

Grand Traverse Band of Ottawa and Chippewa Indians

DRAFT Natural Hazards Mitigation Plan Annex



Let Our Resources Work For You.

I. ACKNOWLEDGEMENTS

The Plan Annex is the culmination of the interdisciplinary and interagency planning effort that required the assistance and expertise of numerous agencies, organizations, and individuals. Without the technical assistance and contributions of time and ideas of these agencies, organizations, and individuals, this plan annex could not have been completed.

Each entity within Grand Traverse Band of Ottawa and Chippewa Indians (GTB) reservation and on land owned by the GTB is a continuing participant in the update of the Plan Annex. The following is a list of key contributors who were instrumental in the development of the Grand Traverse Band of Ottawa and Chippewa Indians Natural Hazards Mitigation Plan Annex:

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II. LETTER OF TRANSMITTAL

(Insert Transmittal Letter Here Upon Final Adoption)

DRAFT

III. PREFACE

Hazard mitigation is any action taken before, during, or after a disaster to permanently eliminate or reduce the long-term risk to human life and property from natural and technological hazards. This procedure is an essential element of emergency management, along with preparedness, response, and recovery. Emergency management includes four phases: a community prepares for a disaster; responds when it occurs; and then there is a transition into the recovery process, during which mitigation measures are evaluated and adopted.

The evaluation improves the preparedness posture of the Tribal Government for the next incident, and so on. When successful, mitigation will lessen the impacts of natural hazards to such a degree that succeeding incidents will remain incidents and not become disasters.

The mission of the Grand Traverse Band of Ottawa and Chippewa Indians Natural Hazards Mitigation Plan Annex is to permanently eliminate or reduce long-term risks to people and property from natural hazards so that the Tribal Government assets such as transportation, infrastructure, commerce, and tourism can be sustained and strengthened. This can be accomplished through collaborative efforts/activities amongst agencies within the Grand Traverse Band of Ottawa and Chippewa Indians.

Mitigation allows repairs and reconstruction to be completed after an incident occurs in such a way that does not just restore the damaged property as quickly as possible to pre-disaster conditions. This process is needed to ensure that such cycles are broken, that post-disaster repairs and reconstruction take place after damages are analyzed, and that sounder, less vulnerable conditions are produced. Through a combination of regulatory, administrative, and engineering approaches, losses can be limited by reducing susceptibility to damage.

Recognizing the importance of reducing community vulnerability to natural hazards, the Grand Traverse Band seek to actively address the issues through the development and implementation of this plan. The many benefits to be realized from this effort are:

Community Benefits of a Natural Hazard Mitigation Plan
Protection of the public health and safety
Preservation of essential services
Prevention of property damage
Preservation of the local economic base

This process will help ensure that the reservation and owned lands of the Grand Traverse Band remains vibrant, safe, enjoyable places in which to live, raise a families, continue to conduct business, and maintain a tourist base.

IV. EXECUTIVE SUMMARY

In 2000, the Disaster Mitigation Act shifted the Federal Emergency Management Agency's (FEMA) scope of work to promoting and supporting prevention, or what is called hazard mitigation planning. FEMA now requires government entities to have natural hazards mitigation plans in place as a condition for receiving grant money, such as hazard mitigation grant program funds, in the future.

To meet this requirement, the Michigan State Police provided funding to encourage regional cooperation in the development of individual county Natural Hazards Mitigation Plans. The Northwest Michigan Hazard Mitigation Planning Project update was coordinated by the Northwest Michigan Council of Governments (NWMCOG) with Leelanau County being the Fiduciary. The update included Antrim, Kalkaska, Missaukee, Wexford, Grand Traverse, Leelanau, Benzie, and Manistee counties and was expanded to include the Grand Traverse Band of Ottawa and Chippewa Indians Plan Annex.

NWMCOG worked with the Task Forces to update the county plans for these counties as well as the GTB Tribal Government for the GTB Tribal Plan Annex, which includes a general community profile, a comprehensive inventory of existing hazards, a hazard analysis, goals and objectives, and feasible mitigation strategies to address the prioritized hazards.

The Grand Traverse Band Tribal Plan Annex focuses on natural hazards such as drought, wildfires, flooding, shoreline erosion, thunderstorms and high winds, tornadoes, and extreme winter weather, and was created to protect the health, safety, and economic interests of the residents and businesses by reducing the impacts of natural hazards through planning, awareness, and implementation. Through this Plan, a broad perspective was taken in examining multiple natural hazards mitigation activities and opportunities in GTB Tribal areas. Each natural hazard was analyzed from a historical perspective, evaluated for potential risk, and considered for possible mitigative action.

The Plan Annex serves as the foundation for natural hazard mitigation activities and actions within the GTB Tribal area, and will be a resource for building coordination and cooperation within the community for local control of future mitigation and community preparedness around the following:

V. PURPOSE OF THE PLAN

In 2000, the Disaster Mitigation Act shifted the Federal Emergency Management Agency's (FEMA) scope of work to promoting and supporting prevention, or what is referred to as hazard mitigation planning. FEMA requires government entities to have natural hazards mitigation plans in place and updated on a 5-year cycle as a condition for receiving grant money related to natural hazard remediation.

The purpose of the Grand Traverse Band of Ottawa and Chippewa Indians Tribal Plan Annex is to find solutions to existing problems, anticipate future problems, prevent wasteful public and private expenditures, protect property values, and allocate land resources. The implementation of the GTB Tribal Plan Annex is intended to prevent injury, loss of life, property damage, breakdown in vital services like transportation and infrastructure, economic slumps, diminished tourist activity, liability issues, and damage to a community's reputation. For GTB Tribal lands in the northwest region of the lower peninsula of Michigan, the planning process utilized the following steps in the development of the Plan. Emphasis was placed on natural hazards that have had significant impact on the community in the past.

Steps in the Planning Process
Identification of natural hazards and risks
Preparation of draft plan annex
Identification of natural hazards mitigation goals and objectives for emergency management programs
Selection of evaluation criteria
Selection of mitigation strategies using locally chosen criteria
Public Comment
Completion of the final plan

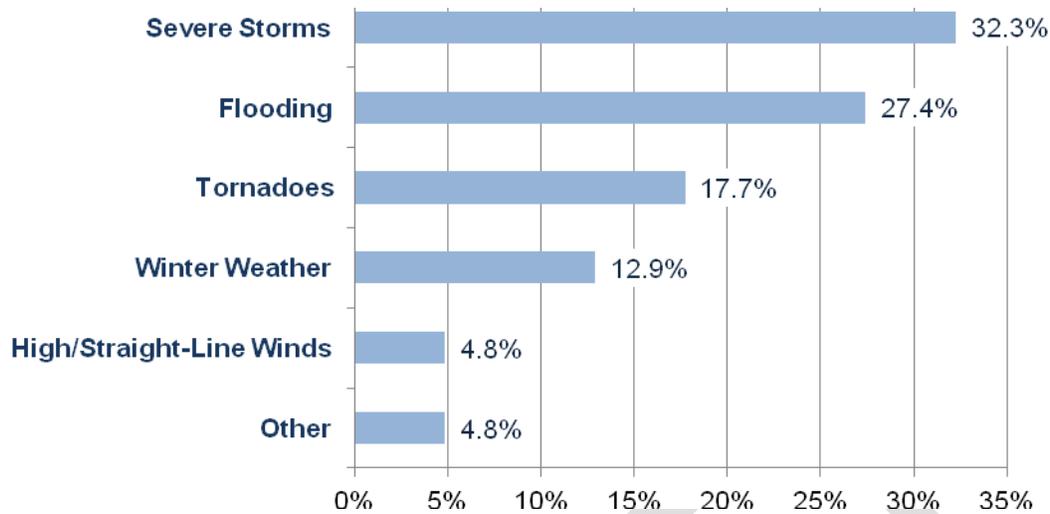
What is a Hazard?

A hazard is an event or physical condition that has potential to cause fatalities, injuries, property damage, infrastructure damage, and agricultural loss, damage to the environment, interruption of business, or other types of harm or loss. This plan annex focuses on principle natural hazards that affect GTB Tribal lands. This Plan annex is intended to be a resource for building coordination and cooperation within a community for local control of future mitigation and community preparedness.

Principle Natural Hazards in Northern Lower Michigan
Severe Storms (Thunderstorms, Winter storms)
High Winds
Tornadoes
Extreme Temperatures
Flooding
Shoreline Hazards
Dam Failures
Drought
Wildfires
Invasive Species
Subsidence

Source: FEMA

Figure 1: Disaster Declarations for the State of Michigan



What is Mitigation?

Mitigation is the sustained action taken to lessen the impact from natural hazards and to work to reduce the long-term risk to human life and property, and their effects. This long-term planning distinguishes mitigation from actions geared primarily to emergency preparedness and short-term recovery. This Plan can be used to lessen the impact, to support and be compatible with community goals, to lay out considerations in choosing and evaluating methods, and to look at the feasibility of mitigation strategies.

VI. COMMUNITY PROFILE

The Grand Traverse Band of Ottawa and Chippewa Indians (GTB) were one of many tribes throughout the United States who entered into agreements with the United States through the Treaties of 1836 and 1855. As a result of these Treaties the Ottawa and Chippewa nation of Indians ceded large tracts of land to the United States while in turn the nation of Indians could reserve tracts of land in common for their own use.

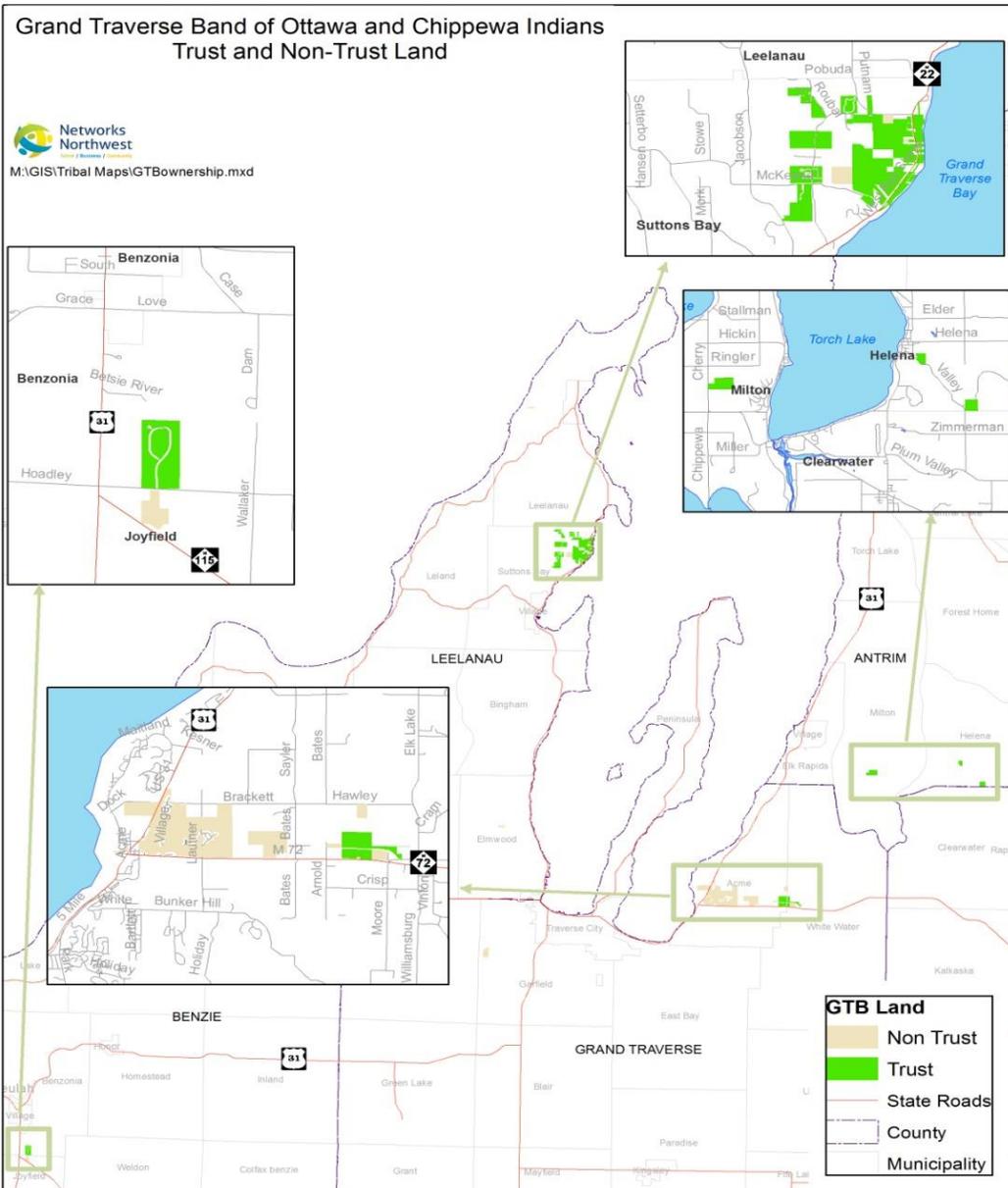
For the Michigan based tribe, Grand Traverse Band of Ottawa and Chippewa Indians formerly known as the Anishinaabek, this meant that they reserved a twenty thousand acre tract of land located on the north shore of Grand Travers Bay, through the 1836 Treaty, in addition to approximately 84,000 acres of land divided between two separate tracts of land located in Leelanau County and Antrim County, through the 1855 Treaty.

