

Appendix E

Stakeholder and Public Outreach Documentation

Tioga County is updating its Hazard Mitigation Plan!

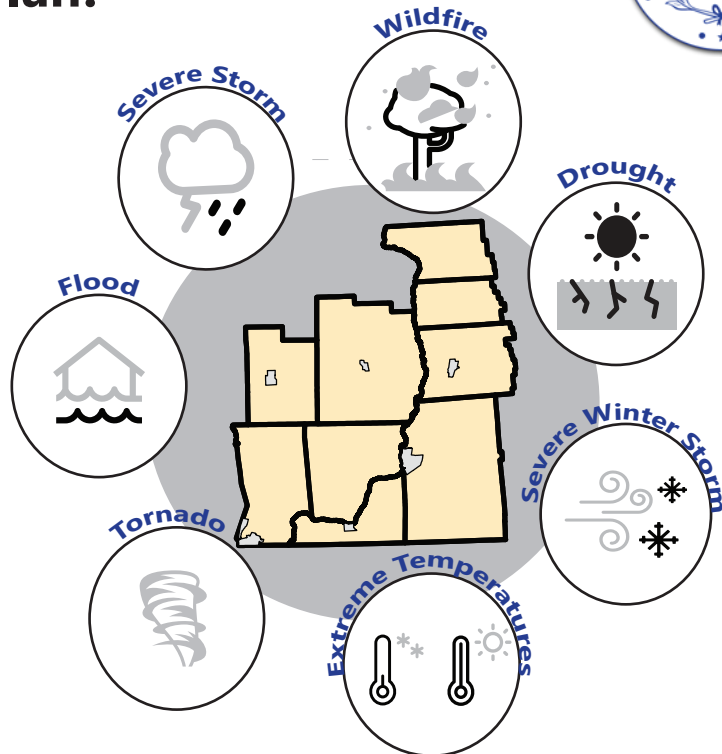


How can you Participate?

Contact your local municipality or Barton & Loguidice at astone@bartonandloguidice.com.

- Learn about the Plan
- Share ideas that can help reduce the risk of hazards

Contact the Office of Emergency Services for information about future public meetings



What is a Hazard Mitigation Plan?

A hazard mitigation plan identifies and evaluates risks and vulnerabilities associated with natural hazards and disasters. This process aims to reduce the loss of life and property by minimizing the impact of natural hazard events. Hazard mitigation planning leads to the development of short-term and long-term strategies to reduce and manage risk. Mitigation strategies identified in an updated hazard mitigation plan may be eligible for grant funding for implementation.

Benefits of Hazard Mitigation



Protects public safety & prevents loss of life and injury



Prevents damage to your community's unique assets



Reduces harm to existing & future development



Minimizes operational downtime & accelerates recovery



Reduces the cost of disaster response & the risk of exposure



Maintains community & strengthens social connections

Tioga County Hazard Mitigation Plan Update 2024 *Jurisdictional Team Kick-off Meeting*

Tioga County Public Safety Building
Wednesday, May 3, 2023
1:30-2:30pm

Agenda

Welcome and Introductions

1:30 – 1:40: Planning Participants Introduction

- Core Planning Group, Steering Committee, Jurisdictional Team

1:40 – 1:45: Hazard Mitigation Overview

- Requirements of the Disaster Mitigation Act of 2000

1:45 – 1:50: Hazard Mitigation Plan Update

- Plan components and new FEMA requirements

1:50 – 1:55: Past Hazard Profiles

- Review of hazards profiled in the 2018 HMP

1:55 – 2:10: Polling Exercise

- Multiple choice and open response questions

2:10 – 2:15: Jurisdiction Participation

- Annex updates

2:15 – 2:20: Why Participate?

- Risk Reduction
- FEMA assistance programs

2:20 – 2:25: Jurisdiction Participation Milestones

- Progress checks

2:25 – 2:30: Project Schedule and Next Steps

- Planning process timeline



Tioga County Hazard Mitigation Plan – 2023 Update

Agenda

1. Planning Participants
2. Hazard Mitigation Planning Overview
3. Hazard Mitigation Plan Update
4. Past Hazard Profiles
5. Polling Exercise
6. B&L Approach
7. Jurisdiction Participation
8. Why Participate?
9. Jurisdiction Participation Milestones
10. Project Schedule
11. Next Steps



(Gaylord Stream Crossing Replacement project. Owego, NY)



Planning Participants

Core Planning Group

The Core Planning Group will take lead on the development of the Hazard Mitigation Plan update for Tioga County. The Core Planning Group is composed of staff from several county departments, members of the consultant team, and representatives from New York State's Department of Homeland Security and Emergency Services (DHSES). The Core Planning Group will meet monthly during the hazard mitigation planning process.

Steering Committee

The Steering Committee will serve as an advisory board overseeing the development of Tioga County's Hazard Mitigation Plan update. The committee is composed of the Core Planning Group and several other key stakeholders within the County, and it will meet on an as-needed basis during the development of the plan update.

Jurisdictional Team

The Jurisdictional Team will be composed of two representatives from each jurisdiction within Tioga County. The Jurisdictional Team will meet with the Core Planning Group prior to the two public meetings and after other project milestones have been achieved.

Hazard Mitigation Planning

- Hazard mitigation planning reduces the risk that natural hazards pose to critical community assets. Through the implementation of long and short-term strategies hazard mitigation can limit the number and severity of injuries that occur from hazard events.
- The Disaster Mitigation Act of 2000 requires state, local, tribal and territorial governments to have a FEMA-approved mitigation plan in order to be eligible for mitigation project funding:
 - The Plan needs to be updated every 5 years
 - Follow the 2022 NYS Hazard Mitigation Planning Standards
 - FEMA 2023 Policy Guidance



Hazard Mitigation Plan Update

Tioga County received a grant from FEMA to update the 2018 Multi-Jurisdictional Hazard Mitigation Plan.

Plan Components:

- County Profile
- Planning Process
- Risk Assessment
- Hazard Profiles
- Hazard Vulnerability Assessment
- Mitigation Goals and Strategies
- Plan Implementation, Monitoring, and Maintenance
- Jurisdictional Annex for each municipality

New Elements to Consider

- Include representatives from a broad range of sectors, such as community lifelines and non-profits that support underserved communities.
- Consider the effects of climate change and other future conditions.
- Address existing mitigation plan requirements of the HHPD grant program to include all dam risks.
- Describe building codes and land use and development ordinances.

Past Hazard Profiles

In 2018, Tioga County prioritized the following hazards:

1. Drought
2. Flood
3. Extreme Temperature
4. Severe Storm



Have you participated in past Tioga County HMP updates?

Yes

No

What hazard has the greatest impact in your municipality? (Damage to property, crops, people)

Flooding

Severe Thunderstorm/Windstorm/Hail

Tornado

Ice Storm

Extreme Temperatures (Heat/Cold Wave)

Ice Jam

Severe Winter Storm

Drought

Earthquake

Wildfire

Which hazards occur the most often in your municipality?

Flooding

Severe Thunderstorm/Windstorm/Hail

Tornado

Ice Storm

Extreme Temperatures (Heat/Cold Wave)

Ice Jam

Severe Winter Storm

Drought

Earthquake

Landslide

Wildfire

What are the hazards that affect the largest area of your municipality?

Flooding

Severe Thunderstorm/Windstorm/Hail

Tornado

Ice Storm

Extreme Temperatures (Heat/Cold Wave)

Ice Jam

Severe Winter Storm

Drought

Earthquake

Landslide

Wildfire

Which residents within your community in Tioga County are most vulnerable to natural hazards?

Which of the following infrastructural assets and services within your municipality are most vulnerable to natural hazards?

Hospitals and medical facilities

Police and fire stations

Emergency operations centers

Evacuation shelters

Dams

Water and wastewater

Power utilities

Transportation (roads, railways, waterways)

Communication systems/centers

Are there any specific locations, facilities, or resources in your municipality that you are most concerned about being impacted by natural hazards?

How concerned are you about the impacts of climate change for your municipality in Tioga County?

Not Concerned

Somewhat
Concerned

Extremely
Concerned

What type of action do you think can best reduce your residents' risk to natural hazards?

Local Planning and Regulations

Structure and Infrastructure Projects


Natural Systems Protection (stabilizing erosion hazard areas, requiring water conservation during droughts, encouraging conservation easements).

Education and Awareness Programs

B&L Approach

- B&L will use a hybrid approach to community involvement and will provide a variety of engagement opportunities
- B&L will consider the needs and vulnerability of all Tioga County residents to provide mitigation strategies that are realistic and equitable in approach
- Mitigation Strategies can represent the following categories:
 - Local Plans and Regulations
 - Structure and Infrastructure Projects
 - Natural Systems Protection
 - Education and Awareness Programs

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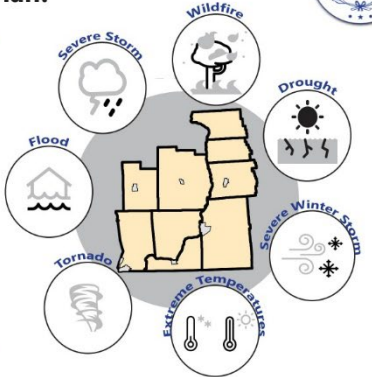


How can you Participate?

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- Learn about the Plan
- Share ideas that can help reduce the risk of hazards







Contact the Office of Emergency Services for information about future public meetings



What is a Hazard Mitigation Plan?

A hazard mitigation plan identifies and evaluates risks and vulnerabilities associated with natural hazards and disasters. This process aims to reduce the loss of life and property by minimizing the impact of natural hazard events. Hazard mitigation planning leads to the development of short-term and long-term strategies to reduce and manage risk. Mitigation strategies identified in an updated hazard mitigation plan may be eligible for grant funding for implementation.

Benefits of Hazard Mitigation

 Protects public safety & prevents loss of life and injury	 Prevents damage to your community's unique assets	 Reduces harm to existing & future development
 Minimizes operational downtime & accelerates recovery	 Reduces the cost of disaster response & the risk of exposure	 Maintains community & strengthens social connections

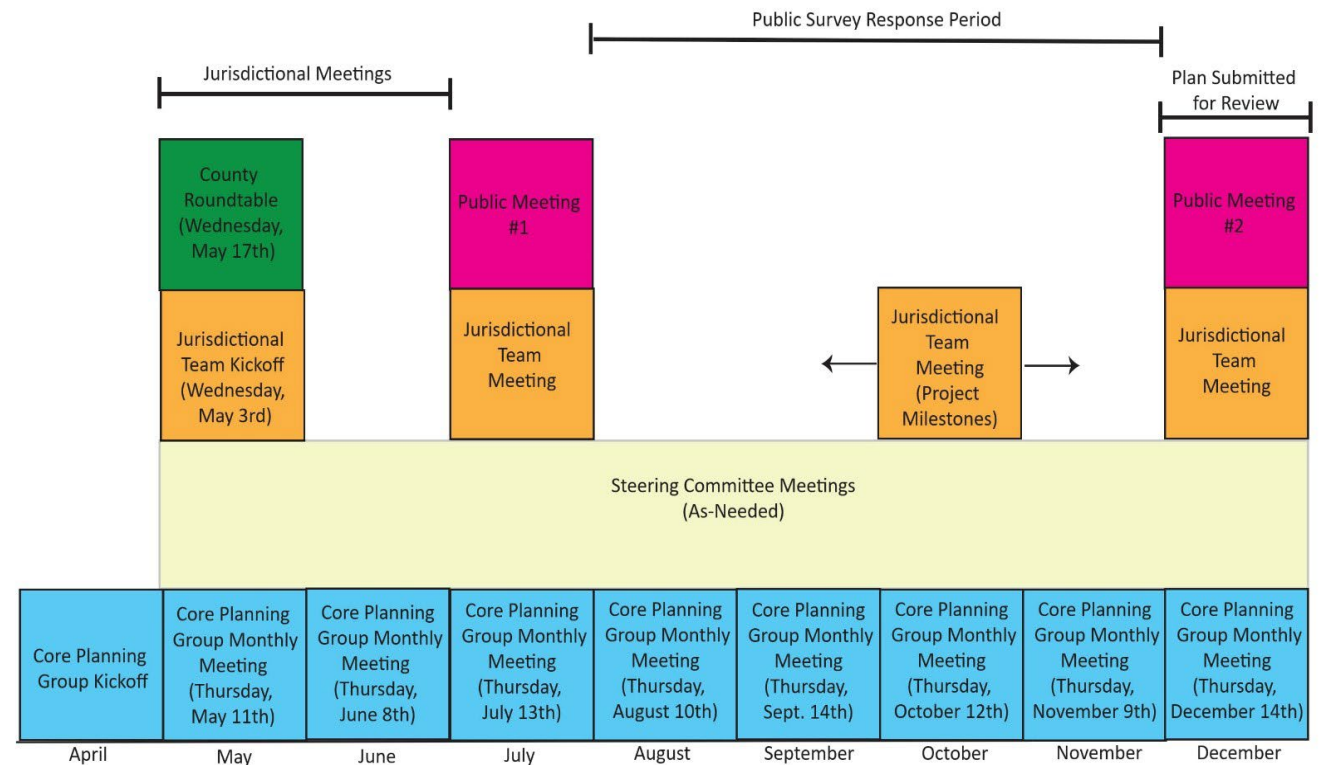
B&L Approach

Community Engagement Plan (CEP)

- This plan outlines who is involved in the HMP Update and how different groups will be involved in the process

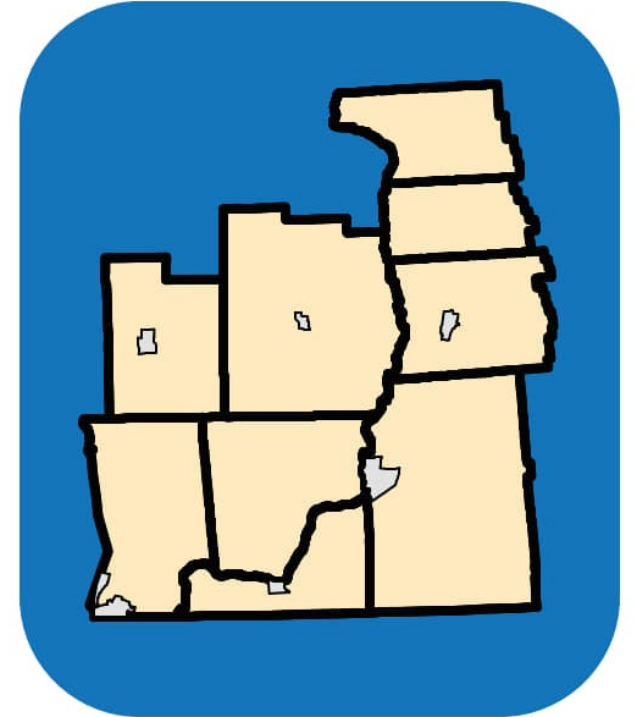
Elements of the CEP

- Project Overview
- Project Players
- In-Person Meeting Engagements
- Online Engagement
- Engaging Underserved Communities within Tioga County
- Engagement Timeline
- Hazard Mitigation Overview Handout



Jurisdiction Participation

- B&L will hold individual meetings with each jurisdiction
 - One primary meeting and follow-up, as needed
 - Virtual, in-person, or hybrid
 - Local planning team – consider including:
 - Local elected officials
 - Town/Village board members
 - Town/Village clerks
 - Planning board members
 - Highway/DPW superintendent
 - Water/sewer department staff
 - Floodplain administrator
 - Code enforcement
 - Local fire and police department officials
 - Health Department/Social Services



Why Participate?

- Hazard mitigation planning reduces loss of life and property by minimizing the impact of disasters
- Mitigation plans are key to breaking the cycle of disaster damage and reconstruction, which is expected to intensify with climate change
- By participating in and adopting the HMP, your community may be eligible for funding to reduce disaster losses and protect from future disaster damages:

In 2022, the Village of Pulaski, NY received \$1,000,000 for stormwater flooding improvements through a Pre-Disaster Mitigation Grant!

FEMA Assistance Programs

Hazard Mitigation Grant Program (HMGP)

Post Fire/Fire Management Assistance Grant

Pre-Disaster Mitigation Grant (PDMG)

Building Resilient Infrastructure and Communities Program (BRIC)

Flood Mitigation Assistance Grant (FMA)

Rehabilitation of High Hazard Potential Dam (HHPD) Grant Program

Jurisdiction Participation Milestones

- Attend KICKOFF meeting
- Identify primary project contacts
- Attend at least one meeting to update information and develop new mitigation actions with B&L
- Review and update your jurisdiction's annex
- Pass board resolution for Approvable Pending Adoption (APA) by FEMA

Project Schedule



May 3rd, 2023

Jurisdictional Team
Kickoff Meeting



July 2023

Public Meeting #1



December 2023

Public Meeting #2



**November to
December 2023**

Submit Final Plan to
NYS DHSES and FEMA

**May to
December 2023**

Data Collection
County Roundtable (May 17th)
Jurisdictional Meetings
Core Planning Group Meetings



**April to
August 2023**

Risk Assessment
Mitigation Strategy
Development of Draft Plan



**May to
December 2023**

Revise and Finalize Plan to
Ensure Compliance with State
and Federal Requirements



Presentation of Draft Plan to
NYS DHSES

Next Steps

- Please record attendance using the sign-in sheet
- Brainstorm local project team to participate in municipal meeting (to occur after County Mitigation Action Roundtable on May 17)
- Sign-up for a meeting slot with B&L (link will be sent after this meeting)

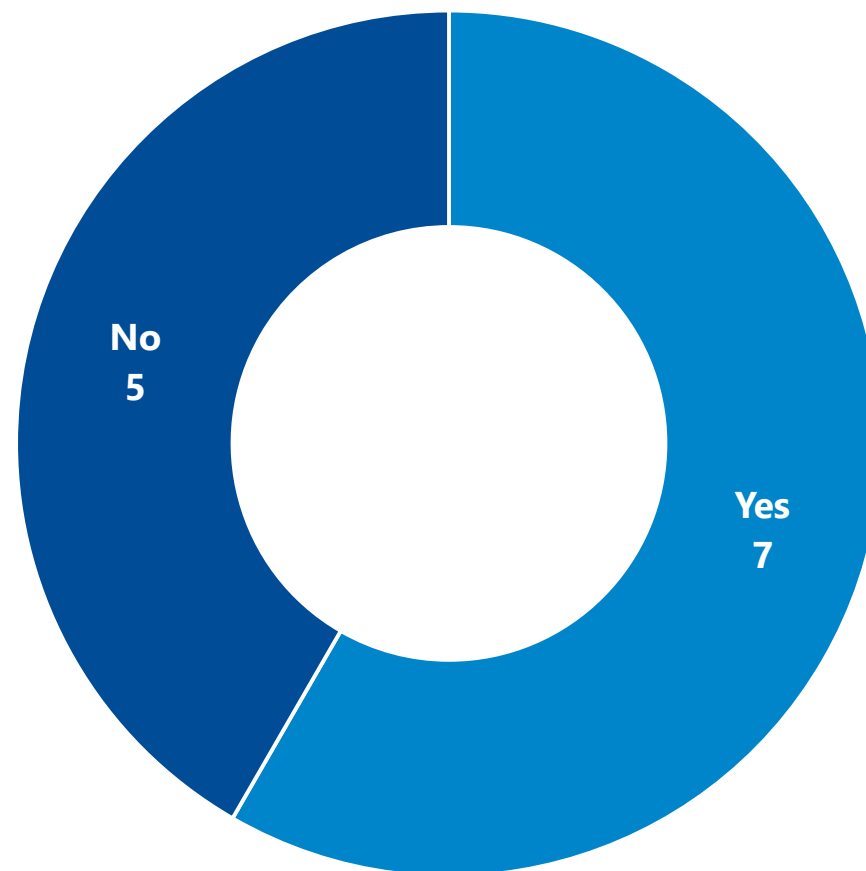
Contact Us

Name	Affiliation	Email	Committee
Wendy Walsh	Tioga Co. SWCD	walshw@tiogacountyny.gov	Core Planning Group
Elaine Jardine	Tioga Co. ED&P	jardinee@tiogacountyny.gov	Core Planning Group
Mike Simmons	Tioga Co. Emergency Services	simmonsm@tiogacountyny.gov	Core Planning Group
Bob Williams	Tioga Co. Emergency Services	williamsr@tiogacountyny.gov	Core Planning Group
Corinne Cornelius	Tioga Co. Emergency Services	corneliusc@tiogacountyny.gov	Core Planning Group
Jayne Breschard	Barton & Loguidice, Senior Managing Community Planner	jbreschard@bartonandloguidice.com	Core Planning Group
Andrew Stone	Barton & Loguidice, Community Planner I	astone@bartonandloguidice.com	Core Planning Group

