



ONEIDA COUNTY ALL HAZARDS MITIGATION PLAN UPDATE

Prepared with the assistance of the North Central Wisconsin Regional Planning Commission



ONEIDA COUNTY ALL HAZARDS MITIGATION PLAN UPDATE

prepared for:

Oneida County Emergency Services

by:

North Central Wisconsin Regional Planning Commission

adopted by Oneida County Board on:

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This update was prepared at the request and under the supervision of the Local Emergency Planning Committee and the Captain of Emergency Services by the North Central Wisconsin Regional Planning Commission (NCWRPC). For more information, contact:

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INTRODUCTION

Part I of the Oneida County All Hazards Mitigation Plan (AHMP) Update describes and documents the process used to develop the Plan Update. This includes how it was prepared and who (committee, organizations, departments, staff, consultants, etc.) was involved in the update process. It also describes the local government involvement, the time period in which the Update was prepared, and who to contact to answer questions and make recommendations for future amendments to the Plan.

DISASTER MITIGATION ACT OF 2000

The development of the Oneida County All Hazards Mitigation Plan Update is a response to the passage of the Disaster Mitigation Act of 2000 (DMA2K). On October 30, 2000, DMA2K was signed into law by the U.S. Congress in an attempt to stem the losses from disasters, reduce future public and private expenditures, and to speed up 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 parts of DMA2K that pertain to local governments and tribal organizations:

- The Act establishes a new requirement for local governments and tribal organizations to prepare an All Hazards Mitigation Plan in order to be eligible for funding from FEMA through the Pre-Disaster Mitigation Assistance Program and Hazard Mitigation Grant Program.
- The Act establishes a requirement that natural hazards such as tornados, floods, wildfires need to be addressed in the risk assessment and vulnerability analysis parts of the All Hazards Mitigation Plan. Manmade such as hazardous waste spills is encouraged but not required to be addressed.
- The Act authorizes up to seven percent of Hazard Mitigation Grant Program funds available to a state after a federal disaster to be used for development of state, local, and tribal organization All Hazards Mitigation Plans.
- The Act establishes November 1, 2004 as the date by which local governments and tribal organizations are to prepare and adopt their respective plans in order to be eligible for the FEMA Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program.

- If a plan is not prepared by November 1, 2004, and a major disaster is declared, in order for a local government or tribal organization to be eligible to receive funding through the Hazard Mitigation Grant Program, they must agree to prepare an All Hazards Mitigation Plan within one year.
- In addition, by not having an All Hazards Mitigation Plan, local governments and tribal organizations cannot utilize funding through the Pre-Disaster Mitigation Grant Program.
- All Hazards Mitigation Plans must be updated every five years.

Since the DMA2K, additional laws have been passed that help to shape hazard mitigation policy. These are codified in amendments to the Sandy Recovery Improvement Act (SRIA) of 2013, the National Flood Insurance Act of 1968, and the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016.

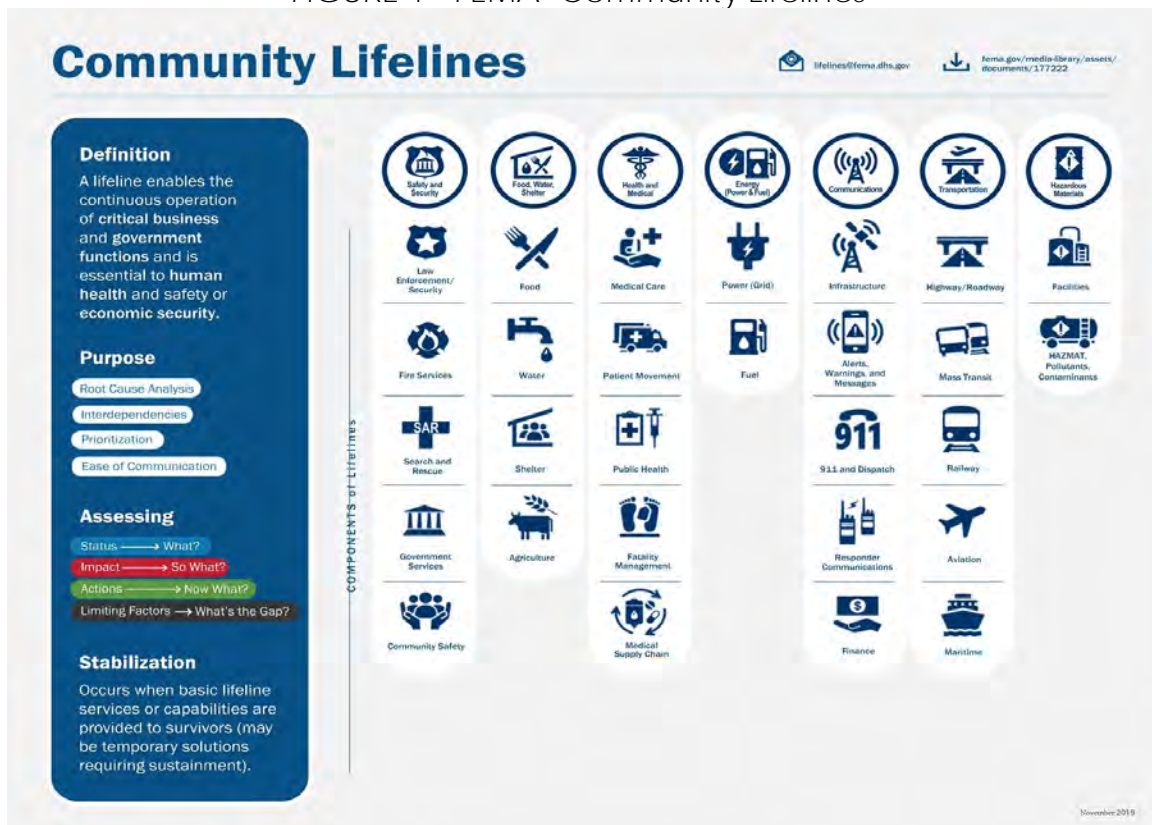
The following grant programs have hazard mitigation plan adoption requirements: Hazard Mitigation Grant Program (HMGP), Public Assistance Grant Program (PA), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA), Fire Management Assistance Grant Program (FMAG), and Rehabilitation of High Hazard Potential Dams Grant Program (HHPD).

Local hazard mitigation plans form the foundation of a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction and repetitive damage. The Federal Emergency Management Agency (FEMA) supports local mitigation planning to foster partnerships among all levels of government, to develop and strengthen non-governmental and private partnerships, to reduce the costs associated with disaster response and recovery by promoting mitigation activities, and to promote more disaster-resilient and sustainable communities.

Community resilience is the ability of a community to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. Activities such as disaster preparedness (which includes prevention, protection, mitigation, response and recovery) and reducing community stressors (the underlying social, economic and environmental conditions that can weaken a community) are key steps to resilience.

"Community lifelines" (see Figure 1) are the infrastructure of resilience that enable the continuous operation of critical government and business functions and is essential to human health and safety or economic security. FEMA developed the community lifelines concept as a disaster response tool, to highlight the priority areas of focus for initial incident stabilization. However, lifelines exist steady-state, and enable all other aspects of society. As such, FEMA now incorporates community lifelines into all of its planning and reporting requirements, including mitigation. Mitigation planning helps to understand risk to and vulnerability of lifelines, to prioritize mitigation investments, and to reduce the likelihood that lifelines will fail as a result of an incident.

FIGURE 1 - FEMA "Community Lifelines"



Source: FEMA.

The Stafford Act lays out requirements for local mitigation plans which are further clarified by FEMA policy guidance.

THE FIVE PARTS OF AN ALL HAZARDS MITIGATION PLAN UPDATE

The Oneida County All Hazards Mitigation Plan Update was categorized into five parts in order to address FEMA's local mitigation plan requirements. The five parts are as followed:

- Part I: Update Planning Process
- Part II: Planning Area
- Part III: Risk Assessment
- Part IV: Mitigation Strategy
- Part V: Plan Maintenance Process and Adoption

DEVELOPMENT OF THE ALL HAZARDS MITIGATION PLAN UPDATE

The Oneida County Emergency Services Department received a Planning Grant in July of 2021 to update its All Hazards Mitigation Plan through the Pre-Disaster Mitigation (PDM) Program.

In late 2021, the North Central Wisconsin Regional Planning Commission (NCWRPC) finalized a work agreement with Oneida County and began preparation of the All Hazards Mitigation Plan at the request of the County Captain of Emergency Services in January of 2022.

The update process included regular Task Force Committee meetings as well as extensive involvement from the local units of government within Oneida County and the counties surrounding Oneida. A variety of local and regional agencies were involved in the development of the Plan at various stages, and extensive opportunity for public participation was provided including public informational meetings and hearings. All sections of the plan report were reviewed and analyzed by the planning team at subsequent meetings and revised as established in the design of the update process for this Plan.

The remainder of this chapter expands on and provides more detail on key aspects of the update development process.

KEY ELEMENTS OF THE UPDATE TO THE PREVIOUS 2010 PLAN

The major enhancements to the Oneida County All Hazards Mitigation Plan developed through this Update are as follows:

- ✓ Review of Recommended Revisions - The final Crosswalk for the previous plan update approval passed the plan with no recommended revisions.
- ✓ Review and update of planning area chapter - The planning area description and inventory was expanded and improved with additional information and updated statistics.
- ✓ Addition of economic impact modeling of the cumulative effects of job loss (due to hazard event) in the top industry sectors of the County.
- ✓ Review and update of risk assessment - The risk assessment was updated with documentation on recent hazard events, and a new map was added to geographically represent wildfire risk in the County. The priority level of hazards facing the County was also reviewed and updated.
- ✓ Review and update of Mitigation Strategy - The mitigation strategies chapter begins with a complete progress report on the strategies from the 2016 plan, establishment of new set of strategies for next five-year cycle and an updated prioritization of projects.

ALL HAZARDS MITIGATION PLAN UPDATE TASKFORCE

The Oneida County All Hazard Mitigation Plan Update was prepared under the guidance of an advisory taskforce of the Local Emergency Planning Committee (LEPC) that consisted of a broad cross section of government, agency and interest group representatives from across the County. Periodic meetings were held with the NCWRPC staff, the County Captain of Emergency Services (Jacob Simkins), and the LEPC to provide input on the types of hazards to be considered, appropriate mitigation strategies, and to review draft reports. LEPC members and their representation are as follows:

Name	Title/Agency	LEPC Position
Rob Swearingen	Wisconsin State Assembly	State Official
Krisopher Hanus	Mayor of Rhinelander	Local Official
Dan Hess	Chief Deputy	Law Enforcement
Jake Simkins	Director of Emergency Services	EM
Brian Tonnancour	Fire Chief – Rhinelander	Firefighting
Brian Gehrig	First Responders – Pine Lake	First Aid
Rebecca Wold	Health Department	Health
Jeff Paddock	Wisconsin DNR	Environmental

Scott Langa	Ascension	Hospital
Alex Hegeman	Highway Commissioner	Transportation
Duff Damos	NRG Media	Broadcast Media
Jason Goeldner	Dean of Public Safety	Nicolet College
Tom Emond	Ahlstrom-Munskjo	Facility Rep.

LOCAL GOVERNMENT INVOLVEMENT

There were a number of opportunities for the local units of government to become involved in the update process. All jurisdictions participated in the previous plan as well as this Update through one or more of these opportunities.

In January of 2022 a hazard mitigation issues survey was sent to each town chairperson and clerk requesting which hazards are a concern, input on past and future mitigation measures, and to document other information that could be incorporated into the All Hazards Mitigation Plan Update. Responses were received from 10 of 20 towns. A significant amount of information was gleaned from these questionnaires and incorporated into the planning document. Town representatives were also invited to the Agency Involvement Meeting; refer to that section, below.

The City of Rhinelander was involved in the development of the Plan Update in two ways: 1) seats on the LEPC and 2) participation in a formal City Mitigation Planning Meeting. Fire Chief Brian Tonnancour represented the City on the LEPC.

The City planning meeting was held on June 21, 2022. City officials were formally introduced to the update process by NCWRPC and walked through an exercise to develop plan elements specific to the City. Participants in this meeting included the following:

- Zach Vruwink City Administrator
- Jake Simkins Oneida County Emergency Services
- Dawn Robinson Oneida County Emergency Services
- Lloyd Gauthier Police Chief
- Brian Tonnancour Fire Chief

These participants provided information on hazards that have significance to the City, discussed critical facilities and provided mitigation strategy ideas for the Plan Update.

NEIGHBORING COMMUNITY INVOLVEMENT

One of the requirements of the update process was to include neighboring communities. In previous plans, the NCWRPC experienced low attendance in response to invitations to county emergency management staff from surrounding counties. As a result, NCWRPC contacted staff during the update process via email from Vilas, Forest, Langlade, Lincoln and Price counties. Ideas were exchanged about All Hazards Mitigation planning processes and strategies between the various counties.

LOCAL AND REGIONAL AGENCY INVOLVEMENT

Another requirement of the update process was to involve local and regional agencies that have a role in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests. Some of these categories were addressed through Taskforce membership or other meetings. But to fully meet this objective, the NCWRPC invited a diverse group of stakeholders to discuss potential hazard mitigation strategies.

The meeting was held on July 21, 2022 at the Oneida County Law Enforcement Center in Rhinelander. Agencies and organizations represented include the following:

- | | |
|-------------------|---|
| - Paul Fiene | Oneida County Forestry |
| - Jeff Paddock | WiDNR – Spill Coordinator |
| - Lindsey Kennedy | Oneida County Asst. Facilities Director |
| - Dave Jaeger | Town of Minocqua Police Dept. |
| - Dawn Robinson | Oneida County Emergency Services |
| - Leah Van Zile | WPSC/WEC Energy Group |
| - Karl Jennrich | Oneida County Planning & Zoning |
| - Jake Simkins | Oneida County Emergency Services |

A number of other agencies were invited but chose not to attend.

During the meeting, the Plan Update and its components were introduced to the attendees. Mitigation strategy ideas were solicited and a number of ideas were discussed at length with the group. Part IV of the Plan was revised based on the meeting.

During the meeting a number of issues were discussed. Meeting attendees brought up issues with flooding, high wind events, wildfires, and tornados. All were concerned about staffing levels and the ability to fill

vacant positions. Wisconsin Public Service (WPS) commented that there is a good level of communication between WPS and emergency services during disasters.

PUBLIC REVIEW PROCESS AND PLAN ADOPTION

Opportunities for public comment were provided to review the Plan Update during the drafting stage and prior to Plan approval. All meetings were properly posted and open to the public. A copy of the draft was made available on the internet. Comments and questions about the Plan were directed to the Oneida County Emergency Services.

Public informational meetings on the draft update were held at the Oneida County Law Enforcement Center on July 21, 2022. Notice was posted in the local newspaper. Unfortunately, no members of the public chose to attend these meetings. In addition, no comments were received via U.S. Mail or email as a result of the meetings.

A public hearing will be scheduled by the County Public Safety Committee prior to forwarding to County Board for approval. Following the public hearing, the Plan Update will be forwarded to the County Board for final adoption. The adopting resolution will be included in Appendix B along with details on any plan changes resulting from hearing comments and County Board action.

The City of Rhinelander was asked to adopt the Plan Update for its jurisdiction on their own and properly post and hold a open public meeting, see APPENDIX B for the City resolution of adoption.

INCORPORATED PLANS, STUDIES, REPORTS AND TECHNICAL DATA

Many plans, reports, and technical data sources were referenced and incorporated into the Oneida County All Hazards Mitigation Plan Update. These sources include but are not necessarily limited to the following:

Wisconsin Department of Natural Resources, North Central Wisconsin Regional Planning Commission and Oneida County geographic information system databases provided much of the base data for the mapping and analysis within the Update. Statistical reports and data from the US Census and Wisconsin Departments of Administration, Revenue, and Workforce Development were used for the demographic background in Part 2 of this Update. Land use data in Part 2 was obtained from the Oneida County Comprehensive Plan.

Wisconsin Department of Natural Resources Wetlands Inventory and Dams Database were used to identify and map wetlands and dams within the County for Maps 3 and 4 in Part 2 and Table 12 in Part 3. NFIP DFIRM flood zone maps for Oneida County provided the mapping of 100-year floodplain areas, Map 4 in Part 2, for flooding risk assessment, Map 9 in Part 3.

NOAA National Climatic Data Center severe weather event data was used extensively for the risk assessment in Part 3. The wildfire section of the risk assessment was based on the Wisconsin Department of Natural Resources' fire occurrence database and statewide Communities At Risk (CAR) assessment. Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment Tracking System (BRRTS),

Other plans, reports, and documents were reviewed by staff during the update process including but not limited to the FEMA Discovery Report for Wolf River Watershed, State of Wisconsin Hazard Mitigation Plan, the Hazard Analysis for the State of Wisconsin, the Wisconsin Repetitive Loss Report, the Oneida County Zoning Ordinance, the Oneida County Land and Water Resource Management Plan, the Oneida County Emergency Operations Plan, and the 2014 Commodity Flow Study for Oneida County. Although these may not have been directly incorporated, the review provided valuable insight and direction to the update process.

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<https://www.co.oneida.wi.us/departments/em/>

<https://www.ncwrpc.org/ncwrpc2021/all-hazard-mitigation-planning/>

<https://wem.wi.gov/about-hazard-mitigation/>

<http://www.fema.gov/hazard-mitigation-planning/>

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INTRODUCTION

Part II of the Oneida County All-Hazards Mitigation Plan Update provides general geographical information on Oneida County including demographic and economic characteristics. The general development patterns of the County are described in terms of current land use and future development trends.

In addition to developing an understanding of the planning area, this chapter represents the beginning stages of assessing vulnerability by inventorying the numbers, types and values of existing buildings, infrastructure and critical facilities within each participating jurisdiction in the planning area. This overall summary of each jurisdiction's vulnerability to hazards describes the potential impact on the community.

Land use and development trends are analyzed to project the number and type of potential future buildings, infrastructure and critical facilities within each jurisdiction so that mitigation options can be considered in future land use decisions.

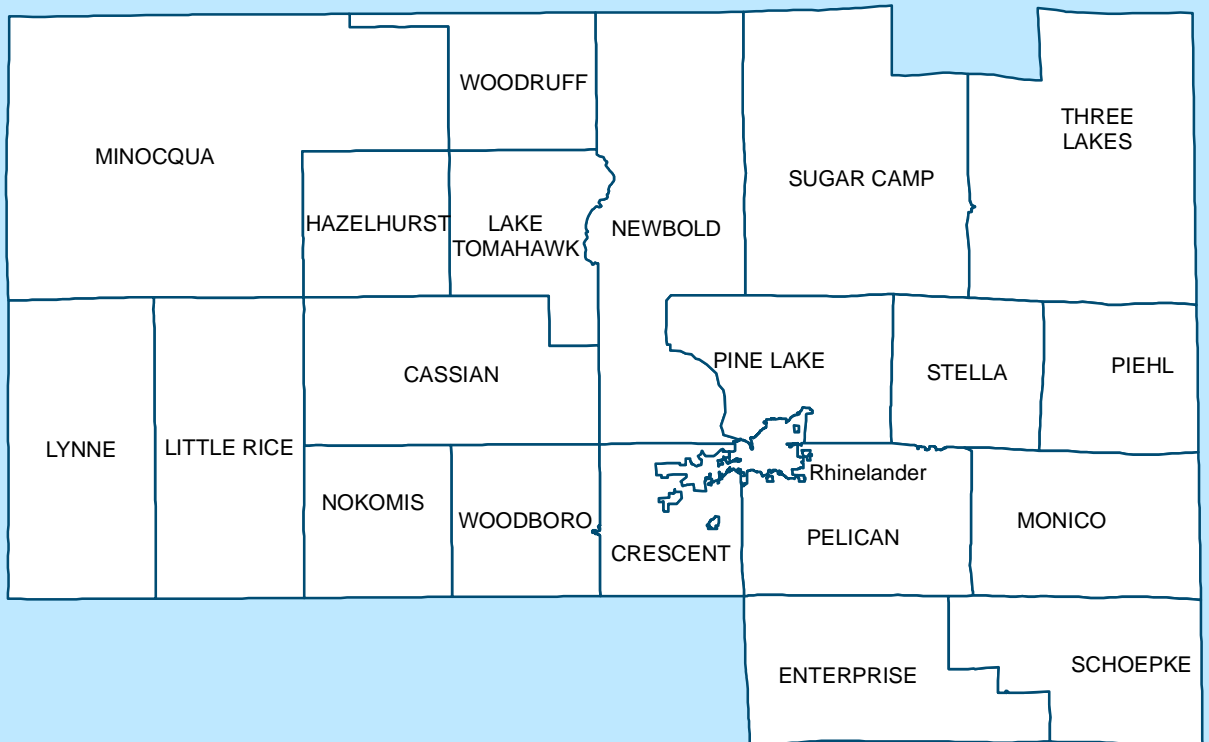
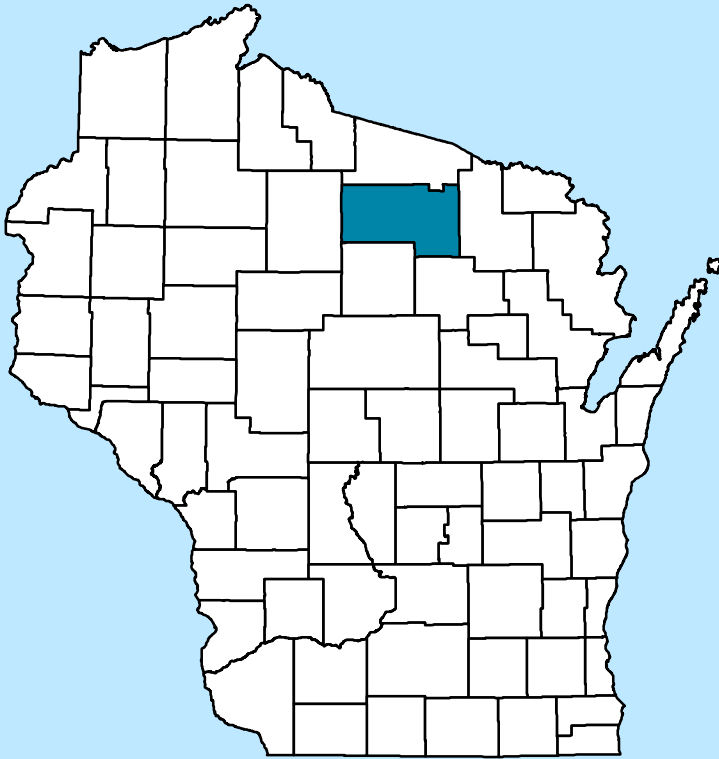
The resulting information is an important element of the planning process, since sound alternative mitigation strategies cannot be formulated and evaluated without an in-depth knowledge of the relevant conditions in the study area.

GENERAL GEOGRAPHY

LOCATION

Oneida County is located in north central Wisconsin (See Map 1) and is bounded on the north by Vilas County, on the east by Forest, on the south by Langlade and Lincoln, and on the west by Price County. Oneida County lies 268 miles north of Milwaukee; 135 miles northeast of Green Bay; 60 miles north of Wausau and 200 miles north of Madison. Major metropolitan areas outside of Wisconsin with transportation linkages to Oneida County are Chicago, 340 miles southeast; Minneapolis-St. Paul, 242 miles southwest; and Duluth, 200 miles northwest.

The only incorporated area is the City of Rhineland just southwest of the geographic center of the County. There are also the unincorporated "villages" within the Towns of Lake Tomahawk, Minocqua/Woodruff and Three Lakes distinguishable by their downtown-like business districts. Other notable rural places include Hazelhurst, Monico, Pelican Lake and Sugar Camp.



This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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CIVIL DIVISIONS

There are 21 municipalities (20 towns and 1 city) in the Oneida County planning area. The City of Rhinelanders is the County Seat. These units of government provide the basic structure of the decision-making framework. The County has a total surface area of approximately 1,235 square miles, of which about 10 % is water. The area and proportion of the County comprised by each civil division is presented in Table 1.

Table 1 Geographical Size by Civil Division				
Municipality	Area in square miles			Area as % of County
	Water area	Land area	Total area	
Cassian town	4.19	64.21	68.40	5.5%
Crescent town	3.64	28.67	32.31	2.6%
Enterprise town	2.45	56.42	58.88	4.8%
Hazelhurst town	4.20	30.87	35.07	2.8%
Lake Tomahawk town	5.42	33.86	39.28	3.2%
Little Rice town	6.79	66.85	73.65	6.0%
Lynne town	2.08	70.05	72.14	5.8%
Minocqua town	18.92	149.15	168.08	13.6%
Monico town	0.76	53.81	54.56	4.4%
Newbold town	14.58	78.40	92.98	7.5%
Nokomis town	4.20	32.72	36.92	3.0%
Pelican town	3.38	50.46	53.86	4.4%
Piehl town	0.77	37.20	37.98	3.1%
Pine Lake town	4.85	40.10	44.96	3.6%
Schoepke town	5.07	45.59	50.66	4.1%
Stella town	2.32	34.99	37.30	3.0%
Sugar Camp town	9.19	88.76	97.96	7.9%
Three Lakes town	19.79	80.13	99.88	8.1%
Woodboro town	2.73	34.21	36.94	3.0%
Woodruff town	7.41	28.14	35.56	2.9%
Rhinelanders city	0.27	8.34	8.61	0.7%
Oneida County	123.01	1,112.93	1,235.98	100.0%

Source: U.S. Census and NCWRPC

TOPOGRAPHY

Oneida County is in the Northern Highlands area of Wisconsin. The surface of the County is a gently undulating plain, dotted with numerous lakes and swamps. There are some relatively prominent drift hills in the northeast. The soil varies from a fine sand to sandy loam and loam. The elevation is generally between 1,500 and 1,800 feet, with most of the land only slightly higher than the level of the lakes and streams.

The drainage pattern in the County is typical of a glaciated region: irregular and poorly defined. It is characterized by numerous lakes, bogs and marshes. Most of the County is drained by the Wisconsin River and its tributaries. The Wolf and its tributaries drain a small area in the southeastern part of the County. Watersheds in the extreme northwest corner drain via Squaw Creek and into the Flambeau-Chippewa system, which empties into the upper Mississippi River.

CLIMATE

Oneida County has a continental climate that is characterized by long, cold, snowy winters; warm summers; and springs and falls that are often short. From late fall through spring, the weather changes every few days because of air masses that are part of pressure systems moving eastward and northeastward over the northern states.

In winter, the average temperature is about 14 degrees F., and the average daily minimum temperature is about 4 degrees. The lowest temperature on record is -48 degrees, which occurred in 1996. The number of days at or below 0 degrees has varied from 9 in 1931 to 53 in 1950. In summer, the average temperature is 66 degrees and the average daily maximum temperature is 77 degrees. The highest recorded temperature is 100 degrees, which occurred in 2006. The number of days at or above 90 degrees has varied from 1 in 1951 to 35 in 1933.

Total annual precipitation is about 30.66 inches. Of this, about 70% usually falls in April through September. Thunderstorms occur on about 34 days each year. Hail falls on an average of two days a year. Average seasonal snowfall is 53 inches. The prevailing wind is from the southwest, with the highest average wind speed of 12 mph during spring.

DEMOGRAPHIC AND ECONOMIC PROFILE

POPULATION AND HOUSEHOLDS

The official state population estimate for Oneida County shows a population of 37,935 people for 2022. This represents a 0.24% increase over the 2020 Census reported population of 37,845. This indicates an upward trend in population of Oneida County had increase by 1,847 people between 2010 and 2020, a 5.1%. Population loss has been a common problem for most of Oneida's neighboring counties except for Vilas (refer to Table 2). If this growth rate continues, it is anticipated the population of Oneida County will be approximately 39,985 people (5.7%) in 2030, and then slightly decrease to 38,500 people (-3.71%) in 2040.

Population concentrations and trends are important when prioritizing hazard mitigation strategies. Approximately 25 percent of the population is classified by the Census as urban and 75 percent is rural. Rhinelander is the most densely populated and developed area in the County. Other areas of population concentrations include the Towns of Minocqua, Woodruff and Three Lakes. Map 8 shows areas of development concentrations in the County. Overall population density of the County is 34 persons-per-square-mile and ranges from a high of 993.4 in the City of Rhinelander to a low of 2.0 in the Town of Lynne.

Table 2 Population of Adjacent Counties				
	2010	2020	# Change	% Change
Oneida	35,998	37,845	1,847	4.1%
Vilas	21,430	23,047	1,617	7.5%
Forest	9,304	9,179	-125	-1.3%
Langlade	19,977	19,491	-486	-2.4%
Lincoln	28,743	28,415	-328	-1.1%
Price	14,159	14,054	-105	-0.7%
Wisconsin	5,686,986	5,893,718	206,732	3.6%

Source: U.S. Census

Between 2010 and 2020, some communities within the County experienced an increase in their population base (refer to Table 3). The greatest amount of growth occurred in the Town of Little Rice with a 26.8 percent increase over this time. The Town of Three Lakes also exhibited

notable growth at 13.2 percent. In terms of actual number of people, Town of Minocqua led the way by adding 609 residents, followed by the City of Rhinelander with 487 over this time. Most notable declines in population were seen by Town of Woodruff and Monico with over 15% loss in population. Town of Woodruff saw the biggest loss in actual number with a decrease of 304 people.

Table 3 Population and Households of Minor Civil Divisions						
Minor Civil Division	2010 Population	2010 Households	2020 Population	2020 Households	% '10-'20 Population	'10-'20 % Households
Cassian	985	445	1,069	463	8.5%	4.0%
Crescent	2,033	857	1,984	863	-2.4%	0.7%
Enterprise	315	146	353	143	12.1%	-2.1%
Hazelhurst	1,273	537	1,299	471	2.0%	-12.3%
Lake Tomahawk	1,043	443	1,155	411	10.7%	-7.2%
Little Rice	306	154	388	173	26.8%	12.3%
Lynne	141	69	139	50	-1.4%	-27.5%
Minocqua	4,453	2,079	5,062	2,029	13.7%	-2.4%
Monico	309	127	260	178	-15.9%	40.2%
Newbold	2,719	1,176	2,831	1,230	4.1%	4.6%
Nokomis	1,371	590	1,372	621	0.1%	5.3%
Pelican	2,764	1,183	2,809	1,108	1.6%	-6.3%
Piehl	86	41	74	47	-14.0%	14.6%
Pine Lake	2,740	1,136	2,724	1,182	-0.6%	4.0%
Schoepke	387	188	388	159	0.3%	-15.4%
Stella	650	263	569	237	-12.5%	-9.9%
Sugar Camp	1,694	729	1,819	822	7.4%	12.8%
Three Lakes	2,131	996	2,413	887	13.2%	-10.9%
Woodboro	813	351	808	348	-0.6%	-0.9%
Woodruff	1,987	948	1,683	867	-15.3%	-8.5%
Rhinelander city	7,798	3,545	8,285	3,388	6.2%	-4.4%
County Total	35,998	16,003	37,484	15,677	4.1%	-2.0%

Source: Census

According to the US Census, the median age in Oneida County is 51.4 up from the median age of 49 ten years ago. This characterizes the County population relatively old as in comparison to the State's median age of 36. The County has been identified as a retirement area resulting from being a vacation spot for many seasonal homeowners. Location of seasonal housing is a strong indicator in terms of retirement location. In Oneida

County a high percentage, 45%, of all housing units have been identified as seasonal/recreational.

SEASONAL POPULATION

In addition to the regular full-time resident population, Oneida County is known as a popular tourist destination. The impact of this seasonal population cannot be overlooked when planning for hazards. Table 4 shows estimated seasonal residents by municipality based on the seasonal housing data in the Census. Determining when and for how long these seasonal residents will be in the County is problematic, but the numbers give some indication of what weekend or other peak period population levels might be. To calculate the estimated seasonal resident population the estimated number of seasonal housing units was multiplied by the average household size for that municipality.

Table 4 Estimated Seasonal Resident Population		
Municipality	Est. 2015-2019 Seasonal Housing Units	Est. 2015-2019 Seasonal Population
Cassian	664	1,441
Crescent	373	1,003
Enterprise	310	657
Hazelhurst	719	1,726
Lake Tomahawk	640	1,510
Little Rice	302	550
Lynne	307	654
Minocqua	2,702	6,052
Monico	108	212
Newbold	1,162	2,580
Nokomis	598	1,399
Pelican	585	1,408
Piehl	65	124
Pine Lake	408	922
Schoepke	511	996
Stella	122	301
Sugar Camp	964	2,333
Three Lakes	1,978	4,134
Woodboro	429	1,085
Woodruff	614	1,339
Rhineland city	281	601
County Total	13,904	31,100

Source: U.S. Census, American Community Survey 2015-2019

Another component of the seasonal population includes short-term accommodations such as short-term rentals, campgrounds, and hotel-style lodging. The scope of this plan did not provide for a detailed inventory of accommodations; however, the Wisconsin DNR completed a general inventory as part of its last statewide comprehensive outdoor recreation plan. That report is due for an update, but its inventory identified 3,089 hotel/motel beds, 45 bed and breakfast beds, and 492 other types of beds available around the County. The DNR also identified 1,596 campsites in various campgrounds across the County as well as educational/recreational camps with a capacity for 2,771 individuals.

EMPLOYMENT

The Retail Trade has the greatest impact on Oneida County employment having the most employees at about 2,920 jobs in 2020 which is more than 16.6 percent of total employment. Health Care and Social Assistance is the second largest industry sector in the County with 2,765 positions or 15.8 percent of total employment. The Accommodation and Food Service industry sector has the third highest number of employees at about 1,783 or 10 percent.

Within the leisure & hospitality sector are two prominent sub-sectors: food service & drinking places and food & beverage stores. With the extent of lakes and recreation land, Oneida County is a popular tourist destination, creating more demand for restaurants, bars, and hotels. Although food service is the number two industry sub-sector, none of these employers appear on the list of top employers in the County as jobs in food service and drinking places tend to be seasonal with many part-time positions.

Table 5 Notable Employers in Oneida County			
Company	Product or Service	Size	Location
Aspirus Rhinelanders Hospital	General medical and surgical hospitals	500-999	C. of Rhinelanders
Ahlstrom	Paper, except newspaper, mills	250-499	C. of Rhinelanders
Wal-Mart	Discount department stores	250-499	C. of Rhinelanders T. of Minocqua
Aspirus Howard Young Medical Center	General medical and surgical hospitals	250-499	T. of Woodruff
County of Oneida	Executive and legislative offices	250-499	Various locations
Nicolet Area Technical College	Junior colleges	250-499	C. of Rhinelanders T. of Minocqua
School District of Rhinelanders	Elementary and secondary schools	100-249	Various Locations
Printpack	Packaging Materials	100-249	C. of Rhinelanders
Marshfield Clinic Woodruff Center Hospital	General medical and surgical hospitals	100-249	T. of Woodruff

Source: WisDWD and NCWRPC

Healthcare sub-sectors are well represented on the top employers list (refer to Table 5) as a result of the demand for health services generated by the County's aging population. Educational services are also a large source of employment with two major educational facilities among the top employers in the County: Rhinelanders School District and Nicolet Area Technical College.

Identifying locations of large employment is important when prioritizing hazard mitigation strategies. Analyzing employment sectors within the County confirms Rhinelanders and Minocqua/Woodruff as the primary employment and service hubs in the County, however, many of the unincorporated "places" like Three Lakes and Lake Tomahawk are also significant employment centers.

In addition to the seasonal swells in employment, the number of people working in a given locality fluctuates on a daily basis. Workers travel into Oneida from surrounding counties and residents flow out of the County for employment. Overall, workers flowing into the County and residents flowing out are nearly balanced. The most significant connection is with Vilas County to the north with 2,100 Vilas residents traveling into Oneida for work while 1,350 Oneida County residents go to Vilas. Lincoln County is also a notable link with 650 to 800 workers traveling between each county.

ECONOMIC IMPACT OF JOB LOSS IN ONEIDA COUNTY

To help determine the potential impact of a hazard occurrence on the economy of the County, EMSI economic modeling software was used to estimate the cumulative effects of job losses in selected industry sectors of the County. Limited representative sectors were chosen for illustrative purposes to control the scale of analysis required for this planning project. It is not meant to discount the value or importance of any other industry within the County. A catastrophic, worst case, scenario is examined. Actual impacts would vary by the degree of severity of the event. The 4 sectors in Table 6 represent 55% of the overall earnings of Oneida County.

Table 6		Economic Impact of Catastrophic Event on Industry Sectors by employment in Oneida County	
Sector	# Locations	Potential Jobs Impacted	Earnings
Retail Trade	197	2,920	\$117,179,600
Health Care and Social Assistance	209	2,765	\$230,711,600
Government	83	2,245	\$163,846,835
Accommodation and Food Services	188	1,783	\$42,950,687
		9,713	\$554,688,722
<i>Source: EMSI Economic Modeling Specialists and NCWRPC</i>			

LAND USE/LAND COVER AND DEVELOPMENT PATTERNS

Land use is an important determinant in the potential impact a particular hazard may have, and inaction which may be taken to mitigate the hazard impacts. An understanding of the amount, type, and spatial distribution of urban and rural land uses within the County is an important consideration in the development of a sound hazard mitigation plan.

The Oneida County Comprehensive Plan has categorized land use in Oneida County into classifications. Aerial photos were used to digitize land use creating a Geographic Information System (GIS) coverage. Map 2 shows the land use and development concentrations in Oneida County. Table 7 shows the acreage and percent of each classification.