Unfortunately, even though the GTB had documented reservation lands it still was a struggle getting their tribe recognized by the United States Government. It wasn't until 1980, that the Anishinaabek people were finally recognized as the Grand Traverse Band of Ottawa and Chippewa Indians through the Indian Reorganization Act.

Grand Traverse Band of Ottawa and Chippewa Indians Trust and Non-Trust Land



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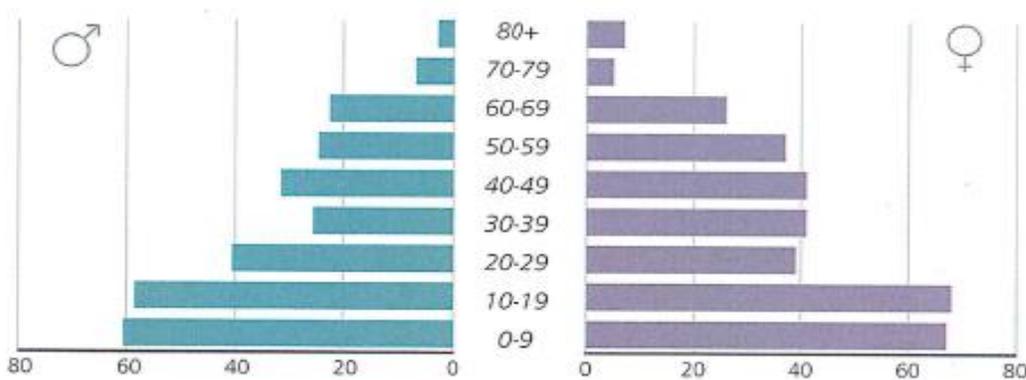
Demographics

According to the 2010 US Census, the population of the Grand Traverse Reservation and Off-Reservation Trust Land was 608 people, an 11.6% increase over the 2000 population of 545 people. The population distribution between males and females is 45.6% and 54.4% respectively.

2010 U.S. Census Statistics				
Geography		Population	Male (%)	Female (%)
Reservations	Grand Traverse Reservation and Off-Reservation Trust Land	608	45.6	54.4
	Little Traverse Bay Reservation and Off-Reservation Trust Land	51	52.9	47.1
	Little River Reservation and Off-Reservation Trust Land	57	52.6	47.4
	Sault Ste Marie Reservation and Off-Reservation Trust Land	1,747	47.9	52.1
	Isabella Reservation*	26,274	50.1	49.9
Village & City	Suttons Bay	618	44.7	55.3
	Traverse City	14,674	47.4	52.6
Counties	Leelanau County	21,708	49.3	50.7
	Grand Traverse County	86,986	49.4	50.6
State of Michigan		9,883,640	49.1	50.9
United States of America		308,745,538	49.2	50.8

Source: U.S. Census Bureau, 2010 SF1 General Population and Housing Characteristics Profiles
*Off-Reservation Trust Land data for Isabella Reservation is not yet available.

The population pyramid (below) has a broad base indicating a high proportion of children living on reservation land compared to elderly populations. The pyramid also depicts a rapid rate of population growth. Such pyramids indicate a high birth rate, high death rate and short life expectancy.



Based on ACS estimates, roughly 34% of the GTB Reservation population has an income of less than \$10,000

2006-2010 American Community Survey 5-Year Estimates				
Income	Estimate	Estimate Margin of Error	Percent (%)	Percent Margin of Error
Total households	279	+/-68	-	-
Less than \$10,000	94	+/-48	33.7	+/-14.3
\$10,000 to \$14,999	7	+/-8	2.5	+/-2.9
\$15,000 to \$24,999	62	+/-28	22.2	+/-8.6
\$25,000 to \$34,999	27	+/-21	9.7	+/-7.5
\$35,000 to \$49,999	31	+/-22	11.1	+/-7.3
\$50,000 to \$74,999	8	+/-8	2.9	+/-2.8
\$75,000 to \$99,999	39	+/-29	14.0	+/-10.2
\$100,000 to \$149,999	3	+/-6	1.1	+/-2.3
\$150,000 to \$199,999	4	+/-6	1.4	+/-2.0
\$200,000 or more	4	+/-6	1.4	+/-2.3

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates
2010 Census Income Data for American Indian Areas are not yet available.

Housing

In 2010, 48.6% and 42.1% of homes on GTB Reservation were renter and owner occupied. Only 9.3% of the housing stock was vacant. Compared to Leelanau and Grand Traverse Counties, along with the State of Michigan, the GTB Reservation has the highest percentage of renters and the lowest number of homeowners as well as the lowest amount of vacancies. Leelanau County has the highest number of vacant homes at 38% which is nearly three times that of the national average of 11.4%. Grand Traverse County has occupancy and vacancy percentages similar to the State of Michigan.



VII. Planning Process

Representatives from the Grand Traverse Band (GTB) have been invited to participate in all County Local Planning Team (LPT) meetings where tribal land is owned within the regional planning area for this process. These counties include Antrim, Benzie, Grand Traverse and Leelanau. Other forms of participation included more informal settings such as phone conversations and email communications.

The first set of county planning committee meetings were held in the autumn of 2013 with a defined goal of updating each County's Natural Hazard Mitigation Plan. The LPT for each county served as the oversight committee for the development of the County Natural Hazard Mitigation Plan. The LPT is a committee appointed by the County Board that includes representation from jurisdictions within the county, including response agencies, elected officials, and community groups. Those who participated in the LPT meetings is listed on page 4 of each county's plan.

The LPT reviewed portions of the plan, assisted in development of the risk assessment matrix and finalized the rating of those identified risks. Throughout the course of the past year, the LPT has met several times, typically at least once per month, to discuss updates to the plan, including demographics, event occurrences, vulnerability and risk assessment modifications, and updating the mitigation strategies.

The Natural Hazard Mitigation Plan Update was presented and discussed at several local township meetings, advertised for public comment, and presented to the County Board of Commissioners. As the planning process continued to evolve, individual communities and representatives were sought after for participation and information on matters that directly impacted them. LPT meeting invitations were widely distributed, and as always, these meetings are open to the public, with input from the public welcome. When these meetings were not convenient for those parties whose information was vital to the plan update, individual meetings or discussions were held to gather this information.

Other groups or committees that have offered input throughout the planning process including filling out and/or discussing the risk assessment matrix are EMS service providers, the Sheriff's Departments, Health Departments, Planning Departments Board of Commissioners, Michigan State Police, and individual fire and ambulance departments.

Tribal Annex

In the Code of Federal Regulations (44 CFR 201.7) it states that tribal communities may participate in multi-jurisdictional plans but it also states that "Indian tribal governments that participate in multi-jurisdictional plans, must address all the elements identified in this section to ensure eligibility as a grantee or sub grantee.

Tribal Agencies Involvement

Therefore, the Grand Traverse Band of Ottawa and Chippewa formed their own Local Planning Team (LPT) in order to develop this plan annex. The GTB LPT meets on a bi-monthly basis. The GTB Tribal Manager holds monthly Department Manager meetings and all Government Departments have opportunities to share department information, specifically 2/10/16 and 3/10/16 to comment on the plan. The GTB Tribal LPT was comprised of tribal leaders including representation from the following Tribal Agencies:

Organization	Department
GTB	Public Safety
GTB	Public Works
GTB	Planning
GTB	Fire
GTB	Information

	Technology/Cyber Security
GTB	Human Services
GTB	Housing
GTB	Health
GTB	Natural Resources/Environmental
GTB	Office of Management and Budget
GTB	Law Enforcement
GTB	Cultural Department

The identified divisions and agencies are responsible for both ensuring that disasters do not impact local residents, and responding when appropriate. Funding for implementing mitigation strategies will likely derive from local sources, the Bureau of Indian Affairs (BIA) and FEMA.

Throughout the planning process, several references were made during various discussions about the informal networks that exist among individuals, families and communities. When disaster strikes, jurisdictional boundaries begin to fade, and people pull together to respond with resilience. While the tribe does not have all the tools necessary for any job, they rely on and coordinate extensively with the associated Counties. A diagrammed Organizational Structure can be seen in Appendix B.

The Grand Traverse Band LPT met several of times to identify local hazards, identify local assets, assess vulnerability and perform a risk assessment. And finally the GTB Tribal LPT met to identify goals, priorities, and mitigation strategies. Members of the public were given the opportunity to attend each of the GTB Tribal LPT meetings.

The table below lists each of the GTB Tribal LPT meetings:

- January 4th, 2016 LPT/Public Meeting
- January 11th, 2016 LPT/Public Meeting
- January 18th, 2016 LPT/Public Meeting
- January 25th, 2016 LPT/Public Meeting
- January 28th, 2016 LPT/Public Meeting
- February 18th, 2016 LPT Meeting
- March 11th, 2016 LPT Meeting

Public Involvement

Furthermore, the DRAFT GTB Tribal Annex was made available to the public for review and comment for a 30 day period between March 17, 2016 – April 17, 2016. Additionally, the opportunity for the public to both review and comment was made known via newspaper and radio.

Integration into Existing planning Mechanisms

Existing plans were reviewed and incorporated into the Natural Hazard Mitigation Plan, where appropriate. The Natural Hazard Mitigation Plan will augment the current County, Township, Village and Tribal Comprehensive Plans already in place. Portions of the Mitigation Plan will be incorporated into other plans where applicable.

A listing of Grand Traverse Band plans and documents that provided information for the Counties Natural Hazard Mitigation Plans follows:

- Grand Traverse Band Emergency Action Guide – updated February 24, 2016 Tribal Council Resolution
- Grand Traverse Band Long-Range Transportation Plan – March 2014 approved
- Grand Traverse Band Master Plan (Land Use Plan) – June 2012 approved
- Integrated Resource Management Plan – 2010 approved
- Renewable Energy Plan – 2008 approved

VIII. Risk Assessment

Grand Traverse Band (GTB) has many of the same risks as the Counties. GTB representatives were present during the discussions of the natural hazard events that have the potential for impacting GTB lands in each county. Recent hazard events include:

- March 2012 Winter Storm Power outage and heavy snow and trees down due to Extreme Winter Weather affecting GTB Tribal Members in Peshawbestown from 3/2 to 3/7. Power returned late in the week for residence and businesses in Peshawbestown.
- August 2015 Thunderstorm and High Wind Power Outage affecting GTB Tribal Members and GTB Businesses in Peshawbestown 8/ 2 to 8/5, 2015.

Identification of Hazards

The GTB Tribal LPT met on February 18, 2016 and developed the following list of hazards that could potentially affect the Grand Traverse Band of Ottawa and Chippewa reservation or lands owned by the Tribe. The LPT selected the following hazards based on historical records, local knowledge and the estimated potential losses associated with each hazard.

HAZARDS AFFECTING GRAND TRAVERSE BAND OF OTTAWA AND CHIPPEWA			
-	Frequent	Infrequent	Rarely
Blizzard	X		
Hailstorm	X		
Ice Storm	X		
Severe Summer Storms	X		
High winds	X		
Drought		X	
Extreme Heat		X	
Tornado		X	
Flood		X	
Wildfire		X	
Infectious Disease		X	
Invasive Species		X	
Earthquake			X
Coastal Erosion			X

Vulnerability

The GTB LPT and Tribal Emergency Planner identified Peshawbestown as particularly vulnerable to flood events, due to its dense population and location along the eastern coast of Lake Michigan. Additionally, the reservation is vulnerable to coastal erosion, similar to problems facing communities located throughout the coastline of Leelanau County. Other hazards, such as those related to temperatures, tornadoes, and precipitation events, have an equal chance of impacting Peshawbestown and other reservation lands.

