

NATURAL HAZARDS MITIGATION PLAN: 2025-2029

COUNTY ADOPTION: APRIL 15, 2025

JEFFERSON COUNTY, WISCONSIN



FORWARD

The *Jefferson County Hazard Mitigation Plan: 2025-2029* consists of six chapters. The first chapter provides an overview of the project. The second chapter presents background information about Jefferson County including its setting, demographic and economic characteristics, climate, natural resources, land use, and development trends. Chapter 3 presents background information related to special needs populations and groups in the county. Chapter 4 contains a complete inventory of critical facilities in the county. Natural hazards are reviewed in Chapter 5 along with estimated losses to buildings, infrastructure, and critical facilities. In Chapter 6, goals, objectives, and policies are identified that will help to craft appropriate solutions to the identified problems. A range of activities are also presented to help foster hazard mitigation efforts. Various funding sources are reviewed with an eye towards identifying options for funding identified projects. Most of the maps in the plan are included in the appendix.

Jefferson County initially adopted a multi-jurisdictional plan in 2008 and updated the plan in 2012 and 2018. This most recent version is intended to guide mitigation efforts in Jefferson County during the five-year period from 2025 through 2029.

ACKNOWLEDGEMENTS

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- | | |
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| 2. Cassie Richardson | 17. Russell Kutz |
| 3. Robert Preuss | 18. Brandon White |
| 4. Karl Zarling | 19. David Drayna |
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- ♦ Ben Patterson, Fire Chief, Village of Johnson Creek
- ♦ Bruce Peterson, Fire Chief, City of Fort Atkinson
- ♦ Alan D. Richter, Chief of Police, City of Jefferson
- ♦ Tanya Reynen, Fire Chief, City of Watertown
- ♦ Steve Schroeder, Chief of Police, City of Lake Mills
- ♦ Denis Sorensen, Chief of Police, City of Waterloo
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- ◆ Kyle L. Ellefson, Village Administrator – Village of Johnson Creek
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- ◆ Rusty Kapela, National Weather Service, Meteorologist
- ◆ Bill Kern, Highway Department Commissioner
- ◆ Paul Milbrath, Jefferson County Sheriff
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- ◆ Gail M. Scott, Director – Health Department
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- ◆ Mike Drew, Captain – City of Jefferson
- ◆ Dale Falk, Town Supervisor – Town of Oakland
- ◆ James Frohmader, Supervisor – Town of Aztalan
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- ◆ Glendan Rewoldt, Deputy Clerk – Town of Sumner
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- ◆ Rusty Kapela, National Weather Service, Meteorologist
- ◆ Bill Kern, Highway Department Commissioner
- ◆ Paul Milbrath, Jefferson County Sheriff
- ◆ Joe Nehmer, Director – Parks Department
- ◆ Gail M. Scott, Director – Health Department
- ◆ Mark Watkins, Director – Land & Water Conservation Department

Project Supervision

Tracy Hameau, Emergency Management Director, and Donna Haugom, Emergency Management Director (former), served as the project supervisors for Jefferson County.

Funding

Partial funding for the preparation of this plan was provided by a planning grant from the Building Resilient Infrastructure and Communities (BRIC) Program administered by the Federal Emergency Management Agency (FEMA).

Consultant

Civi Tek Consulting (<https://www.civitekconsulting.com/>) prepared this plan under the supervision of Tim Schwecke.

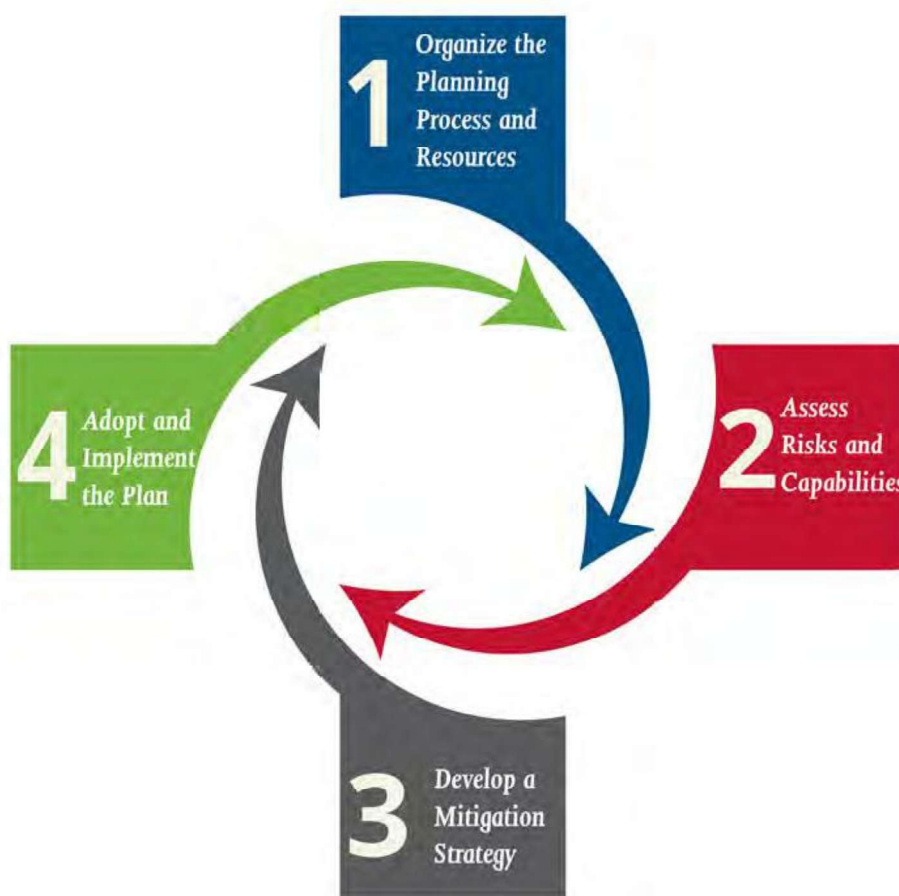


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INTRODUCTION

1. CHAPTER OVERVIEW

This chapter introduces the need for this plan by making the case that natural disasters have historically caused substantial damage to people and property in Jefferson County, and that while it is not possible to prevent natural disasters from occurring, it is possible to better position a community to mitigate the effects of natural disasters. The purpose and scope of this plan are described so that it is clear what this document is intended to do and how it relates to other previous planning efforts and ongoing emergency management activities. The ways in which the general public and local units of government were involved in the preparation, review, and adoption of this plan are documented. A procedure for keeping this document current is described. In the final section, those governmental units adopting this plan are listed.



2. PURPOSE

It's fair to say that most people do not think about natural disasters until they are personally affected in some way. When a significant event does strike, the general public most often looks to government at all levels and non-governmental organizations, like the American Red Cross, for assistance. Likewise, local units of government look to state agencies and the federal government for financial help and assistance. Depending on the scale of the incident, assistance can be short-term or on-going over an extended period of time.

Throughout the United States, government's response, and associated costs, has grown significantly. At the federal level, the average annual loss from natural disasters was \$3.3 billion between 1989 and 1993. Between 1994 and 1998, that figure rose to \$13 billion.

In an effort to curb rising costs, the federal government adopted the Disaster Mitigation Act of 2000 (DMA 2000). It amended the Robert T. Stafford Disaster Relief and Emergency Act, which is the primary law at the federal level dealing with disaster planning, mitigation, response, and recovery.

DMA 2000 reinforced the importance of hazard mitigation planning to proactively devised strategies intended to avoid and reduce the negative effects of natural disasters. If a community wants to apply for grant funding from the Pre-Disaster Mitigation (PDM) Program or the Hazard Mitigation Grant Program (HMGP), it must have an approved hazard mitigation plan. If a disaster strikes a community that does not have an approved plan, it can only receive funding through HMGP if it agrees to prepare a plan within one year.

Jefferson County and participating municipalities have prepared this plan to meet this new requirement, and in so doing, help its citizens mitigate the effects of natural disasters.

Chapter Contents

1. Chapter Overview
2. Purpose
3. Scope
4. Relationship of Mitigation Planning to Other Emergency Management Activities
5. Relationship to Other Plans and Studies
6. Plan Preparation, Review, and Adoption
7. Plan Maintenance and Amendment
8. Incorporating this Plan into Other Planning Efforts
9. Governmental Units Adopting this Plan

3. SCOPE

The scope of this plan is limited to natural hazards. It does not address threats of terrorism or man-made hazards. Hazardous materials (HAZMAT) are addressed in this plan when the production and storage are vulnerable to natural hazards such as flooding. Plans and programs are in place at the county and state levels to address HAZMAT incidents and accidents.

4. RELATIONSHIP OF MITIGATION PLANNING TO OTHER EMERGENCY MANAGEMENT ACTIVITIES

Mitigation planning is one prong of a multi-faceted approach to Emergency Management (*Exhibit 1-1*). Each of these are briefly described to help provide context for this plan.

MITIGATION

Mitigation is any activity that is proactively done to reduce a community's vulnerability of damage from future disasters. Mitigation is the focus of this plan.

PREPAREDNESS

Emergency preparedness focuses exclusively on creating effective strategies and procedures to respond to an emergency. It includes creating the institutional framework for response and protocol for decision making, conducting training of first responders, ensuring equipment is available and operational, and developing and maintaining an appropriate communications network.

Jefferson County has a well-established and tested emergency operations plan (EOP). It identifies a decision-making structure and areas of responsibility depending on the nature of the emergency.

RESPONSE

Response includes any action taken immediately before, during, and after an event to save lives and minimize property damage.

RECOVERY

Although the extent and type of recovery efforts will vary with the nature and extent of the event, they focus on restoring support services and infrastructure and helping those affected to regain a sense of normalcy. Recovery starts as soon as the incident occurs.

It is important to recognize that each of these areas focuses on different aspects of emergency management, but that the effectiveness of each depends on an integrated systems approach.

Key Terms in This Chapter

Disaster Mitigation Act of 2000 (DMA 2000) – A federal law (P.L. 106-390) amending the Robert T. Stafford Disaster Relief and Emergency Act. The act authorizes the president to establish (1) a program of technical and financial assistance to the states and local governments to assist in the implementation of pre-disaster hazard mitigation measures; (2) the National Predisaster Mitigation Fund; and (3) an interagency task force. It requires state, local, or tribal governments to develop predisaster hazard mitigation plans as a precondition of receiving certain federal funds and controls and streamlines the cost of disaster assistance.

Federal Emergency Management Agency (FEMA) – A federal agency created in 1979 with a mission to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery. In March 2003, it was placed under the Department of Homeland Security.

Hazard mitigation plan – A plan prepared at the state or local level that systematically evaluates policies, actions, and tools, and sets goals for implementation over the long term that will result in a reduction in risk and minimize future losses in a community.

Hazard Mitigation Grant Program (HMGP) – A federal program administered by the Federal Emergency Management Agency intended to prevent future losses of lives and property due to disasters; to implement state or local hazard mitigation plans; to enable mitigation measures to be implemented during immediate recovery from a disaster; and to provide funding for previously identified mitigation measures to benefit the disaster area. It was authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Wisconsin Emergency Management (WEM) – A state agency that specializes in hazard mitigation, warning and communications, emergency police services, disaster response and recovery, hazardous materials & EPCRA, radiological emergency preparedness, and exercise and training.

5. RELATIONSHIP TO OTHER PLANS AND STUDIES

The following plans, studies, and reports were reviewed in preparing this plan:

Comprehensive Plans Jefferson County and many of the cities and villages have adopted comprehensive plans consistent with state requirements. At a minimum, a comprehensive plan needs to address the following nine elements:

- ◆ Issues and opportunities
- ◆ Housing
- ◆ Transportation
- ◆ Utilities and Community Facilities
- ◆ Agriculture, Natural and Cultural Resources
- ◆ Economic Development
- ◆ Intergovernmental Cooperation
- ◆ Land Use
- ◆ Plan Implementation

Land use policies established in a community's comprehensive plan have a significant relationship to this plan especially in the area of floodplain management. For example, what kind of development will a community allow in the floodplain? This is a significant public policy questions that should be addressed in a comprehensive plan.

Exhibit 1-1. Emergency Management



- ◆ **Jefferson County Hazards Analysis** This document identifies those hazards that have or could occur in the county. It also describes each hazard, its frequency of occurrence, and actions being taken to mitigate the hazard. It was last updated March 2012.
- ◆ **Jefferson County Flood Mitigation Plan** In 1999, Jefferson County adopted a flood mitigation plan for the unincorporated area of the county and updated it in 2001. The goal of the plan is to reduce the economic and personal costs of flood damages and is intended to:
 - ◆ Document the extent of existing flooding
 - ◆ Document the potential economic impacts of major flooding
 - ◆ Identify properties at greatest risk of damage
 - ◆ Document properties with repetitive flood damages
 - ◆ Identify feasible management alternatives to reduce flood risks
 - ◆ Identify potential funding sources for flood mitigation implementation
 - ◆ Develop a proactive implementation strategy to reduce flood risks
 - ◆ Identify strategies to ensure the community's preparedness in case of a flood disaster
 - ◆ Make Jefferson County and its residents eligible for federal financial assistance from the Flood Mitigation Assistance program administered by FEMA.
- ◆ **Jefferson County Hazardous Materials Response Plan** Jefferson County has a hazardous materials response plan which identifies the policies and procedures for responding to hazardous materials incidents/accidents. It was adopted in compliance with the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and state law codified in Section 166.20, Wis. Stats. It was last updated March, 2011. A commodity flow study was completed in 2023.
- ◆ **Jefferson County Emergency Operations Plan (EOP)** The Jefferson County Office of Emergency Management maintains an emergency operations plan (EOP) that identifies the procedures for responding to emergency events in the county.

- ◆ **Jefferson County Land and Water Resources Management Plan 2021-2030** Jefferson County Land and Water Conservation Department prepared the Jefferson County Land and Water Resource Management Plan for 2021-2030, an update of the 2011-2020 plan, to guide land and water resource protection in the county. The plan addresses the protection of lakes, stream, wetlands, and soil. Like the county land use plan, this plan further protects environmentally sensitive areas and natural flood storage in the county. Implementation of the plan's recommendations will assist in the prevention of flood damage in Jefferson County.
- ◆ **State Hazard Mitigation Plan** This plan was prepared by Wisconsin Emergency Management (WEM) and complies with the requirements of the Disaster Mitigation Act of 2000 at the state level.
- ◆ **Emergency Action Plan Lower Watertown Dam** This plan was prepared by the Rock River Power and Light Corporation for the hydroelectric plant on the Rock River in the city of Watertown.
- ◆ **Emergency Action Plan Upper Watertown Dam** This plan was prepared by the Rock River Power and Light Corporation for the hydroelectric plant on the Rock River in the city of Watertown.
- ◆ **Jefferson County Business Flood Assessment** This report was prepared to assess the knowledge, experiences, and impact the flooding had on the business owners of Jefferson County, who own or operate businesses along the Rock and Crawfish Rivers in the communities of Fort Atkinson, Jefferson, Johnson Creek, Lake Mills, Palmyra, Waterloo, and Watertown, Wisconsin.
- ◆ **Flood of June 2008 in Southern Wisconsin** This report was prepared by the U.S. Geological Service (USGS) in cooperation with the Federal Emergency Management Agency (FEMA). Flood peak inundation maps and water surface profiles were generated for the communities of Reedsburg, Rock Springs, LaFarge, Gays Mills, Milford, Jefferson, Fort Atkinson, Janesville, and Beloit in a geographic information system by combining flood high-water marks with available 1-10 meter resolution digital-elevation-model data. The high-water marks used in the maps were a combination of those surveyed during the June 2008 flood by communities, counties, and federal agencies and hundreds of additional marks surveyed in August 2008 by the USGS. The flood maps and profiles outline the extent and depth of flooding through the communities and were used in flood response and recovery efforts by local, county, state and federal agencies. (Scientific investigations Report 2008-5235, U.S. Geological Survey)
- ◆ When any of these local plans are updated, they should incorporate provisions, as may be appropriate, that support this plan.

6. PLAN PREPARATION, REVIEW, AND ADOPTION

2008 PLAN

The Jefferson County Board adopted a public participation plan on July 11, 2006 that describes the ways in which the public and local units of government would be involved in the preparation, review, and approval of the plan. Key elements include: a project website, publication of all meetings, submittal of press releases, and public presentations.

An ad hoc working group was established and given the responsibility of developing the first draft of the plan. It consisted of ten members, including staff from various county departments and a representative from Forth Health Care and from the National Weather Service. Work on this plan began with the first meeting on June 29, 2006. In all, the working group met four times to work on the plan and review various drafts.

Local jurisdictions were involved in a number of ways and were kept abreast of the plan's progress. Initially, letters were sent to each local unit of government inviting them to designate an individual who would serve as a point of contact and a liaison. The local contact was given a listing of critical facilities in his/her jurisdiction for review and

comment. A member of the consulting team attended a meeting of the Jefferson County Towns Association and presented the project to the attendees and answered questions.

After the working group finished its work, it submitted a draft plan to the Jefferson County Law Enforcement Emergency Management (LEEM) Committee, a committee of the County Board. The LE/EM Committee reviewed the draft plan and made revisions. At this point, public presentations were held for local officials and the public at five locations throughout the county. Following those meetings, the LE/EM Committee made revisions to the draft plan and on January 22, 2008 recommended the draft plan to the full County Board for its review and action.

On February 12, 2008 the County Board adopted this plan by resolution. A number of local jurisdictions also adopted this plan by resolution. In a letter dated July 25, 2008, Wisconsin Emergency Management and the Federal Emergency Management Agency certified that this plan meets federal requirements.

2012 5-YEAR PLAN UPDATE

In 2011, the Jefferson County Emergency Management office applied for and received a grant to prepare a five-year update to the plan. The county contracted with Civi Tek Consulting for this project.

The Jefferson County Board of Supervisors adopted a public participation plan on April 17, 2012, that describes the ways in which the public and local units of government would be involved in the preparation, review, and approval of the plan update. Key elements include: a project website, establishment of a steering committee, publication of all meetings, submittal of press releases, and numerous opportunities for submitting written comments and suggestions.

No comments were received from residents, property owners, or other interested parties during the process.

Municipalities in the county were involved in a number of ways and were kept abreast of the plan's progress. Initially, letters were sent to each municipality inviting them to approve a memorandum of understanding (MOU) and to designate an individual who would serve as a point of contact and a liaison. All of the municipalities approved the MOU. The local point of contact was given a listing of critical facilities in his/her jurisdiction for review and comment. Corrections were made to the list of critical facilities based on the input received.

A steering committee was established and given the responsibility of reviewing the draft of the plan update. Members are listed in the acknowledgements to this plan. The committee met on July 9, 2012 to review the proposed changes to the plan. Members of the public in attendance were given an opportunity to provide input (see agenda).

After the steering committee finished its work, another draft (2.0) was prepared, which was sent to Wisconsin Emergency Management (WEM) for tentative review. A third draft of the plan was prepared to address WEM's initial comments.

A copy of this draft was then sent to each of the cities and villages in the county, the adjoining counties, and the local chapter of the American Red Cross for review and comment.¹ An executive summary was sent to each of the towns for review and comment. Revisions as requested were incorporated into the plan document.

A fourth draft of the plan was prepared based on the local government input that was received. It was then sent to the Federal Emergency Management Agency for preliminary approval. A letter dated June 3, 2013, indicated such approval. The Law Enforcement/Emergency Management Committee of the County Board reviewed this draft on June 28, 2013, and recommended the draft plan to the full County Board for its review and action.

On July 9, 2013 the County Board of Supervisors adopted the plan update. The Federal Emergency Management Agency and Wisconsin Emergency Management certified that this plan update meets federal requirements on October 18, 2013 and October 28, 2013 respectively.

¹ Note: Jefferson County is not located within the jurisdiction of a regional plan commission.

Table 1-1 summarizes the changes made to each section of the plan as part of the update.

Table 1-1. Summary of Changes Made in the 2012 Plan Update

Plan Section	Summary of Changes
Chapter 1	This chapter was reviewed and updated as needed. Specifically, a narrative describing the process used in developing the update was included. The procedure for plan maintenance was reviewed and updated. A section titled "Incorporating this Plan into Other Planning Efforts" was added.
Chapter 2	This chapter was updated using data the best available data.
Chapter 3	This chapter was updated including data from the 2010 Census of population and housing.
Chapter 4	This chapter was updated.
Chapter 5	Natural hazard profiles, occurrences, and probabilities were reviewed and updated as necessary. In addition, the risk assessments were updated.
Chapter 6	This chapter was updated. The steering committee focused in on the goals, objectives, policies, and activities. Revisions were made and new ones were added.
Map Series	All of the maps were updated.
Appendix A	Public participation documentation for the 2013-2017 plan is included.
Appendix B	Resolutions adopting the 2013-2017 plan update are included.
Appendix C	Certification letters from WEM and FEMA for the 2013-2017 plan are included.
Appendix D	This appendix was updated to list all of the municipalities adopting the plan.
Appendix E	The listing represents an up-to-date inventory of critical facilities in the county sorted by type of facility.
Appendix F	The listing represents an up-to-date inventory of critical facilities in the county sorted by jurisdiction.
Appendix G	The history of storm events was updated using data provided by the National Weather Service.
Appendix H	No change
Appendix I	No change

2018 5-YEAR PLAN UPDATE (2019-2023)

The Jefferson County Emergency Management office applied for and received a grant in 2016 to prepare a five-year update to the plan (2019-2023). The county contracted with Civi Tek Consulting for this project.

The Jefferson County Board of Supervisors adopted a public participation plan on July 11, 2017, that describes the ways in which the public and local units of government would be involved in the preparation, review, and approval of the plan update. No comments were received from residents, property owners, or other interested parties during the process.

Municipalities in the county were involved in a number of ways and were kept abreast of the plan's progress. Initially, letters were sent to each municipality inviting them to approve a memorandum of understanding (MOU) and to designate an individual who would serve as a point of contact and a liaison.

A steering committee was established and given the responsibility of reviewing the draft of the plan update. Members are listed in the acknowledgements to this plan. The committee met to review the proposed changes to the plan. A copy of this draft was then sent to each of the cities and villages in the county, the adjoining counties, and the local chapter of the American Red Cross for review and comment.² An executive summary was sent to each of the towns

² Note: Jefferson County is not located within the jurisdiction of a regional plan commission.

for review and comment. All of the municipalities responded. Revisions as requested were incorporated into the plan document.

A draft of the plan was prepared based on the local government input that was received. It was then sent to the Federal Emergency Management Agency for preliminary approval. The Law Enforcement/Emergency Management Committee of the County Board reviewed this draft on December 28, 2018, and recommended the draft plan to the full County Board for its review and action. On January 8, 2019 the County Board of Supervisors adopted this plan. Wisconsin Emergency Management certified that this plan update meets federal requirements on February 13, 2019. *Table 1-2* summarizes the changes made to each section of the plan as part of the 2018 update.

Table 1-2. Summary of Changes Made in the 2012 Plan Update

Plan Section	Summary of Changes
Chapter 1	This chapter was reviewed and updated as needed.
Chapter 2	This chapter was updated using data the best available data.
Chapter 3	This chapter was updated including data from the 2010 Census of population and housing and the 2015 American Community Survey
Chapter 4	This chapter was updated.
Chapter 5	Natural hazard profiles, occurrences, and probabilities were reviewed and updated as necessary. In addition, the risk assessments were updated.
Chapter 6	This chapter was updated. The steering committee focused in on the goals, objectives, policies, and activities. Revisions were made and new ones were added.
Map Series	Maps were updated as needed.
Appendix A	Public participation documentation for the 2019-2023 plan is included.
Appendix B	Resolutions adopting the 2019-2023 plan update are included.
Appendix C	Certification letters from WEM and FEMA for the 2019-2023 plan are included.
Appendix D	This appendix was updated to list all of the municipalities adopting the plan.
Appendix E	The listing represents an up-to-date inventory of critical facilities in the county sorted by type of facility.
Appendix F	The listing represents an up-to-date inventory of critical facilities in the county sorted by jurisdiction.
Appendix G	The history of storm events was updated using data provided by the National Weather Service.
Appendix H	No change
Appendix I	No change

2024 5-YEAR PLAN UPDATE (2025-2029)

The Jefferson County Emergency Management office applied for and received a grant in 2023 to prepare the third five-year plan update. As with the other plan updates, the County Board adopted a public participation plan at their meeting on September 10, 2024. A steering committee was formed, consisting of 17 members as listed in the acknowledgements section.

The following committee meetings were held (*Appendix B*):

- September 30, 2024 (10 Attendees)
- October 24, 2024 (13 Attendees, one of which was a member of the public)

To promote intergovernmental participation, a survey was sent to all of the towns, cities, and villages (*Appendix B*). Responses were reviewed and used in developing the mitigation strategy.

School districts in the county were invited to be a part of this plan update and were sent a survey (*Appendix B*).

The American Red Cross and each of the adjoining counties were contacted to solicit early feedback (*Appendix B*).

The various chapters and appendices were posted on the county's website as they were finalized.

The Jefferson County LEEM Committee reviewed the plan at their meeting on March 28, 2025 and recommended approval. The Jefferson County Board conducted a public hearing at their meeting on April 15, 2025, and adopted the plan at that time.

Jefferson County is not served by a regional plan commission (RPC).

Table 1-3 summarizes the major changes to the 2018 plan.

Table 1-3. Summary of Changes Made in the 2018 Plan Update

Plan Section	Summary of Changes
Chapter 1	This chapter was reviewed and updated as needed.
Chapter 2	This chapter was updated using the best available data.
Chapter 3	This chapter was updated including data from the 2020 Census of population and housing and the 2023 American Community Survey. Information regarding under-served populations is included.
Chapter 4	This chapter was updated to reflect changes in critical facilities.
Chapter 5	Natural hazard profiles, occurrences, and probabilities were reviewed and updated as necessary. In addition, the risk assessments were updated.
Chapter 6	This chapter was updated. The steering committee focused in on the goals, objectives, policies, and activities. Revisions were made and new ones were added. A description of Lifelines was added. A listing of major accomplishments was updated to chronicle all of the work that has happened in the last 5 years.
Appendix A	Maps were updated as needed. Maps were added for (1) persons over 65 years of age, (2) persons with disabilities, (3) persons of minority status; and (4) persons living below poverty threshold.
Appendix B	Public participation documentation for the 2025-2029 plan is included.
Appendix C	Resolutions adopting the 2025-2029 plan update are included.
Appendix D	Certification letters from WEM and FEMA for the 2025-2029 plan are included.
Appendix E	This appendix was updated to list all of the municipalities adopting the plan.

Table 1-3. Summary of Changes Made in the 2018 Plan Update

Plan Section	Summary of Changes
Appendix F	The listing represents an up-to-date inventory of critical facilities in the county sorted by type of facility.
Appendix G	The listing represents an up-to-date inventory of critical facilities in the county sorted by jurisdiction.
Appendix H	The list of Red Cross shelters was updated and included as an appendix.
Appendix I	The history of storm events was updated using data provided by the National Weather Service. The additional information was reviewed and used in prioritizing weather events.
Appendix J	No change
Appendix K	No change
Appendix L	The list of acquired properties was updated and included as an appendix.
Appendix M	The list of federal and state grants was updated and included as an appendix.

7. PLAN MAINTENANCE AND AMENDMENT

DMA 2000 requires that an adopted plan be reviewed and updated at least once every five years. However, to ensure that the plan remains a viable planning tool, it should be reviewed each year and following a natural disaster. The Federal Emergency Management Agency (FEMA) and Wisconsin Emergency Management (WEM) will be notified of amendments to this plan.

Without periodic review and assessment, this plan has the potential to lose its relevance as conditions change, specific projects are implemented, and new priorities emerge.

ANNUAL REVIEW

Each November, the Emergency Management Director should review and monitor this plan and suggest amendments to the LEEM Committee. As part of this review, the Emergency Management Director should contact each of the participating jurisdictions to give them the opportunity to suggest changes. During this annual review, most of the focus should be on Chapter 6, which lists the goals, objectives, policies, and activities.

To determine whether amendments are needed, the following considerations should be reviewed:

- ◆ Review of general development trends
- ◆ Review of hazard risks
- ◆ Review of hazard mitigation goals and objectives
- ◆ Review of completed mitigation activities and their effectiveness
- ◆ Review of recommended strategies
- ◆ Review of available resources for future projects
- ◆ Public input
- ◆ Input from WEM and FEMA

FOLLOWING A NATURAL DISASTER

In addition, to a yearly review cycle, this plan should be updated following a significant natural disaster. Ideally, the update would be completed within six months of the event.

The public will be formally notified of meetings scheduled for the purpose of plan review. Other mechanisms that will be used to maintain public involvement include making available a copy of the plan at local public libraries, issuance of periodic press releases to the media describing the status of plan implementation and the use of the county's website as a medium to keep residents informed of the plan's status and implementation activities.

HISTORY OF ADOPTION AND AMENDMENT

A history of adoption and amendment is included in Appendix E. It lists when this plan was first adopted and the various amendments which have taken place since then.

8. INCORPORATING THIS PLAN INTO OTHER PLANNING EFFORTS

The state-mandated comprehensive plan and floodplain regulations will be the primary means of reducing the effects of hazards on people and property in Jefferson County. Mitigation strategies can be incorporated into these plans when they are updated. Each jurisdiction should incorporate goals, objectives, and policies into their comprehensive plans that are consistent with this plan. Following adoption of the 2025 plan update, the Jefferson County Emergency Management Director will send a letter to the Plan Commission of each city and village encouraging them to cross reference their plan revisions with this plan. Likewise, amendments to this plan should be made consistent with comprehensive plans so long as such action would reduce the impact of hazards on people and property.

In addition to long-range planning, this plan will also be utilized when reviewing land development projects. It will be useful to consult this plan to determine where hazards are located, primarily in 100-year floodplains. The plan will also be consulted as necessary when capital improvement plans are being prepared. Again, the intent of these cross-cutting planning efforts is to reduce the effects of hazards on people and property.

9. GOVERNMENTAL UNITS ADOPTING THIS PLAN

This plan has been prepared at the county level as a multi-jurisdictional document with the active input and direct involvement of the cities, villages, and towns. The Jefferson County Board of Supervisors adopted the plan on April 15, 2025. Cities and villages have 12 months from that date to adopt the plan (*Appendix E*).

PLANNING AREA PROFILE

1. CHAPTER OVERVIEW

This chapter is intended to give an overview of Jefferson County to help describe the setting and provide the general context for mitigation planning.

2. REGIONAL CONTEXT

Jefferson County is located midway between the Milwaukee and Madison metropolitan areas. It is bordered by Waukesha County on the east, Dodge County on the north, Dane County on the west, and Walworth and Rock counties on the south (*Exhibit 2-1*). It encompasses 564 square miles and is located in the Eastern Ridges and Lowlands portion of southeastern Wisconsin which is densely populated with a high concentration of industry and farms.

The Rock River, which travels north to south in the central to western half of the Jefferson County, is a Mississippi River tributary that flows through northern Illinois. It drains most of Jefferson County. The major feeder streams are the Crawfish, Bark, Scuppernong, and Oconomowoc rivers and the Whitewater, Koshkonong, and Deer creeks. Lake Koshkonong is the largest lake, located in the southwest portion of the county. Other smaller lakes are Rock Lake, Lake Ripley, Hahn's Lake, Red Cedar Lake, Goose Lake, Golden Lake, Mill Pond, Green Isle Lake, Upper and Lower Spring Lake, and Blue Spring Lake.

Exhibit 2-1. General Location



Land use percentages of assessed totals are estimated as 67 percent for agricultural with residential and commercial uses at 9 percent each. Approximately 5 percent of the county's surface is covered with water (i.e., lakes, rivers, streams, etc.) and the remaining balance is non-assessed properties such as government, religious, non-profit, and other uses.



Chapter Contents

1. Chapter Overview
2. Regional Context
3. Units of Government
4. School Districts
5. Population
6. Housing
7. Transportation
8. Land Use and Development Trends
9. General Climate
10. Soil
11. Topography
12. Surface Water Resources
13. Wetlands

Industry is the largest employment sector at 46 percent. There are approximately 1,420 farms with an average size of 174 acres.

3. UNITS OF GOVERNMENT

Civil divisions in Jefferson County consist of 16 towns, 5 villages, and 6 cities (*Table 2-1* and *Map 1*). The City of Watertown is located in Jefferson and Dodge counties. The Village of Cambridge is located in Jefferson and Dane counties. The majority of Lac La Belle is located in Waukesha County. The City of Whitewater is located in Jefferson and Walworth counties. The City of Jefferson is the county seat.

Table 2-1. Civil Divisions; Jefferson County: 2024

Towns	Cities	Villages
Aztalan	Fort Atkinson	Cambridge [1]
Cold Spring	Jefferson	Johnson Creek
Concord	Lake Mills	Lac La Belle [1]
Farmington	Waterloo	Palmyra
Hebron	Watertown [1]	Sullivan
Ixonia	Whitewater [1]	
Jefferson		
Koshkonong		
Lake Mills		
Milford		
Oakland		
Palmyra		
Sullivan		
Sumner		
Waterloo		
Watertown		

Notes: 1. Municipality located in Jefferson County and another county

4. SCHOOL DISTRICTS

There were 13 school districts in Jefferson County (*Table 2-2* and *Map 2*). Four of the districts do not maintain a school in the county.

Table 2-2. School Districts; Jefferson County: 2024

District name	Public schools in Jefferson County
Cambridge	1
Edgerton	0
Fort Atkinson	6
Jefferson	4
Johnson Creek	1
Kettle Moraine	0
Lake Mills	3
Milton	0
Oconomowoc Area	1
Palmyra-Eagle Area	1
Waterloo	4
Watertown Unified	4
Whitewater Unified	0

5. POPULATION

According to the U.S. Census Bureau, there were 84,900 county residents in 2020 (*Table 2-2*). With 5,120 residents, the town of Ixonia is the most populous of the 16 towns in the county. The Village of Johnson Creek is the most populous village and Watertown is the most populous city. As seen in *Table 2-3*, the county has enjoyed steady growth since 1990.

At -0.2 percent, cities as a group posted the smallest change in population from 2010 to 2020 when compared to towns as a group (2.7%) and villages (9.3%) also as a group. With the exception of two towns, the population in towns posted modest population gains. The Town of Ixonia experienced the highest rate of change (16.8%) and the largest numerical gain (735 residents). With a change in population of 9.3 percent, the Town of Lake Mills posted the second highest rate of change, although it only added 126 residents.

Except for a small corner of the village, Lac La Belle is located in Waukesha County and has only 2 residents in Jefferson County. Of the villages, Johnson Creek experienced the largest change from 2010 to 2020 (21.2%) and also the largest numerical increase (580 residents). Twelve of the twenty-seven municipalities experienced a decrease in their populations.

The portion of the City of Watertown in Jefferson County has a current population of 14,674 residents. With 12,579 residents, Fort Atkinson is the second most populous city in the county. Between 2010 and 2020, only three of the six cities saw a population increase, with Lake Mills growing the fastest at 8.8 percent.

Table 2-3. Population; Jefferson County and Civil Divisions: 1980, 1990, 2000, 2010, 2020, and 2022

Town	1980 Census	1990 Census	2000 Census	2010 Census	2020 Census	Percent Change 2010-20	2022 ACS Estimate
Aztalan	1,752	1,476	1,447	1,457	1,382	-5.1	1,084
Cold Spring	684	683	766	727	737	1.4	792
Concord	1,805	1,884	2,023	2,072	1,981	-4.4	2,098
Farmington	1,528	1,404	1,498	1,380	1,407	2.0	1,440
Hebron	1,104	975	1,135	1,094	1,043	-4.7	1,164
Ixonia	2,905	2,789	2,902	4,385	5,120	16.8	5,087
Jefferson	2,891	2,687	2,457	2,178	2,067	-5.1	1,792
Koshkonong	2,979	2,984	3,395	3,692	3,763	1.9	3,748
Lake Mills	1,515	1,584	1,936	2,070	2,196	6.1	2,254
Milford	1,066	1,007	1,055	1,099	1,106	0.6	1,267
Oakland	2,240	2,526	3,135	3,100	3,231	4.2	3,234
Palmyra	1,069	1,176	1,145	1,186	1,220	2.9	1,236
Sullivan	1,646	1,924	2,124	2,208	2,295	3.9	2,176
Sumner	973	822	904	832	846	1.7	714
Waterloo	811	694	832	909	867	-4.6	866
Watertown	1,921	1,840	1,876	1,975	1,933	-2.1	1,815
Total	26,889	26,455	28,630	30,364	31,194	2.7	30,767
Village							
Cambridge [1]	59	80	87	109	99	-9.2	64
Johnson Creek	1,136	1,259	1,581	2,738	3,318	21.2	3,337
Lac La Belle [1]	-	-	0	1	2	100.0	0
Palmyra	1,515	1,540	1,766	1,781	1,719	-3.5	2,097
Sullivan	434	449	688	669	651	-2.7	6,64
Total	1,949	3,328	4,122	5,298	5,789	9.3	6,162
City							
Fort Atkinson	9,785	10,213	11,621	12,368	12,579	1.7	12,522
Jefferson	5,647	6,078	7,146	7,973	7,793	-2.3	7,778
Lake Mills	3,670	4,143	4,843	5,708	6,211	8.8	6,280
Waterloo	2,393	2,712	3,259	3,333	3,492	4.8	3,511
Watertown [1]	12,202	12,388	13,535	15,402	14,674	-4.7	14,711
Whitewater [1]	2,422	2,466	2,611	3,240	3,168	-2.2	4,201
Total	36,119	38,000	43,015	48,024	47,917	-0.2	49,003
Jefferson County	66,152	67,783	75,767	83,686	84,900	1.5%	85,492

Source: US Census Bureau including American Community Survey (ACS)

Notes: 1. Municipality located in Jefferson County and another county

6. HOUSING

According to the 2022 American Community Survey of population and housing (ACS), there were over 36,000 dwelling units in the county (*Table 2-4*). Almost 72 percent were single family residences. Structures with 5 to 9 units represent the second most common housing type. Dwellings of 2 units are the third most common type of housing. Over one-fourth of the county's housing stock was built more than 70 years ago (*Table 2-5*).

Table 2-4. Housing Types; Jefferson County: 2022

Units in structure	Number	Percent
1-unit, detached	26,164	71.7
1-unit, attached	1,321	3.6
2 units	1,797	4.9
3 or 4 units	1,208	3.3
5 to 9 units	2,207	6.1
10 to 19 units	879	2.4
20 or more units	1,418	3.9
Mobile home	1,443	4.0
Boat, RV, van, etc.	32	0.1
Total	36,469	100

Source: US Census Bureau, American Community Survey (2022)

Table 2-5. Age of Housing Stock; Jefferson County: 2022

Year structure built	Number	Percent
2020 or later	115	0.3
2010 to 2019	1,660	4.6
2000 to 2009	4,916	13.5
1990 to 1999	5,628	15.4
1980 to 1989	2,776	7.6
1970 to 1979	4,750	13.0
1960 to 1969	2,579	7.1
1950 to 1959	3,532	9.7
1940 to 1949	1,553	4.3
1939 or earlier	8,960	24.6
Total	36,469	100.0

Source: US Census Bureau; American Community Survey (2022)

7. TRANSPORTATION

SURFACE TRANSPORTATION

The county contains approximately 1,374 miles of roadways (*Table 2-6* and *Map 3*). Nearly two-thirds of which are classified as a local road. Interstate 94 travels east and west in the northern part of the county (*Map 1*). Interchanges are located at the City of Lake Mills (STH 89), the Village of Johnson Creek (STH 26), and at Concord (CTH F).

The other key regional highways include STH 26, STH 12, STH 18, and STH 16. Each of these highways connects one or more of the incorporated municipalities in Jefferson to the Interstate highway system and provides access to nearby metropolitan areas. Extremely hazardous substances may be transported over any local, state, or federal highway, without restriction provided weight limits are met.

AIR TRANSPORTATION

Public-use airports are located in the City of Watertown, City of Fort Atkinson, and Village of Palmyra (*Map 12*).

Table 2-6. Roadway by Type: Jefferson County

Type of Roadway	Miles	Percent of Total
Interstate Highway	24.56	1.8
State Highway	151.74	11.0
County Highway	259.77	18.9
Local Roads	919.41	66.9
Other	18.58	1.4
Total	1374.06	100

Source: Jefferson County

- ♦ Watertown Municipal Airport is classified as transport/corporate based airport¹. Forecasts prepared for the Wisconsin Bureau of Aeronautics indicate that use will increase to 7,530 operations by 2030, a 1 percent decrease since 2010 (58,000).
- ♦ Fort Atkinson Municipal Airport is classified as a general utility airport². Total operations are forecasted to grow at a rate of 2% from 10,900 in 2010 to 11,880 in 2030.
- ♦ Palmyra Municipal Airport is classified as a basic utility airport³. It is estimated that use will decrease slowly by 1% from 15,650 in 2010 to 15,470 operations by 2030.

In addition to these public-use airports, there are a number of private-use airports, including McDermott Airpark. Private-use airports are not considered critical infrastructure for the purposes of this plan.

RAIL TRANSPORTATION

As shown on *Map 12*, there are three railroads in Jefferson County: Wisconsin Southern, Union Pacific, and Canadian Pacific.

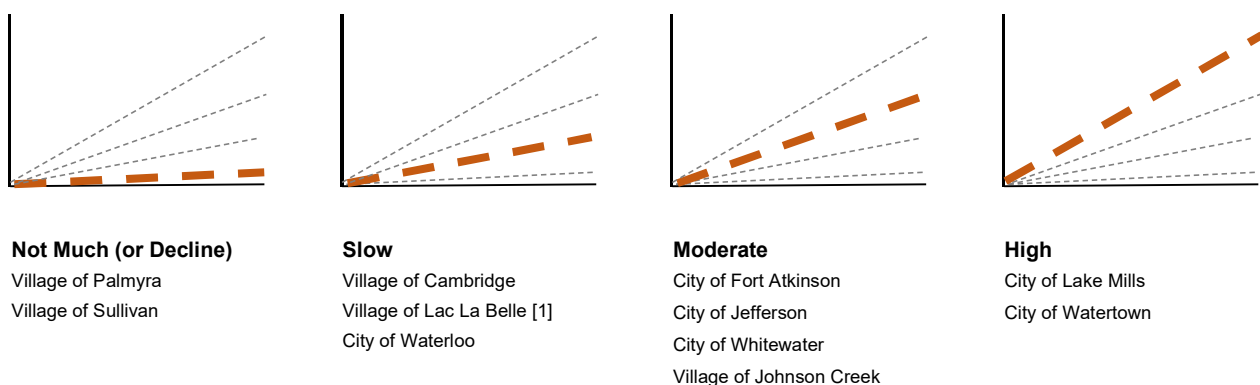
8. LAND USE AND DEVELOPMENT TRENDS

The unincorporated area of Jefferson County is predominated by rural land uses, principally agriculture (*Map 4*). The Jefferson County Comprehensive Plan and Land Use Map summarize the most recent land use totals by acreage. In the unincorporated area, agriculture and other open lands account for nearly three-quarters of the land area. With 15.6 percent of the land area, wetlands constitute the second largest land use type.

As envisioned in the county's recently adopted farmland preservation plan, most of the future growth is expected to take place in planned urban service areas located in or adjacent to the existing urban municipalities. Most rural areas of the county are zoned as agricultural preservation areas and environmental corridor, which limit urban development.

Urban development is anticipated to increase proportional to the population growth, and will likely be limited to approximately 800 to 900 acres of new urban development in the unincorporated areas of the county. Anticipated development in cities and villages are graphically depicted in *Exhibit 2-1*.

Exhibit 2-1. Anticipated Population Growth Next Ten Years



Note: Rankings for municipalities in Jefferson County are for comparative purposes only

¹ A transport/corporate airport is intended to serve corporate jets, small passenger and cargo jet aircraft used in regional service and small aircraft (piston and turboprop) used in commuter air service.

² A general utility airport is intended to serve virtually all small general aviation single and twin-engine aircraft, both piston and turboprop, with a maximum takeoff weight of 12,500 pounds or less.

³ A basic utility airport is intended to serve all small single-engine piston aircraft and many smaller twin-engine aircraft with a maximum takeoff weight of 12,500 pounds or less.

9. GENERAL CLIMATE

Wisconsin's climate is typically classified as continental. About two-thirds of the annual precipitation falls during the growing season (freeze-free period). It is normally adequate for vegetation, although drought is occasionally reported. This climate is most favorable for dairy farming; the primary crops are corn, small grains, hay, and vegetables. The rapid succession of storms moving from west to east or southwest to northeast account for the stimulating climate.

Table 2-7 charts conditions in the City of Lake Mills, which is representative of the entire county.

Table 2-7. Climate; City of Lake Mills

Climate Normals	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Ave Daily High (F°)	26.6	32	43.7	59	71.7	80	85	82.1	74.3	62	46.2	31.4
Ave Daily Low (F°)	7.9	11.9	23.6	36	46.5	56	61	58.5	50.8	41	28.8	14.7
Growing Degree Days	0	2	37	161	359	535	675	610	413	202	40	3
Heating Degree Days	1479	1207	970	525	227	38	0	18	103	431	825	1302
Cooling Degree Days	0	0	0	0	44	131	246	182	31	10	0	0
Ave Precipitation (")	1.29	1.13	2.3	3.1	3.17	3.5	3.9	4.05	3.89	2.4	2.28	1.87
Ave Snowfall (")	9.6	7	6.4	1.4	0.1	0	0	0	0	0.1	2.3	10.7

Source: National Weather Service

The lakes and rivers of Jefferson County often are ice covered from late December to late March. Snow covers the ground 50 to 75 percent of winter days. Flooding is most frequent and most serious during March and April, and sometimes in February, due to the melting of snow and spring rains. During this period, flood conditions are often aggravated by ice jams that clog flowing floodwaters. Excessive rains from thunderstorms sometimes produce tributary flooding or flash flooding along the smaller streams and creeks.

10. SOIL

The most common soil associations occurring in the upland areas of Jefferson County are the Fox, Kidder, Keowns, Mayville, Rotamer, and Sebwa silt loams. These soils are made up of loam and silt loam soils that have subsoils of silty clay loam over clay loam and underlain by calcareous loam glacial till. The soils of these associations are well drained and facilitate good infiltration of runoff. These soils fall mainly into the hydrologic soil group B⁴.

Adrian and Houghton muck soils dominate the lowlands in the county. Adrian and Houghton muck soils are very poorly drained organic soil that consists of decomposed residue from wetland plants such as reeds, sedges, and forbs. Houghton muck occurs in old glacial lakebeds and wetlands. The lowland soils fall into hydrologic soil groups A/D, B/D and D, indicating limited infiltration capacity.

11. TOPOGRAPHY

Jefferson County is located in a glaciated area, dominated by rolling hills and wide valleys. The topography of the area is the result of 4 major glacial advances, the last of which occurred about 12,000 years ago. Two lobes of the huge glacier sheet, known as the Green Bay and Lake Michigan lobes, interacted over southeast Wisconsin, including Jefferson County, with ice thicknesses ranging from 1/4 mile to 1 mile. As the glaciers advanced and retreated across the county, they deposited large amounts of rock debris known as drift. As the glaciers retreated, outpourings of sand and gravel were added to the drift. The two glacier lobes pushed up against each other over the southeast corner of Jefferson County, leaving behind rock debris that formed the Kettle Moraine ridge located in that part of the county.

⁴ Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate. The soils range from Group A, which has high permeability in well-drained soil with less runoff [produced], to Group D which has low permeability and more anticipated runoff.

The glacier left behind many ground moraines, which provide many hills located in the county. Among the moraines, large outwash plains formed as melt waters deposited fine sands and gravel. Most of the wide floodplain areas of the county are in these outwash plains. The large floodplains south of the City of Watertown, at Lake Koshkonong, and west of the City of Jefferson, are examples of large outwash plains.

12. SURFACE WATER RESOURCES

Jefferson County has a total of 40 lakes, 27 of these are named and 13 are unnamed (*Table 2-7*). Lake Koshkonong is the largest lake in the county followed by Rock Lake.

The Rock River and its tributaries drain Jefferson County. Upstream of the outlet of the Rock River at Lake Koshkonong, the river drains over 2,500 square miles and includes portions of Columbia, Dane, Dodge, Fond du Lac, Jefferson, Washington, and Waukesha counties.

The drainage basin of Rock River is divided into the Upper Rock River Basin and Lower Rock River Basin by the Wisconsin Department of Natural Resources for water quality planning purposes. Descriptions for each of the watersheds follow in the following sections.

UPPER ROCK RIVER BASIN

The northern and central portions of Jefferson County are drained by the Upper Rock River Basin. This basin includes all surface waters draining to the Rock River above the Bark River. More than 1,920 square miles are drained by the Upper Rock River, including all of Dodge County and parts of Columbia, Dane, Fond du Lac, Jefferson, Washington and Waukesha counties. The basin is divided into 13 watersheds. Seven of the 13 watersheds in the Upper Rock River Basin drain the northern and central parts of Jefferson County.

Middle Rock River Watershed (UR 01) The Middle Rock River watershed is approximately 132 square miles, including parts of Dodge and Jefferson counties. It extends from the north edge of Fort Atkinson upstream to the dam at Watertown. Totalling 55 stream miles, the major streams within the watershed are Deer Creek, Rock River, and nine unnamed creeks. Agriculture is the dominant land use in this watershed; however, urbanization is occurring on the north side of Fort Atkinson and on the southwest side of Watertown. There are three municipal wastewater treatment plant dischargers in this watershed (Watertown, Johnson Creek, and Jefferson) and four industrial dischargers.

Lower Crawfish River Watershed (UR 02) The Lower Crawfish River watershed is 178 square miles including parts of Dane, Dodge, and Jefferson counties. Totalling 90.4 stream miles, the major streams in the watershed are the Crawfish River, Mud Creek, Nolan Creek, Rock Creek, and 7 unnamed creeks. This watershed includes the Crawfish River and all its tributaries from the dam at Columbus downstream to its confluence with the Rock River at Jefferson. The land use in this watershed is primarily agricultural. There are two municipal wastewater treatment plants (Columbus and Lake Mills) and five industrial plants discharging into this watershed.

Mauneshia River Watershed (UR 05) This watershed is 126 square miles and includes parts of Dane, Dodge, and Jefferson counties. Totalling 98 stream miles, the major streams in the watershed are Mauneshia River, Schumacher Creek, Spring Creek, Stony Brook, Stransky Creek, and 19 unnamed streams. Agriculture is the predominant land use in this watershed. The watershed has two state wildlife areas. There are two municipal wastewater dischargers into the watershed (Marshall and Waterloo) and two industrial dischargers.

Johnson Creek Watershed (UR 07) The Johnson Creek watershed is 45 square miles in Jefferson County. Totalling 37.5 stream miles, the major streams in the watershed are Johnson Creek and seven unnamed creeks. The predominant land use in this small watershed is agriculture, although there has been increasing urbanization.

Sinissippi Lake Watershed (UR 08) The Sinissippi Lake watershed is 237 square miles including parts of Dodge and Jefferson counties. It includes the mainstream of the Rock River from the dam at Horicon downstream to the Watertown dam and all the streams which flow into the Rock River in this area. Totalling 160 stream miles, the major

streams in the watershed are Baker Creek, Oyman Creek, Dead Creek, Lentz Creek, Neda Creek, Oliver Creek, Rock River, Silver Creek, Wildcat Creek, Woodland Creek, and 20 unnamed streams. The land use in this watershed is primarily agricultural. There are eight communities which have municipal wastewater facilities that discharge into this watershed.

Oconomowoc River Watershed (UR 09) The Oconomowoc River watershed is 129 square miles including parts of Jefferson, Washington, and Waukesha counties. Totaling 88.8 stream miles, the major streams in the watershed are Battle Creek, Coney Creek, Flynn Creek, Little Oconomowoc River, Mason Creek, Oconomowoc River, Rosenow Creek, and 11 unnamed creeks. From its source, the Oconomowoc River flows in a southwesterly direction through six major lakes for approximately 49 miles before entering the Rock River in the Town of Ixonia. Urbanization is continuing, especially next to or near lakes. The City of Oconomowoc is the only municipality in the watershed with a wastewater discharge to surface water. There are approximately 1,100 acres of publicly-owned recreation lands and three large county-owned parks in this watershed.

Ashippun River Watershed (UR 10) The Ashippun River watershed is 69 square miles including parts of Dodge, Washington, and Waukesha counties and a small part of Jefferson County. Totaling 63 stream miles, the major streams in the watershed are Ashippun River, Davey Creek, Dawson Creek, Mud Run Creek, and nine unnamed creeks. The predominant land use is agricultural. The only municipal wastewater discharger in the watershed is the Town of Ashippun.

LOWER ROCK RIVER BASIN

The Lower Rock River Basin drains the southern, eastern, and western portions of Jefferson County. The Lower Rock River Basin drains an area of approximately 1,307 square miles including parts of Columbia, Dane, Jefferson, Rock, Walworth, and Waukesha counties. There are 15 watersheds in the Lower Rock River Basin, five of which drain the southern, eastern, and western portions of Jefferson County.

Lower Koshkonong Creek Watershed (LR 11) The Lower Koshkonong Creek watershed is approximately 219 square miles and includes parts of Dane, Jefferson, and Rock counties. Totaling 104 stream miles, the major streams in this watershed are Allen Creek, Koshkonong Creek, Otter Creek, Sounders Creek, and 15 unnamed streams. While the majority of wetlands in the watershed have been drained for agricultural purposes, many significant wetland areas remain. Agriculture is the predominant land use. There are significant soil losses in this watershed. Soil loss, coupled with wetland drainage and stream channel drainage, indicates significant sediment likely reaches the watershed's surface water, adversely affecting habitat, and water quality. Fort Atkinson, Cambridge, Rockdale, and Edgerton are each a municipal point discharger in the watershed.

Upper Koshkonong Creek Watershed (LR 12) The Upper Koshkonong Creek watershed is 107 square miles including parts of Dane and Jefferson counties. Totaling 73 miles, the major streams in the watershed are Koshkonong Creek, Mud Creek, and 35 unnamed streams. The land use is primarily agriculture. Large portions of the wetlands were drained for this purpose. This wetland loss, coupled with stream ditching and widespread use of field tiles, allows a significant amount of sediment and nutrients to reach surface waters in the watershed and, thus, downstream watersheds.

Bark River Watershed (LR 13) The Bark River watershed is approximately 189 square miles and includes parts of Jefferson, Waukesha, and Washington counties. Totaling 171.5 stream miles, the major streams in this watershed are the Bark River, Deer Creek, Duck Creek, Meadow Brook, Scuppernong Creek, Wales Creek, and 36 unnamed streams. Agriculture is the predominant land use in the Bark River Watershed. This watershed has many large lakes which continue to have development around them. Though some of the wetlands have been drained, significant amounts of wetlands remain in this watershed. There is significant development in the Waukesha County portion of the watershed. This is the greatest threat to increased flood flows in this basin.

Whitewater Creek Watershed (LR 14) The Whitewater Creek watershed is 71 square miles including parts of Jefferson, Walworth, and Rock counties. Totaling 60 stream miles, the major streams in this watershed are Bluff Creek, Galloway Creek, Spring Brook, Whitewater Creek, and 17 unnamed streams. Land use in this watershed is

predominantly agriculture. A portion of the Kettle Moraine State Forest runs along the southeast edge of the watershed. The Whitewater Municipal Treatment Plant discharges into this watershed.

Scuppernong River Watershed (LR 15) The Scuppernong River watershed is 86.5 square miles including parts of Jefferson, Walworth, and Waukesha counties. Totaling 835 stream miles, the major streams in the watershed are Funk Creek, Mud Creek, Paradise Springs Creek, Scuppernong River, Spring Creek, Steel Brook, and 28 unnamed streams. Agriculture is the predominant land use in this watershed. The Kettle Moraine State Forest and two state wildlife areas with large forested tracts and wetland areas are within this watershed. Other wetlands have been drained for agricultural purposes. The only urban area in this watershed is the Village of Palmyra.

13. WETLANDS

Within the unincorporated areas of Jefferson County, there are 55,097 acres of wetlands. These wetlands make up 15.5 percent of the land area. The majority of wetlands are associated with the floodplains of local rivers and creeks.

SPECIAL NEEDS POPULATIONS AND GROUPS

1. CHAPTER OVERVIEW

During a natural disaster the potential exists for certain populations and groups of people to be disproportionately affected when compared to the general population. This section looks at those groups including the elderly, people with disabilities, minorities, people in poverty, homeless individuals, populations with language barriers, and people in mobile home parks, campgrounds, and group quarters. Strategies and actions are included in Chapter 5 in order to address the particular needs of the groups.



2. ELDERLY

As a group, the elderly are especially vulnerable to natural hazards. This is especially true when an elderly person lives by him or herself or with an elderly spouse and do not have family or friends to help them prepare for natural hazards or react to and recover from an event.

The aging of the population is occurring throughout the nation and is also evident in Jefferson County. As seen in *Table 3-1*, the number of people younger than 55 decreased between 2010 and 2020, while the number of those older than 55 increased. As the population continues to get proportionately older, it will become increasingly important to address the needs of the elderly with respect to natural hazards planning.

Chapter Contents

1. Chapter Overview
2. Elderly
3. People with Disabilities
4. Minority Status
5. Poverty
6. Social Vulnerability Index
7. Homelessness
8. People Living in Manufactured and Mobile Homes
9. People in Campgrounds

Table 3-1. Age of Population; Jefferson County: 1990, 2000, 2010, and 2020

Age Group	Percent of Total				Percent Change 2010-2020
	1990	2000	2010	2020	
85 and older	1.3	1.7	1.8	1.5	-16.7
75 to 84	4.5	4.5	4.1	5.4	31.7
65 to 74	7.2	6.4	7.3	10.7	46.6
55 to 64	4.2	9.1	12.4	14.7	18.5
45 to 54	14.5	14.1	15.3	13.2	-13.7
35 to 44	14.7	16.8	13.2	12.6	-4.5
25 to 34	15.8	13.6	12.0	11.1	-7.5
20 to 24	7.2	5.8	6.5	6.4	-1.5
15 to 19	8.9	7.3	7.9	8.2	3.8
10 to 14	7.3	7.5	6.6	5.6	-15.2
5 to 9	7.5	6.8	6.7	5.9	-11.9
Under 5 years	6.9	6.3	6.3	4.8	-23.8

Source: Census of Population and Housing, US Census Bureau

The proportion of those 65 years and older in Jefferson County is similar to what is seen statewide (*Table 3-2*). *Map 7* compares this attribute across all of the civil divisions in Jefferson County based on the jurisdiction's land area.

3. PEOPLE WITH DISABILITIES

Like the elderly, people with disabilities have increased exposure to some types of natural hazards. As indicated in *Table 3-2*, 12.7 percent of the population in Wisconsin self-reported a disability in 2023. This compares to 12.3 percent of the people in Jefferson County. The types of disabilities are addressed in *Table 3-3*. *Map 8* compares this attribute across all of the civil divisions in Jefferson County based on the jurisdiction's land area.

Table 3-2. Demographic Comparison; Jefferson County and State of Wisconsin: 2023

	Percent of Total Population	
	Jefferson County	State of Wisconsin
Population 65 Years and Older	19.2	19.2
People with Disabilities	12.3	12.7
Minority Status	11.5	20.0
Poverty	10.5	10.7

Source: 2023 American Community survey (1-year estimates)

4. MINORITY STATUS

Just over 11 percent of the county population identified as a minority, which is less than the statewide value of 20 percent (*Table 3-2*). *Map 9* compares this attribute across all of the civil divisions in Jefferson County based on the jurisdiction's land area.

Table 3-3. People with Disabilities; Jefferson County: 2023

Disability	Percent of Total Population
With a hearing difficulty	3.3
With a vision difficulty	1.9
With a cognitive difficulty	5.9
With an ambulatory difficulty	5.3
With a self-care difficulty	2.1
With an independent living difficulty	5.5

Source: 2023 American Community survey (1-year estimates)

6. SOCIAL VULNERABILITY INDEX

The Social Vulnerability Index (SVI) is a tool created by the U.S. Centers for Disease Control and Prevention (CDC) to identify communities that may be particularly vulnerable to disasters or other public health emergencies. The SVI considers social factors that can impact a community's resilience to and ability to recover from disasters, such as poverty levels, housing conditions, access to transportation, and minority status.

The index ranks areas (e.g., census tracts or counties) across various themes, each representing a key dimension of social vulnerability.

1. Socioeconomic Status
2. Household Composition
3. Racial & Ethnic Status
4. Housing Type and Transportation.

The SVI uses these variables to assign a score for each area, ranking it relative to other areas (statewide or nationally). High SVI scores indicate greater vulnerability, meaning that the area may face more significant challenges in preparing for, responding to, and recovering from events like natural disasters, disease outbreaks, or economic crises.

Table 3-4. Social Vulnerability Index; Jefferson County: 2022

	Statewide Score	Vulnerability
Overall Score	0.3803	Low to Medium
Socioeconomic Status	0.3239	Low to Medium
Household Characteristics	0.2958	Low to Medium
Racial & Ethnic Status	0.6338	Medium to High
Housing Type & Transportation	0.5634	Medium to High

Source: CDC/ATSDR Social Vulnerability Index; <https://svi.cdc.gov/map/>

Note: Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability).

Exhibit 3-1. Social Vulnerability Index for **Jefferson** County by Census Tract: 2022

JEFFERSON COUNTY, WISCONSIN

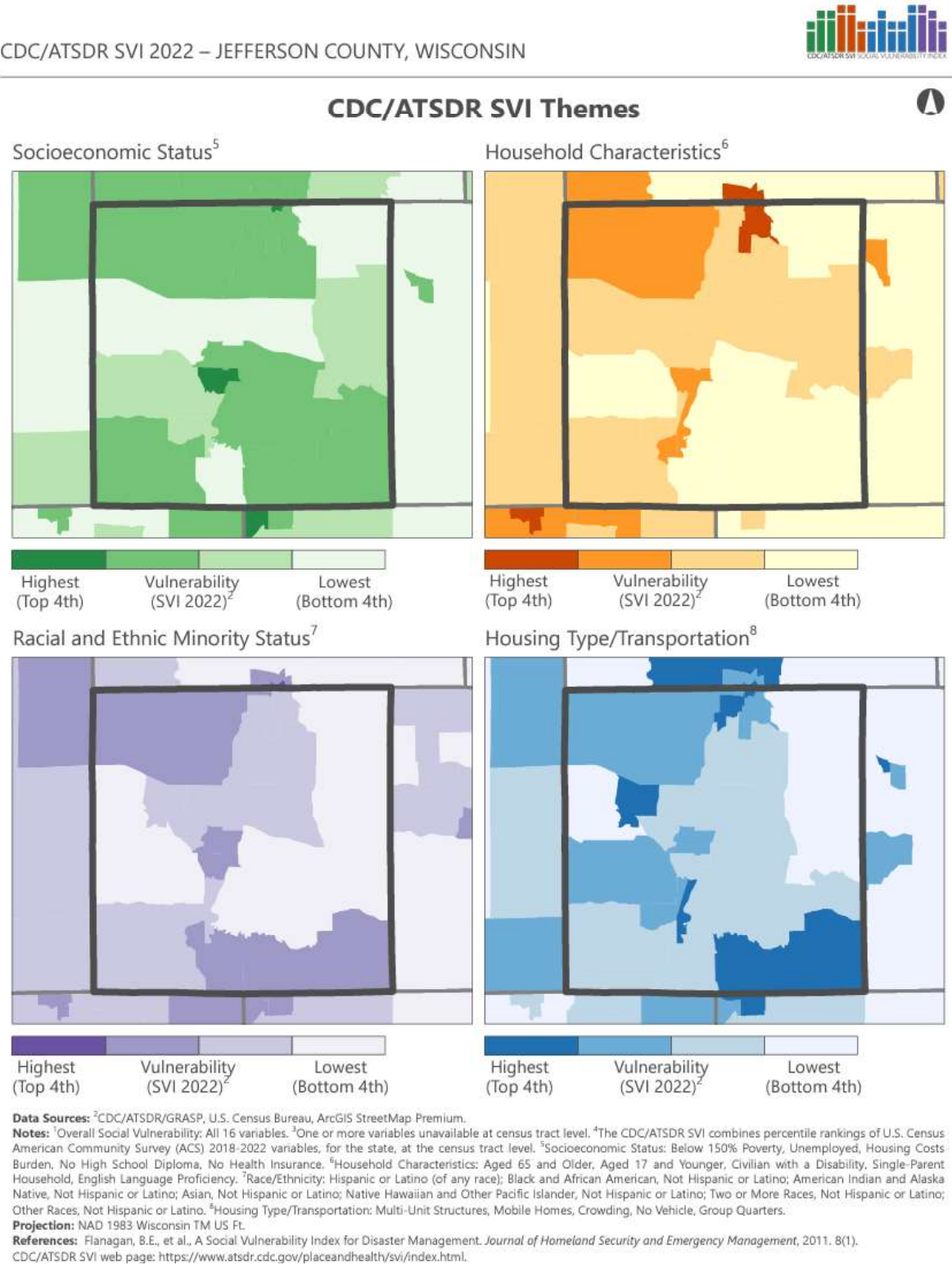


ATSDR Agency for Toxic Substances
and Disease Registry

GRASP

Geospatial Research, Analysis, and
Services Program

Exhibit 3-1. Social Vulnerability Index for **Jefferson County** by Census Tract: 2022



7. HOMELESSNESS

Homeless individuals are disproportionately affected by many types of natural disasters. Excessive heat and cold are especially hard on the elderly homeless. There is no accurate number of homeless individuals in Jefferson County. Local relief organizations provide assistance.

8. PEOPLE LIVING IN MANUFACTURED AND MOBILE HOMES

Manufactured housing and mobile homes are especially susceptible to damage from wind and other storms. As a result, people living in this type of housing are more vulnerable to injury and death when compared to those living in dwellings built with conventional framed construction.

In 2024, there were 21 mobile home parks in Jefferson County (*Appendix E*). Most of these were located in a city or village. As a proportion of the total housing stock, the city of Lake Mills had the highest proportion of mobile homes when compared to other municipalities in Jefferson County. None of the mobile parks have a storm shelter where people could go during wind-related storm events.

9. PEOPLE IN CAMPGROUNDS

People staying in campgrounds are even more vulnerable to wind storm events than those living in mobile home and manufactured homes. Although a significant number of campers stay in hard-sided campers or RVs, many stay in soft-sided tents. During a wind storm or tornado, they have little protection from flying debris and falling branches and trees.

In 2024, there were 21 campgrounds in Jefferson County (*Appendix E*). With the exception of two campgrounds, they were all privately operated. None of campgrounds have a storm shelter.

CRITICAL FACILITIES

1. CHAPTER OVERVIEW

This chapter focuses on those critical facilities in Jefferson County that need to be evaluated in terms of natural hazards mitigation planning. For the purpose of this plan, critical facilities are categorized into the following classification scheme:

- ◆ Type I A facility that provides a public service, which if damaged would significantly impair a local governmental response
- ◆ Type II A facility that provides a public service, but which if damaged would not significantly impair a local governmental response
- ◆ Type III A facility that can cause greater damage to the surrounding area if damaged by a natural hazard
- ◆ Type IV A facility that primarily housing special populations such as the infirm, children, elderly, or people with development disabilities

In all, there were 644 critical facilities in the county (*Table 4-1*). There were 185 Type I facilities, 136 Type II, 71 Type III, and 252 Type IV facilities.

As part of this project, the consultant created an Access™ database to manage basic information for critical facilities identified in this plan. Each facility is assigned to one or more parcels using the county PIN number to facilitate use in the county's geographic information system.

2. BRIDGES

The road network in the county consists of local, county, state, and federal roads. There are 51 locations where a federal, state, or county roadway crosses a waterbody. These range in size from a single culvert to a multi-span bridge. These locations have been identified because flooding may overtop the roadway or backup floodwaters. The locations are shown on *Map 11*. Bridges that cross another roadway or railroad tracks are not considered a critical facility from the perspective of natural hazards.



Chapter Contents

1. Chapter Overview
2. Bridges
3. Dams
4. Public-Use Airports
5. Communication Towers
6. Telephone Facilities
7. Electric Facilities
8. Natural Gas Facilities
9. Petroleum Pipeline Facilities
10. Public Water Facilities
11. Wastewater Facilities
12. Fire and Police Services
13. National Guard Facilities
14. Government Facilities
15. Schools
16. Special Care Facilities-Residential
17. Special Care Facilities-Nonresidential
18. Health Care Facilities
19. Facilities with Hazardous Materials
20. Vulnerable Housing
21. American Red Cross Shelters

In 2024, there were 645 critical facilities in Jefferson County.

Table 4-1. Critical Facilities by Type: 2024

Facility Type	Type I	Type II	Type III	Type IV
Facility with Hazardous Materials	-	-	42	-
Infrastructure				
Bridge	-	51	-	-
Dam (large & small)	-	-	25	-
Communication Tower	-	53	-	-
Electric Facility – Power Plant	4	-	-	-
Electric Facility – Substation	17	-	-	-
Natural Gas Facility	-	-	2	-
Natural Gas Pipeline	-	-	1	-
Petroleum Pipeline	-	-	1	-
Public-Use Airport	-	4	-	-
Telephone Facility	4	-	-	-
Utility Offices/Yard	6	-	-	-
Water Facility [1]	37	-	-	-
Wastewater Facility	12	-	-	-
Government Facility				
Community Center	-	7	-	-
Library	-	7	-	-
Municipal Garage	20	-	-	-
Municipal Office and Other	29	-	-	-
Post Office	-	10	-	-
Senior Center	-	4	-	-
Health Care Facility				
Health Care Clinic	29	-	-	-
Hospital	1	-	-	-
Public Safety Facility				
EMS Facility	6	-	-	-
Fire Station	9	-	-	-
National Guard Facility	2	-	-	-
Police Station	9	-	-	-
School				
K-12	-	-	-	54
Secondary	-	-	-	3
Special Care Facility - Residential				
Adult Family Home	-	-	-	53
Community Based Residential Facility	-	-	-	52
Nursing Home	-	-	-	3
Residential Care Apartment Complex	-	-	-	3
Special Care Facility - Nonresidential				
Adult Day Care	-	-	-	6
Group Day Care	-	-	-	36
Vulnerable Housing				
Mobile Home Park	-	-	-	21
Campground	-	-	-	21
Total	185	136	71	252

Notes: 1. Types of facilities included in this category include wells, towers, and treatment plants.

Key Terms in This Chapter

Adult day care – A place where adults receive care for less than 24 hours.

Adult family home (AFH) – A place where three or four adults who are not related to the operator reside and receive care, treatment, or services that are above the level of room and board and that may include up to seven hours per week of nursing care per resident.

Community based residential facility (CBRF) – A place where five or more adults reside who are not related to the operator, who do not require care above intermediate level nursing care, and who receive care, treatment, or services that are above the level of room and board, but includes no more than three hours of nursing care per week per resident.

Group day care – A place where a person for less than 24 hours a day provides care and supervision for 9 or more children who are not related to the provider.

Nursing home – A place where unrelated individuals live, who because of their mental or physical condition, are given 24-hour personal care and nursing care, but who do not require hospitalization.

Large dam – A dam that either (1) has a structural height of over 6 feet and impounds 50 acre-feet or more, or (2) has a height of 25 feet or more and impounds more than 15 acre-feet.

Power plant – A facility containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Public-use airport – An airport open for public use without prior permission, and without restrictions within the physical capacities of available facilities. A public-use airport may or may not be publicly owned.

Residential care apartment complex (RACA) – A multi-family building where five or more adults reside in independent dwelling units and also receive not more than 28 hours per week of supportive services, personal assistance, and nursing assistance.

Small dam – A dam not classified as a large dam.

Substation – An auxiliary power station where electrical current is converted, as from DC to AC, or where voltage is stepped up or down.

3. DAMS

According to a statewide inventory maintained by the DNR, there were 25 dams in the county. Over the years, seven dams have been decommissioned (*Table 4-2*). The Rock River and its tributaries has the highest number of dams followed by the Scuppernong River and its tributaries. *Map 11* shows the location of dams (large and small) within the county.

For the purposes of this plan, dams are classified as a Type III critical facility in that a dam failure would cause additional impacts primarily to downstream properties.

4. PUBLIC-USE AIRPORTS

There are four airports open for public use (*Map 12*).

5. COMMUNICATION TOWERS

Map 13 shows the location of 53 communication towers located in the county.

6. TELEPHONE FACILITIES

Four telephone facilities are maintained by telephone service providers (*Map 13*). They are located in the Cities of Jefferson, Lake Mills, and Watertown and the Village of Palmyra.

Table 4-2. Abandoned Dams: 2024

Name	Year	Jurisdiction
Ball Park Dam	2004	Waterloo, city
Golden Dam	Not known	Concord, town
Hebron	1996	Hebron, town
Hoopers Dam	2012	Milford, town
Slabtown	1992	Hebron, town
Oakland	1991	Oakland, town
Upper Waterloo	1995	Waterloo, city

Source: Wisconsin Department of Natural Resources

7. ELECTRIC FACILITIES

There are four electric power plants in the county (*Map 14*). One is located southeast of the City of Watertown in the Town of Watertown. The other is located in the City of Whitewater. Two hydroelectric power plants are located in the City of Watertown. Eighteen substations are located throughout the county primarily in or near urban areas (*Map 14*).

8. NATURAL GAS FACILITIES

Guardian Pipeline operates a high-pressure natural gas pipeline in the eastern part of the county (*Map 14*). There are two above-ground metering stations associated with the pipeline in the Town of Ixonia.

Table 4-3. Regulated Dams by Waterbody: 2024

Waterbody	Number
Ashipun River	0
Bark River	2
Crawfish River	0
Maunsha River	0
Rock River	7
Scuppernong River	4
Other	11
Total	24

9. PETROLEUM PIPELINE FACILITIES

Enbridge Energy operates a pipeline for transporting petroleum crude oil through the county. It is located to the south and west of the cities of Lake Mills and Fort Atkinson (*Map 14*). It carries oil from Superior to Chicago where it is processed. Gate valves are located along the pipeline in three locations. Because of concerns about security, the exact location of the pipeline and gate valves are not mapped in this plan.

10. PUBLIC WATER FACILITIES

Public water facilities inventoried for this plan include water wells, towers, reservoirs, and treatment plants. A total of 37 facilities have been identified and are shown on *Map 15*.

11. WASTEWATER FACILITIES

Wastewater treatment plants are located in each of the urban areas and in the more developed areas of the Towns of Ixonia and Sullivan (*Map 15*).

12. FIRE AND POLICE FACILITIES

Within Jefferson County, there were 9 police stations and 9 fire stations (*Map 16*). Generally, EMS services are housed with a fire station or police station. In two instances though, EMS services are housed in a stand-alone building.

13. NATIONAL GUARD FACILITIES

There are two National Guard facilities. One is in the City of Fort Atkinson and the other is in the City of Watertown (*Map 16*).

14. GOVERNMENT FACILITIES

Government facilities included in the inventory of critical facilities include a wide array of facilities including community centers, public libraries, municipal garages, municipal offices, post offices, and senior centers. *Map 17* shows the location of the 77 government facilities.

Table 4-4. Government Facilities: 2024

Town	Community Center	Public Library	Municipal Garage	Municipal Office and Other	Post Office	Senior Center
Aztalan	-	-	1	1	-	-
Cold Spring	-	-	-	1	-	-
Concord	1	-	2	1	-	-
Farmington	-	-	1	1	-	-
Hebron	-	-	-	1	-	-
Ixonia	-	-	2	1	1	-
Jefferson	-	-	-	0	1	-
Koshkonong	-	-	-	2	-	-
Lake Mills	-	-	-	-	-	-
Milford	-	-	1	1	-	-
Oakland	-	-	1	1	-	-
Palmyra	-	-	-	1	-	-
Sullivan	-	-	1	1	-	-
Sumner	-	-	-	1	-	-
Waterloo	-	-	-	1	-	-
Watertown	-	-	-	1	-	-
Village						
Cambridge [1]	-	-	-	-	-	-
Johnson Creek	1	1	2	1	1	-
Lac La Belle [1]	-	-	-	-	-	-
Palmyra	1	1	1	1	1	-
Sullivan	-	-	-	1	1	-
City						
Fort Atkinson	-	1	1	1	1	1
Jefferson	1	1	3	5	1	1
Lake Mills	1	1	1	2	1	1
Waterloo	1	1	2	1	1	-
Watertown [1]	1	1	1	2	1	1
Whitewater [1]	-	-	-	-	-	-
Total	7	7	20	29	10	4

Notes: 1. Municipality located in Jefferson County and another county

15. SCHOOLS

Within Jefferson County, there were 54 schools serving kindergarten through high school. There were three colleges. Maranatha Baptist Bible College is located in the City of Watertown, Madison Area Technical College—Fort Atkinson is in the City of Fort Atkinson, and UW—Whitewater is in Whitewater. School locations are shown on *Map 18*.