FORESTRY AND AGRICULTURE

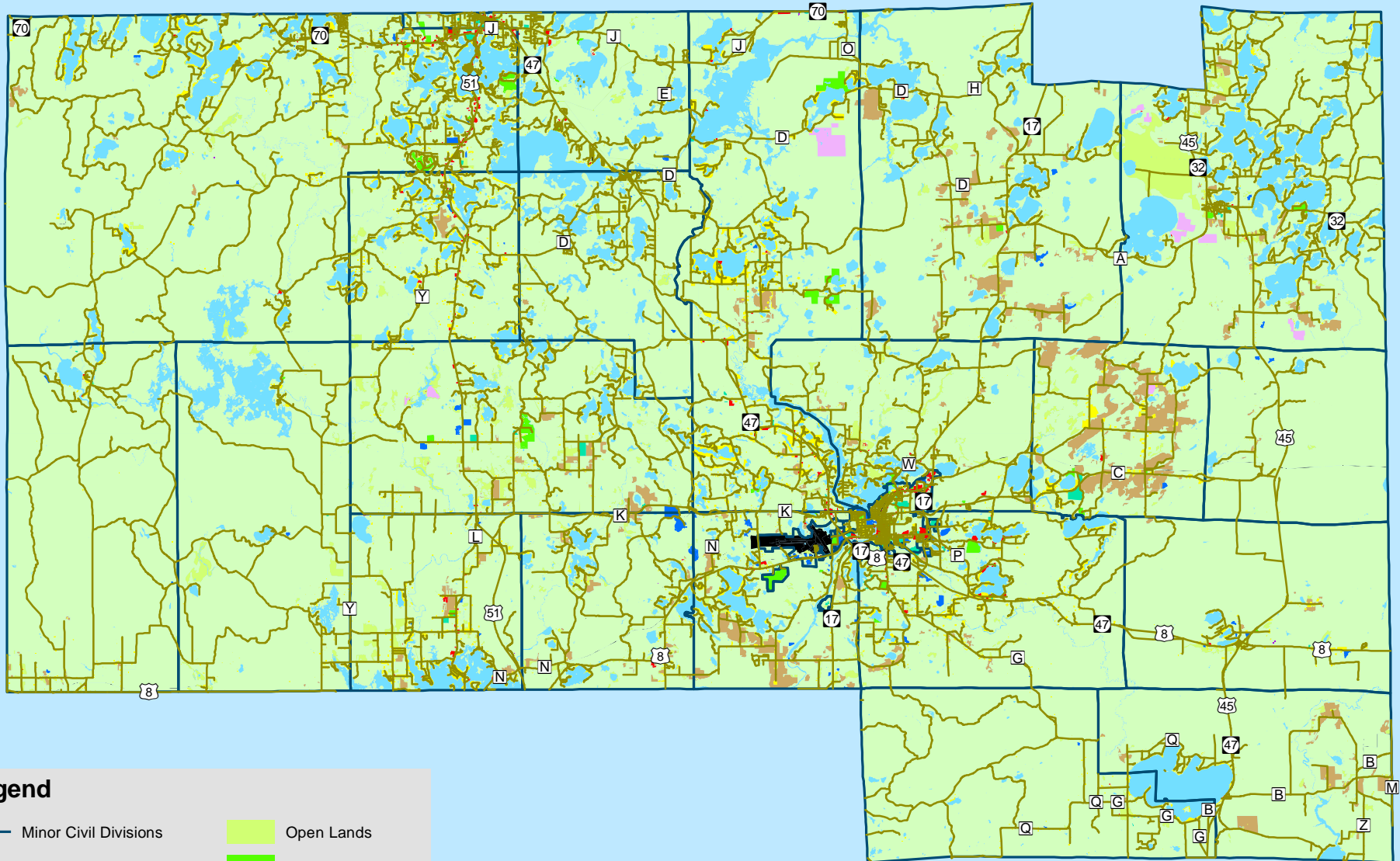
The dominant land-uses in Oneida County are forestry. The land area in the County is approximately 82 percent forested, comprised of about 645,000 acres. Agricultural land covers another 4 percent of the land area. The main agricultural practices in the County are potatoes, some forage and hay crops, and a minor amount of cattle. There are also about 1,300 acres of cranberry production concentrated primarily in the Towns of Cassian, Minocqua, Newbold, and Three Lakes. Agriculture is scattered throughout the County but much of it is concentrated in the Town of Stella.

Table 7 Generalized Land Use in Oneida County		
Description	Acres	Percent
Agriculture*	32,231	4.08%
Commercial and Industrial	3,978	0.50%
Governmental/ Public/Institutional	1,195	0.15%
Outdoor Recreation	2,271	0.29%
Residential	24,899	3.15%
Transportation	6,711	0.85%
Water	74,692	9.44%
Forestry	644,858	81.54%
Total	790,834	100.0%

Source: NCWRPC, 2020 *Includes Open Grassland.

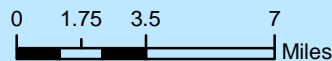
2-13

Existing Land Use



Legend

- | | |
|------------------------------|--------------------|
| Minor Civil Divisions | Open Lands |
| Roads | Outdoor Recreation |
| Agriculture | Residential |
| Commercial | Transportation |
| Cranberry Bog | Utility |
| Governmental / Institutional | Water |
| Industrial | Woodlands |



Source: NCRPC, WI DNR, LU 2020, Oneida Co.

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RESIDENTIAL DEVELOPMENT

Land in residential development makes up only 3.15 percent of the total County area. Residential concentrations are scattered throughout the County (see “Population and Households” above). Much of the scattered rural development is related to direct recreational demand as various types of housing have clustered along streams and lakes.

There are several mobile home parks in the County. According to the U.S. Census, there were 1,872 mobile homes in 2020. This is about 6 percent of housing units for the County compared to about 4 percent for the entire state. This is significant due to their vulnerability to natural hazards, especially tornadoes. Map 8 displays the mobile home concentrations within the County.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Commercial and industrial development makes up only about 0.5 percent of the total area of the County. Land use for commercial and industrial development is also scattered throughout the County. There are five designated industrial parks in Oneida County. Four are located in the Rhinelander area and one is in the Town of Three Lakes. Commercial centers are located in the City of Rhinelander, the Minocqua/Woodruff area, and the Town of Three Lakes. Commercial activity in the surrounding rural area is primarily dominated by small commercial recreation operations focusing on the tourism industry.

SURFACE WATER

Oneida County has a total surface area of about 790,834 acres, however, about 74,692 acres (9.44%) is comprised of surface water (see Map 3). The majority of this area is comprised of 426 named lakes and 701 unnamed lakes totaling 66,545 acres and 2,056 acres respectively. The largest natural lake is Lake Tomahawk at 3,627 acres, and the largest artificial water body is the Willow Reservoir at 5,135 acres. The deepest lake is Clear Lake, which measures approximately 100 feet at its deepest point. The County contains 830 miles of streams, of which about 192 miles are classified as trout streams. The Three Lakes area holds the world's largest chain of freshwater lakes. While most of the County drains into the Wisconsin River, a small area in the southeast drains into the Wolf River and another small area in the northwest drains through a series of river systems to the upper Mississippi River.

Oneida County contains fourteen watersheds located throughout the County. Map 3 shows the watershed boundaries. The watersheds are as follows:

- Upper South Fork Flambeau River
- Bear River
- Sugar Camp Creek
- Eagle River
- Upper Tomahawk River
- Middle Tomahawk River
- Lower Tomahawk River
- Somo River
- Rhinelander Flowage
- Pelican River
- Woodboro
- Noisy and Pine Creek
- Prairie River
- Upper Wolf River

Floodplains and wetlands are important subsidiary components of the surface water system as described below.

FLOODPLAIN

The primary value of floodplains is their role in natural flood control. Flood plains represent areas where excess water can be accommodated whether through drainage by streams or storage by wetlands and other natural detention/retention areas. Specific areas that will be inundated will depend upon the amount of water, the distance and speed that water travels, and the topography of the area. If uninterrupted by development, the areas shown on Map 4 as floodplains should be able to handle the severest (regional) flood, i.e. those that have a probability of occurring once every one hundred years.

There is value in preserving and protecting these natural flood control areas from encroachment. First, by preventing development in the floodplain, the cost of building dikes, levies, or other man-made flood control devices will be saved. Second, for each structure that is constructed in a flood-prone area, that flood-prone area expands, potentially subjecting other structures originally built outside the delineated flood hazard area to the risk of flooding. Each new structure (or modification to existing) placed in the floodplain puts more life and property in danger.

Counties, cities, and villages are required to adopt reasonable and effective floodplain zoning ordinances. The requirement is found in section 87.30 of the Wisconsin Statutes and Chapter NR 116 of the Wisconsin Administrative Code. Floodplain zoning is designed to protect individuals, private property, and public investments from flood damage.

Floodplain zoning maps identify areas where major floods can occur. Regulations prohibit development in the floodway, the most dangerous flood area. In other flood areas, the flood fringe, a development that is built above flood levels and otherwise flood-protected is allowed if it is in accordance with local ordinances. For regulatory purposes, a floodplain is generally defined as land where there is a 1% chance of flooding in any year (also known as the 100-year floodplain).

In order to participate in the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP), the County and the City of Rhinelander have completed a Flood Insurance Study and a Flood Insurance Rate Map (FIRM) that encompasses Oneida County, see Table 8 for a summary of NFIP status. This FIRM delineates the "A" Zones including the floodway and flood fringe which are those areas inundated by the 100-year flood within the County. Oneida County has updated its FIRM to digital standards. The digital FIRMs are referred to as DFIRM. The NCWRPC downloaded the DFIRM from FEMA's website for use in this plan. Although unofficial, these digital files indicate there are approximately 54,756 acres of floodplain in Oneida County, or about 6.9 percent of the area of the County. Map 4 shows the approximate floodplains in Oneida County. Floodplains in Oneida are small and floods occur only during periods of exceptionally heavy rainfall or in conjunction with snowmelt. Currently, there are no repetitive loss structures, those with multiple flood insurance claims, in Oneida County.

Table 8 FEMA Community Status Book Report Communities Participating in the National Flood Insurance Program Wisconsin - Oneida County				
Community	Initial FHBM	Initial FIRM	Current Map	Program Entry
Oneida County	09/04/81	08/05/91	05/16/13	08/05/91
City of Rhinelander	12/17/73	08/05/91	05/16/13	08/05/91
Source: FEMA 10/18/2022.				

The Biggert-Waters Flood Insurance Reform Act was signed into law in July 2012. This act implemented significant reforms to the structure of flood insurance under the National Flood Insurance Program (NFIP). Then, on March 21, 2014, President Obama signed the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA) into law amending the NFIP further. These new laws impact the various elements of the NFIP, including Insurance, Flood Mapping, Mitigation, and Floodplain management.

HFIAA repeals and modifies certain provisions of the Biggert-Waters Flood Insurance Reform Act, and makes additional program changes to other aspects of the program not covered by that Act. Many provisions of the Biggert-Waters Flood Insurance Reform Act remain and are still being implemented. The new law lowers the recent rate increases on some policies, prevents some future rate increases, and implements a surcharge on all policyholders. The Act also repeals certain rate increases that have already gone into effect and provide for refunds to those policyholders. Both of these laws are important to local floodplain managers and planners because rate structure increases may increase the interest of policyholders that own flood-prone properties in alternatives to mitigate both flood risk and flood insurance costs for those properties.

WETLANDS

Wetlands perform many indispensable roles in the function of the hydrologic cycle and local ecological systems. In terms of hazard mitigation, they act as water storage devices in times of high water. Like sponges, wetlands absorb excess water and release it back into the watershed slowly, preventing flooding and minimizing flood damage. As more impermeable surfaces are developed, this excess capacity for water runoff storage becomes increasingly important.

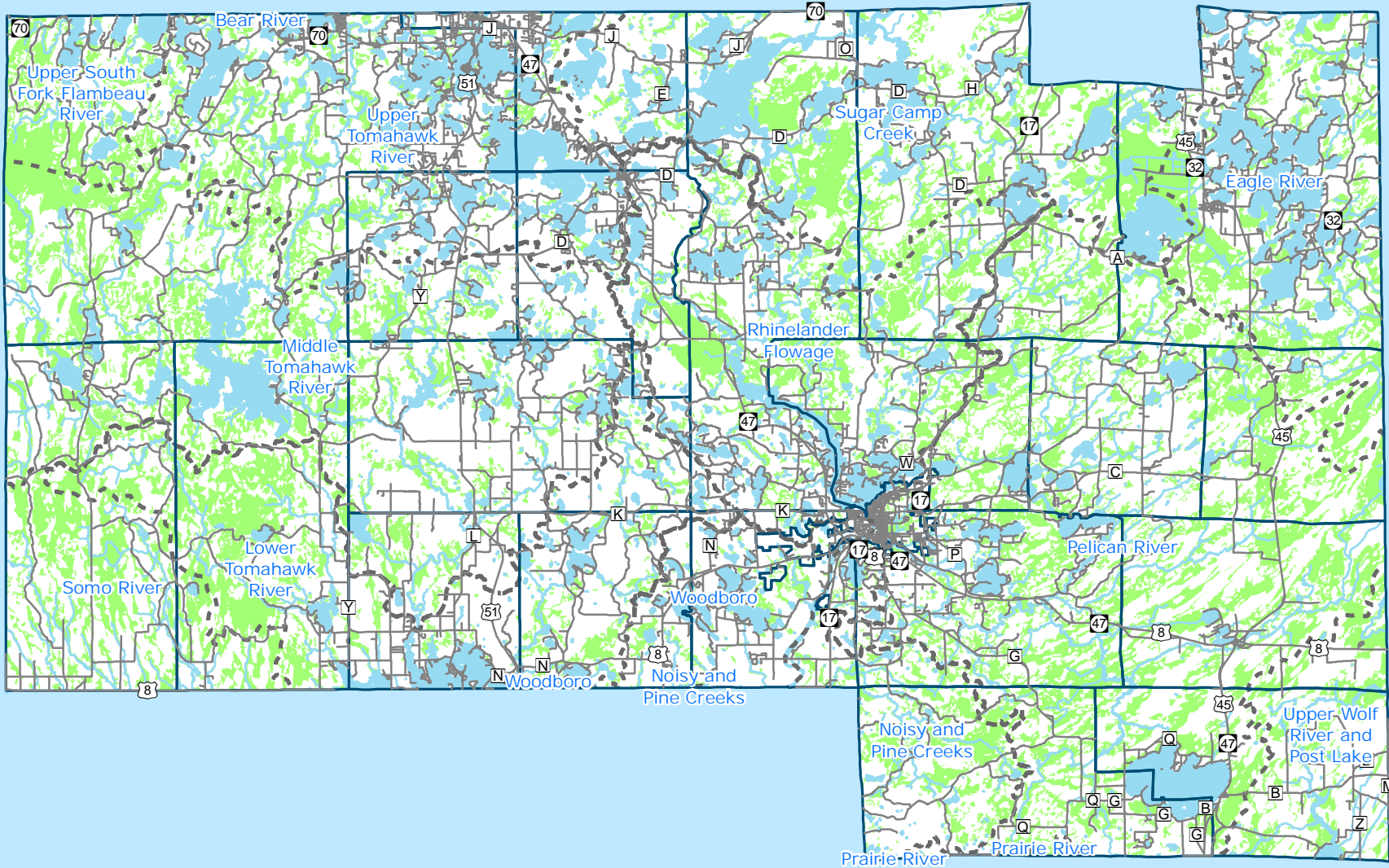
The DNR has identified the location of wetlands through its Wisconsin Wetland Inventory. According to that database, Oneida County has approximately 237,000 acres of wetland or about 30 percent of its total area. Much of this is wooded. Map 3 shows these wetland areas in Oneida County. The wetlands are spread across the County, but significant concentrations include the Munninghoff Marsh on the Rhinelander Flowage, Rainbow Wetlands State Natural Area, and the Thunder Marsh in the Town of Three Lakes area.



Rainbow Wetlands State Natural Area (WisDNR)

Eradication of wetlands can occur through the use of fill material. This can destroy the hydrological function of the site and open the area to improper development. The Wisconsin Department of Natural Resources (DNR) has promulgated minimum standards for managing wetlands.

2-19



Legend

-  Minor Civil Divisions
-  Roads
-  Water
-  Watersheds Boundary
-  Wetlands



Source: NCWRPC, WI DNR, Oneida Co.

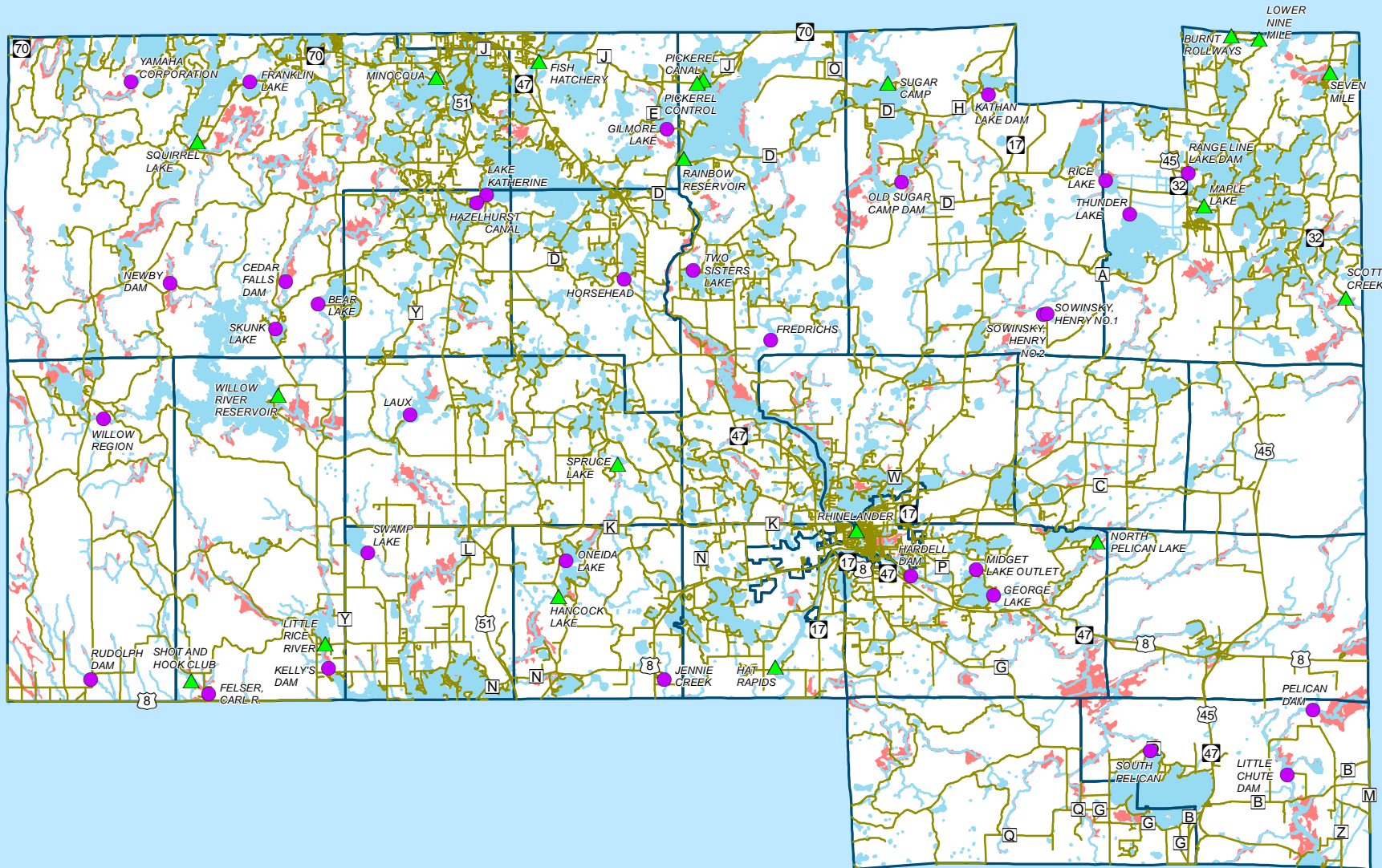
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2-20



Legend

- | | |
|--|---|
|  Minor Civil Divisions | Dam Size |
|  Roads |  Large |
|  Water |  Small |
|  Floodplains | |



Source: NCWRPC, WI DNR, Oneida Co., FEMA

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OTHER LAND COVER/USES

Recreational lands including parks and outdoor sports facilities total about 2,017 acres or 0.3 percent of the County area. Other lands may have recreational aspects, particularly woodlands. Governmental, public and institutional lands total about 938 acres or about 0.15% of the County area. The transportation category is primarily the roadway travel corridors for federal, state, county, and local highways and roads. Sometimes overlooked, transportation land use can be significant. In Oneida County, surface transportation facilities consume about 6,711 acres of land or about 0.85 percent of the total area. Note that this is almost twice as much land area as is used for commercial, industrial and institutional uses in the County.

FUTURE GROWTH AND DEVELOPMENT IN ONEIDA COUNTY

Oneida County's population has increased by 4.1 percent over the last 10 years with a net gain of 1486 residents. By 2030, Oneida County is estimated to have grown to a population of about 39,985, a gain of 2137 residents if the growth rate continues at the current level. This equates to approximately 1018 structures (housing units) or about 102 per year.

From a net growth perspective, residential migration into Oneida County has been solely responsible for all its population growth because natural growth has been negative (more deaths than births). This growth pattern is reflective of an aging population and the seasonal-to-permanent housing market.

Rhineland is the largest urban area in the County and will see continued growth as the employment and shopping hub for the surrounding area. Future residential growth in the Rhineland area is anticipated to be primarily through infill development of single-family and duplexes around the City. Major apartment complexes are located on Driscoll Road, E Timber Dr., Bruner St., and W Davenport St. The towns surrounding the City, Crescent, Newbold, Pelican, and Pine Lake, as well as Woodboro, will likely be more of a retirement destination than the City itself and will see continued development in part as a bedroom community to Rhineland.

Outside Rhineland, growth tends to be clustered in subdivisions near popular lakes and recreation areas, and relatively close to amenities like retail and healthcare. This will result in continued growth in the Towns of

Minocqua and Newbold as well as Nokomis, Sugar Camp, and Three Lakes, as new subdivisions are developed in these towns.

Much of this development is concentrated on the east side of Rhinelander along the STH 17 bypass.

The City anticipates future commercial growth to occur within its current boundary through infill and reuse, such as the planned second Kwik Trip store. However, this area along the 17-bypass has the potential to attract more development, as well as industrial land surrounding the airport.

In other parts of the County, new commercial and industrial development is expected to be gradual over time, paralleling population growth.

New residential infrastructure or public facilities have been built in the following towns. Town of Sugar Camp built a new Ambulance building and has some new residential subdivisions. Town of Hazlehurst had multiple residential developments and built a new fire house along with renovating town hall and community building. Town of Pine Lake has had small residential subdivisions with larger developments getting annex to the City of Rhinelander. Town of Lake Tomahawk build new town office and community center. Town of Little Rice has seen an increase in residential lots with 35 new lots created in the last year. Town of Newbold built a new Town Hall and Public Works shop building. Town of Three Lakes is looking at building a new fire station and options for affordable housing.

PUBLIC FACILITIES AND SERVICES

TRANSPORTATION

The transportation system of Oneida County provides the basis for movement of goods and people into, out of, through, and within the County. An efficient transportation system is essential to the sound social and economic development of the County and the Region. The analysis of transportation routes should be considered in the possible event of a disaster (See Map 5).

The principal highways serving Oneida County are (north-south) US Highways 45 & 51 and State Highway 17 which serves Rhinelander and (east-west) US Highway 8. State highways 32, 47 and 70 also serve the County. These highways link the County with neighboring communities and are vital to the County's tourism and recreation-based economy.

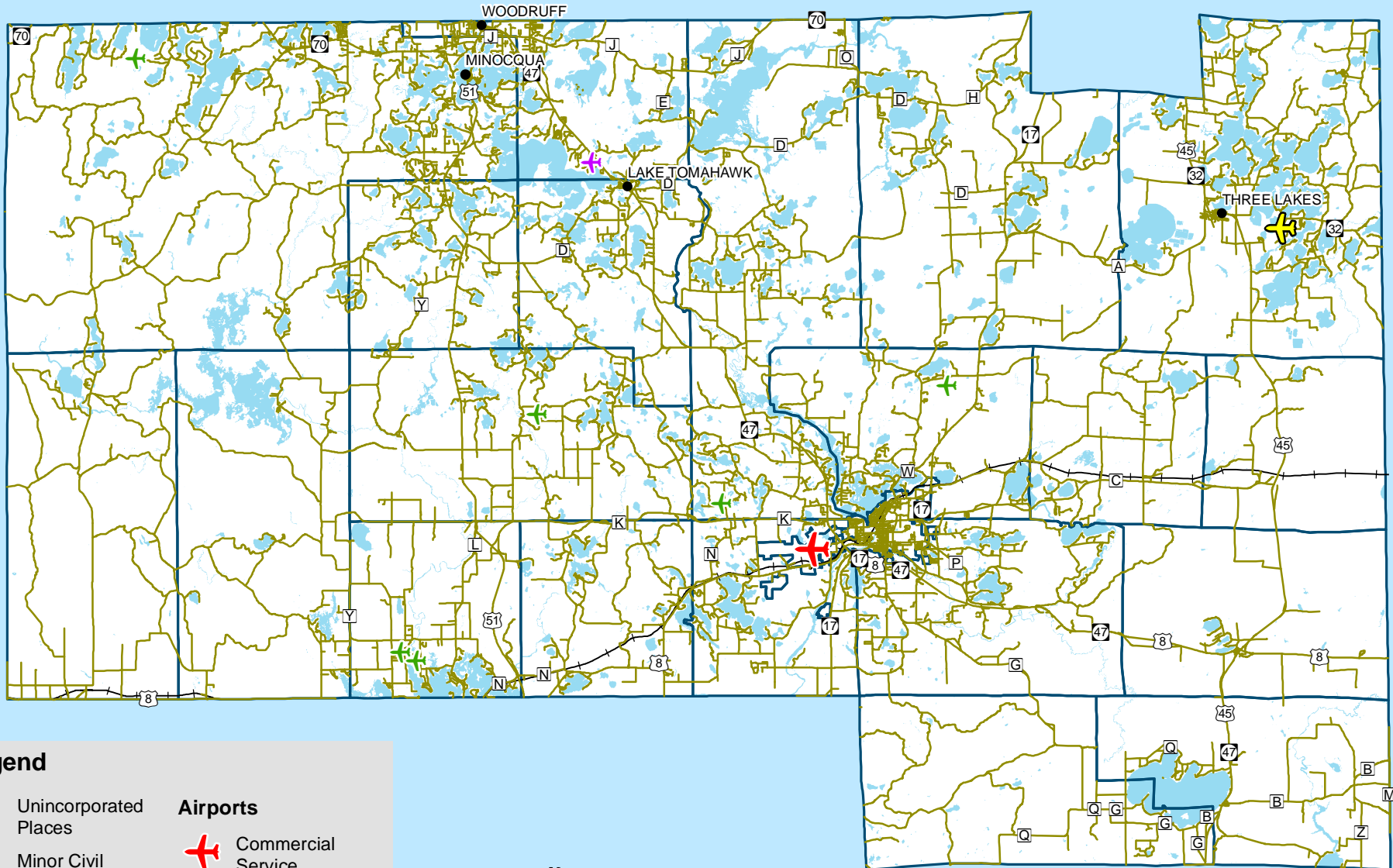
Networks of county trunk highways collect traffic from rural land uses. These county highways serve an important role in linking the area's agricultural and timber resources to the County's major highways and population centers. Local roads provide access to local development, farming and forest areas, as well as the County's lake areas.

The Wisconsin Department of Transportation maintains 15 bridges on state highways within the County. Oneida County itself owns another 13 bridges on various County highways. Local roads have 8 bridges in the City and another 21 bridges belonging to various towns. There are also two rail bridges.

Oneida County Social Services coordinates transit services for the elderly and disabled in the County with bus service in the Rhinelander area and vans in the Minocqua-Woodruff area. A volunteer driver network is also available.

The Canadian National Railroad also serves Oneida County. The rail line runs east-west through the southern and central part of the County with access in Rhinelander at the downtown rail yard, the mill and the airport industrial park.

The Rhinelander-Oneida County Airport is located approximately two miles west of the City of Rhinelander. This is the largest airport in the County, providing commercial service through various airlines. In addition, an airport that can accommodate smaller aircraft is located in Three Lakes. There are also a number of privately owned airfield facilities in the County including the Howard Young Medical Center Heliport in Woodruff and at Aspirus Hospital in Rhinelander.

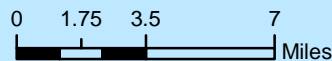


2-24

Transportation

Legend

- Unincorporated Places
- Minor Civil Divisions
- Roads
- RailRoad
- Water
- Airports**
- ✈ Commercial Service
- ✈ Small General Aviation
- ✈ Paved Landing Strip (Private)
- ✈ Grass Strip (Private)



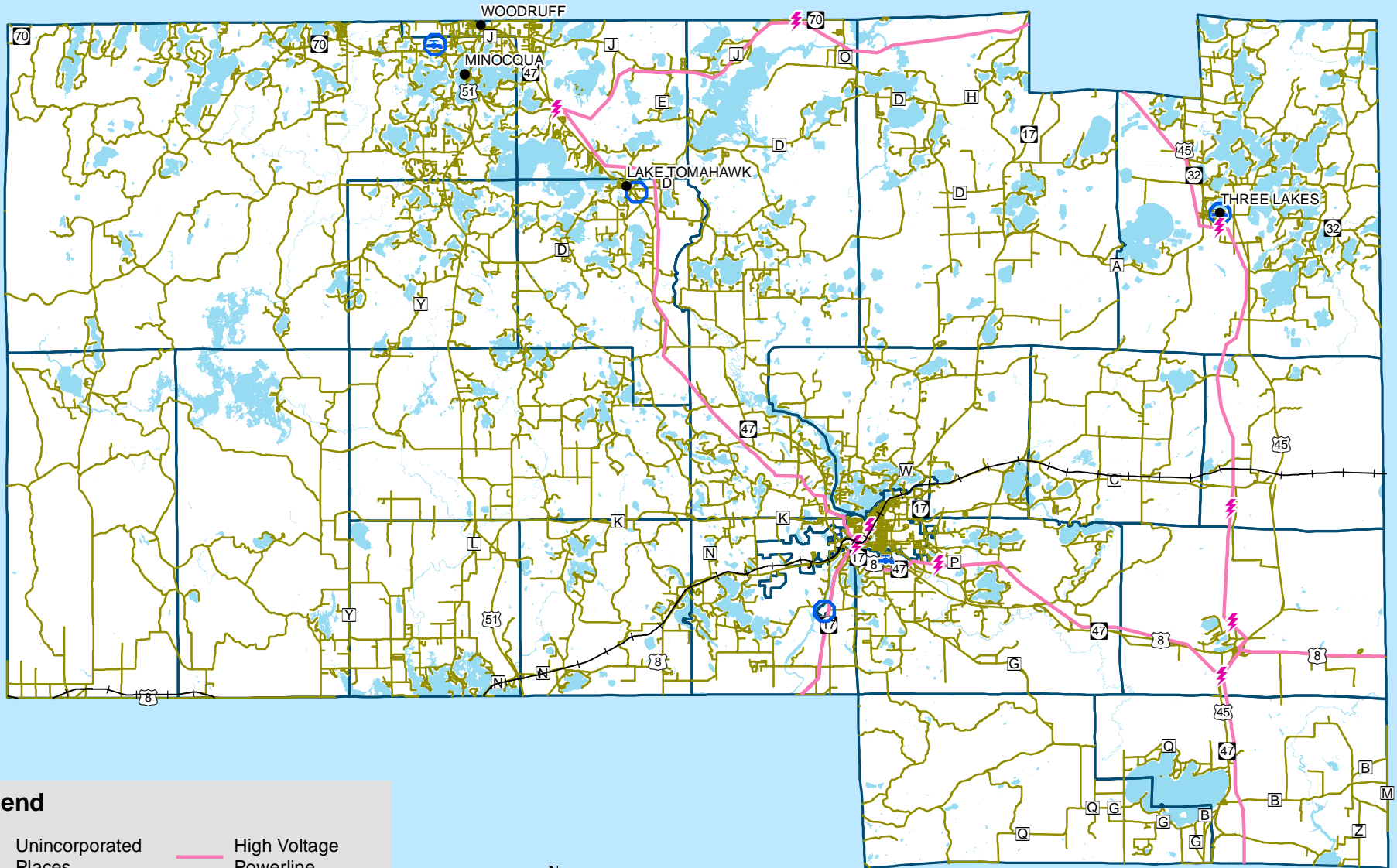
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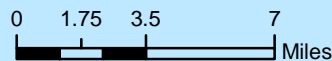


2-25

Utilities

Legend

- Unincorporated Places
- Minor Civil Divisions
- Roads
- RailRoad
- Water
- High Voltage Powerline
- ⚡ Substations
- Public Water Supply
- Waste Water Treatment Plant



Source: NCRPC, WI DNR, Oneida Co.

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UTILITIES

Utility systems are important in hazard mitigation planning because of the dependency on water, wastewater treatment, gas service, electricity, communications, etc. Because of this reliance and vulnerability to hazards, utility systems must be identified for this Plan (See Map 6).

The protection of the public water supply facilities from potential contamination from hazards such as flooding is a consideration for hazard mitigation planning. Oneida County has four public water / wastewater systems. The City of Rhinelander has the largest system in the County serving a range of commercial, industrial and residential uses. The Lakeland Sanitary District serves parts of Minocqua and Woodruff as well as Arbor Vitae in Vilas County. This service area is comprised of the more developed areas of those towns representing mostly residential and commercial use. The Lake Tomahawk Sanitary District serves residential and commercial customers. The Three Lakes Sanitary System is the smallest in the County with residential, commercial and some industrial uses.

The protection of the wastewater facilities is an important consideration for hazard mitigation planning because of its potential to contaminate nearby waterbodies in the event of high water. Also of concern during periods of flooding is the threat of damage to infrastructure and associated facilities.

The TransCanada - ANR pipeline moves natural gas through the County. The line runs 7 miles from the southern part of the County to the City of Rhinelander and the 20 miles from the City to the eastern border with Forest County.

Wisconsin Public Service provides natural gas to the City of Rhinelander along with the following towns: Crescent, Enterprise, Hazelhurst, Lake Tomahawk, Minocqua, Monico, Newbold, Nokomis, Pelican, Pine Lake, Schoepke, Stella, Sugar Camp, Three Lakes, Woodboro and Woodruff.

The infrastructure of electric and telephone lines as well as broadband internet should be considered in the events of high wind, ice storms, tornadoes, flooding, and fire. Wisconsin Public Service and the Price County Cooperative provide Oneida County with electric service. American Transmission Company (ATC), maintains the major electric transmission facilities located in the State of Wisconsin, including Oneida County. There are several major electrical transmission facilities located in Oneida County.

Frontier Communications is the primary provider for traditional land-line telephone service in the County. Frontier also provides a wide range of internet based communication services. A wide variety of other providers offer internet based communications as well.

Nationwide, cellular telephone systems account for more than half of all 911 calls. Service coverage is based upon the handset receiving a direct line-of-sight signal from a system provider's antenna on a tower. Limitations for receiving a signal include topography and the thickness & type of building materials. Signals generally cannot travel well in dense forest cover, over tall hills, or through thick or multiple cement walls. Cell service coverage within Oneida County is very good, however, there remain some areas where service can be spotty.

A new solar farm has been completed south of Rhinelander (Hodag Solar Project). This solar farm is located between Boyce Drive and Highway 17 near Lake Juila. 21,000 solar panels will be located on 50 acres and provide power for 1,500 homes

EMERGENCY SERVICES AND FACILITIES

The type and location of public emergency services are an important consideration in hazard mitigation planning, because of the potential direct involvement of such facilities in certain hazard situations. Fire, police and ambulance service areas and station locations are shown on Maps 7a and 7b.

The locations of fire stations that serve the local units of governments in Oneida County are shown in Map 7a and Map 7b. The Rhinelander Fire Department is a paid full-time fire department, while the remainder of the departments rely on volunteers for this service. Detailed mutual aid arrangements are in place between these fire services through the Mutual Aid Box Alarm System (MABAS).

The Oneida County Sheriff's Department provides law enforcement service in all the municipalities. Local departments serve their respective jurisdictions including the City of Rhinelander, the Town of Minocqua, the Town of Woodruff, and the Town of Three Lakes. All five departments work together through mutual aid agreements.

Oneida County provides a countywide ambulance service. This service covers the entire county and some outlying areas with the exception of

the City of Rhinelander. The City of Rhinelander provides its own service in conjunction with its Fire Department.

Oneida County maintains an Emergency Operations Plan (EOP) to help coordinate these emergency services. This provides a general overview for the County and municipal emergency response personnel during response to a number of disasters. This document is used to coordinate the County and local units of government during times of response and recovery. It also provides a link between the County and municipal plans.

CRITICAL COMMUNITY FACILITIES

In addition to emergency service facilities, other community facilities are also important in hazard mitigation planning. Government administration buildings serve as the headquarters that link to resources in helping solve potential problems. Hospitals are very important for knowing where injured residents have to be transported if a hazard situation would breakout.



Woodruff Town Hall

Established in 1977, Howard Young Medical Center, affiliated with Ministry Health Care, is located in Woodruff. This Hospital facility provides 24-hour emergency service and critical care.

Aspirus Rhinelander Hospital has had a presence in Rhinelander since 1896. Currently, Aspirus Rhinelander Hospital is located in a 238,460 square-foot medical campus with a combined hospital and clinic built in 2004. The facility has 99-bed hospital and provides residents in Oneida and surrounding counties health care services for all ages.

- Comprehensive Birthing Center and Women's Imaging Services;
- Five state-of-the-art surgical suites and three surgical procedure rooms; and
- Cancer Center equipped with the latest technology available in medical and radiation oncology.

A variety of specialized medical and dental clinics are also located throughout the City of Rhineland, including a Aspirus Clinic. There are also a number of clinics in Three Lakes, Minocqua and Woodruff that provide medical care. Several independent doctors' office locations are scattered throughout the County.

There are a range of senior services available in the County as well. There is a Senior Center in Rhineland (operated by the County Department on Aging) as well as dining sites throughout the County.