Capability

The Grand Traverse Band of Ottawa and Chippewa have multiple Departments that are responsible for carrying out specific functions. These individuals assisted in supplying information necessary to complete the drafting of this planning document. The following Grand Traverse Band Departments are responsible for the following actions:

- GTB Emergency Management Office – Coordination and utilization of resources in the GTB Tribe in an emergency or disaster situation. Maintain GTB Tribal Emergency Action Guide (EAG) and All Hazard Health Plans for Risk Communication, Pandemic Influenza Plan, and Emergency Management MOU's and NIMS compliance requirements. Provides annual emergency preparedness trainings and exercises for government staff, community awareness workshops and tornado shelter. Representation on Region 7 Homeland Security Planning Board, County and Tribal LEPC/LPT Committees, 911 Advisory Board, and Leelanau County EOC Tribal Liaison.
- GTB Fire and Rescue - Fire and Rescue Response, Fire/Rescue training programs; CPR, First Aid, AED Training, FF11, MFR, and EMT. Tribal Facility Inspections (Govt facilities, playground, storage tank, tornado shelters, etc.); Drills (fire and tornado, evacuation, etc.); Fire Prevention Programs (smoke detectors, fire starter program) and Wildland Fire Management program services.
- GTB Law Enforcement – Police response for all calls for service, criminal investigations, Search and Rescue, SORNA, Emergency Response Team; Emergency Preparedness and Homeland Security (exercises, training, planning), representation on local boards: 911 Advisory Board, Michigan Tribal Law Enforcement Association, Coordinated Community Response Multi-disciplinary Team, LEPC/LPT Board and community police programs.
- GTB Natural Resources– Maintain GTB Spill Plans for Marina and environmental hazards, environmental oversight to maintain surface water quality, wetland and watersheds, streambank stabilization, and resource use agreements to improve resource management. Protect and enhance natural resources and environment. Advocate for clean air and water (Green Initiative and renewable energy). Protection of Great Lakes from invasive species, preservation of wild life and promotion of traditional native ways of living: (fishing, gathering, hunting, trapping).
- GTB Facilities Maintenance - Provides services to GTB Government employees, community members and Tribal Properties. Services over 180,000 square feet of building space and 100,000 square feet of common area space, 60 acres of lawn, summer camp maintenance (Alden), two community parks (Peshawbestown and Antrim), Pow-Wow Grounds and Marina in Peshawbestown.
- GTB Public Works – Supplies wastewater collection and treatment for Peshawbestown and Turtle Creek/Williamsburg communities, Grand Traverse Resort water system and distribution system, Leelanau County Law Enforcement Center water system and waste water system, and Antrim well system testing and Camp Alden well system testing.

- GTB Human Services – Provides human service programs for community members (elders, youth, and vulnerable population). Prevention and intervention services to families, behavioral health services, emergency assistance (utility assistance, emergency food, funeral assistance and emergency medical assistance).
- GTB Cultural Department – Maintains a record of the history of the GTB Anishinaabek language, culture, traditions, and tribal artifacts at the Eyaawing Museum and repatriates Native American remains in sacred burial sites. Elders Program provides meal service and site activities for all Elders in the six county service area.
- GTB Housing Department – Maintains Elders Apartment Complex/Peshawbestown, single and family housing units in six county service areas. Provides Home Ownership programs, emergency home repair and inspections, housing assistance, well-septic program, and home ownership opportunities.
- GTB Tribal Management Department – Includes Tribal Managers Office, Office of Management and Budget, Grant Writing Department, Housing Department, Community Satellite Offices (Benzie, Charlevoix and Traverse City 3 Mile Office) and Human Resources (personnel and employment center).
- GTB Health Services – Provides family practice medical clinic, dental clinic, optical services, health transportation and community health representatives (CHR's) to GTB community members and employees in the six county service areas.
- GTB Education – Maintains the Kitchi Minogining Tribal School, Heritage Library, Children's Camp, and youth service programs, Benodjenh Center (daycare and Early Head Start Program), Strongheart Center (civic center with indoor kitchen, gymnasium, showers, sauna, 2nd floor walking track)
- GTB Legal Department – Provides Land & Roads Management Office (property management, transportation planning, road maintenance, road construction, residential tribal lots for members, mapping of GTB properties, land acquisition) and maintains files for GTB 2,700 acres of land of which 1,223 acres are in trust. Legal Department provides legal services for legislation, programmatic functions of GTB Tribal Government, tribal citizens, and coordination with federal, state, and local governments.

Furthermore, the Grand Traverse Band of Ottawa and Chippewa have several existing laws, policies, and regulations that will help prevent or reduce losses through its statutory code which addresses the following:

- Fire and Police statute – delegates the hazard response and mitigation to specific departments with policies and procedures for response and mitigation.
- The GTB has adopted the State of Michigan's zoning to address flood plain management.
- The GTB defers to the State of Michigan's flood plain zoning and wetlands management.
- The GTB defers to the State of Michigan's soil erosion standards.
- The GTB Title 14 compiled statutory laws address natural disasters in the following chapters:
 - **Chapter 1**, Law Enforcement and Police Force
 - **Chapter 2**, Fire and Rescue
 - **Chapter 6**, Application of Non-Tribal Law [to the extent that the tribal statutes do not address a subject matter on public safety and regulation, then the GTB references State law as the rules for decisions]
 - **Chapter 7**, Firearms
 - **Chapter 8**, Hazardous Materials Release
 - **Chapter 10**, Marina Operations Code

Existing financial resources for mitigation activities

The GTB has existing financial resources as designated in its annual budgetary process. Additionally, there are potential sources of funding for future mitigation, including financial resources to meet the required nonfederal match.

Grand Traverse Band of Ottawa and Chippewa Asset Inventory

The LTP met and developed a comprehensive asset inventory for the Grand Traverse Band of Ottawa and Chippewa Tribe and all tribal owned lands. The asset inventory identified 73 assets in the following categories:

- Office Buildings
- Satellite Offices
- Camps
- Marinas
- Outbuildings and Sheds
- Parks
- Museums
- Historic, Cultural, Spiritual Sites
- Schools
- Medical Facilities
- Mechanical Facilities
- Emergency Facilities

Furthermore, the group documented the following information for each asset:

- Description of asset
- Owner of the asset or what entity has jurisdiction over each asset
- Location of Asset
- Indicated whether a backup generator exists onsite for each asset

Lastly, the group identified the top three vulnerabilities to each asset based on the following:

- Identified Hazards
- Risk Assessment
- History of Hazard Events
- Asset Inventory

For the complete GTB Asset Inventory, see Appendix A attached to this document. (Attached GTB Asset Inventory Spreadsheet as Appendix A)

IX. Mitigation Goals, Priorities and Strategies

Tribal Goals

Tribal Goals were developed by the Tribal LPT at the March 11th LPT meeting. The Tribal Goals were developed based largely on local objectives in light of current tribal assets, lands, hazards, risks, and vulnerabilities.

The table below lists each of the Tribal Goals developed by the Tribal LPT.

Natural Hazards Mitigation Planning Goals for Grand Traverse County

Goal 1: Increase local participation, strategies, and initiatives in natural hazard mitigation

Goal 2: Integrate natural hazard mitigation considerations into other tribal planning mechanisms

Goal 3: Utilize available resources and apply for other natural hazard mitigation project

Goal 4: Develop and complete natural hazard mitigation projects in a timely manner

Goal 5: Reduce the possibility of damage and losses to existing assets, including people, critical infrastructures, and public facilities

Goal 6: Ensure uninterrupted government and emergency functions in a disaster

Goal 7: Increase public awareness on being prepared before, during and after a disaster, when essential services may not be available

Tribal Priority Areas

Tribal Priority Areas were selected by the LPT at the January 18th LPT meeting. The Priority areas were selected based largely on local knowledge regarding tribal assets, lands, hazards, risks, and vulnerabilities. The table below lists each of the Priority Areas Selected by the Tribal LPT.

Natural Hazards Mitigation Priority Areas

Priority Area 1:

Severe Winter Weather – Community wide heavy snow, extreme temperatures, and concerns about major power and energy

Priority Area 2:

Severe Weather (High Winds, Tornadoes) – Community wide, highlighting the seasonal population influx and festivals held in various towns and villages throughout counties.

Priority Area 3:

Extreme Heat – Community wide, extreme high temperatures, and their affect, particularly on vulnerable populations, i.e. Elderly, children, those in hospitals etc.

Priority Area 4:

Wildfire – Community wide potential for wildfire/urban interface

Grand Traverse Band representatives were included in the discussions of the hazard mitigation strategies for the plan update. The hazard mitigation strategies have been updated of each the county's Plans.

Implementation

Each County's Emergency Management Director will work with Grand Traverse Band personnel to

develop detailed implementation strategies, identify required and available resources, assign specific staff roles and responsibilities, and initiate work on each mitigation strategy. Work on the individual strategies will proceed according to their plan priority ranking, available funding, and more detailed cost-benefit analyses.

The Grand Traverse Band tribal government will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding. This plan will be amended by the Grand Traverse Band tribal government necessary to reflect changes in tribal or Federal laws and statutes as required.

Tribal Mitigation Strategies

The table below lists a broad range of mitigation strategies that was developed by the Tribal LPT based on the identified hazards, and risk assessment. The strategies are listed according to each of the hazards identified by the Tribal LPT. Each of the mitigation strategies was developed to be in alignment with both the Tribal Mitigation Goals and Priorities.

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Frequent Natural Hazard	Mitigation Strategies
Blizzard	
	Ensure the development and enforcement of building codes for roof snow loads.
	Discourage flat roofs in areas that experience heavy snows.
	Adding building insulation to walls and attics.
	As buildings are modified, using new technology to create or increase structural stability
	Establishing standards for all utilities regarding tree pruning around power lines.
	Burying overhead power lines.
	Informing the public about severe winter weather impacts.
	Producing and distributing family and traveler emergency preparedness information about severe winter weather hazards.
	Including safety strategies for severe weather in driver educating classes and materials.
	Encouraging homeowners to install carbon monoxide monitors and alarms.
	Educating citizens that all fuel-burning equipment should be vented to the outside.
	Identifying specific at-risk populations that may be exceptionally vulnerable in the event of long -term power outages.
	Organizing outreach vulnerable populations including establishing and promoting accessible heating centers in the community.
	Adopt the International Building Code (IBC) and international Residential Code (IRC)
	Retrofitting public buildings to withstand snow loads and prevent roof collapse.
	Using snow fences or "living snow fences" (e.g. rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.
	Installing redundancies and loop feeds.
	Installing roadway heating technology to prevent ice/snow buildup.
	Using designed-failure mode for power line design to allow lines to fall or fail in small sections rather than as a complete system to enable faster restoration.
	Planning for and maintaining adequate road and debris clearing capabilities.
	Informing the public about severe winter weather impacts.

Wireless emergency alerts warn anyone in the are with a WEA capable phone in the case of an extreme or imminent danger
Shelter for mobile home communities
Severe Summer Storms
Installing lightning protection devices and methods, such as lightning rods and grounding, on communications infrastructure and other critical facilities.
Installing and maintaining surge protection on critical electronic equipment.
Developing a lightning brochure for distribution by recreation equipment retailers or outfitters.
Mailing safety brochures with monthly water bills.
Posting warning signage at local parks.
Teaching school children about the dangers of lightning and how to take safety precautions.
High Winds
Adopting the International Building code (IBC) and International Residential Code (IRC).
Adopting standards from International Code Council (ICC) - <i>600 Standard for Residential Construction in High-Wind Regions</i> .
Reviewing building codes and structural policies to ensure they are adequate to protect older structures from wind damage.
Requiring or encouraging wind engineering measures and construction techniques that may include structural bracing , straps and clips, anchor bolts, laminate or impact-resistant glass, reinforced pedestrian and garage doors, window shutters, waterproof adhesive sealing strips, or interlocking roof shingles.
Requiring tie-downs with anchors and ground anchors appropriate for the soil type for manufactured homes.
Requiring the use of special interlocking shingles designed to interlock and resist uplift forces in extreme wind conditions to reduce damage to a roof or other structures.
Improving nailing patterns.
Requiring building foundation design braced elevated platforms, and protections against the lateral forces of winds and waves.
Requiring new masonry chimneys greater than 6 feet above a roof to have continuous reinforced steel bracing.
Requiring structures on temporary foundations to be securely anchored to permanent foundations.
Using natural environmental features as wind buffers in site design.
Incorporating passive ventilation in the building design.
Incorporating passive ventilation in the site design. Passive ventilation systems use a series of vents in exterior walls or at exterior windows to allow outdoor air to enter the home in a controlled way.
Encouraging architectural designs that limit potential for wind-borne debris.
Improving architectural design standards for optimal wind conveyance.
Creating a severe wind scenario to estimate potential loss of life and injuries, the types of potential damage, and existing vulnerabilities within a community to develop severe wind mitigation priorities.
Using HAZUS to quantitatively estimate potential losses form wind.
Establishing standards for all utilities regarding tree pruning around lines.
Incorporating inspection and management of hazardous trees into the drainage system maintenance process.
Preemptively testing power line poles to determine if they are rotting.
Inspecting utility poles to ensure they meet specifications and are wind resistant.
Burying power lines to provide uninterrupted power after severe winds, considering both maintenance and repair issues.
Creating a severe wind scenario to estimate potential loss of life and injuries, the types of potential damage, and existing vulnerabilities within a community to develop severe wind mitigation priorities.