16. SPECIAL CARE FACILITIES - RESIDENTIAL

The term special care facility is a broad term for a type of housing arrangement where residents receive care or supervision from trained personnel. Special care facilities include nursing homes, residential care apartment complexes (RCACs), community based residential facilities (CBRFs), and adult family homes (AFHs) (*Map 19*).

There were three nursing homes in the county (*Table 4-5*).

In a RACA, people live in independent dwelling units complete with a kitchen, a bathroom, and sleeping and living areas. The management team provides supportive services such as general housekeeping and transportation to access community services and recreational activities. Personal services are also provided and may include help with daily activities such as dressing, eating, bathing, and grooming. Finally nursing services are available to help with health monitoring, medication administration, and medication management. There were 3 RACAs in Jefferson County.

CBRFs and AFHs are similar in terms of the level of care provided. One significant difference between them is the number of residents served in the facility. An AFH can serve up to four adults. A CBRF serves five or more adults. There were 53 AFHs in the county and 52 CBRFs (*Table 4-5*).

17. SPECIAL CARE FACILITIES – NONRESIDENTIAL

Nonresidential special care facilities include group day care centers and adult day care centers (*Map 20*). Group day care centers provide child care for nine or more children. Adult day care centers provide care to older adults who may live at home but need care during the day because the spouse or other primary care giver is not able to provide care. There were 36 group day care centers located throughout the county primarily in more urban areas and 6 adult day care centers (*Table 4-5*).

Table 4-5. Special Care Facilities: 2024

Town	Nursing Home	Residential Care Apartment Complex (RACA)	Community Based Residential Facility (CBRF)	Adult Family Home (AFH)	Group Day Care	Adult Care
Aztalan	-	-	-	-	-	-
Cold Spring	-	-	-	-	-	-
Concord	-	-	-	-	-	-
Farmington	-	-	-	2	-	-
Hebron	-	-	2	-	1	-
Ixonia	-	-	1	4	1	-
Jefferson	-	-	2	-	-	1
Koshkonong	-	-	2	10	-	-
Lake Mills	-	-	2	-	-	-
Milford	-	-	-	-	-	-
Oakland	-	-	1	-	-	-
Palmyra	-	-	-	-	-	-
Sullivan	-	-	-	1	-	-
Sumner	-	-	-	-	-	-
Waterloo	-	-	-	-	-	-
Watertown	-	-	2	-	-	-
Village						
Cambridge [1]	-	-	-	-	-	-
Johnson Creek	-	-	3	1	2	-
Lac La Belle [1]	-	-	-	-	-	--
Palmyra	-	-	-	-	1	-
Sullivan	-	-	-	-	1	-
City						
Fort Atkinson	1	1	13	22	10	2
Jefferson	1	-	15	5	6	2
Lake Mills	1	-	3	1	5	-
Waterloo	-	1	2	-	1	1
Watertown [1]	-	1	4	6	8	-
Whitewater [1]	-	-	-	1	-	-
Total	3	3	52	53	36	6

Source: Wisconsin Department of Health and Family Services

Notes: 1. Municipality located in Jefferson County and another county

18. HEALTH CARE FACILITIES

For the purpose of this plan, health care facilities are divided into two types: hospitals and health care centers. Health care centers provide subacute medical and include ambulatory surgery centers and health care clinics operated by a number of medical practitioners.

Fort Memorial Hospital in the City of Fort Atkinson is the only hospital in Jefferson County. Watertown Memorial Hospital is in the City of Watertown but is physically located in Dodge County. It serves an area with 60,000 residents.

A total of 15 health care centers were identified (*Map 21*).

19. FACILITIES WITH HAZARDOUS MATERIALS

There were 42 locations in the county where hazardous materials are stored, used, or manufactured (*Map 22*). For the purposes of this plan, a facility with hazardous materials is classified as a Type III critical facility because there could be damage to surrounding properties if a natural hazard damaged a facility with hazardous materials.

20. VULNERABLE HOUSING

Vulnerable housing, including campgrounds and mobile home parks, is described in Chapter 3.

21. AMERICAN RED CROSS SHELTERS

Jefferson County is served by the American Red Cross in Southeastern Wisconsin and the Badger and South Central Wisconsin Region. Designated shelters in the county are listed in *Appendix H*.

FLOODING

NATURAL HAZARDS ASSESSMENT

1. CHAPTER OVERVIEW

This chapter evaluates the natural hazards that have or could occur in the county. Initially, 15 hazards were identified. They were prioritized and two of the hazards were dropped from future consideration. The remaining 13 hazards are described in detail. After describing the nature of the hazard, the frequency of occurrence is documented along with its effect on critical facilities, various population groups, and economic sectors. Estimates of economic loss are included when there is enough empirical data to do so.



2. HAZARD IDENTIFICATION

As part of an initial screening process, the working group used the methodology developed by Wisconsin Emergency Management¹ to evaluate natural hazards in Jefferson County to determine which warrant the most attention. For each hazard, the members used a group consensus process to assign a numeric value to the 10 factors listed in *Table 5-1*.

Table 5-1. Natural Hazard Assessment Criteria

Factor	Description
Historical Hazard Frequency	Frequency of past occurrences
Anticipated Hazard Probability	Probability of the hazard occurring again
Historical Health and Public Safety	Degree of past hazard events causing injuries, sickness, and/or deaths
Residential Damage	Degree of past hazard events causing damages to homes
Business Damage	Degree of past hazard events causing damages to businesses
Public Costs	Amount of local, state, and federal funds expended on past hazard recovery activities
Magnitude of Population at Risk	Amount of the area's population still vulnerable to injury, sickness, and/or death
Magnitude of Homes at Risk	Amount of homes still vulnerable to damage
Magnitude of Businesses at Risk	Amount of businesses still vulnerable to damage or interruption of business trade
Magnitude of Public Infrastructure at Risk	Amount of infrastructure that is susceptible to damages

Source: *Resource Guide to All Hazards Mitigation Planning in Wisconsin*, 2023. Wisconsin Emergency Management

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- 1. Chapter Overview
- 2. Hazard Identification
- 3. History of Weather-Related Events
- 4. Presidential Declarations
- 5. Climate Change
- 6. Dam Failure
- 7. Flooding
- 8. Ice Shoves
- 9. Fog
- 10. Tornado / High Winds
- 11. Hailstorms
- 12. Thunderstorms
- 13. Winter Storms
- 14. Extreme Temperature
- 15. Drought
- 16. Wildland Fire
- 17. Summary of Risk by Jurisdiction
- 18. Summary of Damage Estimates

Table 5-2 shows the results of that exercise. The three highest ranked natural hazards are riverine flooding, tornadoes, and thunderstorms. Given the distance to a known fault line, earthquakes were judged to be of little concern. In addition, given the topography and soils in the county, land failures, including subsidence and mass movement, were judged to be of little concern. Both were removed from further consideration in this plan.

¹ *Resource Guide to All Hazards Mitigation Planning in Wisconsin*, 2023. Wisconsin Emergency Management

Table 5-2. Comparative Analysis of Natural Hazards; Jefferson County: 2025

	1	2	3	4	5	6	7	8	9	10	11
	Historical Hazard Frequency	Anticipate d Hazard Probability	Historical Health and Public Safety	Residentia l Damage	Business Damage	Public Costs	Magnitude of Population at Risk	Magnitude of Homes at Risk	Magnitude of Businesse s at Risk	Magnitude of Infrastruct ure at Risk	Overall Score
Natural Hazard	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	(1,2,3)	
Flooding – river	3	3	3	3	2	3	1	2	2	2	24
Tornado / high winds	2	2	2	3	3	2	2	2	2	2	22
Storms - thunderstorm	3	3	1	2	2	2	2	2	2	1	20
Storms – snow	3	3	3	1	1	2	3	1	2	1	20
Extreme temperature	2	2	3	1	1	1	2	2	1	1	16
Storms – hail	2	2	1	2	2	2	1	1	1	1	15
Drought	1	1	1	1	2	2	1	1	2	1	13
Fog	2	2	1	1	1	1	1	1	1	1	12
Wildland fire	1	1	1	1	1	2	1	1	1	2	12
Ice shoves	2	1	1	1	1	1	1	1	1	1	11
Dam failure	1	1	1	1	1	1	1	1	1	1	10
Flooding – storm water	1	1	1	1	1	1	1	1	1	1	10
Land failure	1	1	1	1	1	1	1	1	1	1	10
Earthquake	1	1	1	1	1	1	1	1	1	1	10

Notes: This matrix is based on a qualitative assessment and is intended to identify those hazards posing the greatest concern.

A low, medium, or high numerical rating of 1, 2, or 3, respectively, is assigned to each criterion and then the ratings for each hazard are totaled.

Column 1 refers to the frequency of past occurrences.

Column 2 refers to the probability of the hazard occurring again.

Column 3 refers to the degree of past hazard events causing injuries, sickness, and/or deaths.

Column 4 refers to the degree of past hazard events causing damages to homes.

Column 5 refers to the degree of past hazard events causing damages to businesses.

Column 6 refers to the amount of local, state, and federal funds expended on past hazard recovery activities.

Column 7 refers to the amount of the area's population still vulnerable to injury, sickness, and/or death.

Column 8 refers to the amount of homes still vulnerable to damage.

Column 9 refers to the amount of businesses still vulnerable to damage or interruption of business trade.

Column 10 refers to the amount of infrastructure that is susceptible to damages.

Column 11 is the overall score for the hazard.

In reviewing these natural hazards, it became evident that they are quite variable (*Table 5-3*). Some of the hazards are characteristically localized occurrences, while others could potentially cover all of Jefferson County and the surrounding region. Further, some hazards occur with little advance warning and others can be forecasted with some degree of accuracy. Some hazards have the potential to occur often, while others occur infrequently.

Table 5-3. Nature of Natural Hazards; Jefferson County

Natural Hazard	Extent	Amount of Advance Warning	Recurrence Interval
Wildland fire - 25 acres or more	Localized	None	100
Wildland fire - less than 25 acres	Localized	None	10
Dam Failure	Localized along affected stream corridors	None to weeks	[1]
Tornado/High Wind	Localized; generally, a linear path up to several miles long	Hours	1
Hail Storms	Localized; 1 square mile and larger	Hours	1
Flooding – Riverine	Localized in 100-year floodplain	One day	100 [2]
Flooding – Stormwater	Localized	One day	100 [2]
Ice Shoves	Localized; typically on west side of large lakes	One day	5
Fog	Localized to countywide	One day	0.5
Thunderstorm	Localized; 10 square miles and larger	One day	0.5
Snow Storms	Countywide	Several days	1
Extreme Temperature - heat	Countywide	Several days	10
Extreme Temperature – cold	Countywide	Several days	3
Drought - short-lived	Countywide	Several months	10
Drought - long-lived	Countywide	Year	75

Notes: 1. It is not possible to define a recurrence interval for this type of hazard
 2. Based on a 100-year flood

Table 5-4 lists each of the hazards and identifies whether they will have an impact on the critical facilities identified in this plan, noncritical buildings and structures, special populations, the general population, and broadly defined economic sectors.

Table 5-4. General Effects of Natural Hazards on Facilities, Population Groups, and Economic Sectors; Jefferson County: 2025

Critical Facility	Dam Failure	Flooding - Riverine	Stormwater	Ice Shoves	Fog	Tornado/High Wind	Hail Storms	Thunderstorm	Snow Storms	Extreme Temperature	Drought	Wildland Fire
Facility with Hazardous Materials												
Infrastructure	-	D	-	-	-	D	-	-	-	-	-	-
Bridge	D	D	-	-	-	-	-	-	-	-	-	-
Dam	D	D	-	-	-	-	-	-	-	-	-	-
Communication Tower	-	-	-	-	-	-	-	-	-	-	-	-
Electric Facility – Power Plant	-	-	-	-	-	D	-	-	-	-	-	-
Electric Facility – Substation	-	-	-	-	-	D	-	-	-	-	-	-
Natural Gas Facility	-	-	-	-	-	D	-	-	-	-	-	-
Petroleum Pipeline	-	-	-	-	-	-	-	-	-	-	-	-
Public-Use Airport	-	-	-	-	I	D	I	I	I	-	-	-
Telephone Facility	-	-	-	-	-	D	-	-	-	-	-	-
Utility Offices/Yard	-	-	-	-	-	D	-	-	-	-	-	-
Water Facility [1]	-	-	-	-	-	D	-	-	-	-	I	-
Wastewater Facility	-	-	-	-	-	D	-	-	-	-	-	-
Government Facility												
Community Center	-	-	-	-	-	D	D	-	-	-	-	-
Library	-	-	-	-	-	D	D	-	-	-	-	-
Municipal Garage	-	-	-	-	-	D	D	-	-	-	-	-
Municipal Office and Other	-	-	-	-	-	D	D	-	-	-	-	-
Post Office	-	-	-	-	-	D	D	-	-	-	-	-
Senior Center	-	-	-	-	-	D	D	-	-	-	-	-
Health Care Facility												
Health Care Clinic	-	-	-	-	-	D	D	-	-	-	-	-
Hospital	-	-	-	-	-	D	D	-	-	-	-	-
Public Safety Facility												
EMS Facility	-	-	-	-	-	D	D	-	-	-	-	-
Fire Station	-	-	-	-	-	D	D	-	-	-	-	-
National Guard Facility	-	-	-	-	-	D	D	-	-	-	-	-
Police Station	-	-	-	-	-	D	D	-	-	-	-	-
School												
K-12	-	-	-	-	-	D	D	-	-	-	-	-
Secondary	-	-	-	-	-	D	D	-	-	-	-	-
Special Care Facility - Residential												
Adult Family Home	-	-	-	-	-	D	D	-	-	-	-	-
Community Based Residential Facility	-	-	-	-	-	D	D	-	-	-	-	-
Nursing Home	-	-	-	-	-	D	D	-	-	-	-	-
Residential Care Apartment Complex	-	-	-	-	-	D	D	-	-	-	-	-
Special Care Facility - Nonresidential												
Adult Day Care	-	-	-	-	-	D	D	-	-	-	-	-
Group Day Care	-	-	-	-	-	D	D	-	-	-	-	-
Vulnerable Housing												
Mobile Home Park	-	-	-	-	-	D	D	-	-	-	-	-
Campground	-	-	-	-	-	D	D	-	-	-	-	-
Noncritical Buildings/Structures												
Population Groups												
General Public	-	-	-	-	-	I	-	-	-	I	I	-
Elderly and People with Disabilities	-	-	-	-	-	-	-	-	-	I	-	-
Homeless	-	-	-	-	-	-	-	D	D	D	-	-
Economic Sector												
Agriculture	-	D	D	-	-	-	D	I	-	I	D	-
Commercial	-	-	-	-	-	-	-	-	-	-	I	-
Industrial	-	-	-	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	I	-	-	-	-	-	-	-	-

Notes: 1. Types of facilities included in this category include wells, towers, and treatment plants

Key: - No or minimal effect, I – Indirect Effect, D – Direct Effect

3. HISTORY OF WEATHER-RELATED EVENTS

Table 5-5 presents a summary of documented weather-related events that have affected Jefferson County from 1950 through 2023 (See *Appendix I* for a list of all events). Strong winds associated with a thunderstorm occur with the highest frequency—on average 3.6 times a year. At about 1.8 times a year, hail is the second most common weather-related event. Winter storms are the third most common weather-related event. Flooding has a recurrence interval of 0.5 per year.

Out of all of the weather-related events, tornadoes have caused the highest number of deaths and injuries. Extreme cold caused 4 deaths. Lightening caused 7 injuries and 1 death. High winds caused 2 injuries, and thunderstorm winds caused 9 injuries. Floods and winter storms each caused one injury.

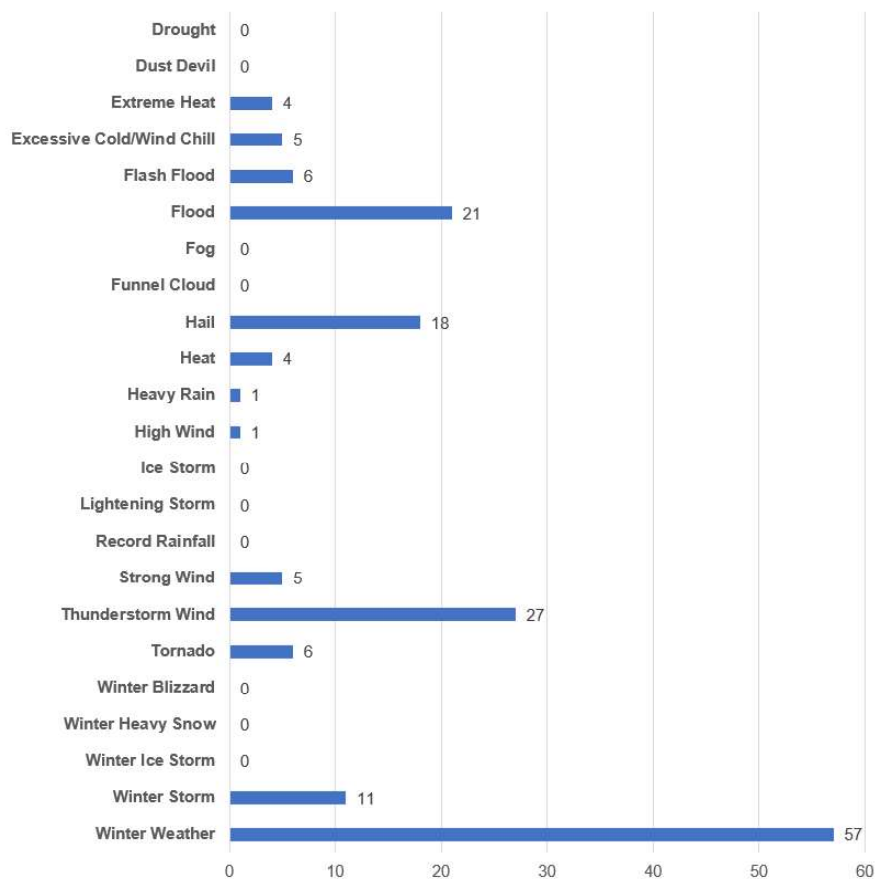
Flooding over the years has caused by far the most damage to property and crops (\$173.3 million). At \$13.53 million, hail caused the second highest amount of damage.

Table 5-5. Summary of Weather-Related Events Affecting Jefferson County: 1950 through 2023

Type of Event	Number of Events	Deaths	Injuries	Property Damage	Crop Damage
Drought	18	0	0	0	\$300,000
Dust Devil	1	0	0	0	0
Extreme Heat	7	0	0	0	0
Cold/Wind Chill	27	3	10	\$2,000	0
Extreme Cold/Wind Chill	4	0	0	0	0
Flood	35	0	0	\$3,659,000	\$28,519,000
Flood – Flash	15	0	1	\$104,380,000	\$36,775,000
Fog	72	0	0	\$10,000	0
Funnel Cloud	12	0	0	0	0
Hail	152	0	0	\$13,538,000	\$200,000
Heavy Rain	11	0	0	\$30,000	0
High Wind	14	0	2	\$1,113,000	\$200,000
Lightning	23	1	7	\$971,000	0
Strong Wind	39	0	0	\$169,000	0
Thunderstorm Winds	290	0	9	\$4,236,000	\$359,000
Tornado	45	3	36	\$11,148,000	\$21,000
Winter Storms	30	0	0	\$10,000	0
Winter Weather	146	0	0	\$50,000	0
Winter – Blizzard	6	0	0	0	0
Winter – Heavy Snow	5	0	0	0	0
Winter – Ice Storm	3	0	0	\$20,000	0
Total	955	7	65	\$139,336,000	\$66,374,000

Source: National Climatic Data Center database accessed on August 2024

<https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=55%2CWISCONSIN>

Exhibit 5-1. Summary of Weather-Related Events, Jefferson County: 2018 through 2023

Source: National Climatic Data Center database accessed August 2024
<https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=55%2CWISCONSIN>

4. PRESIDENTIAL DECLARATIONS

Since 1965, there have been 38 major disaster declarations issued for Wisconsin, 6 emergency declarations, and one fire management assistance declaration. Jefferson County was included in seven disaster declarations and two emergency declarations.

Major Disaster Declaration A major disaster declaration was issued for Jefferson County in 1973, 1976, 1991, 1993, 2004, 2007, 2008, and 2020 (*Table 5-6*). Most recently, Jefferson County was one of 30 counties under a disaster declaration (FEMA-1768-DR) for severe storms, tornadoes, and flooding. In that instance, both individual assistance and public assistance grants were made to help local communities respond to severe storms and flooding. Disaster declarations were issued in 2004 and 2007 for severe storms and flooding. In 1993, Jefferson County received \$1,453,507 in state and federal aid. However, the total flood damage suffered is believed to exceed several million dollars.

Emergency Declaration There have been four emergency declarations. In 2008, Jefferson County was one of 11 counties affected by a significant snow event. In 2005, an emergency declaration was issued for all 72 counties in the state as part of the nationwide response to Hurricane Katrina. In 1976, Jefferson County was one of 66 counties covered by an emergency declaration for drought. In 2020, an emergency declaration was issued for all 72 counties in the state as part of the nationwide response to Covid-19 Pandemic.

Fire Management Assistance Declaration No fire management assistance declarations have been issued for Jefferson County (and it is unlikely that one would be issued given the nature of that category of declaration).

Table 5-6. Presidential Disaster Declarations, Jefferson County: 1965 through 2024

Major Disaster	Year	Description	Type of Assistance	
			Public	Individual
DR-376-WI	1973	Severe storms, flooding	Yes	Yes
DR-496-WI	1976	Severe storms, icing, wind, flooding	Yes	Yes
DR-912-DR	1991	Hail, severe storms	Yes	No
DR-994-WI	1993	Severe storms, tornadoes, flooding	Yes	Yes
DR-1526-WI	2004	Severe storms, flooding	Yes	Yes
DR-1768-WI	2008	Severe storms, tornadoes, flooding	Yes	Yes
DR-4520-WI	2020	Covid-19 Pandemic	Yes	Yes
Emergency Declaration	Year	Description		
FEMA-3249-EM	2005	Hurricane Katrina evacuation	Yes	No
FEMA-3454-EM	2020	Covid-19	Yes	No
Fire Management Assistance	Year	Description		
None	-	-	-	-

Source: Federal Emergency Management Agency <https://www.fema.gov/disaster/declarations> accessed December 2024

Denied Applications for Presidential Disaster Declaration On two occasions, the county's application for a presidential disaster declaration has been denied (*Table 5-7*).

Table 5-7. Denied Applications for Presidential Disaster Declarations, Jefferson County: 1965 through 2024

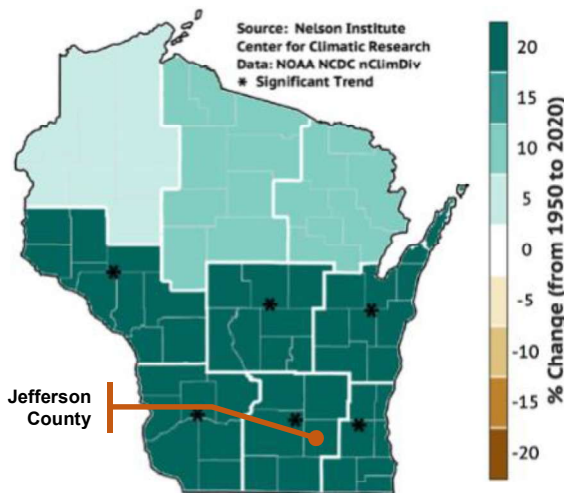
Year	Number of Counties Included	Description
1977	6	Tornado
1996	15	Flooding

Source: Wisconsin Emergency Management and Jefferson County Emergency Management

5. CLIMATE CHANGE

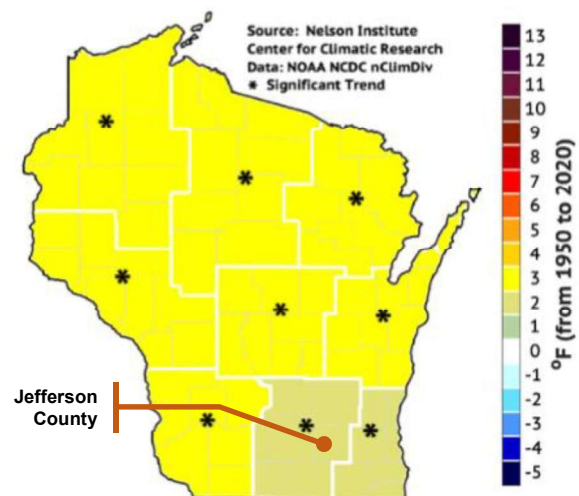
Historical Change To better understand the nature of the changing climate in our state, the Wisconsin Initiative on Climate Change Impacts (WICCI) released an initial report in 2011 and an update in 2023. As documented, Wisconsin's climate has been undergoing significant changes. Historically, precipitation has increased statewide from 1950 to 2023 (*Exhibit 5-2*). The southern part of the state saw the largest increase. Jefferson County experienced an increase of 20 percent in precipitation. Temperatures over the same period also increased statewide. Jefferson County experienced an average increase of 2 °F (*Exhibit 5-3*).

Exhibit 5-2. Historical Change in Annual Precipitation from 1950 to 2020



Source: Wisconsin's changing climate: Impacts and solutions for a warmer climate. 2021. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

Exhibit 5-3. Historical Change in Annual Temperature from 1950 to 2020

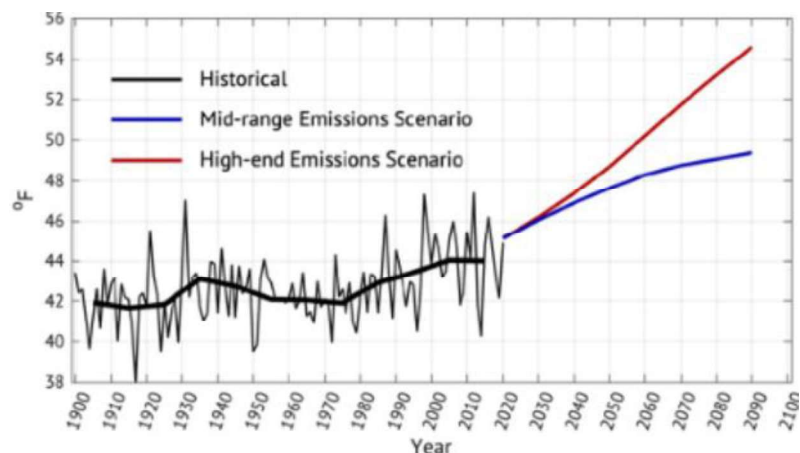


Source: Wisconsin's changing climate: Impacts and solutions for a warmer climate. 2021. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

Future Conditions Looking ahead, WICCI analyzed Wisconsin's projected climate under two different future climate scenarios, based on a mid-range and high-end estimate of future greenhouse gas emissions. For both scenarios, the average temperatures in Wisconsin will be about four to six degrees warmer compared to our baseline climate conditions at the end of the 20th century (*Exhibit 5-4*). Further into the future, the emissions scenarios diverge dramatically and show a difference of six degrees between each other by the late 21st century.

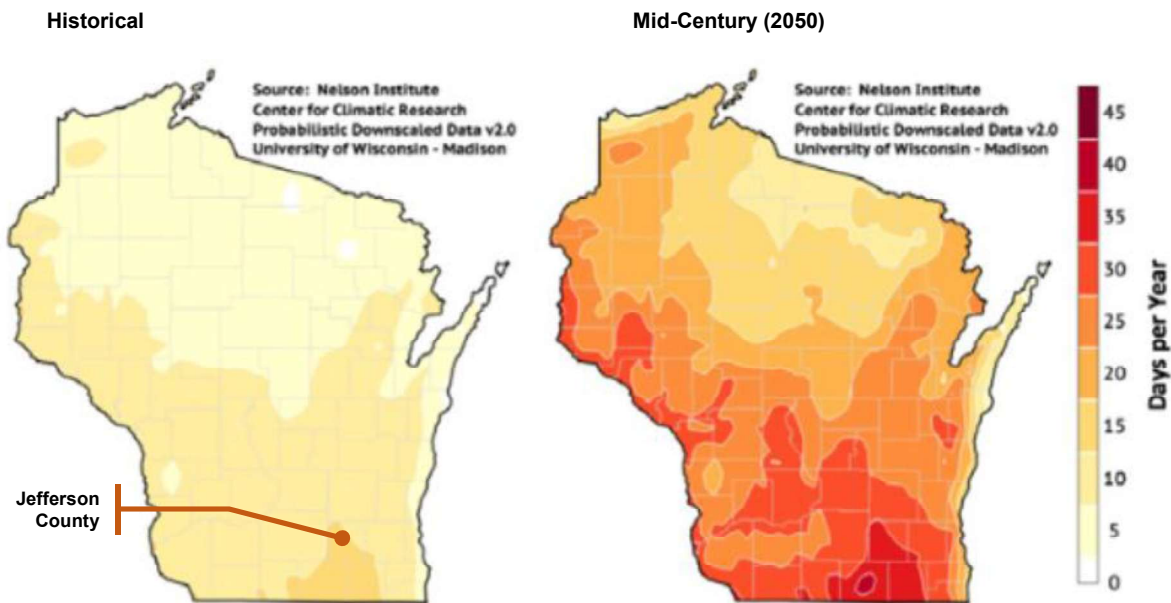
While seemingly modest, an increase of a single degree will yield significant impacts on the frequency and magnitude of many extreme weather events. (*Exhibit 5-5*).

Exhibit 5-4. Historical Average Temperature: Historical (1900-2020) and Projected (2020-2090)



Source: Wisconsin's changing climate: Impacts and solutions for a warmer climate. 2021. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

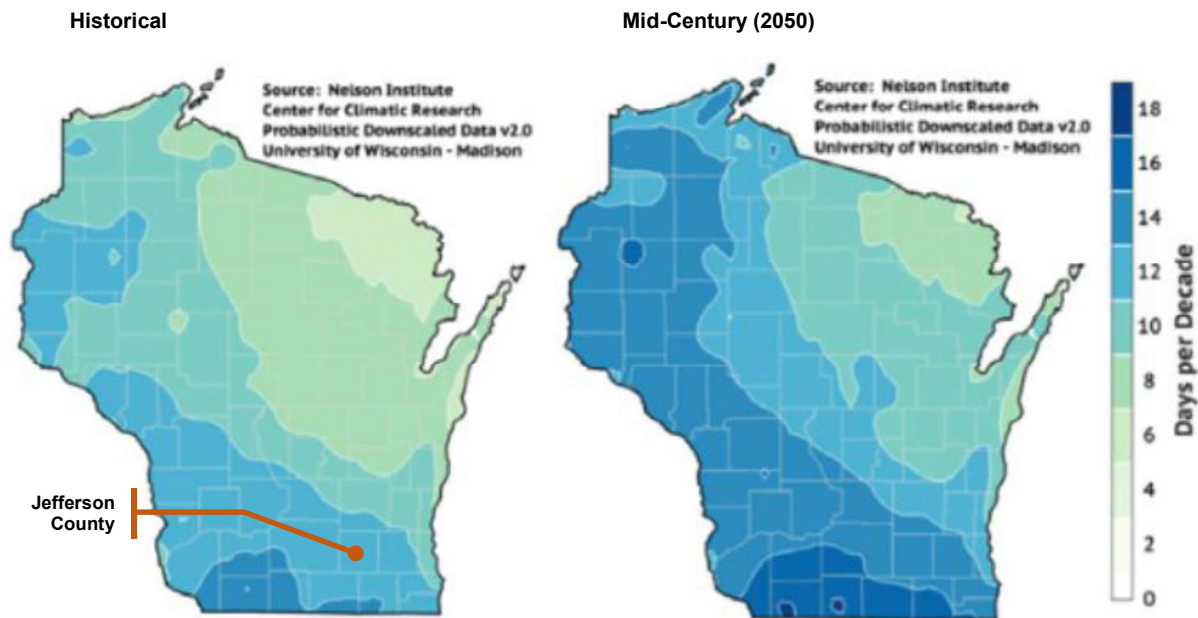
Exhibit 5-5. Number of Extremely Hot Days per Year



Source: Wisconsin's changing climate: Impacts and solutions for a warmer climate. 2021. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

The report suggests Wisconsin will likely to continue to trend toward wetter conditions, especially during winter, spring, and fall (*Exhibit 5-6*). Extreme rain events will also increase significantly. Extreme precipitation events are likely to remain most common in the southern and western parts of the state.

Exhibit 5-6. Frequency of Extreme Rainfall (2 or more inches of precipitation in 24hr period)



Source: Wisconsin's changing climate: Impacts and solutions for a warmer climate. 2021. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin.

6. DAM FAILURE

PROFILE

A dam failure involves the uncontrolled release of impounded water when the structure fails. A dam can fail because of excessive rainfall or melting snow, poor construction or maintenance, flood damage, earthquake activity, weakening caused by burrowing animals, vegetation, surface erosion, vandalism, or a combination of factors. When a dam does fail, the impounded water flows unimpeded and, depending on what development is located downstream, can potentially cause significant property damage and loss of life.

HISTORY OF PAST OCCURRENCES

According to the Wisconsin Department of Natural Resources, there are about 3,700 dams in the state. Between 1990 and 1995, 75 dam failures were documented, many of which resulting from the flooding that occurred statewide in 1993. In Jefferson County, there are no documented dam failures.

VULNERABILITY ASSESSMENT

There were 31 dams in the county according to the Department of Natural Resources (DNR) (*Table 5-8*). Nineteen are classified as large and 6 as small. A failure of a small dam would likely not cause damage. Given the amount of water impounded behind a large dam, dam failure is a concern in varying degrees.

Table 5-8. Dams; Jefferson County: 2024

Status	Large	Small	Unknown
Active	11	6	6
Removed	7	0	0
Total	19	6	6

Source: Wisconsin Department of Natural Resources, data accessed December 2024

Dams are also classified based on the threat to downstream property if a dam failed. A dam rated as a high hazard indicates that a failure would most probably result in the loss of life. A significant hazard indicates that a dam failure could result in appreciable property damage. A low hazard rating is assigned to dams where a dam failure would result in only minimal property damage and where loss of life is unlikely. Of the 11 large dams, 5 are classified as high and 6 are classified as low (*Table 5-9*).

Section NR 335.07 of the Wisconsin Administrative Code mandates that owners of a large dam or a dam that poses a threat to life or property must prepare an emergency action plan (EAP). An EAP is a document that identifies potential emergency conditions at a dam and procedures to be followed to eliminate the loss of life and minimize downstream property damage. When drafting an EAP, the dam operator must consult with the local units of government that lie downstream of the dam as well as the county emergency management department. According to the DNR inventory, an EAP has not been prepared for one of the 11 large dams (*Table 5-9*). Based on historical data and the lack of multiple large, high-risk dams in the county, it is unlikely that a catastrophic dam failure, resulting in the loss of life and property, will occur in Jefferson County in the future.

Table 5-9. Large Dams; Jefferson County: 2024

Official Name	DNR ID	Jurisdiction	Ownership	Stream Name	Hazard Rating Code [1]	Status of Emergency Action Plan
Lower Watertown Dam	141	Watertown, city	Private	Rock River	High	2019
Upper Watertown Dam	142	Watertown, city	Private	Rock River	Low	2019
Spring Lake Dam	144	Palmyra, village	Municipality	Scuppernong River	High	2016
Blue Springs Lake	145	Palmyra, town	Lake District	Spring Creek	High	2015
Rome Dam	259	Sullivan, town	Municipality	Bark River	High	2014
Carlin	260	Sullivan, town	Private	Scuppernong River	Low	2011
Jefferson Dam	588	Jefferson, city	Private	Rock River	Low	2002
Lake Mills Dam	1245	Lake Mills, city	Private	Rock Creek	High	2018
Fin-N-Feather Club	2923	Hebron, town	Private	Trib. Of Mud Creek	Low	-
Jefferson Marsh WRP – North	5735	Hebron, town	DNR	Unknown	Low	2022
Jefferson Marsh WRP – South	6066	Hebron, town	DNR	Deer Creek	Low	2022

Source: Wisconsin Department of Natural Resources

Key: 1. High - loss of life likely should dam fail; Significant - significant property damage is likely; Low - neither loss of life or property will occur

Effects on Facilities – Because a dam break analysis has not been conducted on any of the dams in Jefferson County, it is not possible to determine what effects would occur. It is believed that much of the released waters would be contained within the 100-year floodplain below the dam failure. Except for wastewater facilities, there are no critical facilities in the 100-year floodplain.

Effects on Population Groups – A dam failure would not disproportionately affect the elderly, people with disabilities, or the homeless.

Effects on Economic Sectors – Although a dam failure could damage individual structures, it likely would not affect the overall economy of the area or any particular economic sector.

Climate change can be expected to lead to more frequent, higher intensity tornados. This will affect more people over a wider area of the County, and the resulting damage will be higher.

7. FLOODING

PROFILE

Riverine flooding occurs when a stream, lake, or other body of water overflows its banks onto normally dry land. **Stormwater** flooding occurs when stormwater pools in normally dry depressions in the land. Flooding can develop slowly over a period of days, but can also occur within a few hours in some watersheds with narrow stream channels.

HISTORY OF PAST OCCURRENCES

Jefferson County has experienced several major floods in the last century. Documentation of historic flooding is available from the following sources:

- ◆ Presidential disaster declarations
- ◆ Insurance claim records from the Federal Flood Insurance Program
- ◆ Records from U. S. Geological Survey stream gage stations
- ◆ Damage assessment for 2004 flood
- ◆ Anecdotal information from local community leaders

Presidential Disaster Declarations Since 1965, there have been seven presidential declarations in Jefferson County, five of which were flood related. Presidential disaster declarations were issued in Jefferson County for flooding in 1973, 1976, 1993, 2004, and 2008. On July 2, 1993 a declaration was issued for the June 1993 floods. As part of the declaration, federal and state grant dollars, \$1,235,097.96 and \$218,409.11, respectively, were awarded to local units of government to assist with the flood recovery through the Disaster Recover Aids Program.

Historical National Flood Insurance Program Claims In 1968, Congress adopted the National Flood Insurance Act, which among other things created the National Flood Insurance Program (NFIP). This Federal program allows property owners to purchase flood insurance if their community participates in the program. In fact, certain homeowners must purchase flood insurance when their property is located in the regulatory floodplain. All county residents are eligible to purchase flood insurance because all of the jurisdictions participate in the program.

Paid claims for flood damage under the NFIP are good indicators of the number of properties that are located in floodplains. From 1978 through 2023, there were 355 insurance claims with a payout of more than \$10.47 million.

Table 5-10. National Flood Insurance Program Claims; Jefferson County; 1980 - 2023

Year	Number of Claims	Claim Payments
1980-1981	0	0
1982	11	0
1983-1984	0	0
1985	3	0
1986	20	0
1987-1992	0	0
1993	51	549,488
1994-1995	0	0
1996	9	0
1997	0	0
1998	1	0
1999	0	0
2000	7	0
2001-2003	0	0
2004	31	206,316
2005-2006	0	0
2007	5	0
2008	185	8,979,985
2009	4	0
2010	3	0
2011-2012	0	0
2013	16	220,393
2014-2015	0	0
2016	1	0
2017	0	0
2018	3	517,603
2019	3	0
2020	0	0
2021	1	0
2022	1	0
2023	0	0
Total	355	\$10,473,785

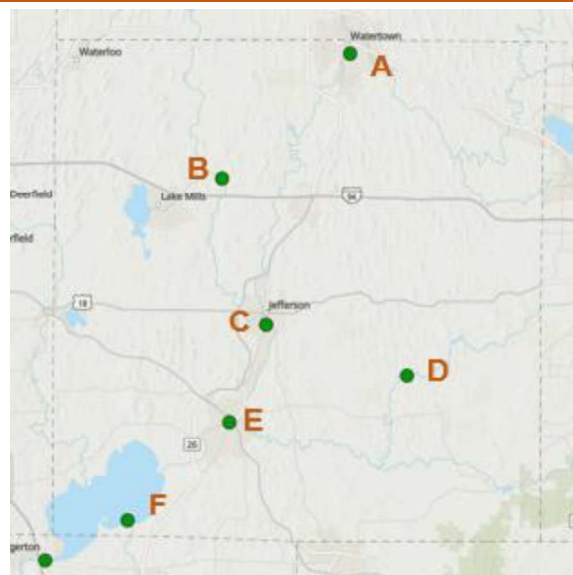
Source: National Flood Insurance Program website

Repetitive Loss Properties A property for which two or more National Flood Insurance Program losses of at least \$1,000 each have been paid within any 10-year rolling period since 1978 is referred to as a repetitive loss property. According to the National Flood Insurance Program, there were 28 repetitive loss properties in Jefferson County in 2018; 26 were residential and 2 were nonresidential.

Requirements of the program stipulate that individual policy information may not be disclosed, including addresses of such properties.

Records from U. S. Geological Survey Stream Gage Stations – A summary of the annual mean stream flow, highest daily mean, instantaneous peak, percent of exceedance, and predicted flood flows for each gaging station is presented in *Table 5-11*. According to the flood frequencies estimated by the US Geological Service (Report 91-4128), the 1959 flood may have exceeded a 100-year event on the Crawfish River at Milford. The Rock River in 1979 was approximately a 50-year event at Watertown and Indianford. The largest event on the Bark River at Rome was between a 10- and 50-year flood. While Jefferson County has experienced several major floods—based on stream gage records—only one has been a 100-year flood event, and only on one river. Based on the available information, if a 100-year flood would occur in the county, potential damages could dramatically exceed those of past floods without appropriate mitigation measures.

Exhibit 5-7. River Gauges: Jefferson County: 2024



Key:

- A** Rock River at Watertown
- B** Crawfish River at Milford
- C** Rock River at Jefferson
- D** Bark River at Rome
- E** Rock River at Fort Atkinson
- F** Rock River at Lake Koshkonong

Source: National Oceanic and Atmospheric Administration

Table 5-11. Measured and Predicted Stream Flows at USGS Stream Gaging Stations, Jefferson County and Vicinity

	Rock River at Watertown	Crawfish River at Milford	Bark River at Rome	Rock River at Indianford	Rock River at Fort Atkinson
Gage Number	0542550	05426000	05426250	05427570	05427085
Time Period	1931-2005	1931-2005	1972-2005	1975-2005	1999-2005
Drainage Area (square miles)	969	762	122	2,630	2,240
Annual Mean Flow (cfs)	503	418	88.9	1,807	1,479
10% Exceeds (cfs)	1,330	1,090	158	3,820	3,180
50% Exceeds (cfs)	262	194	76	1,320	960
90% Exceeds (cfs)	39	39	32	369	306
Highest Daily Mean (cfs) (year)	1,186 (1993)	6,130 (1959)	476 (1993)	11,700 (1979)	2,294 (2004)
Instantaneous Peak Flow (cfs) (year)	5,080 (1979)	6,140 (1959)	467 (1993)	11,900 (1979)	-
Predicted 10-Year Flow (cfs)	4,100 ¹ 3,620 ²	4,200 ¹ 3,970 ²	425 ²	9,170 ²	-
Predicted 50-Year Flow (cfs)	6,100 ¹ 5,010 ²	5,700 ¹ 5,230 ²	545 ²	12,200 ²	-
Predicted 100-Year Flow (cfs)	7,100 ¹ 5,590 ²	9,500 ¹ 5,720 ²	590 ²	13,400 ²	-
Predicted 500-Year Flow (cfs)	10,000 ¹ 6,930 ²	10,000 ¹ 6,730 ²	695 ²	16,300 ²	-

Source: U. S. Geological Survey Water Resources of Wisconsin Water Year 1999 (WDR-WI-05-1)

¹ Source: Flood Insurance Study for Jefferson County, FEMA 2005

² Source: USGS Water Resource Report 91-4128 "Flood Frequency Characteristics of Wisconsin Streams"

2004 Flood Damage Assessment – During the flooding of 2004, staff with Jefferson County completed a damage report following FEMA guidelines using the Residential Substantial Damage Estimator (RSDE). *Table 5-12* shows the results. Of the 40 residential structures with some damage, 7 experienced damage in excess of 50 percent or substantial damage.

Seven in 10 of the damaged residential structures are located in the town of Sumner. The town of Koshkonong had the second highest number of damaged structures.

Major Floods – Severe flooding has occurred in 1929, 1959, 1973, 1976, 1979, 1982, 1986, 1993, 1994, 1996, 1997, 2000, 2004, 2006, 2007, 2008, and 2010. The worst recorded flood was in 1929. At the Fort Atkinson stream gage, the peak level in 1929 was measured at 784.3, which is approximately 6 feet above flood stage. During this time, there were fewer residential properties in the unincorporated sections along the river. The majority of the structures on Blackhawk Island and the North Shore were constructed in the late 1940s and early 1950s. In 1959 and 1979, the flood waters were approximately 4 to 5 feet above the river bank and all residents along the river were evacuated.

Typically, the Rock River experiences high water during the spring as a result of winter melt. In 1986, the highest level recorded was in October, measuring about one foot below the 1959 spring flood. Some degree of high water is evident nearly every year along the Rock River at Blackhawk Island.

1993 Flood – In 1993, floodwater was within 10 inches of the all-time watermark set in 1929 at Blackhawk Island. All of the residents were evacuated for seven or more weeks beginning in the spring. Residents were encouraged to drink bottled water because many of the private wells were submerged and a number of local roadways were damaged because they remained under water for an extended period of time. A restaurant and a boat marina were damaged. The north shore area was also flooded, although resulting damage was not severe.

The Rock River in Fort Atkinson rose to its highest July level since records were first kept in 1933. According to the Director of Public Works, additional water inflow and infiltration caused the community's wastewater treatment plant to operate above hydraulic capacity. Many storm sewer inlets were damaged and needed to be repaired.

In July, the Department of Natural Resources observed more than a dozen sites underwater and inaccessible at the River Bend Resort/Campground.

Most of the development along the Rock River in the city of Jefferson is located outside of the 100-year floodplain.

Most of the damage associated with the flooding was related to stormwater backups. The Dairy Queen, one block away from the river, was flooded by storm water, while properties closer to the river had no damage. Many residential structures experienced basement flooding. A warehouse and distribution operation, known at that time as Doscocil Foods, was effectively protected by sandbags and remained open.

According to Capt. Dick Gallop of the Watertown Fire Department, that community experienced a number of flooded basements, but no significant damage to first floor living spaces in residential neighborhoods.

Tab 5-12. Flood Damages from the 2004 Flood; Unincorporated Jefferson County

Jurisdiction	Percent Damage
Sumner, Town	1167.2
Sumner, Town	1042
Watertown, Town	240.9
Ixonia, Town	106.3
Sumner, Town	101.7
Sumner, Town	71.4
Sumner, Town	53.7
Watertown, Town	47.2
Koshkonong, Town	46.6
Sumner, Town	46.1
Sumner, Town	45.2
Sumner, Town	44.9
Koshkonong, Town	44.4
Sumner, Town	42.4
Sumner, Town	40.2
Sumner, Town	36.4
Sumner, Town	36.4
Sumner, Town	33.9
Sumner, Town	33.4
Sumner, Town	29.2
Sumner, Town	28.5
Koshkonong, Town	27.5
Sumner, Town	26.4
Watertown, Town	24.8
Sumner, Town	24.1
Koshkonong, Town	23.9
Sumner, Town	23.1
Koshkonong, Town	21.4
Sumner, Town	18.5
Sumner, Town	15.6
Sumner, Town	12.6
Sumner, Town	12.6
Sumner, Town	11.2
Sumner, Town	11.1
Sumner, Town	10.2
Sumner, Town	8.4
Koshkonong, Town	7.8
Sumner, Town	5.2
Jefferson, Town	5.1
Ixonia, Town	1.8

Source: Jefferson County

2007 Flood – Heavy rains, beginning on August 18, 2007, and lasting for seven days, caused significant property damage in 2007. On August 26, 2007, Jefferson County was added to a disaster declaration that was ultimately issued for 14 counties in southern Wisconsin. On September 17, 2007, a Mobile Disaster Recovery Center was set up at the Jefferson County fairgrounds. Federal, state, and local officials conducted a Preliminary Damage Assessment of those applying for individual assistance. As of October 11, 2007, 104 applications were received from residents. A total of \$115,442.42 was awarded for housing assistance and \$3,021.32 for other needs assistance. Most of the damage resulted from sewer backups and stormwater in basements. In a few instances, basement walls were damaged from the saturated soils. The Lake Mills area suffered the most damage as reported to Jefferson County Emergency Management (*Table 5-13*).

2008 Flood – In June 2008, heavy rain caused severe flooding across southern Wisconsin, including portions of Jefferson County. The U.S. Geological Survey conducted a research study to generate flood-peak inundation maps and water surface profiles for nine communities in the study area, three of which are located in Jefferson County.² These include the Rock River at the city of Jefferson (*Exhibit 5-8*); Crawfish River at Milford, an unincorporated community (*Exhibit 5-9*); and Rock River at the city of Fort Atkinson (*Exhibit 5-10*).

Flooding on Blackhawk Island, 2004



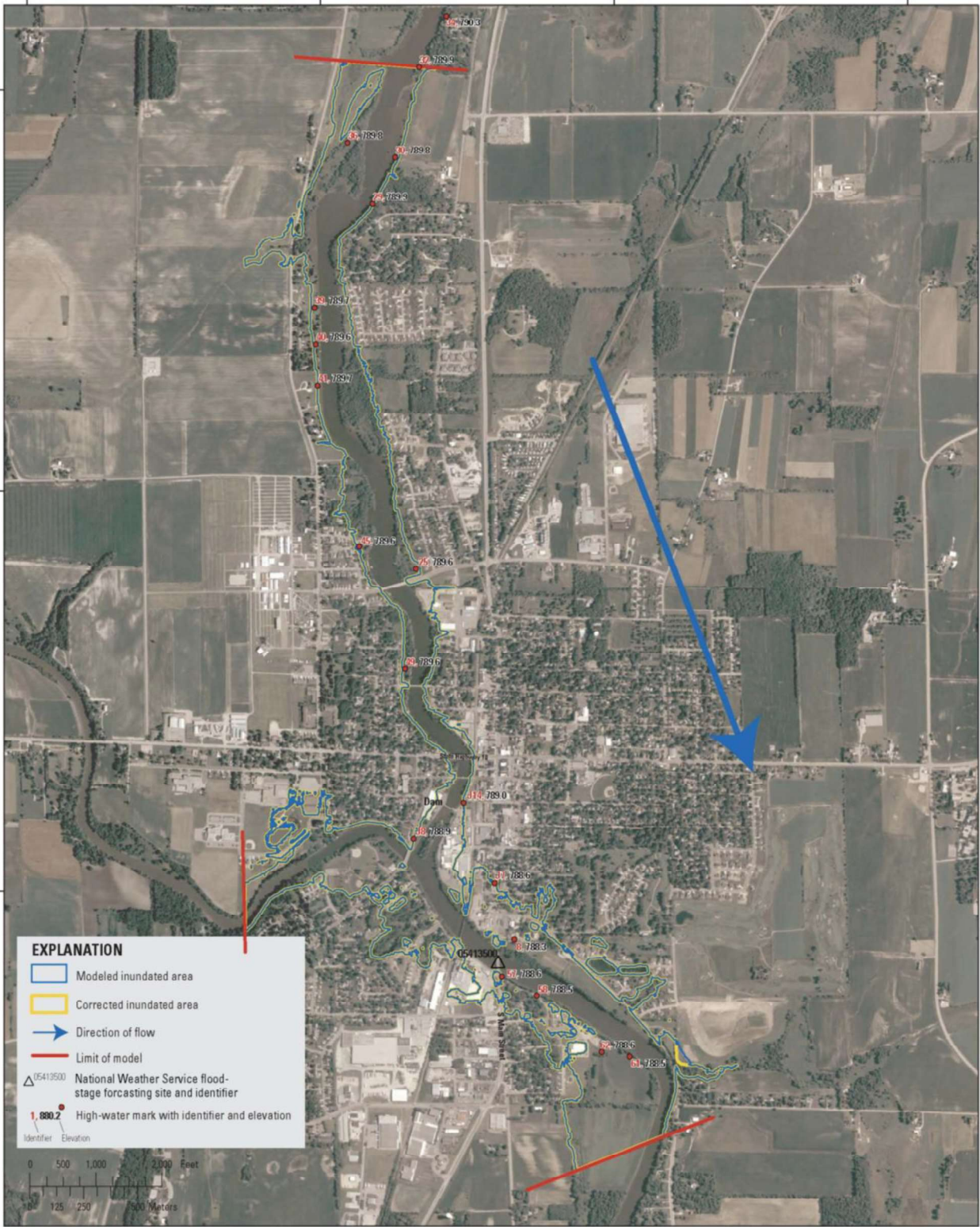
Table 5-13. Damage Reports for Flooding, August 2007

Town	Damage Reports
Aztalan	2
Hebron	1
Jefferson	2
Lake Mills	23
Milford	4
Oakland	1
Sullivan	1
Waterloo	1
Watertown	1
City	
Fort Atkinson	1
Jefferson	18
Lake Mills	26
Watertown [1]	8
Jefferson County	53

Source: Jefferson County Emergency Management

² *Flood of June 2008 in Southern Wisconsin*, 2008, Faith A. Fitzpatrick, et al; U.S. Geological Survey, U.S. Department of the Interior; Scientific Investigations Report 2008-5235

Exhibit 5-8. 2008 Flood Inundation Map; City of Jefferson, Wisconsin



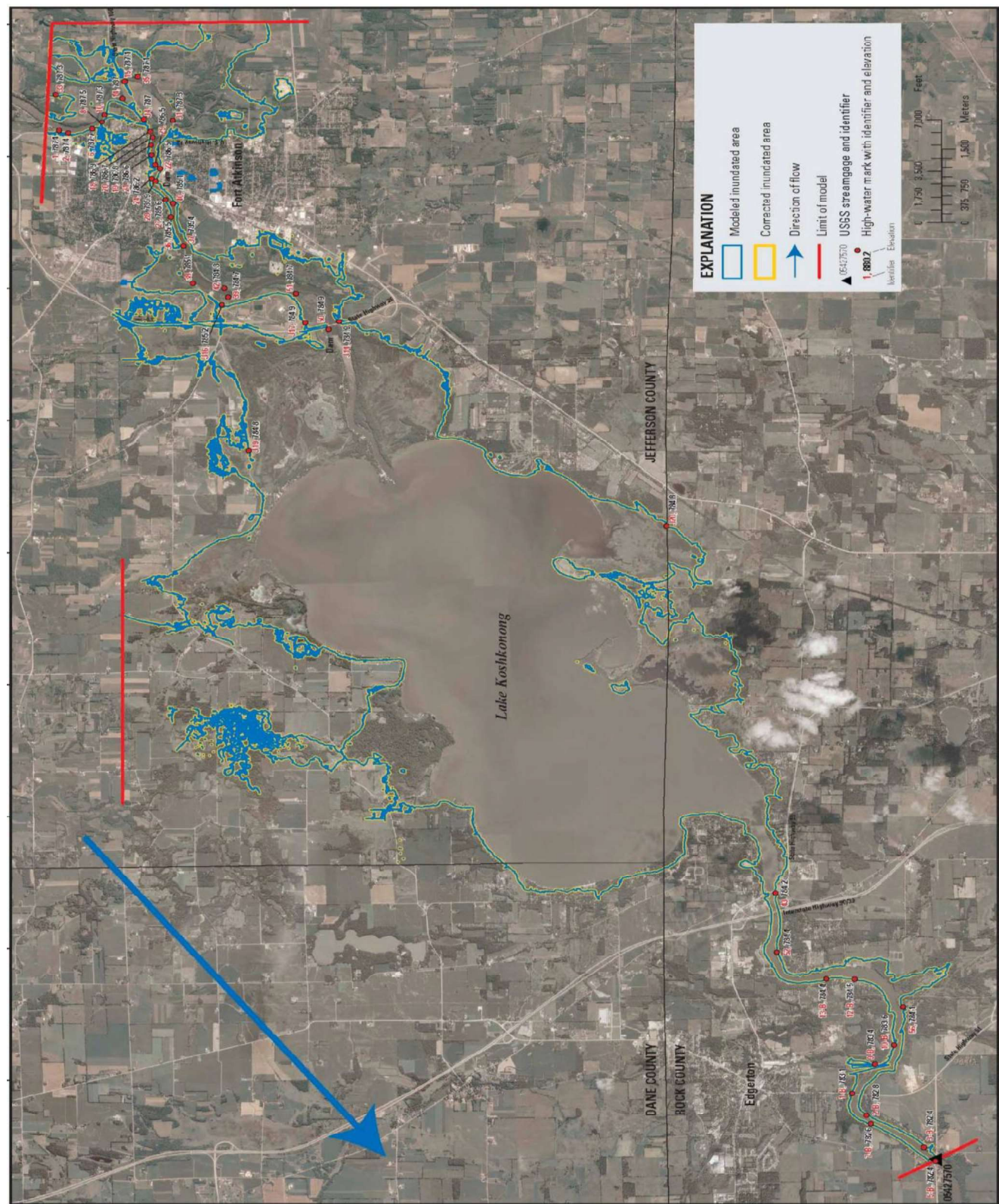
Source: *Flood of June 2008 in Southern Wisconsin*, 2008, Faith A. Fitzpatrick, et al; U.S. Geological Survey, U.S. Department of the Interior; Scientific Investigations Report 2008-5235

Exhibit 5-9. 2008 Flood Inundation Map; Milford (Unincorporated), Wisconsin



Source: *Flood of June 2008 in Southern Wisconsin*, 2008, Faith A. Fitzpatrick, et al; U.S. Geological Survey, U.S. Department of the Interior; Scientific Investigations Report 2008-5235

Exhibit 5-10. 2008 Flood Inundation Map; City of Fort Atkinson, Wisconsin



Source: *Flood of June 2008 in Southern Wisconsin*, 2008, Faith A. Fitzpatrick, et al; U.S. Geological Survey, U.S. Department of the Interior; Scientific Investigations Report 2008-5235

Throughout the region, there were evacuations and road closures and prolonged, extensive damage and losses associated with agriculture, businesses, housing, public health and human needs, and infrastructure, and transportation.

To further document some of these impacts, the Jefferson County Economic Development Consortium conducted a survey of those in the business community.³ Over 200 employees were laid off according to the survey; with a significant number of individuals not returning to their jobs. The survey estimated a loss of \$4.7 million dollars related to physical damage, production and order loss, and infrastructure.

This flood event caused the first full activation of the Jefferson County Emergency Operations Center (EOC) on June 12, 2008 with partial activation on June 23, 2008. There were 21 full road closures, 18 partial closures (including 5 bridges), and partial closure of I-94 due to concerns about the stability of the bridge over the Rock and Crawfish rivers. Multiple families were evacuated throughout the county.

Presidential Disaster Declaration (FEMA-1768-DR) was granted for individual and public assistance. Over \$4 million in SBA loans were received in Jefferson County, over \$3 million were received for Individual and household programs, over \$3 million were received for housing assistance, and over \$400,000 for other needs. In total, more than \$10 million was received.

VULNERABILITY ASSESSMENT – 2006

Effects on Facilities – The consultant team identified 843 buildings (in 2006) within the 100-year floodplain (*Table 5-14*). Using the methodology described in *Appendix H*, it is estimated that if all waterbodies in the county experienced 100-year flood levels during the same time period, flood damage to buildings could potentially exceed \$13.3 million. It should be noted however, that flood magnitudes are generally not uniform across different watersheds and that it would be a rare occurrence for all water bodies in the county to experience a 100-year flood from the same event. The town of Sumner is anticipated to experience the highest amount of building damage followed by the Town of Oakland⁴. Five municipalities do not have a building in the 100-year floodplain.

A countywide 100-year flood could potentially cause more than \$13.3 million in damage to buildings.

With the exception of wastewater treatment facilities, there are no critical facilities in the 100-year floodplain.

³ Source: *Jefferson County 2008 Business Flood Assessment*, Dennis L. Hartwig, Jefferson County Economic Development Consortium.

⁴ Note: The floodplain maps contained apparent errors, especially around Lake Ripley.

Table 5-14. Buildings in 100-Year Floodplain and Estimated Damage: 2006

Town	Number of Buildings by Percent Damaged			Total Number of Buildings	Market Value of Structures (\$ millions)	100-Year Flood Damage (\$ thousands)
	<10%	10-20%	>20%			
Aztalan	2	4	1	7	0.4	57.0
Cold Spring	2	3	1	6	0.5	83.7
Concord	2	0	0	2	0.3	23.6
Farmington	1	4	0	5	0.5	61.3
Hebron	5	7	4	16	1.5	297.2
Ixonia	1	0	0	1	0.03	0.001
Jefferson	4	9	0	13	1.3	135.1
Koshkonong	47	57	40	144	7.0	992.3
Lake Mills	4	2	0	6	0.6	63.1
Milford	6	9	3	18	1.2	215.2
Oakland	59	77	66	202	29.3	5,517.9
Palmyra	14	17	0	31	4.3	461.5
Sullivan	8	9	6	23	1.8	243.6
Sumner	132	54	17	203	10.0	1,095.4
Waterloo	0	1	0	1	0.1	14.8
Watertown	9	10	1	20	1.5	148.5
Village						
Cambridge [1]	0	0	0	0	0	0
Johnson Creek	1	0	0	1	0.2	12.6
Lac La Belle [1]	0	0	0	0	0	0
Palmyra	0	0	0	0	0	0
Sullivan	0	0	0	0	0	0
City						
Fort Atkinson	8	12	0	20	5.0	597.0
Jefferson	30	23	5	58	9.2	1,542.0
Lake Mills	10	15	13	38	5.7	970.6
Waterloo	9	8	9	26	4.6	728.2
Watertown [1]	2	2	0	4	0.2	26.0
Whitewater [1]	0	0	0	0	0	0
Jefferson County	356	323	166	845	85.23	13,286.601

Source: Civi Tek Consulting and Planning and Design Institute (PDI)

Notes: 1. Municipality located in Jefferson County and another county

A number of areas have concentrations of buildings as generally described below.

1. **Blackhawk Island and Veterans Lane** – This area is located just upstream of Lake Koshkonong and southwest of the City of Fort Atkinson and has experienced significant flooding in the past. The area has been a targeted area for past county-sponsored removal of flood prone homes. From 1996 through 1998, 38 structures were removed from the Blackhawk Island area as part of the County's flood mitigation program.
2. **North Shore** - This area is on the north shore of Lake Koshkonong and includes both seasonal and permanent homes.
3. **Rock River Mobile Home Court** - This is a small subdivision of approximately 20 mobile homes located along the Rock River south of the Village of Johnson Creek. There are also other permanent residential structures in the immediate area.

4. **Rock River Road** - This residential area is west of Fort Atkinson along the Rock River and has a number of year-round residences.
5. **Rock River Paradise Subdivision** - This small residential development is east of the City of Watertown along the Rock River.
6. **Pottawatom Trail** - This residential development is located on the south side of Lake Koshkonong.
7. **River Bend Resort/Campground** – This is a condominium campground located along the Crawfish River in the Town of Milford. It contains approximately 300 campsites, which are individually owned. The recreation buildings, miniature golf, parking lot, and piers are owned jointly.

Countywide, damage to public facilities included erosion of recreational trails, damage to community and county parks, local and county road washouts, and damage to culverts and bridges. These infrastructure damages resulted in serious health and safety concerns as they impeded police, fire, and rescue personnel from getting to the scene of emergency situations.

Effects on Population Groups – There are no population groups that are especially vulnerable to flooding except to the extent older homes, which were built prior to floodplain regulations, are occupied by lower income residents.

Effects on Economic Sectors – While flooding can impact a number of economic sectors, the agricultural sector is the most vulnerable. Aside from damaging farm buildings, flooding can destroy crops and reduce crop yields for surviving crops.

Table 5-15 summarizes the agricultural losses due to flooding from 1986 through 2006. In addition, harvesting crops on wet soils causes soil compaction that reduces crop yields in subsequent years. Heavy rains, which are often associated with flooding, cause a considerable amount of soil erosion on unprotected soils.

Table 5-15. Agricultural Losses Due to Flooding: Jefferson County: 1986 through 2006

Year	Soybeans (\$ millions)	Corn (\$ millions)
1986	0.7	3.9
1993	2.1	6.4
1996	2.5	6.4
1997	1.5	3.2
2000	1.0	2.1

Source: Farm Services Agency

Damages sustained by businesses in the county are primarily a direct reflection of the agricultural production losses. The effects of the agricultural base extend throughout the county. Farming supports a variety of farm- (e.g., implement dealers, feed stores, granaries) and non-farm related (e.g., grocery stores, hardware stores) businesses. Most notably, the 1993 flooding affected a number of business sectors that support farmers.

Other Effects – During periods of flooding, no-wake boating restrictions are imposed which limit recreational uses, but are needed to protect shorelines from erosion.

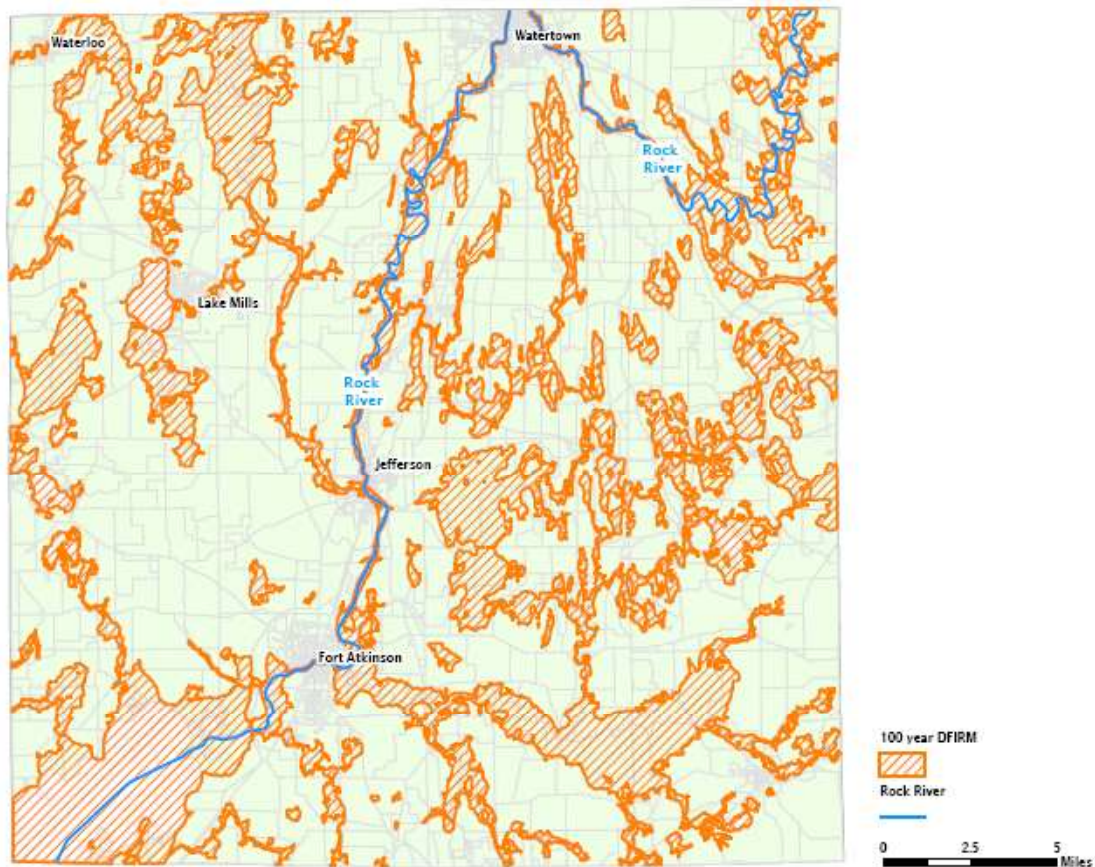
Climate change can be expected to lead to more annual precipitation with more frequent and heavier high precipitation events. This will lead to more flooding and the potential for dam failure. Flood damage will affect more people over a wider area of the County, and resulting damages will be higher.

VULNERABILITY ASSESSMENT – 2007

Flood analysis for Jefferson County was performed using HAZUS-MH released in July 2007. The bundled aggregated general building stock was updated to Dun & Bradstreet 2006. Building valuations were updated to R.S. Means 2006. Building counts based on census housing unit counts are available for RES1 (single-family dwellings) and RES2 (manufactured housing) instead of calculated building counts.

The site-specific inventory (specifically schools, hospitals, emergency operation centers, fire stations and police stations) was updated using the best available statewide information.

HAZUS-MH was used to generate the flood depth grid for a 100-year return period calculated by clipping the USGS 30m DEM to the DFIRM boundary. *Exhibit 5-11* depicts the flood boundary from the HAZUS-MH analysis.

Exhibit 5-11. HAZUS-MH Analysis (100-Year Flood): 2007

Aggregate Loss Analysis – HAZUS-MH was used to estimate the damages for a 100-year flood event in Jefferson County. An estimated 129 buildings will be damaged totaling \$58 million in building losses and \$151 million in total economic losses. The total estimated number of damaged buildings, total building losses, and estimated total economic losses are shown in *Table 5-16*.

HAZUS-MH estimates 26 census blocks with losses exceeding \$1 million. The distribution of losses is shown in *Exhibit 5-12*.

HAZUS-MH aggregate loss analysis is evenly distributed across a census block. Census blocks of concern should be reviewed in more detail to determine the actual percentage of facilities that fall within the flood hazard areas. The aggregate losses reported in this study may be overstated.

Table 5-16. Economic Loss for a 100-Year Flood: 2007

General Occupancy	Estimated Total Buildings	Total Damaged Buildings	Total Building Exposure X 1000	Total Economic Loss X 1000	Building Loss X 1000
Agricultural	1	0	\$80,731	\$4,479	\$962
Commercial	192	1	\$948,602	\$29,472	\$6,758
Education	5	0	\$121,088	\$537	\$74
Government	13	0	\$42,507	\$1,495	\$154
Industrial	74	3	\$696,703	\$46,500	\$9,732
Religious/Non-Profit	13	0	\$98,065	\$3,531	\$460
Residential	24,675	125	\$4,488,760	\$64,473	\$39,486
Total	24,973	129	\$6,476,456	\$150,487	\$57,626

The reported building counts should be interpreted as degrees of loss rather than as exact numbers of buildings exposed to flooding. These numbers were derived from aggregate building inventories which are assumed to be dispersed evenly across census blocks. HAZUS-MH requires that a predetermined amount of square footage of a typical building sustain damage in order to produce a damaged building count. If only a minimal amount of damage to buildings is predicted, it is possible to see zero damaged building counts while also seeing economic losses.

Exhibit 5-12. Economic Loss for a 100-Year Flood by Census District: 2007

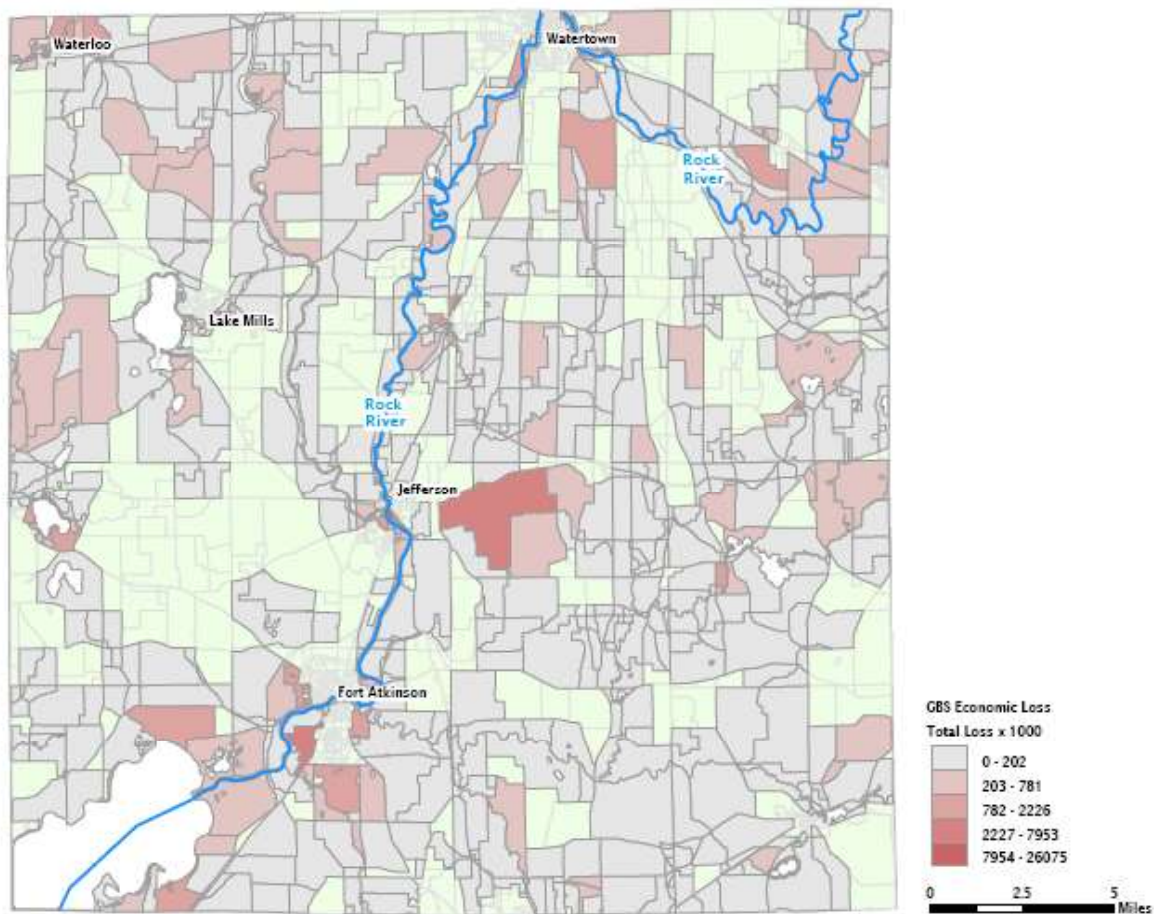


Exhibit 5-13 shows census blocks overlaid with the flood boundary and orthophoto of Jefferson County. Census block 550559909002011 has an estimated building loss of \$866,000 with a combined replacement cost of \$3 million. HAZUS-MH estimates that 36 buildings are within the calculated flood boundary for this block. Although the orthophoto shows significant flooding in this census block, very few buildings appear to be at risk.

