

2022
2027

IOWA COUNTY

HAZARD MITIGATION PLAN



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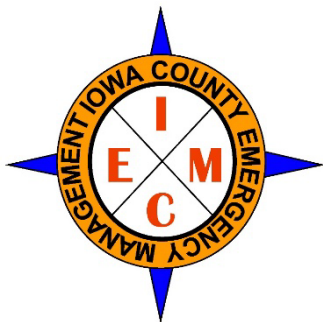
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This hazard mitigation plan is owned by Iowa County Emergency Management.
 Plan support was provided by Southwestern Wisconsin Regional Planning Commission.

Executive Summary

What is Hazard Mitigation Planning?

A hazard is a situation that poses a threat to the life, health, prosperity, or the environment of a community. Hazard Mitigation is any sustained action taken to eliminate or reduce the long-term risk to human life and property from natural and technological hazards. The objective of this plan is to explore which hazards pose the greatest risk to Iowa County and recommend action to mitigate future risk.

According to the Disaster Mitigation Act of 2000, local governments must prepare, adopt, and update a Hazard Mitigation Plan in order to be eligible for post-disaster FEMA assistance. This plan works to assess risk, decrease impact, and prevent future damages. The organization and contents of this plan are driven by the requirements of the FEMA and the input of local residents.

Iowa County's Planning Process

The county prepared its original Hazard Mitigation Plan in 2012 and adopted an update in 2017. This plan is an update of the 2017 plan, incorporating all cities, villages, and towns of Iowa County. Iowa County Emergency Management (ICEM) and Southwestern Wisconsin Regional Planning Commission (SWWRPC) guided the development of this plan through existing knowledge of the communities and local input. Local input was gained through three public meetings and two stakeholder meetings. Chapter 1 outlines the methods, participants, and practices used to develop the plan.

Iowa County Hazard Mitigation Goals

The following goals describe the desired long-term outcomes from hazard mitigation planning:

- Protect human lives and ensure environmental health, both today and for future generations, and empower people to protect themselves.
- Protect utilities, infrastructure, and critical facilities, including police, fire, and EMS stations.
- Build resilience to long-term risks through collaboration and proactive planning and action.
- Maximize the use of state and federal funds and promote county-wide planning that invests in reduction of future risk, and which avoids transferring risk from one community to another.

Action Recommendation Development

Chapters 5 and 6 outline local and county-wide action recommendations. These actions were developed by the planning team with input from stakeholders, local officials, and local residents. The actions intend to reduce or avoid long-term vulnerabilities to the people, economy, infrastructure, and environment of Iowa County. Each action was developed with a brief description of priority, expense, responsibility, and timeline to accomplish.

Approval and Implementation

The completed plan was sent to Wisconsin Emergency Management (WEM) on August 22, 2022. Following approval by WEM and FEMA, the plan was adopted at the county level. After the county adopted the plan, cities and villages within the county had one year to adopt the plan. Adoption of this plan provides Iowa County a framework of actions to prioritize hazard mitigation. Using the plan, the county and local communities will coordinate to undertake the identified actions.

Chapter 1: Plan Goals and Process

Purpose of the Plan

Every natural disaster takes a toll on the social, environmental, and economic well-being of local communities and residents. Many natural disasters have occurred in Iowa County, including heavy snows in 1973, 1990, 2007-2008; droughts in 1976 and 1988; a crippling ice storm in 1976; heavy rains and flooding conditions in 1978, 1990, 1993, 2000, 2007, 2008, and 2017; the COVID-19 pandemic beginning in 2020; and one of the worst tornadoes in Wisconsin's history, experienced by the Barneveld and Brigham communities in 1984. This plan works to address the many hazards Iowa County is susceptible to and mitigate the potential damages from those hazards.

Hazard Mitigation Goals

The following goals describe the desired long-term outcomes from hazard mitigation planning:

- Protect human lives and ensure environmental health, both today and for future generations, and empower people to protect themselves.
- Protect utilities, infrastructure, and critical facilities, including police, fire, and EMS stations.
- Build resilience to long-term risks through collaboration and proactive planning and action.
- Maximize the use of state and federal funds and promote county-wide planning that invests in reduction of future risk, and which avoids transferring risk from one community to another.

Disaster Mitigation Act of 2000

The development and update of the Iowa County Hazard Mitigation Plan is a response to the passage of the Disaster Mitigation Act of 2000 (DMA), which was signed into law on October 30, 2000, with the **goal of reducing losses and future public and private expenditures and improving response and recovery from disasters**. This act, Public Law 106-390, amended the Robert T. Stafford Relief and Emergency Assistance Act. The following is a summary of the portions of the DMA that relate to local governments:

- Local governments and tribal organizations must prepare a multi-hazard mitigation plan in order to be eligible for funding from the FEMA Pre-Disaster Mitigation Assistance Program and Hazard Mitigation Program.
- Natural hazards need to be addressed in a risk assessment and vulnerability analysis sections of the multi-hazard mitigation plan. Assessment of human-caused hazards such as hazardous waste spills is encouraged but not required.
- Authorizes up to seven percent of Hazard Mitigation Grant Program funds available to a state following a federal disaster declaration to be used for development of state, local, and tribal organization multi-hazard mitigation plans.
- Without an up-to-date multi-hazard mitigation plan, local governments and tribal organizations cannot obtain funds from the Pre-Disaster Mitigation Grant Program.

Local Context

In order to comply with Section 322 of the Disaster Mitigation Act of 2000 and qualify for future hazard mitigation grant awards, Iowa County must develop a county-wide hazard mitigation plan. ICEM received a Building Resilient Infrastructure and Communities (BRIC) program planning grant from WEM

in February of 2022. In March of 2022, ICEM partnered with SWWRPC to complete the update to the Iowa County Hazard Mitigation Plan.

Per FEMA requirements, this hazard mitigation plan includes a description of the following:

Planning Process: A general description of the purpose of the plan and what is included in the plan. This section includes an identification of the county and municipalities included in the plan, a description of plan development, public involvement and input process, and coordination with other plans.

Planning Area: A description of the geography of the planning area. This section documents the demographic and economic characteristics of the planning area.

Risk Assessment: Includes a hazard identification and a risk/vulnerability assessment. Each of the hazards affecting the planning area are addressed in the risk assessment. The risk assessment documents the history and impact of the hazard's occurrence in the planning area, the vulnerability of the planning area to each risk, and the probability and potential cost associated with future occurrences.

Mitigation Strategy: Incorporates the mitigation goals, actions, and projects into the local communities and county-wide. Strategies identify how the mitigation goals identified will be prioritized, implemented, and administered by the local jurisdictions in Iowa County.

Plan Maintenance Process and Adoption: Describes the method and schedule that will be used to monitor, evaluate, review progress, make revisions and update the Mitigation Plan within a five-year cycle and how public participation will be sought in this plan maintenance process. The plan approval process describes and documents how the plan was formally adopted by the governing bodies within the planning area.

Work on the Iowa County Multi-Hazard Mitigation Plan began in March 2022. FEMA and WEM determined the plan met requirements on October 12th, 2022. The plan was adopted by the Iowa County Board on November 15th, 2022.

Planning Process

Planning Team

The first step in the planning process was to identify and organize a planning team made up of professional staff and county officials with expertise related to effective planning and hazard mitigation. See Table 1 for a list of planning team members and their organizational affiliation. Planning team members met throughout the planning process to review the previous plan, prepare and review outreach efforts, and work on developing strategies for the updated 2022 Plan.

Table 1 - Hazard Mitigation Planning Team	
Name	Title
Keith Hurlbert	Director, ICEM
Amanda Gardener	Assistant, ICEM
Troy Maggied	Executive Director, SWWRPC
Ellen Tyler	Community Resiliency Planner, SWWRPC
Matt Honer	Senior Planner, SWWRPC

Outreach

The planning team prioritized the need for community outreach in creating a successful hazard mitigation plan. In order to create plans that result in useful action, a planning process should involve both those with knowledge about needed actions, as well as those who have agency to implement those actions. To accomplish this, the planning team convened a stakeholder group for two workshop sessions and gathered input from local representatives and residents during three public meetings, as described in the following paragraphs. See Appendix A for dates, attendance, and content of the stakeholder group and public meetings.

Stakeholder Group

A stakeholder group was convened by the planning team to gather an informed perspective on the many facets of community life in Iowa County. This group was comprised of interdisciplinary community leaders with a variety of knowledge domains, ranging from school district superintendents to local non-profit leaders. See Table 2 for a list of stakeholder group members and their organizational affiliation. Members of this group met for two workshop sessions, once before and once after the public meetings, and they each attended one of the public meetings.

Table 2 - Hazard Mitigation Stakeholder Group	
Name	Organization
Ben Gruber	WI Dept of Natural Resources
Craig Hardy	Iowa County Highway Department
David Vobora	Southwestern Wisconsin Community Action Program
Debbie Siegenthaler	Iowa County Health Department
Greg Lee	City of Dodgeville
Jeff Halverson	Dodgeville Fire Department
Katie Abbott	Iowa County Land Conservation Department
Kurt Hoeper	Upland Hills Health
Mitch Wainwright	Mineral Point Unified School District
Patricia Johnson	Alliant Energy
Paul A. Weber	Dodgeville School District
Paul Dietmann	Compeer Financial
Scott Godfrey	Iowa County Planning & Development
Stan McGraw	Retired, Previously Emergency Planning Committee
Steve Braun	Grant County Emergency Management
Thomas C. Slaney	Iowa County Social Services
Troy Moris	Health Department

Municipal Representatives

Each municipality participating in the plan was required to send at least one representative to a hazard mitigation public meeting. At the public meetings, representatives completed an evaluation of the strategies identified for their community in the 2017 Iowa County Hazard Mitigation Plan (see Appendix C for completed evaluations). Next, representatives moved through five stations where they learned about and provided input related to the following topics: previous hazard events in the county, future hazard risk, identification of local assets and risks based on community-specific maps, vulnerable populations, flooding, tornadoes and severe storms, strategies for action, and climate change.

Table 3 – Participating Jurisdictions and Community Representatives		
Community	Name, Title	Meeting Attended
Town of Arena	Andrea Joo, Supervisor	June 23 rd , Wyoming
Village of Arena	Kate Reimann, President	June 23 rd , Wyoming
Village of Avoca	Susie Ziebarth, Clerk/Treasurer	June 23 rd , Wyoming
Village of Avoca	Liz Wilkinson, Deputy Clerk	June 23 rd , Wyoming
Village of Barneveld	Jeremy Oyen, Police Chief	July 7 th , Dodgeville
Town of Brigham	Jerry Davis, Supervisor	June 23 rd , Wyoming
Town of Clyde	Rebecca Sadler, Supervisor	July 7 th , Dodgeville
Village of Cobb	Lisa Riley, Clerk/Treasurer	June 30 th , Mineral Point
Village of Cobb	Arnold Fritsch, Trustee	June 30 th , Mineral Point
City of Dodgeville	Lauree Aulik, Clerk/Treasurer	July 7 th , Dodgeville
Town of Dodgeville	Sara Olson, Clerk/Treasurer	July 7 th , Dodgeville
Town of Dodgeville	Peter Vanderloo, Supervisor	July 7 th , Dodgeville
Town of Dodgeville	Pam Johnson-Loy, Supervisor	July 7 th , Dodgeville
Town of Eden	Andrew Bishop, Clerk	June 30 th , Mineral Point
Town of Highland	Lois Nankee, Clerk	July 7 th , Dodgeville
Village of Highland	Tom Cody, Trustee	July 7 th , Dodgeville
Village of Hollandale	Holly DeWitt, Clerk/Treasurer	June 30 th , Mineral Point
Village of Hollandale	Bob Hittesdorf, Trustee	June 30 th , Mineral Point
Town of Linden	Jeff Lindner, Supervisor	July 7 th , Dodgeville
Village of Linden	Robert Spurley, President	July 7 th , Dodgeville
Town of Mifflin	Tammy Menning, Treasurer	June 30 th , Mineral Point
City of Mineral Point	Christy Skelding, Clerk/Treasurer	June 30 th , Mineral Point
Town of Mineral Point	Debi Heisner, Clerk/Treasurer	June 30 th , Mineral Point
Town of Moscow	Gary Langfoss, Supervisor	June 30 th , Mineral Point
Town of Moscow	Joe Hendrickson, Chairman	June 30 th , Mineral Point
Town of Moscow	Mary Kolb, Clerk/Treasurer	June 30 th , Mineral Point
Town of Pulaski	Bill Whitmore, Supervisor	June 23 rd , Wyoming
Village of Rewey	Colleen Ingwell, Clerk/Treasurer	June 30 th , Mineral Point
Town of Ridgeway	Joe Thomas, Chairman	July 7 th , Dodgeville
Village of Ridgeway	Hailey Roessler, Clerk/Treasurer	July 7 th , Dodgeville
Village of Ridgeway	Michele Casper, President	July 7 th , Dodgeville
Village of Ridgeway	Michael Gorham, Marshal	July 7 th , Dodgeville
Town of Waldwick	Mike Doyle, Clerk	June 30 th , Mineral Point
Town of Wyoming	John Hess, Chairman	June 23 rd , Wyoming
Town of Wyoming	Richard Cates, Supervisor	June 23 rd , Wyoming

Public Outreach

In addition to the municipal representatives and stakeholder group members, the general public was invited to participate in the public meetings. Flyers for the public meetings were distributed by planning team members, stakeholder group members, and every municipal clerk in the county (Appendix A). In addition, press releases about the meetings were run in local newspapers and radio announcements were broadcasted by a local station. All attendees followed the same exercises as the municipal representatives (described above), with exception of the evaluation of previous plan strategies, which were completed only by municipal representatives. Attendance over the three public meetings of municipal representatives, stakeholder group members, and the general public totaled 71 people.

Public Comment

The plan was made available to the public via the ICEM website on August 22nd, 2022. Municipal clerks were notified of the opportunity to send proposed revisions and comments, and were encouraged to review the sections of the plan most relevant to them, at a minimum. All edit suggestions were reviewed by the planning team and incorporated into the plan as appropriate. The plan was presented for public comment and official adoption at the Iowa County Board Meeting on November 15th, 2022.

Incorporated Plans

The following is a list of references used to determine planning area characteristics, identify risk, and develop strategies for this plan.

- Wisconsin State Hazard Mitigation Plan (2021)
- State of Wisconsin Threat and Hazard Identification and Risk Assessment (2021)
- Iowa County Hazard Mitigation Plan (2017)
- Iowa County Emergency Response Plan
- Hazardous Material Strategic Plan
- Monroe County Climate Readiness and Rural Economic Opportunity Assessment – Wisconsin’s Green Fire (2022)
- Wisconsin’s Changing Climate: Impacts and Solutions for a Warmer Climate – WICCI (2021)

Current Mitigation Efforts

Assistance Programs: According to ICEM, the county coordinates state and federal disaster relief assistance to victims in affected areas. This assistance could include the Individual and Households Program, the Small Business Administration's loan programs, FEMA Public Assistance, Wisconsin Disaster Fund and various other disaster relief programs available for both presidential declared and non-presidential declared disasters.

Education and Outreach: Since the early 1990s, an annual state-wide Tornado and Severe Weather Awareness Week is practiced in March or April. Among other events, this week includes extensive public education through the media, as well as a tornado safety drill in all county facilities. Media information packets and social media posts re-emphasize and alert the public to tornado warning procedures. ICEM regularly meets with local governments to educate and inform residents about emergency response and hazard mitigation.

Emergency Response and Mutual Aid: Initial emergency response in Iowa County is the responsibility of the full-time sheriff and police agencies. However, these agencies have a limited number of personnel on duty at any given time and are spread over a wide land-area. Local community fire and EMS services are often initial responders. Emergency services, including fire and EMS manned by volunteers, are located in every area throughout the county as well as neighboring communities that provide services to areas within Iowa County. Currently, all local fire departments within Iowa County maintain a formal mutual aid agreement through the Mutual Aid Box Alarm System (MABAS), as does ICEM through the Wisconsin Statewide Mutual Aid Compact for Emergency Management (WiSMAC) agreement with surrounding county emergency management departments. ICEM also has access to incident management teams through WEM and WIDNR. Police have access to the Emergency Police Services (EPS) system through WEM.

Warning Systems: An effective warning system is the single most important method for alerting the public of severe weather hazards. In addition to the use of local radio stations and National Oceanic and Atmospheric Administration (NOAA) weather radio warnings, ICEM uses warning sirens and Emergency Mass Notification Systems to broadcast warnings. Below are more detailed explanations of each:

Local Two-Way Radio: Radio is used to link all police, fire, and EMS agencies within the county to one another and the Sheriff's Communications Center. The communications center provided by the county is the core to the county's public safety two-way communications and paging system on multiple channels.

The county-hosted two-way radio communication system links all highway vehicles and is available to interested towns and villages, while Iowa County cities also have individual two-way radio systems for local use.

National Oceanic and Atmospheric Administration: NOAA Weather Radio continuously broadcasts National Weather Service (NWS) forecasts, warnings, and other critical weather information. NOAA Weather Radio also provides direct warnings to the public for natural, man-made, or technological hazards, and it is the primary trigger for activating the national Emergency Alert System on commercial radio, television, and cable systems.

Mass Notification: Iowa County uses a mass notification. It is free of charge and can send email, voice, and/or text messaging emergency notifications. This public safety alert system provides notices regarding weather safety, road safety, or other notices pertaining to keeping the public informed and safe.

Sirens: Warning sirens are located in every city and village in Iowa County. Some have more than one. Significant development in townships and unincorporated areas means that much of the recent development in Iowa County is being done outside of the reach of warning sirens. Warning sirens are tested and maintained by individual municipalities.

Integrated Public Alert & Warning System (IPAWS): This system is a federal text alerting system that uses geo fencing of cell towers to determine who receives messages. There is no subscription for this service as all cellular phones are programmed to receive the alerts if within the geo fence area. This system is also used to broadcast presidential messages.

National Flood Insurance Program Participation (NFIP): Table 4 lists the jurisdictions that participate in NFIP. Participating in this program requires the jurisdiction to follow state and federal floodplain zoning requirements and undertake substantial damage analysis following natural hazard events. Communities not participating in NFIP do not have established floodplains within their jurisdiction. Townships participate through the county.

Table 4 - National Flood Insurance Program Participating Jurisdictions	
Community	Participation
Iowa County	Yes
City of Dodgeville	Yes
City of Mineral Point	Yes
Village of Arena	Yes
Village of Avoca	Yes
Village of Barneveld	No*
Village of Cobb	Yes
Village of Highland	No*
Village of Hollandale	Yes
Village of Linden	Yes
Village of Rewey	No*
Village of Ridgeway	Yes

Source: FEMA Community Status Book Report for Wisconsin, 7/11/2022

*Reason for non-participation: Municipality has no land or structures in the floodplain

Existing Policies, Procedures, and Ordinances: Iowa County has a Floodplain Zoning Ordinance that regulates floodplain development throughout the townships and is administered by the county planning and zoning department. All cities and villages have their own floodplain zoning ordinances that are administered at the municipal level. Additional ordinances regarding shore land protection at the county level mitigate potential flooding risks. Iowa County and the municipalities within the county also follow the Wisconsin Uniform Dwelling Code which requires all buildings be built to coded specifications. No municipality in Iowa County is required to utilize a Municipal Storm water system permit and no municipalities currently have an ordinance or permit.

The following communities currently have Emergency Operations Plans in place to mitigate the potential effects of natural and man-made hazards:

- Town of Brigham
- Town of Moscow
- Town of Ridgeway
- Village of Arena
- Village of Avoca
- Village of Barneveld
- Village of Ridgeway
- Village of Highland
- Village of Hollandale
- City of Dodgeville

These plans identify local government official roles and responsibilities before, during, and after hazard events.

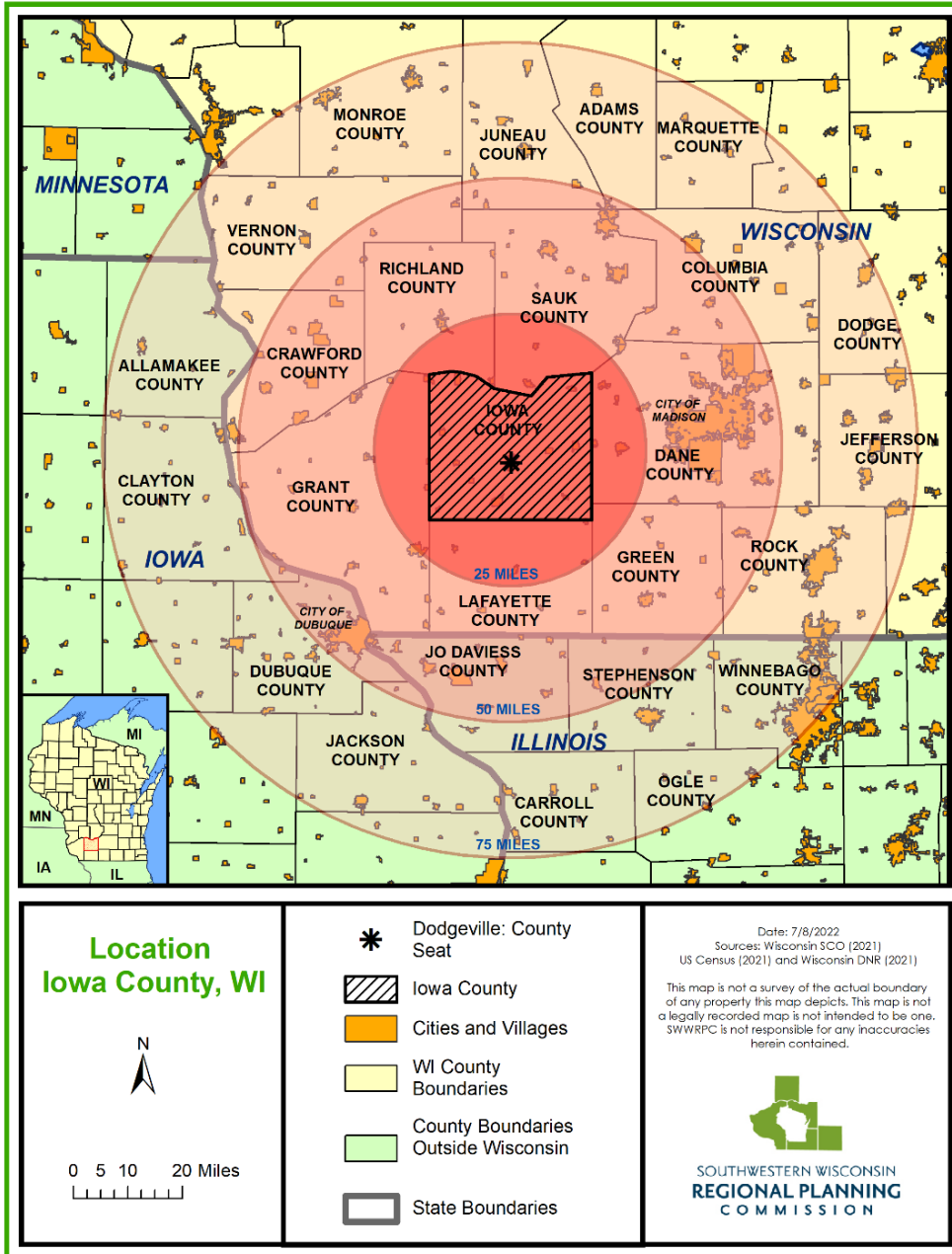
According to the Wisconsin Comprehensive Planning Law, all communities in Iowa County that wish to adopt land use regulation are required to have comprehensive plans that address issues related to the following list of elements. Within these elements, communities are able to create and implement policies, procedures, and ordinances on hazard mitigation.

1. Issues and Opportunities
2. Housing
3. Transportation
4. Utilities and Community Facilities
5. Agricultural, Natural and Cultural Resources
6. Economic Development
7. Intergovernmental Cooperation
8. Land Use
9. Implementation

Chapter 2: Planning Area

Iowa County is a rural county located in southwestern Wisconsin. It is 762.67 square miles, of which approximately five square miles are water (lakes, streams, or rivers). By land area, the county is the 35th largest in the state. It is bordered by Dane, Green, Grant, Lafayette, Richland, and Sauk Counties, and to the north, the Wisconsin River. Figure 1 shows the location of Iowa County in the context of surrounding states, counties, and large cities. The 2021 estimated population based on the 2020 census was 23,709¹.

Figure 1: Iowa County Location



¹ U.S. Census Bureau (2021). *2020 Decennial Census*. <https://data.census.gov/cedsci/>

Physical Geography

Iowa County is located in a portion of Wisconsin called the “Driftless Area” because it was not covered by glaciers during the last glaciation. Without glaciers, many hills and valleys remain intact in the area when they were eroded to the north and east of the region. The resulting topography has some of the most diverse and distinct elevation changes in the state. The highest point in Iowa County is West Blue Mound with an elevation of 1719 feet.²

The most prominent topographical feature in Iowa County is Military Ridge, a steep escarpment that divides the county between the Lower Wisconsin River Basin and the Sugar-Pecatonica and Grant-Platte River Basins. Military Ridge runs through the towns of Eden, Linden, Dodgeville, and Brigham. The northern descent into the Wisconsin River valley is steep, south of the Ridge is a long gentle slope with a gradual elevation drop of about six feet per mile.

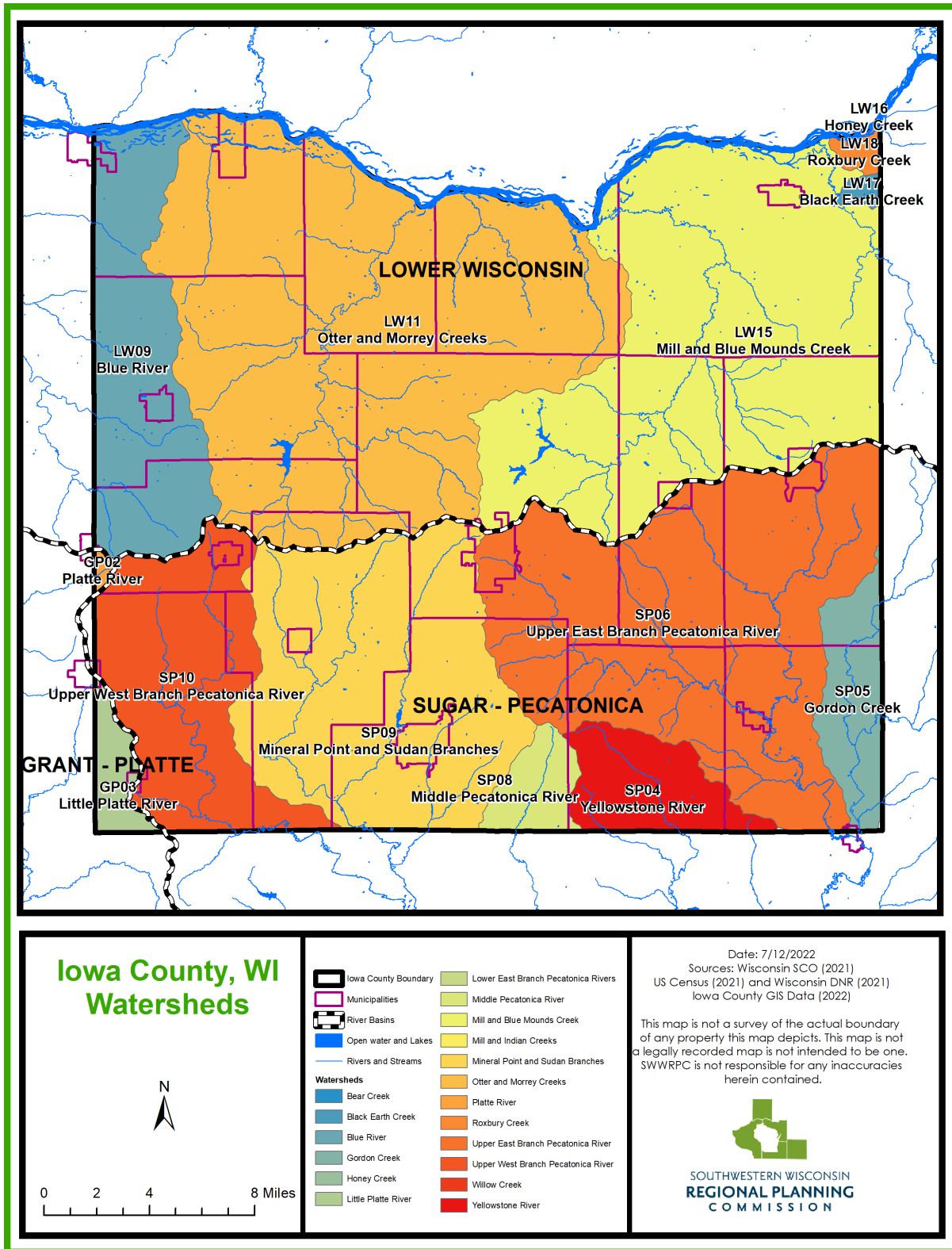
Iowa County overlaps three major river basins: The Lower Wisconsin River Basin, the Sugar-Pecatonica Basin in the South, and the Grant-Platte Basin in the southwest. These three basins are subdivided into smaller watersheds such as ones that contain Otter and Morrey Creeks, and Mill and Blue Mounds Creek. See Figure 2 for Iowa County watersheds and river basins.

There are no natural lakes in Iowa County, but there are several reservoirs including Twin Valley Lake and Cox Hollow Lake in Governor Dodge State Park, Blackhawk Lake, and Ludden Lake. A number of streams, including many cold-water trout streams, are located in Iowa County. The main waterbodies in Iowa County are the Wisconsin River in the north and the Pecatonica River branches in the south.

Iowa County north of Military Ridge is part of the Western Coulee and Ridges Ecological Landscape. Here, streams have cut deeply through the less resistant Cambrian sandstone resulting in a landscape of steep-sided valleys and rugged, more heavily forested slopes. South of the Military Ridge, the Southwest Savanna Ecological Landscape is more open, gently sloping, and underlain by more resistant limestone. The southern half of the county was mostly prairie and savanna before European settlement and through time has retained many prairie remnants and large areas of grassland to a degree not found elsewhere in Wisconsin. Today, this area is primarily in agricultural production with scattered woodlands, savannas, and remnant prairies.

² State Cartographer’s Office. *Wisconsin High Points*. <https://www.sco.wisc.edu/wisconsin/high-points/>

Figure 2: Iowa County Watersheds and River Basins



Iowa County, WI Watersheds

Iowa County Boundary	Lower East Branch Pecatonica Rivers
Municipalities	Middle Pecatonica River
River Basins	Mill and Blue Mounds Creek
Open water and Lakes	Mill and Indian Creeks
Rivers and Streams	Mineral Point and Sudan Branches

Watersheds

Bear Creek	Platte River
Black Earth Creek	Roxbury Creek
Blue River	Upper East Branch Pecatonica River
Gordon Creek	Upper West Branch Pecatonica River
Honey Creek	Willow Creek
Little Platte River	Yellowstone River

Date: 7/12/2022
Sources: Wisconsin SCO (2021)
US Census (2021) and Wisconsin DNR (2021)
Iowa County GIS Data (2022)

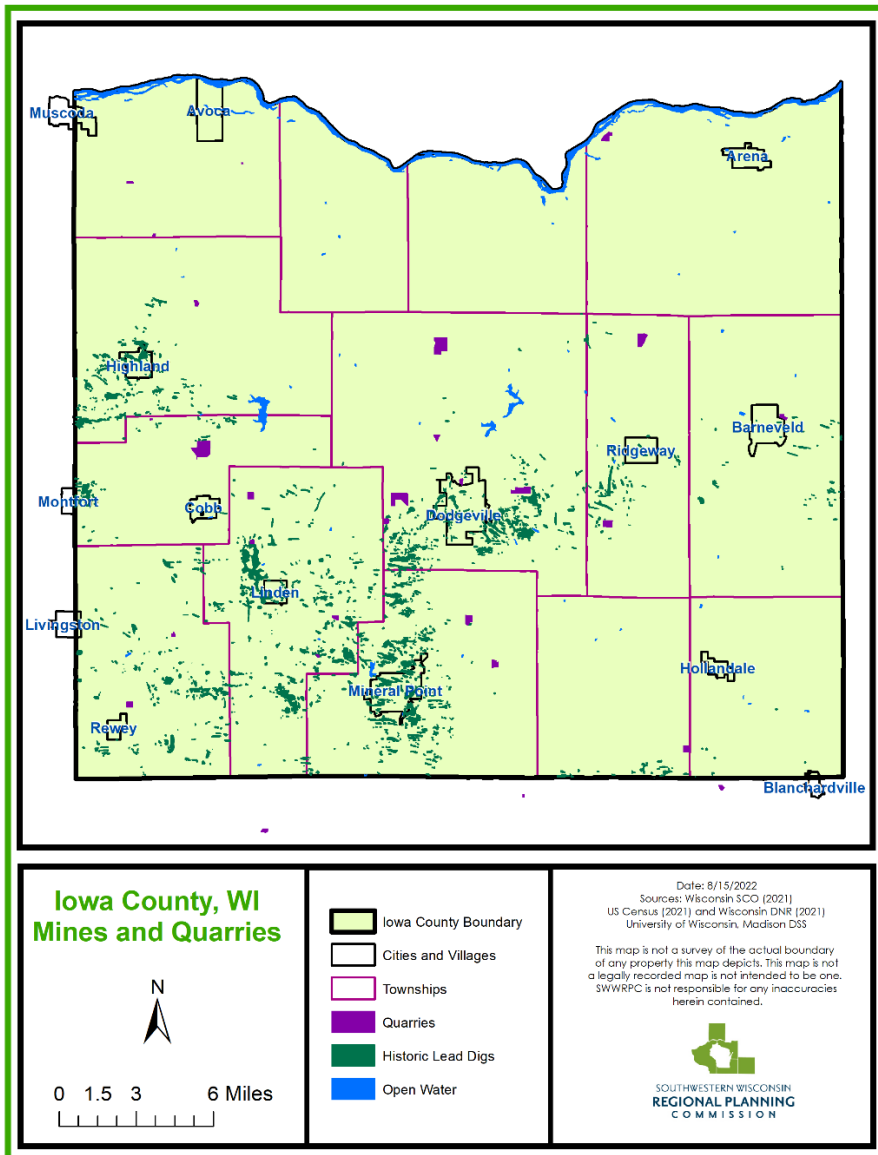
This map is not a survey of the actual boundary of any property this map depicts. This map is not a legally recorded map is not intended to be one. SWWRPC is not responsible for any inaccuracies herein contained.

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Geology

Iowa County's land surface elevations range from 630 to 1,719 feet above mean sea level. The north half of the county's bedrock is predominantly sedimentary and consists of Cambrian and Ordovician sandstone and shale or limestone. Pleistocene deposits are absent except for thin layers of loess and/or hill slope sediments on the ridge tops and valley sides, and stream sediment in valley bottoms. South of Dodgeville, the county's bedrock is predominantly Galena and Platteville dolomite. Metallic resources in the region include lead and zinc. Both metals have played an important role in the history of the county. Early settlers came to what is now Iowa County to mine lead in the Dodgeville, Mineral Point, and Barneveld areas. In the late 1820's, this area provided for 75% of the United States demand for lead. See Figure 3 for the mining areas of Iowa County. Today, Iowa County no longer mines lead or zinc. Presently, non-metallic mines actively mine sand, gravel, and limestone. Limestone is one of the most significant geological resources in the area and is used in construction and agricultural operations.

Figure 3: Iowa County Mining Areas

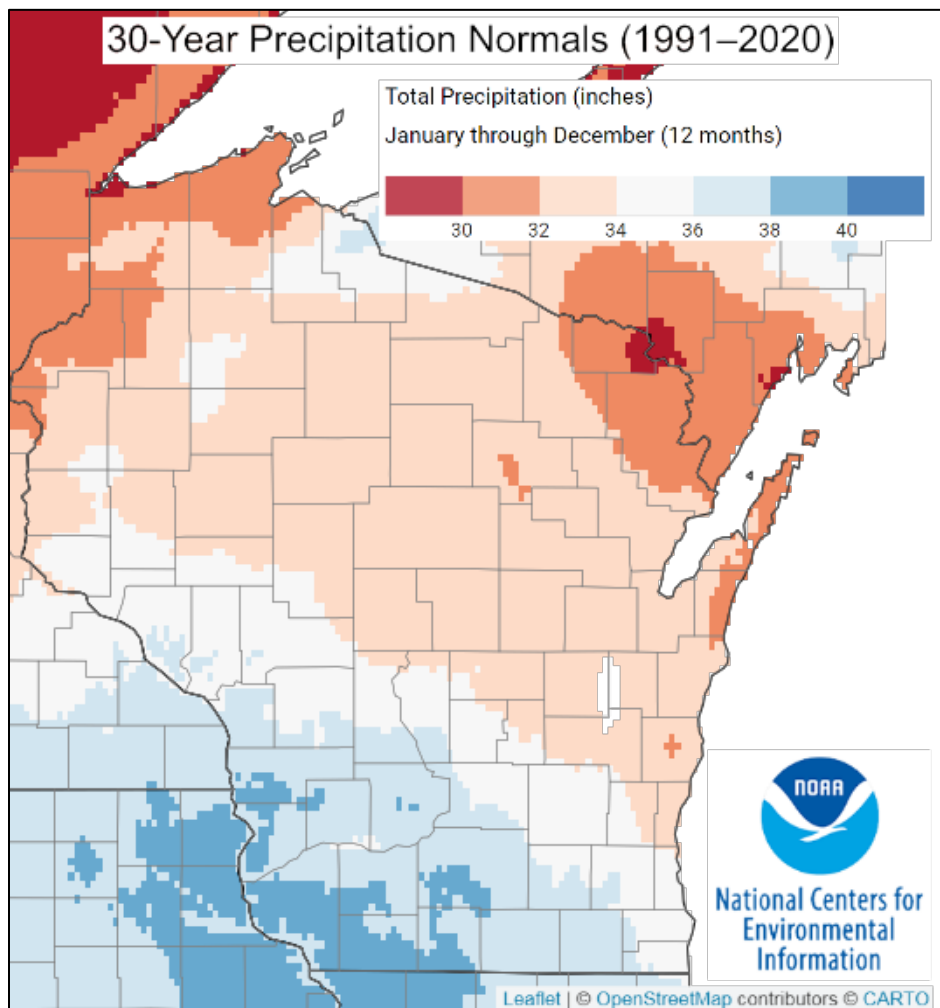


Climate

The climate of Iowa County is considered continental. This means Iowa County has cold enough winters to have fixed periods of snow and moderate precipitation in the summers. The county experiences wide changes of temperature in all seasons, with at least three months of temperatures above 50 degrees Fahrenheit and winters with at least one full month below 32 degrees Fahrenheit.

Precipitation is distributed evenly throughout the county, approximately two-thirds of which falls during the growing season. Iowa County's 30-year average annual precipitation, 1981- 2010, ranges from 36 to 42 inches, higher than that of most other counties in the state. 2019 was the wettest year ever recorded for the state of Wisconsin, totaling 44.55 inches. The anticipated trend toward wetter years is further discussed in Chapter 3: Climate Change. On average, annual snowfall for Iowa County has been under 40 inches.³ Figure 4 shows the 30-year average annual precipitation throughout the state of Wisconsin.

Figure 4: Wisconsin 30-Year Average Annual Precipitation 1991 - 2020⁴



³ National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service. *Average Seasonal Snowfall Across Wisconsin and Average Yearly Precipitation Across Wisconsin* (2010). <http://www.weather.gov/>

⁴ National Oceanic and Atmospheric Administration. *U.S. Climate Normals (1991-2020)*. <https://ncei-normals-mapper.rcc-acis.org/>

Political Jurisdictions

Government units within the county include two cities, nine villages, and fourteen townships. The county seat is at Dodgeville, located near the center of the county. Dodgeville is the largest city, with a 2020 population of 4,984. Dodgeville is located half-way between Madison, WI and Dubuque, IA.

Demographics

The overall population of Iowa County grew by 0.09% percent between 2010 and 2020, from 23,687 to 23,709. In the same decade, the percentage of the population younger than 18 decreased from 25% to 22.7%, and the percentage of the population over the age of 65 increased from 13.3% to 18.5%. Iowa County is very homogenous, with 94.2% of the County's population being white.