Avoiding use of aerial extensions to water, sewer, and gas lines.
Reinforcing garage doors.
Avoiding placing flag poles or antennas near buildings. Upgrading and maintaining existing lightning protections systems to prevent roof cover damage.
Educating design professionals to include wind mitigation during building design.
Upgrading overhead utility lines (e.g., adjust utility pole sizes, utility pole span widths, and/or line strength).
Installing safe rooms.
Ensuring that school officials are aware of the best area of refuge in school buildings.
Instructing property owners on how to properly install temporary window coverings before a storm.
Using GIS to map areas that are at risk to the wind hazard associated with different conditions and to identify concentrations of at risk structures.
Retrofitting or constructing the emergency operations center to FEMA 361 standards.
Informing residents of shelter locations and evacuation routes.
Protecting traffic lights and other traffic controls from high winds.
Converting traffic lights to mast arms.
Installing redundancies and loop feeds.
Encouraging wind-resistant roof shapes (e.g., hip over gamble).
Developing and maintaining a database to track community vulnerability to severe wind.
Establishing standards for all utilities regarding tree pruning around lines.
Incorporating inspection and management of hazardous trees into the drainage system maintenance process.
Anchoring roof-mounted heating, ventilation, and air conditioning units.
Retrofitting or constructing the emergency operations center to FEMA 361 standards.
Avoiding placing flag poles or antennas near buildings. Upgrading and maintaining existing lightning protections systems to prevent roof cover damage.
Inspecting utility poles to ensure they meet specifications and are wind resistant.
Educating homeowners on the benefits of wind retrofits such as shutters, hurricane clips etc.

Infrequent Natural Hazard	Mitigation Strategies
Drought	
	Identifying available water supplies.
	Developing a drought emergency plan.
	Developing criteria or triggers for drought-related actions.
	Developing a drought communication plan and early warning system to facilitate timely communication of relevant information to officials, decision makers, emergency managers, and the general public.
	Developing agreements for secondary water sources that may be used during drought conditions.
	Gathering and analyzing water and climate data to gain a better understanding of local climate and drought history.
	Establishing a regular schedule to monitor and report conditions on at least a monthly basis.
	Regularly checking for leaks to minimize water supply losses.
	Improving water supply monitoring.
	Checking for leaks in plumbing or dripping faucets.
	Identifying factors that affect the severity of a drought.
	Determining how the community and its water sources have been impacted by droughts in the past.
	Establishing a regular schedule to monitor and report conditions on at least a monthly basis
	Developing a drought emergency plan.
	Developing agreements for secondary water sources that may be used during drought conditions.
	Checking for leaks in plumbing or dripping faucets.
Extreme Heat	
	Increased tree plantings around buildings to shade parking lots and along public rights-of-way.
	Encouraging installation of green roofs, which provide shade and remove heat from the roof surface and surrounding air.
	Using cool roofing products that reflect sunlight and heat away from a building.
	Educate citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves when extreme temperatures occur.
	Organizing outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community.
	Requiring minimum temperatures in housing/landlord codes.
	Encouraging utility companies to offer special arrangements for paying heating bills, if not already required by state law.
	Creating a database to track those individuals at high risk of death, such as the elderly, homeless, etc.
Tornado	
	Requiring construction of safe rooms in new schools, daycares, and nursing homes.
	Encouraging the construction and use of safe rooms in homes and shelter areas of manufactured home parks, fairgrounds, shopping malls, or other vulnerable public structures.
	Encouraging builders and homeowners to locate tornado safe rooms inside or directly adjacent to houses to prevent injuries due to flying debris or hail.
	Developing a local grant program to assist homeowners who wish to construct a new safe room.
	Consulting guidance from FEMA p-320 - Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business and International Code Council (ICC) - 500 Standard for the Design and Construction of Storm Shelters.
	Encourage structural bracing
	Encourage use of straps and clips
	Encourage use of Anchor bolts
	Encourage use of laminated or impact-resistant glass
	Encourage use of reinforced pedestrian and garage doors
	Encourage use of Window shutters

Encourage use of waterproof adhesive sealing strips
Encourage use of interlocking roof shingles.
Educating citizens through media outlets.
Conducting tornado drills in schools and public buildings
Teaching school children about the dangers of tornadoes and how to take safety precautions.
Distributing tornado shelter location information.
Supporting severe weather awareness week.
Flood
Developing a floodplain management plan and updating it regularly.
Mitigating hazards during infrastructure planning. For example decisions to extend roads or utilities to an area may increase exposure to flood hazards.
Adopting a post-disaster recovery ordinance based on a plan to regulate repair activity, generally depending on property location.
Passing and enforcing an ordinance that regulates dumping in streams and ditches.
Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage.
Developing a storm water committee that meets regularly to discuss issues and recommend projects.
Forming a regional watershed council to help bring together resources for comprehensive analysis,, planning, decision-making, and cooperation.
Establishing watershed-based planning initiatives to address the flood hazard with neighboring jurisdictions.
Limiting the density of developments in the floodplain.
Developing a stream buffer ordinance to protect water resources and limit flood impacts.
Prohibiting any fill in floodplain areas.
Adopting ASCE 24-05 Flood Resistant Design and Construction. ASCE 24 is a referenced standard in the IBC that specifies minimum requirements and expected performance for the design and construction of buildings and structures in the flood hazard areas to make them more resistant to flood loads and flood damage.
Requiring standard tie-downs of propane tanks.
Completing a storm water drainage study for known problems areas.
Preparing and adopting a storm water drainage plan and ordinance.
Preparing and adopting a community wide storm water management master plan.
Requiring a drainage study with new development.
Designing a "natural runoff" or "zero discharge" policy for storm water in subdivision design.
Requiring more trees be preserved and planted in landscape designs to reduce the amount of storm water runoff.
Requiring developers to plan for on-site retention basins for excessive storm water and as a firefighting water source.
Encouraging the use of porous pavement, vegetative buffers, and islands in large parking area.
Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
Incorporating the procedures for tracking high water marks following a flood into emergency response plans.
Conducting cumulative impact analyses for multiple development projects within the same watershed.
Developing a dam failure study and emergency action plan.
Obtaining depth grid data and using it to illustrate flood risk to citizens.
Developing and maintaining a database to track community exposure to flood risk.
Revising and updating regulatory floodplain maps.
Participating in NFIP
Completing and maintaining FEMA elevation certificates for pre-FIRM and/or post-FIRM buildings.
Revising the floodplain ordinance to incorporate cumulative substantial damage requirements.
Advising the public about the local flood hazard, flood insurance, and flood protection measures
Implementing damage reduction measures for existing buildings such as acquisition, relocation, retrofitting, and

maintenance of drainage ways and retention basins.
Taking action to minimize the effects of flooding on people, property, and building contents through measures including flood warning emergency response and evacuation planning.
Installing, re-routing , or increasing the capacity of a storm drainage system.
Increasing drainage or absorption capacities with detention and retention basins, relief drains, spillways, drain widening/dredging or rerouting, logjam and debris removal, extra culverts, bridge modification, dike setbacks, flood gates and pumps, or channel redirection.
Increasing capacity of storm water detention and retention basins.
Increasing dimensions of drainage culverts in flood-prone areas.
Requiring developers to construct on-site retention basins for excessive storm water and as a firefighting water source.
Providing grassy swales along roadsides.
Performing regular drainage system maintenance, such as sediment and debris clearance, as well as detection and prevention of discharges into storm water and sewer systems from home footing drains, downspouts, or sewer pumps.
Routinely cleaning debris from support bracing underneath low-lying bridges.
Routinely cleaning and repairing storm water drains.
Inspecting bridges and identifying if any repairs or retrofits are needed to prevent scour.
Incorporating ice jam prevention techniques as appropriate.
Dry flood proofing non-residential structures by strengthening walls, sealing openings, or using waterproof compounds or plastic sheeting on walls to keep water out.
Elevating roads and bridges above the base flood elevation to maintain dry access. In situations where flood waters tend to wash roads out, construction, reconstruction, or repair can include not only attention to drainage, but also stabilization of armoring of vulnerable shoulders or embankments.
Raising low-lying bridges.
Flood proofing wastewater treatment facilities located in flood hazard areas.
Depending on its infrastructure capabilities, using check valves, sump pumps, and backflow prevention devices in homes and buildings.
Using minor structural projects that are smaller and more localized (e.g., floodwalls or small berms) in areas that cannot be mitigation through non-structural activities or where structural activities are not feasible due to low densities.
Using bioengineered bank stabilization techniques.
Protecting and enhancing landforms that serve as natural mitigation features (i.e. riverbanks wetlands dunes etc.)
Retaining thick vegetative cover on public lands flanking rivers.
Encouraging homeowners to purchase flood insurance.
Annually distributing flood protection safety pamphlets or brochures to the owners of flood-prone property.
Educating citizens about safety during flood conditions, including the dangers of driving on flooded roads.
Using outreach programs to advise homeowners of risks to life, health, and safety.
Educating the public about securing debris, propane tanks, yard items, or stored objects that may otherwise be swept away by floodwaters.
Wildfire
Installing roof coverings, sheathings, flashing, skylights, roof an attic vents, eaves, and gutters that conform to ignition-resistant construction standards.
Installing wall components that conform to ignition-resistant construction standards.
Creating buffers around residential and non-residential structures through the removal or reduction of flammable vegetation, including vertical clearance of tree branches.
Replacing flammable vegetation with less flammable species.
Performing arson prevention cleanup activities in areas of abandoned or collapsed structures, accumulated trash or debris, and with a history of storing flammable materials where spills or dumping may have occurred.

Performing maintenance including fuel management techniques such as pruning and clearing dead vegetation, selective logging, cutting high grass, planting fire-resistant vegetation, and creating fuel/fire breaks (i.e., areas where the spread of wildfires will be slowed or stopped by the removal of fuels).
Using prescribed burning to reduce fuel loads that threaten public safety and property.
Identifying and clearing fuel loads created by downed trees.
Installing fire mitigation systems such as interior and exterior sprinkler systems.
Performing safe disposal of yard and household waste rather than open burning.
Removing dead or dry leaves, needles, twigs, and combustibles from roofs, decks, eaves, porches, and yards.
Creating a defensible space or buffer zone cleared of combustible materials around property.
Installing and maintaining smoke detectors and fire extinguishers on each floor of their homes or other buildings.
Using local fire departments to conduct education programs in schools.
Protecting propane tanks or other external fuel sources.
Linking wildfire safety with environmental protections strategies (i.e., improving forest ecology, wildlife habitat, etc.).
Informing the public about proper evacuation procedures.
Consulting Firewise guidance and encouraging or requiring best practices in your community.
Routinely inspecting the functionality of fire hydrants.
Requiring and maintaining safe access for fire apparatus to wildland-urban interface neighborhoods and properties.
Using prescribed burning to reduce fuel loads that threaten public safety and property.
Developing partnerships with neighborhood groups, homeowners' associations and others to conduct outreach activities.
Keeping flammables, such as curtains, secured away from windows or using heavy fire-resistant drapes.
Infectious Diseases
Encourage the continued cooperation between Tribal Public Health Department and the Michigan Department of Health and Human Services.
Provide public education materials related to the prevention/treatment of infectious diseases.
Invasive Species
Create effective mechanisms to prevent the introduction of invasive species.
Create monitoring systems for detecting new infestations.
Move rapidly to eradicate newly detected invaders.
Preventing or alleviating wildfires by proper maintenance and separation of power lines as well as efficient response to fallen power lines.