Exhibit 5-13. Flood Damage Exposure in Jefferson: 2007

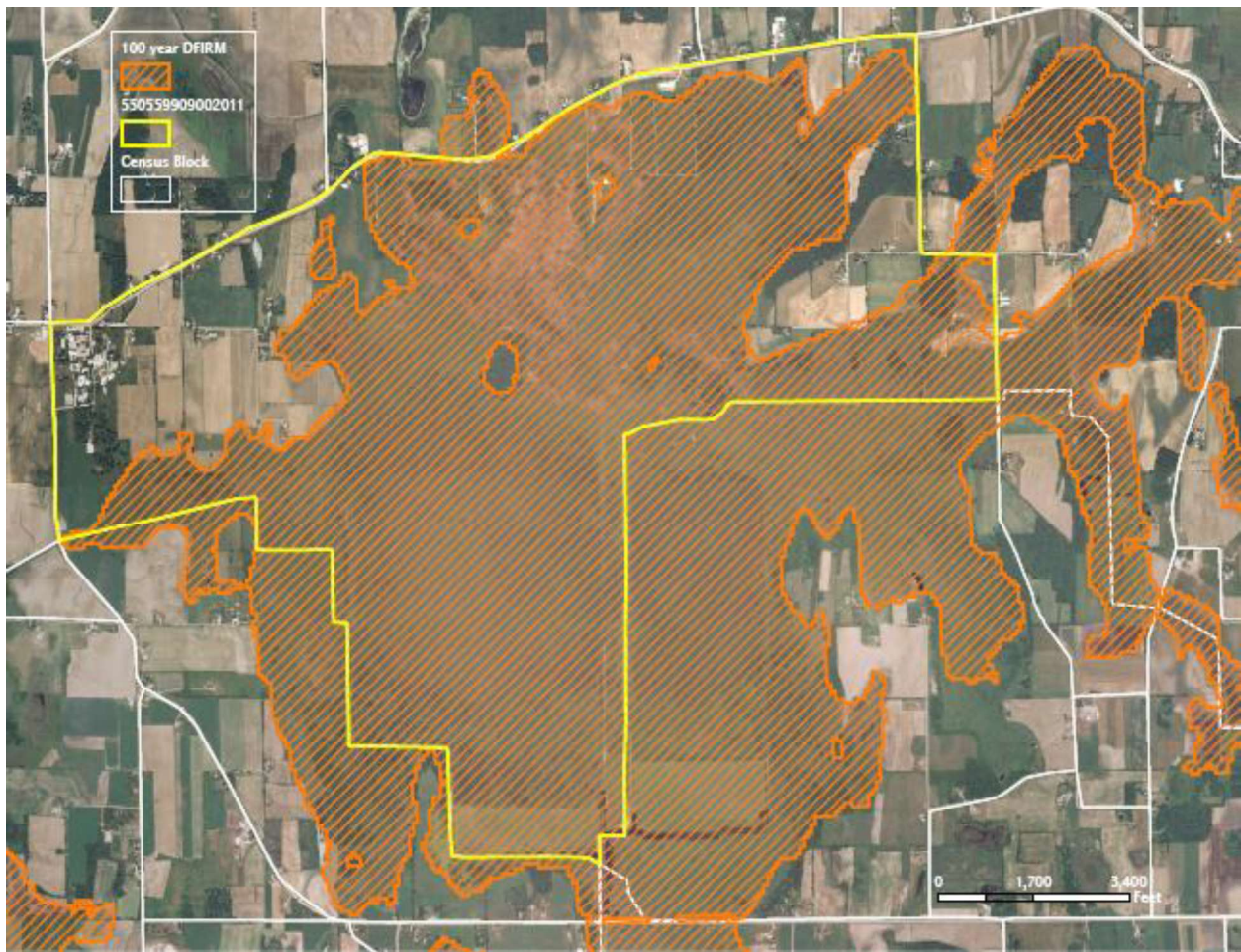
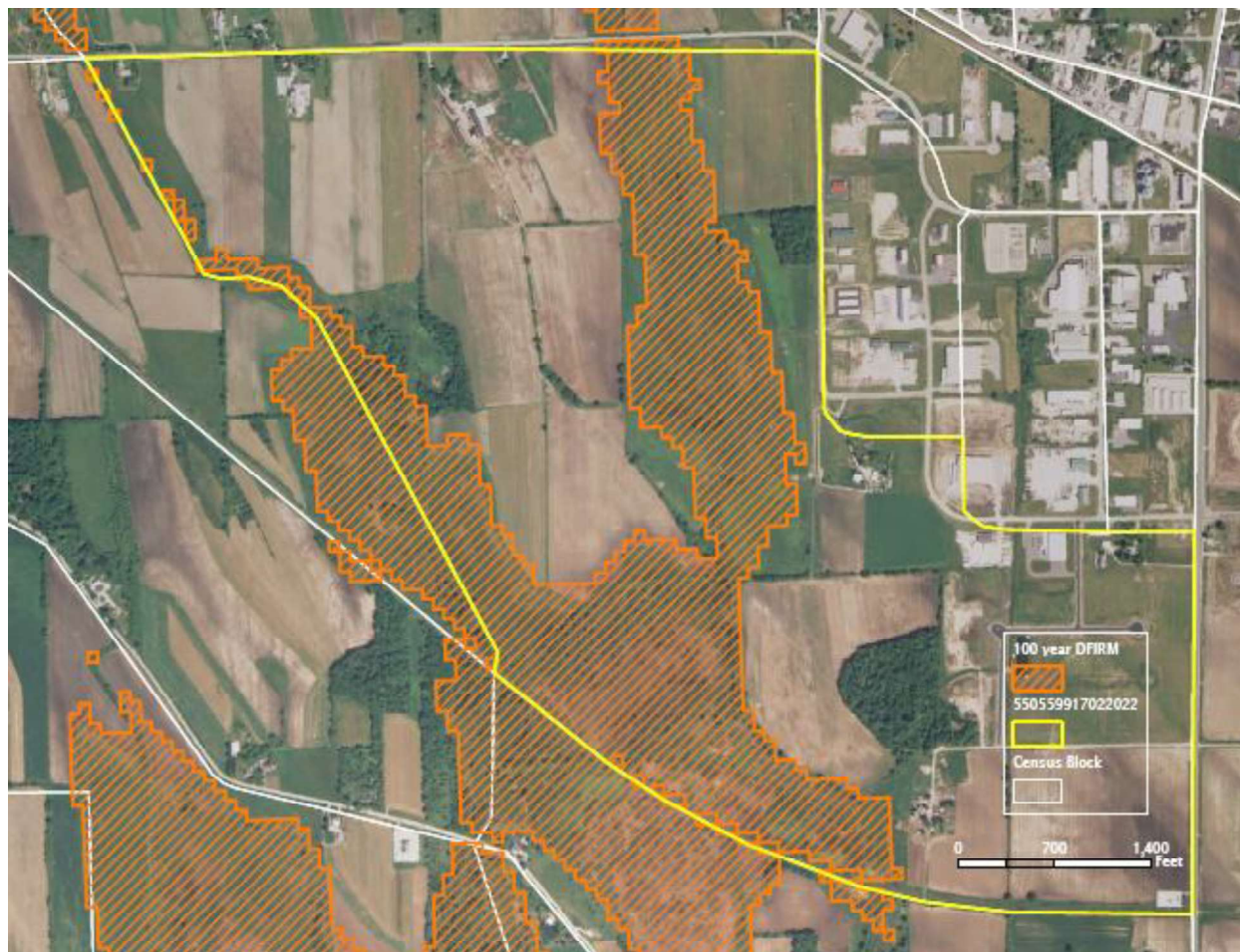


Exhibit 5-14 shows census blocks overlaid with the flood boundary and orthophoto of Ixonia. Census block 550559917022022 has an estimated building loss of \$225,000 with a combined replacement cost of \$930,000. HAZUS-MH estimates that 11 buildings are within the calculated flood boundary for this block. However, the orthophoto shows this area to be predominately forest.

Exhibit 5-14. Flood Damage Exposure in Ixonia: 2007



Essential Facility Loss Analysis – An essential facility would encounter many of the same impacts as any other building within the flood boundary. These impacts include: structural failure, extensive water damage to the facility, and loss of facility functionality (i.e. a damaged police station will no longer be able to serve the community).

The HAZUS-MH analysis identified that no essential facilities are subject to flooding. A list of the essential facilities within Jefferson County is included in *Table 5-18*.

Table 5-17. Essential Facility Loss for a 100-Year Flood: 2007

Class	Building Count	At Least Moderate Damage	At Least Substantial Damage	Loss of Use
Care Facilities	4	0	0	0
Fire Stations	11	0	0	0
Police Stations	13	0	0	0
Schools	55	0	0	0
EOC	0	0	0	0
Total	83	0	0	0

Shelter Requirement Analysis -

HAZUS-MH estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. HAZUS-MH also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 1,921 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to

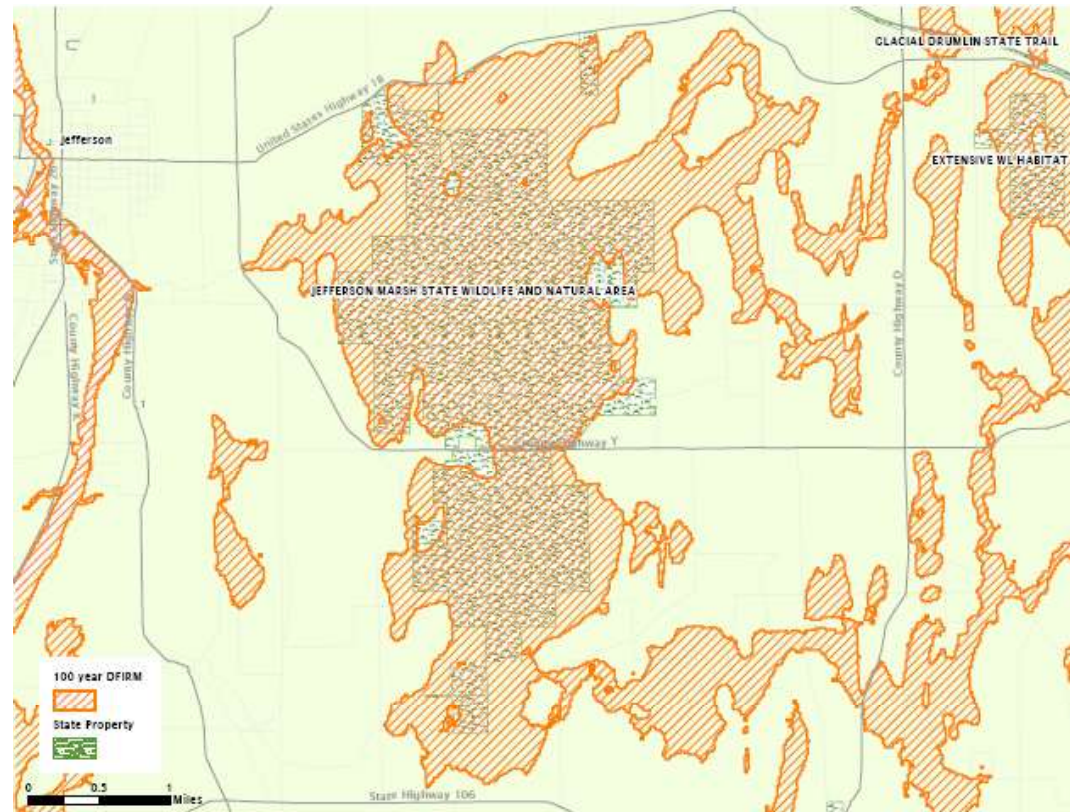
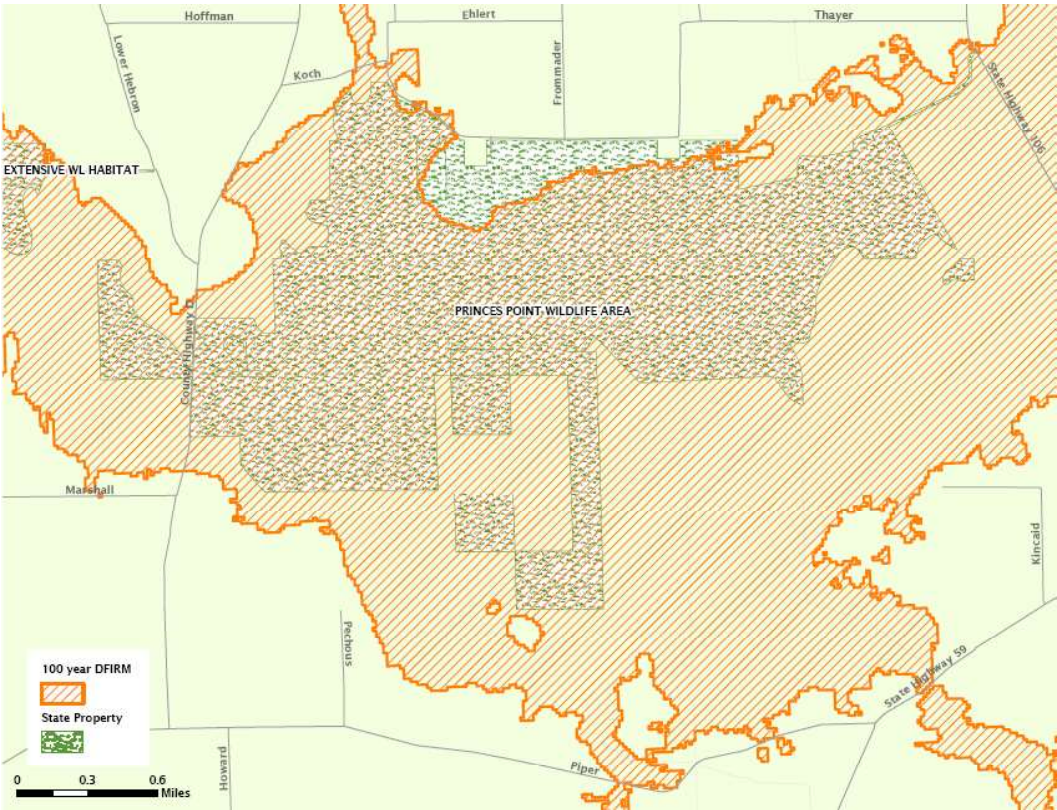
the inundated area. Of these 2,528 people (out of a total population of 74,021) will seek temporary shelter in public shelters.

State Property Loss Analysis – The flood boundaries were overlaid with the State of Wisconsin property boundaries as provided by the Department of Natural Resources. *Table 5-18* provides a list of state properties impacted by the flood boundary. *Exhibit 5-15* shows two examples of inundated areas.

Table 5-18. State Property Flood Inundation: 2007

State Property	Percent Inundated	Acres
Jefferson Marsh State Wildlife and Natural Area	93	3060
Lake Mills Wildlife Area	90	2472
Princes Point Wildlife Area	94	2019
Waterloo Wildlife Area	35	1496
Extensive Wildlife Habitat	11	1282
Rome Pond Wildlife Area	52	1188
Koshkonong Wildlife Area	86	726
Scattered Wildlife	3	349
Kettle Moraine State Forest-Southern Unit	1	251
Glacial Drumlin State Trail	9	61
Kanow Park Fishery Area	100	47
Lake Mills Hatchery	35	28
Aztalan State Park	14	27
Statewide Natural Area	0	25
Statewide Public Access	1	15
Rem-Golden Lake	32	11
Red Cedar Lake Natural Area	6	4
Lima Marsh Wildlife Area	0	0

Exhibit 5-15. Select State of Wisconsin Properties Boundary with 100-Year Flood Boundary: 2007



Recent Flooding

As part of the 2024 plan update, local officials were asked to identify roads in their jurisdiction that are prone to localized flooding. Results are included in *Table 5-19*.

Table 5-19. Localized Flooding

Town	Location	Year
Aztalan	-	
Cold Springs	None	--
Concord	-	
Farmington	None	
Hebron	None (Hanson Road has had problems in the past but have now been resolved).	
Ixonia	<ul style="list-style-type: none"> Rock River Road from 16 to River Vally Road; River Valley Road from Hill to the Rock River; River Road from CW to Evergreen Road 	<ul style="list-style-type: none"> All years
Jefferson		
Koshkonong	<ul style="list-style-type: none"> Blackhawk Island Road, Oxbow Bend, Rock River Road, Bark River Road 	<ul style="list-style-type: none"> Multiple
Lake Mills	-	
Milford	-	
Oakland	-	
Palmyra	-	
Sullivan	-	
Sumner	<ul style="list-style-type: none"> Blackhawk Island Road, Lamp Road, High Ridge Road 	<ul style="list-style-type: none"> Multiple
Waterloo	<ul style="list-style-type: none"> Island Road adjoining wetland 	<ul style="list-style-type: none"> Periodic
Watertown	None	
Village		
Cambridge	None	
Johnson Creek	None	
Lac La Bell	-	
Palmyra	-	
Sullivan	-	
City		
Fort Atkinson	-	
Jefferson	None	
Lake Mills	None	
Waterloo	-	
Watertown	<ul style="list-style-type: none"> Hart Street from Wakoka Street to Chenango Street; Dayton Street from West Street to Railroad Tracks; W Main Street from Railroad Viaduct to Carriage Hill Drive; Maple Crest Lane from Crestview Drive to South Street; South Street from Maple Crest Lane to Winnebago Way; Winnebago Way from Cherokee Court to South Street; Schuman Drive from Wedgewood Court to Stoneridge Drive; E. Spaulding Street from Valview Court to Center Street; Intersection of Memorial Drive and STH 16 Frontage Road Mary Street from Neenah to S. Ninth Street; Hady Lane from West Street to end of street; West Street from Cobblestone Way east to RR tracks; Cobblestone Way from Willow Creek Parkway to Green Ridge Circle; Fairview Drive north and south of the intersection with Hoffmann Drive; S. Twelfth Street between Air Park Drive and the City limits; S. Twelfth Street from RR tracks to Sunset Ave.; S. Tenth Street between Station St. and Clyman Street 	<ul style="list-style-type: none"> 2022 2018
Whitewater	-	

Source: 2024 Community Survey conducted as part of plan update

Historical flood damage - Based on NWS reporting there have been 50 flood events from 1950 through 2023, resulting in property damage of \$2.16 million and crop damage of \$1.3 million.

Climate change can be expected to lead to more precipitation especially in the spring and fall, higher intensity tornados. This will affect more people over a wider area of the County, and the resulting damages will be higher.

8. ICE SHOVES

PROFILE

An ice shove, also referred to as an ice flow, is a large accumulation of broken ice blocks and sheets which have been piled up by the wind along the shoreline of a lake. Ice shoves are characteristically found on large lakes in the spring during and immediately after ice breakup. The size of the ice shove is related to the amount of ice on the lake when breakup occurs and the strength and duration of the winds at breakup.

HISTORY OF PAST OCCURRENCES

Ice shoves occur on a fairly frequent basis on the north and northeast shore of Lake Koshkonong. Rock Lake in the northwest quadrant of the county is the second largest lake in the county and has experienced ice shoves, but to a lesser degree than Lake Koshkonong. No other lakes in the county are large enough to generate ice shoves of any consequence.

VULNERABILITY ASSESSMENT

Although ice shoves occur on a fairly frequent basis, most do not cause damage to man-made structures such as buildings, piers, boat landings, and roads. On a few occasions though, ice shoves have become rather large and damaged man-made structures. Damage estimates are not available for ice shoves.

Effects on Facilities – Ice shoves most directly affect buildings and structures near the lakeshore. Ice may pile on top of a road if not removed as it moves on shore.

Effects on Population Groups – Ice shoves do not negatively affect any population group in particular.

Effects on Economic Sectors – Ice shoves do not negatively affect any economic sector in particular.

9. FOG

PROFILE

Fog is a visible concentration of small water droplets suspended in the air at the earth's surface that obscures visibility to less than one kilometer. It forms when air temperature falls to its dew point, which is the temperature at which air is holding as much moisture as it can. When air reaches its dew point, it condenses into very small water droplets.

HISTORY OF PAST OCCURRENCES

Fog can form throughout the year, but is most common from September through April. As shown in *Appendix G*, there have been 72 reported occurrences of fog in Jefferson County since 1950. In Jefferson County fog tends to cover large areas.

VULNERABILITY ASSESSMENT

Effects on Facilities – Fog does not damage or impair the operation of facilities.

Effects on Population Groups – Fog does not negatively affect any population group.

Effects on Economic Sectors – Fog impairs visibility and can hamper ground and air transportation. When visibility is decreased, the potential for motor vehicle crashes increase as does the possibility of an airplane accident on landing or take off.

10. TORNADO / HIGH WINDS

PROFILE

A tornado is a violently rotating column of air extending from the ground to the base of a convective cloud. The tornado may or may not have a visible condensation funnel (commonly referred to as a "funnel cloud"), which may or may not extend from the cloud base all the way to the ground. In the absence of a visible condensation funnel, a severe weather spotter can determine they are looking at a tornado if they observe cloud-base rotation superimposed over rotating dirt and debris at ground level. Wind speeds in a tornado typically range from 80 mph to 150 mph, but on occasions reach speeds in excess of 200 mph. There have been documented tornado winds exceeding 300 mph outside of Wisconsin. The majority of damage resulting from a tornado occurs within one-eighth mile of the tornado's path, which characteristically does not exceed 16 miles. In fact, the average path length of tornadoes in Wisconsin for the period of 1950-2005 was 5.8 miles with a duration of about 10 minutes. Tornadoes with track lengths greater than 150 miles have been reported in Wisconsin, although they are quite rare.

Tornadoes are visible because low atmospheric pressure in the vortex leads to cooling of the air by expansion with condensation and formation of water droplets. They are also visible as a result of the airborne debris and dust associated with the vortex. The destructive power of the tornado lies primarily in its high horizontal winds, a built-in upward-lifting force, and airborne debris impacting structures (collectively resulting in about 95 percent of the damage). To a much lesser degree, air pressure differences associated with a tornado result in additional damage. Years ago, it was assumed that air pressure differences accounted for a large portion of the damage, however, it is now realized that most buildings have enough air leakage or infiltration so that most of the air pressure differences between the inside and outside of a structure are minimized as the tornado approaches. Since tornadoes are usually associated with organized storm systems that consist of several thunderstorm cells of varying intensity, large hail, torrential rain, and intense lightning usually accompany the storm that spins-up a tornado.

Although a tornado can form at any time during the year, the peak tornado season is May through July. They can also occur at any time of the day. The peak hour for tornado initiation is between 6 pm and 7 pm and the peak hours of occurrence are between 2 pm and 10 pm.

Prior to 2007, the Fujita Tornado Scale was used to estimate the wind speed of a tornado based on damage to structures (*Table 5-20*). Though the Fujita Scale has 13 ratings (F0-F12), tornadoes never exceed an F5 (261 to 318 MPH). Beginning in 2007, tornadoes will be rated using the Enhanced Fujita Tornado Scale, which is essentially the same as the former scale except for the wind speed (*Table 5-21*).

Table 5-20. Fujita Tornado Scale

Fujita Rating	Wind Speed	Characteristic Damage
F0	40 to 72 mph	Some damage to chimneys, TV antennas, roof shingles, trees, and windows
F1	73 to 112 mph	Automobiles overturned, carports destroyed, and trees uprooted
F2	113 to 157 mph	Roofs blown off homes, sheds and outbuildings demolished, mobile homes overturned
F3	158 to 207 mph	Exterior walls and roofs blown off homes; metal buildings collapsed or are severely damaged; forests and farmland flattened
F4	208 to 260 mph	Few walls, if any, standing in well-built homes; large steel and concrete missiles thrown far distances
F5	261 to 318 mph	Homes leveled with all debris removed; schools, motels, and other larger structures have considerable damage with exterior walls and roofs gone; top stories demolished

Table 5-21. Enhanced Fujita Tornado Scale

Fujita Rating	Wind Speed	Characteristic Damage
EF0	65 to 86 mph	Some damage to chimneys, TV antennas, roof shingles, trees, and windows
EF1	86 to 110 mph	Automobiles overturned, carports destroyed, and trees uprooted
EF2	111 to 135 mph	Roofs blown off homes, sheds and outbuildings demolished, mobile homes overturned
EF3	136 to 165 mph	Exterior walls and roofs blown off homes; metal buildings collapsed or are severely damaged; forests and farmland flattened
EF4	166 to 200 mph	Few walls, if any, standing in well-built homes; large steel and concrete missiles thrown far distances
EF5	>200 mph	Homes leveled with all debris removed; schools, motels, and other larger structures have considerable damage with exterior walls and roofs gone; top stories demolished

Table 5-22. Tornado Frequency: Jefferson County: 1950 through 2023

Fujita Rating [1]	Number of Occurrences	Probability of Occurrence
F0	8	31%
F1	12	46%
F2	5	19%
F3	1	4%
F4	0	0%
F5	0	0%
EF0	12	67%
EF1	6	33%
EF2	0	0%
EF3	0	0%
EF4	0	0%
EF5	0	0%

Source: National Weather Service

Notes:

1. Refer to Table 5-19 and 5-20 for a description of the Fujita ratings
2. Based on data collected by the National Weather Service

HISTORY OF PAST OCCURRENCES

Wisconsin lies along the northern edge of the nation's tornado belt that extends northeastward from Oklahoma into Iowa. Winter, spring, and fall tornadoes are more likely to occur in southern Wisconsin than in northern counties. Yet, tornadoes have occurred in Wisconsin during every month except February.

Wisconsin's tornado season runs from the beginning of April through September. The most severe tornadoes typically occur during April, May, and June. Many tornadoes strike in late afternoon or early evening. However, tornadoes have occurred at other times. Personal property damage, deaths, and injuries have and will continue to occur in Wisconsin. On average, one person dies from tornado-related injuries each year.

In 2005, Wisconsin had a record of 62 verified tornadoes, including 27 that occurred on August 18, 2005. Seven of the 27 tornadoes on that day visited Jefferson County.

In Jefferson County, there have been 45 verified tornadoes from 1950 through 2023 (*Appendix G*). The vast majority of them were F0 or F1 (*Table 5-22*). Prior to 1950, there were four verified tornadoes: 1851, 1878, 1883, and 1931. Prior to 1982 when the National Weather Service began classifying tornadoes, ratings are at best broad estimates, with an accuracy of plus/minus 1.

A presidential disaster declaration was issued for tornado damage in 1991 and 1993. During the period from 1950 through 2023, tornadoes resulted in 3 fatalities, 36 injuries, \$11.1 million in property damage, and \$21,000 in crop damage (*Appendix G*).

VULNERABILITY ASSESSMENT

Effects on Facilities – Because tornadoes apparently occur randomly across the landscape, all areas of the county are equally as likely to experience a tornado. Therefore, all of the critical facilities which have been identified are at risk.

Effects on Population Groups – Even though all areas of the county are equally likely to experience a tornado, those living in mobile homes or staying in a campground are more vulnerable than those people living in a residence with a basement. In 2018, there were more than 20 mobile home parks and campgrounds, none of which had a storm shelter where people could go during a wind-related storm event.

Effects on Economic Sectors – While individual businesses may be damaged, the overall economy generally experiences short-term effects of a tornado, if at all.

Based on historical occurrences and documented damage estimates, a tornado would be expected to cause about \$250,000 on average. The range however, is quite wide depending on where the tornado occurs and its magnitude (*Table 5-23*).

Climate change can be expected to lead to more frequent, higher intensity tornados. This will affect more people over a wider area of the County, and the resulting damage will be higher.

11. HAILSTORMS

PROFILE

A hailstorm is a weather event where water particles in the upper atmosphere form into round or irregular masses of ice that fall to earth. Hail stones form when sub-freezing temperatures in the upper atmosphere cause water in thunderstorm clouds to accumulate in layers around an icy core. When strong underlying winds no longer can support their weight, the hailstones fall to Earth. The size of hail typically ranges from ¼” up to three inches in diameter. In a rather rare occurrence, a 2006-hail storm in Lake Mills created hail stones with a diameter of 4.25 inches.

Hail tends to fall in swaths that may be 20-115 miles long and 5-30 miles wide. The swath is not normally an even bombardment of hail, but generally consists of a series of hail strikes that are produced by individual thunderstorm clouds traversing the same general area. Hail strikes are typically one-half mile wide and up to five miles long. They may partially overlap, but often leave completely undamaged gaps between them.

Hailstorms tend to occur in conjunction with severe thunderstorms.

HISTORY OF PAST OCCURRENCES

From 1950 through 2023, there have been 152 documented hailstorm events in the county (*Appendix G*) resulting in \$13.538 million in property damage and \$200,000 in crop damage.

VULNERABILITY ASSESSMENT

Effects on Facilities – The threat of hail damage increases as the size of the hailstones increase. Hail can break windows, damage roofs and siding, and dent motor vehicles.

Effects on Population Groups – All population segments are equally susceptible to hail storms. Hail storms while resulting in property and crop damage, rarely cause serious injury or loss of life.

Effects on Economic Sectors – Of all the economic sectors, agriculture is the most susceptible to hail damage. When hailstones approach golf ball size, crops are damaged and are not able to recover, resulting in some cases a total loss.

ESTIMATED DAMAGE

Based on historical data, hailstorms, while quite numerous, do not cause widespread or significant damage. There is however, one exceptional event. In April 2006, hailstorms caused \$13.2 million in property damage. This single event accounts for nearly 98 percent of all the documented damage that occurred since 1950.

For the purposes of this plan, it is estimated that a typical hailstorm (excluding the 2006 event) would cause about \$5,000 in property damage and \$1,500 in crop damage per event.

Climate change can be expected to lead to more frequent, higher intensity hailstorms. This will affect more people over a wider area of the County, and the resulting damage will be higher.

Table 5-23. Estimated Tornado Damage: Jefferson County

Fujita Rating [1]	Damage Estimate
EF0	0 to \$250,000
EF1	\$25,000 to \$250,000
EF2	\$25,000 to \$2,500,000
EF3	\$250,000 to \$3,000,000
EF4	\$500,000 to \$3,000,000
EF5	\$750,000 to \$3,000,000

Notes:
1. Refer to Table 5-20 for a description of the Fujita ratings

12. THUNDERSTORMS

PROFILE

Thunderstorms are severe and violent forms of convection produced when warm moist air is overlaid by dry cool air. As the warm air rises, thunderheads (cumulonimbus clouds) form and cause the strong winds, lightening, hail, and rain characteristically associated with these storms. Thunderheads may be a towering mass 6 miles or more across and 40,000 to 50,000 feet high. As much as 1.5 million tons of water may be held in a thunderhead.

A storm event arising for a single thunderhead typically lasts less than 30 minutes in a given location. However, strong frontal systems may spawn more than one squall line composed of many individual thunderheads.

As defined by the National Weather Service, a severe thunderstorm is a thunderstorm event that produces one or more of the following: downbursts with winds of 58 mile per hour or greater, hail $\frac{3}{4}$ of an inch in diameter, or a tornado.

HISTORY OF PAST OCCURRENCES

From 1950 through 2023, there have been more than 290 thunderstorm events, resulting in 9 injuries, \$4.2 million in property damage, and \$359,000 in crop damage. They account for about one-third of all weather-related events documented since 1950. On average, county residents can expect to experience almost 4 significant thunderstorm events each year.

Although thunderstorms can occur throughout the year, they are most common from May through September. Typically, they occur after noon until 10:00 pm.

The most devastating thunderstorm to hit Jefferson County occurred May 31, 1998. Straight-line winds with peak gusts of 100 to 128 mph hit 12 counties in south central and southeast Wisconsin, while another 8 counties had peak gusts of 60 to 80 mph. It is believed that this event was the most damaging, widespread, straight-line thunderstorm wind event to hit southern Wisconsin in more than 100 years. Roofs were torn off of barns, homes, and other buildings. Thousands of trees were uprooted or significantly damaged. Hundreds of motor vehicles were either damaged or totaled by falling trees and branches or collapsed garages. At one point, about 60,000 customers were without electricity in south central Wisconsin and about 170,000 in southeast Wisconsin. Some areas were without power for as much as 5 or 6 days. Property damage for all 20 counties totaled more than \$55.85 million and \$1.48 million in crop losses. In Jefferson County, there were 8 reported injuries, \$2.7 million in property damage, and \$200,000 in crop losses.

VULNERABILITY ASSESSMENT

Effects on Facilities – Aside from hail, straight line winds from a thunderstorm can damage property and to a less extent crops. Overhead utility lines are quite susceptible to downed trees and tree branches. Entire neighborhoods and even larger areas can lose power because of a thunderstorm. All areas of the county are equally susceptible to thunderstorms, meaning that all critical facilities are at risk.

Effects on Population Groups – Wind associated with severe thunderstorms can cause injury or loss of life. With the exception of those living in mobile home parks or staying in campgrounds, no population group is uniquely susceptible to a thunderstorm event. Those in mobile homes and campgrounds are at risk from falling trees and branches, and damage to their residence or camper.

Effects on Economic Sectors – Thunderstorms do not affect any economic sector disproportionately more than others.

Based on historical data, a thunderstorm is expected to cause about \$60,000 in property damage and less than \$5,000 in crop damage. It is believed the crop damage impact is under reported.

Climate change can be expected to lead to more frequent, higher intensity severe thunderstorms and resultant high winds, hail, and lightning. This will affect more people over a wider area, and the resulting damage will be higher.

13. WINTER STORMS

PROFILE

Winter storms include a wide range of weather-related events including snowstorms, blizzards, freezing rain, sleet, and ice storms. Typical snow events produce totals of between one and three inches. On a statewide basis, heavy snowfalls happen on average only five times per winter. Total snow accumulations in southern Wisconsin average about 40-50 inches. While blizzard conditions can occur in southern Wisconsin, it is rare. Both ice and sleet storms can occur at any time from October into April. They are more common in southern Wisconsin than in the northern part of the state. Statewide, there are 3 to 5 freezing rain events.

HISTORY OF PAST OCCURRENCES

From 1950 through 2023, there have been 190 winter storm events in Jefferson County consisting of either blizzard conditions, heavy snow, ice, or sleet -- about 2.6 per winter season.

VULNERABILITY ASSESSMENT

Effects on Facilities – Heavy snow can cause the structural collapse of buildings with flat roofs. In recent memory there have been a few winter seasons where snow events taxed the ability of local governments to pay for the removal of snow from roads and keep them clear of snow.

Effects on Population Groups – Winter storms affect all population groups equally. People who commute a comparatively long distance are disproportionately affected.

Effects on Economic Sectors – A prolonged winter storm event with a large accumulation of snow can have a short-term effect on the local economy in terms of lost productivity. Transportation-related businesses are often negatively affected when winter weather hits.

The cost of snow removal is incorporated into local government budgets so there is no direct financial impact arising from most winter storms.

Climate change can be expected to lead to more frequent, higher intensity winter storms causing more impacts over a wider area.

Terms Related to Winter Storms

Heavy snowfall - The accumulation of six or more inches of snow in a 12-hour period or eight or more inches in a 24-hour period.

Blizzard - The occurrence of sustained wind speeds in excess of 35 miles per hour accompanied by heavy snowfall or large amounts of blowing or drifting snow.

Ice storm - An occurrence where rain falls from warmer upper layers of the atmosphere to the colder ground, freezing upon contact with the ground and exposed objects near the ground forming an accumulation of at least 1/4" in 12 hours or less.

Freezing drizzle / freezing rain - The effect of drizzle or rain freezing upon impact on objects that have a temperature of 32 degrees Fahrenheit or below.

Sleet - Solid grains or pellets of ice formed by the freezing of raindrops or the refreezing of largely melted snowflakes. This ice does not cling to surfaces.

14. EXTREME TEMPERATURE

PROFILE

Periods of excessive heat, often referred to as heat waves, are quite common in Wisconsin during the summer months. When high temperatures do occur, they cover large areas of the country.

The National Weather Service (NWS) devised the Heat Index⁵ as a way to measure the combined effects of temperature and relative humidity. The Heat Index chart (*Exhibit 5-17*) also shows when certain physiological responses are commonly seen with prolonged exposure and/or physical activity. As the relative humidity increases, even modest temperatures can cause heatstroke and other less serious heat disorders.

⁵ The Heat Index is sometimes referred to as the apparent temperature.

Exhibit 5-16. Heat Disorders and Symptoms

Heat Disorder	Symptoms
Sunburn	Redness and pain; in severe cases swelling of skin, blisters, fever, headaches
Heat Cramps	Painful spasms usually in muscles of legs and abdomen possible; heavy sweating
Heat Exhaustion	Heavy sweating, weakness, skin cold, pale and clammy; pulse thready; normal temperature possible; fainting and vomiting
Heatstroke	High body temperature (106 or higher); hot dry skin; rapid and strong pulse; possible unconsciousness

Source: National Weather Service, National Oceanic and Atmospheric Administration

Exhibit 5-17. Heat Index (Apparent Temperature)

Air Temp. °F	Relative Humidity (%)												
	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	118	124	129	136							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

Source: National Weather Service, National Oceanic and Atmospheric Administration

With Prolonged Exposure and/or Physical Activity

	Extreme Danger – Heat stroke or sunstroke highly likely
	Danger – Sunstroke, muscle cramps, and/or heat exhaustion likely
	Extreme Caution – Sunstroke, muscle cramps, and/or heat exhaustion likely
	Caution – Fatigue possible

HISTORY OF PAST OCCURRENCES

Based on records maintained by the National Weather Service, there have been 17 reported events with excessive temperatures since 1950 (*Appendix G*).

VULNERABILITY ASSESSMENT

From 2000 through 2023, there were 3 years in which at least one or more persons in Wisconsin died from the effects of excessive heat (*Table 5-24*). One fatality occurred in Sauk County in 2011. Its likely county residents received medical treatment for heat-related symptoms that are not reported.

In 1995, two heat waves gripped much of the state. The first occurred in mid-June and the second in mid-July. In the second heat wave, temperatures rose to between 100°F and 108°F with heat indices of 120°F to 130°F.

According to the National Weather Service, the mortality rate from excessive heat in Wisconsin is the highest of all natural disasters – more than four times greater than the second highest cause of death, tornadoes.

Intensely urbanized areas feel the effects of heat waves more than rural areas in that the temperature in urban areas is often elevated because radiant energy is stored in pavement and the exterior building surfaces and is released slowly over a period of time. Even during a heat wave, nighttime temperatures typically drop, but less so in urban areas because these heat reservoirs dissipate the radiant heat collected during the daytime. This phenomenon is often referred to as the heat island effect.

Not only are urban areas heat islands, pollutants often build up in the lower atmosphere during periods of excessive heat, causing respiratory problems, especially for the young, the elderly, and those with respiratory ailments such as asthma.

Although the more urban areas of the county experience the heat island effect, the change in the ambient temperature is modest. This is because the urban areas of the county are relatively small and street trees help to deflect solar radiation back into the atmosphere.

Effects on Facilities – Excessive heat does not directly impact critical facilities.

Effects on Population Groups – The elderly are disproportionately affected by heat. For example, during the heat waves of 1995, three-quarters of the fatalities were 60 years of age or older (*Table 5-25*).

Effects on Economic Sectors – Excessive heat and prolonged periods of warmer temperatures can affect agriculture in a variety of ways (*Exhibit 5-18*).

Out of all of the natural hazards in Wisconsin, excessive heat is one of the leading cause of fatalities.

Table 5-24. Heat-Related Fatalities and Injuries; Wisconsin: 2000 - 2023

Year	Deaths	Injuries
2011	5	8
2012	7	0
2022	2	0
Total	14	8

Source: National Weather Service, Milwaukee - Sullivan Office

Table 5-25. Heat-Related Fatalities; United States: 1995

Age	Number	Percent
0 – 19	14	1.4
20 – 29	5	0.5
30 – 39	34	3.3
40 – 49	79	7.7
50 – 59	95	9.3
60 – 69	179	17.5
70 – 79	253	24.8
80 – 89	241	23.6
90 and older	61	6.0
Unknown age	60	6.0
Total	1,021	100

Source: National Weather Service

Exhibit 5-18. Impacts on Agriculture

- a. Increased frequency of heat stress on livestock and crops.
- b. Decreased dairy herd milk production during extreme heat events. *
- c. Rapid shifts between warm and cold periods in the spring that can damage fruit crops and degrade soil health through freeze/thaw cycles (e.g., pore structure, aggregate stability, etc.).*
- d. Less reliable winter snow and ice cover causing winter kill of alfalfa and damage to winter cereals (e.g. wheat) and cranberry crops.
- e. Increased susceptibility to insect pests and pathogens causing increased crop losses, as well as increased pesticide use and reduced pesticide effectiveness.
- f. Increased weed pressure from natural regeneration of exposed soils following rain events causing increased herbicide use.
- g. A need to develop and plant crop varieties adapted to longer growing seasons, increased temperatures, and erratic precipitation access.
- h. Extended the fall planting date and increased the growing season for cover crops.
- i. Potential to use longer-season crop varieties that have higher input needs.
- j. Increased risk of drought causing decreased germination and crop loss, especially during fruiting periods. *
- k. Increased use of groundwater sources for irrigation during extreme heat or drought events. • Increased crop loss due to excessive precipitation, especially during seed germination periods. *
- l. Increased frequency of waterlogged soils resulting in delayed or missed planting and harvesting, delayed or missed manure and fertilizer applications, a need for adjustments to nutrient management to account for changes in nutrient cycling in wet soils, and potential for soil compaction and reduced time for animals on pasture.
- m. Increased frequency of extreme rainfall events which intensifies potential for soil erosion and gully formation; nutrient, sediment, and pathogen runoff to surface waters; and challenges for manure management.

Note: * See source for relevant sources cited.

Source: (2023). Climate Change Impacts on Wisconsin Agriculture. Ames, Iowa: United States Department of Agriculture Climate Hubs, University of Wisconsin-Madison, Clean Wisconsin, and Great Lakes Research Integrated Science Assessment.

Additionally, some businesses may close or reduce production to minimize heat effects on employees.

15. DROUGHT

PROFILE

A drought is an extended period of time when rainfall is significantly below normal amounts. Unlike other natural disasters, it is not known until much later in time, when a drought begins. A drought could last for months, several years, and in extreme conditions, much longer. Droughts are typically accompanied by higher-than-normal temperatures and lower-than-normal relative humidity levels. Some droughts cover entire regions of a continent or can affect a sub-region as small as several counties.

A number of methodologies have been developed to measure droughts from a purely meteorological standpoint. Droughts can also be defined based on the consequences which result. For the purposes of this plan, two types of drought are considered: agricultural and hydrologic. An agricultural drought causes a noticeable drop in crop yields and a hydrological drought causes a drop in lake and stream levels and lowers the height of the ground water table.

Although these two types of droughts can occur at the same time, the negative effects of a drought are first seen on crop production. Hydrologic droughts characteristically lag behind an agricultural drought because it takes time for the lack of precipitation to lower surface and ground water levels. As a result, it is possible for an area to experience a hydrologic drought long after the end of an agricultural drought.

HISTORY OF PAST OCCURRENCES

Agricultural and hydrologic droughts occur in Wisconsin on a regular basis. Since the Dust Bowl, short-lived droughts have occurred on an interval of about once in every ten years. Long-term droughts are more infrequent. Since the Dust Bowl, there have been four significant droughts in the state: 1987-1988, 1976-1977, 1955-1959, and 1948-1950.

From 1950 through 2023, there have been 18 periods of drought in the County, resulting in reported crop damage of \$300,000.

VULNERABILITY ASSESSMENT

Given the nature of droughts, it is difficult to quantify the impacts on Jefferson County.

By most accounts, the 1987-1988 drought in Wisconsin was the most severe and is estimated to have a recurrence interval of about 75 years. All Wisconsin counties were eligible for drought assistance. Agricultural losses throughout the state totaled \$1.3 billion. More than half of the farms in the state suffered crop losses of 50 percent or more, with 14 percent experiencing a crop loss of 70 percent or more.

POTENTIAL FOR FUTURE LOSSES

Effects on Facilities and Population Groups – Unlike many of the other natural disasters addressed in this plan, drought conditions do not cause physical harm to people or destroy buildings and other structures.

Effects on Economic Sectors -- The two main concerns with drought relate to economic losses to agricultural crops and livestock and effects on ground water supplies available to both private and public water wells.

According to the Jefferson County Agricultural Preservation and Land Use Plan, roughly half of the unincorporated area of the county is in agricultural production. Droughts would therefore affect a significant portion of the county and a significant economic sector. During extended droughts, municipalities often see an increased water usage due primarily to increased use for lawns and gardens. It is important that municipal wells are properly sized for the number of residents they are intended to serve. At times it may be necessary to impose water restrictions when there is concern that the available water supply may not be sufficient to meet basic needs.

Because municipal wells are generally concentrated in a relatively small area, extended droughts can affect the level of the water table. With decreased rainfall, the water table will naturally drop. Most public water wells draw from the deep aquifers and typically are not negatively affected. However, those wells serving an individual household are comparatively shallow and are more susceptible to a dropping water table, especially when located near a municipal well. Nearly two-fifths of county residents receive their drinking water from a municipal system and the remaining three-fifths from a private well (*Table 5-25*).

Table 5-26. Source of Drinking Water; Jefferson County: 2016

	Number of residents	Percent of total
Public well	35,058	41.6
Private well	49,204	58.4
Total	84,262	100

Source: Estimated from population estimates prepared by Wisconsin Department of Administration, Demographic Service Center

16. WILDLAND FIRE

PROFILE

A wildland fire is an uncontrolled fire burning natural vegetation and potentially buildings and other structures. A wildland fire can occur in a large forested area, woodlot, grassland, roadside ditch, or marsh.

Wildland fires can be ignited by lightening, human carelessness, and arson. In Wisconsin, human carelessness is the leading ignition source.

HISTORY OF PAST OCCURRENCES

Because the majority of Jefferson County is in some form of agriculture, there have been few instances of wildland fires. Those wildland fires that have started are relatively small and contained comparatively quickly. Larger fires that do occur, often occur in marsh areas.

VULNERABILITY ASSESSMENT

Effects on Facilities – With the exception of some utility infrastructure, no critical facilities in Jefferson County are vulnerable to a wildland fire.

Effects on Population Groups – wildland fires do not negatively affect any population group.

Effects on Economic Sectors – Wildland fires do not negatively affect any of the economic sectors in Jefferson County.

It is estimated that direct costs for fighting a five-acre grass fire is in the range of \$1,500 to \$4,500. Costs related to a fire exceeding 25 acres would be in the range of \$10,000 to \$25,000.

Climate change can be expected to lead to more wildland fires as the potential of droughts increase. This will affect more people over a wider area, and the resulting damage will be higher.

17. SUMMARY OF RISK BY JURISDICTION

Table 5-27 presents a summary of risk for each jurisdiction in Jefferson County.

Table 5-27. Summary of Risk by Jurisdiction: 2025

Town	Dam Failure	Flooding [2]	Dense Fog	Tornado	Hail-storm	Thunder-storm	Winter Storms	Temp. Extremes	Drought	Wildland Fire
Aztalan	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Cold Spring	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Concord	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Farmington	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Hebron	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Ixonia	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Jefferson	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Koshkonong	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Lake Mills	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Milford	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Oakland	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Palmyra	Medium	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Sullivan	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Sumner	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Waterloo	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Watertown	Medium	High	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Village										
Cambridge [1]	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Johnson Creek	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Lac La Belle [1]	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Palmyra	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Sullivan	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
City										
Fort Atkinson	Low	High	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Jefferson	Low	High	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Lake Mills	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Waterloo	Low	High	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Watertown [1]	Medium	High	Low	Medium	Medium	Medium	Medium	Medium	Low	Low
Whitewater [1]	Low	Medium	Low	Medium	Medium	Medium	Medium	Medium	Low	Low

Notes:

1. Municipality located in Jefferson County and another county
2. See Section 6 of this chapter for a detailed loss estimate.

Since the last plan, there have been some minor shifts, primarily to flood risk. As noted in Chapter 6, the county has been actively pursuing grant funding to help purchase flood-prone properties to remove existing structures. In a similar way, some jurisdictions have seen minor shifts as lands are being annexed to cities and villages and removed from towns. Finally, as more buildings are constructed the potential for storm damage increases incrementally as well.

18. SUMMARY OF DAMAGE ESTIMATES

Table 5-28 lists damage estimates for the various natural hazards reviewed in this chapter.

Table 5-28. Damage Estimates for Natural Hazards; Jefferson County

Natural hazard	Damage estimate
Dam Failure	Unknown
Flooding [1]	\$2.16 million property; \$1.3 million crop
Ice Shoves	\$1,000
Fog [2]	0
Tornado/High Wind	\$375,000 property; \$1,000 crop
Hail Storms [2]	\$5,000 property; \$1,500 crop
Thunderstorm [2]	\$20,000 property; \$2,000 crop
Winter Storms [2] [3]	0
Extreme Temperature – heat	0
Extreme Temperature – cold	0
Drought - short-lived	0
Drought - long-lived	0 property; \$100,000-\$200,000 crop
Wildland fire - 25 acres or more	\$10,000 to \$20,000
Wildland fire - less than 25 acres	\$1,500 to \$4,500

Notes: 1. Based on a reported damage from 1950 through 2023 for 50 events
 2. Estimates do not include damage to motor vehicle or other accident-related costs
 3. Estimate does not include snow removal costs. These are included in local government budgets.

MITIGATION STRATEGY

1. CHAPTER OVERVIEW

This chapter is intended to identify common mitigation strategies for each of the natural hazards reviewed in this plan and potential funding sources for carrying out mitigation activities. The bulk of the chapter is devoted to listing goals, objectives, and policies along with activities that apply broadly to the county and civil divisions. Where warranted, special programs or projects or activities that apply to a single jurisdiction are also listed.



2. TYPES OF POTENTIAL MITIGATION STRATEGIES

Mitigation strategies can be grouped into six broad categories:

- ◆ Prevention
- ◆ Property protection
- ◆ Public education and awareness
- ◆ Natural resource protection
- ◆ Emergency services
- ◆ Structural projects

Examples are listed below for each of the natural hazards addressed in this plan.

Chapter Contents

1. Chapter Overview
2. Types of Potential Mitigation Strategies
3. Existing Mitigation Strategies
4. Funding Sources
5. Review of Capabilities
6. Authority to Control Land Use and Development
7. Goals, Objectives, and Policies
8. Mitigation Projects and Activities

Dam Failure

- ◆ Remove dams that don't serve a useful purpose
- ◆ Require the preparation of emergency action plans
- ◆ Ensure that emergency action plans are current
- ◆ Ensure that dam inspections are conducted as required by state law
- ◆ Include a dam failure in emergency planning exercises
- ◆ Minimize the level of development in a dam's hydraulic shadow in an effort to minimize damage resulting from a dam failure

Key Terms in This Chapter

Community Rating System (CRS) – A voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum National Flood Insurance Program requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from qualified community actions.

Goal – A statement that describes a desired condition to be achieved sometime in the future. A goal is often broad in scope, not easily measurable, and long-term in nature.

Objective – A specific and usually measurable intermediate end that is achievable and make progress toward a goal.

National Flood Insurance Program – A Federal program created in 1968 under which flood-prone areas are identified and flood insurance is made available to the owners of the property in participating communities.

Policy – A predetermined course of action or specific rule that an organization adopts and uses in decision-making and which when applied will help to achieve one or more of its goals or objectives.

Repetitive loss community – A community with one or more repetitive loss properties.

Repetitive loss property (RLP) – For purposes of the Community Rating System, a property for which two or more National Flood Insurance Program losses of at least \$1,000 each have been paid within any 10-year rolling period since 1978.

Severe residential loss (SRL) property – A residential property (1) that has at least four NFIP claim payments over \$5,000 each, when at least two such claims have occurred within any ten-year period, and the cumulative amount of such claims payments exceeds \$20,000; or (2) or which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the value of the property, when two such claims have occurred within any 10-year period.

Safe room – An above ground room within a building (most often homes) that is specifically designed to withstand high winds and provides occupants a safe refuge from tornadoes, hurricanes, or other high-wind events.

Strategy – An action or a group of actions intended to achieve a goal or objective.

Flooding

- ◆ Continue to enforce floodplain regulation and strengthen requirements when appropriate
- ◆ Limit development in the floodplain through local floodplain regulations or zoning
- ◆ Provide dryland access through flood-prone areas
- ◆ Retrofit legal nonconforming buildings that do not meet floodplain regulations (e.g., elevating, floodproofing)
- ◆ Purchase repetitive loss properties and other flood-prone properties and remove structures (i.e., demolition or relocation)
- ◆ Raise the surface of local roads above 50-year flood elevations and arterials above 100-year flood elevations
- ◆ Enlarge the cross-section of culverts and bridges when they do not adequately carry anticipated flood flows
- ◆ Prohibit basements in new subdivisions where flooding from stormwater could be problematic
- ◆ Clean drainageways to allow a free flow of water
- ◆ Minimize the amount of impervious surfaces in a watershed so that stormwater can soak into the ground rather than contributing to flood water
- ◆ Maintain appropriate water rescue equipment
- ◆ Develop and implement appropriate evacuation procedures in flood-prone area
- ◆ Install gaging stations to better understand surface water flow regimes
- ◆ Construct stormwater facilities (e.g., detention and retention basins) to help manage stormwater
- ◆ Take steps to upgrade the National Flood Insurance Program requirements

Ice Shoves

- ◆ Limit development along lakeshores prone to ice shoves

Fog

- ◆ Identify those roadways where fog is localized and install appropriate signage
- ◆ Install automated visibility warning systems to detect reduced visibility conditions

Tornado / High Winds

- ◆ Construct storm shelters in campgrounds and mobile home parks
- ◆ Bury electrical and telephone lines and other utility cables
- ◆ Continue to enforce building codes and strengthen requirements when appropriate
- ◆ Include safety strategies for severe weather events in driver education classes

Severe Storms/Hail

- ◆ Encourage property owners to use building products (e.g., roofing, siding) resistant to hail damage

Snow Storms

- ◆ Bury electrical and telephone lines and other utility cables
- ◆ Install temporary snow fences along road ways that have experienced blowing and drifting snow
- ◆ Continue to enforce building codes and strengthen requirements when appropriate
- ◆ State and local governments can produce and distribute information to motorists relating to severe winter weather hazards
- ◆ Include safety strategies for severe weather events in driver education classes

Extreme Temperature

- ◆ Establish heating and cooling centers for vulnerable populations including the elderly and homeless
- ◆ Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperature

Drought

- ◆ Adopt local ordinances for prioritizing water usage during drought emergencies
- ◆ Develop public wells in deep aquifers
- ◆ Maintain enough water storage capacity in public water systems
- ◆ Protect wetlands from development
- ◆ Encourage the use of water-saving devices in homes and other places where water is used
- ◆ Encourage farmers to take out crop insurance

- ◆ Protect important aquifer recharge areas from inappropriate development

Wildland Fire

- ◆ Maintain appropriate fire fighting equipment to effectively respond to wildland fires
- ◆ Ensure that new homes are well protected from wildland fires and have multiple routes of ingress and egress
- ◆ Provide homeowners with information on how to create a defensible space around structures
- ◆ Bury electrical and telephone lines and other utility cables
- ◆ Institute measures to reduce soil erosion following a wildland fire event
- ◆ Local governments in rural areas can require the issuance of burn permits
- ◆ Encourage property owners to conduct controlled burns as a means of controlling fuel buildup

3. EXISTING MITIGATION STRATEGIES

NATIONAL FLOOD INSURANCE PROGRAM

In 1968, Congress created the National Flood Insurance Program (NFIP)¹ to identify and map flood-prone communities and provide flood insurance to those property owners within a community that has adopted floodplain management regulations that meet minimum requirements. The Federal Insurance and Mitigation Administration, a division of the Federal Emergency Management Agency (FEMA), administers this Federal program. Over 21,000 communities across the United States and its territories now participate in the NFIP.

Jefferson County participates in the NFIP along with each of the cities and villages (*Table 6-1*). In 1971, the city of Fort Atkinson became the first jurisdiction in the county to participate. In a number of instances, revised flood insurance rate maps (FIRMs) have been adopted as more accurate information became available.

Beginning in 2006, the Federal Emergency Management Agency, in collaboration with the Wisconsin Department of Natural Resources, initiated a multi-year effort to create and adopt digital FIRMs for the entire county. Those FIRMs became effective June 2, 2009. The county maps were again updated in 2015.

Table 6-1. Local Participation and Compliance with NFIP Requirements: 2024

City of Fort Atkinson

NFIP Status: Participating (#555554)

Floodplain Ordinance: Chapter 30, Article III of the municipal code

Adoption of Initial FIRM: 5/26/1971

Adoption of Latest FIRM: 2/04/2015

Designated Agency/Department: Zoning administrator

Primary Responsible Party for Substantial Damage Provisions: Local building Inspector

Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP: Comprehensive plan to help guide future development

City of Jefferson

NFIP Status: Participating (#555561)

Floodplain Ordinance: Chapter 286 of the municipal code

Adoption of Initial FIRM: 5/26/1972

Adoption of Latest FIRM: 2/04/2015

Designated Agency/Department: Zoning administrator

Primary Responsible Party for Substantial Damage Provisions: Local building Inspector

Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP: Comprehensive plan to help guide future development

City of Lake Mills

NFIP Status: Participating #(550195)

Floodplain Ordinance: Chapter 660 of the municipal code

Adoption of Initial FIRM: 7/2/1987

Adoption of Latest FIRM: 2/04/2015

Designated Agency/Department: Zoning administrator

Primary Responsible Party for Substantial Damage Provisions: Local building Inspector

Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP: Comprehensive plan to help guide future development

¹ The National Flood Insurance Program was created with the passage of the National Flood Insurance Act of 1968.

Table 6-1. Local Participation and Compliance with NFIP Requirements: 2024**City of Waterloo****NFIP Status:** Participating (#550198)**Floodplain Ordinance:** Chapter 375 of the municipal code**Adoption of Initial FIRM:** 9/18/1985**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**City of Watertown [1]****NFIP Status:** Participating (#550107)**Floodplain Ordinance:** Chapter 532 of the municipal code**Adoption of Initial FIRM:** 4/1/1981**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**City of Whitewater [1]****NFIP Status:** Participating (#550200)**Floodplain Ordinance:** Chapter 19.46 of the municipal code**Adoption of Initial FIRM:** 6/1/1982**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Village of Cambridge [1]****NFIP Status:** Participating (#550080)**Floodplain Ordinance:** Chapter 15.60 of the municipal code**Adoption of Initial FIRM:** 6/4/1980**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Village of Johnson Creek****NFIP Status:** Participating (#550194)**Floodplain Ordinance:** Chapter 240 of the municipal code**Adoption of Initial FIRM:** 9/30/1982**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Village of Lac La Belle [1]****NFIP Status:** Participating (#550565)**Floodplain Ordinance:** Chapter 8 of the municipal code**Adoption of Initial FIRM:** 1/18/1983**Adoption of Latest FIRM:** 10/19/2023**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Village of Palmyra****NFIP Status:** Participating (#550196)**Floodplain Ordinance:** Chapter 17 of the municipal code**Adoption of Initial FIRM:** 5/3/1990**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator

Table 6-1. Local Participation and Compliance with NFIP Requirements: 2024**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Village of Sullivan****NFIP Status:** Participating (#550197)**Floodplain Ordinance:** Chapter 465 of the municipal code**Adoption of Initial FIRM:** 9/18/1985**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future development**Jefferson County****NFIP Status:** Participating (#55055)**Floodplain Ordinance:** Chapter 14 of the municipal code**Adoption of Initial FIRM:** 9/29/1978**Adoption of Latest FIRM:** 2/04/2015**Designated Agency/Department:** Zoning administrator**Primary Responsible Party for Substantial Damage Provisions:** Local building Inspector**Floodplain Mgmt. Efforts Contributing to Continued Compliance with NFIP:** Comprehensive plan to help guide future developmentSource: Federal Emergency Management Agency <https://www.fema.gov/cis/WI.pdf> Accessed October 1, 2024

Notes:

1. Municipality located in Jefferson County and another county

Participation in the NFIP is based on an agreement between local communities and the federal government that states, if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas, the federal government will make flood insurance available within the community as a financial protection against flood losses.

Because Jefferson County and each of the cities and villages participate in the NFIP, property owners are able to purchase flood insurance, including those not located within a mapped floodplain area. Flood insurance pays even when no state or federal disaster is declared. Historically, federal disaster declarations have been issued in less than 50 percent of the flooding incidents.

There are two types of flood insurance. The first is a policy that insures the physical structure and the second is a policy that covers the content of the building. The standard flood insurance policy provides coverage for one building per policy. The only exception is 10 percent coverage for a detached garage. However, the total payment for flood damage to the detached garage and the house together cannot exceed the building policy limit. For coverage to apply, the garage can only be used for parking and storage. All other buildings on the premises need separate coverage. The maximum allowable limits are \$250,000 for residential properties and \$500,000 for commercial properties.

Contents are not automatically included. If contents coverage is desired, a specific amount must be named and a separate premium charged. Contents coverage limits are \$100,000 for residential policies and \$500,000 for commercial policies.

Building property coverage includes:

- ◆ The insured building and its foundation
- ◆ The electrical and plumbing systems
- ◆ Central air conditioning equipment, furnaces, and water heaters
- ◆ Refrigerators, cooking stoves, and built-in appliances such as dishwashers
- ◆ Permanently installed carpeting over an unfinished floor
- ◆ Permanently installed paneling, wallboard, bookcases, and cabinets.
- ◆ Window blinds
- ◆ Detached garages (up to 10 percent of building property coverage)
- ◆ Debris removal

Federal disaster declarations are issued in less than 50% of the flooding incidents.

Personal property coverage includes:

- ◆ Personal belongings such as clothing, furniture, and electronic equipment
- ◆ Curtains
- ◆ Portable and window air conditioners
- ◆ Portable microwave ovens and portable dishwashers
- ◆ Carpets not included in building coverage (see above)
- ◆ Clothes washers and dryers
- ◆ Food freezers and the food in them
- ◆ Certain valuable items such as original artwork and furs (up to \$2,500)

The cost of an annual regular flood insurance policy varies depending on the site location, age of the building, design of the building, and elevation of the building if located in a flood hazard area

Sanitary sewer backups are not covered. However, many homeowners policies do have riders to cover sewer back-ups. Sewer back-up riders can cost as little as \$30 per year.

While flood insurance coverage can significantly reduce the potential economic loss to a landowner in case of a flood disaster, flood insurance also helps reduce the cost of disaster aid to the general public. It has been shown that every \$3 paid in flood insurance claims saves \$1 in disaster assistance payments.

In 2024, there were 193 insurance policies in Jefferson County with coverage of more than \$46.4 million (*Table 6-2*). Premiums totaled \$235,513 for those policies.

Table 6-2. Flood Insurance Policies: 2024

Jurisdiction	Policies	Total Coverage	Total Written Premiums + FPF	Total Annual Payment
Cambridge, village [1]	0	0	0	0
Fort Atkinson, city	22	\$5,910,000	\$49,983	\$61,593
Jefferson, city	24	\$5,896,000	\$41,641	\$50,435
Jefferson County, unincorporated	127	\$28,664,000	\$123,876	\$160,656
Johnson Creek, village	0	0	0	0
Lac La Belle, village [1]	0	0	0	0
Lake Mills, city	0	0	0	0
Palmyra, village	0	0	0	0
Sullivan, village	1	\$1,000,000	\$1,866	\$2,443
Waterloo, city	5	\$751,000	\$5,049	\$6,717
Watertown, city [1]	14	\$4,244,000	\$13,098	\$16,136
Whitewater, city [1]	0	0	0	0
Total	193	\$46,465,000	\$235,513	\$297,980

Source: Federal Emergency Management Agency <https://nfip-services.floodsmart.gov/reports-flood-insurance-data>

Report title: "Policy Information by State and Community"; data as of September 30, 2024

Key:

Policies in Force is the number of policies as of the date of the report.

Total Coverage is the total building and contents coverage for the policies in force.

Total Written Premium + FPF is the sum of the premium and FPF (federal policy fee) for the policies in force.

Total Annual Payment is the sum of submitted written premium, discounts, fees, assessments and surcharge

Notes: 1. Municipality located in Jefferson County and another county

COMMUNITY RATING SYSTEM

The Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum requirements of the National Flood Insurance Program (NFIP). Because flood risk has been reduced, policy holders in participating communities enjoy lower flood insurance premiums than those located in a community that is not part of CRS. Flood insurance premium rates are discounted as shown in Table 6-3 based on a community's rating. A Class 1 community receives a 45 percent premium discount, while a Class 9 community receives a 5 percent discount. A Class 10 community is not participating in CRS and receives no discount. The CRS classes for local communities are based on 18 activities, organized under four categories: (1) public information, (2) mapping and regulations, (3) flood damage reduction, and (4) flood preparedness. Nationwide, 1,049 communities are part of CRS, or roughly 5 percent of those who are eligible.

In Jefferson County, the City of Watertown is the only jurisdiction that is part of CRS (*Table 6-4*). All of the other communities have a CRS rating of 10.

Table 6-3. Insurance Premium Reductions for Communities in the Community Rating System

CRS Rating	Special Flood Hazard Area	Non-Special Flood Hazard Area
1	45%	10%
2	40%	10%
3	35%	10%
4	30%	10%
5	25%	10%
6	20%	10%
7	15%	5%
8	10%	5%
9	5%	5%
10	0	0

Table 6-4. CRS Rating for Communities in Jefferson County: 2024

Jurisdiction	CRS Rating
Jefferson County	10
City of Fort Atkinson	10
City of Jefferson	10
City of Lake Mills	10
City of Waterloo	10
City of Watertown [1] [2]	7
City of Whitewater [1]	10
Village of Cambridge [1]	10
Village of Johnson Creek	10
Village of Lac La Belle [1]	10
Village of Palmyra	10
Village of Sullivan	10

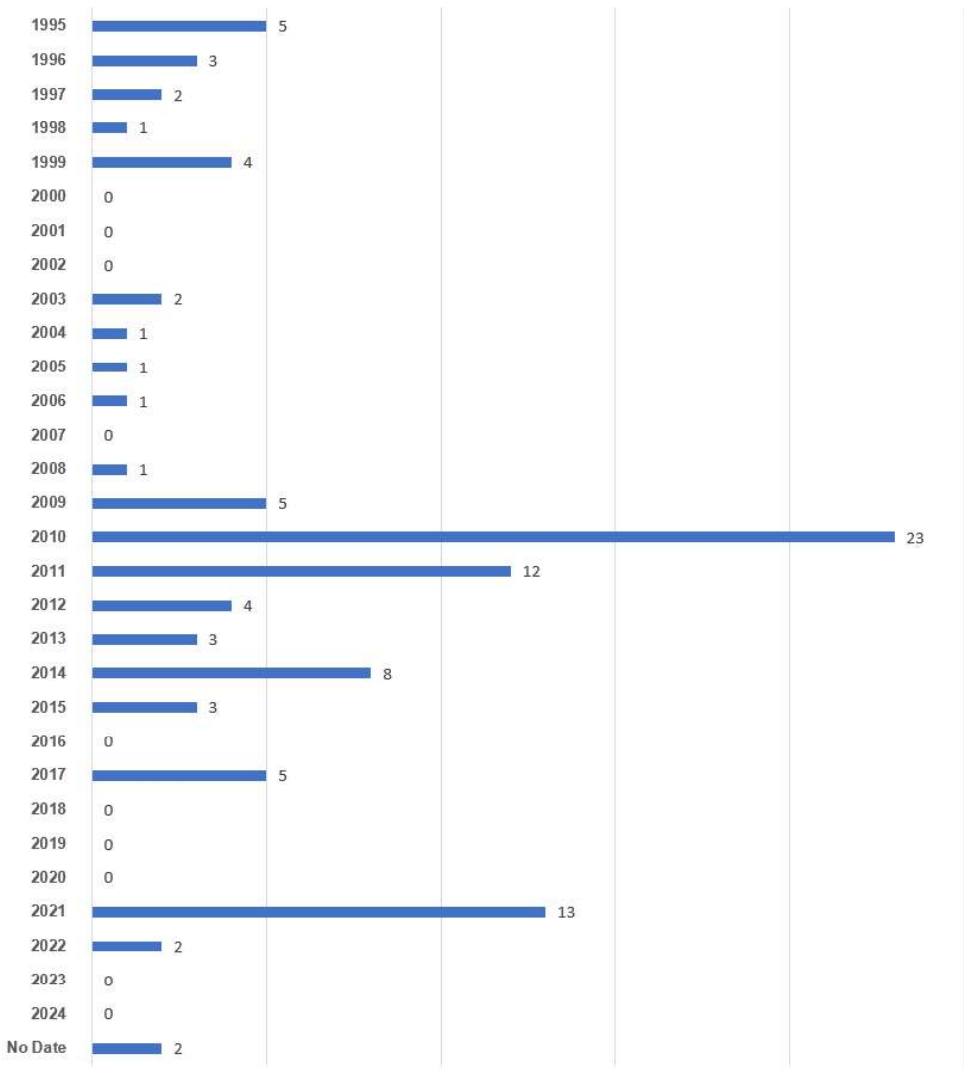
Source: Federal Emergency Management Agency; <https://www.fema.gov/cis/WI.pdf> accessed October 10, 2024

Notes: 1. Municipality located in Jefferson County and another county
2. Watertown enrolled in the CRS in October 1991 and has maintained its current rating since October 2001.

PROPERTY ACQUISITION AND STRUCTURE REMOVAL

Given the large number of buildings located in the 100-year floodplain, Jefferson County began a program in 1988 to acquire flood-prone properties with the intent of removing the buildings either through demolition or relocation. Since the first acquisitions in 1995, there has been more than 100. (*Exhibit 6-1*). The largest number of acquisitions occurred in 2010. A complete listing with property locations is included as *Appendix J*.

Exhibit 6-1. Flood-Prone Properties Acquired by Jefferson County by Year: 1988–2024



Source: Jefferson County Emergency Management

STORMREADY

StormReady is a national voluntary program, administered through local National Weather Service (NWS) offices that encourages communities to take a proactive approach in developing plans to improve local hazardous weather operations and public awareness for all types of local severe weather threats². It is intended to give communities the skills and education needed to cope with and manage potential weather-related disasters, before and during the event. By participating in StormReady, local agencies can earn recognition for their jurisdiction by meeting criteria established by the National Weather Service in partnership with federal, state, and local emergency management professionals.

The program does not replace any of the various federally or state-funded hazard mitigation programs, rather, it compliments them. The entire community - from the mayor, emergency managers, to business leaders and civic groups - can take the lead on becoming StormReady.

² More information about StormReady is available from the Milwaukee/Sullivan Weather Service Forecast office. www.crh.noaa.gov/mkx/?n=stormready-mkx

Education and communication are a key part of the StormReady program. The Wisconsin StormReady Advisory Board, comprised of National Weather Service personnel and state, regional, and county emergency managers, reviews applications and visits the jurisdictions to verify the steps made in the process to become StormReady. The designation is only valid for two years. As of 2024, there were 19 counties, 14 communities, and 6 universities in Wisconsin that were StormReady certified (*Table 6-5*).

The City of Lake Mills was initially certified in 2001, the first community in Wisconsin to receive the StormReady designation. The City of Whitewater, is the only other jurisdiction in the county to be certified. UW-Whitewater was certified in the last five years.

Table 6-5. StormReady Jurisdictions; Wisconsin: 2024

Counties	Communities	Universities
Brown	Bayside	University of Wisconsin
Calumet	Belleville	University of Wisconsin, Eau Claire
Eau Claire	Cedarburg	University of Wisconsin, La Crosse
Fond du Lac	Dousman	University of Wisconsin, Milwaukee
Iowa	Elm Grove	University of Wisconsin, Stevens Point
La Crosse	Hillsboro	University of Wisconsin, Whitewater
Lincoln	Lake Delton	
Manitowoc	Lake Mills	
Monroe	New Berlin	
Oneida	Reedsburg	
Outagamie	Stevens Point School Area District	
Ozaukee	Viroqua	
Racine	Waupaca	
Sauk	Whitewater	
St. Croix		
Taylor		
Vernon		
Washburn		
Wood		

Source: National Weather Service, <https://www.weather.gov/stormready/wi-sr>. Accessed October 1, 2024

NOAA WEATHER RADIO

NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting continuous weather information direct from a nearby National Weather Service office. NWR broadcasts National Weather Service warnings, watches, forecasts, and other hazard information 24 hours a day. It is also used to broadcast warning and post-event information for all types of hazards - both natural events (e.g., severe weather, flooding) and man-made events (e.g., Amber Alerts, toxic, chemical, and biological releases, terrorist attacks). The radios can be programmed to receive information specific to a certain geographic area and sound an alarm to alert users of approaching dangerous weather. NWR is the primary actuator of the Federal Communications Commission’s Emergency Alert System (EAS).

The NOAA Weather Radio network provides authoritative weather and emergency information to the public.

As of June, 2012, the NWR network included 1,000 stations covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories.

The Milwaukee/Sullivan Weather Service Forecast office is located in the town of Sullivan and serves 20 counties in south-central and southeast Wisconsin. NOAA Weather Radios are available through retail stores that sell electronic appliances, marine supply stores, truck stops, cable shopping networks, mail order catalogs, and the Internet.

URBAN STORMWATER MANAGEMENT ORDINANCES

New urban development brings with it increases in impervious surfaces such as rooftops, driveways, and streets. As areas develop into urban land uses, there is an increase in both volume and rate of runoff. To control the rate of runoff and potential downstream increases in peak flood elevations, some communities require detention of stormwater.

Jefferson County has adopted a stormwater management ordinance and each of the cities and villages have an ordinance as well.

EROSION AND SEDIMENT CONTROL ORDINANCES

Sediment from construction sites can deposit in local streams causing blockages that can result in potentially higher flood elevations during storm events. To control construction site erosion from construction sites, the Wisconsin Department of Commerce has adopted construction site erosion control regulations through the state Uniform Building Code. State erosion control regulations are enforced through the local building inspectors. In addition to the state regulations, the City of Watertown has adopted a citywide construction erosion control ordinance for new developments.

SHORELAND ZONING

Under Wisconsin Administrative Code NR 115, counties are required to adopt a shoreland zoning ordinance that controls development within the shoreland³ of lakes and streams. The shoreland-zoning ordinance establishes minimum lot sizes—10,000 square feet on public sanitary sewer and 20,000 square feet on private sanitary systems. Buildings must be setback 75 feet from the ordinary high-water mark and comply with local floodplain zoning ordinances. The ordinance regulates the cutting of trees and shrubbery within 35 feet of the ordinary high-water mark and prohibits more than 30 feet of every 100 feet to be removed. Primary uses in the shoreland-zoning district are limited to open space, agricultural, and maintenance of piers, roadways, and public utilities. These development standards follow land when it is annexed into a city or village, unless the municipality has adopted an ordinance as strict as the county ordinance. Jefferson County has adopted an ordinance consistent with state requirements. No city or village in Jefferson County has adopted a shoreland zoning ordinance.

SHORELAND WETLAND ZONING

Under Wisconsin Administrative Code NR 115, counties are required to adopt a shoreland wetland zoning ordinance that creates a shoreland wetland zoning district to control the development of wetlands that are two acres or more in size within the shoreland area. Permitted uses in the shoreland wetland district are limited to:

- ◆ recreation (hiking, fishing, hunting, swimming, and boating)
- ◆ agriculture
- ◆ public roadways and railroad lines
- ◆ public utilities
- ◆ non-residential building used for aquaculture

These development standards follow land when it is annexed into a city or village, unless the municipality has adopted an ordinance as strict as the county ordinance. Jefferson County has adopted an ordinance consistent with state requirements. No city or village in Jefferson County has adopted a shoreland zoning ordinance.

COMPREHENSIVE PLANS

In 1999, the Governor signed legislation that created a new framework for comprehensive planning in Wisconsin. By January 1, 2010, any community wanting to regulate land use must have an adopted comprehensive plan that meets minimum state requirements. Although state requirements do not require that natural hazard planning be a part of a comprehensive plan, communities do have an opportunity to consider natural hazards when devising land use plans and goals, objectives, and policies relating to land use and environmental management. *Table 6-6* shows the status of these plans in the county.

FARMLAND PRESERVATION PROGRAM

The state of Wisconsin created the Wisconsin Farmland Preservation Program in 1977 to support the efforts of counties to preserve agricultural resources. If a county has an approved agricultural preservation plan that meets the standards of Chapter 91, Wisconsin Statutes,

Table 6-6. Comprehensive Plans in Jefferson County: 2024

Jurisdiction	Current Plan Adopted
Jefferson County	February 9, 2021
City of Fort Atkinson	March 19, 2019
City of Jefferson	January 21, 2020
City of Lake Mills	November 7, 2023
City of Waterloo	May 6, 2021
City of Watertown [1]	December 17, 2019
City of Whitewater [1]	July 8, 2017
Village of Cambridge [1]	November 28, 2023
Village of Johnson Creek	November 27, 2023
Village of Lac La Belle [1]	December 5, 2018
Village of Palmyra	June 19, 2019
Village of Sullivan	November 10, 2009

Source: Various municipal websites; accessed October 10, 2024

Notes: 1. Municipality located in Jefferson County and another county

³ A shoreland is defined as land within the following distances from the ordinary high-water mark of navigable waters: 1000 feet from a lake, pond, or flowage; and 300 feet from a river or stream or the landward side of the floodplain, whichever is greater. (NR 115.03 (8))

farmland owners are eligible to receive a state income tax credit.

In October 1999, the county board adopted the *Jefferson County Agricultural Preservation and Land Use Plan*. The agricultural preservation goals of the plan are to:

- ◆ Preserve the rural character and aesthetic quality of Jefferson County.
- ◆ Provide equity and fairness to owners of land with comparable resources and location characteristics.
- ◆ Minimize nonagricultural development on prime agricultural soils.
- ◆ Maintain the integrity of agricultural districts allowing for accepted agricultural practices.

The County has since updated the farmland preservation plan consistent with state requirements.