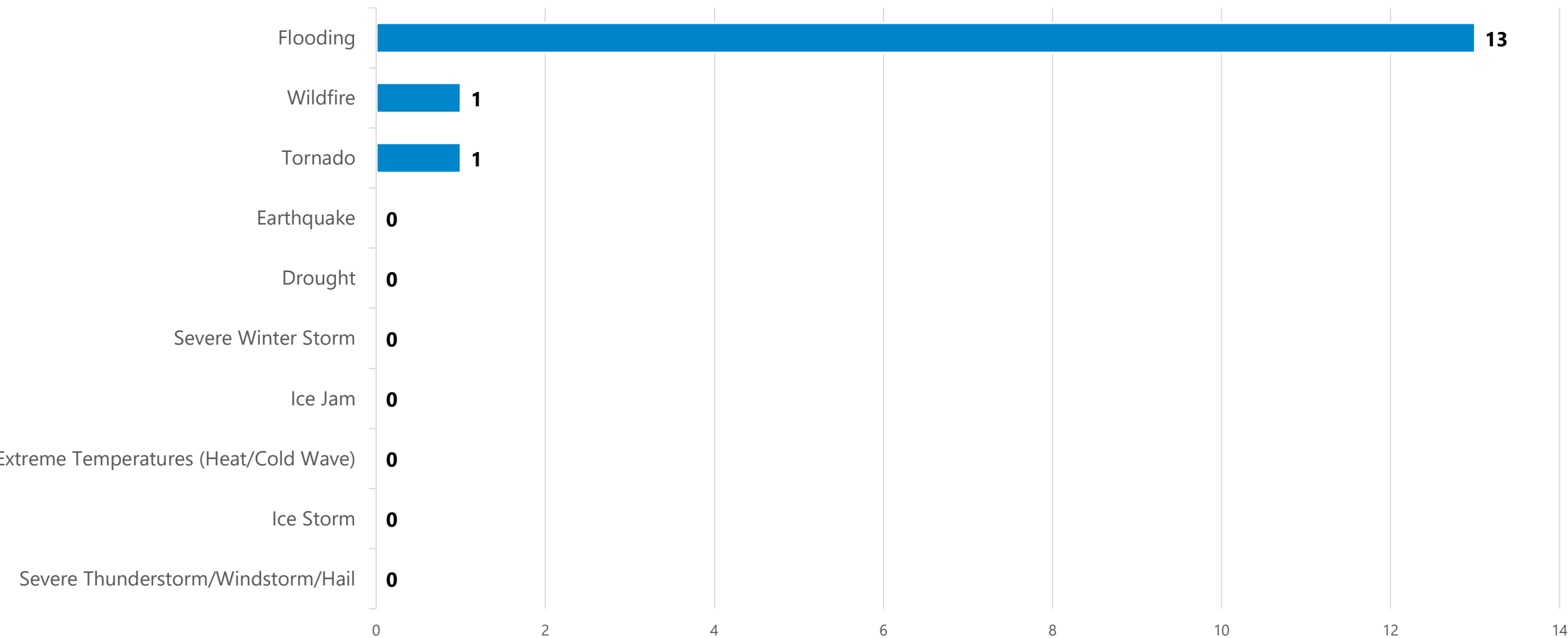
Live Polling Results

- 16 Participants -

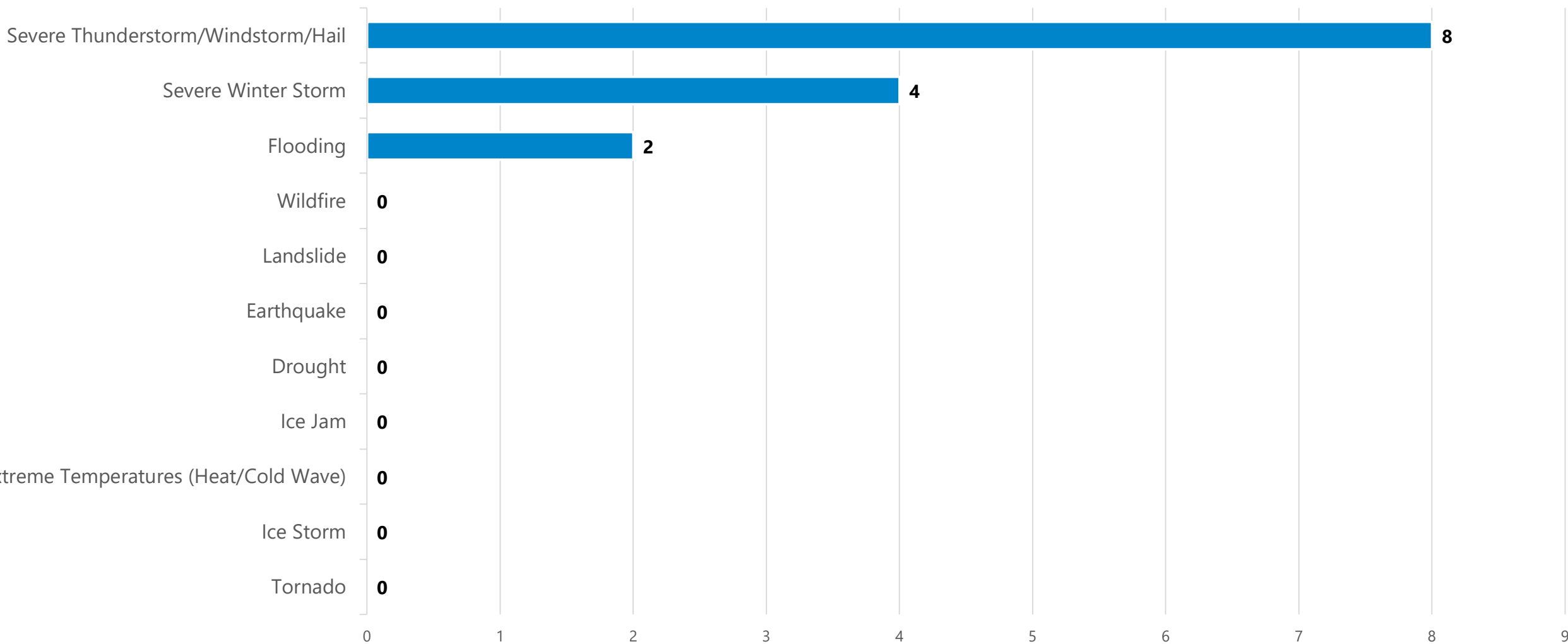
Have you participated in past Tioga County HMP updates?



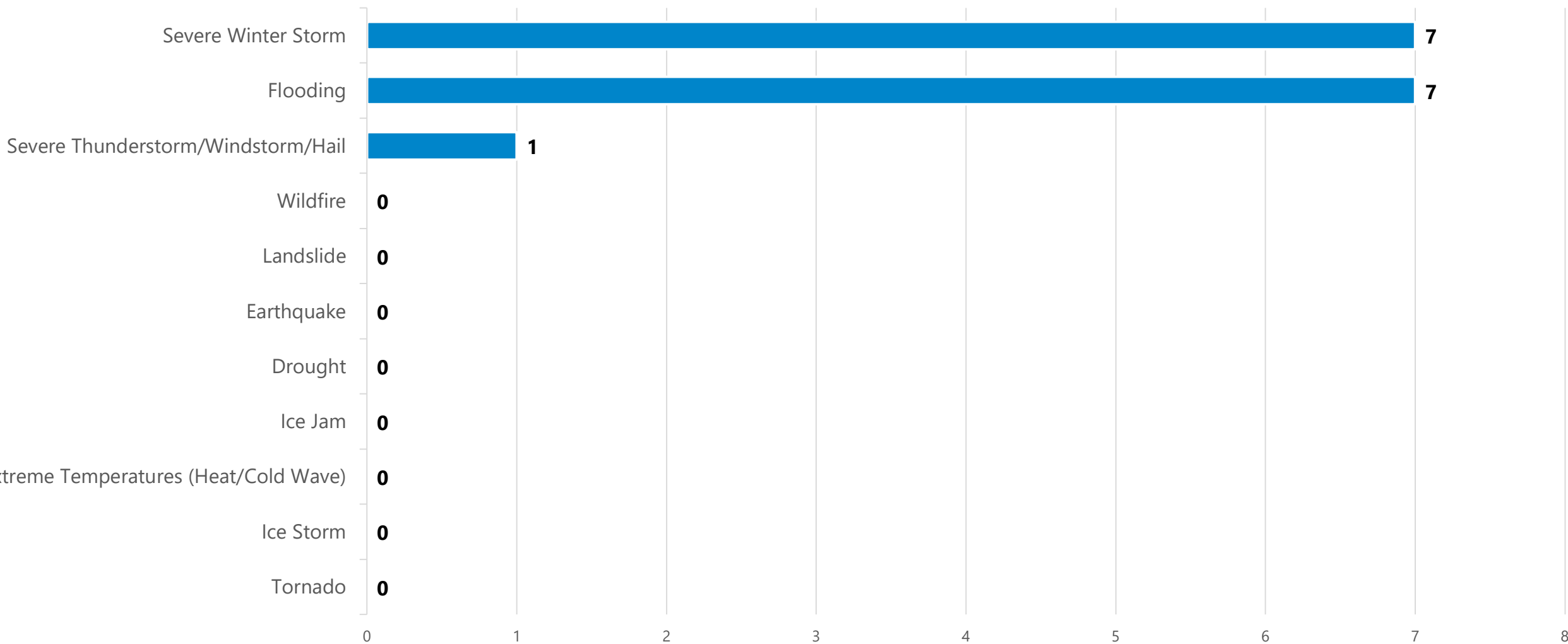
What hazard has the greatest impact in your municipality? (Damage to property, crops, people)



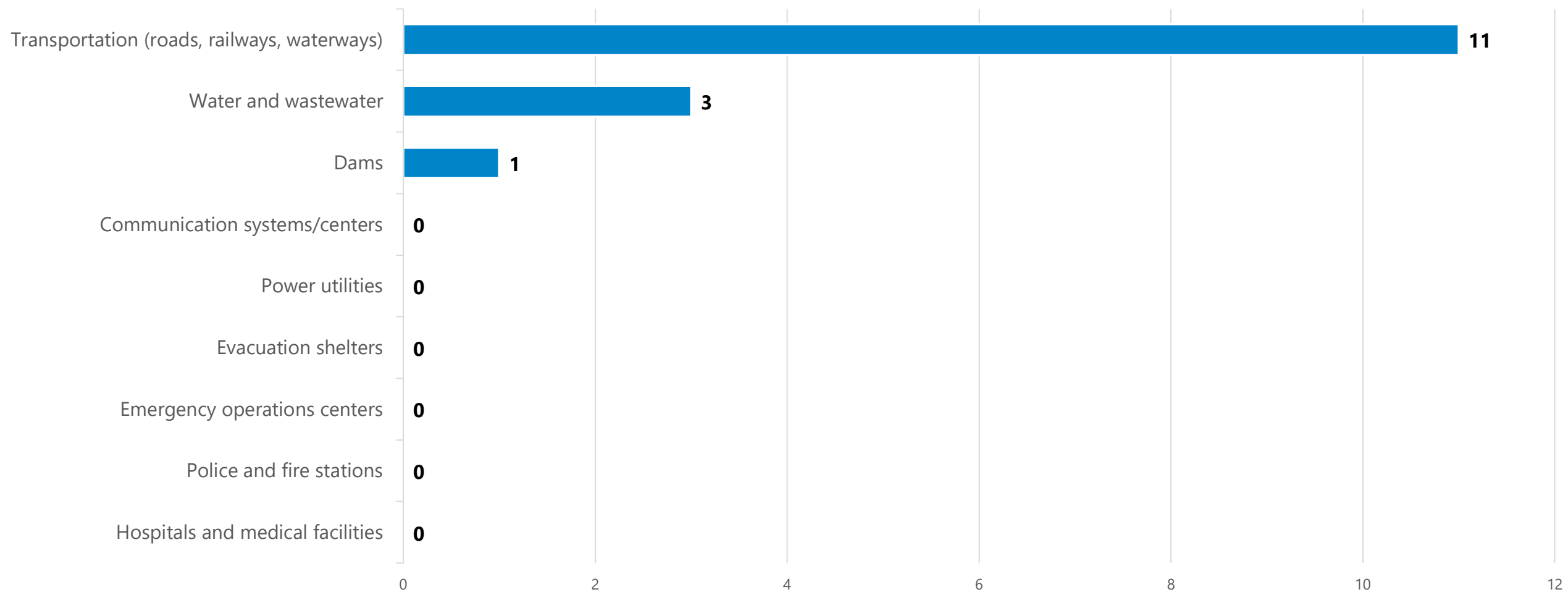
Which hazards occur the most often in your municipality?



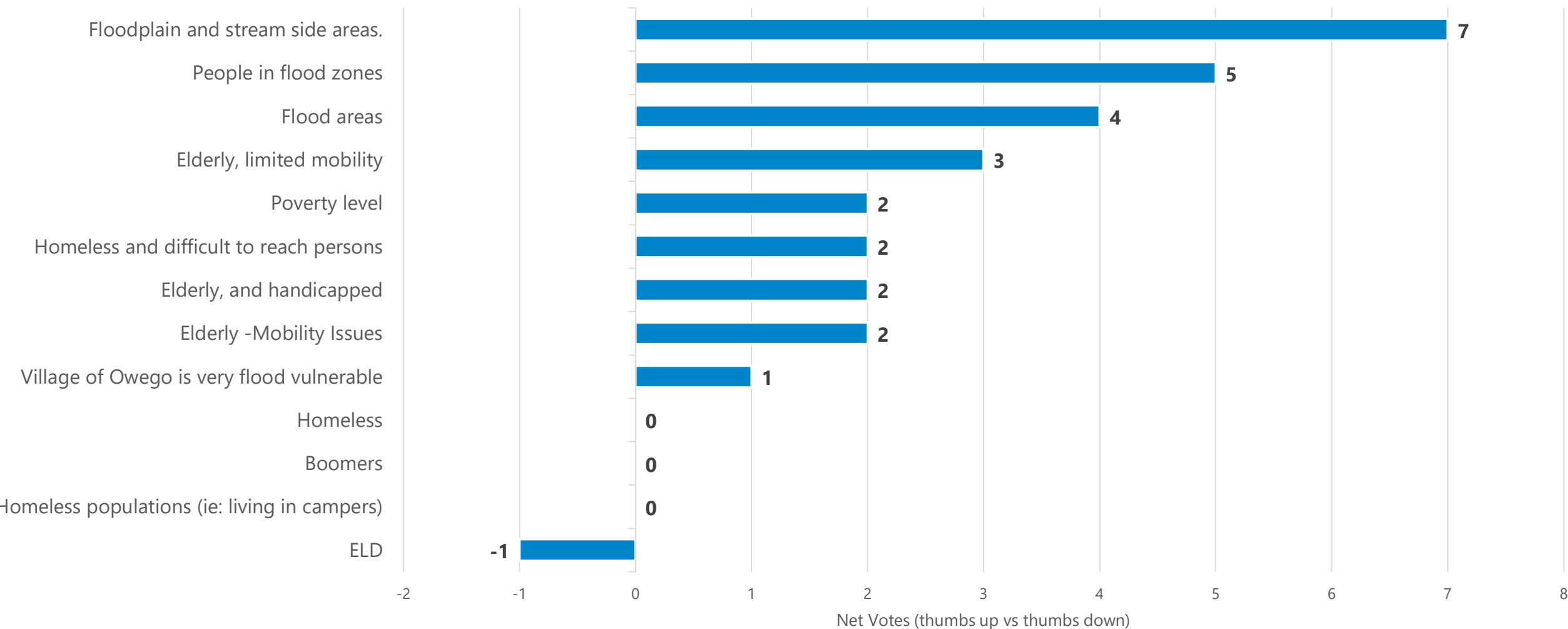
What are the hazards that affect the largest area of your municipality?



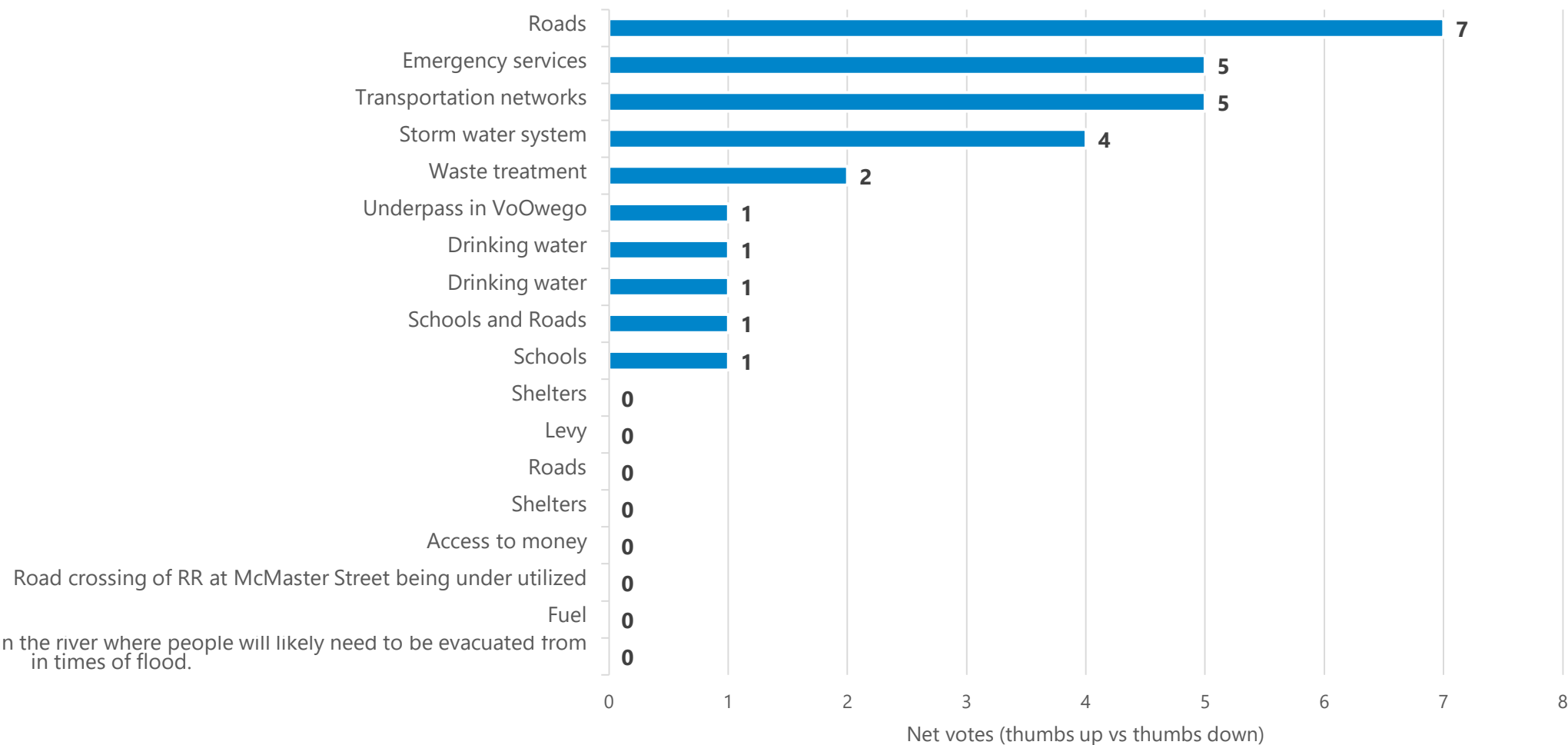
Which of the following infrastructural assets and services within your municipality are most vulnerable to natural hazards?