Rarely Occurring Natural Hazards	Mitigation Strategies
Earthquakes	
	Educating homeowners on safety techniques to follow during and after an earthquake.
	Conducting information sessions or other forms of outreach on seismic code provisions for new and existing buildings to enhance code use and enforcement by local architects, engineers, contractors, and code enforcement personnel.
	Developing an outreach program to encourage homeowners to secure furnishings, storage cabinets, and utilities to prevent injuries and damage. Examples include anchoring tall bookcases and file cabinets, installing latches on drawers and cabinet's doors, restraining desktop computers and appliances, using flexible connections on gas and water lines, mounting framed pictures and mirrors securely, and anchoring and bracing propane tanks and gas cylinders.
	Supporting financial incentives, such as low interest loans or tax breaks, for home and business owners who seismically retrofit their structures.
	Collecting geologic information on seismic sources, soil conditions, and related potential hazards.
	Maintaining a database to track community vulnerability to earthquake risk.
	Establishing a school survey procedure and guidance document to inventory structural and non-structural hazards in and around school buildings.
	Requiring bracing of generators, elevators and other vital equipment in hospital.
	Developing an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.
	Educating homeowners on safety techniques to follow during and after an earthquake
	Developing an outreach program to encourage homeowners to secure furnishings, storage cabinets, and utilities to prevent injuries and damage. Examples include anchoring tall bookcases and file cabinets, installing latches on drawers and cabinet's doors, restraining desktop computers and appliances, using flexible connections on gas and water lines, mounting framed pictures and mirrors securely, and anchoring and bracing propane tanks and gas cylinders.
	Adopting and enforcing updated building code provisions to reduce earthquake damage risk.
	Adopting the International Building Code (IBC) and International Residential Code (IRC)
	Creating an earthquake scenario to estimate potential loss of life and injuries, the types of potential damage, and existing vulnerabilities within a community to develop earthquake mitigation priorities.
Coastal Erosion	
	Developing an erosion protection program for high hazard areas.
	Using a rock splash pad to direct runoff and minimize the potential for erosion
	Using GIS to identify concentrations of at-risk structures.
	Using a hybrid of hard/soft engineering techniques (i.e.. Combine low profile rock rubble oyster reefs or wood structures with vegetative planting or other soft stabilization techniques.
	Developing a brochure describing risk and potential mitigation techniques.
	Prohibiting removal of natural vegetation from dunes and slopes.
	Planting mature trees in the coastal riparian zone to assist in dissipation of the wind force in the breaking wave zone.
	Adopting sediment and erosion control regulations.
	Adopting zoning and erosion overlay districts.
	Developing an erosion protection program for high hazard areas.
	Employing erosion control easements.
	Prohibiting development in high -hazard areas.
	Developing and implementing an erosion management plan.
	Developing and maintaining a database to track community vulnerability to erosion.

Implementing marine riparian habitat reinstatement or revegetation.
Notifying property owners located in high risk areas.

X. Maintenance, Monitoring, and Implementation

Grand Traverse Band may wish to develop their own Natural Hazard Mitigation Plan in the future. Until that point, they will continue to be a participant in County plan updates. As such, Counties will work with tribal representatives to maintain and update their information when it is warranted. Grand Traverse Band will continue to have an open seat on County's LPT/LEPC.

The County Natural Hazard Mitigation Plan will have a complete review at least every five (5) years to identify and include significant changes that would affect the mitigation strategies identified in the plan. The plan will be evaluated to ensure that increased development, increased exposure to particular hazards and the development of new mitigation capabilities or techniques, as well as changes to federal and/or state legislation are incorporated into the implementation of, and revisions to, the plan.

- The Planning Process will be scheduled for review annually by the LPT
- The Planning Area information will be updated when new data becomes available, or with updates to area Comprehensive Plans. This will be scheduled for review at least every five years.
- The Risk Assessment section will be reviewed by County Emergency Management and the LPT/LEPC annually. Revisions will be forwarded to Michigan State Police
- Mitigation Strategies will be reviewed annually by the LPT/LEPC, County Board of Supervisors, and individual municipalities to update strategies and priorities.
- The Plan Maintenance section will be reviewed every five years in conjunction with plan revisions.

The plan will also be reviewed by the LPT following any major public sector damage sustained due to natural disaster or a disaster declaration to revise the plan to identify and document the storm events, as well as to reflect additional mitigation strategies or revisions to priorities identified in the plan.

Throughout the ongoing plan maintenance, the public will have the opportunity to provide input and feedback on the plan. Copies of the plan will be made available to the public through county offices. The plan may also be obtained electronically. A minimum of one public hearing will be held during each five-year evaluation and update. These hearings will provide the public with a forum for which they may express concerns, opinions or ideas about natural hazard planning and identified mitigation strategies.

County Emergency Management will review the plan every five years and will monitor progress of all mitigation projects and will update those strategies in plan updates. Newly identified mitigation needs will be addressed through the development of additional goals, objectives, or strategies, as applicable. If changes in implementation priority are deemed necessary, the rationale will be documented.

Revisions and updates will be distributed for review and approval to the County Emergency Management Department, municipalities, and implementation partners. Plan revisions will be made available to the general public for review and comment during the plan updating process. Public comment on revisions and updates also will be solicited through public outreach efforts that may include open houses, public meetings, press releases, websites or displays at community events. During this process, Counties will work to ensure that Grand Traverse Band representatives are involved with the update, and ensure representatives are communicating with and gathering input from the public living on the reservation, as well as the Tribal Council. This will likely be accomplished through Tribal Council meetings, as well as community-wide events.

The County LPT will have oversight of the County Natural Hazard Mitigation Plan. As described previously, the LPT is comprised of representatives from government agencies, including the Grand Traverse Band of Ottawa

and Chippewa Indians. LPT meetings are always posted and are open, with public attendance and input invited. Committee members may monitor the status of mitigation projects by evaluating implementation actions and processes, identifying those that have worked well, difficulties encountered, and making suggestions for revisions to the mitigation strategies as necessary. This process will require significant coordination with LPT and other jurisdictions and agencies identified in the mitigation strategies.

Incorporation

Information from these two separate processes were used to incorporate the plans into each other. In addition, tribal regulations were reviewed during the creation of this plan to ensure that the mitigation plan could be incorporated and adhered to. As other tribal plans are created or updated, appropriate information contained in the County Natural Hazard Mitigation Plan will be incorporated into the planning procedures of these documents.

Many committees have some personnel overlap within the GTB organization. It will be helpful to have cross-committee representation to discuss and incorporate elements of planning documents into one another. Committee meetings and Tribal Council members are open to the public. In addition, LPT meetings where the County Natural Hazard Mitigation Plan is discussed and developed are all open to the public. Public input at these meetings is appreciated.

Committee meetings and Tribal Council members are open to the public. In addition, LPT meetings where the County Natural Hazard Mitigation Plan is discussed and developed are all open to the public. Public input at these meetings is appreciated.

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XI. Maps

- A. Peshawbestown Address Map
- B. Tribal Properties in Six County Service Area
- C. GTB Region Map with Trust and non-trust properties

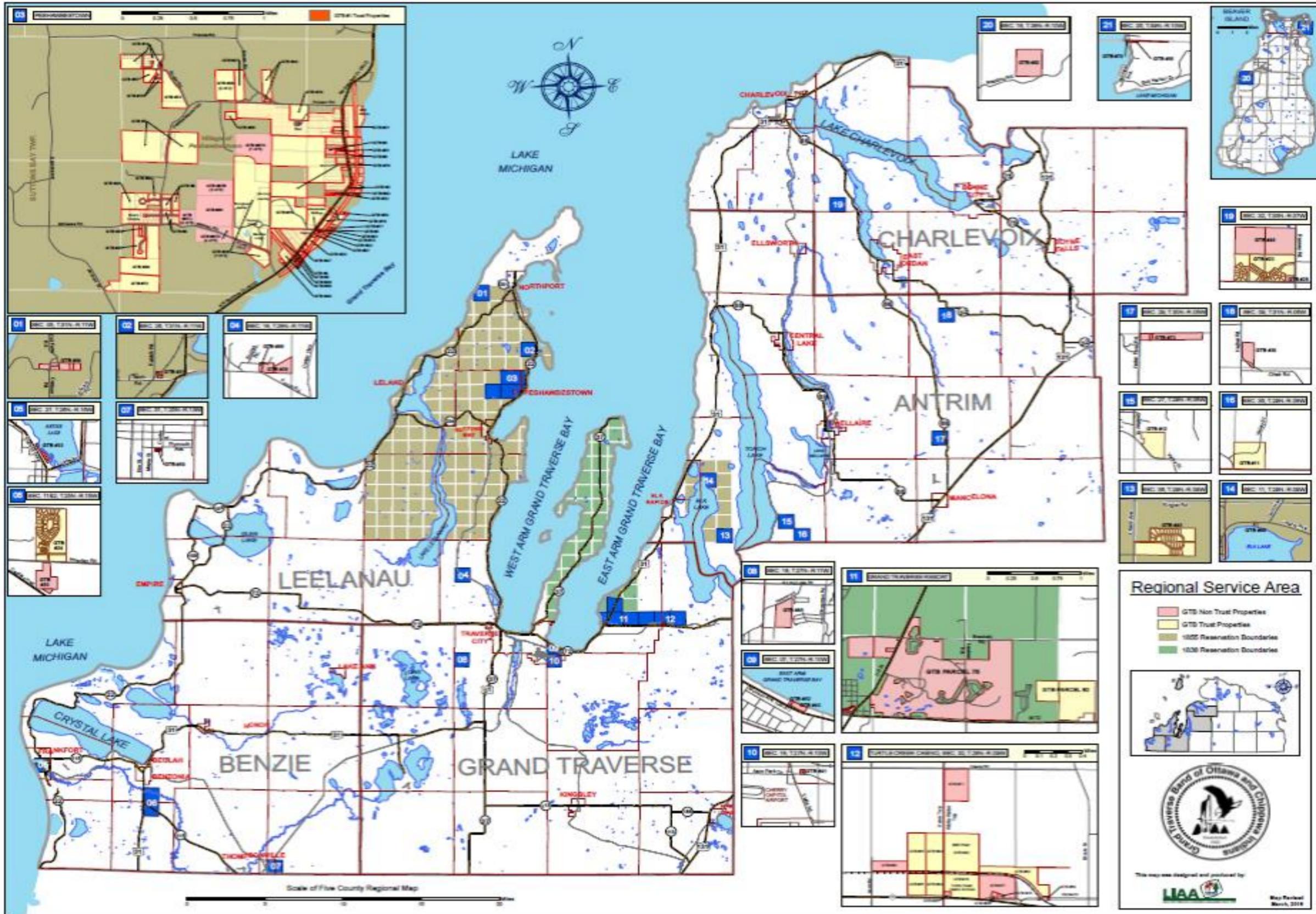
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B. Tribal Properties in Six County Service Area



C. GTB Region Map with Trust and non-trust properties



Public Outreach

January 16th Tribal Newsletter

Grand Traverse Band of Ottawa and Chippewa Indians

Natural Hazard Mitigation Plan (Tribal Annex)

TRIBAL COMMUNITY NOTICE

The Grand Traverse Band of Ottawa and Chippewa Indians Emergency Management Office will conduct tribal community meetings in January 2016 to gather comments for the GTB Natural Hazard Mitigation Tribal Annex, a supplement to the Leelanau, Benzie and Grand Traverse County Natural Hazard Mitigation Plans.

The Natural Hazard Mitigation Plan (Tribal Annex) outreach meetings are to gather tribal community comments on natural hazards that have or may occur on tribal lands and identify local risks and vulnerabilities to prevent injury, loss of life, property damage, and promote and support prevention or hazard mitigation planning.

Meetings have been set for January 2016:

Monday, January 4, 2016 - Peshawbestown /
Housing Office 5-6 pm;

Monday, January 11, 2016 – Charlevoix Office
5-6pm;

Monday, January 18, 2016 – Traverse City Office
5-6 pm and

Monday, January 25, 2016 – Benzie Office
5-6 pm

Thursday, January 28, 2016 – Peshawbestown /
Medicine Lodge 12-1 pm

- You can access the DRAFT GTB Hazard Mitigation Tribal Annex Plan on the GTB website on our Home Page under Department 2 Public Safety Department; select Emergency Management. Tribal comment period for GTB Tribal Annex Natural Hazard Mitigation Plan Tribal Annex.

