



SOKAOGON CHIPPEWA COMMUNITY MOLE LAKE ALL HAZARDS MITIGATION PLAN UPDATE 2024

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



SOKAOGON CHIPPEWA COMMUNITY ALL HAZARDS MITIGATION PLAN UPDATE

prepared for:

Sokaogon Chippewa Community at Mole Lake

by:

North Central Wisconsin Regional Planning Commission

adopted by Tribal Council on:

February 19, 2024

This Plan was prepared at the request and under the supervision of the Sokaogon Chippewa Community and its Emergency Management Director by the North Central Wisconsin Regional Planning Commission (NCWRPC). For more information, contact:

NORTH CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION
210 McCLELLAN STREET, SUITE 210
WAUSAU, WI 54403



Telephone: 715-849-5510

FAX: 715-849-5110

email: staff@ncwrpc.org

www.ncwrpc.org

TABLE OF CONTENTS

Part I – Update Planning Process

- Introduction..... 1-1
- Legislative Requirement for Mitigation Planning..... 1-1
- The Five Parts of the All Hazards Mitigation Plan Update..... 1-3
- Key Elements of the Update to the 2016 Plan 1-3
- Development of the All Hazards Mitigation Plan Update 1-4
 - All Hazards Mitigation Plan Update Committee 1-4
 - Neighboring Community Involvement..... 1-5
 - Local and Regional Agency Involvement..... 1-5
 - Public Review Process and Plan Adoption 1-6
 - Incorporated Plans, Studies, Reports and Technical Data..... 1-7
- Contact Information 1-8

Part II – Planning Area

- Introduction..... 2-1
- General Geography 2-1
 - Location and Land Status 2-1
 - Government..... 2-2
 - History..... 2-3
 - Environment..... 2-3
 - Climate..... 2-4
- Demographic and Economic Profile 2-5
 - Population and Households 2-5
 - Employment..... 2-6
- Land Use/Land Cover and Development Patterns 2-6
 - Agriculture and Forestry..... 2-7
 - Commercial and Governmental Development 2-7
 - Residential Development..... 2-7
 - Surface Water..... 2-7
 - Floodplains..... 2-7
 - Wetlands 2-9
 - Other Land Cover/Uses 2-9
- Public Facilities and Services 2-9
 - Transportation..... 2-9
 - Utilities 2-10
 - Emergency Services and Facilities 2-10
- Inventory of Tribal Community Facilities..... 2-11
 - Inventory of Significant Cultural and Sacred Sites 2-13
- Future Growth & Development in Sokaogon Chippewa Community 2-14

Part III – Risk Assessment

- Introduction..... 3-1
- Hazard Identification..... 3-1

Climate Change & Hazard Risk Assessment..... 3-2
Hazard Analysis..... 3-3
 Winter Storms/Extreme Cold 3-4
 Severe Thunderstorms/High Wind/Lightning/Hail 3-7
 Tornados 3-10
 Forest Fires/Wildfires..... 3-14
 Drought/Extreme Heat..... 3-16
 Flooding..... 3-19
 Epidemic/Pandemic..... 3-23

Part IV – Mitigation Strategies

Introduction..... 4-1
Progress Report 2016-2023 4-1
Tribal Hazard Mitigation Goals 4-4
Prioritization of Strategies..... 4-5
Mitigation Action Plan 4-6
 All Hazards 4-6
 Winter Storms/Extreme Cold 4-15
 Severe Thunderstorms/High Wind/Lightning/Hail 4-16
 Tornado 4-16
 Forest Fires/Wildfires..... 4-17
 Drought/Extreme Heat..... 4-18
 Flooding..... 4-18
 Epidemic/Pandemic..... 4-19

Part V – Plan Maintenance Procedures

Introduction..... 5-1
Plan Update Adoption..... 5-1
 Assurances 5-1
Plan Implementation..... 5-1
 Administrative Responsibilities 5-1
 Promote Success of Identified Projects 5-2
 Community Disaster Resilience 5-2
 Incorporation into Other Local Planning Mechanisms..... 5-3
 Integration with FEMA Mitigation Programs and Initiatives..... 5-3
Tribal Capability Assessment 5-4
 Funding Capabilities 5-4
Plan Evaluation and Maintenance 5-5

Tables

Table 1 – Population Growth 2-5
Table 2 – Household Growth..... 2-5
Table 3 – Existing Land Use 2-6
Table 4 – Inventory of Sokaogon Chippewa Facilities and Properties 2-12
Table 5 – Inventory of Tribal Single Family Dwelling Units..... 2-13
Table 6 – Tornado Wind and Damage Scale 3-11
Table 7 – Reported Tornadoes/Funnel Clouds in Forest County 3-12
Table 8 – Benchmark for Progress on 2016 Plan 4-2
Table 9 – Summary of SCC Hazard Mitigation Strategies 4-14

Maps

Map 1 – Location..... 2-16
Map 2 – Generalized Land Use..... 2-17
Map 3 – Surface Water, Wetlands & Watersheds 2-18
Map 4 – Floodplains & Dams 2-19
Map 5 – Transportation Map 2-20
Map 6 – Utilities..... 2-21
Map 7 – Fire Service 2-22
Map 8 – EMS Service..... 2-23
Map 9 – Police Service..... 2-24
Map 10 – Critical Community Facilities 2-25
Map 11 – Tornado Vulnerability 3-26
Map 12 – Flood Vulnerability..... 3-27

Appendixes

Appendix A – Meeting Notices A-1
Appendix B – Sample Functional Needs Intake Form..... B-1
Appendix C – Resolutions of Plan Update Adoption C-1
Appendix D – FEMA Mitigation Grant Reference D-1

INTRODUCTION

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

LEGISLATIVE REQUIREMENT FOR MITIGATION PLANNING

The development of the Sokaogon Chippewa Community All Hazards Mitigation Plan Update is a response to federal regulations requiring the update of a local hazard mitigation plan every five years. The Disaster Mitigation Act of 2000 (DMA2K) amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), creating the framework for state, local (counties and incorporated municipalities), tribal and U.S. territorial governments to engage in hazard mitigation planning to receive certain types of non-emergency disaster assistance. Requirements and procedures to implement hazard mitigation planning provisions may be found in the Code of Federal Regulations, Stafford Act Title 44, Chapter 1, Part 201 (44 CFR Part 201).

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).

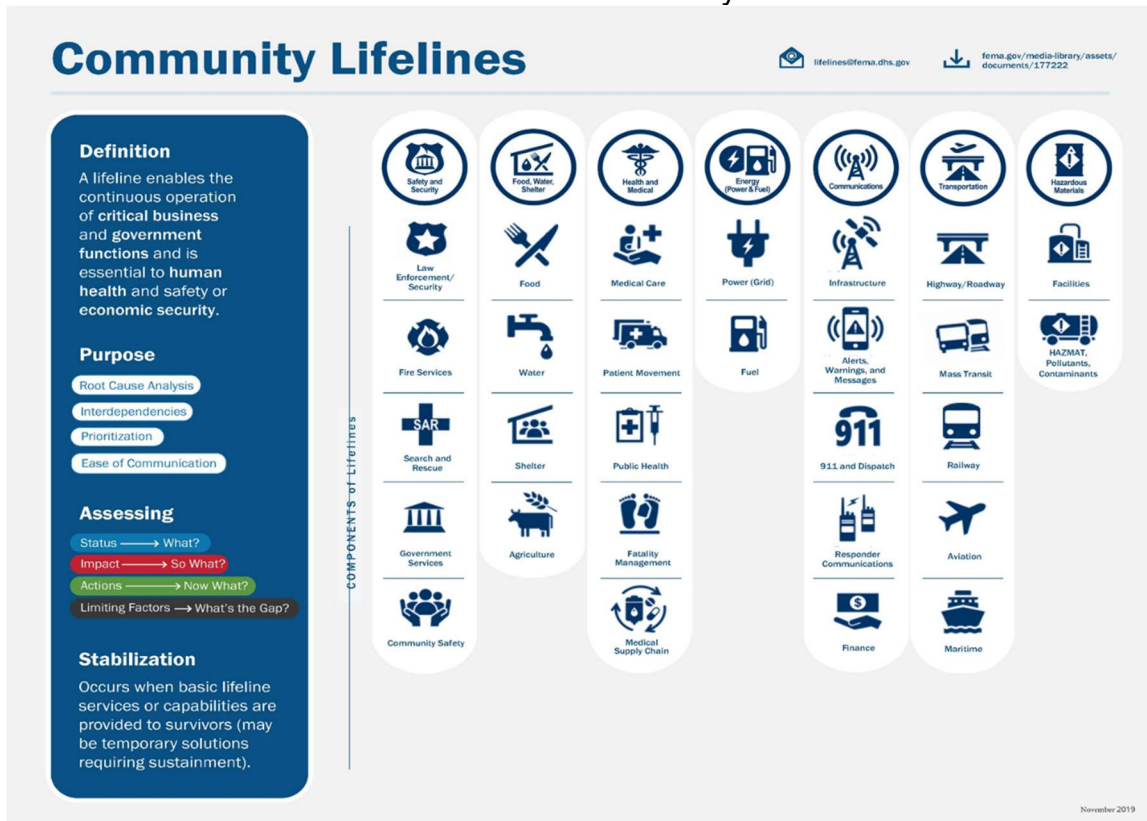
Local hazard mitigation plans form the foundation of a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction and repetitive damage. The Federal Emergency Management Agency (FEMA) supports local mitigation planning to foster partnerships among 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 tribal mitigation plans which are further clarified by FEMA policy guidance.

THE FIVE PARTS OF THE ALL HAZARDS MITIGATION PLAN UPDATE

The Sokaogon Chippewa Community All Hazards Mitigation Plan Update was categorized into five parts in order to address FEMA's tribal 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

KEY ELEMENTS OF THE UPDATE TO THE 2016 PLAN

The major enhancements to the Sokaogon Chippewa Community All Hazards Mitigation Plan developed through this update are as follows:

- ✓ Review of Recommended Revisions - The final Crosswalk for the previous plan approval listed a number of "recommended revisions" which were addressed in this update through the experience of subsequent plan adoptions from other communities.
- ✓ Review and update of planning area chapter - The planning area description and inventory was expanded and improved with additional information and updated statistics.
- ✓ Expanded Hazard Coverage - New hazards addressed in the Update include: Pandemic.
- ✓ Review and update of risk assessment - The risk assessment was updated with documentation on recent hazard events. The priority level of hazards facing the Tribe was also reviewed and updated.
- ✓ Climate Change - A new section directly addressing the impact of climate change is incorporated into the Risk Assessment. The previous plan made only indirect references.
- ✓ 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.
- ✓ The concept of Community Lifelines is introduced into the Plan, see Chapter 1.
- ✓ Concept of Community Resilience is introduced into the Plan, see Chapter 5.

DEVELOPMENT OF THE ALL HAZARDS MITIGATION PLAN UPDATE

The Sokaogon Chippewa Community received a Planning Grant in July of 2021 to develop an All Hazards Mitigation Plan through the Hazard Mitigation Grant Program (HMGP). Tribal Council oversaw development of the update until a Tribal Emergency Management Director was appointed in December of 2022. At that time, the new EM Director, Noel VanDiver, was charged with overseeing the Plan Update development by Tribal Council.

In the summer of 2021, the North Central Wisconsin Regional Planning Commission (NCWRPC) finalized a work agreement with Sokaogon Chippewa and began preparation of the All Hazards Mitigation Plan at the request of Tribal Administration. Having done extensive work on various mitigation plans across the Region, including the initial Sokaogon Chippewa AHMP, Darryl L. Landeau, AICP was assigned to the project by the NCWRPC.

The update process included regular committee meetings as well as extensive involvement from the neighboring communities surrounding the Sokaogon Chippewa lands. A variety of tribal and regional agencies were involved in the development of the Plan Update at various stages, and extensive opportunity for public participation was provided including a public informational meeting.

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

All Hazards Mitigation Plan Update Committee

The Sokaogon Chippewa Community All Hazard Mitigation Plan was prepared under the guidance of an advisory committee that consisted of the heads of key Tribal departments and agencies. Periodic meetings were held with the NCWRPC staff and the Committee to provide input on the types of hazards to be considered, appropriate mitigation strategies, and to review draft reports. Committee members are as follows:

- Bobbie Halada - Assistant Director, SCC Health Clinic
- Wayne LaBine – Education Director
- Michael LaRonge – Tribal Historic Preservation Officer
- Ken McNinch – Utilities Director
- Caleb McGeshick – Tribal Council Representative
- Walter Panick – Housing Director
- Noel VanDiver – Emergency Management Director
- George VanZile – Tribal Roads Director

Neighboring Community Involvement

One of the requirements of the planning process is to include neighboring communities. The following were identified as neighboring communities to the Sokaogon Chippewa Tribe at Mole Lake:

- Forest County - county level of government in which the Tribal area resides
- Town of Nashville: surrounding local unit
- Forest County Potawatomi: closest sister tribe

Each of these entities participated in the planning process for the Sokaogon Chippewa Community All Hazards Mitigation Plan Update by having representatives attend the Agency and Organization Interest Group meeting for the Plan Update, see "Local and Regional Agency Involvement", below for further details on this meeting.

During the meeting a number of inter-jurisdictional issues were discussed, including: dispatching coordination; improving address numbering for 911 response in conjunction with the County, providing alternative access routes to areas restricted by only one-way in or out, early warning needs including weather radios, and a variety of others.

Local and Regional Agency Involvement

Another requirement of the planning 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-private interests. To meet this objective, the NCWRPC invited a diverse group of stakeholders to discuss potential hazard mitigation strategies. The invite group also included the Tribe's neighboring communities.

The meeting was held on April 19, 2023 at the Administration Building in Mole Lake. Agencies and organizations represented include the following:

- Mike Spencer - Mole Lake Casino Security Director
- Melinda Chaney - Treasurer, Crandon Rescue Squad
- Bobbie Irocky - Forest County Potawatomi EM Director
- Mary Torgersen - Chair, Town of Nashville
- Jeremy Wild - Mole Lake Convenience Store Manager
- Ken McNinch - Mole Lake Public Works Director
- August VanZile - Director, Sokaogon Finance Incorporated
- Sheriff Jeff Marvin - Forest County Sheriff's Office
- Mike Nixon - Crandon Fire Department
- Eugene Okraswski - Crandon Fire Department
- Chief Darrell Wilson - Crandon Fire Department
- Caleb McGeshick - Tribal Council Member
- Amber Rehberg - Area Director, University of Wisconsin Extension

- Stephanie Statezny - Forest County EM Director
- Janet Daily - Forest Co. Health Dept. Public Health Nurse
- Amy Gatton - Director, Forest County Health Department
- Michael LaRonge - Tribal Historic Preservation Officer
- Sherri Mohr - CEO, United Safety Solutions
- Bobbie Halada - Assistant Director, SCC Health Clinic
- Noel VanDiver - Tribal Emergency Management Director
- Darryl Landeau - Senior Planner, NCWRPC

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. Participants were then asked to respond to a number of questions designed to identify mitigation concerns and needs they see facing the Tribe. Potential solutions for the concerns/needs were discussed to identify mitigation strategies for possible inclusion in Part IV of the Plan.

During the meeting a number of issues were discussed, including: dispatching and mutual aid, fire number addressing improvement, availability and access to heavy equipment, early warning systems including weather radios, power outage, functional needs, access to residences on Ackley Circle, among others.

Public Review Process and Plan Adoption

For purposes of this Plan Update, "public" is defined as all tribal members living on Tribal trust and fee lands making up the Mole Lake reservation area. Chapter II of this Plan Update provides some basic demographic details about this population.

Opportunities for public comment were provided to review the Plan Update during the drafting stage and prior to Plan approval. See APPENDIX A for copies of public meeting notices. A copy of the draft was made available on the Internet. Comments and questions about the Plan Update were directed to the Tribal Emergency Management Department.

A public informational meeting on the draft plan update was held at the Tribal Administration Building on April 19, 2023. Notice for the meeting was published in the Tribal Newspaper, on its Facebook page and on flyers posted in public buildings. Plan staff: Noel VanDiver, Tribal Emergency Management Director and Darryl Landeau of the NCWRPC, attended the meeting. However, no members of the public chose to attend and thus no public comments were received. In addition, no written comments were submitted.

On November 20, 2023, Tribal Council held a regularly scheduled, posted and open public meeting with review of mitigation plan update on the agenda. NCWRPC and Tribal EM Staff gave a brief overview of the plan update and answered questions from Council Members on the Plan. Some members of the

tribal public provided some questions and input on matters that were already addressed in the Plan Update.

On February 19, 2024 Tribal Council held a regularly scheduled Tribal Council meeting with adoption of Tribal All Hazard Mitigation Plan Update on the posted agenda. There was brief discussion on the Plan Update before the resolution was moved and adopted, see APPENDIX C for copy of adopting resolution.

Incorporated Plans, Studies, Reports And Technical Data

Many plans, reports, and technical data sources were referenced and incorporated into the Sokaogon Chippewa Community Tribal 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 Forest County geographic information system databases provided much of the base data for the mapping and analysis within the Plan. 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 Plan. Land use data in Part 2 was obtained from the Sokaogon Chippewa Community 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. NFIP DFIRM flood zone maps for Forest County provided the mapping of 100-year floodplain areas, Map 4 in Part 2, for flooding risk assessment, Map 12 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.

Other plans, reports, and documents were reviewed by staff during the update process including but not limited to the FEMA Discovery Report for the Wolf River Watershed, State of Wisconsin Hazard Mitigation Plan; the Hazard Analysis for the State of Wisconsin, the Wisconsin Repetitive Loss Report, the Forest County All Hazards Mitigation Plan Update, the Forest County Zoning Ordinance, the Forest County Land and Water Resource Management Plan, the Forest County Emergency Operations Plan, the City of Crandon All Hazards Mitigation Plan Update, the North Central Wisconsin Pandemic Assessment and Future Response Plan and the North Central Wisconsin Regional COVID-19 Recovery Plan. Although these may not have been directly incorporated, the review provided valuable insight and direction to the update process.

CONTACT INFORMATION

Thomas Richmond, Emergency Management Director
Sokaogon Chippewa Community
Tribal Administration Building
3051 Sand Lake Road
Crandon, WI 54520

Phone: (715)662-0351

Email: thomas.richmond@scc-nsn.gov

Go To:

<https://sokaogonchippewa.com/>

<https://www.ncwrpc.org/ncwrpc2021/mole-lake-all-hazards-mitigation-plan-2023/>

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

<https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning>

INTRODUCTION

Part II of the Sokaogon Chippewa Community All Hazards Mitigation Plan provides general geographical information, including demographic and economic characteristics. The general development patterns of the tribal area 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 the planning area. This overall summary of the area'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 the area 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 and Land Status**

The Sokaogon Chippewa Community tribal lands are located in the Town of Nashville in Forest County, Wisconsin. The Town of Nashville is a double township offset from each other. The Mole Lake reservation is located in the northern section of Nashville, which occupies the southwest corner of Forest County. The City of Crandon lies kitty-corner, north and east, of the Town. Nashville borders Oneida County to the west and Langlade County to the south. See Map 1.

The Mole Lake reservation lies approximately 100 miles northwest of Green Bay; 211 miles northwest of Milwaukee; and 208 miles north of Madison. Major metropolitan areas outside of Wisconsin are Chicago, 305 miles southeast; Minneapolis-St. Paul, 250 miles west; and Duluth, 220 miles northwest.

The Sokaogon Chippewa Community has over 6,000 acres in the Mole Lake Reservation. Of these lands, 1,930 are categorized as reservation land, another 1,320 acres are considered trust lands, and the balance are fee lands, mainly obtained through purchase. There are about 1,300 tribal members, but approximately 500 reside on reservation land.

The reservation and trust lands are located in the Town of Nashville and the fee lands are in the Towns of Nashville and Lincoln, and in the Town of Ainsworth in

Langlade County. The Town of Lincoln is also home to reservation land belonging to the Forest County Potawatomi Community.

Government

The Sokaogon Chippewa Community is a sovereign nation chartered by the Bureau of Indian Affairs, federally recognized as a Native American Tribe/Nation, and operates under a ratified constitution. The Community is governed by a six-member council. Tribal government is organized into a number of departments and agencies as follows:

- Administration
- A-Binoojii Daycare Child Development Center
- Brighter Days Victim Assistance Program
- Communications
- Convenience Store
- Cultural and Recreation Center
- Tribal Child Support Agency
- Education Department
- Elder Services
- Enrollment
- Environmental (Wastewater Facility)
- Family Services
- Fisheries
- Forestry Department
- Food Distribution
- Health Clinic
- Housing Department
- Human Resources (HR)
- Indian Child Welfare
- Information Technology (IT)
- Mole Lake Casino, Lodge & Conference Center
- Police Department
- Roads Department
- Sokaogon Finance Incorporated (SFI)
- TrANS Program
- Tribal Court
- Tribal Historic Preservation Office (THPO)



Mole Lake Casino & Lodge and surrounding area

History

In 1930, a roll had been taken in the Mole Lake area and 199 Indians were determined to be in this band. Under the provisions of the 1934 Reorganization Act, 1,745 acres of land were purchased for the Mole Lake Reservation. This area lies in southwestern Forest County, near Crandon.



Chief Ackley

According to tribal history, the band had been promised the land by treaty signed with President Franklin Pierce. However, the agent, who was to confirm the treaty and secure the land for them, drowned on his return trip to Washington. The Tribe, under the leadership of Chief Willard Ackley, finally and after a long struggle, received federal recognition and reservation status in 1937. In 1939, the Sokaogon of Mole Lake were granted 1,680 acres of reservation land.

At that time, the principle means of gaining a livelihood for this group were boat building, harvesting wild rice and wreath greens, and selling souvenir bows and arrows and other novelties. The soil, a sandy loam with gravel outcroppings, yields fair crops of potatoes, short season vegetables, oats, clover, and timothy hay. The game on the reservation included deer, bear, muskrats, and water fowl.

With the advent of gambling casinos and bingo, the tribe has continued with an age-old Chippewa tradition of playing games of chance. The introduction of bingo and casinos drastically altered unemployment on the reservation. Rates fell from 80% to 10% within a couple of years. The surrounding communities have also benefitted financially and reduced their dependency on federal aid.

Today, the Sokaogon Chippewa Community continues to harvest wild rice and spear fish in traditional ways. And now, utilizing state of the art technology, they continue to protect the resources of their environment for future generations. The tribe continues to use its money wisely by investing in cultural preservation and restoration projects, environmental planning of their resources, education of their community members, and social programs that enhance the general health and welfare of the Community.

Environment

Forests play a key role in the protection of environmentally sensitive areas like steep slopes, shoreland, wetlands, and flood plains. The Mole Lake reservation is mainly forested, with a mix of conifer and deciduous tree species.

The Mole Lake reservation is located within the Upper Wolf River and Post Lake watershed, which drains into Lake Michigan. Wetlands play a role in the function of the hydrologic cycle and local ecosystems, and they also assist in hazard mitigation by acting as water storage devices in times of high water. A significant amount of reservation land is wetland. The majority of the reservation lies within

a glacial drift aquifer, which is the major source of ground water in most of the county.



Rice Lake

Three lakes, either on or adjacent to the reservation, are vital to the Community. These lakes, at the headwaters of the Wolf River, include: Bishop Lake, Mole Lake and Rice Lake. Rice Lake is one of the remaining ancient wild rice beds in Wisconsin. The annual wild rice harvest in early fall is an essential part of tribal community life.

Climate

Winters in the Mole Lake area are very cold, and the short summers are fairly warm. The short frost-free period during the summer limits cropping mainly to forage crops, small grains, and adapted vegetables. Precipitation is fairly well distributed throughout the year but reaches a peak in the summer. Snow covers the ground much of the time from late fall through early spring.

In winter, the average temperature is 14 degrees F and the average daily minimum temperature is 4 degrees. The lowest temperature on record for the area, which occurred on January 17, 1982, is -39 degrees. In summer, the average temperature is 63 degrees and the average daily maximum temperature is 76 degrees. The highest recorded temperature in the area, which occurred on July 26, 1955, is 100 degrees.

The total annual precipitation in the area is about 30 inches. Of this total, more than 21 inches, or about 70 percent, usually falls between April and September. The growing season for crops falls within this period. In two years out of ten, the rainfall in April through September is less than 18 inches. Thunderstorms occur on about 34 days each year.

The average seasonal snowfall is about 67 inches. The greatest snow depth in the area at any one time during the period of record was 56 inches. On average, 93 days of the year have at least one inch of snow on the ground. The number of such days varies greatly from year to year.

The sun shines 65 percent of the time possible in summer and 45 percent in winter. The prevailing wind is from the southwest. Average wind speed of 12 miles per hour occurs in spring.

DEMOGRAPHIC AND ECONOMIC PROFILE

Population and Households

Tribal population of the Sokaogon Chippewa (Mole Lake) has grown by nearly 23 percent between 2000 and 2020, outperforming its neighbors and even the overall statewide population growth. Both Forest and Langlade Counties lost population over this time period. See Table 1.

Table 1: Population Growth				
Community	Population			
	2000	2010	2020	% Change 2000-2020
Mole Lake*	392	414	507	22.7%
T. of Nashville	1,157	1,064	1,215	4.8%
T. of Lincoln	1,005	955	1,133	11.3%
Forest Co.	10,024	9,304	9,179	-9.2%
Langlade Co.	20,740	19,977	19,491	-6.4%
Wisconsin	5,363,690	5,686,986	5,893,718	9.0%

*Source: US Census. *Tribal population is also included in the Town of Nashville total.*

Between 2000 and 2020 Mole Lake experienced a significant increase in total households of 55.6 percent (see Table 2). The neighboring towns also saw an increase in households on track with population growth, but the counties, overall, experienced a decrease in the number of households.

Table 2: Household Growth				
Community	Households			
	2000	2010	2020	% Change 2000 - 2020
Mole Lake*	144	152	224	55.6%
T. of Nashville	485	448	526	8.5%
T. of Lincoln	404	399	483	19.6%
Forest Co.	4,043	3,836	3,929	-2.8%
Langlade Co.	11,187	12,360	8,539	-23.7%
Wisconsin	2,084,544	2,279,768	2,377,935	14.1%

*Source: U.S. Census. *Tribal households also included in the Town of Nashville total.*

The Mole Lake Community overall is relatively young with a median (average) age of about 35 years. This makes the tribe significantly younger than Forest County as a whole which has a median age of about 46 years. Obviously, there is a significant youth component to the Community population with about 30% of the total tribal population being under the age of 18. The working adult

population (ages 18 to 64) is about 60% of the Community while the elder population, those 65 years and over, comprise about 10%.

Employment

The Sokaogon Chippewa Community is one of the largest employers in Forest County, employing more than 300 people of diverse skills. The Mole Lake Casino and Lodge and the Tribal government are both among the top employers in the County.