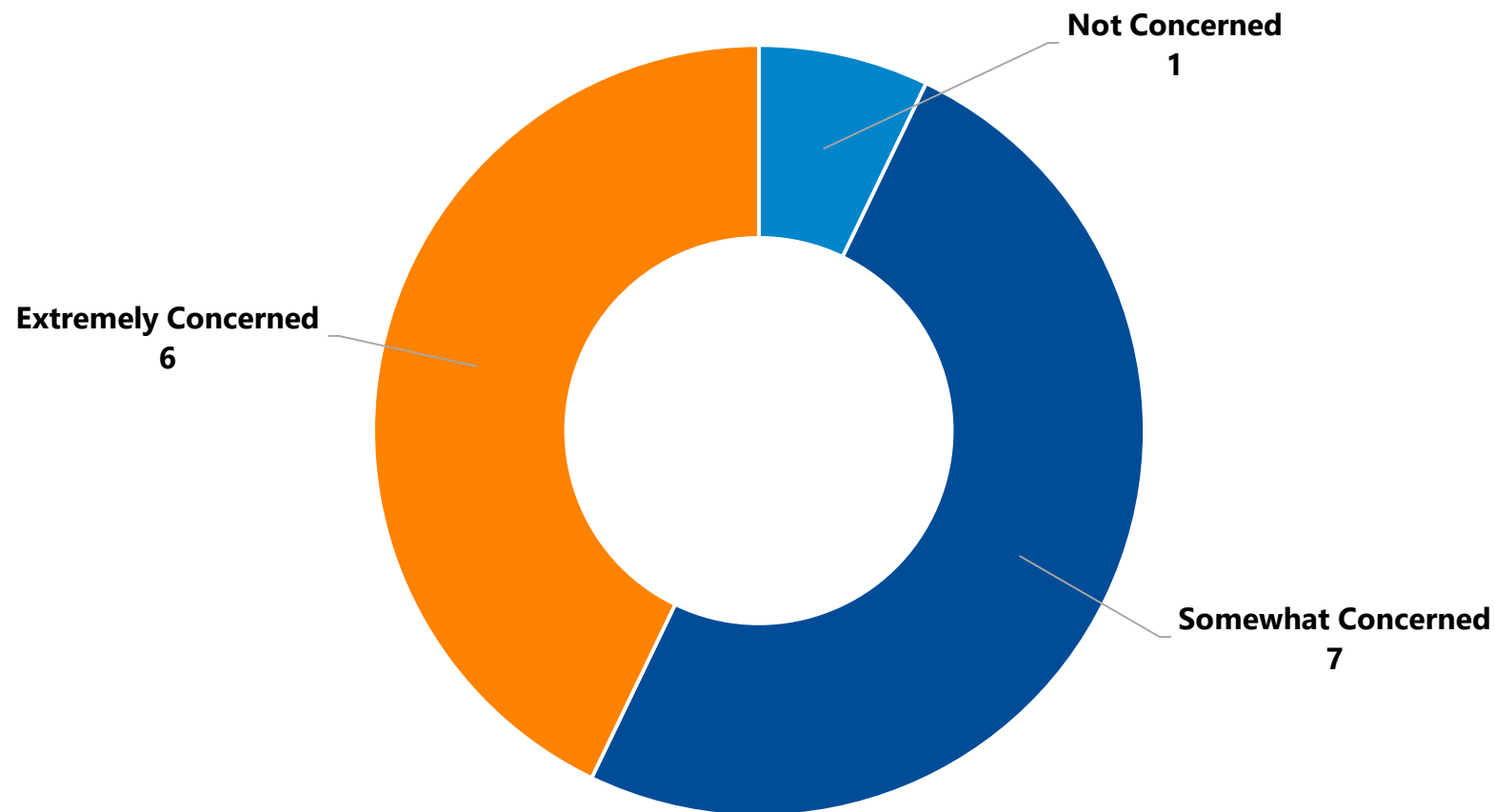
Which residents within your community in Tioga County are most vulnerable to natural hazards?



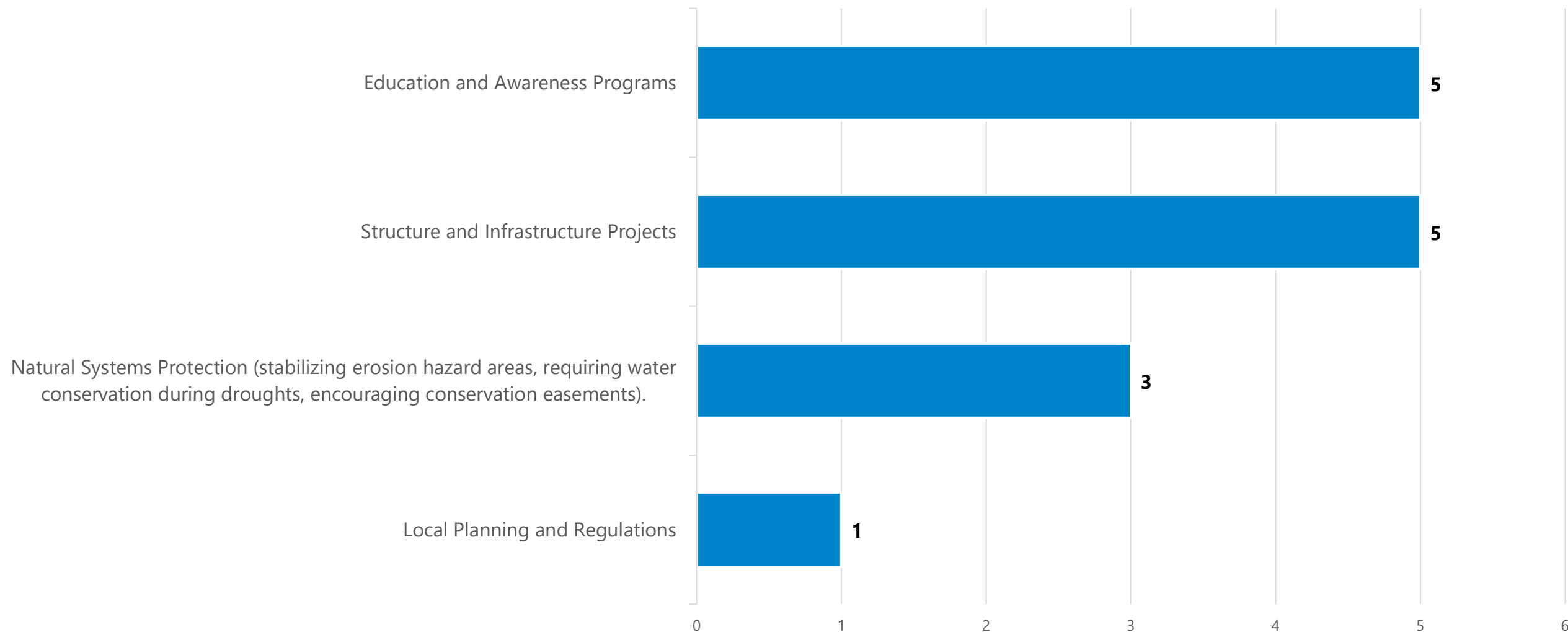
Are there any specific locations, facilities, or resources in your municipality that you are most concerned about being impacted by natural hazards?



How concerned are you about the impacts of climate change for your municipality in Tioga County?



What type of action do you think can best reduce your residents' risk to natural hazards?



Tioga County Hazard Mitigation Plan – 2023 Update
 County Mitigation Action Roundtable
 County Office Building (Auditorium)
 56 Main Street, Owego

Wednesday, May 17, 2023
 2:00-4:00pm

Please print your information below.

Name	Email	Title/Affiliation
1. Corinne Cornelius	[REDACTED]	Deputy Director Emergency Services
2. GARY HOWARD		SHERIFF
3. Elaine Jardine		EDRP
4. Mike Jura		Jurand at Tioga County NY.gov
5. Alex Marks		Marksa@TiogaCountyNY.gov
6. Heather Vroman		Public Health Director
7. Bryan Goodrich		gov GIS Manager
8. Shawn Yetter		Social Services
9. Ellen Pratt		Sustainability/County
10. Gary Hammond		DPW Commissioner
11. PETER DeWIND		County Attorney
12. Wendy Walsh		SWD
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		



Tioga County Hazard Mitigation Plan – 2023 Update

Agenda

1. Welcome & Introductions
2. HMP Update Overview
3. Update Planning Mechanisms and Capabilities
4. Update Critical Facilities List
5. Review Goals and Objectives
6. Presentation of Vulnerability Assessment
7. Selected Hazards to Profile
8. Create New County Mitigation Actions



Introductions

Core Planning Group

- Leads the development of the HMP Update
- Meets monthly
- Stays updated on status of the plan, discusses strategies for meetings and public outreach, provides data and information

Steering Committee

- Serves as advisory board
- Meets on as-needed basis
- Reviews agendas and materials for public engagement activities, provides feedback on draft reports, offers project guidance and local community knowledge, promotes public input opportunities

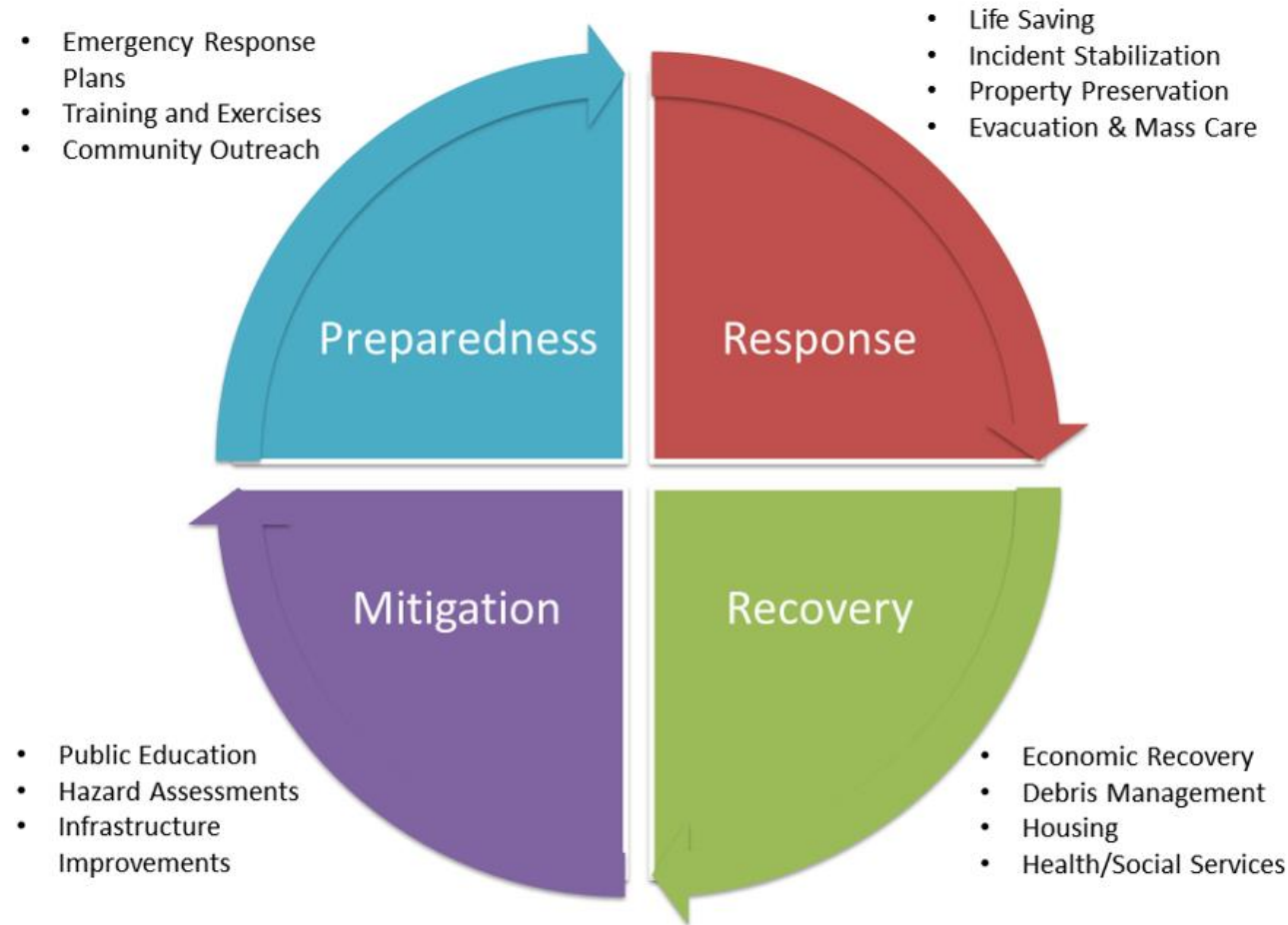
Jurisdictional Team

- Composed of two representatives from each jurisdiction
- Meets prior to the two public meetings and other project milestones
- Will establish a more unified county-wide approach such as implementation of shared services

HMP Update Overview

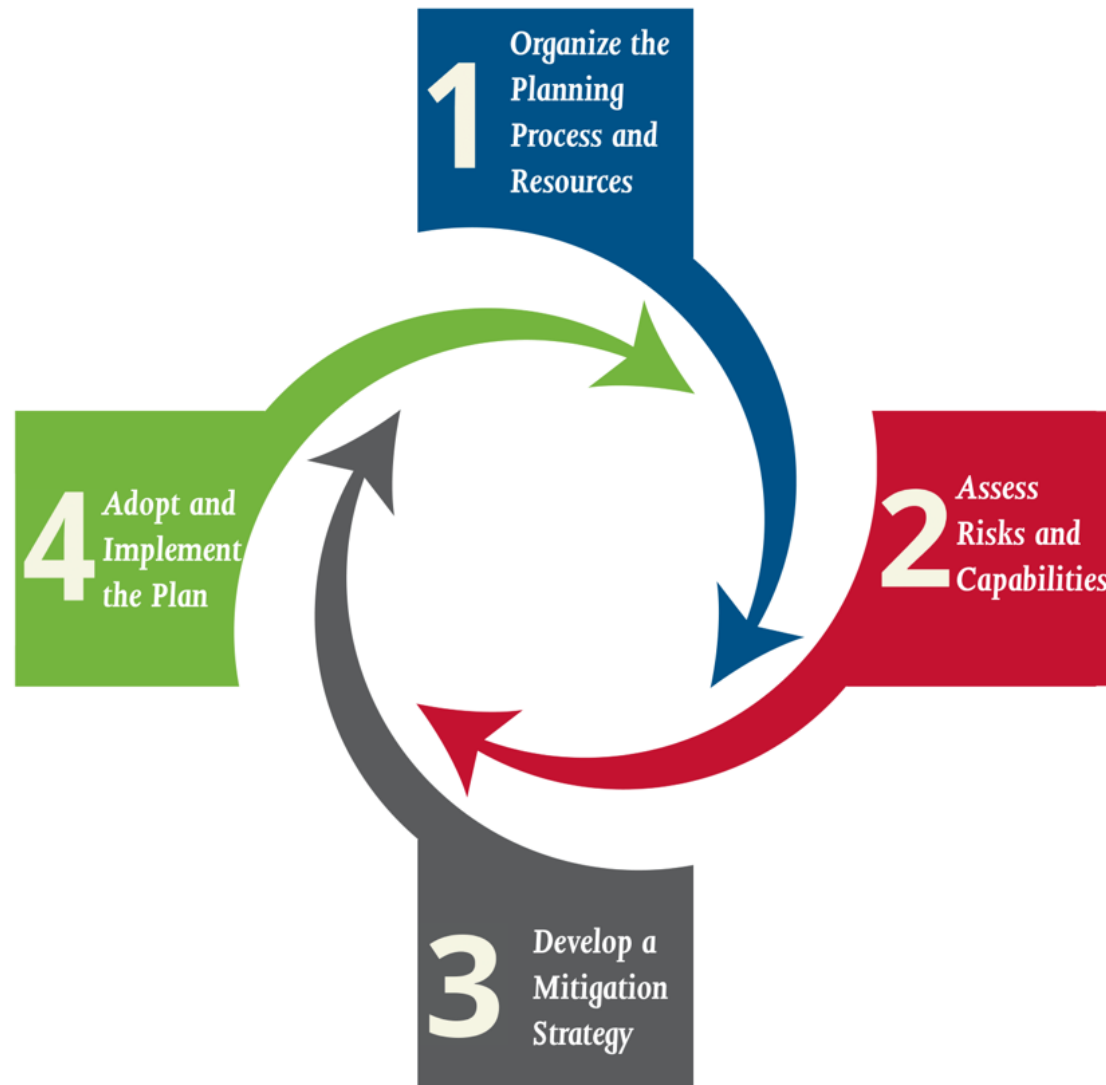
What is Hazard Mitigation?

- Hazard mitigation is one of the four phases of emergency management
- It is a method for alleviating property loss, reducing damage to the environment, and limiting the number and severity of injuries that occur from hazard events through long and short-term strategies



What Does Planning for Hazards Look Like?