- Written comments will be accepted until Wednesday, February 3, 2016 submitted to:

**Grand Traverse Band of Ottawa and Chippewa Indians
Emergency Management Office - Natural Hazard
Mitigation Plan (Tribal Annex)**

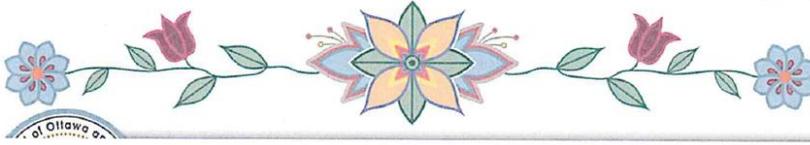
**2605 N. West Bay Shore Drive, Peshawbestown, MI
49682**

- Draft copies are also available for review at the Grand Traverse Band Emergency Management Office, Medicine Lodge and GTB Tribal Police Department, 2300 N. Stallman Rd. Peshawbestown, MI.

Contact Information:

GTB Public Safety Department Manager (231) 534-7111

Color Log In



- Tribal Council
- Tribal Manager Office
- Government Departments
- Public Information
- Tribal Court

Home > Public Safety > Emergency Management

Emergency Management

Fire and Rescue

SORNA Information

Tribal Police

Tribal Prosecutor

Tribal Victims Assistance



DISASTER HERO

Emergency Preparation

for KIDS! (click here)

Emergency Management

Grand Traverse Band of Ottawa and Chippewa Indians

Emergency Management

The Grand Traverse Band (GTB) Emergency Management Office is located in the Medicine Lodge at 2300 N. Stallman Road, Peshawbestown, MI, approximately 4 miles north on M22 from Suttons Bay.

The GTB Tribal Emergency Management Office works on emergency preparedness initiatives for the Tribal Government. The Tribal Emergency Management Office works collaboratively with Leelanau County 911 Center on tribal, county and state of emergency events for Leelanau County as well as cooperates with surrounding counties of Antrim, Benzie, Charlevoix, Grand Traverse, and Manistee counties on emergency preparedness.

The Tribal Emergency Operations Center (EOC) is not staffed on a full-time basis but will open periodically for simulated exercises as well as real events that occur within Peshawbestown. During these events the EOC will be staffed by representatives from tribal and local organizations to collaborate on real time events. The goal of GTB Emergency Management Office is to work collaboratively with local county Emergency Management Offices on preparedness initiatives for each area of Antrim, Benzie, Charlevoix, Grand Traverse, Leelanau and Manistee counties and surrounding counties in the northwest region of Lower Peninsula of Michigan. GTB Emergency Management Office collaborates with GTB Tribal Government Departments to prepare for natural and man-made disasters through exercises and trainings and continually updating GTB Emergency Operations Plans.

Every county has links to Emergency Management information to assist citizens to better prepare themselves for inclement weather conditions, unexpected emergencies or disaster location of emergency shelters in those counties. The Grand Traverse Band has six emergency shelter locations for Peshawbestown, Antrim, Benzie and Charlevoix. (See Tornado Shelter Locations link listed below). Currently Leelanau County has a link of "Where to Go in an Emergency" for emergency shelter locations in Leelanau County, if needed. For additional emergency preparedness information for Community and Family Preparedness click on website links to assist community members to plan for family emergencies and weather related events. Indian Country Ready.gov or FEMA.gov has links to Severe Weather sites: Tornadoes, other Natural Disasters and general emergency guidelines.

TRIBAL COMMUNITY NOTICE for the Grand Traverse Band of Ottawa and Chippewa Indians (GTB) Natural Hazard Mitigation Plan Tribal Annex.

The GTB Emergency Management Office will conduct tribal community meetings in January 2016 to gather comments for the GTB Natural Hazard Mitigation Tribal Annex, a supplement to the Benzie, Grand Traverse and Leelanau County Natural Hazard Mitigation Plans. The community meetings are to gather tribal comments on natural hazards that have or may occur on tribal lands and identify local risks and vulnerabilities to prevent injury, loss of life, property damage, and promote and support prevention or hazard mitigation planning. Listed below are the Natural Hazard Mitigation Elements to be addressed to expand the GTB Tribal Hazard Mitigation Plan Annex.

Meetings:

Monday, January 4, 2016 - Peshawbestown / Housing Office 5:00-6:00 PM;

Monday, January 11, 2016 - Charlevoix Satellite Office 5:00-6:00 PM;

Monday, January 18, 2016 - Traverse City Office 5:00-6:00 PM;

Monday, January 25, 2016 - Benzie Satellite Office 5:00-6:00 PM; and

Thursday, January 28, 2016 - Peshawbestown / Medicine Lodge 12:00-1:00 PM

You can access the DRAFT GTB Natural Hazard Mitigation Tribal Plan Annex and Elements questions required to expand GTB Tribal Annex. Also included as reference are the County Plans listed below. Written comments will be accepted until Wednesday, February 3, 2016 submitted to: Grand Traverse Band of Ottawa and Chippewa Indians, Emergency Management Office - Natural Hazard Mitigation Plan (Tribal Annex), 2605 N. West Bay Shore Drive, Peshawbestown, MI 49682. Draft copies are also available at the GTB Emergency Management Office, Medicine Lodge and GTB Tribal Police Department, 2300 N. Stallman Rd., Peshawbestown, MI. For more information contact: GTB Public Safety Department Manager (231) 534-7111.

GTB Tribal Annex - Natural Hazard Mitigation Plan

2016 Leelanau County Natural Hazard Mitigation Plan

2016 Benzie County Natural Hazard Mitigation Plan

2015 Grand Traverse County Natural Hazard Mitigation Plan

GTB Natural Hazard Mitigation Plan Annex Elements to be addressed

Tornado Shelter Locations



Make a Plan



Disaster Preparation



Family Preparedness

Appendices

Appendix A – Asset Inventory (Capabilities Assessment)

Appendix B – Organizational Structure

Appendix C – Responses to FEMA revisions

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Appendix A - Asset Inventory (Capabilities Assessment)

Type of Asset	Name of Asset	Description of Asset Use	Owner/ Jurisdiction	Location of Asset	Backup Generator Onsite	Complete Based on Identified Hazards	#1 Vulnerability To This Facility	#2 Vulnerability To This Facility	#3 Vulnerability To This Facility
Office Buildings									
	Grand Traverse Band Main Administrative Office	Office	GTB	Leelanau County	No	Complete Based on Identified Hazards	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	EDC Administrative-Business Building	Office	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	EDC Shipping & Receiving	Warehouse	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	EDC Vacation Rentals (The Chalet & Cedarview)	Rental	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Elders Complex	Elder Apartments	GTB	Leelanau County	YES		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Emergency Operations Center (Basement - Medicine Lodge)	Emergency Ops.	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Fire Station	Fire/Rescue Response	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	NRD Storage Building	Storage	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Hotel/Lodge - (Peshawbestown)	Lodging	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Industrial Facilities (Eagletown Market Gas Station)	Convenience Store	GTB	Leelanau County	Yes		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Police Station - (Basement of Medicine Lodge)	Police response	GTB	Leelanau County	Partial		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Resort Facilities - LSC	Casino	GTB	Leelanau County	Yes		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Strongheart Center - Recreational Facility	Gym-Kitchen-Showers	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire	

Automotive Building	Garage-Mechanics	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
OMB/Accounting Building	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
HR Dept/Membership Office	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Bingo Hall	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Natural Resource Building (Putnam Road)	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
M22 Library	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Housing Office	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Natural Resource Building on Bay	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Tribal Court	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Maintenance (Facility Management)	Offices	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
The Ridge Microbrewery & Restaurant	Retail	GTB	Leelanau County	No	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
IT Department (Basement - Medicine Lodge)	Lodging	GTB	Leelanau County	Partial	Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
EDC Vacation Rentals (Old M-72 Unit Williamsburg)	Lodging	GTB	Grand Traverse County	No	Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire
EDC Hammersmith Building (Williamsburg)	Offices	GTB	Grand Traverse County	No	Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire

	Turtle Creek Casino	Casino-Lodging	GTB	Grand Traverse County	Yes		Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire
	All Resort Properties (EDC -Acme) - Grand Traverse Resort	Lodging-Golf	GTB	Grand Traverse County	No		Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire
	EDC Vacation Rentals (Munson Beach House)- TC	Lodging	GTB	Grand Traverse County	No		Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire
Satellite Offices									
	Traverse City Satellite Office	Offices-Kitchen-Community Rm.	GTB	Grand Traverse County	No		Severe Thunderstorms - High Winds	Severe Winter Weather	Wildland Fire
	Benzie Satellite Office	Offices-Kitchen-Community Rm.	GTB	Benzie County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Boys Home (Benzie Satellite Office) separate wing	Residential Treatment	GTB	Benzie County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Charlevoix Satellite Office	Offices-Gym-Kitchen	GTB	Charlevoix County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Alden Camp									
	Alden Camp	Kitchen-Showers-Camp Buildings	GTB	Antrim County	No		Severe Winter Weather	High Winds	Wildland Fire
Marina									
	Arthur Duhamel Marina (10 slips)	Tribal Fisherman Slips	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	GTB Marina #2 (under construction - 150+ slips)	Commercial Boat Slips	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
Outbuildings and Sheds									
	#1 - Shed - Medicine Lodge	Storage	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	#2 - Shed - (Putnam Rd.)	Storage	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	#3 - NRD Storage Building	Storage	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	#4 - NRD Fish Processing Facility at Art Duhamel Marina	Processing	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	#5 - NRD 8' x 20' Shed with electricity at current NRD Bldg.	Storage	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
	#6 - Housing Warehouse - (Putnam)	Storage	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire

	#7 - Pole Barn - Benzie	Storage	GTB	Benzie County	No		Severe Winter Weather	High Winds	Wildland Fire
	#8 - Shed - Benzie	Storage	GTB	Benzie County	No		Severe Winter Weather	High Winds	Wildland Fire
	#9 - Shed - (Charlevoix Office)	Storage	GTB	Charlevoix County	No		Severe Winter Weather	High Winds	Wildland Fire
	#10 - Fish Processing Building (Beaver Island)	Retail - Storage	GTB	Charlevoix County	No		Severe Winter Weather	High Winds	Wildland Fire
	#11 - Ice House - (Beaver Island)	Storage	GTB	Charlevoix County	No		Severe Winter Weather	High Winds	Wildland Fire
	#12 -								
Parks									
	Elders Park	Park	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Museum									
	Eyaawing Museum	Artifacts-Offices- kitchen	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Historic, Cultural, Spiritual Sites									
	Historic Site - Pow Wow Grounds	Camp grounds	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Youth Building - (Pow-Wow Grounds)	Offices	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Kateri Tekakwitha Church	Community Church	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Ceremonial Dome (Sweat Lodge)	Traditional Ceremonies	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Burial Grounds	Sacred Lands	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Northport Indian Church	Community Church	GTB	Leelanau County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
	Kewadin Indian Mission Church	Community Church	GTB	Antrim County	No		Severe Winter Weather	Severe Thunderstorms - High Winds	Wildland Fire
Schools									