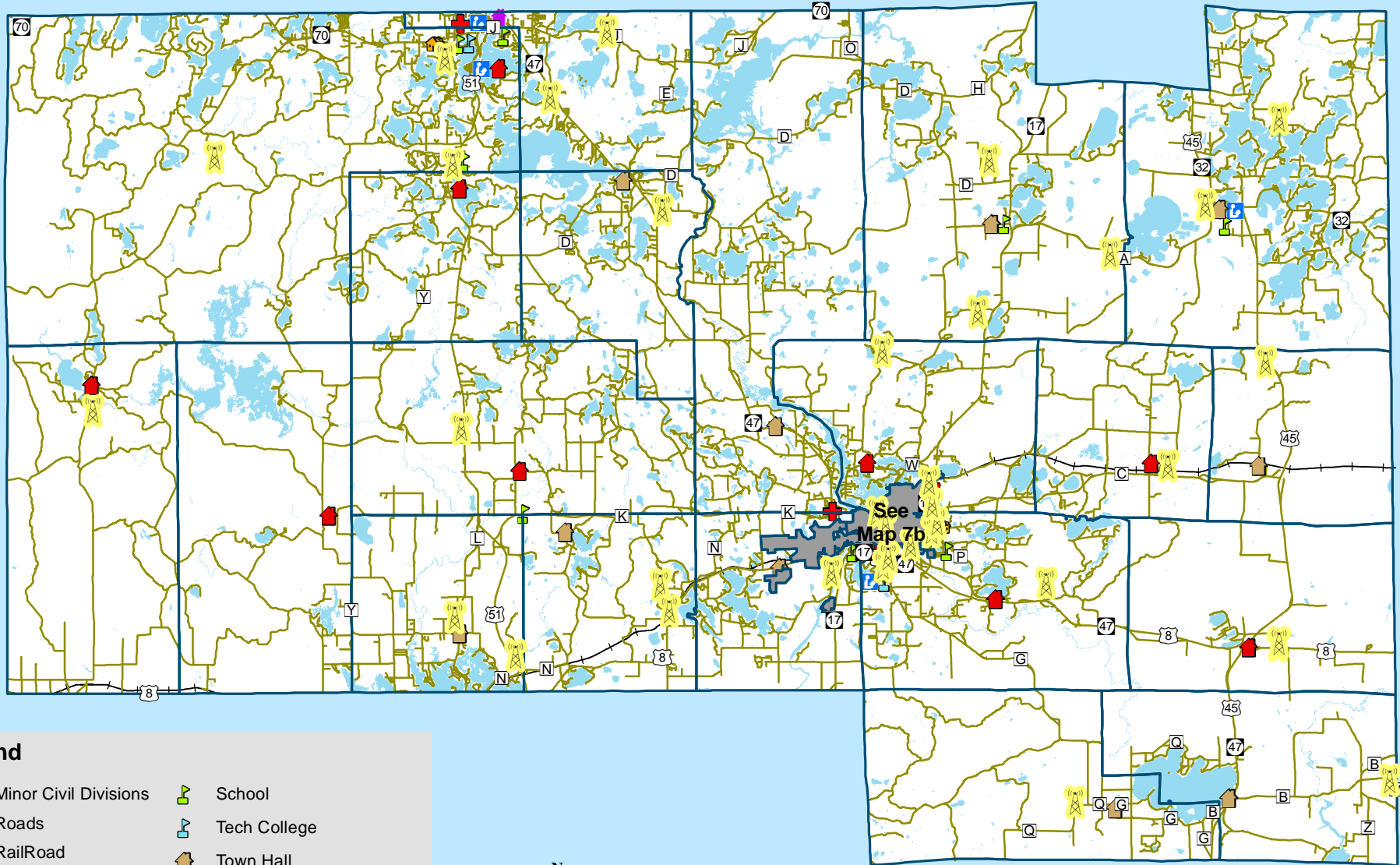
There are three nursing homes in Rhineland and one in Woodruff with a total capacity of over 300, as well as several in surrounding communities . A Residential Care Apartment Complex (RCAC) is a residential facility that offers a 24-hour on-site attendant, along with a number of services such as aid with medications and personal care. There are thirteen RCAC facilities in the county, six in Rhineland with a total of 232 units, five in Minocqua-Woodruff with 144 units, and one 24-unit facility in Three Lakes. Community Based Residential Facilities (CBRF) offer round the clock care and a level of services that is greater than an RCAC but less than a nursing home. There are nine CBRFs in the county, five in Rhineland with a capacity of 74, on facility, capacity 16, in Lake Tomahawk, and four facilities with a capacity of 75 in Minocqua-Woodruff.

Nursing homes are vulnerable, because of the high level of assistance with the residents that live there. The schools are another facility that are important, since hundreds of the county's children are there for much of the year. Map 7a and 7b shows the location of selected types of critical community facilities within Oneida County.



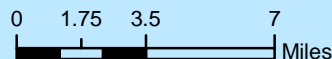
Oneida County Department on Aging & Senior Center

2-30



Legend

- | | |
|-----------------------|--------------------------------|
| Minor Civil Divisions | School |
| Roads | Tech College |
| Rail Road | Town Hall |
| Water | Town Hall / Fire & Police Dept |
| Health Services | Town Hall / Fire Dept |
| Library | Communication Towers |
| Nursing Home | |



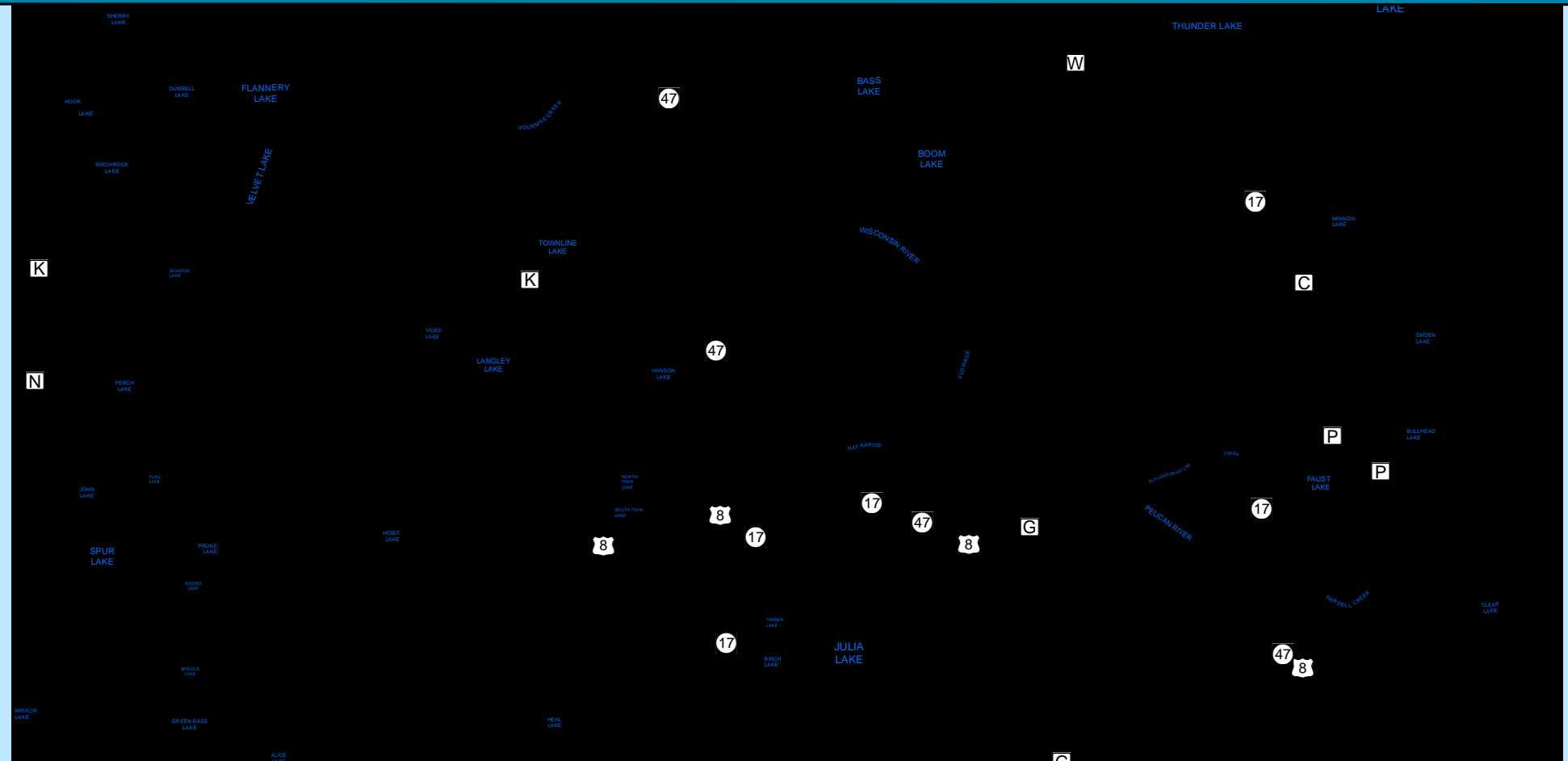
Source: NCWRPC, WI DNR, Oneida Co.

This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



Prepared By:
**North Central
Wisconsin Regional
Planning Commission**

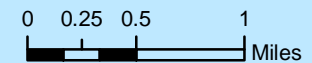
210 McClellan St., Suite 210, Wausau, WI 54403 715-849-5510
staff@ncwrpc.org - www.ncwrpc.org



Critical Community Facilities

Legend

- | | | |
|-----------------------|----------------------------|----------------------|
| Minor Civil Divisions | Court House | Libraries |
| Roads | Emergency Operation Center | Schools |
| Rail Road | Garage | Tech College |
| Water | Health Services | Town Hall |
| City Hall | Hospital | Nursing Home |
| Correctional Facility | | Communication Towers |



Source: NCWRPC, WI DNR, Oneida Co.

This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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Map 7b

INVENTORY AND VALUE OF STRUCTURES / PROPERTY

The value of the real estate and personal property in a community reflects the upper end of the potential for property damages in each community. The annual assessed value of each municipality represents the Assessors improvement value and managed forest land value by each municipality in the county. Table 9 lists each municipality's total assessed values for improvement values, managed forest land and personal property that is taxed, and the percent each municipality represents of the county total.

Municipality	Assessed Improvement Value	Managed Forest Land Value	Personal Property	Total	% of Total
Cassian town	\$131,216,800	\$769,200	\$769,200	\$160,929,100	3.50%
Crescent town	\$151,997,900	\$538,700	\$538,700	\$159,987,600	3.50%
Enterprise town	\$42,914,100	\$1,213,100	\$1,213,100	\$52,332,700	1.10%
Hazelhurst town	\$202,588,200	\$1,827,300	\$1,827,300	\$227,244,200	5.00%
Lake Tomahawk town	\$127,999,600	\$708,200	\$708,200	\$130,328,700	2.80%
Little Rice town	\$40,891,700	\$87,319,000	\$87,319,000	\$142,437,900	3.10%
Lynne town	\$16,261,900	\$432,700	\$432,700	\$21,715,700	0.50%
Minocqua town	\$1,043,203,200	\$16,757,400	\$16,757,400	\$1,110,104,600	24.20%
Monico town	\$16,536,200	\$448,900	\$448,900	\$57,733,000	1.30%
Newbold town	\$308,680,200	\$721,400	\$721,400	\$318,357,500	6.90%
Nokomis town	\$143,982,600	\$233,600	\$233,600	\$151,699,500	3.30%
Pelican town	\$186,234,300	\$3,453,100	\$3,453,100	\$202,701,100	4.40%
Piehl town	\$7,866,200	\$213,500	\$213,500	\$28,431,600	0.60%
Pine Lake town	\$186,252,500	\$811,700	\$811,700	\$208,916,700	4.60%
Schoepke town	\$54,374,900	\$280,100	\$280,100	\$82,060,900	1.80%
Stella town	\$46,030,000	\$864,500	\$864,500	\$58,543,600	1.30%
Sugar Camp town	\$198,532,500	\$1,635,800	\$1,635,800	\$223,576,500	4.90%
Three Lakes town	\$434,984,200	\$6,048,800	\$6,048,800	\$452,401,800	9.90%
Woodboro town	\$91,281,800	\$149,100	\$149,100	\$98,842,900	2.20%
Woodruff town	\$209,250,800	\$7,331,400	\$7,331,400	\$217,766,700	4.70%
Rhineland city	\$457,492,000	\$24,573,800	\$24,573,800	\$482,065,800	10.50%
County Total	\$4,098,571,600	\$156,331,300	\$156,331,300	\$4,588,178,100	100%

Source: Oneida County Tax Parcels 2021 DOR Equalized Values for Personal Property Values.

The valuation of property in a community reflects the potential for property damages across the community. However, only taxable properties are included in this valuation. Tax-exempt government properties are not included. With Oneida County owning many critical facilities that are needed in times of disaster, the potential for damages to these structures could be devastating for the county. In Table 10a, the county owned critical facilities are listed with the general location they are in and the value of the facilities. Estimates for local government facilities are given in Table 10b - c.

Table 10a Inventory & Value of County Properties		
Name	Value*	Location
Courthouse	\$20,968,706	Rhinelander city
Land Fill Buildings	\$2,053,918	Rhinelander city
Highway Department	\$6,452,966	Rhinelander city
Parks and Recreation	\$1,389,271	Various locations
Highway Shop	\$5,872,844	Rhinelander city
Highway Shop	\$1,135,750	Minocqua town
Highway Shop	\$973,893	Monico town
Highway Shed	\$296,456	Three Lakes town
Human Services Center	\$3,559,337	Rhinelander city
Northern Advantage	\$3,245,803	Rhinelander city
Koinonia Treatment Ctr	\$2,137,204	Rhinelander city
Communications Buildings	\$70,287	Various locations
School Bus Storage	\$697,593	Rhinelander city
Law Enforcement Center	\$22,212,004	Rhinelander city
Forestry Department	\$315,000	Various locations
Misc. Property	\$3,629,737	Various locations
Total	\$75,040,769	Above locations

**Includes insured buildings, contents, and property in the open.*

Source: 2021 Statement of Values, State of WI Local Gov. Property Insurance Fund.

Table 10b Inventory & Value of City Properties	
Property	Value*
Library	\$7,464,128
Airport	\$13,152,480
Animal Shelter	\$704,260
City Shop	\$3,002,533
Police Department	\$2,293,577
Fire Department	\$1,473,249
City Hall	\$3,374,646
Parks and Recreation - various	\$3,747,906
Golf Course	\$1,710,743
Water Utility	\$12,992,390
Wastewater Treatment Plant	\$23,269,606
Landfill Remediation - Barnes St.	\$141,473
Cemetery	\$418,393
Other Misc. Property	\$356,500
Total	\$74,101,844

*Includes insured buildings, contents, and property in the open.

Source: Estimated Statement of Values from City Insurance Policy.

Table 10c: Inventory & Value of Town Owned Properties		
Municipality	Property	Value*
Cassian Town	Town Hall / Pavilion	\$851,465
	Town Shop / Fire Dept.	\$656,295
	Town Park	\$39,319
Crescent town	Town Hall / Shop / Fire Dept.	\$682,000
	Fire Station	\$44,000
Enterprise town	Community Bldg / Storage	\$250,000
Hazelhurst town	Town Hall	\$1,039,400
	Town Garage	\$350,500
	Fire Barn	\$174,200
	Storage Building	\$127,700
Lake Tomahawk town	Town Hall	\$969,000
	Fire Station / Garage	\$1,150,000
	Information Booth	\$57,000
	Legion Hall	\$220,000
	Pavilion / Concession / Dugout / Storage	\$312,000
	Old Town Garage	\$176,000
Little Rice town	Town Hall / Buildings	\$945,500
Lynne town	Town Hall and Fire Dept.	\$451,000
Minocqua town	Community Bldg / Courthouse	\$3,740,000
	Police Dept.	\$1,540,000
	Fire / EMS Station	\$440,000
	Fire Station (BoDiLac)	\$550,000
Monico town	Town Hall	\$1,058,624
Newbold Town	Town Hall	\$637,422
	Fire Station No. 1	\$826,606
	Town Garage	\$379,119
	Fire Station No. 2	\$450,466
Nokomis town	Town Hall	\$253,000
Pelican town	Town Hall / Pavilion and Town Garage	\$1,144,000
Piehl town	Town Hall	\$253,000
Pine Lake town	Town Hall / Fire Dept.	\$560,000
	Town Shop and Fire Hall #2	\$463,000

Table 10c: Inventory & Value of Town Owned Properties Continued		
Municipality	Property	Value*
Schoepke Town	Town Hall / Community Center	\$359,645
	Town Garage	\$348,355
	Fire Station	\$1,005,863
	Storage	\$628,649
Stella town	Town Hall / Facilities	\$740,000
Sugar Camp town	Town Hall / Shop / Fire Dept.	\$3,565,345
Three Lakes Town	Museum and Library	\$3,317,346
	Police Station/Town Hall	\$2,110,788
	Fire Stations 1 and 2	\$1,703,196
	Various Recreation Facilities	\$1,234,812
	Town Shop	\$2,458,710
	Cemetery Storage	\$6,834
	Airport	\$271,524
	Information Bureau	\$271,824
	Community Health Foundation	\$899,750
	Misc. Property	\$1,296,290
Woodboro town	Town Hall	\$220,000
Woodruff Town	Town Hall/Police Dept./Community Ctr	\$1,746,421
	Fire Dept.	\$1,686,591
	Cemetery	\$15,000
Source: Local Gov. Insurance Declarations & NCWRPC Estimates. *includes contents & property in the open		

INTRODUCTION

Analyzing the hazards in a community is an important and vital step in the mitigation planning process. Before mitigation strategies can be determined, a risk assessment must be made. Part III of the Oneida County All-Hazards Mitigation Plan Update will focus on the following:

- Identification of the types of natural hazards that can affect Oneida County
- An analysis of the hazards identified as pertinent to Oneida County

The Hazard Analysis will consist of:

- Background Information
- History of previous occurrences of hazard events
- **An analysis of the County's vulnerability to future events**
- An estimate of future probability and potential losses from the hazard

HAZARD IDENTIFICATION

The process of identifying those hazards that should be specifically addressed in the Oneida County All-Hazards Mitigation Plan Update was based on consideration of a number of factors. The process included a review of past hazard events to determine the probability of future occurrences and threat to human safety and property damage.

Worksheets from the Wisconsin Guide to All-Hazards Mitigation Planning were used by the Update Taskforce to evaluate and rank the listing of possible hazards to help identify which hazards should be included in the Update according to threat to human safety and possible damage to property. The ranking was compared against the ranking from the original County mitigation plan.

After review of the hazard scoring exercise, the Committee ranked winter storms down slightly in the priority; while potentially serious and severe in the County, thunderstorms generally responsible for more damage overall. Hazardous Materials incident was the next concern even though there is the potential for significant, devastating impacts, the County's past experience has been primarily minor occurrences with limited effects. Pandemic took the next spot with that being fresh on **everyone's** minds. Rounded off by Drought / Extreme Heat and Tornado.

The resulting priority ranking of hazards accepted by the Committee is as follows:

1. Severe Thunderstorm / Hail / Lightning / Wind
2. Winter Storms / Extreme Cold
3. Hazardous Materials Incidents
4. Pandemic
5. Drought / Extreme Heat
6. Tornado

This Plan Update focuses on natural hazards that have or could cause disasters that can be mitigated on a local level. Hazards that are considered "technological" or "manmade" include things like transportation incidents, explosions and structural fire, civil or prison disturbances, mass casualty events, war, and terrorism. As a result of homeland security efforts since 9/11, Oneida County prepares and exercises for these types of events, so they are not specifically included in the mitigation planning process or this Update.

There are other types of natural hazards not directly addressed as well. For example: low magnitude earthquakes occur in Wisconsin every few years, but none have exceeded a magnitude of 3.9, which would have vibrations similar to the passing of a semi-truck, therefore, earthquakes are not covered in this Plan Update. Oneida County does not have coastal hazard issues and conditions for landslide or subsidence problems are not significant in the County. Each update of the all-hazards mitigation plan, provides an opportunity to review the range of potential hazards to determine the need to incorporate any "new" hazards into the Plan.

During committee meetings the COVID19 pandemic was fresh on everyone's mind. A new section was added to this plan update about on epidemic and pandemic hazards. This is something that will need to be addressed in more detail in future updates.

HAZARD ANALYSIS

The hazard analysis for each hazard included in this Plan Update is broken down into four components, as follows:

1. *Background on Hazard* - The next step after identifying a hazard is to define the hazard and give some general background behind it. This can include occurrence of the hazard within the County or State. This section may also give some indication of the risk to public health and safety and to personal and public property.

2. *History of Hazards* - Past experiences of a hazard are indicators of the potential for future disasters for which Oneida County would be vulnerable. A review of past occurrences for each identified hazard in Oneida County was completed.

Some disasters have had damages that exceeded the capabilities of local communities and State agencies. Federal assistance is then requested. Federal assistance may be offered through a variety of programs. Assistance may be directed to agricultural producers, individuals and families, businesses, or local governments. There have been 8 natural disasters in Oneida where Presidential Declaration was approved from 1971-2020. They include the following:

- 1976 Drought - Disaster
- 1977 High Winds and Hail
- 1984 Tornados - Disaster
- 1999 Severe Storms/Flooding
- 2000 Severe Storms/Flooding
- 2019 Severe Storms/Flooding
- 2020 COVID19 - Pandemic

It should be noted that this significantly underestimates the number of hazard events that have occurred in Oneida County. Almost every year there are significant weather events or disasters that cause thousands of dollars in damage for which no Federal disaster assistance is requested. Major indicators of hazard severity are the deaths, injuries, and economic losses resulting from natural hazards and disasters.

The National Oceanic and Atmospheric Administration (NOAA) and National Centers for Environmental Information (NCEI) publish the National Weather Service (NWS) data describing recorded weather events and resulting deaths, injuries, and damages. From January 1, 1950 to December 31, 2021, NCEI reported 537 severe weather events for Oneida County.

Note that since the earlier NCEI data is somewhat incomplete, this report focuses on the 10-year period from 2011 to 2021 for hazard analysis purposes. Other sources of data are used to supplement the NCEI data. These sources included other plans and reports, documents from the Oneida County Emergency Services Department, past local newspaper articles, the Wisconsin Department of Natural Resources (DNR), Wisconsin Emergency Management (WEM), and the National Weather Service.

3. *Vulnerability Assessment For Hazards* - For each hazard identified, a summary of the impact that may be caused to the community is given. When possible, existing buildings, infrastructures, and critical facilities located in the hazard areas are identified. Critical facilities are community buildings that are especially important to the health and welfare of the population following hazard events. Examples of such facilities include hospitals, police & fire stations, town halls, and shelters.

Because this is a multi-jurisdictional plan, FEMA requires that the Plan access each jurisdiction's risks where they vary from the risks facing the entire planning area. This section of the Plan Update will identify variations in vulnerability for specific municipalities where they occur.

4. *Future Probability and Potential Dollar Losses for Hazard* - The historic data and vulnerability assessment for each hazard is used to project the potential future probability of that hazard occurring in the County and the potential damages in dollars that might be reasonably expected. This section sets the benchmark to mitigate for each hazard.

HAZARD ANALYSIS: TORNADOS

BACKGROUND ON TORNADO HAZARD:

A tornado is a relatively short-lived storm composed of an intense rotating column of air, extending from a thunderstorm cloud system. It is nearly always visible as a funnel, although its lower end does not necessarily touch the ground. Average winds in a tornado, although never accurately measured, are between 100 and 200 miles per hour, but some tornados may have winds in excess of 300 miles per hour.

A tornado path averages four miles, but may reach up to 300 miles in length. Widths average 300 to 400 yards, but severe tornados have cut swaths a mile or more in width, or have formed groups of two or three funnels traveling together. On average, tornados move between 25 and 45 miles per hour, but speeds over land of up to 70 miles per hour have been recorded. Tornados rarely last more than a couple of minutes in a single location or more than 15 to 20 minutes in a ten-mile area.

Table 11 Tornado Wind and Damage Scale		
Category	Wind Speeds	Damage
EF0	65 to 85 MPH	Some damage to chimneys, TV antennas, roof shingles, trees, and windows.
EF1	86 to 110 MPH	Automobiles overturned, carports destroyed, trees uprooted
EF2	111 to 135 MPH	Roofs blown off homes, sheds and outbuildings demolished, mobile homes overturned.
EF3	136 to 165 MPH	Exterior walls and roofs blown off homes. Metal buildings collapsed or are severely damaged. Forests and farmland flattened.
EF4	166 to 200 MPH	Few walls, if any, standing in well-built homes. Large steel and concrete missiles thrown far distances.
EF5	OVER 200 MPH	Homes leveled with all debris removed. Schools, motels, and other larger structures have considerable damage with exterior walls and roofs gone. Top stories demolished

Source: National Weather Service

Tornados are classified into six intensity categories, EF0-EF5. This scale is an updated or "enhanced" version of the Fujita Tornado Scale (or "F Scale"). The scale estimates wind speeds within tornados based upon the damage done to buildings and structures. It is used by the National Weather Service in investigating tornados and by engineers in correlating building design and construction standards against anticipated damage caused by different wind speeds.

Wisconsin lies along the northern edge of the nation's maximum frequency belt for tornados, known as "Tornado Alley". Tornado Alley extends northeast from Oklahoma into Iowa and then across to Michigan and Ohio. Winter, spring and fall tornados are more likely to occur in southern Wisconsin than in northern counties. Tornados have occurred in Wisconsin every month except February.

HISTORY OF TORNADOS IN ONEIDA COUNTY:

Oneida County has had 20 verified tornados from 1950 to 2021 (Table 12). In addition, Oneida County recorded a tornado warning on July 6, 2012, but no damage was reported. The National Centers for Environmental Information (NCEI) data contains 1 funnel cloud report on September 19, 2012 and the last recorded tornado on July 19, 2019.

Date	Time CST	Location	Length Miles	Width Yards	EF Scale	Deaths	Injuries	Est. Cost
6/25/50	2100	Crescent	13	880	F4	2	12	250K
6/20/53	1800	Pelican Lake	2	100	F1	0	0	25K
6/14/80	1325	Pine Lake	2	50	F1	0	3	25K
6/14/80	1422		n/a	n/a	F0	0	0	0
6/13/81	2040		n/a	n/a	F0	0	0	25K
6/13/81	2100		n/a	n/a	F2	0	0	250K
4/27/84	1437	Lake Tomahawk	16	87	F3	1	5	25M
6/8/85	1852	Minocqua	47	2640	F3	2	16	25M
7/4/86	1935	Lake Tomahawk	2	100	F2	0	0	250K
8/1/88	1820		0	20	F0	0	0	0
6/27/91	1820	Minocqua	6	400	F2	0	0	250K
8/9/93	2015	Lynne	0	50	F0	0	0	1K
8/14/00	1910	Minocqua / Lake Tomahawk	0	25	F0	0	0	0
5/1/01	2055	Minocqua / Woodruff	2	125	F1	0	0	15K
9/6/01	1609	Pelican Lake	1	30	F0	0	0	66K
4/18/02	1557	Woodboro	0	25	F0	0	0	0
4/18/02	1633	Rhineland	0	25	F0	0	0	0
7/11/04	1442	Nokomis	0	60	F0	0	0	0
7/11/04	1543	Cassian	0	10	F0	0	0	0
5/16/17	1912	Enterprise	.33	175	F0	0	0	0
7/19/19	1849	Oneida Co.	5.42	50	F0	0	0	400K
Totals:						5	36	51M

Source: NCEI and Oneida County

On September 19, 2012, NCEI reports that thunderstorms produced a funnel cloud over Rhineland. The thunderstorms had developed ahead of a cold front with a strong upper level system. Some of these storms produced heavy rain, large hail and damaging winds, as well as, funnel clouds.

The most recent verified tornado occurrence happened on July 19, 2019 Where a line of severe thunderstorms moved across much of central, north central, and eastern Wisconsin during the evening hours of July 19,

2019. Widespread tree and power line damage was reported from central Wisconsin into the Fox Valley and lake shore. WPS reported over 50,000 outages at the height of the storm. A tornado produced a path of scattered tree damage west of Pelican Lake. Peak winds were estimated around 80 mph and produced property damage over \$400,000.

The strongest Oneida County tornado recorded during this time period occurred on June 25, 1950. This was a F4 tornado that carved a path 13 miles long by approximately 880 yards wide in the Town of Crescent. It resulted in two deaths, twelve injuries and approximately \$250,000 in property damages including 5 homes destroyed.

In 1984 and 1985 two F3 tornados were reported in Oneida County. The 1984 tornado resulted in 1 death, 5 injuries and an estimated \$5 million in property damage including 60 homes destroyed in the Lake Tomahawk area. The storm created a path approximately 16 miles long and 87 yards wide. Oneida County received a Presidential Emergency Declaration for the removal of downed timber on public and private lands and for emergency police services. The 1985 tornado resulted in 2 deaths, 16 injured and an estimated \$25 million in property damage including 94 homes destroyed in the Minocqua area. The storm created a path approximately 47 miles long and 2,640 yards wide. A request for Presidential Disaster Declaration was denied.

TORNADO VULNERABILITY ASSESSMENT:

Although Oneida County is mostly a rural county, there are concentrations of population scattered throughout County. Subdivisions, rural unincorporated communities like Minocqua, Three Lakes, etc. and the Rhinelander area can be regarded as more vulnerable because these areas pose more of a risk to human safety and property damage. Map 8 illustrates these areas within the County.

Mobile homes are of significant concern in assessing the hazard risks from tornados. In general, it is much easier for a tornado to damage and destroy a mobile home than standard constructed houses and buildings. Since 6 percent of Oneida County's housing units are mobile homes, vulnerability to health and safety along with property damage is much greater. Research by the National Weather Service has shown that 40 percent of all deaths in the U.S. from tornados were in mobile homes, compared to 29 percent in stick-built homes, and 11 percent in vehicles.

While mobile homes are scattered throughout the County, many are concentrated in mobile home parks. Oneida County has approximately 26 mobile home parks, see Map 8 for locations. Within these park sites,

there are over 950 individual sites. The largest is located in the City of Rhinelander with about 120 sites. The second largest is located in the Town of Minocqua with approximately 110 sites. The total number of mobile homes reported in the 2016-2020 American Community Survey USCensus for Oneida County is 1,872.

Besides mobile homes, there are many other areas vulnerable to tornados such as campgrounds. Like mobile homes parks, campgrounds are of concern in the County because often times there is a concentration of people in them and there is little shelter provided. Map 8 also shows the location of campgrounds in the County.

Youth camps present another concern for Oneida County. Youth camps operate during the summer months and contain large populations of juveniles and young adults. Most youth camps consist of cabins used for sleeping and daily activities. A large number of these cabins are wood structures with no basements. This presents a problem for safely sheltering people in the event of a tornado.

The following is a list of things that may be affected by a tornado. Much of this list can be referenced in Part II.

- Community facilities – hospitals, schools, "prisons/jails"
- Public Service - police and fire departments
- Utilities - power lines, telephone lines, radio communication
- Transportation – debris clean-up, sign damage
- Residential – nursing homes, garages, trees and limbs, siding, windows
- Businesses – signs, windows, siding, billboards
- Agricultural - buildings, crops, livestock

Based on review of historic tornado events, no specific areas in the County have unusual risks. The risk for tornado is relatively uniform and a countywide concern. Tornados are a principal concern with City of Rhinelander officials. The Towns of Cassian, Lake Tomahawk, Minocqua and Pelican identified tornado as a top concern in the town mitigation issue survey. Minocqua established a tornado siren policy in 2011.

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES – TORNADOS:

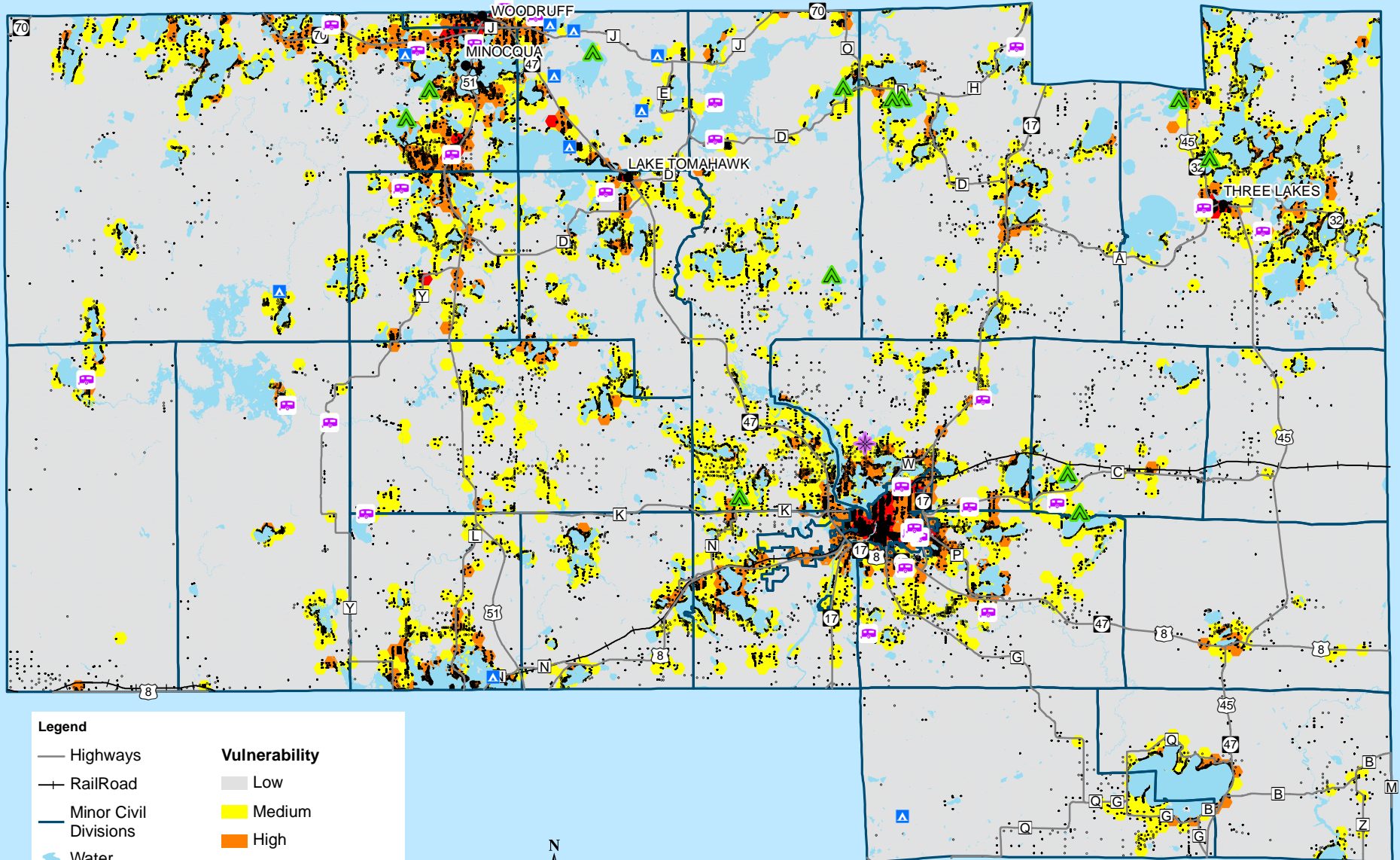
There were two tornado events having occurred inside the primary window of analysis between 2011 and 2021, the last tornado reported in Oneida County happen in July 19, 2019. The examination is expanded to the full range of historic data from 1950 to 2021. Based on this extended look at the frequency of past events, Oneida County can expect a

tornado about once every 4.44 years, on average. This equates to a probability of 0.23 or about a 23 percent chance in a given year. However, the record of past tornados appears to indicate a trend of groups of tornados occurring followed by periods with no tornados. The data also indicates a tendency for tornados to occur in pairs. Table 13 indicates the probability of tornados of a specific magnitude.

Tornado Scale	F0	F1	F2	F3	F4	F5
Number of Reported Tornados*	12	3	3	2	1	0
Probability of Occurrence	57%	14%	14%	10%	5%	<1.0%

Source: National Weather Service & NCWRPC – *Based on historical data from 1950 to 2021.

Historic data is again used to estimate potential future dollar losses due to tornado. Estimated damages resulting from various tornados in Oneida County range from \$0 to \$25 million. On average, Oneida County might expect damages of \$2.5 million per tornado, however, only two of these 21 historic tornados resulted in damages exceeding \$1 million, one had \$400,000 four others had \$250,000, and the rest were \$66,000 or less. Over the next ten-year period, tornado losses in Oneida County could approach \$6 million.

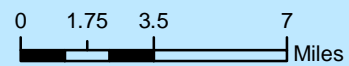


3-10

Vulnerability

Legend

— Highways	Vulnerability
+ Rail Road	Low
— Minor Civil Divisions	Medium
Water	High
▲ Campgrounds	Very High
✳ Fest Grounds	Parcel Improvements
🚐 Mobile Home Parks	
▲ Youth Camps	



Source: NCWRPC, WI DNR, Oneida Co.

This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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HAZARD ANALYSIS: SEVERE THUNDERSTORM / HIGH WIND / HAIL / LIGHTNING

BACKGROUND ON SEVERE THUNDERSTORM HAZARD:

The National Weather Service definition of a severe thunderstorm is a thunderstorm event that produces any of the following: downbursts with winds of 58 miles per hour or greater (often with gusts of 74 miles per hour or greater), hail 1 inch (recently increased from $\frac{3}{4}$ inch) in diameter or greater or a tornado. Strong winds, hail, and lightning will be addressed in this section, however tornadoes will be referenced as a separate hazard.

Lightning results from discharge of energy between positive and negative areas separated by rising and falling air within a thunderstorm. This discharge heats the surrounding air to 50,000 degrees. Hail results as the warm rising air cools, forming ice crystals which are held by the updrafts until accumulating enough weight to fall. The hail size depends on strength of the updrafts keeping it up.

Thunderstorms frequency is measured in terms of incidence of thunderstorm days or days on which thunderstorms are observed. Wisconsin averages between 30 and 50 thunderstorm days per year depending on location. A given county may experience ten or more thunderstorm days per year. The southwestern area of the state normally has more thunderstorms than the rest of the state.

HISTORY OF SEVERE THUNDERSTORMS IN ONEIDA COUNTY:

The NCEI has reported 49 severe storm events for Oneida County between 2011 and 2021, discounting multiple reports for the same event. These storms typically contain some form of heavy rain and strong winds. About 25 significant hail events, typically related to a severe thunderstorm, were listed during this time period. There was also 2 notable lightning incidents identified.

The most recent *thunderstorm* event was on December 15, 2021. A historical event unfolded across the central United States on Friday (12/15) as a strong storm system tracked across the central Plains and through the Upper Mississippi Valley. Record warmth was observed across the state of Wisconsin ahead of this system, as temperatures soared into the 60s. A weakening line of severe thunderstorms tracked across central Wisconsin during the late evening hours, producing damaging winds before weakening. Thunderstorm winds downed trees and power lines in Pelican Lake. The time of this event is an estimate based on radar data.