Communities with the highest growth rate, excluding municipalities split across multiple counties, between 2010- 2020, include the Village of Barneveld (8.12%), Village of Hollandale (6.25%), and the City of Dodgeville (6.2%). Communities with the greatest decrease in population 2010-2020, include the Village of Avoca (13.19%), the Village of Rewey (11.64%), and the Town of Linden (10.86%).⁵

Development Trends

Development in Iowa County is primarily concentrated in the cities and villages and their surrounding townships. The townships in the eastern part of the county, particularly where it borders Dane County, generally experienced more development than the more rural western part of the county. The municipalities with the largest amount of new construction from 2016 to 2021 were the City of Dodgeville, the City of Mineral Point, Village of Barneveld, and the Town of Dodgeville.⁶

Housing

Housing stock in the county increased from 10,764 total housing units in 2015 to 10,905 units in 2020. The occupancy rate in 2020 was 90.8%, with 74% of units being owner-occupied. Of the total housing units in Iowa County, 26.6% were built prior to 1940 and 211 units were built after 2010. The median value of owner-occupied housing units in 2020 was \$194,600, up 19.2% from \$163,300 in 2015. The median rent in 2020 was \$784, up 14.1% from \$687 in 2015. Renters paying more than 35% of their household income decreased from 25.9% in 2015 to 22.1% in 2020. The number of mobile homes in Iowa County has decreased by 32%, from 568 in 2015 to 385 in 2020.⁵

⁵ U.S. Census Bureau (2021). *2020 Decennial Census P.L. 94-171 Redistricting Data*.

U.S. Census Bureau (2011). *2010 Decennial Census Summary File 1*.

U.S. Census Bureau (2022). *2020 American Community Survey 5-year estimates (2016-2020)*.

U.S. Census Bureau (2016). *2015 American Community Survey 5-year estimates (2011-2015)*.

Retrieved from <https://data.census.gov/cedsci/>

⁶ Wisconsin Department of Revenue (2017, 2021). *Net New Construction Reports*. Retrieved from <https://www.revenue.wi.gov/SLFReportsassessor/>

Education and Employment

According to the American Community Survey, 25.3% of Iowa County's population had a bachelor's degree or higher in 2020, up slightly from 22.9% in 2015, but still lower than the state as a whole with 30.8%. The percentage of the population with a high school degree, equivalent, or higher was 95.4% in 2020, up slightly from 93.1% in 2015.

The per capita income of Iowa County in 2020 was \$36,035, up 30.3% from \$27,664 in 2015, actually surpassing the state per capita income of \$34,450 in 2020. Unemployment in 2020 was at historic lows, estimated to be 2.1%. While that has fallen slightly from 4.7% in 2015, the percentage of the population 16 and older in the labor force has increased slightly from 69.5% in 2015 to 69.9% in 2020.⁵

Utilities

Communication, water and sewer, natural gas, and electricity infrastructure are critical functions of everyday life and critical to emergency response operations. Yet, these utilities are vulnerable to a variety of hazards creating a risk if the utilities were to be restricted or damaged by natural or man-made hazards.

Cell phone reception in the county is reliable but can be limited in the deeper valleys in the northern section of the county. Broadband coverage generally provides high-speed internet to most villages and cities, but it was cited as an issue during the public meetings in more rural areas of the county, which poses significant challenges for emergency services to those areas.

Iowa County has one 138-volt power line through the county. A high-voltage transmission line has been ordered going east-west across the county, however the status of this line remains pending and is not guaranteed to be implemented, and is therefore represented by a dashed line in Figure 5. A natural gas pipeline travels north-south through the county. There are numerous electric stations throughout the county and windfarms located in the Town of Eden (Figure 5). Iowa County is served by both public and private water systems (Figure 6).

Figure 5: Iowa County Gas and Electric Infrastructure

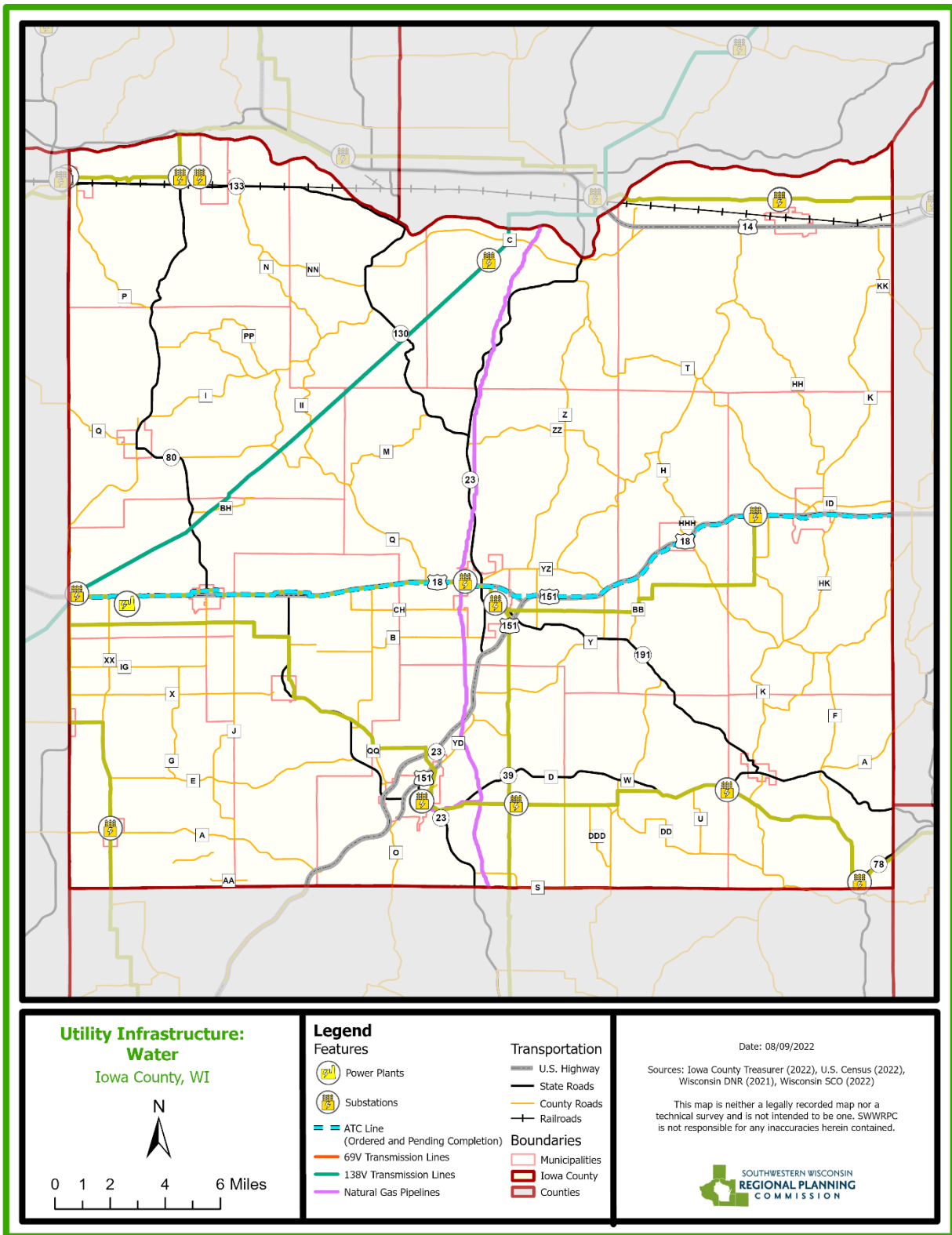
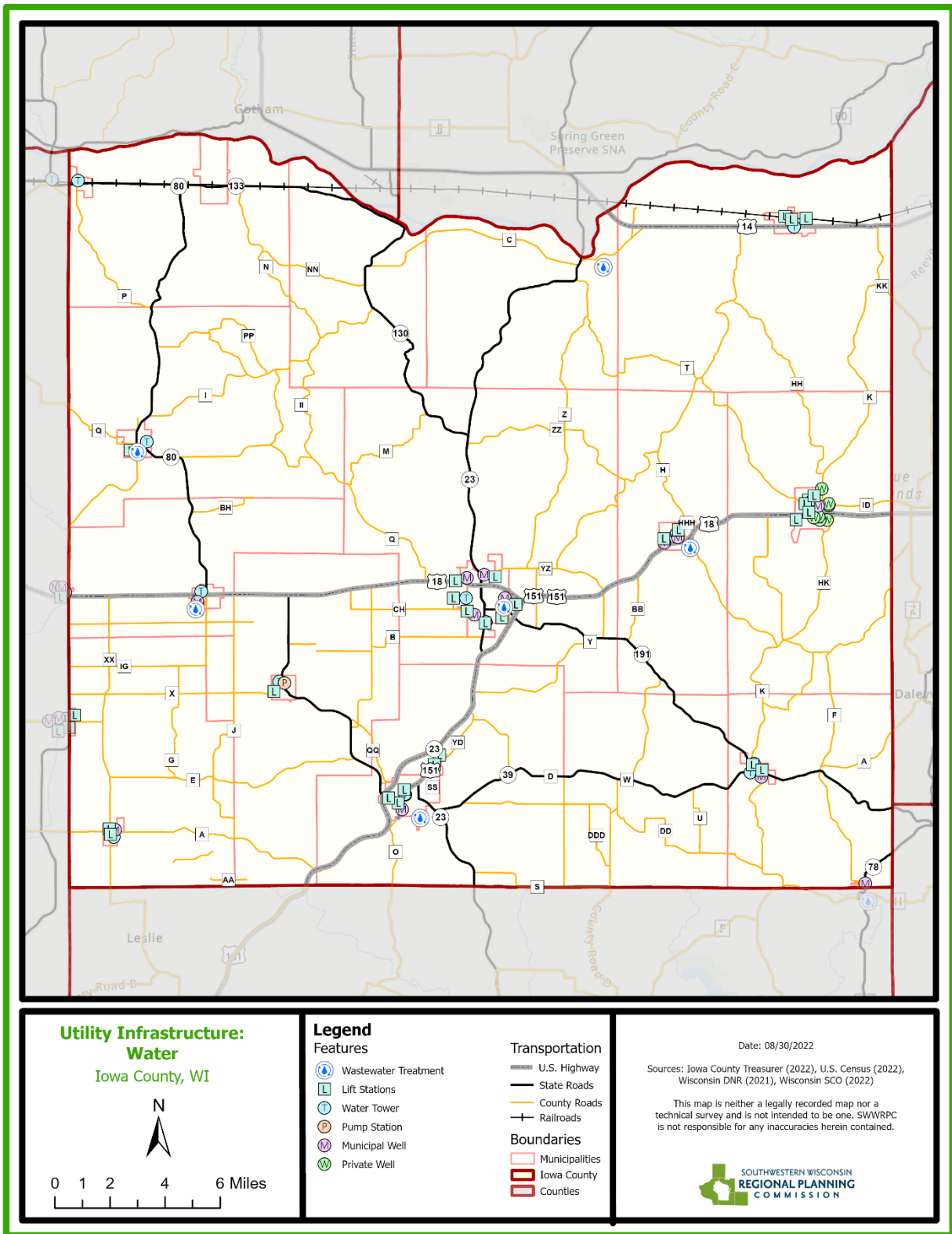


Figure 6: Iowa County Water Utilities



Transportation Infrastructure

Iowa County has 1,151.54 miles of roads maintained by local governments.⁷ US Highway 18/151 is a major highway running through Iowa County connecting southwest Wisconsin to Madison to the east, and to Dubuque to the west. US Highway 18/151 is the principle arterial in the county, and information collected at the public meetings indicated that many hazardous materials are transported on this route by large vehicles. Other heavily used roads in the county include US Highway 14 and State Highways 23, 39, 130, and 191.

There is active recreational transportation use in Iowa County, indicated on the map both by the ATV/UTV routes, as well as the many recreational trails available in the county. There are some traffic safety concerns for mixed-vehicle use of the roads, which is relevant for designing signage, policy, and road infrastructure.

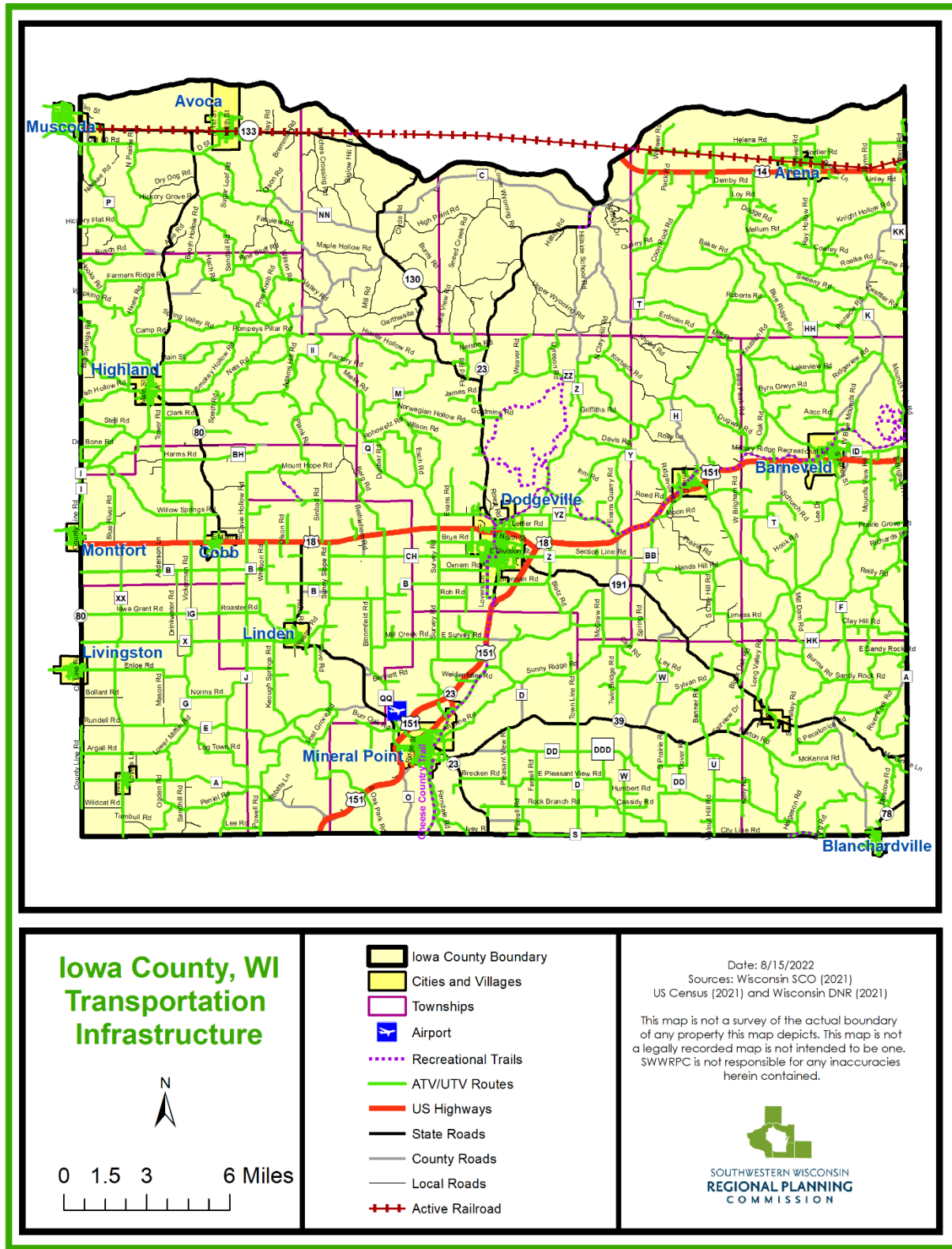
The county has an active rail line along its northern boundary. Wisconsin and Southern Railroad (WSOR) provides freight rail services on this line. Products moved on this line consist of grain, sand and aggregate, lumber, and fertilizer products. Although these are the majority of items that travel on the line currently, there is the possibility that other potentially hazardous materials can be shipped on the line as well. The rail corridor is actively managed through a public private partnership between the Wisconsin Department of Transportation, the Wisconsin River Rail Transit Commission (which Iowa County is a member of), and WSOR.

Another rail corridor in Iowa County runs from Mineral Point to Monroe. The portion of the corridor in Iowa County is not an active rail corridor, currently the corridor is “rail-banked” and serves as a recreational trail known as the Cheese Country Trail. The corridor is maintained and preserved for the potential return of freight rail services by the Pecatonica Rail Transit Commission.

Iowa County is served by two county airports: the Iowa County Airport in Mineral Point, and the Lone Rock Airport in Sauk County. The Dane County International Airport is approximately 60 miles from Dodgeville. See Figure 7 for transportation infrastructure.

⁷ Iowa County Highway Department. *DOT Wisconsin Information System for Local Roads*. January 1, 2022.

Figure 7: Iowa County Transportation Infrastructure



Emergency Services

The Sheriff's Office, Emergency Management and Coroner's Office all operate out of the Iowa County Law Enforcement Center (LEC) in Dodgeville.

Iowa County's Emergency Management Office is staffed by a full-time director and a ¾-time department assistant. The agency concentrates its efforts on the planning, preparedness, response, recovery, and mitigation areas of Emergency Management. The county Emergency Operations Center (EOC) is operated by the agency as well and is located in the LEC.

The Iowa County Sheriff's Office provides 24-hour dispatch services for law, fire, and EMS. They provide primary law enforcement for all rural areas of the county, providing service to those communities that do not have a police department. They have contracted with small communities for more direct coverage at times. The Sheriff's Office also staffs and manages the county jail.

Iowa County is serviced by 17 fire departments and 11 EMS departments. Five communities have first responder agencies (communities with medically trained personnel, but without an ambulance): Ridgeway, Hollandale, Linden, Rewey, Cobb. The fire and EMS agencies of Iowa County have an established mutual aid agreement with MABAS-WI, forming Mutual Aid Box Alarm System (MABAS) Division 124, giving access to mutual aid resources from across the state. The county uses the MABAS to coordinate fire and EMS response to incidents that require more resources than the primary response agency has. Every municipality in Iowa County has fire and emergency medical services coverage (see Figures 8 and 9).

Additionally, the county contracts with Vernon County Emergency Management for hazardous material response through a four-county consortium agreement. This agreement has established a response trailer in Iowa County with a full complement of response equipment. There are a number of volunteer firefighters in the county trained as hazardous materials technicians and operate on a paid, on-call status. The team is a Level III response unit. Additionally, Iowa County has provided training for Wide Area Search and Technical Rescue Response.

Figure 8: Iowa County Fire Department Service Areas

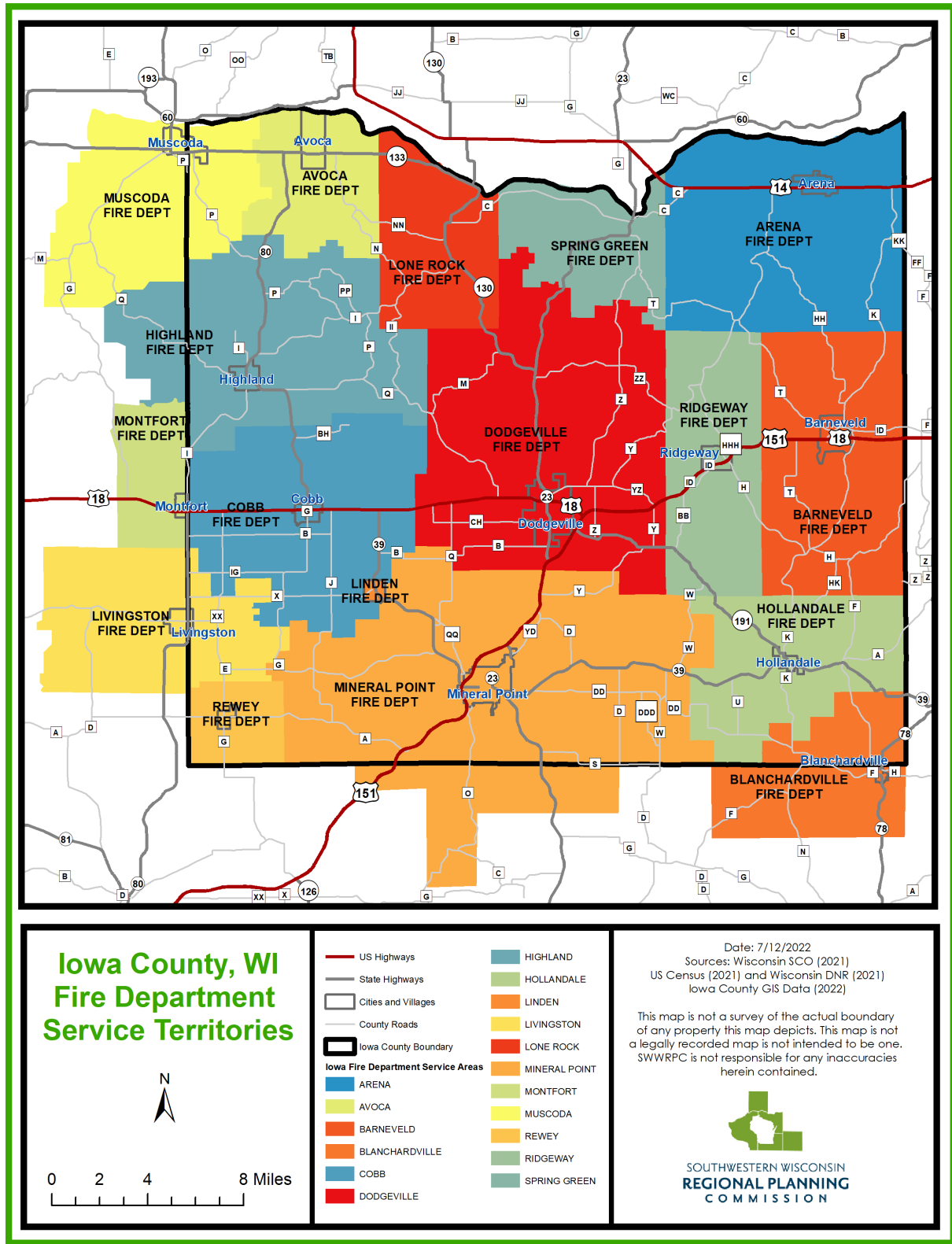
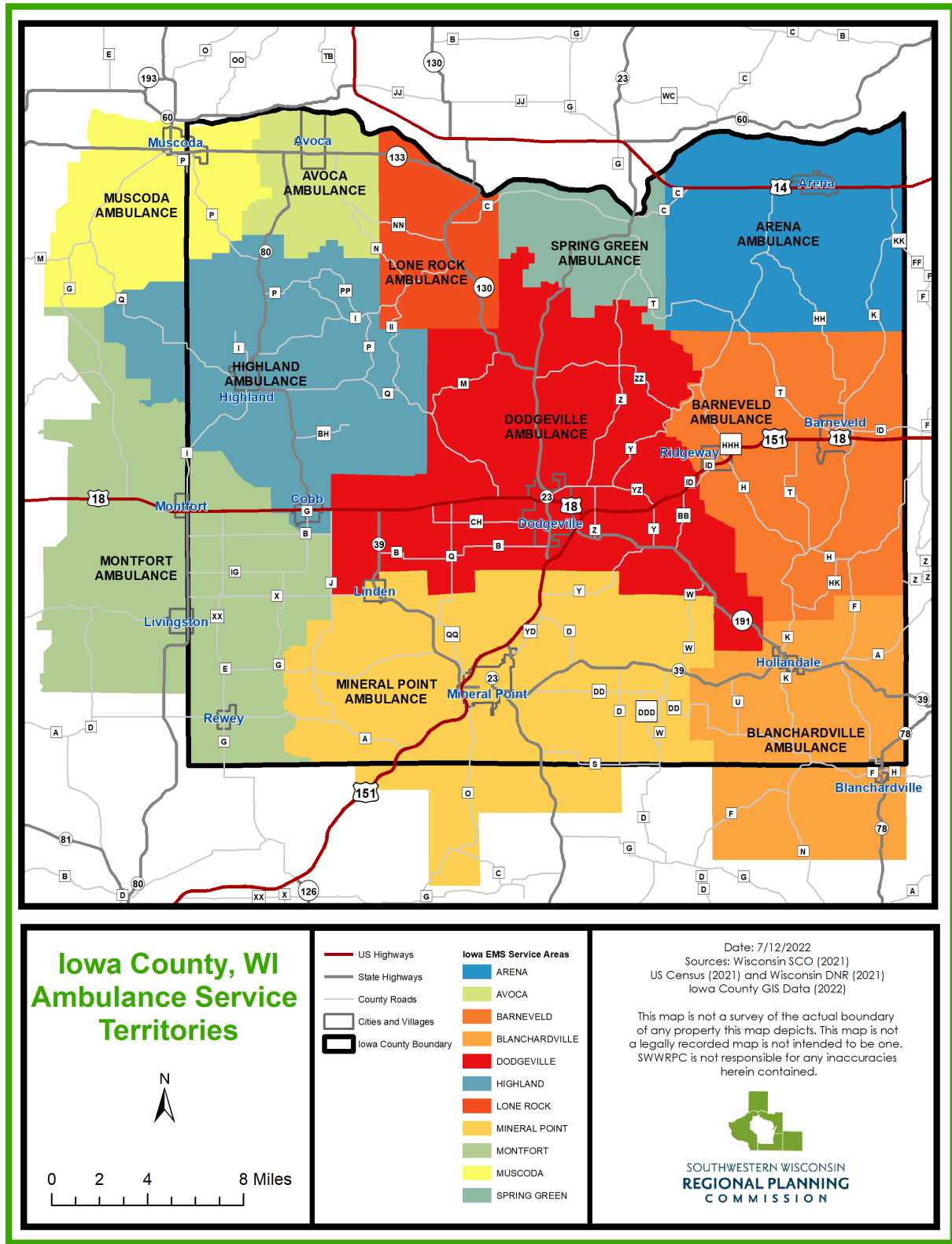


Figure 9: Iowa County Emergency Medical Service Areas



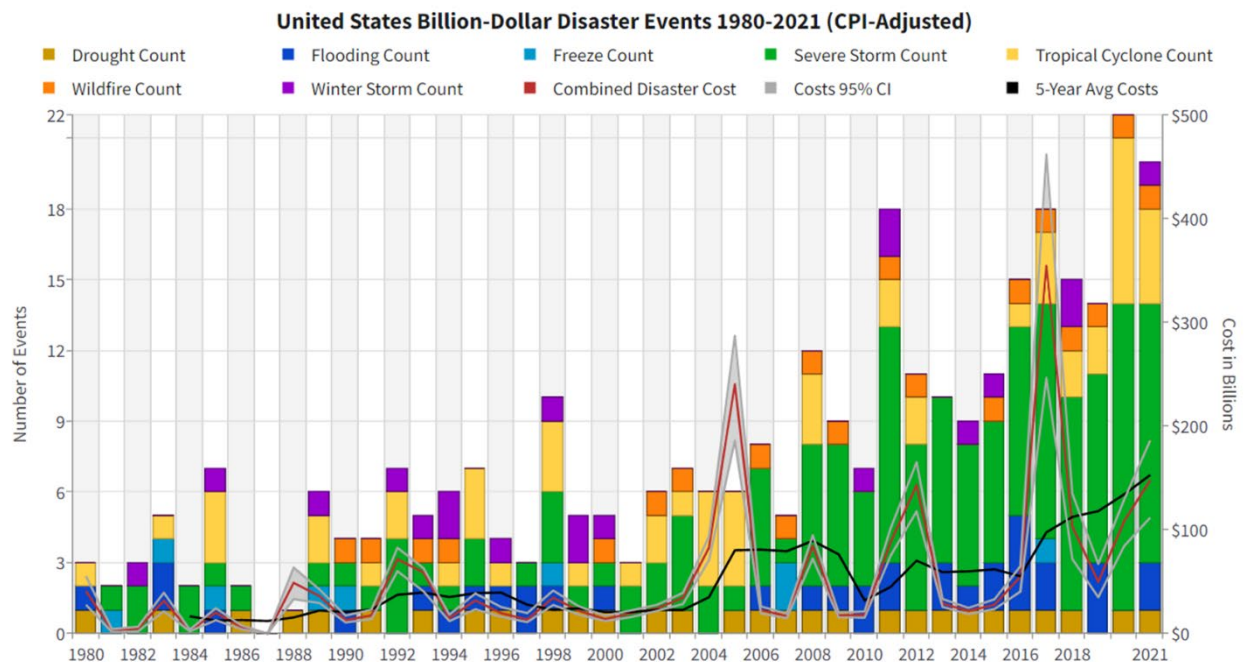
Chapter 3: Climate Change

Background

Proficient preparation for future hazard events requires an informed understanding of climate change and analysis of climate change impacts, as evidenced by historic climate trends and scientific research. Climate change has altered the severity, frequency, and types of hazard events experienced globally and in Iowa County. Research indicates that climate change will have an even greater impact in the future.

Already, the U.S. has been majorly impacted by climate change. Disaster events are becoming more severe and costly (Figure 10), and communities across the world have struggled to adapt to changing weather patterns and storm occurrences.

Figure 10: U.S. Billion-Dollar Disaster Events, Adjusted for Inflation⁸



In Iowa County, the average temperature has risen by an average of 0.5°F per decade over the last 50 years (Figure 11), and precipitation has increased by an average of 1.12 inches per decade (Figure 12). Research from the Wisconsin Initiative on Climate Change Impacts (WICCI) has found that southern Wisconsin experienced a dramatic increase in precipitation over the last decade, and very extreme precipitation events will become more frequent in the future.⁹ This is recognizable locally by the many flooding incidents experienced in Iowa County in recent years (see Table 13 for previous flooding events). Nationally, the cost of the National Floodplain Insurance Program (NFIP) has become unsustainable, as payouts from the program have exceeded the premiums paid in. The NFIP lost an

⁸ NOAA National Centers for Environmental Information (2022). *U.S. Billion-Dollar Weather and Climate Disasters*. <https://www.test.ncei.noaa.gov/access/billions>

⁹ WICCI (2021). *Wisconsin’s Changing Climate: Impacts and Solutions for a Warmer Climate*.

estimated \$50 billion since its inception as of March, which lead to an overhaul of the program in 2022 in an effort to more accurately, equitably, and sustainably maintain NFIP.¹⁰

Figure 11: Iowa County Annual Average Temperature, 1895-2022, with 50-Year Trendline (1973-2021)

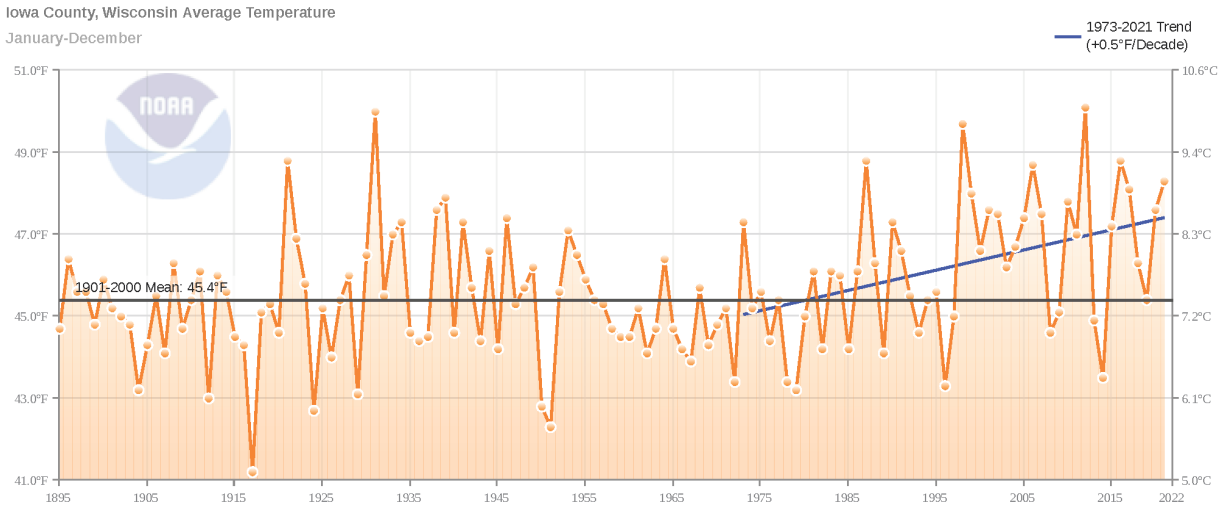
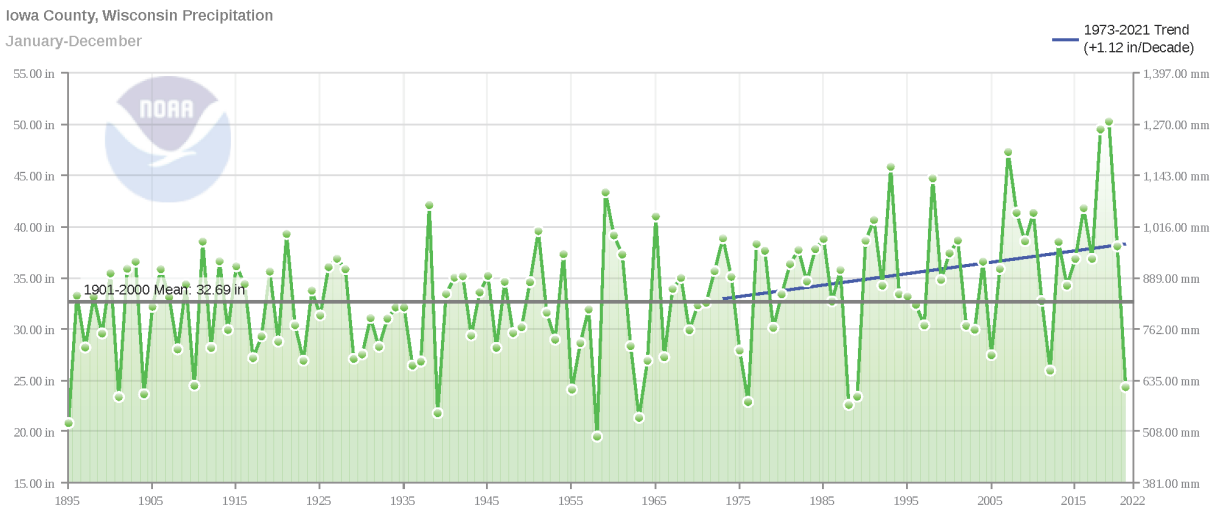


Figure 12: Iowa County Annual Precipitation, 1895-2022, with 50-Year Trendline (1973-2021)



¹⁰ Forbes (2021). *FEMA's Upcoming Changes Could Cause Flood Insurance to Soar at the Shore.*

Anticipated Impacts

In order to effectively plan for future hazard events, some of the anticipated impacts of climate change identified by WICCI are listed below.¹¹ These impacts inform expectations of the future, which in turn inform recommended actions for hazard mitigation:

- More frequent and severe weather events
- More flooding
- More frequent and severe heat days
- More freeze/thaw cycles, posing issues for existing infrastructure
- Changing habitat for plants and animals, potentially resulting in loss of native species and introduction of new pests
- Water quality degradation from flooding runoff

In addition to direct local impacts, Iowa County should also anticipate the global knock-on effects from climate change. For example, though a hurricane in Savannah, Georgia may not have local direct impacts to Wisconsin, it is a major trade port location, and could result in supply chain issues that would affect Iowa County residents. Other potential knock-on effects from climate change could include:

- Climate refugees relocating to Wisconsin
- Less stable power grid
- Global supply chain issues
- Economic volatility
- Changing federal environmental regulation
- Changing FEMA funding as national disaster events increase

Vulnerable Populations

Hazard events tend to have disproportionately negative impacts on vulnerable populations, and climate change is anticipated to worsen this by way of making hazard impacts more frequent and severe. Vulnerable populations include those with less access to financial resources; those with limited mobility and access to transportation such as rural populations, elderly populations, disabled populations, and children; those experiencing communication barriers with local resources such as non-English speakers; stigmatized communities such as undocumented immigrants and previously-incarcerated populations; and those who are more exposed to weather elements, such as populations who are recreating outdoors, unhoused populations, and populations residing in mobile homes, tents, or other vulnerable housing.

The Iowa County community is home to many vulnerable populations, and one way that the county can prepare for worsening impacts of climate change is by putting emphasis on protecting and serving those who will likely be most severely affected. During the hazard mitigation public meetings, attendees were asked to consider the unique needs and risks of several vulnerable populations, and share their ideas for how to address those needs. Table 5 shows attendees' responses to this exercise.

¹¹ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

Table 5 – Responses to Public Meeting “Vulnerable Populations” Grid

Vulnerable Population	Unique Needs or Risks	Ideas for Addressing Unique Needs/Risks
Elderly	Mobility limitations, medical needs, communication issues, no one to check on them, no social media, low access to transportation, no way to get food/resources	Cooling stations, service to check on them during emergencies, ADRC expansion, classes at community center, Meals on Wheels service expansion
Children	Lack of experience and understanding, lack of access to critical resources, reliant on adult support	Disaster drills in schools, more internet access in remote areas, development and support of daycare
Non-English Speakers	Difficulty communicating with EMS, fears about contacting EMS, unknown cultural differences	Targeted outreach to these populations during emergencies, liaison/connector/education/outreach
Medically or Chemically Dependent	Facility care, medications, mobility issues, low access to transportation	Address this population in Emergency Operations Plans, have medical facilities/caregivers involved in planning
Low-Income	Lack of resources/transport/shelter, limited form of transport, low/no stockpile, renters and trailers don't have basements, Bit-O-Green Trailer Park hit by tornadoes/weather, eviction, unable to escape and/or sustain themselves while awaiting help	Communicate/maintain school gym as shelter, fire departments should warn trailer residents of emergencies, resources to assist, pursue grants, pursue eligible low-income loans, educate on available shelter and resources, utilize mass texts, free emergency kits
New Residents to the Area	Unaware of warnings and storm/winter prep and procedures, difficulty navigating ATV traffic and tractors, unfamiliar with area, don't know resources, no network locally, disconnected feeling	Include information in community welcome basket, provide call contact resource list, send information flyer, welcome kit
Physically or Mentally Disabled	Lack of transportation or may need medical equipment, confusion/scaredness, adult care facility near highway, issues summoning help	Possible list of addresses or groups that work with them, assessment of needs, make sure EMS knows where these populations live, make communications between agencies (i.e. Health Dept and EMS) easier, less red tape
Recreating Outdoors	Need safe roadside parking, not in touch with local news or contacts, no cell service, susceptible to storm damage	Extensive signage, storm shelters, sirens, education
Other vulnerable populations identified by attendees were incarcerated populations and tourists.		

Perspectives from Iowa County

During the public meetings, attendees were presented with information about climate change and asked to share their expectations for how climate change will impact them. Of the 61 attendees who answered the prompt “In the next ten years, I expect that climate change...”, 28 attendees selected “will majorly impact my life,” 32 attendees selected “will have some impact on my life,” and 1 attendee selected “will not affect my life at all.” Attendees were then asked to explain why they chose the corresponding statement. Tables 6, 7, 8, and 9 summarize the responses of public meeting attendees.

