Town of Mina

Town Board Packet

September 8, 2022 Meeting

#2 of 2

Chautauqua County HMP Update - Mina (T) Interview

Fri, Sep 2, 2022 2:51 pm

From: Rebecca A. Reohr

To: me and 3 recipients

Cc: Jayme Breschard and 4 recipients

1 Attachments

(T) Mina Interview Sheet.pdf - (808kB)

Good afternoon,

Thank you for participating in the interview to update the Town of Mina's annex for Chautauqua County's new Hazard Mitigation Plan. As promised during the interview, attached is a copy of the interview sheet that we filled out together. There are a few cells/text highlighted in yellow that still need to be filled in. Once you have filled in the required information, please send the final copy back to me. If there is anything on the worksheet that you notice is incorrect or if there are any changes you would like made please feel free to make edits to the document.

As requested in the interview, here is the link to the website we got the severe storm event records from: https://www.ncdc.noaa.gov/stormevents/ (https://www.ncdc.noaa.gov/stormevents/)

If you have any questions or would like further support, I am available to provide any assistance. I look forward to hearing from you soon!

Thank you,

Rebecca Reohr

Rebecca A. Reohr
Engineer I

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Interview Template: Town of Mina

Table 1. Planning Mechanisms and Capabilities		
Planning Mechanism	**Town of Mina**	**Notes**
Plans		
Comprehensive Plan	Yes	Survey is currently out. Updating the comprehensive plan currently.
Capital Improvement Plan	Yes	Highway equipment
Economic Development Plan	No	Partial – they are getting a grant from the county to do an assessment of moving fire station. They will look at economic development for down town area. Primarily for tourism.
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan	No	
Transportation Plan	No	
Stormwater Management Plan	No	Applied for a grant for an engineering study
Community Wildfire Protection	Yes or No	
Pandemic Response Plan	No	
Open Space	No	
Development Approvals		
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	**	Will provide this
Fire department ISO rating	**	May be able to provide this
Site plan review requirements	Yes	
Land Use Regulations		
Zoning ordinance	Yes	From 2020
Subdivision ordinance	Yes	
NFIP Participant/Floodplain ordinance	Yes	
Natural hazard specific ordinance	No	
Flood insurance rate maps	No	
Acquisition of land for open space and public recreation	Yes	Recently acquired land donated to the Town by the fire department (turned into a park with basketball courts, tennis courts, etc.)
Administration		
Planning Commission	Yes	
Mitigation Planning Committee	No	

Table 1. Planning Mechanisms and Capabilities		
Planning Mechanism	**Town of Mina**	**Notes**
Maintenance programs to reduce risk	Yes	Insurance company – NYMIR – recommend how to reduce risks and the town implements them
Mutual aid agreements	Yes	
Staff		
Chief Building Official	Yes	
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	No	
GIS Coordinator	No	
Technical Abilities		
Warning systems/services	Yes	Fire department has sirens, gates, pagers, etc.
Hazard date and information	Yes	Fire dept. logs hazard dates and information
Grant writing	No	
HAZUS analysis	No	
Funding Resources		
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric services	No	
Impact fees for new development	No	
Storm water utility fee	No	
Incur debt through general obligation bonds and/or special tax bonds	Yes	
Incur debt through private activities	No	
Community Development Block Grant	Yes	
Other federal funding programs	Yes	USDA Rural Development
State funding programs	YES	CHIPS funding, AIM funding, DEC
Programs/Organizations		
Local citizen groups or non-profit organizations focused on environmental protection emergency preparedness, access and functional needs	Yes	Fire department – focuses on emergency preparedness, Findley Lake Watershed Foundation
Ongoing public education or information program	Yes	Library, Community Connections, Historical Society

Table 1. Planning Mechanisms and Capabilities		
Planning Mechanism	**Town of Mina**	**Notes**
Natural disaster or safety related school programs	N/A (no schools in the Town)	
Storm Ready certification	No	
Firewise Communities certification	No	
Public-private partnership initiatives addressing disaster-related issues	Yes	Partnership with the fire department. Shared service with neighboring highway departments.