- There are four main steps in creating a hazard mitigation plan
- The purpose of this plan is to document the natural hazards that affect Tioga County and outline practical mitigation strategies that can be implemented to reduce the effects of such hazard events

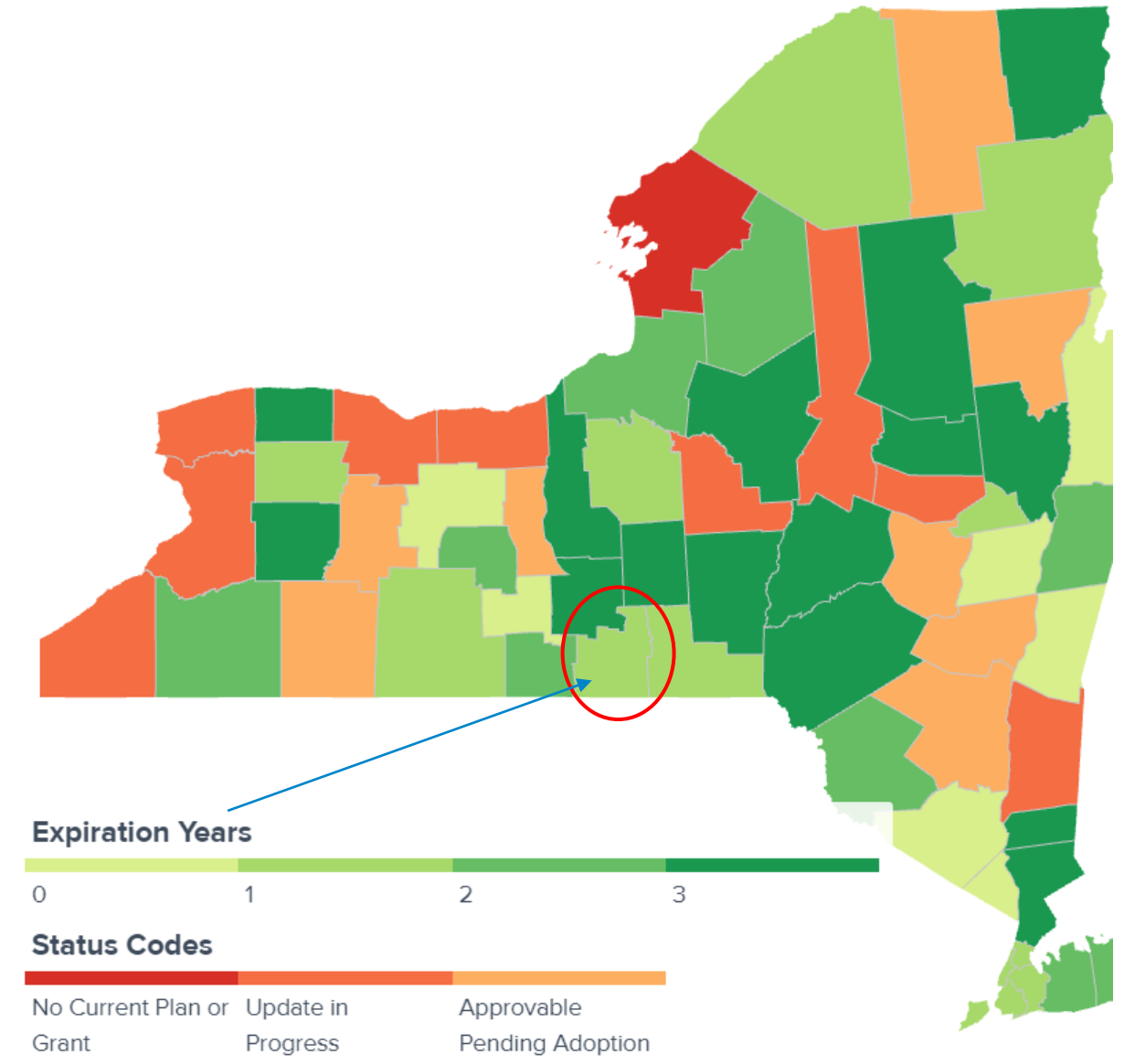


Status of Tioga's Current HMP

Current HMP expires on 8/12/2024

FEMA approved HMP provides access to:

1. Hazard Mitigation Grant Program (HMGP)
2. Pre-Disaster Mitigation Grant (PDM)
3. Building Resilient Infrastructure and Communities (BRIC) Program
4. Flood Mitigation Assistance Grant (FMA)
5. Post Fire/Fire Management Assistance Grant
6. Rehabilitation of High Hazard Potential Dam (HHPD) Grant Program



Hazard Mitigation Plan Update

Tioga County received a grant from FEMA to update the 2018 Multi-Jurisdictional Hazard Mitigation Plan.

Plan Components:

1. County Profile
2. Planning Process
3. Risk Assessment
4. Hazard Profiles
5. Hazard Vulnerability Assessment
6. Mitigation Goals and Strategies
7. Plan Implementation, Monitoring, and Maintenance
8. Jurisdictional Annex for each municipality

How Does FEMA's New Policy Guide Impact the Plan?

Per FEMA's new policy guide, the updated HMP must:

- Include effects of climate change and other future conditions in the risk assessment.
- Recognize the important role of adopting and enforcing building codes and land use ordinances in the ability of local government to improve mitigation capabilities.
- Facilitate stronger alignment with other FEMA mitigation programs (i.e., NFIP, CRS).
- Include existing mitigation plan requirements for the High Hazard Potential Dams (HHPD) grant program to include dam risks.



Local Mitigation Planning Policy Guide

FP 206-21-0002

Released April 19, 2022, Effective April 19, 2023

OMB Collection #1660-0062



FEMA

Planning Mechanisms and Capabilities

Planning Mechanisms and Capabilities

- Planning and regulatory capabilities are plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards.
- Administrative and technical capabilities include boards, commissions, departments, staff and consulting services, along with the related skills and tools, that can be used for mitigation planning and the implementation of specific mitigation actions.
- Financial capabilities include access to or eligibility to use funding resources for hazard mitigation.
- Education and outreach capabilities include programs and methods already in place that could be used to support implementation of mitigation actions and communicate hazard-related information.

Asset Inventory – Critical Facilities & Infrastructure

Built Environment – Critical Facilities & Infrastructure

The purpose of an asset inventory is to identify specific vulnerable assets in your community: people, economy, built environment, and natural environment.

According to the U.S. Department of Homeland Security, critical infrastructure and critical facilities are defined as follows:

Critical Infrastructure

“Critical infrastructure includes the vast network of highways, connecting bridges and tunnels, railways, utilities and buildings necessary to maintain normalcy in daily life. Transportation, commerce, clean water and electricity all rely on these vital systems.”

Critical Facilities

“Typical critical facilities include hospitals, fire stations, police stations, storage of critical records, and similar facilities. These facilities should be given special consideration when formulating regulatory alternatives and floodplain management plans.”

Goals and Objectives

Goals v. Objectives



- **Goal:** A short statement of the desired outcome to be accomplished over a long time frame, usually 3 to 5 years. It is a broad statement that focuses on the desired results.
- **Objective:** A specific, actionable target that needs to be achieved within a smaller time frame, such as a year or less, to reach a certain goal.

What are some additional objectives that are appropriate for Goal #1? Goal 1: Protect life and property

Top

If you believe that the updated HMP should include additional goals, what should these goals be?

Top

What are some additional objectives that are appropriate for Goal #2? Goal 2: Increase Public Awareness and Preparedness / Understanding of Natural Hazards and their Risks

Top

What are some additional objectives that are appropriate for Goal #3? Goal 3: Reduce Hazard Impact on the Economy (throughout the County)

Top

What are some additional objectives that are appropriate for Goal #4? Goal 4: Protect Open Space, Agricultural Land, the Environment and Natural Resources

Top

What are some additional objectives that are appropriate for Goal #5? Goal 5: Promote and Support Partnerships

Top

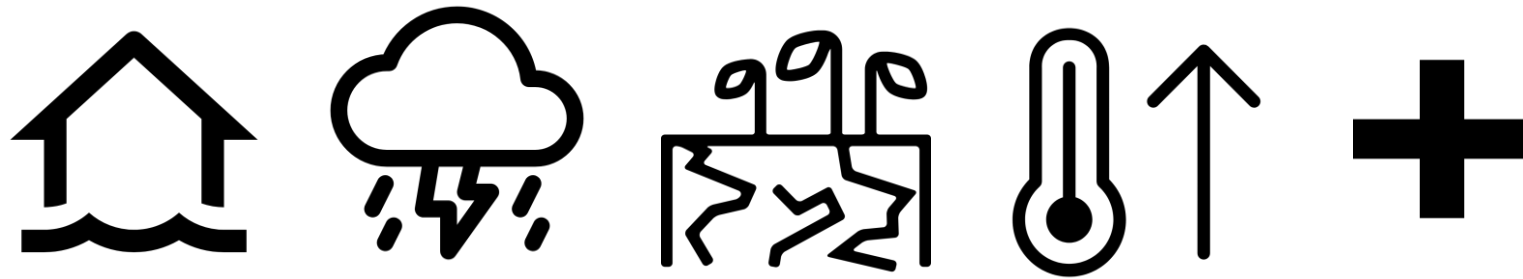
What are some additional objectives that are appropriate for Goal #6? Goal 6: Enhance Emergency Management Preparedness, Response, and Recovery

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Vulnerability Assessment

Vulnerability Assessment

Vulnerable assets, describing potential impacts, and estimating losses for each hazard



Exposure

Sensitivity

Adaptive capacity

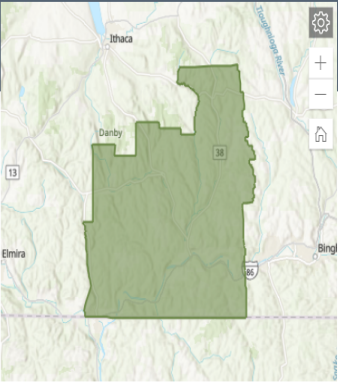
Social / Economic Vulnerability

Social vulnerability is understood as the level of sensitivity that social groups have to the negative impacts of natural hazards, such as disproportionate death, injury, and loss.

AT RISK POPULATION PROFILE

Tioga County, NY

Geography: County



47,414 Population	19,606 Households	2.39 Avg Size Household	44.7 Median Age	\$67,733 Median Household Income	\$151,688 Median Home Value	82 Wealth Index	157 Housing Affordability	20 Diversity Index
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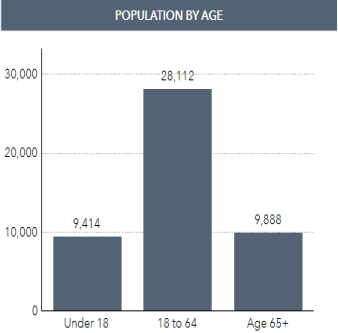
AT RISK POPULATION

5,721 Households With Disability	9,888 Population 65+	1,247 Households Without Vehicle
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POVERTY AND LANGUAGE

10% Households Below the Poverty Level	1,967 Households Below the Poverty Level	13 Pop 65+ Speak Spanish & No English
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POPULATION BY AGE



POPULATION AND BUSINESSES

40,911 Daytime Population	1,343 Total Businesses	18,406 Total Employees
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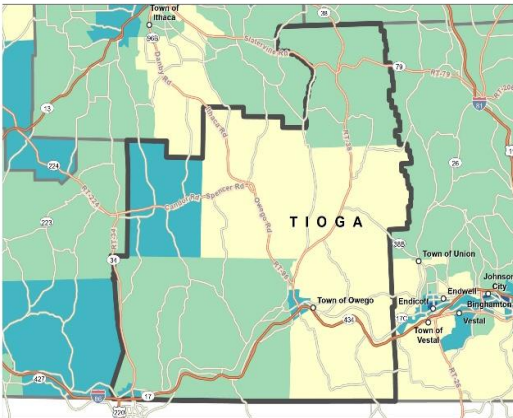
Language Spoken (ACS)	Age 5-17	18-64	Age 65+	Total
English Only	7,558	27,825	9,587	44,970
Spanish	90	217	70	377
Spanish & English Well	90	178	57	325
Spanish & English Not Well	0	39	0	39
Spanish & No English	0	0	13	13
Indo-European	22	328	99	449
Indo-European & English Well	22	319	92	433
Indo-European & English Not Well	0	0	3	3
Indo-European & No English	0	9	4	13
Asian-Pacific Island	16	231	15	262
Asian-Pacific Isl & English Well	8	170	15	193
Asian-Pacific Isl & English Not Well	8	21	0	29
Asian-Pacific Isl & No English	0	40	0	40
Other Language	0	36	18	54
Other Language & English Well	0	36	18	54
Other Language & English Not Well	0	0	0	0
Other Language & No English	0	0	0	0

Source: Esri, ACS, Esri-Data Analyst, Esri forecasts for 2022, 2027, 2017-2021. © 2023 Esri

CDC/ATSDR Social Vulnerability Index 2020

TIOGA COUNTY, NEW YORK

Overall Social Vulnerability¹



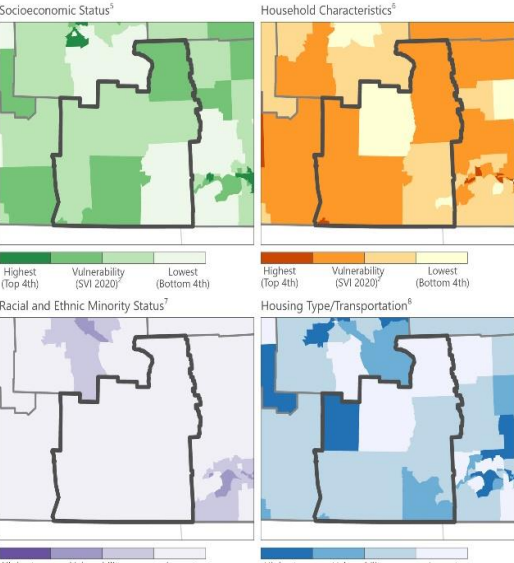
Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI 2020)** County Map depicts the social vulnerability of communities, at a census tract level, within a specified county. CDC/ATSDR SVI 2020 groups **sixteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

Legend: Highest (Top 4th), Vulnerability (SVI 2020)², Lowest (Bottom 4th), Data Unavailable³

Agency for Toxic Substances and Disease Registry
Geographical Research, Analysis, and Services Program

CDC/ATSDR SVI 2020 - TIOGA COUNTY, NEW YORK

CDC/ATSDR SVI Themes



Socioeconomic Status⁴
Legend: Highest (Top 4th), Vulnerability (SVI 2020)², Lowest (Bottom 4th)

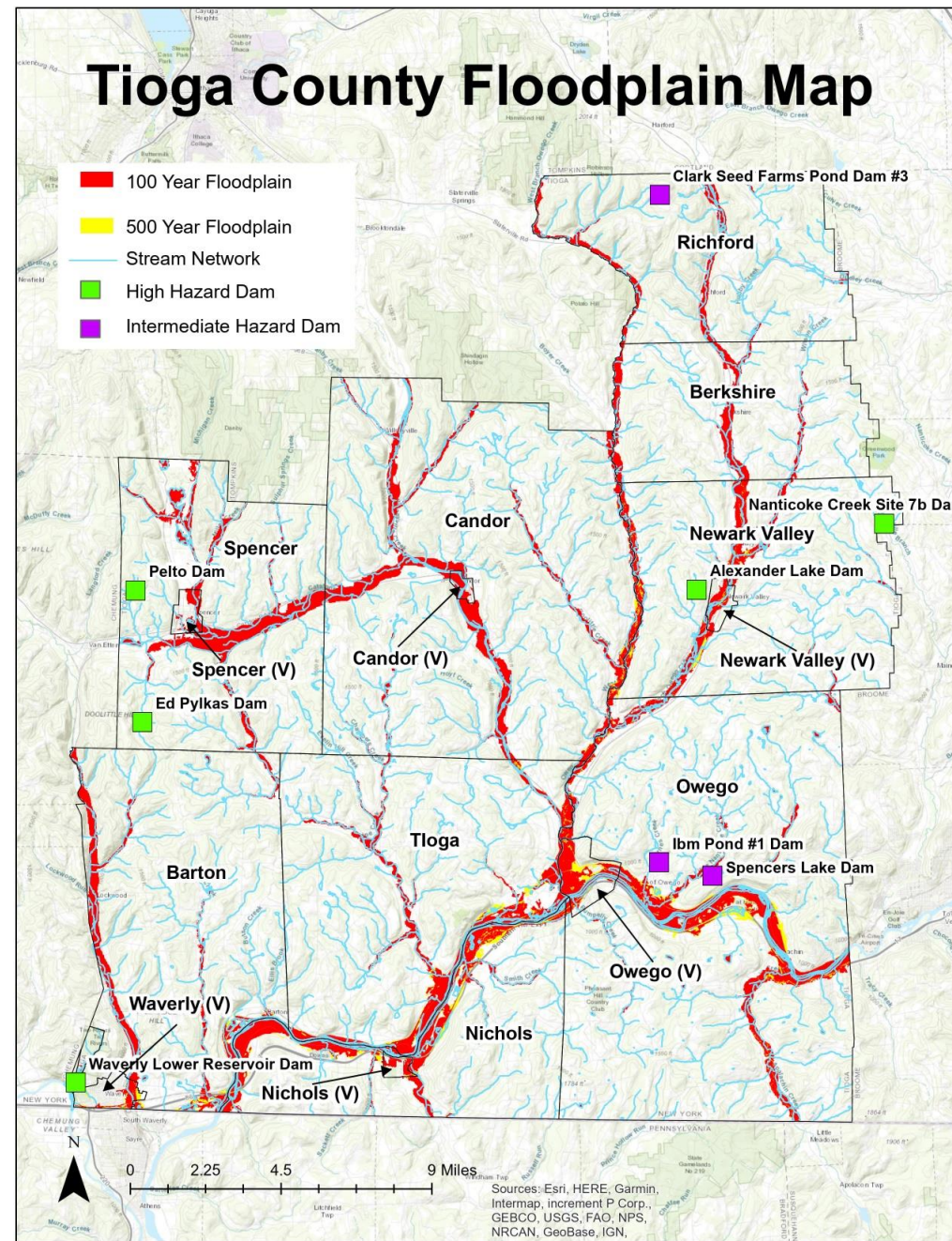
Household Characteristics⁴
Legend: Highest (Top 4th), Vulnerability (SVI 2020)², Lowest (Bottom 4th)

Racial and Ethnic Minority Status⁵
Legend: Highest (Top 4th), Vulnerability (SVI 2020)², Lowest (Bottom 4th)

Housing Type/Transportation⁶
Legend: Highest (Top 4th), Vulnerability (SVI 2020)², Lowest (Bottom 4th)