Table 6 – Responses to Public Meeting Climate Change Expectations Exercise		
“In the next ten years, I expect that climate change...”		
...will not affect my life at all	...will have some impact on my life	...will majorly impact my life
1 vote	32 votes	28 votes

Table 7 – Climate Change Will Not Affect My Life at All
“In the next ten years, I expect that climate change will not affect my life at all.”
“Wisconsin is pretty isolated/safe”

Table 8 – Climate Change Will Have Some Impact on My Life
“In the next ten years, I expect that climate change will have some impact on my life.”
<p>“Thanks to increase in government regulation”</p> <p>“Already feeling it”</p> <p>“- Hard on outdoor workers such as construction [illegible text]. May change working hours. - More storms, require more labor for response to storms. Clean up, repair”</p> <p>“More people moving to Wisconsin”</p> <p>“Hard on cattle, heat mostly, crop damage”</p> <p>“Climate change, more extreme events (drier, windier)”</p> <p>“Changing crop yields”</p> <p>“More floods, windstorms, damage to personal property”</p> <p>“Hot/dry weather”</p> <p>“Increased demand for energy (heating/cooling) and more severe storms to respond to”</p> <p>“Midwest less impacted (Dodgeville City)”</p> <p>“More severe weather events will impact our elderly and have more needs”</p> <p>“Heat production ag will hurt income”</p> <p>“Population issues w/rising numbers. Creating housing and economic challenges.”</p> <p>“Coastal impact on crops”</p> <p>“Economic impact”</p>

Table 9 – Climate Change Will Majorly Impact My Life

"In the next ten years, I expect that climate change will majorly impact my life."
<p>"The changes in business, environmental, and life styles will create much more day-to-day stress"</p> <p>"From a realtor's view: - Floodplains are always expanding, causing difficulty to utilizing land for building and increase holder costs for owners such as FP insurance. - Crop yields and prices are driving price per acre to record highs. - Flooding in villages create challenges for resale of houses."</p> <p>"Wisconsin now gets as hot as Florida, where I lived. Also, in Orlando, which historically doesn't get hurricanes much, I went through 3 in 4.5 years."</p> <p style="padding-left: 40px;">"Others moving to Wisconsin"</p> <p style="padding-left: 40px;">"Negative attitude toward life"</p> <p style="padding-left: 40px;">"Changing weather patterns affecting agriculture"</p> <p style="padding-left: 40px;">"Water + food scarcity for children + grandchildren"</p> <p style="padding-left: 40px;">"Food insecurity & larger natural disasters"</p> <p>"Issue weaves a vulnerability thru many things (weather events, disease) the economic cost will have to affect policy"</p> <p style="padding-left: 40px;">"Food supply for family as temps change crops"</p> <p style="padding-left: 40px;">"Health imports → financial"</p> <p style="padding-left: 40px;">"Loss of critical natural resources, including habitat & lands"</p> <p style="padding-left: 40px;">"Costs of materials, food, fuel, etc."</p> <p style="padding-left: 40px;">"So many things will need to change, electric vehicles, etc."</p> <p>"Increase in severe events/flooding/storms, also increase in demand for land for Ag as large farms want to move here"</p> <p style="padding-left: 40px;">"Population change"</p> <p>" - Food and supply chain disruptions - Climate refuge moving in, privileged migration will happen first - Recreation impacts (ice/snow/etc.) - Energy costs (heat/AC) - Damage from storms/floods - Ag impacts from drought and flooding - Wildfire impacts - Increase in invasive species, new ones - Climate anxiety (kids especially) - Ecological grief"</p>

By anticipating the impact of climate change, Iowa County officials and residents can be more prepared for future hazard events and the context in which hazard events will occur. In the next section, hazards that threaten Iowa County are explored, many of which are expected to worsen due to climate change.

Chapter 4: County-Wide Risk Assessment

Hazard Identification

Iowa County is susceptible to many hazards due to its climate, unique geography, and population. This chapter identifies the natural and man-made hazards most likely to occur or most likely to have severe impacts in the county. Identifying these hazards is an important and necessary step to informing and developing the mitigation strategies and priorities.

One way to identify potential hazards is to review past FEMA disaster declarations. These are important indicators of future high-hazard susceptibility. Iowa County has experienced 15 Federal Disaster Declarations since 1953 (Table 10), most of which relate to severe storms and flooding.

Declaration Date	Description
March 23 rd , 1976	Severe Storms, Icing, Wind, Flooding
June 17 th , 1976	Drought
June 7 th , 1978	Severe Storms, Hail, Flooding, Tornadoes
June 12 th , 1984	Severe Storms and Tornadoes
July 13 th , 1990	Flooding, Severe Storm, Tornadoes
June 2 nd , 1993	Flooding, Severe Storm, Tornadoes
June 24 th , 2000	Flooding, Severe Storms, Tornadoes
June 18 th , 2004	Severe Storms and Flooding
August 26 th , 2007	Severe Storms and Flooding
June 14 th , 2008	Severe Storms, Icing, Wind, Flooding
April 5 th , 2011	Severe Winter Storm and Snowstorm
August 8 th , 2013	Severe Storms, Flooding, and Mudslides
October 7 th , 2017	Severe Storms, Straight-line Winds, Flooding, Landslides, and Mud
March 13 th , 2020	COVID-19 Pandemic
April 4 th , 2020	COVID-19 Pandemic

While Federal Disaster Declarations highlight the most severe disasters in Iowa County, they do not capture all of the natural hazards to which Iowa County is exposed. In exploration of these hazards the following sources were consulted:

- NOAA National Climatic Data Center
- National Weather Service
- Iowa County Emergency Management
- Wisconsin Department of Natural Resources
- U.S. Geological Survey
- Participation from local government officials, key stakeholders, and the public

Hazard events are generally unpredictable. Any number of events can occur in any given year. Climate research indicates that natural hazard events will become more severe, longer in duration, and more

¹² Federal Emergency Management Agency (FEMA) (2022). *List of Federal Disaster Declarations*. <https://www.fema.gov/disaster/declarations>

unpredictable in the foreseeable future due to climate change (see Chapter 4 for further discussion of climate change).¹³ Given these challenges, understanding the frequency and severity of past natural events is a first step in assessing future hazards. Table 11 shows the history of hazards in Iowa County as collected by the NOAA and WIDNR during the years 1950-2021. This is the largest and best available collection of hazard event data. Not all hazards were collected until recent decades, so the data may only reflect a recent history of hazards.

Hazard	Years Collected	# of Past Events	Deaths	Injuries	Property Damage (\$)	Crop Damage (\$)	# of Events per Year
Wild/Forest Fires (minor incidents included)	1982-7/2022	592	Unknown	Unknown	Unknown	Unknown	14.8
Thunderstorm Winds	1955-7/2022	180	0	0	\$3.64M	\$460K	2.69
Blizzard/ Winter Storms/ Heavy Snow	1996-7/2022	177	0	0	\$10K	\$0	6.81
Fog	1999-7/2022	73	0	0	\$0	\$0	3.17
Hail	1955-7/2022	76	0	0	\$22.73M	\$305K	1.13
Tornado	1954-7/2022	30	9	206	\$6.12M	\$55K	0.44
Extreme Heat	1998-7/2022	36	0	0	\$0	\$0	1.5
Extreme Cold/ Wind Chill	1996-7/2022	34	0	1	\$3k	\$0	1.31
Drought	2002-7/2022	18	0	0	\$0	\$150K	0.9
Flood /Flash Flood	1998-7/2022	21	0	0	\$1.55M	\$7.1M	0.88
Lightning	1996-7/2022	4	0	0	\$375K	\$10K	0.15
Earthquake	-	0	0	0	0	0	0

¹³ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

¹⁴ Wisconsin Department of Natural Resources (WIDNR). (2022). *Wildfire Dashboard*. https://dnrmaps.wi.gov/WAB/WildfireOccurrence_Dashboard/; NOAA. (July 2022). *Storm Events Database*. <https://www.ncdc.noaa.gov/stormevents/>

Hazard Assessment in Public Meetings

During the public meetings, attendees were asked to vote for three hazards they believe will pose the biggest risk to Iowa County in the next ten years. The results, shown in Table 12 below, provide a snapshot of the concerns of public officials and residents in Iowa County. These concerns may be influenced by recency bias, as nearly all selections of “Domestic Terrorism” were made on the July 7th public meeting, following the July 4th 2022 Highland Park, IL parade shooting incident. Overall, the most frequently chosen hazards were “High Winds and Tornadoes” and “Flooding.”

Table 12 - Public Meeting Vote Responses: “Which three hazards do you believe will pose the biggest risk to Iowa County in the next ten years?”				
Hazard	Public Meeting			
	Wyoming 6/23/22	Mineral Point 6/30/22	Dodgeville 7/7/22	Total
High Winds and Tornadoes	7	16	13	36
Flooding (including due to precipitation, water table increase, and other)	7	12	8	27
Disruption of Life Lines (electric, fuels, water, wastewater)	1	4	18	23
Cyber-Attack	3	4	15	22
Domestic Terrorism (including active shooter incidents and anti-government movements)	2	0	19	21
Drought and Extreme Heat	1	5	14	20
Lightning, Thunderstorms, and Hail	5	10	2	17
Climate Change	4	5	4	13
Emerging Infectious Diseases (including pandemics)	2	3	3	8
Winter Storms and Extreme Cold	1	3	2	6
Food and Agriculture Emergencies	3	1	1	5
Hazardous Materials Incident and Radiological Release	0	0	3	3
Dam Failure and Other Infrastructure Failure	1	0	2	3
Wildfires	1	0	0	1
Landslides and Land Subsidence	0	0	0	0

Vulnerability Assessment

The following section provides a more detailed assessment of risk associated with each of the natural and man-made hazards that have historically affected, or may affect, Iowa County. The vulnerability assessment includes the following for each hazard:

- A description of the hazard
- An overview of the historical occurrences of the hazard in Iowa County
- An assessment of vulnerability to the hazard throughout Iowa County
- A projection of the future probability and potential damages of the hazard in Iowa County

Flooding

Flooding is defined as “a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area.”¹⁵ Flood events are the most common natural hazard in the U.S. and frequently occur in Iowa County. Several types of flooding affect/may affect Iowa County, including:

- **Dam or Levee Failure:** Dam failure causes flooding downstream of the dam. Prolonged rainfall is the most common cause of dam failure. See Figure 14 for a map of dam vulnerability in the county.
- **Flash Flooding:** Flash floods are defined as rapid and extreme flow of water into a normally dry area, or a rapid rise in water-level, above a predetermined flood level, in a stream or creek. Flash floods define the rate of flooding and can be caused by other flood types, such as intense rainfall, dam failure, or an ice jam. Ongoing flooding can intensify to flash flooding in cases where intense rainfall results in a rapid surge of rising flood waters. Flash flood vulnerability is not perfectly indicated by FEMA floodplain maps (see Figure 13 for Iowa County flood zones), as data gathered at the public meetings indicated that residents have experienced flooding in areas outside of the current maps.
- **Local Drainage Floods:** This type of flood occurs outside of recognized drainage channels or delineated flood plains and is caused when water has no place to travel. Heavy precipitation, a lack of infiltration, inadequate facilities for drainage and storm-water conveyance, and increased surface runoff can result in this flood type. These events frequently occur in flat areas and particularly during winter and spring in areas with frozen ground. They also occur in urbanized areas with large impermeable surface.
- **Riverine:** Also known as overbank flooding, riverine flooding is caused by a flooding river. In steep valleys, riverine flooding is usually rapid and deep, but short in duration. In flat areas, riverine flooding is typically slow, relatively shallow, and may last for long periods. Riverine flooding is typically caused by prolonged periods of rainfall that saturate the ground and overload streams and reservoirs.
- **Storm-water:** Storm-water flooding occurs when water from a storm event exceeds the capacity of local drainage systems, either man-made or natural.
- **Groundwater Flooding:** Flooding due to increased recharge causing the water table to rapidly rise, either forcing water to flood above the ground surface or forcing water by hydraulic pressure through cracks and crevices and into basements.¹⁶ See Figure 15 for a water table map of Iowa County.

The heaviest flooding in Iowa County occurs during spring due to snow melt and heavy rains, and occasionally in the summer and fall. Streams in the county that occasionally produce flooding include the Morrey, Otter, Lower, Mill, and Blue Mounds Creeks, which all drain north into the Wisconsin River. Additionally, the Mineral Point, Dodge and Blue Mounds branches of the Pecatonica River can cause flooding. These drain south into the Rock River. See Figure 13 for floodplains located in Iowa County.

¹⁵ FEMA (2022). *National Flood Insurance Program Terminology Index*. <https://www.fema.gov/flood-insurance/terminology-index>

¹⁶ WDHS (2014). *Wisconsin Flood Toolkit*. <http://www.co.grant.wi.gov/docview.asp?docid=18516&locid=147>

Figure 13: Iowa County Floodplain

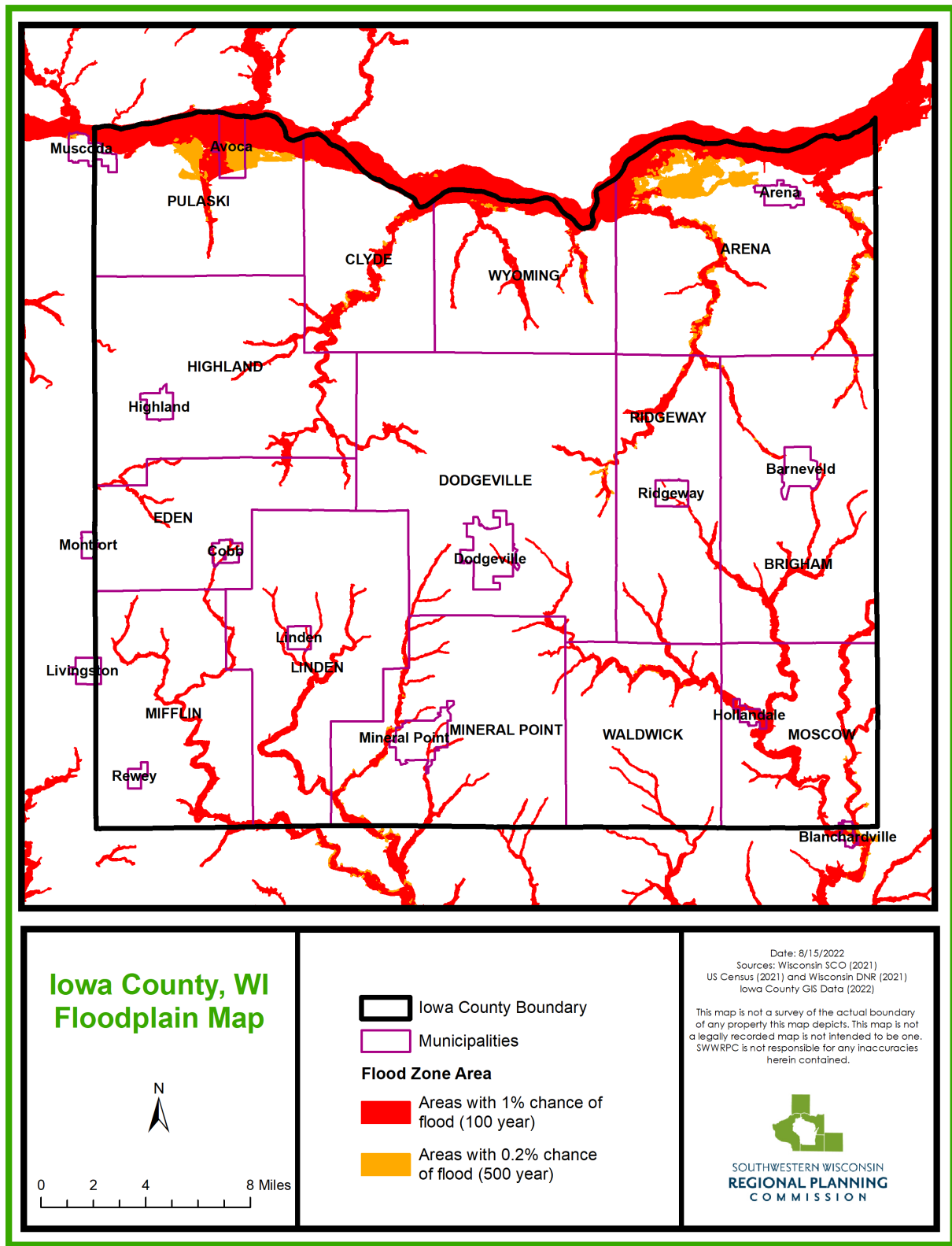


Figure 14: Dam Vulnerability in Iowa County

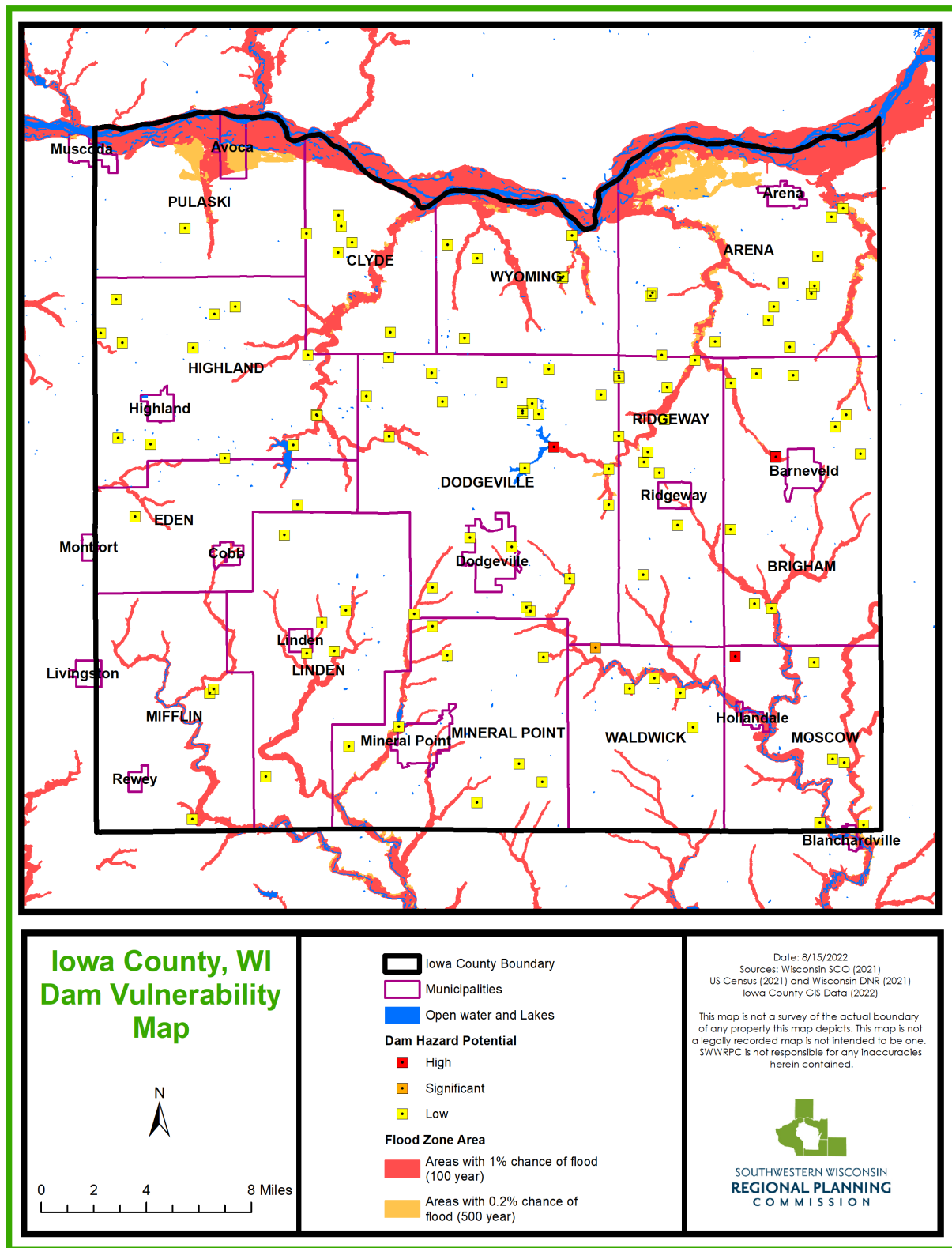
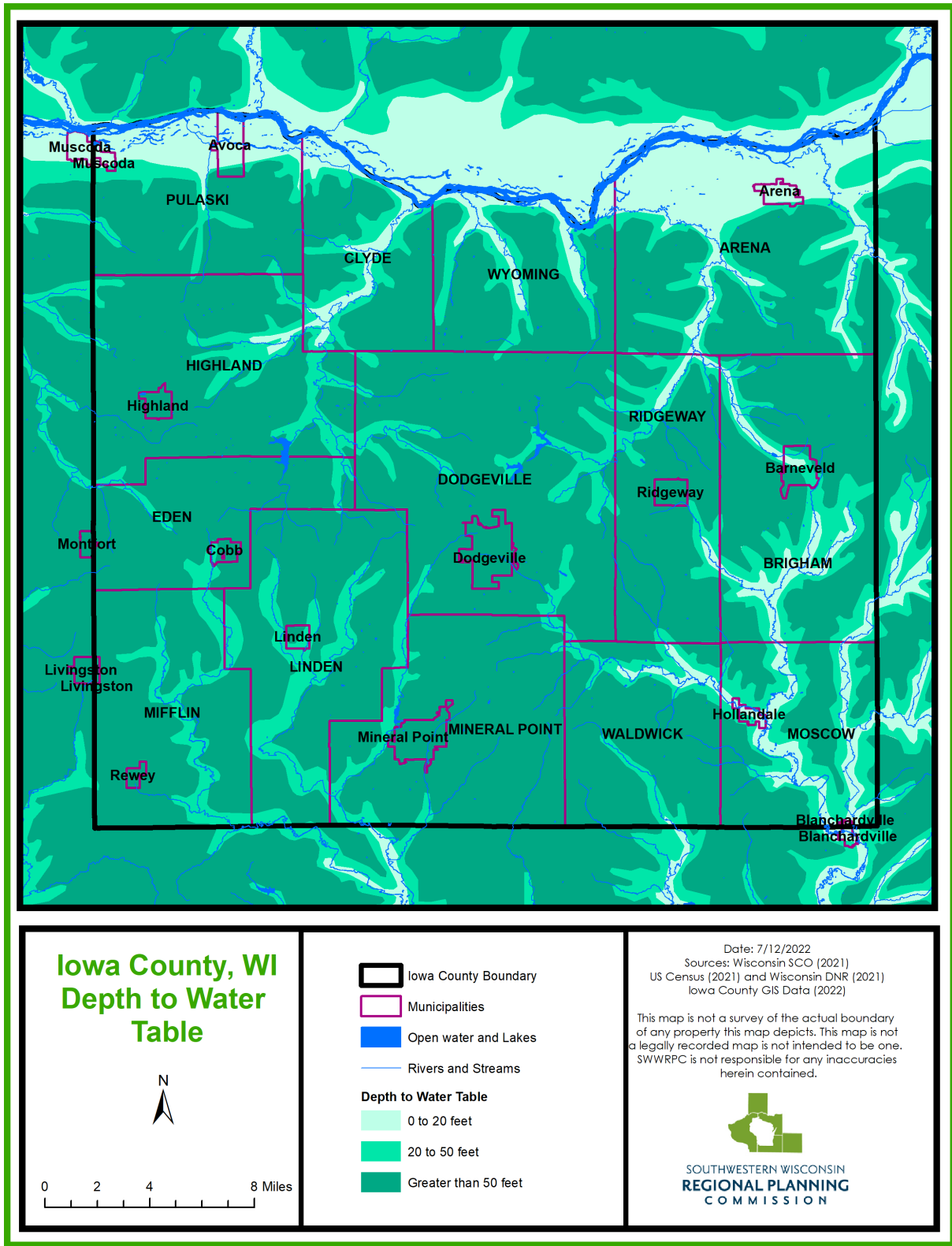


Figure 15: Depth to Water Table in Iowa County



Historic Flooding Events

According to NOAA, FEMA, and local records, Iowa County experienced 21 major flood events between 1998 and 2021 (see Table 13). The total damages caused by these flooding events were \$1.552M in property damage and \$7.1M in crop loss/damage. On average, that is approximately \$412,000 in damages per flooding event in the county.

Location	Date	Flood Type	Property Damage (\$)	Crop Damage (\$)
Dodgeville	March 30 th , 1998	Flood	\$10K	\$0
Countywide	May 16 th , 1999	Flash Flood	\$50K	\$0
Northern Portion	June 1 st , 2000	Flash Flood	\$200K	\$1.56M
Northern Portion	June 1 st , 2000	Flash Flood	\$583K	\$2M
Avoca	June 13 th , 2000	Flood	\$0	\$0
Countywide	August 2 nd , 2001	Flood	\$0	\$0
Highland	May 23 rd , 2004	Flash Flood	\$100K	\$300K
Multiple Counties	June 1 st , 2004	Flood	\$0	\$2M
Arena	August 5 th , 2007	Flash Flood	\$50K	\$0
Avoca	August 19 th , 2007	Flash Flood	\$200K	\$500K
Mineral Point	August 22 nd , 2007	Flash Flood	\$100K	\$100K
Avoca/ Cobb	June 12 th , 2008	Flash Flood	\$3K	\$500K
Avoca	July 27 th , 2009	Flash Flood	\$75K	\$0
Arena	June 21 st , 2013	Flash Flood	\$70K	\$100K
Blanchardville	June 22 nd , 2013	Flash Flood	\$10K	\$20K
Mineral Point	June 22 nd , 2013	Flash Flood	\$60K	\$20K
Rewey	February 20 th , 2018	Flood	\$0	\$0
Arena	August 21 st , 2018	Flood	\$30K	\$0
Jonesdale	March 13 th , 2019	Flood	\$5K	\$0
Rewey	September 12 th , 2019	Flash Flood	\$5K	\$0
Avoca	October 22 nd , 2020	Flash Flood	\$1K	\$0
TOTAL			\$1.552M	\$7.1M

*NOAA estimates do not reflect actual FEMA damages due to these events.

Vulnerability Assessment

The most common type of flooding in Iowa County is flash flooding due to the steep and rugged terrain north of Military Ridge. Flooding at or near the Wisconsin River is also a regular occurrence. Storm-water flooding is an additional likely occurrence in cities and villages without a dedicated storm-water system. Iowa County has a large number of dams and retention structures, these create an additional vulnerability to flooding from dam failure. Aspects of Iowa County infrastructure and services most vulnerable to floods include:

- Agricultural Industry – Loss of crop, livestock illness and possible death, soil erosion
- Business/Industry Infrastructure – Property damage, loss of income

¹⁷ NOAA. (July 2022). *Storm Events Database*. <https://www.ncdc.noaa.gov/stormevents/>

- Emergency Services – Warning systems; access to vulnerable populations such as older, low-income, children, disabled, recreational park users, and visitors
- Environmental – Soil erosion, water contamination, loss of wildlife habitat, wildlife illness, and possible death
- Residential Infrastructure – Flooded basements, collapsed foundations, damaged septic systems, collapsed wells, and destroyed/severely damaged homes
- Public Health – Harmful molds, water contamination
- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks, damaged water treatment systems, diminished water quality from overflow and backup of sanitary sewer, roadway infrastructure including culvert and bridge damage which can impact commutes and school bussing capability

Future probability and potential loss

On average there were 0.88 major flooding events per year in Iowa County between 1998 and July of 2022. The majority of those events were flash floods, due to large rainfall events. Climate trends and research suggest that the frequency of future large rain events will increase and become more severe.¹⁸ Since flash-flooding is localized in nature, risk will vary throughout the county, with locations of lower elevations being more vulnerable.

The average cost of a flooding event in Iowa County between 1998 and July of 2022 was approximately \$412K. With increased frequency and severity of flooding events, this expense is likely to increase. There is one repetitive loss structure in Iowa County in the City of Mineral Point that is residential, and no severe repetitive loss structures in the county.

Property damage and potential loss are likely to be higher than the previous average cost in the event of a dam failure. Three dams in the county are considered “High Hazard.” See Figure 14 for a dam vulnerability map of Iowa County. The hazard ratings are not based on physical attributes, quality, or strength of the dam itself, but instead that the failure of these dams would likely result in the loss of life and significant property damage.

¹⁸ WICCI (2021). *Wisconsin’s Changing Climate: Impacts and Solutions for a Warmer Climate*.

Severe Thunderstorms

The National Weather Service (NWS) definition of a severe thunderstorm is a thunderstorm producing a tornado, winds of at least 58 mph, and/or hail at least 1 inch in diameter. Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph and/or hail of at least ½" is defined as approaching severe. A thunderstorm travels approximately 30-50 mph and runs its course within 30 minutes. Heavy rain, lighting, hail, tornadoes, and severe winds occur separately and in combination during severe thunderstorm events. Data from NOAA and ICEM indicate that there have been 19 significant thunderstorm events since January of 2018.¹⁹ The following four hazards: hail, lightning, thunderstorm winds, and tornadoes are associated with thunderstorms. The entire area of Iowa County is at risk for these hazards.

Severe Thunderstorms – Hail Event

The NWS defines hail as precipitation in the form of irregular pellets or balls of ice more than 1/8 inches in diameter. Hail risk is considered severe once it is larger than 3/4 inches in diameter. Hail can develop within thunderstorms when strong currents of rising air, known as updrafts, carry water droplets high within the storm. The cold air loft causes the water droplets to freeze. As the frozen droplet begins to fall toward the ground, rising currents within the storm lift the ice again. The hailstone gains an ice layer and grows increasingly larger with each ascent. Eventually, the hailstone becomes too heavy for the updraft to support, and it falls to the ground. Injury and loss of life are rarely associated with hailstorms, however, extensive property damage is possible, especially to crops.

Historical Hail Events

According to NOAA records, Iowa County experienced 76 hail events between 1955 and July of 2022. The total damages caused by hail in these events was \$22.73M in property damage and \$305K in crop loss/damage. On average, that is approximately \$303K in damages per hail event in Iowa County. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to hail:

- Agricultural Industry – Loss of crop, livestock injury and possible death
- Business/industry infrastructure – Property damage (roof and vehicle damage), debris cleanup
- Emergency Services – Warning systems, access to vulnerable populations such as older, poor, children, park users, and visitors
- Environmental – N/A
- Residential Infrastructure – Property damage (roof and vehicle damage), debris cleanup
- Public Health – Dangerous road conditions
- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks debris cleanup, road damage

¹⁹ NOAA Storm Events Database for the events "*hail, lightning, thunderstorm winds, tornadoes.*"
<https://www.ncdc.noaa.gov/stormevents/>

Future Probability and Potential Loss

According to NOAA, on average there were 1.13 hail events per year between 1955 and July of 2022. Trends and research suggest an increase in large storm events during the spring and fall, when hail events are most likely to occur. From previous occurrences and an expected increase in events, Iowa County can expect to have more than 1.13 hail events per year on average. The average cost in property and crop damages of a significant hail event in Iowa County between 1955 and July of 2022 was \$303K on average.

Severe Thunderstorm – Lightning Event

Lightning is a phenomenon associated with thunderstorms and occurs when the rising and descending air separates and builds up positive and negatively charged areas. Lightning results when the built-up energy is discharged between the two areas. Lightning damage occurs when humans and animals are electrocuted, fires are caused by a lightning strike, materials are vaporized along the lightning path, and/or sudden power surges cause damage to electrical or electronic equipment.

Historical Severe Lightning Events

According to NOAA records, Iowa County experienced four significant and damaging lightning events between 1996 and July of 2022. The total damages caused by lightning in these events was \$375K in property damage and \$10K in crop loss/damage. On average, that is approximately \$96.25K in damages per significant lightning event in Iowa County. See Appendix D: Storm Event Database.

Vulnerability Assessment

In general, lightning does not often cause significant injury or damage. Aspects of Iowa County infrastructure and services most vulnerable to lightning:

- Agricultural Industry – Loss of crop, livestock injury and possible death
- Business/industry infrastructure – Property damage
- Emergency Services – Warning systems, access to vulnerable populations such as older, low-income, children, disabled, recreational park users, and visitors
- Environmental – Habitat loss due to wildfires
- Residential Infrastructure – Property damage
- Public Health – Large crowds in open areas
- Public Infrastructure (including utilities) – Downed and damaged electrical lines, poles and antennae, damaged transformers, telephone lines and interrupted radio communications, debris clean-up, and road damage

Future Probability and Potential Loss

According to NOAA, on average there were 0.15 lightning events per year in Iowa County between 1996 and July of 2022. Trends and research suggest an increase in large storm events during the spring and fall, when lightning events are most likely to occur.²⁰ From previous occurrences and an expected increase in events, Iowa County can expect to have more than 0.15 lightning events per year on average.

²⁰ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

The average cost in property and crop damages of a significant lightning event in Iowa County between 1996 and July of 2022 was \$96.25K.

Severe Thunderstorm – Thunderstorm Wind Event

Thunderstorm winds are winds of 58 mph or more and can cause extensive damage. They are most common between April and September and tend to peak in June. Fast-moving bands of thunderstorms with destructive winds, called derechos, move in straight lines rather than the spirals of a tornado. Derechos are rare events that may multiply the severity of and damage from single-event thunderstorms.

Historical Severe Thunderstorm Events

According to NOAA records, Iowa County experienced 180 thunderstorm wind events between 1955 and July of 2022. Total damages caused by these events was \$3.642M in property damage and \$460K in crop loss/damage. On average, that is approximately \$20,233 in damages per significant thunderstorm wind event in Iowa County. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to thunderstorm winds:

- Agricultural Industry – Loss of crop, livestock injury and possible death
- Business/Industry Infrastructure – Property damage (roof and vehicle damage), property loss, debris clean-up
- Emergency Services – Warning systems, access to vulnerable populations such as older, low-income, children, disabled, recreational park users, and visitors, possible human injury and/or death
- Environmental – Tree damage, pollution due to hazardous waste spills
- Residential Infrastructure – Property damage (roof and vehicle damage), property loss, debris clean-up
- Public Health – Significant risk of bodily harm due to flying debris and hazardous driving conditions
- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks debris clean-up, road damage

Future Probability and Potential Loss

According to NOAA, on average there were 2.69 thunderstorm wind events per year in Iowa County between 1955 and July of 2022. Trends and research suggest an increase in large storm events during the spring and fall, when thunderstorm events are most likely to occur. From previous occurrences and an expected increase in events, Iowa County can expect to have more than 2.69 thunderstorm wind events per year on average. The average cost in property and crop damages of a significant thunderstorm wind event in Iowa County between 1955 and July of 2022 was \$20,233.33.

Severe Thunderstorm – Tornado Event

A tornado is a violently rotating funnel shaped column of air that touches the ground. Using the new Enhanced Fujita Scale wind speeds can vary from as low as 65 miles per hour for an EF0 tornado to over 200 miles per hour for an EF5 tornado. Tornado paths are generally not wider than 1/4 a mile and not longer than 16 miles. A tornado's destructive power comes from its high wind and sudden pressure changes. Tornadoes are associated with storm systems and are usually accompanied by hail, torrential rain, and intense lightning. In the U.S., tornadoes are classified according to the Enhanced Fujita Scale and generally land into one of six intensity categories, EF0-EF5²¹.

Historical Occurrence

According to NOAA records, Iowa County experienced 30 tornadoes between 1954 and July of 2022. Iowa County experienced one of Wisconsin's largest and deadliest tornado events in the Village of Barneveld and the Town of Brigham. The Tornado event in June of 1984 led to 9 deaths and over 200 injuries. Total damages caused by the 30 tornado events in Iowa County was \$6.12M in property damage and \$55K in crop loss/damage. On average, that is approximately \$205,833 in damages per tornado event in Iowa County. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to tornadoes:

- Agricultural Industry – Loss of crop, livestock injury and possible death
- Business/Industry Infrastructure – Property damage and loss
- Emergency Services – Warning systems, access to vulnerable populations such as older, low-income, children, disabled, recreational park users, and visitors, possible human injury and/or death
- Environmental – Habitat loss
- Residential Infrastructure – Property damage and loss
- Public Health – Potential injury or death due to flying debris, downed powerlines, or collapsed structures
- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks debris clean-up, road damage

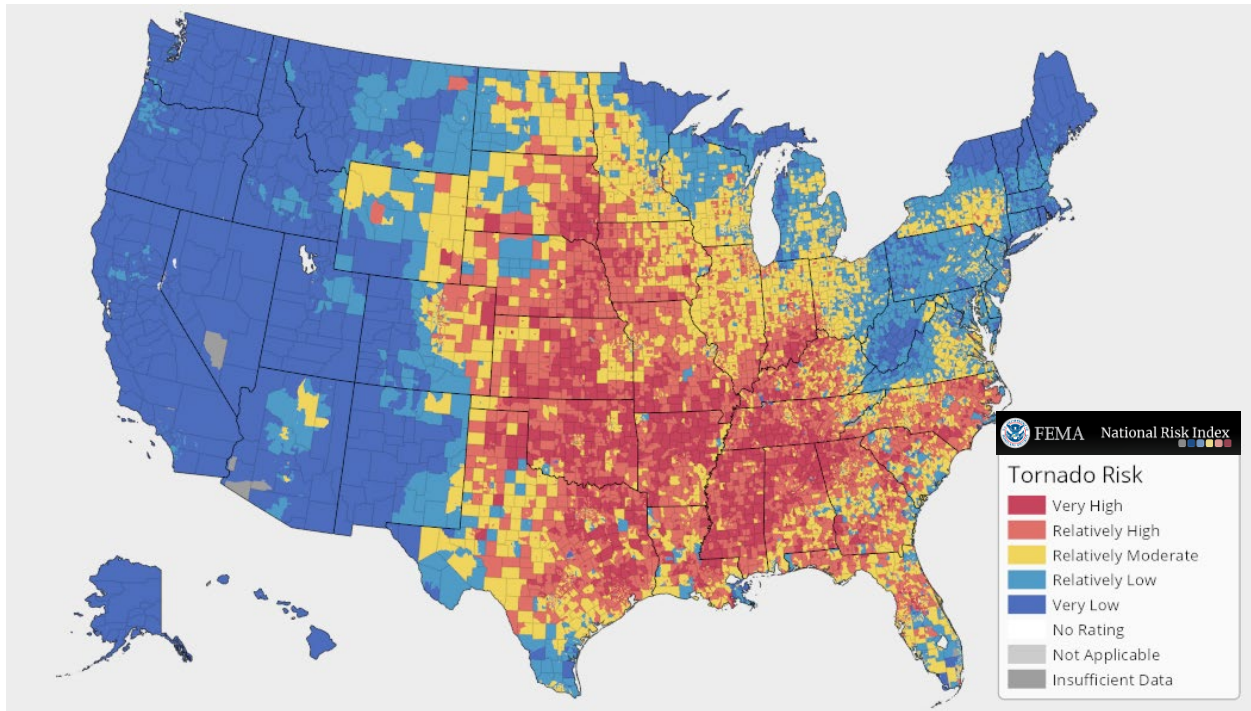
Future Probability and Potential Loss

According to NOAA, on average there were 0.44 tornado events per year in Iowa County between 1954 and July of 2022. Trends and research suggest an increase in large storm events during the spring and fall, when tornado events are most likely to occur.²² From previous occurrences and an expected increase in storm events, Iowa County can expect to have more than .44 tornado events per year on average. According to FEMA's National Risk Index (see Figure 16), Iowa County has relatively moderate risk for tornadoes.

²¹ National Weather Service. *The Enhanced Fujita Scale*. <https://www.weather.gov/oun/efscale>

²² WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

Figure 16: FEMA Tornado Risk in the United States



Severe Winter Storms

Winter storms include heavy snowstorms, blizzards, and ice storms. Winter storms cover broad geographical areas, and one storm can impact entire regions of the state. The winter storm season in Wisconsin is from October to March. However, severe winter weather has occurred as early as September and as late as April and the early part of May in some areas of the state. Winter storms frequently result in problems of drifting snow and hazardous roadway conditions. According to the Wisconsin State Hazard Mitigation Plan (2021), there are six elements that make up hazardous winter weather²³:

- **Heavy snowfall:** Accumulation of four or more inches of snow in a 12-hour period or six or more inches in a 24-hour period
- **Blizzard:** Sustained wind or frequent wind gusts of at least 35 mph accompanied by considerable falling and/or blowing snow
- **Ice Storm:** Freezing rain produces significant or damaging accumulations of ice, usually ¼" or thicker
- **Freezing Drizzle/Freezing Rain:** Drizzle or rain that falls as a liquid but freezes into glaze upon contact with the ground or objects with a temperature of 32°F or below
- **Sleet:** Pellets of ice composed of frozen or mostly frozen raindrops or refrozen partially melted snowflakes
- **Wind Chill:** Measure of accelerated heat loss from exposed skin due to increased wind speeds

Historical Occurrences

According to NOAA records, Iowa County experienced 177 severe winter storms between 1996 and July of 2022. The total damages caused by the 177 winter storm events in Iowa County was \$10K in property damage. Considering the frequency of these storms and the potential damages due to heavy snow and closed roads, it is likely that the number for property damage is under-reported and that loss of services/income is not included in that estimate. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to severe winter storms:

- Agricultural Industry – Livestock injury and possible death
- Business/Industry Infrastructure – Property damage (roof and vehicle damage), property loss, income loss, transportation breakdown
- Emergency Services – Warning systems, access to vulnerable populations such as older, low-income, children, disabled, recreational park users, and visitors, possible human injury and/or death
- Environmental – N/A
- Residential Infrastructure – Property damage (roof), property loss, debris clean-up
- Public Health – Loss of electricity and natural gas services

²³ Wisconsin Emergency Management (December 2021). *Threat & Hazard Identification and Risk Assessment* https://wem.wi.gov/wp-content/library/Mitigation/Appendix_A_THIRA.pdf Page 216

- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks debris clean-up, road damage, school closures, workforce impacts from school and business closures and commute impacts

Future Probability and Potential Loss

According to NOAA, on average there were 6.81 severe winter storm events per year in Iowa County between 1996 and July of 2022. Trends and research suggest a decrease in the time of freezing conditions necessary for severe winter storms, but suggest greater precipitation in the forms of both snow and rain, leading to an unknown future probability of ice storm events.²⁴ From previous occurrences Iowa County may expect to have, on average, 6.81 severe winter storm events per year.