An additional benefit of agricultural preservation is the long-term protection of natural floodplains and flood storage. Sites managed for agricultural preservation will have minimal urban development. Under the agricultural preservation program, the county has established an A-3 Agricultural/Rural Residential Zoning District that limits the number of residential lots in agricultural areas to a maximum of three 2-acre lots per agricultural parcel. The result of the county's agricultural zoning is that much of the floodplain and flood storage areas will be preserved from urban development and increases in flood elevations due to upstream urbanization will be minimized.

ENVIRONMENTAL CORRIDORS

As part of its agricultural preservation and land use plan, Jefferson County designated certain land as environmental corridors where additional preservation policies and development standards apply. The environmental corridor protection effort is intended to:

- ◆ protect and preserve an environmental corridor system consisting of wetlands, floodplains, and steeply sloped glacial features,
- ◆ protect groundwater and surface water quality, and
- ◆ discourage development in areas that possess valuable natural resource characteristics and wildlife habitats.

Environmental corridors include the following area:

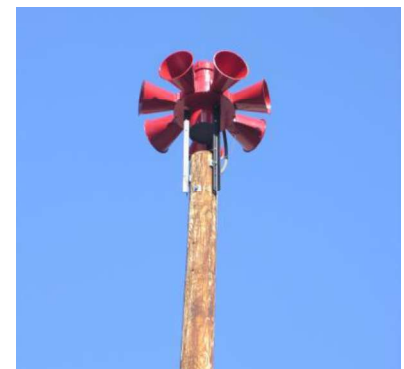
- ◆ Publicly-owned park, recreation, and conservancy lands.
- ◆ Water bodies and wetlands mapped as part of the wetland inventory conducted by the Wisconsin Department of Natural Resources.
- ◆ 100-year floodplains based on Federal Emergency Management Agency (FEMA) maps.
- ◆ Contiguous woodlands over 10 acres in size.
- ◆ Lands with slopes in excess of 20 percent.

Under the county's environmental corridor overlay district zoning, urban development is limited to one dwelling unit per 10 acres. Land disturbances associated with nonagricultural development are prohibited on slopes greater than 20 percent. No buildings should be constructed within 75 feet of wetlands designated by the Department of Natural Resources or navigable bodies of water. Within Jefferson County, 16,000 acres of environmental corridor is in public ownership. Approximately 55,000 acres, or 15.5 percent of the county, is wetland and/or land within the 100-year floodplain. The environmental corridor district provides another tier of protection for floodplains and flood storage areas such as wetlands. The result of the corridor program will be additional prohibition of building in flood-prone areas and greater protection of natural flood storage, minimizing future increases in flood elevations.

TORNADO SIRENS

Jefferson County has a variety of warning devices/methods. There is an outdoor warning siren system comprised of 41 sirens that reach about 37 percent of the county's population. This system is maintained by each municipality and is tested once a month throughout the year. The 911 Center activates all sirens with the exception of Fort Atkinson, Waterloo, and Fort Atkinson.

Tornado Siren



Annex B of the Jefferson County Emergency Operations Plan identifies the procedures and resources used to provide interagency communications between responders. The annex also identifies the county’s procedures and resources used to provide warning to all county residents in the event of a disaster.

ROADWAY CLOSURES DURING FLOOD EVENTS

In some of the larger flood events, roadways in the county are blocked with water. This can create a potentially dangerous scenario for drivers, limit access to areas within the county, or cause travel delays. To deal with roadway closings, there are two categories of alternatives. The first are alternatives to modify the roadway (e.g. bridge replacement and elevate roadway) to prevent flooding. The second category includes maintenance of a system to actively close roadways when flooding occurs and identify alternate routes for emergency traffic.

Bridge Replacement. In some cases, an alternative to road inundation may be to increase the hydraulic opening of the bridges to allow less backwater on the upstream side of the bridge. The Flood Insurance Study does not provide enough information for most bridges to determine if the bridge is causing the roadway inundation. From the available information, it appears that most of the bridges in Jefferson County are inundated by backwater from downstream areas, and the bridge plays little roll in the roadway inundation. At this time, an active bridge replacement program with the sole purpose of reducing the frequency of inundation is recommended. When bridges are scheduled for replacement due to age or roadway expansion, the bridge designers should look at the effect of the bridge design on the roadway overtopping. If feasible, the new bridge should be replaced with a structure that would meet the criteria outlined in *Table 6-7*.

The Wisconsin Department of Transportation (WDOT) provides design criteria for structure crossings a stream in the Facilities Development Manual, Procedure 13-10-1. Major structures, such as bridges and box culverts, are designed using a process of selecting a design frequency which best produces a balance between structure costs and the cost of potential flood-related damages or risks. Structures in new locations are generally designed to accommodate the 100-year event without increasing the upstream flood stages over existing conditions. Replacement structures are generally designed not to increase the headwater elevation from existing conditions.

In some situations, structure sizes may be increased to reduce the upstream flood elevations. In those cases, if the existing structure is causing upstream flood storage, the flows will need to be re-evaluated to determine if the new structure will increase downstream flows and stages. Under Wisconsin Administrative Code NR 116, if a new bridge results in upstream or downstream increases in the flood elevation greater than 0.01 feet, easements from the affected landowners are required. Where feasible, roadway surfaces should be designed to provide emergency access during flood events.

Table 6-7. Recommended Roadway Flood Protection Level	
Roadway Classification	Recommended Protection Level
Interstate and railroads	100-year flood
State & county highway	50-year flood
Local arterial	50-year flood
Minor and collector street	10-year flood

Elevation of Roadways An alternative to roadway inundation is to raise the pavement surface to above the regional flood elevation. Placing additional fill along the roadway corridor would raise the road surface. While this alternative would help maintain public access, the raising of the road surface may increase flood elevations upstream of the fill. The fill would need to be structurally designed to withstand the hydraulic pressures of the floodwaters. As with bridge replacement, wide-scale elevation of roadway surfaces is not recommended at this time. As roadway maintenance is scheduled, the designers should consider the alternative of roadway elevation. Roadways should only be raised where the project is cost effective.

Road Closures During Flooding Drowning is the number one cause of flood deaths. More people drown in their cars than anywhere else. During flood events, the depth of the water over road surfaces is difficult to predict. Many drivers enter water they think is a few inches deep, only to find themselves in the center of a flowing stream. For years, Jefferson County and the local municipalities have closed and barricaded roadways that are flooded. The Jefferson County Emergency Operations Plan (March 2000) outlines the procedures for emergency response during flood events. A coordinated system between Jefferson County Emergency Management, the Jefferson County Sheriffs Department, and local municipalities is in place to close flooded roads and reroute traffic.

PUBLIC INFORMATION

Information is one of the most important tools in helping people mitigate the potential impacts of natural hazards. To be effective, information needs to be available from several sources and be offered on an on-going basis.

By way of example, *Table 6-8* outlines the roles of the various organizations involved in public education with regards to floodplain issues.

In an effort to keep state residents informed about natural hazards, Wisconsin Emergency Management sponsors a number of public awareness campaigns, including:

- ◆ Tornado & Severe Weather Week
- ◆ Rip Current Awareness Week
- ◆ Heat Awareness Day
- ◆ Lightning Safety Week proclamations

Table 6-8. Organizations and Their Roles in Distributing Public Information Regarding Floodplain Management

Organization / Activities	
Federal Emergency Management Agency (FEMA)	<ul style="list-style-type: none">◆ Provides information on National Flood Insurance Program (NFIP)◆ Provides training to insurance industry on implementation of NFIP◆ Provides technical information on flood mitigation activities◆ Maintains a national library of floodplain maps
Wisconsin Emergency Management	<ul style="list-style-type: none">◆ Provides information and training in emergency management including preparedness, response, recovery, and mitigation activities.
Wisconsin Department of Natural Resources	<ul style="list-style-type: none">◆ Provides information on National Flood Insurance Program (NFIP)◆ Provides technical information on flood mitigation activities◆ Maintains a state library of floodplain maps and flood profile models◆ Provides training to local zoning administrators on implementation of floodplain zoning ordinances
Jefferson County Zoning and Sanitation Department	<ul style="list-style-type: none">◆ Maintains local library of floodplain maps◆ Provides information on National Flood Insurance Program (NFIP)◆ Provides information on county floodplain regulations
Local Insurance Agents	<ul style="list-style-type: none">◆ Provides information on National Flood Insurance Program (NFIP)
Local Lending Agencies	<ul style="list-style-type: none">◆ Provides information on National Flood Insurance Program (NFIP). Flood insurance is required on federally-backed mortgages for properties located in a floodplain.
Real Estate Agents	<ul style="list-style-type: none">◆ Provides information on National Flood Insurance Program (NFIP)◆ Required by state law to notify buyers whether or not a structure is located in a regulatory floodplain

4. FUNDING SOURCES

AVAILABLE FEDERAL FUNDING SOURCES

The Federal Emergency Management Agency administers a number of programs that fund mitigation activities at the local and State level.

The **Building Resilient Infrastructure and Communities (BRIC)** program provides mitigation grants to state and local government, and Tribal Nations, for all-hazards mitigation planning and to implement cost-effective mitigation projects that support resiliency to infrastructure and community lifelines.

Hazard Mitigation Grant Program The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. FEMA ended this program in the 2020 Federal Fiscal Year, but grants were provided in 2016-2019 to Wisconsin communities.

Flood Mitigation Assistance Program The Flood Mitigation Assistance (FMA) program was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FEMA provides FMA funds to assist States and communities implement measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program.

Pre-Disaster Mitigation Program The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds.

Repetitive Flood Claims Program The Repetitive Flood Claims (RFC) grant program was authorized by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, which amended the National Flood Insurance Act of 1968. Up to \$10 million is available annually for FEMA to provide RFC funds to assist States and communities reduce flood damages to insured properties that have had one or more claims to the National Flood Insurance Program. Eligible activities include acquisition of properties, and either demolition or relocation of flood-prone structures, where the property is deed restricted for open space uses in perpetuity.

Severe Repetitive Loss Program The Severe Repetitive Loss (SRL) grant program was authorized by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, which amended the National Flood Insurance Act of 1968 to provide funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss (SRL) structures insured under the National Flood Insurance Program (NFIP). The act authorized up to \$40 million for each fiscal year 2005 through 2009. Eligible flood mitigation project activities include floodproofing (historical properties only), relocation, elevation, acquisition, mitigation reconstruction (demolition rebuild), and minor physical localized flood control projects.

FUNDING RECEIVED

Since 1996, Jefferson County has received more than \$32.6 million in federal funding for mitigation activities (*Appendix M*).

5. REVIEW OF CAPABILITIES

This multi-jurisdictional plan covers all of the unincorporated area of Jefferson County and 11 municipalities – 5 villages and 6 cities. They all have different levels of resources and personnel that could be made available in the implementation of this plan.

By in large, all of the cities and villages in Jefferson County have been facing serious budget constraints for years, exacerbated by state-imposed levy limits. The outlook is not expected to change. As a result, each of the communities is heavily dependent on grant funding. These conditions limit each jurisdiction's ability to expand or improve its mitigation capabilities.

Table 6-10. Summary of Staff Capabilities: 2024 (August)

Village	Administrator	Emergency Management Staff	Community Planner
Cambridge [1]	Yes	No	No
Johnson Creek	Yes	No	No
Lac La Belle [1]	Yes	No	No
Palmyra	Yes	No	No
Sullivan	Yes	No	No
City			
Fort Atkinson	Yes	Yes	Yes
Jefferson	Yes	Yes	Yes
Lake Mills	Yes	Yes	Yes
Waterloo	Yes	Yes	Yes
Watertown [1]	Yes	Yes	Yes
Whitewater [1]	Yes	Yes	Yes
Jefferson County	Yes	Yes (2 FTE)	Yes

1. Municipality located in Jefferson County and another county

6. AUTHORITY TO CONTROL LAND USE AND DEVELOPMENT

As set forth in state statutes, municipalities in the state are given the authority to adopt and enforce various regulations controlling land development and use. All municipalities in Jefferson County have elected to do so (*Table 6-11*). All of the municipalities in the county also enforce building codes.

Table 6-11. Summary of Authority to Control Development: 2024

Village	Floodplain Zoning	General Zoning	Land division Regulations
Cambridge [1]	Yes	Yes	Yes
Johnson Creek	Yes	Yes	Yes
Lac La Belle [1]	Yes	Yes	Yes
Palmyra	Yes	Yes	Yes
Sullivan	Yes	Yes	Yes
City			
Fort Atkinson	Yes	Yes	Yes
Jefferson	Yes	Yes	Yes
Lake Mills	Yes	Yes	Yes
Waterloo	Yes	Yes	Yes
Watertown [1]	Yes	Yes	Yes
Whitewater [1]	Yes	Yes	Yes
Jefferson County	Yes	Yes	Yes

1. Municipality located in Jefferson County and another county

7. GOALS, OBJECTIVES, POLICIES, AND IMPLEMENTATION

This section builds off of the previous parts of the plan and presents a unified plan of action to mitigate the effects of natural hazards on property, people, and assets. It lists goals, objectives, and policies that should guide decision-makers and other officials. Goals are intended to describe an end state, usually in general terms. In contrast, objectives describe an end state in measurable and specific terms. Policies give clear direction on what will be done to help achieve a goal and objective.

Following the listing of goals, objectives, and policies, a chart lists specific action items along with an estimated implementation cost. Responsible entities are listed for each so that implementation is well defined.

The activity charts are a work in progress. As items are completed, they should be deleted and as new opportunities or issues arise items will be added. Further, depending on available resources, including funding and staff time, priorities may change.

PRIORITIZATION OF GOALS AND ACTIONS

Activities are prioritized as low, medium, or high based on the STAPLE+E approach. *Exhibit 6-2* lists each of the criteria used to identify the priority. The mitigation actions with the highest priority were deemed to be the most cost effective and most compatible with the community's social and cultural values.

Exhibit 6-2. STAPLE+E

Criteria	Description
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 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, that comply with Federal, State, and local environmental regulations, and that are consistent with the community's environmental goals, have mitigation benefits while being environmentally sound.

The 2025 plan update carries forward the priorities established in the previous plan.

RELATIONSHIP TO OTHER LOCAL PLANNING EFFORTS

It is strongly recommended that these goals and actions be adopted as part of local comprehensive planning efforts where appropriate, especially in areas where existing problems can be corrected and to prevent problems from occurring in newly developed areas.

COST BENEFIT ANALYSIS FOR GOALS AND ACTIONS

Specific cost benefit reviews will occur for each action in each participating jurisdiction during annual budget scenarios. Most identified actions are programmatic and not capital expenditures. The impact and cost of each program will be determined on an as needed basis prior to implementation. The information provided with each action is intended to assist in the cost benefit evaluation of each action. Costs estimates, funding sources, schedules, and responsible parties are preliminary and subject to change based on fiscal conditions. Federal funding for mitigation activities can only be obtained when benefits clearly outweigh the costs. As part of the 2010 update, significant changes were made to this section of the plan. Those goals, objectives, policies, and activities that were added as part of the 2018 plan update are so noted, along with those that have been revised. Those that ensure continued compliance with the National Flood Insurance are also so designated.

The following exhibit presents a summary of changes in objectives, policies, and implementation activities between the 2012 plan and the 2018 plan and this plan update.

The following goals, objectives, and policies were derived based on the risk assessment. They have been updated in each of the plan updates.

Most recently, the 2024 Steering Committee reviewed the goals, objectives, and policies included in the following pages at their meeting and made minor revisions.

Exhibit 6-3. Summary of Significant Changes to Objectives, Policies, and Activities in 2018 Plan

Goal		Objectives	Policies
Goal 1.	Public Education and Communication	No change	No change
Goal 2.	Flooding and Dam Failure	No change	No change
Goal 3.	Tornadoes	No change	No change
Goal 4.	Extreme Temperature	No change	No change
Goal 5.	Severe Storms, Hail & High Winds	No change	No change
Goal 6.	Drought	No change	No change
Goal 7.	Wildland Fire	No change	No change

COMMUNITY LIFELINES

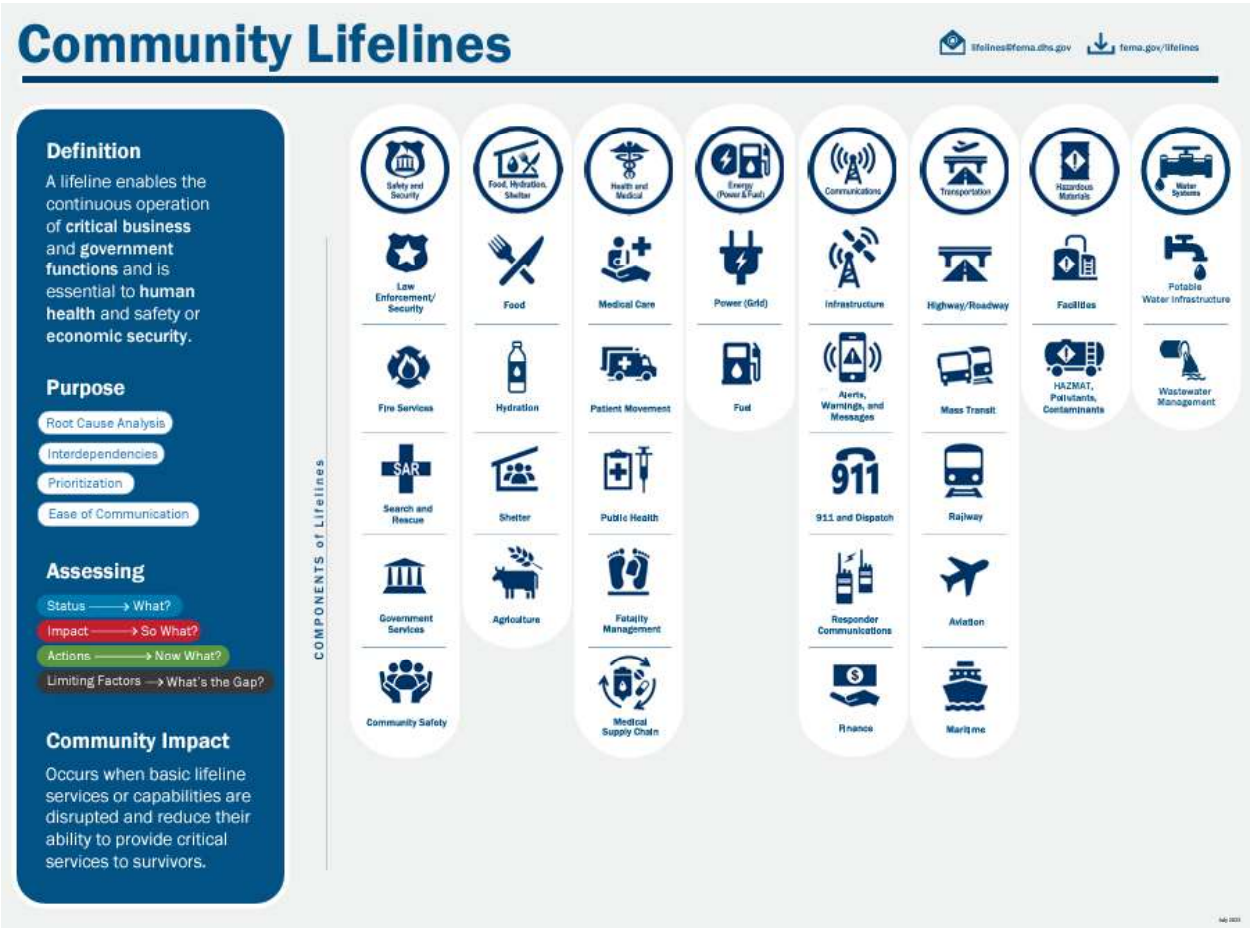
Community lifelines are essential services and infrastructure that enable the sustained operation of a community and support its resilience, especially in the face of disasters (*Exhibit 6-4*). The Federal Emergency Management Agency (FEMA) identifies seven key community lifelines:

1. **Safety and Security** – Law enforcement, emergency services, and general public safety.
2. **Food, Water, and Shelter** – Access to food, potable water, sanitation, and housing.
3. **Health and Medical** – Medical care, health resources, and public health services.
4. **Energy (Power and Fuel)** – Electricity, gas, and fuel for transportation and heating.
5. **Communications** – Internet, cell networks, and other communication systems.
6. **Transportation** – Roads, bridges, airports, and public transportation.
7. **Hazardous Materials** – Management and containment of hazardous substances.
8. **Water Systems** – Potable water and wastewater management.

In hazard mitigation planning, community lifelines guide strategies to reduce the risks and impacts of natural hazards. By focusing on these lifelines, communities can prioritize protecting the critical infrastructure that supports essential functions, thereby strengthening community resilience. Some mitigation activities, like the following, can promote Community Lifelines:

1. installing community safe rooms,
2. floodproofing critical infrastructure like water and wastewater facilities,
3. installing backup generator at government facilities, and
4. providing emergency shelters.

Exhibit 6-4. Community Lifelines



Source: Community Lifelines Poster, July 26, 2023

GOALS, OBJECTIVES AND POLICIES

The following goals, objectives, and policies were derived based on the risk assessment. They have been updated in each of the plan updates.

Goal 1. Public Education

Provide the public with the education they need to adequately prepare for and respond to natural hazards identified in this plan including dam failure, flooding, ice shoves, fog, tornado/high winds, hailstorms, thunderstorms, winter storms, extreme temperature, drought, and wildland fire. **(2008 Plan)**

Objectives

1. Strengthen emergency service preparedness and response by enhancing public education throughout the county. **(2008 Plan)**
2. Increase the number of households that have prepared a family emergency plan. **(2008 Plan)**
3. Increase the number of public outreach materials in Spanish. **(2008 Plan)**

Policies

1. Work with non-governmental organizations (youth, service, professional, religious) to promote mitigation education and awareness. **(2008 Plan)**
 2. Look for multiple and varied opportunities to disseminate educational information to county residents. **(2008 Plan)**
-

Goal 2. Flooding

Protect the public health, safety, and welfare of county residents and public and private property during flood events. **(2008 Plan)**

Objectives

1. Minimize the impact of flooding on potentially affected structures. **(2008 Plan)**
2. Decrease the number of structures currently located in the 100-year floodplain that are not properly flood-proofed. **(2008 Plan)**
3. Minimize the amount of impervious surface in new development projects to allow more infiltration of stormwater into the ground. **(2008 Plan)**
4. Decrease the number of repetitive loss properties. **(2008 Plan)**
5. Decrease the number of repetitive loss communities in the county. **(2008 Plan)**
6. Increase public awareness of flooding. **(2008 Plan)**
7. Improve communication between the county and local units of government when floods occur or are likely to occur. **(2008 Plan)**

Policies

1. Continue to enforce floodplain regulations to ensure that future development in the 100-year floodplain meets established standards. **(2008 Plan)**
 2. Continue the buyout program on Blackhawk Island. **(2008 Plan)**
 3. Support the identification and conservation of land with high flood mitigation value (e.g., wetlands, upland storage, and infiltration areas). **(2008 Plan)**
 4. Support land acquisition and other management strategies to preserve open space for flood mitigation purposes. **(2008 Plan)**
 5. Ensure that governmental officials and employees, county residents, and real estate agents are aware of floodplain regulations. **(2008 Plan)**
 6. Ensure that people owning property in the 100-year floodplain, and their agents, notify buyers when selling their property. **(2008 Plan)**
 7. Adopt standards to control the proportion of a site that can be covered with impervious surfaces. **(2008 Plan)**
 8. Locate public infrastructure outside of the 100-year floodplain. When infrastructure has been located in the 100-year floodplain, it should be flood-proofed or otherwise protected from flood water. **(2008 Plan)**
 9. Design and properly size all new stream crossings to not create a significant upstream back-water effect. **(2008 Plan)**
 10. Continue to enforce stormwater management regulations. **(2008 Plan)**
 11. Use data records in on-going assessment of flood problems and effectiveness or response programs. **(2008 Plan)**
 12. Formalize communications links and establish procedures. **(2008 Plan)**
 13. Update flood insurance rate maps (FIRMs) when it can be shown that they are substantially inaccurate. **(2008 Plan)**
 14. Ensure that all large dams in the county have emergency action plans and that they are up to date. **(2008 Plan)**
 15. Undertake such activities as may be required to remain compliant with the requirements of the National Flood Insurance Program. **(2008 Plan)**
 16. Develop a strategy for managing flood-prone properties that have been acquired. **(2024 Plan)**
-

Goal 3. Tornadoes

Lessen the effects of a tornado to the extent feasible and speed recovery following an event. **(2008 Plan)**

Objectives

1. Increase public education and awareness of the potential severity of tornadoes. **(2008 Plan)**
2. Minimize the amount of time that businesses damaged by a tornado are not operational. **(2008 Plan)**
3. Minimize the amount of time it takes to rebuild or restore dwellings damaged by a tornado. **(2008 Plan)**
4. Prevent injuries and death from tornadoes. **(2008 Plan)**

Policies

1. Bury overhead power and utility lines where feasible as a way to reduce power outages during all types of storm events. **(2008 Plan)**
2. Require that mobile homes and manufactured housing are securely anchored in place. **(2008 Plan)**
3. Ensure that adequate tornado shelters are available to county residents especially those living in mobile home parks. **(2008 Plan)**
4. Include redevelopment objectives in smart growth comprehensive plans to support post-disaster development activities. **(2008 Plan)**
5. Continue to support the efforts of severe weather spotters. **(2008 Plan)**
6. Keep the current siren system functioning and in good repair. **(2008 Plan)**
7. Encourage residents to obtain NOAA weather radios especially in those areas of the county that are not covered by a siren. **(2008 Plan)**

Goal 4. Extreme Temperature

Protect the health of Jefferson County residents from extreme temperature. **(2008 Plan)**

Objectives

1. Prevent deaths and injuries from extreme temperature. **(2008 Plan)**

Policies

1. Encourage volunteers and public agencies to look after vulnerable individuals, especially the elderly, during times of extreme temperature. **(2008 Plan)**
2. Open county and other public facilities with air conditioning as appropriate for public access during periods of extreme heat. **(2008 Plan)**
3. Ensure that county residents are aware that there are different forms of assistance to help qualified individuals pay their winter heating costs. **(2008 Plan)**

Goal 5. Severe Storms, Hail, & High Winds

Protect and prepare Jefferson County residents from the dangers of extreme weather. **(2008 Plan)**

Objectives

1. Increase public education and awareness of the potential dangers of thunderstorms, snowstorms, hail, and windstorms. **(2008 Plan)**

Policies

1. Bury overhead power and utility lines where feasible as a way to reduce power outages during all types of storm events. **(2008 Plan)**
 2. Provide citizens with early storm warnings. **(2008 Plan)**
 3. Encourage the use of surge protectors on critical electronic equipment in governmental and critical facilities. **(2008 Plan)**
 4. Work with utility companies to assess and to improve, when necessary, electric service reliability. **(2008 Plan)**
 5. Work with utility companies to ensure that trees are properly trimmed near utility lines. **(2008 Plan)**
-

Goal 6. Drought

Protect the public health, safety, and welfare of Jefferson County residents during periods of drought. **(2008 Plan)**

Objectives

1. Decrease water consumption during periods of drought. **(2008 Plan)**
2. Minimize the economic impacts of drought on the local economy. **(2008 Plan)**

Policies

1. Encourage water conservation during periods of drought. **(2008 Plan)**
2. Impose watering restrictions during periods of extreme drought. **(2008 Plan)**
3. Work with multiple agencies to conserve water, provide drought prediction, and provide stream and groundwater monitoring. **(2008 Plan)**
4. Work with agencies that can assist with and promote soil health, preserve soil moisture and help to minimize the loss of the crops and topsoil in the event of a drought. **(2008 Plan)**
5. Continue to monitor groundwater levels to identify the status of groundwater resources and trends. **(2008 Plan)**
6. Work cooperatively with state agencies and other levels of government in developing appropriate strategies on a regional basis. **(2008 Plan)**
7. Provide water for livestock when the needs of humans have been or are being met. **(2008 Plan)**

Goal 7. Wildland Fire

Protect structures and residents in Jefferson County from the hazard of uncontrolled wildfire. **(2008 Plan)**

Objectives

1. Decrease the number of wildland fires occurring in the county. **(2008 Plan)**
2. Decrease the number of acres burned from wildland fires. **(2008 Plan)**
3. Increase public education. **(2008 Plan)**

Policies

1. Support the use of controlled burns as a way of reducing the threat of dangerous wildland fires. **(2008 Plan)**
 2. Enhance emergency services to increase the efficiency of wildfire response and recovery activities. **(2008 Plan)**
 3. Keep track of wildfire events in the county to better document the extent and location of these events. **(2008 Plan)**
-

8. MITIGATION PROJECTS AND ACTIVITIES

MAJOR ACCOMPLISHMENTS

Since this plan was first adopted in 2008, a number of significant work activities have been accomplished as described in *Table 6-13*.

Table 6-13. Major Accomplishments: 2008-2024

Description	Jurisdiction
1. Floodproofed or otherwise protected the Waterloo Carousel from flooding. (Activity #21 under Goal 2, Flooding in 2008 Plan)	City of Waterloo
2. Jefferson County Emergency Management secured funding from local, state, and federal sources to acquire more than 25 flood-prone properties. (Activity #2 under Goal 2, Flooding in 2008 Plan)	Jefferson County
3. Acquired a 1.6-acre site along the Mauneshia River in the downtown area for flood storage. Demolished an old pickle factory (Both of these are related to Activity #21 under Goal 2, Flooding in 2008 Plan)	City of Waterloo
4. Jefferson County Emergency Management secured funding from local, state, and federal sources to acquire 21 flood-prone properties. (Activity #2 under Goal 2, Flooding in 2008 Plan)	Jefferson County
5. Worked with County Fair Director to establish radio and procedures for early weather detection and notification during events, and provide a copy of events at the fairgrounds to National Weather Service for early warning notifications.	Jefferson County
6. Conducted STEP training (Student Tools for Emergency Planning) in to local schools	Jefferson County
7. Conducted a number of table-top exercises	Jefferson County and others
8. Worked to get LP for county residents (2015)	Jefferson County
9. Developed a debris management plan	Jefferson County
10. Completed a feasibility study to establish a water gaging station on the Crawfish River near Hubbleton	Jefferson County
11. Amended the county's emergency operations plan to address extreme temperatures	Jefferson County
12. Implemented Integrated Public Alert and Warning System (IPAWS) (2016)	Jefferson County
13. Completed 5-year update of multi-jurisdictional hazard mitigation plan (2018)	Jefferson County and participating jurisdictions
14. Town of Hebron resolved localized flooding along Hanson Road	Town of Hebron
15. City of Watertown completed a flood control plan in 2024	City of Watertown

FUTURE PROJECTS AND ACTIVITIES

The following are specific projects and activities to be undertaken in the next 5 and 10 years subject to necessary resources, including staff time and needed funding.

Goal 1. Public Education

Implementation Projects and Activities Related to Public Education	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Develop, enhance, and implement education programs aimed at mitigating natural hazards and reducing the risk to citizens, public agencies, private property owners, businesses, and schools. (Safety Network, faith-based organizations, civic groups, Chambers of Commerce, etc.) (2008 Plan; 2024 status – ongoing effort)	\$5,000	Medium	X	X	Jefferson County Emergency Management; American Red Cross
2. Create displays for use at public events (health fair, public awareness day, county fair). (2008 Plan; 2024 status – ongoing effort)	Staff time and supplies	Low	X	X	Jefferson County Emergency Management
3. Establish a single webpage on the county's website to provide up-to-date hazard-related information. (2008 Plan; 2024 status – Facebook site created but ongoing effort)	Staff time	Medium	X	X	Jefferson County Emergency Management
4. Work with the schools within the county to promote hazard mitigation education and awareness and discuss ways to better integrate mitigation into the curriculum. (2008 Plan; 2018 status – conducted STEP (Student Tools for Emergency Planning) in two schools)	Staff time	Medium	X	X	Jefferson County Emergency Management; American Red Cross
5. Identify, improve, and sustain collaborative programs focusing on the real estate and insurance industries, public and private sector organizations, and individuals to avoid activity that increases risk to natural hazards. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management; American Red Cross; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
6. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office, National Weather Service (NWS)
7. Work to provide more hazard-related information in Spanish. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management Jefferson County Literacy Council; United Migrant Opportunity Service; Jefferson County Public Health; Workforce Development
8. Enhance the Village's website (Village of Sullivan) to include more information about disaster preparedness (2024 status – ongoing effort)	Staff time	Medium	X		Village of Sullivan

Goal 2. Flooding

Implementation Projects and Activities Related to Flooding	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Identify and analyze feasible mitigation options for repetitive flood properties and other flood-prone properties. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X	X	Jefferson County Emergency Management
2. Apply for funding through the federal Hazard Mitigation Grant program, Flood Mitigation Assistance Program, and the Pre-Disaster Mitigation Program as well as any other resources that may be available to help flood proof repetitive loss sites and other flood-prone properties or remove them through acquisition followed by demolition or relocation. (2008 Plan; 2024 status – ongoing effort)	Staff time	High	X	X	Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, and Watertown; village of Cambridge
3. Develop a computerized database containing information on each culvert and bridge within the county. (2008 Plan; 2024 status – in progress)	Staff time	Medium	X		Jefferson County Emergency Management
4. Identify those culverts and bridges that are undersized or are otherwise unable to handle expected flood flows. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
5. Develop a geographic database for public roadways that are susceptible to flooding. (2008 Plan; 2024 status – ongoing)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
6. Prepare a strategy to prioritize road improvements for public roadways that are susceptible to flooding. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
7. Identify undeveloped areas of the county, if any, that have flood mitigation value and develop appropriate strategies to protect them. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
8. Establish a framework to compile and coordinate surface water management plans and data throughout Jefferson County. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
9. Post flood recovery plans and programs to help county residents rebuild and implement mitigation measures to protect against future floods. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X	X	Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan

Implementation Projects and Activities Related to Flooding	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
10. Distribute National Flood Insurance Program information. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X	X	Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
11. Explore options for improving the ability of local units of government to report flooding, receive information, and request assistance. (2008 Plan; 2024 status – ongoing effort, email monthly updates to municipalities)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
12. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X	X	Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
13. Evaluate the support for and the feasibility of becoming part of the Community Rating System (CRS) to lower flood insurance premiums for property owners. (2008 Plan; 2024 status – ongoing effort)	Staff time	High	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
14. Work with the DNR to ensure that an emergency action plan is prepared for large dams and that they are periodically updated. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management
15. Develop a prioritized list of areas of the county meriting detailed flood studies. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management
16. Install a surface water gaging station on the Crawfish River near Hubbleton. (2008 Plan; 2024 status – completed feasibility determination)	Staff time	Medium	X		Jefferson County Emergency Management
17. Ensure that privately-owned large dams are inspected consistent with state law. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management; Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan as appropriate
18. Conduct a study to determine feasible and cost-effective solutions to minimize flooding in downtown Waterloo (Mauneshia River). (2008 Plan; 2018 status – in progress)	\$8,000 to \$12,000	High	X		City of Waterloo
19. Enhance the 1.6-acre site the City acquired in 2012 for flood storage and restore the stream channel and other related efforts (2018 status – new action item)	Unknown	High	X		City of Waterloo
20. Repair the Mill Road Dam. (2008 Plan; 2018 status – ongoing effort)	Unknown	High	X		Village of Palmyra
21. Mitigation projects as may be identified as a result of the Water Resources Management Study within the Village of Johnson Creek. (2008 Plan; 2018 status – no action)	Variable	Variable	X		Village of Johnson Creek
22. Enlarge the capacity of the city's (Watertown) stormwater sewer system which may include detention basins (2018 status – ongoing effort)	Unknown	Medium	X	X	City of Watertown

Implementation Projects and Activities Related to Flooding	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
23. Complete a dam failure analysis for the Spring Lake Dam (2018 status – ongoing effort)	Cost included in current budget	High	X		Village of Palmyra
24. Add a backup power to two well pump houses	\$150,000 each	Medium	X		City of Fort Atkinson
25. Add two portable pumps for lift station use	\$45,000 each	Medium	X		City of Fort Atkinson

Goal 3. Tornadoes

Implementation Projects and Activities Related to Tornadoes	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Periodically assess whether there are enough shelters to house displaced persons. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X	X	Jefferson County Emergency Management; American Red Cross
2. Apply for mitigation funding to purchase NOAA weather radios for county residents. (2008 Plan; 2024 status – no action)	Staff time	Low	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
3. Study the feasibility of and support for adopting a local regulation which would require new mobile home parks and future expansions of existing parks to provide for a tornado shelter. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management
4. Develop and implement strategies for debris management. (2008 Plan; 2018 status – in progress and completion anticipated in 2019)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
5. Amend land development regulations to require a storm shelter in mobile home parks when the number of mobile homes exceeds a threshold as established by the jurisdiction. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Zoning Department; Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
6. Install storm shelters near or in existing mobile home parks and high occupancy campgrounds, such as Bark River Campground & Resort and River Bend. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Mobile home park operators and campground operations with Jefferson County Emergency Management
7. Investigate grant funding for storm shelters. (New 2012; 2024 status – in progress)	Staff time	Medium	X		Jefferson County Emergency Management
8. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office
9. Update and improve sirens (2024 status – ongoing effort)	Unknown	Medium	X	X	City of Watertown
10. Update the city's outdoor storm warning system (7 sirens) (2018 status – new action item)	\$210,000	Medium	X	X	City of Fort Atkinson

Implementation Projects and Activities Related to Tornadoes	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
11. Study the feasibility of constructing a storm shelter at Sand Beach trailer park (2018 status – new action item)	Budget	Medium	X		City of Lake Mills

Goal 4. Extreme Temperature

Implementation Projects and Activities Related to Extreme Temperatures	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Develop a directory of public buildings that would be open to the public during heat waves (and also during the evening hours). (2008 Plan; 2024 status – in progress)	Staff time	Medium	X	X	Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
2. Call a meeting of public and nonprofit organizations that may be able to mobilize a volunteer corps of individuals willing to assist vulnerable people during periods of extreme temperature. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
3. Investigate the possibility of establishing a database of individuals who are vulnerable to extreme temperature and who have voluntarily placed their name on the call list. (2008 Plan; 2024 status – in progress)	Staff time	Medium	X		Jefferson County Volunteer Organization Acting in Disasters (VOAD); Jefferson County Emergency Management; Jefferson County Public Health
4. Publicize available programs that help residents pay for their utility expenses. (2008 Plan; 2024 status – ongoing activity)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
5. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office
6. Amend the county's emergency operations plan to address extreme temperatures. (2008 Plan; 2024 status – ongoing effort)	Staff time	High	X		Jefferson County Emergency Management; American Red Cross; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
7. Develop an inclement weather plan	Staff time	Medium	X		Jefferson County Emergency Management in cooperation with cities and villages.

Goal 5. Severe Storms, Hail, & High Winds

Implementation Projects and Activities Related to Severe Storms, Hail and High Winds		Cost Estimate (2024)	Priority	Schedule		Responsible Entity
				2025 to 2029	2030 to 2034	
1.	Produce and distribute emergency preparedness information related to thunderstorms, snow storms, hailstorms, and windstorm hazards. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management; American Red Cross
2.	Identify and pursue funding opportunities to develop and implement local and county mitigation activities. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management; American Red Cross; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
3.	Install lightning grade surge protection devices for critical electronic components used by government, public service, and public safety facilities, such as warning systems, control systems, communications, and computers. (2008 Plan; 2024 status – ongoing effort)	\$3,000	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
4.	Provide the public with information about proven lightning safety guidelines to reduce the risk of lightning hazards. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
5.	Develop and implement strategies for debris management. (2008 Plan; 2024 status – ongoing effort)	Staff time	Medium	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
6.	Apply for mitigation funding to purchase NOAA weather radios for county residents. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management
7.	Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office

Goal 6. Drought

Implementation Projects and Activities Related to Drought	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Create an ordinance to prioritize or control water use during drought conditions. (2008 Plan; 2024 status – no action)	Staff time	Medium	X	X	Municipalities with public water systems
2. Provide public education about the potential severity of drought events. (2008 Plan; 2024 status – ongoing effort)	Staff time	Low	X		Jefferson County Emergency Management, cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
3. Develop a set of procedures for water distribution during drought to those in need. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management
4. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office

Goal 7. Wildland Fire

Implementation Projects and Activities Related to Wildland Fire	Cost Estimate (2024)	Priority	Schedule		Responsible Entity
			2025 to 2029	2030 to 2034	
1. Apply for federal and state grants to enhance the capability of local fire departments. (2008 Plan; 2024 status – no action)	Staff time	Medium	X	X	Jefferson County Emergency Management; local fire departments
2. Provide education to county and municipality personnel about federal cost-share and grant programs, Fire Protection Agreements, and other related federal programs so the full array of assistance available to local agencies is understood. (2008 Plan; 2024 status – no action)	Staff time	Low	X		Jefferson County Emergency Management; cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater; villages of Cambridge, Johnson Creek, Lac La Belle, Palmyra, and Sullivan
3. Study the feasibility of and support for adopting a local burning permit program at the Town level. (2008 Plan; 2024 status – no action)	Staff time	Medium	X		Jefferson County Emergency Management working with the Towns
4. Develop and maintain a geographic database for natural hazard events, including location, weather conditions, and resulting damage. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Emergency Management; Jefferson County Land Information Office
5. Investigate the establishment of a uniform way of providing information to the public regarding issuance of burning permits. (2008 Plan; 2024 status – no action)	Staff time	High	X		Jefferson County Sheriff's Department; local fire departments

ADDITIONAL PROJECTS AND ACTIVITIES

In addition to the above, each of the participating municipalities were asked to complete a survey identifying potential mitigation projects and activities. Their responses are included below as submitted.

Additional Mitigation Projects and Activities

Town of Aztalan (Kathleen Pitzner)

Severe Weather: (1) Bury electrical and other utility lines to prevent service outages during weather events (2) Become a NWS Storm Ready Community (3) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (4) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (5) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (6) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.

Wildfire: (1) Provide information to property owners on creating a defensible space around structures

Climate Adaptation and Other: (1) Incorporate natural hazard information into the town's comprehensive plan

Town of Cold Springs (Byron Freeman)

Severe Weather: (1) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (2) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (3) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (4) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters (2) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.

Wildfire: (1) Encourage controlled burns as a means of controlling fuel buildup (2) Provide information to property owners on creating a defensible space around structures

Climate Adaptation and Other: (1) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures (2) Expand landowner/farmer outreach programs which will increase conservation efforts (3) Encourage farm operators to evaluate the economics of crop insurance programs

Town of Farmington (Kevin Emrath)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (3) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (4) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events

Stormwater, Floodwater, Debris Management: (1) Raise road surfaces to mitigate flood chances (2) Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters (3) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (4) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Consider requirement(s) for burn permits (2) Encourage controlled burns as a means of controlling fuel buildup (3) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the town's comprehensive plan (2) Establish local heating and cooling centers (3) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures

Town of Jefferson (Mike Hollinger)

Severe Weather: (1) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (2) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc.

Stormwater, Floodwater, Debris Management: (1) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.

Wildfire: (1) Consider requirement(s) for burn permits (2) Assess fire district equipment needs and capabilities to effectively respond to

Additional Mitigation Projects and Activities

wildland fires

Climate Adaptation and Other: (1) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures

Town of Koshkonong (Kim Cheney)

Severe Weather: (1) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (2) Designate a storm debris collection point and/or create a debris management plan (3) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Ensure new developments have adequate ingress and egress routes

Climate Adaptation and Other: (1) Promote the use of drought-resistant landscaping practices using native plantings

Dams: (1) Review any local dam Emergency Action Plans (EAP)

Town of Lake Mills (Robin Untz)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Bury electrical and other utility lines to prevent service outages during weather events (3) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (4) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (5) Update zoning to require community safe rooms in new or expanding mobile home villages and campgrounds (6) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (7) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (8) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (9) Develop and implement appropriate evacuation procedures in flood-prone areas (10) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Raise road surfaces to mitigate flood chances (2) Development of stormwater retention ponds (3) Upgrade storm sewer systems (4) Initiate the creation of a stormwater management plan (5) Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters (6) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (7) Designate a storm debris collection point and/or create a debris management plan

Wildfire: (1) Consider requirement(s) for burn permits (2) Encourage controlled burns as a means of controlling fuel buildup (3) Ensure new developments have adequate ingress and egress routes (4) Provide information to property owners on creating a defensible space around structures (5) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the town's comprehensive plan (2) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures (3) Apply to become part of the Tree City USA program or adopt an urban forest management plan to mitigate high heat extremes during the summer (4) Adopt local ordinances for prioritizing water usage during periods of drought (5) Promote the use of drought-resistant landscaping practices using native plantings (6) Expand landowner/farmer outreach programs which will increase conservation efforts (7) Encourage farm operators to evaluate the economics of crop insurance programs

Town of Oakland (Susan Dascenzo)

Severe Weather: (1) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (2) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (3) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Development of stormwater retention ponds (2) Initiate the creation of a stormwater management plan

Wildfire: (1) Consider requirement(s) for burn permits (2) Ensure new developments have adequate ingress and egress routes

Climate Adaptation and Other: (1) Incorporate natural hazard information into the town's comprehensive plan (2) Adopt local ordinances for prioritizing water usage during periods of drought (3) Expand landowner/farmer outreach programs which will increase conservation efforts

Town of Watertown (James Wendt)

Severe Weather: (1) Bury electrical and other utility lines to prevent service outages during weather events (2) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (3) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (4) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (5) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (6) Review/update Emergency Operating Plans (EOP)

Additional Mitigation Projects and Activities

Stormwater, Floodwater, Debris Management: (1) Raise road surfaces to mitigate flood chances (2) Development of stormwater retention ponds (3) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (4) Designate a storm debris collection point and/or create a debris management plan

Wildfire: (1) Consider requirement(s) for burn permits (2) Provide information to property owners on creating a defensible space around structures

Climate Adaptation and Other: (1) Incorporate natural hazard information into the town's comprehensive plan (2) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures (3) Expand landowner/farmer outreach programs which will increase conservation efforts

Dams: (1) Ensure that dam inspections are conducted as required by state law

Town of Watertown (John Thoma)

Severe Weather: (1) Post information on the town's website related to emergency warning systems, importance of NOAA weather radios (2) Post information on the town's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (3) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters (2) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.

Wildfire: (1) Consider requirement(s) for burn permits (2) Ensure new developments have adequate ingress and egress routes (3) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures

Dams: (1) Ensure that dam inspections are conducted as required by state law

Village of Cambridge (Paula Hollenbeck)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (3) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (4) Post information on the village's website related to emergency warning systems, importance of NOAA weather radios (5) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Development of stormwater retention ponds (2) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (3) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Ensure new developments have adequate ingress and egress routes (2) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the village's comprehensive plan (2) Establish local heating and cooling centers

Village of Johnson Creek (Benjamin Patterson)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Bury electrical and other utility lines to prevent service outages during weather events (3) Become a NWS Storm Ready Community (4) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (5) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (6) Update zoning to require community safe rooms in new or expanding mobile home villages and campgrounds (7) Post information on the village's website related to emergency warning systems, importance of NOAA weather radios (8) Post information on the village's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (9) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (10) Develop and implement appropriate evacuation procedures in flood-prone areas (11) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Apply for grant(s) to purchase flood-prone properties (2) Implement critical facility flood protection measures (wastewater treatment plant, police station, municipal building) (3) Initiate the creation of a stormwater management plan (4) Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters (5) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (6) Designate a storm debris collection point and/or create a debris management plan (7) Remove debris and downed trees along streams and waterways to help improve stream flow (8) Notify railroad officials of potential issues with tracks and crossings that could impact the safety of residents

Wildfire: (1) Consider requirement(s) for burn permits (2) Encourage controlled burns as a means of controlling fuel buildup (3) Ensure new

Additional Mitigation Projects and Activities

developments have adequate ingress and egress routes (4) Provide information to property owners on creating a defensible space around structures (5) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the village's comprehensive plan

(2) Establish local heating and cooling centers (3) Promote the use of drought-resistant landscaping practices using native plantings (4) Expand landowner/farmer outreach programs which will increase conservation efforts (5) Encourage farm operators to evaluate the economics of crop insurance programs

Dams: (1) Review any local dam Emergency Action Plans (EAP)

Village of Palmyra (Scott Pavlock)

Severe Weather: (1) Bury electrical and other utility lines to prevent service outages during weather events

(2) Become a NWS Storm Ready Community (3) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks (4) Update zoning to require community safe rooms in new or expanding mobile home villages and campgrounds (5) Post information on the town's, village's, or city's website related to emergency warning systems, importance of NOAA weather radios (6) Post information on the town's, village's, or city's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (7) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (8) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Build or reinforce levees, dams, floodwalls and berms (2) Initiate the creation of a stormwater management plan (3) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (4) Designate a storm debris collection point and/or create a debris management plan (5) Notify railroad officials of potential issues with tracks and crossings that could impact the safety of residents

Wildfire: (1) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the village's comprehensive plan

(2) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures (3) Expand landowner/farmer outreach programs which will increase conservation efforts (4) Encourage farm operators to evaluate the economics of crop insurance programs

Dams: (1) Ensure that dam inspections are conducted as required by state law

Village of Sullivan (Hether Rupnow)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.

Wildfire: (1) Consider requirement(s) for burn permits (2) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Adopt local ordinances for prioritizing water usage during periods of drought

City of Fort Atkinson (Chief Bruce Peterson)

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (3) Post information on the city's website related to emergency warning systems, importance of NOAA weather radios (4) Post information on the city's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (5) Develop and implement appropriate evacuation procedures in flood-prone areas (6) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Raise road surfaces to mitigate flood chances (2) Implement critical facility flood protection measures (wastewater treatment plant, police station, municipal building) (3) Designate a storm debris collection point and/or create a debris management plan

Wildfire: (1) Ensure new developments have adequate ingress and egress routes

Climate Adaptation and Other: (1) Incorporate natural hazard information into the comprehensive plan (2) Establish local heating and cooling centers (3) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures

Dams: (1) Review any local dam Emergency Action Plans (EAP)

City of Lake Mills (Drake Daily)

Additional Mitigation Projects and Activities

Severe Weather: (1) Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.) (2) Bury electrical and other utility lines to prevent service outages during weather events (3) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (4) Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks

Stormwater, Floodwater, Debris Management: (1) Build or reinforce levees, dams, floodwalls and berms (2) Implement critical facility flood protection measures (wastewater treatment plant, police station, municipal building) (3) Development of stormwater retention ponds (4) Upgrade storm sewer systems (5) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (6) Designate a storm debris collection point and/or create a debris management plan (7) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Consider requirement(s) for burn permits (2) Encourage controlled burns as a means of controlling fuel buildup (3) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Apply to become part of the Tree City USA program or adopt an urban forest management plan to mitigate high heat extremes during the summer

Dams: (1) Ensure that dam inspections are conducted as required by state law (2) Review any local dam Emergency Action Plans (EAP) (3) Include dam failure scenarios in emergency planning exercises

City of Watertown (Maureen McBroom, Stormwater Project Manager)

Stormwater, Floodwater, Debris Management: (1) Apply for grant funding to begin implementing the city's flood control plan which was estimated to cost \$30 million. (Plan completed in 2024.)

City of Waterloo (Jeanne Ritter)

Severe Weather: (1) Bury electrical and other utility lines to prevent service outages during weather events (2) Evaluate existing outdoor sirens and coverage (add, repair, or upgrade as needed) (3) Post information on the city's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (4) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Upgrade storm sewer systems (2) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc. (3) Remove debris and downed trees along streams and waterways to help improve stream flow (4) Notify railroad officials of potential issues with tracks and crossings that could impact the safety of residents

Wildfire: (1) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the city's comprehensive plan (2) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures

Dams: (1) Include dam failure scenarios in emergency planning exercises

City of Whitewater (Todd Lindert)

Severe Weather: (1) Post information on the city's website related to emergency warning systems, importance of NOAA weather radios (2) Post information on the city's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc. (3) Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events (4) Review/update Emergency Operating Plans (EOP)

Stormwater, Floodwater, Debris Management: (1) Designate a storm debris collection point and/or create a debris management plan (2) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Encourage controlled burns as a means of controlling fuel buildup

Climate Adaptation and Other: (1) Incorporate natural hazard information into the comprehensive plan (2) Establish local heating and cooling centers (3) Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temperatures (4) Adopt local ordinances for prioritizing water usage during periods of drought

Dams: (1) Ensure that dam inspections are conducted as required by state law (2) Review any local dam Emergency Action Plans (EAP) (3) Include dam failure scenarios in emergency planning exercises

Jefferson County Parks (Kevin Wiesman)

Severe Weather: (1) Bury electrical and other utility lines to prevent service outages during weather events (2) Develop and implement appropriate evacuation procedures in flood-prone areas

Stormwater, Floodwater, Debris Management: (1) Apply for grant(s) to purchase flood-prone properties (2) Development of stormwater retention ponds (3) Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical

Additional Mitigation Projects and Activities

roadways, stormwater drainage, power outages, etc. (4) Designate a storm debris collection point and/or create a debris management plan (5) Remove debris and downed trees along streams and waterways to help improve stream flow

Wildfire: (1) Consider requirement(s) for burn permits (2) Encourage controlled burns as a means of controlling fuel buildup (3) Provide information to property owners on creating a defensible space around structures (4) Assess fire district equipment needs and capabilities to effectively respond to wildland fires

Climate Adaptation and Other: (1) Incorporate natural hazard information into the comprehensive plan (2) Apply to become part of the Tree City USA program or adopt an urban forest management plan to mitigate high heat extremes during the summer (3) Promote the use of drought-resistant landscaping practices using native plantings (4)

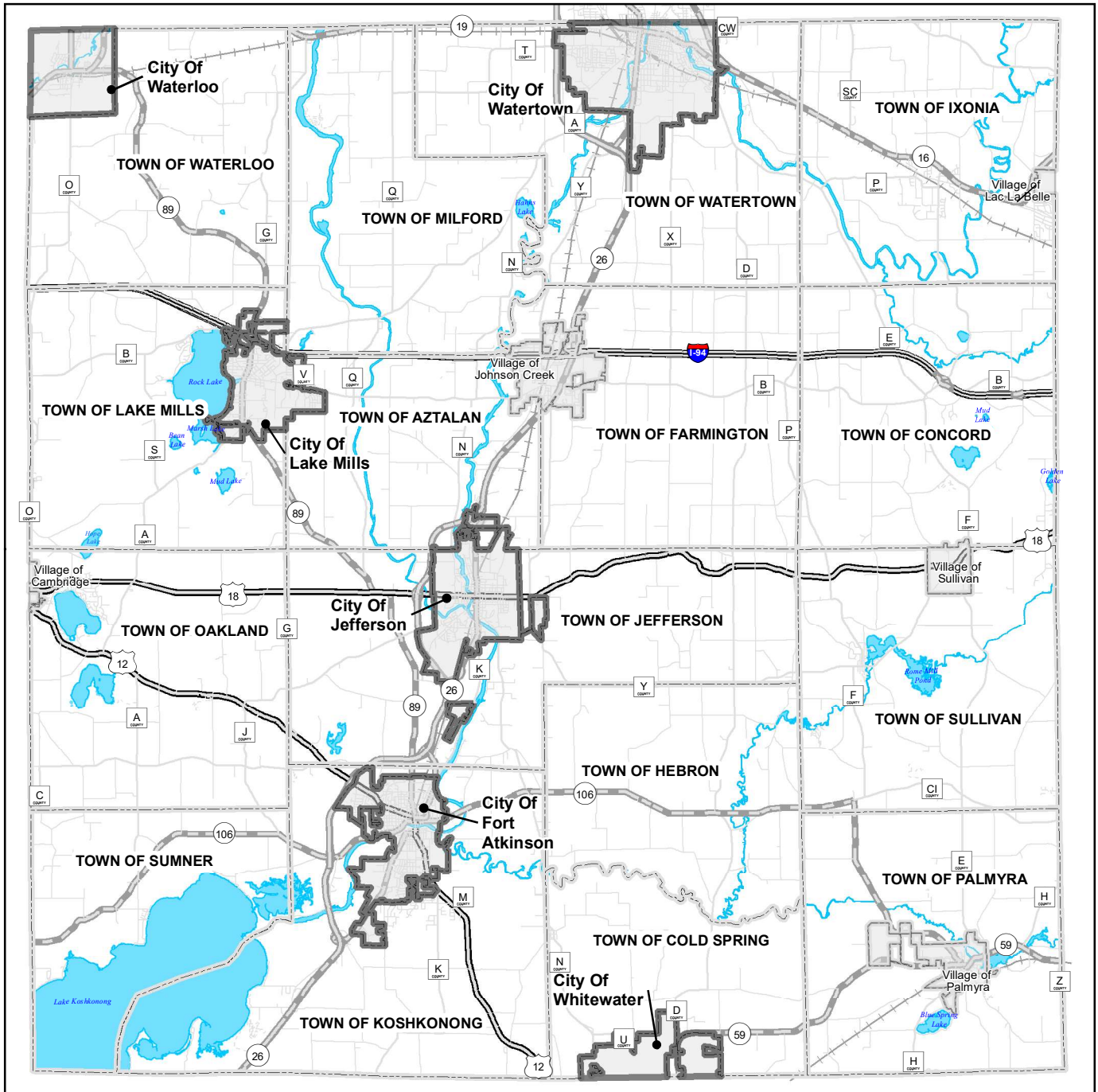
Expand landowner/farmer outreach programs which will increase conservation efforts

Dams: (1) Include dam failure scenarios in emergency planning exercises

Source: Community Survey conducted in 2025

MAP SERIES

1. Civil Divisions: 2024
2. School Districts: 2024
3. Road Network: 2024
4. Land Use; Unincorporated Jefferson County
5. Surface Water Resources: 2024
6. Persons over 65 Years of Age: 2022
7. Persons with Disabilities: 2022
8. Persons of Minority Status: 2022
9. Persons Living Below Poverty Threshold: 2022
10. Campgrounds and Mobile Home Parks: 2024
11. Bridges and Dams: 2024
12. Public-Use Airports and Railroads: 2024
13. Telecommunication Facilities: 2024
14. Energy Facilities: 2024
15. Public Water and Wastewater Facilities: 2024
16. Public Safety Facilities: 2024
17. Government Facilities: 2024
18. Schools: 2024
19. Special Care Residential Facilities: 2024
20. Special Care Non-Residential Facilities: 2024
21. Health Care Facilities: 2024
22. Facilities with Hazardous Materials: 2024
23. Structures in 100-Year Floodplain: 2024
24. Critical Facilities by Type: 2024



Legend



City Boundary



Village Boundary



Town Boundary



Water Body



River

Source: Basemap from Jefferson County
Land Information Office

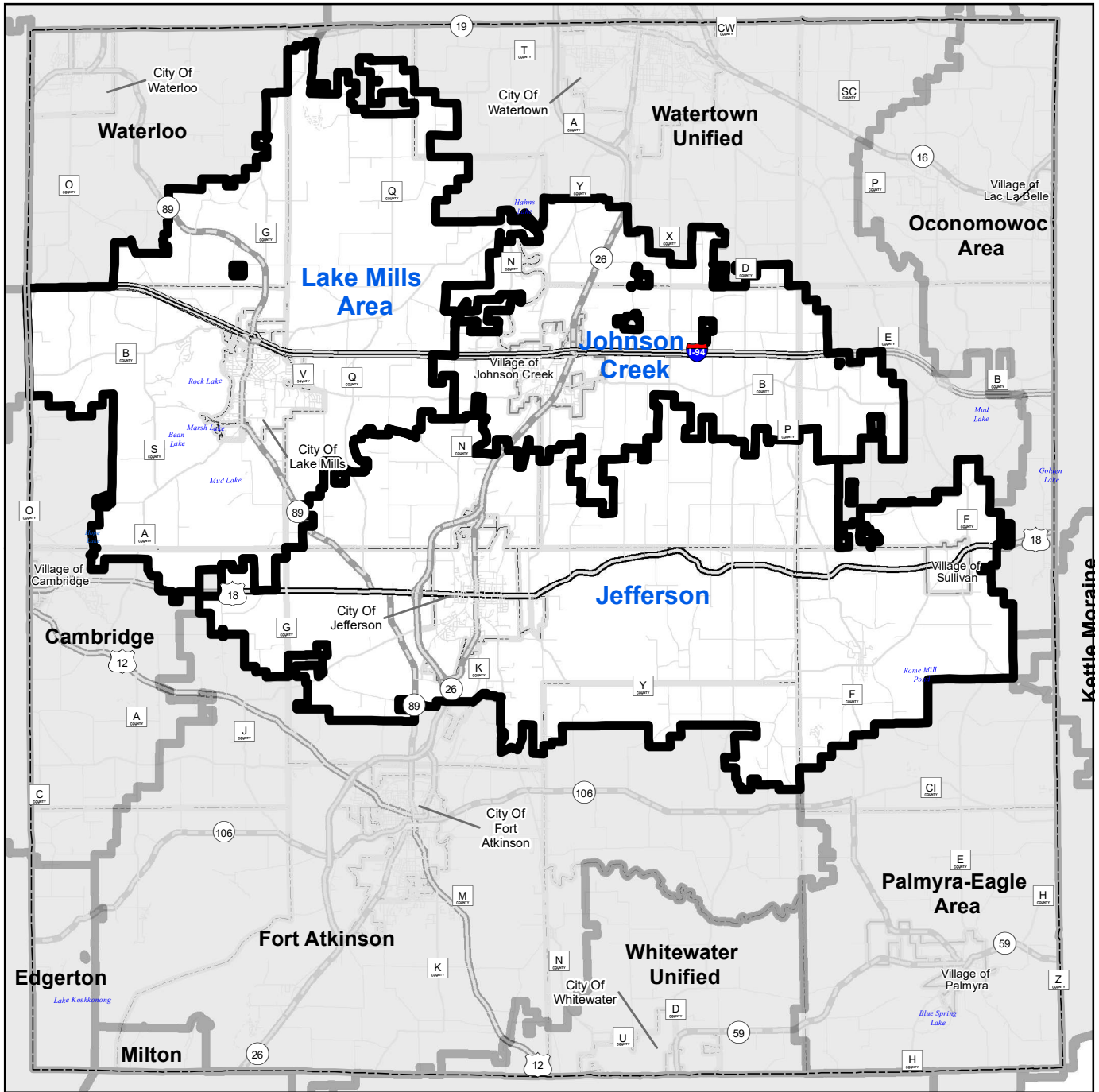
0 1 2 3
Miles



Map 1 Civil Divisions: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029


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CONSULTING



Legend

School District Boundary

 In County

 Extends out of County



Water Body



River



Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

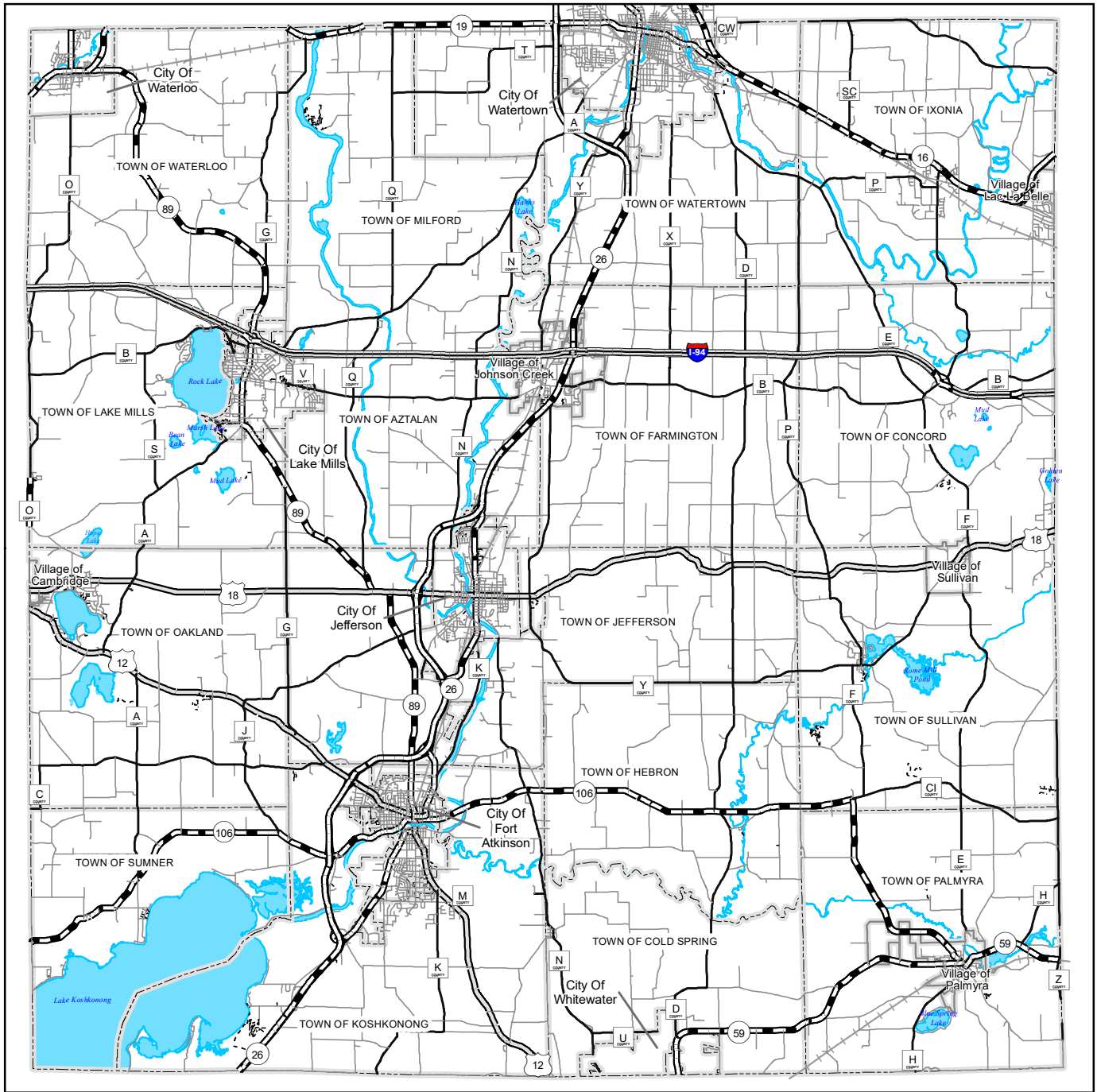
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Map 2 School Districts: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

----- Private Road

—— Local Road


— COUNTY — Collector Road

==○== State Highway

==≡ Federal Highway

==≡ Interstate

——+—— RailRoads

 Water Body

 River

 Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

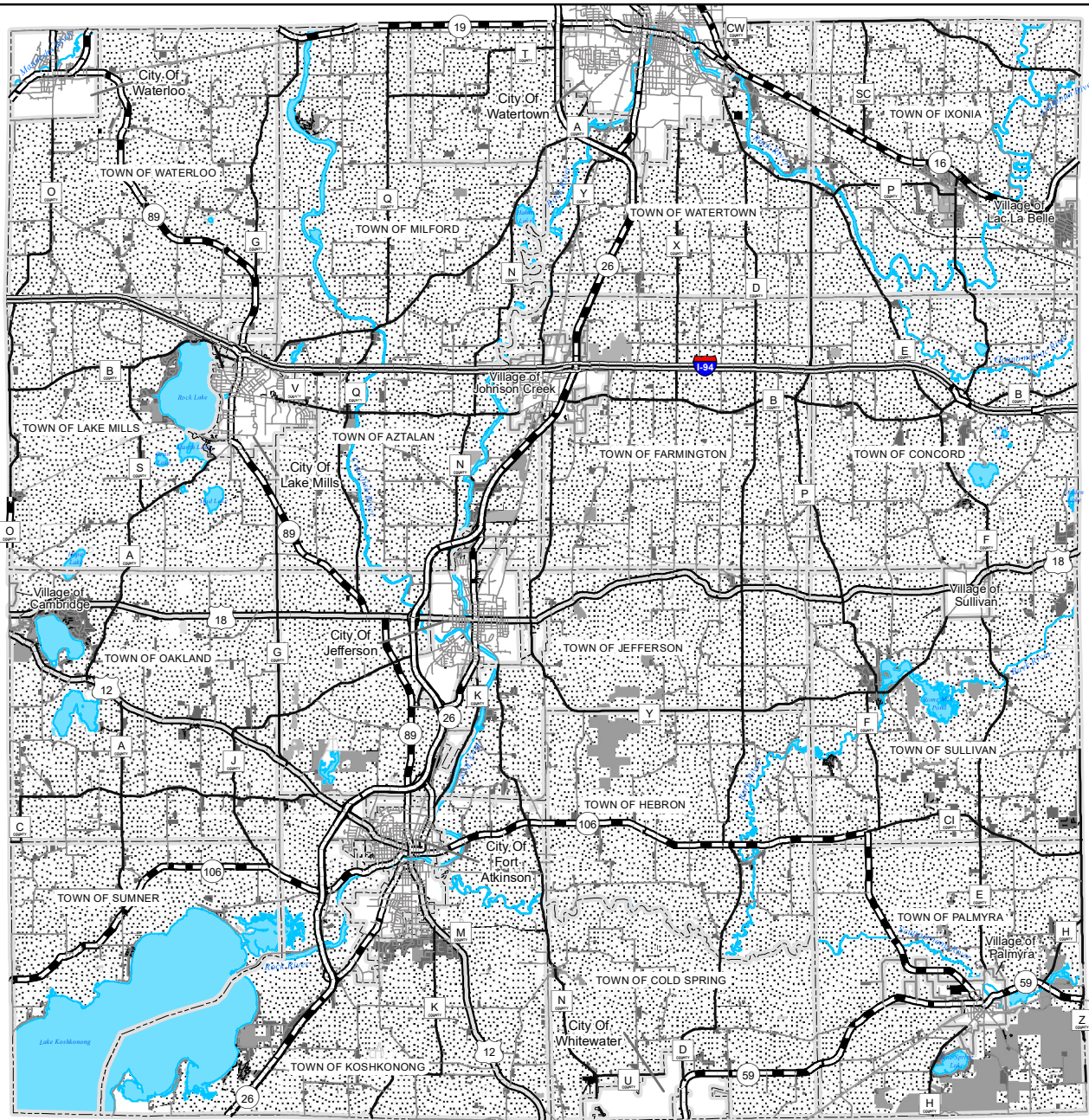
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Map 3 Road Networks: 2024





**Jefferson County
Hazard Mitigation Plan
2025-2029**

**CIVITEK
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Legend

-  Surface Water
-  Agricultural - Open Lands
-  Commercial
-  Industrial
-  Public - Semi Public
-  Residential
-  Transportation
-  Transportation - Utility

-  Road
-  River
-  Water Body
-  Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

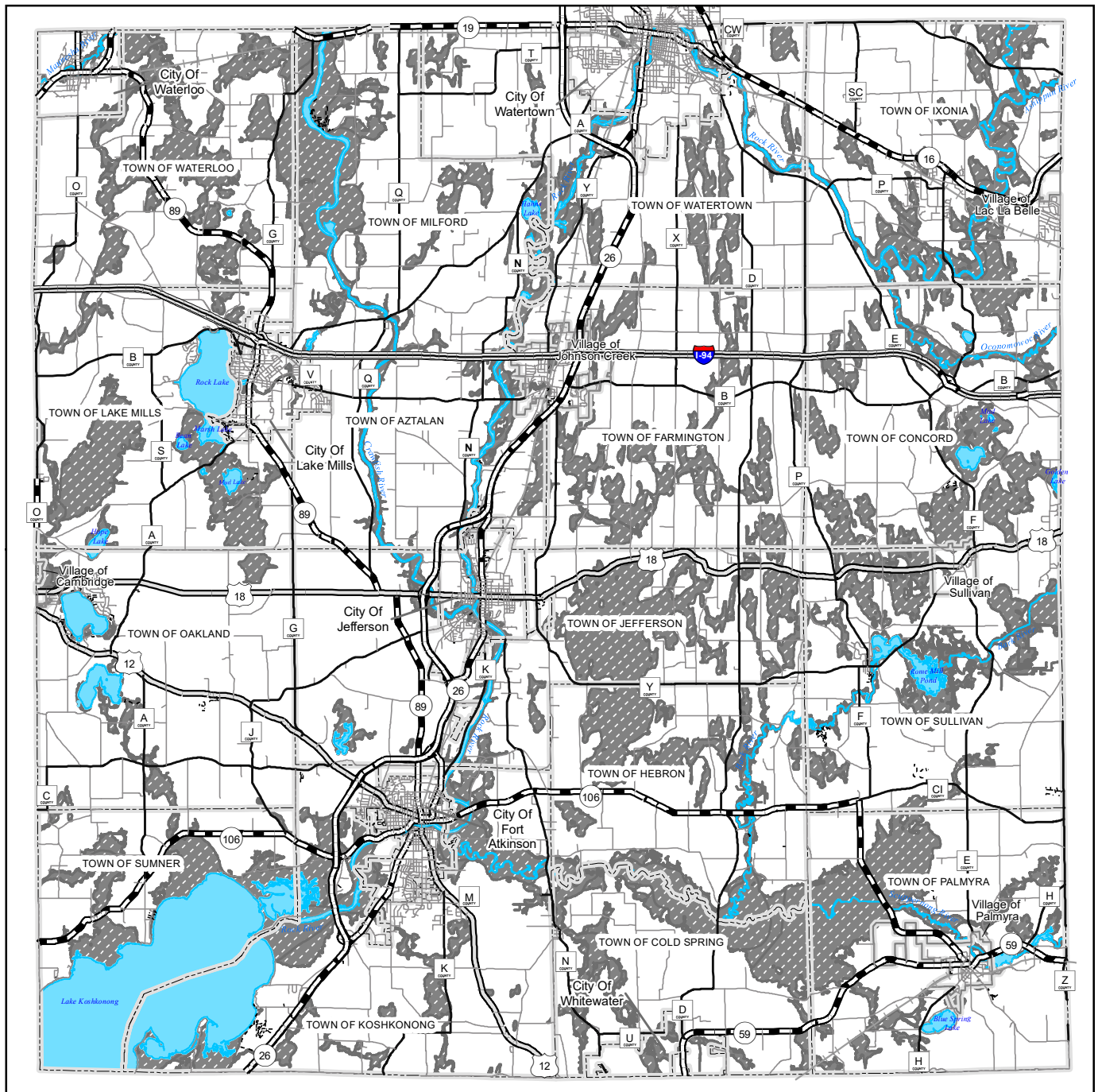
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Miles









Map 4
Land Use: Unincorp.
Jefferson Co: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

-  100 Year Floodplain
-  Road
-  Stream
-  River
-  Water Body
-  Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

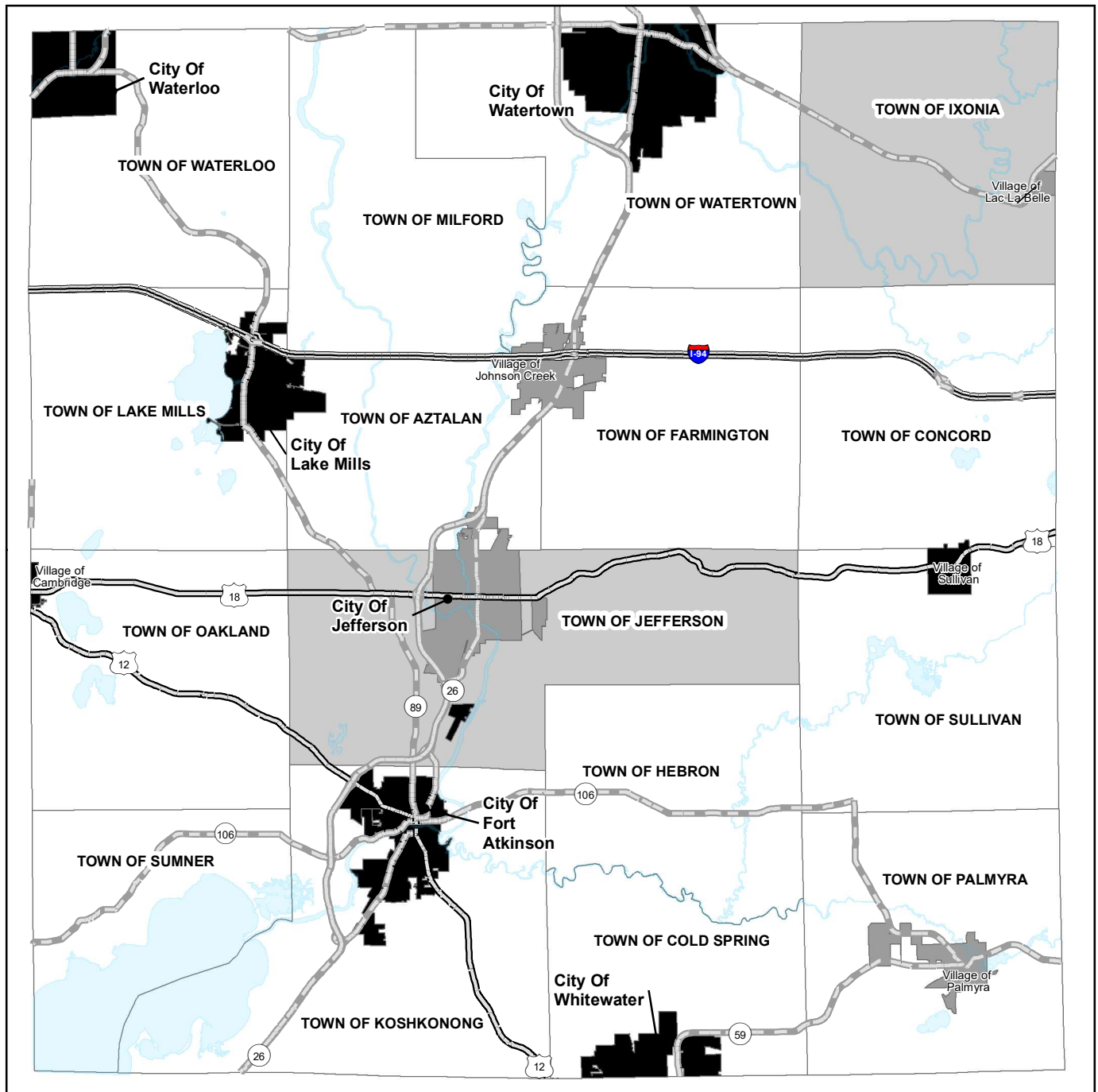
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Miles