Table 2. Emergency Shelters						
Facility	**Address**	**Owner/ Occupant**	**Support medical needs?**	**ADA Compliant?**	**Pets accepted?**	**Notes**
Mina-Findley Lake Community Center	2883 North Rd Findley Lake, NY 14736			Yes	Yes	Total Sq Ft: 16,000 Very limited
Findley Lake United Methodist Church	2862 North Rd Findley Lake, NY 14736			Yes	Yes	Very Limited No generator
Findley Lake Volunteer Fire Department	10372 Main Street Findley Lake, NY 14736			Yes	Yes	Very Limited

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Table 3. Critical Infrastructure in the Town of Mina		
Facility Name	**Address**	**Located in Floodplain***
Community Services		
Mina-Findley Lake Community Center	2883 North Road, Findley Lake, NY 14736	No
Emergency Services		
Findley lake Volunteer Fire Department	10372 Main St	No
Federal Facilities		
Findley Lake Post Office	Main Street	Yes or No
Schools		
County and Municipal Facilities		
*Based on HAZUS-modeled 100-year and 500-year floodplains		

Table 4. Severe Storm Event Records for the Town of Mina					
Event Type	**Date**	**Magnitude**	**Estimated Property Damage**	**Estimated Crop Damage**	**Description of Event**
Thunderstorm Wind	4/12/1996		$40000	$0	Severe thunderstorms crossed the area during the evening hours. The thunderstorm winds downed power lines and several dozen trees. One camper trailer was destroyed and two others damaged. A boat dock was also ruined.
Thunderstorm Wind	8/15/1996		$8000	$0	
Thunderstorm Wind	4/14/2019	50	$1000	$0	A dynamic low pressure system tracked just to the north of the area with low CAPE but a strongly sheared environment developing in the warm sector of this system. This encompassed the southern portions of the area. Strong low level speed and direction shear was present with wind speeds up to 65 knots off the ground. A line of storms developed along a pre-frontal trough and moved across the region during the evening hours. Initial storms were further supported by a mid-level low that resulted in multiple hail reports. This area of storms evolved into a linear structure with multiple waves of stronger wind moving northward along the boundary. This line began producing wind damage with periods of diffuse rotation near these waves.
Thunderstorm Wind	5/23/2019	50	$1000	$0	A line of strong to severe convection which developed well upstream across the Midwest States overnight continued east across Ohio, Lake Erie, and southern Ontario during the morning hours. These storms developed along and were supported by a pre-frontal trough and initial shortwave. The line of storms developed a well defined MCV noted in radar and satellite imagery. The line of storms had a long history of wind damage from Indiana all the way through northern Ohio. The line looked very healthy on radar all the way to the east end of Lake Erie, then it rapidly weakened as it came onshore into western New York. Several strong elevated cores also briefly developed along the line, one over eastern Lake Erie, and the other over northwestern Cattaraugus County. ||The second round of strong thunderstorms developed over Lake Ontario between a pre-frontal trough and an approaching cold front. As the storms approached the eastern Lake Ontario region, the storms morphed into a fairly impressive line that exhibited lightning jumps within the individual cells.
		Total	**$50,000**	**$0**	

Table 4. Severe Storm Event Records for the Town of Findley Lake					
Event Type	**Date**	**Magnitude**	**Estimated Property Damage**	**Estimated Crop Damage**	**Description of Event**
Thunderstorm Wind	6/8/2003	60	$15000	$0	Thunderstorms that crossed the western southern tier region during the evening hours produced damaging winds, downing trees and power lines. Power lines were reported down in Findley Lake, Forestville, Arkwright, Hamburg and East Aurora. Trees were reported down in Silver Creek, Ellicottville, and Pomfret.
Hail	8/16/2003	0.75	$5000	$0	A pair of cold fronts crossed Lake Erie and the western souther tier. In Barcelona, the thunderstorm winds downed trees and power lines. Chautauqua County Sheriffs reported 3/4 inch hail at Findley Lake.
Thunderstorm Wind	6/8/2003	60	$15000	$0	Thunderstorms that crossed the western southern tier region during the evening hours produced damaging winds, downing trees and power lines. Power lines were reported down in Findley Lake, Forestville, Arkwright, Hamburg and East Aurora. Trees were reported down in Silver Creek, Ellicottville, and Pomfret.
Thunderstorm Wind	8/7/2008	50	$15000	$0	Thunderstorms that developed in an unstable air mass during the afternoon hours were enhanced by lake breezes. A thunderstorm over Chautauqua County produced downburst winds estimated near 60 mph that downed trees and power lines in Findley Lake. The heavy rain that accompanied the storm resulted in flash flooding. Route 426 was closed due to flooding. Elsewhere, thunderstorms produced hail up to one inch in Niagara Falls, Niagara County and just outside of North Osceola, Lewis County.
Flash Flood	8/7/2008		$20000	$0	Thunderstorms that developed in an unstable air mass during the afternoon hours were enhanced by lake breezes. A thunderstorm over Chautauqua County produced downburst winds estimated near 60 mph that downed trees and power lines in Findley Lake. The heavy rain that accompanied the storm resulted in flash flooding. Route 426 was closed due to flooding. Elsewhere, thunderstorms produced hail up to one inch in Niagara Falls, Niagara County and just outside of North Osceola, Lewis County.
Thunderstorm Wind	9/7/2010	44	$12000	$0	A cold front crossed the western New York during the evening hours. A thunderstorm accompanying the front produced wind gusts to 60 mph. The winds downed trees and wires in Findley Lake in Chautauqua county and Alabama, Pembroke and Darien in Genesee county.