²⁴ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

Wildland and Forest Fires

A forest fire is any uncontrolled fire that occurs in a woodland outside of the limits of an incorporated village or city. A wildfire is any instance of uncontrolled burning in brush, marshes, grasslands, or field lands. Types of fires include:

- *Interface or intermix fires* occur in areas where both vegetation and structures provide fuel. These are also referred to as wildland-urban interface fires.
- *Firestorms* occur during extreme weather (e.g. high temperatures, low humidity, and high winds) with such intensity that fire suppression opportunities are limited. These events typically burn until the weather or fuel conditions change, reducing fire behavior.

Prescribed fire is the intentional application of fire to wildland natural fuels, under specific environmental conditions, to accomplish planned land management objectives. It is a commonly suggested management strategy and one of the most complicated and complex operations to implement.

Historical Occurrences

According to records from the WI-DNR, Iowa County experienced 592 wildland and forest fires between 1982 and July of 2022. The total damage to property and crops is unknown. See Appendix E: Iowa County Fire Events.

Vulnerability Assessment

Areas of northern Iowa County are more susceptible to wildfire and forest fire events than areas south of Military Ridge (see Figure 15). Large pine plantations create stockpiles of underbrush in these areas. Particularly susceptible are the Towns of Pulaski and Arena.

Aspects of Iowa County infrastructure and services most vulnerable to wildfires and forest fires:

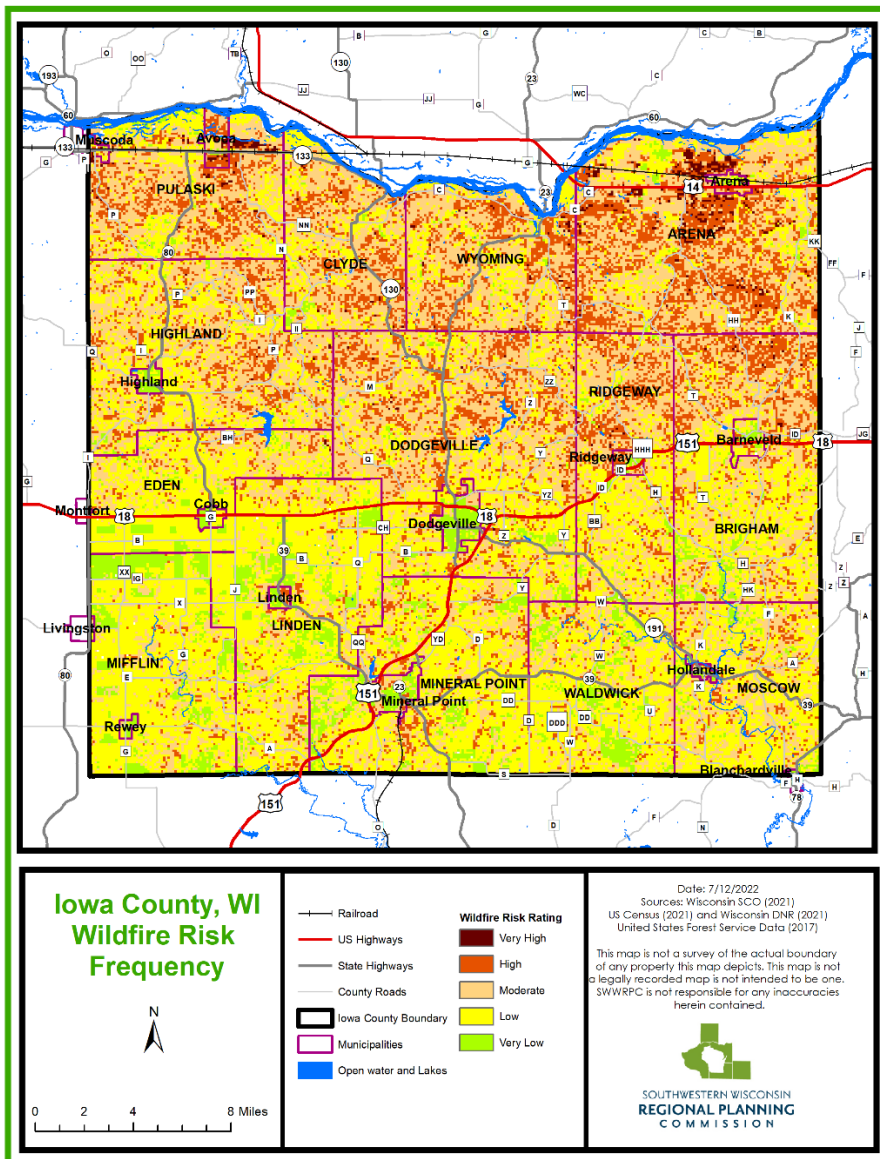
- Agricultural Industry – Loss of Crop, loss of agricultural and industry buildings, livestock injury and possible death
- Business/industry infrastructure – Property damage, property loss, income loss, transportation breakdown
- Emergency Services – Warning systems, access to vulnerable populations such as older, poor, children, recreational park users, and visitors, possible human injury and/or death, stress on volunteer fire departments and volunteer networks
- Environmental – Loss of wildlife habitat, wildlife illness and possible death, soil erosion
- Residential Infrastructure – Property damage, property loss, debris clean-up
- Public Health – Ash and smoke inhalation, fire debris, illness and loss of life
- Public Infrastructure (including utilities) – Property damage, downed transmission lines and poles, damaged transformers and telecommunication networks debris clean-up, road damage and closure, railroad track damage

Future Probability and Potential Loss

According to the Wisconsin Department of Natural Resources, on average there were 14.8 wildfire and forest fire events per year, between 1982 and July of 2022. Trends and research suggest that an increase

in temperatures and droughts could increase the risk and severity of wildfires in the future.²⁵ From previous occurrences Iowa County can expect to have, on average, 14.8 wildfire and/or forest fire events per year. According to the Risk Factor tool created by the nonprofit First Street, there are 22,495 properties in Iowa County that have some risk of being affected by wildfire over the next 30 years. This represents 72% of all properties in Iowa County.²⁶ Forest and wildfires can be naturally created through cycles of growth and death in prairies and forests. Events of greater severity could decrease the future probability of events, with underbrush being removed due to fire. Historically, events in Iowa County have been small, and the cost of damages is unknown. See Figure 17 for wildfire risk in the county.

Figure 17: Wildfire Risk in Iowa County



²⁵ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

²⁶ First Street Foundation, Risk Factor (July 2022) https://riskfactor.com/county/iowa-county-wi/55049_fsid/fire

Fog

Fog, at its most basic definition, is a cloud on the ground rather than in the atmosphere. Fog occurs when the air near the ground is saturated with moisture and condenses on tiny particles suspended in the air. Once condensation occurs on these tiny surfaces, the resulting liquid drops can remain suspended in the air because their weight causes them to descend slowly to the ground or be carried by wind. Fog is often hazardous when the visibility is reduced to ¼ mile or less. While all of the county may experience fog, the most significant fog hazard concern is vehicle transportation, so transportation paths are likely the largest risk.

Historical Occurrences

According to NOAA records, Iowa County experienced 73 dense fog events between 1999 and July of 2022. The total damages caused by dense fog in these events is unknown. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to fog:

- Agricultural Industry – N/A
- Business/industry infrastructure – N/A
- Emergency Services – Warning systems, possible human injury and/or death due to accidents
- Environmental – N/A
- Residential Infrastructure – N/A
- Public Health – Possible injury/death due to vehicle crashes
- Public Infrastructure (including utilities) – N/A

Future Probability and Potential Loss

According to NOAA, on average there were 3.17 dense fog events per year between 1999 and July of 2022. Fog is a regional event that affects the entire county. The largest vulnerability attributed to fog in Iowa County is automobile crashes. According to the Wisconsin Department of Transportation, fog contributed to 243 car crashes in Iowa County between 1994 and 2016. During these crashes six people were killed, 137 were injured and 153 crashes caused property damage.²⁷ From previous occurrences Iowa County can expect to have, on average, 3.17 dense fog events per year.

²⁷ Wisconsin Traffic Operations and Safety (TOPS) Laboratory. Wisconsin MV4000 crash data, Iowa County crashes 1994-2016 [dataset]. Available from the *WisTransPortal Data Hub*, <http://transportal.cee.wisc.edu/>. Wisconsin Department of Transportation [producer]. Retrieved August 2017.

Drought

Drought is a deficiency in precipitation over an extended period, usually a full season or more, resulting in a water shortage, causing adverse impacts on vegetation, animals, and/or people. The severity of a drought depends upon the degree of moisture deficiency, the duration, and the size of the affected area. According to NOAA, droughts are described in four ways: meteorological, agricultural, hydrological, and socioeconomic. These drought types can occur at the same time.²⁸

- *Meteorological drought* is based on the degree of dryness (rainfall deficit) and the length of the dry period.
- *Agricultural drought* is based on the impacts to agriculture by factors such as rainfall deficits, soil water deficits, reduced ground water, or reservoir levels needed for irrigation.
- *Hydrological drought* is based on the impact of rainfall deficits on the water supply such as stream flow, reservoir and lake levels, and ground water table decline.
- *Socioeconomic drought* is based on the impact of drought conditions (meteorological, agricultural, or hydrological drought) on supply and demand of some economic goods. Socioeconomic drought occurs when the demand for an economic good exceeds supply as a result of a weather-related deficit in water supply.

Historical Occurrences

According to NOAA records, Iowa County experienced 18 drought events between 2002 and July of 2022. According to their records, Iowa County experienced \$150,000 in crop damages during these events. NOAA's figure is likely incomplete, as drought damages are generally reported to the United States Department of Agriculture, insurance companies, or go unreported. Federal drought emergencies were officially declared in Wisconsin 1976, 1987, and 2005. Areas of the county with sandy soils report periods of drought-like conditions almost annually. See Appendix D: Storm Events.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to extreme temperatures:

- Agricultural Industry – Crop failure, livestock illness, and possible death. Particularly of concern are agricultural lands that are not irrigated
- Business/Industry Infrastructure – Limited water for industrial uses
- Emergency Services – Water for use in firefighting may be scarce
- Environmental – Wildlife illness and possible death
- Residential Infrastructure – Limited water for residential uses
- Public Health – Loss of potable water
- Public Infrastructure (including utilities) – Diminished water levels in municipal wells

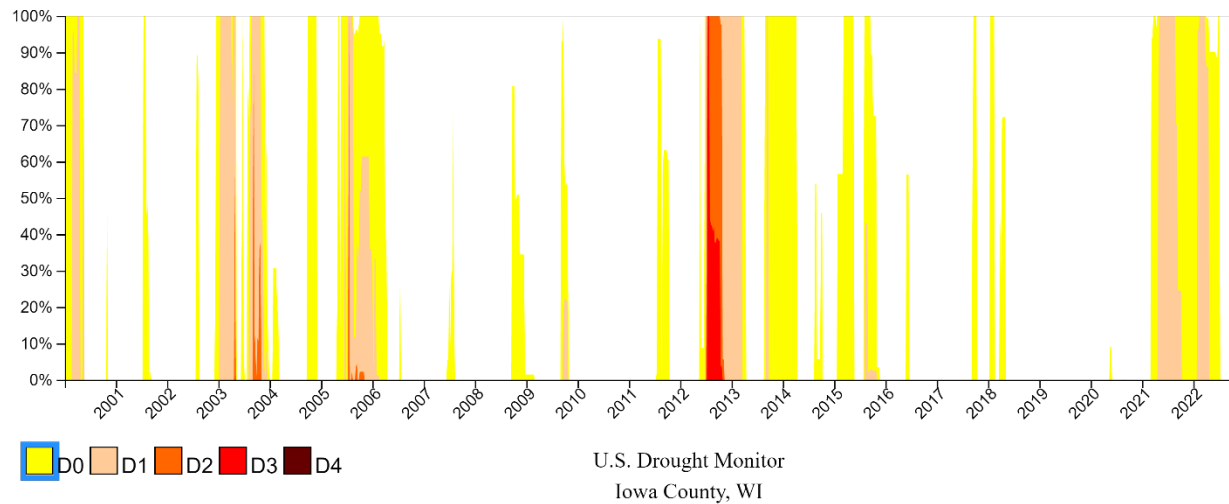
Further, drought can lead to an increased risk of flooding (due to a loss of vegetation that stabilizes the earth in times of runoff) and increased risk of fire. The entire county is at risk of drought.

²⁸ NOAA. *Drought*. (June 2018) https://www.weather.gov/media/owlie/2018_Drought.pdf

Future Probability and Potential Loss

According to NOAA, on average there were 0.9 drought events per year in Iowa County between 2002 and July of 2022. Trends and research suggest both an increase in regularity and total precipitation throughout the year in Wisconsin. However, droughts are complex natural occurrences and their severity and duration are difficult to predict. Short severe droughts may cause very large crop damages if they occur during the growing season, as can long droughts that last for periods of months or years.

Figure 17: Historic Drought Conditions in Iowa County



D0=Abnormally Dry, D1=Moderate Drought, D2=Severe Drought, D3=Extreme Drought, D4=Exceptional Drought

Extreme Temperatures

Extremely high and extremely low temperatures pose dangers to the health of people and animals. Extreme heat is an especially dangerous threat due to the combination of its impact on vulnerable populations and economic productivity with the frequency of its occurrence. Duration of extreme heat is an important factor in its danger, as longer periods of extreme heat offer no respite or opportunity for recovery.

Historical Occurrences

According to NOAA records, Iowa County experienced 68 extreme temperature events between 1996 and July of 2022. Extreme temperature events are regional and can vary in severity and duration. See Appendix D: Storm Event Database.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to extreme temperatures:

- Agricultural Industry – Loss of crop, livestock illness, and possible death
- Business/Industry Infrastructure – Increased heating and cooling cost
- Emergency Services – Human illness and death (heat stroke, dehydration, frostbite, hypothermia), particularly vulnerable are older, low-income, children, and disabled populations, and those that are isolated and do not have access to adequate heating or cooling sources

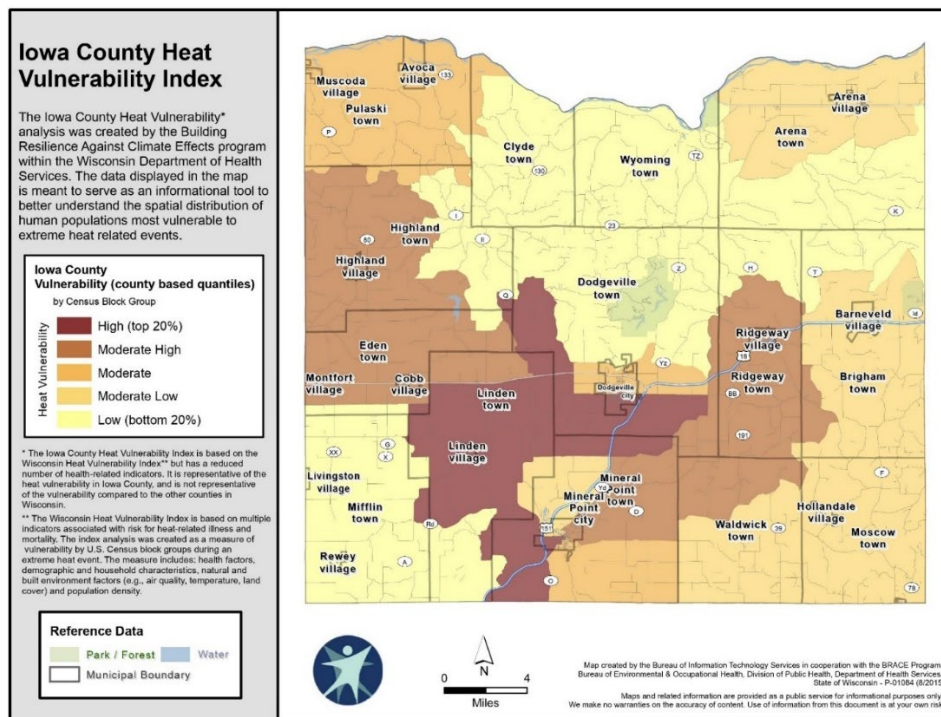
- Environmental – Wildlife illness and possible death, plant and tree damage
- Residential Infrastructure – Increased heating and cooling costs, frozen water pipes
- Public Health – Increased air contamination levels
- Public Infrastructure (including utilities) – Diminished operations of public facilities and schools, frozen pipes, increased heating and cooling costs, increased electricity demand, and possible large scale power outages, road damages

Future Probability and Potential Loss

According to NOAA, on average there were 1.3 extreme cold and 1.3 extreme heat events per year in Iowa County between 1996 and July of 2022. Potential loss from extreme temperature events are under-reported and have not often taken into account higher energy consumption, road damages, or closing facilities. At the residential level, extreme temperatures present issues of human safety and property damage.

The Wisconsin Department of Health Services developed a Heat Vulnerability Index (HVI) that takes into account population density, health factors, demographic and socioeconomic factors, and natural and built environment factors. Figure 18 shows areas of Iowa County where the population is more vulnerable to extreme heat events. The map can help identify high-risk neighborhoods and populations to receive targeted messaging related to heat events and additional resources during extreme heat events. This county map is representative of Iowa County alone, and is not comparable to HVI maps for other counties in Wisconsin.²⁹

Figure 18: Heat Vulnerability Map for Iowa County



²⁹Wisconsin Department of Health Services. *Vulnerability Indices*. Accessed July, 2022. <https://www.dhs.wisconsin.gov/climate/wihvi.htm>

Biological Hazards: Epidemics, Infestations, and Blight

An epidemic is the unusual increase in the number of cases of an infectious disease which already exists in a certain region or population. It can also refer to the appearance of a significant number of cases of an infectious disease in a region or population that is usually free from that disease. Insect infestations are the influx and detrimental development of insects that negatively affect humans, animals, and/or crops and materials. Blight is a biological plant disease, spread from infected plants and then deposited on soil by fungal spores that are carried by insects, wind, water, and animals.

Historical Occurrences

Biological hazards have occurred on a regular basis in Iowa County. Biological hazards change based upon climate and weather patterns, as well as social patterns. The COVID-19 global pandemic has resulted in 13,186 confirmed deaths in Wisconsin as of July 19th, 2022.³⁰ The COVID-19 pandemic also resulted in major disruptions to systems and lifestyles, including supply chain issues, workforce shortages, school closures, hospital service shortages, and mental health decline in the general public.

Other examples of biological hazards include the highly pathogenic avian influenza, which was identified in Wisconsin in 2022.³¹ As of 2022, Iowa County is a confirmed area with Emerald Ash Borer, which is an invasive beetle that attack ash trees.³² The county was a quarantine county for Gypsy Moth, and has been spraying targeted areas as of 2021.³³ Asian Carp have been found in the Wisconsin River in 2011 and 2013 as far north as Iowa County.³⁴ Chronic wasting disease has been long established in Iowa County's whitetail deer population. Oak wilt and Dutch elm disease are also present and ongoing threats to trees in the area. Additionally, many invasive land and aquatic plants are currently established in Iowa County.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to biological hazards:

- Agricultural Industry – Loss of crop, livestock illness, and possible death
- Business/Industry Infrastructure – Business closure, workforce shortage, supply shortage
- Emergency Services – Human illness and death, particularly vulnerable are older, low-income, children, and those that are isolated
- Environmental – Wildlife illness and possible death, plant and tree damage, ecosystem damage
- Residential Infrastructure – Insect infestations
- Public Health – Human illness and possible death
- Public Infrastructure (including utilities) – N/A

³⁰ Wisconsin Department of Health Services (2022). *COVID-19: Wisconsin Deaths*. <https://www.dhs.wisconsin.gov/covid-19/deaths.htm>

³¹ Wisconsin Department of Agriculture, Trade, and Consumer Protection (2022). *Highly Pathogenic Avian Influenza Confirmed in Rock County Backyard Flock*. https://datcp.wi.gov/Pages/News_Media/20220402HPAIRockCounty.aspx

³² Wisconsin Department of Agriculture, Trade, and Consumer Protection (2022) *Wisconsin's Emerald Ash Borer Information Source*. <http://datcpservices.wisconsin.gov/eab/index.jsp>

³³ Wisconsin Department of Agriculture, Trade, and Consumer Protection (2021). *WDNR Gypsy Moth Spraying Maps and Timeline Notice*. <https://www.iowacounty.org/departments/Airport/GypsyMothSpraying>

³⁴ WIDNR. (2015) *Asian Carp Control Efforts*. http://dnr.wi.gov/news/mediakits/mk_carpcontrol.asp

Future Probability and Potential Loss

As of this plan's writing, the impacts of the COVID-19 pandemic still continue after two years. Pandemics have long been predicted by experts, and remain a threat to the residents of Iowa County and broader world. It is likely that infestations of invasive insects, plants, and animals will continue to establish themselves in Iowa County, and climate change will increase the range and severity of disruptive pests and diseases.³⁵ Blights will continue to cause problems in years with heavy rainfall. Infestations, blights, and epidemics have the potential to cause large losses to environmental resources, crop damages, and human illness and possible death.

³⁵ WICCI (2021). *Wisconsin's Changing Climate: Impacts and Solutions for a Warmer Climate*.

Landslides and Embankment Failures

The term landslide includes a wide range of ground movements such as rock falls, deep failure of slopes and shallow debris flows. Although gravity acting on an over-steepened slope is the primary reason for a landslide, there may be other contributing factors, including erosion by rivers or lakes, the weakening of rock and soil slopes through saturation by snowmelt or heavy rains, excess weight from the accumulation of rain or snow, stockpiles of rock or ore, waste piles, earthquakes, or from man-made structures stressing a weak slope. Landslides may include any combination of natural rock, soil, or artificial fill and are classified by their type of movement and material.

Historical Occurrences

The U.S. Geological Survey (USGS) keeps detailed records on when and where landslides occur. According to their records, Iowa County has no reported landslides. However, a mudslide was reported nearby in Boscobel in 2013. Landslides cause on average \$1 to \$2 billion in damages and more than 25 fatalities annually. Landslides are known to occur along limestone and sandstone bluffs of rivers and streams, which are common in Iowa County.³⁶ While no data is available for embankment failures, they have occurred on a relatively small scale in Iowa County in the past.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to landslide and embankment failures:

- Agricultural Industry – Loss of crop, livestock injury, soil erosion, possible death
- Business/industry infrastructure – Property damage
- Emergency Services – Warning systems, possible human injury and death
- Environmental – Loss of habitat
- Residential Infrastructure – Property damage
- Public Health – Pollution
- Public Infrastructure (including utilities) – Property damage, road damages and closures, utility service disruption

Future Probability and Potential Loss

Despite a lack of landslide occurrences on record in Iowa County, there is still a chance that a large landslide may happen in the county. The future probability of embankment failures is greater than that of landslides. According to the Iowa County Highway Department, smaller road embankment washouts generally cost around \$1,000 - \$2,000 per occurrence.

³⁶ United States Geological Survey (2017) *Landslide Hazard Program*. <https://landslides.usgs.gov/aboutus/>

Sinkholes and Subsidence

The United States Geological Survey (USGS) defines subsidence as “the loss of surface elevation due to removal of subsurface support.” Sinkholes occur where subsurface conditions of limestone, carbonate rock, salt beds, and/or rocks naturally dissolves by ground water circulation. As the rock dissolves, spaces and caverns develop underground. Sinkholes are dramatic because the land usually stays intact until the underground spaces expand too far and suddenly collapse.

Historical Occurrences

While no sinkholes have been recorded, small sinkholes happen frequently in areas with freeze thaw cycles. Iowa County is also at risk of experiencing sinkholes because of the large quantity of carbonate bedrock in the county. The majority of Iowa County bedrock is carbonate, with the exception of the northern portion of the county along the Wisconsin River. These areas are prone to sinkholes and subsidence. Potential danger of sinkholes is also possible in areas of the county that were previously mined. Iowa County has a history of lead and zinc mining, and some mining shafts have been opened in areas where development occurred.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to sinkholes and subsidence:

- Agricultural Industry – Loss of crop, soil erosion, livestock injury or death
- Business/Industry Infrastructure – Property damage
- Emergency Services – Warning systems, possible human injury and death
- Environmental – Damage to natural habitats
- Residential Infrastructure – Property damage
- Public Health – Vulnerable population injury or death
- Public Infrastructure (including utilities) – Property damage, road damages and closures, utility service disruption

Future Probability and Potential Loss

Iowa County is at risk for sinkholes because of the large quantity of carbonate bedrock and a history of lead and zinc mining and in the past. As development happens in the county, more mines will be discovered. The potential for loss due to sinkholes and subsidence can be significant, and is a risk that should be accounted for in development and emergency planning. An estimate for potential loss is unavailable since there is no recorded precedent in the county.

Earthquake

An earthquake may be caused by slipping plates that make up the earth's crust or by human activity, such as mining and fluid injection-related activities. Earthquakes can result in a violent shaking or trembling of the ground. An earthquake does not need to be of large magnitude to cause extensive damage. Areas that are less prone to this hazard are usually less prepared, which can result in significant damage.

Historical Occurrences

NOAA records earthquake events at their exact location. According to their records, no previous earthquakes have been centered in Iowa County.³⁷ Most earthquakes that occur in Wisconsin are very low in intensity and barely felt. These very minor earthquakes are fairly common, occurring every few years.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to earthquakes are the following:

- Agricultural Industry – Storage infrastructure damage, livestock injury or death
- Business/industry infrastructure – Property damage, disruption of services and goods
- Emergency Services – Warning systems, possible human injury and death
- Environmental – N/A
- Residential Infrastructure – Property damage
- Public Health – N/A
- Public Infrastructure (including utilities) – Property damage, damage and disruption to utilities including gas, electric, and water, road damage, and possible disruption of service

Earthquakes are able to cause a range of other disasters including fires.

Future Probability and Potential Loss

Most earthquakes that affect Iowa County are very low in intensity and are not likely to cause any damage or be felt in any way. It is likely that low intensity earthquakes similar to those of the past will happen in the future. Yet, if a moderate to high intensity event were to happen in Iowa County, it would cause a large range of significant damage, as buildings and infrastructure in Iowa County were not built to withstand high intensity earthquakes.

³⁷ NOAA. *US Earthquake Intensity Database*. Accessed July, 2021. <https://www.ngdc.noaa.gov/hazard/eq-intensity.shtml>

Hazardous Material Incident

A hazardous material incident is any uncontrolled release of an item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

Historical Occurrences

According to WEM, hazardous material incidents are often the result of the transportation of hazardous materials. In Dodgeville, between 2015-July of 2022, there were 4 hazardous materials incidents reported by the US Department of Transportation on highways, none of which resulted in fatalities, evacuations, or closures of any kind.³⁸

PFAS (per- and polyfluoroalkyl substances which are long-lasting chemicals that are harmful to human and animal health) have been identified in water, air, fish, and soil, as well as in consumer, commercial, and industrial products nationally and worldwide, including in Iowa County.³⁹ Groundwater and drinking water contamination due to agricultural runoff, decaying infrastructure, incorrect hazardous waste disposal including medical product disposal, and other sources are ongoing concerns for the region. Iowa County is especially threatened by runoff and spillage from agricultural sources due to the large presence of agricultural industry.

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to hazardous material incidents:

- Agricultural Industry – Crop damage, damage to soil and productivity, livestock damage
- Business/Industry Infrastructure – Property damage, disruption of services and goods
- Emergency Services – Possible human injury and death
- Environmental – Loss of habitat, air, water, and soil contamination
- Residential Infrastructure – Property damage, evacuation, injury and possible death
- Public Health – Air, water, food, and soil contamination resulting in quality-of-life reduction and potential death
- Public Infrastructure (including utilities) – Property damage, damage and possible disruption of service

Future Probability and Potential Loss

Areas of greatest future probability in Iowa County include highly travelled roadways and railroads. These two important transportation networks have large amounts of hazardous or potentially hazardous materials traveling on them. Other possible events would involve the spill of manure from a manure transport vehicle on a local road, and the spill of a large amount of hazardous material at a local business. Potential losses vary greatly depending on the extent and severity of the material.

³⁸ U.S. Department of Transportation. *Office of Hazardous Materials Safety - Incident Reports Database Search*. Accessed July, 2022.

³⁹ EPA. *PFAS Explained*. <https://www.epa.gov/pfas/pfas-explained>. Accessed August, 2022.

Cyberattack

WEM defines a cyberattack as “the hostile use of information technology by individuals or groups for the purpose of financial gain or as an action to further a social or political agenda. This includes the use of information technology to threaten, exchange information, and/or organize and execute attacks against networks, computer systems, and infrastructure.” Possible incidents include unauthorized access to networks, computer viruses, shutting down websites, and taking over public infrastructure such as electrical networks or communication networks.

Historical Occurrences

A cyberattack is an evolving man-made technological hazard that has much lower relevance to geography than most other hazards, due to the fact that cyberattacks do not happen in a location, but rather through online networks. These incidents have increased over time, and the FBI has recorded 2.76 million complaints globally in the last five years, resulting in a loss of \$18.7 billion. Ransomware attacks have affected the following sectors most frequently: healthcare and public health, financial services, information technology, critical manufacturing, and government facilities.⁴⁰ See Figures 19 and 20 for more information.

Vulnerability Assessment and Future Probability

Aspects of Iowa County infrastructure and services most vulnerable to a cyberattack incident:

- Agricultural Industry – Loss of communications, financial theft
- Business/Industry Infrastructure – Disruption of service, hostile takeover/ransom of website, theft of business sensitive data, financial theft
- Emergency Services – Warning systems network compromised, loss of communications
- Environmental – Protection systems and networks compromised
- Residential Infrastructure – Property damage, evacuation, injury and possible death
- Public Health – Hostile takeover/ransom of private computers, theft of personal information including banking information
- Public Infrastructure (including utilities) – Power failure, utility shut down, disruption of services, loss of services

Future Probability and Potential Loss

As technology advances, cyberattacks will likely become more sophisticated and damaging. Given that the victim losses reported to the Internet Crime Complaint Center have totaled \$51.8 million in Wisconsin¹, the potential loss due to cyberattacks is extremely high. This may affect individuals, businesses, government agencies, and all other entities with information stored and transferred online.

⁴⁰ Federal Bureau of Investigation, 2021. *Internet Crime Report 2021*.

Figure 19: FBI Internet Crime Complaint Center Complaints and Losses over the Last Five Years

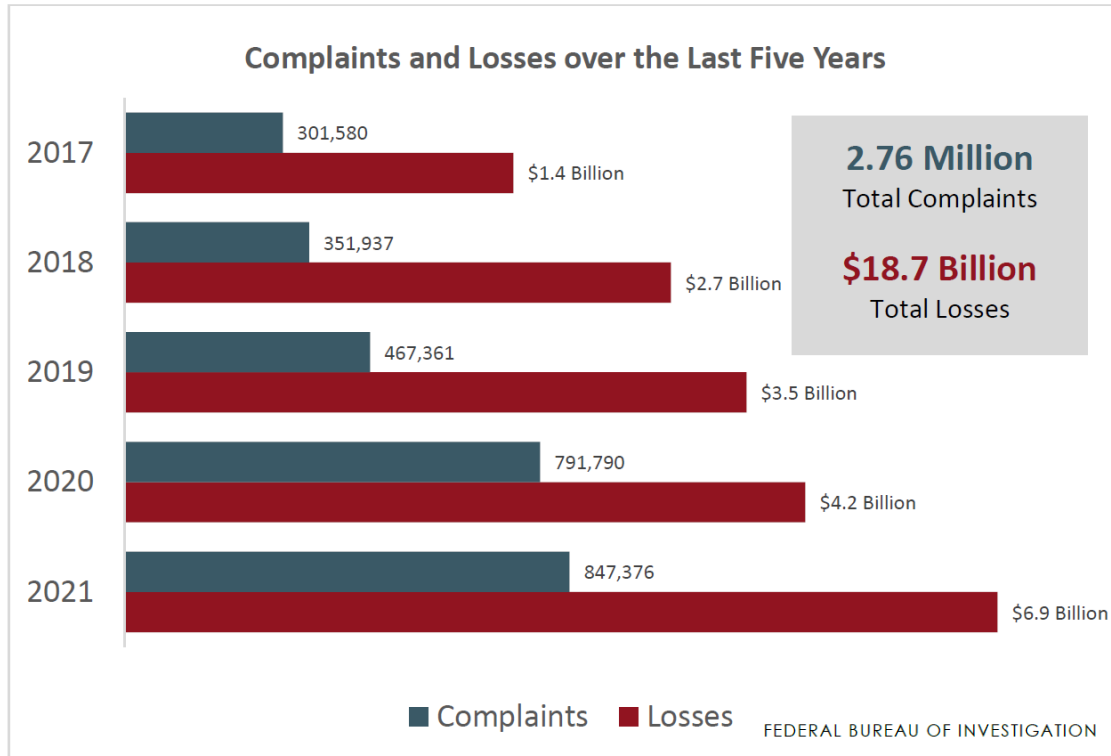
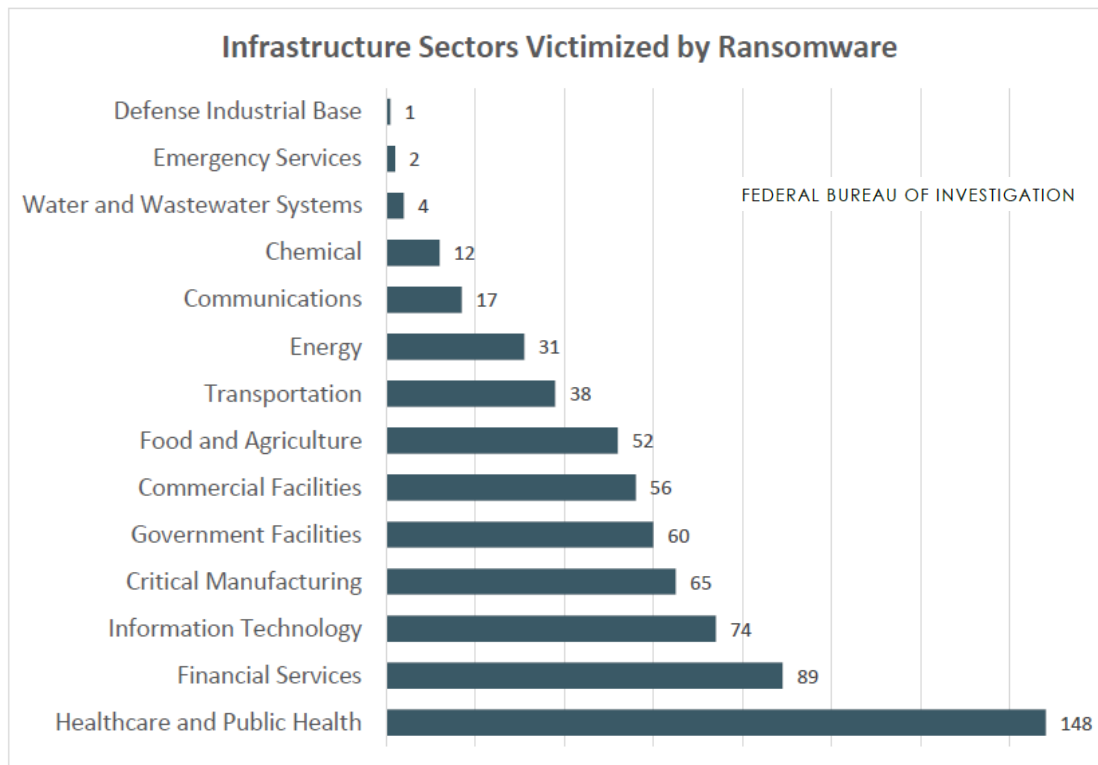


Figure 20: FBI Internet Crime Complaint Center Infrastructure Sectors Victimized by Ransomware



Domestic Terrorism

According to WEM, terrorism is the threat or use of violence to create fear for the purpose of furthering or achieving a political goal.⁴¹ Examples of domestic terrorism include active shooter incidences, anti-government demonstrations, and riots.

Historical Occurrences

On August 5, 2012 an active shooter incident at the Sikh Temple of Wisconsin in Oak Creek resulted in six deaths and four injuries.⁴² On January 6th, 2020, following the presidential election, several Wisconsinites participated in a breach of the U.S. Capitol, and have since been criminally convicted. Domestic terrorism has been identified as a growing threat in the U.S., and Figure 21 shows the types of terrorist attacks recorded over a 25-year time period.⁴³

Vulnerability Assessment

Aspects of Iowa County infrastructure and services most vulnerable to a domestic terrorism incident:

- Agricultural Industry – N/A
- Business/Industry Infrastructure - Disruption of service, theft, property damage
- Emergency Services – Human injury or death
- Environmental – Possible damage to ecosystems
- Residential Infrastructure: Property damage, evacuation, injury and possible death
- Public Health – Human injury or death, mental health damage including PTSD
- Public Infrastructure (including utilities) – Disruption of services, loss of services, cost to update school and other infrastructure in efforts to protect against domestic terrorism issues.

Future Probability and Potential Loss

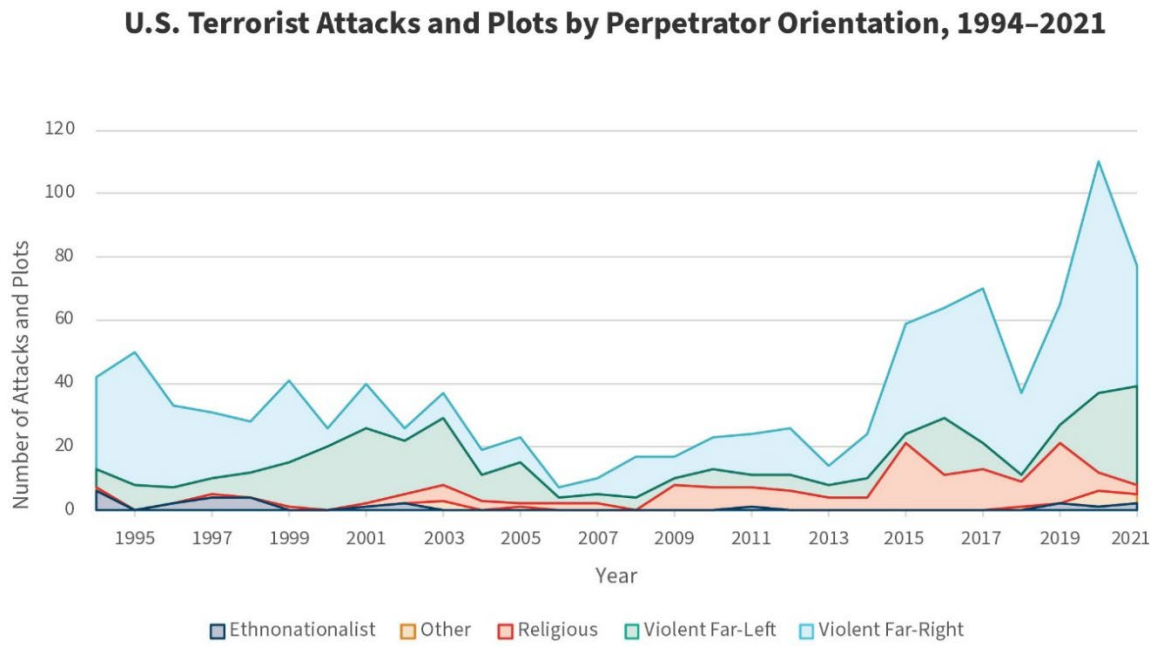
As demonstrated in Figure 21, instances of domestic terrorism have increased in recent years, indicating that the probability of future events is high. Loss of life is the primary concern when anticipating domestic terrorism. In 2021 alone, there were 30 fatalities due to domestic terrorism in the United States.³ Property damage, theft, and other violations are also threats from this hazard.

⁴¹ WEM, 2021. *Threat & Hazard Identification and Risk Assessment (THIRA)*. https://wem.wi.gov/wp-content/library/Mitigation/Appendix_A_THIRA.pdf

⁴² Federal Bureau of Investigation. *Active Shooter Incidents in the United States from 2000-2018*. <https://www.fbi.gov/file-repository/active-shooter-incidents-2000-2018.pdf/view>

⁴³ Center for Strategic & International Studies (2020). *The Escalating Terrorism Problem in the United States*. <https://www.csis.org/analysis/escalating-terrorism-problem-united-states>

Figure 21: Number of Terrorist Attacks and Plots in the U.S.



Source: Data compiled by CSIS Transnational Threats Project.