The second most recent *thunderstorm* event was on July 26, 2021. A complex of thunderstorms developed across northern Minnesota and tracked east along a warm front across northern Wisconsin during the late evening and early morning hours. The storms produced a swath of wind damage across north-central and northeast Wisconsin. Thunderstorm winds downed numerous trees and power lines in Rhinelander. The time of this event is an estimate based on radar data.

The most recent *hail* event was on July 14, 2021. Several rounds of thunderstorms developed across northeast Wisconsin during the afternoon and evening hours. The strongest storms produced hail up to ping pong size, damaging wind gusts, along with heavy rain and flash flooding. Portions of east-central Wisconsin received 2 to 5 inches of rain through the overnight hours. Ping pong size hail fell south of Sugar Camp.

The second most recent *hail* event was on June 11, 2021. An unstable air mass combined with outflow boundaries from previous convection to cause thunderstorms across central and north-central Wisconsin. The strongest storms produced small hail during the afternoon hours. Penny size hail fell near Sugar Camp.

The most recent *lighting* event was on July 25, 2020. A line of thunderstorms tracked across north-central Wisconsin during the early morning hours. Lightning struck a house in Minocqua, setting it on fire and burning it to the ground. Lightning struck a house on Nixon Road in Minocqua during the early morning hours, causing it to burn to the ground.

The second most recent *lighting* event was on September 6, 2016. Thunderstorms moved across northern Wisconsin during the early morning of September 6th. A man, who was walking his dog, was struck by lightning and died of his injuries two days later. A 66-year-old man was struck by lightning outside his residence on Tanglewood Court in Minocqua. He was first taken to Howard Young Medical Center, then transported to St. Claire's Hospital in Weston. From there, he was taken to a burn center in Madison where he died from his injuries.

SEVERE THUNDERSTORM VULNERABILITY ASSESSMENT:

The National Weather Service can forecast and track a line of thunderstorms that may be likely to produce severe high winds, hail, and lightning but where these related hazards form or touch down and how powerful they might be, remains unpredictable. The distribution of

thunderstorms and related hazard events have been widely scattered throughout the County.

Many thunderstorm events (without tornadoes) have caused substantial property and infrastructure damage and have the potential to cause future damage. In order to assess the vulnerability of the Oneida County area to thunderstorms and related storm hazards, a review of the past events indicates significant impacts to:

- Infrastructure – hospitals, schools, street signs, police and fire departments
- Utilities - electric lines/poles/transformers, telephone lines, radio communication
- Transportation – debris clean-up
- Residential - mobile homes, garages, trees and limbs, siding, windows
- Businesses – signs, windows, siding, billboards
- Agricultural - buildings, crops, livestock
- Vehicles – campers, boats, windshields, body, paint

Based on review of the historic patterns of thunderstorms associated with high wind, hail, or lightning, there are no specific areas in the County that have unusual risks. The risk for severe thunderstorms is relatively uniform and a countywide concern. The Towns of Pine Lake, Stella Sugar Camp, and Three Lakes identified severe thunderstorms as a top concern in the town mitigation issue survey.

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES - SEVERE THUNDERSTORMS:

Based on the historic data presented here (frequency of past events 2011 to 2021), Oneida County can expect 5 severe thunderstorm events per year on average. In other words, the probability is 1.0 or a 100% chance of multiple storms in a given year. The probability of a thunderstorm with damaging hail in Oneida County is also at 1.0 or 100% chance with about 2.5 incidents in a given year. The probability of a significant lightning event is about 0.2 or a 20% chance in a given year.

According to the NCEI, historic thunderstorm events with associated high wind averaged \$55,750 in damage per incident. Hail events averaged \$50,000 in damage per incident. There was insufficient data to calculate average lightning damages. Losses in Oneida County associated with severe thunderstorms including high wind and hail could approach \$2.8 million over the next ten-year period.

HAZARD ANALYSIS: WINTER STORMS / EXTREME COLD

BACKGROUND ON WINTER STORMS/EXTREME COLD HAZARD:

A variety of weather phenomena and conditions can occur during winter storms. For clarification, the following are National Weather Service approved descriptions of winter storm elements:

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

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

Ice Storm – an occurrence where rain falls from warmer upper layers of the atmosphere to the colder ground, freezing upon contact with the ground and exposed objects near the ground.

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

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

Wind chill – an apparent temperature that describes the combined effect of wind and low air temperatures on exposed skin.

Winter storms can vary in size and strength and include heavy snowfall, blizzards, ice storms, freezing drizzle/freezing rain, sleet, wind chill, and blowing and drifting snow conditions. Extremely cold temperatures accompanied by strong winds can result in wind chills that cause bodily injury such as frostbite and death.

True blizzards are rare in Wisconsin. They are more likely to occur in the northwestern part of the state than in south-central Wisconsin, even though heavy snowfalls are more frequent in the southeast. However, blizzard-like conditions often exist during heavy snowstorms when gusty winds cause the severe blowing and drifting of snow. Heavy snow and ice storms have been part of nearly every winter in Oneida County.

Dangerously cold conditions can be the result of the combination of cold temperatures and high winds. The combination of cold temperatures and

high wind creates a perceived temperature known as "wind chill". Wind chill is the apparent temperature that describes the combined effect of wind and air temperatures on exposed skin. When wind blows across the skin, it removes the insulating layer of warm air adjacent to the skin. When all factors are the same, the faster the wind blows the greater the heat loss, which results in a colder feeling. As winds increase, heat is carried away from the body at a faster rate, driving down both the skin temperature and eventually the internal body temperature.

The National Weather Service issues wind chill advisories when wind chill readings of -20 to -34 degrees are expected. Wind chill warnings are issued when wind chill values are expected at or below -35 degrees. Extreme cold events are most likely during the months of January and February.

HISTORY OF WINTER STORMS/EXTREME COLD IN ONEIDA COUNTY:

The NCEI has reported 27 major winter storm events for Oneida County between 2011 and 2021. All of these storms contained some form of snow, sleet, freezing rain, and/or ice conditions.

There were 20 events listed as a winter storm in the NCEI database. The most recent occurred on December 10, 2021. A surface low tracked northeast from the central Plains through the western Great Lakes region late Friday night (12/10) into Saturday morning (12/11), bringing 8 to 14 inches of snow to northern Wisconsin and portions of central and northeast Wisconsin. Gusty winds of 30 to 40 mph led to blowing and drifting of snow and power outages across portions of northern Wisconsin with over 14,000 customers reported without power. Some of the highest snowfall totals included 14.0 inches in Monico and 11.0 inches near Rhinelander, and 10.5 inches in Minocqua as well as near Hazelhurst.

There were five events logged as Cold/Wind Chill in the NCEI database. The most recent event was on February 2, 2021. Cold air remained across northern Wisconsin on the morning of February 14th with lows of -15 degree fahrenheit to -30 degree fahrenheit. The combination of the bitter cold and light winds created wind chills of -35 degree fahrenheit to -40 degree fahrenheit across central and north-central Wisconsin. Morning low temperatures fell to -22 degrees fahrenheit during the morning of February 14th, with light allowing wind chills to fall to -35 to -39 degrees fahrenheit.

Only one event was logged as an ice storm on February 4, 2019. Freezing rain fell across northern Wisconsin as a low pressure system moved across the state. One-quarter to four-tenths of an inch of ice accumulated

across far north-central Wisconsin during the overnight hours of February 3rd into the early afternoon of the 4th. Roads became hazardous as the ice accumulated and hundreds of vehicles slid off roads. Icing also caused numerous power outages, and at the height of the event more than 5,000 customers were without power. One-tenth of an inch of ice was measured in Rhinelander.

A number of the winter storms over the last 10-years have cited "near blizzard" or "blizzard like" conditions, but have not warranted a full blizzard label from the NCEI database. The last time a storm was tagged as a blizzard was on February 24, 2019 when a fierce, late-winter storm produced heavy snow, freezing rain, and high winds across much of central and northern Wisconsin on February 23-24 as an area of low pressure rapidly deepened across the Great Lakes. At the height of the storm on the 24th, travel was not recommended across parts of central and northern Wisconsin as blizzard conditions made travel nearly impossible. The combination of ice, snow, and strong winds caused power outages and tree damage in many locations. New daily snowfall records were set for February 24 in Rhinelander and Wausau. The 10.9 inches in Rhinelander broke the previous record of 5.8 inches that was set in 2017. Snow and blowing snow caused whiteout conditions in Oneida County for most of the afternoon. Gusts to 53 mph were recorded near Monico and at Rhinelander-Oneida County Airport.

WINTER STORMS / EXTREME COLD VULNERABILITY ASSESSMENT:

Winter storms and extreme cold present a serious threat to the health and safety of affected citizens and can result in significant damage to property. Heavy snow or accumulated ice can cause the structural collapse of buildings, down power lines, motor vehicle accidents or isolate people from assistance or services. Extreme cold includes the risk frostbite and hypothermia.

The following is a list of things that may be adversely affected by a winter storm or extreme cold. Much of these community assets can be referenced in Part II.

- Infrastructure – operation of emergency services, operation of public facilities and schools
- Utilities – down power and telephone lines
- LP Gas at residences freezing in temps below -40 degrees.
- Septic systems - freezing
- Transportation – automobile accidents, roadway plowing, salting/sanding

- Residential – roofs
- Businesses – commerce
- Agricultural - livestock

Based on review of the historic events of winter storms and extreme cold, there are no specific areas in the county that have unusual risks. The risk for winter storms and extreme cold is relatively uniform and a countywide concern. The Towns of Cassian, Lake Tomahawk, Minocqua, Pelican and Schoepke identified winter storms as a top concern in the town mitigation issue survey.

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES – WINTER STORMS/EXTREME COLD:

Based on historical frequency, Oneida County can expect 2.7 significant winter storms per year on average. In other words the probability is 1.0 or a 100 % chance in a given year.

For extreme cold temperatures, based on historical frequency, Oneida County can expect an occurrence about every 2 years on average for a probability of 0.5 or a 50% chance in a given year. Although, since extreme cold temperatures often accompany winter storms, a probability of 100% chance in a given year cannot be ruled out.

Estimating potential future losses for winter storms is difficult. Damages and losses are typically widespread. Auto accidents and additional snow removal time are typical impacts of winter storms, and such claims are not aggregated or tracked for monetary damage. Winter storms do have the potential to be extremely destructive, particularly in the case of ice storms. Potential future losses per incident might range from \$5,000 to \$2 million based on experiences from other counties.

HAZARD ANALYSIS: FOREST FIRE / WILDFIRE

BACKGROUND ON FOREST FIRE / WILDFIRE HAZARD:

The terms forest fire and wildfire have come to be used interchangeably essentially and refer to uncontrolled, wild, or running fires occurring on forest, marsh, field, cutover, or other lands or involving farm, city, or village property and improvements incidental to the uncontrolled, wild, or running fires occurring on forest, marsh, field, cutover, or other lands.

Wildfires can occur at any time the ground is not completely snow covered. The season length and peak months may vary appreciably from year to year. Land use, vegetation, amount of combustible materials

present and weather conditions such as wind, low humidity and lack of precipitation are the chief factors for fire season length.

HISTORY OF FOREST FIRE / WILDFIRE IN ONEIDA COUNTY:

The Wisconsin DNR maintains a database of wildfire data. This data represents the most comprehensive source of information for analyzing fire trends in an area such as Oneida County. Data that could be analyzed is only available between 2016 and 2021. That 6 year period an average of about 30 fires that have burned 17 acres, annually. The typical fire in Oneida County burns about 1/2 acre.

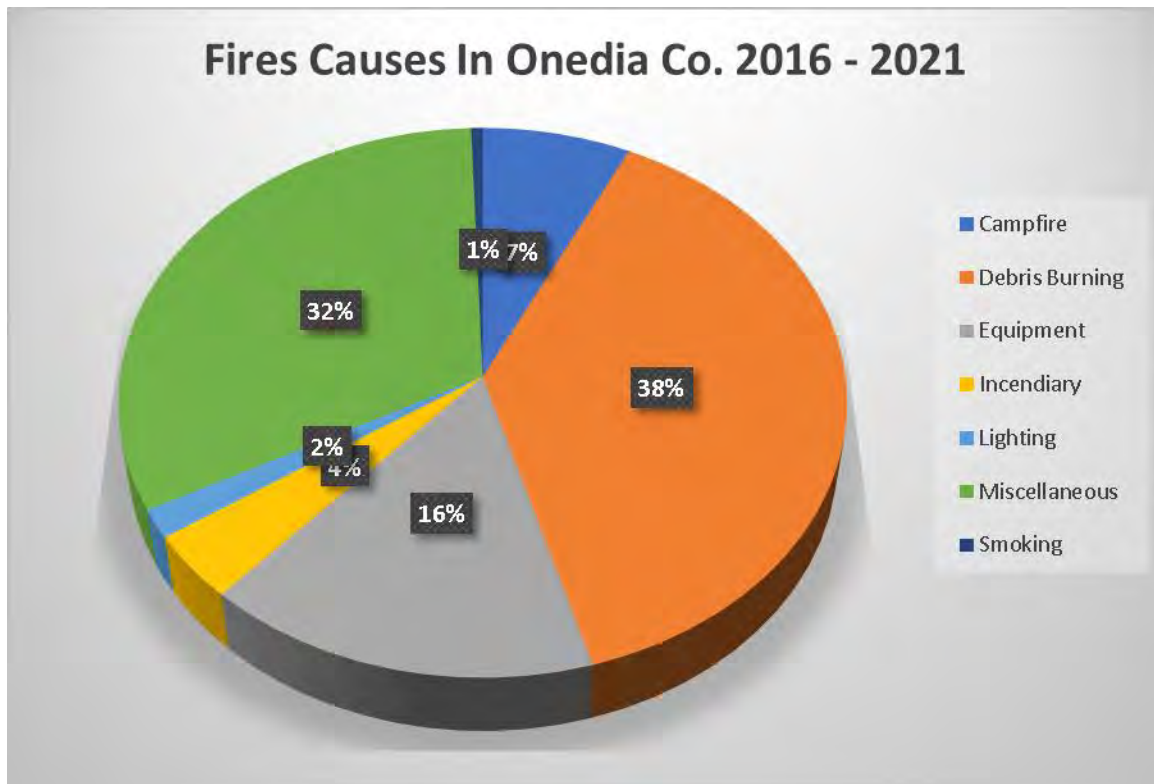
May is the leading month for wildfire in Oneida with 39% of the total number of fires between 2016 and 2021. However, wildfires have occurred in each month of the year in Oneida except January and February.

The Town of Minocqua experienced the most wildfires between 2016 and 2021 with 19 and 44 total acres burned. The Towns of Little Rice, Lynne, Monico, Piehl, Stella and City of Rhinelander had the fewest fires with 2 over that period. The Town of Piehl had the least area burned with only 0.03 acres affected



Wildfire Aftermath, Pelican 2010

The chart below breaks down the causes of wildfire within Oneida County from 2016 to 2021 as classified by the WDNR. The principle cause of wildfire in Oneida County and Wisconsin as a whole is debris burning which resulted in 38% of wildfires within the County. Miscellaneous includes a variety with improper ash disposal most notable is the next leading category at 32%. Equipment, includes vehicle, motor and other machinery related except railroad, causes 16% and is closely followed by campfires at 7%; not unexpected for a recreational county like Oneida. Miscellaneous includes a variety with improper ash disposal most notable. Lightning, the only natural cause of fire, was responsible for less than 2%.



Source: WIDNR 2016-2021

FOREST FIRE / WILDFIRE VULNERABILITY ASSESSMENT:

Oneida County has 650,000 acres of woodland, or 82 percent of the total land area, across the County. The potential for property damage from fire increases each year as more recreational and retirement homes are developed on wooded land.

Rural buildings may be more vulnerable because of lack of access. Access to buildings off main roads is sometimes long, narrow driveways with minimal vertical clearance making it hard for emergency vehicles to combat fires. These buildings also may not have much of a defensible space because of little area between the structures themselves and highly flammable vegetation.

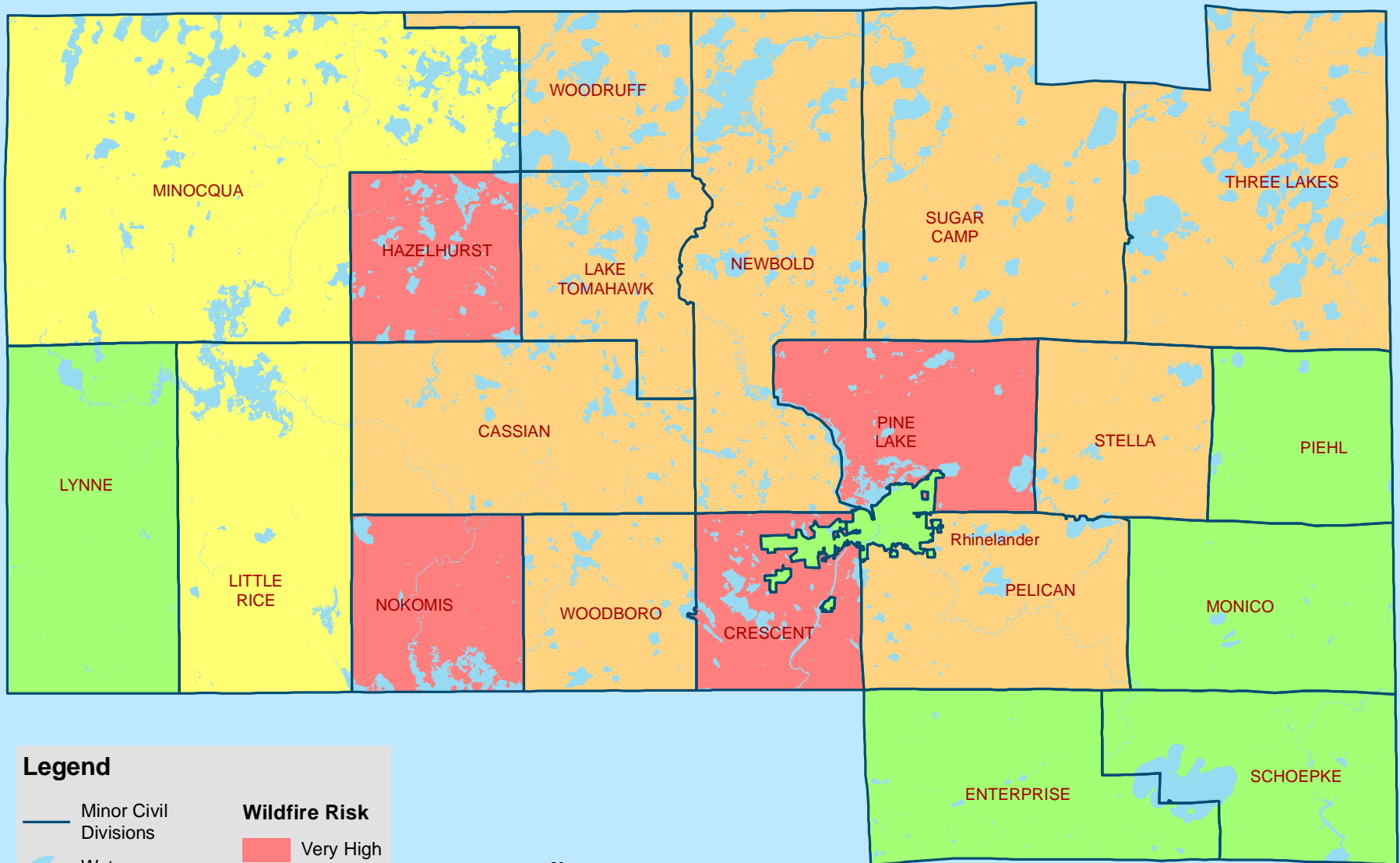
Campgrounds are also a concern because of campfires. Oneida County has state, federal and numerous privately owned campgrounds throughout the County. Locations of the campgrounds are shown on Map 8.

The trend toward introducing more human development into fire prone areas has brought about the term wildland urban interface or WUI. The WUI identifies areas where structures and human development meet or

intermingle with undeveloped wildlands. It is within these areas where wildfire poses the greatest risk to human lives and property.

The WDNR has completed a statewide evaluation of fire risk, referred to as the CAR or Communities At Risk assessment. This assessment uses extensive DNR geo-databases to analyze and map hazardous woodland fuel types and the degree of the intermixing of development with wildlands. The maps identify the level of risk for each community on a scale of very high, high, moderate, or low, and also have a community of concern designation, see Map 10. The Towns of Crescent, Hazelhurst, Nokomis and Pine Lake are rated very high. Cassian, Lake Tomahawk, Newbold, Pelican, Stella, Sugar Camp, Three Lakes, Woodboro and Woodruff have a high risk level and the Towns of Little Rice and Minocqua are designated communities-of-concern. The Towns of Enterprise, Lynne, Monico, Piehl, Schoepke and the City of Rhinelander are rated low risk for wildfire.

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES – FOREST FIRE / WILDFIRE:
Forest and wildfires are relatively common occurrences in Oneida County. There has been an average of 30 fires per year in the County. In other words, the probability is 1.0 or 100% chance of wildfire each year.



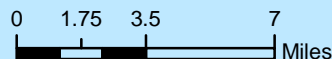
3-21

Wildfire Risk

Legend

- Minor Civil Divisions
- Water

- Wildfire Risk**
- Very High
 - High
 - Concern
 - Low



Source: NCWRPC, WI DNR, Oneida Co.

This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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Map 10

Because of the relatively small impact of typical individual fires in the County, loss data is not tracked. This makes it difficult to develop an estimate of potential future dollar losses. However, with 30 fires per year, the County should expect some fires to "get out of hand" with the potential to easily exceed the \$1.4 million in damages of the Cottonville Fire that occurred in southern Wisconsin.

HAZARD ANALYSIS: FLOOD/DAM FAILURE

BACKGROUND ON FLOOD HAZARD:

There are a variety of classifications for flooding including coastal, dam failure, flash, lake, riverine, stormwater and urban/small stream. Oneida County has the potential for all these types except coastal. The following descriptions of the types of flooding are compiled from various FEMA and other notable hazard planning sources:

Coastal – Different from other types of flooding which relate to movement of water through a watershed, coastal flooding is due to the effect of severe storm systems on tides resulting in a storm surge. Primarily known as an ocean-based event, the Great Lakes coastal areas can also be affected.

Dam Failure – More of a technology related hazard than a natural hazard, various factors can result in the failure of the structural technology that is a dam, thus causing flooding of areas downstream of the dam often similar in effect to flash flooding.

Flash – Involves a rapid rise in water level moving at high velocity with large amounts of debris which can lead to damage including tearing out of trees, undermining buildings and bridges, and scouring new channels. Dam failure, ice jams and obstruction of the waterway can also lead to flash flooding. Urban /built-up areas are increasingly subject to flash flooding due to removal of vegetation, covering of ground with impermeable surfaces and construction of drainage systems.

Lake – Prolonged wet weather patterns can induce water-level rises that threaten lakeshore areas.

Riverine – Also known as overbank flooding, this is the most common type of flooding event. The amount of flooding is a function of the size and topography of the watershed, the regional climate, soil and land use characteristics. In steep valleys, flooding is usually rapid and deep, but of short duration, while flooding in flat areas is typically slow, relatively shallow, and may last for long periods.

The cause of flooding in rivers is typically prolonged periods of rainfall from weather systems covering large areas. These systems may saturate the ground and overload the streams and reservoirs in the smaller sub-basins that drain into larger rivers. Annual spring floods are typically due to the melting of snowpack.

Stormwater – Water from a storm event that exceeds the capacity of local drainage systems, either man-made or natural, can result in flooding. Inadequate storm sewers and drainage systems are often the primary factor resulting in this type of flooding.

Urban and Small Stream – Locally heavy rainfall can lead to flooding in smaller rivers and streams. Streams through urban or built-up areas are more susceptible due to increased surface runoff and constricted stream channels.

Major floods in Oneida County tend to occur in the spring when melting snow adds to normal runoff and in summer or early fall after intense rainfalls. Flooding occurs in the spring due to snowmelt and frozen soil. This build up continues until the river or stream overflows its banks, for as long as a week or two and then slowly recedes inch by inch. The timing and location of this type of flooding is fairly predictable and allows ample time for evacuation of people and protection of property.

Flooding could be a significant hazard in Oneida County, particularly because the Wisconsin River runs through Oneida County. As described in Part II, there are approximately 830 miles of streams in Oneida County within fourteen main watersheds.

Floodplains exist along the Wisconsin River and the tributaries that feed into it. These floodplains are narrow along tributaries and lakes but extensive throughout the County. Floodplains are described in Part II and shown on Map 4 of this Plan Update. The Federal Emergency Management Agency (FEMA) identified these floodplains on digital Flood Insurance Rate Maps (DFIRMs), and the North Central Wisconsin Regional Planning Commission incorporated them into an internal GIS coverage for planning purposes.

There are 44 dams in Oneida County (See Map 4 and Table 14). These dams serve many useful purposes including agricultural uses, providing recreational areas, electrical power generation, erosion control, water level control and flood control. According to the DNR, Oneida County has 20 large dams (including Hat Rapids, Rainbow Reservoir and Willow

Reservoir), which have a structural height of over 20 feet. The Wisconsin DNR regulates all dams on waterways to some degree, however the small dams are not stringently regulated for safety purposes. The federal government has jurisdiction over large dams that produce hydroelectricity. At least two of the dams have the ability to produce hydroelectricity in Oneida County: Hat Rapids and the Rhinelander Paper Mill. If an Emergency Action Plan (EAP) year is known it is listed in Table 14.

A dam can fail for a number of reasons such as excessive rainfall or melting snow. It can also be the result of poor construction or maintenance, flood damage, weakening caused by burrowing animals or vegetation, surface erosion, vandalism or a combination of these factors. Dam failures can happen with little warning resulting in the loss of life and significant property damage in an extensive area downstream of the dam.

The WDNR assigns hazard ratings to large dams within the state. When assigning hazard ratings, two factors are considered: existing land use and land use controls (zoning) downstream of the dam. Dams are classified into three categories that identify the potential hazard to life and property downstream should the dam fail. A high hazard indicates that a failure would most probably result in the loss of life. A significant hazard indicates a failure could result in extensive property damage. A low hazard exists where failure would result in only minimal property damage and loss of life is unlikely. For Oneida County, there are four dams that have a high hazard rating: Willow Reservoir, Maple Lake, Rainbow Reservoir and the Rhinelander Paper Company. Fish Hatchery, North Pelican Lake, Pickerel Control and Burnt Rollways have a significant rating, while the rest are rated low. The towns of Sugar Camp, Stella, Pine Lake, Newbold, Land little Rice were concerned with flooding.

HISTORY OF FLOODING IN ONEIDA COUNTY:

The most recent flooding event happened on October 17, 2016. Thunderstorms, that moved along a frontal boundary, produced heavy rainfall across northern Wisconsin on the evening of October 17th and isolated large hail after midnight. The heaviest rain fell in a swath from far northern Lincoln County to Florence County. Some of the heaviest rain fell in Rhinelander (Oneida County) where there was minor street flooding. The rainfall total of 4.64 inches at Rhinelander, most of which fell in just a few hours, set a new calendar day rainfall record for October. It also tied for second wettest calendar day on record at Rhinelander.

Flooding was the principal cause of damage in two of five Presidential Disaster Declarations in Oneida County from 1971 to 2014. The most

recent declaration as of this Plan Update occurred in 2000. Between July 2 and 10, the County received heavy rainfall resulting in three urban small stream flood and two additional flood reports. Oneida County was one of thirty counties included in the Disaster Declaration. As a result, twelve towns, the City of Rhinelander and the County Highway Department reported damages of approximately \$146,000. An additional administrative cost of about \$5,000 brought the total flood damage request to about \$151,000. Private sector damages tabulated by Oneida County Emergency Management was about \$191,000. NCEI reported damages of \$180,000.

Flooding of roads and basements was reported in the area from Pelican Lake to Rhinelander. Small streams and creeks overflowed their banks and rural areas suffered some crop damage. The Wisconsin River reached flood stage (6 ft) near Lake Tomahawk between July 9 and 10 due to the previous two days of heavy rainfall. There was widespread flooding of lowland and wooded areas. A boat ramp and part of a parking lot also became submerged.

Name	Size	Hazard Rating	EAP Year
Spruce Lake	Large	Low	2007
Laux	Small	Low	
Hat Rapids	Large	Low	2014
Lake Katherine	Small	Low	
Hazelhurst Canal	Small	NA	
Horsehead	Small	Low	
Felser, Carl R.	Small	NA	
Shot & Hook Club	Large	Low	2004
Little Rice River	Large	Low	2013
Willow River Reservoir	Large	High	2014
Willow Region	Small	Low	2011
Franklin Lake	Small	NA	
Squirrel Lake	Large	Low	
Skunk Lake	Small	NA	
Minocqua	Large	Low	Exempt
Two Sisters Lake	Small	NA	
Rainbow Reservoir	Large	High	2014
Pickrel Canal	Large	Low	
Pickrel Control	Large	Significant	
Fredrichs	Small	Low	
Swamp Lake	Small	Low	
North Pelican Lake	Large	Significant	
Midget Lake Outlet	Small	NA	
George Lake	Small	NA	
Rhinelander	Large	High	2014
Sowinski, Henry No. 1	Small	NA	

Sowinski, Henry No. 2	Small	NA	
Sugar Camp	Large	Low	
Lower Nine Mile	Large	Low	
Rice Lake	Small	NA	
Burnt Rollways	Large	Significant	2014
Seven Mile	Large	Low	
Range Line Lake Dam	Small	Low	
Scott Creek	Large	Low	
Maple Lake	Large	High	
Thunder Lake	Small	Low	
Oneida Lake	Small	Low	
Hancock Lake	Large	Low	2010
Jennie Creek	Small	Low	
Madeline Lake (Fish Hatchery)	Large	Significant	
Gilmore Lake	Small	Low	
South Pelican	Small	Low	Exempt
Yamaha	Small	NA	
Rudolph Dam	NA	NA	
<i>Source: WisDNR Dam Database, 2014 and NCWRPC.</i>			

In 1999, Oneida County received another Presidential Disaster Declaration after severe storms passed through the area causing wind and water related damages. The Declaration included ten counties in the northern portion of the state.

Other historic events include: July 2003 thunderstorms that dumped 6 inches of rain around Pelican Lake causing flash flooding. In April of 2002, severe storms resulted in urban and small stream flooding that caused flooded roads and basements in Rhinelander. Earlier in April of 2002, rainfall and snowmelt caused flooding of roads and low-lying areas across eastern Oneida County. Rhinelander again had urban and small stream flooding in September of 2001. The City of Rhinelander has made significant progress in addressing its flooding woes by improving storm water systems and working to coordinate the operations of area dams.

Oneida County has not experienced a dam failure with any loss of life or substantial property damage. However, on July 14, 2002 the Oneida County Sheriff's department received a report of a large piece of concrete falling off the Rainbow Flowage Dam. Wisconsin Valley Improvement investigated the report and found the dam to be structurally safe.

FLOOD VULNERABILITY ASSESSMENT:
 Flood events in the County have caused substantial property and infrastructure damage in the past and have the potential to cause future

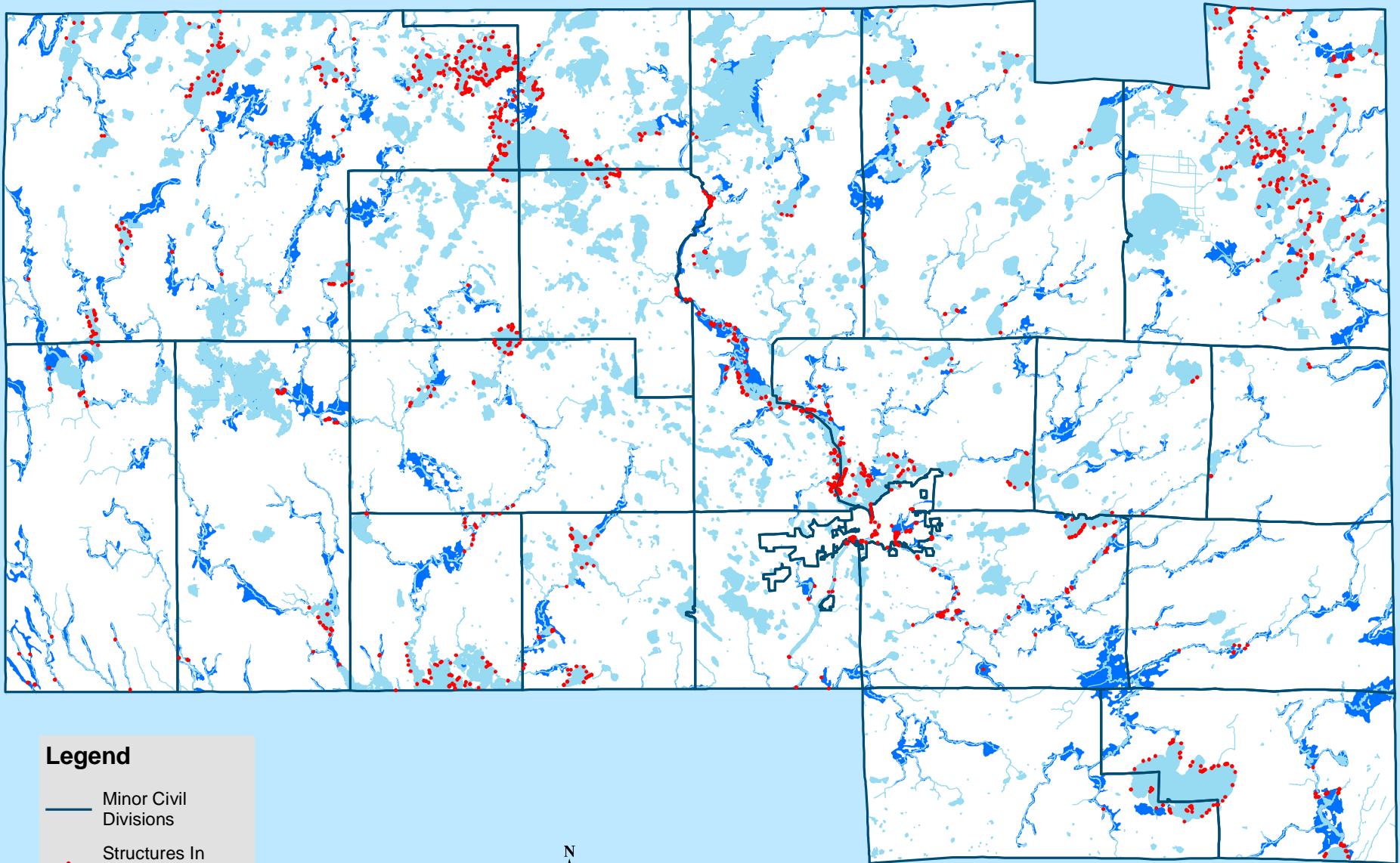
damage, since a significant number of structures still exist in the floodplain. Looking at past events, the following have been significantly impacted by flooding:

- Infrastructure – flooded public facilities
- Roadways – washouts, inundated roadways, debris clean-up
- Residential structures – flooded basements, damaged septic systems
- Businesses – loss of commerce
- Agriculture - inundated cropland






To assess the vulnerability of the Oneida County area to flooding hazards, basic inventory data described in Part II must be analyzed. For this purpose, consideration should be given to structures (specifically critical facilities), infrastructure, and cropland.

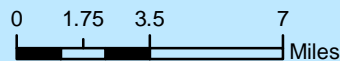
One of the first reports to reference in assessing vulnerability to structures during flooding is the Wisconsin Repetitive Loss Report. The Repetitive Loss Report provides information to the status of repetitive loss properties by community. FEMA classifies a repetitive loss structure “when more than one flood insurance claim of at least \$1,000 is made within a ten-year period”. The information is used as a floodplain management tool and to supplement information provided by communities for flood mitigation grants administered by WEM. According to the report, there are no repetitive loss structures within Oneida County.

Since no structures are listed in the Repetitive Loss Report, structures within floodplains were analyzed, see methodology outlined below. The floodplain boundaries within Oneida County are shown on Map 4. Table 15 shows the number of structures in each municipality identified as “vulnerable to flooding” according to proximity to floodplains. There were a total of 1,402 structures identified in the designated floodplain boundaries, see Map 9. Estimated value of structures located within the floodplain in Oneida County is just under \$168 million.



Legend

-  Minor Civil Divisions
-  Structures In Floodplain
-  Water
-  Streams
-  Floodplains



Source: NCWRPC, WI DNR, Oneida Co.

This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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Table 15			
Inventory Value for Structures in Floodplains			
Municipality	# of Structures	Average Imp. Value	Est. Imp. Total Value
Cassian town	36	\$68,747	\$2,474,900
Crescent town	15	\$60,693	\$910,400
Enterprise town	26	\$102,192	\$2,657,000
Hazelhurst town	21	\$162,724	\$3,417,200
Lake Tomahawk	33	\$88,206	\$2,910,800
Little Rice town	50	\$37,450	\$1,872,500
Lynne town	34	\$33,815	\$1,149,700
Minocqua town	240	\$207,880	\$49,891,300
Monico town	8	\$16,313	\$130,500
Newbold town	170	\$75,822	\$12,889,800
Nokomis town	32	\$137,244	\$4,391,800
Pelican town	93	\$55,404	\$5,152,600
Piehl town	5	\$32,720	\$163,600
Pine Lake town	127	\$78,961	\$10,028,100
Schoepke town	65	\$87,543	\$5,690,300
Stella town	5	\$61,240	\$306,200
Sugar Camp town	73	\$112,496	\$8,212,200
Three Lakes town	195	\$111,648	\$21,771,300
Woodboro town	48	\$77,596	\$3,724,600
Woodruff town	52	\$147,896	\$7,690,600
Rhineland city	74	\$304,399	\$22,525,500
Oneida County	1,402	\$119,801	\$167,960,900

Source: NCWRPC and Oneida County Property Tax Database 2021.