The Community has a limited economic base that is highly dependent on tourism dollars. The economic enterprises include the Mole Lake Casino and Bingo and adjoined Café Manoomin Restaurant and hotel, the Mole Lake New Business Incubator, Sokaogon Finance Incorporated (SFI), and the Sokaogon Chippewa Community C-Store.

LAND USE/COVER AND DEVELOPMENT PATTERNS

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

Table 3: Existing Land Use		
Description	Acres	Percent
Agricultural	1.58	0.03%
Commercial	51.69	0.85%
Government	43.18	0.71%
Open Land	21.07	0.35%
Outdoor Recreation	13.43	0.22%
Residential	212.99	3.49%
Transportation	73.60	1.21%
Water	556.33	9.11%
Woodlands	5,132.40	84.05%
Total	6,106.28	100.0%
<i>Source: NCWRPC GIS Database, 2022</i>		

The North Central Wisconsin Regional Planning Commission (NCWRPC) has categorized land use in Forest County into general classifications using 2020 aerial photography to digitize a land use Geographic Information System (GIS) coverage. Map 2 shows the land use and development patterns in the Mole Lake area. Table 3 shows the acreage and percent of each classification for Mole Lake Community lands.

Agriculture and Forestry

The dominant land-use on Mole Lake Tribal land is woodlands. Land area of the Tribe is approximately 84 percent forested, comprised of approximately 5,132 acres of woodland. There is a small percentage of agricultural land in the area.

Commercial and Governmental Development

Commercial and governmental development makes up only about 1.5 percent of the total area of the Tribe. Land use for commercial development is mostly located along STH 55. Tribal government and other institutional facilities are also concentrated along that major roadway. Some of the businesses in the corridor include: the C-Store Gas Station, Sokaogon Finance Incorporated, Day Care, Mole Lake Casino and Lodge.

Residential Development

Land in residential development makes up about 3.5 percent of the total tribal area. There are various residences scattered throughout the area primarily along roadways. However, much of the housing stock is concentrated in three general areas including: (1) Ackley Circle / Indian Route 10, (2) Daisy Lane/John K Road/Sokaogon Drive, and (3) Indian Settlement Road. Multifamily apartment buildings include Randall Apartments on Indian Settlement Road, another apartment building on Sokaogon Drive, the elder apartments on Highway 55.

Surface Water

The Town of Nashville is part of two watersheds. The northwestern half of the town, where the Mole Lake reservation is located, lies within the Upper Wolf River and Post Lake watershed, and the southeastern half of the town is in the Lily River watershed. Both of these watersheds drain into Lake Michigan. Surface waters comprise about 556 acres or 9 percent of the Tribal land. See Map 3.

The rivers and lakes within the reservation and surrounding area provide fisheries and wild rice habitat, both significant tribal resources. Rice Lake and Swamp Creek are identified as important wild rice areas.

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

Floodplains

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 to streams or through storage in 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 a map 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.

The value of floodplains is in preserving and protecting these natural flood control areas from encroachment. First, by preventing development in the floodplain, the cost of building dikes, levees, 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 flood plain puts more life and property in danger.

In Wisconsin, counties are required to adopt 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. According to the Sokaogon Chippewa Community Comprehensive Plan, these regulations do not apply to tribal trust and other lands incorporated into the reservation boundary, because of tribal sovereignty. Privately held tribal or Indian property may be subject to these types of regulations.

Floodplain zoning maps identify areas where significant flooding can occur. These regulations prohibit development in the floodway, the most dangerous flood area. In other flood areas, the flood fringe, development that is built above flood levels and otherwise flood-protected is allowed in accordance with the regulations. For regulatory purposes, a floodplain is generally defined as land where there is a one percent chance of flooding in any year (also known as the 100-year floodplain). A tribe can enact its own regulations. The Sokaogon could incorporate floodplain regulations similar to those required of Wisconsin counties through a Tribal Land Use Ordinance, as recommended in the Sokaogon Chippewa Community Comprehensive Plan

A tribe may also participate in the National Flood Insurance program or NFIP. However, many tribes do not, for various reasons such as limited flood plain mapping or inability of tribal members to afford NFIP premiums. Digital Flood Insurance Rate Maps, or DFIRMs, have been prepared for Forest County including the tribal area. These DFIRMs delineate the "A" Zones including the floodway and flood fringe, those areas inundated by the 100-year flood.

The NCWRPC downloaded the DFIRMs for use in this Plan. The digital files indicate approximately 920 acres of floodplain within the Tribal boundaries. Map 4 shows these approximate flood hazard boundary areas. While it appears that there is a significant area of floodplain within tribal boundaries, much of this land may not be developable for other reasons, i.e.: wetlands, see below. Further detailed investigation is needed to evaluate Sokaogon Chippewa Community participation in the NFIP.

Currently, there are no repetitive loss structures, those with multiple flood insurance claims in the Mole Lake area. The NCWRPC did identify three

structures within the floodplain in the area, but they were outside the Tribal boundary.

Wetlands

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

The DNR has identified the location of wetlands on their WISCLAND database. According to this information, there are approximately 1,730 acres of wetlands with the Tribal boundaries. Map 3 shows these wetland areas to be scattered throughout the Mole Lake area.

Destruction of wetlands can occur through the use of fill material. This can compromise the hydrological function of the site and open the area to improper development. The US Environmental Protection Agency (EPA) has promulgated minimum standards and works with the Tribe to manage and protect wetlands.

Other Land Cover/Uses

Open lands represent undeveloped land not wooded or part of a farm such as grassland. Outdoor recreation land consists primarily of green space, trails and ball diamonds behind the Casino, but the Tribe also maintains a number of public boat landings. 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 Mole Lake, surface transportation facilities consume about 74 acres of land or about 1.2 percent of total land area.

PUBLIC FACILITIES AND SERVICES**Transportation**

The transportation system of the Sokaogon Chippewa Community provides the basis for movement of goods and people into, out of, through, and within the reservation area. An efficient transportation system is essential to the sound social and economic development of the Community and the surrounding region. The analysis of transportation routes should be considered in the possible event of a disaster. See Map 5. Proposed future roads and trails are also shown.

State Highway 55, County Highway M, and to a lesser degree CTH B, serve the Mole Lake community. County highways serve rural land uses and distribute local traffic to the regional arterial system. STH 55 is the principal truck route as designated by WisDOT.

The Forest County Commission on Aging coordinates a bus service to provide transportation to the elderly and disabled residents of Forest County including Mole Lake residents. The Tribe also operates a minibus to transport elders.

The Crandon Municipal Airport lies just to the northeast of Mole Lake. This airport provides general aviation service for small private airplanes and limited airfreight. The nearest commercial passenger service is at the Rhinelander/Oneida County Airport in Rhinelander.

There is no local access to rail service in Mole Lake. The nearest freight rail would be out of Rhinelander.

Utilities

Utility systems are important in hazard mitigation planning because of the community's reliance on water, wastewater treatment, gas service, electricity, and communications. 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 flooding and other threats is a consideration for hazard mitigation planning. The Mole Lake reservation has a public water supply system and sanitary sewer service. The wastewater treatment plant has a capacity of 90,000 gallons per day. Two water towers, with a capacity of 105,000 and 50,000 gallons, are part of the drinking water system. Storm sewers exist along STH 55 from the casino to Swamp Creek.

The infrastructure of electric and telephone lines should be considered in the event of high wind, ice storms, tornados, flooding, or fire. Electrical service is provided by the Wisconsin Public Service Corporation. The closest high-voltage (115kv) electric transmission line to Mole Lake is located along USH 8 to the north. Liquid petroleum / propane (LP gas) is available for home and business delivery from several vendors. Natural gas service does not currently extend to the reservation, but is available in some adjacent towns.

Telephone service is provided by Frontier, which also provides DSL Broadband internet to most of the area. The Tribe owns a wireless telephone antenna mounted on its water tower, which it leases to provide cell phone service throughout the reservation.

Emergency Services and Facilities

The type and location of public emergency services are an important consideration in hazard mitigation planning, because of the crucial role of such facilities in certain hazard situations.

Fire service for the Sokaogon Chippewa is provided by the City of Crandon Fire Department through the Crandon Fire District and EMS/rescue - ambulance

service is provided by Crandon Area Rescue Squad, a separate entity. See Maps 7 and 8. The Tribal water system includes hydrants for fire fighting.

The Sokaogon Chippewa Community Police Department (SCCPD) provides professional and timely services to the members of the Community. The SCCPD is committed to enhancing the bond with the Community and reducing criminal activity through problem-oriented, community-oriented policing efforts and by partnering with the residents to discuss and address their concerns openly. The SCCPD officers are Wisconsin Certified Tribal Law Enforcement Officers and are empowered to enforce Tribal, State, and Federal Criminal Law where applicable. The SCCPD also enforces Tribal regulatory laws and Tribal ordinances.

The SCCPD has a Cooperative Law Enforcement Agreement with Forest County to provide Law Enforcement and dispatching services. The Forest County Sheriff’s Department provides dispatching services for the Department via its 911 system. See Map 9

The nearest medical facilities are Aspirus Rhinelander Hospital in Rhinelander and Aspirus Langlade Hospital in Antigo, which provide 24-hour emergency service and critical care. The medical clinic in Crandon is affiliated with Aspirus.

The Sokaogon Chippewa Health Clinic serves resident and non-resident tribe members and is open to the general public. The facility offers a variety of non-urgent, primary care medical and dental services, as well as mental health, vocational rehabilitation, substance abuse services and a pharmacy.



Sokaogon Chippewa Community Health Clinic

INVENTORY OF TRIBAL 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. Elder housing sites are vulnerable, because of the high level of assistance required by the residents that live there. Since children are often

congregated there, day care and youth center sites are important. Mole Lake children attend school in Crandon. Map 10 shows the location of selected types of Tribal community facilities in Mole Lake.

The valuation of property reflects the potential for property damages across the community. The Tribe holds many community and economic facilities in common on behalf of the entire community. Refer to Table 4 for a full inventory of these tribal facilities. The Tribe also holds a significant part of the housing stock within the reservation, see Table 5

Table 4: Inventory of Sokaogon Chippewa Facilities & Properties		
Property	Location	Est. Value
Casino/Restaurant	3084 Hwy 55	12,803,688
Hotel Conference Ctr	3084 Hwy 55	12,288,738
Casino/Hotel Storage	3084 Hwy 55	614,988
Casino/Hotel Storage	E. Community Dr	161,689
Rec Center	Casino Way	1,412,234
Medical Clinic	3144 VanZile Rd	2,324,794
Water Tank	3167 Hwy 55	339,046
C-Store Gas Station	3156 Hwy 55	531,035
Historical Home	Hwy 55	260,913
SFI Office	3163 Hwy 55	393,800
Storage Bldg	3015 Hwy 55	144,254
Senior Housing	VanZile Rd	2,500,000
Elder Apartments	3154 Hwy 55	1,906,410
Day Care Center	Casino Way	250,000
EPA Storage Garage	3098 Sand Lake Rd	94,238
Admin./Environmental	3051 Sand Lake Rd	3,667,579
Maintenance Bldg	Community Dr	419,320
Food Distribution	3162 VanZile Rd	178,710
Fish Hatchery	3051 Sand Lake Rd	308,400
Pump House	Sokaogon Dr	337,885
Recycling Bldg	Community Dr	224,556
Family Services Bldg	10808 Sokaogon Dr	289,816
Brighter Days	10804 Sokaogon Dr	1,056,550
Water Tank	Ackley Circle	493,161
Housing Office	3265 Indian Settlement Rd	520,497
Housing Maint. Bldg	3265 Indian Settlement Rd	962,170
Randall Apartments	3207 Indian Settlement Rd	475,200
Insurance Office	Hwy 55	350,000
Agricultural Facility	Mole Lake Rd	300,000
WW Treatment Plant	Ackley Circle	1,500,000
Infrastructure	underground	793,278
Total		\$47,920,949
<i>Source: Sokaogon Chippewa Community and NCWRPC, 2022-2024.</i>		

Table 5: Inventory of Tribal Single Family Dwelling Units		
Street Location	Number of Units	Est. Total Value
Indian Settlement Rd	16	1,799,490
Krystal Ln	1	120,340
Community Dr	2	241,120
Sokaogon Dr	8	1,066,340
Ackley Circle	8	966,570
Daniel Dr	3	366,520
County Rd M	11	1,794,100
Hwy 55	8	1,066,560
Sand Lake Rd	7	993,850
Indian Route 10	12	2,066,790
John K Rd	11	1,483,900
Daisy Ln	11	1,686,190
Frontage Rd	5	875,380
McGeshick Lane	2	240,000
McGeshick Rd	4	480,000
Dry Lake Rd	22	2,640,000
Totals	131	\$17,887,150

Source: Sokaogon Chippewa Community and NCWRPC, 2022-2024.

Inventory of Significant Cultural and Sacred Sites

The Dinesen House log cabin was built during the 19th century deep in Indian territory wilderness adjacent to a US military trail and remains in its original spot now along Hwy 55 within the Mole Lake reservation. The 150+ year old structure has gained prominence since 2005 when it became listed on the National Register of Historic Places and fully restored in the years following. The cabin served as a mail and trading station where furs were traded with the local Chippewa.



The Dinesen House

There are a number of other assets that have been identified as having cultural importance to the Sokaogon Chippewa Community:

- Mushgigamongsebe District: An an area of historic cultural importance to the Sokaogon. It includes the river, wetlands and surrounding area from the Hemlock Creek Valley west to the outlet of Rice Lake, including Spirit

Hill. The District has been a gathering place and center for religious and cultural events.

- Rice Lake, itself.
- Pow Wow Grounds.
- Chief Ackley’s House.
- Cultural Center.
- Tribal Cemetery.



- Battle of Mole Lake Historical Marker and associated battlefield and burial grounds.

Note that some of these facilities are shown on Map 10, however, in order to protect some sites from excess traffic and potential vandalism, the Tribe prefers not to advertise their locations.

FUTURE GROWTH AND DEVELOPMENT IN THE SOKAOGON CHIPPEWA COMMUNITY

Population of the Sokaogon Chippewa Community at Mole Lake grew by 22.7% between 2000 and 2020. Carrying this trend forward forecasts a 2040 Tribal population of 622 people. Approximately 51 new housing units would be needed on Tribal land to accommodate this growth.

The projected residential land demand is based on this expected growth in households. An average increase of approximately 12 acres of residential land is anticipated on the reservation every 5 years to accommodate population growth. Much of this new residential development will continue to concentrate in the tribes existing residential areas of Ackley Circle / Indian Route 10, Daisy Lane/John K Road/Sokaogon Drive, and Indian Settlement Road.

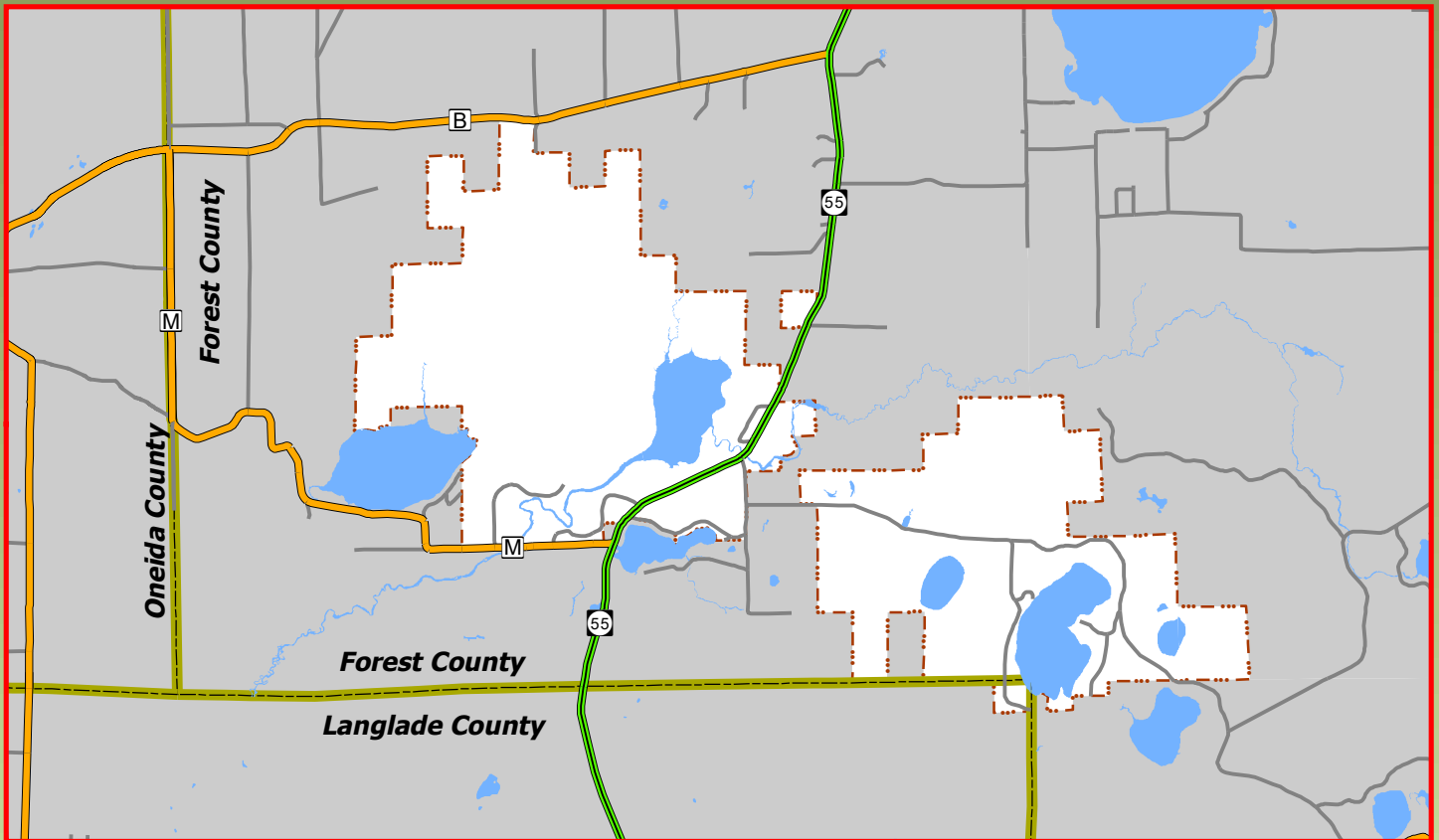
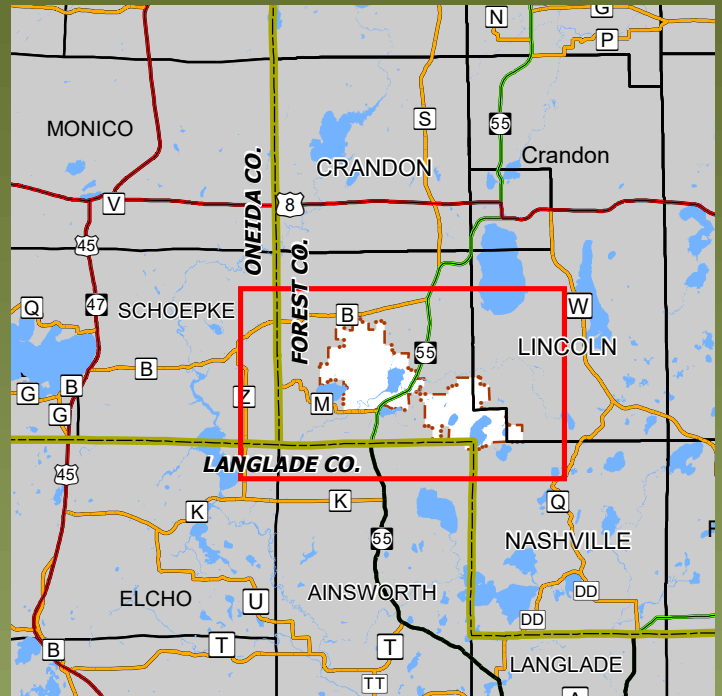
Along with this population growth the Tribe continues to work on economic development and diversification. As with any economic activity, market demand will be a primary factor driving development. Assuming that an increase in commercial land use will parallel the increase in population on the reservation, demand for commercial land will increase by about 2.5 acres every 5 years. Much of this new commercial growth will continue to concentrate in the tribe's main commercial area along Hwy 55.

Since the initial all hazards plan in 2016, the Tribe has completed several major development projects, including:

- Elder Housing with supportive services for elderly and disabled (24 unit apartment renovation of old motel on Hwy 55)
- Recreation Center
- Fish Hatchery
- Greenhouse/Agricultural Facility
- Insurance Office
- Food Distribution Facility


In addition to the growth of the community's population and commercial base, the Tribe continues to plan and develop new tribal facilities as well as renovation and expansion of existing facilities. The following new facilities are being planned at this time:

- Renovation and Expansion of the Sokaogon Chippewa Health Clinic
- 20 New Housing Starts (across tribal residential areas).
- Dry Lake Rd Residential Development (6 units).
- Expansion of Elderly and Assisted Living Facility (for 25 to 30 tribal residents).
- Upgrade/Expansion of WWTP and Lift Station with water line improvements.



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

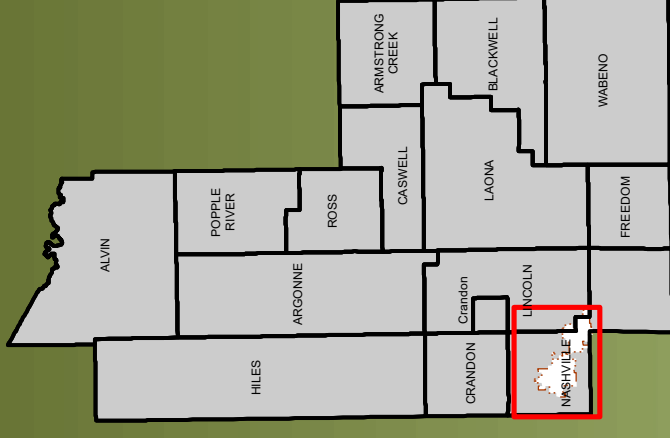
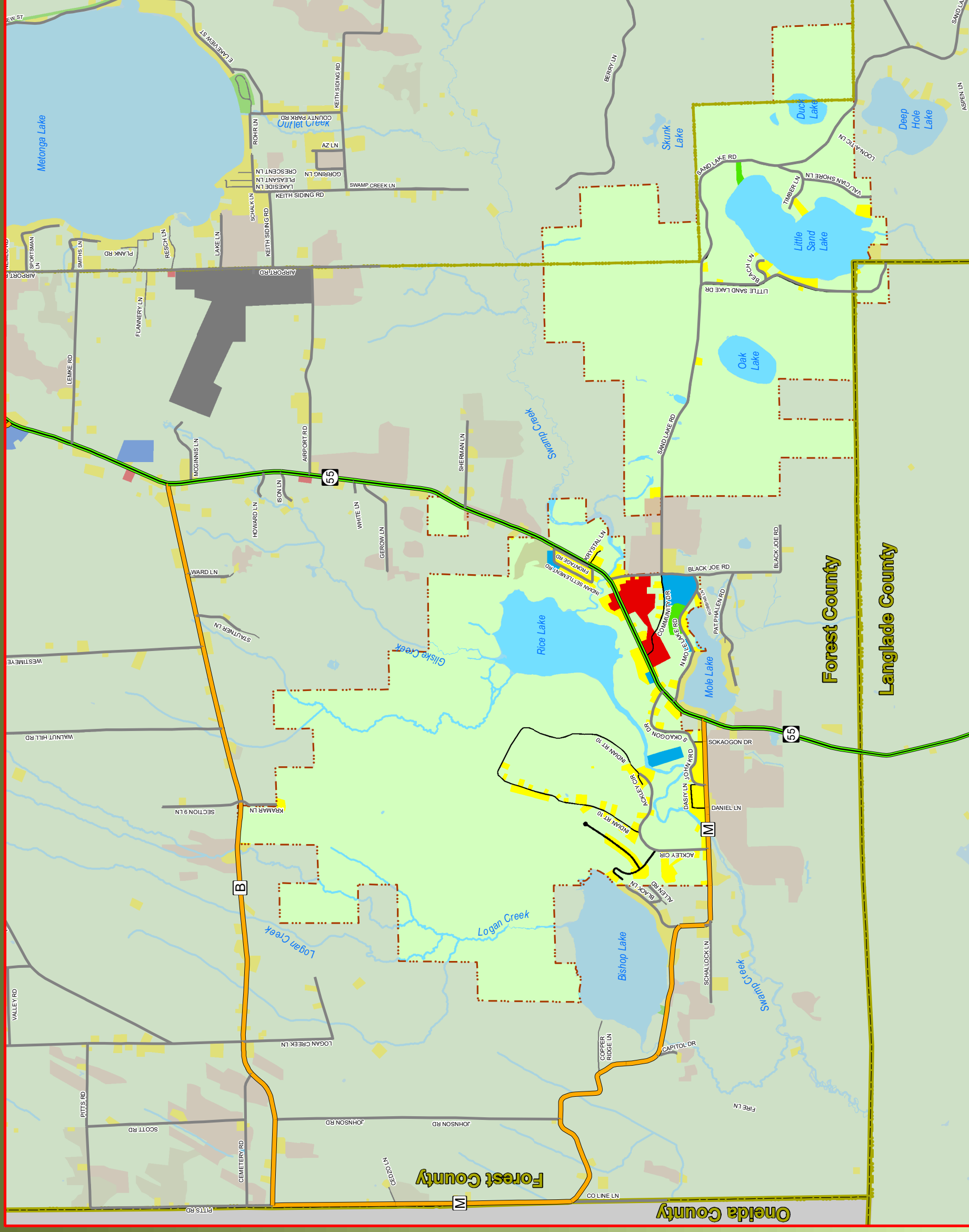
 Tribal Land

Source: WI DNR, NCWRPC













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.



THIS PAGE LEFT BLANK, INTENTIONALLY.