CSIS | TRANSNATIONAL THREATS PROJECT



Chapter 5: Summary of Local Risks and Mitigation

The following section summarizes recent local hazards and recommended actions for each community. The Villages of Muscoda, Livingston, and Montfort were not included in Iowa County's Plan, those Villages are included in Grant County's Hazard Mitigation Plan. The Village of Blanchardville was not included in Iowa County's plan, as it is mostly in Lafayette County and is included in Lafayette County's plan. Local actions were identified by the planning team through a compilation of public input, local knowledge, and the county-wide risk assessment. Once local input was summarized, the planning team determined estimated costs, implementation responsibility, timeline for completion, and priority.

Estimated Costs

Actions were developed with the understanding that financial and human resources are the greatest obstruction to communities undertaking hazard mitigation actions. In the final review of each community's actions, estimated costs were considered in prioritization. For high-cost actions, such as storm shelters and addressing public infrastructure, this plan encourages advanced preparation by undertaking studies to clearly identify needs and to prepare grant narratives ahead of time in order to maximize the use of state and federal funds. In several instances, the extent or severity of hazard related problems are not known at this time.

Implementation Responsibility

Each action is associated with a responsible party. In most cases, hazard mitigation is the responsibility of local government. In other instances, hazard mitigation is under the jurisdiction of the state or county, and at times hazard mitigation is required by local business and land owners. In all cases, assistance in implementing the hazard mitigation action is provided by ICEM.

Timeline

Each action has a unique timeline depending on complexity, location, and available resources. In general, timelines are based upon the estimated time it would take the responsible party to complete the action.

Action Prioritization

Actions are prioritized based upon the risk assessment, local input, estimated costs, availability of local and county resources, and impact. Local hazard mitigation actions are organized into high, medium, and low priority.

- **High Priority:** Planning and implementation on the action should begin as soon as possible.
- **Medium Priority:** Implementation should begin following completion of high priority actions, following the initiation of high priority actions, or as new resources become available.
- **Low Priority:** The action should be considered according to context and opportunity following consideration of high and medium priority actions.

City of Dodgeville

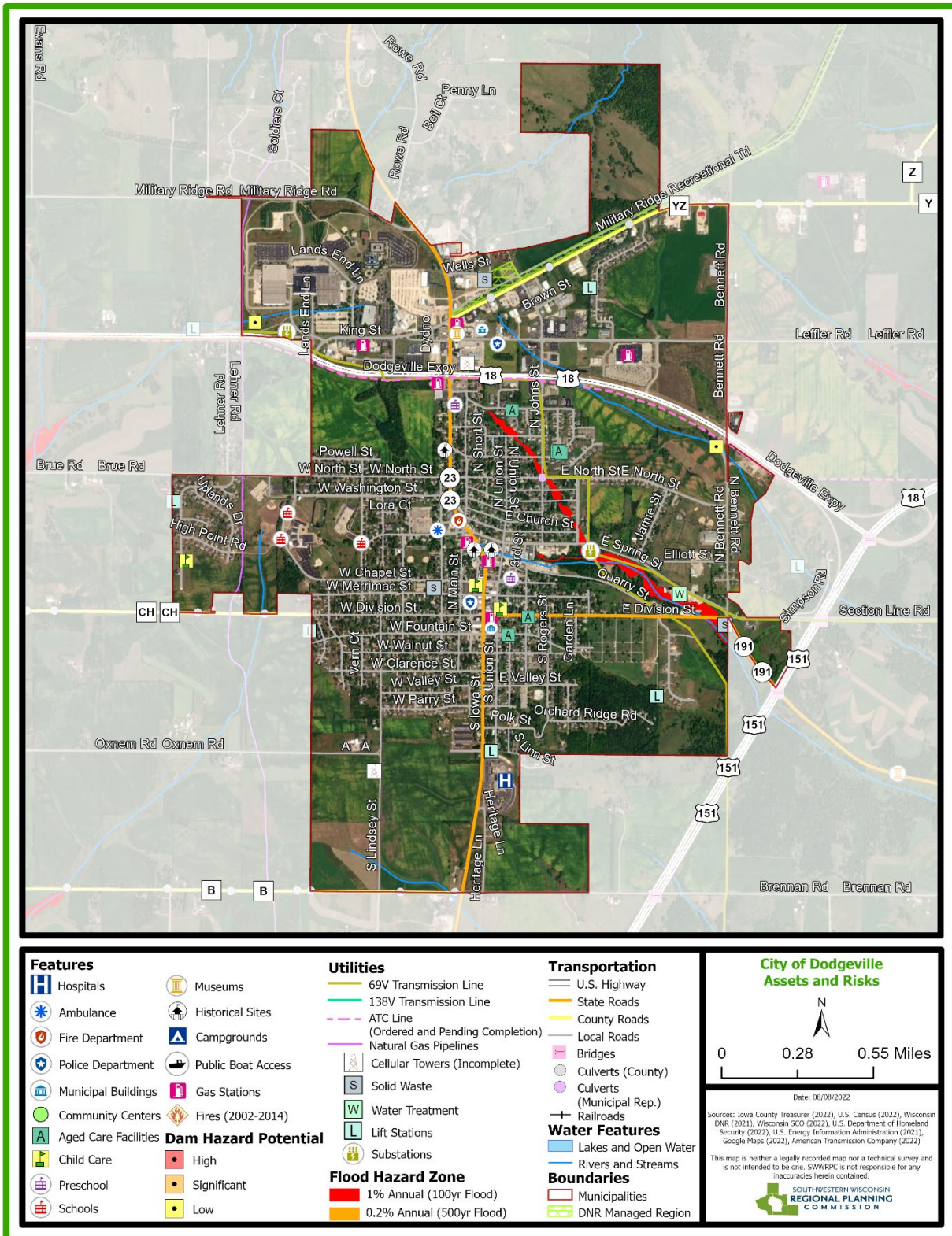
The City of Dodgeville is located in the central part of Iowa County. The population was estimated to be 4,714 in 2021⁴⁴. Within Dodgeville is the Military Ridge Trailhead, ICEM, and the Iowa County Sheriff's Office. Dodgeville is an employment center, with Lands' End located in the city, and is nearby Governor Dodge State Park, a major outdoor recreation location.

Table 14: City of Dodgeville Local Action Recommendation

Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	City Council/ ICEM	\$25K per generator	City Budget, ARPA Funds	Install and maintain backup power at local critical infrastructure sites.
High	2 years	City Council/ ICEM	\$31.4K	BRIC Grant, City Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	2 years	City Council	Varies	City Budget	Invest in cyber protection system.
Medium	5 years	City Council	\$5K - \$10K	City Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	City Council/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	2 years	City Council	Existing staff time	City Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	City Council	Unknown	BRIC Grant, ARPA Funds, City Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁴⁴ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 22: City of Dodgeville Map



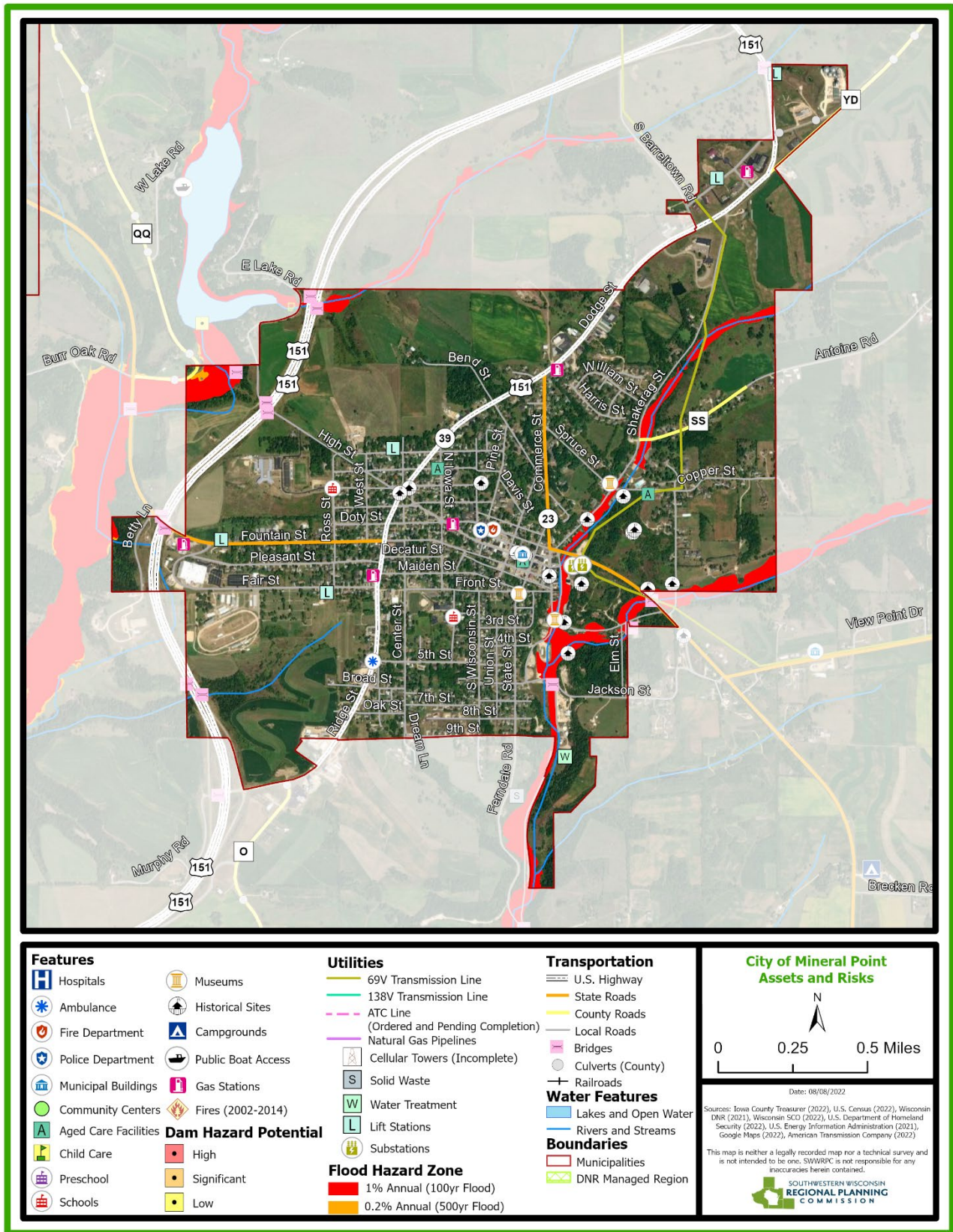
City of Mineral Point

The City of Mineral Point is located in the southern part of Iowa County. The population was estimated to be 2,503 in 2021⁴⁵. Mineral Point is home to the Iowa County Fairgrounds and Rodeo Grounds. There are roaster piles (mine waste piles) from 1980 located near the river in the southeast peninsula of the city limits.

Table 15: City of Mineral Point Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	2 years	Hodan Center/ ICEM	Existing staff time	City Budget, ICEM Budget	Develop Emergency Response Plan and notification system for Hodan Center and senior facilities.
High	1 year	Local Govt./ ICEM	Existing staff time	City Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	City Council/ ICEM	\$25K per generator	City Budget, ARPA Funds	Install and maintain backup power at local critical infrastructure sites.
High	2 years	City Council/ ICEM	\$30.4K	BRIC Grant, City Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	2 years	City Council	Varies	City Budget	Invest in cyber protection system.
Medium	5 years	City Council	\$5K - \$10K	City Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	City Council/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	2 years	City Council	Existing staff time	City Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	City Council	Unknown	BRIC Grant, ARPA Funds, City Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁴⁵ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 23: City of Mineral Point Map



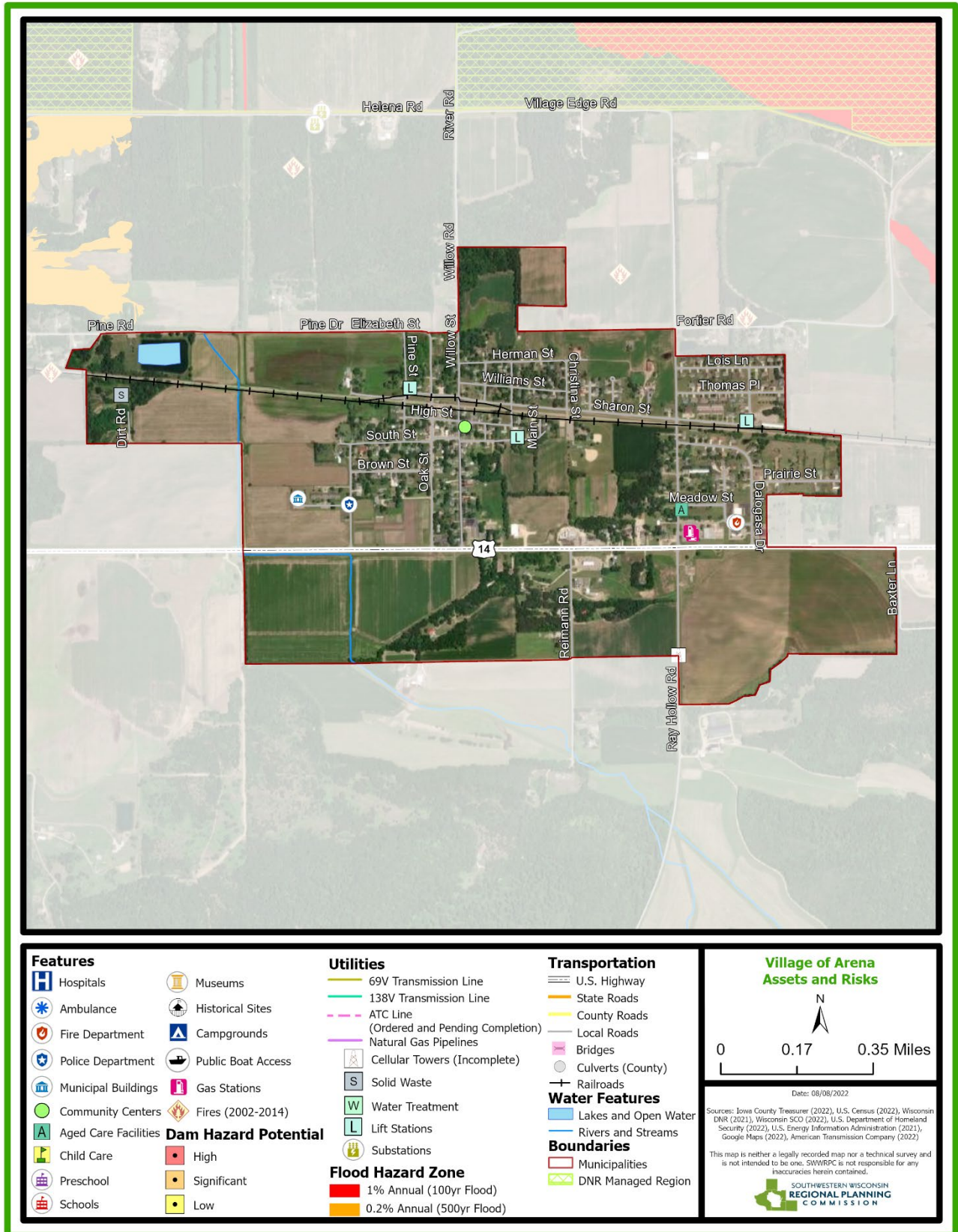
Village of Arena

The Village of Arena is located in the Wisconsin River valley in northern Iowa County. The population was estimated to be 839 in 2021⁴⁶. The village is not located in the floodplain, but there is floodplain located between the Wisconsin River and the village.

Table 16: Village of Arena Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	2 years	Village Board	Varies	Village Budget	Invest in cyber protection system.
High	5 years	Village Board	\$300K	Village Budget, ARPA Funds	Implement mitigation measures to alleviate water runoff from streets into private properties causing flooding.
High	1 year	Local Govt./ ICEM	Existing staff time	Village Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	2 years	Village Board/ ICEM	\$12.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁴⁶ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 24: Village of Arena Map



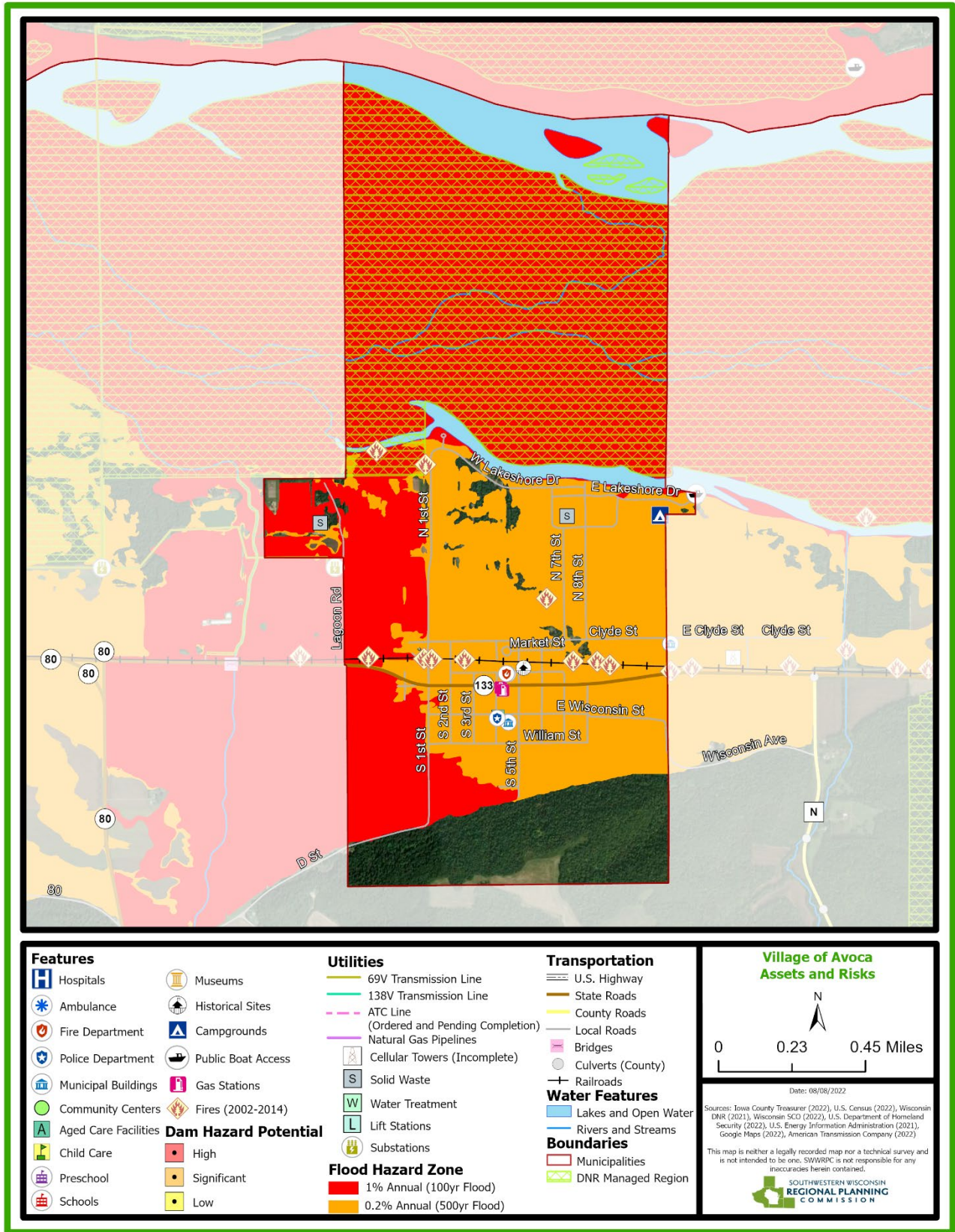
Village of Avoca

The Village of Avoca is located in the far northwest corner of the county. The population was estimated to be 614 in 2021⁴⁷. Avoca has steep valleys to the south of the Village. During heavy rain events, those steep valleys would drain into Morrey Creek and flood the village. In 2008, a large flash flood event caused \$1.7 million in damages to the village. In response and with FEMA funds, a berm was built to restrict flood waters from entering the village. Most of the village remains in the floodplain.

Table 17: Village of Avoca Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	2 years	Village Board/ICEM	\$15.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Village Board	Unknown	BRIC Grant, ARPA Funds, Village Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁴⁷ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 25: Village of Avoca Map



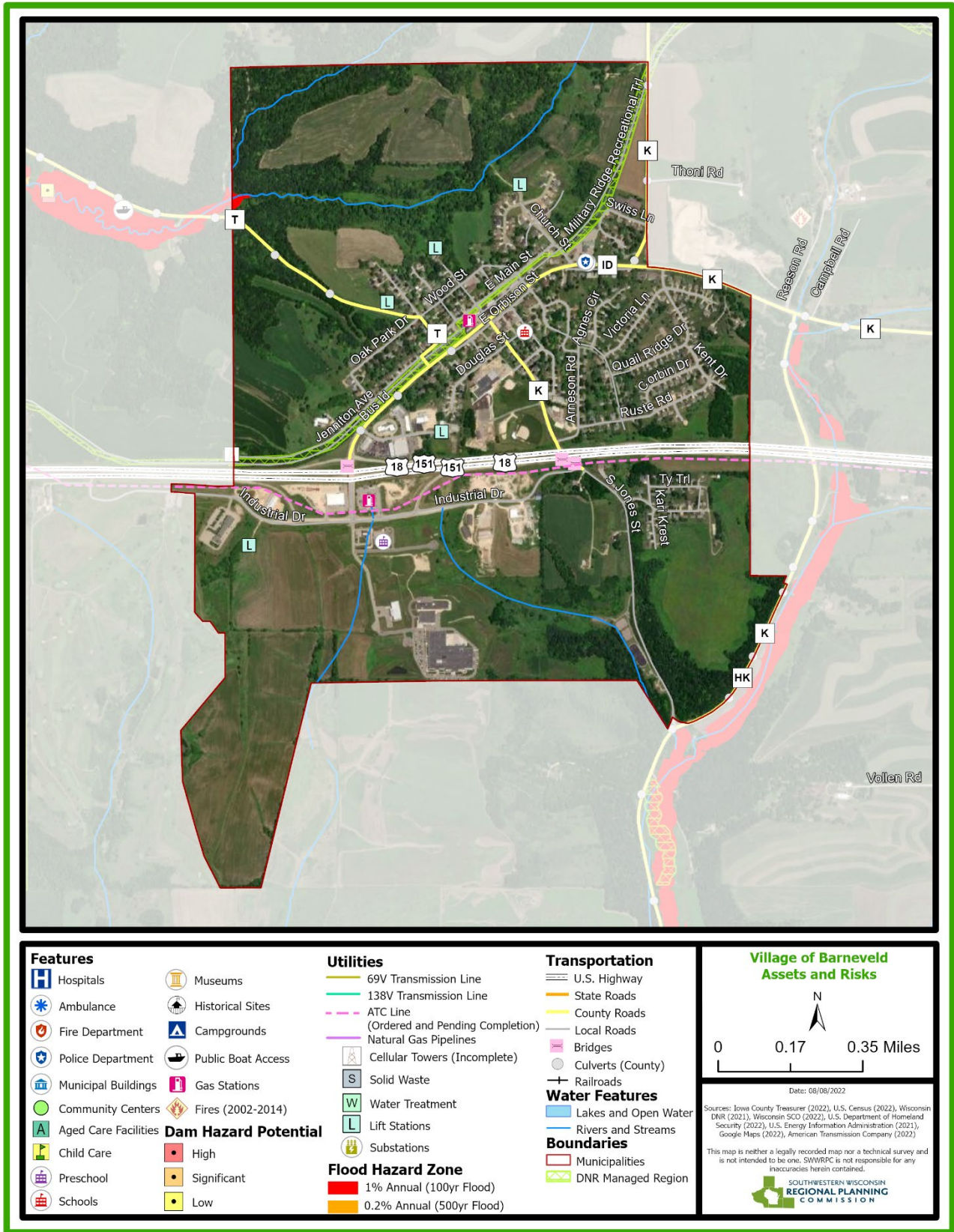
Village of Barneveld

The Village of Barneveld is located in the far east of Iowa County. Highway 18/151 travels through the village, as does the Military Ridge State Trail. The population was estimated to be in 1,279 in 2021⁴⁸. Barneveld was severely affected by an F5 tornado in 1984, which was one of Wisconsin’s worst tornado disasters. Barneveld’s proximity to Madison creates the likelihood of future residential and commercial development within the village.

Table 18: Village of Barneveld Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	2 years	Village Board/ICEM	\$19.9K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Village Board	Unknown	BRIC Grant, ARPA Funds, Village Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁴⁸ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 26: Village of Barneveld Map



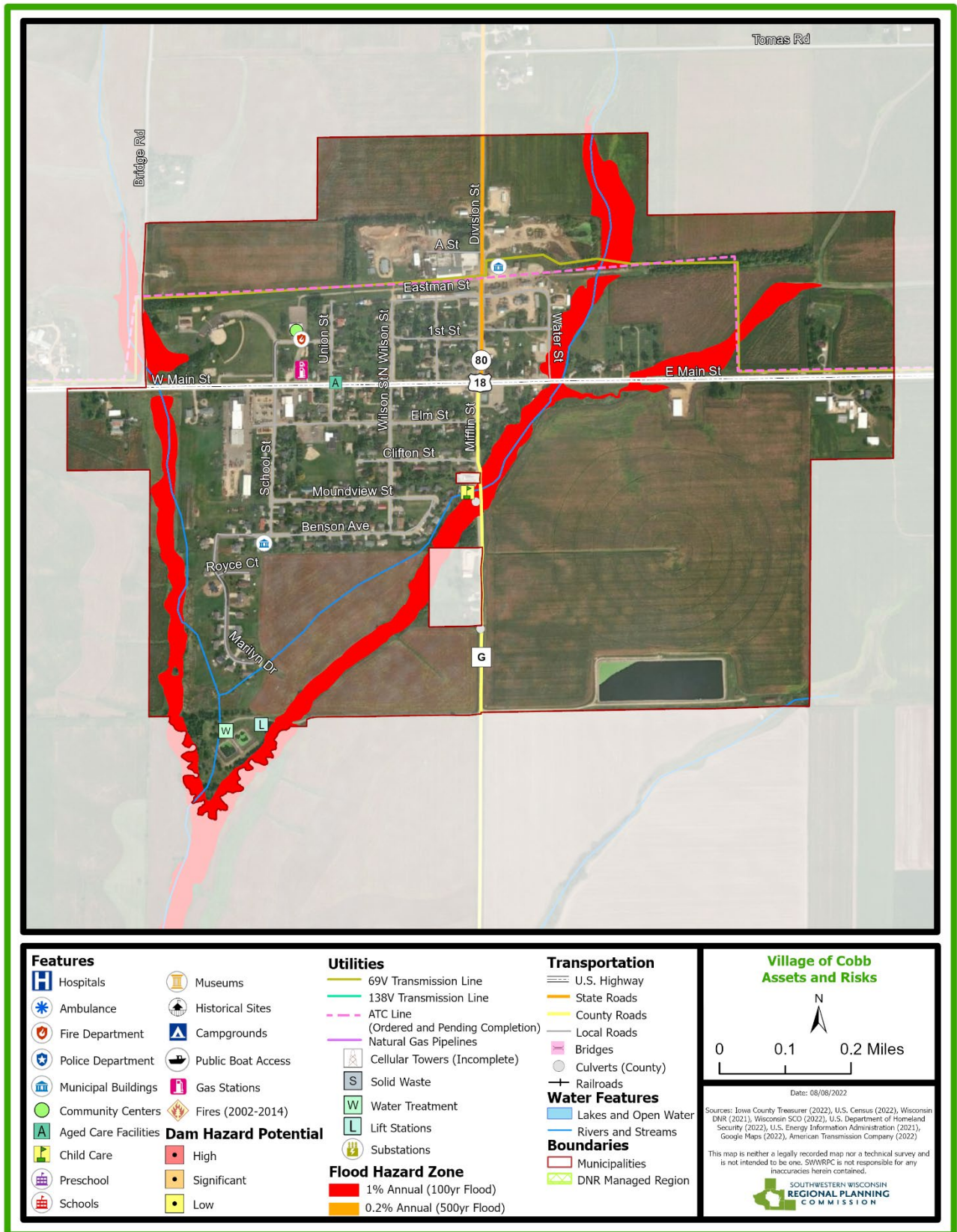
Village of Cobb

The Village of Cobb is located in the western half of the county. The population was estimated to be 471 in 2021⁴⁹.

Table 19: Village of Cobb Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Local Govt./ ICEM	Existing staff time	Village Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	2 years	Village Board/ ICEM	\$29.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁴⁹ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 27: Village of Cobb Map



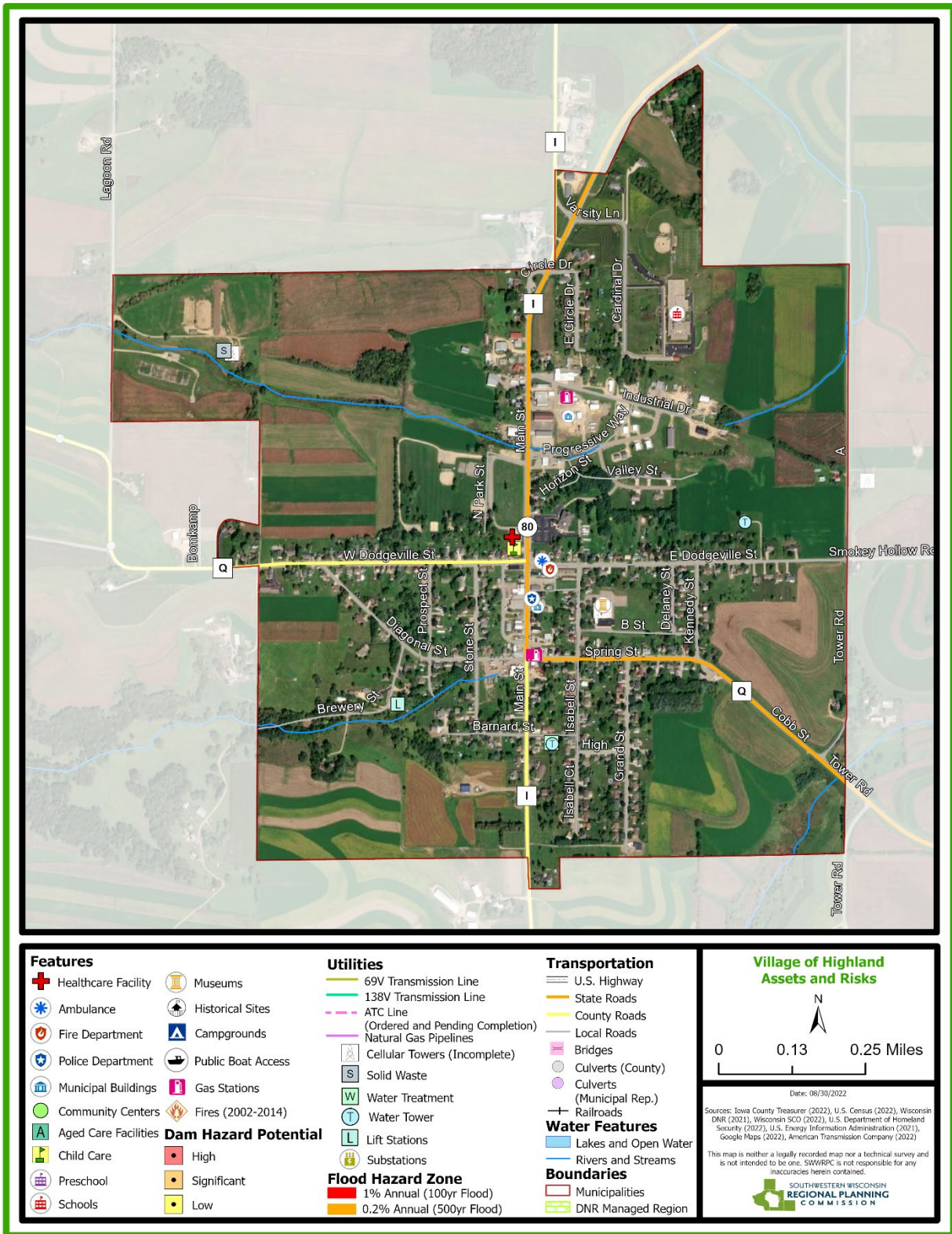
Village of Highland

The Village of Highland is located in western half of Iowa County, within Highland Township. The village's population was estimated to be 873 in 2021⁵⁰.

Table 20: Village of Highland Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	2 years	Village Board/ ICEM	\$12.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board	Unknown	Village Budget	Maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Village Board	Unknown	BRIC Grant, ARPA Funds, Village Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵⁰ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 28: Village of Highland Map



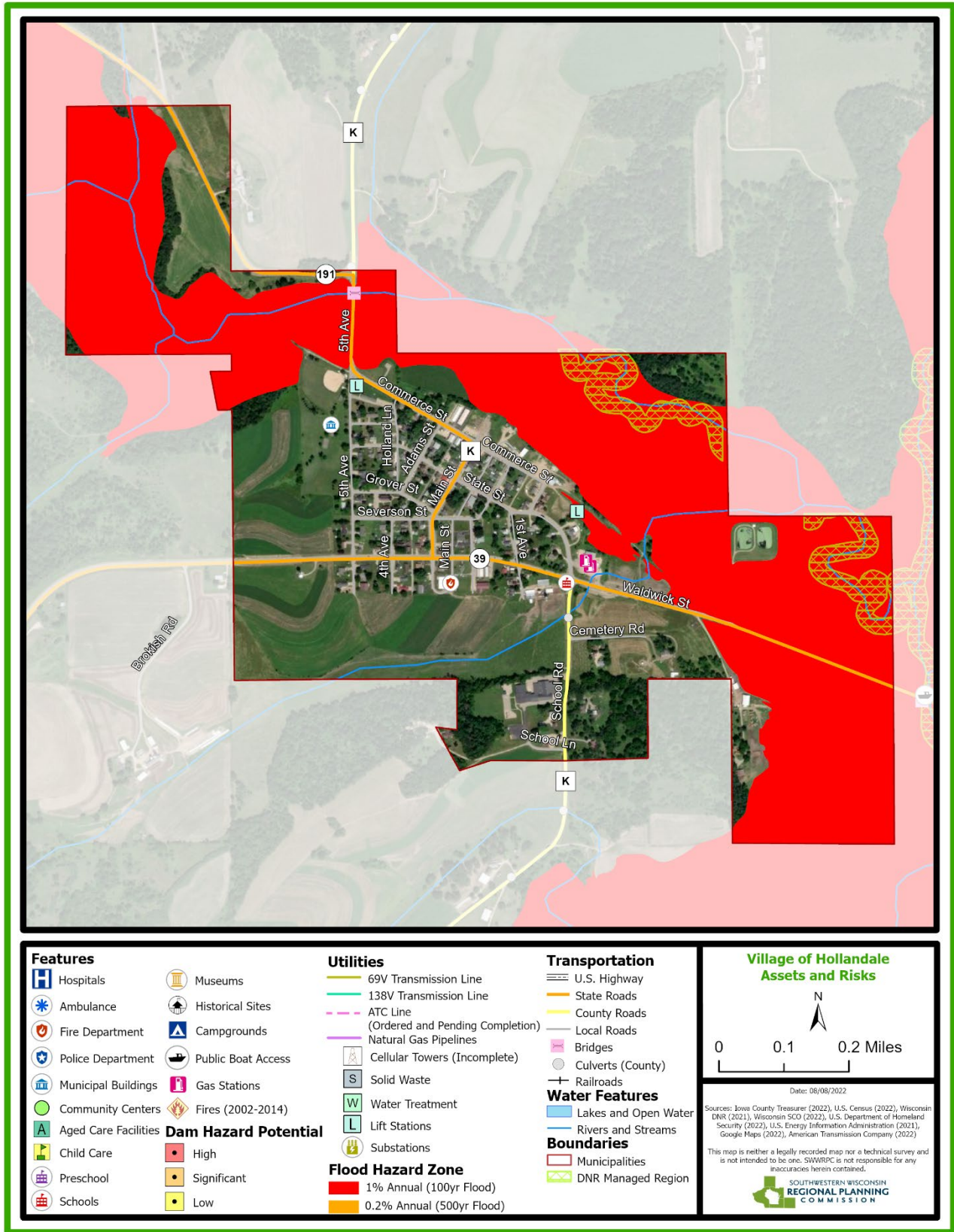
Village of Hollandale

The Village of Hollandale is located in the southeastern corner of Iowa County. The village's population was estimated to be 280 in 2021⁵¹.

Table 21: Village of Hollandale Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	3 years	Local Govt.	\$3K- \$5K	Village Budget	Develop a plan to prevent the failure of the Storm Sewer System.
High	5 years	Village Board	Unknown	Village Budget, DNR Clean Water Fund Program	Undertake study and address the need to protect groundwater from contamination.
High	2 years	Village Board/ ICEM	\$12.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁵¹ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 29: Village of Hollandale Map



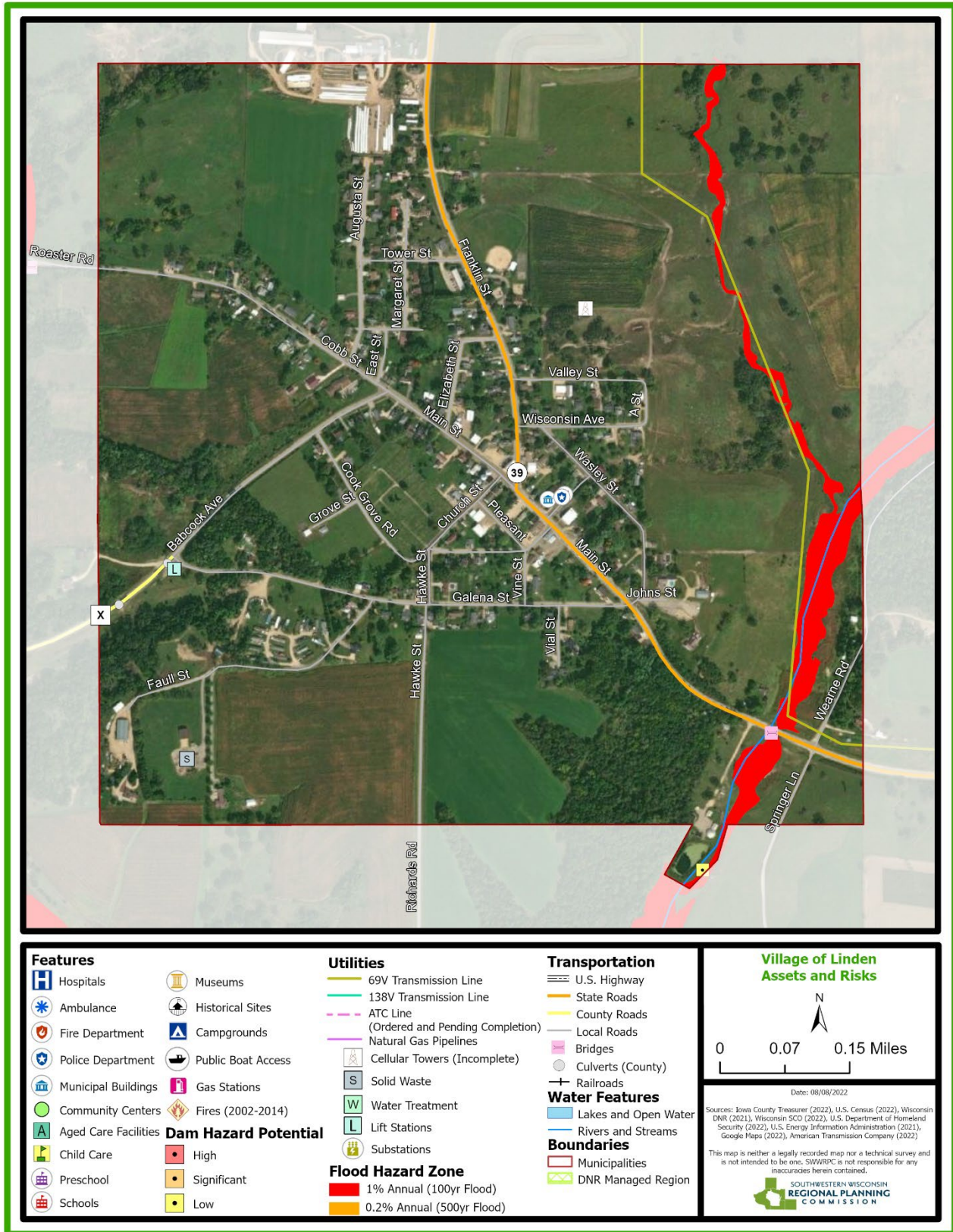
Village of Linden

The Village of Linden is located in the southern half of Iowa County. The village’s population was estimated to be 537 in 2021⁵².