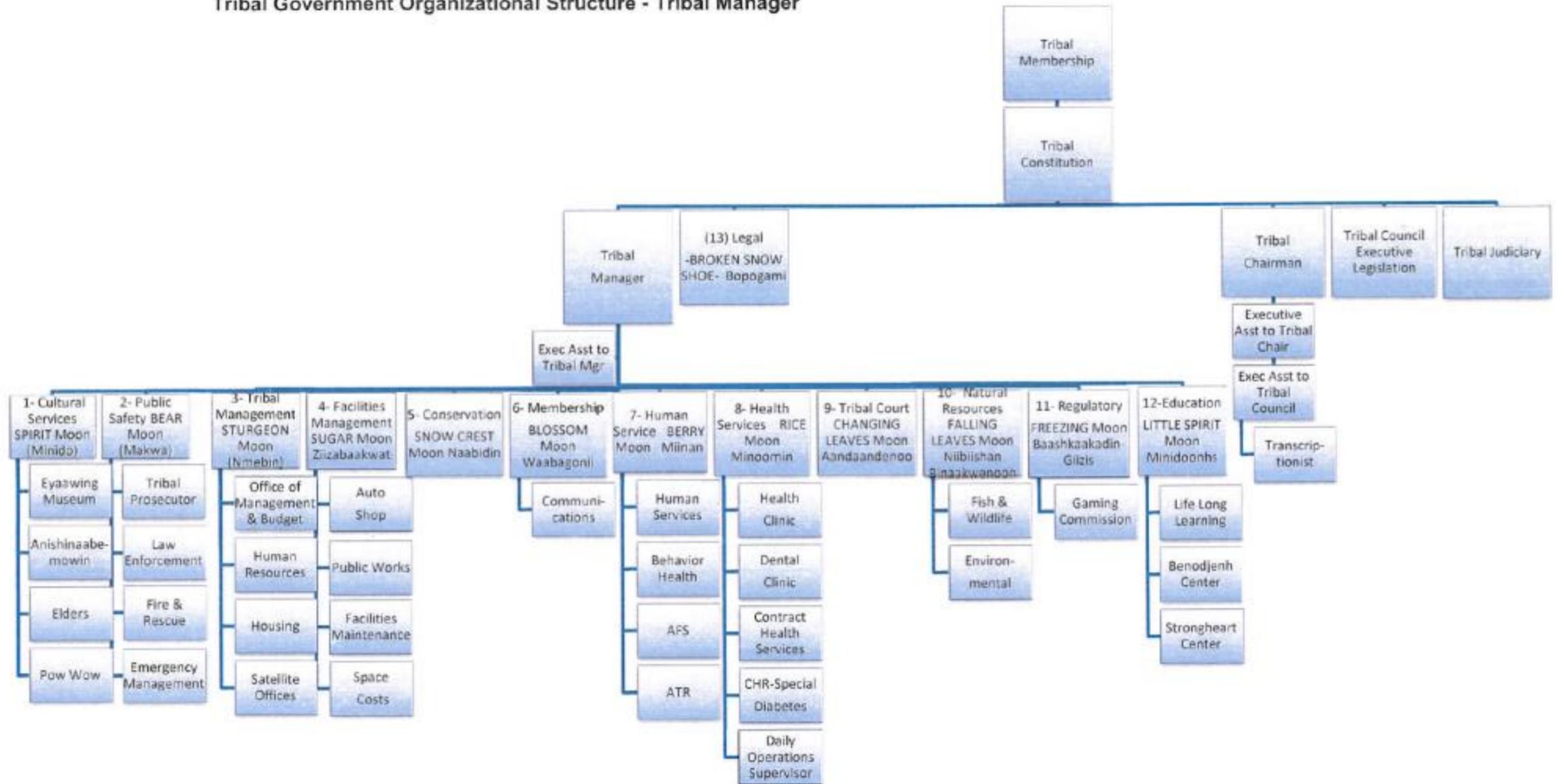
	Childcare Facility (Benodjenh Center)	Daycare-School	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
Medical Facilities									
	Medical Facility (GTB Family Health Clinic and Dental Clinic)	Clinic- Mental Health - Human Sv. Offices	GTB	Leelanau County	No		Severe Winter Weather	High Winds	Wildland Fire
Mechanical Facilities									
	Tower Site (Putnam Road GTB)	Communication Antennas	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water and Sewage Treatment Facilities(Water-Sewer: 80% Residential)	Treatment Facility	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water Tower #1	Residential - Business	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water Tower #2	Residential - Business	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water and Sewage Treatment Facilities *Water- Sewer: 100% public sewer	Treatment Facility	GTB	Grand Traverse County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water Tower #3 TCC	Residential - Business	GTB	Grand Traverse County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Water Tower #4 GTR	Residential - Business	GTB	Grand Traverse County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
Emergency Facilities									
	Emergency Siren - Located near Pow-Wow Grounds	Warning Siren	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Tornado Shelter #1	20-25 person shelter	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Tornado Shelter #2	20-25 person shelter	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Tornado Shelter #3	20-25 person shelter	GTB	Leelanau County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Tornado Shelter #4	20-25 person shelter	GTB	Antrim County	No		Severe Thunderstorms - High Winds	Extreme Winter Weather	Wildland Fire
	Tornado Shelter #5	20-25 person shelter	GTB	Benzie County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire
	Tornado Shelter #6	20-25 person shelter	GTB	Charlevoix County	No		Severe Winter Weather	Thunderstorms - High Winds	Wildland Fire

Revised:

3/14/2016

Appendix B - Organizational Structure

Tribal Government Organizational Structure - Tribal Manager



****Note: The Tribal Chairman and Tribal Council are only shown on the same Organizational Chart line as the Tribal Manager, Tribal Judiciary, and Legal for the convenience of viewing the whole Organizational Structure****

Appendix C - Responses to FEMA revisions

Grand Traverse Band of Ottawa and Chippewa Indians Natural Hazard Mitigation Plan Annex

Outreach Community Meetings Request for Tribal Comment

FEMA is requiring additional information for the GTB Tribal Natural Hazard Mitigation Plan. Please review the questions and answer as much as possible after you have reviewed the GTB Natural Hazard Mitigation Plan Annex.

It is an important FEMA goal to get as many tribal communities as possible to develop plans and to adopt these plans.

In the Code of Federal Regulations (44 CFR 201.7) it states that tribal communities may participate in multi-jurisdictional plans but it also states that “Indian tribal governments that participate in multi-jurisdictional plans, ***must address all the elements identified in this section to ensure eligibility as a grantee or subgrantee.***”

What this means for tribal plans when they appear as an annex to a county plan is all elements must be addressed.

The Grand Traverse Band will conduct community outreach to specific tribal agencies and populations to receive comments on the GTB Tribal Annex. At a minimum, the tribal annex should be expanded to address the following:

*****In addition to having been incorporated into the GTB Tribal Hazard Mitigation Annex, responses to each of the elements/questions are provided in red below.*****

Planning Process

1. Does the plan annex describe how the “public” was involved? Was there an opportunity for tribal members to comment on the plan annex during the drafting stage and prior to the plan approval?

Yes, advertised:

- January 2016 GTB Newsletter
- Grand Traverse Band Government Website – Emergency Management link – 1/8/2016
- GTB LPT Meetings: 8/28/2015, 2/18/2016, 3/11/2016
- GTB Dept. Managers Meetings: 2/10/2016, 3/10/2016

2. Does the plan describe how tribal agencies (e.g. public safety, public works, planning) were involved in the process and if these agencies had an opportunity to comment on the plan prior to plan approval?

The GTB Local Planning Team consists of public safety, public works, planning, fire, IT cyber security, human services, housing director, health, natural resources/environmental, OMB, law enforcement, and cultural department. GTB LPT meets on a bi-monthly basis. The GTB Tribal Manager holds monthly Department Manager meetings and all Government Departments have opportunities to share department information, specifically 2/10/16, 3/10/16 and 30-Day Public Comment period 3/17/2016 to 4/17/2016 to comment on the plan.

3. The current plan annex mentions two significant power outages—has there been any effort to outreach to the power company?

The GTB Facilities Management Department Manager and shift supervisors contact the local utility companies whenever GTB Government loses power. Telephone calls are made to Consumers Energy (Benzie, Leelanau, Grand Traverse county tribal coverage), and Great Lakes Utility Company (Charlevoix and Alden tribal coverage). GTB Tribal Housing Manager and supervisors contact the utility coverage immediately affecting tribal housing units in the six county service areas as well.

The GTB Tribal Manager also maintains contact with the local utility companies due to significant power outages that occur on tribal properties affecting Tribal Government and the community residents.

4. Can the tribal community document that it has reached out to tribal members and to residents of the reservation?

Yes. Advertisement of community meetings were placed in the January 2016 GTB Newsletter and community meetings were held four times in January 2016 at the four tribal sites with a fifth meeting held 1/28/16 at GTB Medicine Lodge in Peshawbestown, MI.

In addition, the GTB DRAFT Tribal Annex, FEMA questions and County Natural Hazard Mitigation Plans (Antrim, Benzie, Grand Traverse and Leelanau County) were posted on the Grand Traverse Band Tribal website 1/8/2016, under the Emergency Management link accepting comments.

Additional information was requested from the GTB Local Planning Team 2/16/16, 3/11/16 and the GTB Department Managers Meeting 2/10/16 and 3/10/16.

Risk Assessment

1. The current plan annex indicates that the Grand Traverse Band has many of the same risks as the counties. We would like the tribe to more closely consider any unique or specific risks to the tribal community. What are the most significant hazards to the tribal community?

Loss of Power is the most significant due to severe winter weather, high winds, and heat. Are there portions of the tribal community that are more at risk for flooding and shore erosion than other portions? GTB Eyaawing Museum and Natural Resource Building in Leelanau County are located on the shoreline of Grand Traverse Bay and have a risk of soil erosion and flooding due to high winds and severe weather events. Are portions of the tribal community more at risk for wildfires than other areas? Yes, all GTB properties are located in areas surrounded by trees, power lines or in areas not easily accessible to fire hydrants.

2. What are the tribal community's most significant assets and what is the tribal community doing to protect these assets? The current annex indicates that the tribal community has assets including 76 office buildings, a marina, a museum and other facilities. What are the most significant risk to these assets and what is the tribal community doing to protect these properties from damage associated with storms, floods, and other hazards?

The Medicine Lodge is an integral part of the GTB infrastructure providing medical, dental, and mental health services to the community. The GTB Police Department and 911 Dispatch is located at the facility and provides 24/7 police protection and emergency services to the surrounding communities (native and non-native).

Finally, the GTB Communications Department and IT Services are housed in the basement, and are vital to providing community information, tribal phone lines, and computer back-up to the GTB Fileserver. GTB has tried annually for years to obtain generators and is unable to obtain adequate funding resources to power the entire building in the event of power loss to the police department and medical clinic and emergency operations center and IT Dept for 25,240 square feet (two floors) of building space.

GTB Housing units in the six county service area has 153 Total Units listed below:

4 low-income in Antrim County	- 5 Tribal Housing Units in Antrim County
1 Market Rental in Antrim County	
8 low-income in Benzie County	- 18 Tribal Housing Units in Benzie County
10 Market Rentals in Benzie County	
13 low-income in Charlevoix County	
87 low-income in Leelanau County	- 117 Tribal Housing units in Leelanau County
11 Mutual Help in Leelanau County	
19 Market Rentals in Leelanau County	

3. Is the tribal community doing anything to protect special cultural sites or sacred sites and do these sites have any unique vulnerability?

The six cultural/historical sites are surrounded by trees which creates vulnerabilities to severe winter weather, thunderstorms, high winds and wildland fires.

1-Museum/Tribal artifacts – Offices – Leelanau County – Museum on G.T. Bay in Peshawbestown (soil erosion, severe winter weather, thunderstorms, high winds, wildland fire)

1-Historic Burial Site-Pow-Wow Grounds on Reservation – Leelanau County – (wildland fire, winter weather, soil erosion)

1-Youth Building-Pow-Wow Grounds-Campgrounds- Leelanau County – (wildland fire, winter weather, soil erosion)

1-Kateri Tekakwitha Church-Community Church – Leelanau County – (wildland fire, winter weather, soil erosion)

1-Kewadin Indian Church-Cemetery -Kewadin, MI – (wildland fire, winter weather, soil erosion)

1-Northport Indian Mission Church-Cemetery-Northport, MI- (wildland fire, winter weather, soil erosion)

4. Does the tribal community have special population groups (e.g. small children) who may be more vulnerable in the event of a tornado or power outage and how is the tribe planning to respond to these vulnerable populations in the event of a disaster?

The GTB has 153 tribal housing homes on the Reservation in Peshawbestown with a Benodjenh Day Care/Head Start facility near the Pow-Wow Grounds and an Elders Complex with 16 apartments. This does not include privately owned homes, apartments and residential homes in Peshawbestown.

The Benzie Office and Strongheart Civic Center are currently designated as Red Cross Shelters even though neither facility has generators to support the facility during power outages. The addition of the backup generators at Benzie, Strongheart Civic Center, Medicine Lodge, and Charlevoix Office will enable them to be designated as Red Cross Shelters. The GTB Emergency Operations Center is in the GTB Public Safety Department, which is located in the lower level of the Medicine Lodge. The Medicine Lodge has a limited capacity small generator to support only the IT Dept in the basement and two rooms in the Tribal Police Department.

Generators are needed to support the entire GTB Medicine Lodge building to enable full-services for the GTB Tribal Police Department, Communications, IT Department, and Health and Dental Clinics, and tribal emergency operations center. The GTB is in need of generator support as back-up power to assist vulnerable populations during power outages, natural disaster, or other emergencies.