Map 5 Surface Water Resources: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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CONSULTING



Legend

Over 65 per SQ MI

- Less than 5
- 5 to 9
- 10 to 35
- Greater than 35

Source: Basemap from Jefferson County
Land Information Office

Data: US Census Bureau
American Community Survey

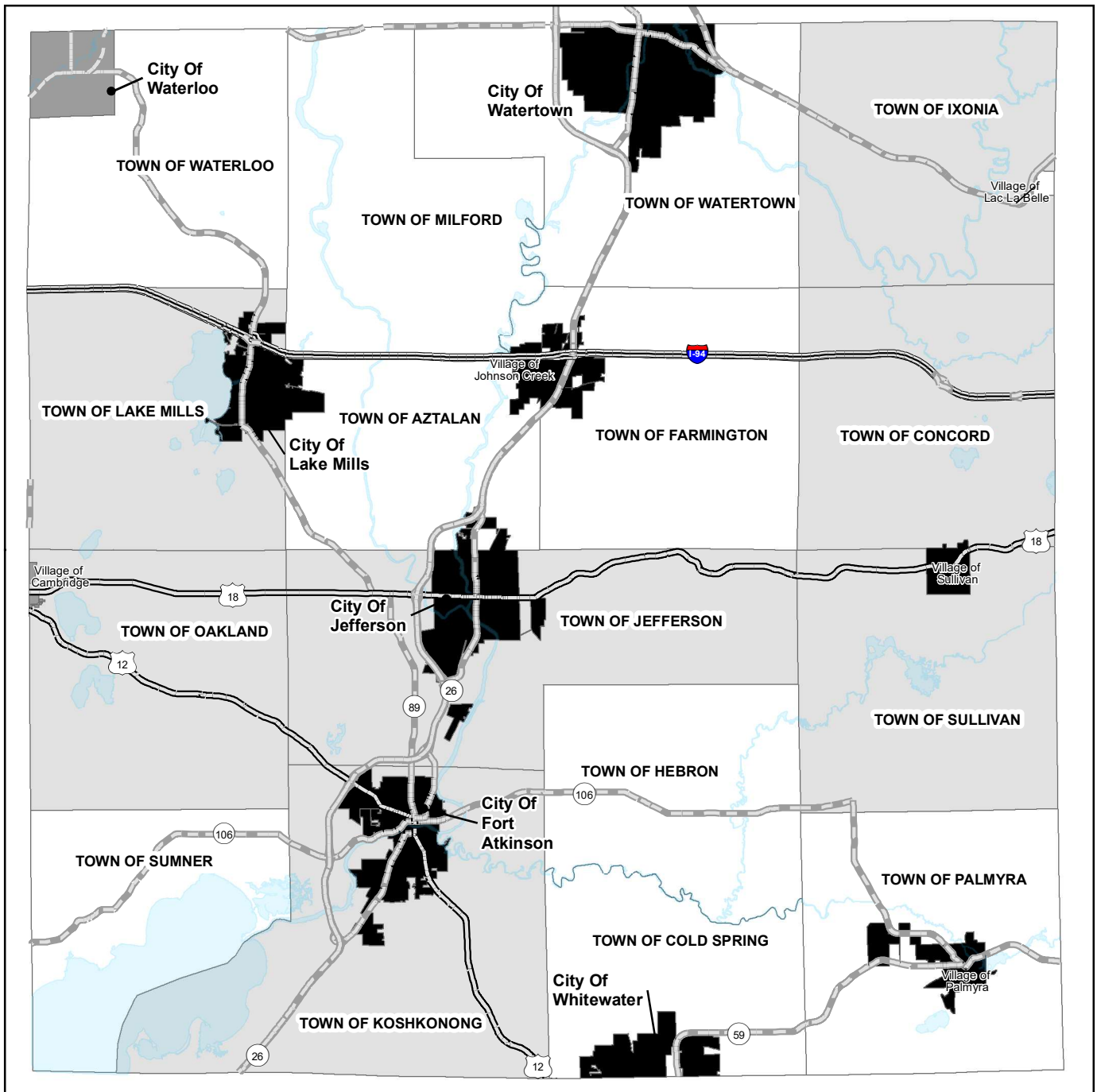
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Miles



Map 6 Over 65 per SQ MI: 2022 Estimate

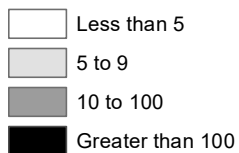
Jefferson County Hazard Mitigation Plan 2025-2029

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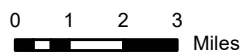
Legend

Disabilities per SQ MI



Source: Basemap from Jefferson County
Land Information Office

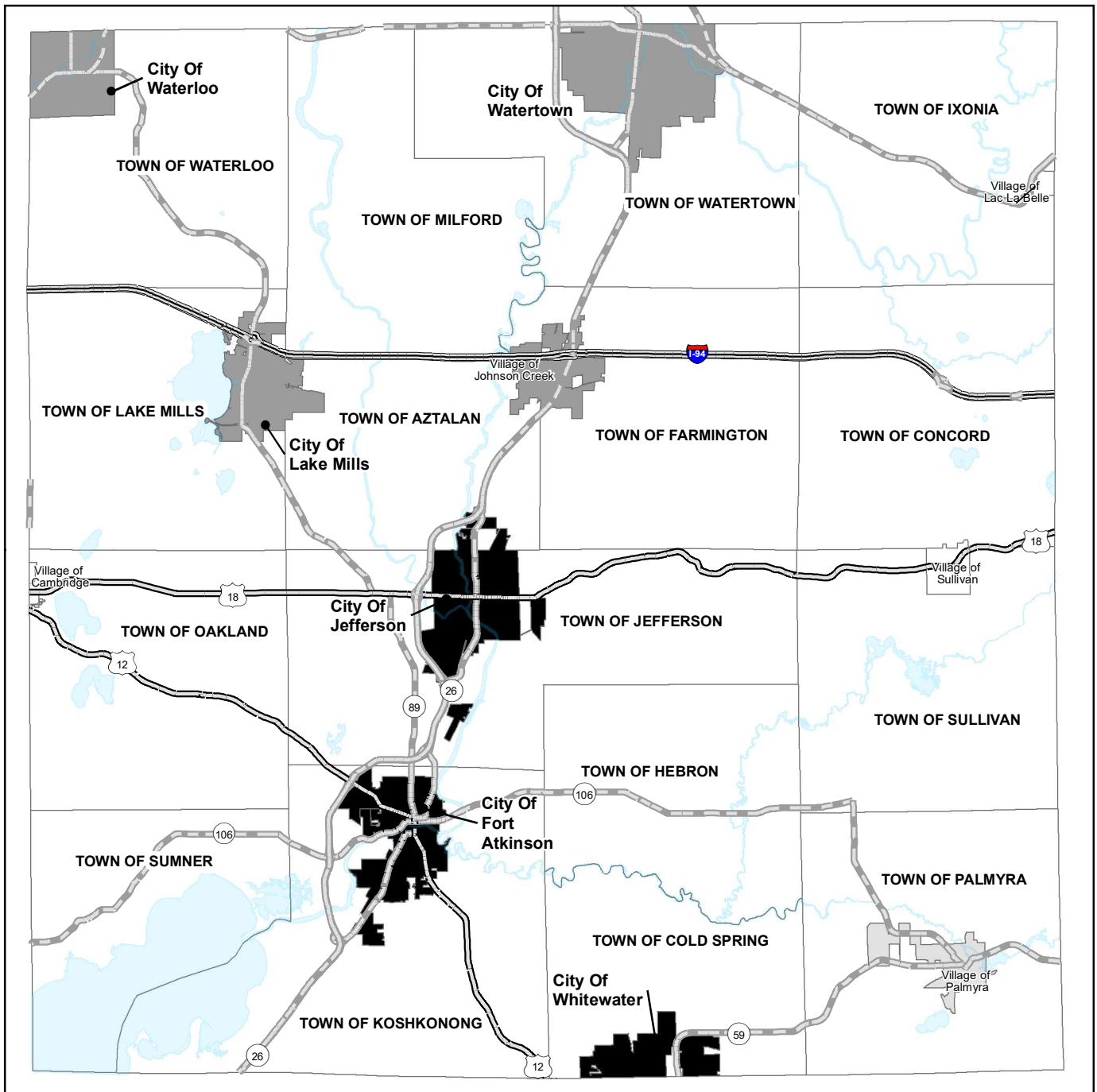
Data: US Census Bureau
American Community Survey



Map 7 Disabilities per SQ MI: 2022 Estimate

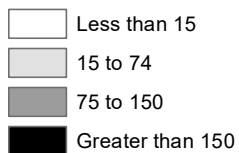
Jefferson County Hazard Mitigation Plan 2025-2029

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CONSULTING



Legend

Minorities per SQ MI



Source: Basemap from Jefferson County
Land Information Office

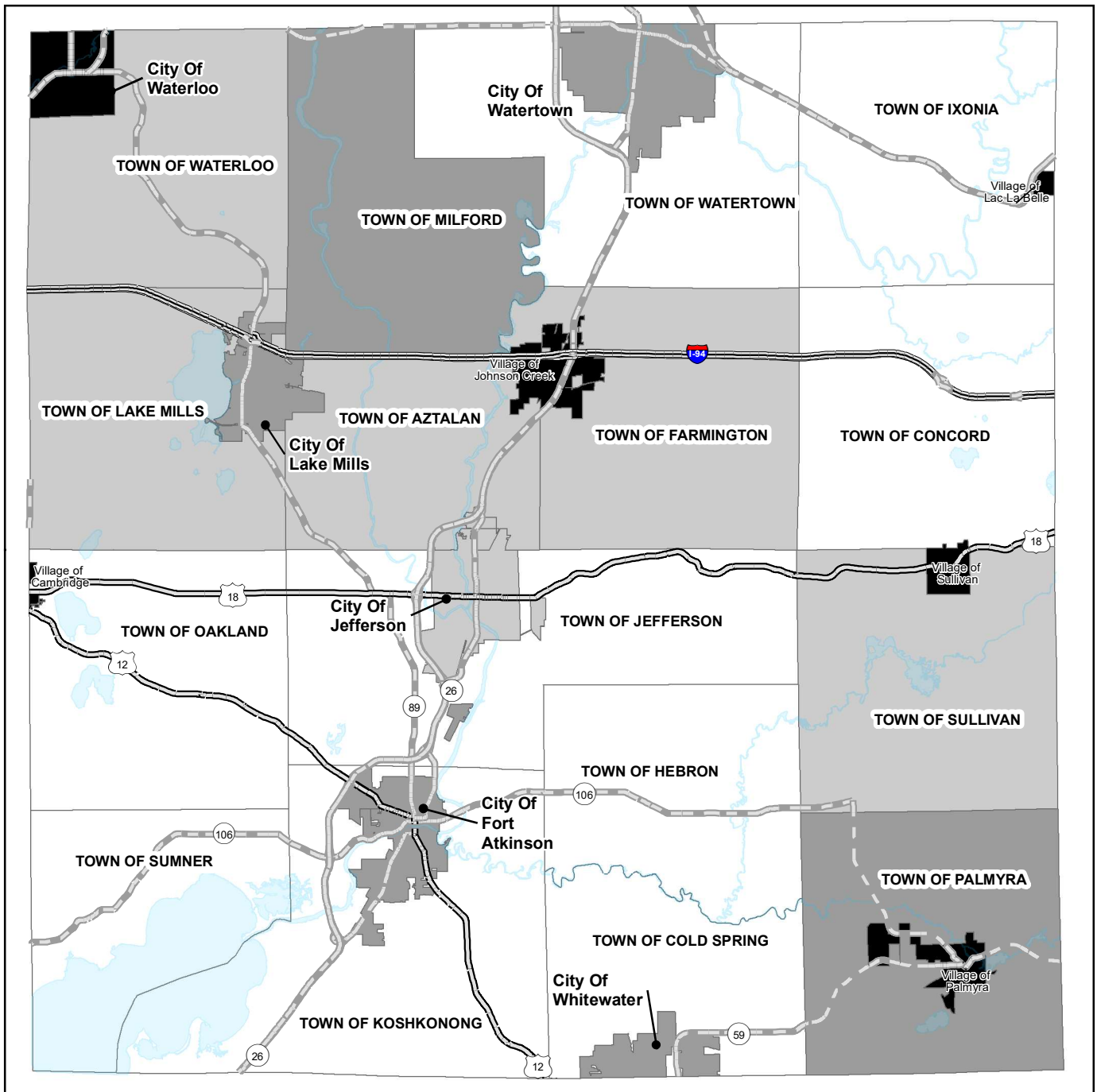
Data: US Census Bureau
American Community Survey



Map 8 Minorities per SQ MI: 2022 Estimate

Jefferson County Hazard Mitigation Plan 2025-2029

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CONSULTING



Legend

Poverty per SQ MI

- Less than 5
- 5 to 9
- 10 to 50
- Greater than 50

Source: Basemap from Jefferson County
Land Information Office

Data: US Census Bureau
American Community Survey

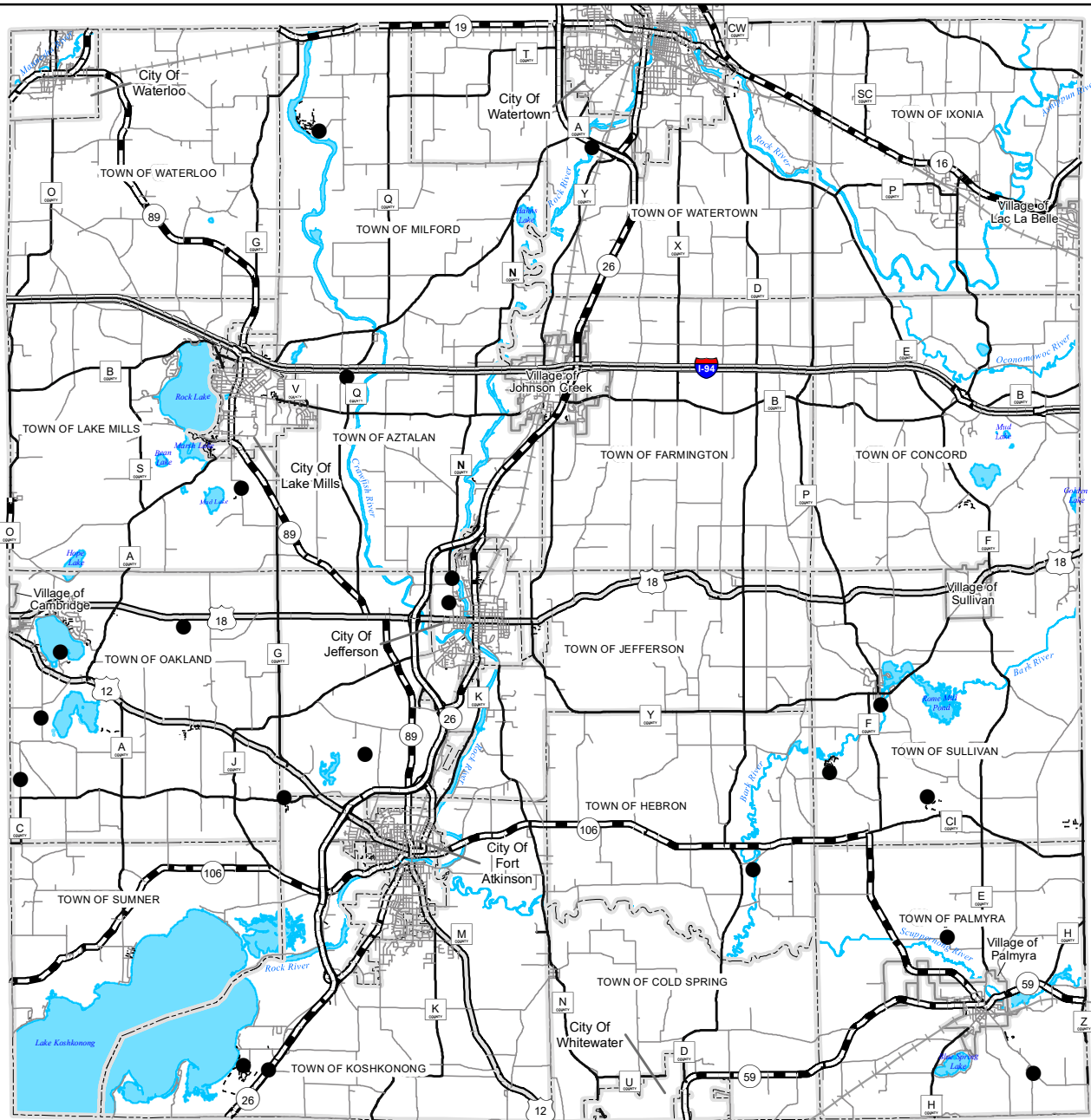
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Miles



Map 9 Poverty per SQ MI: 2022 Estimate

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

● Campground

 Water Body

 Towns

 Road

 Rivers

Source: Jefferson County Land Information Office

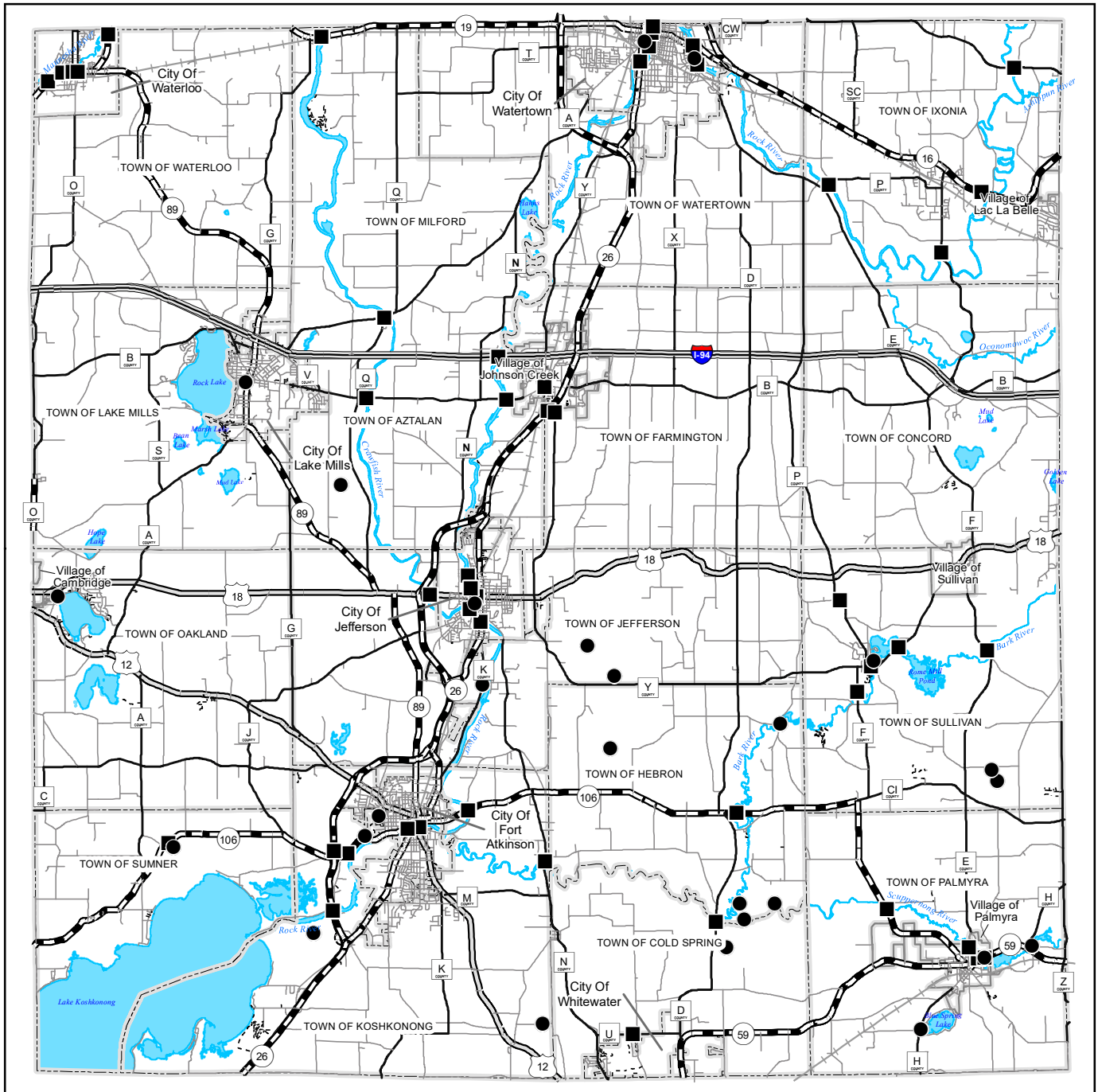
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Miles



Map 10
Campgrounds: 2024





Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

- Bridge
- Dam

-  Road
-  River
-  Water Body
-  Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

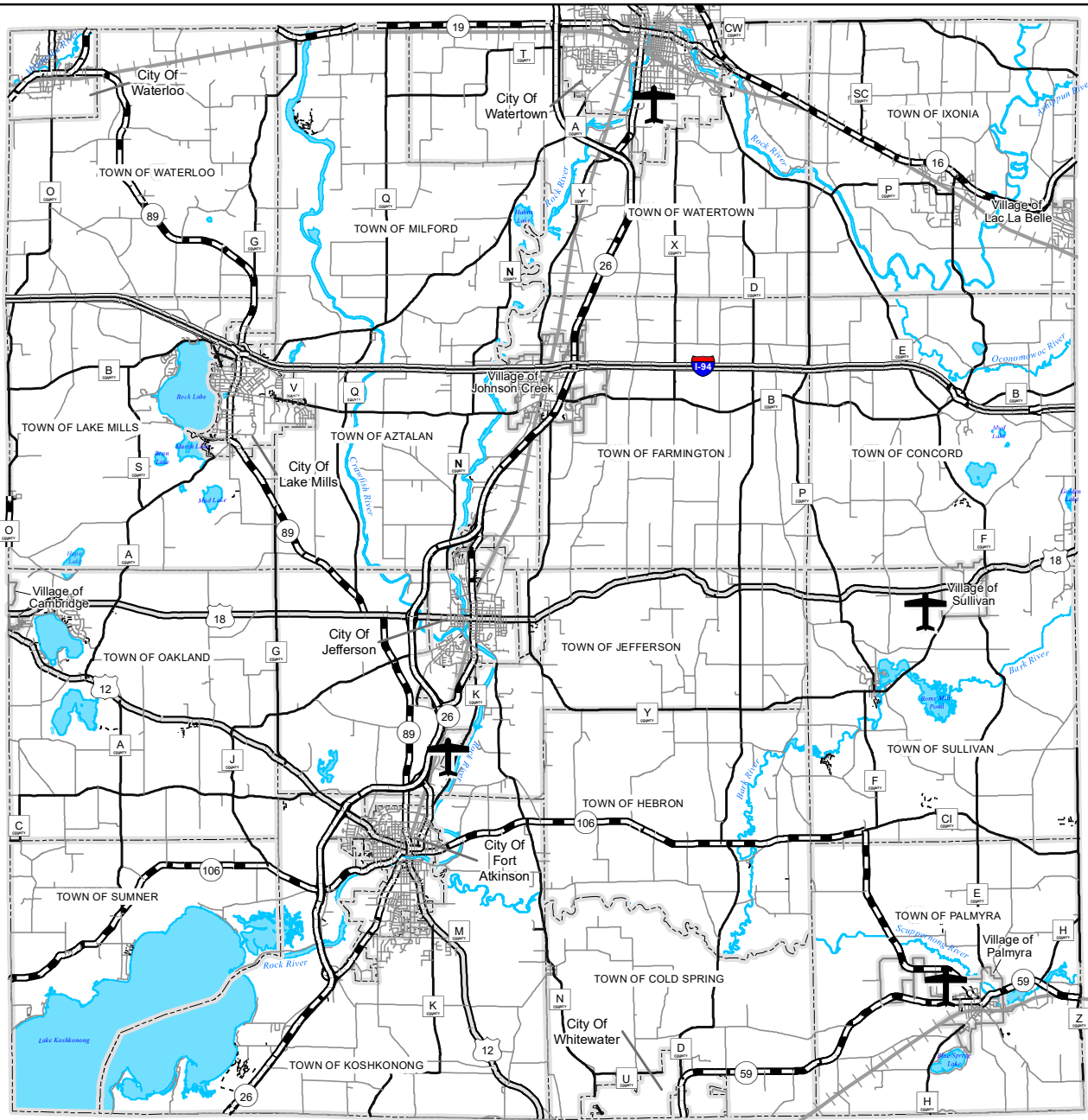
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Miles



Map 11 Bridges and Dams: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

 Airport

 Railroad

 Road

 River

 Water Body

 Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

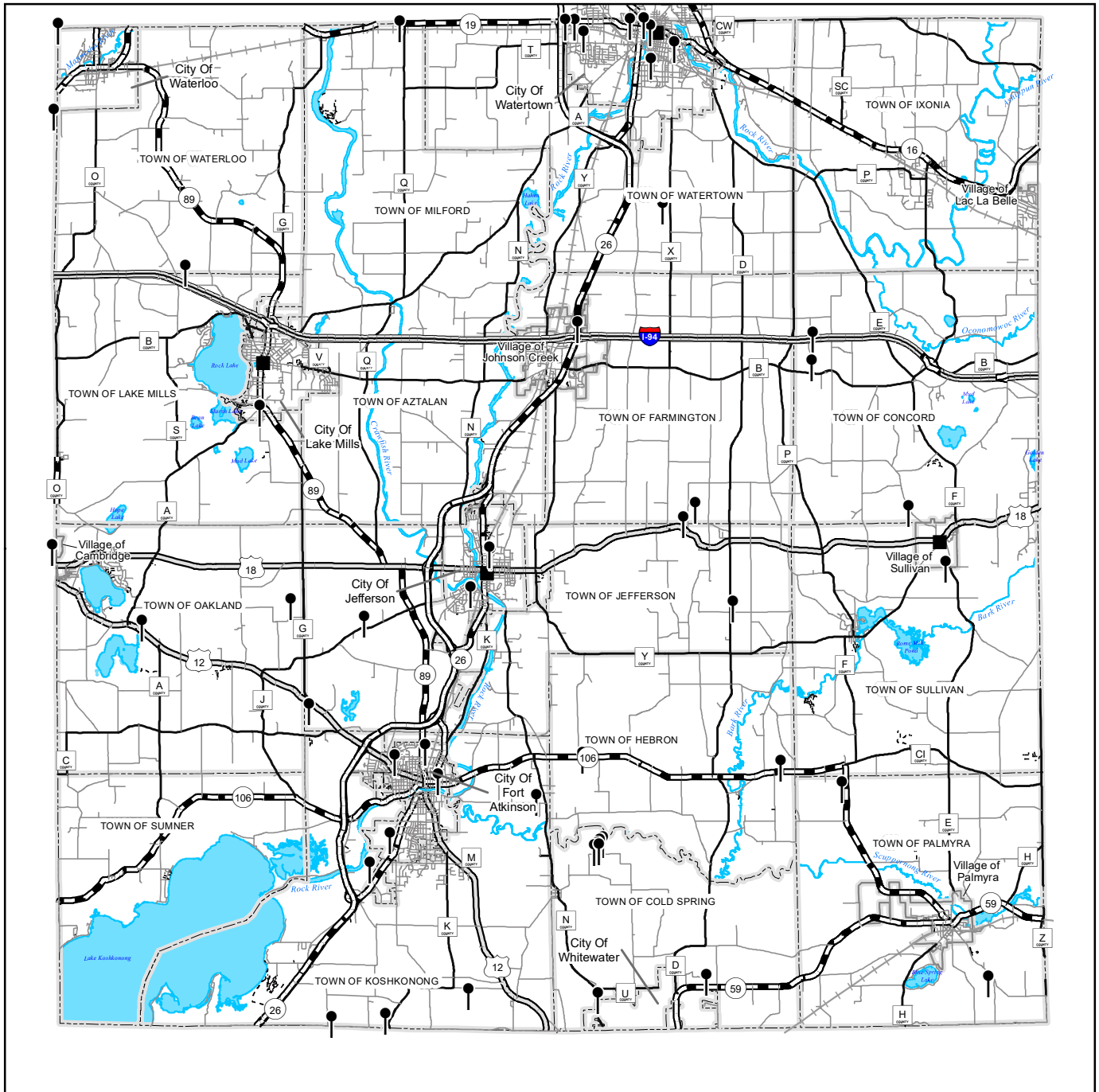
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Miles



Map 12 Public Use Airports and Railroads: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
CONSULTING



Legend



Communication Tower



Telephone Facility



Road



River



Water Body



Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

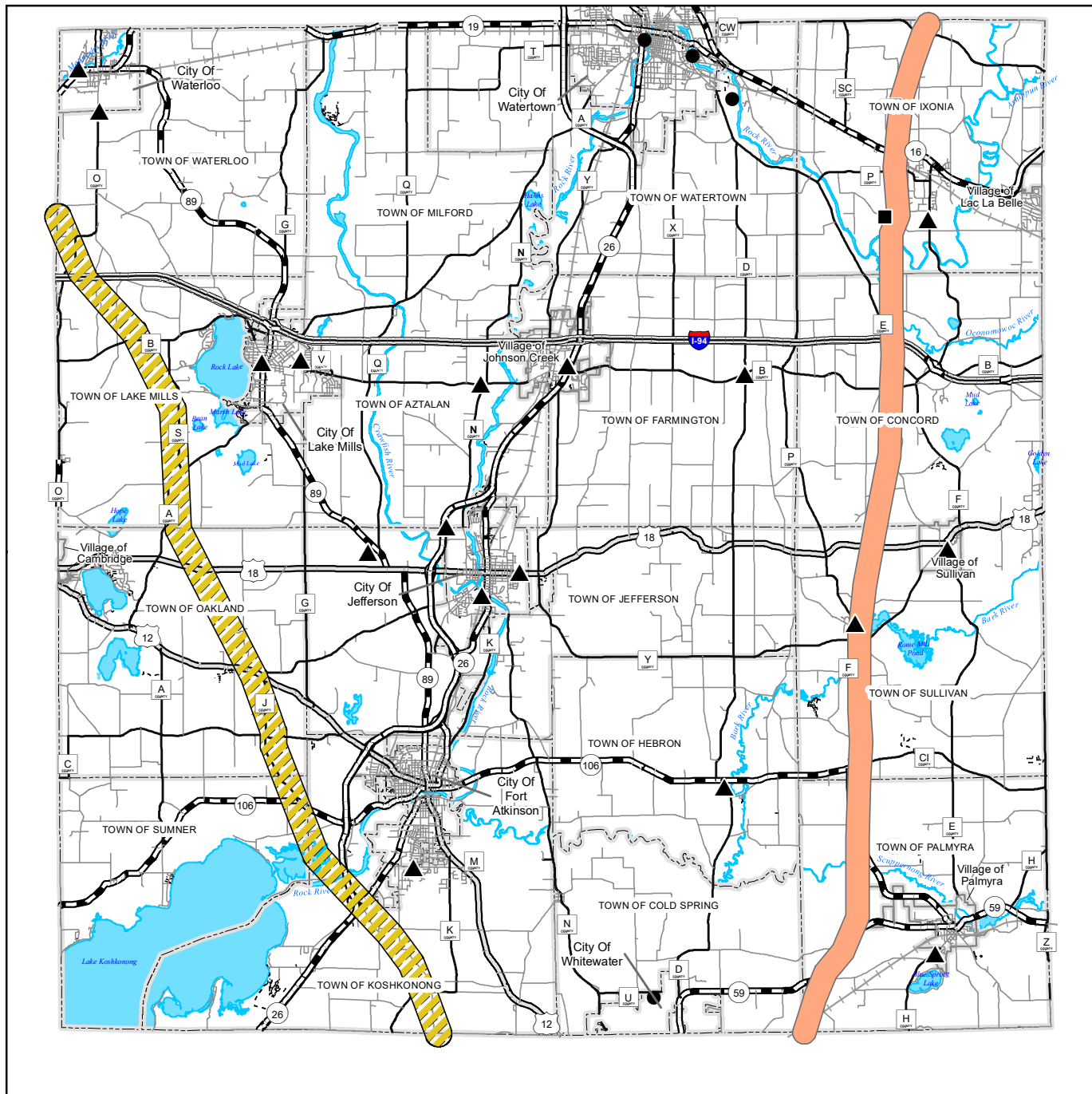
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Map 13 Telecommunication Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
CONSULTING



Legend

- ▲ Electric Substation
- Electric Powerplant
- Natural Gas Facility
-  Crude Oil Pipeline (approximate location)
-  Natural Gas Pipeline (approximate location)
-  Road
-  River
-  Water Body
-  Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

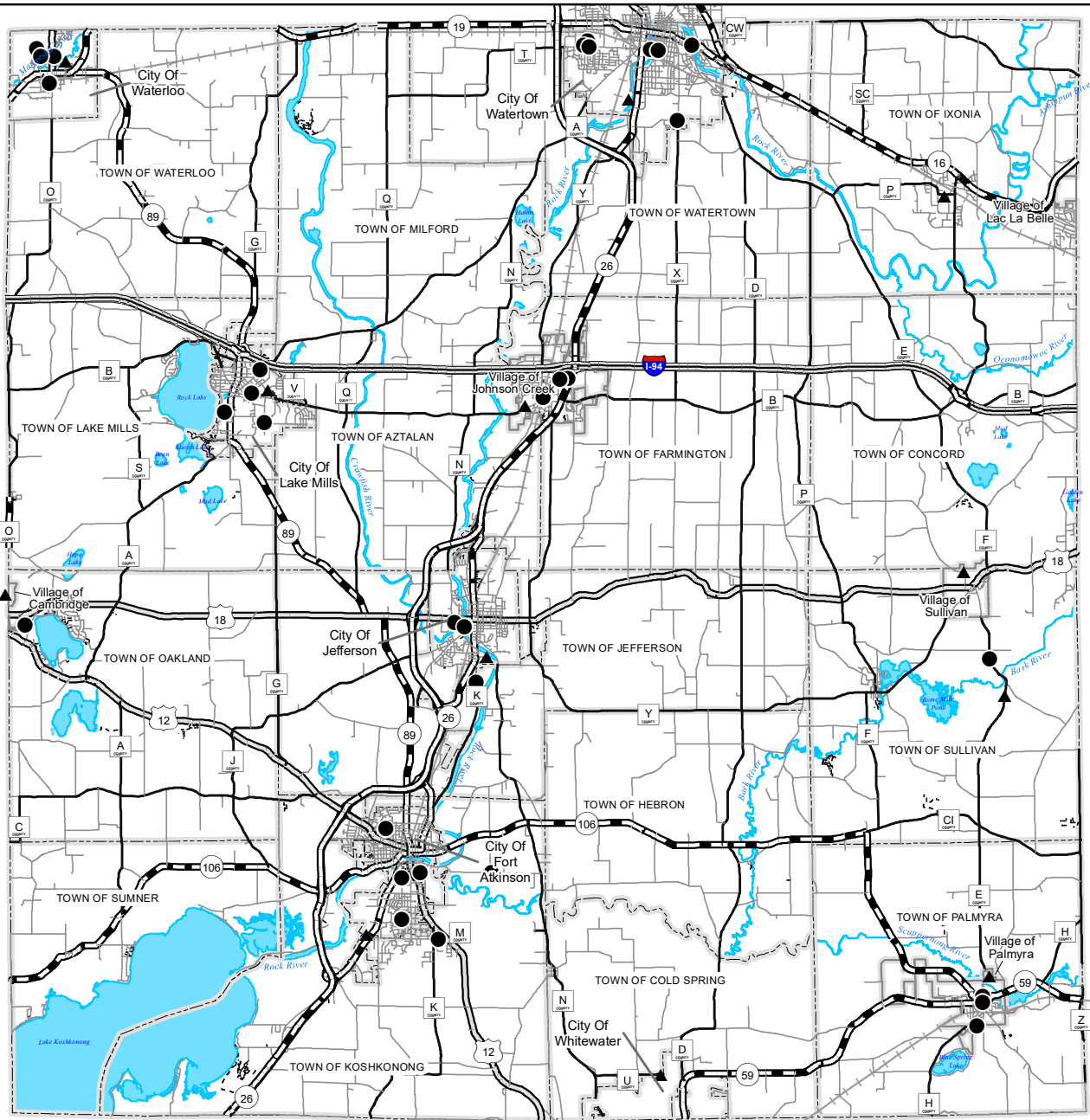
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Miles



Map 14 Energy Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
CONSULTING



Legend

- Public Water Facility
- ▲ Wastewater Treatment Facility
- Road
- ~ River
- Water Body
- Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

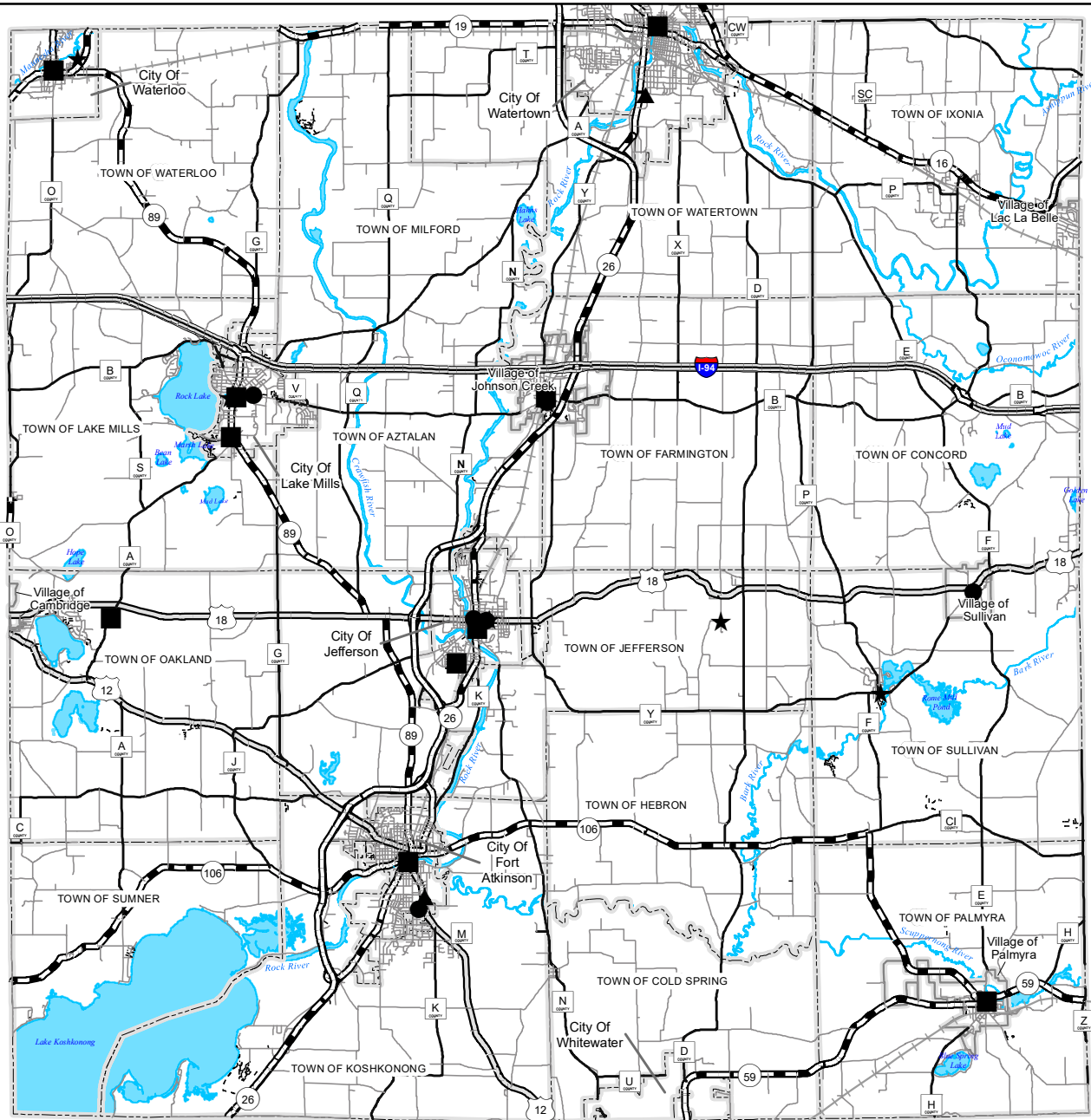
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Miles



Map 15 Public Water and Wastewater Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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CONSULTING



Legend

- ▲ Military Facility
- EMS Facility
- ★ Fire Station
- Police Station

- Road
- River
- Water Body
- Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

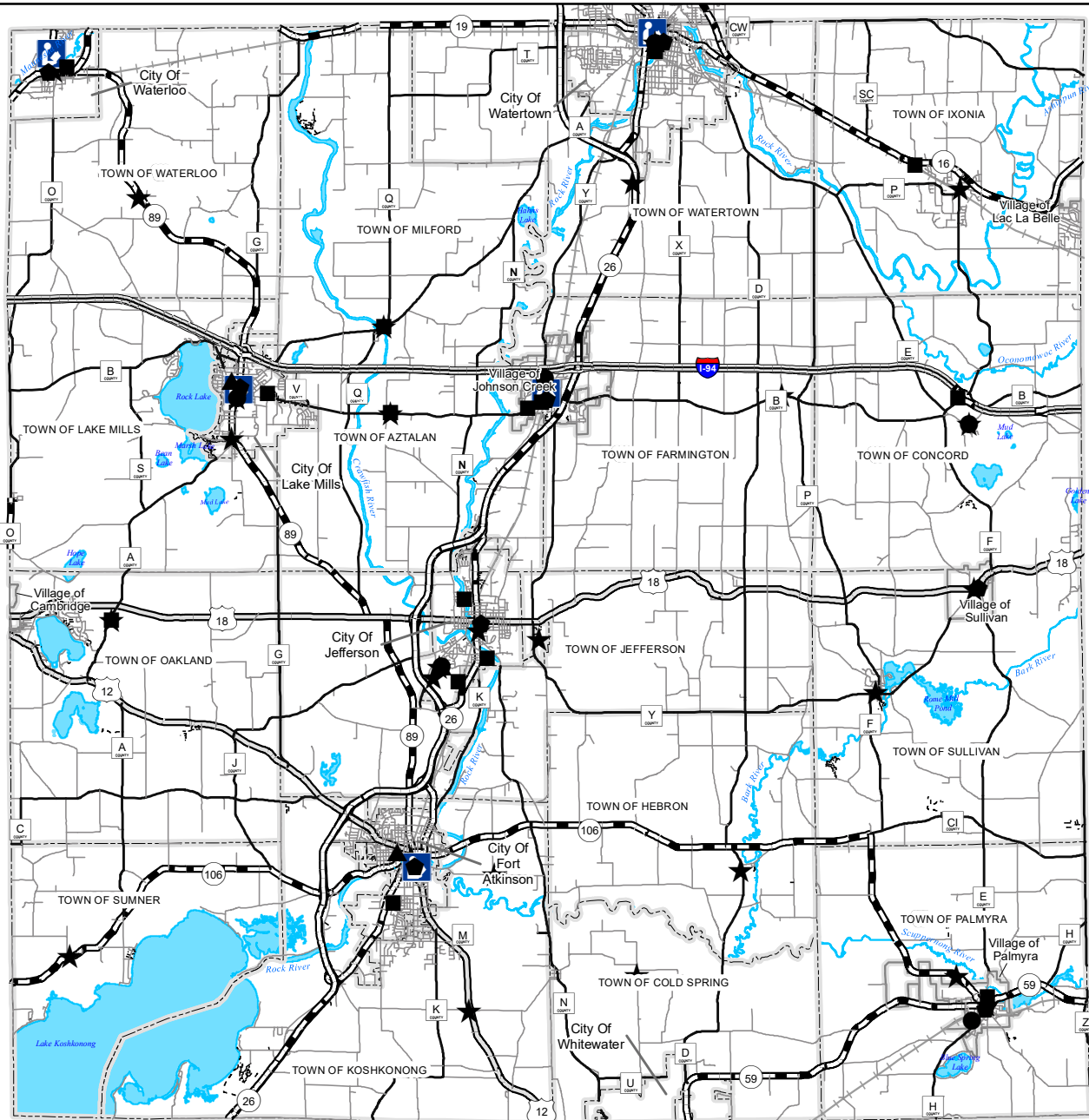
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Map 16 Public Safety Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
CONSULTING



Legend



Library



Post Office



Municipal Office and Other



Community Center



Municipal Garage



Senior Center



Road



River



Water Body



Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

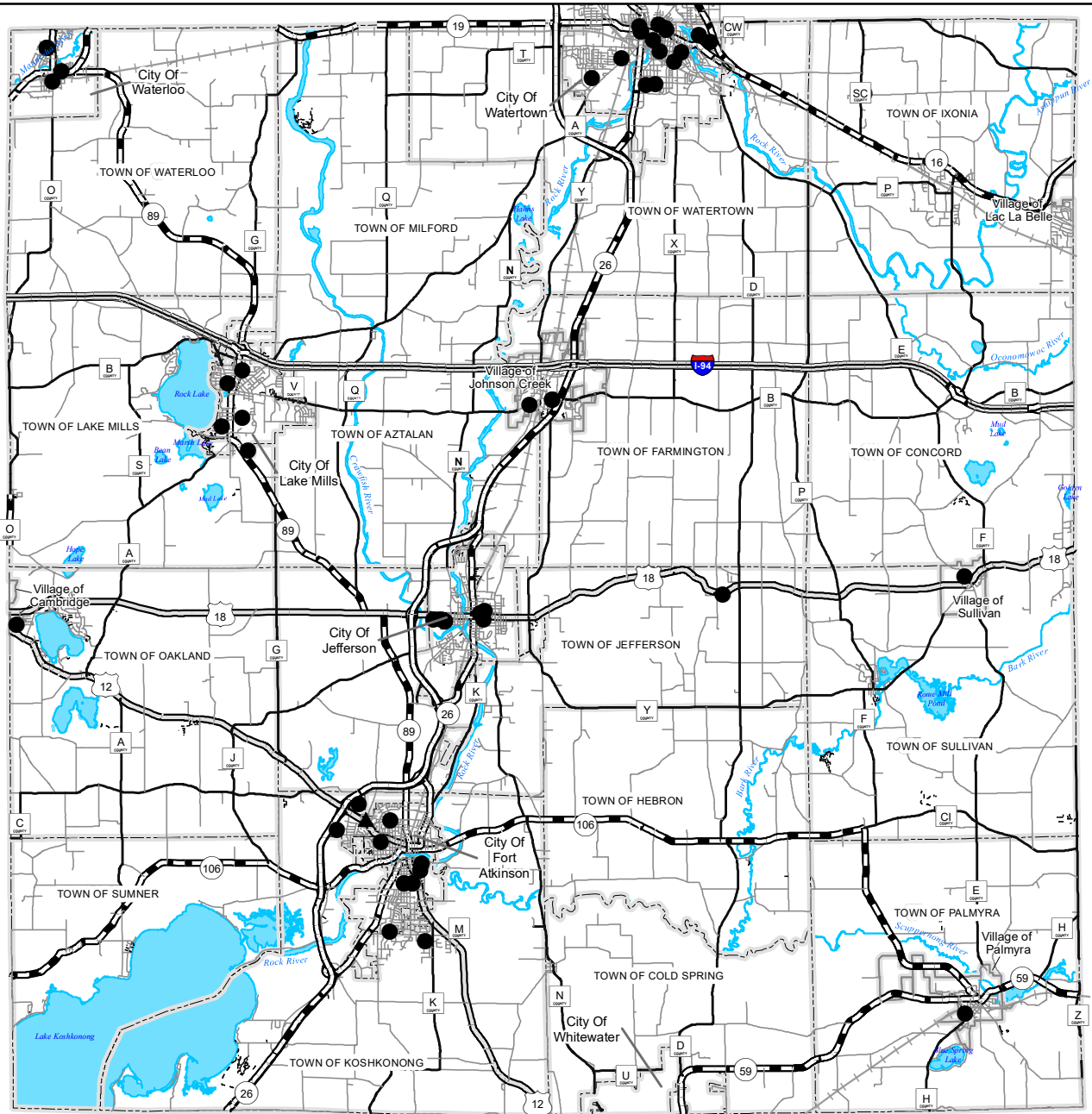
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Miles



Map 17 Government Facilities: 2024

Jefferson County Hazard Mitigation Plan 2025-2029

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Legend

● Preschool - 12

▲ Post High School

— Road

— River

Water Body

Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

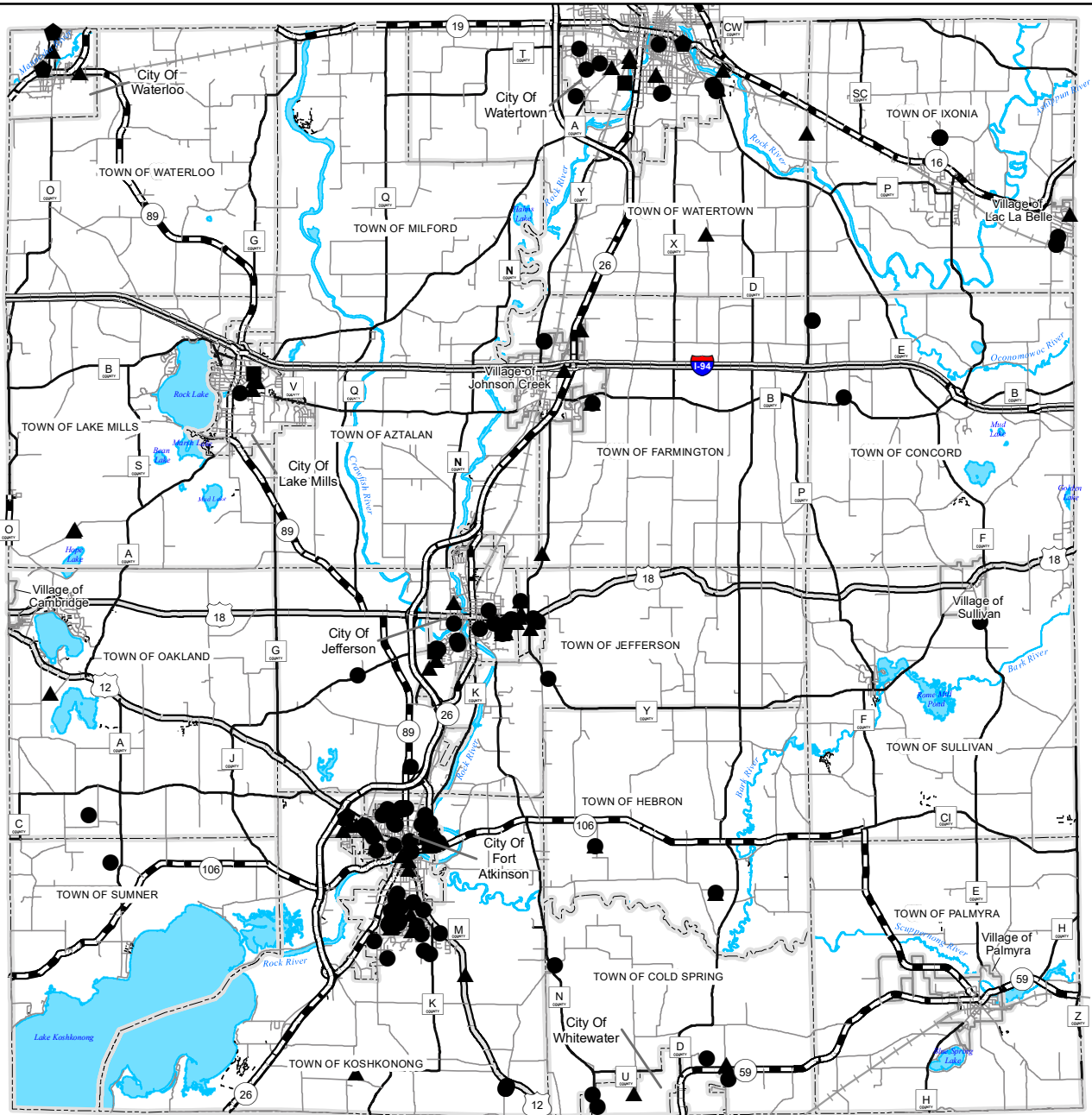
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Miles



Map 18 Schools: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
CONSULTING



Legend

- Adult Family Home
- ▲ Community Based Residential Facility
- Nursing Home
- ⬠ Residential Care Apartment Complex
- Road
- ~ River
- Water Body
- Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

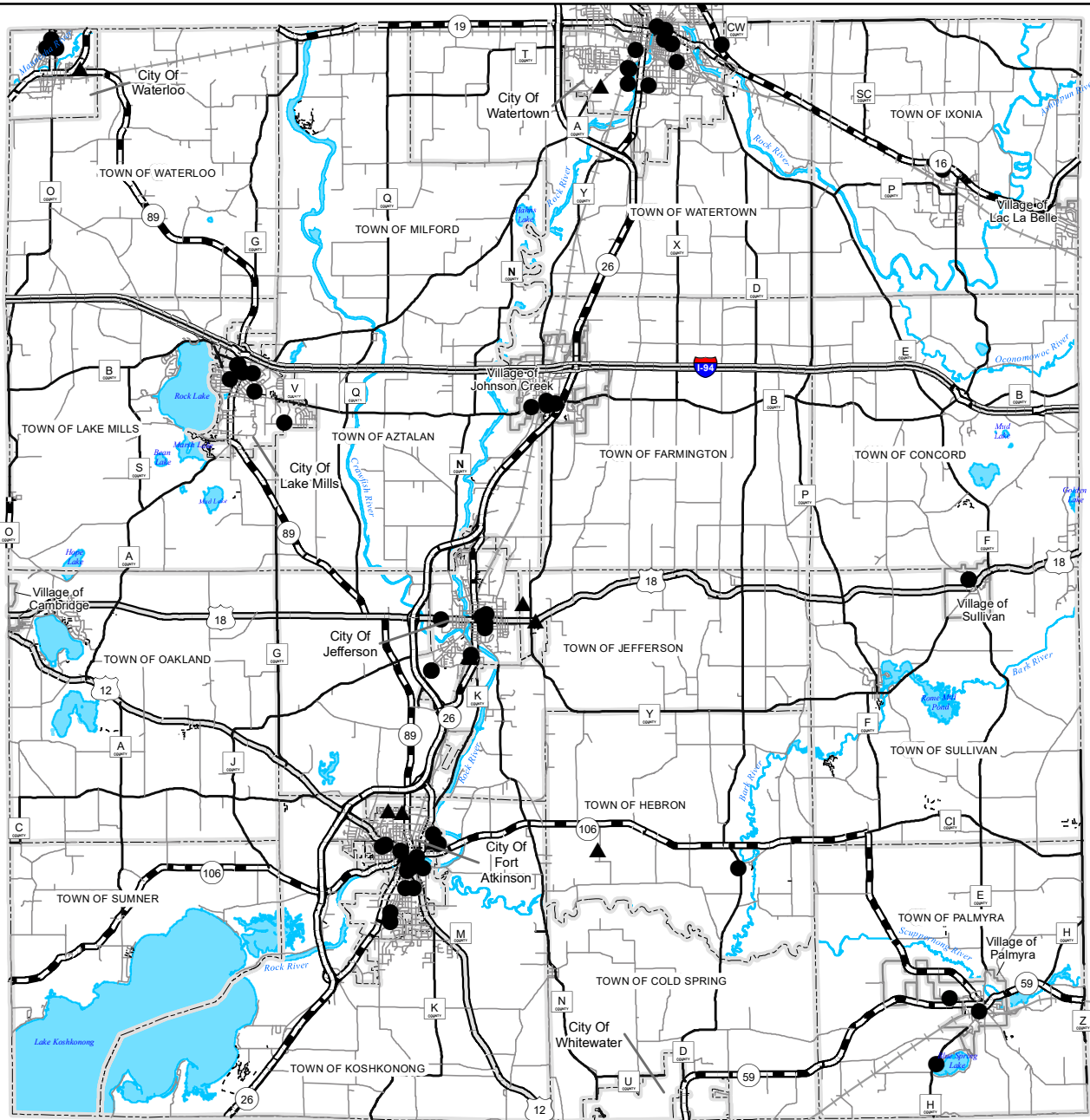
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Map 19 Special Care Residential Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

CIVITEK
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Legend

- ▲ Group Child Care Center
- Adult Day Care

— Road

— River

Water Body

Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

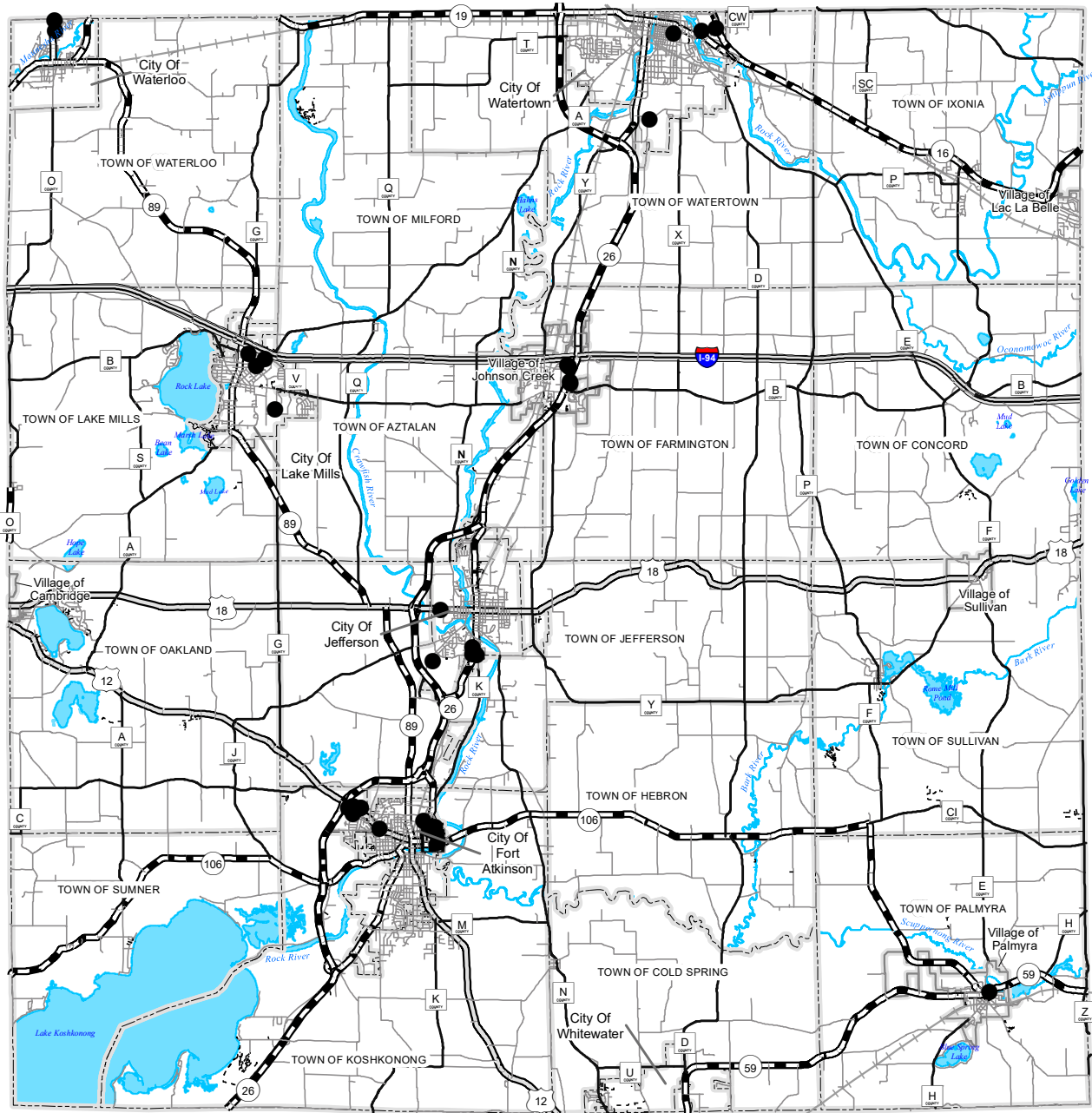
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Map 20 Special Care Non-Residential Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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CONSULTING



Legend

- | | |
|--|--|
|  Hospital |  Road |
|  Health Care Facility |  River |
| |  Water Body |
| |  Municipal Boundary |

Source: Basemap from Jefferson County
Land Information Office

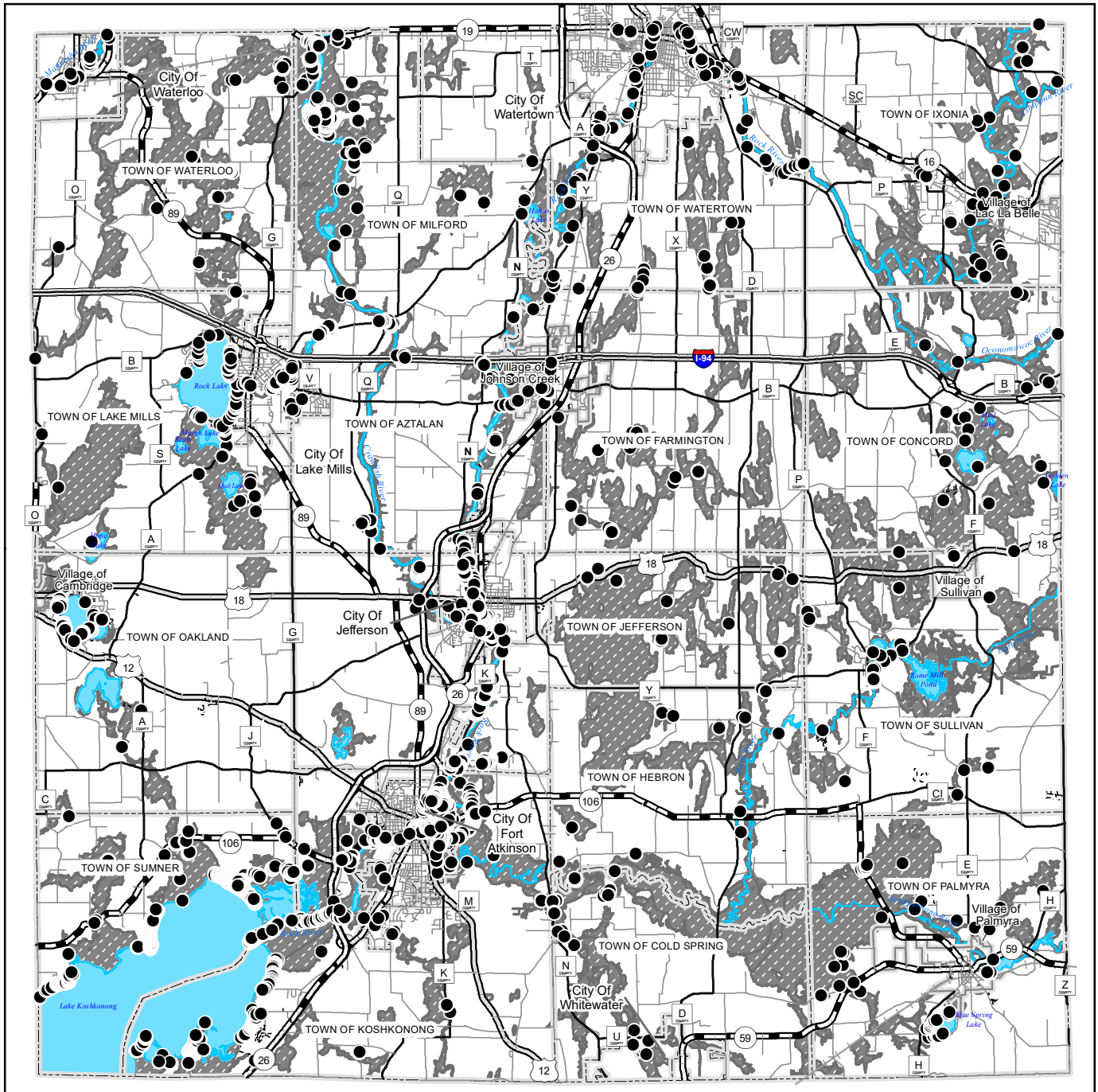
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Map 21 Health Care Facilities: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

- Structure
- ▨ 100 Year Floodplain
- Road
- River
- Water Body
- Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

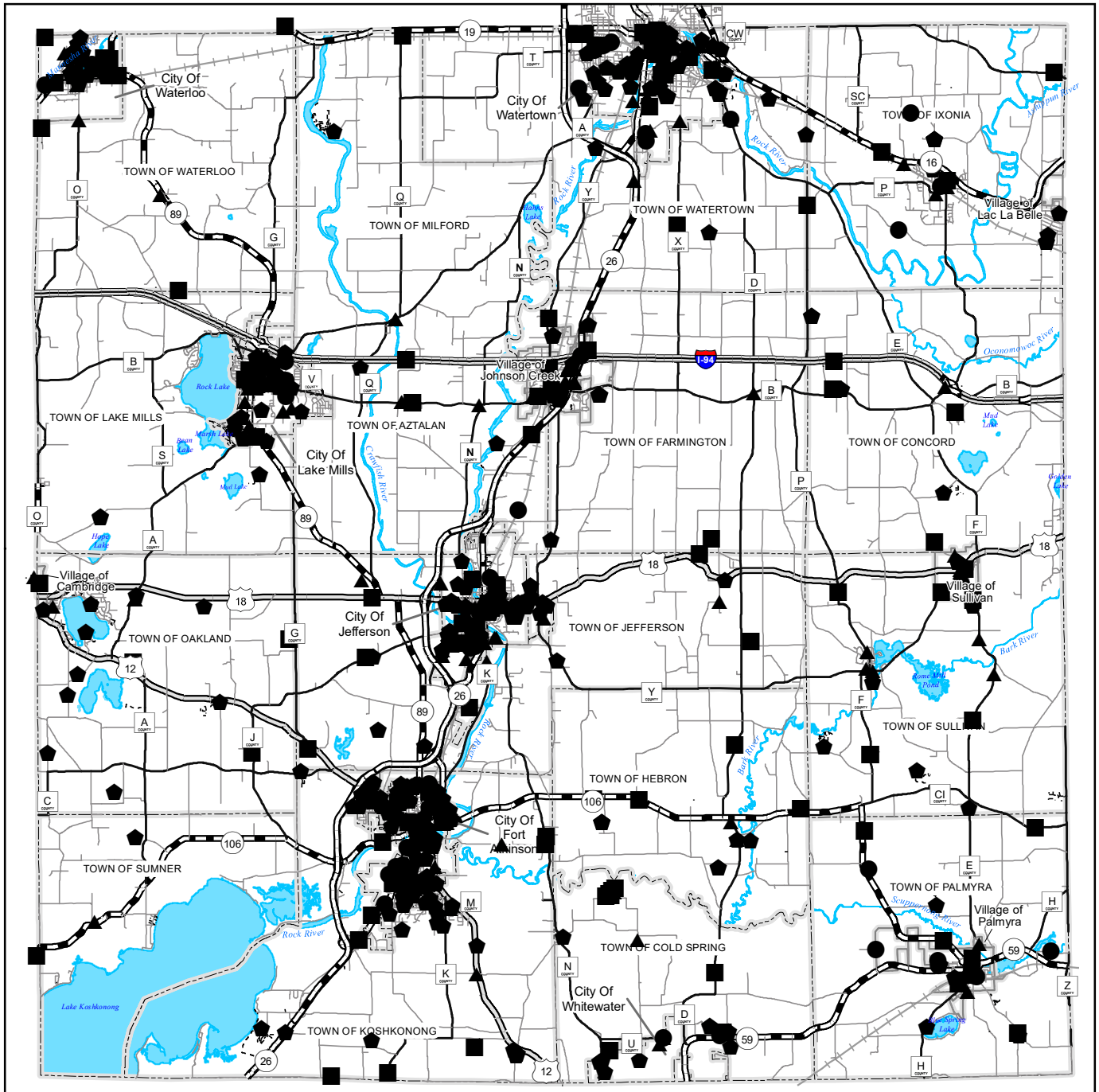
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Map 23 Structures in 100 Year Floodplain: 2007

Jefferson County
Hazard Mitigation Plan
2025-2029

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Legend

- ▲ Type I
- Type II
- Type III
- ◆ Type IV

— Road

— River

Water Body

Municipal Boundary

Source: Basemap from Jefferson County
Land Information Office

0 1 2 3
Miles



Map 24 Critical Facility by Type: 2024

Jefferson County
Hazard Mitigation Plan
2025-2029

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PUBLIC PARTICIPATION DOCUMENTATION

2024 Public Participation Plan	B-2
Sample email sent to municipalities regarding participation	B-3
Municipal point of contacts	B-4
School District Point of Contacts	B-5
Community Needs and Capabilities Survey #1	B-6
School District Survey	B-11
Survey of Local Projects and Activities #2	B-13
Communication with Adjoining Counties	B-16
Communication with American Red Cross	B-17
Steering committee meeting #1 (September 30, 2024)	B-18
Steering committee meeting #2 (October 24, 2024)	B-19
Law Enforcement and Emergency Management Committee Agenda – March 28, 2025	B-20
Jefferson County Board Meeting Agenda – April 15, 2025	B-21

Public Participation Plan Jefferson County Hazard Mitigation Plan 5-Year Update

Working in concert with local jurisdictions, Jefferson County has initiated a project to update the Jefferson County hazard mitigation plan that was first adopted in 2008. The items listed below are the ways in which the County will facilitate public participation in the plan update.

- **Formation of a Steering Committee.** A steering committee will be established to guide the project and provide oversight and input. Members will include county officials and staff and local officials and representatives who wish to participate.
- **Public Notices for Steering Committee Meetings.** All Steering Committee meetings will be formally noticed and open to the public consistent with the state's open meeting law.
- **Local Government Involvement.** Each of the local governments in Jefferson County (towns, cities, and villages) will be contacted early in the process and informed about the project and asked to enter into a memorandum of understanding (MOU) with the County. Although the MOU would be non-binding, it would establish a framework for intergovernmental cooperation and coordination in terms of information sharing and give the jurisdiction the opportunity to also adopt the updated plan making it eligible for federal mitigation funding.
- **Local Jurisdiction Survey.** A set of maps, a listing of critical facilities in the jurisdiction, and a draft version of the assessment matrix used in the plan will be sent to each of the jurisdictions in the County. Local officials will have an opportunity to review and comment on the materials prepared up to that date.
- **Website.** Information about the project will be posted on the County's website, along with draft documents, maps, meeting notices and agendas, and project-related news.
- **Material Availability.** As various drafts are completed, copies will be sent to each of the local jurisdictions in Jefferson County and other interested parties for review and comment.
- **Acknowledgement by municipalities.** Each of the cities and villages in the county will be sent a proposed copy of the plan along with a form they can use to acknowledge that they have reviewed the plan, and either recommend one or more revisions or accept the plan as drafted.
- **Public Hearing.** The Board of Supervisors will hold at least one public hearing to formally accept public comment on the proposed plan. Each of the cities and villages in the county will need to conduct separate public hearings to collect public input from within their particular jurisdiction.
- **Other Means.** The County may provide other avenues for public participation and local government involvement during the course of the project.

Adopted September 10, 2024, by the Jefferson County Board of Supervisors by Resolution 2024-43

Sample Correspondence Sent to Municipalities Regarding Participation

Subject: Participation in Jefferson County Hazard Mitigation Plan Update

Jefferson County prepared a multi-jurisdictional hazards mitigation plan in 2008 and has updated it every five years after that.

The county is embarking on another five-year update, and we need the involvement of all of the towns, cities, and villages in Jefferson County to make sure we address local issues and concerns.

As in the past, cities and villages will have the opportunity to adopt the updated plan — doing so will allow them to qualify to apply for federal funding for hazard mitigation projects and activities.

If your jurisdiction would like to participate, complete the attached memorandum of understanding and appoint one person from your jurisdiction who will (1) verify the accuracy of a list of critical facilities that will be prepared for your jurisdiction, (2) review and comment on the draft plan, (3) complete a short survey, and (4) serve as a liaison. If that individual would like to be more involved, he or she can also volunteer to serve on a steering committee that will have a direct role in overseeing the plan update process.

I hope you can see the benefits (and low cost) of participating in this project. To participate, sign the enclosed memorandum and then appoint one person to represent your jurisdiction in the process. Please send me the completed forms by August 31, 2024 (via mail or email).

The County Board has hired Civi Tek Consulting of Lake Mills to help prepare the plan update. If you should have any questions, you may contact me at (920) 674-7450 or at donna@jeffersoncountywi.gov.

Kind regards,

Donna Haugom, Director of Emergency Management
Jefferson County Office of Emergency Management

Donna Haugom, WCEM
Director
Jefferson County
Emergency Management

Phone: 920-674-7450
107 E Washington St
Jefferson, WI 53549

www.jeffersoncountywi.gov



Municipal Point of Contacts

Survey #1	Survey #2	Town	Point of Contact
	X	Aztalan	Kathleen Pitzner
X	X	Cold Spring	Byron Freeman, Town Supervisor
		Concord	
X	X	Farmington	Kevin Emrath, Town Chairman
X		Hebron	Kathleen Gross, Town Clerk
X		Ixonia	Perry Groetsch, Town Chairman
	X	Jefferson	Tracie Stammer, Town Supervisor
	X	Koshkonong	Kim Cheney, Chairperson
	X	Lake Mills	Robin Untz, Town Clerk
		Milford	Steve Kube, Town Chairman
	X	Oakland	Laura Payne, Town Chair**
		Palmyra	Frank Sauter, Town Chairman
		Sullivan	
	X	Sumner	Patricia Achilli
X		Waterloo	Scott Hassett, Town Chairman
X	X (2)	Watertown	James Wendt, Administrative Clerk **
Village			
X	X	Cambridge	Paula Hollenbeck, Village Trustee
X	X	Johnson Creek	Benjamin Patterson, Fire-EMS Chief
		Lac La Bell	none
	X	Palmyra	Scott Pavlock, Public Safety Director/Police Chief**
	X	Sullivan	Heather Rupnow, Clerk/Treasurer
City			
	X	Fort Atkinson	Bruce Peterson, Fire Chief**
X		Jefferson	Alan D. Richter, Chief of Police**
	X	Lake Mills	Steve Schroeder, Chief of Police** Drake Daily, City Manager
	X	Waterloo	Denis Sorensen, Chief of Police**
X		Watertown	Tanya Reynen, Fire Chief** Victoria Parker - Environmental Health Specialist/Emergency Preparedness Coordinator**
	X	Whitewater	Todd Lindert, Emergency Management Coordinator** Sabrina Ojibway, Support Services Manager

** Also served on Steering Committee

Jefferson County Parks Department – Survey #2

School District Point of Contacts

Survey	School District	Point of Contact
X	Calvary Baptist	Randy Krystowiak, Administrator
X	Cambridge	Bill Miller, Director of Buildings and Grounds
X	Jefferson	<ul style="list-style-type: none">• Charles Urness, Superintendent• Nick Skretta, Jefferson High School Principal• Jake Wichman, Principal
X	Fort Atkinson	Rob Abbott, Superintendent
X	Johnson Creek	Mark Green
X	Lake Mills	Tonya Olson, District Administrator

Jefferson County Hazard Mitigation Plan Survey 2024

Your Name:

Your Position/Title:

Name of City, Village, Town:

1. Which plans has your organization adopted?

Plan	Yes	No	Unsure
Comprehensive Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capital Improvement Plan (CIP)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic Development Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing Plan or Study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operations Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continuity of Operations Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stormwater Management Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disaster Recovery Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watershed Restoration Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parks/Outdoor Recreation Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainability, Energy, and/or Climate Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmland Preservation Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Land & Water Conservation Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List any other recent plans: <div></div>			

Page 2

2. Which ordinances has your community adopted?

Ordinance	Yes	No	Unsure
General Zoning Ordinance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floodplain Zoning Ordinance, if City or Village	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoreland Zoning Ordinance, if City or Village	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoreland-Wetland Zoning Ordinance, if City or Village	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building Codes/Uniform Dwelling Code	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farmland Preservation Zoning, if Town	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Historic Preservation Ordinances, if City or Village	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List other ordinances:			

3. Which personnel and technical resources does your organization have? Include in-house staff and contracted external resources.