Legend

-  US Highway
-  State Highways
-  County Highways
-  Local Roads
-  Minor Civil Divisions
-  Tribal Land
-  Agriculture
-  Commercial
-  Governmental / Institutional
-  Industrial
-  Open Lands
-  Outdoor Recreation
-  Residential
-  Transportation
-  Water
-  Woodlands



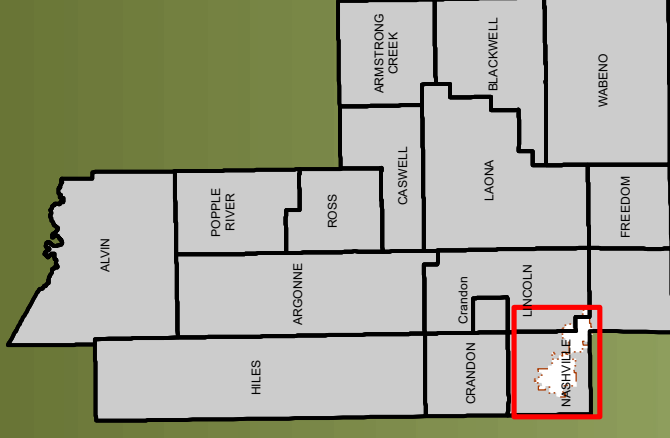
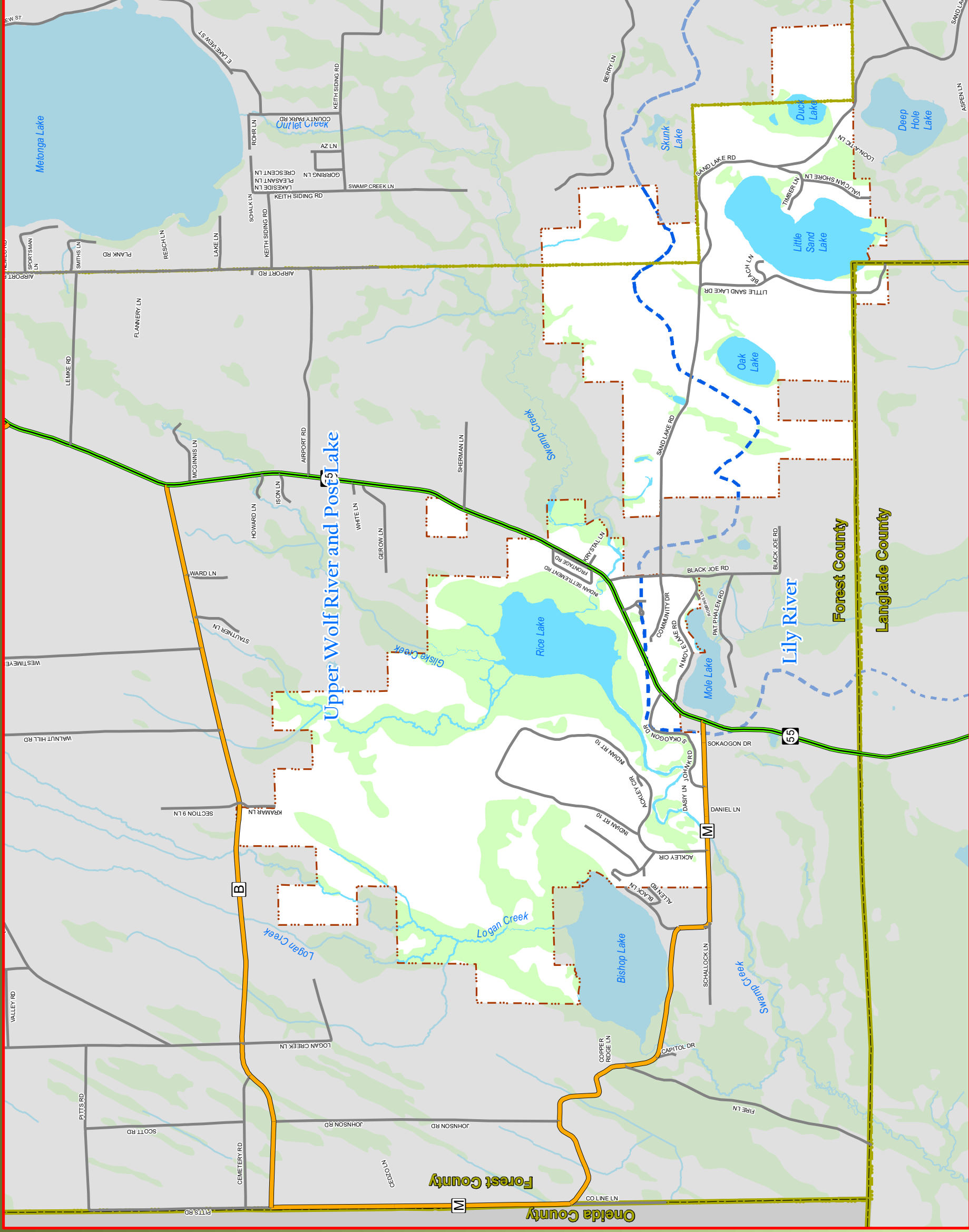
Source: WIDNR, NCWRPC, FOREST CO.

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



Legend

- County Boundaries
- Minor Civil Divisions
- Tribal Land
- US Highway
- State Highways
- County Highways
- Local Roads
- Water
- Watersheds
- Wetlands



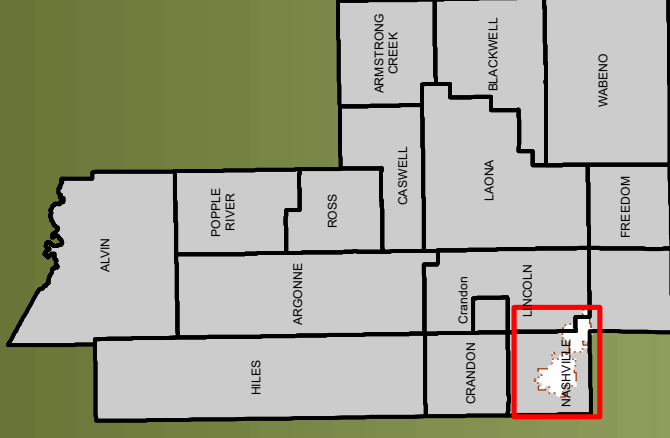
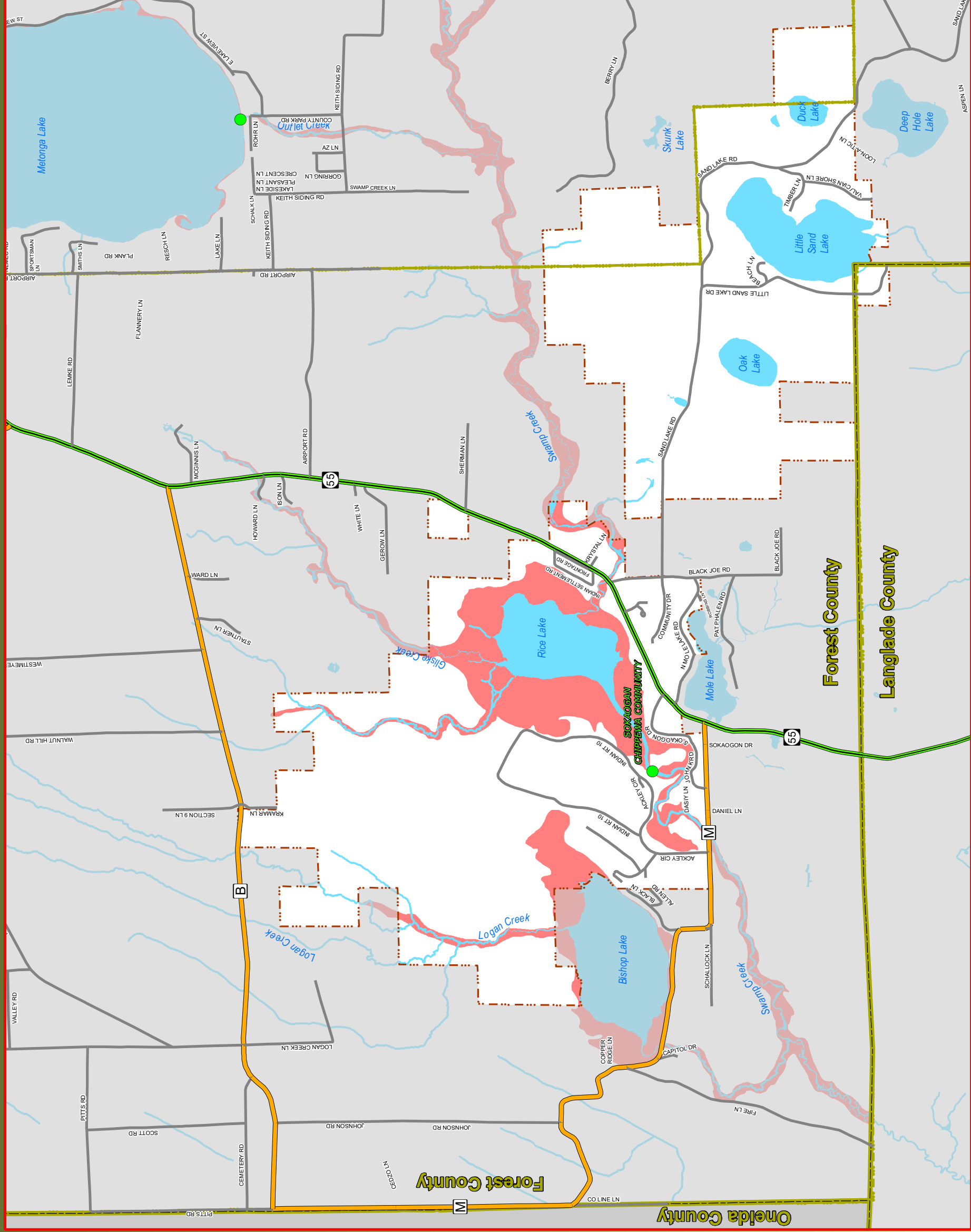
Source: WIDNR, NCWRPC, FOREST CO.

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



Legend

- County Boundaries
- DFIRM Floodplain
- Minor Civil Divisions
- Tribal Land
- Large Dam
- Small Dam
- US Highway
- State Highways
- County Highways
- Local Roads

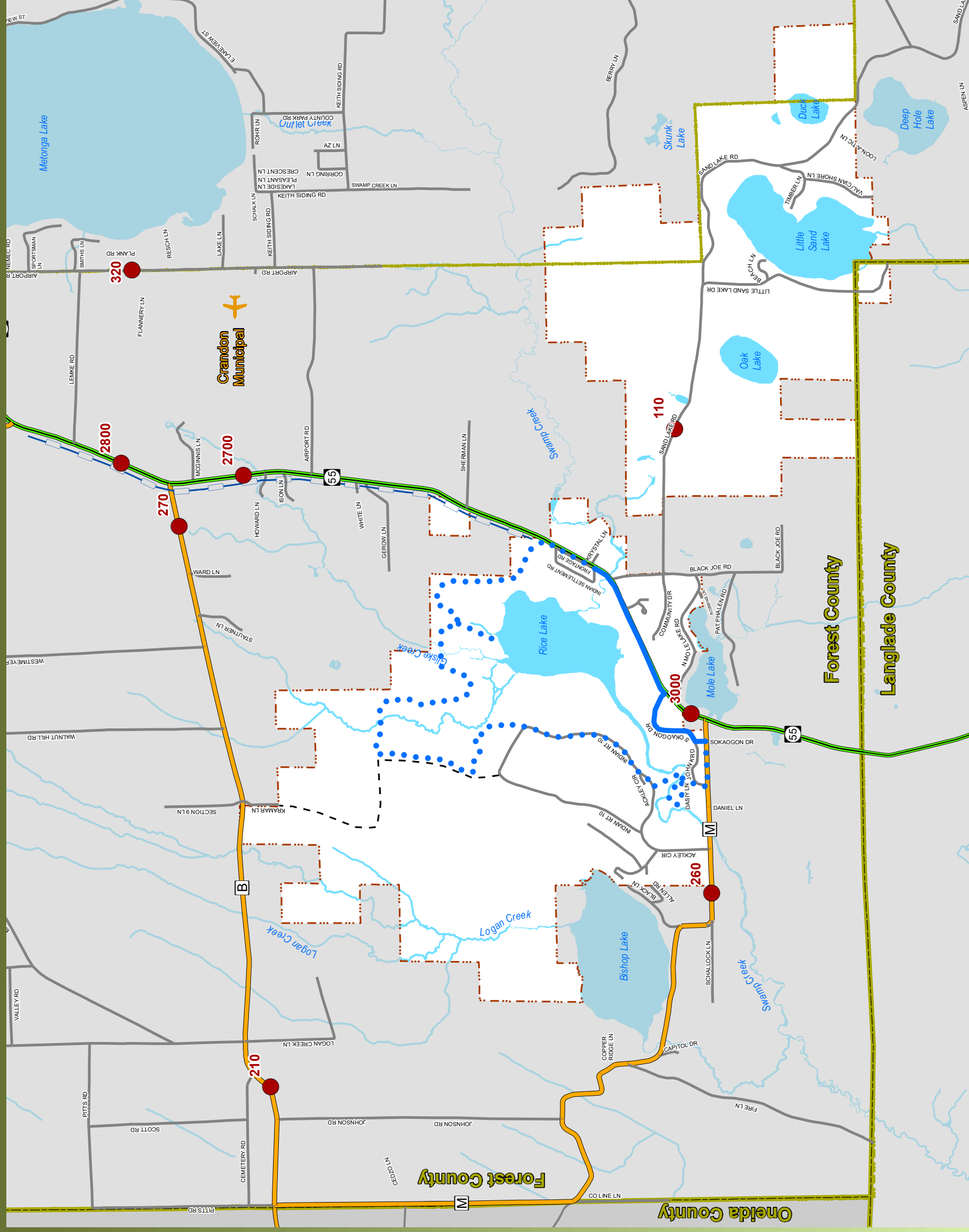


Source: WI DNR, NCWRPC, FOREST CO., FEMA
 This map is neither a legally recorded map nor a survey of the actual boundary of any property depicted. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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



Legend

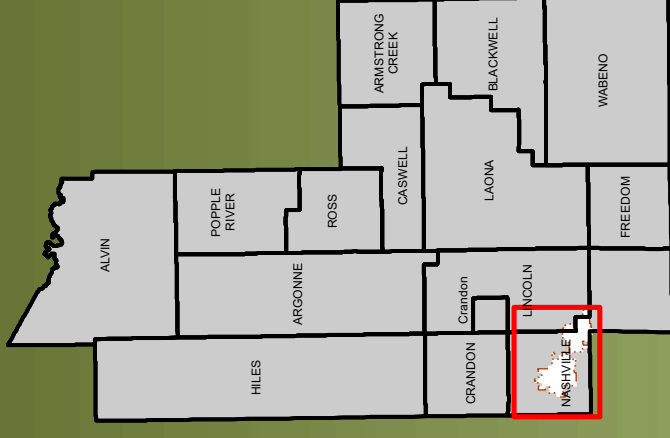
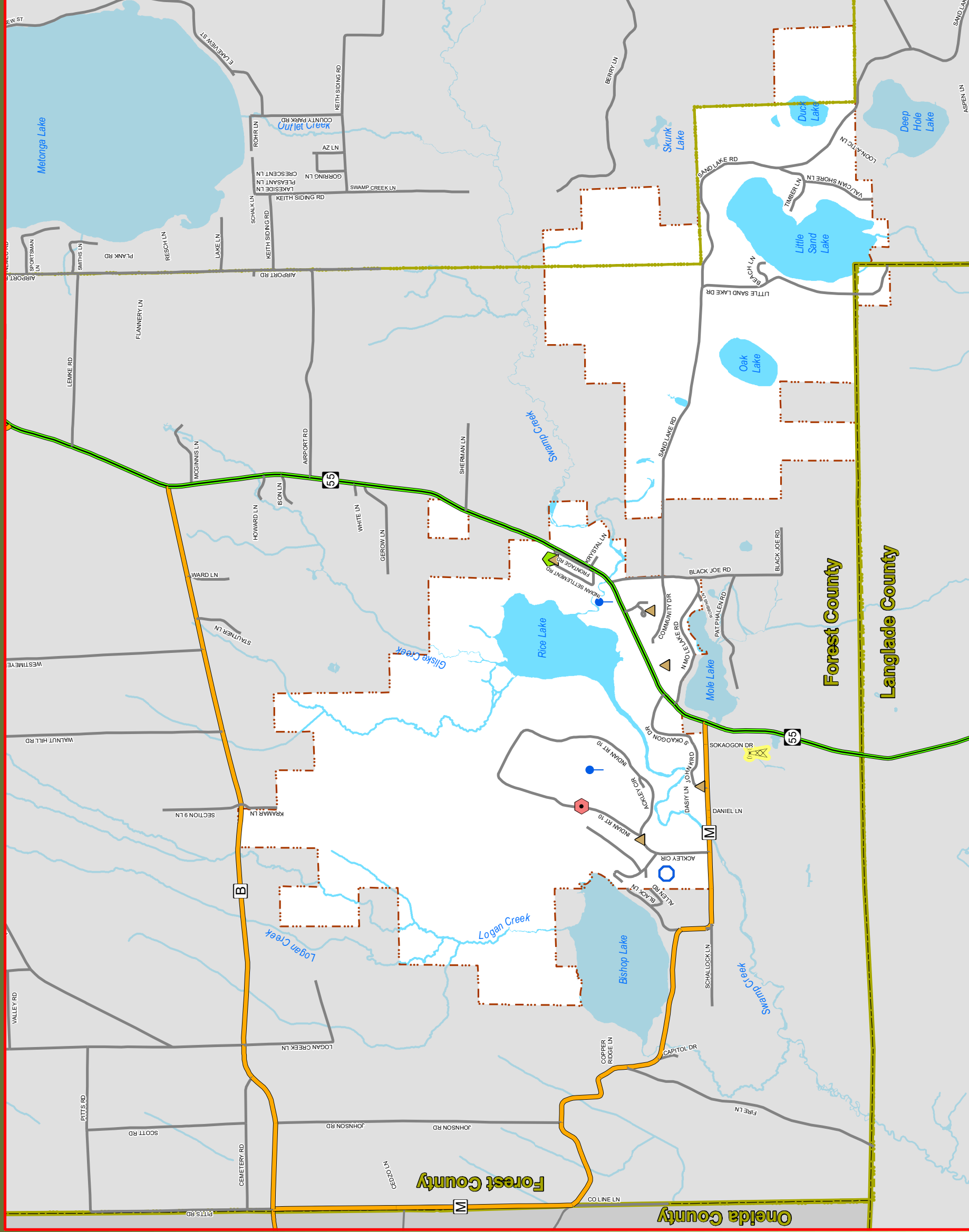
- County Boundaries
- Minor Civil Divisions
- Tribal Land
- US Highway
- State Highways
- County Highways
- Local Roads
- Existing Pedestrian Trail
- Proposed Rice Lake Trail
- Proposed Hiking/Biking Trail
- Proposed Road
- Traffic Counts
- Airport
- Small General Aviation



Source: WI DNR, NCWRPC, FOREST CO., WI DOT
 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



Legend

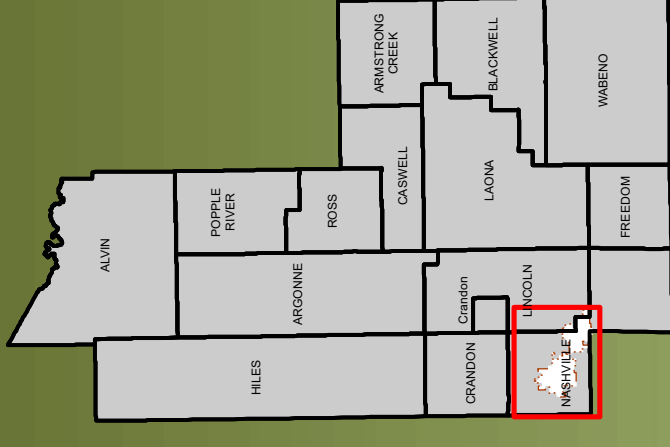
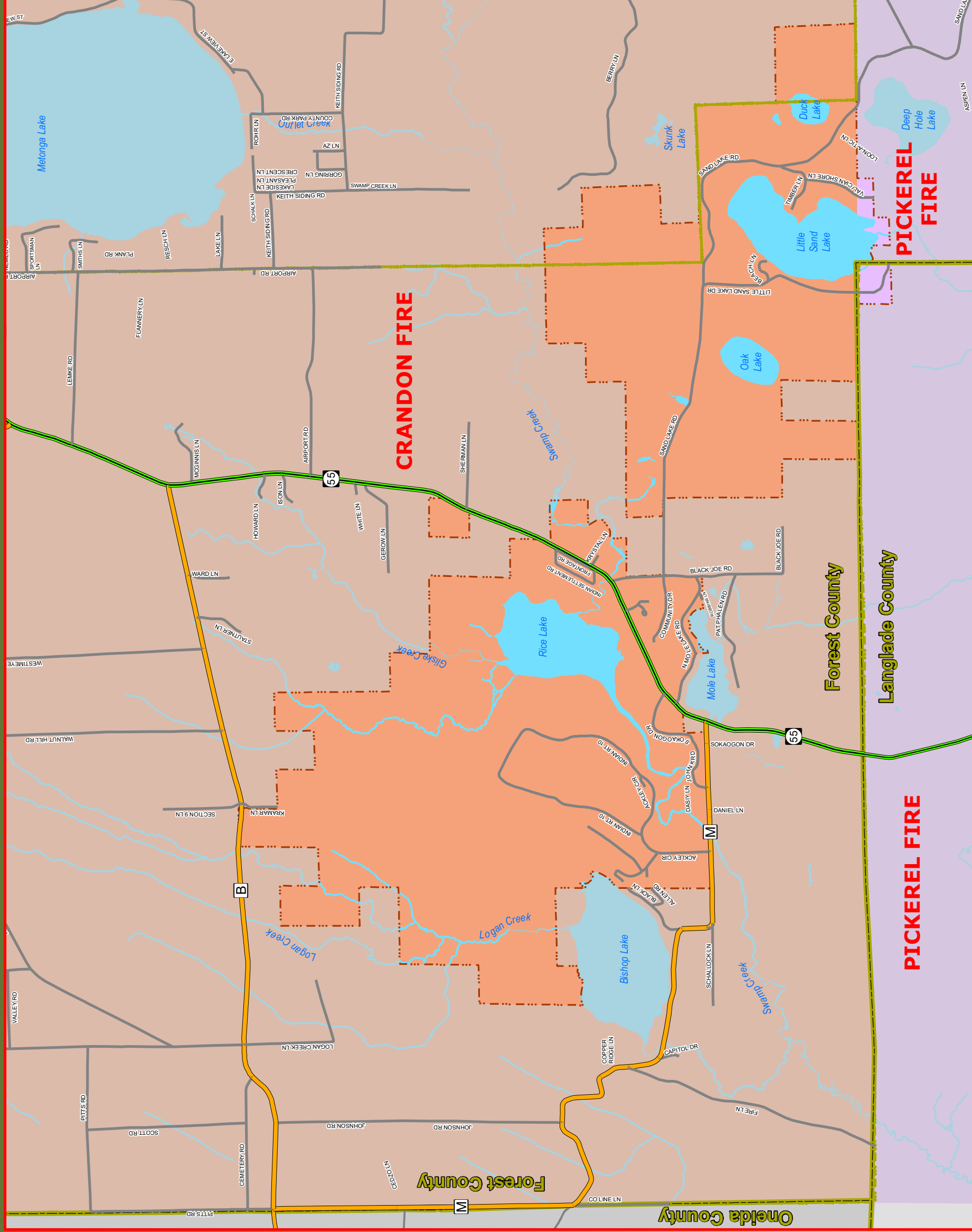
- County Boundaries
- Minor Civil Divisions
- Tribal Land
- US Highway
- State Highways
- County Highways
- Local Roads
- Celltowers
- Lift Stations
- Booster Station
- Pump House
- Waste Water Treatment Plant
- Water Tower



Source: WI DNR, NCWRPC, FOREST CO., WI DOT
 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



Legend

- County Boundaries
- Fire Service
- Minor Civil Divisions
- Crandon Fire
- Tribal Land
- Pickerel Fire
- US Highway
- State Highways
- County Highways
- Local Roads
- Water



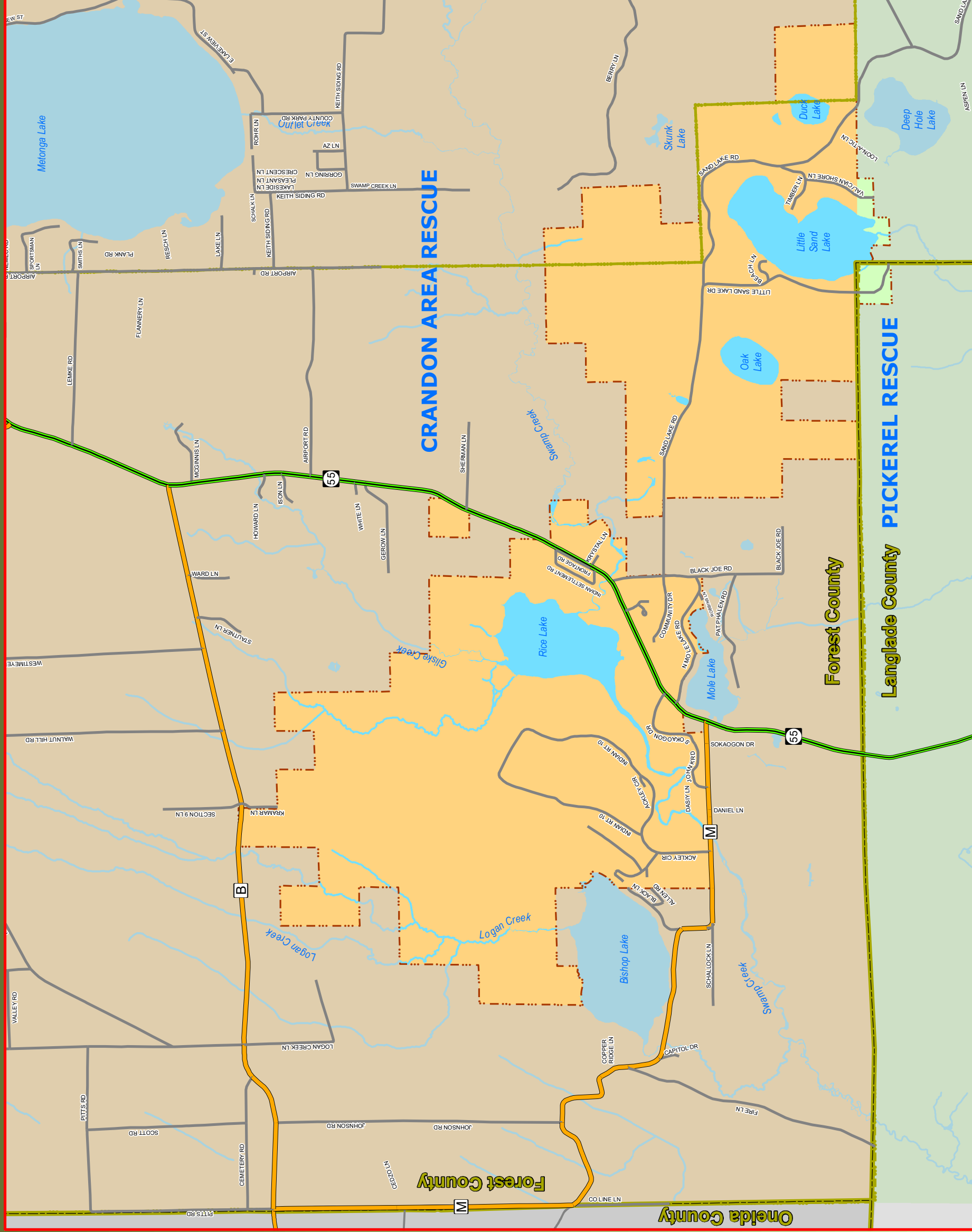
Source: WI DNR, NCWRPC, FOREST CO.