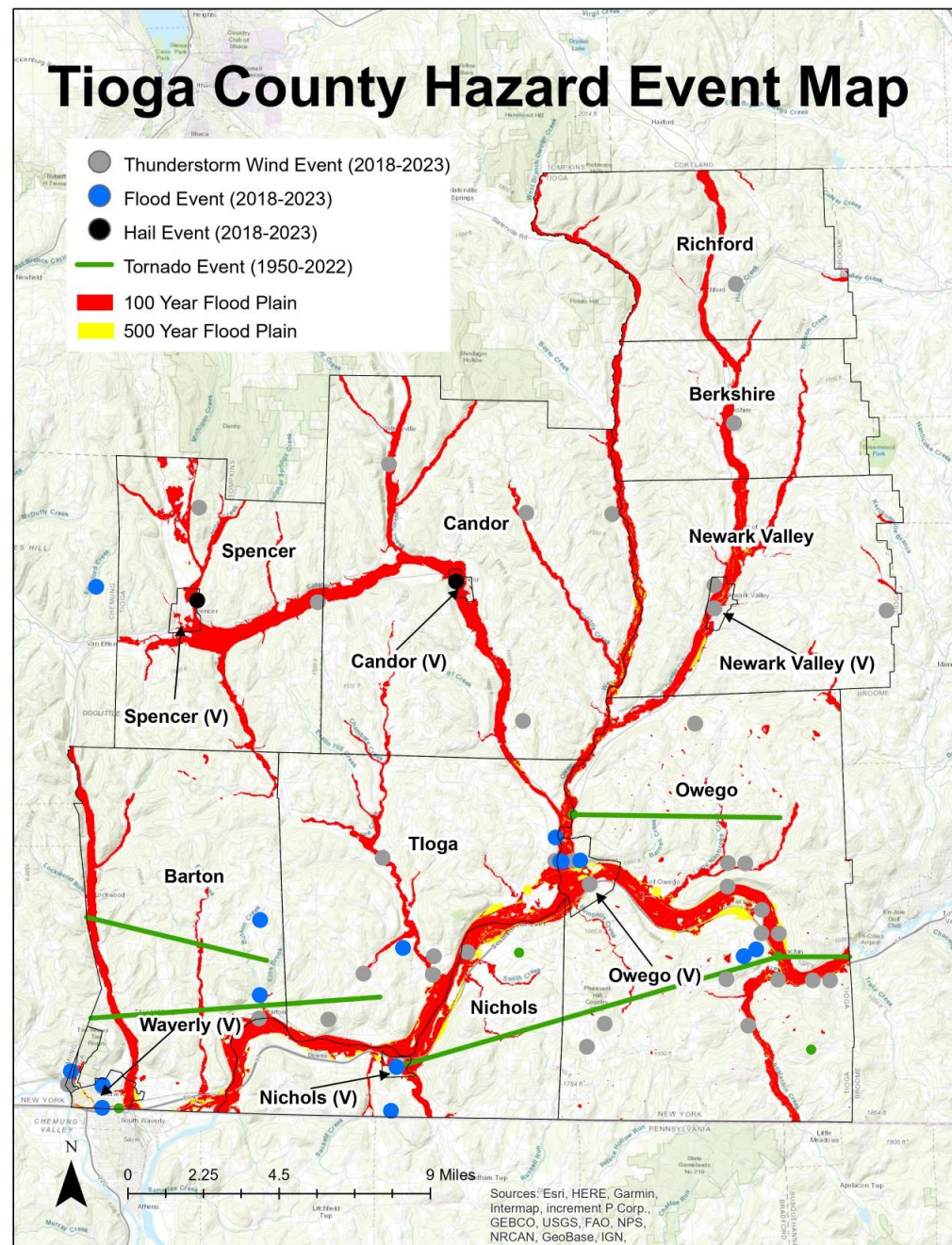
Data Source: CDC/ATSDR/HRAP, U.S. Census Bureau, Esri, StreetMapTM Premium
Notes: Overall Social Vulnerability: All 16 variables. "Census tracts with 0 population." The CDC/ATSDR SVI combines percentile settings of US Census American Community Survey (ACS) 2012-2020 variables for the entire or the census tract level. Socioeconomic Status: Below 12th, Poverty, Unemployed, Housing Costs Burden, No High School Diploma, No Health Insurance. Household Characteristics: Aged 65 and Older, Aged 17 and Younger, Civilian with a Disability, Single Parent Household, English Language Proficiency. Racial/Ethnic Minority Status: Hispanic or Latino (of any race), Black and African American, Not Hispanic or Latino, American Indian and Alaska Native, Not Hispanic or Latino, Asian, Not Hispanic or Latino, Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino, Two or More Races, Not Hispanic or Latino. Housing Type/Transportation: Multi-Unit Structures, Mobile Homes, Crowding, No Vehicle, Group Quarters.
Projection: North Carolina AD 1983 UTM Zone 18N, Contour Interval: 10'.
References: Phragar, B.F., et al. A Social Vulnerability Index for Disaster Management. Journal of Homeland Security and Emergency Management, 2011, 8(1).
CDC/ATSDR SVI web page: <https://www.ehponline.org/view/fullarticle.aspx>

Vulnerabilities resulting from the Physical Environment.

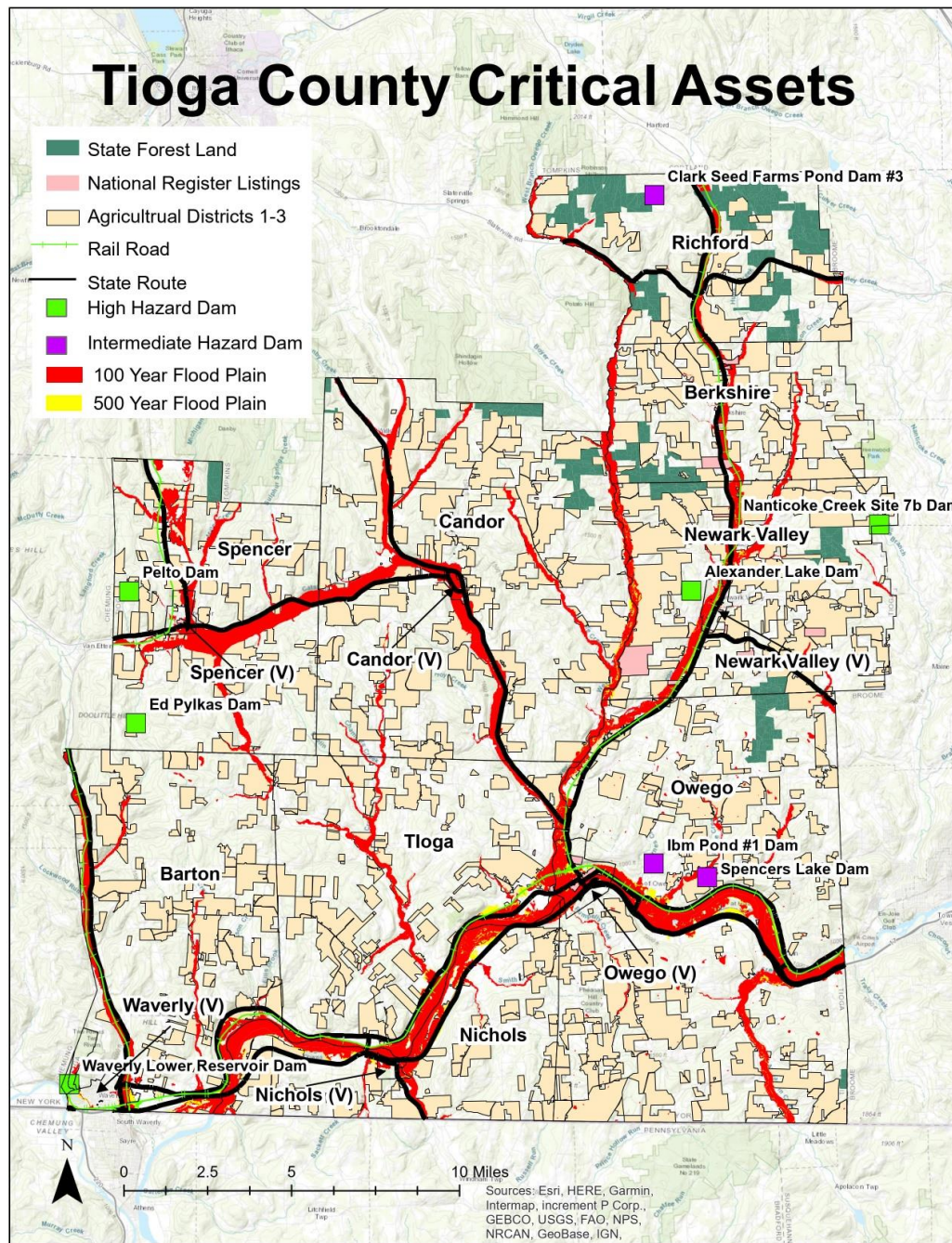


Where do different types of hazards typically impact the County?

How will climate change impact the frequency and severity of hazards in the County?



What will happen to the County's critical assets if hazards aren't mitigated?



Which of the following infrastructural assets and services in Tioga County are most vulnerable to natural hazards?

Hospitals and medical facilities

Police and fire stations

Emergency operations centers

Evacuation shelters

Dams

Water and wastewater

Power utilities

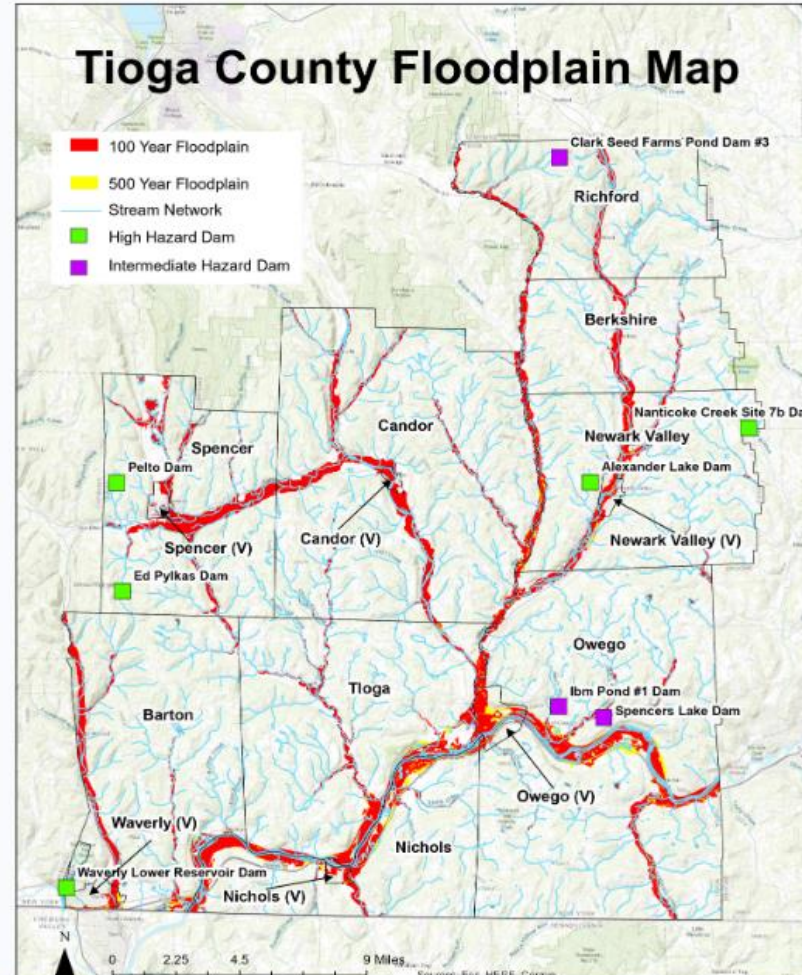
Transportation (roads, railways, waterways)

Communication systems/centers

Which residents in Tioga County are most vulnerable to natural hazards?

Top

Which region of the county is most vulnerable to hazards, such as flooding?



Hazard Selection

Hazard Selection

In 2018, Tioga County prioritized the following hazards:

1. Drought
2. Flood
3. Extreme Temperature
4. Severe Storm

In 2020, the NYS DHSES updated the County Emergency Preparedness Assessment (CEPA) for Tioga County.

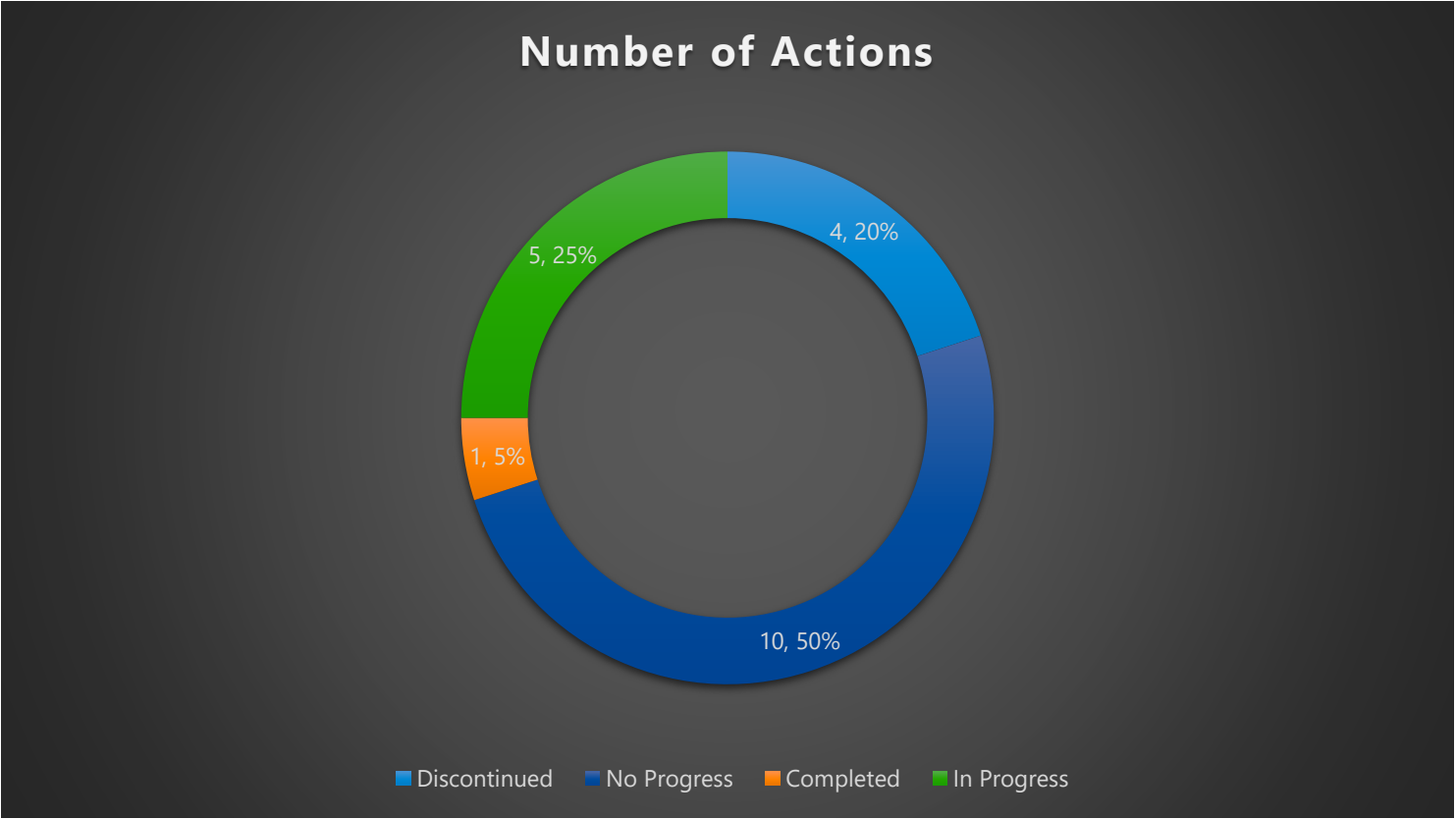
2020 Tioga County CEPA Risk Assessment			
Hazard	Likelihood	Consequence	Relative Risk Score
Flooding	High	High	16 / 25
Flash Flooding	High	High	16 / 25
Severe Winter Snowstorms	High	High	16 / 25
Extreme Temperatures	High	High	16 / 25
Severe Wind / Tornado	High	Medium	12 / 25
Wildfire	High	Medium	12 / 25
Drought	Medium	Medium	9 / 25
Ice Storms	Low	High	8 / 25
Hurricanes/Tropical Storms	Low	High	8 / 25
Landslides	Low	Low	4 / 25
Earthquakes	Very Low	Low	2 / 25



New Mitigation Actions

Status of 2018 Actions

One of the County's 20 Mitigation Actions from the 2018 HMP has been completed. Actions that have not been completed can be included in the plan update as [New Actions](#).



Creating New Mitigation Actions

We will now create new hazard mitigation actions!

- FEMA's new guidelines for 2023 require that each participating municipality create at least one action per hazard.
- Actions that can be considered include:
 1. Local Plans and Regulations: Zoning amendments, Comprehensive plan updates, Participate in the Community Rating System (CRS)
 2. Structure and Infrastructure Projects: Remove existing structures from flood hazard areas, Improve stormwater drainage system capacity
 3. Natural Systems Protection: Protect and preserve wetlands, Establish and manage riparian buffers along rivers and streams
 4. Education and Awareness: Outreach programs to provide education on mitigation actions that homeowners can take to reduce their risk of floods, Hazard mapping online for residents and design professionals

What type of action do you think can best reduce Tioga County residents' risk to natural hazards?

Local Planning and
Regulations

Structure and
Infrastructure Projects

Natural Systems
Protection

Education and
Awareness Programs

How concerned are you about the impacts of climate change for Tioga County?

Not Concerned

Somewhat
Concerned

Extremely
Concerned

Contact Us

Name	Affiliation	Email
Wendy Walsh	Tioga Co. SWCD	walshw@tiogacountyny.gov
Elaine Jardine	Tioga Co. ED&P	jardinee@tiogacountyny.gov
Mike Simmons	Tioga Co. Emergency Services	simmonsm@tiogacountyny.gov
Bob Williams	Tioga Co. Emergency Services	williamsr@tiogacountyny.gov
Corinne Cornelius	Tioga Co. Emergency Services	corneliusc@tiogacountyny.gov
Jayne Breschard	Barton & Loguidice, Senior Managing Community Planner	jbreschard@bartonandloguidice.com
Andrew Stone	Barton & Loguidice, Community Planner I	astone@bartonandloguidice.com

Questions?

County Roundtable Polling Results - 5/17/2023

Current run (last updated Jan 4, 2024 9:37am)

12

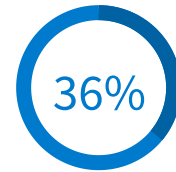
Activities

7

Participants

3

Average responses



Average engagement

What are some additional objectives that are appropriate for Goal #1? Goal 1: Protect life and property

High hazard dams
👍 2 🗨️ 0

Responses

Upvotes

Downvotes



High hazard dams

2

0

Engagement

1

Response

What are some additional objectives that are appropriate for Goal #2? Goal 2: Increase Public Awareness and Preparedness / Understanding of Natural Hazards and their Risks

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

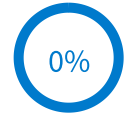
**What are some additional objectives that are appropriate for Goal #3? Goal 3:
Reduce Hazard Impact on the Economy (throughout the County)**

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

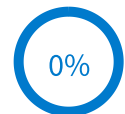
**What are some additional objectives that are appropriate for Goal #4? Goal 4:
Protect Open Space, Agricultural Land, the Environment and Natural Resources**

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

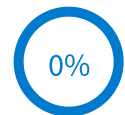
**What are some additional objectives that are appropriate for Goal #5? Goal 5:
Promote and Support Partnerships**

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

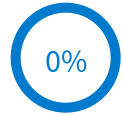
**What are some additional objectives that are appropriate for Goal #6? Goal 6:
Enhance Emergency Management Preparedness, Response, and Recovery**

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

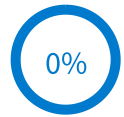
**If you believe that the updated HMP should include additional goals, what should
these goals be?**

Nobody has responded yet.
Hang tight! Responses are coming in.