Methodology – Structures within Floodplains:

1. NCWRPC downloaded the individual FEMA DFIRM floodplain maps into a GIS coverage for the County.
2. A building outlines from 2019 Oneida County GIS data was used to select outlines that intersected FEMA floodplain.
3. Centroids from building outlines were joined with Oneida County tax parcel data to calculate improvement values.
4. Total structures with the floodplain were then tabulated by municipality - Table 15.
5. Improvement values were summarized from Oneida County tax parcel data – Table 15.

In addition to structural damage from flooding, there have been significant damages to public roadways, particularly to roadway surfaces, culverts and bridges. Floods have inundated roadways in the County from a period of a few days up to as much as three months. Such interruptions in the County transportation network cause travel delays through detours and may leave some locations inaccessible for periods of time.

The primary impact from damages to roadways is to businesses. The monetary impact is unknown but past floods have restricted public access and even closed businesses. Tourism is an important industry in the County and several campgrounds, lodges and restaurants may be affected by flooding.

The agriculture industry is a sector that can face substantial losses during a flood. Flood conditions can leave farmers with the following economic setbacks:

- Delayed planting (reduced growing season)
- Prevention of fields from being seeded
- Seed and agricultural chemicals washing out of fields
- Rotting of plants due to excess moisture
- Areas where planted crops left in the fields due to excessive moisture
- Crops not reaching full maturity or stunted growth
- Requirements by farmers to expend higher amounts of money on additional soil amendments
- Lower quality (nutritional value) of harvestable crops as a feed source.

Reductions in quantity can result in loss of revenues from cash crops and increased expenses for purchasing the needed livestock feed from outside sources. Additionally, reductions in crop quality result in lower prices received for cash crops and increased amounts spent for nutritional supplements to animal feed, which need to be added even in much of the purchased feed.

Economic losses to farmers can generate a ripple affect to the local community as well. Reduction in farm income will curtail the farmers' ability to purchase new equipment and make other improvements. Farmers will have less money to spend at farm dealers, farm supplies, building/hardware suppliers, fertilizer, feed and seed dealers, and other agribusiness and retail establishments. The State itself will have reduced tax revenues. Farmers will have less money to save and invest, and suffer still more increases in debt load.

The forest products industry is affected similarly to agriculture. Forestlands become too wet for logging operations and many water logged tree plantations suffer high mortality rates. Mill inventories become very low, resulting in increased prices for consumers.

The areas considered to have a higher risk for impact from flooding include those communities with structures in floodplains as shown in Map 12. Dam break is a top hazard concern with officials from the City of Rhinelander, as well as in the Towns of Cassian, Newbold and Three Lakes (according to their mitigation survey results).

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES – FLOOD:

Based on the historic data presented here (frequency of past events - 2011 to 2021), Oneida County can expect a flood event about every 10 years on average. This equates to a probability of 0.1 or about a 10 percent chance in a given year.

Due to the significant number of dams and particularly large dams with high hazard ratings, dam failure is an important hazard event to plan for in Oneida County. However, based on past experience, the actual probability of a major dam failure is very low.

Historic data is again used to estimate potential future dollar losses due to flood. Based on events described earlier for which we have loss figures, Oneida County can anticipate property and crop losses of approximately \$200,000, on average, between the public and private sector for each flood occurrence. Over the next ten-year period, flood losses in Oneida County could approach \$200,000.

HAZARD ANALYSIS: HAZARDOUS MATERIALS INCIDENTS

BACKGROUND ON HAZARDOUS MATERIALS INCIDENT HAZARD:

This type of hazard occurs with the uncontrolled release or threatened release of hazardous materials from a fixed site or during transport that may impact public health and safety and/or the environment.

Under the Emergency Planning and Community Right to Know Act (EPCRA), a hazardous material is defined as any chemical that is a physical hazard or health hazard [defined at 29 CFR 1910.1200(c)] for which the Occupational Health and Safety Administration (OSHA) requires a facility to maintain a Material Safety Data Sheet (MSDS). Under EPCRA there is no specific list of hazardous materials. An extremely hazardous substance (EHS) is defined as one of 356 substances on the United States

Environmental Protection Agency list of extremely hazardous substances, identified at 40 CFR Part 355.

EPCRA of 1986 also known as SARA Title III, brings industry, government and the general public together to address emergency planning for accidental chemical releases. The emergency planning aspect requires communities to prepare for hazardous chemical releases through emergency planning. This provides essential information for emergency responders. The community right-to-know aspect increases public awareness of chemical hazards in their community and allows the public and local governments to obtain information about these chemical hazards.

Counties in Wisconsin, including Oneida County have a Local Emergency Planning Committee (LEPC) that is set up in accordance with the federal legislation and is responsible for implementation of EPCRA at the county level. The County Captain of Emergency Services is a member of the LEPC to ensure continuity and coordination of emergency response planning.

To meet the requirements of Title III of EPCRA, the LEPC developed the County Hazardous Materials Response Plan. This plan establishes policies and procedures for responding to hazardous material incidents. The LEPC is required to review, test, and update the Plan every two years. Methods for notification and reporting an incident are outlined in the plan. This plan also works in conjunction of the County Emergency Operation Plan (EOP) where alert to the public, communications, and response procedures are outlined. The plan is tested through tabletop, functional and full-scale exercises and actual response situations.

To provide a high level of hazardous materials response capabilities to local communities, Wisconsin Emergency Management contracts with 22 Regional Hazardous Materials Response Teams. The teams are divided into Task Forces: Northeast Task Force, Northwest Task Force, Southeast Task Force, and the Southwest Task Force. These Task Forces are then divided into Type I, Type II, and Type III teams, all with complimentary capabilities and training requirements.



Oneida County is located in the Northeast Taskforce area with a Type II team cooperatively with the City of Wausau. The Regional Response Team may be activated for an incident involving a hazardous materials spill, leak, explosion, injury or the potential of immediate threat to life, the

environment, or property. The Regional Teams respond to the most serious of spills and releases requiring the highest level of skin and respiratory protective gear. This includes all chemical, biological, or radiological emergencies.

Oneida HazMat Team Training

HISTORY OF HAZARDOUS MATERIALS INCIDENTS IN ONEIDA COUNTY:

Oneida County has recorded numerous hazardous material incidents from 2010 to 2020, see Table 16. Many of these consisted of small spills that did not meet EPCRA reporting requirements. In most cases these incidents were quickly resolved by the response of a local municipal fire department.

Table 16		Oneida County Hazardous Materials Incidents
Date	Description	
01/14/10	Freon	
01/18/10	Carpet Cleaner	
02/02/10	Odor	
02/12/10	Meter Ammonia	
02/19/10	Meter Ammonia	
03/30/10	Fire -Possible Hazardous Materials	
08/04/10	Personal Exposure	
11/24/10	Odor Complaint	
04/27/11	Fuel Oil in Residence	
06/20/11	Gas Spill	
06/14/12	Diesel Fuel - WPS	
07/03/12	Petroleum Spill - WPS	
09/30/12	Oil Sheen on Water	
05/30/13	Abandoned Containers	
06/20/13	Fuel Spill	
07/10/13	Fuel Spill	
11/01/13	Fuel Spill	
01/14/14	Propane Tanker	
05/11/14	Spill/Oil Sheen	
08/20/15	Oneida County Highway Dept Assistance	
08/21/15	Unknown Canister	
06/23/16	HazMat Spill	
08/30/16	Ammonia Metering Assistance	
10/24/18	Fuel Spill	
06/05/19	Fuel and Oil Spill (Town of Schoepke)	
02/03/20	Mixture of Chlorine (Base Cleaning Solution)	

Source: Oneida County Emergency Services, 2020

Occasionally, some hazardous material incidents or spills are potentially more serious and warrant or require a response by the County Hazardous Material Response Team. Three recent events are described below to illustrate typical HazMat response: 4/12/07, 11/1/13 and 1/14/14.

On January 14, 2014, the Oneida County Sheriff's Office requested the HazMat Team at a tanker-truck vs. vehicle accident at the intersection of US Highway 51 and Fernwood Road in the Town of Cassian. Deputies were requesting the Team evaluate and monitor the accident site while the vehicles were removed. The HazMat Team arrived on scene and remained until the vehicles were cleared.

On November 1, 2013, the Oneida County Sheriff's Office responded to an accident on Clover Road and River Road in the Town of Pine Lake in which a vehicle's gas tank was damaged and spilling fuel into water located in a nearby ditch. The Wisconsin Department of Natural Resources Spill Coordinator was brought in to inspect the site. The Spill Coordinator found a slight odor and a very thin sheen on the water, but determined that no additional mitigation was required.

On April 12, 2007, a semi-truck was damaged after hitting some rocks when turning into Menards in Rhinelander. As a result of the accident, approximately 35 gallons of hydraulic fluid and 5 gallons of diesel fuel spilled on the pavement. Response involved Oneida County Emergency Management, Wisconsin DNR and Rhinelander's police, fire and public works departments. The spill was cleaned using sand and oil dry. The WisDNR followed up with the responsible parties. Table 17 below list Spills or abandoned containers that were tracked through the Bureau For Remediation and Redevelopment Tracking System (BRRTS). The majority of these spills were from a petroleum-based substances.

BRRTs Number	Location	Year	Amount	Unit	Substance	Cause
0444555557	THREE LAKES	2010	10	Gal	Mineral Oil without PCBs or PCBs <50ppm	HIGH WINDS KNOCKED DOWN A TREE, TREE KNOCKED DOWN TRANSFORMER
0444555653	THREE LAKES	2010	100	Gal	Diesel Fuel	RELEASE FROM ABOVE GROUND STORAGE TANK
0444555581	MINOCQUA	2010	20	Gal	Mineral Oil	
0444556050	PINE LAKE TN	2010	5	Gal	Engine Waste Oil	
0444556312	WOODRUFF	2010	20	Gal	Mineral Oil without PCBs or PCBs <50ppm	LIGHTNING STRIKE

0444556313	MINOCQUA	2010	5	Gal	Mineral Oil	
0444556346	RHINELANDER	2010	4800	Gal	Wastewater	TANKER TRUCK ROLLOVER
0844555522	STELLA	2010			Abandoned Container	
0444557102	RHINELANDER	2011	15	Gal	Mineral Oil	WIND CAUSED TRANSFORMER POLE TO BREAK
0444557540	MONICO	2011	0		Fuel Oil	SPILL FROM BASEMENT FUEL OIL TANK. SPILL IN BASEMENT OF HOME. SUMP PUMP PUMPED OIL/WATER MIX TO THE OUTSIDE.
0444557224	RHINELANDER	2011	20	Gal	Gasoline - Unleaded and Leaded	FUEL TANK FELL OF OF EMPLOYEE VEHICLE
0444557536	WOODRUFF	2011	15	Gal	Mineral Oil	LIGHTNING STRIKE
0444557942	TRIPOLI	2011	15	Gal	Hydraulic Oil	
0444558368	RHINELANDER	2011	10	Gal	Mineral Oil without PCBs or PCBs <50ppm	CAR ACCIDENT
0444558383	RHINELANDER	2012	40	Gal	Mineral Oil without PCBs or PCBs <50ppm	PLOW TRUCK HIT A PAD MOUNTED TRANSFORMER
0444558681	RHINELANDER	2012	75	Gal	Diesel Fuel	
0444559421	MINOCQUA	2012	15	Gal	Hydraulic Oil	
0444559372	RHINELANDER	2012	29	Gal	Mineral Oil	TREE FELL DURING STRONG WINDS BREAKING A POWER POLE.
0444559989	CRESCENT	2012	15	Gal	Mineral Oil	LIGHTNING STRIKE
0444559984	WOODBORO	2012	20	Gal	Diesel Fuel	SKID STEER FIRE.
0444560026	RHINELANDER	2012	0		Gasoline - Unleaded and Leaded	NORTH STATES UTILITY CUT THROUGH AN UST WHILE INSTALLING A NATURAL GAS LINE TO RESIDENCE.
0444559824	RHINELANDER	2012	20	Gal	Mineral Oil	TREE CAME DOWN ON POWER LINES, CAUSING SPILL FROM POLE MOUNTED TRANSFORMER.
0444560474	MINOCQUA	2013	5	Gal	Hydraulic Oil	SUSPECTED HYDRAULIC LEAKS FROM PLOWING EQUIPMENT.

						SPILL WAS TO A SWALE NORTH AND WEST OF WALMART.
0444560946	HAZELHURST	2013	10	Gal	Diesel Fuel	FIRE
0444560934	LAKE TOMAHAWK	2013	5	Gal	Diesel Fuel	SPILL FROM FUEL TANK OF RV. POSSIBLE FILL CAP OFF.
0444561465	MONICO	2013	7	Gal	Hydraulic Oil	TRUCK TIPPED OVER SPILLING LOAD OF SALT AND DIESEL FUEL
0444561465	MONICO	2013	12	cuyd	Other Substance Not Listed	TRUCK TIPPED OVER SPILLING LOAD OF SALT AND DIESEL FUEL
0444561362	RHINELANDER	2013	50	Gal	Fuel Oil	LEAK IN HEAT GUN USED TO THAW RAILROAD CARS.
0844560550	RHINELANDER	2013			Abandoned Container	
0444561676	MINOCQUA	2014	5	Gal	Diesel Fuel	TRAFFIC ACCIDENT
0444561676	MINOCQUA	2014	5	Gal	Engine Waste Oil	TRAFFIC ACCIDENT
0444561676	MINOCQUA	2014	5	Gal	Antifreeze	TRAFFIC ACCIDENT
0444562869	RHINELANDER	2014	25	Gal	Diesel Fuel	
0444562810	MINOCQUA	2014	12	Gal	Mineral Oil without PCBs or PCBs <50ppm	STORM DAMAGE.
0444562816	MINOCQUA	2014	12	Gal	Mineral Oil without PCBs or PCBs <50ppm	TREE FALL
0444563215	RHINELANDER	2015	20	Gal	Hydraulic Oil	BROKEN HYDRAULIC LINE
0444563331	RHINELANDER	2015	20	Gal	Hydraulic Oil	HYDRAULIC FILTER FITTING FAILURE
0444563374	THREE LAKES	2015	3.5	mmft	Liquid/Gaseous Heating Fuel	A CONTRACTOR DUG INTO A 1 AND 1/4 INCH GAS MAIN.
0444576368	UNKNOWN	2015	20	Gal	Hydraulic Oil	
0444576536	LAKE TOMAHAWK	2015			Gasoline - Unleaded and Leaded	UNKNOWN
0444578611	LITTLE RICE	2016	2	Gal	Fuel Oil	LEAKING ABOVE GROUND STORAGE TANK
0444576875	MONICO	2016	5		Hydraulic Oil	
0444577691	MINOCQUA	2016	3000	Gal	Diesel Fuel	SEMI TANKER DISCONNECTED FROM SEMI AFTER DRIVER TURNED ONTO CTH J. THE

						FRONT OF THE TANKER DROPPED DOWN & WAS PUNCTURED BY SEMI CAUSING DIESEL FUEL TO SPILL ON PAVEMENT & RUN INTO ADJACENT STORMDRAINS
0444577402	MINOCQUA	2016			Gasoline - Unleaded and Leaded	VEHICLE OR VESSEL DERAILMENT, ROLLOVER OR CAPSIZING
0444577707	WOODRUFF	2016	20	Gal	Hydraulic Oil	
0444578179	RHINELANDER	2016	5	Gal	Hydraulic Oil	Hydraulic line break.
0444578729	WOODBORO TN	2016	2147	Gal	Leachate from landfill runoff	DISCHARGE FROM SECONDARY CONTAINMENT
0444579955	CRESCENT	2016	50	Gal	Diesel Fuel	TRANSPORTATION ACCIDENT FUEL TANK SPILL
0444578722	MONICO	2017	1	Gal	Diesel Fuel	SEMI SPUN OFF ROAD INTO DITCH
0444579549	ARBOR VITAE	2017	17	Gal	Mineral Oil without PCBs or PCBs <50ppm	WEATHER CAUSED TREE TO KNOCK OVER POLE AND TRANSFORMER. SPILL WENT ONTO ROAD BUT RAIN AND SNOW CAUSED RUNOFF INTO SOIL.
0444579600	ARBOR VITAE TN	2017	17	Gal	Mineral Oil without PCBs or PCBs <50ppm	HOTLINE: SEVERE WEATHER CAUSED THE RELEASE. A TREE LIMB HIT WIRES CAUSING THE TRANSFORMER TO FALL.
0444579520	CASSIAN	2017	20	Gal	Hydraulic Oil	EQUIPMENT FIRE.
0444579488	LAKE TOMAHAWK	2017			Gasoline - Unleaded and Leaded	See Comments
0444580032	HAZELHURST	2017	7.5	Gal	Mineral Oil without PCBs or PCBs <50ppm	WEATHER KNOCKED DOWN THE TREE THAT HIT THE TRANSFORMER, WHICH CAUSED THE SPILL
0444579739	RHINELANDER	2017	10	Gal	Hydraulic Oil	HYDRAULIC HOSE

						BROKE ON TRUCK.
0444580595	THREE LAKES	2017			Gasoline - Unleaded and Leaded	A WHITE BOAT DOCKED IN THE CHANNEL BETWEEN TOWNLINE AND PLANTING GROUND LAKE NEAR A PRIVATE RESORT IS LEAKING GASOLINE INTO THE WATER. OWNER AND VEHICLE NUMBERS ARE UNKNOWN.
0444580030	LAKE TOMAHAWK	2017	10.5	Gal	Mineral Oil without PCBs or PCBs <50ppm	TREE FELL ON A POWER LINE
0444581742	MINOCQUA	2017	25	Gal	Mineral Oil without PCBs or PCBs <50ppm	SUSPECTED MOBILE VEHICLE COLLISION WITH A PAD MOUNT TRANSFORMER
0444581867	NEWBOLD	2018	30	Gal	Hydraulic Oil	THE BUILDING SUPPLY COMPANY WAS DELIVERING SHINGLES TO THE ABOVE ADDRESS AND WHILE OFFLOADING THE SHINGLES A HYDRAULIC LINE RUPTURED.
0444581604	HAZELHURST	2018	30	Gal	Jet Fuel	HELICOPTER CRASH
0444582453	WOODBORO	2018	10	Gal	Mineral Oil without PCBs or PCBs <50ppm	CAUSE UNKNOWN AT THIS TIME.
0444582108	CRESCENT	2018	15	Gal	Gasoline - Unleaded and Leaded	A PIECE OF EQUIPMENT AT 6809 FIRE TOWER RD (DRIVEWAY) WHICH STALLED AND IT ROLLED BACK INTO A WETLAND TIPPING THE MACHINE ON ITS SIDE.
0444582506	CRESCENT	2018	20	Gal	Mineral Oil without PCBs or PCBs <50ppm	TRANSFORMER FAILED DUE TO WEATHER AND LARGE RAINFALL.
0444582502	RHINELANDER	2018	30	Gal	Hydraulic Oil	DUMP

						TRUCK/SEMI DUMP TRAILER TURNED ON ITS SIDE WHILE DRIVING THROUGH CONSTRUCTION SITE. TRUCK SPILLED SUBSTANCE ONTO PRIVATE PROPERTY WOODED AREA.
0444582689	WOODBORO	2018	70	Gal	Diesel Fuel	CAR/TRUCK ACCIDENT
0444583107	RHINELANDER	2019	20	Gal	Hydraulic Oil	TRUCK FROM POCH WAS DELIVERING COAL AT AHLSTROM-MUNKSJO AND BLEW A HYDRAULIC LINE.
0444583526	THREE LAKES	2019	80	Gal	Mineral Oil	CAUSE UNKNOWN AT THIS TIME.
0444583780	NOKOMIS	2019	20	Gal	Mineral Oil without PCBs or PCBs <50ppm	VEHICLE IMPACTED POLE THAT HAD TRANSFORMER ON IT
0444584690	RHINELANDER	2019	0	Gal	Food Product	STRUCTURE FIRE COMPROMISED CONTAINER AND RELEASED OIL.
0444584690	RHINELANDER	2019			Engine Waste Oil	STRUCTURE FIRE COMPROMISED CONTAINER AND RELEASED OIL.
0444583569	NOKOMIS	2019	13	Gal	Hydraulic Oil	HYDRAULIC LINE BROKE OFF OF THE RIG
0444583799	ENTERPRISE	2019	25	Gal	Mineral Oil without PCBs or PCBs <50ppm	SET SUSPECTS THAT DURING THE WINTER A SNOW PLOW HIT A TRANSFORMER AND EVENTUALLY IT FAILED AND RELEASED CONTENTS ON THE GROUND.
0444583804	PELICAN	2019	26	Gal	Mineral Oil without PCBs or PCBs <50ppm	SEVERE WEATHER KNOCKED OVER POLE-MOUNTED TRANSFORMER

0444584003	CASSIAN	2019	800	Gal	Diesel Fuel	PICKUP TRUCK T BONED TANKER TRUCK. HJ MARTENS INC IS THE TANKER TRUCKING CO. HAZ MAT CREW HAS CONTAINED THE SPILL BUT NOT CLEANED UP YET.
0444584003	CASSIAN	2019	330		Gasoline - Unleaded and Leaded	PICKUP TRUCK T BONED TANKER TRUCK. HJ MARTENS INC IS THE TANKER TRUCKING CO. HAZ MAT CREW HAS CONTAINED THE SPILL BUT NOT CLEANED UP YET.
0444583726	PELICAN	2019	10	Gal	Diesel Fuel	CAUSE UNKNOWN AT THIS TIME.
0444584626	MINOCQUA	2019	20		Gasoline - Unleaded and Leaded	CAUSE UNKNOWN AT THIS TIME.
0444584791	RHINELANDER	2019	10	Gal	Diesel Fuel	PRIMARY PRODUCT LINE DAMAGED DURING EXCAVATION ACTIVITIES
0444586002	WOODRUFF	2020	2	Gal	Gasoline - Unleaded and Leaded	
0444586838	SCHOEPKE	2020			Diesel Fuel	CAUSE UNKNOWN AT THIS TIME.
0444585464	RHINELANDER	2020	5	Gal	Hydraulic Oil	PLANE CRASH
0444585779	RHINELANDER	2020	15	Gal	Mineral Oil without PCBs or PCBs <50ppm	VEHICLE IMPACTED A UTILITY POLE THAT WAS SUPPORTING A TRANSFORMER.
0444586517	HAZELHURST	2020	7.5	Gal	Mineral Oil	TRANSFORMER EXPLODED DURING THE STORM LAST NIGHT AND LEAKED MINERAL OIL OVER A 20X20 FOOT SECTION OF WOODED AREA.
0444586350	MINOCQUA	2020	15	Gal	Hydraulic Oil	BROKE A HOSE
0844586574	WOODBORO	2020			Abandoned Container	
0444587819	HAZELHURST	2021	20	Gal	Mineral Oil	DRIVER IMPACTED

						PAD MOUNTED TRANSFORMER, PUSHED 10-20 FEET BEYOND LOCATION
0444587157	NOKOMIS	2021	15	Gal	Diesel Fuel	BACKHOE SLIPPED OFF THE SHORE INTO THE LAKE BED. WHILE THE BACKHOE WAS IN THE LAKE IT WAS TIPPED ON ITS SIDE AND SOME DIESEL WAS LOST FROM THE FUEL TANK ONTO THE ICE.
0444587310	RHINELANDER	2021	2	Gal	Gasoline - Unleaded and Leaded	VEHICLE DROVE OFF ROAD CAUSING PIPES ON THE BOTTOM OF THE TRUCK TO BE SCRAPED, WHICH LED TO THE RELEASE OF THE GASOLINE
0444587422	RHINELANDER	2021	40	Gal	Hydraulic Oil	HYDRAULIC LINE BROKE WHILE DUMPING LOAD.
0444588689	RHINELANDER	2021	250	Gal	Asphalt	See Comments
0444588048	THREE LAKES	2021	15	Gal	Mineral Oil	A STORM KNOCKED A TREE DOWN WHICH HIT A POLE THAT HAD A TRANSFORMER ON IT. SPILL WAS DISCOVERED AT MIDNIGHT, STORMS PASSED THROUGH BETWEEN 4-7 PM YESTERDAY, 6/8/2021.
0444588537	THREE LAKES	2021			Petroleum - Unknown Type	RP CALLED AND STATED THEY LOADED THEIR BOAT AT THE ABOVE BOAT LAUNCH AND WHEN THEY LOADED THEY NOTICED A OIL SHEEN ON THE WATER AND THEY HAD AN OIL FILM

						ON THE HULL OF THEIR BOAT.
0444588776	NOKOMIS	2021	12	Gal	Engine Waste Oil	EQUIPMENT MALFUNCTION DURING SCARIFICATION PROJECT CAUSED MOTOR TO LEAK FROM BULLDOZER IN TWO LOCATIONS, ONE WHERE THE DOZER BROKE DOWN AND ONE IN THE GRAVEL PARKING LOT.

HAZARDOUS MATERIALS INCIDENT VULNERABILITY ASSESSMENT:

In 2014, the Oneida County LEPC participated in a detailed Hazardous Materials Commodity Flow Study. This Study inventoried the risk factors that make hazardous materials incidents a keen concern in Oneida County, which are reviewed below:

Fixed Facilities

The Commodity Flow Study identified that facilities within Oneida County utilize 27 substances meeting EPCRA (Tier II) reporting requirements and are considered a controlled material by US DOT. These are sites that have hazardous materials present at any one time in amount equal to or exceeding the chemical-specific threshold planning quantity (TPQ). A number of businesses have reduced and/or eliminated a number of chemicals over the years. Most notably businesses replaced anhydrous ammonia with ammonium hydroxide and elemental chlorine with sodium hypochlorite. The elimination of these two chemicals (ammonia and chlorine) allowed the facilities to opt out of EPA's Section 112(r) Accidental Release Prevention/Risk Management Plan Rule.

Highway

Trucks carry the bulk of hazardous materials to and through the County. Regular shipments of gasoline, propane, acid and other substances are delivered across Wisconsin. Every roadway in the County is a potential route for hazardous material transport, but major transportation routes are Federal and State Highways 51, 45, 17, and 32 (See Map 5 Transportation in Part II).

The Commodity Flow Study monitored traffic at key locations and counted trucks with Hazardous Warning Placards. The locations of the

intersections and the total number of trucks with hazardous materials are seen in Table 18.

Intersection	# of Trucks
Hwy 51 @ Hwy 47 (Woodruff)	3
Hwy 8 @ Hwy 51 (Exit 234)	6
Hwy 8/17/47 Int.(Rhineland)	13
Hwy 45 @ Hwy 8 (Monico)	3
Hwy 17 @ County A (Sugar Camp)	5
Total Observations	30

Source: Oneida Co. LEPC, 2014.

Railroad

The Canadian National Railroad, another mode for the transportation of hazardous material, provides 41 miles of track through Oneida County (see Map 5). Although trucks transport most of the hazardous materials in the state and U.S., rail can carry significantly larger loads of hazardous materials.

No statistics are available regarding the types of extremely hazardous substances transported annually by rail throughout Oneida County, but the potential exists for the transportation of any extremely hazardous substance listed on the U.S. EPA's list or OSHA's toxic and Hazardous Material List. These substances are transported in containers that range from ten-ounce agricultural packages to 196,000 pounds of rail car quantities.

Pipeline

The TransCanada - ANR Pipeline Company provides a pipeline to move natural gas through the County. It runs 7 miles from the southern part of the County to the City of Rhineland, and then 20 miles from the City of Rhineland to the eastern County line to Forest County.

Based on the location of the fixed facilities, the City of Rhineland has a higher probability of chemical release. A hazardous materials incident can have far reaching impacts, however, those communities which are traversed by major highways, rail or pipeline are also susceptible to a higher risk, refer to Maps 5 and 6.

FUTURE PROBABILITY & POTENTIAL DOLLAR LOSSES – HAZARDOUS MATERIALS INCIDENTS:

Based on the historic data presented here (frequency of past events), Oneida County can expect about 2.6 minor hazardous material releases each year on average, which is a probability of 1.0 or a 100 percent chance in a given year.

There is insufficient data to determine the probability of a major incident. However, with the number of verified trucks carrying hazardous materials, a major industrial railway and a natural gas pipeline moving through the County, the chances appear to be significant for a catastrophic hazardous materials incident occurring at some point in Oneida County.

As with the probability, there is limited historic data to base an estimate of potential dollar losses from HazMat incidents. However, based on occurrences statewide, damages range from \$100 to \$10.5 million per incident. The higher end of the range is not impossible in Oneida County.

HAZARD ANALYSIS: DROUGHT / EXTREME HEAT

BACKGROUND ON DROUGHT / EXTREME HEAT HAZARD:

A drought is an extended period of unusually dry weather, which may be accompanied by extreme heat (temperatures which are 10 or more degrees above the normal high temperature for the period). There are basically two types of drought in Wisconsin: agricultural and hydrologic. Agricultural drought is a dry period of sufficient length and intensity that markedly reduces crop yields. Hydrologic drought is a dry period of sufficient length and intensity to affect lake and stream levels and the height of the groundwater table. These two types of drought may, but do not necessarily, occur at the same time.

Droughts, both agricultural and hydrologic, are relatively common in the state. Small droughts of shortened duration have occurred at an interval of about every ten years since the 1930's.

Extended periods of warm, humid weather can create significant risks for people, particularly the elderly who may lack air conditioning or proper insulation or ventilation in their homes. Animals are also at risk during extended periods of heat and humidity. The National Weather Service issues a Heat Advisory when the Heat Index ranges from 105 to 114 degrees daytime and remains at or above 80 degrees at night, during a 24-hour period. The heat index combines the effects of heat and humidity to better reflect the risk of warm weather to people and animals. When

heat and humidity combine to reduce the amount of evaporation of sweat from the body, outdoor activity becomes dangerous even for those in good shape. The index measures the apparent temperature in the shade. People exposed to the sun would experience an even higher apparent temperature. A heat index of 105 is considered dangerous and prolonged exposure can result in heat stroke, exhaustion and cramps. People should be reminded to use extreme caution when the heat index is between 95 and 105. A heat index of 95 occurs when the temperature is 90 degrees and the relative humidity is 50 percent.

HISTORY OF DROUGHT / EXTREME HEAT IN ONEIDA COUNTY:

NCEI reports indicate that Oneida County was under drought conditions 1 times between 2011 and 2021. The event last from November 27, 2012 to April 1, 2013. Lack of significant rainfall for the last couple of weeks of November led to worsening drought conditions. Parts of Lincoln County, Oneida County and Vilas County that were experiencing moderate drought conditions earlier in the month, were classified as severe drought starting on the 27th of the month, and continuing into April of 2013.

Beginning in 2013, improved rainfall across the Midwest gradually relieved the drought in Wisconsin. Nationally, however, what is being tagged at the 2012-2015 North American Drought has affected over 80% of the U.S. as well as parts of Canada and Mexico, and drought continues to affect parts of the country. This drought is on track to exceed the 1988-89 drought, which also affected Wisconsin/Oneida County, as the costliest natural disaster in U.S. history.

Oneida County was one of 64 counties that were included in a Presidential Emergency Declaration for the drought of 1976-1977. Statewide agricultural losses during this drought were set at \$624 million. Oneida County suffered fire losses in local forests and farmers suffered great loss of potato and hay crops. A number of wells in the County went dry and financial assistance was needed to drill new ones. Federal monies totaled only 19% of losses attributed to the drought.

Despite drought events, there are no incidences of excessive heat listed by the NCEI for Oneida County between 2011 and 2022. The last excessive heat event reported by the NCEI was in 1999 when consecutive days between July 23 and July 31 of high temperatures combined with high humidity levels resulted in heat related illnesses and caused some roads to buckle.

DROUGHT / EXTREME HEAT VULNERABILITY ASSESSMENT:

Droughts can have a dramatic effect on the potato and other farms as well as forestry enterprises located throughout Oneida County. With forestry and agriculture being important sectors of the County's economy, droughts can have disastrous effects. Even small droughts of limited duration can significantly reduce crop growth and yields, adversely affecting farm income. More substantial events can decimate croplands and result in total loss, hurting the local economy.

Irrigation can negatively impact the environment by drawing water that naturally goes to aquifers and surface water. Drought can exacerbate the problem when high withdrawal rates versus little precipitation deplete waterbodies and aquifer supplies, therefore decreasing drinking water supplies, drying streams, and hindering aquatic and terrestrial wildlife. During severe droughts, some wells - mainly private wells - will go dry.

Another significant area of impact from drought includes the tourism sector of the economy. As lake levels go down, there is less tourism seen in the County. The recent drought conditions reduced water levels on many lakes across the County.

Droughts can trigger other natural and man-made hazards as well. They greatly increase the risk of forest fires and wildfires because of extreme dryness. In addition, the loss of vegetation in the absence of sufficient water can result in flooding, even from average rainfall, following drought conditions.

The following is a list of things that may be adversely affected by a drought. Much of these community assets can be referenced in Part II.

- Infrastructure – municipal water supplies
- Surface water –groundwater reserves, recreation, and wildlife
- Forests
- Agricultural - crops, livestock

The areas most susceptible to drought conditions would be agricultural towns. Agricultural land is scattered throughout the County but largely the Towns of Cassian, Crescent, Newbold, Nokomis, Schoepke, Stella, Sugar Camp, and Three Lakes.

According to the Wisconsin Emergency Management, excessive heat has become the most deadly hazard in Wisconsin in recent times. Extreme heat can happen anywhere within Oneida County affecting everyone, however the elderly and young are the ones with the highest risk of getting heat related injuries, which can lead to death. Ways to prevent

injuries include wearing light-colored clothing, drink plenty of water, slow down, and do not stay in the sun for too long.

FUTURE PROBABILITY AND POTENTIAL DOLLAR LOSSES – DROUGHT/EXTREME HEAT:

Based on the historic data presented here (frequency of past events), Oneida County can expect a drought every ten years on average, which is a probability of 0.10 or a 10 percent chance in a given year. Significant severe drought is somewhat less common, affecting Wisconsin once about every 15 years.

Drought is another hazard lacking good loss figures at the county level. However, a look at aggregate data from two previous major droughts for which figures are available can give some indication of potential impact. Those droughts resulted in losses of \$9.6 million (1976-77) to \$18 million (1987-88) per county in Wisconsin on average.

Normally, central Wisconsin is known for its cold winters, however, extreme heat waves may affect Oneida County in the future. Oneida County can expect a heat wave once about every 17 years for about a 6 percent chance in a given year based on the historic data presented.

HAZARD ANALYSIS: EPIDEMIC / PANDEMIC

Background On Epidemic / Pandemic Hazard:

Communicable diseases, sometimes called infectious diseases, are illnesses caused by organisms such as bacteria, viruses, fungi and parasites. Sometimes the illness is not due to the organism itself, but rather a toxin that the organism produces after it has been introduced into a human host. Communicable diseases may be transmitted (spread) either by: one infected person to another, from an animal to a human, or from some inanimate object (doorknobs, table tops, etc.) to an individual. Some communicable diseases can be spread in more than one way.

Pandemic Influenza is a global disease outbreak. An outbreak occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily from person to person, causes serious illness or death, and can sweep across the county and around the world in a very short time frame.

History of Epidemic / Pandemic in Oneida County:

COVID-19 is a disease caused by a new virus strain that began spreading in people in December 2019. On March 11, 2020 the COVID-19 outbreak

was characterized as a pandemic by the World Health Organization. Then on April 4, 2020 a Presidential Disaster Declaration was signed for the pandemic in the United States. Since then, the pandemic has been dynamic and constantly changing with cases surging in waves coinciding with new variants of the virus. As of October 2022, the pandemic was in a bit of a lull, but new daily cases were still significant with expectations of increasing again. So far, the U.S. Center for Disease Control has reported that there have been approximately 96,704,026 cases of COVID-19 in the United States alone with a death toll now exceeding 1 million.

Influenza Pandemics are naturally occurring events. Global outbreaks have occurred four times in the last century, in 1918, 1957, 1968 and 2009. The greatest loss occurred in 1918 when the Spanish Flu (H1N1) killed an estimated 20-40 million people worldwide between 1918 and 1919. The mortality rate in the United States was 550,000. The Asian Flu (H2N2) occurred from 1957 to 1958 with a mortality rate of 70,000 in the United States. The Hong Kong Flu (H3N2) occurred from 1968 to 1969 with a mortality rate of 34,000 in the United States.

2009 saw the rise of a new variant of the H1N1 virus, popularly referred to as the Swine Flu. Lab confirmed deaths from Swine Flu total about 14,000 worldwide with 3,400 deaths in the United States. However, most experts now agree that the actual death toll attributable to the 2009 Swine Flu is 10 to 15 times the confirmed number. Spread of H1N1 flu occurs in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through close range coughing or sneezing by people with influenza. As a result of preparation and mitigation strategies such as vaccinations and public education, the threat of a full blown H1N1 pandemic in the U.S. has receded. The possibility for a pandemic, though, still exists.

A previous pandemic flu threat that still looms is the avian flu. Birds can contract avian flu and pass it along to humans. Some strains of the avian flu are more virulent than others. Public health experts continue to be alert to the risk of a possible re-emergence of an epidemic of avian among people primarily in Asia in 2003. People who had been very close contact with infected birds (for example, people who lived with chickens in their houses) contracted a virulent form of avian flu and there was a high death rate from this disease. Thus far, the avian flu virus has not mutated and has not demonstrated easy transmission from person to person. However, were the virus to mutate in a highly virulent form and become easily transmissible from person to person, there would be significant potential for a pandemic that could disrupt all aspects of society and severely affect the economy.

The Oneida County Health Department tracks communicable disease through a channel of communications at the local, state and regional levels between public health, private physicians, hospitals, and labs. This communication channel allows for prompt investigation of possible outbreaks and unusual situations, and to implement control measures to minimize further transmission of disease to others.

In Oneida County, there have been 10,159 total cases of COVID-19 resulting in 145 deaths so far as of 10/16/22. For Wisconsin, cases are up to 1.88 million with 15,352 deaths. By comparison, there were 13,511 confirmed or probable cases of the 2009 H1N1 from April 2009 to March 2010 with 1,320 hospitalized and 55 deaths across Wisconsin.

The next epidemic / pandemic situation may not be a "flu" but could be a developing "super bug" such as antibiotic resistant MRSA or some as yet unknown bacteria or virus.