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



Legend

- County Boundaries
- Minor Civil Divisions
- Tribal Land
- US Highway
- State Highways
- County Highways
- Local Roads
- Water
- EMS Service
- CRANDON AREA RESCUE
- PICKEREL RESCUE



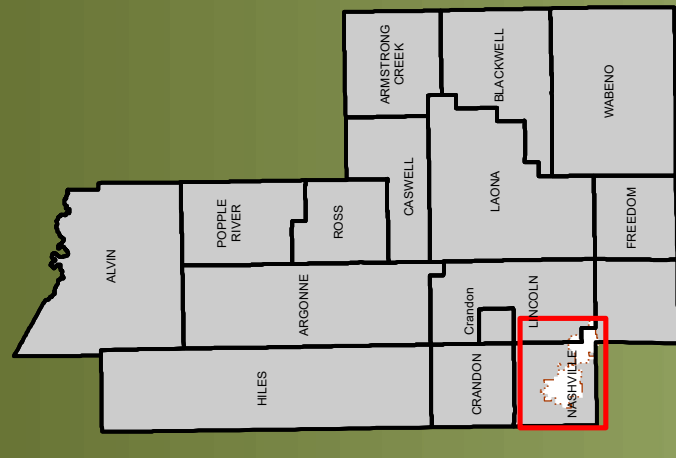
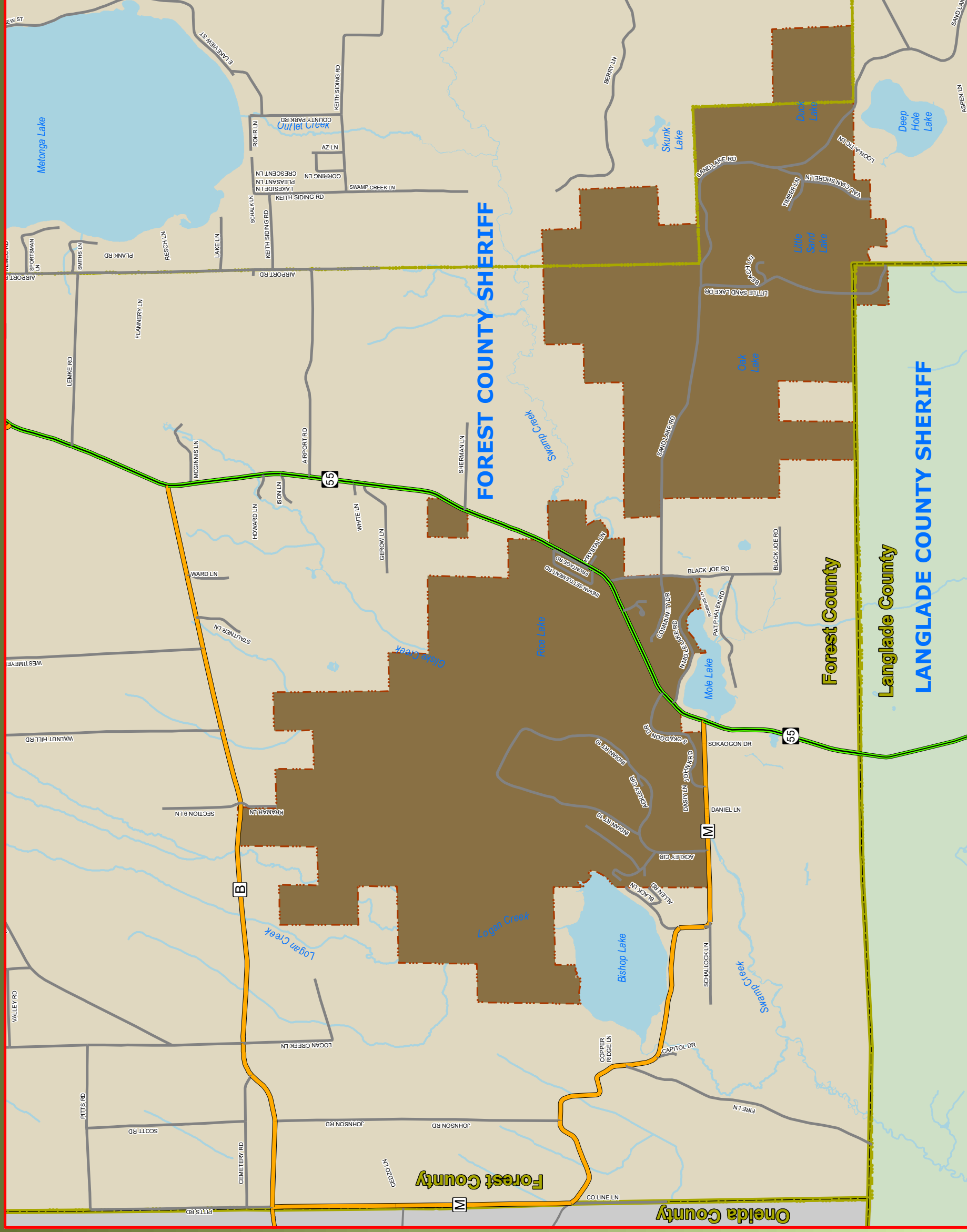
Source: WI DNR, NCWRPC, FOREST CO.

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



- Legend**
- County Boundaries
 - Minor Civil Divisions
 - Tribal Land
 - US Highway
 - State Highways
 - County Highways
 - Local Roads
 - Water
- Police Service**
- Forest County Sheriff
 - Langlade County Sheriff
 - Tribal Police



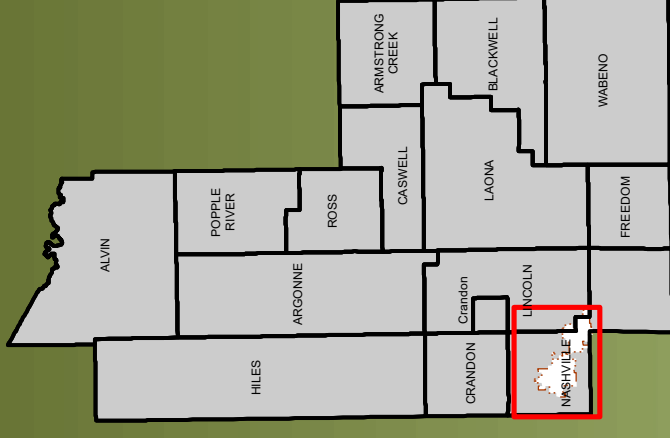
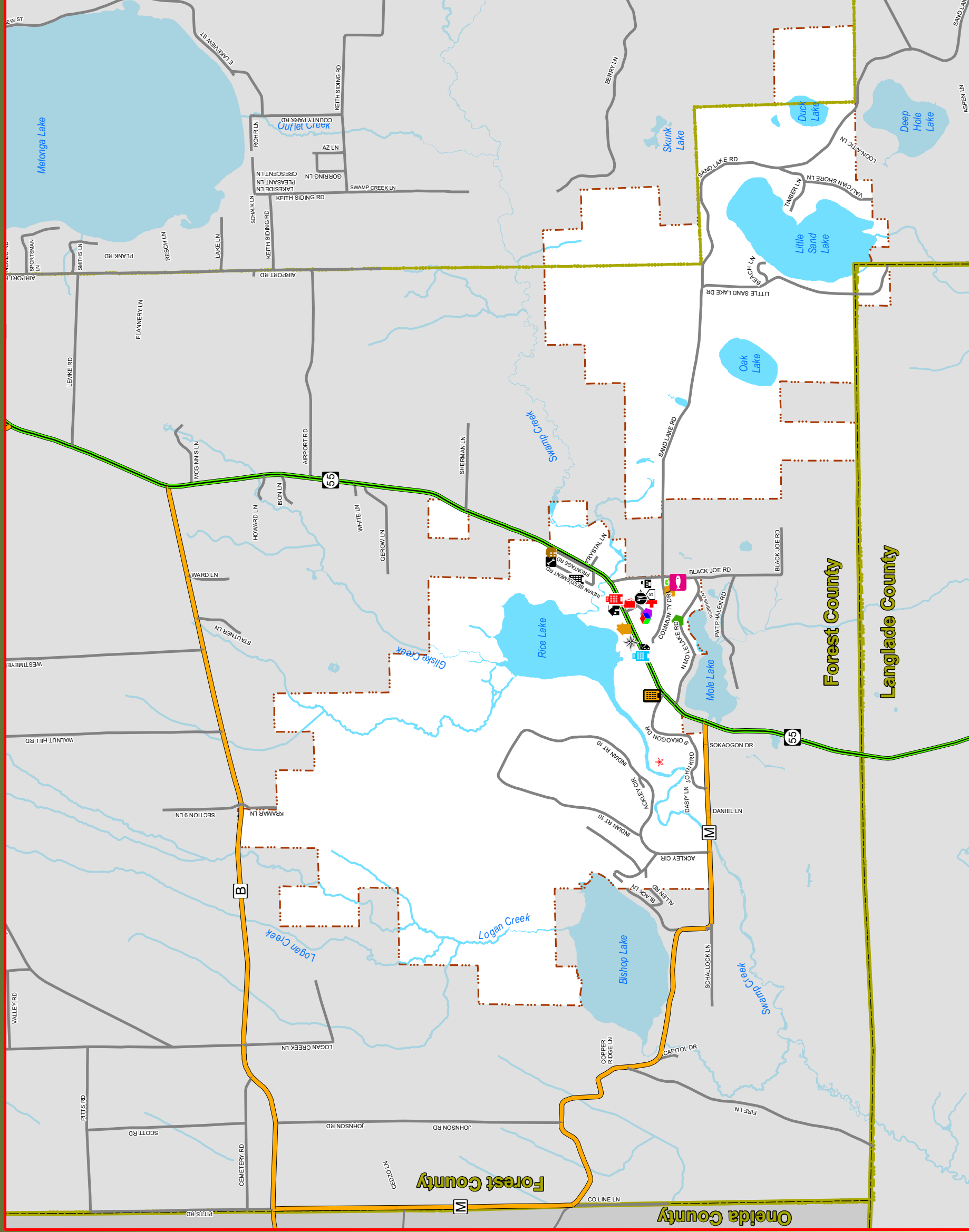
Source: WI DNR, NCWRPC, FOREST CO.

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



Legend

- Convenience Store
- Administration Building
- Apartments
- Family Services
- Historical Marker
- Insurance Office
- SFI Office
- Roads Shop
- Rec Center
- Recycling Center
- Elder Housing
- Pow Wow Grounds
- Senior Housing
- Health Clinic
- Casino
- Dinisen House
- Community Baseball Fields
- Day Care Center
- Food Services Bldg
- Tribal Housing Office
- Tribal Housing Equipment Garage
- Fish Hatchery
- US Highway
- State Highways
- County Highways
- Local Roads
- County Boundaries
- Minor Civil Divisions
- Tribal Land
- Water



Source: WI DNR, NCWRPC, FOREST 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

THIS PAGE LEFT BLANK, INTENTIONALLY.

INTRODUCTION

Analyzing the hazards facing 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 Mole Lake All Hazards Mitigation Plan will focus on the following:

- Identification of all types of natural hazards that can affect Mole Lake
- An analysis of each hazard identified as pertinent to Mole Lake

The hazard analysis will consist of:

- Background information
- History of previous occurrences of hazard events
- An analysis of the Mole Lake'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 Mole Lake All Hazards Mitigation Plan 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 the threat to human safety and property damage.

Worksheets from the Wisconsin Guide to All-Hazard Mitigation Planning were used by the Planning Taskforce to evaluate and rank a list of possible hazards to help identify which hazards should be included in the Plan based on threat to human safety and possible damage to property.

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

1. Winter Storm / Extreme Cold
2. Epidemic / Pandemic
3. Tornado
4. Thunderstorm /High Wind /Lightning /Hail Fire
5. Drought / Extreme Heat
6. Forest Fire / Wild
7. Flooding

Winter events maintain their top spot from the initial plan due to recurring power outage issues and public demand for back-up power. However, pandemic surges on to the list all the way to number 2, due to the impact of Covid-19 on the community. This displaces severe thunderstorms which falls two spots to come in under tornado holding in third.

This plan focuses on natural hazards that can be mitigated on a local level and have or could cause disasters. Technological or manmade hazards are things like transportation incidents, civil disturbances, hazardous material incidents, mass casualty events, war,

and terrorism. Local Law Enforcement Officials already work closely with the State on plans for these types of events, so they are not included in this planning process. Dam failure is extremely low risk within the Mole Lake's jurisdiction but is technically covered under flooding in this report. Low magnitude earthquakes occur in Wisconsin every few years, but none so far 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. Mole Lake does not have coastal hazard issues and conditions for landslide or subsidence problems are not significant in the area.

CLIMATE CHANGE & HAZARD RISK ASSESSMENT

While the assessment of hazard risk is largely based on past weather events and existing development trends, projecting future risks and vulnerabilities is also subject to the influence of possible large-scale, longer-term climatic changes. This section explores how the area's climate is changing and how climate change may impact the probability and severity of natural hazards.

There is ongoing debate over the existence, causes, severity, and impacts of global climatic changes, such as global warming. According to the National Academy of Sciences, the Earth's surface temperature has risen by about 1 degree Fahrenheit in the past century, with accelerated warming during the past two decades. There is strong evidence that most of the warming over the last 50 years is attributable to human activities. Increasing global temperatures are expected to raise sea level and impact local climate conditions such as precipitation levels. Changing regional climate could alter forests, crop yields, and water supplies. It could also affect human health, animals, and many types of ecosystems. Most of the United States is expected to warm, although sulfates may limit warming in some areas. Scientists currently are unable to determine which parts of the United States will become wetter or drier, but there is likely to be an overall trend toward increased precipitation and evaporation, more intense rainstorms, and drier soils.

Regardless of the debate over the causes of climate change, there is clear evidence that Wisconsin's climate is indeed changing. The 2003 report entitled *Confronting Climate Change in the Great Lakes Region* published by the Union of Concerned Scientists and the Ecological Society of America projected that by 2030, summers in Wisconsin may resemble those in Illinois overall, in terms of temperature and rainfall. By 2100, the summer climate will generally resemble that of current-day Arkansas, and the winter will feel much like current-day Iowa.

To further document these climate changes and explore their impacts on our State, the Wisconsin Initiative on Climate Change Impacts (WICCI) was formed as a collaborative effort of the University of Wisconsin and the Wisconsin Department of Natural Resources. The following are some of the key climatic trends being experienced in Wisconsin according to their analysis (www.wicci.wisc.edu):

1. **RISING TEMPERATURES** - Average temperatures are rising and are projected to continue to rise. The annual average temperature in Forest County has increased between 0.0 and 0.5 degrees between 1950 and 2006. Between 1980 and 2055,

annual average temperatures are projected to increase by about 4 degrees in the County. More extreme heat events are also projected. The number of days projected to be 90° F or greater will increase by 12-14 days in Forest County between 1980 and 2055.

2. **MORE PRECIPITATION** – Forest County is experiencing more annual precipitation, and is expected to get wetter in the future, but there is significant seasonal and geographic variation to the precipitation. The data shows that the annual average precipitation has increased in the County over the past fifty years overall.
3. **HEAVIER PRECIPITATION EVENTS** - Heavy precipitation events appear to be increasing in frequency. In the past, the region experienced heavy precipitation events of two or more inches about ten times per decade (once each year). The County is projected to experience 2.5 additional heavy precipitation events per decade by 2055.

HAZARD ANALYSIS

The hazard analysis for each hazard included in this plan 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 hazard within the area, 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 disasters is an indication of the potential for future disasters for which Mole Lake would be vulnerable. A review of past occurrences for each identified hazard in Mole Lake was completed. Due to Mole Lake's small size and the breadth of many hazard events, the Town of Nashville and Forest County hazard histories will be examined as representative of hazards affecting Mole Lake by virtue of being located within their boundaries.

Some disasters have had damages that exceeded the capabilities of local communities and state agencies. Federal assistance is then requested, which 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 seven natural disasters in Forest County for which a Presidential Declaration was requested from 1971 to 2021. They include the following:

- 1975 Army Worm Infestation
- 1976 Drought – Presidential Emergency Declaration
- 1977 High Winds / Hail – Presidential Emergency Declaration
- 2000 Severe Storms/Flooding/Tornado – Presidential Disaster Declaration
- 2010 Severe Storms – State Disaster Fund
- 2019 Severe Storms/Flooding/High Winds/Tornado - Presidential Disaster Declaration

- 2020 Corona Virus Pandemic – Presidential Disaster Declaration

It should be noted that this significantly underestimates the number of hazard events that have occurred in the area. Almost every year significant weather events or disasters cause thousands of dollars in damage where 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 Climatic Data Center (NCDC) publish the National Weather Service (NWS) data describing recorded weather events and resulting deaths, injuries, and damages. From January 1, 2012 to December 31, 2021, NCDC reported 70 severe weather events for Forest County.

Since the earlier NCDC data is somewhat incomplete, this report focuses on the 10-year period from 2012 to 2021 for hazard analysis purposes. Other sources of data are used to supplement the NCDC data. These sources include Wisconsin Emergency Management, Wisconsin Department of Natural Resources, Forest County Emergency Management, and local news reports.

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, government administration buildings, and shelters.

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 such a hazard event occurring in the area, and the potential damages in dollars that might be reasonably expected. This section sets a benchmark amount for mitigation of each hazard.

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 even death.

True blizzards are rare in Wisconsin. They are more likely to occur in the northwestern part of the state than in other areas, 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 are a part of nearly every winter in Mole Lake.

Dangerously cold conditions can be the result of the combination of cold temperatures and high winds, which creates a perceived sensation 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 December, January and February.

History of Winter Storms/Extreme Cold in Mole Lake Area:

The NCDC has reported 33 major winter storm events and 5 cold temperature events for Mole Lake between 2012 and 2021. These storms typically contain some form of heavy snow, blowing snow, ice, freezing rain or drizzle, or glaze.

The most recent heavy snow in Mole Lake took place 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. The highest snowfall total across Forest County was 7.9 inches near Mole Lake.

On February 24, 2019, the NCDRC reported blizzard conditions as a fierce, late-winter storm produced heavy snow, freezing rain, and high winds across much of central and northern Wisconsin from the 23rd to the 24th 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. Snow totals reached 15.9 inches near Mole Lake. Parts of central and east-central Wisconsin received up to one-half inch of ice accumulation in addition to the snow. Measured wind gusts in the 50 mph to 60 mph range were recorded at many locations. New daily snowfall records were set for February 24 in many locations. Snow and blowing snow caused whiteout conditions in Forest County for most of the afternoon.

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.

The most recent extreme cold or wind chill event took place on February 7, 2021, when arctic air was entrenched across northern Wisconsin with morning low temperatures from -15 to -30 degrees. The combination of the bitter cold and light winds created wind chills of -35 to -45 degrees.

A historic event of significance took place in February 1996, when an arctic air mass stalled over Wisconsin bringing extreme cold for an extended period of 5 days. Wind chills reached 70 degrees below zero in some areas. Significant damages and disruption occurred, including cancellation of all outdoor events at the Badger State Games. At least one person died from hypothermia, but this was not in Forest County.

Winter Storms/Extreme Cold Vulnerability Assessment:

Winter storms 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, cause motor vehicle accidents, or isolate people from assistance and services. Extreme cold includes the risk of frostbite and hypothermia.

The following is a list of things that may be adversely affected by a winter storm. Many 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 at temperatures below 40 degrees below zero
- Septic system freezing
- Transportation – automobile accidents, roadway plowing, salting/sanding
- Residential – roofs
- Businesses –commerce
- Agricultural – livestock, (forest crop if ice storm)

There are no specific areas in Mole Lake that have an unusually high risk. Winter storms cover a broad area and are a region-wide concern. The extreme cold weather can affect the entire county. The risk to public health includes the chance of getting frostbite and hypothermia, and motor vehicle accidents. Everyone is at risk for becoming injured in extreme cold weather, either because of frail health or because of travel in a motor vehicle.

Future Probability and Potential Dollar Losses – Winter Storms/Extreme Cold:

Based on historical frequency, Mole Lake can expect 3.3 major winter storms per year on average. In other words, the probability is 1.0 or a 100% chance of winter storms in a given year.

Mole Lake can expect an extreme cold temperature event about once every two years, or a 50% chance in a given year, based on historical frequency. Although, because extreme cold temperatures often accompany winter storms, a probability of 100% chance in a given year cannot be ruled out.

Estimating potential future losses from winter storms is difficult. Damages and losses are typically widespread. Auto accidents and additional snow removal expense 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 areas in northern Wisconsin.

HAZARD ANALYSIS: SEVERE THUNDERSTORMS/HIGH WINDS/LIGHTNING/HAIL

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 one inch (recently increased from $\frac{3}{4}$ of an inch) in diameter or greater, or a tornado. Strong winds, hail, and lightning will be addressed in this section, and tornadoes are discussed as a separate hazard.

Lightning results from discharge of energy between positive and negative areas within a thunderstorm separated by rising and falling air. 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 suspended.

Thunderstorm frequency is measured in terms of incidence of thunderstorm days or days on which thunderstorms are observed. Wisconsin averages between 30 and 50 incidence 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.

Measured wind speeds are typically in the range of an EF0 tornado and may even approach EF1 speeds. Strong winds can be associated with tornado episodes, thunderstorms, or even winter storms. The effects are often widespread, impacting areas hundreds of miles from the actual areas of thunderstorms or snow. Trees, signs, and power poles are the most commonly impacted by high wind events, but significant damage, bodily injury, or death can occur.

History of Severe Thunderstorms in Mole Lake Area:

The NCDRC database reported six severe thunderstorm events for the Mole Lake area between 2012 and 2021. These storms typically contain some form of heavy rain, strong winds, lightning, or hail. About 3 significant hail events, typically related to a severe thunderstorm, were listed during this time period. Historical size of the hail in these events ranged from 0.75 to 1.75 inches in diameter. No major lightning incident was noted.

Most recently, on June 8, 2021, thunderstorms developed across the Upper Peninsula of Michigan and tracked south through north-central Wisconsin during the late afternoon and early evening hours, producing isolated wind damage.

The most recent incident including hail reports occurred on August 7, 2019. Severe thunderstorms formed in very unstable air ahead of a passing cold front. The worst of the damage from the storms occurred across east-central and parts of northeast Wisconsin. Thunderstorm winds downed numerous trees and some power lines. Penny size hail was reported in areas around Crandon.

Forest County was included in a Presidential Disaster Declaration for storms that occurred between July 18 and 20, 2019. 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 across 18 counties including Forest. WPS reported over 50,000 outages at the height of the storms. The worst damage was associated with a macroburst, a large downburst of straight-line winds that affected a large swath from Pelican Lake in Oneida County, southeast through Langlade and Oconto counties. Southwestern Forest County including Mole Lake was on the periphery of this damage. Hundreds of thousands of trees were snapped or uprooted, resulting in damage to dozens of homes and cottages. The damage path was

about 60 miles long and up to 10 miles wide at times. Winds were likely near 100 mph in the hardest hit areas in northeast Langlade County. These storms also resulted in tornados and flooding in other parts of the state.

On July 8, 2013, storms brought thunderstorm winds and hail into the Town of Nashville. The storms produced wind damage from a wet microburst, penny to nickel size hail, and heavy rainfall. The microburst, with winds estimated at 75 mph, downed about 30 trees. Numerous locations received more than two inches of rain in a three to four hour period.

Another historic event of note occurred on June 23, 2010. Severe storms caused significant damage across a number of counties. Although the damages did not qualify for a disaster declaration, the State Disaster Fund was activated. Unstable air combined with a surface front and an upper level disturbance to produce severe thunderstorms across northern Wisconsin. High winds from the storms, some estimated as strong as 90 mph, caused considerable damage to trees and power lines as the storms moved through north-central and northeast Wisconsin. Roads across parts of northern Wisconsin were blocked by downed trees and power lines, including most of the roads in the town of Nashville (and Mole Lake) where numerous homes were damaged. Power was knocked out to more than 15,000 Wisconsin Public Service customers in Forest and multiple other counties for at least part of the night and some well into the next day

The Mole Lake area has been fortunate to not experience any major lightning events between 2012 and 2021. The last major lightning event in Forest County took place in 2000 in the Town of Alvin. Lightning struck a house near the intersection of highway 55 and highway 70.

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.



Forest County Hail

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 Mole Lake 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 (including wildrice and forest crop) & 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 locations that have unusual risks. The events are spread uniformly across the landscape and are an areawide concern.

Future Probability and Potential Dollar Losses – Severe Thunderstorms:

Based on historical frequency, Mole Lake can expect a severe thunderstorm event every other year, on average. In other words, the probability is 0.6, or a 60% chance of storms in a given year. The probability of a thunderstorm with notable hail is less at 0.3 or 30% chance in a given year. There is not enough data available regarding lightning events to indicate probability.

According to the NCDC data, historic thunderstorm events with associated high wind and reported damages averaged \$40,833 in property damage per incident across Forest County. No crop damages were reported. There was insufficient data regarding historic hail and lightning events. Losses in Mole Lake associated with severe thunderstorms could approach \$244,998 over the next ten-year period.

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 difficult to measure precisely, 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.

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. Wisconsin has seen a tornado event occur in every month of the year except for February.

Table 6: Tornado Wind and Damage Scale		
Tornado Scale	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.

History of Tornadoes in Mole Lake Area:

Forest County experiences fewer tornadoes than many counties in the State of Wisconsin. And, fortunately, there is only one tornadic event on record in the Mole Lake area at least back to 1950. On July 6, 2012, scattered thunderstorms formed along a cold front moving across Wisconsin. The storms produced wind damage, funnel clouds and hail as large as nickel size. A funnel cloud was spotted south of County Highway Q between the Towns of Lincoln and Nashville. Three other small funnel clouds were spotted near the intersection of State Highway 32/55 and County Highway N, between Argonne and Crandon.