Table 22: Village of Linden Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Village Board	Unknown	Village Budget, DNR Clean Water Fund Program	Undertake study and address the need to protect groundwater from contamination.
High	2 years	Village Board/ ICEM	\$12.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Village Board	Unknown	BRIC Grant, ARPA Funds, Village Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵² Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 30: Village of Linden Map



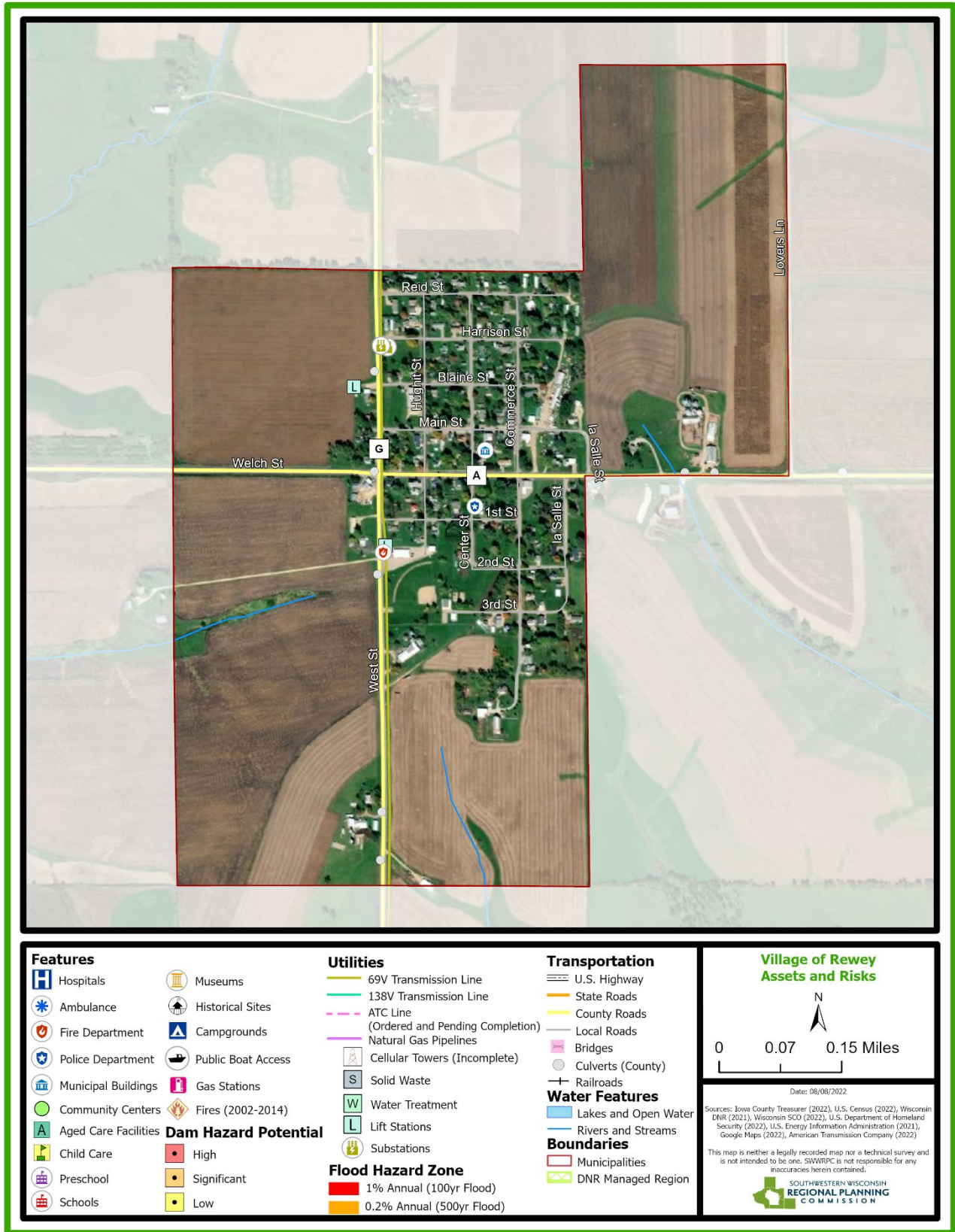
Village of Rewey

The Village of Rewey is located in the southwestern corner of Iowa County. The village’s population was estimated to be 282 in 2021⁵³.

Table 23: Village of Rewey Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Local Govt./ ICEM	Existing staff time	Village Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	2 years	Village Board/ ICEM	\$15.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Village Board	Unknown	BRIC Grant, ARPA Funds, Village Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵³ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 31: Village of Rewey Map



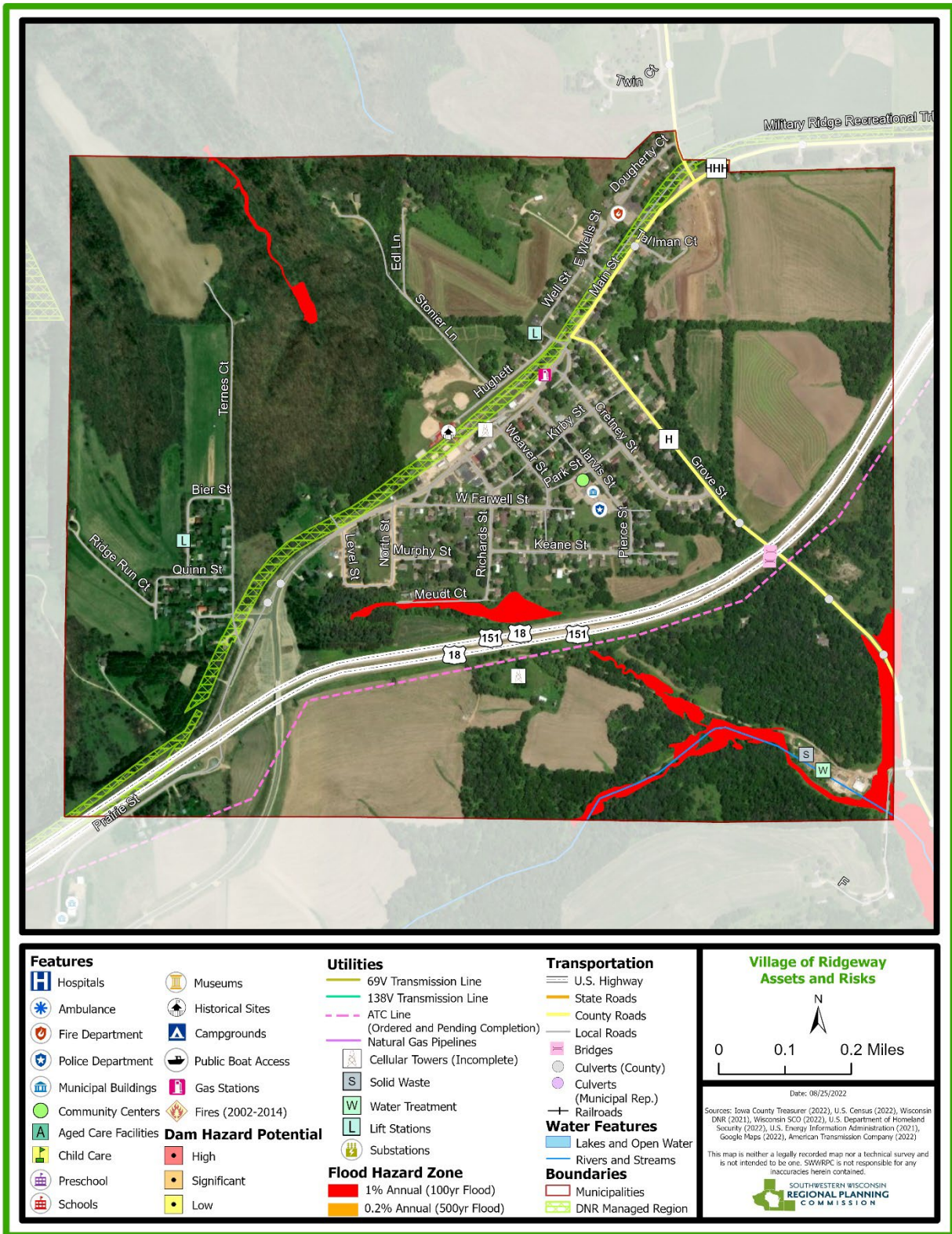
Village of Ridgeway

The Village of Ridgeway is located in the eastern half of Iowa County. The village’s population was estimated to be 666 in 2021⁵⁴.

Table 24: Village of Ridgeway Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	6 months	Village	\$10K	Village Budget, DNR Clean Water Fund Program	Undertake study to determine methods to protect wastewater treatment plant.
High	2 years	Village Board/ ICEM	\$12.4K	BRIC Grant, Village Budget	Update outdoor warning siren(s) for automated activation of tornado/high wind threat.
High	5 years	Village Board/ ICEM	\$25K per generator	Village Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	2 years	Village Board	Existing staff time	Village Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Village Board/ ICEM	\$5K - \$10K	Village Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Village Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Village Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁵⁴ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 32: Village of Ridgeway Map



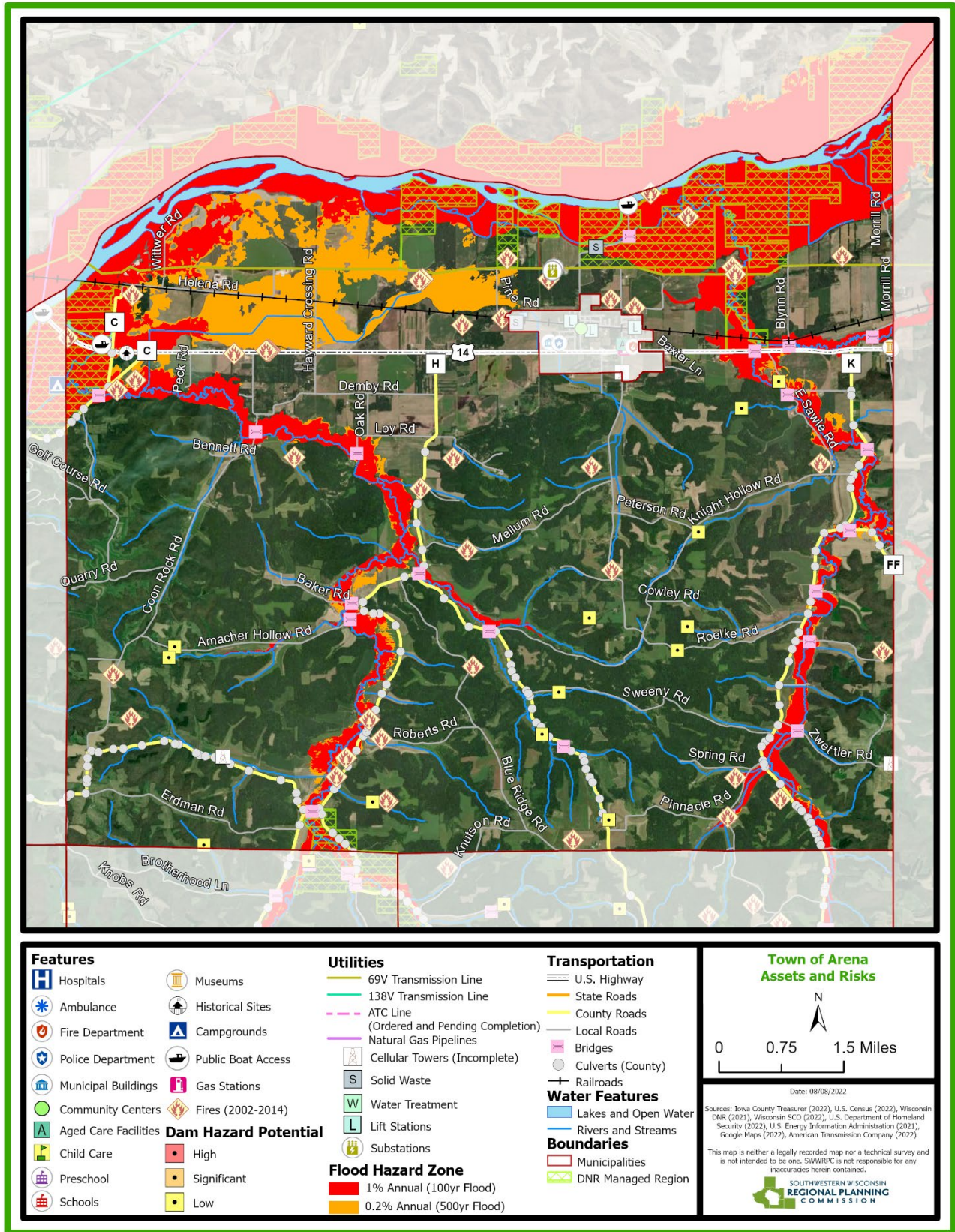
Town of Arena

The Township of Arena is located in the northeastern corner of Iowa County. Its northern border is the Wisconsin River. The Township of Arena’s population was estimated to be 1,536 in 2021⁵⁵. Arena’s geography transitions from steep valleys in the south of the township to a large open area in the Wisconsin River Valley to the north. The township has two significant watersheds: Mill Creek and Blue Mounds Creek, which converges with Black Earth in the township before entering the Wisconsin River.

Table 25: Town of Arena Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town Board	Unknown	Town Budget	Develop mitigation strategies for infrastructure damage due to flooding. Blynn, Sawle, Morrill, Cook Rock, and Baker roads.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵⁵ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 33: Town of Arena Map



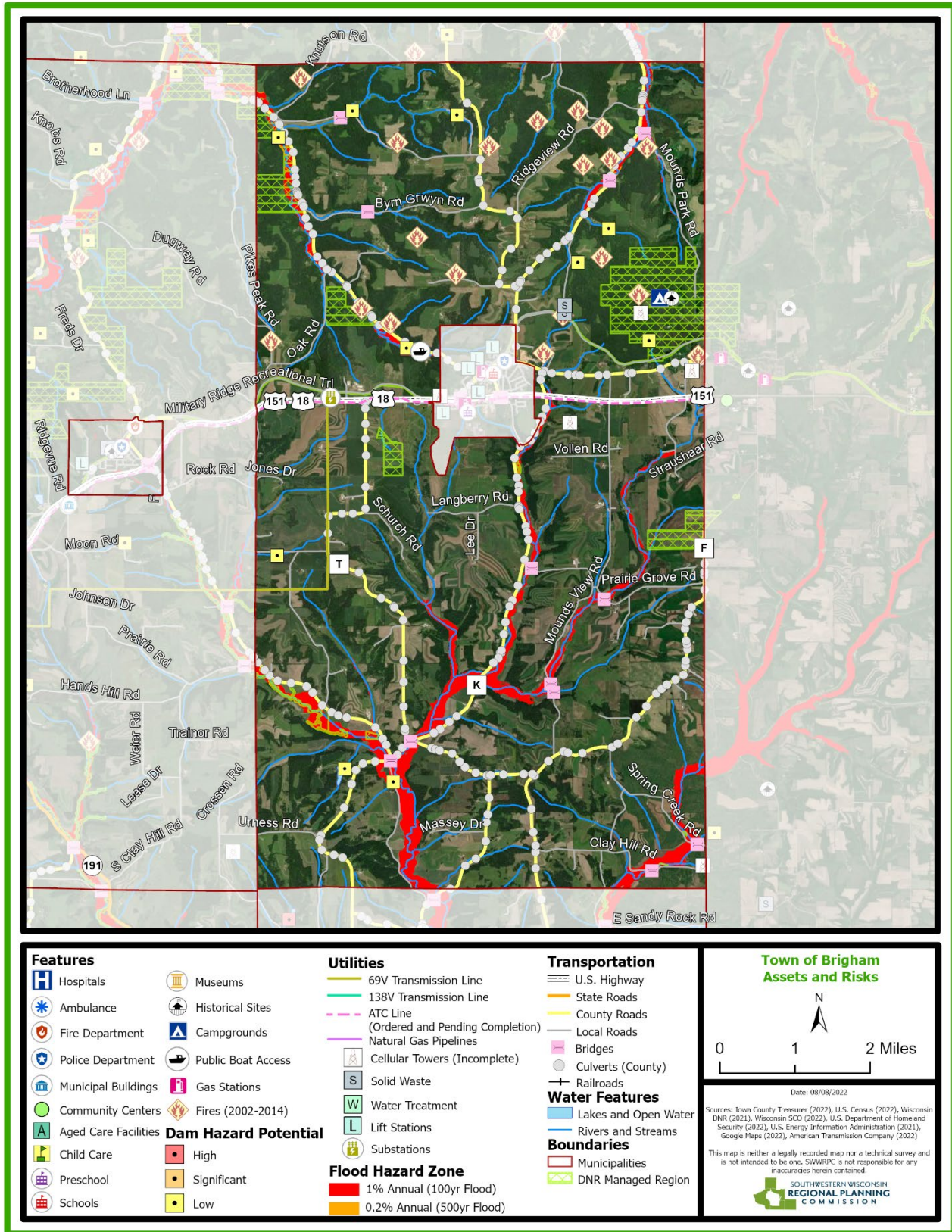
Town of Brigham

The Township of Brigham is located on the Eastern border of Iowa County. Proximity to Madison increases development pressure for the Township. The Township of Brigham’s population was estimated to be 1,105 in 2021⁵⁶.

Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ DOT	Unknown	BRIC Grant, Town Budget	Request study to determine infrastructure project to address flooding on Mounds Park Road
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵⁶ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 34: Town of Brigham Map



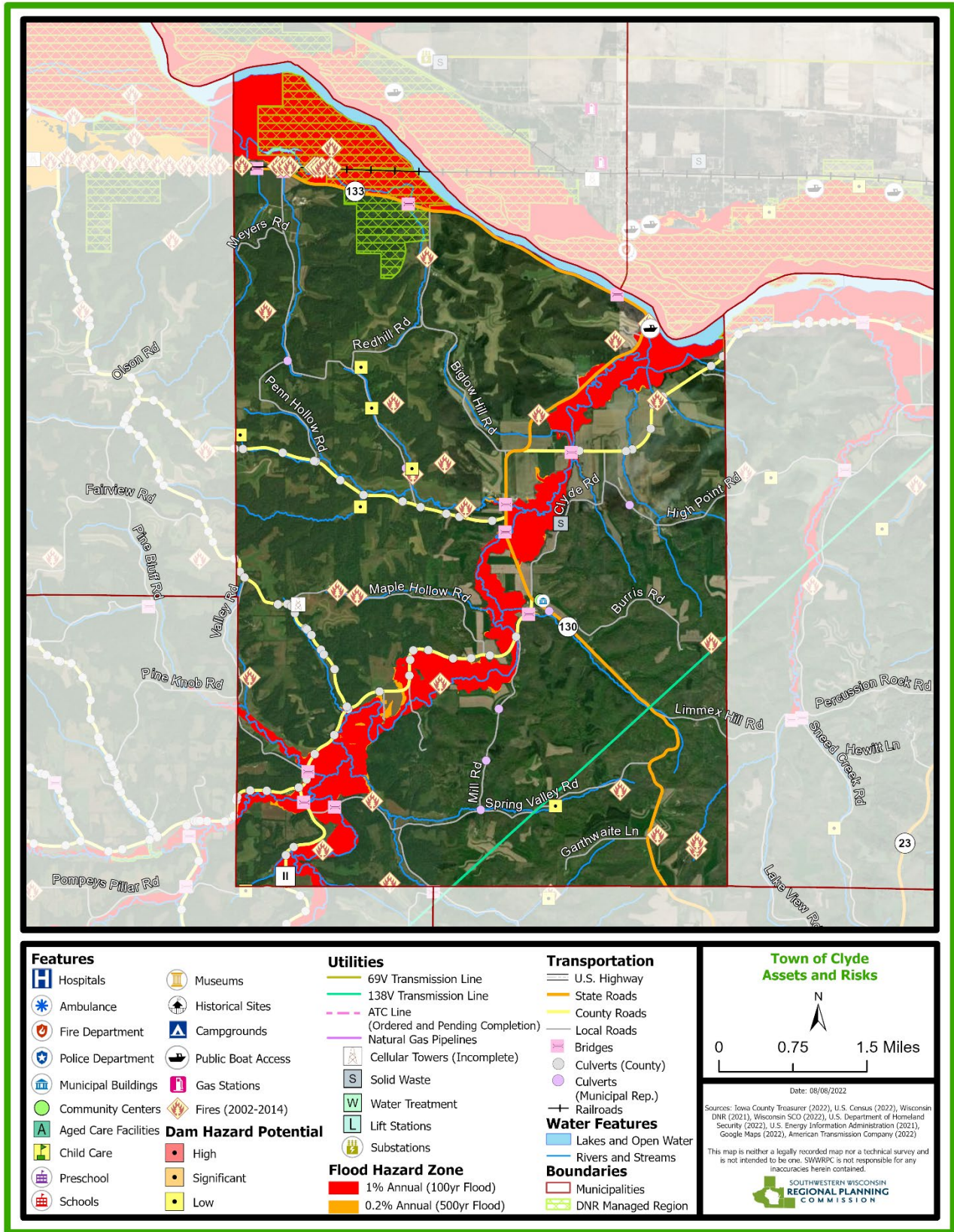
Town of Clyde

The Township of Clyde is located in the northern section of Iowa County. Its northern border is the Wisconsin River. The Township of Clyde’s population was estimated to be 318 in 2021⁵⁷. Clyde is an agricultural community and is primarily steep valleys that descend into the Wisconsin River Valley. Otter Creek is a large creek that runs through Clyde and is prone to regular flooding. Flooding of Otter Creek has caused significant road flooding and washouts in the township. Clyde receives Fire and EMS services from the Village of Lone Rock, on the opposite side of the Wisconsin River. The bridge system connecting the two communities is aging, in need of periodic repair, and is susceptible to closure.

Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Town Board/ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	Ongoing	Town Clerk	Existing staff time	None Needed	Utilize town email list to reach out to residents for emergency alerts.
Medium	5 years	Town Board/ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵⁷ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 35: Town of Clyde Map



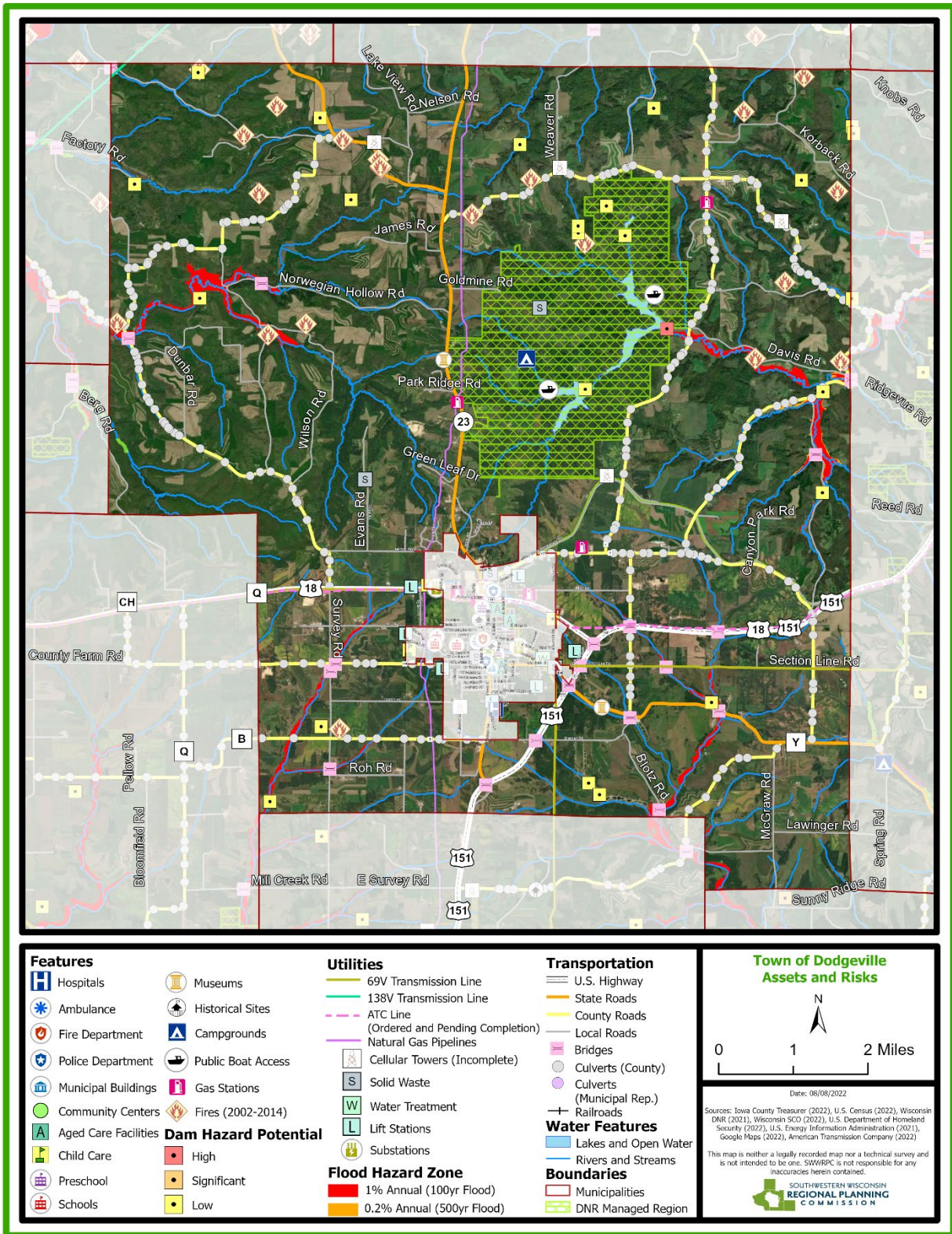
Town of Dodgeville

The Township of Dodgeville is located in the middle of Iowa County. It is the fastest growing township in the county. The Township of Dodgeville’s population was estimated to be 1,743 in 2021⁵⁸. The Town of Dodgeville is home to Governor Dodge State Park.

Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁵⁸ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 36: Town of Dodgeville Map



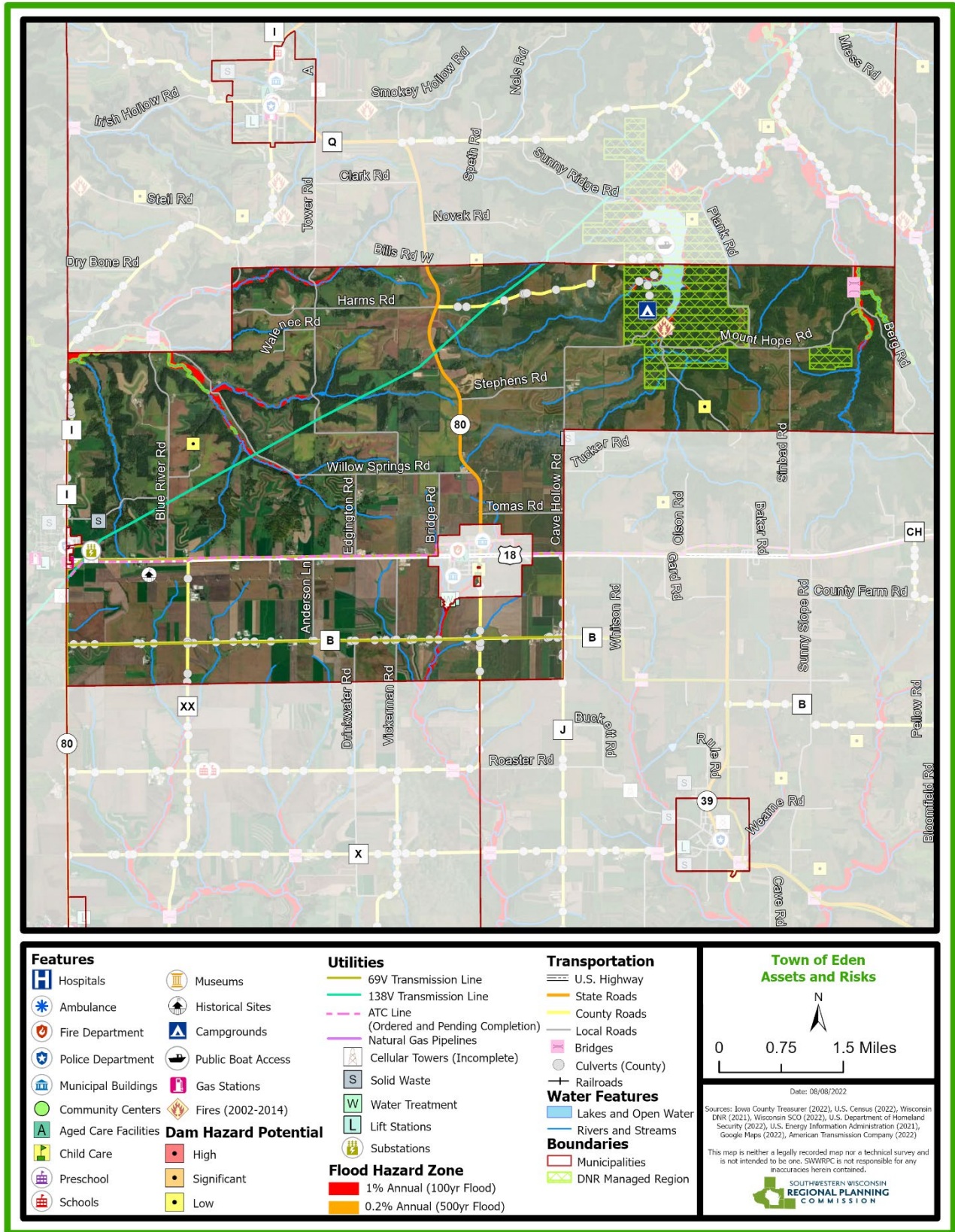
Town of Eden

The Township of Eden is located on the western border of Iowa County. The Township of Eden’s population was estimated to be 376 in 2021⁵⁹.

Table 29: Town of Eden Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	Ongoing	ICEM	Existing staff time	None Needed	Provide Blackhawk Lake campers information on wireless emergency mass notification system.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	ICEM/ Town/ Fire & EMS	Existing staff time	Hazardous Materials Emergency Preparedness Grant	Develop Hazardous Material Response Plan for manure spill event and educate first responders.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.
Low	1 year	ICEM/ Town/ Wind Farm	\$500K - \$1K	Town Budget / Utility Budget	Update the Emergency Response Plan for Montfort Windfarm.

⁵⁹ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 37: Town of Eden Map



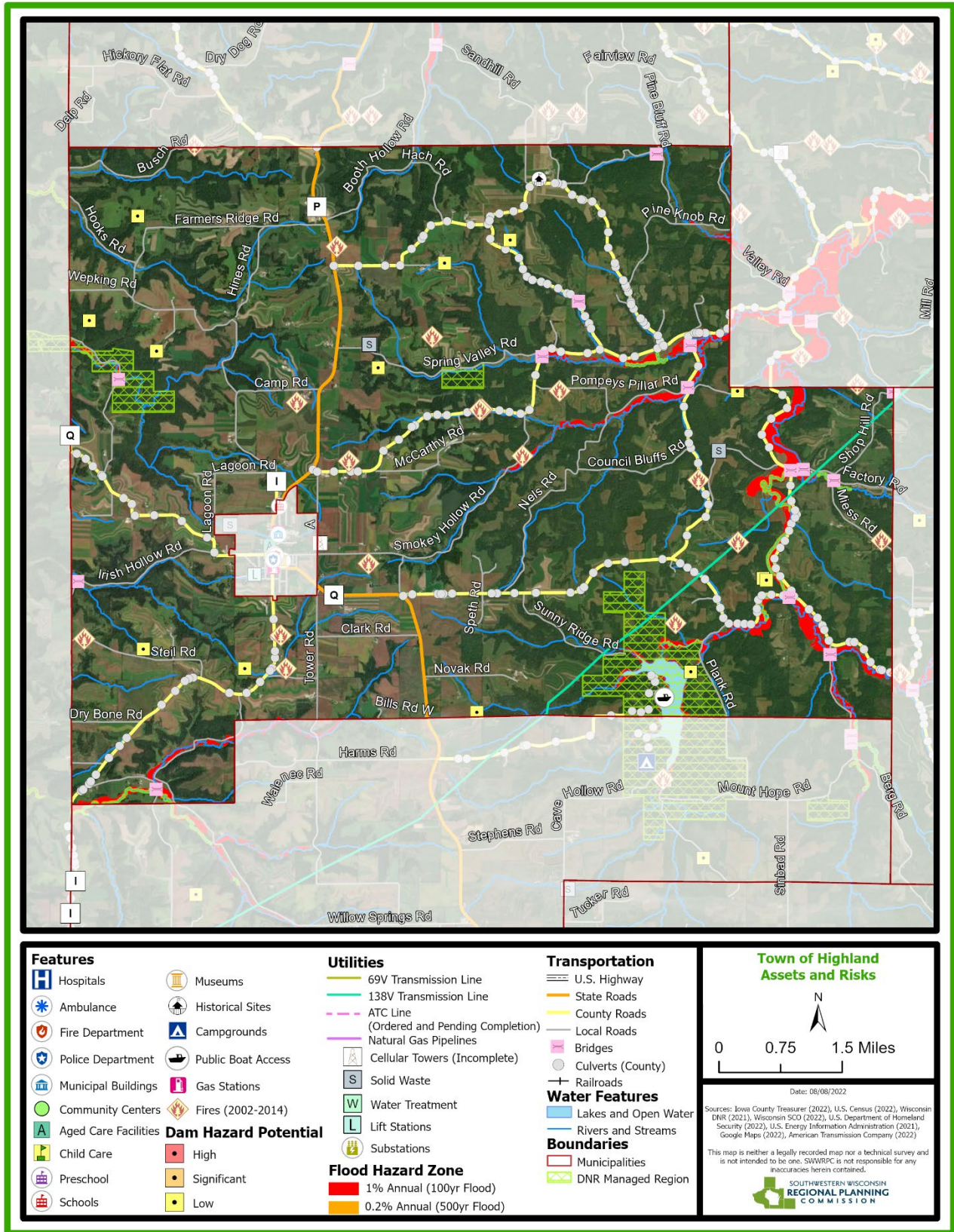
Town of Highland

The Township of Highland is located on the western border of Iowa County. The Township of Highland’s population was estimated to be 794 in 2021⁶⁰.

Table 30: Town of Highland Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	4 years	Town/ WisDOT/ Highway Dept.	Unknown	Town Budget / DOT Grant	Request a study to identify inadequate culverts and drainage ditches.
Medium	3 years	Town/ WIDNR	Unknown	Town Budget/ DNR Budget	Study and address field run off into Big Spring Creek.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶⁰ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 38: Town of Highland Map



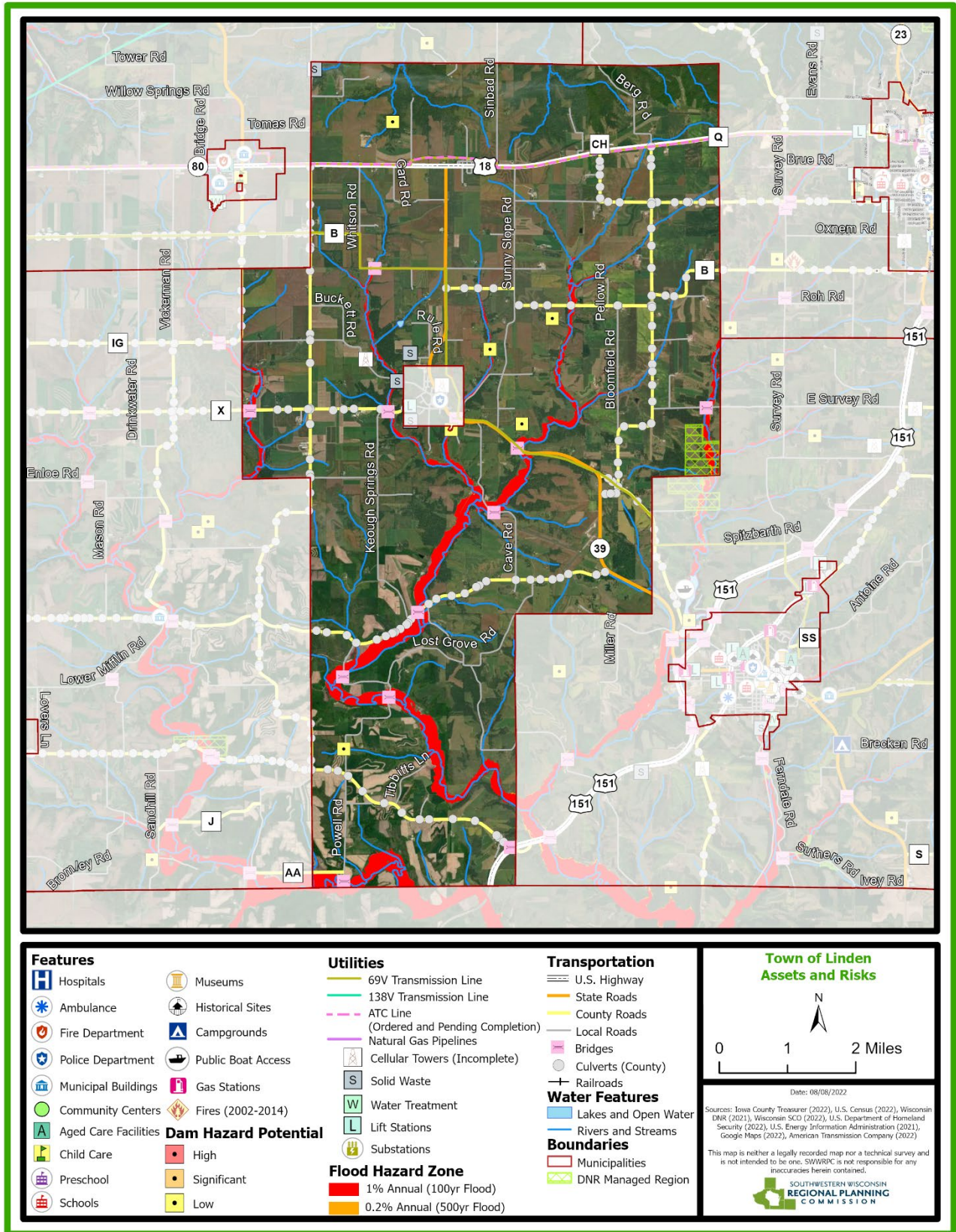
Town of Linden

The Township of Linden is located in the southern half of Iowa County. The Township of Linden’s population was estimated to be 839 in 2021⁶¹.