Resource	Yes	No	Unsure
Designated Emergency Management Manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planner or engineer trained in land development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planner or engineer trained in construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planner or engineer trained in natural hazards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Works	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building inspector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floodplain Manager/Administrator, if City or Village	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GIS Technician	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grant writer/administrator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warning systems/services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mutual Aid Agreements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintenance Programs (tree trimming, stormwater infrastructure maintenance, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List any other available resources:			

Page 3

4. Which financial resources does your organization have?

Resource	Yes	No	Unsure
Capital Improvements Project Funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authority to levy taxes for special purposes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stormwater Utility Fees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Development Block Grant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Revenue from utilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impact fees for new development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tax Incremental Financing (TIF)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List any other resources:			

5. Which outreach/engagement capabilities does your organization have to implement hazard mitigation strategies?

Strategy	Yes	No	Unsure
Staff with hazard mitigation training to attend community events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ongoing education programs (first aid, disaster preparedness, safety training, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nonprofit organizations that assist vulnerable populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nonprofit organizations involved in environmental protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Municipal website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Municipal or utility newsletter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency notification apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
List other available strategies:			

6. Rate the categories discussed in questions 2 through 6 by how effectively your organization can implement hazard mitigation projects and strategies:

Category	Low	Moderate	High
Planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ordinances/Zoning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personnel/Technical Resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial Resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outreach/Engagement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. What improvements do you think are needed to more effectively manage natural hazards and disaster response for each category:

Category	Improvements Needed
Planning	
Ordinances/Zoning	
Personnel/ Technical Resources	
Financial Resources	
Outreach/ Engagement	

8. What are the top three needs to improve your community's capacity to implement hazard mitigation projects and strategies?

1.	
2.	
3.	

9. List any roads in your jurisdiction that have been flooded in the last 5 years:

Road Name	Road Segment (From/To) or General Location	Year(s)

Thank you for taking the time to complete this survey. It's most appreciated.

Please return this survey by October 4, 2024:

Tracy Hameau, Emergency Management Director
Jefferson County
107 E. Washington
Jefferson, WI 54549

thameau@jeffersoncountywi.gov

Jefferson County Hazard Mitigation Plan
School District Survey 2024

School District

Your Name

Your Position/Title

1. Does the school district have a strategic plan? ☐ Yes ☐ No

If yes, does anything relate to mitigating natural hazards? ☐ Yes ☐ No

If yes, briefly describe.

2. Briefly, what natural hazards are of most concern to the school district and why?

3. Has the school district undertaken any projects to help mitigate natural hazards?

Mitigation Project/Activity	Recently Completed	In Progress	Budgeted
Install backup generators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood-proof existing buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install or improve on-site stormwater management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install or improve tornado safe rooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building improvements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Remove large trees that pose a threat to infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. What schools in your district do not have a tornado safe room?

1.		4.		7.	
2.		5.		8.	
3.		6.		9.	

	Yes	No	Unsure
5. Does the school district have an emergency preparedness plan specifically tailored to natural hazards like flooding or high winds?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Does the school district provide specific education or resources for students and families about natural hazard risks and preparedness?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Does the school district have a post-disaster recovery plan to ensure continuity of education if a school is damaged by a natural hazard?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Does the school district have a plan for providing psychological support to students and staff in the aftermath of a natural disaster affecting their school or the larger community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Survey of Local Mitigation Projects and Activities (#2)



JEFFERSON COUNTY HAZARD MITIGATION PLAN UPDATE

Hazard mitigation planning efforts, projects and activities

* Required

1. Name of Municipality *

Enter your answer

2. Your Name *

Enter your answer

3. Hazard Mitigation Activities and Projects

Select hazard mitigation projects/activities your jurisdiction and community may benefit from and like to accomplish in the next 5 years. It is especially important to list projects and activities that may be eligible for mitigation grant funding. There is room at the end of this survey to elaborate on any of these or add your jurisdiction's pre-identified projects.

SEVERE WEATHER *

- ☐ Install backup generators at critical facilities (e.g., Municipal buildings, shelters, businesses, healthcare facilities, schools, etc.)
- ☐ Bury electrical and other utility lines to prevent service outages during weather events
- ☐ Become a NWS Storm Ready Community
- ☐ Evaluate existing outdoor sirens and coverage. (add, repair, or upgrade as needed)
- ☐ Explore grant opportunities for community safe rooms/storm shelters in municipal buildings, campgrounds, and mobile home parks
- ☐ Update zoning to require community safe rooms in new or expanding mobile home villages and campgrounds
- ☐ Post information on the town's, village's, or city's website related to emergency warning systems, importance of NOAA weather radios
- ☐ Post information on the town's, village's, or city's website related to emergency preparedness planning, the safe operation of generators, and space heaters, winter weather driving, tornado safety, etc.
- ☐ Encourage local businesses, churches, schools, etc. to utilize NOAA All Hazards Weather Radios as a way to keep the public safe during dangerous weather events
- ☐ Develop and implement appropriate evacuation procedures in flood-prone areas
- ☐ Review/update Emergency Operating Plans (EOP)

4. STORMWATER, FLOODWATER, DEBRIS MANAGEMENT *

- ☐ Apply for grant(s) to purchase flood-prone properties
- ☐ Build or reinforce levees, dams, floodwalls and berms
- ☐ Raise road surfaces to mitigate flood chances
- ☐ Implement critical facility flood protection measures (wastewater treatment plant, police station, municipal building)
- ☐ Development of stormwater retention ponds
- ☐ Upgrade storm sewer systems
- ☐ Initiate the creation of a stormwater management plan
- ☐ Develop a plan/pursue funding to modify any bridges/culverts in your jurisdiction that are not able to handle floodwaters
- ☐ Assess tree trimming projects that would mitigate storm debris-related damage and hazards, such as blocked critical roadways, stormwater drainage, power outages, etc.
- ☐ Designate a storm debris collection point and/or create a debris management plan
- ☐ Remove debris and downed trees along streams and waterways to help improve stream flow
- ☐ Notify railroad officials of potential issues with tracks and crossings that could impact the safety of residents

5. WILDFIRE *

- ☐ Consider requirement(s) for burn permits
- ☐ Encourage controlled burns as a means of controlling fuel buildup
- ☐ Ensure new developments have adequate ingress and egress routes
- ☐ Provide information to property owners on creating a defensible space around structures
- ☐ Assess fire district equipment needs and capabilities to effectively respond to wildland fires

6. CLIMATE ADAPTATION AND OTHER ITEMS *

- ☐ Incorporate natural hazard information into the town's, village's, city's comprehensive plan
- ☐ Establish local heating and cooling centers for towns, villages, and cities
- ☐ Encourage local residents to contact friends, neighbors, and other family members during periods of extreme temps
- ☐ Apply to become part of the Tree City USA program or adopt an urban forest management plan to mitigate high heat extremes during the summer
- ☐ Adopt local ordinances for prioritizing water usage during periods of drought
- ☐ Promote the use of drought-resistant landscaping practices using native plantings
- ☐ Expand landowner/farmer outreach programs which will increase conservation efforts
- ☐ Encourage farm operators to evaluate the economics of crop insurance programs

7. DAMS *

- ☐ Ensure that dam inspections are conducted as required by state law
- ☐ Review any local dam Emergency Action Plans (EAP)
- ☐ Include dam failure scenarios in emergency planning exercises
- ☐ Evaluate the removal of dams that no longer serve a useful purpose

8. Please list any hazard mitigation projects or activities your jurisdiction may have planned over the next five years or elaborate on any of the items listed above *

Enter your answer

9. Comments *

Enter your answer

Submit

Communication with Adjoining Counties and America Red Cross

From: Tracy Hameau <THameau@jeffersoncountywi.gov>
Sent: Monday, October 14, 2024 10:43 AM
To: Kevin Wemet; Gail Goodchild; Rowland, Jason; jmeagher@co.dodge.wi.us; tubbs.charles@countyofdane.com
Cc: Tim Schwecke; Tracy Neuhauser
Subject: Jefferson County Natural Hazards Mitigation Plan: 2025-2029

Good morning,

Jefferson County Emergency Management is in the process of updating our Hazards Mitigation Plan. Like many of you, we're on our third 5-year update.

Please let us know if there are any natural hazards you believe should be addressed across county lines or if any kind of multi-jurisdictional effort could be implemented by October 21, 2024.

Also, there are a number of cities and villages that are located in more than one county. These include:

- City of Watertown
- City of Whitewater
- Village of Cambridge
- Village of Lac La Belle

Did these communities participate in your most recent effort to update your county plan?

When we finalize our plan update, we'll send you a link to access the document. As always, we appreciate any input you may have.

Thank you for your time and effort – I really appreciate it.

Sincerely,

Tracy Hameau
Emergency Management Director
Jefferson County, WI
thameau@jeffersoncountywi.gov
Phone: (920) 674-7450

107 E Washington
Jefferson, WI 54549
www.jeffersoncountywi.gov



To: Shana Beal, Disaster Program Manager, American Red Cross- Southeast Wisconsin

From: Tracy Hameau, Director; Jefferson County Emergency Management

Subject: Jefferson County Natural Hazards Mitigation Plan: 2025-2029

Jefferson County Emergency Management is in the process of updating our Hazards Mitigation Plan. We wanted to reach out to thank you for sending us the updated list of storm shelters in our county.

Secondly, please let us know if there is anything in our plan that would help you in providing your services in Jefferson County.

When we finalize our plan update, we'll send you a link to access the document. As always, we appreciate any input you may have.

Thank you for your time and effort – I really appreciate it.

Sincerely,

Tracy Hameau, Director; Jefferson County Emergency Management

**Steering Committee Meeting #1
September 30, 2024**

AGENDA

**Jefferson County
Hazard Mitigation Plan Update Steering Committee
Kick-off Meeting**

September 30, 2024, 6:00 p.m.

Jefferson County Emergency Management Office
107 E Washington St.
Jefferson, WI 53549

Virtual log in: [Join the meeting now](#)

Meeting ID: 268 944 130 151

Passcode: gaontg

1. Introductions
2. Certification of compliance with open meetings law
3. Public comment
4. Project description – What is a hazard mitigation plan?
5. Role of steering committee
6. Project timeline
7. Upcoming committee tasks
8. Feedback and questions
9. Set date and time for next meeting
10. Adjourn

Meeting Attendance

- ◆ Drake Daily, City Manager, City of Lake Mills
- ◆ Tracy Hameau, Director, Jefferson County Emergency Management
- ◆ Todd Lindert, Emergency Management Coordinator, City of Whitewater
- ◆ Tracy Neuhauser, Deputy Director, Jefferson County Emergency Management
- ◆ Sabrina Ojibway, Support Services Manager, City of Whitewater
- ◆ Laura Payne, Town Chair, Town of Oakland
- ◆ Ben Patterson, Fire Chief, Village of Johnson Creek
- ◆ Tanya Reynen, Fire Chief, City of Watertown
- ◆ Tim Schwecke, Civi Tek Consulting
- ◆ Brian Udovich, Jefferson County Engineer

Steering Committee Meeting #2
October 24, 2024

AGENDA

***Jefferson County Hazard Mitigation Plan
Steering Committee Meeting***

October 24, 2024, 11:00a.m.

Jefferson County Emergency Management Office
 107 E Washington St.
 Jefferson, WI 53549

OR

Virtual log in:
Microsoft Teams
[Join the meeting now](#)

Meeting ID: 224 779 583 142
 Passcode: Jeqpno



1. Call to order
2. Roll call
3. Certification of compliance with open meetings law
4. Approval of the agenda
5. Approval of the September 30, 2024 minutes
6. Public comment – *(Members of the public who wish to address the committee on specific agenda items must register their request at this time; there will be a two (2) minute limit)*
7. Discussion on Survey and Results
8. Review selected parts of plan to confirm/revise
9. Upcoming committee tasks
10. Timeline for Hazard Mitigation Plan completion
11. Feedback and questions from Steering Committee
12. Set date and time for next meeting- *if needed*
13. Adjourn

Meeting Attendance

- ◆ Patricia Cicero, Director, Jefferson County Land and Water Conservation Department
- ◆ Tracy Hameau, Director, Jefferson County Emergency Management
- ◆ Paula Hollenbeck, Village Trustee, Village of Cambridge
- ◆ Anita Martin, Interested Citizen
- ◆ Tracy Neuhauser, Deputy Director, Jefferson County Emergency Management
- ◆ Ben Patterson, Fire Chief, Village of Johnson Creek
- ◆ Bruce Peterson, Fire Chief, City of Fort Atkinson
- ◆ Alan D. Richter, Chief of Police, City of Jefferson
- ◆ Tanya Reynen, Fire Chief, City of Watertown
- ◆ Steve Schroeder, Chief of Police, City of Lake Mills
- ◆ Tim Schwecke, Civi Tek Consulting
- ◆ Brian Udovich, Jefferson County Engineer
- ◆ Matthew Zangl, Director of Planning and Development for Jefferson County

Law Enforcement and Emergency Management Committee Agenda – March 28, 2025**LAW ENFORCEMENT AND EMERGENCY MANAGEMENT COMMITTEE
AGENDA******REVISED 03-25-2025**

**Jefferson County Courthouse
311 S. Center Ave, C2003, Jefferson
March 28th, 2025 @ 8:30 a.m.**

[Join the meeting now](#)

Meeting ID: 236 030 545 93

Passcode: ee6ZX6Lu

DWAYNE MORRIS; DAVID DRAYNA; BRANDON WHITE; MARY ROBERTS; KARL ZARLING

1. Call to order
2. Roll call
3. Certification of compliance with open meetings law
4. Approval of the agenda
5. Public comment – (Members of the public who wish to address the committee on specific agenda items must register their request at this time)
6. Approval of the February 28, 2025 meeting minutes
7. Communications
8. Grants – Update of ongoing or new grants
9. ***Discussion and approval of the Hazard Mitigation Plan update**
10. ****Discussion and possible action on Sheriff's Office Mobile App**
11. Proclamation of Law Enforcement Memorial Day – May 14, 2025
12. Report from the Sheriff
13. Update on Lateral Patrol Transfers
14. Review monthly bills and financial items (December-Final, January, February) and Report on the budget
15. Review monthly jail and patrol activity reports
16. Discussion and possible action on approving jail assessment fund purchases
17. Discussion on potential items for the April 25, 2025 meeting agenda (Emergency Management)
18. Adjourn

A quorum of any Jefferson County Committee, Board, Commission or other body, including the Jefferson County Board of Supervisors, may be present at this meeting.

Individuals requiring special accommodations for attendance at the meeting should contact the County Administrator 24 hours prior to the meeting at 920-674-7101 so appropriate arrangements can be made.

Jefferson County Board Meeting Agenda – April 15, 2025 (Second page only)

- a. Resolution – Approving 2025 Local Road Improvement Program asphalt bids (Page 11)
- b. Resolution – Approving 2025 pre-mixed hot mix asphalt vendor quotes (Page 13)
- c. Resolution – Approving 2025 asphalt milling quotes (Page 14)
- d. Resolution – Approving 2025 asphalt pulverizing quotes (Page 16)
- 13. **HUMAN RESOURCES COMMITTEE**
 - a. Ordinance – Amending Personnel Ordinance HR0360, Hours of Work, Overtime, and Compensatory Time, Shift Differentials and Premium Pay (Page 17)
 - b. Resolution – Approving GovInvest compensation management software (addendum)
- 14. **LAW ENFORCEMENT AND EMERGENCY MANAGEMENT COMMITTEE**
 - a. Proclamation – Proclaiming May 11-27, 2025, as National Police Week (Page 19)
 - b. Resolution – Adopting the Jefferson County Hazard Mitigation Plan 2025-2029 (Page 20)
- 15. **PARKS COMMITTEE**
 - a. Resolution – Accepting bids for the construction of the Interurban Bike Trail Phase III and amending the 2025 budget in the Parks Department (Page 22)
- 16. **PLANNING AND ZONING COMMITTEE**
 - a. Report (Page 24)
 - b. Ordinance – Amending Official Zoning Map (Page 25)
- 17. **SOLID WASTE AND AIR QUALITY COMMITTEE**
 - a. Resolution – Supporting Jefferson County Clean Sweep, E-Waste Recycling, Tire Recycling and Drug Take Back Program (Page 27)
- 18. **APPOINTMENTS BY COUNTY BOARD CHAIR** (Page 28)
 - a. Dave Flowers, Community Group Representative, to the Local Emergency Planning Committee (LEPC) for an indeterminate term.
- 19. **APPOINTMENTS BY COUNTY ADMINISTRATOR** (Page 28)
 - a. Joan Callan to the Human Services Board to fill an unexpired term ending November 1, 2026.
 - b. Municipal Library Appointments: Kristin Martin and Cari Redington (Cambridge), Kyle Jacobson and Duane Scott (Fort Atkinson), Tom Beirl (Jefferson), Katie Tietzen (Johnson Creek), Tracy Grant (Waterloo), Beth Mueller (Watertown) appointed for a three-year term beginning May 1, 2025 and ending May 1, 2028.
 - c. Melissa Howe, Town of Ixonia, to the Oconomowoc Library Board for a three-year term ending May 1, 2028
 - d. Steve Nass to the Board of Health for a three-year term ending May 9, 2028
 - e. Danielle Thompson, Law Representative, to the Traffic Safety Commission for an indeterminate term
- 20. **PUBLIC COMMENT** (General)
- 21. **ANNOUNCEMENTS**
- 22. **ADJOURN**

NEXT COUNTY BOARD MEETING

**TUESDAY, MAY 13, 2025
7:00 P.M.**

ADOPTION RESOLUTION (2025 PLAN UPDATE)

RESOLUTION NO. 2025-10

Adopting The Jefferson County Hazard Mitigation Plan 2025-2029

Executive Summary

The Federal Disaster Mitigation Act of 2000 requires that government units periodically update their Hazard Mitigation Plans. Jefferson County initially adopted a multi-jurisdictional Hazard Mitigation Plan in 2008 and updated the plan in 2012 and 2018. On September 10, 2024, the Jefferson County Board of Supervisors passed Resolution 2024-43 requiring the Emergency Management Department to update its plan. This new 2025 update will guide hazard mitigation efforts in Jefferson County for the next five-year period from 2025 through 2029.

The Jefferson County Hazard Mitigation Plan (2025-2029) identifies demographic and economic characteristics, climate, natural resources, land use, and developmental trends of the county. Special needs populations and groups are also identified. The plan inventories critical facilities in the County in light of natural hazards along with estimated losses to buildings and infrastructure. This plan makes clear appropriate solutions in terms of a wide range of activities that help to foster hazard mitigation efforts. Mitigation funding sources, maps, and other important features are included.

This resolution adopts the 2025-2029 Jefferson County Hazard Mitigation Plan. The Law Enforcement & Emergency Management Committee considered this resolution at its meeting on March 28, 2025, and recommended forwarding it to the County Board for approval.

WHEREAS, the Executive Summary is incorporated into this resolution, and

WHEREAS, the United States Congress passed the Disaster Mitigation Act of 2000 (DMA2K), which requires that a local unit of government must have an approved all hazard mitigation plan before it can receive Federal grant monies from the Federal Emergency Management Agency for pre-disaster mitigation projects, and

WHEREAS, Jefferson County Emergency Management has updated the comprehensive Hazard Mitigation Plan, initially adopted in 2008, that evaluates the risks posed by potential hazards including, but not limited to, flooding, tornadoes, winter storms, and other severe weather conditions, and identifies strategies for reducing the impact of such hazards on the community, and

WHEREAS, the Jefferson County Board of Supervisors adopted Resolution No. 2024-43 on September 10, 2024, to accept public input concerning the updated plan, and

WHEREAS, Jefferson County has engaged relevant stakeholders, including local governments, emergency responders, community organizations, and the public, in the planning process to ensure the plan is comprehensive and reflects the needs of all residents, and

WHEREAS, the Jefferson County Hazard Mitigation Plan is designed to enhance the County's ability to protect its residents, infrastructure, and economy from the effects of disasters through proactive mitigation strategies, improved risk assessments, and coordinated response efforts, and

WHEREAS, the adoption of this plan demonstrates Jefferson County's commitment to mitigating hazards and improving the resilience of our communities, and

WHEREAS, the Jefferson County Board of Supervisors makes the following findings:

1. The Jefferson County Hazard Mitigation Plan, as prepared and presented by the Jefferson County Emergency Management Department, is hereby adopted as the official Hazard Mitigation Plan for Jefferson County.
2. The plan shall be used as a guide for future hazard mitigation efforts and will serve as the foundation for seeking and applying for federal, state, and local funding to implement mitigation projects.
3. The Jefferson County Emergency Management Director is hereby authorized to submit the adopted plan to FEMA and other relevant authorities for approval.
4. The Hazard Mitigation Plan shall be reviewed periodically and updated as necessary, with public input and participation from relevant stakeholders, to ensure its continued relevance and effectiveness.

NOW, THEREFORE, BE IT RESOLVED that Jefferson County hereby adopts the Jefferson County Natural Hazards Mitigation Plan: 2025-2029. While content related to Jefferson County may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Jefferson County to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

BE IT FURTHER RESOLVED THAT this resolution shall take effect immediately upon its adoption.

Fiscal Note: This resolution has no direct fiscal impact.

Strategic Plan Reference: YES



Highly Regarded Quality of Life: Anticipate and plan for environmental vulnerabilities, to include drought, zoonotic, heavy storms, and other disaster events; Develop a comprehensive flood mitigation plan to evaluate and plan for current and future risk and mitigation strategies

Voice Vote - Passed

STATE OF WISCONSIN)
)ss
COUNTY OF JEFFERSON)

I, Audrey McGraw, County Clerk of Jefferson County, Wisconsin, do hereby certify that the attached is a true and correct copy of Resolution No. 2025-10, adopted at the April 15, 2025, Session of the County Board of Supervisors at the County Courthouse in the City of Jefferson.

WITNESS MY HAND AND SEAL this 21st day of April 2025.



Audrey McGraw

Audrey McGraw
Jefferson County Clerk
Jefferson, Wisconsin

Referred By:
Law Enforcement & Emergency Management Committee

04-15-2025

REVIEWED: Corporation Counsel: DHT ; Finance Director: *[Signature]*

LETTERS OF CERTIFICATION

2008 Plan (Approved July 25, 2008) D-2

5-year Update (2013) – WEM Certification D-3

5-year Update (2013) – FEMA Certification D-4

5-year Update (2018) – WEM Certification D-5

5-Year Update (2025) – FEMA Certification D-6

2008 Plan

U.S. Department of Homeland Security
Region V
536 South Clark Street, Floor 6
Chicago, IL 60605



FEMA

Ms. Roxanne Gray
State Hazard Mitigation Officer
Wisconsin Div. of Emergency Management
2400 Wright Street, P. O. Box 7865
Madison, WI 53707-7865

JUL 25 2008

Dear Ms. Gray, ✓

Thank you for submitting the Jefferson County Hazard Mitigation Plan. We are pleased to inform you that the plan is *approved* for Jefferson County and its unincorporated areas, and the following communities: the Cities of Fort Atkinson, Lake Mills, and Watertown; the Villages of Johnson Creek, Lake Mills, and Sullivan. Formal approval for the other participating jurisdictions, however, is contingent upon the adoption of the plan by those communities. The plan was reviewed based on the local plan criteria contained in 44 CFR Part 201, as authorized by the Disaster Mitigation Act of 2000 and the Flood Mitigation Assistance (FMA) Program.

The approval of this plan ensures the continued availability of FMA and Stafford Act funding including the Pre-Disaster Mitigation Program and the Hazard Mitigation Grant Program. All requests for funding, however, will be evaluated individually according to the specific eligibility and other requirements of the particular program under which the application is submitted.

Over the next five years, we encourage Jefferson County to follow the plan's schedule for monitoring and updating the plan, and continue their efforts to implement the mitigation measures. The plan must be reviewed, revised as appropriate, resubmitted, and approved within five years in order to continue project grant eligibility.

Please pass on our congratulations to the community on completing this significant action. If you or the community has any questions, please contact Jonathan (J.P.) Marsch at (312) 408-5226.

Sincerely,

Norbert Schwartz, Director
Mitigation Division

Attachment: Local Plan Review Sheets

www.fema.gov

5-Year Update (2013) – Certification Letter from WEM

STATE OF WISCONSIN
DEPARTMENT OF MILITARY AFFAIRS
DIVISION OF EMERGENCY MANAGEMENT

Brian M. Satula
Administrator

Scott Walker
Governor

October 28, 2013

Donna Haugom, Director
Jefferson County Emergency Management
411 S. Center Avenue
Jefferson, WI 53549

Dear Donna:

It gives me great pleasure to inform you that the *Jefferson County, Wisconsin Natural Hazards Mitigation Plan: 2013-2017* has officially been approved by FEMA. The plan complies with the requirements of the Disaster Mitigation Act of 2000. The County is eligible to apply for funding through the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program through October 18, 2018, for projects identified in the Plan. Per the regulations, the Plan is required to be updated and resubmitted for approval every five years to remain eligible for mitigation funding.

With the FEMA Meets Requirements letter you received the Local Hazard Mitigation Plan Review Crosswalk includes recommended revisions for the five-year update.

Congratulations on the approval of the Plan. I also want to commend the County for its commitment to mitigation and reducing future disaster losses, and I look forward to working with you in the future.

If you have any questions, please feel free to call me at 608-242-3222.

Sincerely,

Katie Sommers
Disaster Response and Recovery Planner
Wisconsin Division of Emergency Management

Enclosure

Cc: Ben Schliesman, Southeast Regional Emergency Management Director
Linda Coogan, Southeast Regional Office Operations Associate
Tim Schwecke, Civi Tek Consulting

5-Year Update (2013) – Certification Letter from FEMA

Rec'd 10/6/13

U.S. Department of Homeland Security
Region V
536 S. Clark St., 6th Floor
Chicago, IL 60605-1509

**FEMA**

OCT 18 2013

Ms. Roxanne Gray
State Hazard Mitigation Officer
Wisconsin Emergency Management
2400 Wright Street, P. O. Box 7865
Madison, WI 53707-7865

Dear Ms. Gray:

Thank you for submitting the adoption documentation for the Jefferson County Hazard Mitigation Plan. The plan was reviewed based on the local plan criteria contained in 44 CFR Part 201, as authorized by the Disaster Mitigation Act of 2000. Jefferson County met the required criteria for a multi-jurisdiction hazard mitigation plan and the plan is now approved for the county, the cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, Watertown, and Whitewater, and the villages of Cambridge, Johnson Creek, Palmyra, and Sullivan. According to our records, all participating jurisdictions have now adopted the plan.

The approval of this plan ensures continued availability of the full complement of Hazard Mitigation Assistance (HMA) Grants. All requests for funding, however, will be evaluated individually according to the specific eligibility and other requirements of the particular program under which the application is submitted.

We encourage the participating jurisdictions to work with Jefferson County to follow the plan's schedule for monitoring and updating the plan, and continue their efforts to implement the mitigation measures. The plan must be reviewed, revised as appropriate, resubmitted, and approved within five years in order to continue project grant eligibility.

Please pass on our congratulations to the communities on completing this significant action. If you or the county have any questions, please contact Kirstin Kuenzi at (312) 408-4460.

Sincerely,

Christine Stack, Director
Mitigation Division

www.fema.gov

5-Year Update (2018) – Certification Letter from WEM

STATE OF WISCONSIN
DEPARTMENT OF MILITARY AFFAIRS
DIVISION OF EMERGENCY MANAGEMENT

Brian M. Satula
Administrator

Tony Evers
Governor

February 13, 2017

Ms. Donna Haugom, Director
Jefferson County Emergency Management
411 S. Center Avenue
Jefferson, WI 53549

Ms. Haugom:

Wisconsin Emergency Management (WEM) has reviewed the *Jefferson County Natural Hazards Mitigation Plan: 2019-2023*. The Federal Emergency Management Agency (FEMA) and WEM have signed a Program Administration by States operational agreement, dated October 29, 2018 and amended on November 9, 2017, allowing WEM to review local mitigation plans to ensure they meet the required criteria for a multi-jurisdiction hazard mitigation plan outlined in 44 CFR Part 201. Upon review, Jefferson County meets the required criteria for a multi-jurisdictional hazard mitigation plan.

The county and participating jurisdictions *must now adopt* the plan to have a FEMA-approved hazard mitigation plan and be eligible for funding through the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, and the Flood Mitigation Assistance (FMA) program.

The enclosed Local Mitigation Plan Review Tool includes recommended revisions for the five-year update.

If you have any questions, please call me at (608) 888-5292 or Katie Sommers at (608) 242-3222.

Sincerely,

Robyn Wiseman, CFM
State Hazard Mitigation Officer
Wisconsin Emergency Management

Enclosures

Cc: Ben Schliesman, Southeast Regional Emergency Management Director
Mary Zahn, Southeast Regional Emergency Management Office Operations Associate
Tim Schwecke, Civitek Consulting

5-Year Update (2025) – Certification Letter from FEMA

STATE OF WISCONSIN
DEPARTMENT OF MILITARY AFFAIRS
DIVISION OF EMERGENCY MANAGEMENT

Phone: 608-242-3000
P.O. Box 7865 - Madison, WI 53707-7865



April 1, 2025

Tracy Hameau, Director
Jefferson County
Emergency Management
107 E Washington St
Jefferson, WI 53549

Dear Director Hameau:

Wisconsin Emergency Management (WEM) has reviewed the *Jefferson County Natural Hazards Mitigation Plan: 2025-2029*. The Federal Emergency Management Agency (FEMA) and WEM have signed a Program Administration by States operational agreement, allowing WEM to review local mitigation plans to ensure they meet the required criteria for a multi-jurisdiction hazard mitigation plan outlined in 44 CFR Part 201.

The local mitigation plan meets all applicable FEMA mitigation planning requirements except its adoption by: Jefferson County, Village of Cambridge, Village of Johnson Creek, Village of Palmyra, Village of Sullivan, City of Fort Atkinson, City of Jefferson, City of Lake Mills, City of Waterloo, , City of Watertown, and City of Whitewater.

Local governments, including special districts, with a plan status of "Approvable Pending Adoption" (APA) are not eligible for FEMA mitigation grant programs with a mitigation plan requirement. The next step in the approval process is to formally adopt the mitigation plan and send a resolution to the state for submission to FEMA. Sample adoption resolutions can be found in Appendix A of the Local Mitigation Planning and Policy Guide.

An approved local mitigation plan, including adoption by the local government, is one of the conditions for applying for and/or receiving FEMA mitigation grants from the following programs:

- Hazard Mitigation Grant Program
- Building Resilient Infrastructure and Communities
- Flood Mitigation Assistance

Participating jurisdictions that adopt the plan more than one year after APA status has been issued must either:

- Validate that their information in the plan remains current with respect to both the risk assessment (no recent hazard events, no changes in development) and their mitigation strategy (no changes necessary); or
- Make the necessary updates before submitting the adoption resolution to FEMA.

We look forward to receiving the adoption resolution(s) and discussing options for implementing this mitigation plan. If we can help in any way, please contact me at heather.thole@widma.gov.

Sincerely,



Heather Thole, Alternate GAR
State Hazard Mitigation Officer
Wisconsin Emergency Management

Enclosure

- WEM Plan Review Tool

Cc:

Tracy Neuhauser, Deputy Director, Jefferson County Emergency Management
Ben Schliesman, Southeast Region Director, WEM
Tim Schwecke, Civi Tek Consulting

HISTORY OF ADOPTION AND AMENDMENT

Date of Action	Description
2008 Plan	
February 12, 2008	Jefferson County Board adopted the countywide hazard mitigation plan
May 20, 2008	City of Fort Atkinson adopted the countywide natural hazards mitigation plan
2008	City of Jefferson adopted the countywide natural hazards mitigation plan
January 15, 2008	City of Lake Mills adopted the countywide natural hazards mitigation plan
2008	City of Waterloo adopted the countywide natural hazards mitigation plan
May 20, 2008	City of Watertown adopted the countywide natural hazards mitigation plan
May 27, 2008	Village of Cambridge adopted the countywide natural hazards mitigation plan
February 11, 2008	Village of Johnson Creek adopted the countywide natural hazards mitigation plan
May 5, 2008	Village of Palmyra adopted the countywide natural hazards mitigation plan
January 8, 2008	Village of Sullivan adopted the countywide natural hazards mitigation plan
January 14, 2008	Town of Sumner adopted the countywide natural hazards mitigation plan
2012 Plan Update	
August 13, 2013	Jefferson County Board adopted the countywide hazard mitigation plan update
October 1, 2013	City of Fort Atkinson adopted the countywide natural hazards mitigation plan update
October 9, 2013	City of Jefferson adopted the countywide natural hazards mitigation plan update
July 13, 2013	City of Lake Mills adopted the countywide natural hazards mitigation plan update
August 15, 2013	City of Waterloo adopted the countywide natural hazards mitigation plan update
July 16, 2013	City of Watertown adopted the countywide natural hazards mitigation plan update
July 13, 2013	Village of Cambridge adopted the countywide natural hazards mitigation plan update
July 22, 2013	Village of Johnson Creek adopted the countywide natural hazards mitigation plan update
July 15, 2013	Village of Palmyra adopted the countywide natural hazards mitigation plan update
July 2, 2013	Village of Sullivan adopted the countywide natural hazards mitigation plan update
2018 Plan Update	
January 9, 2019	Jefferson County Board adopted the countywide hazard mitigation plan update
March 5, 2019	City of Fort Atkinson adopted the countywide natural hazards mitigation plan update
Not known	City of Jefferson adopted the countywide natural hazards mitigation plan update
January 7, 2020	City of Lake Mills adopted the countywide natural hazards mitigation plan update
Not known	City of Waterloo adopted the countywide natural hazards mitigation plan update
December 17, 2019	City of Watertown adopted the countywide natural hazards mitigation plan update
Not known	Village of Cambridge adopted the countywide natural hazards mitigation plan update
December 30, 2019	Village of Johnson Creek adopted the countywide natural hazards mitigation plan update
January 6, 2020	Village of Palmyra adopted the countywide natural hazards mitigation plan update
February 5, 2019	Village of Sullivan adopted the countywide natural hazards mitigation plan update
2025 Plan Update	
April 15, 2025	Jefferson County Board adopted the countywide hazard mitigation plan update
■ 2025	City of Fort Atkinson adopted the countywide natural hazards mitigation plan update
■ 2025	City of Jefferson adopted the countywide natural hazards mitigation plan update

<div><div></div><div>2025</div></div>	City of Lake Mills adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	City of Waterloo adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	City of Watertown adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	Village of Cambridge adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	Village of Johnson Creek adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	Village of Palmyra adopted the countywide natural hazards mitigation plan update
<div><div></div><div>2025</div></div>	Village of Sullivan adopted the countywide natural hazards mitigation plan update

Dates for 2025 plan adoption to be added as completed.

Jurisdiction	Facility name	Address
Adult day care center		
Fort Atkinson, city	Camp Buckaroos (0020040)	1204 Monroe Street
Fort Atkinson, city	Reflections Adult Day Care LLC (0018363)	119 Sherman Avenue West
Jefferson, city	Elite Day Services LLC (0013519)	1101 S Grove Avenue
Jefferson, city	True Comfort Adult Day Services (0019099)	152 W Garland Street
Jefferson, town	St Coletta of Wisconsin - Golden Options Program (0	N4637 CTH Y
Waterloo, city	Victory Vision Community Connections Day Center (310 Portland Road
Adult family home (AFH)		
Farmington, town	Buckaroos AFH 2	N6424 S Farmington Road
Farmington, town	Buckaroos AFH 2B	N6424 S Farmington Road, Duplex B
Fort Atkinson, city	Allied Care LLC Adrian House	1212 Adrian Blvd
Fort Atkinson, city	Aspen Place AFH	918 Gail Place
Fort Atkinson, city	Black Bear AFH	222 W Blackhawk Drive
Fort Atkinson, city	Blue Raven	220 W Blackhawk Drive
Fort Atkinson, city	Caring Corner	1328 Commonwealth Drive
Fort Atkinson, city	Clover Lane Place AFH	421 Clover Lane
Fort Atkinson, city	Elm Mound Adult Family Home	117/119 Healy Lane
Fort Atkinson, city	Gray Wolf	212 W Blackhawk Drive
Fort Atkinson, city	Hawks Ridge AFH	1123 N Main Street
Fort Atkinson, city	Heatherlyn Assisted Living	811 Robert Street
Fort Atkinson, city	Hil Nikki Home	506 Nikki Lane
Fort Atkinson, city	Hil Stone Ridge	504 Nikki Lane
Fort Atkinson, city	Lighted Pathways II	710 Badger Court
Fort Atkinson, city	Locust Corners Adult Family Home	28 Sherman Avenue E
Fort Atkinson, city	Locust Corners AFH	28 E Sherman Avenue
Fort Atkinson, city	New Beginnings	402 Raintree Drive
Fort Atkinson, city	Parkview Adult Family Home	303 Memorial Drive
Fort Atkinson, city	Pine Circle AFH	503 Nikki Lane
Fort Atkinson, city	Pinnacle Assisted Living Services	1008 W Blackhawk Drive
Fort Atkinson, city	Silver Fox	214 W Blackhawk Drive
Fort Atkinson, city	St Coletta of Wisconsin - Frederick Avenue	414 Frederick Avenue
Fort Atkinson, city	Walnut AFH	1442 Endl Boulevard
Ixonia, town	My Place of Ixonia I	N8616A North Road
Ixonia, town	My Place of Ixonia II	N8616B North Road
Ixonia, town	My Place of Ixonia III	N8622A North Road
Ixonia, town	My Place of Ixonia IV	N8622B North Road
Jefferson, city	Ellen's Place	459 E Dodge Street
Jefferson, city	St Coletta of Wisconsin - Bonaventure Heights	836 E Racine Street
Jefferson, city	St Coletta of Wisconsin - Seton Home	810 E Racine Street
Jefferson, city	St Coletta of Wisconsin - St Rose	119 Orchard View Court
Jefferson, city	St Coletta of Wisconsin - St. Elizabeth	117 Orchard View Court
Johnson Creek, village	Mark Dr Home	140 Mark Drive
Koshkonong, town	Arbor House AFH	W5814 Hackbarth Road

Jurisdiction	Facility name	Address
Koshkonong, town	Country Hearts	W5999 Friedel Road
Koshkonong, town	Jasper House	N1947 USH 12
Koshkonong, town	Marcey Care AFH	N1546 Shari Lane
Koshkonong, town	Orchard View Adult Family Home	W6429 USH 12
Koshkonong, town	Silver Star AFH	W5991 Lee Drive
Koshkonong, town	Willow Winds II	N374 Twinkling Star Road
Koshkonong, town	Willow Winds III	N346 Twinkling Star Road
Koshkonong, town	Willow Winds IV	N348 Twinkling Star Road
Koshkonong, town	Willow Winds Living	N372 Twinkling Star Road
Lake Mills, city	Victorian Splendor	312 E Lake Street
Sullivan, town	B's Comforts of Home	N4313 CTH P
Watertown, city	Buckaroos AFH	933 South Street
Watertown, city	Concord Ave 1	481 S Concord Avenue
Watertown, city	Concord Ave 2	483 S Concord Avenue
Watertown, city	Concord Heights 1	304 East Haven Drive
Watertown, city	Concord Heights 2	306 East Haven Drive
Watertown, city	Rescare - Casey	917 Casey Drive
Whitewater, city	Topaz House	N197 CTH N
Bridge, major		
Aztalan, town	Bridge on CTH B over Crawfish River	CTH B
Aztalan, town	Bridge on CTH B over Rock River	CTH B
Aztalan, town	Bridge over Crawfish River	I-94
Aztalan, town	Bridge over Rock River	I-94
Cold Spring, town	Bridge on CTH D over Scuppernong Creek	CTH D
Cold Spring, town	Bridge on CTH U	CTH U
Farmington, town	Bridge on CTH Y over Johnson Creek	CTH Y
Fort Atkinson, city	Bridge on Janesville Avenue	Janesville Avenue
Fort Atkinson, city	Bridge on Main Street	Main Street
Hebron, town	Bridge on CTH D over Scuppernong Creek	CTH D
Hebron, town	Bridge on STH 106	STH 106
Ixonia, town	Bridge on CTH CW	CTH CW
Ixonia, town	Bridge on CTH F	CTH F
Ixonia, town	Bridge on CTH P	CTH P
Ixonia, town	Bridge on STH 16	STH 16
Jefferson, city	Bridge on Main Street over Rock River	Main Street
Jefferson, city	Bridge on North Street over Rock River	North Street
Jefferson, city	Bridge on Puerner Street over Rock River	Puerner Street
Jefferson, city	Bridge on Racine Street over Rock River	Racine Street
Jefferson, city	Bridge on Wisconsin Drive over Crawfish River	Wisconsin Drive
Jefferson, town	Bridge on STH 18 over Crawfish River	STH 18
Johnson Creek, village	Bridge on Aztalan Street	Aztalan Street
Johnson Creek, village	Bridge on STH 26 over Johnson Creek	STH 26
Koshkonong, town	Bridge on CTH J	CTH J

Jurisdiction	Facility name	Address
Koshkonong, town	Bridge on CTH N over Bark River	CTH N
Koshkonong, town	Bridge on STH 106	STH 106
Koshkonong, town	Bridge on STH 26	STH 26
Koshkonong, town	Bridge on STH 26	STH 26
Milford, town	Bridge on CTH A over Crawfish River	CTH A
Milford, town	Bridge on STH 19 over Crawfish River	STH 19
Palmyra, town	Bridge on STH 106	STH 106
Palmyra, village	Bridge on Jefferson Street	Jefferson Street
Palmyra, village	Bridge on Main Street/STH 59	Main Street
Palmyra, village	Bridge on Main Street/STH 59	Main Street
Sullivan, town	Bridge on CTH E	CTH E
Sullivan, town	Bridge on CTH F over Bark River	CTH F
Sullivan, town	Bridge on CTH F over Rome Mill Pond	CTH F
Sullivan, town	Bridge on CTH P	CTH P
Sullivan, town	Bridge on Main Street over Bark River	Main Street (CTH F)
Sumner, town	Bridge on STH 106	STH 106
Waterloo, city	Bridge on East Madison B-28-104	E Madison Street
Waterloo, city	Bridge on East Madison B-28-77-93	E Madison Street
Waterloo, city	Bridge on Portland Road	Portland Road / STH 19
Waterloo, city	Bridge on West Madison	W Madison Street
Waterloo, city	Bridge on West Madison Street	W Madison Street
Watertown, city	Bridge on Church Street over Rock River	Church Street
Watertown, city	Bridge on Cody Street over Rock River	Cody Street
Watertown, city	Bridge on East Main Street over Rock River	E Main Street
Watertown, city	Bridge on Main Street over Rock River	Main Street
Watertown, city	Bridge on Milwaukee Street over Rock River	Milwaukee Street
Watertown, city	Bridge on Oconomowoc Avenue over Rock River	Oconomowoc Avenue
Campground		
Aztalan, town	Aztalan Cycle Club, Inc.	N6643 Gomoll Road
Hebron, town	Hebron Campground	N2316 Museum Road
Jefferson, city	Camp Spangler	892 N Jackson Ave
Jefferson, city	Jefferson Co Fairgrounds	503 N Jackson Avenue
Jefferson, town	Dorothy Carnes County Park Camping	N3299 Banker Road
Koshkonong, town	Pilgrim's Campground	W7271 County Road C
Koshkonong, town	Silo Ridge Campground	N357 Old Hwy 26
Koshkonong, town	Wishing Well RV Resort Campground	N551 Wishing Well Lane
Lake Mills, town	Sandhill Station State Campground (DNR)	N5595 Mud Lake Road
Milford, town	River Bend RV Resort	W6940 Rubidell Road
Oakland, town	ChingFactor	N3627 W Cedar Road
Oakland, town	Jefferson Speedway	W8135 STH 18
Oakland, town	Valley View Recreational Club	N3080 E Rockdale Road
Palmyra, town	Circle K Campground	W1316 Island Road
Palmyra, town	Horserider's Campground (DNR)	W830 Little Prairie Road

Jurisdiction	Facility name	Address
Sullivan, town	Bark River Campground & Resort	W2340 Hanson Road
Sullivan, town	Nature's Villa	N2899 Roger Road
Sullivan, town	Rome Riverside Campground	N3780 Water Street
Sumner, town	Blackhawk Club Campground & Marina, Inc.	W7766 Blackhawk Island Rd
Sumner, town	Island Bar & Grill Campground	W7545 Blackhawk Island Road
Watertown, town	Rock River Access Cappies Landing	N8625 Jefferson Road
Child care center - group		
Fort Atkinson, city	Fort Atkinson Preschool and Child Care	31 W Milwaukee Avenue
Fort Atkinson, city	Fort Kidz Too Child Care LLC	205 Park Street
Fort Atkinson, city	Jefferson County Head Start CESA 2	719 S Main Street
Fort Atkinson, city	Kids Konnection	660 McMillen Street
Fort Atkinson, city	Lil' Hawks Kidz Academy	600 Highland Avenue
Fort Atkinson, city	Lil' Hawks Kidz Academy Too LLC	1255 Talcott Avenue
Fort Atkinson, city	Little Badgers Family Childcare	326 Grant Street
Fort Atkinson, city	Parents Cooperative Preschool	320 S Main Street
Fort Atkinson, city	Sheila's Sweet Peas	106 Clarence Street
Fort Atkinson, city	Teddy Bears and Tots	738 Florence Street
Hebron, town	Jefferson County Head Start CESA 2	N2313 CTH D
Ixonia, town	YMCA Ixonia	N8425 North Street
Jefferson, city	Jefferson County Head Start	1541 Annex Road
Jefferson, city	Jefferson County Head Start - East	110 S Sandborn Avenue
Jefferson, city	Kidspace Learning Center	120 S Sanborn Avenue
Jefferson, city	Learning Links Child Care	824 W Racine Street
Jefferson, city	Little Eagles Childcare and Preschool	159 W Garland
Jefferson, city	St. John's Lutheran Childcare	232 E Church Street
Johnson Creek, village	Crossroads Kids Connection	111 South Street
Johnson Creek, village	YMCA Johnson Creek	455 Aztalan St
Lake Mills, city	Kuhl Corner Campus LLC	695 S Industrial Drive
Lake Mills, city	Lake Mills Head Start	229 Fremont Street
Lake Mills, city	Little Woodland Preschool	809 N Main Street
Lake Mills, city	Little Woodland Preschool and Childcare	807 N Main Street
Lake Mills, city	Teddy Bear Preschool	271 E Prospect Street
Palmyra, village	Vita Kids Learning Center	1205 W Royal Lee Drive
Sullivan, village	Kidspace Learning Center	618 Bakertown Drive
Waterloo, city	Little Bears Childcare	807 Lum Avenue
Watertown, city	Bows and Lace Day Care	305 S 5th Street
Watertown, city	Early Education Center	672 Johnson Street
Watertown, city	Gingerbread Preschool and Child Care Center	120 Kuckkan Lane
Watertown, city	Jefferson County Head Start Watertown	672 Johnson Street
Watertown, city	Kiddie Kampus Preschool and Day Care	828 W Main Street
Watertown, city	Ladybug Adventures LLC	500 Milford Street
Watertown, city	YMCA Schurz	1508 Neenah Street
Watertown, city	YMCA Webster	634 S 12th Street

Jurisdiction	Facility name	Address
Communication tower		
Aztalan, town	Communication tower	W5403 Junction Road
Aztalan, town	Communication tower	Gomoll Road
Aztalan, town	Communication tower	Ziebell Road
Cambridge, Village	Communication tower (FCC #1237719)	Lagoon Road
Cold Spring, town	Communication tower	N555 Howard Road
Cold Spring, town	Communication tower (FCC #1035461)	W4362 Findlay Road
Cold Spring, town	Communication tower (FCC #1035462)	W4362 Findlay Road
Cold Spring, town	Communication tower (FCC #1035463)	W4362 Findlay Road
Cold Spring, town	Communication tower (FCC #1035464)	W4362 Findlay Road
Cold Spring, town	Communication tower (FCC #1035465)	W4362 Findlay Road
Concord, town	Communication tower	W2228 CTH B
Concord, town	Communication tower	Bakertown Road
Concord, town	Communication tower	N6217 Morgan Road
Concord, town	Communication tower (FCC #1034429)	Bakertown Road
Concord, town	Communication tower (FCC #1062004)	N6498 CTH F
Concord, town	Communication tower (FCC #1208265)	N6656 S Island Road
Farmington, town	Communication tower	Glover Lane
Farmington, town	Communication tower (FCC #1234475)	Glover Lane
Fort Atkinson, city	Communication tower (FCC #1050098)	Janesville Avenue
Fort Atkinson, city	Communication tower (FCC #1219156)	Janesville Avenue
Fort Atkinson, city	Communication tower (FCC #1229114)	Blackhawk Drive
Hebron, town	Communication tower	2641 Kitzinger Lane
Hebron, town	Communication tower	CTH D South of CTH Y
Ixonia, town	Communication tower	N7614 Ski Slide Road
Ixonia, town	Communication tower	STH 16
Ixonia, town	Communication tower	W1156 / W1158 Gopher Hill Road
Jefferson, city	Communication tower	Greenwood Street
Jefferson, city	Communication tower	Greenwood Street
Jefferson, town	Communication tower	Christberg Road
Jefferson, town	Communication tower	Bakertown Road
Jefferson, town	Communication tower	W6604 CTH J
Jefferson, town	Communication tower (FCC # n/a)	W6998 USH 18
Jefferson, town	Communication tower (FCC #1239957)	W3022 Markert Road
Koshkonong, town	Communication tower (FCC #1034447)	Hoge Road
Lake Mills, town	Communication tower	Cemetery Road
Lake Mills, town	Communication tower (FCC #1057070)	W8668 Airport Road
Lake Mills, town	Communication tower (FCC #1200052)	W8538 Airport Road
Oakland, town	Communication tower	USH 12
Oakland, town	Communication tower (FCC #1042741)	N4097 CTH G
Palmyra, town	Communication tower	CTH CI
Palmyra, town	Communication tower	W581 Little Prairie Road
Palmyra, town	Communication tower	Tamarack Road

Jurisdiction	Facility name	Address
Palmyra, town	Communication tower (FCC #1047466)	N2404 STH 106
Sullivan, town	Communication tower	Village Line Road
Sullivan, town	Communication tower	USH 18 (West of Village)
Sullivan, village	Communication tower	Recycling Lane
Sumner, town	Communication tower	Loga Road
Waterloo, town	Communication tower	N7389 Newville Road
Waterloo, town	Communication tower (FCC #1229718)	Sunset View Lane
Watertown, city	Communication tower	110 Votech Drive
Watertown, city	Communication tower	106 Jones Street
Watertown, city	SBC tower	115 S 4th Street
Watertown, town	Communication tower	N7907 CTH X
Community based residential facility (CBRF)		
Fort Atkinson, city	Birch Terrace	1109 Caswell Street
Fort Atkinson, city	Black Hawk Senior Residence	1 Milwaukee Avenue West
Fort Atkinson, city	Crabapple Court CBRF	1315 N Main Street
Fort Atkinson, city	Falcons Nest CBRF	160 W Blackhawk Drive
Fort Atkinson, city	Golden Eagle CBRF	216 W Blackhawk Drive
Fort Atkinson, city	Hil Apple House	1621 Premier Place
Fort Atkinson, city	Hil Linden Corner	325 W Blackhawk Drive
Fort Atkinson, city	Hil Willow Court	575 W Blackhawk Drive
Fort Atkinson, city	Reena Senior Living	737 Reena Avenue
Fort Atkinson, city	Sienna Crest Fort Atkinson	1531 Commonwealth Drive
Fort Atkinson, city	Stepping Stone CBRF	318 N Main Street
Fort Atkinson, city	Wellington Meadows	525 Memorial Drive
Fort Atkinson, city	Wellington Place of Fort Atkinson	200 S Water Street
Hebron, town	Maple Run CBRF	N2489 Wenham Road
Hebron, town	Oak Grove CBRF	W3343 Hoffman Road
Ixonia, town	Margaret Ruth Home	N8007 Lakeview Drive
Jefferson, city	Jefferson Memorial Care LLC	414 CTH Y
Jefferson, city	Lueder Haus	1473 Annex Road
Jefferson, city	Rescare Hyer	411 Hyer Drive
Jefferson, city	St Coletta of Wisconsin - Dower CBRF	528 S Kranz Avenue
Jefferson, city	St Coletta of Wisconsin - Jacoba	640 E Theodore Street
Jefferson, city	St Coletta of Wisconsin - Lourdes	140 S Kranz Avenue
Jefferson, city	St Coletta of Wisconsin - Padua Heights	724 E Racine Street
Jefferson, city	St Coletta of Wisconsin - San Damiano	128 S Kranz Avenue
Jefferson, city	St Coletta of Wisconsin - St Agnes	900 E Racine Street
Jefferson, city	St Coletta of Wisconsin - St Isidore	124 Orchard View Court
Jefferson, city	St Coletta of Wisconsin - St Michael	822 E Racine Street
Jefferson, city	St Coletta of Wisconsin - Tau	621 E Spring Street
Jefferson, city	Sunset Ridge Jefferson	826 Reinel Street
Jefferson, city	Sunset Ridge Memory Care	816 E Reinel Street
Jefferson, city	Sylvan Crossings at Jefferson	279 N Jackson Street

Jurisdiction	Facility name	Address
Jefferson, town	St Coletta of Wisconsin - St John The Baptist	W5078 USH 18
Jefferson, town	St Coletta of Wisconsin - St Martha	W5092 USH 18
Johnson Creek, village	Rescare 141 Michelle	141 Michelle Drive
Johnson Creek, village	Sunset Ridge Assisted Living	1275 Rammel Drive
Johnson Creek, village	View at Johnson Creek (The)	1 Hartwig Drive
Koshkonong, town	Cedar Hill	N1366 USH 12
Koshkonong, town	Pinnacle Assisted Living Rolling Meadows	N464 Poeppel Road
Lake Mills, city	Brook Gardens Place	300 O'Neil Street
Lake Mills, city	Lilac Springs Assisted Living	403 Oneil Street
Lake Mills, city	Timberwood Lodge Lake Mills	519 Owne Street
Lake Mills, town	London Lodge I	W9095 London Road
Lake Mills, town	London Lodge II	W9097 London Road
Oakland, town	Autumn Winds LLC	N3767 Airport Road
Waterloo, city	Victory Vision Community Living East	968 E Madison Street
Waterloo, city	Victory Vision Community Living North	734 N Monre Street
Watertown, city	Clovercrest	503 Clovercrest Court
Watertown, city	East Haven	208 E Haven Drive
Watertown, city	Eickstaedt	101 Eickstaedt
Watertown, city	Milford Street	557 Milford Street
Watertown, town	Doherty Home	N7855 Little Coffee Road
Watertown, town	My Place of Watertown	N8761 Overland Drive
Community center		
Concord, town	Town of Concord Community Center	W1095 Concord Center Drive
Jefferson, city	Jefferson Area Senior Center	859 Collins Road
Johnson Creek, village	Johnson Creek Community Center	417 Union Street
Lake Mills, city	Lake Mills Community Center	200 Water Street B
Palmyra, village	Ervin L. Young Memorial Library	123 Burr Oak Street
Waterloo, city	Waterloo Youth Center	Mill Street
Watertown, city	Watertown Senior Citizens Center	514 S First Street
Dam - large		
Hebron, town	Cushman Dam	n/a
Hebron, town	Jefferson Marsh WRP - North	n/a
Hebron, town	Princes Point WLA Dam No. 1	n/a
Hebron, town	Princes Point WLA Dam No. 2	n/a
Jefferson, city	Jefferson Dam	n/a
Lake Mills, city	Lake Mills Dam	129 S Main Street
Palmyra, town	Blue Springs Lake	n/a
Palmyra, town	Carlin Dam	Mill Road
Palmyra, village	Spring Lake Dam	n/a
Sullivan, town	Rome Dam	n/a
Watertown, city	Lower Watertown Dam	n/a
Watertown, city	Upper Watertown Dam	n/a
Dam - small		

Jurisdiction	Facility name	Address
Aztalan, town	William R. Wolff Dam	n/a
Cold Spring, town	Witte Dam	n/a
Fort Atkinson, city	Leo R. Roethe Dam	n/a
Hebron, town	Muck Farms Dam No. 2	n/a
Hebron, town	Princes Point WLA Dam	n/a
Jefferson, town	Anhalt & Knox Dam	n/a
Jefferson, town	Muck Farms Dam No. 1	n/a
Koshkonong, town	Evergreen Dam	n/a
Koshkonong, town	Koshkonong Wetland Dam	n/a
Koshkonong, town	William Heffron Dam	n/a
Oakland, town	Lake Ripley Dam	n/a
Sullivan, town	Fin-n-feather Club Dam	n/a
Sullivan, town	Jack Y. Miller Dam	n/a
Sumner, town	Krump Creek Dam	n/a
Electric power plant		
Watertown, city	Lower Watertown Hydroelectric Project	n/a
Watertown, city	Upper Watertown Hydroelectric Project	n/a
Watertown, town	Wisconsin Electric Concord Generating Station	N8914 CTH E
Whitewater, city	Cogentrix	111 CTH U
Electrical substation		
Aztalan, town	Electrical substation	CTH B at CTH N
Farmington, town	Electrical substation	CTH B at CTH D
Hebron, town	Electrical substation	N2457 CTH D
Ixonia, town	Electrical substation	CTH F
Jefferson, city	Electrical substation	Pitzner Parkway
Jefferson, city	Electrical substation	170 Riverview Drive
Jefferson, city	Electrical substation	Racine Street
Jefferson, town	Electrical substation	N4695 STH 89
Johnson Creek, village	Electrical substation	Grell Lane
Koshkonong, town	Electrical substation (WEPCO)	Hackbarth Road
Lake Mills, city	Electrical substation	Campus Street
Lake Mills, city	Electrical substation	CP Avenue
Palmyra, town	Electrical substation	CTH H
Sullivan, town	Electrical substation	Jefferson Street and Summer Hill Road
Sullivan, village	Electrical substation	Front Street
Waterloo, city	Electrical substation	W Madison Street
Waterloo, town	Electrical substation	N8896 CTH O
EMS facility		
Fort Atkinson, city	Ryan Brothers EMS	1210 Arndt Street
Jefferson, city	Jefferson EMS	315 E Racine Street
Jefferson, city	Jefferson EMS Non-Emergency	121 W Racine Street
Johnson Creek, village	Johnson Creek EMS	120 S Watertown Street
Lake Mills, city	Lake Mills Emergency	603 E Lake Street

Jurisdiction	Facility name	Address
Sullivan, village	Sullivan EMS	802 Pleasant Street
Fire department		
Fort Atkinson, city	City of Fort Atkinson Fire Department	124 W Milwaukee Street
Ixonia, town	Ixonia Fire Department	N8320 N Street
Jefferson, city	Jefferson City Fire Department	351 E Racine Street
Jefferson, town	Helenville Fire Department	N4737 Helenville Road
Johnson Creek, village	Johnson Creek Fire Department	120 S Watertown Street
Lake Mills, city	Lake Mills Fire Department	120 Veterans Lane
Palmyra, village	Palmyra Fire Department	126 N 1st Street
Waterloo, city	Waterloo Fire Department	900 Industrial Lane
Watertown, city	Watertown Fire Department	106 Jones Street
Haz chem generator		
Aztalan, town	Renew Energy, LLC	N5355 E Junction Road
Cold Spring, town	Frontier FS - Whitewater	W3364 STH 59
Fort Atkinson, city	Jones Dairy Farm	Jones Avenue
Fort Atkinson, city	Lorman Iron & Metal Company, Inc.	115 Lorchman Street
Fort Atkinson, city	McCain Foods	801 Rockwell Avenue
Fort Atkinson, city	Metal Container Corporation	105 E Blackhawk Drive
Fort Atkinson, city	Nasco Biology Department	901 Janesville Avenue
Fort Atkinson, city	Redi Serve	1200 Industrial Drive
Fort Atkinson, city	SBC/WI - Fort Atkinson	201 Milwaukee Avenue East
Fort Atkinson, city	Spacesaver Corporation (Plant II)	1700 Janesville Avenue
Ixonia, town	Frontier FS Cooperative	W1255 Marrietta Avenue
Jefferson, city	Atlas Cold Storage Corporation	1025 Industrial Avenue
Jefferson, city	Atlas Cold Storage Corporation	230 Collins Road
Jefferson, city	Briggs & Stranton	900 N Parkway
Jefferson, city	Frontier FS Cooperative	222 E Puerner Street
Jefferson, city	LD Foods	1015 Industrial Drive
Jefferson, city	Nestle Purina	150 Riverview Drive
Jefferson, city	Remis Power Systems	925 N Parkway
Jefferson, city	Tyson Foods (Dorskocil Food Service)	1 Rock River Road
Johnson Creek, village	United Cooperative	N6731 Old Hwy 26
Lake Mills, city	APV Americas	100 S CP Avenue East
Lake Mills, city	Daybreak Foods Inc	1028 Mulberry Street
Lake Mills, city	Lake Mills wastewater treatment plant	308 N CP Avenue
Palmyra, town	Dean Kincaid Enterprises	N2028 STH 106
Palmyra, town	Kincaid Inc., Dean Mint Farm	W1900 Kincaid Lane
Palmyra, village	Epic Resins	600 Industrial Boulevard
Palmyra, village	Frontier FS-Palmyra	212 Third Street
Palmyra, village	Standard Process Inc	1200 W Royal Lee Drive
Waterloo, city	Waterloo Malting (Briess Industries, Inc.)	901 W Madison Street
Waterloo, city	Waterloo wastewater treatment plant	401 Hendricks Street
Watertown, city	Ball Plastic Container Corporation	401 Dayton Street

Jurisdiction	Facility name	Address
Watertown, city	Reiss Industries	319 Hart Street
Watertown, city	SBC	115 S 4th Street
Watertown, city	Tractor Supply Store	1911 Market Way
Watertown, city	US Chemical	316 Hart Street
Watertown, city	WalMart Store 1776	1901 E Market Way
Watertown, city	Watertown Hops Company	1224 American Way
Watertown, city	Watertown Water Department	806 S 1st Street
Watertown, city	Watertown Water Department	870 West Street
Watertown, city	WisPak of Watertown	860 West Street
Watertown, town	Wisconsin Electric Concord Generating Station	N8914 CTH E
Whitewater, city	Whitewater wastewater treatment plant (WWTP)	W3875 CTH U
Health care clinic		
Fort Atkinson, city	Fort Atkinson Dialysis Center	525 Handeyside Lane
Fort Atkinson, city	Fort Health Care Internal Medicine	426 McMillen Street
Fort Atkinson, city	Fort HealthCare Business Health	520 Handeyside Lane Unit 3
Fort Atkinson, city	Fort HealthCare Center for Women's Health	650 McMillen Street
Fort Atkinson, city	Fort HealthCare ENT Specialists	512 Wilcox Street
Fort Atkinson, city	Fort HealthCare Orthopedic Associates	1504 Madison Avenue
Fort Atkinson, city	Fort HealthCare Pain Management	1604 Madison Avenue
Fort Atkinson, city	Fort HealthCare Therapy & Sport Center	1504 Madison Avenue
Fort Atkinson, city	Rock River Foot & Ankle Clinic	303 Hake Street
Fort Atkinson, city	SSM Health Dean Medical Group - Fort Atkinson	740 Reena Avenue
Fort Atkinson, city	UW-Health Fort Atkinson Clinic Family Medicine Clini	1620 Mehta Lane
Jefferson, city	Doctors of Physical Therapy	155 Collins Road
Jefferson, city	Fort HealthCare - Jefferson	840 W Racine Street
Jefferson, city	Rock River Community Clinic - Jefferson	1541 Annex Road
Jefferson, city	The Rock Physical Therapy	101 Collins Road
Johnson Creek, village	Fort Health Care - Johnson Creek	400 Doctors Court
Johnson Creek, village	Three Oaks Health	5 Hartwig Drive
Johnson Creek, village	UW Cancer Center	250 Doctors Court
Johnson Creek, village	Watertown Regional Medical Center - Johnson Creek	540 Village Walk Lane
Lake Mills, city	Fort Health Care - Lake Mills	200 E Tyrannena Park Road
Lake Mills, city	Lake Mills Health Services	901 Mulberry Street
Lake Mills, city	Langmade Associates	522 Enterprise Drive
Lake Mills, city	Watertown Regional Medical Center - Lake Mills Clini	1025 Mulberry Street
Waterloo, city	SSM Health Dean Medical Group	105 Highland Terrace
Waterloo, city	Watertown Regional Medical Center - Waterloo	111 Anna Street
Watertown, city	ProHealth Urgent Care Watertown	109 Air Park Drive
Watertown, city	Rock River Community Clinic - Watertown	415 S Eighth Street
Watertown, city	Rock River Foot & Ankle Clinic	101 Oakridge Court
Watertown, city	Watertown Regional Medical Center- Doctors Court C	1507 Doctors Court
Hospital		
Fort Atkinson, city	Fort Atkinson Memorial Hospital	611 E Sherman Avenue

Jurisdiction	Facility name	Address
Military installation		
Fort Atkinson, city	Wisconsin Army National Guard	420 Bark River Road
Watertown, city	Wisconsin National Guard	1700 River Drive
Mobile / manufactured home park		
Aztalan, town	Rock River Mobile Home Park (ID #60095)	W5370 Urban Drive
Concord, town	Spacious Acres Mobile Home Community (ID #60150)	W1211 Sunnyside Drive
Jefferson, city	Maple Grove Mobile Home Park (ID #60990) (ID #609	303 Main Street
Johnson Creek, village	Back Acres Mobile Home Park (ID #60066)	105 Aztalan Street
Johnson Creek, village	Village Terrace Mobile Home Park (ID #60112)	South Street
Koshkonong, town	Wolfs (ID #60091)	N431 Twinkling Star Road
Lake Mills, city	Lakeland Mobile Home Community (ID #60470)	855 E Lake Street
Lake Mills, city	Lakeland Trails (ID #99023)	865 E Lake Street
Lake Mills, city	Quiet Creek, LLC (ID #60052)	657 E Lake Street
Lake Mills, city	Sandy Beach Mobile Home Park (ID #60994)	Sandy Beach Road
Lake Mills, city	Topel's Mobile Home Park (ID #60065)	Topel Street
Lake Mills, city	Woodland Beach Resort (ID #60993)	205 Woodland Drive
Lake Mills, town	Country Acres (ID #60747)	N6789 CTH A
Oakland, town	Breezy Knoll (ID #60144)	N4510 CTH A
Oakland, town	Oak Ridge Mobile Community (ID #60828)	N3525 Triteloff Road
Oakland, town	Ripview Court (ID #60730)	W9202-A Ripley Road
Palmyra, village	Pal Park Manufactured Home Community (ID #60263)	Beach Street
Sullivan, town	Tremain Mobile Home Park (ID #61001)	N2639 CTH Z
Waterloo, city	Wil-Park (ID #60742)	300 Hendricks Street
Watertown, town	Hickory Hill Park (ID #60012)	3266 E Gate Drive
Whitewater, city	Twin Oaks Park (ID #60277)	755 N Tratt Street
Municipal building		
Aztalan, town	Aztalan Town Hall	W6260 Highway B
Cold Spring, town	Cold Springs Town Hall and Community Center	N1409 Fremont Road
Concord, town	Concord Town Hall	W1095 Concord Center Drive
Farmington, town	Farmington Town Hall	N6468 S Farmington Road
Fort Atkinson, city	Fort Atkinson Municipal Building	101 N Main Street
Hebron, town	Hebron Town Hall / Community Center	N2313 CTH D
Ixonia, town	Ixonia Town Hall	W1195 Marietta Avenue
Jefferson, city	Jefferson City Municipal Building	317 S Main Street
Jefferson, city	Jefferson County Community Resource Center	1571Annex Road
Jefferson, city	Jefferson County Courthouse	320 S Main Street
Jefferson, city	Jefferson Town Hall	434 CTH Y
Jefferson, city	UW Extension/Workforce Development	864 Collins Road
Johnson Creek, village	Johnson Creek Village Hall	125 Depot Street
Koshkonong, town	Jefferson County Sheriff Storage	Bark River Road
Koshkonong, town	Koshkonong Town Hall	W5609 Star School Road
Lake Mills, city	Lake Mills City Hall	200 Water Street
Lake Mills, city	Lake Mills Town Hall	1111 S Main Street

Jurisdiction	Facility name	Address
Milford, town	Milford Town Hall	W6335 Highway A
Oakland, town	Oakland Town Hall	N4450 CTH A
Palmyra, town	Palmyra Town Hall	W1125 Highway 106
Palmyra, village	Palmyra Village Hall	100 W Taft Street
Sullivan, town	Sullivan Town Hall	N3866 West Street
Sullivan, village	Sullivan Village Hall	500 Madison
Sumner, town	Sumner Town Hall	N1525 Church Street
Waterloo, city	Waterloo City Hall	136 N Monroe Street
Waterloo, town	Waterloo Town Hall	N8193 Highway 89
Watertown, city	Watertown City Hall	106 Jones Street
Watertown, city	Watertown Health Dept. and Parks and Forestry Dept	514 S First Street
Watertown, town	Watertown Town Hall	N8302 High Road
Municipal garage		
Aztalan, town	Town of Aztalan Road Shop	W6260 Highway B
Concord, town	Jefferson County Road Shop	N6496 County Shop Road
Concord, town	Town of Concord Municipal Garage	N1185 Concord Center Drive
Farmington, town	Town of Farmington Road Shop	N6468 Farmington Road
Fort Atkinson, city	Fort Atkinson Municipal Garage	700 James Place
Ixonia, town	Road Shop - County	W1593 Marrietta Road
Ixonia, town	Town of Ixonia Municipal Garage	N8320 N Street
Jefferson, city	Jefferson County Highway Shop	Puerner Street
Jefferson, city	Jefferson County Parks Maintenance Facility	1555 Industrial Avenue
Jefferson, city	Jefferson Municipal Garage	1122 S Tensfeldt Avenue
Johnson Creek, village	Johnson Creek Municipal Garage	210 Aztalan Street
Johnson Creek, village	Secondary Village Garage	110 Aztalan Street
Lake Mills, city	Lake Mills Municipal Garage	307 N C.P. Avenue
Milford, town	Town of Milford Garage	W6335 Highway A
Oakland, town	Town of Oakland Municipal Garage	N4450 CTH A
Palmyra, village	Palmyra Municipal Garage	203 Jefferson Street
Sullivan, town	Town of Sullivan Public Works Garage	West Street
Waterloo, city	Jefferson County Highway Shop	Pierce Street
Waterloo, city	Waterloo Municipal Garage	211 Hendricks
Watertown, city	Watertown Municipal Garage	810 S 2nd Street
Natural gas facility		
Ixonia, town	Guardian Pipeline metering station	N8952 Highview Road
Ixonia, town	Guardian Pipeline metering station	W1621 Rockvale Road
Nursing home		
Fort Atkinson, city	Bedrock HCS at Fort Atkinson (Lic. #2683)	430 Wilcox Street
Jefferson, city	Alden Estates of Jefferson (Lic. #2390)	1130 Collins Road
Lake Mills, city	Lake Mills Health Services (Lic. #2794)	901 Mulberry Street
Police department		
Fort Atkinson, city	Fort Atkinson Police Department	101 S Water Street
Jefferson, city	Jefferson City Police Department	425 Collins Road

Jurisdiction	Facility name	Address
Jefferson, city	Jefferson County Sheriff's Office	320 S Main Street
Johnson Creek, village	Johnson Creek Police Department	119 Depot Street
Lake Mills, city	Lake Mills Police Department	200 A Water Street
Oakland, town	Oakland Police Department	N4450 CTH A
Palmyra, village	Palmyra Police Department	126 N 1st Street
Waterloo, city	City of Waterloo Police Department	136 N Monroe Street
Watertown, city	City of Watertown Police Department	106 Jones Street
Post office		
Fort Atkinson, city	Fort Atkinson Post Office	24 E Milwaukee Avenue
Ixonia, town	Ixonia Post Office	1235 Marrietta Street
Jefferson, city	Jefferson Post Office	122 S Center Avenue
Jefferson, town	Helenville Post Office	W3290 STH 18
Johnson Creek, village	Johnson Creek Post Office	115 Depot Street
Lake Mills, city	Lake Mills Post Office	155 E Oak Street
Palmyra, village	Palmyra Post Office	116 N Third Street
Sullivan, village	Sullivan Post Office	707 Palmyra Street
Waterloo, city	Waterloo Post Office	241 W Madison Street
Watertown, city	Watertown Post Office	411 Dodge Street
Public library		
Fort Atkinson, city	Dwight Foster Public Library	209 Merchants Avenue
Jefferson, city	Jefferson Public Library	321 S Main Street
Johnson Creek, village	Johnson Creek Public Library	125 Lincoln Street
Lake Mills, city	L.D. Fargo Public Library	120 E Madison
Palmyra, village	Powers Memorial Library	115 W Main Street
Waterloo, city	Karl Junginger Memorial Library	625 N Monroe Street
Watertown, city	Watertown Public Library	100 S Water Street
Public-use airport		
Fort Atkinson, city	Fort Atkinson Municipal Airport	N3321 Airport Road
Palmyra, town	Palmyra Municipal Airport	W1125 STH 106
Sullivan, town	Sullivan Airport	200 Main Street
Watertown, city	Watertown Municipal Airport	1741 River Drive
Residential care apartment complex (RCAC)		
Fort Atkinson, city	Reena Senior Living	737 Reena avenue
Waterloo, city	Highland House	161 Goehl Road
Waterloo, city	Riverwalk Senior Living	477 W Madison Street
School - K-12		
Cambridge, Village	Cambridge High School	Blue Jay Way
Fort Atkinson, city	Barrie Elementary School	1000 Harriette Street
Fort Atkinson, city	Crown of Live Christian Academy	535 Berea Drive
Fort Atkinson, city	Fort Atkinson 4K	719 S Main Street
Fort Atkinson, city	Fort Atkinson High School	925 Lexington Boulevard
Fort Atkinson, city	Fort Atkinson Middle School	310 S Fourth Street East
Fort Atkinson, city	Luther Alternative School	205 Park Street