Table 4. Severe Storm Event Records for the Town of Findley Lake					
Event Type	**Date**	**Magnitude**	**Estimated Property Damage**	**Estimated Crop Damage**	**Description of Event**
Thunderstorm Wind	5/23/2011	52	$15000	$0	Thunderstorms developed in warm, humid air as a cold front approached the region during the afternoon hours. The thunderstorms produced wind gusts measured to 52 knots. The thunderstorm winds downed trees and power lines in Findley Lake, Clymer, Panama and Busti. Training thunderstorms brought heavy rains with radar estimated rainfall rates of two inches per hour. The Village of Lakewood suffered flash flooding. Numerous streets were closed by high water and basements were flooded.
Thunderstorm Wind	6/12/2015	50	$10000	$0	Two lines of showers and thunderstorms moved across the region during the afternoon and early evening hours. The strong thunderstorms produced damaging winds that downed trees and powers lines across the western southern tier and Finger Lakes region.
Hail	4/14/2019	2	$0	$0	A dynamic low pressure system tracked just to the north of the area with low CAPE but a strongly sheared environment developing in the warm sector of this system. This encompassed the southern portions of the area. Strong low level speed and direction shear was present with wind speeds up to 65 knots off the ground. A line of storms developed along a pre-frontal trough and moved across the region during the evening hours. Initial storms were further supported by a mid-level low that resulted in multiple hail reports. This area of storms evolved into a linear structure with multiple waves of stronger wind moving northward along the boundary. This line began producing wind damage with periods of diffuse rotation near these waves.
Thunderstorm Wind	4/14/2019	50	$1000	$0	A dynamic low pressure system tracked just to the north of the area with low CAPE but a strongly sheared environment developing in the warm sector of this system. This encompassed the southern portions of the area. Strong low level speed and direction shear was present with wind speeds up to 65 knots off the ground. A line of storms developed along a pre-frontal trough and moved across the region during the evening hours. Initial storms were further supported by a mid-level low that resulted in multiple hail reports. This area of storms evolved into a linear structure with multiple waves of stronger wind moving northward along the boundary. This line began producing wind damage with periods of diffuse rotation near these waves.

Table 4. Severe Storm Event Records for the Town of Findley Lake					
Event Type	**Date**	**Magnitude**	**Estimated Property Damage**	**Estimated Crop Damage**	**Description of Event**
Thunderstorm Wind	4/25/2022	51	$2000	$0	A cold front advanced slowly towards western New York in the afternoon and evening with convection focused along a pre-frontal trough and an outflow boundary ahead of the main cold front. Large scale support was weak, with the mid-level trough and upper level jet lagging well behind the cold front, which yielded the bulk of the large scale ascent above the cold, post-frontal air. A broken line of convection developed over northern Ohio and lasted for a number of hours as it crossed northeast Ohio, northwest Pennsylvania, and eventually entered western New York. A very narrow axis of modest instability developed just ahead of the line and advected east into western New York. Storms that fired harnessed this instability as it intersected the lake breeze boundary to the east of Lake Erie. This allowed for multiple bowing segments to form over the western Southern Tier. These cells eventually were able to move east of the lake breeze boundary and formed a quasi-linear convective system that advanced toward the Genesee Valley. Multiple reports of wind damage were received, and a NWS storm survey confirmed a tornado in the Town of Alexander in Genesee County.
		Total	**$110,000**	**$0**	