Epidemic / Pandemic Vulnerability Assessment:

Most communicable diseases are dealt with through traditional health department activities. The complexity and magnitude of a Pandemic Influenza outbreak would tax the normal capabilities of the medical service community and the Emergency Management Department would assist in all activities surrounding an event of this severity.

The possibility of a communicable disease epidemic or pandemic outbreak is equal across the County, but the ability to predict where and when an event will occur is very difficult.

Future Probability and Potential Dollar Losses – Epidemic / Pandemic:

Post COVID-19, the future probability of a communicable disease / pandemic outbreak is difficult to determine. The probability would appear low, but the threat exists, and the impact of a widespread event is very severe as displayed by the effects of COVID-19. Significant economic disruption can occur due to loss of employee work time and costs of treating or preventing spread of the pathogen.

A probability of an outbreak might be calculated across a hundred year period. Based on the four major events identified here, the likelihood of an event occurring in any given year would be 4%.

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INTRODUCTION

Hazard mitigation is any action taken to reduce or eliminate the long-term risk to human life and property damage from natural hazards. This chapter describes the mitigation goals and actions to be taken by Oneida County and the local units of government within the County for each of the hazards identified in Part III – Risk Assessment. The intention is to reduce or avoid long-term vulnerability to the identified hazards.

Part IV of the Oneida County All Hazards Mitigation Plan Update will discuss the following factors in establishing the multi-jurisdictional mitigation strategies:

- Benchmark Progress of Previous Plan 2016-2020
- Review of Mitigation Goals
- Prioritize Identified Mitigation Strategies
- Update Mitigation Action Plan

PROGRESS REPORT 2016 - 2020

Table 18 identifies the completed, deleted or deferred mitigation actions from the previous (2016) Plan. For each action recommendation, a brief status report is provided which describes the progress made on that measure. If an item remains unchanged, a description is provided as to why no action has been taken and whether that item is deferred to the new Plan.

The table also provides the new status of each recommendation with regard to the updated Plan alongside the original timeframe target for comparison. Many of the recommendations are on-going efforts and are carried over as such in the updated action plan. Some have had significant progress or have been deferred, but are recommended for further action with new target date or on-going status. If the recommendation has been completed with no further specific action anticipated within the next five year planning period, it is shown as "Removed from list" and will not appear in the updated action plan. In some cases, an incomplete action is not selected for various reasons (noted) and is also shown as "Removed from list". In a few cases, related recommendations are combined as indicated.

This progress report serves as a benchmark for progress in achieving the multi-jurisdictional mitigation goals of Oneida County and the local jurisdictions that participated in the Plan.

TABLE 19 BENCHMARK FOR PROGRESS 2016 - 2020 PLAN			
2016-2020 Plan Measure	Progress Report	Original Status	New Status
Continue to promote the increased use of NOAA weather radios.	Received grants to purchase and distribute NOAA alert radios. County EM promotes and sells the radios.	On-going (1)	On-going (1)
Continue to add/update EM Department link off the existing County web site	Website actively maintained with hazard information.	On-going (2)	On-going (2)
Maintain County Emergency Response Zone Atlas - update, reprint and distribute.	Fundings was delayed until 2022. Atlas will be printed in 2023 and distributed.	2017 (3)	2023 (3)
Replace structure address and road name signs with new, improved reflectivity to aid in emergency response.	Towns maintain road signs based on federal regulations as needed.	2019 (4)	Removed from list
Continue training for Law Enforcement, Fire, EMS, First Responders and the public in i.d. of dangerous weather formations.	County coordinates training sessions with National Weather Service each year.	Annual (5)	Annual (4)
Consider countywide disaster shelter plan including ID of potential shelters, etc.	Limited progress to date. Still considered important at County level due to various shelter issues.	2020 (6)	2025 (5)
Cut back brush and trees along town roads where necessary to prevent roads being closed during storms.	On-going process to keep up with growth of vegetation along road corridors. Identified in two consecutive mitigation surveys.	On-going (6)	On-going (6)

TABLE 19 <i>Continued</i>			
<i>2016-2020 Plan Measure</i>	<i>Progress Report</i>	<i>Original Status</i>	<i>New Status</i>
Build new FD w/ shelter. Consider 2 nd station	No progress on securing funds to build 2 nd stations.	2018 (8)	Removed from list
Install emergency generators to ensure operation of critical facilities...	Limited progress. New survey results incorporated.	2017 (8)	2025 (7)
Assist in development of business interruption plans to help area businesses deal with and recover from a disaster event.	Limited progress due to lack of staff time. Continue to look for options to help businesses create plans	2016 (10)	2027 (8)
Upgrade emergency communications equipment.	Extensive equipment upgrades to county-wide communication equipment. On-going maintenance needed.	Ongoing (9)	On-going (9)
Identify buildings that will provide protection to the public in the event of a tornado warning.	A number of buildings have been identified. Some have been evaluated and used, while some need further study. More comprehensive approach needed.	2019 (12)	On-going (10)
Identify and construct tornado shelters in areas where deficient.	County has applied for funds for this recommendation and been denied. Need still exists.	On-going (13)	On-going (11)
Install emergency warning sirens.	Some towns continue to maintain sirens. City officials still want to add another siren for coverage.	2020 (14)	2024 (12)
Promote the planting of windbreaks to protect farmsteads, buildings & open fields from high winds.	A number of plantings have been installed around the County, but more is needed.	On-going (15)	On-going (13)

TABLE 19 <i>Continued</i>			
2016-2020 Plan Measure	Progress Report	Original Status	New Status
Promote lightning safety at areas of concern such as golf courses, country clubs, etc.	On-going part of Co. EM public informational effort. Golf carts have WiFi/GPS weather alerts.	On-going (16)	On-going (14)
Continue NFIP Compliance - City/County.	On-going efforts of the City and County.	On-going (17)	On-going (15)
After flood events investigate voluntary acquisition of buildings in floodplain / with flood damage.	No progress to date. There have not been flooding events to trigger this strategy since its inception in the previous mitigation plan.	As needed (18)	As needed (16)
Complete Lincoln St. and Davenport St. storm sewer improvement projects.	Davenport and Lincoln Streets project completed.	2020 (19)	Removed from list
ID/repair town roads sub. to washout / improve drainage.	Some progress by various towns. On-going process.	On-going (20)	On-going (17)
Update aerial photography used by the County Land Information Dept - County GIS coverage.	Photos acquired New digital orthophotography to be taken again in 2024-5 w/ Oneida as part of regional consortium.	2019 (21)	2024 (18)
Continue support for HazMat Response Team to respond to hazardous spill situations.	On-going and active County and regional haz-mat teams.	On-going (22)	On-going (19)
Continue to provide outreach efforts to homeowners on protecting homes and structures from wildfires.	County to work with WisDNR on public information and awareness through activities like brochure distribution, etc.	On-going (23)	On-going (20)

TABLE 19 <i>Continued</i>			
<i>2016-2020 Plan Measure</i>	<i>Progress Report</i>	<i>Original Status</i>	<i>New Status</i>
Acquire new tenders, water tankers and other fire equipment to improve firefighting capability and implement the MABAS system as being developed in Oneida County.	County continue to work with local towns to acquire improved equipment	2020 (24)	2024(21)
Provide ample training for volunteer fire fighters for larger fires.	Regular training & exercises conducted cooperatively by WisDNR, Oneida County & local municipal FDs. Expand to include MABUS, etc.	On-going (25)	On-going (22)
Support establishment of Firewise Communities across the County.	Limited progress but still considered valuable wildfire mitigation measure in wooded rural communities such as throughout Oneida County.	On-going (26)	On-going (23)
Develop Community Wildfire Protection Plans in high risk towns.	Limited progress due to overall low priority for County, but should be encouraged for very high risk towns.	2020 (27)	On-going (24)
Identify and develop warming shelters in strategic locations around the County.	County will continue to work on securing locations of shelters throughout the county.	On-going (28)	On-going (25)
Use natural vegetation to create "living snow fences".	A number have been installed but more are needed.	On-going (29)	On-going (26)
Acquire new snow removal equipment.	Town of Scheopke acquired new snow removal equipment	2016 (30)	Remove from List

TABLE 19 Continued			
2016-2020 Plan Measure	Progress Report	Original Status	New Status
Promote winter hazard awareness, including home and travel safety measures...	County does annual winter awareness "PR" campaign.	On-going (32)	On-going (27)
Promote heat hazards awareness including, protecting oneself and watching out for others.	County does heat awareness "PR" campaign as needed.	On-going (32)	On-going (28)
Encourage farmers that irrigate to use irrigation scheduling programs.	Ongoing efforts of the County UWEX and FSA Offices.	On-going (33)	On-going (29)
County should be prepared on how to inform farmers during drought	Ongoing efforts of the County UWEX and FSA Offices.	On-going (34)	On-going (30)
Inform farmers on purchasing crop insurance.	Ongoing efforts of the County UWEX and FSA Offices.	On-going (35)	On-going (31)

LOCAL HAZARD MITIGATION GOALS

The mitigation strategy is based on a set of goals to reduce or avoid long-term vulnerabilities to the hazards identified in the Risk Assessment. The goals were established by the previous Mitigation Plan Taskforce during the development of the original plan. The LEPC reviewed the goals and concurred that these goals continue to represent the desired conditions to strive for through the mitigation efforts of the County and municipalities.

The mitigation goals for reducing or avoiding the long-term vulnerability of Oneida County are as follows:

- Prepare and protect residents and visitors from all hazards.
- Protect the health, safety, and welfare of county residents and visitors, along with mitigating future loss of property from tornados.
- Minimize the threat to human life and property damage caused by severe storms associated with hail, high wind and lightning.
- Lessen the impact floods have on people, property, and the environment.

- Eliminate the loss of life and reduce the risk of property damage in downstream areas that result from a dam failure.
- Protect people and natural resources from adverse affects of hazardous material incidents.
- Protect the safety and property of residents from forest and wild- fires.
- Create safety awareness to citizens and travelers of Oneida County to protect them during and after winter storm events or extreme cold outbreaks.
- Minimize loss while maintaining water supplies during times of drought.
- Create safety awareness in citizens and visitors of Oneida County to protect them during periods of extreme heat.

PRIORITIZATION OF STRATEGIES

The LEPC considered a number of factors in identifying and ranking proposed mitigation strategies. The matrix, below, describes the factors incorporated into the prioritization process. The resulting priority of each strategy is shown in the summary Table 19.

Prioritization Factors for Oneida County Mitigation Strategies

<i>Strategy Prioritization Factor</i>	<i>Description of Factor Considerations</i>
Priority of Hazard Type	The ranking of hazard types, tornado, flooding, etc., accounts for threat to human safety and possible property damage and was carried over to groups of strategies by hazard type. Strategies believed to benefit multiple hazards (listed under "All Hazards") were valued higher.
Ease of Implementation	Strategies where existing staff and resources are adequate were valued higher than those where additional resources are necessary. Consideration was also given to strategies that meet other countywide goals or incorporated as part of another county project. Project timing was also a consideration as to when funding such as grant applications might be available and when various activities could be scheduled.
Perceived Cost versus	Although a detailed cost-benefit analysis was deemed beyond the scope of this

Potential Benefit	study, the Committee weighed the perceived costs of each strategy against the potential benefit anticipated. Proposals that seemed economically unfeasible were rejected.
Multi-jurisdictional Application	Strategies benefiting multiple jurisdictions were valued more than those pertaining to fewer jurisdictions.

Members of the LEPC weighed each strategy based on these prioritization factors and assigned a high, medium or low rating to reflect their relative level of priority for that strategy. Consensus was achieved on the overall priority for the County or local units as shown in Table 19.

MITIGATION ACTION PLAN

The Update mitigation strategies are organized by hazard beginning with some overall strategies that apply to a number of different hazards and are listed under the category, “all hazards”. For each hazard, a goal was established as to what the County intends to achieve by implementing the specific action strategies and is based on the risk assessment findings. Each action strategy is then briefly described and followed by a discussion of the jurisdictions/agencies that will pursue the action including the proposed lead jurisdiction/agency.

Each section of this part is broken down as follows:

Goal:

Broad, long-term mitigation goals to reduce or avoid vulnerabilities to the identified hazard are stated.

Action:

Each action strategy proposed to aid in achieving the overall goal for the identified hazard is described. A given action strategy may be comprised of a number of related sub-actions.

Participating Jurisdictions:

The proposed lead agency or lead jurisdiction is identified along with a listing of the other agencies or jurisdictions that the recommended action applies to. This does not preclude other agencies or jurisdictions from participating in the action.

The chapter concludes with a summary of the recommended mitigation strategies shown in Table 19. Table 19 also contains project cost estimates where available, time frames, and potential resources to implement.

HAZARD: ALL HAZARDS

GOAL:

Prepare and protect residents and visitors from all hazards.

ACTION 1:

The County will continue to promote use of National Oceanic and Atmospheric Administration (NOAA) weather radios as a primary notification system for weather advisories to the general public and special locations. Over the course of the Plan period, County EM Staff will reach out to mobile home parks and other select locations to ensure that the radios are still in use and available. NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting continuous weather information direct from a nearby National Weather Service office. NWR broadcasts National Weather Service warnings, watches, forecasts and other hazard information 24 hours a day. NWR is not only for tornados, but also for other hazards as well making it a single source for comprehensive weather and emergency information. NWR also broadcasts warning and post-event information for all types of hazards--both natural and environmental (such as chemical releases or oil spills).

Participating Jurisdictions for Action 1:

Lead agency will be Oneida County Emergency Services. Jurisdictions participating in this action will include: Oneida County, City of Rhineland, and all Towns.

ACTION 2:

The County will continue to add and update information on its Emergency Management Department web site. The web site should contain information describing the types of natural and man-made hazard disasters in the County and how to respond when a hazard threatens. The site should also contain information on ordinances pertaining to hazards, locations of tornado shelters, and links to other sites with useful information on related matters such as burning permits and weather conditions.

Participating Jurisdictions for Action 2:

Lead agency will be Oneida County Emergency Services. The only directly participating jurisdiction will be Oneida County.

ACTION 3:

The county-wide emergency response zone atlas should be updated. Often referred to as a fire zone atlas, these atlas books were originally conceived to help direct fire fighting and evacuation operations in rural areas at high risk for wildfire. A number of counties across the state have developed, or are developing these atlases, typically sponsored by WisDNR. Recognizing their potential value in responding to a wide variety of hazard events, many counties are utilizing them as a tool in responding to and managing other situations beyond fire.

Zones are drawn around groups of structures based on factors related to access and evacuation. The zones are named, colored-coded and indexed for ease of reference. Atlas books are distributed to police, fire and EMS units responsible for responding to emergency situations in rural areas of the county covered by the atlas.

Participating Jurisdictions for Action 3:

Lead agency will be the Wisconsin Department of Natural Resources. Jurisdictions participating in this action will include Oneida County and all Towns including corresponding police and fire departments.

ACTION 4:

The County should continue and promote the training of Law Enforcement Officers, Municipal Fire Department Members, Emergency Medical Services Personnel, and Municipal First Responders in the identification of dangerous weather patterns. The National Weather Service provides this type of training through their Weather Spotter Program. Oneida County should continue to sponsor this training annually.

Participating Jurisdictions for Action 4:

Lead agency will be Oneida County Emergency Services in conjunction with the National Weather Service - Green Bay. Jurisdictions participating in this action will include Oneida County, City of Rhinelander, and all Towns including corresponding police and fire departments, EMS and First Responders.

ACTION 5:

Shelter related concerns were identified during the development of this All-Hazards Plan. These needs were confirmed by the Wolf River Watershed Discovery Report recently completed by FEMA. Issues identified included mobile home parks, campgrounds and seasonal housing, among others. To address these concerns, the County should work to develop a countywide disaster shelter plan. One issue with shelters may stem from lack of knowledge regarding existence of shelters and procedures for use. Plan distribution and public informational efforts are recommended.

The plan should identify available shelters by function and determine where coverage is deficient. The function of a shelter is to protect people during a disaster event, to accommodate displaced people in the aftermath, or both. Existing facilities (schools, churches, public buildings, etc.) should be evaluated for suitability or locations determined for new structures. Mobile home parks, campgrounds and County parks within the County lack shelters and are a particular concern.

Establish zones to help people to identify which shelter they should go to and procedures for notification. It is also important to evaluate shelters for suitability for various types of hazards. For example, a shelter located within a floodplain may not be the best place to send people during a storm that could result in flooding. Adequate heat (and back-up source of energy to run it) is an important consideration when seeking to shelter people during a winter weather power outage. Local sponsors should be identified to help maintain shelters and ensure they are open in time of need. Transportation options should also be considered especially for the elderly and those with disabilities. The transportation and subsequent shelter of persons with special medical or other needs are critical factors to address.

Based on the Wolf River Watershed Discovery Report, FEMA may be able to provide safe room location analysis and funding/grant assistance for the construction of safe rooms. See also recommendations 12 and 13, below.

Participating Jurisdictions for Action 5:

Lead agencies will be Oneida County Emergency Services. Jurisdictions participating in this action will include Oneida County, City of Rhinelander, and all Towns. The American Red Cross Chapter should also be consulted.

ACTION 6:

In response to the mitigation issues survey, the Towns of Little Rice, Three Lakes, and Pine Lake each identified the need to cut back trees and brush along certain town roads to help prevent those roads from becoming impassible during storms.

Participating Jurisdictions for Action 6:

Lead agencies will be the Towns of Little Rice, Three Lakes, and Pine Lake. These Towns will be the only directly participating jurisdiction. Other jurisdictions may participate in this type of action as the need arises.

ACTION 7:

The Town of Stella and Town of Sugar Camp identified a need to install emergency generators in order to ensure the continued operation of critical

facilities (i.e. town hall and fire station) during a power outage. One option might be the utilization of portable generators, however, the facility needing power would require special accommodations (transfer switch) be pre-installed to connect the generator and allow it to power the building/facility.

Participating Jurisdictions for Action 7:

Lead agencies will be the Town of Stella and Town of Sugar Camp. These communities will be the only directly participating jurisdictions.

ACTION 8:

Assist in the development of business interruption plans to help area businesses deal with and recover from a disaster event. It is estimated that up to 95% of businesses in Oneida County have not made such plans. A low percentage of businesses destroyed in a natural disaster actually reopen. To counteract this issue, information and assistance should be provide to businesses in the County. Emergency Management has done business workshops in the past, and the expertise of the County Economic Development Corporation is essential. FEMA has templates and information on its website.

Participating Jurisdictions for Action 8:

Lead agency will be Oneida County Economic Development Corporation in conjunction with Emergency Management. Jurisdictions participating in this action will include Oneida County and the City of Rhineland.

ACTION 9:

Due to on-going changes in regulations and technology, Oneida County and local government emergency services must continue working together to further upgrade emergency communications equipment. Significant upgrades have been completed over the last few years and establishing dispatch back-up systems between Oneida and Vilas Counties. However, some local departments and agencies continue to struggle with communications. When upgrading communications equipment, it is important to consider interoperability between departments and agencies that may have to work together in response to a hazard incident. Ongoing communication updates will need to continue as needed.

Participating Jurisdictions for Action 9:

Lead agency will be Oneida County Emergency Services. Jurisdictions participating in this action will include Oneida County, City of Rhineland, and all Towns.

HAZARD: TORNADOS

GOAL:

Protect health, safety, and welfare of county residents and visitors, along with mitigating future loss of property from tornados.

ACTION 10:

The County and the local units of governments should identify buildings that will provide protection to the public in the event of a tornado or other hazard, particularly in the case of mobile home parks. There are a number of buildings in the County that can accommodate people during a tornado or other hazard. Closed school buildings are maintained by the District and may have the potential to act as a shelter if needed. Part of this effort would be to work with building owners to reach understanding on use of facilities as shelter. Refer also to recommendation 6, above.

Participating Jurisdictions for Action 10:

Lead agency will be Oneida County Emergency Services. Participating jurisdictions will include: Oneida County, City of Rhinelander, and all Towns.

ACTION 11:

Upon identifying existing buildings that could provide protection, the County and its local units of governments should identify areas that remain deficient in tornado shelters, such as mobile home parks, campgrounds and County parks. Shelters should be planned and constructed in these areas. Structures available to the public during tornado warnings should be publicized by a number of sources such as area newspapers, signs, County maps, and the County web site.

Funding for the construction of shelters may be available through the Wisconsin Department of Commerce's Committee Development Block Grant (CDBG), and FEMA has opened some of its mitigation grants to funding safe rooms and shelters. Oneida County did apply for funding to build shelters but was not awarded. Refer also to recommendation 6, above.

Participating Jurisdictions for Action 11:

Lead agency will be Oneida County Emergency Services. Participating jurisdictions will include: Oneida County, City of Rhinelander, and all Towns.

ACTION 12:

Early warning related concerns were identified during several different parts of the plan process. Despite the trend of many communities abandoning their warning sirens due to liability or maintenance issues, other communities continue to support the use of warning sirens; purchasing new units to replace aging

equipment or fill gaps in coverage. The Town of Minocqua adopted a warning siren policy in 2011.

Rhinelanders officials discussed early warning at the City Involvement Meeting. Funding has been a stumbling block for additional warning sirens.

Participating Jurisdictions for Action 12:

Lead agency will be City of Rhinelanders. The City would be the only directly participating jurisdiction.

HAZARD: SEVERE THUNDERSTORMS / HAIL / LIGHTNING / WIND

GOAL:

Minimize the threat to human life and property damage caused by severe storms associated with hail, high wind and lightning.

ACTION 13:

The County should continue to promote the planting of windbreaks to protect farmsteads, buildings, and open fields from high winds. Established trees and shrubs can slow wind on the downwind side of a windbreak for a distance of 10 times the height of the trees. The windbreaks can also reduce soil erosion, act as snow fences, provide wildlife food and cover, and offer a number of other benefits.

There are resources available for area landowners use to help install and pay for windbreaks. The County Land and Water Conservation Department provides assistance to help establish windbreaks. Windbreaks can also be established through the Conservation Reserve Program (CRP), Conservation Enhancement Reserve Program (CREP), Conservation Security Program (CSP), and Environmental Quality Incentive Program (EQIP) from the USDA Natural Resource Conservation Service (NRCS).

Participating Jurisdictions for Action 13:

Lead agency will be Oneida County Land Conservation Department. Oneida County works cooperatively with NRCS on this activity. Participating jurisdictions will include Oneida County and all Towns.

ACTION 14:

Due to the wide variety of variety of recreation activities throughout the County, public awareness of proven lightening safety guidelines to reduce risk should be promoted. Areas of concern include golf courses, country clubs, parks (particularly major parks such as Hodag Park in Rhinelanders, ball fields (and other athletic fields), public beaches and boat launches. Efforts should be made to get managers and staff of such facilities "up to speed" with procedures

and training for lightning safety. Another common measure is erecting of signs that inform people when to get out of the water or off a golf course (etc.) when lightening threatens.

Participating Jurisdictions for Action 14:

Lead agency will be Oneida County Emergency Services. Participating jurisdictions will include: Oneida County, City of Rhineland, and all Towns.

HAZARD: FLOODING / DAM FAILURE

GOAL:

Lessen the impact floods have on people, property, and the environment.

GOAL:

Eliminate the loss of life and reduce the risk of property damage in downstream areas that result from a dam failure.

Please note: actions denoted with an asterisk () relate to compliance with the National Flood Insurance Program (NFIP).*

ACTION 15*:

Communities within Oneida County currently participating in the National Flood Insurance Program (NFIP) should work to ensure continued compliance. Compliance primarily entails adopting and enforcing floodplain management regulations that meet minimum criteria. Oneida County and the City of Rhineland are in the program. All towns are included under the umbrella of the County through the state mandated county shoreland zoning.

Participating Jurisdictions for Action 15:

Lead agencies include Oneida County Planning and Zoning and the City of Rhineland. The only directly participating jurisdictions are Oneida County and the City of Rhineland.

ACTION 16*:

Oneida County should seek to mitigate the impacts of flooding through the voluntary acquisition and demolition of structures in the floodplain, particularly those with flood damage following a flood event.

Participating Jurisdictions for Action 16:

Lead agencies include Oneida County Planning and Zoning and Emergency Management and the City of Rhineland. Participating jurisdictions will include: Oneida County and City of Rhineland.

ACTION 27:

The County, City and all Towns should identify and repair segments of road subject to washout, and clean out and improve road drainage ditches as needed. Affected communities should look at improving drainage around or elevating roads at risk of washout or overtopping during flood conditions. Such areas may become isolated and inaccessible during or after a disaster event hampering access by law enforcement or rescue personnel.

The County and its municipalities should utilize grants through the Wisconsin DOT to repair minor flood damage to roadways. Mitigation efforts through this program should reconstruct the flood-damaged roadways to a point where future flooding would not cause additional damage. This program can be utilized for minor damage outside of a Presidential Disaster Declaration.

Participating Jurisdictions for Action 17:

Lead agencies/participating jurisdictions will be the County, City or Town as determined by jurisdiction of the road(s) in question.

ACTION 18:

The aerial photography that is used with the County Geographic Information System (GIS) should be updated. Currently, the County is participating with the Wisconsin Regional Orthophotography Consortium (WROC) to pool resources and reduce the cost of the imagery on a five year cycle. Updated photography could be used to identify structures that were constructed or demolished in the flood zones. This could serve as an important planning tool. Aerial photography has potential use for planning and response to other hazard situations as well.

Participating Jurisdictions for Action 18:

Lead agency will be the Oneida County Land Information Office. Oneida County will be the only directly participating jurisdiction.

HAZARD: HAZARDOUS MATERIALS INCIDENTS**GOAL:**

Protect people and natural resources from adverse affects of hazardous material incidents.

ACTION 19:

The County should continue to support its County Level and Regional Hazardous Materials Response Teams to respond to hazardous spill situations. Several factors support this, such as the concentration of fixed-facilities in Rhinelander and around the County, the level of traffic carrying hazardous materials over the major transportation routes, the rail line and the pipeline. Maintaining these

teams provides more immediate response to incidents that require a Hazardous Material Team response. The 2014 Commodity Flow Study for Oneida County contains a variety of recommendations related to the operations and training for the Team(s) which should be incorporated into the ongoing maintenance of the HazMat Team(s).

Participating Jurisdictions for Action 19:

Lead agencies will be Oneida County Emergency Services along with the Oneida County HazMat Team and the Local Emergency Planning Committee (LEPC). Participating jurisdictions include Oneida County, City of Rhineland, and all Towns.

HAZARD: FOREST FIRES AND WILDFIRES

GOAL:

Protect the safety and property of residents from forest and wildfires.

ACTION 20:

The County and DNR should continue to make outreach efforts to homeowners on protecting their homes and structures from wildfires. Since Oneida County is mostly rural with many industrial woodland parcels, emphasis should be placed on building construction materials and establishing defensible areas around structures. Roofs and exterior siding should be made of ignition-resistant materials. At least 30 feet should be left between homes and surrounding combustible vegetation. Outreach efforts can exist in the form of web sites, local newspaper articles, and pamphlets to homeowners.

Participating Jurisdictions for Action 20:

Lead agencies will be Oneida County Emergency Services with WisDNR. Oneida County will be the only directly participating jurisdiction.

ACTION 21:

In response to the mitigation issues survey, the need for a new fire tender (tanker) was identified by the Town of Three Lakes to improve their firefighting capability. Expanding on this recommendation, the LEPC broadened the scope of the recommendation to include other fire engines, tenders, other necessary vehicles and equipment for the purposes of improving the firefighting capabilities of fire departments across the County with particular attention to providing a complete complimentary array of resources for effective MABAS implementation in the County.

Participating Jurisdictions for Action 21:

Lead agencies will be the Town of Three Lakes and other communities/fire departments seeking to improve firefighting capabilities and their MABAS

response. Participating jurisdictions will include: Oneida County, City of Rhinelander, all Towns, and their corresponding fire departments.

ACTION 22:

Local fire departments should work with WisDNR to continue to provide training for joint response to larger fires including execution of MABAS protocols and operations.

Participating Jurisdictions for Action 22:

Lead agencies will be Oneida County Emergency Services and fire districts serving Oneida County. Participating jurisdictions will include: Oneida County, City of Rhinelander, and all Towns.

ACTION 23:

Support establishment of Firewise Communities across the County. The national Firewise Communities program is a multi-agency program, which promotes partnerships between community leaders, homeowners, planners, developers and others to promote wildfire preparedness - before a fire starts. The Firewise approach emphasizes local community responsibility for designing and maintaining safe communities through land use planning, mitigation activities, collective decision-making and effective response.

Firewise Communities/USA is a project of the National Wildfire Coordinating Group's Wildland/Urban Interface Working Team and is the latest component of the Firewise program. According to the NWCG, the Firewise Communities concept "provides citizens with the knowledge necessary to maintain an acceptable level of fire readiness, while ensuring firefighters that they can use equipment more efficiently during a wildland fire emergency."

Becoming a Firewise Community involves a 7-step process.

- Step 1: Contact Firewise
- Step 2: Site visit with local Firewise Communities USA representatives
- Step 3: Community representatives create a multi-discipline Firewise board/committee
- Step 4: Assessment & evaluation
- Step 5: Create plan – Create agreed-upon, area-specific solutions to its WUI fire issues
- Step 6: Implement solutions – Local solutions are implemented following a schedule designed by the local Firewise board and WUI specialist.
- Step 7: Apply for recognition

Participating Jurisdictions for Action 23:

Lead agency will be the respective jurisdictions. Jurisdictions participating in this action will include: Oneida County, City of Rhinelander, and all Towns.

ACTION 24:

Towns with high risk of wildfire should develop Community Wildfire Protection Plans (CWPPs). In Oneida County, the majority of towns have been identified by WDNR as very high or high risk for wildfire including: Hazelhurst, Lake Tomahawk, Little Rice, Pine Lake, Stella, and Sugar Camp

A CWPP identifies and prioritizes areas for hazardous fuels reduction treatments and recommends types and methods of treatment that will protect at-risk areas and critical infrastructure. WisDNR has grant funding available for community wildfire protection planning.

One concept included the development of a single, multi-jurisdictional wildfire protection plan covering the entire County including all the high-risk towns and those of concern. However, the WisDNR has decided not to pursue this approach and maintains its interest in doing CWPPs on town-by-town basis.

Participating Jurisdictions for Action 24:

Lead agency will be the respective jurisdictions. Jurisdictions participating in this action will include: Oneida County and the Towns of Hazelhurst, Lake Tomahawk, Little Rice, Pine Lake, Stella, and Sugar Camp.

HAZARD: WINTER STORMS / EXTREME COLD

GOAL:

Create safety awareness to citizens and travelers of Oneida County to protect them during and after winter storm events or extreme cold outbreaks.

ACTION 25:

Concern was expressed regarding the availability of adequate facilities, including heating units and reliable back-up power to ensure their operation, to serve as warming shelters around the County in the event of extreme cold weather. The County and the local units of governments should identify buildings that will provide protection to the public in the event of a cold outbreak. There are a number of buildings in the County that can accommodate people. Closed school buildings are maintained by the District and may have the potential to act as a shelter if needed. Part of this effort would be to work with building owners to reach understanding on use of facilities as shelter. Refer also to recommendation 6, above.

Participating Jurisdictions for Action 25:

Lead agency will be Oneida County Emergency Services. Participating jurisdictions will include: Oneida County, City of Rhinelander, and all Towns.

ACTION 26:

The County should encourage the development of snow fences using natural vegetation for public safety. **Using snow fences or “living snow fences”** (rows of trees or other vegetation) can limit blowing and drifting of snow over critical roadway segments. Assistance can be provided by the County Land and Water Conservation Department and NRCS to develop windbreaks. Windbreaks would be advantageous to the County Highway Department and towns to prevent blowing and drifting on roadways.

Participating Jurisdictions for Action 26:

Lead agencies will be Oneida County Land Conservation and Highway Departments. Participating jurisdictions will include: Oneida County and all Towns.

ACTION 27:

The County should promote winter hazards awareness, including home and travel safety measures, such as avoiding travel during winter storms. If travel cannot be avoided, having a shovel, sand, warm clothing, food, water, etc. should be encouraged to have in vehicles. Other winter / extreme cold problems identified include freezing of septic systems and residential LP Gas (extreme cold).

Participating Jurisdictions for Action 27:

Lead agency will be Oneida County Emergency Services. Oneida County will be the only directly participating jurisdiction.

HAZARD: DROUGHT / EXTREME HEAT

GOAL:

Minimize loss while maintaining water supplies during times of drought.

GOAL:

Create safety awareness in citizens and visitors of Oneida County to help protect them during periods of extreme heat.

ACTION 28:

The County and City should promote heat hazards awareness, including home and travel safety measures. Include suggestions regarding checking on neighbors or other known that live alone or that may be at a disadvantage in fending for themselves.

Participating Jurisdictions for Action 28:

Lead agency will be Oneida County Emergency Services. Participating jurisdictions will include: Oneida County and the City of Rhinelander.

ACTION 29:

The County should encourage farmers that irrigate to use irrigation scheduling programs and drip or misting systems. Also work with corporate growers. Research-based programs can assist growers in determining frequency and amounts of irrigation throughout the growing season. It can be extremely helpful during a drought.

Participating Jurisdictions for Action 29:

Lead agencies will be Oneida County Land Conservation and Oneida County UW-Extension. Oneida County will be the only directly participating jurisdiction.

ACTION 30:

The County should be prepared on how to inform farmers during times of drought. This could include feed assistance or financial assistance programs and managing crops and livestock during drought conditions.

Participating Jurisdictions for Action 30:

Lead agencies will be Oneida County Land Conservation and Oneida County UW-Extension. Oneida County will be the only directly participating jurisdiction.

Action 31:

The County should inform farmers on the advantages/disadvantages of crop insurance to preserve economic stability for farmers during a drought.

Participating Jurisdictions for Action 31:

Lead agencies will be Oneida County UW-Extension with FSA. Oneida County will be the only directly participating jurisdiction.

HAZARD: EPIDEMIC / PANDEMIC

ACTION 32

Work to implement the recommendations of the North Central Wisconsin Pandemic Assessment and Future Response Plan and the North Central Wisconsin Regional COVID-19 Recovery Plan. Both plans were prepared by the North Central Wisconsin Regional Planning Commission.

The purpose of the North Central Wisconsin Pandemic Assessment and Future Response Plan is to analyze various county and tribal response efforts related to the COVID-19 pandemic and to identify approaches to better address future

pandemics. The overarching goal is to better prepare the region for future public health related disruptions.

The Regional Health Pandemic Assessment and Future Response Committee included a group of experts representing every county throughout the region. The committee included those directing county health departments and tribal health departments. In addition, coordinators from various agencies including those dealing with healthcare emergency readiness, seniors, persons with disabilities, and other specialty populations served on the committee. This group responded to a questionnaire and met virtually throughout the 2021 calendar year. During these meetings, the committee was able to analyze the response to the COVID-19 global pandemic and identify strengths and weaknesses. Through this process, recommendations were created to better respond to pandemics and similar health related disruptions in the future, as follows:

Recommendation 1: Meet Public Health Mission Objectives

1. Modernize and streamline data management and surveillance technology. Local public health relied on the state through the Wisconsin Electronic Disease Surveillance System (WEDSS). Managing this system was staff intensive. Infrastructural improvements are needed.
2. Continue to explore ways to improve metrics within rural communities.
3. Encourage specific state-level guidance related to recommendations for business, educational and municipal facilities best practices in real time during communicable disease threats.
4. **Strengthen the department's** collection and dissemination of information that connects determinants of health with health outcomes.

Recommendation 2: Build on Intergovernmental and Interagency Collaboration

1. Continue to forge robust partnerships among health agency department and staff.
2. Continue to improve and enhance internal and external communication.
3. Continue to investigate opportunities for horizontal collaboration (among local health departments) and vertical collaborations (at the federal, state, and local levels).
4. Continue to create and enhance interagency partnerships to enhance local public health services.
5. Explore opportunities for larger public health departments to partner with smaller local health departments to share services, where and when this would allow a reduction in duplication and offer enhanced services to smaller departments.
6. Consider a regional approach to establish uniformity and consistency across county and tribal lines.

Recommendation 3: Advance Health Equity

1. Weave equity into all aspects of health planning and policy.
2. Engage interested members of the community to be trusted partners on health planning concepts.
3. Continue to engage and include stakeholders with a focus on equity in all regional and state initiatives. This could include community members and nontraditional partners associated with social determinants of health (SDOH) such as planners, law enforcement, schools, and community organizations.
4. Continue to prioritize health equity and meaningful community engagement.
5. Continue to ensure that outreach and educational efforts address social and structural determinants of health equities.

Recommendation 4: Invest in Public Health

1. Encourage federal and state investment in local public health foundational capabilities.
2. Encourage legislatures to actively protect public health authority at the state and local levels so that experts can continue to promote solutions that encourage economic growth, reduce inequities, and address chronic health conditions.
3. Increase per capita health funding in the State of Wisconsin.
4. Secure more sustained and flexible local public health funding.
5. Bolster recruitment and retention of employees to continue to attract and maintain a talented and diverse workforce.
6. Continue to provide those in leadership roles with training and resources they need to lead a strong and diversified public health department.
7. Explore dynamic staffing models that allow local health departments to expand staffing resources in response to communicable disease threats.

In the aftermath of disasters, the most important questions typically center around recovery, how to become less vulnerable to a disaster, and how to be better prepared to deal with a disaster event in the future. When attempting to find answers to these questions, it is clear that the COVID-19 pandemic has brought many issues and vulnerabilities to the forefront, as communities, businesses, residents, and the entire world-at large were not well-prepared to deal with the health emergencies and economic shocks that resulted from the pandemic.

The purpose of North Central Wisconsin Regional COVID-19 Recovery Plan is to guide economic stabilization, recovery, and resiliency efforts within the North Central Wisconsin Region in the face of the current pandemic as well as future events that cause economic shocks. The plan promotes activities that prevent, prepare for, and respond to the COVID-19 pandemic, and in particular, to the economic injury caused by the pandemic, within North Central Wisconsin.

The plan puts forth a set of strategies that will help the Region's local economies recover from and become more resilient to economic shocks by identifying best-practices that help spur economic stabilization and recovery in the wake of economic shocks and that will help build local economic resilience. Helping local recovery and resiliency efforts will help the regional economy as a whole recover and grow back even stronger than before the disaster struck.

Participating Jurisdictions for Action 32

Lead agency will be each respective jurisdiction. Jurisdictions participating in this action will include: City of Rhineland, and all Towns.