Responses

Upvotes

Downvotes



Engagement

0

Responses

Which of the following infrastructural assets and services in Tioga County are most vulnerable to natural hazards?

- Transportation
- Power utilities
- Communication
- Water and
- Emergency
- Police and fire
- Hospitals and
- Dams
- Evacuation shelters

- 1st
- 2nd
- 3rd
- 4th
- 5th
- 6th
- 7th
- 8th
- 9th

Response options	Rank
Transportation (roads, railways, waterways)	1st
Power utilities	2nd
Communication systems/centers	3rd
Water and wastewater	4th
Emergency operations centers	5th
Police and fire stations	6th
Hospitals and medical facilities	7th
Dams	7th
Evacuation shelters	9th



Engagement

4

Responses

Which residents in Tioga County are most vulnerable to natural hazards?

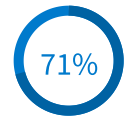
Population that lives in the floodplains

👍 4 🗳️ 0

Elderly



Responses	Upvotes	Downvotes
Population that lives in the floodplains	4	0
Elderly	1	0
Traveling Migrants	0	0
Homeless	0	0
Individuals with special needs	0	0
Young and unsupervised	0	0
Elderly	0	0
low socioeconomic status, homeless d	0	0
Boomers/old Infirm	0	0

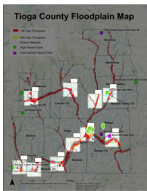


Engagement

9

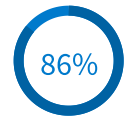
Responses

Which region of the county is most vulnerable to hazards, such as flooding?



Response options

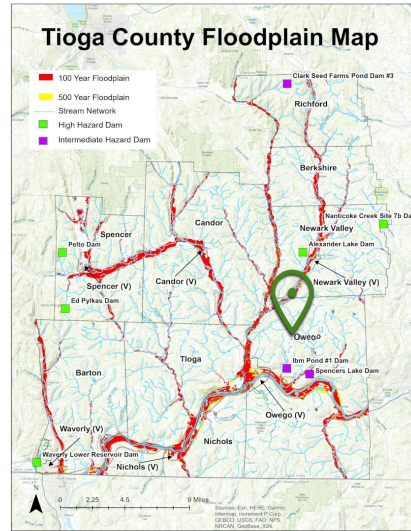
Count Percentage



Engagement

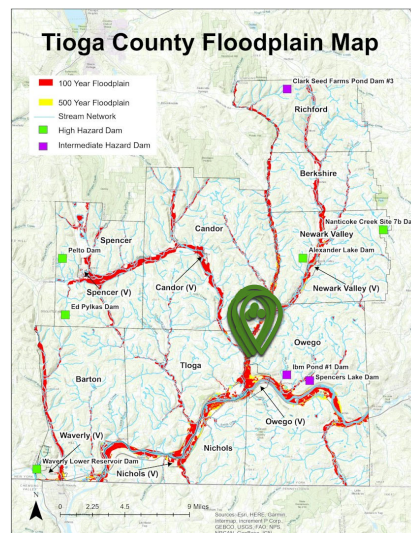
6

Responses



1 17%

Outside defined region



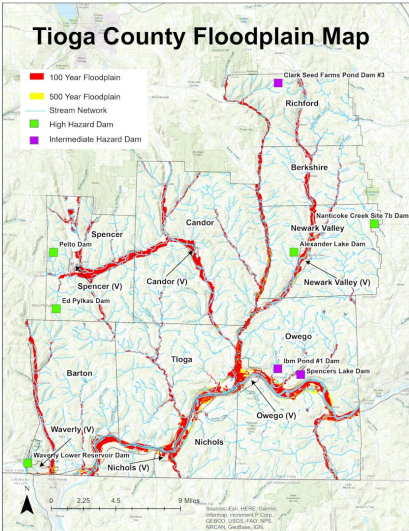
5 83%

Region 1

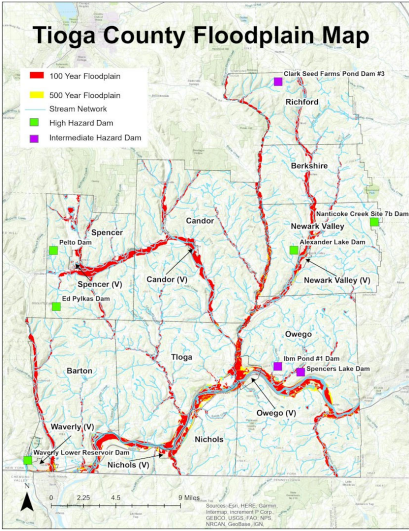
0 0%

Response options

Count Percentage



Region 2



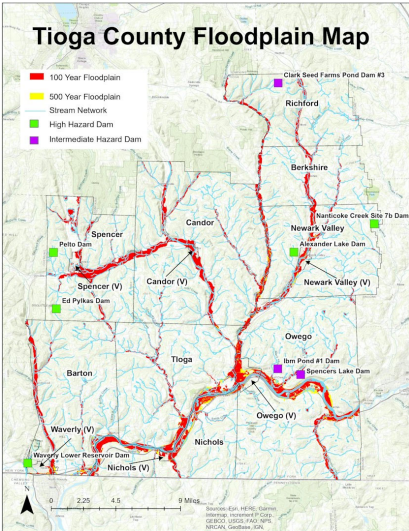
0 0%

Region 3

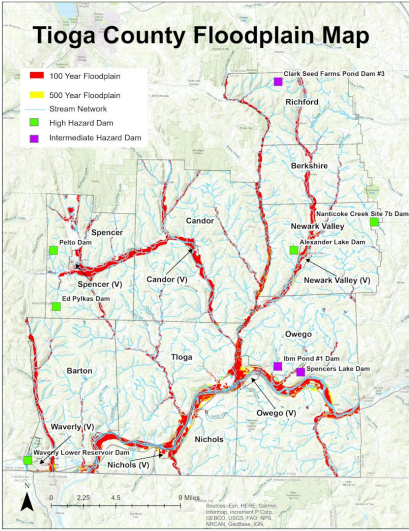
0 0%

Response options

Count Percentage



Region 4



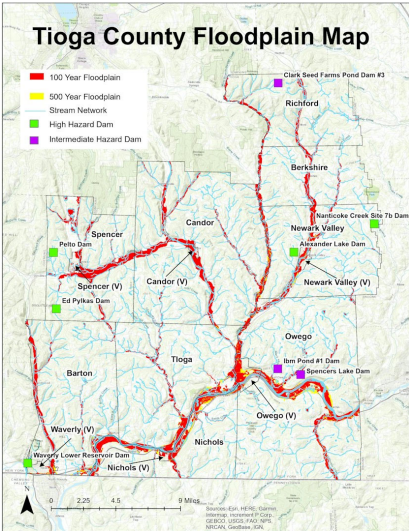
0 0%

Region 5

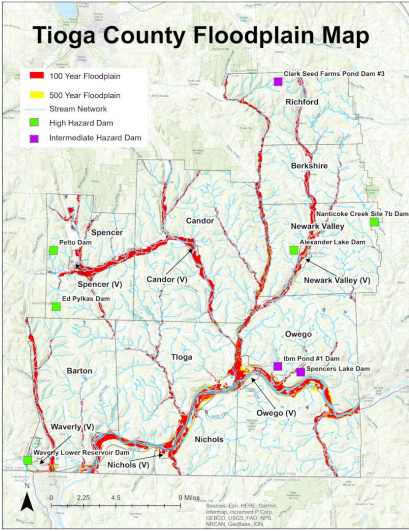
0 0%

Response options

Count Percentage



Region 6



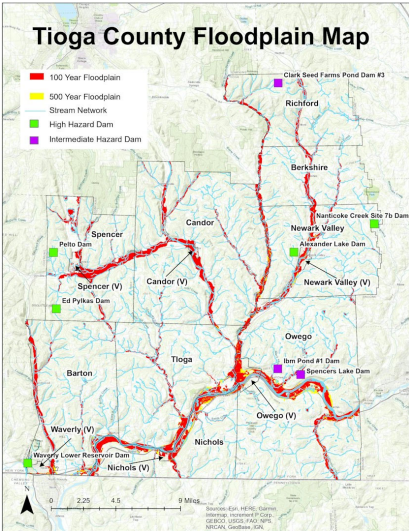
0 0%

Region 7

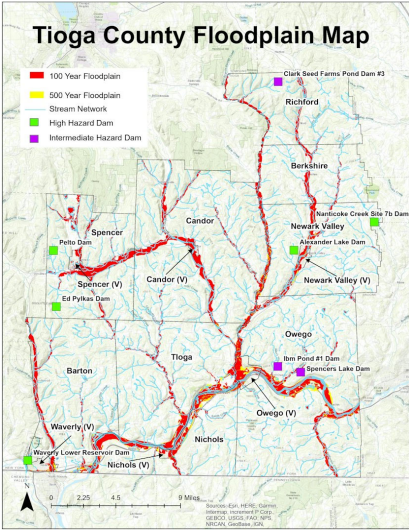
0 0%

Response options

Count Percentage



Region 8



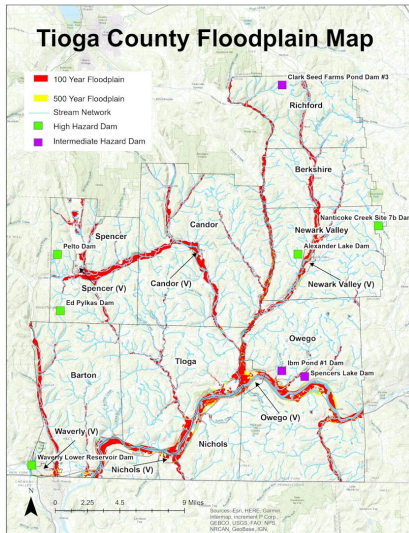
0 0%

Region 9

0 0%

Response options

Count Percentage



Region 10

What type of action do you think can best reduce Tioga County residents' risk to natural hazards?

Local Planning and Regulations	14%
Structure and Infrastructure Projects	43%
Natural Systems Protection	14%
Education and Awareness Programs	29%

Response options

Count Percentage

Local Planning and Regulations

1 14%

Structure and Infrastructure Projects

3 43%

Natural Systems Protection

1 14%

Education and Awareness Programs

2 29%



Engagement

7

Responses

How concerned are you about the impacts of climate change for Tioga County?

Not Concerned	14%
Somewhat Concerned	71%
Extremely Concerned	14%

Response options

Count Percentage

Not Concerned

1 14%

Somewhat Concerned

5 71%

Extremely Concerned

1 14%



Engagement

7

Responses

Tioga County Hazard Mitigation Plan – 2023/24 Update

NEW Hazard Mitigation Action Worksheet

Do you have a mitigation action that you think should be included in the updated HMP?
If so, please complete this worksheet!

1) What is the hazard that needs to be mitigated?

Severe Storm Flood Drought X Extreme Temperature

2) What problem is the hazard causing within the county?

Lack of water for people, crops and livestock

3) How should the county mitigate the hazard and prevent the problems that it is causing?

- Public education campaign to have residents learn about importance of water conservation related practices – work with the NWS as they have programs regarding water conservation
- Encourage farm operations to adopt Climate resilient practices

4) What goal(s) and/or objective(s) does this mitigation action meet?

Education of public on when to conserve water. Assist farm operators in the county in the implementation of soil health practices, water storage, etc

5) How much time would the county need to implement this action?

6months -1 year for education and keep it ongoing
Implementation with Operators will take a longer time

6) What county department or office should lead this effort?

County office???
SWCD for farms



7) How much do you believe this mitigation action will cost the county? Do you know of any potential funding sources?

???

Farm implementation of Climate resilient practices (CRF grant)

Tioga County Hazard Mitigation Plan – 2023/24 Update

NEW Hazard Mitigation Action Worksheet

Do you have a mitigation action that you think should be included in the updated HMP?
If so, please complete this worksheet!

1) What is the hazard that needs to be mitigated?

Severe Storm Flood X Drought Extreme Temperature

2) What problem is the hazard causing within the county?

Flooding impacts to properties and infrastructure

3) How should the county mitigate the hazard and prevent the problems that it is causing?

- Encourage farm operations to implement Stormwater retention ponds, creation of wetland and implementation of Riparian Forest Buffers to address flooding within the watershed.

4) What goal(s) and/or objective(s) does this mitigation action meet?

- Assist farm operators in the county in the implementation of implementation of stormwater retention ponds, creation of wetlands and implementation of Riparian Forest Buffers to address flooding within the watershed and the benefits they can provide to their operations and the watershed as a whole

5) How much time would the county need to implement this action?

Long term action and ongoing

6) What county department or office should lead this effort?

SWCD in partnership with USC



7) How much do you believe this mitigation action will cost the county? Do you know of any potential funding sources?

CRF, USC Funding, WQIP,etc

Tioga County Hazard Mitigation Plan – 2023/24 Update

NEW Hazard Mitigation Action Worksheet

Do you have a mitigation action that you think should be included in the updated HMP?
If so, please complete this worksheet!

1) What is the hazard that needs to be mitigated?

Severe Storm X Flood X Drought Extreme Temperature X

2) What problem is the hazard causing within the county? Due to invasive pests the county is seeing a increase of dead or dying trees along utility rights-of-ways, streams, transportation routes, etc that have the potential to cause impacts during severe storms and flood events. Also with a lack of tree canopy there is potential for increase temperatures in urban areas and lack of shade.

3) How should the county mitigate the hazard and prevent the problems that it is causing?

- Conduct a tree inventory -general methods to help estimate the varieties and types of trees along right of ways. This can include keeping a detailed list of “street trees” in developed areas, trees in municipal parks, etc., and can also include locations of Ash tree stands that are dead, infested, or are still healthy and unaffected.
- Tree assessments – learn methodologies to determine if trees are at high risk at failure
- Offer training to municipal staff on assessments and provide training on removal, (i.e. game of logging)
- Public education campaign to have residents assess their own trees, and see further assistance from a professionals if there is a question about health and safety near homes or roadways
- Tree plantings -

4) What goal(s) and/or objective(s) does this mitigation action meet?

The Ultimate goal of the Tree Mitigation Program is to train municipal staff to inventory and assess the trees that have the potential to fail, blocking streets, clogging waterways and taking out electric grid infrastructure during severe weather events, and to safely remove those trees that present the greatest risk of failure during blue skies, under optimal working conditions,



before the trees become storm debris in the next severe weather event. The public education campaign will urge residents to do the same

5) How much time would the county need to implement this action?

Various timeframes depending on the actions listed in #3

6) What county department or office should lead this effort?

EMS, DPW and SWCD

7) How much do you believe this mitigation action will cost the county? Do you know of any potential funding sources?

Chemung Co. received BRIC grant to do this work, total grant amount was \$122,000 to begin assessments, inventories and trainings.

SWCD could assist with re-planting activities along stream corridors and in some urban locations.

Hazard	Description of the Problem	Description of the Preferred Mitigation Action	Responsible Organization
High Temperatures	Vulnerable residents are at risk of heat stroke due to high temperatures	Keep updated list of vulnerable populations	Department of Health
Drought	Low water table during periods of drought	Educational Campaign (Conserve water, stay safe)	Tioga County WQCC

Tioga County HMP Update

Steering Committee Meeting Notes | June 20, 2023

In Attendance from Steering Committee

Bryan Goodrich, County GIS Manager

Jim Overhiser, Chairman of Owego HP Commission

Julie Overhiser, CSC Task Force Chair

Elaine Jardine, County Planning Director & Co-Lead for HMP Update

Wendy Walsh, District Manager for SWCD & Co-Lead for HMP Update

Mike Simmons, Director of Emergency Services

In Attendance from B&L

Jayne Breschard

Grace DeSantis

Margaret Thurston

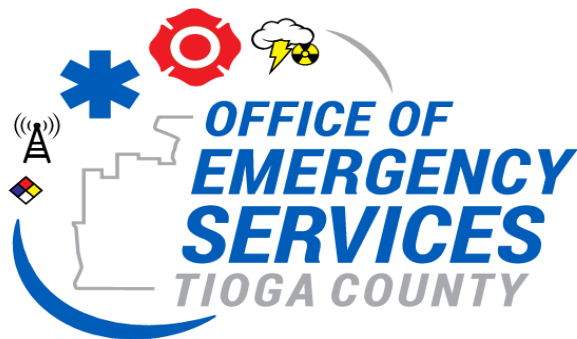
Notes

- Hazards profiled in 2018 HMP: Flooding, drought, extreme temperature, and severe storm
 - Steering Committee would prefer to profile the same hazards as they did in the 2018 HMP, rather than adding new ones
- It can be challenging for municipalities to even decide on flooding mitigation actions, so we may need to be creative and generate outreach/education/planning actions
- New county actions to consider
 - Drought
 - Education and outreach about drought and water conservation
 - NOAA has a program – would like to piggyback off of this
 - Currently have some funding programs (CRS) to look at water storage for farms
- New jurisdictional actions to consider
 - Wonder if there could be a municipal requirement to have a certain amount of water on reserve
 - May need private-public partnerships with this, as Village does not have public water
- Interest in action item for tree maintenance to protect power lines, culvert pipes, etc.