Jurisdiction	Facility name	Address
Fort Atkinson, city	Luther Elementary School	205 Park Street
Fort Atkinson, city	Purdy Elementary School	719 S Main Street
Fort Atkinson, city	Rockwell Elementary School	821 Monroe Street
Fort Atkinson, city	St. Joseph's Catholic School	1650 Endl Boulevard
Fort Atkinson, city	St. Paul's Evangelical Lutheran School	309 Bluff Street
Ixonia, town	Ixonia Elementary School	N8425 N Street
Ixonia, town	Saint Paul's Evangelical Lutheran School	W1956 Gopher Hill Road
Jefferson, city	Jefferson East Elementary School	120 S Sanborn Avenue
Jefferson, city	Jefferson High School	700 W Milwaukee Street
Jefferson, city	Jefferson Middle School	206 S Taft Avenue
Jefferson, city	St. John the Baptist Catholic School	333 E Church Street
Jefferson, city	St. John's Evangelical Lutheran School	232 E Church Street
Jefferson, city	West Elementary School	900 W Milwaukee Street
Jefferson, town	Saint Peters Lutheran School	W3255 USH 18
Johnson Creek, village	Johnson Creek Public School	455 Aztalan Street
Koshkonong, town	Faith Community Christian School	W5949 Hackbarth Road
Lake Mills, city	Lake Mills Elementary School	155 E. Pine Street
Lake Mills, city	Lake Mills High School	615 Catlin Drive
Lake Mills, city	Lake Mills Middle School	318 College Street
Lake Mills, city	Lakeside Lutheran High School	231 Woodland Beach Road
Lake Mills, city	St. Paul Lutheran School	1530 S Main Street
Palmyra, village	Palmyra Eagle Montessori School	701 W Maple Street
Palmyra, village	Palmyra-Eagle High School	123 Burr Oak Street
Sullivan, village	Sullivan Elementary School	618 Bakertown Drive
Waterloo, city	Holy Family Catholic School	387 S Monroe Street
Waterloo, city	Maranatha Baptist Academy	745 W Main Street
Waterloo, city	St. John Evangelical Lutheran School	413 E Madison Street
Waterloo, city	Waterloo Elementary School	785 N Monroe Street
Waterloo, city	Waterloo High School	865 N Monroe Street
Waterloo, city	Waterloo Intermediate School	865 N Monroe Street
Waterloo, city	Waterloo Middle School	865 N Monroe Street
Watertown, city	Calvary Baptist Christian School	792 Milford Street
Watertown, city	Faith Lutheran Day School	626 Milford Street
Watertown, city	Good Shepherd Lutheran School	1611 E Main Street
Watertown, city	Lincoln Elementary School	210 N Montgomery Street
Watertown, city	Luther Preparatory School	1300 Western Avenue
Watertown, city	Riverside Middle School	131 Hall Street
Watertown, city	Saint Bernard Grade School	111 S Montgomery Street
Watertown, city	Saint Jude Academy	111 S Montgomery Street
Watertown, city	Schurz Elementary School	1508 Neenah Street
Watertown, city	St. Henry Parish School	300 E Cady Street
Watertown, city	St. John's Lutheran School	317 N 6th Street
Watertown, city	St. Mark's Lutheran School	705 Jones Street

Jurisdiction	Facility name	Address
Watertown, city	Trinity - St. Lukes Lutheran School (Clark Street Cam	303 Clark Street
Watertown, city	Trinity - St. Lukes Lutheran School (Western Campus	801 S 5th Street
Watertown, city	Watertown 4 Kids	111 Dodge Street
Watertown, city	Webster Elementary School	634 S 12th Street
School - secondary		
Fort Atkinson, city	Madison Area Technical College - Fort Atkinson	827 Banker Road
Watertown, city	Maranatha Baptist University	745 W Main Street
Whitewater, city	UW-Whitewater	UW-Whitewater
Senior center		
Fort Atkinson, city	Fort Atkinson Senior Center	307 Robert Street
Jefferson, city	Jefferson Area Senior Center	859 Collins Road
Lake Mills, city	Lake Mills Senior Center	229 Fremont Street
Watertown, city	Watertown Senior Citizens Center	514 S 1st Street
Telephone facility		
Jefferson, city	Telephone facility (SBC)	211 S Center Avenue
Lake Mills, city	Telephone facility	117 Water Street
Sullivan, village	Telephone facility	156 Main Street
Watertown, city	Telephone facility	115 S 4th Street
Utility office/yard		
Fort Atkinson, city	Fort Atkinson Water Utility	37 N Water Street
Jefferson, city	Jefferson Utilities	425 Collins Road
Lake Mills, city	Lake Mills Utility	Campus Street
Lake Mills, city	Lake Mills Utility	307 N C.P. Avenue
Waterloo, city	Waterloo Water and Light	575 Commercial Lane
Watertown, city	WE Energies	Wakoka Street
Wastewater treatment plant		
Cambridge, Village	Cambridge - Oakland wastewater treatment plant	136 Lagoon Drive
Fort Atkinson, city	Fort Atkinson wastewater treamen plant	1600 Farmco Lane
Ixonia, town	Ixonia wastewater treatment plant	W1275 Elmwood
Jefferson, city	Jefferson wastewater treamen plant	221 E Henry Street
Johnson Creek, village	Johnson Creek wastewater treatment plant	200 Aztalan Street
Lake Mills, city	Lake Mills wastewater treament plant	308 N CP Avenue
Palmyra, village	Palmyra wastewater treamen plant	700 Brennan Road
Sullivan, town	Town of Sullivan wastewater treamen plant (District N	N3704 CTH F
Sullivan, village	Sullivan wastewater treatment plant	624 Bakertown Drive
Waterloo, city	Waterloo wastewater treamen plant	401 Hendricks Street
Watertown, city	Watertown wastewater treatment plant	800 Hoffman Drive
Whitewater, city	Whitewater wastewater treamen plant (WWTP)	W3875 CTH U
Water facility		
Cambridge, village	Water well	Skogen Road
Fort Atkinson, city	Water reservoir - underground	S Sixth Street and Grove Street
Fort Atkinson, city	Water tower	S Fourth Street East
Fort Atkinson, city	Water tower	Hackbarth Road

Jurisdiction	Facility name	Address
Fort Atkinson, city	Water well	Bark River Road
Fort Atkinson, city	Water well No. 6	Zaffke Street
Fort Atkinson, city	Water well No. 7	James Way
Jefferson, city	Water tower	N3971 CTH K (STH 26)
Jefferson, city	Water tower	Greenwood Street
Jefferson, city	Water well	311 Wisconsin Avenue (Business Center Park)
Jefferson, city	Water well No. 2	751 S Main Street
Jefferson, city	Water well No. 4	510 W Milwaukee Street
Jefferson, city	Water well No. 5	N Midway Street
Johnson Creek, village	Water tower	525 Hartwig Boulevard
Johnson Creek, village	Water well	Depot Street
Johnson Creek, village	Water well No. 3	300 Grell Lane
Lake Mills, city	Water reservoir and well	Owen Street and Franklin Street
Lake Mills, city	Water tower	Harvey Road
Lake Mills, city	Water well	Prairie Avenue
Lake Mills, city	Water well	900 CP Avenue
Palmyra, village	Water tower	Village Park - 8th Street
Palmyra, village	Water well	100 W Taft Street
Palmyra, village	Water well	131 Jefferson Street
Sullivan, village	Water well	CTH E
Waterloo, city	Water tower	Squire Road
Waterloo, city	Water tower	Herron Court
Waterloo, city	Water well	461 Porter Street
Waterloo, city	Water well	661 Lum Avenue
Watertown, city	Water tower	Western Avenue
Watertown, city	Water tower	Warren Street
Watertown, city	Water well	806 S 1st Street
Watertown, city	Water well	1000 West Street
Watertown, city	Water well	Water Tower Court
Watertown, city	Water well	1432 E Main Street
Watertown, city	Water well #4	407 Western Avenue
Watertown, city	Water well and tower	870 West Street
Watertown, city	Water well and tower	308 Air Park Drive

CRITICAL FACILITIES SORTED BY TYPE: 2024

AMERICAN RED CROSS SHELTERS: 2024

Facility Name	Address	Municipality
Barrie Elementary School	1000 Harriette Street	Fort Atkinson
Fort Atkinson High School	925 Lexington Blvd	Fort Atkinson
Fort Atkinson Middle School	301 South 4 th Street East	Fort Atkinson
Purdy Elementary School	719 S Main Street	Fort Atkinson
Rockwell Elementary School	821 Monroe Street	Fort Atkinson
Ixonia Elementary School	N8425 North Street	Ixonia
Ixonia Town Hall	W1195 Marietta Avenue	Ixonia
Johnson Creek Junior/Senior High	111 South Street 311 Milwaukee Street	Johnson Creek
Johnson Creek Elementary School	111 South Street	Johnson Creek
Jefferson Senior High School	700 W. Milwaukee Street	Jefferson
St. John The Baptist Catholic School	333 E Church Street	Jefferson
East Elementary School	120 S. Sanborn Avenue	Jefferson
Jefferson Middle School	501 South Taft Street	Jefferson
Lake Mills Middle School	318 College	Lake Mills
Lake Mills High School	615 Catlin Drive	Lake Mills
St. Paul Evangelical Lutheran Church School	1530 S.Main Street	Lake Mills
Lakeside Lutheran High School	231 Woodland Beach Road	Lake Mills
Palmyra-Eagle Middle/High School	123 Burr Oak Street	Palmyra
Sullivan Elementary School	618 Bakertown Road	Sullivan
Concord Community Center	W1095 Concord Center Drive	Sullivan
Waterloo Middle/High Schools	864 North Monroe Street	Waterloo
Wisconsin Army National Guard	1700 River Drive	Watertown

Source: American Red Cross – Southwest WI Chapter, as of August 2024

WEATHER-RELATED EVENTS; JEFFERSON COUNTY: 1950 THROUGH 2023

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Drought	Jefferson County	8/1/2002	-	0	0	0	\$200,000
	Jefferson County	8/1/2003	-	0	0	0	0
	Jefferson County	9/1/2003	-	0	0	0	0
	Jefferson County	10/1/2003	-	0	0	0	0
	Jefferson County	11/1/2003	-	0	0	0	0
	Jefferson County	12/1/2003	-	0	0	0	0
	Jefferson County	7/1/2005	-	0	0	0	0
	Jefferson County	8/1/2005	-	0	0	0	0
	Jefferson County	9/1/2005	-	0	0	0	0
	Jefferson County	10/1/2005	-	0	0	0	0
	Jefferson County	11/1/2005	-	0	0	0	0
	Jefferson County	7/1/2007	-	0	0	0	\$100,000
	Jefferson County	6/26/2012	-	0	0	0	0
	Jefferson County	7/1/2012	-	0	0	0	0
	Jefferson County	8/1/2012	-	0	0	0	0
	Jefferson County	9/1/2012	-	0	0	0	0
	Jefferson County	10/1/2012	-	0	0	0	0
	Jefferson County	11/1/2012	-	0	0	0	0
	Totals			0	0	0	\$300,000
Dust Devil	Fort Atkinson	3/26/2003	-	0	0	0	0
	Totals			0	0	0	0
Extreme Heat	Jefferson County	7/17/2011	-	0	0	0	0
	Jefferson County	7/3/2012	-	0	0	0	0
	Jefferson County	6/28/2012	-	0	0	0	0
	Jefferson County	6/29/2018	-	0	0	0	0
	Jefferson County	7/19/2019	-	0	0	0	0
	Jefferson County	6/14/2022	-	0	0	0	0
	Jefferson County	8/23/2023	-	0	0	0	0
	Totals			0	0	0	0
Cold/Wind Chill	Jefferson County	1/31/1996	-	0	10	0	0
	Jefferson County	2/1/1996	-	0	0	0	0
	Jefferson County	1/17/1997	-	0	0	0	0
	Jefferson County	1/5/1999	-	0	0	0	0
	Jefferson County	12/18/2005	-	0	0	0	0
	Jefferson County	2/17/2006	-	0	0	0	0
	Jefferson County	2/18/2006	-	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Cold/Wind Chill - continued	Jefferson County	1/30/1996	-	2	0	0	0
	Jefferson County	2/3/2007	-	0	0	\$2,000	0
	Jefferson County	1/19/2008	-	0	0	0	0
	Jefferson County	1/30/2008	-	0	0	0	0
	Jefferson County	12/15/2008	-	0	0	0	0
	Jefferson County	12/21/2008	-	0	0	0	0
	Jefferson County	1/14/2009	-	0	0	0	0
	Jefferson County	1/24/2009	-	0	0	0	0
	Jefferson County	1/21/2011	-	0	0	0	0
	Jefferson County	1/21/2013	-	0	0	0	0
	Jefferson County	1/27/2014	-	0	0	0	0
	Jefferson County	1/7/2015	-	0	0	0	0
	Jefferson County	1/9/2015	-	0	0	0	0
	Jefferson County	1/4/2016	-	1	0	0	0
	Jefferson County	12/14/2016	-	0	0	0	0
	Jefferson County	12/18/2016	-	0	0	0	0
	Jefferson County	12/25/2017	-	0	0	0	0
	Jefferson County	01/01/2018	-	0	0	0	0
	Jefferson County	2/7/2021	-	0	0	0	0
	Jefferson County	2/13/2021	-	0	0	0	0
	Totals			3	10	\$2,000	0
Extreme Cold/Wind Chill	Jefferson County	2/10/2008	-	0	0	0	0
	Jefferson County	1/6/2014	-	0	0	0	0
	Jefferson County	1/29/2019	-	0	0	0	0
	Jefferson County	12/22/2022	-	0	0	0	0
	Totals			0	0	0	0
Flood - Flash	Watertown	6/17/1996		0	1	\$400,000	0
	Johnson Creek	6/17/1996		0	0	\$150,000	0
	Jefferson	5/17/1999		0	0	\$30,000	0
	Watertown	5/17/2000		0	0	\$25,000	0
	Countywide	6/1/2000		0	0	\$150,000	\$1M
	Jefferson	8/3/2004		0	0	\$30,000	0
	Milford	9/12/2006		0	0	\$100,000	0
	Lake Mills	8/19/2007		0	0	\$100,000	\$500,000
	Lake Mills	8/22/2007		0	0	\$50,000	\$200,000
	Lake Mills	6/8/2008		0	0	\$102.22M	\$35M
	Watertown	6/23/2010		0	0	\$25,000	\$5,000
	Watertown	7/22/2010		0	0	\$150,000	\$10,000

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
	Busseyville	6/26/2013		0	0	\$4,000	\$2,000
	Busseyville	6/10/2016		0	0	\$3,000	\$57,000
	Waterloo	8/17/2018		0	0	\$943,000	\$1,000
	Totals			0	1	\$104.38M	\$36.775M
Flood	Jefferson County	6/17/1996		0	0	\$250,000	\$8M
	Jefferson County	2/21/1997		0	0	\$500	0
	Watertown	6/21/1997		0	0	\$50,000	0
	Watertown Arpt	5/28/1998		0	0	0	0
	Jefferson County	4/23/1999		0	0	\$5,000	0
	Sullivan	7/2/2000		0	0	0	0
	Jefferson County	2/9/2001		0	0	\$10,000	0
	Watertown	8/21/2002		0	0	0	0
	Jefferson County	5/24/2004		0	0	\$500,000	\$500,000
	Jefferson County	6/1/2004		0	0	\$2.64M	\$20M
	Jefferson County	7/1/2004		0	0	\$100,000	0
	Aztalan	4/10/2013		0	0	\$3,000	\$1,000
	Jefferson	4/10/2013		0	0	\$10,000	\$3,000
	Ft Atkinson	4/11/2013		0	0	\$10,000	\$3,000
	Waterloo	2/19/2018		0	0	\$5,000	0
	Ft Atkinson	5/16/2018		0	0	\$2,000	0
	Waterloo	8/17/2018		0	0	0	\$5,000
	Hubbleton	8/31/2018		0	0	\$1,000	0
	Hubbleton	9/1/2018		0	0	0	\$1,000
	Jefferson	9/3/2018		0	0	\$5,000	0
	Fort Atkinson	9/4/2018		0	0	\$5,000	0
	Fort Atkinson	9/5/2018		0	0	\$15,000	0
	Fort Atkinson	10/1/2018		0	0	\$2,000	0
	Fort Atkinson	10/3/2018		0	0	\$1,000	\$1,000
	Hoopers	10/8/2018		0	0	0	\$5,000
	Jefferson	3/14/2019		0	0	\$5,000	0
	Fort Atkinson	3/14/2019		0	0	\$10,000	0
	Aztalan	3/15/2019		0	0	\$1,000	0
	Lake Koshkonong	3/17/2019		0	0	\$10,000	0
	Fort Atkinson	4/1/2019		0	0	\$3,000	0
	Fort Atkinson	4/1/2019		0	0	\$1,000	0
	Hubbleton	10/4/2019		0	0	\$2,000	0
	Jefferson	10/5/2019		0	0	\$5,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
	Fort Atkinson	10/6/2019		0	0	\$2,000	0
	Fort Atkinson	10/7/2019		0	0	\$5,000	0
Totals				0	0	3.659M	28.519M
Fog [2]	Jefferson County	11/13/1999	-	0	0	0	0
	Jefferson County	12/3/1999	-	0	0	0	0
	Jefferson County	12/13/1999	-	0	0	0	0
	Jefferson County	1/9/2000	-	0	0	0	0
	Jefferson County	2/25/2000	-	0	0	0	0
	Jefferson County	3/21/2000	-	0	0	0	0
	Jefferson County	8/23/2000	-	0	0	0	0
	Jefferson County	8/24/2000	-	0	0	0	0
	Jefferson County	10/24/2000	-	0	0	0	0
	Jefferson County	1/12/2001	-	0	0	0	0
	Jefferson County	1/14/2001	-	0	0	0	0
	Jefferson County	2/24/2001	-	0	0	0	0
	Jefferson County	3/22/2001	-	0	0	0	0
	Jefferson County	4/7/2001	-	0	0	0	0
	Jefferson County	5/25/2001	-	0	0	0	0
	Jefferson County	7/19/2001	-	0	0	0	0
	Jefferson County	7/30/2001	-	0	0	0	0
	Jefferson County	8/3/2001	-	0	0	0	0
	Jefferson County	8/22/2001	-	0	0	0	0
	Jefferson County	9/30/2001	-	0	0	0	0
	Jefferson County	10/22/2001	-	0	0	0	0
	Jefferson County	11/15/2001	-	0	0	0	0
	Jefferson County	12/2/2001	-	0	0	0	0
	Jefferson County	12/16/2001	-	0	0	0	0
	Jefferson County	2/20/2002	-	0	0	0	0
	Jefferson County	4/13/2002	-	0	0	0	0
	Jefferson County	9/6/2002	-	0	0	0	0
	Jefferson County	3/20/2003	-	0	0	0	0
	Jefferson County	3/23/2003	-	0	0	0	0
	Jefferson County	2/26/2004	-	0	0	0	0
	Jefferson County	10/12/2004	-	0	0	0	0
	Jefferson County	12/9/2004	-	0	0	0	0
	Jefferson County	12/29/2004	-	0	0	0	0
	Jefferson County	11/27/2005	-	0	0	0	0
	Jefferson County	12/27/2005	-	0	0	0	0
	Jefferson County	3/9/2006	-	0	0	0	0
	Jefferson County	3/29/2006	-	0	0	0	0
	Jefferson County	5/9/2006	-	0	0	0	0
	Jefferson County	9/14/2006	-	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Fog - continued	Jefferson County	9/15/2006	-	0	0	0	0
	Jefferson County	9/23/2006	-	0	0	0	0
	Jefferson County	12/11/2006	-	0	0	0	0
	Jefferson County	12/21/2006	-	0	0	0	0
	Jefferson County	3/9/2007	-	0	0	0	0
	Jefferson County	3/23/2007	-	0	0	0	0
	Jefferson County	6/1/2007	-	0	0	0	0
	Jefferson County	10/1/2007	-	0	0	0	0
	Jefferson County	12/19/2007	-	0	0	0	0
	Jefferson County	12/21/2007	-	0	0	0	0
	Jefferson County	1/5/2008	-	0	0	0	0
	Jefferson County	1/7/2008	-	0	0	0	0
	Jefferson County	2/4/2008	-	0	0	0	0
	Jefferson County	9/21/2008	-	0	0	0	0
	Jefferson County	12/26/2008	-	0	0	0	0
	Jefferson County	3/7/2009	-	0	0	0	0
	Jefferson County	9/4/2009	-	0	0	0	0
	Jefferson County	9/10/2009	-	0	0	0	0
	Jefferson County	3/7/2010	-	0	0	0	0
	Jefferson County	3/10/2010	-	0	0	0	0
	Jefferson County	5/21/2010	-	0	0	0	0
	Jefferson County	12/30/2010	-	0	0	\$10,000	0
	Jefferson County	2/2/2012	-	0	0	0	0
	Jefferson County	2/15/2012	-	0	0	0	0
	Jefferson County	3/24/2012	-	0	0	0	0
	Jefferson County	8/26/2012	-	0	0	0	0
	Jefferson County	10/22/2012	-	0	0	0	0
	Jefferson County	10/23/2012	-	0	0	0	0
	Jefferson County	11/17/2012	-	0	0	0	0
	Jefferson County	11/20/2012	-	0	0	0	0
	Jefferson County	12/3/2012	-	0	0	0	0
	Jefferson County	1/11/2013	-	0	0	0	0
	Jefferson County	12/03/2013	-	0	0	0	0
Totals				0	0	\$10,000	0
Funnel Cloud	Lake Mills	7/25/1997	-	0	0	0	0
	Watertown	8/21/1998	-	0	0	0	0
	Lake Mills	6/1/2000	-	0	0	0	0
	Fort Atkinson	8/21/2002	-	0	0	0	0
	Lake Mills	7/11/2004	-	0	0	0	0
	Lake Mills	10/2/2006	-	0	0	0	0
	Busseyville	6/7/2008	-	0	0	0	0
	Johnson Creek	6/7/2008	-	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Funnel Cloud - continued	Sullivan	6/7/2008	-	0	0	0	0
	Lake Mills	6/12/2008	-	0	0	0	0
	Concord	6/12/2008	-	0	0	0	0
	Waterloo	7/22/2010	-	0	0	0	0
	Totals			0	0	0	0
Hail	Jefferson County	4/3/1956	1 in.	0	0	0	0
	Jefferson County	7/2/1960	0.75 in.	0	0	0	0
	Jefferson County	4/11/1965	0.75 in.	0	0	0	0
	Jefferson County	9/17/1972	2.50 in.	0	0	0	0
	Jefferson County	8/27/1976	0.75 in.	0	0	0	0
	Jefferson County	4/2/1977	1.75 in.	0	0	0	0
	Jefferson County	4/3/1978	1 in.	0	0	0	0
	Jefferson County	4/3/1978	0.75 in.	0	0	0	0
	Jefferson County	8/5/1979	1 in.	0	0	0	0
	Jefferson County	6/5/1980	0.75 in.	0	0	0	0
	Jefferson County	5/21/1987	2 in.	0	0	0	0
	Jefferson County	5/21/1987	0.75 in.	0	0	0	0
	Jefferson County	4/5/1988	0.75 in.	0	0	0	0
	Jefferson County	3/13/1990	1.75 in.	0	0	0	0
	Jefferson County	3/27/1991	2 in.	0	0	0	0
	Jefferson County	7/19/1992	1 in.	0	0	0	0
	Jefferson County	7/19/1992	1 in.	0	0	0	0
	Helenville	3/23/1994	1.75 in.	0	0	0	0
	Jefferson County	9/9/1994	0.75 in.	0	0	0	0
	Waterloo	6/7/1995	0.88 in.	0	0	0	0
	Sullivan	6/7/1995	1 in.	0	0	0	0
	Cambridge	7/27/1995	1 in.	0	0	0	0
	Farmington	8/9/1995	2.50 in.	0	0	0	0
	Watertown	8/9/1995	1.75 in.	0	0	0	0
	Sullivan	8/9/1995	0.75 in.	0	0	0	0
	Johnson Creek	7/20/1998	0.75 in.	0	0	0	0
	Jefferson	8/24/1998	2 in.	0	0	0	0
	Lake Mills	5/16/1999	1 in.	0	0	0	0
	Waterloo	6/28/1999	0.75 in.	0	0	0	0
	Sullivan	6/28/1999	0.88 in.	0	0	0	0
	Waterloo	3/8/2000	0.75 in.	0	0	0	0
	Palmyra	3/8/2000	0.75 in.	0	0	0	0
	Watertown	5/8/2000	0.75 in.	0	0	0	0
	Hebron	5/8/2000	0.75 in.	0	0	0	0
	Sullivan	5/11/2000	0.75 in.	0	0	0	0
	Sullivan	5/11/2000	0.75 in.	0	0	0	0
	Lake Mills	5/18/2000	1 in.	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Hail - continued	Lake Mills	5/18/2000	1 in.	0	0	0	0
	Lake Mills	6/1/2000	0.75 in.	0	0	0	0
	Fort Atkinson	6/30/2000	0.88 in.	0	0	0	0
	Johnson Creek	7/2/2000	1.75 in.	0	0	\$50,000	\$100,000
	Rome	7/2/2000	2.25 in.	0	0	\$75,000	\$100,000
	Jefferson	9/11/2000	0.88 in.	0	0	0	0
	Palmyra	5/3/2001	0.75 in.	0	0	0	0
	Johnson Creek	5/14/2001	0.88 in.	0	0	0	0
	Sullivan	5/14/2001	1.50 in.	0	0	0	0
	Watertown	5/14/2001	3.75 in.	0	0	\$300,000	0
	Concord	5/14/2001	0.75 in.	0	0	0	0
	Waterloo	6/30/2001	0.75 in.	0	0	0	0
	Waterloo	9/3/2001	0.75 in.	0	0	0	0
	Cold Spring	9/9/2002	0.75 in.	0	0	0	0
	Sullivan	7/31/2003	0.75 in.	0	0	0	0
	Fort Atkinson	8/3/2003	0.75 in.	0	0	0	0
	Hebron	3/1/2004	0.75 in.	0	0	0	0
	Sullivan	3/1/2004	0.75 in.	0	0	0	0
	Waterloo	3/1/2004	1 in.	0	0	0	0
	Fort Atkinson	5/7/2004	0.75 in.	0	0	0	0
	Jefferson	5/23/2004	0.75 in.	0	0	0	0
	Johnson Creek	5/23/2004	0.75 in.	0	0	0	0
	Cambridge	6/23/2004	0.75 in.	0	0	0	0
	Fort Atkinson	6/23/2004	0.88 in.	0	0	0	0
	Fort Atkinson	6/23/2004	1.75 in.	0	0	\$10,000	0
	Waterloo	3/30/2005	0.88 in.	0	0	0	0
	Busseyville	5/6/2005	0.75 in.	0	0	0	0
	Waterloo	5/6/2005	0.88 in.	0	0	0	0
	Lake Mills	5/6/2005	1 in.	0	0	0	0
	Waterloo	5/19/2005	0.75 in.	0	0	0	0
	Lake Mills	6/5/2005	0.75 in.	0	0	0	0
	Fort Atkinson	8/18/2005	1 in.	0	0	0	0
	Lake Mills	4/13/2006	2.50 in.	0	0	0	0
	Lake Mills	4/13/2006	4.25 in.	0	0	\$4.4M	0
	Johnson Creek	4/13/2006	2.50 in.	0	0	\$4.4M	0
	Jefferson	4/13/2006	1.50 in.	0	0	0	0
	Concord	4/13/2006	2 in.	0	0	\$4.4M	0
	Waterloo	5/17/2006	0.75 in.	0	0	0	0
	Lake Mills	8/24/2006	0.75 in.	0	0	0	0
	Waterloo	8/24/2006	0.75 in.	0	0	0	0
	Fort Atkinson	8/25/2006	0.75 in.	0	0	0	0
	Palmyra	9/30/2006	0.75 in.	0	0	0	0
	Jefferson County	10/2/2006	0.75 in.	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Hail - continued	Jefferson County	10/2/2006	0.75 in.	0	0	0	0
	Jefferson County	10/2/2006	0.75 in.	0	0	0	0
	Jefferson County	10/2/2006	0.75 in.	0	0	0	0
	Jefferson County	10/2/2006	0.75 in.	0	0	0	0
	Jefferson County	3/21/2007	0.75 in.	0	0	0	0
	Jefferson County	3/21/2007	0.75 in.	0	0	0	0
	Jefferson County	3/21/2007	0.75 in.	0	0	0	0
	Jefferson County	4/30/2007	0.75 in.	0	0	0	0
	Jefferson County	7/9/2007	1 in.	0	0	0	0
	Jefferson County	7/9/2007	0.75 in.	0	0	0	0
	Jefferson County	6/5/2008	0.88 in.	0	0	0	0
	Jefferson County	6/7/2008	0.75 in.	0	0	0	0
	Jefferson County	6/7/2008	1 in.	0	0	0	0
	Jefferson County	6/7/2008	0.88 in.	0	0	0	0
	Jefferson County	6/14/2008	1 in.	0	0	0	0
	Jefferson County	6/14/2008	0.75 in.	0	0	0	0
	Jefferson County	7/2/2008	1 in.	0	0	0	0
	Jefferson County	6/2/2010	1 in.	0	0	0	0
	Jefferson County	6/2/2010	1.75 in.	0	0	0	0
	Jefferson County	6/2/2010	1 in.	0	0	0	0
	Jefferson County	6/21/2010	1.50 in.	0	0	\$15,000	0
	Jefferson County	6/21/2010	1 in.	0	0	0	0
	Jefferson County	9/6/2010	0.88 in.	0	0	0	0
	Jefferson County	4/3/2011	0.88 in.	0	0	0	0
	Jefferson County	5/11/2011	1.75 in.	0	0	0	0
	Jefferson County	5/11/2011	4.25 in.	0	0	0	0
	Jefferson County	5/11/2011	2 in.	0	0	0	0
	Jefferson County	5/11/2011	2.75 in.	0	0	0	0
	Jefferson County	5/22/2011	1 in.	0	0	0	0
	Jefferson County	5/22/2011	1.75 in.	0	0	0	0
	Jefferson County	5/22/2011	1.25 in.	0	0	0	0
	Jefferson County	6/8/2011	0.75 in.	0	0	0	0
	Fort Atkinson	5/1/2012	1.75 in.	0	0	0	0
	Watertown	5/3/2012	1.25 in.	0	0	0	0
	Lake Mills	5/3/2012	1.25 in.	0	0	0	0
	Lake Mills	5/3/2012	1.00 in.	0	0	0	0
	Johnson Creek	5/3/2012	1.00 in.	0	0	0	0
	Johnson Creek	5/3/2012	0.88 in.	0	0	0	0
	Sullivan	5/3/2012	1.00 in.	0	0	0	0
	Lake Mills	5/3/2012	1.25 in.	0	0	0	0
	Lake Mills	6/15/2013	1.00 in.	0	0	0	0
	Fort Atkinson	5/12/2014	1.75 in.	0	0	0	0
	Cold Spring	5/12/2014	1.75 in.	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Hail - continued	Lake Mills	6/18/2014	0.88 in.	0	0	0	0
	Watertown Airport	5/3/2015	1.00 in.	0	0	0	0
	Watertown	5/3/2015	0.88 in.	0	0	0	0
	Busseyville	3/23/2017	0.75 in.	0	0	0	0
	Palmyra	3/23/2017	1.00 in.	0	0	0	0
	Jefferson	4/10/2017	0.75 in.	0	0	0	0
	Watertown	7/1/2017	0.75 in.	0	0	0	0
	Palmyra	7/6/2017	1.00 in.	0	0	0	0
	Johnson Creek	7/7/2017	0.75 in.	0	0	0	0
	Palmyra	7/10/2017	1.00 in.	0	0	0	0
	Lake Mills	8/3/2017	0.75 in.	0	0	0	0
	Lake Mills	8/3/2017	0.88 in.	0	0	0	0
	Watertown	5/2/2018	0.75 in.	0	0	0	0
	Fort Atkinson	6/11/2021	0.88 in.	0	0	0	0
	Lake Mills	8/6/2021	1.50 in.	0	0	\$8K	0
	Watertown Airport	9/7/2021	1.00 in.	0	0	0	0
	Jefferson	6/13/2022	1.75 in.	0	0	0	0
	Johnson Creek	6/13/2022	1.75 in.	0	0	0	0
	Helenville	6/13/2022	1.75 in.	0	0	0	0
	Watertown Airport	6/13/2022	1.25 in.	0	0	0	0
	Helenville	6/13/2022	1.75 in.	0	0	0	0
	Ixonia	6/13/2022	1.25 in.	0	0	0	0
	Oak Hill	6/13/2022	1.75 in.	0	0	0	0
	Fort Atkinson	4/4/2023	1.00 in.	0	0	0	0
	Watertown	4/15/2023	0.88 in.	0	0	0	0
	Cambridge	4/19/2023	1.50 in.	0	0	0	0
	Ixonia	4/19/2023	1.00 in.	0	0	0	0
	Fort Atkinson	8/24/2023	1.00 in.	0	0	0	0
	Fort Atkinson Municipal Airport	8/24/2023	1.00 in.	0	0	0	0
	Waterloo	10/23/2023	1.00 in.	0	0	0	0
	Totals			0	0	\$13.658M	\$200,000
Heavy Rain	Johnson Creek	4/1/1998	-	0	0	\$3,000	0
	Sullivan	9/18/2001	-	0	0	0	0
	Waterloo	8/3/2003	-	0	0	0	0
	Fort Atkinson	11/1/2003	-	0	0	0	0
	Jefferson	5/17/2004	-	0	0	0	0
	Lake Mills	7/11/2006	-	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Heavy Rain - continued	Lake Mills	4/2/2007	-	0	0	0	0
	Farmington	7/26/2007	-	0	0	0	0
	Palmyra	9/12/2008	-	0	0	0	0
	Fort Atkinson	5/12/2014	-	0	0	0	0
	Cold Spring	5/12/2014	-	0	0	0	0
Totals				0	0	\$3,000	0
High Wind	Jefferson County	10/30/1996	50 knots	0	0	\$20,000	0
	Jefferson County	4/6/1997	63 knots	0	0	\$100,000	0
	Jefferson County	3/8/1998	50 knots	0	0	\$5,000	0
	Jefferson County	11/10/1998	59 knots	0	2	\$900,000	\$200,000
	Jefferson County	3/17/1999	52 knots	0	0	\$2,000	0
	Jefferson County	4/7/2001	51 knots	0	0	0	0
	Jefferson County	4/11/2001	55 knots	0	0	0	0
	Jefferson County	11/12/2003	55 knots	0	0	\$3,000	0
	Jefferson County	2/9/2004	53 knots	0	0	0	0
	Jefferson County	10/26/2010	50 knots	0	0	\$20,000	0
	Jefferson County	2/19/2016	53 knots	0	0	\$25,000	0
	Jefferson County	3/16/2016	50 knots	0	0	\$8,000	0
	Jefferson County	3/8/2017	56 knots	0	0	\$15,000	0
	Jefferson County	12/15/2021	58 knots	0	0	\$15,000	0
Totals				0	0	\$1.113M	\$200,000
Lightning	Ixonia	4/11/1996	-	0	0	0	0
	Watertown	4/11/1996	-	0	0	0	0
	Ixonia	10/6/1996	-	0	0	\$50,000	0
	Ixonia	7/16/1997	-	0	0	\$250,000	0
	Waterloo	7/18/1997	-	0	0	\$50,000	0
	Waterloo	7/20/1997	-	0	0	\$50,000	0
	Lake Mills	7/26/1997	-	0	0	\$10,000	0
	Watertown	7/26/1997	-	0	0	\$15,000	0
	Watertown	7/26/1997	-	0	0	\$5,000	0
	Cambridge	4/15/1998	-	0	0	\$100,000	0
	Fort Atkinson	6/1/2000	-	0	0	\$30,000	0
	Lake Mills	6/1/2000	-	0	0	\$3,000	0
	Lake Mills	7/17/2001	-	0	0	\$25,000	0
	Fort Atkinson	4/18/2002	-	0	0	0	0
	Watertown	7/15/2003	-	0	1	0	0
	Palmyra	7/15/2003	-	0	0	\$2,000	0
	Fort Atkinson	6/25/2005	-	0	5	0	0
	Watertown	7/23/2005	-	0	0	\$1,000	0
	Watertown	7/23/2005	-	0	0	\$100,000	0
	Cold Spring	11/27/2005	-	0	0	\$100,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
	Grellton	7/7/2008	-	1	0	0	0
	Watertown	7/7/2008	-	0	1	\$30,000	0
	Helenville	3/6/2016	-	0	0	\$150,000	0
	Totals			1	7	\$971,000	0
Record Rainfall	Lake Mills	5/31/2000	-	0	0	0	0
Strong Wind	Sullivan	9/29/1997	44 knots	0	0	0	0
	Jefferson County	5/24/2000		0	0	0	0
	Jefferson County	9/19/2001		0	0	0	0
	Jefferson County	10/24/2001		0	0	0	0
	Jefferson County	12/5/2001		0	0	\$5,000	0
	Jefferson County	3/7/2004	42 knots	0	0	\$2,000	0
	Jefferson County	3/14/2004	39 knots	0	0	\$2,000	0
	Jefferson County	4/18/2004	49 knots	0	0	\$10,000	0
	Jefferson County	12/12/2004	38 knots	0	0	\$1,000	0
	Jefferson County	1/24/2006	39 knots	0	0	\$5,000	0
	Jefferson County	3/13/2006	41 knots	0	0	\$5,000	0
	Jefferson County	3/31/2006	39 knots	0	0	\$2,000	0
	Jefferson County	5/11/2006	36 knots	0	0	\$1,000	0
	Jefferson County	2/22/2007	39 knots	0	0	\$2,000	0
	Jefferson County	5/24/2007	39 knots	0	0	\$2,000	0
	Jefferson County	8/27/2007	39 knots	0	0	\$15,000	0
	Jefferson County	11/5/2007	39 knots	0	0	\$5,000	0
	Jefferson County	12/23/2007	39 knots	0	0	\$5,000	0
	Jefferson County	4/26/2008	40 knots	0	0	\$5,000	0
	Jefferson County	10/26/2008	47 knots	0	0	\$5,000	0
	Jefferson County	10/6/2009	42 knots	0	0	\$5,000	0
	Jefferson County	5/5/2010	39 knots	0	0	\$10,000	0
	Jefferson County	1/1/2011	39 knots	0	0	\$4,000	0
	Jefferson County	2/18/2011	26 knots	0	0	\$2,000	0
	Jefferson County	4/15/2011	26 knots	0	0	\$3,000	0
	Jefferson County	5/15/2011	32 knots	0	0	\$5,000	0
	Jefferson County	9/29/2011	46 knots	0	0	\$2,000	0
	Jefferson County	1/1/2012	27 knots	0	0	\$1,000	0
	Jefferson County	4/15/2012	40 knots	0	0	\$1,000	0
	Jefferson County	4/16/2012	39 knots	0	0	\$1,000	0
	Jefferson County	6/18/2012	39 knots	0	0	\$10,000	0
	Jefferson County	1/19/2013	42 knots	0	0	\$5,000	0
	Jefferson County	4/11/2013	45 knots	0	0	\$10,000	0
	Jefferson County	12/4/2017	39 knots	0	0	\$4,000	0
	Jefferson County	10/20/2018	39 knots	0	0	\$1,000	0
	Jefferson County	2/24/2019	39 knots	0	0	\$1,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Strong Wind - continued	Jefferson County	11/27/2019	39 knots	0	0	\$5,000	0
	Jefferson County	4/14/2022	39 knots	0	0	\$2,000	0
	Jefferson County	6/24/2023	39 knots	0	0	\$25,000	0
Totals				0	0	\$169,000	0
Thunderstorm Winds	Jefferson County	8/3/1960	0	0	0	0	0
	Jefferson County	8/3/1960	0	0	0	0	0
	Jefferson County	8/3/1960	0	0	0	0	0
	Jefferson County	8/8/1960	0	0	0	0	0
	Jefferson County	5/14/1961	53	0	0	0	0
	Jefferson County	5/14/1961	52	0	0	0	0
	Jefferson County	8/13/1961	65	0	0	0	0
	Jefferson County	6/17/1962	0	0	0	0	0
	Jefferson County	6/17/1962	0	0	0	0	0
	Jefferson County	6/19/1964	0	0	0	0	0
	Jefferson County	6/22/1964	0	0	0	0	0
	Jefferson County	7/17/1964	0	0	0	0	0
	Jefferson County	6/22/1965	0	0	0	0	0
	Jefferson County	5/23/1966	0	0	0	0	0
	Jefferson County	8/1/1966	0	0	0	0	0
	Jefferson County	6/10/1970	0	0	0	0	0
	Jefferson County	6/27/1972	0	0	0	0	0
	Jefferson County	6/9/1974	0	0	0	0	0
	Jefferson County	6/20/1974	0	0	0	0	0
	Jefferson County	7/3/1974	0	0	0	0	0
	Jefferson County	7/9/1974	0	0	0	0	0
	Jefferson County	6/4/1975	0	0	0	0	0
	Jefferson County	6/13/1975	0	0	0	0	0
	Jefferson County	5/20/1977	0	0	0	0	0
	Jefferson County	5/21/1977	60	0	0	0	0
	Jefferson County	7/6/1977	61	0	0	0	0
	Jefferson County	7/6/1977	0	0	0	0	0
	Jefferson County	7/6/1977	0	0	0	0	0
	Jefferson County	7/6/1977	0	0	0	0	0
	Jefferson County	7/16/1977	0	0	0	0	0
	Jefferson County	8/4/1977	0	0	0	0	0
	Jefferson County	6/17/1978	0	0	0	0	0
	Jefferson County	6/17/1978	0	0	0	0	0
	Jefferson County	7/20/1978	0	0	0	0	0
	Jefferson County	7/28/1978	0	0	0	0	0
	Jefferson County	6/20/1979	0	0	0	0	0
	Jefferson County	6/29/1979	0	0	0	0	0
	Jefferson County	6/7/1980	52	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Jefferson County	8/4/1980	0	0	0	0	0
	Jefferson County	4/3/1981	55	0	0	0	0
	Jefferson County	6/24/1981	0	0	0	0	0
	Jefferson County	8/31/1981	0	0	0	0	0
	Jefferson County	7/6/1982	0	0	0	0	0
	Jefferson County	7/6/1982	0	0	0	0	0
	Jefferson County	7/17/1983	0	0	0	0	0
	Jefferson County	7/17/1983	0	0	0	0	0
	Jefferson County	7/19/1983	0	0	0	0	0
	Jefferson County	7/19/1983	0	0	0	0	0
	Jefferson County	7/19/1983	0	0	0	0	0
	Jefferson County	7/19/1983	69	0	0	0	0
	Jefferson County	7/19/1983	56	0	0	0	0
	Jefferson County	8/16/1983	0	0	0	0	0
	Jefferson County	6/6/1984	0	0	0	0	0
	Jefferson County	7/9/1984	0	0	0	0	0
	Jefferson County	7/9/1984	61	0	0	0	0
	Jefferson County	10/16/1984	52	0	0	0	0
	Jefferson County	4/23/1985	0	0	0	0	0
	Jefferson County	5/11/1985	0	0	0	0	0
	Jefferson County	7/25/1986	0	0	0	0	0
	Jefferson County	9/28/1986	0	0	1	0	0
	Jefferson County	8/16/1987	0	0	0	0	0
	Jefferson County	8/16/1987	0	0	0	0	0
	Jefferson County	5/8/1988	0	0	0	0	0
	Jefferson County	8/18/1988	0	0	0	0	0
	Jefferson County	11/15/1988	52	0	0	0	0
	Jefferson County	5/24/1989	0	0	0	0	0
	Jefferson County	8/4/1989	0	0	0	0	0
	Jefferson County	8/4/1989	50	0	0	0	0
	Jefferson County	8/4/1989	55	0	0	0	0
	Jefferson County	8/4/1989	61	0	0	0	0
	Jefferson County	8/5/1989	0	0	0	0	0
	Jefferson County	6/2/1990	0	0	0	0	0
	Jefferson County	6/28/1990	0	0	0	0	0
	Jefferson County	6/28/1990	0	0	0	0	0
	Jefferson County	4/29/1991	0	0	0	0	0
	Jefferson County	7/1/1991	0	0	0	0	0
	Jefferson County	7/7/1991	56	0	0	0	0
	Jefferson County	7/7/1991	0	0	0	0	0
	Jefferson County	7/7/1991	0	0	0	0	0
	Jefferson County	7/7/1991	70	0	0	0	0
	Jefferson County	7/7/1991	0	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Fort Atkinson	4/18/1994	52	0	0	0	0
	Sullivan	4/18/1994	57	0	0	0	0
	Lake Mills	6/25/1994	0	0	0	0	\$50,000
	Johnson Creek	6/25/1994	0	0	0	0	\$50,000
	Jefferson	7/4/1994	0	0	0	0	\$50,000
	Palmyra	7/15/1995	0	0	0	0	0
	Ft. Atkinson	7/25/1995	0	0	0	0	0
	Waterloo	8/7/1995	0	0	0	0	0
	Lake Mills	8/7/1995	0	0	0	0	0
	Milford	8/7/1995	0	0	0	\$80,000	0
	Ft. Atkinson	8/9/1995	0	0	0	0	0
	Palmyra	8/9/1995	0	0	0	0	0
	Palmyra	8/9/1995	0	0	0	0	0
	Watertown	8/28/1995	0	0	0	0	0
	Ft. Atkinson	8/28/1995	0	0	0	0	0
	Busseyville	4/18/1996		0	0	\$500,000	0
	Sullivan	4/18/1996	54	0	0	0	0
	Ixonia	8/5/1996		0	0	\$12,000	0
	Jefferson	10/29/1996		0	0	\$5,000	0
	Ft Atkinson	10/29/1996		0	0	\$20,000	0
	Hebron	4/5/1997		0	0	\$100,000	0
	Lake Mills	6/21/1997	56	0	0	\$3,000	0
	Watertown	6/24/1997	62	0	0	\$2,000	0
	Lake Mills	6/24/1997		0	0	\$15,000	0
	Waterloo	7/16/1997		0	0	\$700	0
	Cambridge	7/25/1997		0	0	\$2,000	0
	Busseyville	7/25/1997		0	0	\$400	0
	Concord	7/25/1997		0	0	\$500	0
	Hebron	7/25/1997		0	0	\$300	0
	Cold Spring	7/25/1997		0	0	\$200	0
	Lake Mills	7/26/1997	52	0	0	\$3,000	0
	Jefferson	7/26/1997		0	0	\$159K	0
	Sullivan	7/26/1997	51	0	0	0	0
	Palmyra	7/26/1997		0	0	\$700	0
	Lake Mills	7/27/1997		0	0	\$900	0
	Ft Atkinson	7/27/1997		0	0	\$700	0
	Lake Mills	5/15/1998	52	0	0	\$500	0
	Jefferson	5/28/1998		0	0	\$70,000	0
	Sullivan	5/28/1998	55	0	0	0	0
	Countywide	5/31/1998		0	8	\$2.7M	\$200,000
	Jefferson	6/18/1998		0	0	\$6,000	0
	Palmyra	6/25/1998		0	0	\$2,000	0
	Waterloo	7/20/1998		0	0	\$1,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Ixonia	7/20/1998		0	0	\$5,000	0
	Lake Mills	2/11/1999	56	0	0	\$1,000	0
	Palmyra	2/11/1999		0	0	\$1,000	0
	Lake Mills	6/6/1999	50	0	0	0	0
	Hebron	6/6/1999		0	0	\$30,000	0
	Sullivan	6/6/1999		0	0	\$1,000	0
	Concord	6/10/1999		0	0	\$1,000	0
	Hebron	6/11/1999		0	0	\$3,000	0
	Watertown	7/23/1999	52	0	0	0	0
	Ft Atkinson	7/23/1999		0	0	\$2,000	0
	Farmington	9/19/1999		0	0	\$2,000	0
	Watertown	5/11/2000	52	0	0	\$1,000	0
	Watertown	5/11/2000	56	0	0	\$1,000	0
	Lake Mills	6/1/2000	52	0	0	\$2,000	0
	Ft Atkinson	6/1/2000		0	0	\$3,000	0
	Lake Mills	8/26/2000		0	0	\$2,000	0
	Johnson Creek	8/26/2000		0	0	\$4,000	0
	Lake Mills	6/11/2001	56	0	0	\$30,000	0
	Johnson Creek	6/30/2001	52	0	0	0	0
	Palmyra	9/3/2001	50	0	0	0	0
	Palmyra	9/7/2001	52	0	0	0	0
	Lake Mills	4/18/2002	51	0	0	0	0
	Concord	6/10/2002	52	0	0	0	0
	Rome	8/21/2002	56	0	0	0	\$2,000
	Busseyville	8/21/2002	52	0	0	0	0
	Ft Atkinson	5/10/2003	56	0	0	0	0
	Jefferson	6/25/2003	52	0	0	0	0
	Ft Atkinson	6/28/2003	50	0	0	0	0
	Watertown	7/4/2003	56	0	0	0	0
	Waterloo	7/15/2003	65	0	0	\$175,000	0
	Watertown	7/30/2003	50	0	0	0	0
	Ft Atkinson	3/1/2004	52	0	0	\$2,000	0
	Palmyra	3/5/2004	52	0	0	\$1,000	0
	Palmyra	3/5/2004	52	0	0	\$1,000	0
	Watertown	5/17/2004	52	0	0	0	0
	Ft Atkinson	6/23/2004	80	0	0	0	0
	Watertown	8/3/2004	56	0	0	\$20,000	0
	Palmyra	10/29/2004	52	0	0	0	0
	Ft Atkinson	3/30/2005	56	0	0	\$15,000	0
	Busseyville	5/19/2005	61	0	0	\$10,000	0
	Jefferson	6/4/2005	65	0	0	\$75,000	0
	Johnson Creek	6/4/2005	56	0	0	0	0
	Concord	6/4/2005	55	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Cambridge	6/26/2005	52	0	0	0	0
	Ft Atkinson	6/26/2005	52	0	0	0	0
	Busseyville	6/26/2005	52	0	0	\$10,000	0
	Lake Mills	6/26/2005	52	0	0	0	0
	Watertown	7/21/2005	53	0	0	\$1,000	0
	Ft Atkinson	7/23/2005	58	0	0	\$30,000	0
	Cambridge	7/25/2005	52	0	0	\$2,000	0
	Ft Atkinson	8/18/2005	52	0	0	\$1,000	0
	Palmyra	9/13/2005	52	0	0	0	0
	Ft Atkinson	5/24/2006	50	0	0	\$10,000	0
	Waterloo	7/20/2006	56	0	0	\$5,000	0
	Ft Atkinson	7/20/2006	56	0	0	\$25,000	0
	Rome	7/20/2006	56	0	0	0	0
	Ft Atkinson	7/27/2006	52	0	0	0	0
	Busseyville	7/27/2006	52	0	0	0	0
	Ixonia	7/30/2006	52	0	0	0	0
	Johnson Creek	8/24/2006	52	0	0	0	0
	Watertown	10/2/2006	52	0	0	0	0
	Palmyra	10/2/2006	56	0	0	0	0
	Palmyra	4/3/2007	45	0	0	\$1,000	0
	Jefferson	6/3/2007	56	0	0	\$25,000	0
	Ft Atkinson	6/18/2007	52	0	0	0	0
	Farmington	7/26/2007	43	0	0	\$1,000	0
	Palmyra	8/12/2007	52	0	0	0	0
	Palmyra	6/6/2008	50	0	0	0	0
	Lake Mills	6/8/2008	50	0	0	\$25,000	0
	Ft Atkinson	6/8/2008	50	0	0	0	0
	Hubbleton	6/28/2008	74	0	0	\$40,000	0
	Johnson Creek	7/10/2008	56	0	0	\$20,000	0
	Sullivan	7/10/2008	50	0	0	0	0
	Ft Atkinson	3/24/2009	56	0	0	\$2,000	0
	Whitewater	6/8/2009	56	0	0	0	0
	Ft Atkinson	6/18/2009	56	0	0	\$10,000	0
	Ft Atkinson	6/25/2009	56	0	0	\$100	0
	Ft Atkinson	6/25/2009	56	0	0	0	0
	Watertown	6/18/2010	50	0	0	0	0
	Ft Atkinson	6/21/2010	70	0	0	0	0
	Lake Mills	8/9/2010	65	0	0	0	0
	Whitewater	8/20/2010	50	0	0	0	0
	Ft Atkinson	8/20/2010	50	0	0	0	0
	Lake Mills	8/20/2010	50	0	0	0	0
	Oak Hill	8/20/2010	50	0	0	0	0
	Lake Mills	9/2/2010	56	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Jefferson	9/2/2010	56	0	0	0	0
	Helenville	10/26/2010	65	0	0	\$15,000	0
	Lake Mills	10/26/2010	65	0	0	\$20,000	0
	Watertown	5/22/2011	56	0	0	\$50,000	0
	Ft Atkinson	5/22/2011	50	0	0	\$5,000	0
	Cambridge	6/8/2011	65	0	0	0	0
	Lake Mills	6/8/2011	65	0	0	0	0
	Ft Atkinson	6/8/2011	65	0	0	0	0
	Hebron	6/8/2011	70	0	0	0	0
	Oak Hill	6/8/2011	52	0	0	0	0
	Palmyra	6/21/2011	56	0	0	0	0
	Busseyville	7/11/2011	56	0	0	0	0
	Lake Mills	9/3/2011	65	0	0	0	0
	Waterloo	9/3/2011	65	0	0	\$15,000	0
	Palmyra	5/28/2012	52	0	0	\$3,000	0
	Watertown	7/18/2012	52	0	0	0	0
	Ft Atkinson	7/26/2012	57	0	0	0	0
	Palmyra	7/26/2012	55	0	0	0	0
	Sullivan	7/26/2012	56	0	0	0	0
	Palmyra	7/30/2012	52	0	0	0	0
	Lake Mills	9/4/2012	56	0	0	\$8,000	0
	Ft Atkinson	9/4/2012	52	0	0	\$2,000	0
	Waterloo	5/14/2013	65	0	0	\$100,000	0
	Waterloo	6/12/2013	56	0	0	\$10,000	0
	Watertown	6/12/2013	52	0	0	\$10,000	0
	Ft Atkinson	6/12/2013	56	0	0	\$10,000	0
	Lake Mills	6/15/2013	52	0	0	\$7,000	0
	Jefferson	8/22/2013	56	0	0	\$5,000	0
	Watertown	5/12/2014	52	0	0	\$10,000	0
	Palmyra	6/17/2014	50	0	0	\$5,000	0
	Oak Hill	6/18/2014	55	0	0	\$5,000	0
	Sullivan	6/30/2014	55	0	0	\$1,000	0
	Ft Atkinson	6/22/2015	61	0	0	\$5,000	0
	Waterloo	7/13/2015	60	0	0	\$10,000	0
	Johnson Creek	6/5/2016	56	0	0	\$20,000	0
	Concord	6/5/2016	61	0	0	\$10,000	0
	Lake Koshkonong	6/9/2016	50	0	0	\$15,000	0
	Jefferson	7/5/2016	50	0	0	\$2,000	0
	Waterloo	7/21/2016	50	0	0	\$10,000	0
	Lake Koshkonong	9/25/2016	50	0	0	\$2,000	0
	Kroghville	3/7/2017	61	0	0	\$6,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thunderstorm Winds - continued	Watertown Airport	3/7/2017	54	0	0	0	0
	Hebron	5/15/2017	50	0	0	\$500	0
	Cold Spring	5/17/2017	61	0	0	\$15,000	0
	Whitewater	5/17/2017	65	0	0	\$5,000	0
	Ft Atkinson	5/17/2017	56	0	0	\$15,000	0
	Oak Hill	5/17/2017	56	0	0	\$4,000	0
	Oak Hill	5/17/2017	56	0	0	0	0
	Sullivan	5/29/2017	50	0	0	\$5,000	0
	Waterloo	6/28/2017	70	0	0	\$10,000	0
	Ft Atkinson	6/28/2017	52	0	0	\$10,000	0
	Jefferson	7/15/2017	50	0	0	\$4,000	0
	Sullivan	7/15/2017	50	0	0	\$2,000	0
	Lake Mills	5/2/2018	61	0	0	\$20,000	0
	Jefferson	8/26/2018	61	0	0	\$6,000	0
	Oak Hill	9/21/2018	50	0	0	\$1,000	0
	Sullivan	9/21/2018	61	0	0	\$25,000	0
	Sullivan	6/27/2019	50	0	0	\$10,000	0
	Watertown Airport	6/30/2019	50	0	0	0	0
	Ixonia	6/30/2019	56	0	0	\$12,000	0
	Watertown	8/7/2021	52	0	0	0	\$1,000
	Watertown Airport	8/7/2021	52	0	0	0	\$1,000
	Fort Atkinson Municipal Airport	8/7/2021	52	0	0	0	\$5,000
	Lake Mills	6/13/2022	56	0	0	\$15,000	0
	Aztalan	6/13/2022	50	0	0	\$4,000	0
	Waterloo	6/15/2022	50	0	0	\$1,000	0
	Busseyville	6/15/2022	50	0	0	\$5,000	0
	Fort Atkinson Municipal Airport	6/15/2022	50	0	0	\$2,000	0
	Fort Atkinson	7/24/2022	50	0	0	\$3,000	0
	Lake Mills	9/25/2022	50	0	0	\$10,000	0
	Johnson Creek	10/12/2022	50	0	0	\$12,000	0
	Lake Koshkonong	7/22/2023	52	0	0	\$6,000	0
	Fort Atkinson	7/28/2023	65	0	0	\$60,000	0
	Pipersville	7/28/2023	50	0	0	\$1,000	0
	Palmyra	7/28/2023	50	0	0	\$4,000	0
	Sullivan	7/28/2023	61	0	0	\$1,000	0
	Sullivan	7/28/2023	56	0	0	\$4,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
	Jefferson	8/24/2023	50	0	0	\$5,000	0
	Fort Atkinson	8/24/2023	50	0	0	\$1,000	0
	Fort Atkinson	8/24/2023	50	0	0	\$5,000	0
Totals				0	9	\$4.426M	\$359,000
Tornado [2, 3]	Jefferson County	4/11/1965	F2	3	28	\$2.5M	0
	Jefferson County	6/12/1967	F0	0	0	0	0
	Jefferson County	6/18/1971	F1	0	1	\$25,000	0
	Jefferson County	6/24/1971	F1	0	0	\$2500	0
	Jefferson County	7/14/1972	F1	0	0	\$250,000	0
	Jefferson County	7/19/1972	F1	0	3	\$250,000	0
	Jefferson County	6/20/1974	F1	0	0	0	0
	Jefferson County	8/9/1979	F1	0	0	\$25,000	0
	Jefferson County	6/5/1980	F2	0	0	\$25,000	0
	Jefferson County	6/5/1980	F3	0	0	\$250,000	0
	Jefferson County	6/15/1981	F2	0	3	\$250,000	0
	Jefferson County	7/12/1986	F0	0	0	0	0
	Jefferson County	9/28/1986	F2	0	1	\$2.5M	0
	Jefferson County	5/8/1988	F2	0	0	\$250,000	0
	Jefferson County	3/27/1991	F2	0	0	\$2.5M	0
	Lake Mills	9/19/1997	F0	0	0	\$650,000	0
	Lake Mills	6/6/1999	F0	0	0	\$3,000	0
	Fort Atkinson	8/13/2002	F0	0	0	\$5,000	0
	Cold Spring	6/23/2004	F1	0	0	\$150,000	0
	Watertown	7/11/2004	F0	0	0	0	0
	Busseyville	8/18/2005	F1	0	0	0	\$2,000
	Fort Atkinson	8/18/2005	F0	0	0	\$50,000	\$2,000
	Fort Atkinson	8/18/2005	F1	0	0	\$30,000	\$2,000
	Fort Atkinson	8/18/2005	F1	0	0	\$30,000	\$2,000
	Fort Atkinson	8/18/2005	F1	0	0	\$355,000	0
	Fort Atkinson	8/18/2005	F1	0	0	\$20,000	\$2,000
	Fort Atkinson	8/18/2005	F0	0	0	\$7,000	\$1,000
	Aztalan	6/7/2008	EF0	0	0	0	0
	Busseyville	6/21/2010	EF1	0	0	\$620,000	\$10,000
	Waterloo	7/22/2010	EF0	0	0	0	0
	Farmington	7/22/2010	EF0	0	0	0	0
	Lake Koshkonong	7/22/2010	EF0	0	0	0	0
	Cold Spring	7/22/2010	EF0	0	0	0	0
	Busseyville	10/01/2019	EF0	0	0	0	0
	Sullivan	10/01/2019	EF1	0	0	0	0
	Grellton	7/29/2021	EF0	0	0	0	0
	Pipersville	7/29/2021	EF1	0	0	0	0
	Grellton	7/29/2021	EF0	0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Tornado - continued	Sullivan	7/29/2021	EF1	0	0	0	0
	Grellton	10/12/2022	EF0	0	0	0	0
	Aztalan	10/12/2022	EF0	0	0	0	0
	Oak Hill	10/12/2022	EF0	0	0	0	0
	Cambridge	3/31/2023	EF0	0	0	100,000	0
	Palmyra	3/31/2023	EF1	0	0	300,000	0
	Palmyra	7/28/2023	EF1	0	0	0	0
	Busseyville	2/8/2024	EF1	0	0	0	0
	Lake Koshkonong	5/26/2024	EF0	0	0	15,000	0
	Cold Spring	5/26/2024	EF0	0	0	4,000	0
	Waterloo	6/22/2024	EF0	0	0	25,000	0
	Hubbleton	6/22/2024	EF1	0	0	6,000	0
	Totals			3	36	\$11.148M	\$21,000
Winter - Blizzard	Jefferson County	1/29/1996	-	0	0	0	0
	Jefferson County	1/16/1997	-	0	0	0	0
	Jefferson County	1/2/1999	-	0	0	0	0
	Jefferson County	2/24/2007	-	0	0	0	0
	Jefferson County	12/11/2010	-	0	0	0	0
	Jefferson County	2/1/2011	-	0	0	0	0
	Totals			0	0	0	0
Winter – Heavy Snow	Jefferson County	1/26/1996	-	0	0	0	0
	Jefferson County	12/11/2000	-	0	0	0	0
	Jefferson County	12/18/2000	-	0	0	0	0
	Jefferson County	3/2/2002	-	0	0	0	0
	Jefferson County	1/21/2008	-	0	0	0	0
	Totals			0	0	0	0
Winter - Ice Storm	Jefferson County	12/23/1996	-	0	0	0	0
	Jefferson County	2/4/1997	-	0	0	0	0
	Jefferson County	2/17/2008	-	0	0	\$20,000	0
	Totals			0	0	\$20,000	0
Winter Storm	Jefferson County	4/11/1997		0	0	0	0
	Jefferson County	1/8/1998		0	0	0	0
	Jefferson County	3/9/1999		0	0	0	0
	Jefferson County	4/7/2000		0	0	0	0
	Jefferson County	2/11/2003		0	0	0	0
	Jefferson County	1/6/2005		0	0	0	0
	Jefferson County	1/22/2005		0	0	0	0
	Jefferson County	2/16/2006		0	0	0	0
	Jefferson County	12/1/2006		0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Winter Storm - continued	Jefferson County	2/23/2007		0	0	0	0
	Jefferson County	2/25/2007		0	0	0	0
	Jefferson County	4/11/2007		0	0	\$10,000	0
	Jefferson County	12/1/2007		0	0	0	0
	Jefferson County	12/11/2007		0	0	0	0
	Jefferson County	1/29/2008		0	0	0	0
	Jefferson County	2/5/2008		0	0	0	0
	Jefferson County	3/21/2008		0	0	0	0
	Jefferson County	11/30/2008		0	0	0	0
	Jefferson County	12/1/2008		0	0	0	0
	Jefferson County	12/8/2008		0	0	0	0
	Jefferson County	12/18/2008		0	0	0	0
	Jefferson County	12/21/2008		0	0	0	0
	Jefferson County	2/21/2009		0	0	0	0
	Jefferson County	3/28/2009		0	0	0	0
	Jefferson County	12/8/2009		0	0	0	0
	Jefferson County	12/23/2009		0	0	0	0
	Jefferson County	1/7/2010		0	0	0	0
	Jefferson County	2/20/2011		0	0	0	0
	Jefferson County	3/2/2012		0	0	0	0
	Jefferson County	3/2/2012		0	0	0	0
	Jefferson County	12/20/2012		0	0	0	0
	Jefferson County	2/7/2013		0	0	0	0
	Jefferson County	3/5/2013		0	0	0	0
	Jefferson County	12/22/2013		0	0	0	0
	Jefferson County	2/1/2015		0	0	0	0
	Jefferson County	11/20/2015		0	0	0	0
	Jefferson County	12/28/2015		0	0	0	0
	Jefferson County	12/10/2016		0	0	0	0
	Jefferson County	12/16/2016		0	0	0	0
	Jefferson County	2/8/2018		0	0	0	0
	Jefferson County	4/18/2018		0	0	0	0
	Jefferson County	1/18/2019		0	0	0	0
	Jefferson County	1/22/2019		0	0	0	0
	Jefferson County	2/11/2019		0	0	0	0
	Jefferson County	12/29/2020		0	0	0	0
	Jefferson County	1/28/2023		0	0	0	0
	Jefferson County	2/16/2023		0	0	0	0
	Jefferson County	2/22/2023		0	0	0	0
	Jefferson County	3/9/2023		0	0	0	0
	Jefferson County	3/25/2023		0	0	0	0
Totals				0	0	\$10,000	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Winter Weather	Jefferson County	1/16/1996		0	0	0	0
	Jefferson County	1/23/1996		0	0	0	0
	Jefferson County	2/3/2003		0	0	0	0
	Jefferson County	4/4/2003		0	0	0	0
	Jefferson County	4/7/2003		0	0	0	0
	Jefferson County	12/10/2003		0	0	0	0
	Jefferson County	1/4/2004		0	0	0	0
	Jefferson County	1/16/2004		0	0	0	0
	Jefferson County	12/18/2004		0	0	0	0
	Jefferson County	11/10/2006		0	0	0	0
	Jefferson County	1/12/2007		0	0	0	0
	Jefferson County	1/14/2007		0	0	0	0
	Jefferson County	1/21/2007		0	0	0	0
	Jefferson County	3/2/2007		0	0	0	0
	Jefferson County	11/21/2007		0	0	0	0
	Jefferson County	12/4/2007		0	0	0	0
	Jefferson County	12/15/2007		0	0	\$50,000	0
	Jefferson County	12/22/2007		0	0	0	0
	Jefferson County	12/28/2007		0	0	0	0
	Jefferson County	2/9/2008		0	0	0	0
	Jefferson County	2/11/2008		0	0	0	0
	Jefferson County	11/24/2008		0	0	0	0
	Jefferson County	12/3/2008		0	0	0	0
	Jefferson County	12/16/2008		0	0	0	0
	Jefferson County	12/23/2008		0	0	0	0
	Jefferson County	12/24/2008		0	0	0	0
	Jefferson County	12/25/2008		0	0	0	0
	Jefferson County	12/27/2008		0	0	0	0
	Jefferson County	1/3/2009		0	0	0	0
	Jefferson County	1/9/2009		0	0	0	0
	Jefferson County	1/9/2009		0	0	0	0
	Jefferson County	1/12/2009		0	0	0	0
	Jefferson County	1/13/2009		0	0	0	0
	Jefferson County	2/26/2009		0	0	0	0
	Jefferson County	2/8/2010		0	0	0	0
	Jefferson County	3/19/2010		0	0	0	0
	Jefferson County	12/3/2010		0	0	0	0
	Jefferson County	12/9/2010		0	0	0	0
	Jefferson County	12/20/2010		0	0	0	0
	Jefferson County	1/17/2011		0	0	0	0
	Jefferson County	2/6/2011		0	0	0	0
	Jefferson County	2/21/2011		0	0	0	0
	Jefferson County	12/29/2011		0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Winter Weather - continued	Jefferson County	1/12/2012		0	0	0	0
	Jefferson County	1/17/2012		0	0	0	0
	Jefferson County	1/20/2012		0	0	0	0
	Jefferson County	1/22/2012		0	0	0	0
	Jefferson County	2/23/2012		0	0	0	0
	Jefferson County	12/9/2012		0	0	0	0
	Jefferson County	1/27/2013		0	0	0	0
	Jefferson County	1/30/2013		0	0	0	0
	Jefferson County	2/22/2013		0	0	0	0
	Jefferson County	2/26/2013		0	0	0	0
	Jefferson County	3/18/2013		0	0	0	0
	Jefferson County	11/25/2013		0	0	0	0
	Jefferson County	12/8/2013		0	0	0	0
	Jefferson County	12/19/2013		0	0	0	0
	Jefferson County	1/10/2014		0	0	0	0
	Jefferson County	1/14/2014		0	0	0	0
	Jefferson County	1/24/2014		0	0	0	0
	Jefferson County	1/26/2014		0	0	0	0
	Jefferson County	1/26/2014		0	0	0	0
	Jefferson County	2/13/2014		0	0	0	0
	Jefferson County	2/17/2014		0	0	0	0
	Jefferson County	3/4/2014		0	0	0	0
	Jefferson County	11/22/2014		0	0	0	0
	Jefferson County	11/24/2014		0	0	0	0
	Jefferson County	11/28/2014		0	0	0	0
	Jefferson County	12/8/2014		0	0	0	0
	Jefferson County	1/3/2015		0	0	0	0
	Jefferson County	1/8/2015		0	0	0	0
	Jefferson County	3/3/2015		0	0	0	0
	Jefferson County	3/23/2015		0	0	0	0
	Jefferson County	2/29/2016		0	0	0	0
	Jefferson County	3/1/2016		0	0	0	0
	Jefferson County	3/24/2016		0	0	0	0
	Jefferson County	4/2/2016		0	0	0	0
	Jefferson County	4/8/2016		0	0	0	0
	Jefferson County	12/4/2016		0	0	0	0
	Jefferson County	12/23/2016		0	0	0	0
	Jefferson County	1/3/2017		0	0	0	0
	Jefferson County	1/10/2017		0	0	0	0
	Jefferson County	1/11/2017		0	0	0	0
	Jefferson County	1/16/2017		0	0	0	0
	Jefferson County	1/24/2017		0	0	0	0
	Jefferson County	2/24/2017		0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Winter Weather - continued	Jefferson County	3/2/2017		0	0	0	0
	Jefferson County	3/12/2017		0	0	0	0
	Jefferson County	1/14/2018		0	0	0	0
	Jefferson County	1/22/2018		0	0	0	0
	Jefferson County	2/3/2018		0	0	0	0
	Jefferson County	2/5/2018		0	0	0	0
	Jefferson County	2/11/2018		0	0	0	0
	Jefferson County	3/5/2018		0	0	0	0
	Jefferson County	4/3/2018		0	0	0	0
	Jefferson County	4/14/2018		0	0	0	0
	Jefferson County	12/28/2018		0	0	0	0
	Jefferson County	1/27/2019		0	0	0	0
	Jefferson County	2/5/2019		0	0	0	0
	Jefferson County	2/7/2019		0	0	0	0
	Jefferson County	2/17/2019		0	0	0	0
	Jefferson County	2/23/2019		0	0	0	0
	Jefferson County	2/26/2019		0	0	0	0
	Jefferson County	3/9/2019		0	0	0	0
	Jefferson County	4/14/2019		0	0	0	0
	Jefferson County	4/27/2019		0	0	0	0
	Jefferson County	10/28/2019		0	0	0	0
	Jefferson County	10/30/2019		0	0	0	0
	Jefferson County	11/6/2019		0	0	0	0
	Jefferson County	11/10/2019		0	0	0	0
	Jefferson County	12/14/2019		0	0	0	0
	Jefferson County	12/30/2019		0	0	0	0
	Jefferson County	1/10/2020		0	0	0	0
	Jefferson County	1/11/2020		0	0	0	0
	Jefferson County	1/17/2020		0	0	0	0
	Jefferson County	1/24/2020		0	0	0	0
	Jefferson County	1/31/2020		0	0	0	0
	Jefferson County	2/9/2020		0	0	0	0
	Jefferson County	2/12/2020		0	0	0	0
	Jefferson County	2/17/2020		0	0	0	0
	Jefferson County	11/24/2020		0	0	0	0
	Jefferson County	12/11/2020		0	0	0	0
	Jefferson County	1/1/2021		0	0	0	0
	Jefferson County	1/25/2021		0	0	0	0
	Jefferson County	1/30/2021		0	0	0	0
	Jefferson County	2/4/2021		0	0	0	0
	Jefferson County	2/11/2021		0	0	0	0
	Jefferson County	2/13/2021		0	0	0	0
	Jefferson County	3/15/2021		0	0	0	0

Event Type	Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Winter Weather - continued	Jefferson County	12/28/2021		0	0	0	0
	Jefferson County	12/31/2021		0	0	0	0
	Jefferson County	1/1/2022		0	0	0	0
	Jefferson County	1/22/2022		0	0	0	0
	Jefferson County	1/24/2022		0	0	0	0
	Jefferson County	2/6/2022		0	0	0	0
	Jefferson County	2/18/2022		0	0	0	0
	Jefferson County	2/21/2022		0	0	0	0
	Jefferson County	2/24/2022		0	0	0	0
	Jefferson County	3/6/2022		0	0	0	0
	Jefferson County	3/31/2022		0	0	0	0
	Jefferson County	12/9/2022		0	0	0	0
	Jefferson County	12/15/2022		0	0	0	0
	Jefferson County	12/22/2022		0	0	0	0
	Jefferson County	12/25/2023		0	0	0	0
	Jefferson County	2/9/2023		0	0	0	0
Totals				0	0	\$50,000	0

Source: National Climactic Data Center database initially accessed on January 19, 2024.
<https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=55%2CWISCONSIN>

Data verified by Rusty Kapela on April 10, 2007. Data update on December 10, 2018.

Note: 1. The location for some events is denoted by direction from the center of a nearby community and distance
 2. Includes freezing fog
 3. Tornadoes through the end of 2006 were rated on the Fujita Tornado Scale. Beginning January 1, 2007, the Enhanced Fujita scale was used.

METHODOLOGY FOR ESTIMATING FLOOD DAMAGE (2006)

Overview – This narrative is intended to document the resources, process, and assumptions used in estimating how much damage would occur to buildings during a 100-year flood. Although flood damages were calculated for each building in the floodplain, it should be emphasized that the total calculated damage estimate was prepared to compare damage from flooding to damage caused by other natural hazards to help decision makers set priorities and devise appropriate mitigation activities.

Resources Used – Jefferson County has a well-developed geographic information system (GIS). It includes a number of map themes and includes a topographic relief map with two-foot contour intervals and an orthographic base with a resolution of two feet. The GIS system also includes property tax information for every parcel in the county.

Beginning in 2006, the Federal Emergency Management Agency, in collaboration with the Wisconsin Department of Natural Resources, initiated a multi-year effort to create and adopt digital flood insurance rate maps (FIRMs) for the entire county. Preliminary FIRM maps were produced as part of that effort and were made available in September, 2006. Adoption of the final set of flood insurance maps would occur in 2008. Because the preliminary FIRMs were the best available data at the time, they were used in this project.

Methodology and Assumptions – The approach was straight forward – identify buildings located within the 100-year floodplain and estimate how much damage each would suffer during a 100-year flood. Initially, a query was used to identify those parcels that were located, in whole or in part, in the 100-year floodplain. The consultant then viewed each of those parcels to determine if a principal building (e.g., house, commercial building, industrial building) was located within the 100-year floodplain. In some cases, a single parcel had more than one building in the floodplain. For example, there were many parcels that had a house with a detached garage. In deciding which of the buildings is the principal building, the consultant viewed the orthographic map and considered the size of the buildings and proximity to driveways or other access points.

A point was located on the approximate center of the principal building to identify it and its location. The elevation of the ground at the point was derived from the relief map. It was assumed that the first floor was 18 inches above the ground elevation.

Flood levels at each of the points were derived from the preliminary flood data. The first-floor elevation and flood elevation were then compared. The extent of damage for each principal building was expressed as a percent based on standardized flood loss tables prepared by the Federal Emergency Management Agency. For this analysis, damage estimates for one or two story buildings with basements were used (Table K-1).

The consultant then classified each principal building as residential, commercial, industrial, or agricultural based on zoning information in the GIS.