Table 31: Town of Linden Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	ICEM/Town/ Fire & EMS	Existing staff time	Hazardous Materials Emergency Preparedness Grant	Develop Hazardous Material Response Plan for manure spill event and educate first responders.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶¹ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 39: Town of Linden Map



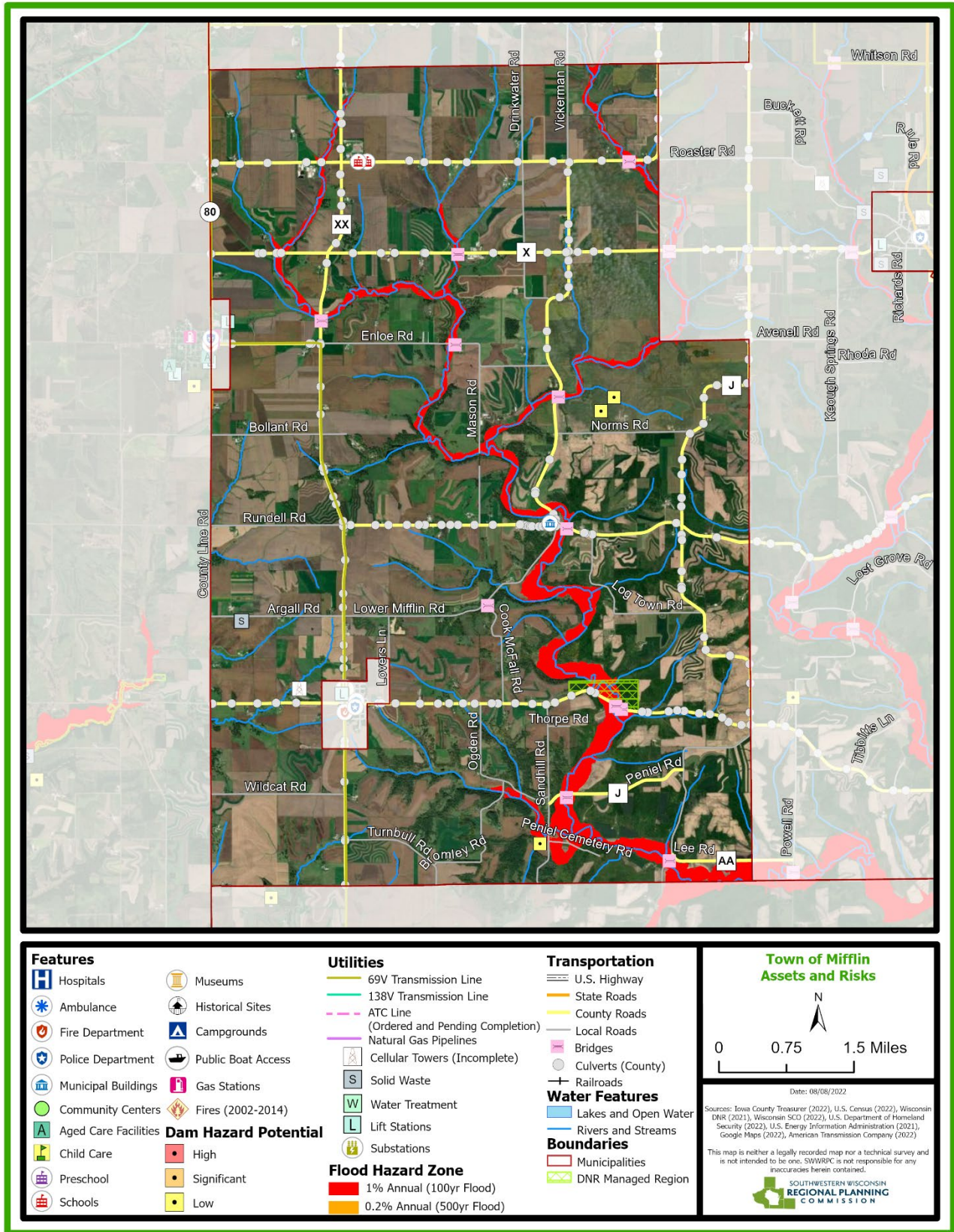
Town of Mifflin

The Township of Mifflin is located in the southwestern corner of Iowa County. Land use in the township is majority agricultural. The population was estimated to be 603 in 2021⁶².

Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Town/ Highway	Existing staff time	Town Budget	Develop plan to prioritize roads to be cleared in case of severe weather events.
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶² Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 40: Town of Mifflin Map



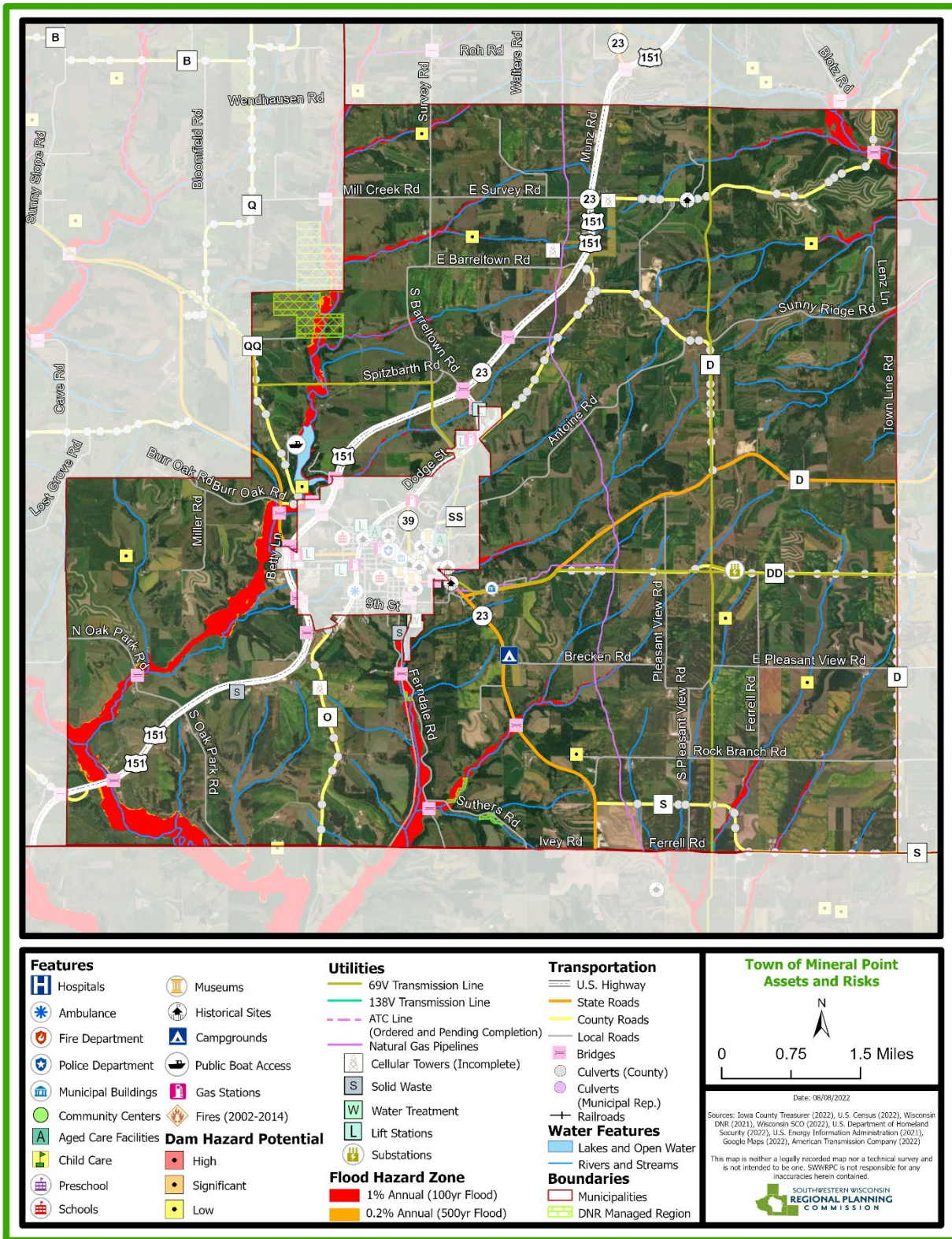
Town of Mineral Point

The Township of Mineral Point is located on the southern border of Iowa County. The Township of Mineral Point’s population was estimated to be 1,095 in 2021⁶³.

Table 33: Town of Mineral Point Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶³ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 41: Town of Mineral Point Map



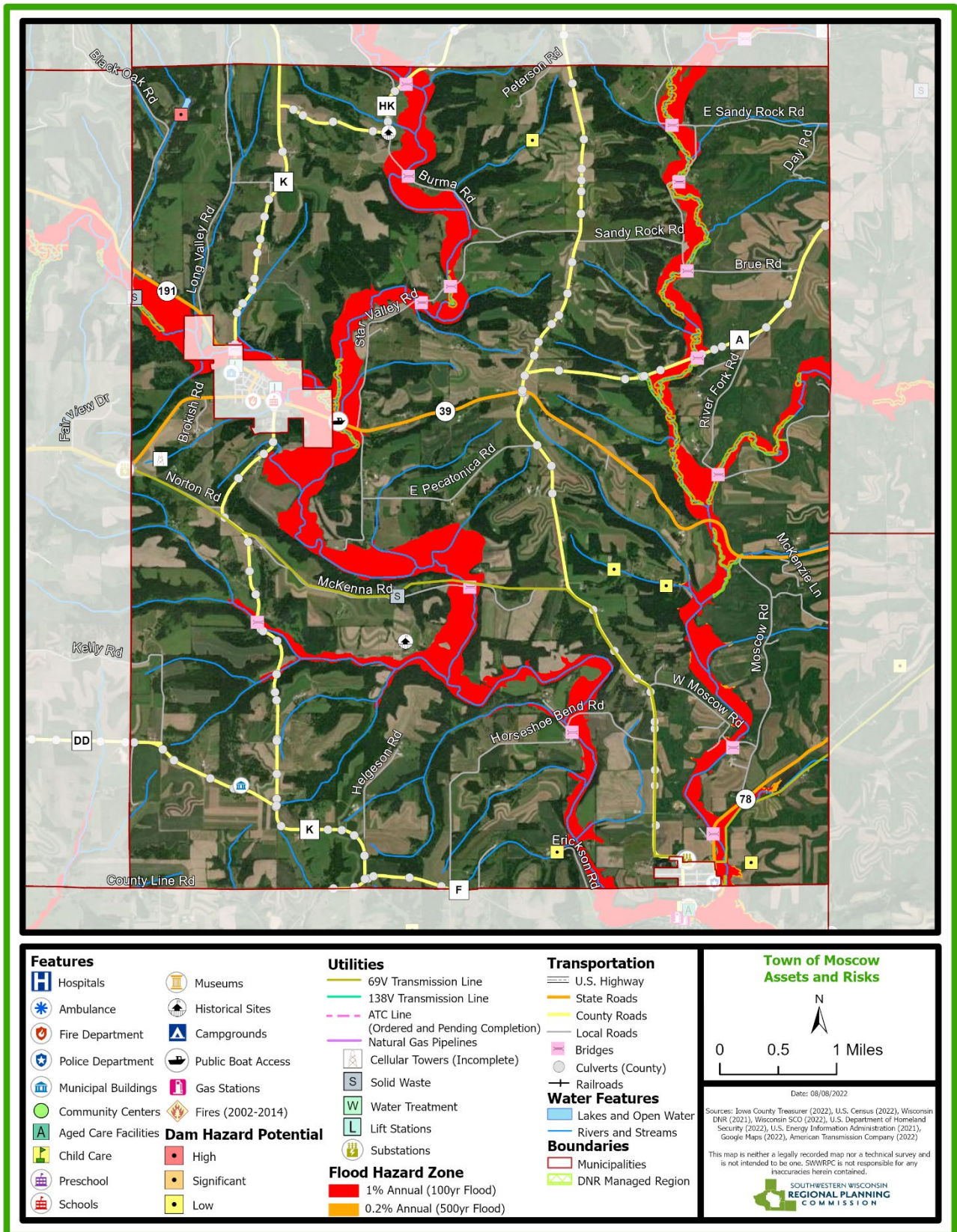
Town of Moscow

The Township of Moscow is located in the southeastern corner of Iowa County. The Township of Moscow’s population was estimated to be 614 in 2021⁶⁴.

Table 34: Town of Moscow Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.

⁶⁴ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 42: Town of Moscow Map



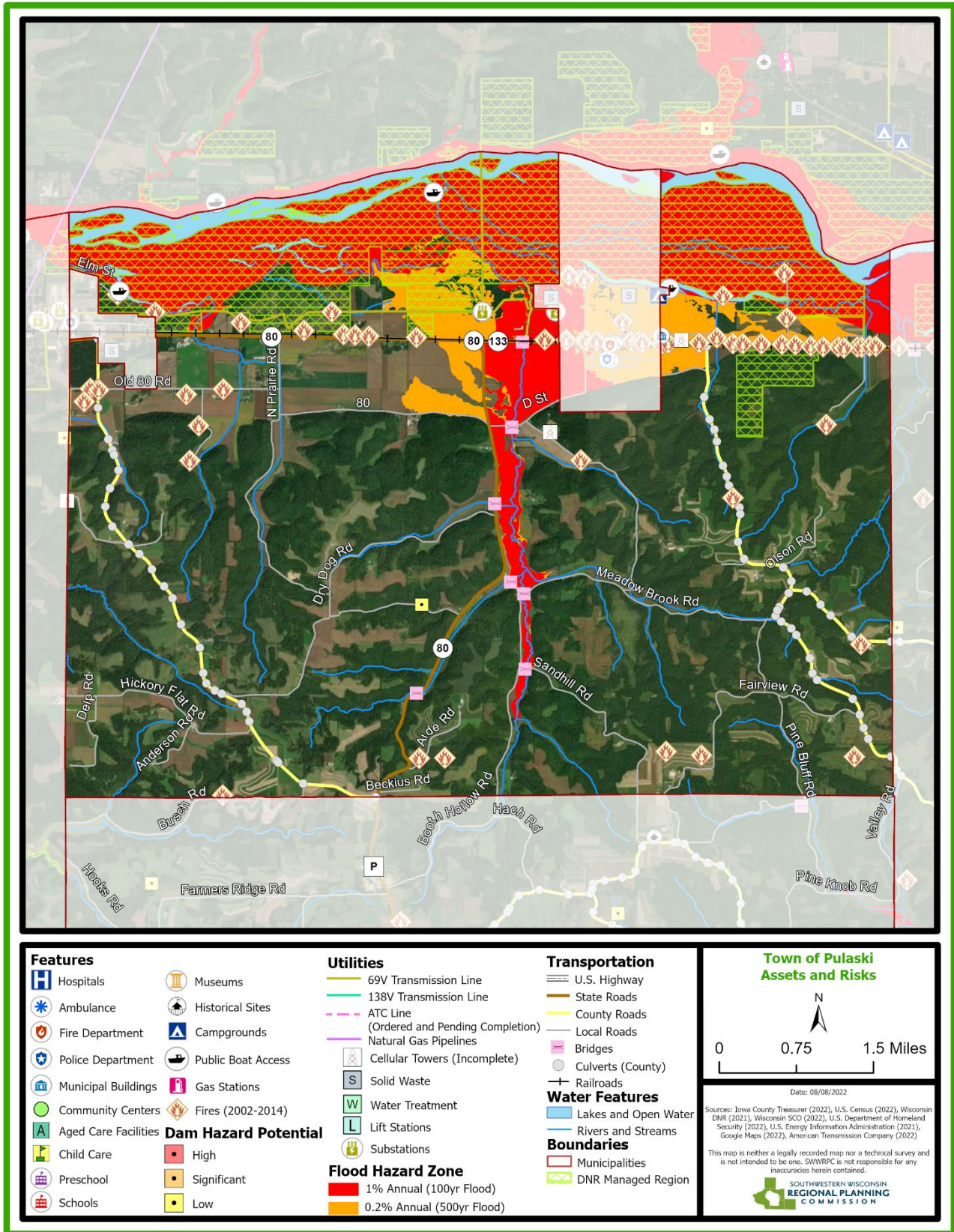
Town of Pulaski

The Township of Pulaski is located in the northwestern corner of Iowa County. Its northern border is the Wisconsin River. The population was estimated to be 403 in 2021⁶⁵. Pulaski's geography descends from Military Ridge into steep valleys that drain into the Wisconsin River.

Table 35: Town of Pulaski Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 Years	Town/WisDOT	\$5K- \$10K	Town Budget, DOT Grant	Request study and recommend repairs to address repetitive road washouts and flooding.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Low	5 years	Town Board	Unknown	Town Budget	Prepare grant narrative to replace culverts in problem areas.

⁶⁵ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 43: Town of Pulaski Map



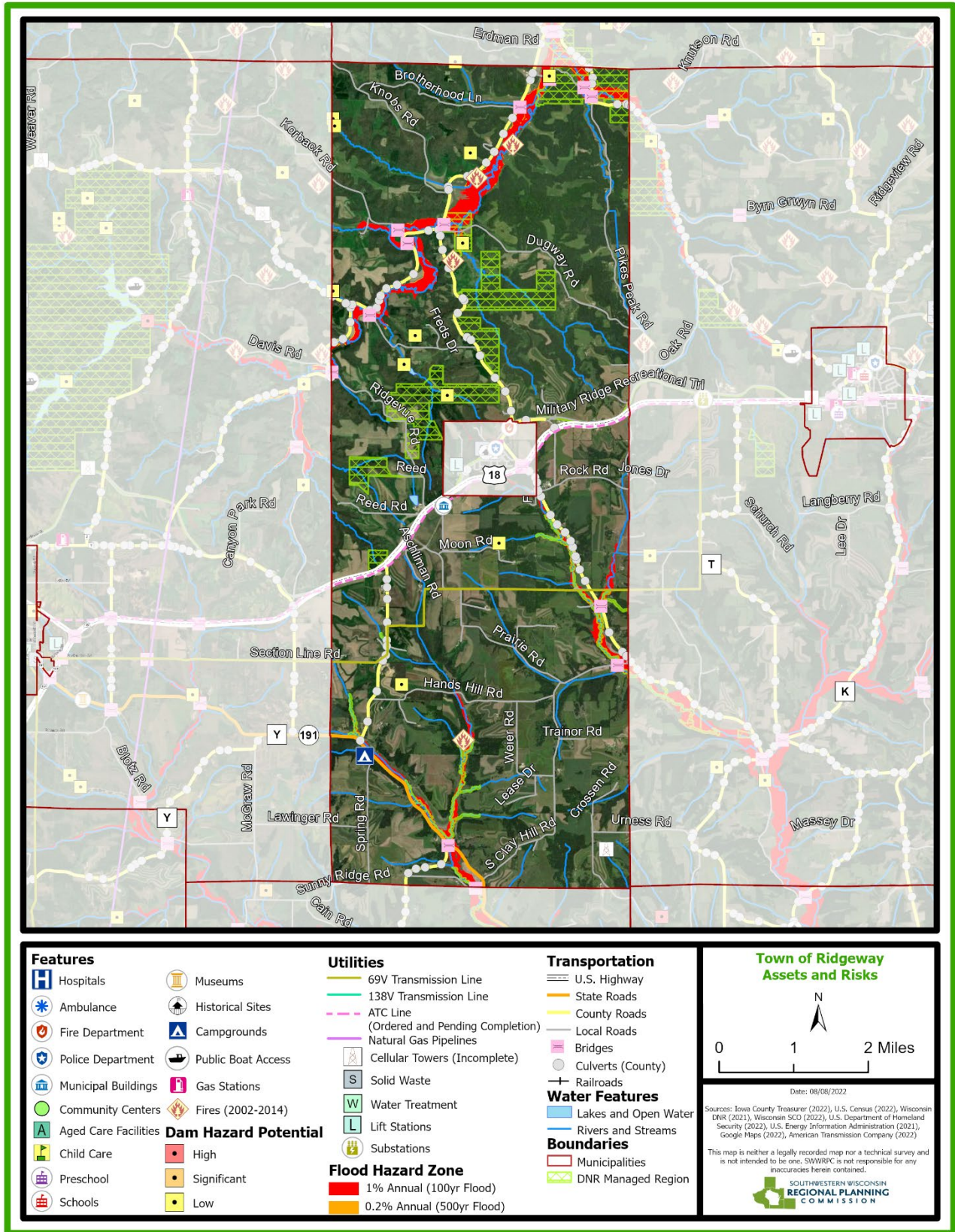
Town of Ridgeway

The Township of Ridgeway is located in the eastern half of Iowa County. Ridgeway’s population was estimated to be 582 in 2021⁶⁶.

Table 36: Town of Ridgeway Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Low	5 years	Town Board	Unknown	Town Budget	Prepare grant narrative to replace culverts in problem areas.

⁶⁶ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 44: Town of Ridgeway Map



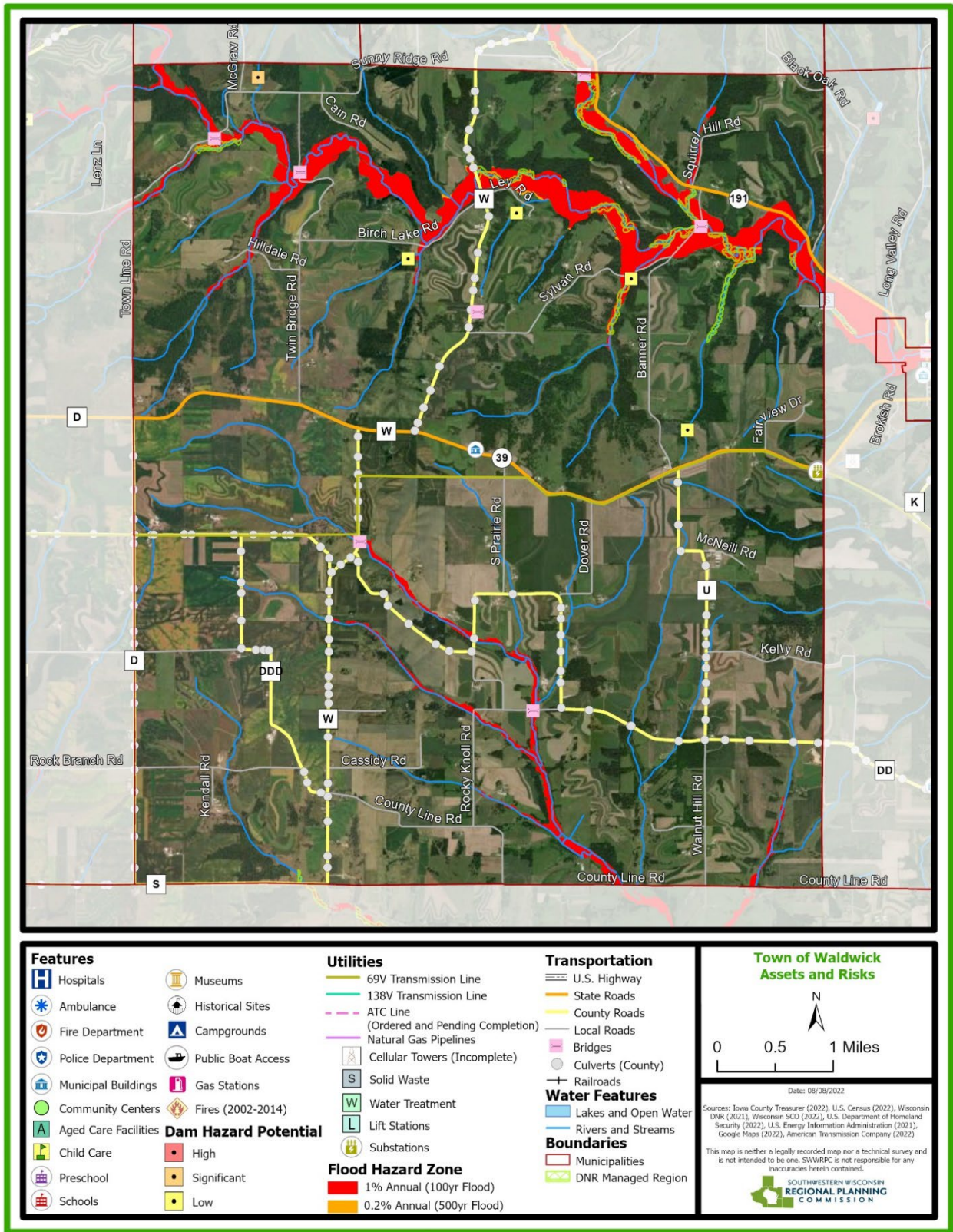
Town of Waldwick

The Township of Waldwick is located on the southern border of Iowa County. The Township of Waldwick’s population was estimated to be 481 in 2021⁶⁷.

Table 37: Town of Waldwick Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	3 years	Town/ WisDOT	\$5K	Town Budget, DOT Grant	Develop and plan to apply to WisDOT for county bridge funding.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶⁷ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 45: Town of Waldwick Map



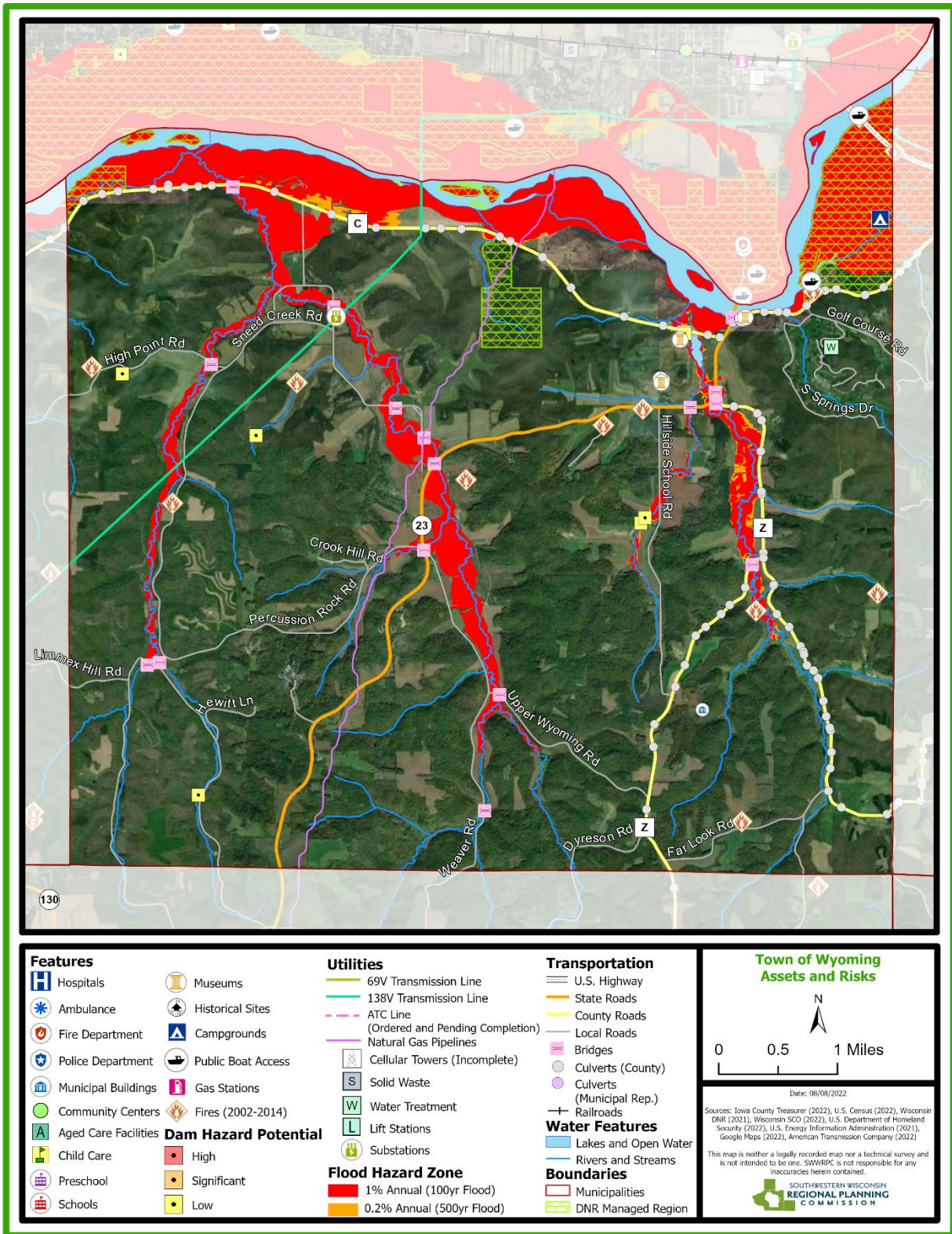
Town of Wyoming

The Township of Wyoming is located in northern Iowa County. Its northern border is the Wisconsin River. The Township of Wyoming's population was estimated to be 310 in 2021⁶⁸. Wyoming's geography descends from Military Ridge in steep valleys.

Table 37: Town of Waldwick Local Action Recommendation					
Priority	Timeline	Responsibility	Est. Cost	Potential Funding	Strategy
High	1 year	Town Board/ICEM	Existing staff time	Town Budget, ICEM Budget	Complete an Emergency Operations Plan.
High	5 years	Town Board/ICEM	\$25K per generator	Town Budget, ARPA funds	Install and maintain backup power at local critical infrastructure sites.
Medium	5 years	Town/ Fire Dept.	\$8K	DNR Forest Fire Protection (FFP) Grant	Identify relevant sites and install dry hydrants for filling tenders for firefighting.
Medium	5 years	Town Board/DNR	Unknown	DNR Budget + Town Budget	Construct and protect wetlands.
Medium	1 year	House on the Rock/ WIDNR	\$5K- \$10K	DNR Clean Water Fund Program	Undertake vulnerability analysis of water treatment facility and address needs.
Medium	5 years	Town Board	Existing staff time	None Needed	Develop stricter driveway ordinance to accommodate emergency equipment, referencing model provided by the county.
Medium	2 years	Town Board	Existing staff time	Town Budget	Establish new intergovernmental mutual aid agreements for sharing services and resources.
Medium	5 years	Town Board/ICEM	\$5K - \$10K	Town Budget	Develop Continuity of Operations and Continuity of Government Plans that include planning for cyber-attacks.
Medium	1 year	Town Board/ICEM	Existing staff time	Hazard Mitigation Grant Program	Identify and designate weather shelters by type in the community and communicate to residents.
Medium	3 years	Town Board	Existing staff time	None needed	Support and advocate for county and state expansion of rural broadband.
Medium	5 years	Town Board	Unknown	BRIC Grant, ARPA Funds, Town Budget	Pursue carbon-neutral or reduced footprints of local government, including solar power and energy efficiency.

⁶⁸ Wisconsin Demographic Services Center, Official Final Estimates 2021

Figure 46: Town of Wyoming Map



Chapter 6: County-Wide Mitigation Actions

Similar to the local mitigation actions identified in Chapter 5, county-wide actions were developed to reduce or avoid long-term vulnerabilities to the people, economy, infrastructure, and environment of Iowa County.

County-Wide Actions

Table 39: Iowa County Action Recommendations					
Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
High	5 years	\$2K - \$5K	ICEM Budget/ EMPG Grant	County Departments	Develop and maintain Continuity of Operations Plans for all county departments that includes planning for cyber-attacks.
High	5 years	\$0 - \$500K per site.	ARPA funds	ICEM/ Local Gov., Hazard Mitigation Grant Program	Work with local governments to identify locations that can serve as public shelters in emergency situations (thunderstorms, hail, lightning, high winds, and tornadoes) and/or explore building public storm shelters.
High	5 years	\$2K	Wisconsin DNR Forest Fire Protection (FFP) Grant	ICEM/ Local Fire Depts.	Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups in areas with high wild-fire vulnerability.
High	5 years	Unknown	Hazard Mitigation Grant Program, BRIC, DNR Surface Water Grant	Planning and Zoning Dept./Land Conservation Groups/DNR	Conduct planning and restoration projects along upstream rivers and tributaries and their associated floodplains that will reduce the impact of flooding due to improved wetlands and watersheds. These include restoring upper watershed wetlands and reconnecting floodplains.
High	1 year	\$10K	Sheriff's Budget	ICEM	Implementation of an automatic mutual aid system for county fire departments through updating the Master Street Address Guide.
Medium	5 years	Varies	DNR Clean Water Fund Program	Highway Dept./ICEM/ Planning and Zoning Dept.	Conduct infrastructure studies, including stormwater management, green infrastructure projects, and long-term water management needs.

Table 39 Continued: Iowa County Action Recommendations					
Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
Medium	5 years	\$20K	ICEM budget	ICEM/ Public Health Dept./ ADRC/ SWCAP/ Social Services	Promote and maintain a “Functional Need Database” identifying the locations of isolated, vulnerable, or special need populations in Iowa County.
Medium	5 years	\$10K	Planning & Zoning Budget + Planning Grants	Planning and Zoning Dept.	Consider adopting a county-wide storm water ordinance. Encourage local municipalities to do the same; encouraging those who already have an ordinance to enforce it.
Medium	5 years	\$2- \$5 Yearly	Local Budget + Transportation Grants	Highway Dept.	Identify the locations where snow fencing is needed and install fencing where needed.
Medium	5 years	Existing staff time	ICEM Budget/ EMPG Grant	ICEM/ Local Gov.	Public education and outreach on drought and extreme heat hazards and safety.
Medium	1 year	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Develop a model for stricter driveway ordinance to accommodate emergency equipment for local governments to reference when creating their own.
Medium	5 years	Unknown	ICEM Budget/ EMPG Grant	ICEM/Local Gov.	Offer preparedness training for individuals and local government and first responders to include: how to treat water supply for potable water and use of standard camping gear for off-grid use (ex. cooking).
Low	5 years	20-200 Hours (\$1,100-11,000)	Planning & Zoning Budget	Planning and Zoning Dept.	Consider amending county code to restrict development on wetlands less than five acres.

Table 40: Iowa County Ongoing Action Recommendations

Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant/ EPCRA Grant	ICEM	Maintain planning facility Emergency Response Plans annually including hazardous material spill and radiological release.
High	Ongoing	Existing staff time	ICEM Budget & Computer Hazmat & Equipment Grant	ICEM	Maintain support for level 3 Hazardous Material Response Team and equipment.
High	Ongoing	Existing staff time	ICEM Budget/Local Law/Fire/ EMS budget	Law/Fire/ EMS/ICEM	Develop and implement Rescue Task Force training and exercises for domestic terrorism.
High	Ongoing	Existing staff time	ICEM budget and School District Budget	Law/ICEM	Assist schools with development of active killer response plans.
High	Ongoing	Existing staff time	None needed	Law Enforcement	Maintain awareness of domestic terrorism threats through State & Federal Advisory programs and local sharing of information.
High	Ongoing	Existing staff time	ICEM Budget/Local Law/Fire/ EMS budget	Law/Fire/ EMS/ICEM	Participate in training, classes, and exercises to maintain with current domestic terrorism practices.
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Maintain Memorandum of Understanding (MOU's) with private/public resources for life line disruptions.
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Maintain contact information for lifeline providers for the purpose of information dissemination.
High	Ongoing	Existing staff time	LC & DNR budgets	Land Conservation Dept.	Maintain DAM Emergency Plans and inundation mapping of DAM failures.
High	Ongoing	Existing staff time	None needed	Planning and Zoning Dept.	Maintaining ordinances that restrict development within inundation zones.
High	Ongoing	\$3K/Year	ICEM Budget/ EMPG Grant	ICEM	Maintain the Iowa County Mobile Disaster Response.

Table 40 Continued: Iowa County Ongoing Action Recommendations

Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
High	Ongoing	\$3.5K/Year	ICEM Budget/ EMPG Grant	ICEM	Maintain and support the Vernon/Iowa County Hazardous Material Response Units.
High	Ongoing	Existing staff time \$2K	ICEM Budget & School Districts	ICEM	Assist local governments and school districts to develop and maintain emergency response plans.
High	Ongoing	Existing staff time \$1K	ICEM Budget/ EMPG Grant	ICEM	Promote emergency wireless mass-notification system throughout the county.
High	Ongoing	Varies	County IT Budget	Information Technology Dept.	Maintain and support effective technology to prevent successful cyber-attacks on county network.
High	Ongoing	Existing staff time	County IT Budget	Information Technology Dept.	Continue to educate county employees on safe computer operations for cyber security.
High	Ongoing	Existing staff time	Planning & Zoning Budget	Planning and Zoning Dept.	Continue to actively promote and participate in the National Flood Insurance Program.
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Public education and outreach on winter storms and extreme cold hazards and safety.
High	Ongoing	Existing staff time	None needed	ICEM	Maintain current Memorandum of Understanding (MOU's) with establishments to provide warming shelters. Add new MOU's as opportunities are presented.
High	Ongoing	\$200 per dept.	None needed	Local Fire Depts.	Encourage Fire Departments in partnership with their governing entities to create and distribute information via social media on "reducing structural ignitability" and "emergency preparedness" relevant to wildfires.
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Maintain ESF 11 to reflect current resources for response to food or agricultural emergencies.
High	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Develop and maintain a plan for livestock emergency transport response.

Table 40 Continued: Iowa County Ongoing Action Recommendations

Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
High	Ongoing	Existing staff time	Health Dept. Budget	Health Dept.	Maintain existing Public Health Emergency Preparedness Plan that includes emerging infectious diseases.
High	Ongoing	Existing staff time	None needed	Health Dept./ICEM	Continue monthly meetings with Health Department and ICEM staff to discuss current and emerging public health issues and mitigation strategies.
High	Ongoing	Existing staff time	None needed	ICEM	Outreach through DATCP on emerging issue affecting food supply and livestock producers.
High	Ongoing	Existing staff time	ICEM Budget	ICEM/ WIDNR	Encourage visitors and campers at Governor Dodge, Tower Hill, Blue Mounds State Parks and golfers various golf courses to sign up for wireless mass emergency notification system.
Medium	Ongoing	Existing staff time \$1K	None needed	ICEM	Participate in emergency awareness events including tornado and severe weather awareness.
Medium	Ongoing	Existing staff time	None needed	Highway Dept./ Local Gov.	Support mutual aid agreements among local government and the county to address emergency priorities and share equipment.
Medium	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant/ EPCRA Grant	ICEM/ Fire & EMS	Work with communities to develop a Hazardous Material Response Plan for manure spill event and educate first responders.
Medium	Ongoing	Existing staff time	None needed	ICEM	Post emergency awareness information to the Iowa County Website and EM Social Media sites.
Medium	Ongoing	TBD \$15,000+ per Year	Planning & Zoning Budget + Retained Fees or WLIP Grant	Planning and Zoning Dept.	Continue to invest in technologies such as county wide Light Detection & Ranging (LiDAR) on floodplains to improve local knowledge of floodplain areas.

Table 40 Continued: Iowa County Ongoing Action Recommendations

Priority	Timeline	Est. Cost	Potential Funding	Responsibility	Action
Medium	Ongoing	Existing staff time	None needed	Planning and Zoning Dept./ WIDNR	Work with WIDNR and private landowners to inspect, address, and maintain dams.
Medium	Ongoing	\$60K	WLIP grant & Retained fees	Planning and Zoning Dept.	Obtain digital orthophotography every 3 years for determining structures in hazard areas (e.g. floodplain).
Medium	Ongoing	\$200K	Local Budget + BRIC grant	ICEM/ Villages/Cities	Work with local communities to support, maintain, and expand the use of warning sirens throughout the county.
Medium	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant/ EPCRA Grant	ICEM/ Local Gov.	Work with local fire and EMS departments to develop and train on hazardous material spill response plan.
Medium	Ongoing	Existing staff time	ICEM Budget/ EMPG Grant	ICEM	Continue with outreach, storm spotter training with NWS to educate the public.
Medium	5 years	Existing staff time	DNR Funding programs	USDA-NRCS/ Land Conservation Dept./ Uplands Watershed Group	Encourage more landowners to apply for cost-sharing for stream bank stabilization projects to mitigate damage from flooding.
Medium	5 years	Existing staff time	USDA-NRCS assistance programs	USDA-NRCS/ Land Conservation Dept./ Uplands Watershed Group	Encourage greater adoption of managed grazing and cover cropping to capture rainfall on cropland and prevent it from contributing to flooding.

Chapter 7: Plan Adoption and Implementation

Plan Adoption

This plan must be adopted by the Iowa County Board as well as the incorporated areas (cities and villages) of Iowa County. Cities and villages must adopt the plan within a year of the county adoption in order to receive hazard mitigation grant funds. According to FEMA, townships must participate in the county plan process, but do not have to formally adopt the plan to be eligible to receive mitigation grants, since the county can apply for grants on their behalf. Adoption of the Iowa County Hazard Mitigation Plan accomplishes the following:

- Confirms the commitment of community leaders and citizens to mitigate the effects of disasters.
- Provides a definitive guide for community leaders and officials of the county and local jurisdictions to initiate changes that will decrease damages incurred from disasters.
- Ensures the long-term continuity of mitigation policies and programs through changes in political leadership, county and municipal staff, and community decision makers.
- Provides confirmation to WEM and FEMA that the plan's recommendations were assessed and approved by the governing authority of Iowa County.

Prior to the plan being adopted by the Iowa County Board and the cities and villages of Iowa County, it is reviewed by WEM to ensure compliance with the Disaster Mitigation Act of 2000. Once approved, WEM sends the plan to FEMA for their review and approval. When both WEM and FEMA approve the plan, it is then sent to the Iowa County Board and Iowa County cities and villages for their approval.

Plan Implementation

After county approval on November 15th, 2022, the plan was placed on the county website. ICEM and SWWRPC informed all participating jurisdictions and stakeholders of the plan approval and distributed copies.

ICEM, in conjunction with the Iowa County Planning and Development Department, takes the lead on plan implementation, including assuring the plan is referenced by future planning efforts and is used to provide guidance on political decisions, public expenditures, and policy directives.

All jurisdictions included in this plan will review and integrate this plan into any future planning processes of their jurisdiction. This plan and recommended hazard mitigation actions are used to inform future decisions of the participating jurisdictions in planning efforts including capital improvement plans, comprehensive plans and updates, long-range plans, and any plan that may review and make recommendations related to topics identified and discussed in this plan. Since the previous plan's publishing, all jurisdictions have had access to the review and incorporate it into other planning mechanisms.

ICEM will work to prioritize mitigation projects and work with communities to secure financing for local mitigation strategies. Such efforts include preparation of state, federal, and non-profit grant funding opportunities.