Table 20 - Summary of Mitigation Strategies

Mitigation Measures (See Expanded Text in Plan)	Cost Estimate	Existing and Potential Resources to Implement	Responsible Units	Project** Timeframe	Priority Level
ALL HAZARDS					
1 Continue to promote the increased use of National Oceanic and Atmospheric Administration (NOAA) weather radios, including targeted effort to refresh coverage at area mobile home parks.	Staff Time	Mitigation Grant Radio sales revenue	County EM Dept	On-going	Medium
2 Continue to add/update Emergency Management Department link off the existing County web site.	Staff Time	Dept. Budget	County EM Dept	On-going	Medium
3 Maintain County Emergency Response Zone Atlas - update, reprint and distribute.	\$20,000	WisDNR	WisDNR	2023	Medium
4 Continue training for Law Enforcement, Fire, EMS, First Responders, and the public in the identification of dangerous weather formations.	Staff Time	National Weather Service	County EM Dept	Annual	High
5 Consider county-wide disaster shelter plan including i.d. of potential available shelters, needs of special populations and facilities such as campgrounds, mobile home parks etc.	\$20,000	General Fund / Dept. Budget	County EM Dept	2025	Medium
6 Cut back brush and trees along town roads where necessary to prevent roads from being closed during storms.	Costs to be determined	General Funds	Towns of Little Rice, Three Lakes, Pine Lake & others as appropriate	On-going	Low
7 Install emergency generators to ensure operation of critical facilities during power outage or other disaster event.	\$20,000 ea.	General Funds / Dept. Budgets / Assistance to Firefighters Grants	Towns of Stella and Sugar Camp	2025	Medium
8 Assist in development of business interruption plans to help area businesses deal with and recover from a disaster event.	Staff Time	Preparedness/Public Private Partnership Workshop Grant	County EDC / City of Rhinelander	2027	Low
9 Upgrade emergency communications equipment.	Costs to be determined	General Funds / DOJ/OEC Funding Programs	County / City / All Towns	On-going	High
TORNADO					
10 Identify buildings that will provide protection to the public in the event of a tornado warning, particularly in the case of mobile home parks.	Staff Time	Dept. Budgets	County / City / All Towns	On-going	High
11 Identify and construct tornado shelters in areas where deficient, particularly in the case of mobile home parks.	\$300,000	CDBG Program / Mitigation Grants	Towns of Newbold, Pine Lake, Stella, Sugar Camp, & others as appropriate	On-going	High
12 Install emergency warning sirens.	\$23,000 ea.	General Funds	City of Rhinelander	2024	Medium
SEVERE THUNDERSTORM / HAIL / LIGHTNING / WIND					
13 Promote the planting of windbreaks to protect farmsteads, buildings & open fields from high winds.	Staff Time	NRCS funding programs	County LCD / NRCS	On-going	Low

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Mitigation Measures (See Expanded Text in Plan)	Cost Estimate	Existing and Potential Resources to Implement	Responsible Units	Project** Timeframe	Priority Level
14 courses, county clubs, parks, beaches and other recreation facilities	Staff Time	Dept. Budgets	of Rhinelander / All	On-going	Medium
FLOOD / DAM FAILURE					
15 Continue compliance in the National Flood Insurance Program - NFIP: County / City of Rhinelander.*	Staff Time	Dept. Budgets	County P&Z Dept./ City of Rhinelander	On-going	High
16 After significant flood events investigate voluntary acquisition and demolition of buildings in floodplain with flood damage.*	Cost to be determined	Mitigation Grants	County / City of Rhinelander	As needed	Low
17 ID and repair segments of town road subject to wash out. Clean out and improve town road drainage ditches as needed. Repair flood damage to roadways as needed.	Cost to be determined	General Funds / Local Road Aids /Flood Damage Aids / LRIP Program	County / City / All Towns	On-going	Medium
18 Update aerial photography used by the County Land Information Department - County GIS Coverage.	\$120,000	Dept. Budget / WROC	County Land Info Dept.	2024	Low
HAZARDOUS MATERIALS INCIDENTS					
19 Continue support for the Regional (& Local/County) Emergency Response team to respond to hazardous spill situations.	Budgeted amount here	Response Charges / Dept. Budgets	County EM Dept / City of Rhinelander	On-going	Medium
FOREST FIRE / WILDFIRE					
20 Continue to provide outreach efforts to homeowners on protecting homes and structures from wildfires.	Staff Time	Dept. Budget	County EM Dept / WDNR	On-going	Medium
21 Acquire new tenders, water tankers and other fire equipment to improve firefighting capability and implement the MABAS system as being developed in Oneida County.	Cost to be determined	General Funds / Dept. Budgets / Assistance to Firefighters Grants	Town of Three Lakes / Others as appropriate	2024	Medium
22 Continue to provide training for volunteer fire fighters including MABAS.	Staff Time	Dept. Budgets	Town / City Fire Depts / WDNR	On-going	Medium
23 Support establishment of Firewise Communities across the County.	Staff Time	Dept. Budgets / General Funds	County EM Dept / All Towns	On-going	Medium
24 Develop Community Wildfire Protection Plans in very high / high risk towns.	\$20,000 ea.	WDNR National Fire Plan funding	All Very High and High Risk Towns	On-going	Medium
WINTER STORMS / EXTREME COLD					
25 Identify and develop warming shelters in strategic locations around the County.	Costs vary	Dept. Budgets / Mitigation Grants	County EM Dept. / City of Rhinelander	On-going	Low
26 Use natural vegetation to create "living snow fences".	Costs vary	NRCS funding programs	Co. Hwy Dept./LCD	On-going	Medium
27 Promote winter hazard awareness, including home and travel safety measures such as dealing w/ freezing septics or LP gas.	Staff Time	Dept. Budget	County EM Dept	On-going	Medium
DROUGHT / EXTREME HEAT					
28 Promote heat hazards awareness, including protecting oneself and watching out for others.	Staff Time	Dept. Budgets	County EM Dept. / City of Rhinelander	As needed	Medium
29 Encourage farmers that irrigate to use irrigation scheduling programs and drip/misting systems.	Staff Time	Dept. Budgets	County UW-Ext. Dept / County LCD	On-going	Low
30 County should be prepared on how to inform farmers during times of drought.	Staff Time	Dept. Budgets	Co. UW-Ext. Dept / County LCD / FSA	On-going	Low
31 Inform farmers on purchasing crop insurance.	Staff Time	Dept. Budgets	Co. UW-Ext. / FSA	On-going	Low

Mitigation Measures (See Expanded Text in Plan)	Cost Estimate	Resources to Implement	Responsible Units	Timeframe	Priority Level
PANDEMIC					
32 Implement recommendations of the Pandemic Asssment Plan	Staff Time	Dept. Budgets	County EM Dept. / City of Rhinelander & All Towns	On-going	Medium

* Denotes actions related to compliance with NFIP

**Actual project implementation dependant on funding and staff availability

INTRODUCTION

Part V of the Oneida County All Hazards Mitigation Plan Update describes the plan adoption, implementation, evaluation, and maintenance.

PLAN UPDATE ADOPTION

The adoption of the Oneida County All Hazards Mitigation Plan Update lends itself to serve as a guiding document for all local government officials. It also certifies to program and grant administrators from the FEMA and WEM that the plan's recommendations have been properly considered and approved by the governing authority and the jurisdiction's citizens. Finally, it helps to ensure the continuity of mitigation programs and policies over time because elected officials, staff, and other community decision-makers can refer to the official document when making decisions about the community's future.

Before adoption of the Plan Update by the incorporated areas, the update must be sent to the state and federal level to verify that all DMA2K requirements are met. Once a draft of the updated Plan has been completed, it is submitted to the State Hazard Mitigation Officer (SHMO) at the state level at WEM. Previous drafts of the update have already been reviewed prior to this submittal. The SHMO will determine if the updated Plan meets DMA2K and/or other state program requirements. Upon approval of the draft by WEM, the SHMO is responsible for showing the update to the FEMA Region V Office for review.

Prior to final approval by WEM and FEMA, the update must be formally adopted by Oneida County and its incorporated areas by resolution. Incorporated communities that do not adopt the Plan Update cannot apply for mitigation grant funds unless they opt to prepare, adopt, and submit their own plan. Adoption of the Plan Update gives the jurisdiction a legal basis to enact ordinances, policies, or programs to reduce hazard losses and to implement other mitigation actions.

All general purpose units of government (i.e. city, towns) within Oneida County were offered one or more avenues to participate in the development of this Plan Update. Adoption of the Plan by a local unit of government certifies their participation. The Oneida County Board has adopted this Update. Resolutions of adoption are contained in APPENDIX B.

PLAN UPDATE IMPLEMENTATION

ADMINISTRATIVE RESPONSIBILITIES

Once the Plan Update has been approved, stakeholders must be informed. The County Captain of Emergency Services will distribute copies to stakeholders. The County will make the Plan Update available to the public by linking the report on the Internet.

Along with monitoring the progress of the action projects, the County Captain of Emergency Services and Public Safety Committee should also work to secure funding to implement the Plan Update. State and federal agencies, nonprofit organizations, and foundations continually make grants available. County Emergency Services should research these grant opportunities to determine eligibility for the County and its local units of government.

When implementing this Plan Update, the County Public Safety Committee and staff team should consider innovative ways to involve active participation from nonprofit organizations, businesses, and citizens to implement the Update. The relationship between these groups will result in greater exposure of the Plan Update and provide greater probability of implementation of the action projects listed.

The role of department administrators, elected officials, and local administrators are to ensure that adopted actions from Part IV are considered in their budgets. It is understood that projects may not be carried out as they are scheduled in Part IV due to budget constraints. However, since many of these action projects are considered an investment in safeguarding the publics' health, safety, and property, they should be carefully considered as a priority.

PROMOTE SUCCESS OF IDENTIFIED PROJECTS

Upon implementing a project covered by this Plan Update, it is important to promote the accomplishment to the stakeholders and to the communities. This will help inform people that the update is being implemented and is effective.

INCORPORATION INTO OTHER LOCAL PLANNING MECHANISMS

FEMA requires a process by which the mitigation plan is incorporated into other planning mechanisms where appropriate. When undergoing any planning process, County departments, local units of government and/or any professional staff assisting them, typically review and incorporate any

related pre-existing plans as a matter of course. However, to help ensure this outcome, Oneida County has established a two-part process to incorporate the All Hazards Mitigation Plan into other County and local planning efforts as follows:

- Notification of County Departments and Local Units of Government - Upon adoption of the All Hazards Mitigation Plan, the County Captain of Emergency Services will distribute a letter that explains how the Plan applies to other planning efforts they might undertake and how to obtain copies of the Mitigation Plan.
- Promotion by County Captain of Emergency Services - The Emergency Services Department will promote incorporation of the All Hazards Mitigation Plan as the County Captain of Emergency Services is made aware of or becomes a participant in any new planning process.

Currently, the County's All Hazards Mitigation Plan has already been incorporated into another planning process, the Oneida County Comprehensive Plan, as outlined below. Updates to the Mitigation Plan will be incorporated into future updates to the comprehensive plan as they occur.

Oneida County Comprehensive Plan

The following concepts were considered when developing the current Oneida County and local unit comprehensive plans, based on the nine elements of the Wisconsin comprehensive planning law:

- *Issues and Opportunities Element* – a summary of major hazards local government is vulnerable to, and what is proposed to be done to mitigate future losses from the hazards.
- *Housing Element* – an inventory of the properties that are in the floodplain boundaries, the location of mobile homes, recommendation on building codes, shelter opportunities, and a survey of homeowners that may be interested in a voluntary buyout and relocation program.
- *Utilities and Community Facilities Element* – identify critical facilities such as shelter, schools, medical, water infrastructure, etc. and make recommendations on how to mitigate specific risks factors
- *Transportation Element* – identify any transportation routes or facilities that are more at risk during flooding, winter storms, or hazardous material spills.
- *Agricultural, Natural Resources, and Cultural Resources Element* – identify the floodplains and agricultural areas that are at risk to

- hazardous events. Incorporate recommendations on how to mitigate future losses to agricultural areas.
- *Economic Development Element* – describe the impact past hazards have had on County and municipal business.
 - *Intergovernmental Cooperation Element* - identify intergovernmental police, fire, and rescue service sharing agreements that are in effect, or which may merit further investigation, consider cost-sharing and resource pooling on government services and facilities.
 - *Land Use Element* - describe how flooding have impacted land uses and what is being done to mitigate negative land use impacts from flooding; map and identify hazard areas such as floodplains, hazardous materials areas, and soils with limitations.
 - *Implementation Element* – have action plans from this Plan implemented into comprehensive plans.

PLAN UPDATE EVALUATION AND MAINTENANCE

Planning is an ongoing process. Because of this, this document should grow and adapt in order to keep pace with growth and change of the County and its local jurisdictions. DMA2K requires that local plans be evaluated and updated at least every five years to remain eligible for assistance.

The Plan will be reviewed and evaluated on an annual basis as needed by Emergency Management. The Oneida County Captain of Emergency Services will evaluate incoming information against the contents of the Plan to determine possible need for revisions; and bring that information to the County Public Safety Committee to discuss the evaluation and potential revisions to the Plan as needed. The County Captain of Emergency Services is encouraged to consult/coordinate with the NCWRPC in the event of any revision.

The Plan must also be evaluated and revised following disaster events to determine if the recommended actions are appropriate given the impact of the event. The risk assessment (Part III) should also be reviewed to see if any changes are necessary based on the pattern of disaster damages.

Full updates are required every five years. As a result, every fifth year, the review will be expanded to an overall plan update to meet FEMA requirements. All stakeholders and the public will again be involved in the update process. The County will conduct a survey and open comment

meeting. This also provides an opportunity to inform on the progress of any projects.

The County Public Safety Committee and County Board must approve all changes and updates to the Plan.

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Appendix A – Meeting Notices

NOTICE OF MEETING

COMMITTEE: LOCAL EMERGENCY PLANNING COMMITTEE
PLACE: ONEIDA COUNTY LAW ENFORCEMENT CENTER
COMMUNITY ROOM
DATE: WEDNESDAY, JANUARY 12, 2022
TIME: 1:00 P.M.

ALL AGENDA ITEMS ASSUMED TO BE DISCUSSION/DECISION ITEMS

AGENDA:

1. Call to order
2. Introductions
3. Approve Agenda (Order of Agenda at Chairperson's Discretion)
4. Approve previous meeting minute(s)
5. Public Comments
6. Resignation/Appointment of LEPC Committee Member(s)
7. Election of Officers (Vice Chairperson)
8. HazMat Team Report
9. HazMat Member Status
 - Appoint HazMat Deputy Chief
 - New Members
 - Probationary Members
 - Probationary Completion
 - Resignation of Members
10. Items for and report from Emergency Services
 - All Hazards Mitigation Plan/Update
 - LEPC Compliance Inspector
 - LEPC Bylaws
 - Review and Approval of County-Wide Strategic Plan
 - Review and Approval of Offsite Response Plans
 - WI Association of Hazardous Materials Responders (WAHMR) Conference
11. State HazMat Team Contract
12. County HazMat Team Contracts
13. 2022 Computer HazMat Response Equipment Grant (CHREG)
14. Items for and report from Corporation Counsel
15. Review/Approval of Billing for Spills
16. Public Comments
17. Items for next agenda
18. Set date for next meeting
19. Adjourn

NOTICE OF MEETING

COMMITTEE: LOCAL EMERGENCY PLANNING COMMITTEE
PLACE: ONEIDA COUNTY LAW ENFORCEMENT CENTER
COMMUNITY ROOM
DATE: WEDNESDAY, APRIL 13, 2022
TIME: 1:00 P.M.

ALL AGENDA ITEMS ASSUMED TO BE DISCUSSION/DECISION ITEMS

AGENDA:

1. Call to order
2. Introductions
3. Approve Agenda (Order of Agenda at Chairperson’s Discretion)
4. Approve previous meeting minute(s)
5. Public Comments
6. Resignation/Appointment of LEPC Committee Member(s)
7. All Hazards Mitigation Plan/Update
8. Amendment of Hazardous Incident Response Team Constitution and Bylaws
9. Public Comments
10. Items for next agenda
11. Set date for next meeting
12. Adjourn

NOTICE OF POSTING: BRIAN GEHRIG, CHAIRPERSON

TIME: 8:00 a.m. **DATE:** April 6, 2022 **PLACE:** Oneida County Courthouse

Notice posted by Dawn Robinson, Emergency Services-Oneida County Sheriff’s Office. Additional information on a specific agenda item may be obtained by contacting the person who posted this notice at 715-361-5167.

NEWS MEDIA NOTIFIED:

1.	Northwoods River News	Date:	04/06/22	Time:	8:00 a.m.	Mail/Fax &/or Email
2.	Lakeland Times	Date:	“	Time:	“	“
3.	North Star Journal	Date:	“	Time:	“	“
4.	New Radio Group (NRG Media)	Date:	“	Time:	“	“
5.	WJFW-TV 12	Date:	“	Time:	“	“
6.	Tomahawk Leader	Date:	“	Time:	“	“
7.	WXPR Radio Station	Date:	“	Time:	“	“
8.	WCYE Radio Station	Date:	“	Time:	“	“
9.	WRJO Radio Station	Date:	“	Time:	“	“
10.	Vilas News Review	Date:	“	Time:	“	“

Notice is hereby further given that pursuant to the Americans with Disabilities Act reasonable accommodations will be provided for qualified individuals with disabilities upon request. Please call County Clerk/Tracy Hartman at 715-369-6144, with specific information on your request allowing adequate time to respond to your request.

See reverse side of this notice for compliance checklist with the Wisconsin Open Meeting Law.

**SIGN IN SHEET - ONEIDA COUNTY
LOCAL EMERGENCY PLANNING COMMITTEE MEETING
APRIL 13, 2022**

NAME - <i>Please print</i>	Organization & Address
Jake Simkins	oneida CO. Emergency Services
DAWN ROBINSON	DC Emerg. Services
Arthur Tuma	NEWARK
BRIAN GEHRIG	FIRE DEPT
Tom Wandick	HAZMAT
Rebecca Nold	Oneida County Public Health
Alex Hegeman	Oneida County Highway Dept
Jeff Paddock	WDNR Northern Region Spill Board.
Scott A. Langer	Oneida County EMS
Daniel J. Hen	Oneida Co S.O.
Brian Tammes	Hemelander Fire

All Hazards Mitigation Plan Meeting/Update

Dawn Robinson <drobinson@co.oneida.wi.us>

Wed 4/20/2022 1:20 PM

To: Rhinelander: Kris Hanus (Mayor) (mayor@rhinelanderwi.us) <mayor@rhinelanderwi.us>; Fire: Brian Tonnancour (RFD) (btonnancour@rhinelanderwi.us) <btonnancour@rhinelanderwi.us>; Gauthier LE: Lloyd - LE: Lloyd Gauthier (RPD) (lgauthier@rhinelanderwi.us) <lgauthier@rhinelanderwi.us>; zvrwink@rhinelanderwi.us <zvrwink@rhinelanderwi.us>

Cc: Jacob Simkins <jsimkins@co.oneida.wi.us>; afaust@ncwrpc.org <afaust@ncwrpc.org>; NCWRPC: Darryl Landeau (dlandeau@ncwrpc.org) <dlandeau@ncwrpc.org>

Good afternoon.

The City of Rhinelander adopted the Oneida County All Hazards Mitigation Plan, in 2016, in order to be eligible to receive funding if a major disaster was declared. Currently the plan is being updated and City input is needed during this process. Once the plan is completed, the City can either adopt the County's All Hazards Mitigation Plan or the City would need to create its own Plan, and adopt it, in order to be eligible to receive funding.

Please advise if you are available on June 21, 2022 , 1:00 p.m. to meet at the Sheriff's Office/Law Enforcement Center.

If you have any questions, please feel free to contact our office at 715-361-5167.

Thank you,

Dawn Robinson

Oneida Co. Sheriff's Office Emergency Services

Program Assistant

2000 E. Winnebago Street

Rhinelander, WI 54501

715-361-5167

<https://www.co.oneida.wi.us/>

The information contained in this communication may be confidential, is intended only for the use of the recipient(s) named above, and may be legally privileged. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication, or any of its contents, is strictly prohibited. If you have received this communication in error, please return it to the sender immediately and delete the original message and any copy of it from your computer system. If you have any questions concerning this message, please contact the sender.

Oneida County All Hazards Mitigation Plan Update

City of Rhinelander Planning Meeting SIGN-IN

June 21, 2022 – 1:00 PM

	Name	Title/Department	Email
1	Brian Tommanowicz	Rhinelander Fire Chief	btommanowicz@rhinelander.wis.us
2	Jake Simkins	ONSO Emergency Services	jsimkins@co.oneida.wis.us
3	DAWN ROBINSON	ONSO Emerg. Services PA	d robinson@co.oneida.wis.us
4	Lloyd Gasthiser	Rhinelander Police Chief of Police	lgasthiser@rhinelander.wis.us
5	Zeit Irwin	City of Rhinelander	
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ONEIDA COUNTY SHERIFF'S OFFICE



Grady M. Hartman
Sheriff

Daniel L. Hess
Chief Deputy

MEMORANDUM

TO: Government agencies, County department staff, and other private or non-profit organizations within Oneida County

FROM: Jacob Simkins, Captain of Emergency Services

DATE: July 12, 2022

RE: Oneida Co. All-Hazards Mitigation Plan Update Interest Group Meeting Notice

Oneida County has received a grant through the Federal Emergency Management Agency (FEMA) to complete an update of its All-Hazards Mitigation Plan to protect the health and safety of residents from the impacts of natural hazards and to minimize and prevent damages caused by these events. The North Central Wisconsin Regional Planning Commission (NCWRPC) is assisting Oneida County with this plan.

As a requirement of the planning process, an opportunity to be involved in the process must be provided to local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as business, academia and private and non-profit interests. To meet this requirement, an agency and interest group meeting is scheduled for the following date and place:

When: Thursday, July 21, 2022 at 2:00 p.m.
Where: Oneida County Law Enforcement Center, Community Room
2000 E. Winnebago St., Rhinelander, WI 54501

In addition to meeting FEMA requirements, this meeting will be a way to gather ideas on how to safeguard the residents and visitors of Oneida County and protect property in the event of natural disasters. Since you live and/or do business in or around Oneida County, your input in this process is very valuable.

Please call or email our planner, Andy Faust at the North Central WI Regional Planning Commission, 715-849-5510 ext. 305 afaust@ncwrpc.org or contact Jacob Simkins/Captain of Emergency Services at 715-361-5100 jsimkins@co.oneida.wi.us if you have any questions.

I highly encourage at least one staff person from your department or agency with responsibilities relating to or potentially impacted by natural hazards / disaster to attend.

Thank you.

**ONEIDA COUNTY
HAZARD MITIGATION PLAN
PUBLIC INFORMATIONAL MEETING**

Notice is hereby given by the Oneida County Sheriff's Office Emergency Services that there will be a public informational meeting at the Oneida County Law Enforcement Center – Community Room, 2000 E. Winnebago St., Rhinelander on Thursday, July 21, 2022 from 3:00 to 4:00 pm to discuss the draft of the Oneida County All Hazards Mitigation Plan.

The meeting will be an open house format and provide information about the natural hazards that can affect the County and the strategies being developed to mitigate against future losses and reduce public expenditure for response and recovery. Information about the plan can be found on the web at <https://www.ncwrpc.org/oneida/oneidahzdplan.html>

All interested parties are encouraged to attend. Please call or email our planner, Andy Faust at the North Central WI Regional Planning Commission, 715-849-5510 ext. 305 or contact Jacob Simkins/Captain of Emergency Services at 715-361-5100 if you have any questions or would like more information.

07/11/22

Oneida All Hazards Mitigation Plan Update

Agency & Interest Group Meeting SIGN-IN

July 21, 2022 - 2:00 PM

	Name	Position/Title	Agency/Organization
1	Paul Fiene	Forest Director	OC Forestry
2	DAVID JAEGER	MINOCQUA PD CHIEF	MINOCQUA PD
3	Jeff Paddock	Spill Coordinator	DNR
4	Lindsey Kennedy	Asst. Facilities Director	Oneida County
5	DAWN ROBINSON	Emergency Services PA	Oneida Co. Sheriff's Office
6	Jake Simkins	Captain of Emergency Services	Oneida Co. Sheriff's Office
7	Leah Van Zile	Local Affairs	WPSC/WE
8	Andy Faust	NCWRPC	NCWRPC
9	KARL Jannica	P&Z Oneida County	Oneida County
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Oneida All Hazards Mitigation Plan Update Public Informational Meeting SIGN-IN

July 21, 2022 - 3:00 PM

	Name	Community of Residence	Email (Optional)
1	Andy Fausch	N/CWRPC	a.fausch@ncwrpc.org
2	John Shi	Oneida Co. Sheriff	jshir@oneida.wi.us
3			jshir@oneida.wi.us
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NOTICE OF MEETING

COMMITTEE: LOCAL EMERGENCY PLANNING COMMITTEE
PLACE: ONEIDA COUNTY LAW ENFORCEMENT CENTER
COMMUNITY ROOM
DATE: WEDNESDAY, NOVEMBER 2, 2022
TIME: 1:00 P.M.

ALL AGENDA ITEMS ASSUMED TO BE DISCUSSION/DECISION ITEMS

AGENDA:

1. Call to order
2. Introductions
3. Approve Agenda (Order of Agenda at Chairperson’s Discretion)
4. Approve previous meeting minute(s)
5. Public Comments
6. Resignation/Appointment of LEPC Committee Member(s)
7. All Hazards Mitigation Plan Final Review/Recommend to Public Safety Committee
8. Public Comments
9. Items for next agenda
10. Set date for next meeting
11. Adjourn

NOTICE OF POSTING: BRIAN GEHRIG, CHAIRPERSON

TIME: 8:15 a.m. **DATE:** October 26, 2022 **PLACE:** Oneida County Courthouse
Notice posted by Dawn Robinson, Emergency Services-Oneida County Sheriff’s Office. Additional information on a specific agenda item may be obtained by contacting the person who posted this notice at 715-361-5167.

NEWS MEDIA NOTIFIED:

1.	Northwoods River News	Date:	10/26/22	Time:	8:15 a.m.	Mail/Fax &/or Email
2.	Lakeland Times	Date:	“	Time:	“	“
3.	North Star Journal	Date:	“	Time:	“	“
4.	New Radio Group (NRG Media)	Date:	“	Time:	“	“
5.	WJFW-TV 12	Date:	“	Time:	“	“
6.	Tomahawk Leader	Date:	“	Time:	“	“
7.	WXPR Radio Station	Date:	“	Time:	“	“
8.	WCYE Radio Station	Date:	“	Time:	“	“
9.	WRJO Radio Station	Date:	“	Time:	“	“
10.	Vilas News Review	Date:	“	Time:	“	“

Notice is hereby further given that pursuant to the Americans with Disabilities Act reasonable accommodations will be provided for qualified individuals with disabilities upon request. Please call County Clerk/Tracy Hartman at 715-369-6144, with specific information on your request allowing adequate time to respond to your request.

See reverse side of this notice for compliance checklist with the Wisconsin Open Meeting Law.
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NOTICE OF MEETING

COMMITTEE: LOCAL EMERGENCY PLANNING COMMITTEE
PLACE: ONEIDA COUNTY LAW ENFORCEMENT CENTER
COMMUNITY ROOM
DATE: WEDNESDAY, JANUARY 18, 2023
TIME: 1:00 P.M.

ALL AGENDA ITEMS ASSUMED TO BE DISCUSSION/DECISION ITEMS

AGENDA:

1. Call to order
2. Introductions
3. Approve Agenda (Order of Agenda at Chairperson's Discretion)
4. Approve previous meeting minute(s)
5. Public Comments
6. Review/Approval of the All Hazards Mitigation Plan/Recommend to Public Safety Committee
7. Resignation/Appointment of LEPC Committee Member(s)
8. Election of Officers (Chairperson)
9. HazMat Team Report
10. HazMat Member Status
 - Appoint HazMat Chief
 - New Members
 - Probationary Members
 - Probationary Completion
 - Resignation of Members
11. Items for and report from Emergency Services
 - LEPC Compliance Inspector
 - LEPC Bylaws
 - Review and Approval of County Wide Hazardous Materials Plan-Strategic Plan
 - Review and Approval of Offsite Response Plans
 - HazMat Incident Billing Policy and Procedure
12. WI Association of Hazardous Materials Responders Conference (WAHMR)
13. State HazMat Team Contract
14. County HazMat Team Contracts
15. 2023 Computer HazMat Response Equipment Grant (CHREG)
16. Items for and report from Corporation Counsel
17. Review/Approval Billing for Spills
18. Public Comments
19. Items for next agenda
20. Set date for next meeting
21. Adjourn

NOTICE OF POSTING: BRIAN GEHRIG, CHAIRPERSON

TIME: 8:00 a.m. **DATE:** January 12, 2023 **PLACE:** Oneida County Courthouse

Notice posted by Dawn Robinson, Emergency Services Program Assistant. Additional information on a specific agenda item may be obtained by contacting the person who posted this notice at 715-361-5167.

NEWS MEDIA NOTIFIED:

1.	Northwoods River News	Date:	01/12/23	Time:	8:00 a.m.	Mail/Fax &/or Email
2.	Lakeland Times	Date:	“	Time:	“	“
3.	North Star Journal	Date:	“	Time:	“	“
4.	New Radio Group (NRG Media)	Date:	“	Time:	“	“
5.	WJFW-TV 12	Date:	“	Time:	“	“
6.	Tomahawk Leader	Date:	“	Time:	“	“
7.	WXPR Radio Station	Date:	“	Time:	“	“
8.	WCYE Radio Station	Date:	“	Time:	“	“
9.	WRJO Radio Station	Date:	“	Time:	“	“
10.	Vilas News Review	Date:	“	Time:	“	“

Notice is hereby further given that pursuant to the Americans with Disabilities Act reasonable accommodations will be provided for qualified individuals with disabilities upon request. Please call County Clerk/Tracy Hartman at 715-369-6144, with specific information on your request allowing adequate time to respond to your request.

See reverse side of this notice for compliance checklist with the Wisconsin Open Meeting Law.



**SIGN IN SHEET - ONEIDA COUNTY
LOCAL EMERGENCY PLANNING COMMITTEE MEETING
JANUARY 18, 2023**

NAME - Please print	Organization & Address
Andy Faust	NEWRPC
Michael Dasser	Aspirus 2251 N. Shore Dr Rhinelander
Ben [Signature]	PINE LAKE FD
Rebecca Wold	Oneida County Health Dept
Jacob Simkins	Oneida County Sheriff
Brian Tomaszewski	RFD
Jeff Paddock	DNIR
Alex Hegeman	Oneida Cty Hwy
Steven Schreier	Oneida Co. Board
Daniel L. Hess	Sheriff Office
Tom Emond	Ahlstrom
Mary Langosch	Ahlstrom
JASON GOELDNER	ONEIDA COUNTY HAZMAT
DAWN ROBINSON	Oneida County Sheriff's Office Emerg Serv.

NOTICE OF MEETING

COMMITTEE: PUBLIC SAFETY COMMITTEE
PLACE: ONEIDA COUNTY COURTHOUSE
COMMITTEE ROOM #2
DATE: Thursday, February 9, 2023
TIME: 9:30 A.M. All Hazards Mitigation Plan Public Hearing
9:45 A.M. Regular Public Safety Committee Meeting

It is possible that a quorum of county board members will be at this meeting to gather information about a subject over which they have decision-making responsibility. This constitutes a meeting of the County Board pursuant to State ex rel Badke v. Greendale Village Board, Wis 2d 553, 494 n.w.2d 408 (1993), and must be noticed as such, although the County Board will not take any formal actions at this meeting. It is also possible that there may be quorums of other County Board Committees present, although those committees will not take any formal action at this meeting.

AGENDA:

1. Call to order
2. Approve Agenda

9:30 a.m. Conduct Public Hearing on the Oneida County All Hazards Mitigation Plan

9:45 a.m. Regular Meeting

3. Approve previous meeting minutes
4. Public Comments
5. Schedule Committee meeting date(s)
6. Bills, vouchers and line item transfers for Public Safety Departments
7. Contracting for Secure Detention bed at Marathon County

Sheriff's Office

8. All Hazards Mitigation Plan

Corporation Counsel

9. Corporation Counsel Travel to Madison 1/24-1/25 for CAP Team (as requested/approved by County Board Chair)
10. Corporation Counsel Travel to Legislative Exchange 2/27-3/1
11. Joint County Human Services Agreement Update – Date for joint meeting with Social Services
12. It is anticipated that a motion will be made, seconded, and approved by Roll Call Vote to enter into Closed Session pursuant to Wisconsin Statute 19.85(1)(c) for purposes of considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility (Corporation Counsel Annual Evaluation). A Roll Call vote will be taken to go into closed session
13. It is anticipated that the Committee will return to open session by roll call vote to consider the remainder of the meeting agenda
14. Announcement of action taken in closed session, if such announcement will not undermine the need for the closed session

Medical Examiner

15. It is anticipated that a motion will be made, seconded, and approved by Roll Call Vote to enter into Closed Session pursuant to Wisconsin Statute 19.85(1)(c) for purposes of considering employment, promotion, compensation or performance evaluation data of any public employee over which the governmental body has jurisdiction or exercises responsibility (Medical Examiner Annual Evaluation). A Roll Call vote will be taken to go into closed session
16. It is anticipated that the Committee will return to open session by roll call vote to consider the remainder of the meeting agenda
17. Announcement of action taken in closed session, if such announcement will not undermine the need for the closed session

Sheriff's Office

18. Wages and benefits package for Telecommunicators and Correction Officers:
 - A) Step Plan for Telecommunicators
 - B) PTO Increase
 - C) Max Comp Time Bank Increase
 - D) Weekend Pay
 - E) Special Activity Pay: Field Training
 - F) Overtime Bonus Plan
19. 2024 Staffing Request: Technical Support
20. It is anticipated that a motion will be made, seconded, and approved by Roll Call Vote to enter into Closed Session pursuant to Wisconsin Statute 19.85(1)(e) Deliberating or negotiating the purchase of public properties, the investing of public funds, or conducting other specified public business whenever competitive or bargaining reasons require a closed session (Lac du Flambeau, Arbor Vitae, and Ambulance Intercept Agreements). A Roll Call vote will be taken to go into closed session
21. It is anticipated that the Committee will return to open session by roll call vote to consider the remainder of the meeting agenda
22. Announcement of action taken in closed session, if such announcement will not undermine the need for the closed session

23. Public Comments
24. Items for future agenda(s)
25. Adjourn

NOTICE OF POSTING: STEVEN SCHREIER, CHAIRPERSON

TIME: 9:20 a.m. **DATE:** February 7, 2023 **PLACE:** Oneida County Courthouse

Notice posted by Dawn Robinson, Emergency Services Program Assistant-Oneida County Sheriff's Office. Additional information on a specific agenda item may be obtained by contacting the person who posted this notice at 715-361-5167.

NEWS MEDIA NOTIFIED:

1.	Northwoods River News	Date:	02/07/23	Time:	9:20 a.m.	Mail/Fax &/or Email
2.	Lakeland Times	Date:	"	Time:	"	"
3.	North Star Journal	Date:	"	Time:	"	"
4.	New Radio Group (NRG Media)	Date:	"	Time:	"	"
5.	WJFW-TV 12	Date:	"	Time:	"	"
6.	Tomahawk Leader	Date:	"	Time:	"	"
7.	WXPR Radio Station	Date:	"	Time:	"	"
8.	WCYE Radio Station	Date:	"	Time:	"	"
9.	WRJO Radio Station	Date:	"	Time:	"	"
10.	Vilas News Review	Date:	"	Time:	"	"

Notice is hereby further given that pursuant to the Americans with Disabilities Act reasonable accommodations will be provided for qualified individuals with disabilities upon request. Please call County Clerk/Tracy Hartman at 715-369-6144, with specific information on your request allowing adequate time to respond to your request.

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**NOTICE OF PUBLIC HEARING
ONEIDA COUNTY PUBLIC SAFETY COMMITTEE**

NOTICE IS HEREBY GIVEN THAT THE Oneida County Public Safety Committee will hold a public hearing on the updated draft of the Oneida County All Hazards Mitigation Plan on Thursday, February 9, 2023 at 9:30 a.m. in Committee Room #2, Second Floor, Oneida County Courthouse, 1 South Oneida Avenue, Rhinelander, WI 54501.

The plan is intended to reduce or eliminate long-term risk to people and property from natural disasters. Hazards covered in the plan include flooding, tornadoes, extreme temperatures, wildfire and others. The plan maintains a County eligibility for federal mitigation grants.

The updated Oneida County All Hazard Mitigation Plan is available for review online at:

https://www.ncwrpc.org/oneida/hazardplan/2023/Final_Draft_Oneida_Co_AHMP_112122.pdf

https://www.ncwrpc.org/oneida/hazardplan/2023/Final_Draft_Oneida_Co_AHMP_112122.pdf

A copy of the plan is available for public inspection during normal business hours at the Oneida County Sheriff's Office, 2000 East Winnebago Street, Rhinelander, WI 54501 or phone 715-361-5100.

Anyone having interest may attend and be heard. Interested parties who are unable to attend, may send written comments to the undersigned.

Dated this 19th day of January, 2023.

/s/Steven Schreier, Chairperson
Oneida County Public Safety Committee
P.O. Box 400
Rhinelander, WI 54501

105931

1/24,1/31 WNAXLP

FILE NAME	105931_L_OneidaCountyEmergencyMgmt_Feb9Hearing			NOTES:	
SALES REP	HH	DESIGN	HH		TEARS / E-TEARS
ISSUE NUMBERS	LAK				
	RN	1/24,1/31			
SECTION / REQUEST	LEGALS		COLOR	This document is copyright © The Lakeland Times/The Northwoods River News and may not be used in whole or in part without permission granted by said publications.	
PAID PLACEMENT					



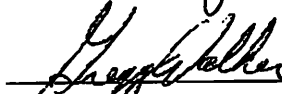
The Northwoods
River News
 232 S. Courtney Street
 Rhinelander, WI 54501 • Fax: 715-365-6361

Gregg Walker, Publisher
 P.O. Box 790, 510 Chippewa Street
 Minocqua, WI 54548
 715-356-5236 phone; 715-358-2121 fax
 gwalker@lakelandtimes.com

STATE OF WISCONSIN }
 County of Oneida }ss

Gregg Walker, of the City of Rhinelander, in said County and State, being duly sworn on his oath says that he is the foreman of WALKER COMMUNICATIONS LLC., a corporation, the publisher of THE NORTHWOODS RIVER NEWS, a newspaper of general circulation, and that the notice, a printed copy of which is hereto annexed, was regularly published in said newspaper

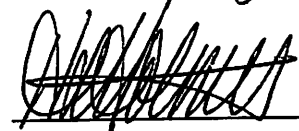
2 times; commencing on the 24th day of January, 2023, and terminated on the 31st day of January, 2023.