Overall, Forest County has had eight recorded tornadoes since 1963, with five occurring prior to 1995, see Table 7. The most recent tornado in Forest County occurred on August 9, 2020. An upper-level shortwave produced thunderstorms across north-central Wisconsin during the evening hours. Three tornadoes and wind damage were reported as these thunderstorms tracked through the area. One of these tornadoes formed at 9:12 PM in a remote forested area in northeast Forest County, east of the town of Alvin. The tornado moved northeast to about 0.3 miles north of Ransdell Lake, then turned east,

reaching maximum width before crossing Huff Creek Road. The tornado produced a path of tree damage before entering Florence County at 9:18 PM. Peak winds were estimated at 105 mph.

Table 7: Reported Tornadoes/Funnel Clouds in Forest County

DATE	TIME	LOCATION	LENGTH (miles)	WIDTH (yards)	DEATHS	INJURIES	EF-SCALE
9/09/2020	9:12 PM	T. Alvin	2.85	250	0	0	EF1
9/19/2012	6:20 PM	T. Wabeno	n/a	n/a	0	0	(FC)
7/06/2012	8:21 PM	T. Lincoln T. Nashville	n/a	n/a	0	0	(FC)
7/6/2012	7:30 PM	T. Argonne	n/a	n/a	0	0	(FC)
4/10/2011	7:30 PM	T. Argonne	9	250	0	0	EF2
4/10/2011	8:03 PM	T. Armstrong Cr.	3	150	0	0	EF1
6/23/2010	5:15 PM	T. Wabeno	n/a	n/a	0	0	(FC)
6/7/2005	6:04 PM	T. Lincoln	n/a	n/a	0	0	(FC)
6/28/1994	5:20 PM	C. Crandon	n/a	n/a	0	0	n/a
5/30/1994	8:50 PM	C. Crandon T. Lincoln T. Laona	12	800	0	3	EF2
9/16/1972	4:05 PM	T. Freedom T. Wabeno	53	200	0	0	EF2
6/30/1968	4:00 AM	T. Caswell	1	200	0	0	EF2
9/19/1963	6:00 PM	T. Laona	1	33	0	0	EF1

Source: National Climatic Data Center. (FC) = funnel cloud.

On September 19, 2012, thunderstorms developed ahead of a cold front and a strong upper level system. Some of the storms produced large hail, damaging winds, and funnel clouds. A funnel cloud was spotted over the Town of Wabeno.

On April 10, 2011, fifteen tornadoes were seen in the state with ten in northeast Wisconsin, a one-day record. Two tornadoes were spotted in Forest County that day. Both were spawned by major thunderstorms that developed along and ahead of a cold front as it encountered moist and unstable air across Wisconsin. These storms also produced straight line wind up to 100 miles per hour.

The first tornado developed at 7:30 pm southeast of Argonne and moved over nine miles to the northeast into Florence County. This was an EF2 storm. It downed hundreds of trees, many of which fell on vacation cabins, and blew the roof off a house east of Argonne. This storm did over \$200,000 in damage. A second tornado formed just after 8 pm at Armstrong Creek and travelled for about three miles to the north and west. It damaged two houses, one seriously, and did over \$50,000 damage.

In June of 2010, a funnel cloud was observed near County Highway C in the town of Wabeno. This event took place in conjunction with severe thunderstorms and winds up

to 90 mph, which damaged trees and power lines across north central Wisconsin, knocking out power for more than 15,000 Wisconsin Public Service customers.

In June of 2005, two supercell storms moved through the southern part of the county causing significant wind damage and producing a funnel cloud three-miles east of Crandon. Three square miles of trees in the Nicolet National Forest were heavily damaged as winds estimated at 90 mph hit the south part of Birch Lake. The roof was torn from a metal building in Laona. Large hail was also associated with this event.

In June of 1994, a waterspout (tornado over water) was observed over Lake Metonga, two miles south of Crandon.

On June 28, 1994, Severe thunderstorms raked west-central and northern Wisconsin with violent damaging winds up to 61 mph, hail up to tennis ball-size, and two tornadoes. One of these tornadoes, a major EF2, cut a 12-mile path from just southwest of Crandon to just north of Laona in Forest County causing over \$1 million damage. It damaged or destroyed 28 homes, including several mobile homes, and leveled 600 acres of timber. Three people were injured in a mobile home that was destroyed by the tornado.



Forest County Tornado Damage, 1994

Forest County also experienced tornadoes in 1972, 1968, and 1963. In September of 1972, a strong EF2 tornado formed northwest of Wabeno and traveled east cutting a 53-mile long swath. Several barns were flattened in the Wabeno area with extensive trees and powerlines downed. Property damages were estimated at about \$250,000. The June 1968 EF2 tornado had a one-mile path with \$25,000 in damages. In September of 1963, an EF1 tornado with a one-mile path caused about \$25,000 in property damages.

Tornado Vulnerability Assessment:

Though Forest County is primarily rural, with concentrations of population scattered throughout the county. Mole Lake can be regarded as more vulnerable because tornadoes pose a greater threat to human safety and property damage in more concentrated areas, see Map 11.

Campgrounds and mobile homes are of significant concern in assessing the hazard risks from tornadoes. In general, it is much easier for a tornado to damage and destroy a mobile home than a site-built home. In addition to mobile homes, campground patrons are vulnerable to tornadoes because minimal shelter is provided. In Mole Lake, there are only a few mobile homes scattered throughout the residential areas. Most of the Tribal housing is stick-build with basements, however, there are some with only crawl spaces or on a slab. There is one campground within Mole Lake: the Tribal campground associated with the Strawberry Moon Pow Wow grounds.

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 – clinics, hospitals, schools
- Public Service – police and fire departments
- Utilities – power lines, & telephone lines
- Transportation – debris clean-up
- Residential – nursing homes, garages, trees and limbs, siding, & windows
- Businesses – signs, windows, siding, & billboards
- Agricultural – buildings, crops (including wildrice and forest crop) & livestock

Based on review of the historic events of tornados, no specific areas in Mole Lake have unusual risks. Tornado events are an area-wide concern.

Future Probability and Potential Dollar Losses – Tornados:

The likelihood of a tornado event affecting Mole Lake in the future is similar to that of Forest County because of the nature of tornado events. Based on historic data, between 2012 and 2021, Forest County experienced one full tornado. This equates to a probability of 0.1 or about a 10 percent chance in a given year. While tornados are not especially common in Forest County, funnel cloud sightings occur more often and serve as reminders of the potential threat of a tornado. Not enough data exists to indicate the probability of tornados of a specific magnitude, however, the tornados on record (since 1950) in Forest County have all been EF1 (3) or EF2 (4).

Historic data is again used to estimate potential future dollar losses due to a tornado. Estimated damages resulting from tornados in Forest County range from zero to \$1 million. On average, Mole Lake might expect damages exceeding \$225,000 per tornado, however, only two of the eight historic tornados resulted in damages exceeding \$250,000 while the others were \$200,000 or less.

HAZARD ANALYSIS: FOREST FIRES/WILDFIRES

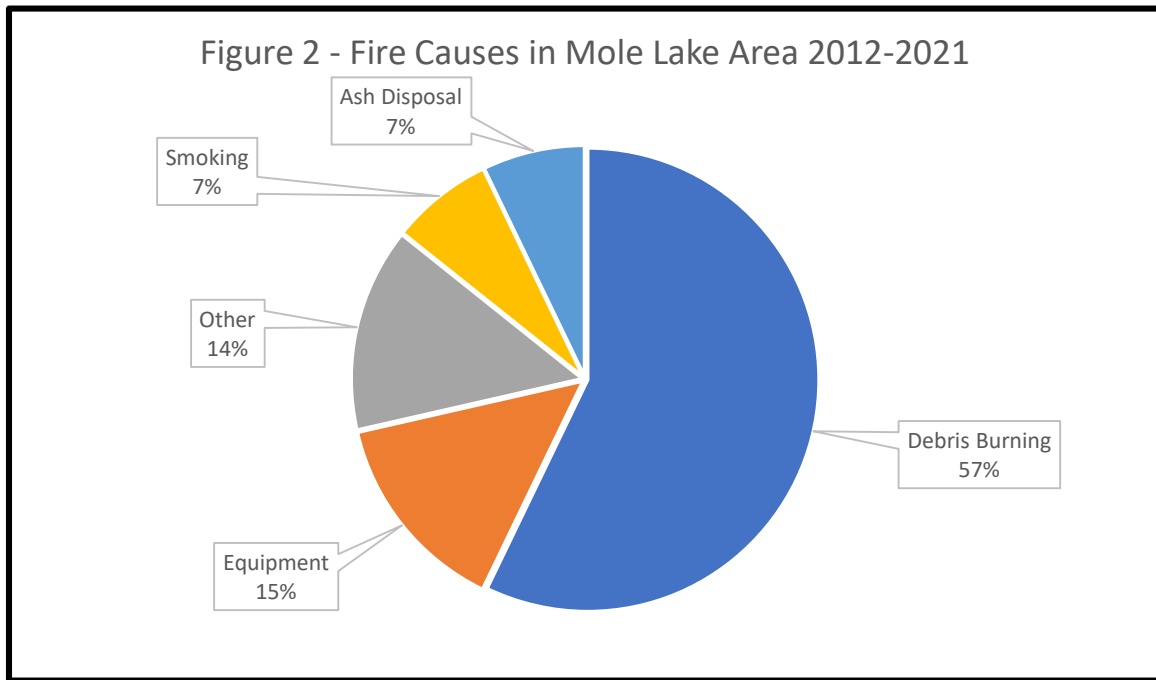
Background on Forest Fires/Wildfires Hazard:

A forest fire is an uncontrolled fire occurring in a forest or in woodlands outside the limits of an incorporated village or city. A wildfire is any instance of uncontrolled burning in brush, marshes, grasslands or field lands. For the purpose of this analysis, both of these kinds of fires are being considered together.

Forest fires and wildfires can occur at any time whenever 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 Fires/Wildfires in Mole Lake Area:

The Wisconsin DNR maintains a database of wildfire data. Due to limitation of data specificity, fires which took place in the Town of Nashville are counted as being in the Mole Lake area. From 2012 to 2021, the Mole Lake area experienced 14 fires or about 1.4 fires annually. However, there is annual variability ranging from zero fires in to three fires in a given year.



Source: DNR.

The fires range in size from 0.02 to 3.56 acres burned with a total area of 8.77 acres burned over the period. Average wildfire size is 0.63 acres. The principal reason these fires are small is the rapid response of municipal fire departments. This history of small fires is not indicative of the actual risk. For example, there have been some larger fires in the area. In 2002, a single fire burned more than 30 acres.

May is the leading month for wildfire in the Mole Lake area, with 57 percent of the total number of fires between 2012 and 2021 taking place in May. Wildfires can generally occur at any time the ground does not have snow cover. Wildfires have occurred in March, April, May and November in the Mole Lake area.

In 2016, the highest total for acres burned in a year (between 2012 and 2021) was reached at 3.96 acres in three fires. Three is the highest number of individual fires in a year during the period, reached in 2013 and 2016, however, all of the fires were very small.

Forest Fires/Wildfires Vulnerability Assessment:

Mole Lake has approximately 5,292 acres of woodlands, or about 84 percent of the total area of Mole Lake. The potential for property damage from fire increases each year as more of the wooded lands are developed.

Rural buildings may be more vulnerable because of lack of access. Building driveways off main roads are sometimes long and narrow with minimal vertical clearance and no turn around areas large enough for emergency vehicles making it hard to save individual dwellings. These buildings also may not have adequate forest clearance between the structure and the forest.

The trend toward introducing more human development into fire prone areas has brought about the term wildland human 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. The Mole Lake Area is classified as a Community of Concern.

Future Probability and Potential Dollar Losses – Forest Fires/Wildfires:

Forest and wildfires are relatively common occurrences in the area. In recent years, Mole Lake has had an average of about 1.4 fires per year. In other words, the probability is 1.0 or a 100 % chance of wildfire each year. However, these fires are typically contained rapidly and remain small, so that each has a minimal impact.

Historic data is used to estimate potential future acres burned due to a wildfire. Estimated losses resulting from wildfires in the Mole Lake area range from zero to 3.56 acres. On average, Mole Lake might expect losses of 0.63 acres per fire; however, only three fires have burned more than one acre of land.

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 at least one fire per year, Mole Lake should expect some fires to "get out of hand". Annual losses would be maximized if a house was destroyed with each acre ("typical" residential parcel size) burned.

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 ten 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 risk for people, particularly the elderly who may lack air conditioning, 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, during a 24-hour period, ranges from 105 to 114 degrees daytime and remains at or above 80 degrees at night. The heat index combines the effects of heat and humidity, better reflecting the risk of hot weather on 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 in 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 fifty percent.

History of Drought/Extreme Heat in Mole Lake Area:

An extended period of drought conditions are shown by NCDC going back to 2005 for Forest County and much of Wisconsin but, eased in 2011. Periods of below normal precipitation led to ongoing moisture deficits despite periodic storm events creating breaks in the dry pattern. In 2009 reports from County Agricultural Agents across northern Wisconsin indicated that crops were drought stressed and would have been in worse shape if temps had not been cooler than normal. The report from Langlade County indicated a 20 to 25 % loss of the corn and soybean crop through July of 2009. During this period, the Governor declared a state of emergency to get assistance to the state's agricultural sectors. The extended dry conditions posed serious challenges for farmers from drought stressed crops to issues providing feed for livestock.

NCDC reports indicate drought periods from September to October 2005, August through October 2007, September 2008 through April 2009, July through October 2009 and from April through August 2010. No drought events were recorded by NCDC since 2010 in Forest County.

The drought of 1976-1977, affected an area stretching from north to south across the state. Stream flow measuring stations recorded recurrence intervals from 10 to 30 years. Numerous private and municipal wells went dry due to the lowered groundwater tables and agricultural losses during this drought were set at \$624 million. Forest County was

one of 64 counties that were declared federal drought areas and deemed eligible for assistance under the Disaster Relief Act.

Forest County was fortunate to experience no extreme heat waves from 2012 to 2021. The most recent extreme heat wave was in July of 1999 when, for over a week, extreme temperatures and humid weather swept across the state. In some places it was so hot that concrete roads began to buckle. Heat related illness was widespread and three deaths resulted outside Forest County.

Drought/Extreme Heat Vulnerability Assessment:

Droughts can have a dramatic effect on the limited agriculture and wild rice operations located in Mole Lake. Even small droughts of limited duration can 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 and other groundwater withdrawal 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 and minimal precipitation deplete water bodies and aquifer supplies, thereby 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, tourism in Forest County declines, affecting Mole Lake. Recent drought conditions have left lake levels down significantly, and many boat launches cannot be used.

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- forest production industry
- Agricultural - crops (inc. wildrice), livestock

Essentially, the entire Mole Lake Area is at risk from the impacts of drought on forestry and tourism.

According to Wisconsin Emergency Management, excessive heat has become the most deadly hazard in Wisconsin in recent times. Extreme heat can happen anywhere within Mole Lake 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, drinking plenty of water, slowing down, and not staying 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), Mole Lake 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 for the last two major droughts can give some idea of potential impact. The last two major droughts in Wisconsin resulted in losses of \$9.6 million (1976-77) to \$18 million (1987-88) per county on average.

Normally, counties in northern Wisconsin are known for their cold winters, however, extreme heat waves will affect Mole Lake in the future. Mole Lake can expect a heat wave about once every 20 years or a 5 percent chance in a given year based on historic data.

HAZARD ANALYSIS: FLOODING / DAM FAILURE

Background on Flood Hazard:

A variety of classifications are used to describe flood events including flash, riverine, urban/small stream, lake, stormwater, dam failure, and coastal. Mole Lake has the potential for all these types of flooding, 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 components of 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 or 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.

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 type 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.

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

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 which 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 – 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.

Flooding problems in Mole Lake 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 is a potentially significant hazard in Mole Lake, particularly because of the extensive water features found throughout the area. As described in Part II, there are seven lakes and three creeks in the Mole Lake area within two watersheds. Surface waters are found on Map 3.

Floodplains are described in Part II and shown on Map 4. These floodplains are narrow along tributaries and lakes but extensive throughout the area. The North Central Wisconsin Regional Planning Commission obtained the digital Flood Insurance Rate Maps (DFIRMs) from FEMA to map the floodplains for planning purposes.

There is one dam in Mole Lake (see Map 4). Swamp Creek Dam, on Swamp Creek below Rice Lake, is a small dam. The Wisconsin DNR regulates all dams on waterways to some degree, however the small dams are not stringently regulated for safety purposes.

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 that 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. Swamp Creek dam has a low hazard rating and does not pose a significant hazard if it fails. There are no high hazard potential dams within the Mole Lake area.

History of Flooding in Mole Lake Area:

Flooding was a principal cause of damage in only one of seven Presidential Disaster Declaration requests in Forest County from 1971 to 2021. This event occurred in 2000, when a nearly stationary front across Wisconsin combined with upper air and abundant moisture to produce a prolonged period of thunderstorms. Flooding from heavy rain caused the majority of problems, including flooded roads and basements. Rainfall totals ranged from 2 to 4 inches in a 24 hour period. Small streams and creeks overflowed their banks and rural areas suffered some crop damage. Mole Lake also received significant hail during this storm event.



Hwy Flood Damage, Forest Co.

The most recent flood event in the Mole Lake Area occurred in March of 2019. Spring snow melt coupled with heavy rains caused flooding outside the Sokaogon C-Store. Emergency pumping was set up to control the expanding water flow near the front door and water filling in the area facing the north exit to State Highway 55.

In April 2002, significant rainfall and snow melt resulted in flooding of roads and low-lying areas throughout Forest County, as well as in Oneida and Florence Counties.

In April of 1996, heavy runoff from spring snow melt and rains resulted in widespread minor flooding across north central and far northeast Wisconsin. Numerous roads and culverts were washed out across numerous counties including Forest.

There are no records of significant dam failure within Mole Lake or Forest County. Some of the dams have developed holes or other damage but have not caused flooding problems.

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, and schools
- Utilities - down electric lines/poles/transformers, telephone lines, and radio communication
- Roadways – washouts, inundated roadways, debris clean-up
- Residential structures – flooded basements, damaged septic systems
- Businesses – loss of commerce
- Agriculture - inundated cropland (including forest), may effect wildrice

To assess the vulnerability of Mole Lake to flooding hazards, basic inventory data in Part II must be analyzed. For this purpose, consideration should be given to structures (specifically critical facilities), infrastructure, and cropland within the flood plain.

One of the first reports to reference in assessing vulnerability to structures during flooding is the State of Wisconsin Repetitive Loss Report. This Report provides the status of repetitive loss structures by community. FEMA, through the Federal Insurance Administration, 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 WEM. According to the report, there are no repetitive loss structures in the Mole Lake area.

Since no structures are listed in the Repetitive Loss Report, structures within floodplains were analyzed. The floodplain boundaries within the Mole Lake area are shown on Map 4. Structures are identified as “vulnerable to flooding” according to proximity to floodplains. However, there were no structures inside reservation boundaries were identified within the floodplain.

In addition to structural damage from flooding, there could be significant damage to public roadways, particularly to roadway surfaces, culverts, and bridges. Flooding could inundate or close roadways from a period of a few days up to as much as several months. Such interruptions in the Mole Lake transportation network would cause travel delays through detours or even cut off access to certain areas.

The primary impact from damages to roadways is to businesses including tribal enterprises. The monetary impact is unknown but past floods in some parts of the County have restricted public access and even closed businesses. Tourism is an important industry in Mole Lake and several facilities, such as the casino and hotel could be significantly affected by widespread flooding.

The Sokaogon Chippewa also have forest resources which can be at risk from flooding. Forestlands can become too wet for logging operations and many water-logged tree plantations suffer high mortality rates. Studies show that flooding conditions can have detrimental effects on wildrice crops as well.

The areas considered to have a higher risk for impact from flooding include structures adjacent to floodplains as shown in Map 12.

Future Probability and Potential Dollar Losses – Flood:

Mole Lake has been fortunate to have experienced only one notable flooding event between 2012 and 2021. Based on historic data presented here (frequency of past events), Mole Lake can expect a flood event about every ten years on average. This equates to a probability of 0.10 or about a 10 percent chance in a given year. The percentage chance of a dam failure is estimated to be less than one percent.

Historic data on the dollar losses due to flood in Forest County is spotty. Recorded losses range from zero to \$154,000. Mole Lake should anticipate at least \$154,000 in property and crop losses, on average, for each significant flood occurrence. Over the next ten-year period, flood losses in Mole Lake will likely exceed \$154,000.

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 Forest 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 at 1,060,833.

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 Forest 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 Forest County, there have been 3,166 total cases of COVID-19 resulting in 52 deaths so far as of 10/16/22. A total of 4 of these deaths were within the Mole Lake Community. 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.

In addition, the social and economic impact of the pandemic on the Mole Lake Community was significant. Much of the tribal operations were shut down for an extended period of time including the casino, one of the tribe's major revenue enterprises. Employment and personal income were also affected and a number of positions were eliminated in cost-cutting measures.

Tribal Covid response measures included formation of an Incident Management Team which functioned through September of 2022. Security was increased to monitor shuttered facilities. When facilities were open, they were staffed with screeners at entrances. All facilities were cleaned twice each day including electrostatic disinfection.

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.

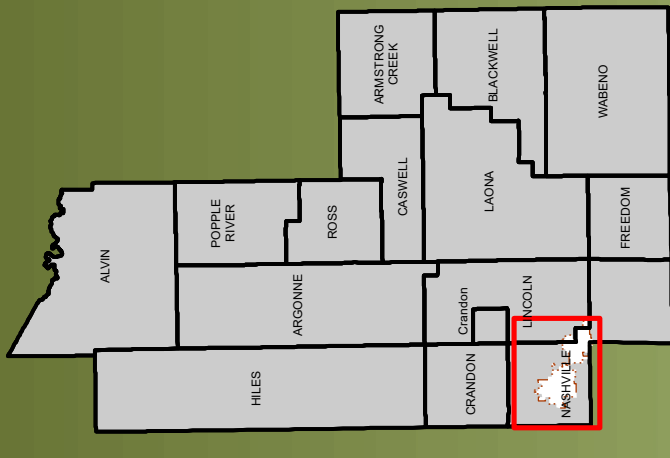
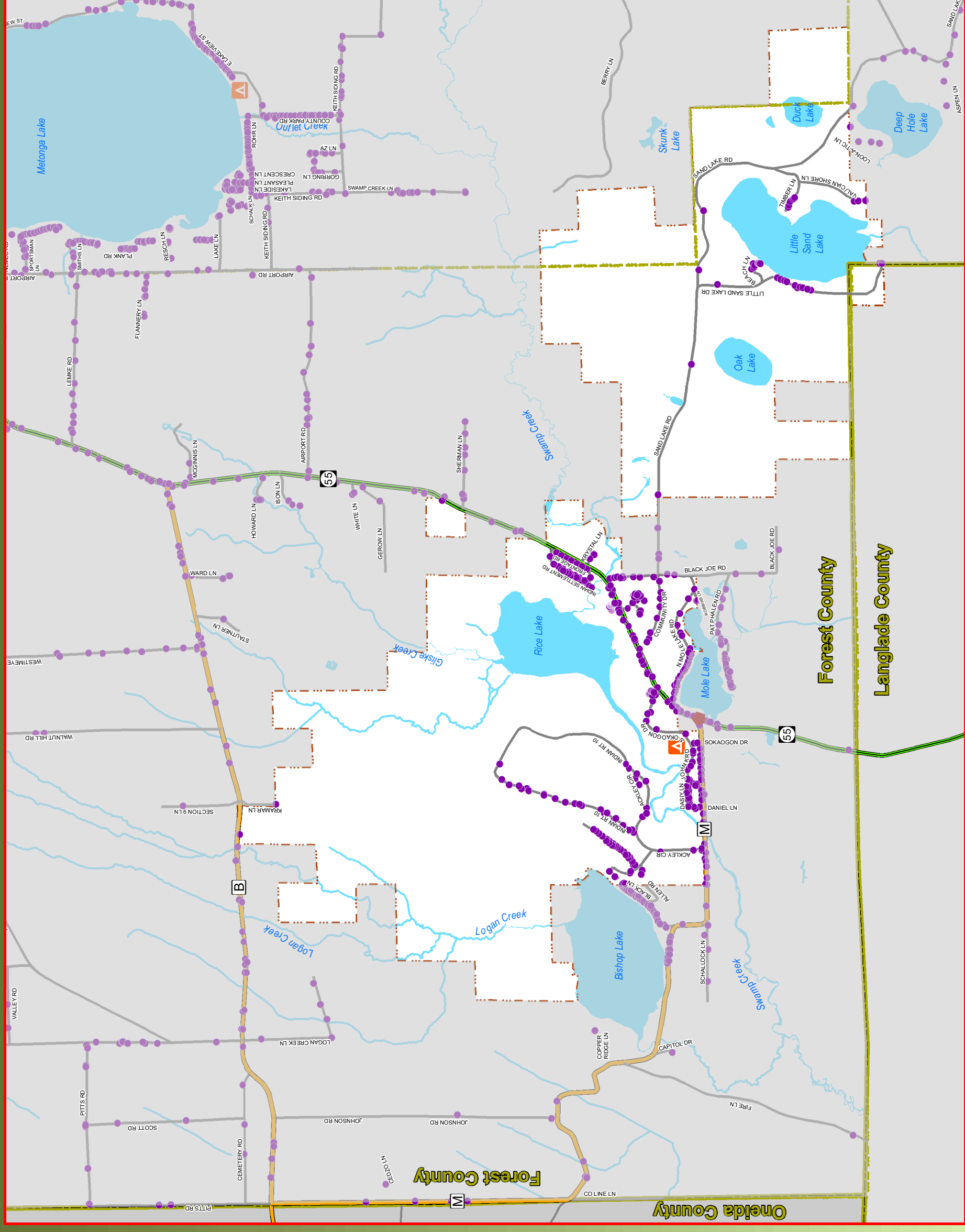
The possibility of a communicable disease epidemic or pandemic outbreak is equal across the County, but the ability to predict where and when an event will occur is very difficult.

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%.

THIS PAGE LEFT BLANK, INTENTIONALLY.