Table 5. Hazard Analysis Criteria						
Score	**Extent**	**Onset**	**Impact**	**Frequency**	**Total Score**	**Overall Vulnerability**
1	One location	Days of warning	Minor damages/ injuries	Rare	4 to 5	Low
2	Several locations	Hours of warning	Moderate damages/ injuries	Infrequent	6 to 8	Moderate
3	Large area	No warning	Severe damages/ injuries	Regular	9 to 12	High

Table 6. Hazard Vulnerability by Event						
Hazard Event	**Extent**	**Onset**	**Impact (Damages and Injury)**	**Frequency**	**Overall Vulnerability**	**Jurisdiction Rank**
Drought	2	3	2	1	8	4
Flood	1	2	2	2	7	5
Extreme Temperatures (Heat Wave, Cold Wave)	3	1	2	2	8	4
Ice Jam	1	2	1	2	6	6
Ice Storm	3	1	3	3	10	2
Severe Thunderstorm/Windstorm	3	1	3	2	9	3
Severe Winter Storm	3	2	3	3	11	1

Table 7. Hazard Mitigation Action Progress *Town of Mina*				
Proposed Mitigation Action	**Hazard(s) Mitigated**	**Goals and Objectives Met**	**Implementing Agency**	**Status**
Design and build municipal sewage system in area of Findley Lake	Quality of lake in terms of excess nutrients	Goal 1 Objective 1-1 Goal 2 Objectives 2-1 and 2-4 Goal 4 Objective 4-2 Goal 6 Objectives 6-4 and 6-5	Town Administration	Under review – had an engineering study completed. Have not made a decision if they will be moving forward with it.

Table 7. Hazard Mitigation Action Progress *Town of Mina*				
Proposed Mitigation Action	**Hazard(s) Mitigated**	**Goals and Objectives Met**	**Implementing Agency**	**Status**
Repair Findley Lake Dam structure. Fixing current holes and strengthening against further damage from storm events.	Erosion underneath road causing sinkholes	Goal 1 Objective 1-1 Goal 2 Objective 2-4 Goal 4 Objectives 4-2 and 4-4 Goal 6 Objectives 6-4 and 6-6	Town Administration	Dam was repaired. There are still some issues with it. The discharge from the dam under the road is still an issue.

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Drought Emergency Plan**
Risk Vulnerability	
Hazard of Concern:	**Drought**
Description of the Problem:	**Many of the tax payers live around Findley lake and the lake levels were extremely low during boating season. This impacted several community members wells and therefore, they were unable to get clean drinking water. The town needed to bring in 7,000 gallons a day of water for the cows.**
Proposed Action	
Description of the Solution	**Develop a drought emergency plan. Transport in freshwater for community members that do not have clean water during droughts.**

Is this project related to a Critical Facility? **Yes** **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Medium**	**Estimated Benefits (Losses Avoided)**	Reduce the impact on community members (and livestock) during a drought in regard to having an adequate supply of clean drinking water.
Useful Life:	**5-10 yrs**		
Estimated Cost:	**Low**		

Plan For Implementation			
Priority (High, Medium, Low)	**Medium**	**Responsible Organization:**	**Town**

Desired Timeframe for Implementation:	**1 year**	**Potential Funding Sources:**	**Pre-Disaster Mitigation Grant**
Estimated Time Required to Implement:	**3-6 months**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Educate Farmers on Soil and Water Conservation Techniques: Encourage famers to implement soil/water conservation practices, such as planting cover crops to prevent erosion; using reduced tillage to minimize soil disturbance	**Low**	**Education would be beneficial, but would need more than just education as in the past the Town needed to transport 7,000 gallons a day in for the cows.**
	Purchase Crop Insurance: Preserve economic stability during a drought by encouraging agricultural interests to obtain crop insurance	**Low**	**Would be beneficial for agriculture/crops.**

Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Beaver relocation to mitigate flooding**
Risk Vulnerability	
Hazard of Concern:	**Flooding**
Description of the Problem:	**Beaver dams keep occurring near roadsides and lead to flooding.**
Proposed Action	
Description of the Solution	**Trap beavers and get rid of the dams.**

Is this project related to a Critical Facility? **Yes** **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Low**	**Estimated Benefits (Losses Avoided)**	**Reduce repetitive flooding from existing dams.**
Useful Life:	**1-3 years**		
Estimated Cost:	**Low**		

Plan For Implementation			
Priority (High, Medium, Low)	**Medium**	**Responsible Organization:**	**Town**
Desired Timeframe for Implementation:	**Within 1 year**	**Potential Funding Sources:**	**Town Budget**