 Gregg Walker

Fee: \$ 7131
 Ad # 172415

Subscribed and sworn to me before this 31st day of January, 2023.



 Notary Public, Oneida County, WI
 My commission expires: 03/15/2025

HL Holmes
 NOTARY PUBLIC
 STATE OF WISCONSIN

NOTICE OF PUBLIC HEARING
ONEIDA COUNTY PUBLIC SAFETY COMMITTEE

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Anyone having interest may attend and be heard. Interested parties who are unable to attend, may send written comments to the undersigned.

Dated this 19th day of January, 2023.
 /s/Steven Schreier, Chairperson
 Oneida County Public Safety Committee
 P.O. Box 400
 Rhinelander, WI 54501
 105931

1/24,1/31 WNAJLP

AGENDA
Notice of Regular Meeting
Oneida County Board of Supervisors
Tuesday, February 21, 2023 – 9:30 a.m.
County Board Meeting Room - 2nd Floor Oneida County Courthouse
Zoom Call-in or Video Option - 1-312-626-6799 Meeting ID: 847 9442 3051 Password: 715665
**** If you are having difficulties with zoom please call the County Clerk's Office at 715-369-6125**
Zoom is being offered as a convenience for this meeting.
If zoom functionality drops the meeting will continue in-person at the location listed above.

1. CALL TO ORDER

There will be a brief moment of silence for our troops, law enforcement officers and emergency responders followed by the Pledge of Allegiance.

2. ROLL CALL

3. ANNOUNCEMENTS BY CHAIR, CORRESPONDENCE AND COMMUNICATIONS

- Please use a microphone when speaking

4. ACCEPT THE MINUTES OF THE JANUARY 17, 2023 MEETING

5. REPORTS/PRESENTATIONS

- 2022 UW-Extension Annual Report
- Broadband Update

6. PUBLIC COMMENT (time limit of three minutes)

- Sign attendance form at the podium

7. CONSENT AGENDA

Resolution # 15 – 2023: Offered by the Supervisors of the Land Records Committee to convey excess county lands part of PL-310-1 and Part of PL-309-1 to Timothy V. Johnson and Barbara J. Johnson and part of PL-310-1 and Part of PL-309-1 to the Town of Pine Lake.

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Resolution # 21 – 2023: Offered by the Supervisors of the Labor Relations Employee Services (LRES) and Land Records Committees to move 50% Deputy I from the Register of Deeds Office to make a full time Aide in the Land Information Office.

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Resolution # 24 – 2023: Offered by the Supervisors of the Administration Committee to amend Resolution #73-2022 to request additional Coronavirus Local Fiscal Recovery Fund (CLFRF) allocated to Oneida County through the American Rescue Plan Act (ARPA) for the purpose of Social Services Office Remodel Project.

- Appointments to Committees, Commissions and other Organizations:
 - Appoint Robbie Deede to the Local Emergency Planning Committee

8. CONSIDERATION OF RESOLUTIONS & ORDINANCES

Resolution # 25 – 2023: Offered by Supervisor Robert Briggs to object to the State Removing Future Taxable Land by Purchasing Conservation and Access Easements.

9. NEXT MEETING DATE AND TIME March 21, 2023 @ 9:30 a.m.

Unless a motion is made to change the starting time.

10. **ADJOURN**

NOTICE: If you wish to reserve your public comment until such time as the agenda item is before the Board for debate, pursuant to County Board Ordinance 2.06(2) you must convey your request to your supervisor, setting forth the nature of the address which shall be confined to the question under debate. The supervisor on the nonmember's behalf will present the request to the Chair to approve the request."

Notice of posting

Time: 3:00 p.m.

Date: 02/16/2023

Place: Courthouse Bulletin Board

Scott Holewinski, County Board Chair, Oneida County Board of Supervisors – Tracy Hartman, County Clerk, posted notice. Additional information on a specific agenda item may be obtained by contacting the person who posted this notice at 715-369-6144.

News Media Notified by group e-mail: Time: 3:00 p.m.

Northwood's River News
Lakeland Times
North Star Journal
Tomahawk Leader

Date: 02/16/2023

Vilas News Review
WHDG Radio
WJFW TV
WXPR Radio

WRJO Radio
WLSL-FM 93.7
WPEG Radio
WSAW TV

GENERAL REQUIREMENTS:

1. Must be held in a location which is reasonably accessible to the public.
2. Must be open to all members of the public unless the law specifically provides otherwise.

NOTICE REQUIREMENTS:

1. In addition to any requirements set forth below, notice must also be in compliance with any other specific statute.
2. Chief presiding officer or his/her designee must give notice to the official newspaper and to any members of the news media likely to give notice to the public.

MANNER OF NOTICE:

Date, time, place and subject matter, including subject matter to be considered in a closed session, must be provided in a manner and form reasonably likely to apprise members of the public and news media.

TIME FOR NOTICE:

1. Normally, a minimum of 24 hours prior to the commencement of the meeting.
2. No less than 2 hours prior to the meeting if the presiding officer establishes there is good-cause that such notice is impossible or impractical.
3. Separate notice for each meeting of the governmental body must be given.

EXEMPTIONS FOR COMMITTEES & SUBUNITS

Legally constituted sub-units of a parent governmental body may conduct a meeting during the recess or immediately after the lawful setting to act or deliberate upon the subject which was the subject of the meeting, provided the presiding officer publicly announces the time, place and subject matter of the sub-unit meeting in advance of the meeting of the parent governmental body.

PROCEDURE FOR GOING INTO CLOSED SESSION:

1. Motion must be made, seconded and carried by roll call majority vote and recorded in the minutes.
2. If motion is carried, chief presiding officer must advise those attending the meeting of the nature of the business to be conducted in the closed session, and the specific statutory exemption under which the closed session is authorized.

SYNOPSIS OF STATUTORY EXEMPTIONS UNDER WHICH CLOSED SESSIONS ARE PERMITTED:

1. Concerning a case which was the subject of a Judicial or quasi-judicial trial before this governmental body. Sec. 19.85(1)(a)
2. Considering dismissal, demotion or discipline of any public employee or the investigation of charges against such person and the taking of formal action on any such matter; provided that the person is given actual notice of any evidentiary hearing which may be held prior to final action being taken and of any meeting at which final action is taken. The person under consideration must be advised of his/her right that the evidentiary hearing be held in open session and the notice of the meeting must state the same. Sec. 19.85(1)(b)
3. Considering employment, promotion, compensation or performance evaluation data of any public employee over which this body has jurisdiction or responsibility. Sec. 19.85(1)(c)
4. Considering strategy for crime detection or prevention. Sec. 19.85(1)(d)
5. Deliberating or negotiating the purchase of public properties, the investing of public funds, or conducting other specified public business whenever competitive or bargaining reasons require a closed session. Sec. 19.85(1)(e)
6. Considering financial, medical, social or personal histories or disciplinary data of specific person, preliminary consideration of specific personnel problems or the investigation of specific charges, which, if discussed in public, would likely have a substantial adverse effect on the reputation of the person referred to in such data. Sec. 19.85(1)(f), except where paragraph 2 applies.
7. Conferring with legal counsel concerning strategy to be adopted by the governmental body with respect to litigation in which it is or is likely to become involved. Sec. 19.85(1)(g)
8. Considering a request for advice from any applicable ethics board. Sec. 19.85(1)(h)

PLEASE REFER TO CURRENT STATUTE SECTION 19.85 FOR FULL TEXT

BALLOTS, VOTES AND RECORDS:

1. Secret ballot is not permitted except for the election of officers of the body or unless otherwise permitted by specific statutes.
2. Except as permitted above, any member may require that the vote of each member be ascertained and recorded.
3. Motions and roll call votes must be preserved in the record and be available for public inspection.

CLOSED SESSION RESTRICTIONS:

1. Must convene in open session before going into closed session.
2. May not convene in open session, then convene in closed session and thereafter reconvene in open session within twelve hours unless proper notice of this sequence was given at the same time and in the same manner as the original open meeting.
3. Final approval or ratification of a collective bargaining agreement may not be given in closed session.
4. No business may be taken up at any closed session except that which relates to matters contained in the chief presiding officer's announcement of the closed session.
5. In order for a meeting to be closed under Section 19.85(1)(f) at least one committee member would have to have actual knowledge of information which he or she reasonably believes would be likely to have a substantial adverse effect upon the reputation involved and there must be a probability that such information would be divulged. Thereafter, only that portion of the meeting where such information would be discussed can be closed. The balance of that agenda item must be held in open session.

USE OF RECORDING EQUIPMENT:

The meeting may be recorded, filmed, or photographed, provided that it does not interfere with the conduct of the meeting or the rights of the participants.

LEGAL INTERPRETATION:

1. The Wisconsin Attorney General will give advice concerning the applicability or clarification of the Open Meeting Law upon request.
2. The municipal attorney will give advice concerning the applicability or clarification of the Open Meeting Law upon request.

PENALTY:

Upon conviction, any member of a governmental body who knowingly attends a meeting held in violation of Subchapter IV, Chapter 19, Wisconsin Statutes, or who otherwise violates the said law shall be subject to forfeiture of not less than \$25.00 nor more than \$300.00 for each violation.

**Prepared by Oneida County Corporation Counsel
Office - 5/16/96**

Appendix B – Resolutions of Plan Update Adoption

RESOLUTION # 19-2023

Resolution approved for presentation to the Oneida County Board by the Supervisors of the Public Safety Committee.

Resolved by the Board of Supervisors of Oneida County, Wisconsin:

WHEREAS, Oneida County recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save tax dollars; and

WHEREAS, an adopted all hazards mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, Oneida County participated jointly in the planning process with the other units of government within the County to prepare an All Hazards Mitigations Plan;

THEREFORE, BE IT RESOLVED, that the Oneida County Board of Supervisors hereby adopt the attached Oneida County All Hazards Mitigation Plan as an official plan.

BE IT FURTHER RESOLVED, that the Oneida County Emergency Services shall submit, on behalf of the participating municipalities, the adopted All Hazards Mitigation Plan to Wisconsin Emergency Management and Federal Emergency Management Agency Officials for final review and approval.

Vote Required: Majority = 2/3 Majority = _____ 3/4 Majority = _____

The County Board has the legal authority to adopt: Yes No _____ as reviewed by the Corporation Counsel, _____, Date: _____

2.9.23

Approved for presentation to the County Board by the Public Safety Committee this 9th day of February, 2023.

Consent Agenda Item: YES NO

Offered and passage moved by:

[Signatures of five supervisors]
Supervisor
Supervisor
Supervisor
Supervisor
Supervisor

21 Ayes

0 Nays

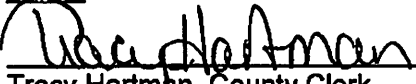
0 Absent

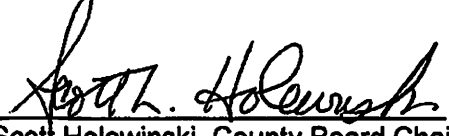
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 0 Abstain

 X Adopted

by the County Board of Supervisors this 21st day of February, 2023.

 Defeated

Tracy Hartman, County Clerk


Scott Holewinski, County Board Chair

Consent Agenda

Supervisors	AYE	NAY	ABS	ABSTAIN
Showalter	X			
Thome	X			
Timmons	X			
Roach	X			
Briggs	X			
Cushing	X			
Sorgel	X			
Winkler	X			
Schultz	X			
Fisher	X			
Kelly	X			
Oettinger	X			
Newman	X			
Schreier	X			
Fried	X			
Harris	X			
Almekinder	X			
Condado	X			
Ryden	X			
Rio	X			
Holewinski	X			
TOTALS	21			
TAGS				

Motion by Cushing to approve the consent agenda as presented, removing resolution #23-2023 and postponing to March 21, 2023.
Seconded by Briggs.

Resolution # 15 – 2023: Offered by the Supervisors of the Land Records Committee to convey excess county lands part of PL-310-1 and Part of PL-309-1 to Timothy V. Johnson and Barbara J. Johnson and part of PL-310-1 and Part of PL-309-1 to the Town of Pine Lake.

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Appointments to Committees, Commissions and other Organizations:
 Appoint Robbie Deede to the Local Emergency Planning Committee

City of Rhinelander Common Council
Oneida County, Wisconsin

Aldersperson Mikalauski, supported by Aldersperson Sopek, made a motion to adopt the following resolution:

RESOLUTION 2023-5

**ADOPTION OF THE ONEIDA COUNTY ALL HAZARDS MITIGATION PLAN
UPDATE**

WHEREAS, the City of Rhinelander recognizes the threat that natural hazards pose to people and property; and

WHEREAS, the process of undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save tax payer dollars; and

WHEREAS, an adopted all hazards mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, all hazard mitigation plans are required to be updated every five years; and

WHEREAS, the City of Rhinelander adopted the last five-year All Hazards Mitigation Plan Update on November 14, 2016; and

WHEREAS, the City of Rhinelander participated jointly in the planning process with Oneida County and the other local units of government within the County to prepare an update to the All Hazards Mitigation Plan; and

WHEREAS, due to the large size of this document, a copy of this updated plan may be found online at: https://www.ncwrpc.org/oneida/hazardplan/Oneida_Co_AHMP_022123.pdf.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. The Rhinelander Common Council hereby adopts the Oneida County All Hazards Mitigation Plan Update as an official plan.
2. The Oneida County Emergency Management Department will submit, on behalf of the City of Rhinelander, the adopted All Hazards Mitigation Plan Update to Wisconsin Emergency Management and Federal Emergency Management Agency officials for certification.
3. All resolutions and parts of resolutions, insofar as they conflict with the provisions of this resolution, are rescinded.

Ayes: 7

Nays: 1

Absent: 1 - Anderson

Abstain: 0

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Appendix C – EMSI Job Loss Analysis

Impact Scenario

Paper (except Newsprint) Mills in Oneida County, WI

Emsi Q2 2022 Data Set

June 2022

North Central Wisconsin Regional Planning Commission



210 McClellan Street, Suite 210
Wausau, Wisconsin 54403

Parameters

Regions:

Code	Description
55085	Oneida County, WI

Industry Scenario:

Code	Description	Change Type	Change Value
322121	Paper (except Newsprint) Mills	Jobs	-299















Model Type: Type Emsi

Input-Output Year: 2021

























Changes to Paper (except Newsprint) Mills using Type Emsi Model

<p>-\$54,660,905</p> <p>Change in Earnings 1.63 Multiplier</p>	<p>-766</p> <p>Change in Jobs 2.56 Multiplier</p>	<p>-\$6,206,853</p> <p>Change in Taxes on Production and Imports (TPI)</p>
---	--	---

















Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Agriculture, Forestry, Fishing and Hunting	-112 
21	Mining, Quarrying, and Oil and Gas Extraction	-1
22	Utilities	-3
23	Construction	-37 
31	Manufacturing	-319 
42	Wholesale Trade	-27 
44	Retail Trade	-20 
48	Transportation and Warehousing	-23 
51	Information	-3
52	Finance and Insurance	-11 
53	Real Estate and Rental and Leasing	-15 
54	Professional, Scientific, and Technical Services	-23 
55	Management of Companies and Enterprises	-6
56	Administrative and Support and Waste Management and Remediation Services	-33 
61	Educational Services	-2
62	Health Care and Social Assistance	-38 
71	Arts, Entertainment, and Recreation	-7
72	Accommodation and Food Services	-32 
81	Other Services (except Public Administration)	-32 
90	Government	-21 

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-44 
13-0000	Business and Financial Operations Occupations	-27 
15-0000	Computer and Mathematical Occupations	-7 
17-0000	Architecture and Engineering Occupations	-18 
19-0000	Life, Physical, and Social Science Occupations	-8 
21-0000	Community and Social Service Occupations	-4 
23-0000	Legal Occupations	-2 
25-0000	Educational Instruction and Library Occupations	-11 
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-12 
29-0000	Healthcare Practitioners and Technical Occupations	-17 
31-0000	Healthcare Support Occupations	-13 
33-0000	Protective Service Occupations	-3 
35-0000	Food Preparation and Serving Related Occupations	-27 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-28 
39-0000	Personal Care and Service Occupations	-14 
41-0000	Sales and Related Occupations	-44 
43-0000	Office and Administrative Support Occupations	-54 
45-0000	Farming, Fishing, and Forestry Occupations	-86 
47-0000	Construction and Extraction Occupations	-38 
49-0000	Installation, Maintenance, and Repair Occupations	-72 
51-0000	Production Occupations	-164 
53-0000	Transportation and Material Moving Occupations	-74 
55-0000	Military-only occupations	0 
99-0000	Unclassified Occupation	-1 

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-6 
Male 14-18	-5 
Female 19-21	-8 
Male 19-21	-12 
Female 22-24	-8 
Male 22-24	-27 
Female 25-34	-35 
Male 25-34	-98 
Female 35-44	-43 
Male 35-44	-109 
Female 45-54	-48 
Male 45-54	-120 
Female 55-64	-43 
Male 55-64	-149 
Female 65-99	-17 
Male 65-99	-41 

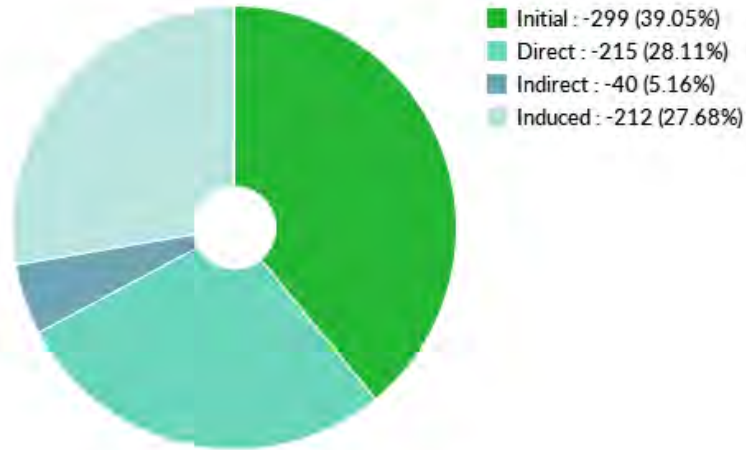
Effect on earnings from removing 299 jobs from Paper (except Newsprint) Mills

<p>-\$33.6M</p> <p>Initial 1.00 Multiplier</p>	<p>-\$8.8M</p> <p>Direct 0.26 Multiplier</p>	<p>-\$1.7M</p> <p>Indirect 0.05 Multiplier</p>	<p>-\$10.5M</p> <p>Induced 0.31 Multiplier</p>
---	---	---	---



Effect on jobs from removing 299 jobs from Paper (except Newsprint) Mills

<p>-299</p> <p>Initial 1.00 Multiplier</p>	<p>-215</p> <p>Direct 0.72 Multiplier</p>	<p>-40</p> <p>Indirect 0.13 Multiplier</p>	<p>-212</p> <p>Induced 0.71 Multiplier</p>
---	--	---	---



Effect on taxes on production and imports from removing 299 jobs from Paper (except Newsprint) Mills

<p>-\$2.3M</p> <p>Local</p>	<p>-\$2.1M</p> <p>State</p>	<p>-\$1.8M</p> <p>Federal</p>
------------------------------------	------------------------------------	--------------------------------------

Appendix A - Data Sources and Calculations

Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

State Data Sources

This report uses state data from the following agencies: Wisconsin Department of Workforce Development

Impact Scenario

Paper (except Newsprint) Mills in Oneida County, WI

Emsi Q2 2022 Data Set

June 2022

North Central Wisconsin Regional Planning Commission



210 McClellan Street, Suite 210
Wausau, Wisconsin 54403

Parameters

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Code	Description
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Industry Scenario:

Code	Description	Change Type	Change Value
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Model Type: Type Emsi

Input-Output Year: 2021

























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51	Information	-3
52	Finance and Insurance	-11 
53	Real Estate and Rental and Leasing	-15 
54	Professional, Scientific, and Technical Services	-23 
55	Management of Companies and Enterprises	-6
56	Administrative and Support and Waste Management and Remediation Services	-33 
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62	Health Care and Social Assistance	-38 
71	Arts, Entertainment, and Recreation	-7
72	Accommodation and Food Services	-32 
81	Other Services (except Public Administration)	-32 
90	Government	-21 

Scenario Results - Occupation

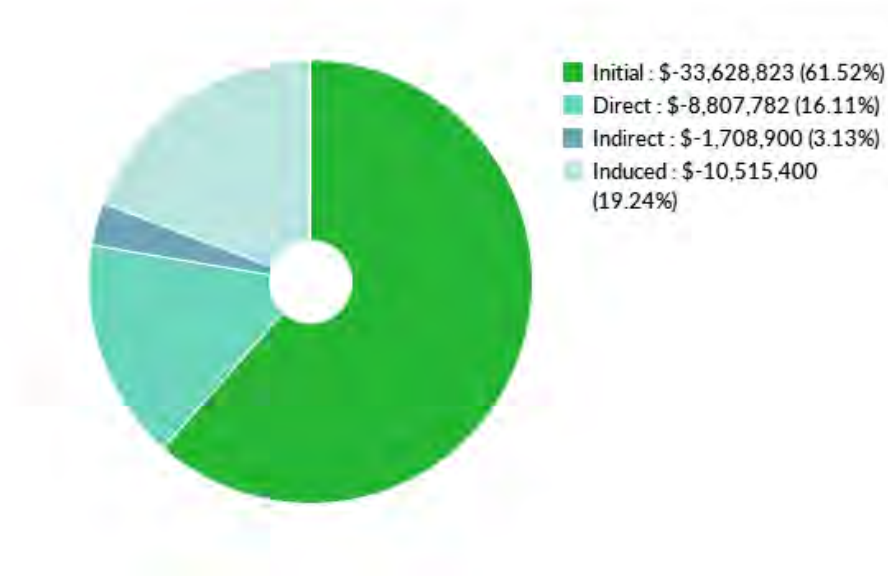
SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-44 
13-0000	Business and Financial Operations Occupations	-27 
15-0000	Computer and Mathematical Occupations	-7 
17-0000	Architecture and Engineering Occupations	-18 
19-0000	Life, Physical, and Social Science Occupations	-8 
21-0000	Community and Social Service Occupations	-4 
23-0000	Legal Occupations	-2 
25-0000	Educational Instruction and Library Occupations	-11 
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-12 
29-0000	Healthcare Practitioners and Technical Occupations	-17 
31-0000	Healthcare Support Occupations	-13 
33-0000	Protective Service Occupations	-3 
35-0000	Food Preparation and Serving Related Occupations	-27 
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-28 
39-0000	Personal Care and Service Occupations	-14 
41-0000	Sales and Related Occupations	-44 
43-0000	Office and Administrative Support Occupations	-54 
45-0000	Farming, Fishing, and Forestry Occupations	-86 
47-0000	Construction and Extraction Occupations	-38 
49-0000	Installation, Maintenance, and Repair Occupations	-72 
51-0000	Production Occupations	-164 
53-0000	Transportation and Material Moving Occupations	-74 
55-0000	Military-only occupations	0 
99-0000	Unclassified Occupation	-1 

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-6 
Male 14-18	-5 
Female 19-21	-8 
Male 19-21	-12 
Female 22-24	-8 
Male 22-24	-27 
Female 25-34	-35 
Male 25-34	-98 
Female 35-44	-43 
Male 35-44	-109 
Female 45-54	-48 
Male 45-54	-120 
Female 55-64	-43 
Male 55-64	-149 
Female 65-99	-17 
Male 65-99	-41 

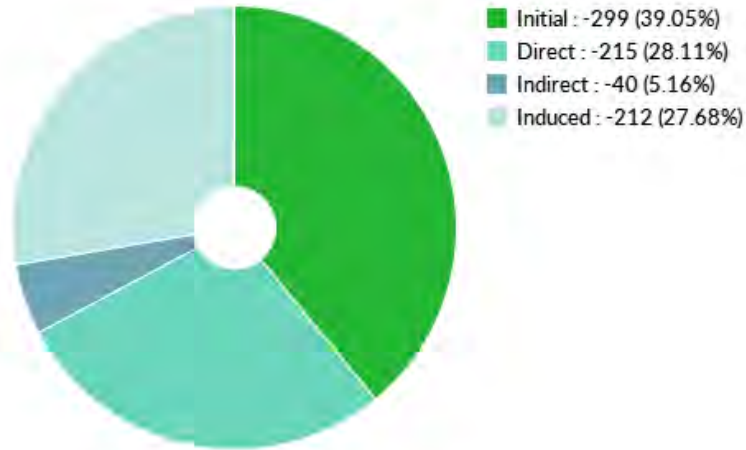
Effect on earnings from removing 299 jobs from Paper (except Newsprint) Mills

<p>-\$33.6M</p> <p>Initial 1.00 Multiplier</p>	<p>-\$8.8M</p> <p>Direct 0.26 Multiplier</p>	<p>-\$1.7M</p> <p>Indirect 0.05 Multiplier</p>	<p>-\$10.5M</p> <p>Induced 0.31 Multiplier</p>
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Effect on jobs from removing 299 jobs from Paper (except Newsprint) Mills

<p>-299</p> <p>Initial 1.00 Multiplier</p>	<p>-215</p> <p>Direct 0.72 Multiplier</p>	<p>-40</p> <p>Indirect 0.13 Multiplier</p>	<p>-212</p> <p>Induced 0.71 Multiplier</p>
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Effect on taxes on production and imports from removing 299 jobs from Paper (except Newsprint) Mills

<p>-\$2.3M</p> <p>Local</p>	<p>-\$2.1M</p> <p>State</p>	<p>-\$1.8M</p> <p>Federal</p>
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Appendix A - Data Sources and Calculations

Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

State Data Sources

This report uses state data from the following agencies: Wisconsin Department of Workforce Development

Impact Scenario

Supermarkets and Other Grocery (except Convenience) Stores in Oneida County, WI

Emsi Q2 2022 Data Set

June 2022

North Central Wisconsin Regional Planning Commission



210 McClellan Street, Suite 210
Wausau, Wisconsin 54403

Parameters

Regions:

Code	Description
55085	Oneida County, WI

Industry Scenario:

Code	Description	Change Type	Change Value
445110	Supermarkets and Other Grocery (except Convenience) Stores	Jobs	-374


Model Type: Type Emsi

Input-Output Year: 2021

Changes to Supermarkets and Other Grocery (except Convenience) Stores using Type Emsi Model

<p>-\$14,629,684</p> <p>Change in Earnings 1.39 Multiplier</p>	<p>-459</p> <p>Change in Jobs 1.23 Multiplier</p>	<p>-\$3,313,232</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

NAICS	Industry	Change in Jobs
11	Agriculture, Forestry, Fishing and Hunting	-2
21	Mining, Quarrying, and Oil and Gas Extraction	0
22	Utilities	-1
23	Construction	-5
31	Manufacturing	-1
42	Wholesale Trade	-1
44	Retail Trade	-378 
48	Transportation and Warehousing	-2
51	Information	-1
52	Finance and Insurance	-3
53	Real Estate and Rental and Leasing	-15 ■
54	Professional, Scientific, and Technical Services	-5
55	Management of Companies and Enterprises	-1
56	Administrative and Support and Waste Management and Remediation Services	-8 ■
61	Educational Services	-1
62	Health Care and Social Assistance	-8 ■
71	Arts, Entertainment, and Recreation	-2
72	Accommodation and Food Services	-8 ■
81	Other Services (except Public Administration)	-7
90	Government	-13 ■

Scenario Results - Occupation

SOC	Occupation	Change in Jobs
11-0000	Management Occupations	-10 ■
13-0000	Business and Financial Operations Occupations	-6 ■
15-0000	Computer and Mathematical Occupations	-1
17-0000	Architecture and Engineering Occupations	0
19-0000	Life, Physical, and Social Science Occupations	0
21-0000	Community and Social Service Occupations	-1
23-0000	Legal Occupations	0
25-0000	Educational Instruction and Library Occupations	-5 ■
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	-4 ■
29-0000	Healthcare Practitioners and Technical Occupations	-13 ■
31-0000	Healthcare Support Occupations	-3 ■
33-0000	Protective Service Occupations	-2
35-0000	Food Preparation and Serving Related Occupations	-66 ■
37-0000	Building and Grounds Cleaning and Maintenance Occupations	-10 ■
39-0000	Personal Care and Service Occupations	-2
41-0000	Sales and Related Occupations	-161 ■
43-0000	Office and Administrative Support Occupations	-30 ■
45-0000	Farming, Fishing, and Forestry Occupations	-2
47-0000	Construction and Extraction Occupations	-4 ■
49-0000	Installation, Maintenance, and Repair Occupations	-6 ■
51-0000	Production Occupations	-32 ■
53-0000	Transportation and Material Moving Occupations	-100 ■
55-0000	Military-only occupations	0
99-0000	Unclassified Occupation	0

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-28 
Male 14-18	-21 
Female 19-21	-19 
Male 19-21	-11 
Female 22-24	-12 
Male 22-24	-11 
Female 25-34	-29 
Male 25-34	-33 
Female 35-44	-31 
Male 35-44	-30 
Female 45-54	-39 
Male 45-54	-29 
Female 55-64	-66 
Male 55-64	-41 
Female 65-99	-35 
Male 65-99	-24 

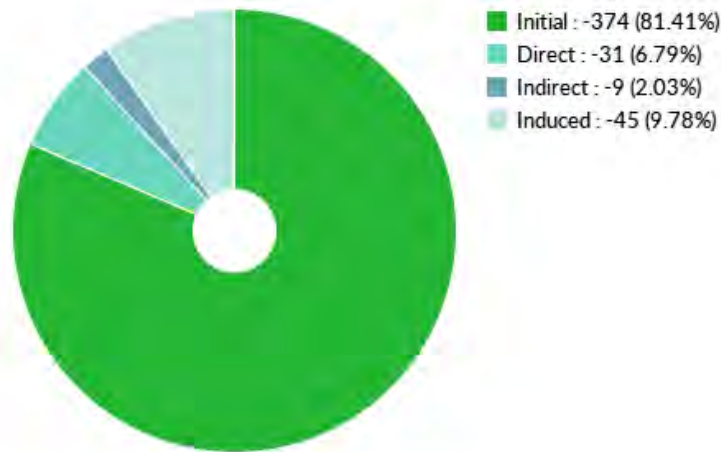
Effect on earnings from removing 374 jobs from Supermarkets and Other Grocery (except Convenience) Stores

<p>-\$10.6M</p> <p>Initial 1.00 Multiplier</p>	<p>-\$1.3M</p> <p>Direct 0.13 Multiplier</p>	<p>-\$373,945</p> <p>Indirect 0.04 Multiplier</p>	<p>-\$2.4M</p> <p>Induced 0.22 Multiplier</p>
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Effect on jobs from removing 374 jobs from Supermarkets and Other Grocery (except Convenience) Stores

<p>-374</p> <p>Initial 1.00 Multiplier</p>	<p>-31</p> <p>Direct 0.08 Multiplier</p>	<p>-9</p> <p>Indirect 0.02 Multiplier</p>	<p>-45</p> <p>Induced 0.12 Multiplier</p>
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Effect on taxes on production and imports from removing 374 jobs from Supermarkets and Other Grocery (except Convenience) Stores

<p>-\$1.6M</p> <p>Local</p>	<p>-\$1.3M</p> <p>State</p>	<p>-\$430,562</p> <p>Federal</p>
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Appendix A - Data Sources and Calculations

Input-Output Data

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State Data Sources

This report uses state data from the following agencies: Wisconsin Department of Workforce Development

Impact Scenario

Warehouse Clubs and Supercenters in Oneida County, WI

Emsi Q2 2022 Data Set

June 2022

North Central Wisconsin Regional Planning Commission



210 McClellan Street, Suite 210
Wausau, Wisconsin 54403

Parameters

Regions:

Code	Description
55085	Oneida County, WI

Industry Scenario:

Code	Description	Change Type	Change Value
452311	Warehouse Clubs and Supercenters	Jobs	-483

Model Type: Type Emsi

Input-Output Year: 2021

















Changes to Warehouse Clubs and Supercenters using Type Emsi Model

<p>-\$27,642,601</p> <p>Change in Earnings 1.41 Multiplier</p>	<p>-637</p> <p>Change in Jobs 1.32 Multiplier</p>	<p>-\$10,812,160</p> <p>Change in Taxes on Production and Imports (TPI)</p>
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Scenario Results - Industry

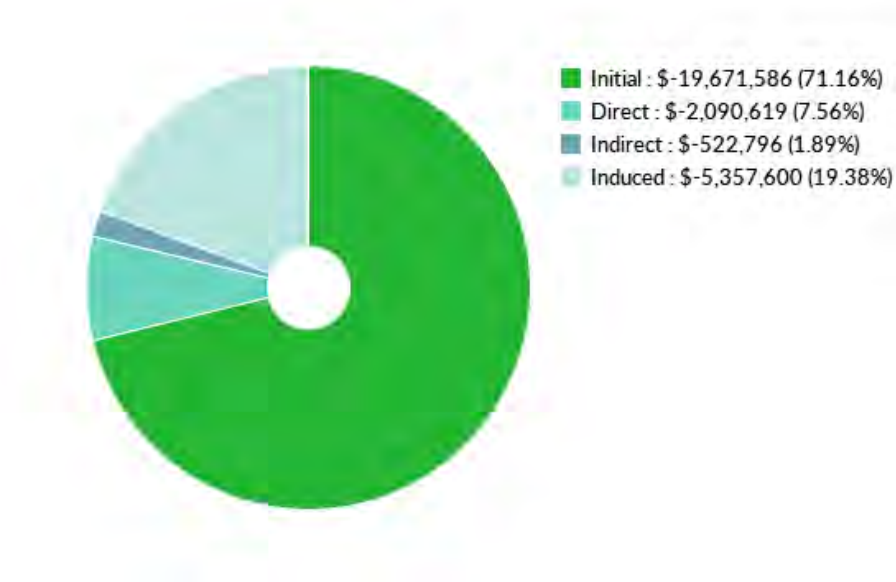
NAICS	Industry	Change in Jobs
11	Agriculture, Forestry, Fishing and Hunting	0
21	Mining, Quarrying, and Oil and Gas Extraction	0
22	Utilities	-1
23	Construction	-8 ■
31	Manufacturing	-2
42	Wholesale Trade	-3
44	Retail Trade	-489 ■
48	Transportation and Warehousing	-4
51	Information	-1
52	Finance and Insurance	-6
53	Real Estate and Rental and Leasing	-19 ■
54	Professional, Scientific, and Technical Services	-7
55	Management of Companies and Enterprises	-4
56	Administrative and Support and Waste Management and Remediation Services	-12 ■
61	Educational Services	-1
62	Health Care and Social Assistance	-13 ■
71	Arts, Entertainment, and Recreation	-2
72	Accommodation and Food Services	-12 ■
81	Other Services (except Public Administration)	-10 ■
90	Government	-40 ■

Scenario Results - Demographics

Demographics	Change in Jobs
Female 14-18	-39 
Male 14-18	-48 
Female 19-21	-27 
Male 19-21	-29 
Female 22-24	-12 
Male 22-24	-14 
Female 25-34	-44 
Male 25-34	-41 
Female 35-44	-51 
Male 35-44	-45 
Female 45-54	-60 
Male 45-54	-42 
Female 55-64	-76 
Male 55-64	-41 
Female 65-99	-44 
Male 65-99	-24 

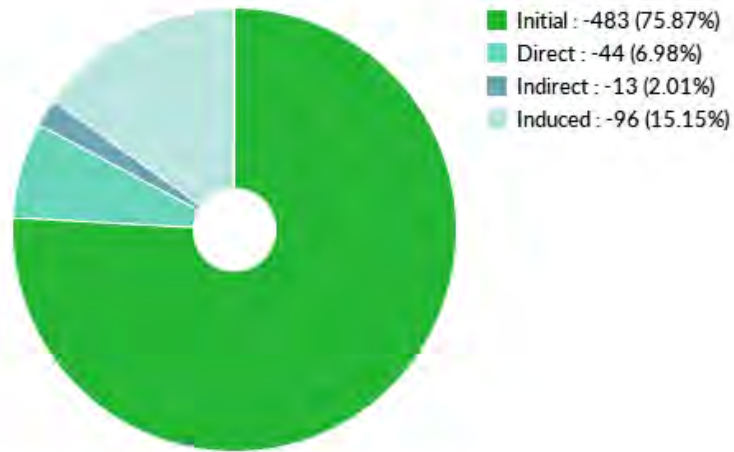
Effect on earnings from removing 483 jobs from Warehouse Clubs and Supercenters

<p>-\$19.7M</p> <p>Initial 1.00 Multiplier</p>	<p>-\$2.1M</p> <p>Direct 0.11 Multiplier</p>	<p>-\$522,796</p> <p>Indirect 0.03 Multiplier</p>	<p>-\$5.4M</p> <p>Induced 0.27 Multiplier</p>
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Effect on jobs from removing 483 jobs from Warehouse Clubs and Supercenters

<p>-483</p> <p>Initial 1.00 Multiplier</p>	<p>-44</p> <p>Direct 0.09 Multiplier</p>	<p>-13</p> <p>Indirect 0.03 Multiplier</p>	<p>-96</p> <p>Induced 0.20 Multiplier</p>
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Effect on taxes on production and imports from removing 483 jobs from Warehouse Clubs and Supercenters

<p>-\$5.4M</p> <p>Local</p>	<p>-\$4.2M</p> <p>State</p>	<p>-\$1.2M</p> <p>Federal</p>
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Appendix A - Data Sources and Calculations

Input-Output Data

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State Data Sources

This report uses state data from the following agencies: Wisconsin Department of Workforce Development