Legend

- County Boundaries
- Minor Civil Divisions
- US Highway
- State Highways
- County Highways
- Local Roads
- Water
- Tribal Land
- Address Points
- Population Concentration
- Campground



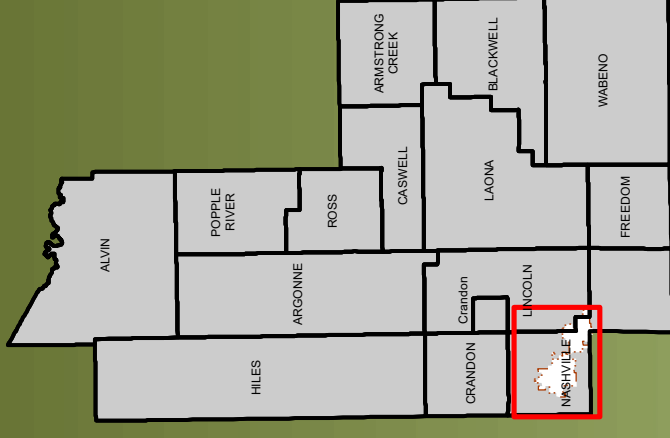
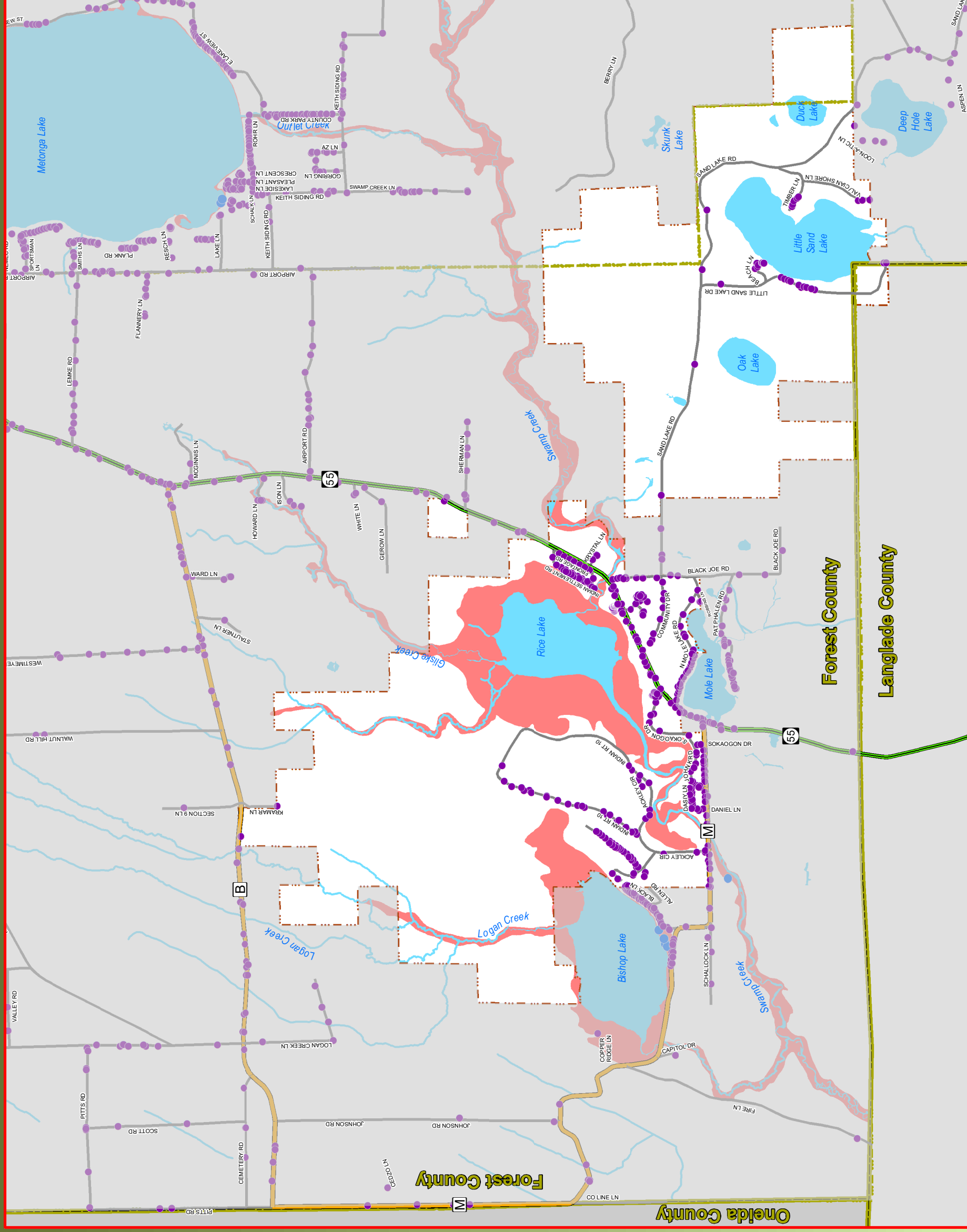
Source: WI DNR, NCWRPC, FOREST CO.

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



Legend

- US Highway
- State Highways
- County Highways
- Local Roads
- County Boundaries
- Minor Civil Divisions
- Tribal Land
- Address
- Structures in DFirm
- DFirm Floodplains
- Water



Source: WI DNR, NCWRPC, FOREST CO., DFIRM

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

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 the Sokaogon Chippewa Community 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 Sokaogon Chippewa Community All Hazards Mitigation Plan Update will discuss the following factors in establishing tribal mitigation strategies:

- Benchmark Progress of Previous Plan from 2016 to 2023
- Review of Mitigation Goals
- Prioritize Identified Mitigation Strategies
- Establish Mitigation Action Plan

PROGRESS REPORT 2016 - 2023

Table 8 identifies the progress made toward mitigation actions from the previous plan in 2016. 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 previous timeframe target for comparison. The new recommendation numbers are shown alongside the original recommendation numbers to help locate specific recommendations within the documents. 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.

Progress has been slow for Mole Lake due to limited resources and staff. However, recently the Tribe has begun to make some significant progress in certain areas, including an overall emphasis on emergency management and mitigation through the appointment of a Tribal Emergency Management Director position. Other areas of progress include sheltering with agreements developed with the American Red Cross and emergency back-up power with its generator project. In each case these are on-going efforts.

This progress report serves as a benchmark for progress in achieving the multi-jurisdictional mitigation goals of the Sokaogon Chippewa Community at Mole Lake.

TABLE 8 BENCHMARK FOR PROGRESS ON 2016 PLAN			
2016 Plan Measure	Progress Report	Original Status	New Status
Promote the distribution & use of NOAA weather radios.	No progress to date due to lack of dedicated staffing. Remains a need.	On-going (1)	On-going (1)
Develop and maintain Emergency Management content on website.	No progress to date due to lack of dedicated staffing. Remains a need.	On-going (2)	On-going (2)
Work with County Sheriff's Dept. to promote enrollment of Mole Lake residents in the Nixle system for text or email emergency alerts. Investigate other early warning options for tribal areas/residents.	No progress to date. Nixle system has been abandoned due to costs and other concerns. However, still an interest for Tribal Officials. Recommendations will be refocused and carried forward.	2016 (3)	On-going (3)
Verify that back-up utilities are available at all critical facilities.	Tribe has made significant progress in equipping facilities with back-up generators, but more work is needed.	2017 (4)	On-going (4)
Develop agreements for access to heavy equipment and trucks, tankers, etc for emergency response.	No progress to date due to lack of dedicated staffing. Remains a need.	2018 (5)	On-going (5)
Work with Forest County on developing and improving its MABAS program for emergency dispatch.	Progress stalled due to County staffing issues. County addressing through cross training and other measures. Project will begin to be moved forward. Remains a need.	On-going (6)	On-going (6)
Develop area-wide disaster shelter plan possibly including i.d. available shelters, tribal housing shelter needs, notification procedures, etc.	Some progress with shelter development, however, no overall, directed effort due to lack of dedicated staffing. Remains a need.	2019 (7)	2025 (7)
Develop and implement alternate access road for Ackley Circle.	No progress to date due to lack of funding. Remains a need.	2020 (8)	2028 (8)
Work on developing tribal emergency response / incident management team.	Tribe has formed incident response teams upon demand of an emergency such as COVID. Current thinking through this planning effort is for a Community Emergency Response Team.	On-going (9)	On-going (9)
Look at creation of Tribal Emergency Management position...	The Tribe recently created and staffed an Emergency Management Position, so the focus shifts to maintaining and developing this position.	2016 (10)	On-going (10)
Promote winter hazards awareness for Tribal members at home and while traveling.	Tribe posts emergency safety messages on its Facebook page and makes brochures available at Tribal Administration Bldg. Remains a need.	Annual (11)	Annual (14)

TABLE 8 <i>Continued</i>			
2016 Plan Measure	Progress Report	Original Status	New Status
Promote public awareness of lightning safety to reduce risk.	Tribe posts emergency safety messages on its Facebook page and makes brochures available at Tribal Administration Bldg. Remains a need.	Annual (12)	Annual (15)
Ensure new Tribal housing and residential facilities are built to withstand wind and lightning.	No organized effort due to lack of dedicated staffing. Remains a need.	2017 (13)	On-going (16)
Ensure construction standards and techniques that strengthen tribal structures against severe wind damage.	No organized effort due to lack of dedicated staffing. Remains a need.	On-going (14)	On-going (17)
Establish emergency tornado shelters in Tribal areas where needed.	Some progress with shelter development, however, no overall, directed effort due to lack of dedicated staffing. Remains a need.	2019 (15)	2027 (18)
Work with BIA on wildland fuel reduction.	No progress to date due to lack of dedicated staffing. Remains a need.	Annual (16)	On-going (19)
Establish Firewise Program and develop Community Wildfire Protection Plan.	No progress to date due to lack of dedicated staffing. Remains a need.	2018 (17)	2026 (20)
Assist population with reducing heat disorders through awareness program.	Tribe posts emergency safety messages on its Facebook page and makes brochures available at Tribal Administration Bldg. Remains a need.	As Needed (18)	As Needed (21)
Investigate NFIP participation.	No progress to date due to lack of dedicated staffing. Remains a need.	2016 (19)	2024 (22)
Develop stormwater management plans for Tribal facilities and housing developments.	No progress to date due to lack of dedicated staffing. Remains a need.	2020 (20)	2028 (23)
Work with Town of Nashville to Address drainage / washout problems on Ackley Circle.	No progress to date due to lack of dedicated staffing. Remains a need.	2016 (21)	2028 (24)

TRIBAL 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 Mitigation Planning Taskforce during the development of the plan. These goals represent the desired conditions to strive for through the Tribe.

The mitigation goals for reducing or avoiding the long-term vulnerability of the Sokaogon Chippewa Community of Mole Lake, Wisconsin are as follows:

- Prepare residents and visitors of Mole Lake for natural hazard events and protect from the effects of such events to the extent possible.
- Protect health and safety of tribal residents and visitors during and after winter storm events.
- Minimize the threat to human life and property damages caused by severe storms and associated lightning and high wind.
- Protect health, safety, and welfare of tribal residents and visitors, along with mitigating future loss of property from tornados.
- Protect the safety and property of residents and visitors from forest and wildfires.
- Improve tribal preparedness for dealing with extended drought.
- Create safety awareness in members of the Tribe to help protect themselves during extreme heat events.
- Explore the National Flood Insurance Program and work to reduce flood risk throughout the Mole Lake area.
- Improve Tribal preparedness for handling and recovering from an epidemic/pandemic.

PRIORITIZATION OF STRATEGIES

The Mitigation Plan Taskforce 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 9.

<u>Prioritization Factors for Sokaogon Chippewa Mitigation Strategies</u>	
<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 tribal goals or incorporated as part of another tribal 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 Potential Benefit	Although a detailed cost-benefit analysis was deemed beyond the scope of this 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 or involving multiple agencies or jurisdictions were valued more than those pertaining to fewer jurisdictions.

Members of the Planning Committee scored 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. A 3-point weighted scale was used to average the scores into the overall high, medium or low priority as shown in Table 9.

MITIGATION ACTION PLAN

The 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 Tribe 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 Agencies:

The proposed lead agency (responsible department) 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 9. Table 9 also contains project cost estimates where available and potential resources to implement the action and anticipated time frames.

ALL HAZARDS

Goal:

Prepare residents and visitors of Mole Lake for natural hazard events and protect from the effects of such events to the extent possible.

❖ Action 1:

The Tribe should implement a program to distribute National Oceanic and Atmospheric Administration (NOAA) weather radios to all existing tribal facilities, including all designated shelter locations, and residences and promote their use. As new units or facilities are opened, a radio should be distributed. A number of communities across Wisconsin have received mitigation grants to acquire radios to support this type of program.

This effort should include ongoing awareness and training efforts so tribal members can effectively use and rely on the radios as part of the overall early warning system. Testing, maintenance and replacement of damaged or faulty radios should also be accounted for.

NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting continuous weather information from the nearest National Weather Service office. NWR broadcasts National Weather Service forecasts, watches, warnings, and other hazard information 24 hours a day. The NOAA weather radio is the primary trigger for activating the Emergency Alert System (EAS) on commercial radio, television and cable systems.

Participating Agencies for Action 1:

Lead agency will be Tribal Emergency Management. Tribal Housing would play a key role in getting the radios out into tribal residences.

❖ Action 2:

The Tribe should add and continue to update information on an Emergency Management web page link off the existing SCC Tribal website. The web page should contain information describing the types of hazards and how to respond to a hazard threat. The site should also contain information on ordinances pertaining to hazards (i.e. floodplain or wetland regulations), locations of shelters, and links to other sites that provide valuable information on weather conditions, burning permits, etc.

Tribal social media sites, such as Facebook, are also good tools for providing important information to tribal residents including emerging or developing situations, program notifications, safety tips and information, etc. For example, updates and reminders of about the NOAA weather radio program could be posted to periodically to help maintain public awareness.

Participating Agencies for Action 2:

Lead agency will be Emergency Management with Tribal Communications responsible for maintaining the site and assisting with social media posts, etc.

❖ Action 3:

Investigate early warning options for tribal area / residents.

Many communities are using web-based community notification systems such as Code Red, Rave and Nixle among others. Forest County had instituted use of the Nixle System, however, this was abandoned due to costs and other issues. Tribal officials have looked at some of these platforms and determined that there were certain feasibility issues including getting and keeping everyone registered, costs, etc.

The Forest County Potawatomi are working on getting their own App for this purpose. The goal is to be able to get information out instantly to the community about an active threat. The SCC should explore options for working jointly with the Potawatomi to adapt this App for both communities or to take on independent development for Mole Lake.

Systems like CodeRed are high-speed telephone emergency notification systems that allow public safety personnel to send messages directly to residents - whether they are home or away - during an emergency. It uses geo-tracking to target specific areas with prerecorded phone messages, emails or texts. Specifications vary but these systems are typically subscriber-based systems that can be used for mass notification of particular areas of the County via internet, email and/or cell phone text. Residents register and choose the type of information to receive such as: public safety notifications, weather alerts, school notifications, community news, etc. The service allows the users to determine the level of information they find important.

The Tribe should also explore other potential early warning and communication systems, including Emergency Alert System (EAS) capabilities and expanded use of emerging technologies such as IPAWS. Currently, NOAA weather radio is the primary trigger for activating the EAS on commercial radio, television and cable systems. Local access to these types of warning systems could facilitate more timely notification of a hazard situation as well as the ability to tailor important information or instructions for the specific area.

Participating Agencies for Action 3:

Lead agency will be Tribal Emergency Management. IT would support program development and implementation.

❖ Action 4:

Install back-up power generators at all critical tribal facilities and tribal member housing units.

This recommendation stems from the frequent power outages experienced in the Mole Lake area, and the instability of the local power grid. Previously, the local plan for power outages was “go to the hotel”. The Mole Lake Casino and Lodge has back-up power facilities to maintain full function of all building operations. The Tribe would use the hotel rooms to house tribal residents who lost power with the Bingo Hall available for overflow. However, the recent increase in outage frequency has led to capacity and cost concerns related to usage of the hotel.

The Tribe has already purchased 165 generators and is in the process of doing the installations at tribal housing units. The Tribe should also make plans to install back-up generators at tribal apartment complexes and multifamily structures.

Critical tribal facilities currently with back-up generators include the Tribal Convenience Store and the Tribal Elder Facility.

The Tribal Health Care Facility currently has a back-up generator; however, this generator does not support full operation of the facility, and the clinic must shut down after 4 hours on the generator. This facility is planned for renovation and expansion, and the Tribe should incorporate adequate back-up generator capacity to maintain full functionality of the facility.

Other critical facilities are currently without back-up power and should have generators installed. These include:

- Tribal Recreation & Cultural Center – This facility is a designated Red Cross shelter location, however it does not have back-up power.
- Tribal Family Services Facility – This facility includes 5 units for emergency housing for individuals or families in need. This facility is recommended for back-up generator to maintain continuity of shelter for those in crisis.
- Tribal Food Distribution Center – Back-up power is recommended to maintain ability continue food distribution operations and preserve food stores during periods of power outage.
- Tribal Roads Garage – Back-up power is recommended to ensure access to equipment when power is out.

Participating Agencies for Action 4:

Lead agencies will be Emergency Management and Housing. Other agencies include Family Services, Food Distribution, and Health Clinic.

❖ Action 5:

Develop agreements for access to heavy equipment and trucks, tankers, etc for emergency response.

One of the issues identified early by the Mitigation Planning Taskforce for the original tribal mitigation plan was the lack of heavy / specialized equipment available to the Tribe for use in the event of a disaster situation. The Tribe should seek out partners able to bring such heavy equipment when needed. The Forest County Highway Department is probably the most obvious and well-equipped public entity for the Tribe to work with, but surrounding neighbor, Town of Nashville, will likely have town crews doing tree removal and clearing debris in areas around the tribal boundaries in the event of a disaster affecting the Tribe and should be coordinated with. Agreements can also be made with private construction and trucking operations.

The Potawatomi have mutual aid agreements with County Highways and local construction firms and trucking companies, including arrangements to haul in potable water tankers, which may serve as useful models.

Participating Agencies for Action 5:

Lead agencies will be Emergency Management and Roads. Tribal Administration would need to be involved with any agreements developed.

❖ Action 6:

Work with Forest County on developing and improving its MABAS program for emergency dispatch.

The County Sheriff's Department is responsible for emergency dispatch in Forest County. With continual updates and improvements, the dispatch system is a work in progress. As part of this on-going effort, Forest County is developing a MABAS or Mutual Aid Box Alarm System. Basically, the MABAS inventories the local agencies and resources available for emergency response and pre-identifies what is needed for a particular situation and location and organizes it into "boxes". So, if the situation calls for everyone in "Box 1", all those agencies are immediately dispatched, improving overall response time and coordination. The system involves creating mutual aid agreements with all the entities involved.

Participating Agencies for Action 6:

Lead agencies will be Emergency Management and Tribal Police. Administration would need to be involved to enter into the necessary mutual aid agreement(s) and ensure coordination of tribal resources.

❖ Action 7:

Develop an area-wide disaster shelter plan possibly including identification of available shelters, tribal housing shelter needs, notification procedures, etc.

Currently, the Tribe has facility use agreements with the American Red Cross to set up shelters in the Mole Lake Area including:

- Health Clinic
- Bingo Hall
- Rec Center
- Lodge & Conference Center

The plan should identify and evaluate available and potential 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 (emergency housing), or both. Existing facilities (schools, churches, public buildings, etc.) should be evaluated for suitability or locations determined for new structures or safe rooms.

Areas of concern include Tribal housing development areas: (1) Ackley Circle / Indian Route 10, (2) Daisy Lane/John K Road/Sokaogon Drive, and (3) Indian Settlement Road. Factors that must be taken into account are numbers and locations of stick-built versus mobile or modular homes, homes without basements and vulnerable populations (elderly, disabled).

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. Local sponsors should be identified to help maintain shelters and ensure they are open in time of need. The plan should include a comprehensive strategy for publicizing the availability of the shelters.

This plan also provides an opportunity to evaluate and prepare for ancillary sheltering needs such as provision of food and water, cot/bedroll needs and storage, back-up power needs, determining inventory and storage of shelter supplies to have on hand (first-aid kits, blankets, flashlights, radios, etc.), and contingency plans in case of failure at a given shelter.

Participating Agencies for Action 7:

Lead agencies will be Emergency Management and Housing.

❖ Action 8:

Develop and implement alternate access road for Ackley Circle / Indian Route 10. Ackley Circle/IR 10 loops through a section of reservation land between Bishop and Rice Lake and is one of the Tribe's principal residential development areas. At this time there is only one access point connecting Ackley Circle/IR 10 to County Highway M, and there is a bridge separating the residential areas from the highway.

A situation in which the bridge is out or there is a blockage of the road, there would be no way out for residents living along this route, and it would be very difficult to get access for emergency services or evacuation. Additional new homes are being planned for this area.

There are a couple of potential pathways for an alternative route in and out of this area. The Tribe should evaluate these routes and seek funding to develop a new road to ensure access to residences along Ackley Circle/IR 10. The Sheriff's Department has expressed concern about this situation in the past.

Participating Agencies for Action 8:

Lead agency will be Roads.

❖ Action 9:

Develop and maintain a tribal Community Emergency Response Team (CERT).

Residents across the Sokaogon Chippewa Community quickly rise to the occasion in time of need to aid their neighbors and the community. As a result, tribal officials have expressed interest in developing a CERT team. Creating a team provides an opportunity to bring some structure and focus for these community "volunteers". This helps in programming skills (CPR for example) and safety training to make community responders more effective and safer as they answer the call for help. It also provides a mechanism to provide lines of communication as well as to direct resources where needed during a situation. One example that frequently comes up during these discussions is the ability to better coordinate outreach and provide assistance to community elderly, disabled or otherwise dependent.

FEMA has a formal Community Emergency Response Team (CERT) program which educates volunteers about disaster preparedness for the hazards that may occur where they live. FEMA provides training programs and resources to support local CERT efforts.

Participating Agencies for Action 9:

Lead agency will be Emergency Management.

❖ Action 10:

Establish standing Tribal Emergency Management Department and work to maintain and develop Tribal Emergency Management Director position.

The Emergency Management position provides a dedicated staff person to ensure that many of the recommendations for hazard mitigation and emergency preparedness within this plan move forward and to work on grants to implement mitigation projects and programs.

Regular on-going activities the position could be responsible for could include:

- Maintaining requirements for the EMPG grant
- Manage weather radio distribution program
- Distribute emergency information and education to tribal members including via website and social media - and be a resource to answer questions and assist tribal residents in preparing for disaster events
- Develop and implement early warning systems for tribal area
- Manage tribal back-up generator program including awareness and training for tribal members, testing and maintenance, monitoring fuel supplies, etc.
- Work on development of agreements for heavy equipment, trucks, buses and other materials and supplies
- Work with Forest County and neighboring communities on a joint integrated preparedness plan
- Work on tribal shelter and emergency housing needs
- Develop tribal Community Emergency Response Team (CERT)
- Coordinate emergency management training for tribal officials, staff and volunteers (CERT team members, etc.)
- Develop functional needs registry for at-risk tribal members to assist in emergency response
- Coordinate implementation of the Sokaogon Chippewa Community Emergency Preparedness Plan
- Take steps to implement and manage other mitigation projects identified in this plan or as tribal needs arise
- Coordinate with other departments and agencies such as Administration, Communications, Elder Services, Environmental, Family Services, Forestry, Health, Housing, Police, Roads, Town of Nashville, Crandon Fire District, Crandon Area Rescue, WisDNR, BIA, etc.

The Emergency Management Director could hold period meetings with appropriate agencies to coordinate and plan for anticipated events, incidents or seasons. For example, the Casino, C-Store, Housing and Roads all have snow clearing responsibilities and associated equipment for certain areas of the tribal community. A fall meeting to

discuss the upcoming snow season and create a plan to work together particularly in cases of exceptional snowfall events.

Of course, the Tribe has limited funding availability. Funding could be pooled from various sources to provide the budget for the position. The Tribe has applied for and received an Emergency Management Performance Grant which will pay up to 50% of the costs for a tribal emergency management position. The Potawatomi and other area tribes utilize this funding for their emergency management directors. The Potawatomi program may be a useful model / resource to aid in developing the position in Mole Lake.

Participating Agencies for Action 10:

Lead agencies will be Emergency Management and Administration. Other tribal departments will coordinate with Emergency Management.

❖ Action 11:

Establish and develop a functional needs registry for tribal residents. The registry provides emergency responders with important information to ensure the safety of residents with special needs such as oxygen supply, ventilation, associated power requirements, critical medications, physical limitations, etc., as well as information like what type of heat source they have, if AC is available, etc.

One area of concern identified during this planning process as needing to be addressed is the provision of aid and/or evacuation for elderly and other homebound in the event of a disaster / emergency. One of the reasons for this concern is the frequency of power outages affecting the area which had a peak in 2022. Maintaining a functional needs registry will help tribal officials make sure residences with critical power requirements have working generators to power ventilators or other important medical devices.

Many communities maintain these types of registries in varying forms. A resident survey could be created and distributed via email and/or US Mail to gather the base information to build the registry. It might be necessary to go door to door and sit with residents to go over the questions with them. Information on generator status with the generator installation program should also be included. Once the initial registry is established consideration must be given to maintaining and updating the information. One option might be to develop an online interface for individuals to enter and submit their information.

Communities approach these registries in different ways. For example, Juneau County, Wisconsin states that “The purpose of the Functional Needs Evacuation Registry is to provide Emergency Responders in your municipality with important information from individuals who may require Evacuation Assistance during an emergency, such as tornado, flood, blizzard, power outage, or disease outbreak.” The County has a downloadable form (see Appendix B) available on their website that people can fill in and mail back to enter the registry or update their registry information.

Participating Agencies for Action 11:

Lead agencies will be Emergency Management and Communications.

❖ Action 12:

Work with Forest County to update address numbering for all tribal facilities and residences to improve 911 dispatching and emergency response.

Structure addressing is a complex thing especially in rural areas. There are many examples of emergency responders going to the wrong building or even not being able to find the building they were called to at all. This is not a good situation during an emergency response. Forest County is responsible for assigning addresses (often referred to as “Fire Numbers” in rural areas, stressing their significance in emergency situations such as a fire). The County assigns a number that fits logically within the address grid and adds it to the 911 system. However, due to jurisdictional issues, this may not have been consistent within the tribal area in the past.

Typically, the process in Forest County begins with a property owner submitting an application and \$75 fee to the County Zoning Department. Zoning then works with the County Emergency Management Department to assign a number and get it added to the Parcel Description and the County Map. The property owner is then sent a Notification of Assignment. The number signs are ordered in bulk every other month. Once the signage is received, they are distributed to the local jurisdiction, which installs the signage and receives a reimbursement per sign at the end of the year.

The Tribe should work with County Emergency Management to come up with a plan on how to do the address numbering in the tribal areas and establish a process that works for the Tribe.

Structures must be identified and determined if it is a primary structure needing a number. Due to differences in jurisdiction and property ownership, one of the issues with addressing within the tribal area is that each primary structure is not on a its own separately defined property parcel. This makes it more difficult to make sure each structure is properly identified and assigned a number. Another issue is fixing addressing errors as they are identified. This can involve changing addresses. In these cases, there is no fee payment to fund the replacement signage.