County and local jurisdiction staff and elected officials ensure that the recommended mitigation strategies are considered in budgets. In addition to grant opportunities discussed in this plan, as political

will dictates, administrators and elected officials will contemplate the use of volunteer efforts, bonds, loans, fees, and taxes to finance high priority mitigation projects.

Plan Monitoring, Evaluation and Update

Planning is an ongoing process, and for this hazard mitigation plan to remain current and applicable, periodic updates will be necessary. The Disaster Mitigation Act of 2000 requires that local mitigation plans are evaluated and updated at least every five years. To expedite this process, Iowa County will begin to maintain a record of disaster related damages that will help to further improve the vulnerability and risk assessments, and will track mitigation projects to determine implementation progress and results. Vulnerability, risk, and mitigation recommendations will be reviewed following a disaster to determine if any changes are warranted based on degrees of damage and patterns of the event. The county board must approve all additions and updates to the plan, and all updates will include public involvement and stakeholder outreach. The plan will be updated in 2027 by ICEM and planning support as they see fit.

The plan is monitored through a biannual survey of each community. ICEM is responsible for surveying each community and tracking progress on each community's strategies. Surveys are done by email or by phone. Regular monitoring assists ICEM in directing communities towards funding opportunities as they become available. Following disaster events, ICEM will collect relevant information to be included in the next plan update. The plan identifies mitigation strategies focused on education and engaging public audiences as a mitigation effort. During these education-focused efforts, ICEM continues to seek public input and incorporate it into mitigation efforts.

ICEM will review the plan to evaluate progress and create a written record for the next plan update. To do this, the planning team suggested that ICEM utilize a progress worksheet. The worksheet is included in Appendix F and should be completed bi-annually. This progress will be reported to relevant stakeholders following the assessment.

Appendix

Appendix A: Public Meeting Information

Appendix B: ICEM Evaluation of Previous Plan Strategies for County

Appendix C: Municipal Evaluations of Previous Plan Strategies

Appendix D: Iowa County Storm Event Database

Appendix E: Iowa County Wild and Forest Fire Events

Appendix F: Iowa County Annual Mitigation Worksheet

Appendix G: Adoption Resolutions of Participating Jurisdictions

Appendix A: Public Meeting Information

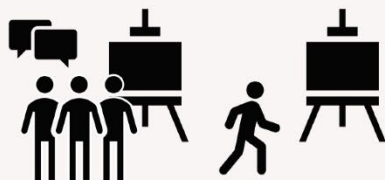
2022 Iowa County Hazard Mitigation Plan Outreach Meetings			
Meeting	Date	Location	Purpose
Kickoff Planning Team Meeting	March 2 nd	Iowa County Law Enforcement Center, Dodgeville	Kickoff meeting to determine process participants, to debrief the 2017 process, and to collect ideas for the 2022 process.
Second Planning Team Meeting	April 21 st	Virtual Meeting	Convene planning team to discuss planning process strategy for 2022.
First Stakeholder Meeting	June 2 nd	Iowa County Law Enforcement Center	Convene stakeholders to discuss goals, strategy, and content of plan.
Public Outreach Meeting #1	June 23 rd	Wyoming Valley School Cultural Arts Center, Wyoming Township	Convene stakeholders, municipality representatives, and public to contribute to hazard mitigation planning.
Public Outreach Meeting #2	June 30 th	Mineral Point City Hall, Mineral Point	Convene stakeholders, municipality representatives, and public to contribute to hazard mitigation planning.
Public Outreach Meeting #3	July 7 th	Iowa County Law Enforcement Center, Dodgeville	Convene stakeholders, municipality representatives, and public to contribute to hazard mitigation planning.
Third Planning Team Meeting	July 14 th	Iowa County Law Enforcement Center, Dodgeville	Debrief public meetings and discuss mitigation strategies and actions.
Second Stakeholder Meeting	August 4 th	Iowa County Law Enforcement Center, Dodgeville	Discuss and evaluate plan content following public outreach.
Fourth Planning Team Meeting	August 16 th	Virtual Meeting	Debrief stakeholder and public meetings and discuss final draft.
Iowa County Board Meeting	November 15 th	Iowa County Health & Human Services Center, Dodgeville	Present draft plan to the Iowa County Board.

Do you live in Iowa County?

Drop in anytime from 4-8 pm.

The Iowa County Hazard Mitigation Planning Team will host three interactive, drop-in style meetings where you can learn and give input about the risks facing your community.

- Thursday, June 23rd:
Wyoming Valley School Cultural Arts Center, Spring Green
- Thursday, June 30th:
Mineral Point City Hall
- Thursday, July 7th:
Iowa County Law Enforcement Center, Dodgeville



Barneveld,
1984 Tornado



Arena,
2018 Flooding



2022 Avian Flu

Hosted by Iowa County Emergency Management and Southwestern Wisconsin Regional Planning Commission
Questions? Contact Ellen Tyler at e.tyler@swwrpc.org or (608) 348-5606

Appendix B: ICEM Evaluation of Previous Plan Strategies for County

ICEM completed the following evaluations of the county-wide strategies listed in the 2017 Iowa County Hazard Mitigation Plan.

Iowa County Evaluation of 2017 Strategies		
Strategy	Completion	Notes
Maintain and support the County and Local Community Fire & EMS use of a Mutual Aid Box Alarm System (MABAS).	Yes	No Longer Relevant, This is ongoing.
Maintain the County's Enhanced 911 system. Work toward funding and establishing a County-Wide Next Generation 911 system.	No	Still Relevant, In progress.
Maintain the Iowa County Mobile Disaster Response, Rural Search, Technical Rescue, and Hazardous Material Response Units	Yes	Still Relevant, ICEM only responsible for Mobile Disaster Response.
Work with local communities to support, maintain, and expand the use of Warning Sirens throughout the County.	Yes	Still Relevant
Develop Continuity of Operations Plans for all County Departments that includes planning for Cyber Attacks.	Yes	No Longer Relevant, Done
Develop Continuity of Operations Plans for all Local Governments that includes planning for Cyber Attacks.	No	No Longer Relevant, Responsibility of municipalities.
Develop Emergency Response Plan for all Local Governments and School Districts.	Somewhat	Still Relevant, Dodgeville, Iowa-Grant, Barneveld, Highland, and Mineral Point School Districts complete. Village of Arena, Village of Avoca, Village of Barneveld, City of Dodgeville, Village of Hollandale, Village of Ridgeway, and Village of Highland complete. Town of Brigham, Town of Ridgeway, and Town of Moscow complete.
Promote emergency wireless mass-notification system throughout the County.	Yes	Still Relevant, Continue due to turnover in residences.
Assure that future land use planning is consistent with mitigation strategies identified in this Plan and in the County's Comprehensive Plan.	Yes	No Longer Relevant, Not actionable enough.

Iowa County Evaluation of 2017 Strategies

Strategy	Completion	Notes
Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in construction and improvements to all buildings within the County to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	No, Longer Relevant, Ongoing, doesn't need to be a specific strategy.
Assure local governments have sufficient back-up power sources so that facilities may continue to provide basic services during times of power failure.	Somewhat	No Longer Relevant, Changing framing of this strategy to be more actionable for 2022.
Work with Local Governments to identify locations that can serve as public shelters in emergency situations and/or explore building public storm shelters.	Somewhat	No Longer Relevant, Changing framing of this strategy to be more actionable for 2022.
Support mutual aid agreements among local government and the county to address emergency priorities and share equipment.	Somewhat	No Longer Relevant, Not actionable enough
Work with communities to develop Hazardous Material Response Plan for manure spill event and educate first responders.	No	Still Relevant
Host Emergency Awareness events including Tornado and Severe Weather Awareness Week in March or April of each year.	Yes	Still Relevant
Post emergency awareness information to the Iowa County Website.	Yes	Still Relevant
Develop a "Functional Need Database" identifying the locations of isolated, vulnerable, or special need populations in Iowa County.	Yes	Still Relevant, Change to promote and maintain.
Coordinate road construction projects with storm water management projects in areas with regular flooding and washouts.	Somewhat	No Longer Relevant, Not actionable enough.

Iowa County Evaluation of 2017 Strategies

Strategy	Completion	Notes
Utilize grant funding to purchase and distribute weather radios among residents.	Yes	No Longer Relevant, Complete.
Explore the use of emergency Warning Siren System Technologies.	Yes	No Longer Relevant, Complete.
Explore training Community Emergency Response Teams for the County.	Yes	No Longer Relevant
Support and comply with State regulations assuring real estate disclosure of hazardous pre-existing property conditions.	Yes	No Longer Relevant, Standard requirement.
Continue to actively promote and participate in the National Flood Insurance Program.	Yes	Still Relevant
Continue to enforce State and Local floodplain zoning standards and regulations.	Yes	No Longer Relevant, Standard and required.
Work with local governments on road, bridge, and other infrastructure planning to better meet flood standards.	Yes	No Longer Relevant, Standard and required.
Continue to enforce the County Subdivision Ordinance requiring engineering for development near or within a delineated floodplain or flood prone area.	Yes	No Longer Relevant, Standard and required.
As feasible, acquire land with structures that are located within the flood plains to remove structures and enforce permanent restrictions on development for these parcels.	No	No Longer Relevant, Not interested in pursuing at this time.

Iowa County Evaluation of 2017 Strategies

Strategy	Completion	Notes
Consider adopting a county-wide storm water ordinance. Encourage local municipalities to do the same; encouraging those who already have an ordinance to enforce it.	No	Still Relevant, Changing framing of this strategy to be more actionable for 2022.
Continue to invest in technologies such as county wide Light Detection & Ranging (LiDAR) on floodplains to improve local knowledge of floodplain areas.	Yes	Still Relevant
Work with WIDNR and private landowners to inspect, address, and maintain dams.	Yes	Still Relevant
Consider amending county code to restrict development on wetlands less than five acres.	Yes	Still Relevant
Support efforts of Alliant Energy (and any future energy providers) to bury power lines and control power line vegetation as much as possible. Coordinate with Highway, Road, and Street projects, when possible, to accomplish this.	Yes	No Longer Relevant, Now a policy of Alliant to bury lines.
Specialized equipment is needed for winter rescue (e.g. snow-mobiles), explore agreements with other organizations to use their equipment during these emergencies.	No	No Longer Relevant, No interest from relevant organizations.
Identify the locations where snow fencing is needed and install fencing where needed.	Yes	Still Relevant, Ongoing.
Encourage Fire Departments in partnership with their governing entities to create and distribute information pamphlets on “reducing structural ignitability” and “emergency preparedness” relevant to wildfires.	Somewhat	Still Relevant, Encourage Fire Departments in partnership with their governing entities to create and distribute information via social media on “reducing structural ignitability” and “emergency preparedness” relevant to wildfires.
Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups in areas with high wild-fire vulnerability.	No	No Longer Relevant, Responsibility of local governments.

Iowa County Evaluation of 2017 Strategies

Strategy	Completion	Notes
Encourage Fire Departments to educate their served populations of “Fuel Reduction Strategies” and work with their governing entities to enact required strategies for the overall protection of the community from wildfires.	Somewhat	No Longer Relevant, Responsibility of local governments.
Explore opportunities to improve traffic warning and safety during hazardous weather conditions (e.g. Intelligent Transportation Systems, fog lights and guardrails).	Somewhat	Still Relevant
Improve Highway 151 corridor to maximize safety at crossings during fog and other hazardous weather conditions and assure that associated land use planning supports these goals.	Somewhat	Still Relevant
Review existing signage and roads for visibility during hazardous weather conditions.	Somewhat	Still Relevant
Encourage and Promote Crop Insurance.	Yes	Still Relevant
Encourage crop and livestock that is compatible with climate and landscape, as well as crop insurance.	No	No Longer Relevant
Identify and educate residents on locations for emergency relief. Especially relating to extreme heat and extreme cold.	Yes	Still Relevant
Develop regulation and ordinance to address existing and emerging sinkholes.	No	No Longer Relevant, Not interested in pursuing this time.

Iowa County Evaluation of 2017 Strategies

Strategy	Completion	Notes
Develop plan and database to keep track of current sinkholes and subsidence properties in Iowa County.	No	No Longer Relevant, Not high priority.
Post information to the Iowa County Website reminding and informing the public and developers that mineshafts and limestone both exist through the County and that they can lead to sinkholes and subsistence.	No	No Longer Relevant, Not interested in pursuing this time.
Work with Local Fire and EMS Depts. to develop and train on Hazardous Material Spill response plan.	Yes	Still Relevant
Encourage and work with businesses to undertake Continuity of Operations Plans.	Yes	No Longer Relevant, Not enough interest from business owners to continue this.

Appendix C: Municipal Evaluations of Previous Plan Strategies

Representatives appointed by the clerk of each municipality completed the following evaluations of the strategies for their respective municipalities, listed in the 2017 Iowa County Hazard Mitigation Plan.

City of Dodgeville Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop and communicate plan on the process of powering critical facilities during power outages.	Somewhat	Still Relevant
2. Develop Emergency Response Plan and Notification System for Dodgeville School District.	Yes	Still Relevant, Plan has been developed and would need to be updated.
3. Improve existing sewer infrastructure.	Yes	Still Relevant
4. Develop a Continuity of Operations (Plan) for the City that includes planning for cyber-attacks.	Somewhat	Still Relevant
5. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	Yes	Still Relevant
6. Develop regulation and ordinance to address existing and emerging sinkholes.	Somewhat	Still Relevant
7. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
8. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
9. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and comprehensive plan.	Yes	Still Relevant
10. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
11. Explore developing mutual-aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Somewhat	Still Relevant
12. Continue to implement storm water ordinance.	Yes	Still Relevant
13. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant

City of Mineral Point Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop Emergency Response Plan and Notification System for Mineral Point School District.	Yes	Still Relevant, Plan has been developed so it would need to be updated.
2. Develop Emergency Response Plan and notification system for Hodan Center and senior facilities.	Unsure	Still Relevant
3. Review and improve Emergency Response Plan and Notification System for County Fairgrounds.	Unsure	Still Relevant
4. Identify and/or explore building public shelters near the county fairgrounds to be used during emergency situations and educate the public on their availability.	Unsure	Still Relevant
5. Adopt a Storm Water Ordinance and work to address problem sewers and culverts.	Somewhat	Still Relevant, Unsure if ord. was adopted, but work on culverts has been done.
6. Develop and communicate plan on the process of powering critical facilities during outages.	Unsure	Still Relevant
7. Develop a Continuity of Operations (Plan) for the City that includes planning for cyber-attacks.	Somewhat	Still Relevant, Starting to switch IT companies to better serve/protect PC's
8. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
9. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
10. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and City's Comprehensive Plan.	Unsure	Still Relevant
11. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant, Working to improve roads w/in city.
12. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
13. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Unsure	Still Relevant

Village of Arena Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop Emergency Response Plan	Yes	Maybe Relevant, Updating the plan is required.
2. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	Somewhat	Still Relevant, Updating is required.
3. Encourage residents and visitors to sign up for emergency wireless mass-notification system.	Yes	Still Relevant
4. Encourage and educate businesses on Continuity of Operations Plans (COOP).	No	Still Relevant, Announcement at board meeting and website.
5. Request safety review of Highway 14.	No	No Longer Relevant, Is a part of the Police Department's supervision.
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant, Is a part of the Fire Chief's supervision.
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant, Is a part of the Building Inspector's supervision.
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Yes	Still Relevant, The Comprehensive Plan was last updated on 03/2020.
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant, Is a part of the Public Works' supervision.
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant, Is a part of the Public Works' supervision
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Somewhat	Still Relevant, Updates are required.
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Yes	Still Relevant, Is a part of the Public Works' supervision.

Village of Avoca Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Educate residents and staff of senior facilities on evacuation procedures	No	Still Relevant
2. Educate business owners on evacuation and Continuity of Operations Plans.	No	Still Relevant
3. Develop mitigation actions to protect water and sewer treatment plant.	No	Still Relevant
4. Develop and communicate plan on the process of powering critical facilities and businesses during power outages.	Yes	Still Relevant
5. Educate campground users on emergency notifications (e.g. RAVE) for mobile devices. Post directions for evacuation.	No	Still Relevant, Updates are required for RAVE.
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	No	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	No	Still Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	No	Still Relevant

Village of Barneveld Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Maintain systems and educate residents on warning sirens and emergency alerts.	Yes	Still Relevant
2. Develop and communicate plan on the process of powering critical facilities during outages.	Yes	Still Relevant, Repeat due to the change of population.
3. Educate owners of businesses and multi-use properties to participate in Emergency Response Planning.	Somewhat	Still Relevant, Repeat due to the addition of several new businesses.
4. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	Somewhat	Still Relevant, Repeat due to the addition of several new businesses.
5. Adopt and/or maintain a Storm Water Ordinance.	Yes	Still Relevant, Need for reinforcement and updating.
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Yes	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Unsure	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Unsure	Still Relevant
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Unsure	Still Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Unsure	Still Relevant

Village of Cobb Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop and communicate plan on the process of powering critical facilities during power outages.	No	Still Relevant, There is a generator for the well and wastewater treatment plant, but still need a plan for the Fire Department and other facilities.
2. Identify facilities for vulnerable population during extreme temperature and weather events.	Somewhat	Still Relevant, Focus on communication to these populations.
3. Develop Emergency Response Plan	Somewhat	Still Relevant, Need to update the Emergency Response Plan.
4. Plan for additional warning siren and/or mass-notification system.	No	Still Relevant, Need to repair. Have 2 sirens, one siren down.
5. Develop and/or maintain a storm water ordinance.	No	Still Relevant
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Yes	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	No	No Longer Relevant: Current road and infrastructure meet current flood standards.
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant, Need to focus on public education.
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	No	Still Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Unsure	Maybe Relevant, Relates back to the first strategy.

Village of Highland Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage businesses to complete a Continuity of Operations Plan	No	Still Relevant
2. Encourage residents to sign up for emergency wireless mass-notification system.	Yes	Still Relevant
3. Maintain safe storage of Fire/EMS equipment	Yes	Still Relevant
4. Identify and educate residents on locations for emergency relief. Especially relating to extreme heat and extreme cold.	Somewhat	Maybe Relevant
5. Develop and communicate plan on the process of powering critical facilities and businesses during power outages.	Yes	Still Relevant
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant, There is a building inspector/zoning administrator.
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Somewhat	Still Relevant, Not sure if this is a Planning Commission topic.
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant, Not sure if this is a Fire/EMS district topic.
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Somewhat	Still Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Yes	Still Relevant, Currently have generators.

Village of Hollandale Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop plan to add storm shelter to existing School along with back-up generator.	No	Still Relevant
2. Develop a plan to prevent the failure of the Storm Sewer System	Yes	Still Relevant, New generator have been installed.
3. Undertake study and address the need to protect groundwater from contamination.	Somewhat	Still Relevant
4. Adopt a storm water ordinance.	No	Still Relevant
5. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
6. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
7. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Yes	Still Relevant
8. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
9. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
10. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant
11. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Yes	Still Relevant
12. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Yes	Still Relevant

Village of Linden Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop and communicate plan on the process of powering critical facilities during power outages.	Yes	Maybe Relevant
2. Encourage residents to sign up for emergency wireless mass-notification system.	Somewhat	Maybe Relevant
3. Undertake study and address the need to protect groundwater from contamination.	Unsure	Still Relevant
4. Encourage Village businesses to complete a Continuity of Operations Plan.	Unsure	Still Relevant
5. Develop an Emergency Response Plan	Yes	Still Relevant
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Unsure	Still Relevant
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Unsure	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Unsure	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Yes	Still Relevant
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Yes	Still Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Yes	Still Relevant

Village of Rewey Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop an Emergency Response Plan	No	Still Relevant
2. Develop and communicate plan on the process of powering critical facilities during outages.	No	Still Relevant
3. Encourage residents to sign up for wireless mass notification system.	No	Still Relevant: Annually
4. Develop and communicate plan for park users to seek shelter in case of emergency.	No	Still Relevant
5. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
6. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
7. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Somewhat	Still Relevant
8. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
9. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Maybe Relevant
10. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Unsure	Still Relevant
11. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	No	Still Relevant
12. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Somewhat	Still Relevant

Village of Ridgeway Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Undertake study to determine methods to protect wastewater treatment plant.	Somewhat	Maybe Relevant
2. Distribute and encourage the use of weather radios.	No	Maybe Relevant
3. Install additional notification siren.	No	No Longer Relevant, Sirens are adequate for the region right now.
4. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	Yes	No Longer Relevant, The Ridgeway Community Center is a public shelter.
5. Adopt and/or maintain a storm water ordinance.	Yes	No Longer Relevant, An ordinance has been adopted.
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	No Longer Relevant, MABAS already exists.
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Village/City to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land-use planning is consistent with mitigation strategies and information identified in this plan and the Village's Comprehensive Plan.	Yes	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant
11. Work with Iowa County to determine coverage and maintenance for all sirens in Iowa County. Educate public on warning sirens.	Somewhat	Maybe Relevant
12. Assist Iowa County in identifying locations that can serve as public shelters during emergency situations.	Somewhat	Maybe Relevant
13. Assure that the Village has sufficient back-up power sources so that critical facilities may continue to provide basic services during times of power failure.	Somewhat	Still Relevant

Town of Arena Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Distribute educational materials for emergency mass notification to temporary visitors and Wisconsin River recreational outfitters.	No	Maybe Relevant
2. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	No	Still Relevant
3. Educate and encourage property owners to brush and remove vegetation to prevent forest and wildfires.	No	No Longer Relevant, Not an issue for the area.
4. Distribute weather radios.	No	No Longer Relevant, Internet and other communications are readily available.
5. Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups.	No	Still Relevant, Rural areas can benefit from dry hydrants.
6. Continue to maintain Emergency Response Planning at local fertilizer businesses.	No	No Longer Relevant, The fertilizer plant is no longer mixing chemicals.
7. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
8. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
9. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
10. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
11. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Brigham Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage visitors and campers at Blue Mounds State Park to sign up for wireless mass emergency notification system.	Somewhat	Still Relevant, A grant has been approved for better wireless.
2. Educate residents and encourage crop insurance.	Somewhat	Still Relevant, More complete coverage.
3. Identify and/or explore building public shelters in or near Blue Mounds State Park to be used during emergency situations and educate the public on their availability.	No	Still Relevant
4. Encourage golfers at Deer Valley Resort to sign up for wireless mass emergency notification system.	Somewhat	Still Relevant
5. Work with WIDNR and private landowners to inspect, maintain, and address dams.	Somewhat	Still Relevant, Birch Lake has new improvements.
6. Request study to determine infrastructure project to address flooding on Mounds Park Road.	Somewhat	Still Relevant, Road improvements are still ongoing.
7. Develop Hazardous Material Response Plan for manure spill event and educate first responders.	Somewhat	Still Relevant, New residents and landowners to be included and notified.
8. Undertake regular inspection and education to prevent emergency overflow of manure storage.	Somewhat	Still Relevant, New residents and landowners to be included and notified.
9. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Maybe Relevant
10. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Somewhat	Still Relevant, New building inspector has been hired.
11. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	No	Still Relevant, Comprehensive Plan revised in 2018 and prime farmland was downgraded, so there isn't complete protection.
12. Strive to upgrade road and other infrastructure to better meet flood standards.	No	Still Relevant, More money is available for roads – COVID, powerlines.
13. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Somewhat	Still Relevant, Continue to upgrade and hire staff for EMS positions.

Town of Clyde Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Maintain EMS and Fire Service in case of bridge closure on State Highway 130.	Yes	Still Relevant
2. Request study and recommended repairs to address repetitive road washouts and flooding.	Unsure	Still Relevant:
3. Develop and implement area land use plans to address regular tree trimming/removal and culvert inspection. Educate residents.	Yes	Still Relevant
4. Develop and communicate plan on the process of powering critical facilities during power outages.	No	Still Relevant
5. Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups.	Unsure	Maybe Relevant:
6. Coordinate road construction projects with storm water drainage projects.	Yes	Still Relevant
7. Identify and/or explore building public shelters to be used during emergency situations and educate the public on their availability.	Yes	Still Relevant
8. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Unsure	Maybe Relevant, The township is too small to have a fire chief on staff. We contract w/Village of Lone Rock for Fire and EMS.
9. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
10. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
11. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
12. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Dodgeville Evaluation of 2017 Strategies

Strategy	Completion	Notes
1. Work with businesses to develop Continuity of Operations Plans in case of long-term power outages or other disaster events.	Unsure	No Longer Relevant, Lack of interest from businesses.
2. Encourage visitors and campers at Governor Dodge State Park to sign up for wireless mass emergency notification system.	No	Still Relevant
3. Communicate highway conditions during extreme weather events (buckling, flooding, and washouts).	Unsure	No Longer Relevant, Responsibility of Police Department.
4. Educate farm owners on resources available to them in response to hazards.	Yes	Still Relevant
5. Develop Hazardous Material Response Plan for manure spill event and educate first responders.	Unsure	Maybe Relevant
6. Distribute weather radios.	No	Maybe Relevant
7. Identify and/or explore building public shelters at Governor Dodge State Park, to be used during emergency situations and educate the public on their availability.	Unsure	No Longer Relevant, Not regulated by another entity.
8. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
9. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
10. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
11. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
12. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Eden Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Continue to upgrade, replace, and repair roads, culverts, and bridges as funds become available.	Yes	Still Relevant
2. Develop stricter driveway ordinance to accommodate emergency equipment.	Yes	Still Relevant
3. Encourage residents to sign up for wireless mass emergency notification system.	Yes	Still Relevant
4. Develop Hazardous Material Response Plan for manure spill event and educate first responders.	Yes	Still Relevant
5. Educate Fire and EMS on chemical spill response.	Unsure	Still Relevant
6. Provide Blackhawk Lake campers information on wireless emergency mass notification system.	Yes	Still Relevant
7. Educate and encourage property owners to brush and remove vegetation to prevent forest and wildfires.	Yes	Still Relevant
8. Develop an Emergency Response Plan for Montfort Windfarm.	Yes	Still Relevant
9. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
10. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
11. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
12. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
13. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Highland Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop an evacuation plan for park users and campers.	No	Maybe Relevant
2. Develop and communicate plan on the process of powering critical facilities during power outages.	No	Maybe Relevant
3. Encourage park users and campers to sign up for wireless mass emergency notification system.	No	Maybe Relevant
4. Request a study to identify inadequate culverts and drainage ditches.	Somewhat	Still Relevant
5. Study and address field run off into Big Spring Creek.	No	Still Relevant
6. Encourage Crop Insurance	Yes	Still Relevant
7. Identify and/or explore building public shelters at Blackhawk Lake to be used during emergency situations and educate the public on their availability.	No	No Longer Relevant, There is a different regulating identity. Black Hawk Lake has its own commission.
8. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	No	Maybe Relevant
9. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
10. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
11. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
12. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	No	No Longer Relevant, The township has its own equipment and if they don't have it then it rents from private entities.

Town of Linden Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage residents to sign up for wireless mass notification system.	Somewhat	Still Relevant
2. Develop Emergency Response Plan.	No	Still Relevant
3. Develop Hazardous Material Response Plan for manure spill event and educate first responders.	No	Still Relevant
4. Develop and communicate plan on the process of powering critical facilities during power outages.	No	No Longer Relevant, Township doesn't have critical facilities that require this.
5. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	No	Maybe Relevant
6. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
7. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
8. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
9. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Mifflin Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop and communicate plan on the process of powering critical facilities during power outages.	No	No Longer Relevant, Part of County responsibility.
2. Develop plan to prioritize roads to be cleared in case of severe weather events.	No	Still Relevant
3. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
4. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
5. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
6. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
7. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Unsure	Still Relevant

Town of Mineral Point Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage residents to sign up for wireless mass notification system.	Somewhat	Still Relevant
2. Work with WIDNR and private landowners to inspect, address, and maintain dams.	Unsure	Still Relevant, Part of Ludden Lake Dam Commission's responsibility.
3. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
4. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
5. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
6. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
7. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Moscow Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage residents to sign up for wireless mass notification system.	No	Still Relevant: Clarify it's cell phone. Define wireless.
2. Develop Emergency Response Plan	Yes	Still Relevant
3. Encourage crop and livestock that is compatible with climate and landscape, as well as crop insurance.	No	No Longer Relevant, Other entities already delegate farmers in regards to this.
4. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
5. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
6. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
7. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
8. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Yes	Still Relevant

Town of Pulaski Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups.	No	Maybe Relevant
2. Prepare grant narrative to replace culverts in problem areas.	Yes	Still Relevant
3. Request study and recommend repairs to address repetitive road washouts and flooding.	No	Still Relevant
4. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
5. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
6. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
7. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
8. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	No	Still Relevant

Town of Ridgeway Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Work with campgrounds in the Town to Develop Emergency Response and Evacuation Plans	Yes	Maybe Relevant
2. Encourage business to develop Continuity of Operations Plans for extended power outages and other hazards.	No	Maybe Relevant
3. Work with WIDNR and private landowners to inspect, address, and maintain dams.	Unsure	No Longer Relevant, NRES is in charge of inspecting dams.
4. Undertake shadow zoning behind dams.	Unsure	Maybe Relevant
5. Develop and communicate plan on the process of powering critical facilities during outages.	No	Maybe Relevant
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	Yes	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	No	No Longer Relevant

Town of Waldwick Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage residents to sign up for wireless mass emergency notification system.	No	Maybe Relevant
2. Develop Mitigation Plans for individual road sites.	No	Maybe Relevant
3. Develop and plan to apply to WisDOT for county bridge funding.	Somewhat	Maybe Relevant
4. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
5. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
6. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
7. Strive to upgrade road and other infrastructure to better meet flood standards.	Somewhat	Still Relevant
8. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	Somewhat	Still Relevant

Town of Wyoming Evaluation of 2017 Strategies		
Strategy	Completion	Notes
1. Encourage and educate public businesses and facilities to have weather monitoring systems and safe shelters for visiting guests.	No	Maybe Relevant
2. Request traffic safety study on Highway 23 and request safety signage.	No	Still Relevant
3. Undertake vulnerability analysis of water treatment facility and address needs.	No	Still Relevant
4. Encourage crop and livestock that is compatible with climate and landscape, as well as crop insurance.	Yes	Still Relevant
5. Develop and implement plan to utilize dry hydrants and possible irrigation hook-ups.	No	Maybe Relevant
6. Continue to maintain Mutual Aid Box Alarm System (MABAS) for Fire and EMS services.	Yes	Still Relevant
7. Continue to support and comply with Wisconsin Uniform Dwelling Code (UDC) in the construction and improvements to all buildings within the Township to assure that buildings are best able to safely withstand natural hazards that may occur.	Yes	Still Relevant
8. Assure that future land use planning is consistent with mitigation strategies and information identified in this plan and the County's Comprehensive Plan.	Yes	Still Relevant
9. Strive to upgrade road and other infrastructure to better meet flood standards.	No	Still Relevant
10. Explore developing mutual aid agreements with the County and/or other municipalities to address emergency priorities and share equipment (e.g. snowplows, salt equipment).	No	Maybe Relevant

Appendix D: Iowa County Storm Event Database

Table 99 – Iowa County Storm Event Database, 2017- 2022 (Source: NOAA)		
Location (if Available)	Date	Event
	1/3/2017	Winter Weather
	1/10/2017	Winter Weather
	1/11/2017	Winter Weather
	1/16/2017	Winter Weather
	1/24/2017	Winter Storm
	2/24/2017	Winter Weather
MINERAL POINT AIRPORT	3/7/2017	Thunderstorm Wind
	3/8/2017	High Wind
	3/12/2017	Winter Weather
WALDWICK	3/23/2017	Hail
MINERAL PT	5/17/2017	Thunderstorm Wind
DODGEVILLE	5/17/2017	Thunderstorm Wind
LIVINGSTON	6/28/2017	Thunderstorm Wind
COBB	6/28/2017	Thunderstorm Wind
MINERAL PT	6/28/2017	Thunderstorm Wind
ARENA	7/9/2017	Hail
REWEY	7/11/2017	Hail
MINERAL POINT AIRPORT	7/11/2017	Hail
MONTFORT JCT	7/19/2017	Thunderstorm Wind
ARENA	7/19/2017	Thunderstorm Wind
AVOCA	7/21/2017	Heavy Rain
	12/4/2017	Strong Wind
	12/25/2017	Cold/Wind Chill
	1/1/2018	Cold/Wind Chill
	1/14/2018	Winter Weather
	2/3/2018	Winter Weather
	2/5/2018	Winter Weather
	2/8/2018	Winter Weather
REWEY	2/20/2018	Flood
	3/5/2018	Winter Weather
	4/3/2018	Winter Weather
	4/18/2018	Winter Weather
MINERAL PT	5/2/2018	Hail
ARENA	5/4/2018	Heavy Rain
HELENA	6/16/2018	Hail
	6/16/2018	Heat
	6/29/2018	Excessive Heat
	7/4/2018	Heat
ARENA	8/21/2018	Flood

MINERAL PT	9/2/2018	Thunderstorm Wind
COBB	10/1/2018	Heavy Rain
MINERAL PT	10/9/2018	Hail
MINERAL PT	10/9/2018	Hail
COBB	10/9/2018	Thunderstorm Wind
	12/28/2018	Winter Weather
	1/18/2019	Winter Storm
	1/22/2019	Winter Storm
	1/27/2019	Winter Weather
	1/29/2019	Extreme Cold/Wind Chill
	2/5/2019	Winter Weather
	2/7/2019	Winter Weather
	2/11/2019	Winter Storm
	2/17/2019	Winter Weather
	2/19/2019	Winter Weather
	2/23/2019	Winter Weather
	2/24/2019	Strong Wind
	2/26/2019	Winter Weather
	3/9/2019	Winter Weather
JONESDALE	3/13/2019	Flood
	4/27/2019	Winter Weather
GOVERNOR DODGE STATE PARK	6/27/2019	Thunderstorm Wind
CLYDE	7/19/2019	Thunderstorm Wind
	7/19/2019	Excessive Heat
DODGEVILLE	7/20/2019	Thunderstorm Wind
REWEY	9/12/2019	Flash Flood
WALDWICK	10/1/2019	Thunderstorm Wind
	10/28/2019	Winter Weather
	10/30/2019	Winter Weather
	11/6/2019	Winter Weather
	11/27/2019	Strong Wind
	1/10/2020	Winter Weather
	1/17/2020	Winter Weather
	2/9/2020	Winter Weather
	2/17/2020	Winter Weather
DODGEVILLE	7/7/2020	Thunderstorm Wind
ARENA	7/9/2020	Thunderstorm Wind
OKEE	10/22/2020	Flash Flood
	11/24/2020	Winter Weather
	12/11/2020	Winter Weather
	12/27/2020	Winter Weather

	12/29/2020	Winter Weather
	1/16/2021	Winter Weather
	1/25/2021	Winter Storm
	1/30/2021	Winter Weather
	2/4/2021	Winter Weather
	2/6/2021	Cold/Wind Chill
	2/11/2021	Winter Weather
	2/13/2021	Winter Weather
	2/13/2021	Cold/Wind Chill
	3/15/2021	Winter Weather
HIGHLAND	8/7/2021	Hail
HIGHLAND	8/7/2021	Tornado
REWEY	8/10/2021	Thunderstorm Wind
MIFFLAN	8/11/2021	Tornado
MINERAL PT	8/11/2021	Tornado
ARENA	9/20/2021	Thunderstorm Wind
	12/15/2021	High Wind
	12/28/2021	Winter Weather
	12/31/2021	Winter Weather
	1/22/2022	Winter Weather
	1/24/2022	Winter Weather
	1/25/2022	Cold/Wind Chill
	2/22/2022	Winter Weather
	2/24/2022	Winter Weather
	3/6/2022	Winter Weather
	3/31/2022	Winter Weather
	04/14/2022	Strong Wind
	6/20/2022	Heat advisory
	6/15/2022	Tornado Warning
	7/4/2022	Heat advisory
	7/5/2022	Thunderstorm Wind

Appendix E: Iowa County Wild and Forest Fire Events

Iowa County Wild and Forest Fire Events, 2017-2022 (Source: WIDNR)			
Date	Location	Cause	Acres Burned
2/21/2017	Arena Township	Other	0.15
3/11/2017	Brigham Township	Debris Burning	0.18
3/21/2017	Ridgeway Township	Debris Burning	5.6
2/2/2018	Arena Township	Debris Burning	2.57
3/4/2018	Brigham Township	Debris Burning	0.72
3/5/2018	Clyde Township	Power Line	0.05
3/22/2018	Brigham Township	Debris Burning	0.05
4/12/2018	Highland Township	Power Line	1
4/26/2018	Clyde Township	Debris Burning	2.31
4/27/2018	Arena Township	Power Line	0.01
3/18/2019	Arena Township	Debris Burning	1.4
3/26/2019	Highland Township	Debris Burning	0.4
3/26/2019	Dodgeville Township	Debris Burning	7.27
3/27/2019	Dodgeville Township	Debris Burning	1.75
3/31/2019	Clyde Township	Debris Burning	1.09
4/5/2019	Pulaski Township	Equipment	0.1
4/14/2019	Arena Township	Debris Burning	0.1
4/15/2019	Arena Township	Improper Ash Disposal	0.31
4/20/2019	Arena Township	Debris Burning	0.44
4/21/2019	Brigham Township	Debris Burning	1.46
3/27/2020	Wyoming Township	Equipment	0.26
11/3/2020	Highland Township	Debris Burning	0.54
3/19/2021	Pulaski Township	Debris Burning	10.64
3/29/2021	Pulaski Township	Other	0.4
3/31/2021	Pulaski Township	Outdoor Furnace	0.01
4/1/2021	Arena Township	Debris Burning	4.99
4/22/2021	Clyde Township	Debris Burning	0.76
6/15/2021	Arena Township	Debris Burning	0.1
6/17/2021	Dodgeville Township	Lightning	0.1
7/2/2021	Arena Township	Equipment	0.11
12/2/2021	Arena Township	Debris Burning	0.1
3/29/2022	Dodgeville Township	Debris Burning	4.93
3/31/2022	Wyoming Township	Debris Burning	1.65
4/10/2022	Highland Township	Debris Burning	0.5
4/17/2022	Pulaski Township	Equipment	0.1
4/17/2022	Pulaski Township	Equipment	0.2
4/20/2022	Clyde Township	Debris Burning	0.01
4/21/2022	Arena Township	Debris Burning	0.01

Appendix F: Iowa County Mitigation Worksheet

Year: _____

Disaster History

Damages: \$

Hazard Mitigation Efforts Completed:

Q1	Q2	Q3	Q4

Lessons Learned/Proposed Updates to Hazard Mitigation Plan:

Appendix G: Adoption Resolutions of Participating Jurisdictions (INSERT DOCUMENTS FOLLOWING COUNTY ADOPTION)

Iowa County

City of Dodgeville

City of Mineral Point

Village of Arena

Village of Avoca

Village of Barneveld

Village of Cobb

Village of Highland

Village of Hollandale

Village of Linden

Village of Rewey

Village of Ridgeway

Town of Arena

Town of Brigham

Town of Clyde

Town of Dodgeville

Town of Eden

Town of Highland

Town of Linden

Town of Mifflin

Town of Mineral Point

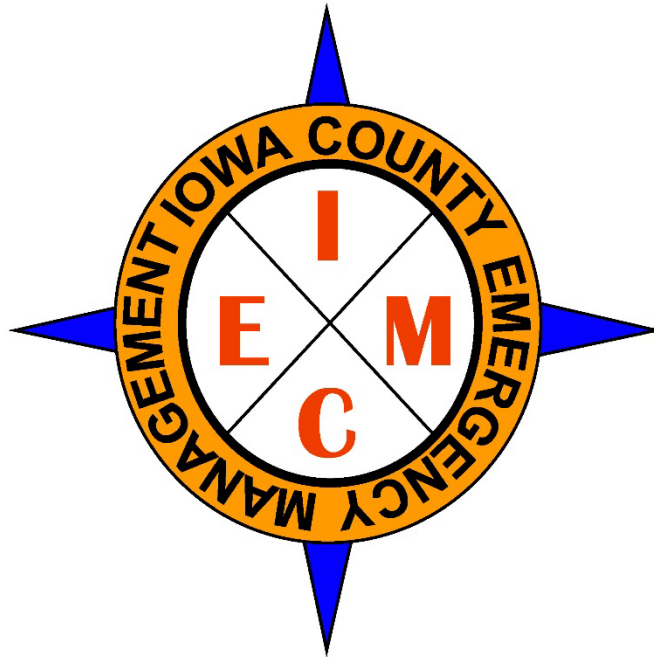
Town of Moscow

Town of Pulaski

Town of Ridgeway

Town of Waldwick

Town of Wyoming



SOUTHWESTERN WISCONSIN
REGIONAL PLANNING
COMMISSION