Next steps

- Jayme to send out hazard scoring results and template for Steering Committee to create new actions
- Setting up jurisdictional interviews

Michael S. Simmons
Director & Fire Coordinator
simmonsm@co.tioga.ny.us



Corinne Cornelius
Deputy Director
corneliusc@co.tioga.ny.us

Wednesday, September 6, 2023, at 9 AM

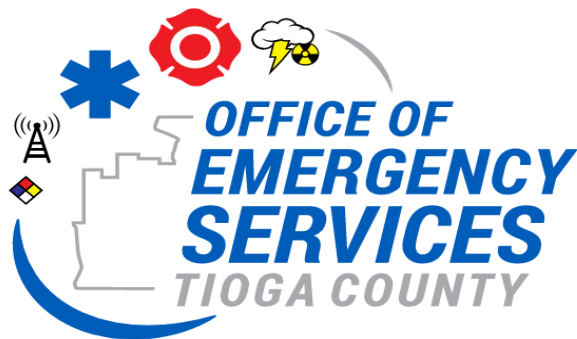
In-Person and Via - Zoom

Tioga County Local Emergency Planning Committee Meeting Agenda

- I. Welcome
 - Mike Simmons, Director, Tioga County Office of Emergency Services
- II. Introductions –Bob Williams
- III. Update of the LEPC –Bob Williams
 - Chair and Co-Chair are still needed.
- IV. Tioga County Public Health Activities - Katie Wait
 - Current Tioga County COVID 19 - status
 - Current Tioga County overdose - status
 - Other Public Health Information
- V. Report of the Office of Emergency Services – Mike Simmons
 - Bureau of Fire – Radio Project Update
 - EMS Update
 - Emergency Management Office
 - Grants Update
 - Citizens Preparedness Events Update
 - Threat Assessment Management Update
- VI. Updates:
 - Community Organizations Active in Disasters (COAD) –Commissioner Shawn Yetter
 - Chair needed.
 - County Animal Rescue Team (CART) – Denise Liske
 - Multi-Hazard Planning for Schools – Bob Williams
 - Hazard Mitigation – Wendy Walsh/Elaine Jardine
 - Town and Village Emergency Planning Project – David Adler, NYS OEM

103 Corporate Drive
Owego, New York 13827
607-687-2023 • 607-687-8466
Fax: 607-687-6782

Michael S. Simmons
Director & Fire Coordinator
simmons@co.tioga.ny.us



Corinne Cornelius
Deputy Director
corneliusc@co.tioga.ny.us

- Hazardous Materials Discussion – Steve Solomon

VII. Presentations:

1. Mark Pellerito - Warning Coordination Meteorologist

National Weather Service - Binghamton, NY Forecast Office
32 Dawes Drive, Johnson City, NY 13790 <http://www.weather.gov/bgm>
Work Number 607-770-9531 x223 / Personal Cell 304-767-0881



2. Carly Norton

Program Manager / Government & Community Relations

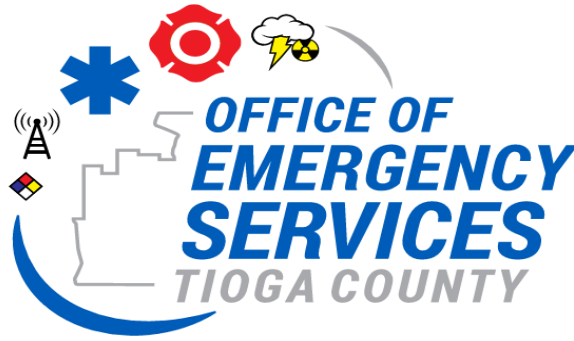
4425 Vestal Road, Vestal, NY 13850

Cell 607.940.1596

cnorton@nyseg.com

Speaking on smart meters

103 Corporate Drive
Owego, New York 13827
607-687-2023 • 607-687-8466
Fax: 607-687-6782



Michael S. Simmons
Director & Fire Coordinator
simmons@co.tioga.ny.us

Corinne Cornelius
Deputy Director
corneliusc@co.tioga.ny.us

3. Paula Granger

Assistant Director, Office of Counter Terrorism

Director, Domestic Terrorism Prevention Unit
New York State Division of Homeland Security & Emergency Services
1220 Washington Avenue, State Office Campus Bldg 7A. Floor 8, Albany, NY 12226
Cell: (518) 937-8060 | paula.granger@dhses.ny.gov
Speaking on Threat Assessment Management

4. Jayme Breschard, AICP, CFM

Senior Managing Community Planner

Barton&Loguidice

Office: 585.325.7190

Email: jbreschard@bartonandloguidice.com

[Website](#) | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Vimeo](#)

Speaking the Tioga County Hazard Mitigation Plan Update

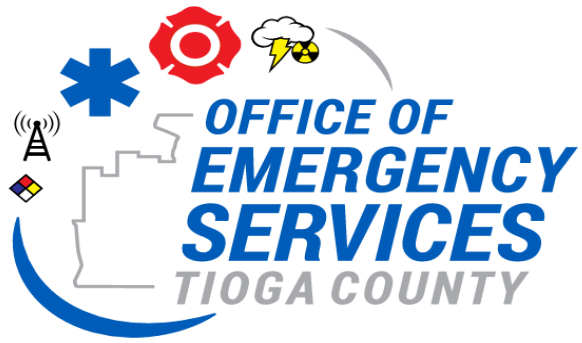
VIII. LEPC Member sharing – Bob Williams

- Discussion on topics participants would like to see covered at meetings in 2023 and 2024.
 - November 1, 2023 – Tabletop Exercise by NYS OEM
 - January 3, 2024 –
 - March 6, 2024 –
 - May 1, 2024 –
 - July 3, 2024 –
 - September 4, 2024 –
 - November 6, 2024 -

IX. Next Meeting Wednesday, November 1, 2023, at 9 AM via ZOOM and in-person at the Tioga County Public Safety Building, 103 Corporate Drive, Owego, New York 13827.

X. Adjourn

103 Corporate Drive
Owego, New York 13827
607-687-2023 • 607-687-8466
Fax: 607-687-6782



Michael S. Simmons
Director & Fire Coordinator
simmonsm@co.tioga.ny.us

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Deputy Director
corneliusc@co.tioga.ny.us

103 Corporate Drive
Owego, New York 13827
607-687-2023 • 607-687-8466
Fax: 607-687-6782

Tioga County Local Emergency Planning Committee Meeting

September 6th, 2023

Sign In Sheet

Name	Organization	Phone Number	E-mail Address
JEFF Winchell	owego PD		
Roseann Cole	nichols Town		
MARK PELLERITO	NWS		
JESSIE Johnson	Tioga County DES		
Stephanne Chapin	DHSEI OAM		
Dean Morgan	Town of Owego		
Michael Roda	TCM		
ERIK VERFVSS	DHSES		
Rick Corman	GFD		
ADAM BESSEY	TCSO		
Dave Heller	NYS OBM		
Bill Carrigg	Town of Owego		
Ann Smith	NYS DOH		

Tioga County Local Emergency Planning Committee Meeting
Minutes
Wednesday, September 6, 2023 at 9 AM
Zoom & In-Person

REPORT - OFFICE OF EMERGENCY SERVICES

- **Communications Project** – Motorola’s Engineering representatives visited four sites. It was suggested that the Apalachin site will need powerlines. Tower drawings should be available in a few weeks.
- **EMS Update:** Curtis Hammond stated that his office is trying to find a cost effective solution to address where EMS is struggling within the county. CAD is ready to depoly into ambulances. Fall EMT class has 14 students. Attendance at meetings of the TC EMT Leadership has been growing during past year.
- **HAZ MAT:** Steve Solomon reported that the Team needs additional members to include more areas and levels of expertise. Most calls are petroleum related. NYS is switching to “green” foam which works with different chemical components. Old foam worked with liquids. New foam works with bubbles.

UPDATES

- **Multi-Hazard Planning for Schools** – Bob Williams – Scheduled for Nov 7-9, 2023. Low enrollment
- **Public Health** – Katie Wait – COVID monitoring; numbers increasing locally as well as state wide. Expecting a Booster vaccine for this fall.
Regional spike in overdose cases. Partnership to End Addiction, now has text alerts. Sheriff’s Office and Public Health working on overdose mapping. Sheriff enters data in National database which plots location.

MEMBER SHARING

Bradford County – Jeff Rosenheck discussed gas well incident from last week. Drilling site took 4 days to plug, foam units were used, EOC activated, possible evacuation of surrounding area. Also discussed training classes information; and Train Awareness course in conjunction with Pueblo, Colorado.

NYS DHSES – Town and Village Emergency Planning Project is moving along.

COAD - Commissioner Yetter is working on the reorganization of committee.

County Animal Rescue Team (CART): Denise Liske reported that Sarah Hogan is new Director at Stray Haven, and very interested in working with CART program. Also looking for more Team members

NYS DOT - Department is prepping for winter.

PRESENTATIONS:

Mark Pellerito – Warning Coordination Meteorologist - National Weather Service – Flood Inundation mapping – first 10% of country (Texas and Northeast) to be onboard by 10/1/2023. No depth mapping available yet. (copy of presentation attached to these minutes).

Carly Norton – Program Manager, NYSEG - Smart Meter Upgrade - NYSEG will begin upgrading existing meters in the Binghamton area with smart meters. These installations are scheduled to begin in fall of 2023 and continue through winter 2025. Smart meters use digital technology to read meters. (copy of presentation attached to these minutes).

Paula Granger – Assistant Director, Office of Counter Terrorism – NYS DHSES

Domestic terrorism prevention efforts directed at specific individuals, groups, organizations.

NYS Executive Order 18- Preventing and Responding to Domestic Terrorism. The Domestic Terrorism Protection Unit maintains awareness of current trends, policy and research, education and awareness, develop and provide training. TAM Team is multi disciplinary team consisting of mental health, law enforcement, prosecutors, probation/parole, religious leaders, schools, business, social services.

Jayne Breschard, Senior Managing Community Planner- Baraton & Loguidice

Tioga County Hazard Mitigation Plan Update (5 year) based on FEMA and NYS standards.

Hazard Mitigation reduces risk that natural hazards pose to critical community assets. (flood, drought, severe storms). (copy of presentation attached to these minutes).

New Representatives:

Stephanie Chapin, Regional Director, NYS Office of Emergency Management

Ann Smith, NYS Dept of Health, Emergency Preparedness

NEXT MEETING

- **Wednesday – November 1, 2023** via ZOOM and in –person at the Tioga County Public Safety Building, 103 Corporate Drive, Owego, NY 13827 Tabletop Exercise by NYS OEM.

Meeting adjourned at 11:28am.

Respectfully Submitted,

Debora Stubecki

Office of Emergency Services

ON LINE ATTENDEES:

Lesley Pelotte	Mayor, Village of Nichols, NY.
Abbey Ortu	TC Economic Development & Planning
Katie Wait	TC Public Health
Jeff Rosenheck	Bradford Co., PA Emergency Mgmt.
Wendy Walsh	TC Soil & Water
Elaine Jardine	TC Economic Development & Planning
Bill Standing	TC Legislature
Rob Roberts	NYSEG
Paula Granger	NYS DHSES
Jayne Breschard	Barton & Loguidice
Jill Konopka	
Margaret Thurston	Barton & Loguidice
Roland Paperman	
H R. Marsh	
Susan Medina	TC Public Health
Denise Liske	
Matt Williams	Bradford County
Sarah Hogan	



Tioga County Hazard Mitigation Plan – 2023 Update

What is Hazard Mitigation?

Hazard mitigation reduces the risk that natural hazards pose to critical community assets. It focuses on long-term risk reduction, and can occur at any phase of the emergency management cycle.



Hazard Mitigation Planning

- The Disaster Mitigation Act of 2000 requires state, local, tribal and territorial governments to have a FEMA-approved mitigation plan in order to be eligible for mitigation project funding.
 - Updates every 5 years
 - Follow the updated FEMA and NYS standards
- Tioga County received a grant from FEMA to update the 2018 Multi-Jurisdictional Hazard Mitigation Plan.



Planning Participants

Core Planning Group

The Core Planning Group will take the lead on the development of the Hazard Mitigation Plan update for Tioga County. The Core Planning Group is composed of staff from several county departments, members of the consultant team, and representatives from New York State's Department of Homeland Security and Emergency Services (DHSES). The Core Planning Group will meet monthly during the hazard mitigation planning process.

Steering Committee

The Steering Committee will serve as an advisory board overseeing the development of Tioga County's Hazard Mitigation Plan update. The committee is composed of the Core Planning Group and several other key stakeholders within the County, and it will meet on an as-needed basis during the development of the plan update.

Jurisdictional Team

The Jurisdictional Team will be composed of two representatives from each jurisdiction within Tioga County. The Jurisdictional Team will meet with the Core Planning Group prior to the two public meetings and after other project milestones have been achieved.

Hazards Profiled

Tioga County is prioritizing the following hazards in the plan:

1. Flood
2. Drought
3. Severe Storms
(including winter storms)
4. Extreme Temperatures
(heat & cold)



Preliminary Findings

- Progress Made
 - Cooling Centers
 - Watershed-based assessments for flooding
 - Database of medical equipment
 - Upgrades to critical facilities
 - And more!
- Challenges
 - Flooding in mobile home parks
 - Senior citizens vulnerable
 - Transportation to shelters
 - Downed tree limbs



Vulnerable Groups

- *Senior citizens 65+
- *Mobile home park residents
- Low income residents
- People with disabilities
- Amish population
- Non-Native English speakers
- Homeless individuals
- Renters
- People without a vehicle

* = priorities identified by HMP Core Planning Committee.
Other data from Tioga County Community Health Assessment,
National Risk Index, ESRI, and Tioga County input.



Owego Heights Mobile Home Park

Feedback

1. What do you see as the biggest challenges with hazard mitigation in the work you do / in the County?
2. Are there other major challenges besides the ones on this list?
3. Are there other groups who are particularly affected by these hazards?



Mitigation Actions

Ongoing Actions from 2018 Plan

- Install Message Boards on Roads
- Map Relief Supply Routes
- App Showing Road Blockages
- Rain Gauges (Flood Warning)
- County Flood Response Plan
- Municipal Emergency Plans
- Mark Flood Levels at Community Flood Awareness Signs
- Basement Cleanout Program for Hazardous Waste
- Online Tool for Recording Losses & Damages

New Actions Proposed

- Drought Awareness Campaign
- Flood Outreach Campaign (Farmers)
- Tree Management Program (assess & remove hazardous trees, plant new trees)
- Complete Watershed Assessments
- Natural Flood Mitigation Solutions for Owego Creek
- Assess and Upgrade Critical Facilities against Flooding
- Other ideas??

Feedback

1. What are your thoughts about the mitigation actions proposed?
2. How can the County address the following challenges?
 - Impacts to senior citizens
 - Mobile home parks and flooding
 - Transportation to shelters
 - EMS calls during extreme heat
 - Impacts to other vulnerable groups



Engagement Strategies

- Meetings with County/Town/Village Officials
- Public Meetings
- Online Survey (<https://www.surveymonkey.com/r/TiogaHMP>)
- Focus Groups
- Publicize through county agencies, press release, Citizen Preparedness Workshops, Emergency Services App
- Hybrid meeting with closed captions

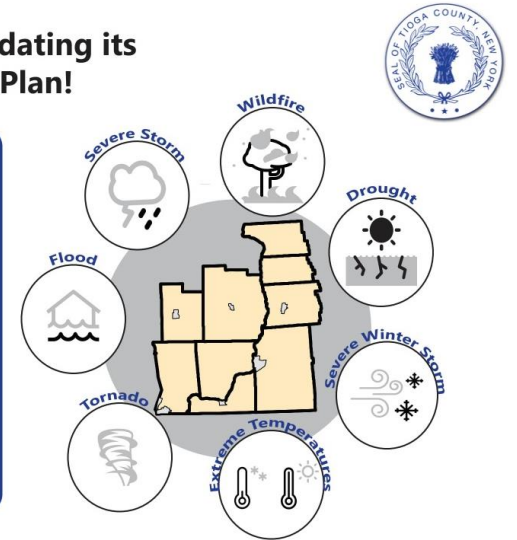
Tioga County is updating its Hazard Mitigation Plan!

How can you Participate?

Contact your local municipality or Barton & Loguidice at astone@bartonandloguidice.com.

- Learn about the Plan
- Share ideas that can help reduce the risk of hazards

Contact the Office of Emergency Services for information about future public meetings



What is a Hazard Mitigation Plan?

A hazard mitigation plan identifies and evaluates risks and vulnerabilities associated with natural hazards and disasters. This process aims to reduce the loss of life and property by minimizing the impact of natural hazard events. Hazard mitigation planning leads to the development of short-term and long-term strategies to reduce and manage risk. Mitigation strategies identified in an updated hazard mitigation plan may be eligible for grant funding for implementation.

Benefits of Hazard Mitigation



Protects public safety & prevents loss of life and injury



Prevents damage to your community's unique assets



Reduces harm to existing & future development



Minimizes operational downtime & accelerates recovery



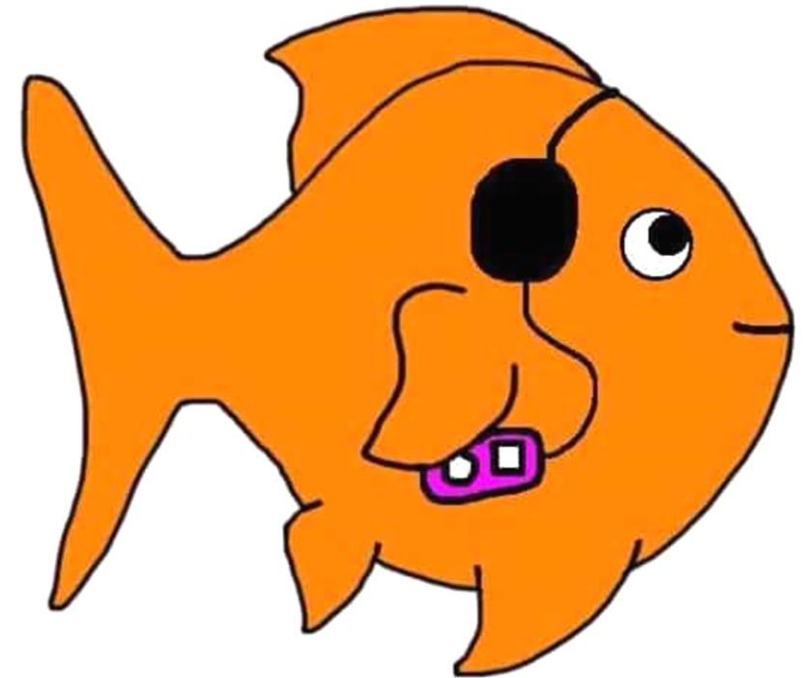
Reduces the cost of disaster response & the risk of exposure



Maintains community & strengthens social connections

Feedback

1. How could we get feedback from the following groups?
 - Homeless individuals
 - Amish community
 - People who speak English as a second language
 - Renters
2. Other engagement ideas?



Public Meeting #1

- October 4th 6-7 pm
- Hybrid meeting: Owego Nazarene Church OR by Zoom
- Zoom link:
<https://bit.ly/tiogahmp10-4>
- Zoom QR code:



Tioga County
NY

You can join us **In-person** or on **Zoom**

PUBLIC Information Meeting

October 4, 2023

Wednesday | 6:00 pm

Owego Nazarene Church
(3732 Waverly Road, Owego NY)

Join us via Zoom!

<https://bit.ly/tiogahmp10-4>

Or

call 646-558-8656

meeting ID: 874 2247 5601

Open for all...



scan me with your
camera app



HAZARD MITIGATION PLAN

Tioga County is updating the County's Hazard Mitigation Plan (HMP). A Hazard Mitigation Plan is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term. Tioga County's current Hazard Mitigation Plan was created in 2018 and will expire on August 12, 2024.

Your input is essential for making sure the plan reflects public priorities.

Please contact Margaret Thurston with any accessibility requests

by **September 20th**

mthurston@bartonandloguidice.com or 585-325-7190

Your Opinion Matters

Requests

1. Fill out the feedback form and return by 9/15
2. Advertise public meeting (Oct 4th 6-7 pm)
3. Publicize online survey (<https://www.surveymonkey.com/r/TiogaHMP>)
4. Convene focus groups if interested



Questions/comments/ideas? Please contact:

- Jayme Breschard: jbreschard@bartonandloguidice.com or 585-325-7190 or
- Margaret Thurston: mthurston@bartonandloguidice.com or 585-325-7190

Tioga Local Emergency Planning Committee Meeting Exercise 9/6/23
Tioga County Hazard Mitigation Plan Update 2024

Feedback Request

Name: _____

Email: _____

Department/Organization: _____

For reference: The hazards profiled in the plan are:

- **Flooding** (riverine flooding, flash flooding, shallow flooding, ice jam flooding, dam failure flooding, etc.)
- **Severe storms** (winter storms, high winds, thunderstorms, tornadoes, tropical storms, etc.)
- **Drought**
- **Extreme Temperatures** (heat and cold)

Challenge	Details/Insights about the Problem	Mitigation Ideas	Who could we contact to learn more?
Senior Citizens Vulnerability (Senior citizens were identified as particularly vulnerable to hazards in this plan.)	What are the impacts of these hazards on senior citizens in the County? Where are the challenges with mitigating these impacts?		
Mobile Home Parks (Trailer parks are usually located in floodplain and house lower income communities who generally lack the capacity to relocate.)	Are the problems mostly with flooding or with severe storms too? Do most owners/renters have flood insurance? Other details? <i>Is the focus on Trailer Parks or Mobile Homes in general? In drawing specific attention to those located in "Parks" might appear to the population that resides in a mobile home but not in a park as not needing a response.</i> <i>As a suggestion separate into (2) categories. Those located within a defined park community or being 2 or more on a parcel, and as a single mobile home.</i>		
Transportation to Shelters (In the past 3 years, the lack of public transportation to move people to shelters has been challenging. Transportation using school buses is dependent on availability.)	More details about this problem?		
EMS Calls in Extreme Heat (The county sees some increase in EMS calls during extreme heat events.)	E.g. patterns in terms of where these calls occur, who calls, whether these residents have A/C, etc.?		