The process should include replacing old and worn signs. In addition, uniform signage and placement aids responders in field locating where they need to be. In some cases existing signage is too small or obstructed by vegetation or other items. Often there are no numbers on the structure itself. Some public information and education efforts are also recommended to raise public awareness of the importance of the numbering system and how it works.

Participating Agencies for Action 12:

Lead agencies will be Emergency Management and Housing.

❖ **Action 13:**

Implement the recommendations of the Sokaogon Chippewa Community Emergency Preparedness Plan developed with United Safety Solutions.

The Tribe has worked with specialized safety consultants in developing emergency and safety policies and procedures and physically inspecting each of its buildings for security, communications, fire safety, etc.

The plan provides emergency operations procedures for the tribe and each of its facilities. The process also included extensive exercises and training on a variety of emergency issues to explore tribal strengths and weaknesses. Future training recommendations are outlined. A broad range of issues are covered, including evacuation and emergency housing (outfitting/emergency supplies, power generation needs, etc.), see also Actions 7/18.

Participating Agencies for Action 13:

Lead agencies will be Emergency Management and Administration. Each tribal agency will have roles and responsibilities.

HAZARD: WINTER STORMS/EXTREME COLD

Goal:

Protect health and safety of tribal residents and visitors during and after winter storm events.

❖ **Action 14:**

The Tribe should promote winter hazards awareness, including home and travel safety measures, such as avoiding travel during winter storms. If travel cannot be avoided, stocking of vehicles with a shovel, sand, warm clothing, food, water, etc. should be encouraged.

This effort should also include suggestions regarding checking on neighbors or others known to live alone or that may be at a disadvantage in fending for themselves.

Other winter / extreme cold problems common in the northwoods include freezing of septic systems and residential LP Gas (extreme cold) and planning ahead to ensure adequate supplies of LP Gas / Propane.

Participating Agencies for Action 14:

Lead agency will be Emergency Management with messaging support from Communications.

HAZARD: SEVERE THUNDERSTORM/HIGH WIND/LIGHTNING/HAIL

Goal:

Minimize the threat to human life and property damaged caused by severe storms and associated lightning and high wind.

❖ **Action 15:**

Public awareness of proven lightning safety guidelines to reduce risk should be promoted. Measures include developing and distributing a lightning safety brochure and posting warning signs at key locations. Areas of concern include, pow-wow grounds, other outdoor attractions, recreation areas and parks, athletic fields, access to tribal fishing grounds and rice beds, other beaches and boat launches. Efforts should be made to get managers and staff that handle such facilities "up to speed" with procedures and training for lightning safety.

Participating Agencies for Action 15:

Lead agency will be Emergency Management with messaging support from Communications.

❖ **Action 16:**

Tribal housing officials should review building plans and procedures to ensure new tribal housing and residential facilities are built to withstand wind and lightning. The Wisconsin Uniform Dwelling Code provisions includes provisions for construction methods that employ cross-bracing, anchoring of walls to foundation, and anchoring roof rafters to walls (also mitigates tornado risk) and measures to provide wind protection and retrofits for vulnerable features (windows, garage doors, patio doors, double-wide entry doors, siding and bracing for walls and rafters. The National Fire Protection Association (NFPA) has standards for the installation of lightning protection systems that can be incorporated into building plans. See also Action 17.

Participating Agencies for Action 16:

Lead agency will be Housing.

HAZARD: TORNADO

Goal:

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

❖ **Action 17:**

The Tribe should require and promote construction standards and techniques to strengthen public and private structures against severe wind damage. Wind engineering measures and construction techniques may include structural bracing, straps and clips, anchor bolts, laminated or impact-resistant glass, reinforced pedestrian and garage

doors, window shutters, waterproof adhesive sealing strips, or interlocking roof shingles. Also, architectural design can make roofs less susceptible to uplift. See also Action 16.

Participating Agencies for Action 17:

Lead agencies will be Housing and Administration (for public buildings).

❖ **Action 18:**

Establish emergency “tornado” saferooms/shelters in areas where needed. See Action 7 on planning for shelter needs. Areas of concern include, but are not limited to, tribal housing development areas: (1) Ackley Circle / Indian Route 10, (2) Daisy Lane/John K Road/Sokaogon Drive, and (3) Indian Settlement Road. Factors that must be taken into account are numbers and locations of stick-built versus mobile or modular homes, homes without basements and vulnerable populations (elderly, disabled). Outfitting of each shelter with emergency supplies (blankets, flashlights, radios, etc.) must be considered when establishing a shelter, as well as, the need for power generation.

Safe room type shelters are eligible for funding under a variety of grant funding programs including FEMA HMGP and BRIC mitigation grants.

Participating Agencies for Action 18:

Lead agencies will be Housing and Emergency Management.

HAZARD: FOREST FIRE / WILD FIRES

Goal:

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

❖ **Action 19:**

Work with BIA on wildland fuel reduction. The BIA funds an annual agreement with WisDNR for fire suppression in the reservation area. At the same time, BIA foresters work with tribes to protect tribal resources, facilities and homes and reduce the risk of wildfire. The BIA has a wildland hazardous fuel reduction program to help fund fuels reduction projects.

Participating Agencies for Action 19:

Lead agencies will be Forestry and Emergency Management.

❖ **Action 20:**

The Tribe should promote the Firewise program and related educational materials to increase community awareness of wildfire risk within the area. Outreach efforts should include information on how to protect homes and structures from wildfires. 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.

The Tribe should also seek to develop a Community Wildfire Protection Plan (CWPP). 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.

Participating Agencies for Action 20:

Lead agencies will be Forestry and Emergency Management.

HAZARD: DROUGHT/EXTREME HEAT

Goal:

Create safety awareness in members of the Tribe to help protect themselves during extreme heat events.

Goal:

Improve tribal preparedness for dealing with extended drought.

❖ **Action 21:**

To assist the tribal population in reducing heat disorders, the Tribe should promote extreme heat hazards awareness, including safety tips, medical information, and contact information for health officials when conditions/temperatures warrant concern. In times of serious / worsening drought, the Tribe should work with County and State officials to keep residents aware of safety and water conservation measures.

Participating Agencies for Action 21:

Lead agency will be Emergency Management with messaging support from Communications. Health should prepare for an influx of health questions from the public and a possible influx of heat related disorder cases.

HAZARD: FLOODING

Goal:

Explore the National Flood Insurance Program and work to reduce flood risk throughout the Mole Lake area.

❖ **Action 22:**

Communities within Forest County currently participate in the National Flood Insurance Program (NFIP). Compliance primarily entails adopting and enforcing floodplain management regulations that meet minimum criteria. Forest County and the City of Crandon are in the program. Tribes such as the Sokaogon Chippewa Community can

participate in the program, and the flood hazard mapping for tribal areas has already been done as part of the county mapping. The recent FEMA risk Discovery Report for the Wolf River Watershed includes the Mole Lake area and recommends that the Tribe adopt a zoning ordinance to control development in the floodplain.

Participating Agencies for Action 22:

Lead agency will be Emergency Management. Tribal Environmental would be a key resource agency. Because of the potential for new regulations and the insurance issues, Administration would also be involved.

❖ Action 23:

The tribe should develop stormwater management plans for tribal facilities. Tribal facilities and housing developments in close proximity to surface waters, wetlands and floodplains should be evaluated for stormwater management issues and need for stormwater management. Without adequate design consideration, development can lead to stormwater run-off issues. By determining how to handle stormwater, drainage problems are not allowed to build on one another, thereby minimizing future flooding.

Participating Agencies for Action 23:

Lead agencies will be Environmental and Housing.

❖ Action 24:

Work with Town of Nashville to address drainage / washout problems on Ackley Circle. Culvert sizing and proximity to floodplain area are principal factors. Ackley Circle is a town road under the jurisdiction of the Town of Nashville, so a cooperative effort would be required. This recommendation is particularly important in that a significant number of tribal residences could become isolated and inaccessible during or after a disaster event that may result in a washout or blockage of this road (see also Action 8). Currently the only access in or out of this area, such an impasse would significantly hampering access by law enforcement or rescue personnel.

Participating Agencies for Action 24:

Lead agency will be Roads.

HAZARD: EPIDEMIC/PANDEMIC**Goal:**

Improve Tribal preparedness for handling and recovering from an epidemic/pandemic.

❖ Action 25:

Develop a pandemic preparedness response and recovery plan based on lessons from the Covid-19 Pandemic. Integrate and optimize use of the Regional Health Care Coalition. Lessons or issues identified during the Covid Pandemic include, but are not limited to, the following:

- Funding for contact tracing
- Testing sites plan
- Vaccine distribution plan
- Mass vaccination plan
- Personal protective equipment stockpile
- Messaging and message consistency

The pandemic preparedness plan should coordinate with the County and adjacent municipalities.

Participating Agencies for Action 25:

Lead agencies will be Emergency Management and Health.

❖ Action 26:

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 of these 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 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 into 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 Agencies for Action 26:

Lead agencies will be Emergency Management, Administration and Health.

Table 9 - Summary of Sokaogon Chippewa Community Hazard Mitigation Strategies

Mitigation Measures (See Expanded Text in Plan)	Cost Estimate	Existing and Potential Resources to Implement	Responsible Dept.	Project Timeframe*	Priority Level (Ave. Score)
ALL HAZARDS					
1 Promote the distribution and use of National Oceanic and Atmospheric Administration (NOAA) weather radios.	\$ 13,750.00	Dept. Budgets; HMGP Mitigation Grants; Trust Fund Endowment, SFI	Emergency Mgmt / Housing	On-going	High (2.67)
2 Develop and maintain Emergency Management content on website and social media/Facebook.	Staff Time	Dept. Budgets	Emergency Mgmt / Communications	On-going	Medium (2)
3 Work to develop early warning options for Mole Lake residents, including potential systems for text or email emergency alerts.	Staff Time	Dept. Budget; General Fund; Trust fund Endowment, SFI	Emergency Mgmt / IT	On-going	Medium (2.33)
4 Obtain, install and maintain back up power generators at critical tribal facilities and residential structures.	Costs to be determined	Dept. Budgets; General Fund; SFI; BRIC/HMGP Mitigation Grants (non-residential)	Emergency Mgmt / Housing	On-going	High (3)
5 Develop agreements for access to heavy equipment and trucks, tankers, etc for emergency response.	Staff Time	Dept. Budgets	Emergency Mgmt / Roads	On-going	Medium (1.67)
6 Work with Forest County on developing and improving its MABAS program for emergency dispatch.	Staff Time	Dept. Budgets	Emergency Mgmt / Police	On-going	Medium (2.33)
7 Develop area-wide disaster shelter plan possibly including i.d. available shelters, tribal housing shelter needs, notification procedures, etc.	\$ 75,000.00	Dept. Budgets; Trust Fund Endowment; SFI	Emergency Mgmt / Housing	2025	High (2.67)
8 Develop and implement alternate access road for Ackley Circle / Indian Route 10.	Costs to be determined	General Fund; Trust Fund Endowment; SFI; BIA Roads Program Funding	Roads	2028	High (3)
9 Develop and maintain a tribal Community Emergency Response Team (CERT).	Staff Time	Dept. Budget	Emergency Mgmt	On-going	High (2.67)
10 Establish standing Tribal Emergency Management Department and work to maintain and develop Tribal Emergency Management Director position.	Costs to be determined	General Fund; Emergency Management Performance Grant (EMPG)	Emergency Mgmt / Tribal Administration	On-going	High (3)
11 Establish and develop functional needs registry for tribal residents to provide tribal emergency responders with important information to ensure safety of residents with special needs like oxygen, ventilation, medicines, physical limitations, etc.	Costs to be determined	Dept. Budgets; General Fund; Trust fund Endowment; SFI	Emergency Mgmt / Communications	On-going	High (2.67)
12 Work with Forest County to update address numbering for all tribal facilities and residences to improve 911 dispatch.	\$16,875	Dept. Budgets; Trust fund Endowment; SFI	Emergency Mgmt / Housing	2027	High (2.67)
13 Implement recommendations of the Sokaogon Chippewa Community Emergency Preparedness Plan developed with United Safety Solutions.	Costs to be determined	Dept. Budgets; Trust Fund Endowment; SFI	Emergency Mgmt / Tribal Administration	On-going	High (3)

Mitigation Measures (See Expanded Text in Plan)	Cost Estimate	Existing and Potential Resources to Implement	Responsible Dept.	Project Timeframe*	Priority Level (Ave. Score)
WINTER STORMS / EXTREME COLD					
14 Promote winter hazards awareness for Tribal members at home and while traveling.	Staff Time	Dept. Budget	Emergency Mgmt / Communications	Annual	High (2.67)
SEVERE THUNDERSTORM / HIGH WINDS / LIGHTNING / HAIL					
15 Promote public awareness of lightning safety to reduce risk.	Staff Time	Dept. Budget	Emergency Mgmt / Communications	Annual	Medium (2)
16 Ensure new Tribal housing and residential facilities are built to withstand wind and lightning.	Staff Time	Dept. Budget	Housing	On-going	High (2.67)
TORNADO					
17 Ensure construction standards and techniques that strengthen tribal structures against severe wind damage.	Staff Time	Dept. Budget	Housing	On-going	High (3)
18 Establish emergency tornado shelter(s)/saferoom(s) in Tribal areas where needed.	Costs to be determined	Dept. Budgets; General Fund; SFI; BRIC/HMGP Mitigation Grants	Emergency Mgmt / Housing	2027	High (2.67)
FOREST FIRE / WILDFIRE					
19 Work with BIA on wildland fuel reduction.	Costs to be determined	Dept. Budgets; BIA Wildland Hazardous Fuel Reduction Program	Emergency Mgmt / Forestry	On-going	Medium (2)
20 Establish Firewise Program and develop Community Wildfire Protection Plan.	\$ 60,000.00	Dept. Budgets; WisDNR National Fire Plan Program Funding; WisDNR Forest Fire Protection (FFP) Grant; SFI	Emergency Mgmt / Forestry	2026	Medium (1.67)
DROUGHT / EXTREME HEAT					
21 Assist population with reducing heat disorders through awareness program.	Staff Time	Dept. Budget	Emergency Mgmt / Communications	As Needed	Medium (2)
FLOODING					
22 Investigate NFIP participation.	Staff Time	Dept. Budget	Emergency Mgmt	2024	Medium (2.33)
23 Develop stormwater management plans for Tribal facilities and housing developments.	Costs to be determined	Dept. Budgets; Trust Fund Endowment; SFI	Environmental / Housing	2028	Medium (2)
24 Work with Town of Nashville to Address drainage / washout problems on Ackley Circle.	Costs to be determined	General Fund; BIA Tribal Roads Program Funding	Roads	2028	Medium (1.67)
EPIDEMIC / PANDEMIC					
25 Develop a pandemic preparedness plan based on lessons from the Covid-19 Pandemic.	Staff Time	Dept. Budgets	Emergency Mgmt / Health	2025	Medium (2)
26 Work to implement recommendations of the North Central WI Pandemic Assessment & Future Response Plan and the North Central WI Regional COVID-19 Recovery Plan.	Costs to be determined	General Fund; Trust Fund Endowment; SFI	Emerg. Mgmt / Tribal Health / Tribal Administration	On-going	Medium (2)

* Actual project implementation dependent on funding and staff availability.

INTRODUCTION

Part V of the Sokaogon Chippewa Community All Hazards Mitigation Plan Update describes the adoption, implementation, including an assessment of the Tribe's capability to mitigate hazards, and evaluation & maintenance processes.

PLAN UPDATE ADOPTION

The adoption of the Sokaogon Chippewa Community All Hazards Mitigation Plan Update lends itself to serve as a guiding document for tribal 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 it must be sent to the state and federal level to verify that all requirements are met. Once a draft of the Plan Update has been completed, it is submitted to the State Hazard Mitigation Officer (SHMO) at the state level at WEM and the FEMA Region V Office. Reviewers will determine if the Plan Update meets program requirements.

Prior to final approval by FEMA, the Plan Update must be formally adopted by the Tribe by resolution. The Tribal Council of the Sokaogon Chippewa Community has considered and adopted this tribal All Hazards Mitigation Plan Update. Refer to APPENDIX C for a copy of the resolution documenting adoption of the Plan Update.

Assurances

With the adoption and through subsequent implementation of this Plan Update, the Sokaogon Chippewa Community tribal government will continue to comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, including 2 CFR Parts 200 and 3002, and will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes, see [44 CFR § 201.7(c)(6)].

PLAN IMPLEMENTATION**Administrative Responsibilities**

Once the Plan update has been approved, stakeholders should be informed. Tribal Emergency Management will distribute notice of availability to stakeholders including tribal departments and agencies and other organizations the Tribe works closely with at the federal, state, county and local levels. The Tribe will also make the Plan Update available to the public by linking the report on their web site.

Tribal Emergency Management will monitor implementation of mitigation measures and any project close-outs. Discussion of such progress will be a topic of the annual, or as needed, meeting with Tribal Council. (See "Plan Evaluation and Maintenance" later in this chapter.

Along with monitoring the progress of the action projects, the Tribe should also work to secure funding to implement the Plan. State and federal agencies, nonprofit organizations, and foundations continually make grants available. The Tribe should research these grant opportunities to determine eligibility.

When implementing this Plan Update, the Tribe should consider innovative ways to involve active participation from nonprofit organizations, businesses, and citizens to implement the Plan. 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 and elected officials is 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 public's 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 community at large. This will help inform people that the Plan Update is being implemented and is effective.

Community Disaster Resilience

There has been a growing movement in emergency management planning circles toward a "new" buzz word: resilience. There is a wide range of definitions for community resilience and what it entails, but in 2012 the National Academy of Sciences looked at the major federal agencies and independent organizations with work efforts related to resilience and determined that *"resilience is the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events. Enhanced resilience allows better anticipation of disasters and better planning to reduce disaster losses—rather than waiting for an event to occur and paying for it afterward."*

Many weather experts now expect severe weather events to become increasingly more frequent and intense. Recent events seem to corroborate this condition with multiple "short duration - high volume" rainfalls causing devastating flooding around the state in 2015, 2016, 2017 and 2018.

It is recommended that the Tribe acknowledge these changing conditions and begin working toward an approach to incorporating a community resilience component into its planning and operations. The Tribe could coordinate with the county and its neighboring towns on resiliency efforts.

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, tribal departments and any professional staff assisting them, typically review and incorporate any related pre-existing plans as a matter of course.

At the time of this mitigation plan update, the Tribe was also involved with the development of a Sokaogon Chippewa Community Emergency Preparedness Plan. The Tribal Emergency Management Director provided oversight for both efforts, and planning staff coordinated to integrate the two plans as they were developed.

The most applicable planning process outside of the mitigation plan is the local comprehensive plan for the tribal community. The Tribe's current comprehensive plan was completed in 2011, and there was no mitigation plan to incorporate at that time with the initial tribal mitigation plan being adopted in 2016. However, the Tribe is scheduled to update its comprehensive plan with the North Central Wisconsin Regional Planning Commission in 2023-2024. This ensures that the tribal mitigation plan will be incorporated into the updated tribal comprehensive plan.

Other tribal plans that may be updated in the future include the Strategic Plan, Indian Housing Plan, and Long Range Transportation Plan. Each of these processes will integrate mitigation goals and projects from the mitigation plan as pertinent to their subject matter.

Integration with FEMA Mitigation Programs and Initiatives

The planning process for this mitigation plan integrated the DFIRM floodplain maps from Forest County for the Tribal area. In addition, FEMA mitigation programs (grants) were evaluated for applicability to Tribal situations and incorporated into the mitigation strategy as appropriate. See Part IV and Table 9.

In addition to updating the mitigation plan, the Tribe has recently established an Emergency Management Director position. This new position provides a dedicated staff member to advance FEMA programs and initiatives where this was previously lacking. The EM Director is currently working on an emergency operations plan and a joint integrated preparedness plan with Forest County.

As the Tribe's capabilities increase, see below, integration with FEMA programs and initiatives will also increase.

TRIBAL CAPABILITY ASSESSMENT

The Sokaogon Chippewa Community is a small tribe with limited staffing, resources and funding. At this time the Tribe does not have any formal pre- or post- disaster hazard management laws, regulations, policies or programs, including those related to development in hazard prone areas. In case of an major event, the Tribal Council will “call an emergency” and form an Incident Management Team to handle the situation, but this can divert resources from other areas.

However, the Tribe has recently created and staffed an Emergency Management Director position. This move provides a dedicated staff person to work on hazard management policies and programs where they did not have this before. The EM Director is already working on a tribal emergency response plan which will begin to establish tribal policies. The EM Director will also be working on programs recommended in the mitigation plan. Over time, this position will develop the Tribe’s capabilities which will eventually lead to the development of formalized regulations, policies and programs for hazard management in the future.

In addition, individual tribal departments have some capacity to integrate mitigation goals into their regular day-to-day activities to achieve progress on basic mitigation recommendations and projects. Refer to the "Responsible Department" column of the mitigation strategies table shown at the end of Chapter IV of this report for department(s) anticipated to lead each recommendation. The EM Director will provide guidance and support needed to facilitate more involved projects and programs.

The Tribe does have an “Environmental Code” for development. The intent is to protect the environment which results in restricting development from environmentally sensitive areas and areas unsuitable for development. These areas are often the more hazard-prone areas as well. This is one reason there are no structures within floodplains in the Sokaogon tribal land areas.

Funding Capabilities

The mitigation strategies table also contains a column titled "Existing and Potential Resources to Implement". In addition to the department(s)/staff that will be dedicated to a particular strategy, this column identifies current and potential future funding sources that the Tribe has access to or may apply for to fund the identified mitigation recommendations and programs.

Because the Tribe has limited funding availability, funding will often have to be pooled from various sources to provide the budget needed for many of the recommendations, and grants will be vital to successful implementation. In fact, the Sokaogon Chippewa Community is very dependent on grant funding to support its programs and initiatives across the board. As a result, the Tribe has a long history of successfully applying for and managing a variety of grants from various

state, federal and other sources. From a mitigation standpoint, the Tribe has funded both its initial and this current hazard mitigation planning project through FEMA mitigation grants (see APPENDIX D for more information about FEMA mitigation grant programs). The new EM Director position is partially funded by an Emergency Management Performance Grant (EMPG) through Wisconsin Emergency Management. And, the Tribe has been managing an influx of grant funding from FEMA and other sources for COVID-19 response and recovery.

Internally, the Tribe funds its general operations through departments via revenues from its casino and other enterprise operations; often with the support of outside grant funding. This budgeting process can include small department projects. Larger projects must be funded through requests to either the Tribal Trust Fund Endowment or SFI. The endowment supports projects and activities that have a positive beneficial impact on the Tribe, its people and their environment. SFI or Sokaogon Finance Incorporated, another tribal enterprise, allocates part of its profits to community projects.

PLAN 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 Tribe. FEMA requires that mitigation plans be updated at least every five years to remain eligible for assistance.

The Plan will be reviewed and evaluated on an annual basis, or more frequently, as needed. Within this period, the Tribal Emergency Management Director will evaluate incoming information against the contents of the Plan as needed to prepare for revisions. The Planning Committee will be called together to discuss evaluation and revisions to the Plan one year from its adoption and annually thereafter. During these meetings, the Committee will review progress made on achieving goals and implementing mitigation strategies and actions. The Tribe is encouraged to consult/coordinate with the NCWRPC at the time of revision.

Tribal Government meetings are open to the (tribal) public, and the public can bring questions or comments regarding this Plan to any regular meeting. The final plan document will be available on the internet until the next draft is posted for review. The public can continue to submit questions or comments at any time via an email link.

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 annual 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. The Tribe will conduct a variety of open meetings including at least one public informational open house. This also provides an opportunity to inform on the progress of any projects.

The Tribal Council must approve all changes and updates to the Plan.

Appendix A – Meeting Notices

Sokaogon Chippewa Community - Mole Lake

Tribal All Hazards Mitigation Plan Update

Planning Committee Meeting

Tuesday, May 3 - 2 PM

Gathering Room in the Mole Lake Casino Lodge

Agenda

1. Call to Order
2. Welcome and Introductions
3. Presentation/Discussion: Mitigation Planning Overview
4. Review of Planning Process for SCC Plan Update
5. Question & Answer
6. Next Meeting
7. Adjourn

SCC-Mole Lake All Hazards Mitigation Plan Update

Committee Meeting SIGN-IN

May 3, 2022 - 2:00 PM

	Name	Department (715) 622-0297
1	Noel Vandiver Jr.	SCC-ICS / noel.vandiver@scclnsn.gov
2	Connie Quade	SCC-ICS
3	Tom VanZile	SCC - Treasurer
4	Yvette McGeshick	SCC - Education
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Sokaogon Chippewa Community - Mole Lake

Tribal All Hazards Mitigation Plan Update

Planning Committee Meeting

Monday, August 22 – 10 AM

Small Conference Room – Tribal Administration Building

Agenda

1. Call to Order
2. Welcome and Introductions
3. Recap Previous Mitigation Meetings
4. Review Mole Lake Planning Area Background
5. Discuss Hazard Risk Assessment Matrix
6. Discuss Hazard Mitigation Issues
7. Review Tribal Mitigation Capabilities
8. Next Meeting
9. Adjourn

SCC-Mole Lake All Hazards Mitigation Plan Update

Committee Meeting SIGN-IN

August 22, 2022 - 10:00 AM

	Name	Department
1	Michael [unclear]	TUPO
2	Joe Kane	Housing
3	Wayne R. LaBine	Honor Ed. Director
4	Carmen McGeshick	EM
5	Ken McMinch	Water & WW
6	Jesse Davis	IT
7	Noel Vandiver	ICS
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Sokaogon Chippewa Community - Mole Lake

Tribal All Hazards Mitigation Plan Update

Planning Committee Meeting

Monday, October 24 – 10 AM

Small Conference Room – Tribal Administration Building

Agenda

1. Call to Order
2. Welcome and Introductions
3. Recap Previous Mitigation Meetings
4. Review Mole Lake Hazard Risk Assessment
5. Discuss Tribal Mitigation Capabilities
6. Next Meeting
7. Adjourn

SCC-Mole Lake All Hazards Mitigation Plan Update

Committee Meeting SIGN-IN

October 24, 2022 - 10:00 AM

	Name	Department
1	Joey Tallier	Health Clinic IT
2	Noel Vandiver	TRANS Program / Planning Committee
3	Michael Lebrun	TUPO
4	Carmen McGeshick	Tribal Secretary/EM
5	Ken McNitch	Utilities Wastewater
6	Jesse Davis	Tribal IT
7	WAYNE R. LABINE	EDUCATION GLIFWC
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

SOKAOGON CHIPPEWA COMMUNITY
EMERGENCY MANAGEMENT DEPARTMENT
3051 SAND LAKE ROAD
CRANDON WI 54520
715-478-7633



MEMORANDUM

TO: Local/State/Federal/Tribal Agencies and Organizations
FROM: Noel Vandiver, SCC Emergency Management Director *NV*
DATE: March 20, 2023
RE: Sokaogon Chippewa Community All-Hazards Mitigation Plan Meeting Invitation

The Sokaogon Chippewa Community has received a grant through the Federal Emergency Management Agency (FEMA) to complete an All-Hazards Mitigation Plan to protect the health and safety of Mole Lake 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 the Community with this plan.