Community Emergency Shelters

Currently, the Strongheart Civic Center in Peshawbestown (18,173 sq. ft.), and the Benzie Community Office in Benzonia (10,424 sq. ft., located 50 miles from the reservation) are both certified Red Cross shelters; the Red Cross of Northwest Michigan, serving Benzie, Grand Traverse, Kalkaska, and Leelanau Counties, may utilize the premises in the event of a natural disaster or community emergency. However, neither of these buildings have a generator, so their accessibility is limited.

A copy of the agreement between the American Red Cross of Northwest Michigan and the Grand Traverse Band of Ottawa and Chippewa Indians is located in the GTB Emergency Management Office. The tribal community office in East Jordan (Charlevoix County) is by far the outermost of the tribal facilities; its location is 70 miles from the reservation. The Charlevoix Community Office can hold up to 84 community members and is 3,046 square feet of building space. There currently is not a generator available for this building, nor is it designated a Red Cross Shelter.

GTB will pursue an agreement with the Red Cross of Northern Lower Michigan, serving Antrim, Charlevoix, Cheboygan, and Emmet counties once a generator is in facility. This action could potentially leverage a previously unidentified resource for 274 tribal members in Antrim and Charlevoix counties. Maps of the GTB reservation and trust lands are attached as reference.

What is the tribal community doing to create an environment that is safer for special populations—the elderly, young children, persons with disabilities, etc..?

The GTB has six tornado shelters in the six county service areas that will hold approximately 20 people each with three tornado shelters in Peshawbestown, and one shelter each at Antrim, Benzie and Charlevoix tribal communities (satellite offices).

In addition, there is one tornado siren located at the Pow-Wow Grounds in Peshawbestown in Leelanau County which has a limited sound range for the immediate area (within sound of Benodjenh Day Care Center and Strongheart Center) and does not reach GTB

Housing/residents over a ¼ mile range.

Tornado Shelters	Location	Address	Longitude/Latitude
Peshawbestown - Elder's	West side of Elder's Complex (behind complex)	11201 Ki-Dah-Keh Drive - behind	45° 01' 13N – 085° 37' 53W
Peshawbestown - Elder's	East side of Elder's Complex (near cul-de-sac in front)	11201 Ki-Dah-Keh Drive – front	45° 01' 10N – 085° 37' 50W
Peshawbestown – Elder's	Peshawbestown Road near weather monitoring station	2809 NW Bay Shore Drive .09 mi south of Putnam Rd – West side	45° 01' 43N – 085° 37' 40W
Antrim	Antrim near playground area	Cherry Avenue, Kewadin – Wingash-Mikun, Rapid City	45° 12' 32N – 085° 11' 01W
Benzie	Benzie Community Center near pow-wow grounds	7282 Hoadley Road, Benzonia	44° 35' 21N – 086° 05' 34W
Charlevoix	Charlevoix Community Center near playground area	10085 Wa-Ba-Noong-Mi-Kun	45° 12' 33N – 085° 11' 03W

Tribal Capabilities for Hazard Mitigation

- 1. Does the tribal community have any existing laws, policies, regulations that will help prevent or reduce losses in the future? For example, does the tribe administer flood plain zoning?**

We have a statutory code that addresses some of the hazard mitigation areas in the context of governmental operations e.g., GTB has a fire and police statutes that delegate the hazard response and mitigation to those departments and those departments have implemented policies and procedures to address hazard mitigation. As a general proposition, if tribal statutes do not specifically address a subject matter area, then the responsible tribal department refers to State statutory law for guidance.

The tribe has adopted state zoning to address flood plain management. In addition, land development programs funded by federal statutes or agencies require the application of tribal, state or federal statutes and regulations to address hazard mitigation. Though the tribe does not a specific flood plain zoning regulation, the tribe would look to parallel state and federal law to address an issue related to flood plain matters. Does the tribe have rules about altering wetlands? The Tribe follows state and federal law on wetlands management. Does the tribe have any rules about building in areas with steep slopes or eroding banks? Yes. The Tribe follows the State of Michigan soil erosion standards.

- 2. Does the tribal community have any existing laws or policies that will help it recover in the event of a disaster?**

Not specifically. The Tribe does have a Title 14 of its compiled statutory laws that include the following chapters:

- Chapter 1 Law Enforcement and Police Force
- Chapter 2 Fire and Rescue
- Chapter 3 Animal Control
- Chapter 4 Liquor Control
- Chapter 5 Food Service Ordinance
- Chapter 6 Application of Non-Tribal Law [to the extent that the tribal statutes do not address a subject matter on public safety and regulation, then the Tribes references State law as the rules for decisions]
- Chapter 7 Firearms
- Chapter 8 Hazardous Materials Releases

Tribal Capabilities to Fund Mitigation and Disaster Recovery

1. Does the tribal community have existing financial resources for mitigation activities?

The Community has existing resources as designated in its yearly budget process. FEMA's grant programs require a nonfederal match.

2. Does the tribal community have existing resources to meet this match requirement?

Yes.

3. Are there potential sources of funding for future mitigation?

Yes.

Tribal Goals, Objectives and Strategies

1. The draft plan annex needs a list of mitigation goals, objectives and strategies that are specific to the tribal community. If HMGP, PDM or FMA funds became available to the tribal communities, what would the tribal community's mitigation priorities be?

Address the need for generator support to provide emergency shelter for community residents in the GTB six county service areas, specifically, Benzie Satellite Office-Community Center, Charlevoix Satellite Office-Community Center, Strongheart Center and the Medicine Lodge in Leelanau County as back-up power to assist vulnerable populations during power outages, natural disaster, or other emergencies.

2. Can these goals and objectives be reconfirmed through public process that involves input from residents, agencies and other stakeholders?

Yes.

2. We would like to get a sense from the plan of the tribal community's top priorities and the relative ranking of the community's different mitigation objectives. If significant funding became available after an event what would the tribal community want to do first, second, third, etc..?

Priority Area 1: Severe Winter Weather.

Priority Area 2: Severe Weather (High Winds, Tornadoes).

Priority Area 3: Severe Heat.

Priority Area 4: Wild Fire.

March 2-7, 2012 the Grand Traverse Band experienced severe winter weather countywide in Leelanau and Grand Traverse Counties with heavy snow, downed trees, extreme temperatures, and loss of power for thousands of residents and businesses. Leelanau County residents had to move out of their homes in to other counties and townships until power was restored six days later in the middle of winter. The power outage affected all businesses and community members creating hardships and safety issues. Since then GTB has

experienced numerous power outages, most recently August 2-5, 2015. Severe high winds went through Leelanau and Grand Traverse counties toppling trees, blocking roads and loss of power for thousands of residents creating millions of dollars in damage to area homes and businesses. Both Leelanau County and Grand Traverse Counties declared local state of emergencies due to the power outage.

The Grand Traverse Band identified several top natural hazard priority areas across all counties in the tribe’s service areas: extreme winter weather, severe high winds and thunderstorms countywide. The first mitigation strategy is to establish emergency shelters with generators to reduce loss of life, prevent injury and maintain vital services for communications for emergency services, shelters, public warning systems and safety of community members and businesses.

There are approximately 650 residents in tribal housing; this does not factor in the hundreds of homeowners and families who reside on/in the reservation and trust lands. All housing residents and their families in the surrounding communities are primarily residential, and at least 51% of the residents are low-to-moderate income persons.

There are 4,179 members of the Grand Traverse Band, of which 1,891 members and their dependents reside on the reservation lands or within the GTB service area; the county breakdown is as follows:

County	GTB Members	County	GTB Members
Antrim	86	Grand Traverse	675
Benzie	157	Leelanau	761
Charlevoix	188	Manistee	24

How will the tribal community implement the plan?

1. What staff, what agency, what commission will take the lead in implementing the plan?

The GTB Emergency Management Office and Emergency Management Coordinator/Public Safety Department Manager will take the lead in implementing the plan in collaboration with the GTB Local Planning Team.

2. Will the designated staff have the authority to work with agencies like public works, police and fire, and other stakeholders to promote actions that will prevent future losses?

Yes. The GTB Public Safety Department Manager/Emergency Management Coordinator (EMC) is responsible for GTB Public Safety Department 2 consisting of the GTB Tribal Law Enforcement, GTB Fire/Rescue Department, and GTB Emergency Management Office. In addition, the GTB EMC participates on monthly Department Manager Meetings facilitated by the GTB Tribal Manager.

3. What is the time frame for implementing the tribe’s top mitigation priorities?

GTB would like to implement the top mitigation priorities within the next 5 years if funding resources were available to complete the priorities.

4. How will the tribe work to keep the plan up-to-date?

The GTB Emergency Management Coordinator will maintain the GTB Natural Hazard Mitigation Plan – Tribal Annex on an annual basis. The beginning of the fourth year of the approved GTB Tribal Annex will be the basis to update the GTB Tribal Plan in collaboration with GTB Tribal Departments so the plan will be renewed before the 5-Year expiration date to continue to keep the plan updated.

5. How will tribal staff evaluate the potential successes and failures of the tribal plan?

GTB Emergency Management Office will review the GTB Tribal Annex on a quarterly basis and bring issues to the GTB Local Planning Team, which meets on a bi-monthly basis or more often when necessary. In addition, the GTB Emergency Management Office collaborates with the Tribal Managers Office and Office of Planning and Evaluation Department (OPDE – Grantwriting Department) monthly to determine funding opportunities. The GTB Tribal Government also conducts annual budget meetings held in the third and fourth quarters of the fiscal year to determine potential funding requests for the next fiscal year.

The Grand Traverse Band of Ottawa and Chippewa Indians (GTB, Grand Traverse Band) became restored as a federally recognized Indian tribe on May 27, 1980 and achieved self-governance status on October 1, 1992. The Grand Traverse Band has a six-county service area located in rural northwest lower Michigan, which includes Antrim, Benzie, Charlevoix, Grand Traverse, Leelanau, and Manistee Counties.

The administrative offices are located in the village of Peshawbestown in Leelanau County, with satellite offices located in Benzie, Charlevoix, and Grand Traverse Counties. Maps of the service area and satellite offices are attached. The Grand Traverse Band has 4,170 enrolled members, with 1,891 (45.35%) residing in the GTB six-county Service Area as follows: Antrim (86, or 4.55%), Benzie (157, or 8.30%), Charlevoix (188, or 9.94%), Grand Traverse (675, or 35.70%), Leelanau (761, or 40.24%), and Manistee (24, or 1.27%), (GTB Community Profile, 11/19/2015).

Most GTB services are provided to any Native American residing in the GTB Service Area. While American Indian and Alaska Native persons make up 0.9% of the population of the United States and 0.6% of the population of Michigan, all counties in the GTB six-county Service Area meets or exceeds the percentage of Native Americans in the state. All counties in the GTB Service Area are designated as rural by the U.S. Department of Agriculture.

Most GTB services are provided to any Native American residing in the six-county service area, a total of 5,108 people (U.S. Census, 2010 Population). The Grand Traverse Band of Ottawa and Chippewa Indians is listed as an Indian entity recognized and eligible to receive services from the United States Bureau of Indian Affairs in the Federal Register, Vol. 80, No. 9, Wednesday, January 14, 2015. Michigan is the only state in the nation to report an overall population loss, but shows growth in 5 of the 6 GTB Service Area counties. The 2010 Census also indicates that Michigan saw a 6% growth in the Native American population; the GTB Service Area saw an 8% increase of Native Americans.

The Grand Traverse Band is governed by seven elected Tribal Council officials that serve 4-year staggered terms. There are thirteen Departments of the GTB government that manage unique programs with administrative competency, diplomatic skills, and a unique sensitivity to the Indian community. These various Departments are under the leadership of an appointed Tribal Manager and full-time Department Managers and include: Department 1 (Spirit Moon) Cultural Services; Department 2 (Bear Moon) Public Safety; Department 3 Tribal Management; Department 4 (Sugar Moon) Facilities Management; Department 5 (Snow Crust Moon) Conservation; Department 6 (Blossom Moon) Membership; Department 7 (Berry Moon) Human Services;

Department 8 (Rice Moon) Health Services; Department 9 (Changing Leaves Moon) Tribal Court; Department 10 (Falling Leaves Moon) Natural Resources; Department 11 (Freezing Moon) Regulatory; Department 12 (Little Spirit Moon) Education; and Department 13 (Broken Snow Shoe Moon) Legal. Please see the attached organizational chart.