Table J-1. Percent of Building Damaged Based on Extent of Flooding

First Floor Flood Depth (feet)	Percent of Building Damaged
-2	4
-1	8
0	11
1	15
2	20
3	23
4	28
5	33
6	38
7	44
8	49
>8	51

Source: Based on Table 3 of *Resource Guide to All Hazards Mitigation Planning in Wisconsin*, 2003. Wisconsin Emergency Management

ESTIMATED FLOOD DAMAGE TO BUILDINGS: 2006

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
City of Fort Atkinson	Residential	\$87,751	4%	\$3,510
City of Fort Atkinson	Residential	\$90,977	4%	\$3,639
City of Fort Atkinson	Commercial	\$91,764	8%	\$7,341
City of Fort Atkinson	Residential	\$96,722	8%	\$7,738
City of Fort Atkinson	Residential	\$56,192	8%	\$4,495
City of Fort Atkinson	Commercial	\$492,269	8%	\$39,381
City of Fort Atkinson	Commercial	\$66,187	8%	\$5,295
City of Fort Atkinson	Commercial	\$1,043,169	8%	\$83,453
City of Fort Atkinson	Residential	\$120,175	11%	\$13,219
City of Fort Atkinson	Residential	\$77,677	11%	\$8,544
City of Fort Atkinson	Commercial	\$1,327,039	11%	\$145,974
City of Fort Atkinson	Commercial	\$23,689	15%	\$3,553
City of Fort Atkinson	Residential	\$88,852	15%	\$13,328
City of Fort Atkinson	Residential	\$64,534	15%	\$9,680
City of Fort Atkinson	Residential	\$74,293	15%	\$11,144
City of Fort Atkinson	Residential	\$54,382	15%	\$8,157
City of Fort Atkinson	Residential	\$68,863	15%	\$10,329
City of Fort Atkinson	Commercial	\$125,999	15%	\$18,900
City of Fort Atkinson	Commercial	\$59,969	20%	\$11,994
City of Fort Atkinson	Commercial	\$936,215	20%	\$187,243
		\$5,046,718.00		\$596,917.00
City of Jefferson	Residential	\$74,277	4%	\$2,971
City of Jefferson	Residential	\$79,962	4%	\$3,198
City of Jefferson	Commercial	\$82,989	4%	\$3,320
City of Jefferson	Residential	\$84,272	4%	\$3,371
City of Jefferson	Residential	\$54,011	4%	\$2,160
City of Jefferson	Residential	\$69,417	4%	\$2,777
City of Jefferson	Residential	\$81,521	4%	\$3,261
City of Jefferson	Commercial	\$117,926	4%	\$4,717
City of Jefferson	Residential	\$45,850	4%	\$1,834
City of Jefferson	Residential	\$74,736	4%	\$2,989
City of Jefferson	Residential	\$83,264	8%	\$6,661
City of Jefferson	Residential	\$72,443	8%	\$5,795
City of Jefferson	Residential	\$59,880	8%	\$4,790
City of Jefferson	Residential	\$84,823	8%	\$6,786
City of Jefferson	Rural	\$149,654	8%	\$11,972
City of Jefferson	Residential	\$88,674	8%	\$7,094
City of Jefferson	Residential	\$97,385	8%	\$7,791
City of Jefferson	Residential	\$78,862	8%	\$6,309
City of Jefferson	Residential	\$74,644	8%	\$5,972
City of Jefferson	Residential	\$63,456	8%	\$5,077
City of Jefferson	Residential	\$64,098	8%	\$5,128
City of Jefferson	Residential	\$74,185	8%	\$5,935
City of Jefferson	Residential	\$110,499	8%	\$8,840
City of Jefferson	Commercial	\$72,993	8%	\$5,839
City of Jefferson	Residential	\$101,787	8%	\$8,143
City of Jefferson	Residential	\$90,691	8%	\$7,255
City of Jefferson	Residential	\$18,340	8%	\$1,467
City of Jefferson	Residential	\$84,731	8%	\$6,778
City of Jefferson	Residential	\$82,347	8%	\$6,588
City of Jefferson	Residential	\$90,966	8%	\$7,277

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
City of Jefferson	Commercial	\$42,090	11%	\$4,630
City of Jefferson	Commercial	\$116,551	11%	\$12,821
City of Jefferson	Residential	\$172,946	11%	\$19,024
City of Jefferson	Residential	\$81,888	11%	\$9,008
City of Jefferson	Residential	\$100,870	11%	\$11,096
City of Jefferson	Residential	\$73,177	11%	\$8,049
City of Jefferson	Residential	\$53,553	11%	\$5,891
City of Jefferson	Residential	\$59,788	11%	\$6,577
City of Jefferson	Residential	\$67,766	11%	\$7,454
City of Jefferson	Residential	\$127,555	11%	\$14,031
City of Jefferson	Industrial	\$404,580	15%	\$60,687
City of Jefferson	Residential	\$56,120	15%	\$8,418
City of Jefferson	Residential	\$88,857	15%	\$13,329
City of Jefferson	Residential	\$86,840	15%	\$13,026
City of Jefferson	Residential	\$65,382	15%	\$9,807
City of Jefferson	Commercial	\$281,519	15%	\$42,228
City of Jefferson	Residential	\$57,129	15%	\$8,569
City of Jefferson	Residential	\$68,500	20%	\$13,700
City of Jefferson	Commercial	\$124,712	20%	\$24,942
City of Jefferson	Residential	\$47,592	20%	\$9,518
City of Jefferson	Residential	\$129,022	20%	\$25,804
City of Jefferson	Residential	\$68,408	20%	\$13,682
City of Jefferson	Commercial	\$25,951	20%	\$5,190
City of Jefferson	Industrial	\$3,907,245	23%	\$898,666
City of Jefferson	Government	\$137,092	23%	\$31,531
City of Jefferson	Industrial	\$137,092	28%	\$38,386
City of Jefferson	Residential	\$94,634	33%	\$31,229
City of Jefferson	Residential	\$85,006	38%	\$32,302
		\$9,170,548.00		\$1,541,690.00
City of Lake Mills	Residential	\$79,600	8%	\$6,368
City of Lake Mills	Commercial	\$250,400	8%	\$20,032
City of Lake Mills	Residential	\$129,000	8%	\$10,320
City of Lake Mills	Residential	\$226,400	8%	\$18,112
City of Lake Mills	Commercial	\$182,700	8%	\$14,616
City of Lake Mills	Residential	\$147,300	8%	\$11,784
City of Lake Mills	Commercial	\$159,700	8%	\$12,776
City of Lake Mills	Residential	\$111,000	8%	\$8,880
City of Lake Mills	Commercial	\$210,000	8%	\$16,800
City of Lake Mills	Commercial	\$63,600	8%	\$5,088
City of Lake Mills	Commercial	\$901,700	11%	\$99,187
City of Lake Mills	Commercial	\$165,200	11%	\$18,172
City of Lake Mills	Commercial	\$83,200	11%	\$9,152
City of Lake Mills	Commercial	\$107,300	11%	\$11,803
City of Lake Mills	Commercial	\$132,400	11%	\$14,564
City of Lake Mills	Commercial	\$214,100	11%	\$23,551
City of Lake Mills	Commercial	\$115,400	15%	\$17,310
City of Lake Mills	Residential	\$91,300	15%	\$13,695
City of Lake Mills	Residential	\$88,300	15%	\$13,245
City of Lake Mills	Residential	\$104,600	15%	\$15,690
City of Lake Mills	Commercial	\$120,600	15%	\$18,090
City of Lake Mills	Residential	\$92,200	15%	\$13,830
City of Lake Mills	Residential	\$96,300	20%	\$19,260
City of Lake Mills	Residential	\$97,000	20%	\$19,400
City of Lake Mills	Residential	\$99,600	20%	\$19,920

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
City of Lake Mills	Commercial	\$135,900	23%	\$31,257
City of Lake Mills	Commercial	\$100,200	23%	\$23,046
City of Lake Mills	Commercial	\$127,500	23%	\$29,325
City of Lake Mills	Commercial	\$97,100	28%	\$27,188
City of Lake Mills	Commercial	\$149,200	28%	\$41,776
City of Lake Mills	Commercial	\$86,600	28%	\$24,248
City of Lake Mills	Commercial	\$153,500	28%	\$42,980
City of Lake Mills	Commercial	\$134,300	33%	\$44,319
City of Lake Mills	Commercial	\$81,000	33%	\$26,730
City of Lake Mills	Commercial	\$162,200	33%	\$53,526
City of Lake Mills	Commercial	\$293,700	38%	\$111,606
City of Lake Mills	Commercial	\$60,100	44%	\$26,444
City of Lake Mills	Commercial	\$71,700	51%	\$36,567
		\$5,721,900.00		\$970,657.00
City of Waterloo	Commercial	\$23,033	4%	\$921
City of Waterloo	Industrial	\$321,088	8%	\$25,687
City of Waterloo	Commercial	\$18,280	8%	\$1,462
City of Waterloo	Commercial	\$370,627	8%	\$29,650
City of Waterloo	Commercial	\$9,871	8%	\$790
City of Waterloo	Commercial	\$30,985	8%	\$2,479
City of Waterloo	Commercial	\$71,383	8%	\$5,711
City of Waterloo	Commercial	\$351,799	8%	\$28,144
City of Waterloo	Residential	\$74,308	8%	\$5,945
City of Waterloo	Commercial	\$111,874	11%	\$12,306
City of Waterloo	Commercial	\$63,523	11%	\$6,988
City of Waterloo	Commercial	\$58,405	11%	\$6,425
City of Waterloo	Industrial	\$1,925,341	15%	\$288,801
City of Waterloo	Commercial	\$88,292	15%	\$13,244
City of Waterloo	Commercial	\$113,336	15%	\$17,000
City of Waterloo	Commercial	\$19,560	20%	\$3,912
City of Waterloo	Industrial	\$74,125	20%	\$14,825
City of Waterloo	Commercial	\$76,319	23%	\$17,553
City of Waterloo	Commercial	\$67,819	23%	\$15,598
City of Waterloo	Commercial	\$78,604	23%	\$18,079
City of Waterloo	Residential	\$37,931	23%	\$8,724
City of Waterloo	Commercial	\$29,248	23%	\$6,727
City of Waterloo	Commercial	\$5,393	23%	\$1,240
City of Waterloo	Industrial	\$440,182	28%	\$123,251
City of Waterloo	Commercial	\$22,850	28%	\$6,398
City of Waterloo	Industrial	\$150,719	44%	\$66,316
		\$4,634,895.00		\$728,176.00
City of Watertown	Commercial	\$12,418	8%	\$993
City of Watertown	Residential	\$35,835	8%	\$2,867
City of Watertown	Residential	\$1,331	11%	\$146
City of Watertown	Commercial	\$146,887	15%	\$22,033
		\$196,471.00		\$26,039.00
Town of Aztalan	Residential	\$71,656	4%	\$2,866
Town of Aztalan	Residential	\$65,628	8%	\$5,250
Town of Aztalan	Rural	\$142,462	11%	\$15,671
Town of Aztalan	Residential	\$679	20%	\$136
Town of Aztalan	Residential	\$32,687	20%	\$6,537
Town of Aztalan	Residential	\$62,317	20%	\$12,463

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Aztalan	Residential	\$61,468	23%	\$14,138
		\$436,897.00		\$57,061.00
Town of Cold Spring	Rural	\$29,234	8%	\$2,339
Town of Cold Spring	Rural	\$90,411	8%	\$7,233
Town of Cold Spring	Rural	\$90,411	15%	\$13,562
Town of Cold Spring	Residential	\$111,800	15%	\$16,770
Town of Cold Spring	Rural	\$90,411	20%	\$18,082
Town of Cold Spring	Residential	\$111,800	23%	\$25,714
		\$524,067.00		\$83,700.00
Town of Concord	Residential	\$227,273	8%	\$18,182
Town of Concord	Residential	\$67,340	8%	\$5,387
		\$294,613.00		\$23,569.00
Town of Farmington	Residential	\$171,239	8%	\$13,699
Town of Farmington	Residential	\$20,381	11%	\$2,242
Town of Farmington	Residential	\$82,745	11%	\$9,102
Town of Farmington	Residential	\$104,520	11%	\$11,497
Town of Farmington	Rural	\$165,229	15%	\$24,784
		\$544,114.00		\$61,324.00
Town of Hebron	Residential	\$92,772	4%	\$3,711
Town of Hebron	Rural	\$102,307	8%	\$8,185
Town of Hebron	Residential	\$85,986	8%	\$6,879
Town of Hebron	Residential	\$51,884	8%	\$4,151
Town of Hebron	Residential	\$74,304	8%	\$5,944
Town of Hebron	Residential	\$75,506	11%	\$8,306
Town of Hebron	Residential	\$141,391	11%	\$15,553
Town of Hebron	Rural	\$133,317	15%	\$19,998
Town of Hebron	Residential	\$63,394	20%	\$12,679
Town of Hebron	Residential	\$96,552	20%	\$19,310
Town of Hebron	Rural	\$133,317	20%	\$26,663
Town of Hebron	Residential	\$43,036	20%	\$8,607
Town of Hebron	Rural	\$120,861	28%	\$33,841
Town of Hebron	Residential	\$58,412	49%	\$28,622
Town of Hebron	Rural	\$56,694	49%	\$27,780
Town of Hebron	Residential	\$131,341	51%	\$66,984
		\$1,461,074.00		\$297,213.00
Town of Ixonia	Residential	\$13,844	8%	\$1,108
		\$13,844		\$1,108
Town of Jefferson	Residential	\$187,317	4%	\$7,493
Town of Jefferson	Residential	\$112,169	8%	\$8,974
Town of Jefferson	Residential	\$88,528	8%	\$7,082
Town of Jefferson	Residential	\$71,225	8%	\$5,698
Town of Jefferson	Rural	\$119,815	11%	\$13,180
Town of Jefferson	Residential	\$139,029	11%	\$15,293
Town of Jefferson	Residential	\$162,972	11%	\$17,927
Town of Jefferson	Commercial	\$108,044	11%	\$11,885
Town of Jefferson	Residential	\$18,611	11%	\$2,047
Town of Jefferson	Rural	\$141,444	11%	\$15,559
Town of Jefferson	Residential	\$42,956	20%	\$8,591
Town of Jefferson	Residential	\$10,462	20%	\$2,092

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Jefferson	Residential	\$96,475	20%	\$19,295
		\$1,299,047.00		\$135,116.00
Town of Koshkonong	Residential	\$68,228	4%	\$2,729
Town of Koshkonong	Residential	\$45,347	4%	\$1,814
Town of Koshkonong	Rural	\$78,718	4%	\$3,149
Town of Koshkonong	Residential	\$52,616	8%	\$4,209
Town of Koshkonong	Residential	\$71,366	8%	\$5,709
Town of Koshkonong	Rural	\$68,723	8%	\$5,498
Town of Koshkonong	Residential	\$39,152	8%	\$3,132
Town of Koshkonong	Residential	\$24,615	8%	\$1,969
Town of Koshkonong	Residential	\$34,362	8%	\$2,749
Town of Koshkonong	Residential	\$57,159	8%	\$4,573
Town of Koshkonong	Residential	\$63,685	8%	\$5,095
Town of Koshkonong	Residential	\$25,523	8%	\$2,042
Town of Koshkonong	Residential	\$73,431	8%	\$5,875
Town of Koshkonong	Rural	\$33,453	8%	\$2,676
Town of Koshkonong	Residential	\$76,983	8%	\$6,159
Town of Koshkonong	Residential	\$23,871	8%	\$1,910
Town of Koshkonong	Residential	\$70,706	8%	\$5,656
Town of Koshkonong	Residential	\$100,772	8%	\$8,062
Town of Koshkonong	Rural	\$40,639	8%	\$3,251
Town of Koshkonong	Rural	\$73,266	8%	\$5,861
Town of Koshkonong	Residential	\$55,425	8%	\$4,434
Town of Koshkonong	Residential	\$83,343	8%	\$6,667
Town of Koshkonong	Residential	\$62,280	8%	\$4,982
Town of Koshkonong	Residential	\$33,370	8%	\$2,670
Town of Koshkonong	Residential	\$78,140	8%	\$6,251
Town of Koshkonong	Residential	\$29,240	8%	\$2,339
Town of Koshkonong	Residential	\$85,491	8%	\$6,839
Town of Koshkonong	Residential	\$190,393	8%	\$15,231
Town of Koshkonong	Residential	\$45,265	8%	\$3,621
Town of Koshkonong	Residential	\$59,142	8%	\$4,731
Town of Koshkonong	Residential	\$35,435	8%	\$2,835
Town of Koshkonong	Residential	\$63,106	8%	\$5,049
Town of Koshkonong	Residential	\$57,159	8%	\$4,573
Town of Koshkonong	Residential	\$29,075	8%	\$2,326
Town of Koshkonong	Residential	\$5,865	8%	\$469
Town of Koshkonong	Residential	\$42,209	8%	\$3,377
Town of Koshkonong	Residential	\$38,657	8%	\$3,093
Town of Koshkonong	Residential	\$64,015	8%	\$5,121
Town of Koshkonong	Rural	\$25,689	8%	\$2,055
Town of Koshkonong	Residential	\$55,672	8%	\$4,454
Town of Koshkonong	Residential	\$186,098	8%	\$14,888
Town of Koshkonong	Rural	\$22,715	8%	\$1,817
Town of Koshkonong	Residential	\$29,984	8%	\$2,399
Town of Koshkonong	Residential	\$67,319	8%	\$5,386
Town of Koshkonong	Residential	\$54,846	8%	\$4,388
Town of Koshkonong	Rural	\$34,196	8%	\$2,736
Town of Koshkonong	Residential	\$46,834	8%	\$3,747
Town of Koshkonong	Residential	\$54,186	11%	\$5,960
Town of Koshkonong	Residential	\$60,463	11%	\$6,651
Town of Koshkonong	Residential	\$48,238	11%	\$5,306
Town of Koshkonong	Rural	\$34,527	11%	\$3,798
Town of Koshkonong	Residential	\$45,843	11%	\$5,043

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Koshkonong	Rural	\$25,028	11%	\$2,753
Town of Koshkonong	Residential	\$33,288	11%	\$3,662
Town of Koshkonong	Residential	\$24,532	11%	\$2,699
Town of Koshkonong	Residential	\$66,823	11%	\$7,351
Town of Koshkonong	Rural	\$139,924	11%	\$15,392
Town of Koshkonong	Residential	\$39,235	11%	\$4,316
Town of Koshkonong	Rural	\$75,249	11%	\$8,277
Town of Koshkonong	Residential	\$83,343	11%	\$9,168
Town of Koshkonong	Residential	\$87,391	15%	\$13,109
Town of Koshkonong	Commercial	\$33,783	15%	\$5,068
Town of Koshkonong	Residential	\$21,476	15%	\$3,221
Town of Koshkonong	Residential	\$15,777	15%	\$2,366
Town of Koshkonong	Residential	\$50,964	15%	\$7,645
Town of Koshkonong	Residential	\$50,138	15%	\$7,521
Town of Koshkonong	Residential	\$56,498	15%	\$8,475
Town of Koshkonong	Residential	\$66,080	15%	\$9,912
Town of Koshkonong	Residential	\$49,643	15%	\$7,446
Town of Koshkonong	Residential	\$19,576	15%	\$2,936
Town of Koshkonong	Residential	\$10,325	15%	\$1,549
Town of Koshkonong	Residential	\$52,781	15%	\$7,917
Town of Koshkonong	Residential	\$53,277	15%	\$7,992
Town of Koshkonong	Residential	\$18,337	15%	\$2,751
Town of Koshkonong	Residential	\$32,297	15%	\$4,844
Town of Koshkonong	Residential	\$34,114	15%	\$5,117
Town of Koshkonong	Residential	\$58,398	15%	\$8,760
Town of Koshkonong	Residential	\$110,106	15%	\$16,516
Town of Koshkonong	Residential	\$47,908	15%	\$7,186
Town of Koshkonong	Residential	\$56,829	15%	\$8,524
Town of Koshkonong	Rural	\$78,635	15%	\$11,795
Town of Koshkonong	Residential	\$108,702	15%	\$16,305
Town of Koshkonong	Residential	\$17,511	15%	\$2,627
Town of Koshkonong	Residential	\$64,263	15%	\$9,639
Town of Koshkonong	Residential	\$54,681	15%	\$8,202
Town of Koshkonong	Residential	\$8,343	15%	\$1,251
Town of Koshkonong	Residential	\$15,033	15%	\$2,255
Town of Koshkonong	Commercial	\$149,176	20%	\$29,835
Town of Koshkonong	Residential	\$49,395	20%	\$9,879
Town of Koshkonong	Residential	\$104,985	20%	\$20,997
Town of Koshkonong	Residential	\$52,534	20%	\$10,507
Town of Koshkonong	Residential	\$4,378	20%	\$876
Town of Koshkonong	Commercial	\$30,810	20%	\$6,162
Town of Koshkonong	Residential	\$14,951	20%	\$2,990
Town of Koshkonong	Residential	\$117,953	20%	\$23,591
Town of Koshkonong	Rural	\$102,094	20%	\$20,419
Town of Koshkonong	Residential	\$75,331	20%	\$15,066
Town of Koshkonong	Rural	\$16,768	20%	\$3,354
Town of Koshkonong	Residential	\$63,106	20%	\$12,621
Town of Koshkonong	Residential	\$19,989	20%	\$3,998
Town of Koshkonong	Residential	\$20,898	20%	\$4,180
Town of Koshkonong	Residential	\$186,098	20%	\$37,220
Town of Koshkonong	Residential	\$28,497	20%	\$5,699
Town of Koshkonong	Residential	\$37,913	20%	\$7,583
Town of Koshkonong	Residential	\$46,091	23%	\$10,601
Town of Koshkonong	Residential	\$45,430	23%	\$10,449
Town of Koshkonong	Residential	\$40,391	23%	\$9,290

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Koshkonong	Residential	\$25,441	23%	\$5,851
Town of Koshkonong	Residential	\$69,219	23%	\$15,920
Town of Koshkonong	Residential	\$46,091	23%	\$10,601
Town of Koshkonong	Residential	\$30,149	23%	\$6,934
Town of Koshkonong	Residential	\$35,518	23%	\$8,169
Town of Koshkonong	Residential	\$48,982	23%	\$11,266
Town of Koshkonong	Residential	\$73,184	23%	\$16,832
Town of Koshkonong	Commercial	\$7,517	23%	\$1,729
Town of Koshkonong	Residential	\$23,293	23%	\$5,357
Town of Koshkonong	Residential	\$22,385	23%	\$5,148
Town of Koshkonong	Residential	\$9,995	23%	\$2,299
Town of Koshkonong	Residential	\$27,341	23%	\$6,288
Town of Koshkonong	Residential	\$42,456	23%	\$9,765
Town of Koshkonong	Residential	\$35,601	23%	\$8,188
Town of Koshkonong	Residential	\$6,030	23%	\$1,387
Town of Koshkonong	Residential	\$14,125	23%	\$3,249
Town of Koshkonong	Residential	\$248	23%	\$57
Town of Koshkonong	Residential	\$110,106	23%	\$25,324
Town of Koshkonong	Residential	\$48,734	23%	\$11,209
Town of Koshkonong	Rural	\$4,378	23%	\$1,007
Town of Koshkonong	Residential	\$53,442	23%	\$12,292
Town of Koshkonong	Government	\$413	23%	\$95
Town of Koshkonong	Residential	\$52,121	23%	\$11,988
Town of Koshkonong	Residential	\$34,196	23%	\$7,865
Town of Koshkonong	Residential	\$10,490	23%	\$2,413
Town of Koshkonong	Residential	\$1,074	23%	\$247
Town of Koshkonong	Residential	\$33,453	23%	\$7,694
Town of Koshkonong	Residential	\$27,258	23%	\$6,269
Town of Koshkonong	Residential	\$29,653	28%	\$8,303
Town of Koshkonong	Residential	\$30,397	28%	\$8,511
Town of Koshkonong	Residential	\$37,748	28%	\$10,569
Town of Koshkonong	Rural	\$578	28%	\$162
Town of Koshkonong	Residential	\$21,641	28%	\$6,060
Town of Koshkonong	Residential	\$74,340	28%	\$20,815
Town of Koshkonong	Residential	\$7,682	28%	\$2,151
Town of Koshkonong	Residential	\$1,569	28%	\$439
Town of Koshkonong	Residential	\$14,125	33%	\$4,661
		\$7,024,884.00		\$992,332.00
Town of Lake Mills	Residential	\$45,114	4%	\$1,805
Town of Lake Mills	Residential	\$28,531	8%	\$2,282
Town of Lake Mills	Residential	\$40,788	8%	\$3,263
Town of Lake Mills	Residential	\$119,068	8%	\$9,525
Town of Lake Mills	Residential	\$220,317	11%	\$24,235
Town of Lake Mills	Rural	\$110,004	20%	\$22,001
		\$563,822.00		\$63,111.00
Town of Milford	Rural	\$157,360	4%	\$6,294
Town of Milford	Rural	\$68,640	8%	\$5,491
Town of Milford	Commercial	\$54,240	8%	\$4,339
Town of Milford	Residential	\$134,800	8%	\$10,784
Town of Milford	Residential	\$23,680	8%	\$1,894
Town of Milford	Residential	\$47,120	8%	\$3,770
Town of Milford	Residential	\$72,960	11%	\$8,026
Town of Milford	Rural	\$640	11%	\$70

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Milford	Residential	\$119,440	11%	\$13,138
Town of Milford	Residential	\$37,040	11%	\$4,074
Town of Milford	Residential	\$11,680	11%	\$1,285
Town of Milford	Residential	\$34,560	15%	\$5,184
Town of Milford	Residential	\$4,800	15%	\$720
Town of Milford	Residential	\$126,400	20%	\$25,280
Town of Milford	Residential	\$47,600	20%	\$9,520
Town of Milford	Rural	\$91,680	33%	\$30,254
Town of Milford	Residential	\$91,680	33%	\$30,254
Town of Milford	Residential	\$112,080	49%	\$54,919
		\$1,236,400.00		\$215,296.00
Town of Oakland	Residential	\$89,400	4%	\$3,576
Town of Oakland	Residential	\$100,900	4%	\$4,036
Town of Oakland	Residential	\$142,000	4%	\$5,680
Town of Oakland	Residential	\$158,500	4%	\$6,340
Town of Oakland	Residential	\$185,800	4%	\$7,432
Town of Oakland	Residential	\$254,300	4%	\$10,172
Town of Oakland	Residential	\$206,800	4%	\$8,272
Town of Oakland	Residential	\$68,900	4%	\$2,756
Town of Oakland	Residential	\$115,000	4%	\$4,600
Town of Oakland	Residential	\$95,900	4%	\$3,836
Town of Oakland	Residential	\$229,400	8%	\$18,352
Town of Oakland	Residential	\$97,600	8%	\$7,808
Town of Oakland	Residential	\$136,100	8%	\$10,888
Town of Oakland	Residential	\$137,200	8%	\$10,976
Town of Oakland	Rural	\$72,400	8%	\$5,792
Town of Oakland	Residential	\$180,700	8%	\$14,456
Town of Oakland	Residential	\$69,700	8%	\$5,576
Town of Oakland	Residential	\$173,100	8%	\$13,848
Town of Oakland	Residential	\$96,300	8%	\$7,704
Town of Oakland	Residential	\$241,700	8%	\$19,336
Town of Oakland	Residential	\$91,200	8%	\$7,296
Town of Oakland	Residential	\$93,100	8%	\$7,448
Town of Oakland	Residential	\$160,700	8%	\$12,856
Town of Oakland	Residential	\$112,200	8%	\$8,976
Town of Oakland	Residential	\$152,000	8%	\$12,160
Town of Oakland	Residential	\$165,600	8%	\$13,248
Town of Oakland	Residential	\$183,100	8%	\$14,648
Town of Oakland	Residential	\$284,200	8%	\$22,736
Town of Oakland	Residential	\$83,800	8%	\$6,704
Town of Oakland	Residential	\$224,300	8%	\$17,944
Town of Oakland	Residential	\$167,700	8%	\$13,416
Town of Oakland	Residential	\$238,800	8%	\$19,104
Town of Oakland	Residential	\$182,700	8%	\$14,616
Town of Oakland	Commercial	\$205,800	8%	\$16,464
Town of Oakland	Residential	\$12,100	8%	\$968
Town of Oakland	Residential	\$101,000	8%	\$8,080
Town of Oakland	Residential	\$68,200	8%	\$5,456
Town of Oakland	Residential	\$146,300	8%	\$11,704
Town of Oakland	Residential	\$93,200	8%	\$7,456
Town of Oakland	Residential	\$134,900	8%	\$10,792
Town of Oakland	Residential	\$84,800	8%	\$6,784
Town of Oakland	Residential	\$115,700	8%	\$9,256
Town of Oakland	Commercial	\$155,400	8%	\$12,432

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Oakland	Residential	\$157,300	8%	\$12,584
Town of Oakland	Residential	\$220,400	8%	\$17,632
Town of Oakland	Residential	\$105,700	8%	\$8,456
Town of Oakland	Residential	\$156,100	8%	\$12,488
Town of Oakland	Residential	\$136,600	8%	\$10,928
Town of Oakland	Residential	\$267,000	8%	\$21,360
Town of Oakland	Residential	\$124,500	8%	\$9,960
Town of Oakland	Residential	\$146,000	8%	\$11,680
Town of Oakland	Residential	\$122,500	8%	\$9,800
Town of Oakland	Residential	\$103,200	8%	\$8,256
Town of Oakland	Residential	\$88,500	8%	\$7,080
Town of Oakland	Residential	\$40,000	8%	\$3,200
Town of Oakland	Residential	\$101,500	8%	\$8,120
Town of Oakland	Commercial	\$115,000	8%	\$9,200
Town of Oakland	Residential	\$114,200	8%	\$9,136
Town of Oakland	Residential	\$128,100	8%	\$10,248
Town of Oakland	Residential	\$112,600	11%	\$12,386
Town of Oakland	Commercial	\$30,400	11%	\$3,344
Town of Oakland	Residential	\$120,000	11%	\$13,200
Town of Oakland	Residential	\$34,400	11%	\$3,784
Town of Oakland	Residential	\$104,100	11%	\$11,451
Town of Oakland	Residential	\$175,000	11%	\$19,250
Town of Oakland	Residential	\$119,900	11%	\$13,189
Town of Oakland	Residential	\$77,300	11%	\$8,503
Town of Oakland	Residential	\$149,700	11%	\$16,467
Town of Oakland	Residential	\$167,000	11%	\$18,370
Town of Oakland	Residential	\$211,700	11%	\$23,287
Town of Oakland	Residential	\$108,000	11%	\$11,880
Town of Oakland	Residential	\$106,400	11%	\$11,704
Town of Oakland	Residential	\$200,900	11%	\$22,099
Town of Oakland	Residential	\$289,400	11%	\$31,834
Town of Oakland	Residential	\$69,500	11%	\$7,645
Town of Oakland	Residential	\$86,900	11%	\$9,559
Town of Oakland	Residential	\$111,500	11%	\$12,265
Town of Oakland	Residential	\$161,400	11%	\$17,754
Town of Oakland	Residential	\$47,600	11%	\$5,236
Town of Oakland	Residential	\$53,000	11%	\$5,830
Town of Oakland	Residential	\$292,300	11%	\$32,153
Town of Oakland	Residential	\$96,900	11%	\$10,659
Town of Oakland	Residential	\$92,900	11%	\$10,219
Town of Oakland	Residential	\$64,100	11%	\$7,051
Town of Oakland	Residential	\$102,600	11%	\$11,286
Town of Oakland	Residential	\$122,800	11%	\$13,508
Town of Oakland	Residential	\$127,000	11%	\$13,970
Town of Oakland	Residential	\$146,500	11%	\$16,115
Town of Oakland	Residential	\$175,000	11%	\$19,250
Town of Oakland	Residential	\$146,600	11%	\$16,126
Town of Oakland	Residential	\$37,600	11%	\$4,136
Town of Oakland	Residential	\$125,600	11%	\$13,816
Town of Oakland	Residential	\$209,900	15%	\$31,485
Town of Oakland	Residential	\$76,100	15%	\$11,415
Town of Oakland	Residential	\$195,200	15%	\$29,280
Town of Oakland	Residential	\$412,000	15%	\$61,800
Town of Oakland	Residential	\$73,700	15%	\$11,055
Town of Oakland	Residential	\$121,200	15%	\$18,180

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Oakland	Residential	\$294,500	15%	\$44,175
Town of Oakland	Residential	\$177,700	15%	\$26,655
Town of Oakland	Residential	\$56,300	15%	\$8,445
Town of Oakland	Residential	\$72,400	15%	\$10,860
Town of Oakland	Residential	\$112,900	15%	\$16,935
Town of Oakland	Residential	\$56,000	15%	\$8,400
Town of Oakland	Residential	\$60,800	15%	\$9,120
Town of Oakland	Residential	\$257,600	15%	\$38,640
Town of Oakland	Residential	\$161,900	15%	\$24,285
Town of Oakland	Residential	\$287,500	15%	\$43,125
Town of Oakland	Residential	\$196,500	15%	\$29,475
Town of Oakland	Residential	\$96,000	15%	\$14,400
Town of Oakland	Residential	\$60,800	15%	\$9,120
Town of Oakland	Residential	\$162,700	15%	\$24,405
Town of Oakland	Residential	\$85,600	15%	\$12,840
Town of Oakland	Residential	\$83,600	15%	\$12,540
Town of Oakland	Rural	\$637,100	15%	\$95,565
Town of Oakland	Residential	\$128,600	15%	\$19,290
Town of Oakland	Residential	\$242,000	15%	\$36,300
Town of Oakland	Residential	\$102,700	15%	\$15,405
Town of Oakland	Residential	\$800	20%	\$160
Town of Oakland	Residential	\$141,400	20%	\$28,280
Town of Oakland	Residential	\$184,000	20%	\$36,800
Town of Oakland	Residential	\$104,400	20%	\$20,880
Town of Oakland	Residential	\$329,900	20%	\$65,980
Town of Oakland	Residential	\$140,200	20%	\$28,040
Town of Oakland	Residential	\$137,700	20%	\$27,540
Town of Oakland	Residential	\$234,700	20%	\$46,940
Town of Oakland	Residential	\$130,400	20%	\$26,080
Town of Oakland	Residential	\$220,200	20%	\$44,040
Town of Oakland	Residential	\$136,100	20%	\$27,220
Town of Oakland	Residential	\$101,200	20%	\$20,240
Town of Oakland	Residential	\$119,400	20%	\$23,880
Town of Oakland	Residential	\$213,800	20%	\$42,760
Town of Oakland	Residential	\$286,500	20%	\$57,300
Town of Oakland	Residential	\$254,600	20%	\$50,920
Town of Oakland	Residential	\$220,500	20%	\$44,100
Town of Oakland	Residential	\$105,900	20%	\$21,180
Town of Oakland	Residential	\$276,200	23%	\$63,526
Town of Oakland	Residential	\$93,900	23%	\$21,597
Town of Oakland	Residential	\$124,400	23%	\$28,612
Town of Oakland	Residential	\$104,700	23%	\$24,081
Town of Oakland	Residential	\$296,100	23%	\$68,103
Town of Oakland	Residential	\$75,400	23%	\$17,342
Town of Oakland	Residential	\$48,000	23%	\$11,040
Town of Oakland	Residential	\$90,000	23%	\$20,700
Town of Oakland	Residential	\$149,300	23%	\$34,339
Town of Oakland	Residential	\$265,100	23%	\$60,973
Town of Oakland	Residential	\$148,000	23%	\$34,040
Town of Oakland	Residential	\$127,200	23%	\$29,256
Town of Oakland	Residential	\$70,600	23%	\$16,238
Town of Oakland	Residential	\$110,700	23%	\$25,461
Town of Oakland	Residential	\$161,900	23%	\$37,237
Town of Oakland	Residential	\$140,500	28%	\$39,340
Town of Oakland	Residential	\$102,600	28%	\$28,728

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Oakland	Residential	\$110,100	28%	\$30,828
Town of Oakland	Residential	\$451,500	28%	\$126,420
Town of Oakland	Residential	\$237,100	28%	\$66,388
Town of Oakland	Residential	\$107,300	28%	\$30,044
Town of Oakland	Residential	\$80,400	28%	\$22,512
Town of Oakland	Residential	\$154,400	28%	\$43,232
Town of Oakland	Residential	\$143,900	28%	\$40,292
Town of Oakland	Residential	\$235,000	28%	\$65,800
Town of Oakland	Residential	\$269,400	28%	\$75,432
Town of Oakland	Residential	\$72,700	33%	\$23,991
Town of Oakland	Residential	\$132,800	33%	\$43,824
Town of Oakland	Residential	\$90,700	33%	\$29,931
Town of Oakland	Residential	\$92,700	33%	\$30,591
Town of Oakland	Residential	\$210,700	33%	\$69,531
Town of Oakland	Commercial	\$257,100	33%	\$84,843
Town of Oakland	Residential	\$53,000	33%	\$17,490
Town of Oakland	Residential	\$64,100	33%	\$21,153
Town of Oakland	Residential	\$205,100	33%	\$67,683
Town of Oakland	Residential	\$122,500	33%	\$40,425
Town of Oakland	Residential	\$155,400	33%	\$51,282
Town of Oakland	Residential	\$140,600	33%	\$46,398
Town of Oakland	Residential	\$194,900	33%	\$64,317
Town of Oakland	Residential	\$192,800	33%	\$63,624
Town of Oakland	Residential	\$107,900	33%	\$35,607
Town of Oakland	Residential	\$84,600	33%	\$27,918
Town of Oakland	Commercial	\$178,400	38%	\$67,792
Town of Oakland	Residential	\$104,900	38%	\$39,862
Town of Oakland	Residential	\$165,100	38%	\$62,738
Town of Oakland	Residential	\$103,800	38%	\$39,444
Town of Oakland	Residential	\$216,100	38%	\$82,118
Town of Oakland	Residential	\$237,800	38%	\$90,364
Town of Oakland	Residential	\$162,100	38%	\$61,598
Town of Oakland	Rural	\$143,200	38%	\$54,416
Town of Oakland	Residential	\$115,800	38%	\$44,004
Town of Oakland	Residential	\$92,100	44%	\$40,524
Town of Oakland	Residential	\$145,700	44%	\$64,108
Town of Oakland	Residential	\$98,900	44%	\$43,516
Town of Oakland	Residential	\$92,900	44%	\$40,876
Town of Oakland	Rural	\$19,900	49%	\$9,751
Town of Oakland	Residential	\$147,000	49%	\$72,030
Town of Oakland	Residential	\$151,600	49%	\$74,284
Town of Oakland	Residential	\$108,600	51%	\$55,386
Town of Oakland	Residential	\$101,300	51%	\$51,663
Town of Oakland	Residential	\$60,900	51%	\$31,059
Town of Oakland	Residential	\$149,700	51%	\$76,347
Town of Oakland	Residential	\$165,200	51%	\$84,252
Town of Oakland	Residential	\$88,800	51%	\$45,288
Town of Oakland	Residential	\$72,300	51%	\$36,873
Town of Oakland	Residential	\$283,200	51%	\$144,432
		\$29,341,300.00		\$5,517,863.00
Town of Palmyra	Residential	\$61,886	4%	\$2,475
Town of Palmyra	Residential	\$88,076	8%	\$7,046
Town of Palmyra	Residential	\$226,010	8%	\$18,081
Town of Palmyra	Residential	\$64,311	8%	\$5,145

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Palmyra	Residential	\$93,605	8%	\$7,488
Town of Palmyra	Residential	\$224,652	8%	\$17,972
Town of Palmyra	Residential	\$217,862	8%	\$17,429
Town of Palmyra	Residential	\$121,153	8%	\$9,692
Town of Palmyra	Residential	\$127,749	8%	\$10,220
Town of Palmyra	Residential	\$69,258	8%	\$5,541
Town of Palmyra	Residential	\$144,433	8%	\$11,555
Town of Palmyra	Residential	\$189,247	8%	\$15,140
Town of Palmyra	Residential	\$65,184	8%	\$5,215
Town of Palmyra	Residential	\$302,931	8%	\$24,234
Town of Palmyra	Residential	\$111,744	11%	\$12,292
Town of Palmyra	Residential	\$55,096	11%	\$6,061
Town of Palmyra	Residential	\$204,185	11%	\$22,460
Town of Palmyra	Residential	\$78,958	11%	\$8,685
Town of Palmyra	Residential	\$101,365	11%	\$11,150
Town of Palmyra	Residential	\$176,928	11%	\$19,462
Town of Palmyra	Residential	\$166,452	11%	\$18,310
Town of Palmyra	Residential	\$122,802	11%	\$13,508
Town of Palmyra	Residential	\$169,653	11%	\$18,662
Town of Palmyra	Rural	\$357,930	11%	\$39,372
Town of Palmyra	Residential	\$82,935	15%	\$12,440
Town of Palmyra	Residential	\$83,129	15%	\$12,469
Town of Palmyra	Residential	\$202,730	15%	\$30,410
Town of Palmyra	Residential	\$155,976	15%	\$23,396
Town of Palmyra	Residential	\$102,820	20%	\$20,564
Town of Palmyra	Residential	\$50,149	20%	\$10,030
Town of Palmyra	Residential	\$124,936	20%	\$24,987
		\$4,344,145.00		\$461,491.00
Town of Sullivan	Rural	\$155,493	8%	\$12,439
Town of Sullivan	Residential	\$6,645	8%	\$532
Town of Sullivan	Residential	\$7,797	8%	\$624
Town of Sullivan	Commercial	\$56,438	8%	\$4,515
Town of Sullivan	Rural	\$158,505	8%	\$12,680
Town of Sullivan	Residential	\$226,550	8%	\$18,124
Town of Sullivan	Rural	\$70,880	8%	\$5,670
Town of Sullivan	Residential	\$59,716	8%	\$4,777
Town of Sullivan	Residential	\$96,131	11%	\$10,574
Town of Sullivan	Residential	\$162,492	11%	\$17,874
Town of Sullivan	Residential	\$142,912	11%	\$15,720
Town of Sullivan	Residential	\$30,744	11%	\$3,382
Town of Sullivan	Residential	\$7,354	11%	\$809
Town of Sullivan	Residential	\$975	15%	\$146
Town of Sullivan	Residential	\$26,403	15%	\$3,960
Town of Sullivan	Residential	\$64,412	15%	\$9,662
Town of Sullivan	Residential	\$37,212	20%	\$7,442
Town of Sullivan	Residential	\$149,380	23%	\$34,357
Town of Sullivan	Residential	\$7,265	23%	\$1,671
Town of Sullivan	Residential	\$13,290	23%	\$3,057
Town of Sullivan	Residential	\$92,498	23%	\$21,275
Town of Sullivan	Rural	\$87,360	28%	\$24,461
Town of Sullivan	Residential	\$90,372	33%	\$29,823
		\$1,750,824.00		\$243,574.00
Town of Sumner	Residential	\$39,365	4%	\$1,575

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Sumner	Rural	\$2,669	4%	\$107
Town of Sumner	Residential	\$49,373	8%	\$3,950
Town of Sumner	Residential	\$153,873	8%	\$12,310
Town of Sumner	Residential	\$31,025	8%	\$2,482
Town of Sumner	Residential	\$6,839	8%	\$547
Town of Sumner	Residential	\$52,125	8%	\$4,170
Town of Sumner	Residential	\$1,668	8%	\$133
Town of Sumner	Residential	\$45,286	8%	\$3,623
Town of Sumner	Residential	\$104,167	8%	\$8,333
Town of Sumner	Residential	\$40,449	8%	\$3,236
Town of Sumner	Residential	\$11,009	8%	\$881
Town of Sumner	Residential	\$23,936	8%	\$1,915
Town of Sumner	Commercial	\$3,336	8%	\$267
Town of Sumner	Residential	\$57,379	8%	\$4,590
Town of Sumner	Residential	\$37,447	8%	\$2,996
Town of Sumner	Residential	\$42,784	8%	\$3,423
Town of Sumner	Residential	\$38,030	8%	\$3,042
Town of Sumner	Residential	\$167	8%	\$13
Town of Sumner	Residential	\$18,682	8%	\$1,495
Town of Sumner	Residential	\$48,205	8%	\$3,856
Town of Sumner	Residential	\$38,197	8%	\$3,056
Town of Sumner	Residential	\$21,100	8%	\$1,688
Town of Sumner	Residential	\$41,366	8%	\$3,309
Town of Sumner	Commercial	\$45,370	8%	\$3,630
Town of Sumner	Residential	\$54,043	8%	\$4,323
Town of Sumner	Residential	\$58,213	8%	\$4,657
Town of Sumner	Rural	\$1,168	8%	\$93
Town of Sumner	Residential	\$127,852	8%	\$10,228
Town of Sumner	Residential	\$34,194	8%	\$2,736
Town of Sumner	Residential	\$18,014	8%	\$1,441
Town of Sumner	Residential	\$27,856	8%	\$2,228
Town of Sumner	Rural	\$34,194	8%	\$2,736
Town of Sumner	Rural	\$29,440	8%	\$2,355
Town of Sumner	Rural	\$8,590	8%	\$687
Town of Sumner	Residential	\$35,362	8%	\$2,829
Town of Sumner	Residential	\$77,812	8%	\$6,225
Town of Sumner	Residential	\$85,318	8%	\$6,825
Town of Sumner	Residential	\$25,437	8%	\$2,035
Town of Sumner	Residential	\$28,690	8%	\$2,295
Town of Sumner	Rural	\$30,941	8%	\$2,475
Town of Sumner	Residential	\$15,679	8%	\$1,254
Town of Sumner	Residential	\$92,157	8%	\$7,373
Town of Sumner	Residential	\$26,271	8%	\$2,102
Town of Sumner	Residential	\$59,881	8%	\$4,790
Town of Sumner	Residential	\$39,448	8%	\$3,156
Town of Sumner	Residential	\$17,014	8%	\$1,361
Town of Sumner	Residential	\$19,849	8%	\$1,588
Town of Sumner	Residential	\$30,441	8%	\$2,435
Town of Sumner	Residential	\$38,030	8%	\$3,042
Town of Sumner	Residential	\$103,416	8%	\$8,273
Town of Sumner	Residential	\$25,187	8%	\$2,015
Town of Sumner	Residential	\$30,274	8%	\$2,422
Town of Sumner	Residential	\$42,617	8%	\$3,409
Town of Sumner	Residential	\$81,565	8%	\$6,525
Town of Sumner	Commercial	\$34,694	8%	\$2,776

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Sumner	Commercial	\$104,167	8%	\$8,333
Town of Sumner	Rural	\$40,949	8%	\$3,276
Town of Sumner	Residential	\$98,495	8%	\$7,880
Town of Sumner	Rural	\$834	8%	\$67
Town of Sumner	Residential	\$25,270	8%	\$2,022
Town of Sumner	Residential	\$47,955	8%	\$3,836
Town of Sumner	Rural	\$60,465	8%	\$4,837
Town of Sumner	Residential	\$33,610	8%	\$2,689
Town of Sumner	Commercial	\$86,569	8%	\$6,926
Town of Sumner	Residential	\$41,867	8%	\$3,349
Town of Sumner	Residential	\$45,953	8%	\$3,676
Town of Sumner	Residential	\$31,609	8%	\$2,529
Town of Sumner	Residential	\$113,841	8%	\$9,107
Town of Sumner	Residential	\$30,941	8%	\$2,475
Town of Sumner	Residential	\$90,072	8%	\$7,206
Town of Sumner	Residential	\$33,026	8%	\$2,642
Town of Sumner	Residential	\$35,111	8%	\$2,809
Town of Sumner	Residential	\$43,285	8%	\$3,463
Town of Sumner	Residential	\$54,210	8%	\$4,337
Town of Sumner	Residential	\$58,213	8%	\$4,657
Town of Sumner	Residential	\$53,042	8%	\$4,243
Town of Sumner	Residential	\$24,937	8%	\$1,995
Town of Sumner	Residential	\$21,267	8%	\$1,701
Town of Sumner	Residential	\$29,273	8%	\$2,342
Town of Sumner	Residential	\$34,528	8%	\$2,762
Town of Sumner	Residential	\$9,341	8%	\$747
Town of Sumner	Commercial	\$69,222	8%	\$5,538
Town of Sumner	Residential	\$32,443	8%	\$2,595
Town of Sumner	Residential	\$6,672	8%	\$534
Town of Sumner	Residential	\$21,934	8%	\$1,755
Town of Sumner	Residential	\$10,258	8%	\$821
Town of Sumner	Commercial	\$36,279	8%	\$2,902
Town of Sumner	Residential	\$73,892	8%	\$5,911
Town of Sumner	Commercial	\$34,194	8%	\$2,736
Town of Sumner	Commercial	\$40,032	8%	\$3,203
Town of Sumner	Residential	\$85,151	8%	\$6,812
Town of Sumner	Residential	\$21,517	8%	\$1,721
Town of Sumner	Residential	\$44,869	8%	\$3,590
Town of Sumner	Residential	\$40,199	8%	\$3,216
Town of Sumner	Residential	\$6,589	8%	\$527
Town of Sumner	Residential	\$27,939	8%	\$2,235
Town of Sumner	Residential	\$99,163	8%	\$7,933
Town of Sumner	Residential	\$32,776	8%	\$2,622
Town of Sumner	Residential	\$182,146	8%	\$14,572
Town of Sumner	Residential	\$56,462	8%	\$4,517
Town of Sumner	Residential	\$33,610	8%	\$2,689
Town of Sumner	Residential	\$56,545	8%	\$4,524
Town of Sumner	Rural	\$48,539	8%	\$3,883
Town of Sumner	Residential	\$87,487	8%	\$6,999
Town of Sumner	Residential	\$41,033	8%	\$3,283
Town of Sumner	Residential	\$46,204	8%	\$3,696
Town of Sumner	Residential	\$25,270	8%	\$2,022
Town of Sumner	Residential	\$44,035	8%	\$3,523
Town of Sumner	Residential	\$48,622	8%	\$3,890
Town of Sumner	Residential	\$59,548	8%	\$4,764

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Sumner	Residential	\$15,262	8%	\$1,221
Town of Sumner	Residential	\$41,700	8%	\$3,336
Town of Sumner	Residential	\$48,372	8%	\$3,870
Town of Sumner	Residential	\$193,405	8%	\$15,472
Town of Sumner	Residential	\$48,706	8%	\$3,896
Town of Sumner	Residential	\$44,202	8%	\$3,536
Town of Sumner	Rural	\$3,336	8%	\$267
Town of Sumner	Residential	\$46,370	8%	\$3,710
Town of Sumner	Residential	\$58,046	8%	\$4,644
Town of Sumner	Residential	\$27,856	8%	\$2,228
Town of Sumner	Residential	\$34,277	8%	\$2,742
Town of Sumner	Residential	\$49,540	8%	\$3,963
Town of Sumner	Residential	\$16,930	8%	\$1,354
Town of Sumner	Residential	\$44,702	8%	\$3,576
Town of Sumner	Residential	\$124,850	8%	\$9,988
Town of Sumner	Residential	\$39,281	8%	\$3,143
Town of Sumner	Residential	\$52,042	8%	\$4,163
Town of Sumner	Residential	\$110,338	8%	\$8,827
Town of Sumner	Residential	\$43,702	8%	\$3,496
Town of Sumner	Commercial	\$39,615	8%	\$3,169
Town of Sumner	Residential	\$44,953	8%	\$3,596
Town of Sumner	Residential	\$59,464	11%	\$6,541
Town of Sumner	Rural	\$64,885	11%	\$7,137
Town of Sumner	Residential	\$72,808	11%	\$8,009
Town of Sumner	Residential	\$46,954	11%	\$5,165
Town of Sumner	Residential	\$98,579	11%	\$10,844
Town of Sumner	Residential	\$69,639	11%	\$7,660
Town of Sumner	Residential	\$97,328	11%	\$10,706
Town of Sumner	Residential	\$33,944	11%	\$3,734
Town of Sumner	Residential	\$99,830	11%	\$10,981
Town of Sumner	Residential	\$2,919	11%	\$321
Town of Sumner	Residential	\$26,021	11%	\$2,862
Town of Sumner	Rural	\$39,365	11%	\$4,330
Town of Sumner	Residential	\$46,287	11%	\$5,092
Town of Sumner	Residential	\$57,379	11%	\$6,312
Town of Sumner	Residential	\$56,545	11%	\$6,220
Town of Sumner	Residential	\$118,011	11%	\$12,981
Town of Sumner	Residential	\$61,549	11%	\$6,770
Town of Sumner	Residential	\$35,362	11%	\$3,890
Town of Sumner	Residential	\$95,827	11%	\$10,541
Town of Sumner	Residential	\$37,864	11%	\$4,165
Town of Sumner	Residential	\$32,276	11%	\$3,550
Town of Sumner	Rural	\$40,699	11%	\$4,477
Town of Sumner	Residential	\$46,370	11%	\$5,101
Town of Sumner	Residential	\$49,123	11%	\$5,403
Town of Sumner	Residential	\$67,554	11%	\$7,431
Town of Sumner	Residential	\$4,253	11%	\$468
Town of Sumner	Residential	\$30,858	11%	\$3,394
Town of Sumner	Commercial	\$41,533	11%	\$4,569
Town of Sumner	Residential	\$63,467	11%	\$6,981
Town of Sumner	Residential	\$51,124	11%	\$5,624
Town of Sumner	Commercial	\$45,536	11%	\$5,009
Town of Sumner	Residential	\$172,555	11%	\$18,981
Town of Sumner	Residential	\$85,652	11%	\$9,422
Town of Sumner	Residential	\$48,706	11%	\$5,358

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Sumner	Rural	\$160,962	11%	\$17,706
Town of Sumner	Residential	\$3,336	15%	\$500
Town of Sumner	Residential	\$81,065	15%	\$12,160
Town of Sumner	Residential	\$43,285	15%	\$6,493
Town of Sumner	Rural	\$119,095	15%	\$17,864
Town of Sumner	Rural	\$74,226	15%	\$11,134
Town of Sumner	Residential	\$10,425	15%	\$1,564
Town of Sumner	Rural	\$59,381	15%	\$8,907
Town of Sumner	Residential	\$42,701	15%	\$6,405
Town of Sumner	Residential	\$28,606	15%	\$4,291
Town of Sumner	Residential	\$52,459	15%	\$7,869
Town of Sumner	Residential	\$126,351	15%	\$18,953
Town of Sumner	Residential	\$51,875	20%	\$10,375
Town of Sumner	Residential	\$47,038	20%	\$9,408
Town of Sumner	Residential	\$14,678	20%	\$2,936
Town of Sumner	Residential	\$26,438	20%	\$5,288
Town of Sumner	Residential	\$69,055	20%	\$13,811
Town of Sumner	Residential	\$33,860	20%	\$6,772
Town of Sumner	Residential	\$37,613	20%	\$7,523
Town of Sumner	Residential	\$25,854	20%	\$5,171
Town of Sumner	Residential	\$49,540	23%	\$11,394
Town of Sumner	Residential	\$60,131	23%	\$13,830
Town of Sumner	Residential	\$31,775	23%	\$7,308
Town of Sumner	Residential	\$38,864	23%	\$8,939
Town of Sumner	Residential	\$110,755	23%	\$25,474
Town of Sumner	Residential	\$37,363	23%	\$8,594
Town of Sumner	Residential	\$42,200	23%	\$9,706
Town of Sumner	Rural	\$1,751	23%	\$403
Town of Sumner	Residential	\$40,949	23%	\$9,418
Town of Sumner	Residential	\$110,755	23%	\$25,474
Town of Sumner	Residential	\$50,374	23%	\$11,586
Town of Sumner	Residential	\$49,957	23%	\$11,490
Town of Sumner	Residential	\$44,202	23%	\$10,166
Town of Sumner	Rural	\$49,540	28%	\$13,871
Town of Sumner	Residential	\$40,699	28%	\$11,396
Town of Sumner	Residential	\$29,440	28%	\$8,243
Town of Sumner	Residential	\$64,885	44%	\$28,549
		\$10,038,188.00		\$1,095,432.00
Town of Waterloo	Residential	\$98,729	15%	\$14,809
		\$98,729		\$14,809
Town of Watertown	Residential	\$97,271	4%	\$3,891
Town of Watertown	Residential	\$108,885	4%	\$4,355
Town of Watertown	Residential	\$132,968	4%	\$5,319
Town of Watertown	Residential	\$162,175	4%	\$6,487
Town of Watertown	Residential	\$15,457	8%	\$1,237
Town of Watertown	Residential	\$598	8%	\$48
Town of Watertown	Residential	\$5,807	8%	\$465
Town of Watertown	Residential	\$74,810	8%	\$5,985
Town of Watertown	Residential	\$3,843	8%	\$307
Town of Watertown	Residential	\$97,356	11%	\$10,709
Town of Watertown	Residential	\$90,353	11%	\$9,939
Town of Watertown	Residential	\$82,838	11%	\$9,112
Town of Watertown	Residential	\$77,799	11%	\$8,558

Jurisdiction	Land Use	Market Value of Structure	Percent Damage	100-Year Flood Damage
Town of Watertown	Residential	\$114,778	11%	\$12,626
Town of Watertown	Residential	\$54,229	11%	\$5,965
Town of Watertown	Residential	\$77,885	11%	\$8,567
Town of Watertown	Residential	\$30,915	15%	\$4,637
Town of Watertown	Residential	\$83,521	15%	\$12,528
Town of Watertown	Residential	\$89,841	15%	\$13,476
Town of Watertown	Residential	\$105,469	23%	\$24,258
		\$1,506,798.00		\$148,469.00
Village of Johnson Creek	Residential	\$157,934	8%	\$12,635
		\$157,934	8%	\$12,635

ACQUIRED FLOOD-PRONE PROPERTIES: 1995–2024

Disaster Number	Address	Parcel Number	Closing Date
DR-912	W7528 Blackhawk Is. Road, Fort Atkinson	028-0513-1342-010	9/18/1995
DR-912	W7352 Blackhawk Is. Road, Fort Atkinson	028-0513-1314-005 & 021	6/10/1996
DR-912	W7622 & W7624 Blackhawk Island Rd, Fort Atkinson	028-0513-1331-002 & 015	2/27/1996
DR-912	W7191 Blackhawk Is. Road, Fort Atkinson	016-0514-1824-008	9/18/1995
DR-912	W6897 Blackhawk Island Road, Fort Atkinson	016-0514-1811-015	4/18/1996
DR-912	W7730 Blackhawk Island Road, Fort Atkinson	028-0513-1333-013	9/18/1995
DR-912	W7264 Blackhawk Island Road, Fort Atkinson	016-0514-1823-010	9/12/1997
DR-912	W7688 Blackhawk Island Road, Fort Atkinson	028-0513-1333-002	11/16/1995
FMA	W7616 Blackhawk Is. Road, Fort Atkinson	028-0513-1331-013	2/12/1999
DR-994	W7091 Blackhawk Is. Road, Fort Atkinson	016-0514-1813-022	8/20/1998
DR-994	W7366 Blackhawk Is. Road, Fort Atkinson	028-0513-1314-001 & 002	6/7/1999
DR-994 & FMA	W7126 Blackhawk Is. Road, Fort Atkinson	016-0514-1824-004	4/5/1999
DR-994	W7324 Blackhawk Is. Road, Fort Atkinson	028-0513-1314-010	9/8/1998
DR-994	W7664 Blackhawk Is. Road, Fort Atkinson	028-0513-1332-002	12/17/1997
DR-994	W7114 Blackhawk Is. Road, Fort Atkinson	016-0514-1824-001	3/26/1999
DR-1332	W7521 Blackhawk Is. Road, Fort Atkinson	028-0513-1342-009	11/24/2003
DR-1332	W7119 Blackhawk Is. Road, Fort Atkinson	016-0514-1824-000	11/28/2005
DR-1369	W7084 Blackhawk Island Road, Ft. Atkinson	016-0514-1813-020	8/3/2004
DR-1369	W7143 Blackhawk Is. Road, Fort Atkinson	Structure only purchased.	Unavailable
DR-1369	W7689 Lamp Road, Fort Atkinson	028-0513-1233-007	3/10/2008
DR-1369	W7139 Blackhawk Is. Road, Fort Atkinson	Structure only purchased.	Unavailable
DR-1369	W7679 Lamp Road, Fort Atkinson	028-0513-1233-010	10/2/2003
DR-1768	W7177 Blackhawk Island Road, Fort Atkinson	016-0514-1824-013	1/4/2012
DR-1768	W4472 River View Road, Watertown	032-0815-1723-012	12/15/2009
DR-1768	N 5869 Marobehl Lane, Johnson Creek	002-0714-2341-001	12/18/2009
DR-1768	W7783 Lamp Road, Fort Atkinson	028-0513-1141-023	5/20/2010
DR-1768	W7118 Blackhawk Island Road, Fort Atkinson	016-0514-1824-002	12/23/2009
DR-1768	N7635 CTH F, Ixonia	012-0816-3422-004	9/12/2010
DR-1768	N1816 Lamp Road, Town of Sumner	028-0513-1141-021	3/19/2010
DR-1768	1852 N. Shore Road, Fort Atkinson	028-0513-1141-013	1/11/2011
DR-1768	N1894 North Shore Road, Fort Atkinson	028-0513-1141-004	12/18/2009
DR-1768	W7836 Willow Road, Fort Atkinson	028-0513-1142-052	4/19/2011
DR-1768	W7724 Lamp Road, Fort Atkinson	028-0513-1144-020	12/1/2010
DR-1768	N355 Oxbow Bend, Milton	016-0513-3413-023	1/18/2011
DR-1768	W6578 STH 106, Fort Atkinson	016-0514-0541-003	5/20/2010
DR-1768	N345 Oxbow Bend, Town of Koshkonong	016-0513-3413-025 & 017	12/28/2010
DR-1768	W7714 Blackhawk Island Road, Fort Atkinson	028-0513-1333-009	12/20/2010
DR-1768	7052 Blackhawk Island Road, Fort Atkinson	016-514-1813-007	1/13/2010
DR-1768	W7702 Lamp Road, Fort Atkinson	028-0513-1233-003	12/11/2012
DR-1768	W7253 Blackhawk Island Road, Fort Atkinson	016-0514-1823-006	5/16/2011

Disaster Number	Address	Parcel Number	Closing Date
DR-1768	W7219 Blackhawk Island Road, Fort Atkinson	016-0514-1824-006	7/30/2010
DR-1768	W7632 Blackhawk Island Road, Ft. Atkinson	028-0513-1331-016	10/11/2011
DR-1768	W7828 Willow Road, Fort Atkinson	028-0513-1142-051	7/15/2010
DR-1768	W7704 Lamp Road, Town of Sumner	028-0513-1233-001 & 1144-024	7/15/2010
DR-1768	W7710 Lamp Road, Town of Sumner	028-0513-1144-025	11/3/2010
DR-1768	W7740 Blackhawk Island Road, Fort Atkinson	028-0513-1333-015	12/3/2010
DR-1768	W7734 Blackhawk Island Road, Fort Atkinson	028-0513-1333-014	12/3/2010
DR-1768	W7706 Lamp Road, Town of Sumner	028-0513-1144-027	12/13/2010
DR-1768	W2545 Rock River Paradise, Watertown	032-0815-2411-016	3/28/2011
DR-1768	W7706 Blackhawk Island Road, Fort Atkinson	028-0513-1333-007	5/25/2011
DR-1768	W7668 Lamp Road, Town of Sumner	028-0513-1233-014	10/1/2010
DR-1768	W7843 Willow Road, Town of Sumner	028-0513-1142-030	12/23/2009
DR-1768	W7085 Blackhawk Island Road, Fort Atkinson	016-0514-1813-021	1/4/2011
DR-1768	W7604 Blackhawk Island Road, Fort Atkinson	028-0513-1331-011	4/19/2011
DR-1768	W7528 Blackhawk Island Road, Fort Atkinson	028-0513-1331-018	7/30/2010
DR-1768	W6952 Blackhawk Island Road, Fort Atkinson	016-0514-1811-008	7/30/2010
DR-1768	W7185 Blackhawk Island Road, Fort Atkinson	016-0514-1824-009	9/14/2010
DR-1768	7738 Lamp Road, Fort Atkinson	028-0513-1144-015	12/7/2010
DR-1768	N2090 Vets Lane, Fort Atkinson	016-0514-0821-003	8/29/2013
DR-1768	2098 Vets Lane, Fort Atkinson	016-0514-0821-001	7/15/2010
DR-1768	W7227 Blackhawk Island Road, Fort Atkinson	016-0514-1823-001	12/21/2011
DR-1768	W2527 Rock River Paradise, Watertown	032-0815-2411-013	10/18/2011
DR-1768	W7332 Blackhawk Island Road, Fort Atkinson	028-0513-1314-008	12/21/2011
DR-1768	N2080 Vets Lane, Fort Atkinson	016-0514-0821-004	7/15/2010
DR-1768	N1880 North Shore Road, Town of Sumner	028-0513-1141-007	1/20/2010
FMA 05	W6984 Blackhawk Island Road, Ft Atkinson	016-0514-1811-003	8/31/2006
FMA 14	W6998 Blackhawk Island Road	016-0514-1811-001	7/29/2015
DR-1933	W7362 Blackhawk Island Road, Fort Atkinson	028-0513-1314-003	4/29/2014
DR-1933	W7610 Blackhawk Island Road, Fort Atkinson	028-0513-1331-012	3/21/2017
DR-1933	W7676 Blackhawk Island Road, Fort Atkinson	028-0513-1332-005	7/16/2014
DR-1933	N7631 County Highway F, Ixonia	012-0816-3422-003	5/30/2014
DR-1933	W7714 Lamp Road, Fort Atkinson	028-0513-1144-023	8/4/2013
DR-1933	W6556 State Highway 106, Fort Atkinson	016-0514-0541-002	6/1/2015
DR-1933	W6544 State Highway 106, Fort Atkinson	016-0514-0541-001	11/26/2014
DR-1933	W7269 Blackhawk Island Road, Fort Atkinson	016-0514-1823-011	5/16/2017
DR-1933	W7059 Blackhawk Island Road, Fort Atkinson	016-0514-1813-011	3/7/2017
DR-1933	W7658 Blackhawk Island Road, Fort Atkinson	028-0513-1332-001	4/28/2014
DR-1933	W7672 Blackhawk Island Road, Fort Atkinson	028-0513-1332-004	4/28/2014
DR-1933	W7796 Lamp Road, Fort Atkinson	028-0513-1141-017	1/16/2015
DR-1933	W7320 Blackhawk Island Road, Fort Atkinson	028-0513-1314-011	4/28/2014
DR-1933	W7071/7079 Blackhawk Island Road, Fort Atkinson	016-0514-1813-015 & 019	8/7/2013
DR-1933	W7511 Blackhawk Island Road, Fort Atkinson	028-0513-1342-007	3/21/2017
DR-1933	W7718 Blackhawk Island Road, Fort Atkinson	028-0513-1333-010	5/7/2014
DR-1933	W7722 Blackhawk Island Road, Fort Atkinson	028-0513-1333-011	4/26/2017
DR- 4383.08 / DNR MFC S	W7578 Blackhawk Island Road, Fort Atkinson	028-0513-1331-006	7/2/2021

Disaster Number	Address	Parcel Number	Closing Date
DR- 4383.08 / DNR MFC K	W7056 Blackhawk Island Road, Fort Atkinson	016-0514-1813-010	7/23/2021
DR- 4383.08 / DNR Stewardship	N2290 Rock River Road, Fort Atkinson	016-0514-0313-011	3/1/2022
DR- 4383.08 / DNR MFC K	W7291 Blackhawk Island Road, Fort Atkinson	016-0514-1823-014	1/6/2022
DR- 4383.08	N1890 North Shore Road, Fort Atkinson	028-0513-1141-006	7/20/2021
DR- 4383.08 / DNR MFC S	W7726 Blackhawk Island Road, Fort Atkinson	028-0513-1333-012	7/20/2021
DR- 4383.09 / DNR Stewardship	W6526 State Highway 106, Fort Atkinson	016-0514-0541-000	9/2/2021
DR- 4383.09 / DNR MFC S	W7596 Blackhawk Island Road, Fort Atkinson	028-0513-1331-010	7/23/2021
DR- 4383.09	N1850 North Shore Road, Fort Atkinson	028-0513-1141-014	10/26/2021
DR-4383.09 / DNR MFC S	W7696 Blackhawk Island Road, Fort Atkinson	028-0513-1333-004	10/25/2021
PDM 19 / DNR MFC S	W7495 Blackhawk Island Road, Fort Atkinson	028-0513-1342-003	11/1/2021
PDM 19 / DNR MFC K	W7265 Blackhawk Island Road, Fort Atkinson	016-0514-1823-007	9/21/2021
PDM 19 / DNR MFC K	W7032 Blackhawk Island Road, Fort Atkinson	016-0514-1813-004	6/24/2021
PDM 19	N397 Oxbow Bend Road, Milton	016-0513-3412-023	10/1/2021
PDM 19	W7744 Lamp Road, Fort Atkinson	028-0513-1144-012	8/24/2021

Key

DNR Stewardship Grant - Urban Green Space 15-Apr-20 to 13-Dec-22

MFC S - Municipal Flood Control Grant - Town of Sumner

MFC K - Municipal Flood Control Grant - Town of Koshkonong

FEDERAL AND STATE FUNDING FOR MITIGATION ACTIVITIES: 1991–2024

Year	Recipient	Amount	Funding Source	Funded Activities
1991	Jefferson County	\$108,684.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-912-DR	Acquisition of 3 residential structures
1993	Jefferson County	\$458,635.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-994-DR	Acquisition of 6 structures
1993	Jefferson County	\$509,000.00	Community Development Block Grant (CDBG)	Land acquisition – Flood Mitigation Program
1993	Jefferson County	\$611,900.00	Urban Rivers Grant Program through Wisconsin Department of Natural Resources	Land acquisition – Flood Mitigation Program
1998	Jefferson County	\$115,332.00	Flood Mitigation Assistance	Acquisition of 2 residential structures
1998	Jefferson County	\$15,239.00	Flood Mitigation Assistance (FMA) program	Prepare a floodplain hazard mitigation plan
2000	Jefferson County	\$226,378.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-1322-DR-WI	Acquisition of 2 residential structures
2001	Jefferson County	\$646,232.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-1369-DR-WI	Acquisition of 5 residential structures
2000	Jefferson County	\$975,000.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-1332-DR-WI	Land acquisition – Flood Mitigation Program
2002	Jefferson County	\$344,582.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-1369-DR-WI	Land acquisition – Flood Mitigation Program
2004	Jefferson County	\$300,000.00	Hazard Mitigation Grant Program through Presidential declaration FEMA-1526-DR-WI	Land acquisition
2005	Jefferson County	\$143,349.00	Flood Mitigation Assistance WI-2005-029	Acquisition of 1 residential structure
2005	Jefferson County	\$58,900.00	Flood Mitigation Assistance (FMA) program	Prepare a flood mitigation plan
2005/06	Jefferson County	\$147,200.00	Flood Mitigation Assistance (FMA) program	Land acquisition – Flood Mitigation Program
2008	Jefferson County	\$8,774,643.00	Hazard Mitigation Grant Program FEMA-1768-DR-WI	Land acquisition
2008	City of Jefferson	\$365,565.00	Hazard Mitigation Grant Program FEMA-1768-DR-WI	Acquisition of 3 SD residential structures
2008	Jefferson County	\$7,020,798.00	Hazard Mitigation Grant Program FEMA-1768-DR-WI	Acquisition of 43 residential structures (35 SD)
2008	Jefferson County	\$2,000,000.00	Community Development Block Grant	Land acquisition
2008	Jefferson County	\$247,569.00	Presidential Disaster Declaration (FEMA-1369-DR-WR)	Land Acquisition
2008	Jefferson County	\$3,066.00	Pre-Disaster Mitigation (PDM) Competitive Grants	Land Acquisition
2008	Jefferson County	\$257,751.00	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2008	Jefferson County	\$34,502.00	Presidential Disaster Declaration (FEMA-3285-EM)	Land Acquisition
2009	Jefferson County	\$581,792.00	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2010	Jefferson County	\$3,665,552.79	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2010	Jefferson County	\$20,740.00	DR-1933	HMP update
2010	Jefferson County	\$3,318,400.00	Hazard Mitigation Grant Program FEMA-1933-DR-WI	Land acquisition
2010	Jefferson County	\$20,801,360.00	Hazard Mitigation Grant Program FEMA-1933-DR-WI	Acquisition of 18 residential structures
2011	Jefferson County	\$1,549,566.86	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2012	Jefferson County	\$124,520.57	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2012	Jefferson County	\$13,273.75	Hazard Mitigation Grant (FEMA-1933-WI)	Land Acquisition
2013	Jefferson County	\$442,306.47	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition

Year	Recipient	Amount	Funding Source	Funded Activities
2013	Jefferson County	\$3,920.92	Hazard Mitigation Grant (FEMA-1933-WI)	Land Acquisition
2014	Jefferson County	\$12,994.27	Hazard Mitigation Grant (FEMA-1768-WI)	Land Acquisition
2014	Jefferson County	\$214,389.69	Hazard Mitigation Grant (FEMA-1933-WI)	Land Acquisition
2014	Jefferson County	\$233,457.00	Flood Mitigation Assistance Program	Acquisition of 1 residential structure
2015	Jefferson County	\$284,026.06	Hazard Mitigation Grant (FEMA-1933-WI)	Land Acquisition
2015	Jefferson County	\$233,456.74	Hazard Mitigation Grant (FMA-PJ-05-WI-2014-001)	Land Acquisition
2016	Jefferson County	\$1,859.38	Hazard Mitigation Grant (FEMA-1933-WI)	Land Acquisition
2016	Jefferson County	\$515.61	Hazard Mitigation Grant (FMA-PJ-05-WI-2014-001)	Land Acquisition
2016	Jefferson County	\$25,200.00	PDM	Update HMP
2016-17	City of Waterloo	\$21,780.00	Municipal Flood Control Grant Program MFC-28290-16	Shore restoration
2016-17	City of Jefferson	\$349,250.00	Municipal Flood Control Grant Program MFC-28014-16	Erosion control
2017	Jefferson County	\$977,641.50	Hazard Mitigation Program Grant (FEMA-1933-WI)	Land Acquisition
2018	Jefferson County	\$764,033.00	DR-4383	Acquisition of 5 residential structures
2018	Jefferson County	\$1,060,841.00	DR-4383	Acquisition of 5 residential structures, 1 commercial structure
2019	Jefferson County	\$2,040,795	Pre-disaster Mitigation Grant	Acquisition of 7 properties
2020	Jefferson County	\$29,550.00	DNR Stewardship Grant CF UFS3201216	Land Acquisition
2020-21	Town of Koshkonong	\$227,680.84	Municipal Flood Control Grant Program MFC-71255-20	Acquisition and demolition
2020-21	Town of Sumner	\$192,090.76	Municipal Flood Control Grant Program MFC-70507-20	
2021	Jefferson County	\$31,362.06	DNR Stewardship Grant CF UFS3201216	Land Acquisition
2021	Jefferson County	\$578,334.96	Hazard Mitigation Grant 4383-08-R (FEMA-4383-08-DR-WI)	Land Acquisition
2021	Jefferson County	\$500,744.13	Hazard Mitigation Grant 4383-09-R (FEMA-4383-09-DR-WI)	Land Acquisition
2021	Jefferson County	\$85,346.64	Municipal Flood Control - Koshkonong (MFC-71255-20)	Land Acquisition
2021	Jefferson County	\$138,644.19	Municipal Flood Control - Sumner (MFC-70507-20)	Land Acquisition
2021	Jefferson County	\$550,504.37	Pre-disaster Mitigation Grant (PDMC-PJ-05-WI-2019-006)	Land Acquisition
2021	Jefferson County	\$1,641,105.95	Hazard Mitigation Program Grant (FEMA-4383-DR_WI)	Land Acquisition
2021	Jefferson County	\$1,530,596.25	Pre-disaster Mitigation Grant (PDM) 2019 PDMC-PJ-05-WI-2019-006	Land Acquisition
2022	Jefferson County	\$109,348.07	DNR Stewardship Grant CF UFS3201216	Land Acquisition
2022	Jefferson County	\$573,161.73	Hazard Mitigation Grant 4383-08-R (FEMA-4383-08-DR-WI)	Land Acquisition
2022	Jefferson County	\$56,412.99	Hazard Mitigation Grant 4383-09-R (FEMA-4383-09-DR-WI)	Land Acquisition
2022	Jefferson County	\$44,489.26	Municipal Flood Control - Koshkonong (MFC-71255-20)	Land Acquisition
2022	Jefferson County	\$4,045.57	Municipal Flood Control - Sumner (MFC-70507-20)	Land Acquisition
2022	Jefferson County	\$41,910.22	Pre-disaster Mitigation Grant (PDMC-PJ-05-WI-2019-006)	Land Acquisition
2023	Jefferson County	\$2,153.00	Hazard Mitigation Grant 4383-08-R (FEMA-4383-08-DR-WI)	Land Acquisition
Total		\$32,681,077.00		

Source: Jefferson County Emergency Management and Wisconsin Emergency Management