As a requirement of the planning process, we are extending this meeting invitation to local and regional agencies that may be affected by or have a role in hazard activities, and agencies that have the authority to regulate development, as well as business, academia and other private and nonprofit interests in and around the Mole Lake area. This meeting is scheduled for the following date and place:

When: Wednesday, April 19, 2023 at 2:00 p.m.
Where: Tribal Administration Building – Large Conference Room
3051 Sand Lake Road
Crandon (Mole Lake), WI 54520

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

Please call or email me if you have any questions regarding this meeting. My number is 715-478-7633, and my email is noel.vandiver@scc-nsn.gov. It would be greatly appreciated if at least one staff person from your department or agency with responsibilities relating to or potentially impacted by natural hazards / disaster can attend.

Miigwech (Thank you).

MIKE SPENCER - CASINO SECURITY

MLSECURITY@MOLELAKE.COM

Melinda Chaney melinda21cars@gmail.com Crandon Rescue

Mary Torgerson torgy-1972@yahoo.com Nashville, TN
Town Chair

Jeff Marvin jmarvin@forestcountysheriff.org

Jeremy Wild secbp@scc-nsn.gov C-store

Ken McVinch Ken.McVinch@scc.nsn.gov Public works
Mole Lake

August VanZile SCI august.vanzile@scc-nsn.gov

MIKE NIXON CRANDON FIRES (Nixon and trucking of WA)

Bogdan Okrasinski Crandon Fire bogdanokrasinski@gmail.com

Darrell B Wilson Sr Crandon Fire Dept crandonfirechief@forest.wi.us

Cathy McVinch Councilman II

Amber Rehberg amber.rehberg@wisc.edu UW-Extension

Stephanie Staterny Forest County Emergency Management forestem@forest.wi.us

Janet Dailey Forest Co Health Dept PH-RN

Amy Galtan Forest County Health amygaltan.director@forest.wi.us

Michael Leboze SCC TRPD Michael.leboze@scc-nsn.gov

Online:
Sherri Mohr, CEO- USS
Bobbie Irocky, Potawatomi EM Director
Bobbie Halada, Assistant Dir, SCC Health

Noel
Darryl



**MOLE LAKE SOKAOGON CHIPPEWA
HAZARD MITIGATION PLAN UPDATE
PUBLIC INFORMATIONAL MEETING**



Notice is hereby given by the Mole Lake Sokaogon Chippewa that there will be a public informational meeting at the Tribal Administration Building – Large Conference Room, 3051 Sand Lake Road, Mole Lake on Wednesday, April 19, 2023 beginning at 5:30 pm to discuss the Tribal All Hazards Mitigation Plan update process.

The meeting will be an open house format and provide information about the natural hazards that can affect the Mole Lake Community and the strategies being developed to mitigate against future losses and reduce public expenditure for response and recovery. A copy of the draft material can be reviewed on the web at: <https://www.ncwrpc.org/molelakemitigation>

All interested parties are encouraged to attend. Contact Sokaogon Emergency Management Director, Noel Vandiver at 715-478-7633 for more information.

03/20/23

Sokaogon Chippewa Community x (2) Mole Lake Band of Lake Super x +

https://www.facebook.com/Sokaogon/

Home | National Ce... Storm Events Datab... Planning Informatio... Greater Mt. Pleasan... Surface Water Gran... Wisconsin - Log In Free APA On-Dema... Wisconsin Departm...

Search Facebook

Mole Lake Band of Lake Superior Chippewa

Page · Government organization

3051 Sand Lake Rd, Crandon, WI, United States, Wisconsin

(715) 478-7500

sokaogonchippewa.com

Open now

Photos See all photos

Mole Lake Band of Lake Superior Chippewa April 12 at 12:00 PM

There will be a public informational meeting at the Tribal Administration Building on Wednesday, April 19th beginning at 5:30 pm to discuss the Tribal All Hazards Mitigation Plan update process. All interested parties are encouraged to attend.

MOLE LAKE SOKAOGON CHIPPEWA HAZARD MITIGATION PLAN UPDATE PUBLIC INFORMATIONAL MEETING

Notice is hereby given by the Mole Lake Sokaogon Chippewa that there will be a public informational meeting at the Tribal Administration Building – Large Conference Room, 3051 Sand Lake Road, Mole Lake on Wednesday, April 19, 2023 beginning at 5:30 pm to discuss the Tribal All Hazards Mitigation Plan update process.

The meeting will be an open house format and provide information about the natural hazards that can affect the Mole Lake Community and the strategies being developed to mitigate against future losses and reduce public expenditure for response and recovery. A copy of the draft material can be reviewed on the web at: <https://www.ncwrpc.org/molelakemitigation>

All interested parties are encouraged to attend. Contact Sokaogon Emergency Management Director, Noel Vandiver at 715-478-7633 for more information.

02/16/23

https://www.facebook.com/photo/?fbid=535937032052989&set=a.1606400095826958..._ft__[0]=AZXzs3PpoV4V2t2v_125FbjPMY5I0toCS8AG22yVHazOSrooxHGUx5hc_U92X_E0TNDP2p3qujqXwin9z5bCmjpbNTLFDz8GMOH04MkyU7MhSWiX66ohP...

Type here to search

12:09 PM 4/19/2023

Mole Lake All Hazards Mitigation Plan Update

Public Informational Meeting SIGN-IN

April 19, 2023 - 5:30 PM

	Name	Area of Residence	Email
1	<i>Paul Landean</i>	<i>Wausau</i>	<i>NCLandean</i>
2	<i>Noel Vandiver</i>	<i>Mole Lake, WI</i>	<i>noel.vandiver@sic-nsn.gov</i>
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

Sokaogon Chippewa Community - Mole Lake

Tribal All Hazards Mitigation Plan Update

Planning Committee Meeting

Tuesday, May 30 – 2 PM

Large Conference Room – Tribal Administration Building

Agenda

1. Call to Order
2. Welcome and Introductions
3. Recap Previous Mitigation Meetings
4. Review Draft Mole Lake Hazard Mitigation Plan Document
5. Prioritize Mitigation Recommendations
6. Approve Draft for WEM/FEMA Review
7. Next Steps
8. Adjourn

Mole Lake All Hazards Mitigation Plan Update

Planning Committee Meeting SIGN-IN

May 30, 2023 - 2:00 PM

	Name	Department/Organization	Email
1	Noel Vandiver	SCC-Tribal EM	noel.vandiver@scc-nsn.gov
2	Karen White	SCC-EDC	karen.white@scc-nsn.gov
3	Peter Mcgeshick III	SCC-EDC	peter.mcgeshickiii@scc-nsn.gov
4	Walter Daniels	Housing Director	walter.daniels@scc-nsn.gov
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

Appendix B – Sample Functional Needs Intake Form

Juneau County Functional Needs Evacuation Registry Application

The purpose of this "Functional Needs Evacuation Registry" is to provide emergency responders in your municipality with important information for individuals who may require assistance with **Evacuation, Emergency Notification, or Emergency Response** during an emergency, such as tornado, flood, blizzard, and power outage or disease outbreak.

Application Date _____ New Application Update Application

PERSONAL INFORMATION

Last Name	First Name, MI	Date of Birth	Sex
Street Address	City or Village		Zip Code
Township	Name of Subdivision, Mobile Home Park, Apartment Building, etc.		
Primary Phone	Alternate Phone	Primary Language	

EMERGENCY CONTACT INFORMATION

Last Name	First Name	Phone
Last Name	First Name	Phone

EVACUATION INFORMATION

Will you require <i>specialized</i> vehicle transportation to a shelter in an emergency	___yes	___no
If so, identify which vehicle types you can ride in.		
<input type="checkbox"/> bus or van with wheelchair lift <input type="checkbox"/> ambulance <input type="checkbox"/> bariatric transport		

FUNCTIONAL OR PHYSICAL NEEDS IMPACTING EVACUATION

	Wheelchair bound		Portable Oxygen or Oxygen Concentrator		Developmentally Disabled
	Bedridden		Ventilator		Socially Impaired
	Walker, canes, crutches		Suction		Psychologically Impaired
	Hearing Impaired		CPAP		Other:
	Visually Impaired		Necessary medications		Other:

ADDITIONAL INFORMATION

PREPARATION

The CODE RED community notification system will send me alerts concerning time-sensitive and/or emergency information that will impact my area, so I may start my personal emergency plan. () I choose to opt out.

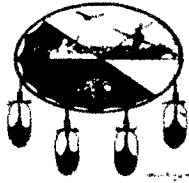
AUTHORIZATION

I (or legal guardian) agree that my information will be added to the Functional Needs Registry. I give my municipality and Juneau County authorization to share this information with community emergency responders in the event of an emergency to facilitate an effective evacuation or emergency response. I grant emergency responders permission to enter my home during or following an emergency event or disaster situation if necessary to assist with my safety and welfare.

Applicant Signature	Date
Authorized Guardian Signature	Date

Mail completed form to: Juneau County Health Department, 200 Hickory St, Mauston, WI 53948.
For questions regarding this form or program, contact Mary Crowley, JCHD Preparedness Coordinator, at 608-847-9588.

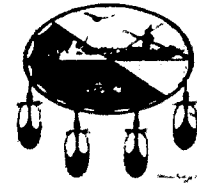
Appendix C – Resolution of Plan Adoption



*Sokaogon Chippewa
Community*

3051 Sand Lake Road, Crandon, WI 54520
Phone: (715) 478-7500 * Fax: (715) 478-5275

www.sokaogonchippewa.com



RESOLUTION # 02-19B-2024

**ADOPTING THE SOKAOGON CHIPPEWA COMMUNITY
ALL HAZARDS MITIGATION PLAN UPDATE**

WHEREAS, the Sokaogon Chippewa Community is a federally recognized Indian Tribe, organized under a Constitution adopted August 25, 1938, and approved on November 9, 1938, pursuant to Section 16 of the Indian Reorganization Act; and

WHEREAS, the Sokaogon Chippewa Community, Mole Lake Band of the Lake Superior Chippewa Indians adopted a Constitution on November 9, 1938, as amended which confers certain sovereign powers upon the Tribal Council by members of the Sokaogon Chippewa Community; and

WHEREAS, the Sokaogon Chippewa Community 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 tribal funds; and

WHEREAS, an adopted All Hazards Mitigation Plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, the Sokaogon Chippewa Community adopted its original All Hazards Mitigation Plan on April 18, 2016; and

WHEREAS, Federal Emergency Management Agency regulations require All Hazards Mitigation Plans to be updated every five years; and

WHEREAS, the Sokaogon Chippewa Community participated in a plan update process designed to satisfy all Federal requirements for Tribal All Hazards Mitigation Plan Updates including involvement of the public, neighboring communities, and other local and regional agencies.

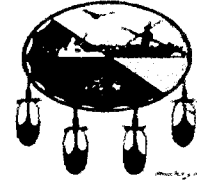
NOW, THEREFORE, BE IT RESOLVED, that the Sokaogon Chippewa Community Tribal Council, hereby adopts the Sokaogon Chippewa Community All Hazards Mitigation Plan Update as an official plan; and



*Sokaogon Chippewa
Community*

3051 Sand Lake Road, Crandon, WI 54520
Phone: (715) 478-7500 * Fax: (715) 478-5275

www.sokaogonchippewa.com



BE IT FURTHER RESOLVED, that the Sokaogon Chippewa Emergency Management Director will submit, on behalf of the Tribe, a signed copy of this resolution adopting the All Hazards Mitigation Plan Update for filing with Wisconsin Emergency Management and Federal Emergency Management Agency officials.

Certification

I, as Tribal Secretary, here by certify that Resolution 02-19B-2024 was duly adopted by the Sokaogon Chippewa Tribal Council, composed of 6 members of whom 4 were present, which constitutes a quorum, held on the 20th day of November, 2023 by vote of 4 member(s) for; and 0 member(s) against; and 0 member(s) abstaining; and 0 member(s) absent.


Rachel Decorah-Toyebo, Secretary

Appendix D – FEMA Mitigation Grant Reference

Summary of FEMA Hazard Mitigation Assistance (HMA) Programs

FEMA [Hazard Mitigation Assistance \(HMA\)](#) programs provide funding for eligible activities that reduce or eliminate long-term risk to people and property from future disasters. These activities are referred to as hazard mitigation. States, local, tribal and territorial (SLTT) governments may apply for this funding to support them build climate resilience.

FEMA is committed to ensuring equitable access to its [HMA](#) programs, which includes reducing barriers to funding and providing focused assistance to underserved communities.

Program Summaries

Building Resilient Infrastructure and Communities

FEMA's [Building Resilient Infrastructure and Communities \(BRIC\)](#) competitive annual grant program supports SLTTs as they implement hazard mitigation projects to reduce the risks from disasters and natural hazards. The program is authorized by the Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act ([Stafford Act](#)),

The BRIC program aims to categorically shift the federal focus away from reactive disaster spending and toward proactive investment in community resilience. FEMA funds BRIC with a 6% set-aside from federal post-disaster grant funds, such as Public Assistance and Individual Assistance grants. As a competitive grant program, applicants can apply on a yearly basis.

FEMA's priorities for the FY 2022 BRIC program are to:

1. Incentivize natural hazard risk reduction activities that mitigate risk to public infrastructure and disadvantaged communities as referenced in Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad;



FEMA

Page 1 of 13

2. Incorporate nature-based solutions, including those designed to reduce carbon emissions;
3. Enhance climate resilience and adaptation;
4. Increase funding for the adoption and enforcement of the latest published editions of building codes; and
5. Encourage mitigation projects that meet multiple program priorities.

Through BRIC, FEMA continues to invest in a variety of mitigation activities with an added focus on infrastructure projects benefitting disadvantaged communities, nature based solutions, climate resilience and adaptation, and adopting hazard resistant building codes.

Management costs allow FEMA to provide financial assistance to reimburse the recipient and subrecipient for eligible and reasonable indirect costs, direct administrative costs, and other administrative expenses associated with a specific mitigation project or Capacity and Capability-Building (C&CB) activity. Management Costs can be submitted under the State/Territory Allocation, Tribal Set-Aside, and national competition.

The BRIC Program also offers non-financial Direct Technical Assistance (DTA) and encourages communities to participate. BRIC DTA gives full support to communities that may not have the resources to begin climate resilience planning and project solution design on their own. FEMA will give wide-ranging support to BRIC DTA communities including climate risk assessments, community engagement, partnership building, mitigation and climate adaptation planning, and BRIC program requests throughout the grant lifecycle.

Flood Mitigation Assistance Program

[Flood Mitigation Assistance \(FMA\)](#) grants provide funding to states, local communities, tribes and territories to reduce or eliminate the risk of repetitive flood damage to buildings insured under the [National Flood Insurance Program](#) (NFIP). The program is authorized by Section 1366 of the National Flood Insurance Act.

FEMA's priorities for the FY 2022 FMA program are to: 1) Align with BRIC's C&CB and increasing the amount of eligible FMA program C&CB activities; 2) Increase funding caps and enhance federal cost share funding that impacts socially vulnerable communities with Severe Repetitive Loss (SRL) and Repetitive Loss



(RL) properties; 3) Increase final priority scoring points for socially vulnerable communities; and 4) Expand access to Benefit-Cost Analysis (BCA) waivers.

FEMA distributes funds annually to develop community or individual flood mitigation projects. These grants address community flood risk for the purpose of reducing National Flood Insurance Program flood claim payments and to mitigate the risk of flooding to individual flood insured structures. In addition, funding is also used for technical assistance and management costs.

As a requirement of the FMA program, all subapplicants must be participating and in good standing with the NFIP.

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides funding to SLTT governments so they can rebuild in a way that reduces, or mitigates, future natural disaster losses in their communities. The program is authorized by Section 404 of the Stafford Act.

HMGP funding is authorized with a Presidential Major Disaster Declaration. A governor or tribal chief executive may request HMGP funding throughout the state, tribe or territory when submitting a disaster declaration. The amount of funding made available to the applicant is based on the estimated total Federal assistance. The formula generally gives 15% of the total federal assistance amount provided for recovery from the presidentially declared disaster and is determined by the FEMA-approved Hazard Mitigation Plan.

Through HMGP, FEMA allows states to access up to 10% and local governments up to 5% of their HMGP award for management and administration costs, there is a lot of opportunity to access funding for mitigation planning and management. Management costs are any indirect costs and administrative expenses that are reasonably incurred by a Grantee or subgrantee in administering a grant or subgrant award.

Hazard Mitigation Grant Program Post Fire

The [HMGP Post Fire](#) program provides funding to help communities implement hazard mitigation measures focused on reducing the risk of harm from wildfire. HMGP Post Fire funding is authorized under Sections 404 and 420 of the Stafford



Act, and provides hazard mitigation grant funding to SLTT governments in areas receiving a [Fire Management Assistance Grant \(FMAG\)](#) declaration.

A Presidential Disaster Declaration is not required to activate funding. The funding amounts are determined by FEMA and are based on a national aggregate calculation of the historical expenditures for FMAG declarations from the past 10 years. This amount is recalculated at the beginning of each fiscal year (October 1-September 30). HMGP Post Fire awards are provided for each FMAG declaration but are aggregated under one award for each Recipient for the fiscal year to lessen the administrative burden and provide all available funding for that fiscal year under one award.

Pre-Disaster Mitigation Program

The Pre-Disaster Mitigation (PDM) program makes federal funds available to state, local, tribal and territorial governments to plan for and implement sustainable cost-effective measures designed to reduce the risk to individuals and property from future natural hazards, while also reducing reliance on federal funding from future disasters. This funding is offered in addition to funds provided through other FEMA grant programs for projects that will support growing mitigation needs nationwide.

On Dec. 29, 2022, President Joseph R. Biden signed into law the Consolidated Appropriations Act of 2023, making \$233 million available to 100 selected community and Tribal Nation resilience projects that support growing mitigation needs nationwide. For additional information, visit [Grants.gov](#) to review the Fiscal Year [2023 funding notice](#).

Safeguarding Tomorrow Revolving Loan Fund Program

The [Safeguarding Tomorrow through Ongoing Risk Mitigation \(STORM\) Act](#) became law on Jan. 1, 2021 and authorizes FEMA to provide capitalization grants to states, eligible federally recognized tribes, territories and the District of Columbia to establish revolving loan funds that provide hazard mitigation assistance for local governments to reduce risks from natural hazards and disasters. The STORM Act amends the Stafford Act.



FEMA

FEMA's priorities for the Safeguarding Tomorrow Revolving Loan Fund (RLF) program are to:

1. Empower eligible entities;
2. Create innovative funding solutions;
3. Deliver equitable investments and increased access;
4. Reduce grant application complexity;
5. Maximize administrative flexibility.

FEMA's [Safeguarding Tomorrow RLF](#) program is the first HMA program to provide capitalization grants to eligible state, territorial, and tribal governments for revolving loan funds. Awarded grant funding will be used by an applicant to administer its revolving loan fund and provide direct loans to local governments based on its unique mitigation needs and priorities.

Hazard Mitigation Assistance

A Common Goal

The shared goal of all FEMA HMA programs is to reduce the loss of life and property due to natural hazards.

General Requirements

All mitigation projects must be cost-effective, technically feasible and effective, and compliant with the [National Environmental Policy Act \(NEPA\)](#) and any other applicable requirements outlined in federal, state, territorial, federally recognized tribal and local laws.

Additionally, all applicants and subapplicants must have a FEMA-approved Hazard Mitigation Plan.

Program Comparisons for Cost Share

Through its grant programs, FEMA typically funds the [federal cost share](#) for 75% of eligible activity costs. In certain cases, FEMA may provide up to 90 or 100%. Refer to Table 1 for additional information. Applicants and subapplicants must pay for the remaining 25%, non-federal costs share, of eligible activity costs with non-



FEMA sources.

In general, the non-federal cost share requirement may not be met with assistance from other federal agencies. However, exceptions include funding from the U.S. Department of Housing and Urban Development's [Community Development Block Grants](#) funds. Federal assistance that is used to meet a non-federal cost share requirement must meet the eligibility and compliance requirements of both federal source programs.

The table below outlines the federal and non-federal cost-share requirements.

Table 1: Cost Share Requirements

Program	Mitigation Award Activity (percent of federal/non-federal cost share)
Hazard Mitigation Grant Program	75/25
Hazard Mitigation Grant Program Post Fire	75/25
Building Resilient Infrastructure and Communities	75/25
Building Resilient Infrastructure and Communities Economically Disadvantaged Rural Communities	up to 90/10



FEMA

Flood Mitigation Assistance (Localized Flood Risk Reduction, Project Scoping, individual mitigation of insured properties, and planning grants)	75/25
Flood Mitigation Assistance Socially Vulnerable Communities with a Center's for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) of 0.5 or greater	up to 90/10
Flood Mitigation Assistance – Repetitive Loss Property	90/10
Flood Mitigation Assistance – Severe Repetitive Loss Property	100/0
Safeguarding Tomorrow RLF	90/10

Eligible Applicants and Subapplicants

States, territories, and federally recognized tribal governments are eligible grant applicants. Each entity designates one agency to serve as the applicant for each HMA program. All interested subapplicants must apply to the designated applicant, who will then submit application(s) (including selected subapplications) to FEMA for a specified grant program.

Homeowners, business operators, and certain non-profit organizations cannot apply directly to FEMA for a grant, but they can be included in a subapplication submitted by an eligible subapplicant. The tables below identify, in general, eligible applicants and subapplicants.



Table 2: Eligibility for Application Submission for Applications/Subapplicants

Applicants	HMGP	HMGP Post Fire	BRIC	FMA	Safeguarding Tomorrow RLF*
State agencies	Yes	Yes	Yes	Yes	Yes
Federally recognized Tribes	Yes	Yes	Yes	Yes	Yes
Territories	Yes	Yes	Yes	Yes	Yes

* The Safeguarding Tomorrow RLF program does not have subapplicants.

Subapplicants	HMGP	HMGP Post Fire	BRIC	FMA
State agencies	Yes	Yes	Yes	Yes
Federally recognized Tribes	Yes	Yes	Yes	Yes
Local governments/ communities*	Yes	Yes	Yes	Yes



Private nonprofit organizations	Yes	Yes	No	No
---------------------------------	-----	-----	----	----

* Local governments/communities may include non-federally recognized tribes consistent with the definition of local government in 44 CFR 201.2, including any federally recognized Indian tribe or authorized tribal organization, or Alaska Native village or organization that is not federally recognized per Title 25 of the United States Code Section 479a et seq.

HMGP and BRIC subapplications containing projects sited within a Special Flood Hazard Area (SFHA) are eligible only if the jurisdiction in which the project is located participates in the National Flood Insurance Program. If subapplications contain projects located outside of the SFHA, participation in the program is not required.

FEMA Review and Selection of Applications

FEMA reviews all subapplications for eligibility and completeness, cost-effectiveness, technical feasibility and effectiveness, compliance with Environmental and Historic Preservation (EHP), and any other program requirements. FEMA cannot fund subapplications that do not meet the program’s requirements. FEMA will notify applicants of the status of their subapplications and will work with them on subapplications identified for further review.

Table 3: Eligible Activities for Mitigation Projects and Capability and Capacity Building Grants

Mitigation Projects

Eligible Activities	HMGP	HMGP Post Fire	BRIC	FMA	Safeguarding Tomorrow RLF*
Property Acquisition



Structure Elevation	.	.	.	.	.
Mitigation Reconstruction	.	.	.	.	.
Flood Risk Reduction Measures	.	.	.	.	.
Stabilization	.	.	.	.	.
Dry Floodproofing Non-Residential Buildings	.	.	.	.	.
Tsunami Vertical Elevation	.	.	.	.	.
Safe Rooms	.	.	.	.	.
Wildfire Management	.	.	.	.	.
Retrofitting	.	.	.	.	.
Generators	.	.	.	.	.
Earthquake Early Warning Systems	.	.	.	.	.
Innovative Mitigation Projects	.	.	.	.	.

Capability and Capacity Building

Eligible Activities	HMGP	HMGP Post Fire	BRIC	FMA	Safeguarding Tomorrow RLF*
New Plan Creation and Updates



Planning-Related Activities	.	.	.	.	.
Project Scoping/Advance Assistance	.	.	.	.	.
Financial Technical Assistance				.	

*The Safeguarding Tomorrow RLF program provides capitalization grants to eligible entities to issue loans to local governments to fund a variety of mitigation activities listed in the table above.

Hazard Mitigation Assistance Programs Application Process

Hazard Mitigation Grant Program and Hazard Mitigation Grant Program Post Fire

Applications are processed through the HMGP system (formerly known as National Emergency Management Information System, or NEMIS). Applicants must apply using the Application Development Module of the HMGP system. When doing so, they can create project applications and submit them to the appropriate [FEMA Region Office](#) within 12 months of a Presidential Disaster Declaration. For HMGP Post Fire, project applications may be submitted until March 31 of the next fiscal year in which the FMAG event occurred.

Flood Mitigation Assistance and Building Resilient Infrastructure and Communities

Applicants to the FMA and BRIC programs are processed through FEMA's Grants Outcomes (FEMA GO) grants management system.

Mitigation eGrants

Existing applications for the [Pre-Disaster Mitigation](#) grant program are managed by the legacy Mitigation eGrants system for FY 2019 and previous year grants.



Contact Information

An applicant can contact a [State Hazard Mitigation Officer](#) or [FEMA Region Office](#) for general questions about hazard mitigation grant programs.

Program Resources

Online Resources

- [BRIC](#)
- [FMA](#)
- [HMGP](#)
- [HMGP Post-Fire](#)
- [Hazard Mitigation Plan Resources](#)
- [PDM](#)
- [Safeguarding Tomorrow RLF](#)

Helplines

Helpline Name	Email	Toll-free number
FEMA Go Helpline	femago@fema.dhs.gov	1-877-585-3242
Benefit Cost Analysis (BCA) Helpline	BCHelpline@fema.dhs.gov	1-855-540-6744
Feasibility and Effectiveness Helpline	FEMA-BuildingScienceHelp@fema.dhs.gov	



FEMA

Office of Environmental Planning and Historic Preservation	EHPHelpline@fema.dhs.gov	1-866-222-3580
Hazard Mitigation Assistance Helpline		1-866-222-3580

Get the Latest Updates

Receive all Hazard Mitigation Assistance updates and grant information by email. [Subscribe](#) today.



FEMA