Estimated Time Required to Implement:	**A few weeks**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Improve Flood Risk Assessment: Revising and updating regulatory floodplain maps; Using GIS to map areas that are at risk of flooding; Regularly calculating and documenting the amount of flood-prone property preserved as open space;	**Low**	**It would be beneficial for the town to have up to date floodplain maps to be aware of what areas are most prone to flooding.**
	Protect Critical Facilities: Require that all critical facilities including emergency operations centers, police stations, fire department facilities be located outside of flood-prone areas; Installing/upgrading stromwater pumping stations; Building earthen dikes around flood-threatened critical facilities		**By requiring critical facilities to be located outside the flood-prone areas, it would keep them protected even if flooding continued due to the beaver dams.**

Progress Report (For Plan Maintenance)	
Date of Status Report:	
Summary of Progress:	

Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Severe Thunderstorm Plan**
Risk Vulnerability	
Hazard of Concern:	**Severe thunderstorm**
Description of the Problem:	Heavy rains speed up erosion under the state road from the dam's discharge. Two state roads come together at that location and it is how a lot of the traffic gets through the community. Very heavily travelled road. These roads lead to the historic business corridor where the tourism is.
Proposed Action	
Description of the Solution	**The state is aware of the situation and they are currently developing a plan to remedy it.**

Is this project related to a Critical Facility? Yes **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Medium**	**Estimated Benefits (Losses Avoided)**	**Reduced impact to the community during severe thunderstorm events.**
Useful Life:	**5-10 years**		
Estimated Cost:	**Medium**		

Plan For Implementation			
Priority (High, Medium, Low)	**Medium**	**Responsible Organization:**	**State**
Desired Timeframe for Implementation:	**1year**	**Potential Funding Sources:**	**Pre-Disaster Mitigation Funding**

Estimated Time Required to Implement:	**6 months**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Protect Power Lines and Infrastructure: Establish standards for all utilities regarding tree pruning around lines; incorporate inspection and management of hazardous trees into the drainage system maintenance process; Upgrade overhead utility lines; Inspect utility poles to ensure they meet specifications and are wind resistant	**Low/Medium**	**Reduce likeliness of power outages and protect community members safety**

Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	
Risk Vulnerability	
Hazard of Concern:	**Extreme Temperatures**
Description of the Problem:	**The Town of Mina experiences extreme temperatures relatively infrequently that have the potential to cause damage to several locations in the Town.**
Proposed Action	
Description of the Solution	Reduce Urban Heat Island Effect: Increase Tree Plantings around buildings to shade parking lots and along public rights-of-way; Encourage installation of green roofs, which provide shade and remove heat from the roof surface; Use cool roofing products that reflect sunlight and heat away from a building

Is this project related to a Critical Facility? **Yes** **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Low**	**Estimated Benefits (Losses Avoided)**	**Planting trees for shade and installing green roofs would reduce the extreme heat in several locations where**
Useful Life:	**10 years**		
Estimated Cost:	**Low-Medium**		

Plan For Implementation			
Priority (High, Medium, Low)	**Low**	**Responsible Organization:**	**Town**

Desired Timeframe for Implementation:	Within 5 years	Potential Funding Sources:	Town Budget
Estimated Time Required to Implement:	1 year	Local Planning Mechanisms to be used in implementation, if any:	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Increase Awareness of Extreme Temperature Risk and Safety: Educate citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves when extreme temperatures occur	**Low**	**Educating community members on what to do in an extreme heat event would reduce negative impacts.**
	Assist Vulnerable Populations: Organize Outreach to vulnerable populations, including establishing and promoting accessible heating or cooling centers in the community; Require minimal temperatures in housing/landlord codes; Encourage utility companies to offer special arrangements for paying heating bills; Create database to track those individuals at high risk of death, such as the elderly, homeless, etc.	**Low**	**Establishing cooling centers in the community would be very beneficial so that vulnerable populations have a place to go to cool down during extreme heat events.**

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Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Ice Storm Awareness Campaign**
Risk Vulnerability	
Hazard of Concern:	**Ice Storm**
Description of the Problem:	**The Town of Mina experiences Ice Storms frequently and they have the potential to cause power outages, damage the town's infrastructure and critical facilities.**
Proposed Action	
Description of the Solution	Increase Public Awareness of the Risk that Ice Storms Pose: Inform Citizens about ice storm events and how to prepare for such events, particularly with respect to loss of electricity

Is this project related to a Critical Facility? Yes **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Low**	**Estimated Benefits (Losses Avoided)**	**Educating the public about risks of ice storms can help keep them safe during an ice storm event.**
Useful Life:	**1 year**		
Estimated Cost:	**Low**		

Plan For Implementation			
Priority (High, Medium, Low)	**Low**	**Responsible Organization:**	**Town**
Desired Timeframe for Implementation:	**Within 1 year**	**Potential Funding Sources:**	**Town Budget**

Estimated Time Required to Implement:	**3-6 months**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Assist Vulnerable Populations: Develop a buddy network of concerned citizens who will check in on elderly, handicapped, low-income, or non-English speaking citizens; create a database to track those individuals at high risk of death	**Low**	**Ensure vulnerable populations are safe in an ice storm event.**
	Purchase Backup Generators: Ensure that nursing homes and other critical assets that require such emergency power sources are equipped with backup generators	**Low**	**Critical facilities would not be impacted as much during a power outage if they have backup generators.**

Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Ice Jam Early Warning System**
Risk Vulnerability	
Hazard of Concern:	**Ice Jam**
Description of the Problem:	**Ice jams occur relatively infrequently in the Town of Mina.**
Proposed Action	
Description of the Solution	Establish an Early Warning System: Alert appropriate authorities and residents of ice jams through the use of ice motion detectors

Is this project related to a Critical Facility? **Yes** No

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**Low**	**Estimated Benefits (Losses Avoided)**	**Emergency personnel and community members would be alerted if there was an ice jam.**
Useful Life:	**5-10 years**		
Estimated Cost:	**Low**		

Plan For Implementation			
Priority (High, Medium, Low)	**Low**	**Responsible Organization:**	**Town**
Desired Timeframe for Implementation:	**Within 5 years**	**Potential Funding Sources:**	**Town Budget**

Estimated Time Required to Implement:	**A few days**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change from existing conditions**
	Install Floating Structures or Ice Control Structures Upstream from location where Ice Jam Usually Occur: Ice booms; Ice Cutting; Trenchers; Channeling plow; Water jet and thermal cutting; Hole Cutting; Ice Breakers; Air bubbler and flow systems	**Low**	**Ice jams do not occur in the Town of Mina frequently enough to install floating structures for ice jams.**
	Monitor Streams for Ice Jams to Minimize Damage to Infrastructure: Establish a regular schedule to monitor and report conditions on a monthly basis during the appropriate months	**Low-medium**	**Ice jams do not occur in the Town of Mina frequently enough to install ice motion detectors.**

Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	

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Chautauqua County HMP Update Mitigation Action Worksheet

Jurisdiction _____

Mitigation Action	
Project ID:	
Project Name:	**Severe Winter Storm Preparedness**
Risk Vulnerability	
Hazard of Concern:	**Severe Winter Storm**
Description of the Problem:	**Severe winter storms occur frequently in the Town of Mina and cause damaging impacts.**
Proposed Action	
Description of the Solution	Conduct Winter Weather Risk Awareness Activities: Inform the public about severe winter weather impacts; Produce and distribute family and traveler emergency preparedness information about severe winter weather hazards; Include safety strategies for severe weather in driver education classes and materials

Is this project related to a Critical Facility? **Yes** **No**

(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater)

Level of Protection:	**High**	**Estimated Benefits (Losses Avoided)**	**The public will be informed about severe winter storms and how to stay safe during a severe winter storm event.**
Useful Life:	**1 year**		
Estimated Cost:	**Low**		

Plan For Implementation			
Priority (High, Medium, Low)	**High**	**Responsible Organization:**	**Town**
Desired Timeframe for Implementation:	**Within 1 year**	**Potential Funding Sources:**	**Town Budget**

Estimated Time Required to Implement:	**3-6 months**	**Local Planning Mechanisms to be used in implementation, if any:**	

Three Alternatives Considered (Including Not Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0.00	**No change in existing conditions**
	Reduce Impacts to Roadways: Plan for an maintain adequate road and debris clearing capabilities; Use snow fences or "living snow fences" to limit blowing and drifting of snow over critical roadway segments; Install roadway heating technology to prevent ice/snow buildup	**Low**	**Reduce the travel hazards during severe winter storms.**

Progress Report (For Plan Maintenance)	
Date of Status Report: **Summary of Progress:**	
Evaluation of the Problem and/or solution:	