Challenge	Details/Insights about the Problem	Mitigation Ideas	Who could we contact to learn more?
Vulnerable groups: - Homeless individuals - Low income residents - People with disabilities - Amish population - Non-native English speakers - Renters, households without a vehicle - Other groups?	How are these groups affected by hazards?		
Other challenges/ideas			

Do you have ideas for how to ask for input from any of the populations listed above?

A few initial challenges I see here is getting identified demographics engaged. Just because people have access to the internet / website does not mean people are going to complete this survey on-line.

Bigger Ideas:

Need to attend senior centers, religious meeting / functions, dinners, community events with information but also a tablet whereby they can complete on-site or with an assistant.

Public outreach using county mailing or include within tax, water bills, etc.

Provide in preferred languages or have a service where people can contact to complete.

Possibly solicit input like conducting a census. Have pollsters go where identified groups exists.

Would you be willing to help with the following?

1. Publicize the public meeting on October 4th? (e.g. post information on website and/or social media, post physical flyer)
2. Publicize the online survey through your website, social media, and/or word of mouth?
3. Organize a focus group to ask residents for feedback about how hazards affect them and their ideas to mitigate hazards?
 - a. If yes, are there one or more vulnerable groups from the above who you might be able to engage as part of the focus group?
4. Other?

Other questions/comments/ideas:

- Public survey link: <https://www.surveymonkey.com/r/TiogaHMP>

Seems the Challenges & Details / Insights identified on the Feedback Request should also be asked within the Public Survey, at least in a general format.

Please return at the end of the meeting, or by Friday, September 15th to [REDACTED]

[REDACTED] . You may also return a physical copy to [REDACTED]

Thank you for your input!

Summary of Conversation with Tioga County Department of Economic Development and Planning – 9/7/23

Abbey Ortu provided more information about the following topics:

- Disposing of or recycle old tires, kids toys, electronics, and other items in addition to hazardous waste.
- Establishing an online system to quickly organize volunteer corps
- Updating the list of food pantries in the County

Next steps: Talk with Core Planning Group about the feasibility of these ideas.

Meeting with Department of Public Health 9/12/23

Attendees:

- Margaret Thurston, B&L
- Grace DeSantis, B&L
- Heather Vroman
- Denis McCann – Director of Administrative Services

Questions

1. Give background on Hazard Mitigation Plan (include hazards profiled, process)
2. Describe the populations you work with the most and your organization's role in working with them?
 - Full service health dept – have mandated services (monitoring disease and surveillance of communicable diseases, environmental health division, making investigations into food borne illnesses, assessing new septic systems, tobacco retailers, rabies investigations)
 - Do a lot of community engagement with community educators (lyme disease, rabies, immunizations)
 - Nursing and immunizations for those who lack health insurance/providers
 - No STD in-house, but have partnership with Tioga Opportunities to provide this
 - Provide early intervention with youth in foster care, working with cps
 - PACT
 - Work with Emergency Services to prepare individuals for flooding, also have a pandemic plan
 - Also have a medical reserve core
 - Extreme temperatures
 - Responsible for maintaining cooling centers list in summer and getting info out to public (on website) and publish a resource guide
 - Use facebook page and fairs to educate about extreme temperatures
 - Have a huge bulletin board in the lobby to discuss various topics (typically include seasonality issues) – shared building with social services and mental hygiene
 - Flood
 - Have a healthy neighborhoods program – home check program
 - E.g. if a home had a flood, they can talk with them about mold concerns
 - Over a decade, have had over 100 families per year
3. Challenges – What are the main challenges that affect the populations you serve, in responding to flooding, drought, storms, or heat/cold?
 - Healthy neighborhoods program
 - Provide bleach, mops, etc. that they would need post-flood
 - Traps, etc. for rodents
 - Sealing windows/doors – protection from weather extremes
 - Give our fire detectors, carbon monoxide detectors
 - Do a home assessment and provide education as part of this program
 - This is a referral program (lead, indoor air quality, fire, and injury prevention are the goals), but they can address a variety of natural hazards through this

- Have adapted the program to meet the needs of the community now that they do not need to follow grant program requirements
- 4. Who do you view as most affected by these hazards and how?
- 5. Mitigation actions - Do you have any ideas for actions the county could take to mitigate the effects of hazards on the people you serve? If time: Do you have any feedback on the mitigation actions proposed so far?
 - Healthy neighborhoods – no longer receive reimbursement for these
 - Would like to see more funding for this
 - Are now just at the beginning of now having funding (was originally funded by NYS DOH HNP)
 - They had previously done a lot of marketing for this program, but are worried without funding they may not be able to market it as much
 - Cutting back branches, dredging waterways to prevent utility outages, flood, road closures
- 6. Public engagement – (describe strategies we have already). Do you think any of these would be effective at reaching the populations you serve? If not, what's the best way to engage with the populations you serve? (*Cannot guarantee we can make this happen)
 - Strategies so far: meetings with county/town village officials, public meeting, online survey, maybe focus groups led by community groups
- 7. Are there ways we can make the meetings more accessible to the populations you serve?
- 8. Requests
 - Public info meeting – can you help advertise if we send you a flyer?
 - Yes
 - Survey - Are you willing to help publicize the survey? If yes, would an online survey work, or would a print survey be better if we are able to develop it? (we would need to check on our end if this is possible. Also you would need to print/distribute/collect it)
 - Yes
 - Focus groups - Do you have any interest in your organization convening focus groups? (groups led by community members to ask people in their community what they want to see) Or, do you have any recommendations of good people or organizations to convene them? What would incentivize or inspire people to come to focus groups? (Note: B&L is not doing focus groups. Rather, we can provide these agencies with resources and review materials if they would like to facilitate their own focus groups.)
 - Will let us know if this is of interest to them
- 9. If time, ask about specific issues we heard in interviews (describe the problem & mitigation actions):
 - Difficulty in reaching certain populations (very rural, lack of internet access, limited municipal budget for mailer, etc) – issue for both alerting people to hazards and including their feedback as part of the plan
 - Challenges with transportation to shelters / heating / cooling shelters
 - Calls to EMS during extreme heat
 - Reaching these groups:
 - Senior citizens
 - Mobile home residents
 - Homeless individuals
 - Low income residents
 - People with disabilities
 - Amish population

- Non-native English speakers
- Renters
- Households without a vehicle
- Other groups?

10. Is there anyone else you recommend Tioga County talk to about this, if time? Either from your organization or elsewhere?

11. Any other thoughts you'd like to share or questions?

12. Follow-up items

Conversation with Ellen Pratt – Sustainability Manager – Tioga County Department of Economic Development and Planning – 9/19/23

Tioga County HMP Update 2024

Attendees:

- Ellen Pratt
- Grace DeSantis (B&L)
- Margaret Thurston (B&L)

Summary:

- Ellen gave feedback on the County's mitigation action in the plan related to waste disposal.



Tioga County Hazard Mitigation Plan Update *Conversation with Tioga Opportunities*

Wednesday, September 27

Notes:

Attendees:

- Christine Shaver – Tioga Opportunities – Director of Program Operations
- Erica Bayne – Tioga Opportunities – Housing Services Coordinator
- Amanda Kushner – Tioga Opportunities – Aging Services Coordinator
- Elaine Jardine – Tioga County Planning Director
- Margaret Thurston – Barton & Loguidice – Community Planning Intern

Notes:

- Introductions
 - Tioga Opportunities works with different vulnerable populations. Office of the aging works in particular with older folks to provide services. Tioga Opportunities also owns and manages 126 rental units in 4 apartment buildings. Most residents are older adults or people with disabilities, who have different challenges & vulnerabilities.
- Challenges that affect populations that Tioga Opportunities serves
 - Power outages – It seems the County has experienced more power outages than in years previously. Concerns for residents include ability to use CPAP machine, access to oxygen, if residents lose their food do they have the ability to replenish their food
 - Transportation – Many folks at apartment complexes don't have transportation that they could use in the event of a power outage or evacuation. There are also many community members throughout the County who do not have transportation.
 - Safety plans – Often, residents do not have means of creating safety plans & executing them.
 - Mobility & access to homes – Many individuals that Tioga Opportunities works with are chair-bound and bed-bound. Not only does this make many residents unable to get out of their homes, but it means someone may not be able to get into their homes to help them.
 - Access to air conditioning – many low-income residents are not able to have air conditioning units
 - Access to assistance programs – Many people don't qualify for certain programs which can help provide basic welfare during an emergency, such as social security programs, food stamps, other programs. However, there is a need among many people even if they don't qualify.
 - Isolation – many folks do not have family members or support systems locally, and so do not have anyone who can help provide what they need during an emergency. It ends up that Office of the Aging is often the people checking up on them, and there is not enough staffing for this.
 - Snow removal – snow removal is a challenge for many residents with disabilities & elderly residents.
- Mitigation action ideas (note that this is just a brainstorm session; all ideas will need to be approved by the Core Planning Committee for the Hazard Mitigation Plan)
 - Note: Tioga Opportunities is not aware of whether there are already ongoing efforts to address these challenges and if so what they are; this would be the realm of Emergency Services.

- Blizzard boxes – this is an existing program to provide shelf-stable food for residents age 60 and over who are home-bound and frail. Perhaps this program could be expanded to more demographics (and maybe more hazards?) with more funding.
- Providing generators to residents with medical needs (and others?) – (not an existing program) this would allow residents to store medications in the fridge, operate their CPAP & oxygen machines, etc.
- County notification system – people would sign up to receive notifications about hazards, AND information about what to do based on those hazards (e.g. “tornado” → go to xyz location, heat wave → here are a list of cooling shelters).
- Other notes
 - A buddy system (where people choose existing buddies and give them their contact information, etc.) probably would not address the isolation issue, because many residents do not have someone they could contact in the first place; if they did, they would already do this. Many residents also lack the means to sign up for a system. So it ends up that Office of the Aging are the people who were checking up on them.
 - It would NOT work to utilize Tioga Opportunities volunteers or their medical vehicle to help with transportation to the shelters. Tioga Opportunities transportation service is mostly run by volunteers not staff, and the volunteers can choose to provide these services or not during natural hazards. There are only 10-15 volunteers total and many of them are older residents. Do not include these volunteers as part of the hazard mitigation plan update. Additionally, Tioga Opportunities’ wheelchair-accessible van is being used now for Medicaid transport ONLY – not using for taking someone to shelter, to the grocery store, etc.
- Public engagement
 - Probably not many people they serve will come to the public meeting because of technology & transportation access.
 - Focus group(s) would probably work best because of technology and skill. Tioga Opportunities would be willing to convene them (e.g. they have their housing sites, a congregate lunch daily, as well as other programs like the WIC program and a family health clinic for younger patients). During October would be best. B&L could provide questions to help facilitate the focus group(s).
 - Tioga Opportunities could also push out social media posts through their channels, and maybe some people would sign up for the online survey based on this. Elaine to email Christine with some text for social media posts. B&L and Tioga County would not be providing incentives to participate (this is one thing that can really boost participation). October is a short-term to ask Tioga Opportunities to do this, but will do their best.
- Next steps
 - B&L – provide questions for focus groups
 - Elaine – email social media post text to Christine
 - B&L and Core Planning Group – Discuss results from this meeting at Core Planning Group Meeting and communicate any follow-ups with Tioga Opportunities
 - Tioga Opportunities – Communicate anything else and convene focus group(s) if possible.

Draft Newsletter Blurb:

Tioga County is updating our Hazard Mitigation Plan, and we want your feedback! A Hazard Mitigation Plan is a way to identify natural hazards the county faces, evaluate people and property at risk, and create strategies to minimize damages in the long term. In this plan, Tioga County has chosen to focus on flooding, severe storms, heat and cold waves, and drought. We want to know how these hazards impact you and any ideas you have! Here are some ways you can get involved:

1. Fill out the online survey: <https://www.surveymonkey.com/r/TiogaHMP>
2. Attend the first public information meeting on Wednesday, October 4th from 6-7 pm in person at the Owego Nazarene Church Fellowship Center [REDACTED] or by Zoom at [REDACTED] If attending in person, please park in the lot to the right of the church and enter from there.
3. For more information, visit <https://www.tiogacountyny.com/departments/emergency-services/> or contact [REDACTED]
[REDACTED]

Shorter blurb for social media (draft):

Tioga County is updating our Hazard Mitigation Plan, and we want your feedback! How do floods, storms, heat, cold, and drought affect you? How can Tioga County reduce these impacts? Fill out the survey (<https://www.surveymonkey.com/r/TiogaHMP>) or attend the first public information meeting on October 4th to make your voice heard.

Public Meeting #1: Wednesday, October 4th from 6-7 pm in person at the Owego Nazarene Church [REDACTED] If attending in person, please park in the lot to the right of the church and enter from there.

For more information, visit <https://www.tiogacountyny.com/departments/emergency-services/> or contact [REDACTED]
[REDACTED]

14 Weather Alerts In Effect

Tioga County to update 'Hazard Mitigation Plan,' seeks community members' input



By [Emmanuella Justine Pierre](#)

Published: Sep. 28, 2023 at 5:11 PM EDT



TIOGA COUNTY (WBNG) -- Tioga County will be updating its "Hazard Mitigation Plan" and seeks feedback on how it can improve the plan from its community members.

County officials will be asking questions such as how floods, storms, heat, cold and drought affect you and how can Tioga County reduce these impacts.

A survey was created for community members to fill out and the first public information meeting was announced for Oct. 4. The survey can be found by [following this link](#).

"The hazards we identified in this plan are severe storm, drought, extreme temperatures and flooding," said Tioga County Planning Director Elaine Jardine. "And of course, for the Village of Owego especially in Tioga County, flooding causes the most damage and loss."

Currently, Tioga County has identified various hazards throughout the county that they look to address.

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Tioga County
NY

PUBLIC Community Survey



Why is this survey important?

This survey will help the County and local municipalities understand how natural hazards (particularly flooding, severe storm, extreme temperatures, and drought) impact the public.



Who can take the survey?

All residents and stakeholders of Tioga County are welcome to take the survey! Please submit your responses by **November 10, 2023**.

Where to take the survey?

<https://www.surveymonkey.com/r/TiogaHMP>



Scan me to take
the survey



HAZARD MITIGATION PLAN

Tioga County is updating the County's Hazard Mitigation Plan (HMP). A Hazard Mitigation Plan is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term. Tioga County's current Hazard Mitigation Plan was created in 2018 and will expire on August 12, 2024.

**Your input is essential for making sure the plan
reflects public priorities.**



Your Opinion Matters





Tioga County, NY Hazard Mitigation Plan SURVEY

More on other
side!



Tioga County is updating the County’s Hazard Mitigation Plan (HMP). A Hazard Mitigation Plan is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term.

Tioga County’s current Hazard Mitigation Plan was created in 2018 and will expire on August 12, 2024. The 2018 version of the plan can be found here: <https://www.tiogacountyny.com/departments/emergency-services/>. The updated plan will incorporate the new guidelines provided by the Federal Emergency Management Agency (FEMA) and New York State’s Division of Homeland Security and Emergency Services (DHSES). Furthermore, it will allow the County to remain eligible for future mitigation funding including the Building Resilient Infrastructure and Communities (BRIC) grant Program.

Your input is essential for making sure the plan reflects public priorities. Your answers to this survey will help the County understand how these natural hazards impact the public and how the County can help reduce this impact.



Take the survey
online!

<https://www.surveymonkey.com/r/TiogaHMP>

Please drop off or mail completed surveys by **November 10, 2023** to:

Attn: Elaine Jardine,
County Planning Director
Tioga County Office of Economic
Development & Planning
56 Main St
Owego, NY 13827

OR

Attn: Wendy Walsh,
District Manager
Tioga County Soil & Water
Conservation District
183 Corporate Dr
Owego, NY 13827

General Questions

1. Which of the following describes your relationship to Tioga County? Select all that apply.

- Tioga County Resident I own property in Tioga County Other (please specify)
- Tioga County Business Owner I am an elected County/Town/Village
official in Tioga County
- I work in Tioga County, but do not live in
Tioga County

2. If you are a resident, which Town or Village do you live in?

(If you don't live in Tioga County, please choose the Town or Village where you work or own property.)

- Town of Barton Town of Nichols Town of Tioga Village of Owego
- Town of Berkshire Town of Owego Village of Candor Village of Spencer
- Town of Candor Town of Richford Village of Newark Valley Village of Waverly
- Town of Newark Valley Town of Spencer Village of Nichols I don't live, work, or
own property in Tioga
County

3. Please rate your level of concern about the following natural hazards’ impact on you and your neighbors.

	Very unconcerned	Unconcerned	Neutral	Concerned	Very concerned
Flooding	○	○	○	○	○
Severe Storms (thunderstorms, lightning, hail, tornadoes, high winds, hurricanes, tropical storms, winter storms, any other storms)	○	○	○	○	○
Extreme Temperatures (heat wave, cold wave)	○	○	○	○	○
Drought	○	○	○	○	○
Other natural hazards you’re concerned about (please describe):					

4. During the time you have lived, worked, or owned property in Tioga County, how have these natural hazards impacted you? Select all that apply.

- My home or business has been flooded.
- I have felt ill because of a heat wave or cold wave.
- I have had to evacuate my home because of a flood or other disaster.
- I have been concerned about how to get water for my home, business, or farm.
- My home or business has been damaged by a storm.
- I wanted to leave my home for the day to get away from the heat, cold, storm, flood, or drought, but I had trouble finding transportation or a safe place to go.

5. Are there any specific people, locations, facilities, or resources in your community that you are most concerned about being impacted by natural hazards?

6. What other impacts do these natural hazards have on you and your neighbors? What other concerns do you have about them?

7. Please rate how well each of the following statements describes you.

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	N/A
I know several people nearby who I can call if I need help in a disaster.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a flood, heat wave, storm, or other hazard hits, I usually check in on my neighbors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that my home or business is adequately insured in the event of a major loss.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know whether or not my home/business is in a floodplain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know how to protect my home/business from natural disasters.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making my home floodproof and stormproof is affordable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
County communications about storms, floods, and other natural hazards are prompt and effective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How do you receive your information concerning a disaster? (Select all that apply)

- Social media
- Online articles
- Email blast
- Word of mouth
- Radio
- Text alert
- Television
- Warning siren
- Newsletter
- Print newspapers
- Public message boards / display signs
- Other (please specify)

9. When you hear about disasters, who does the information usually come from? Select all that apply.

- Federal agency
- Town/Village
- Unknown
- New York State agency
- Community organization
- Other (please specify)
- County agency
- Friends/family

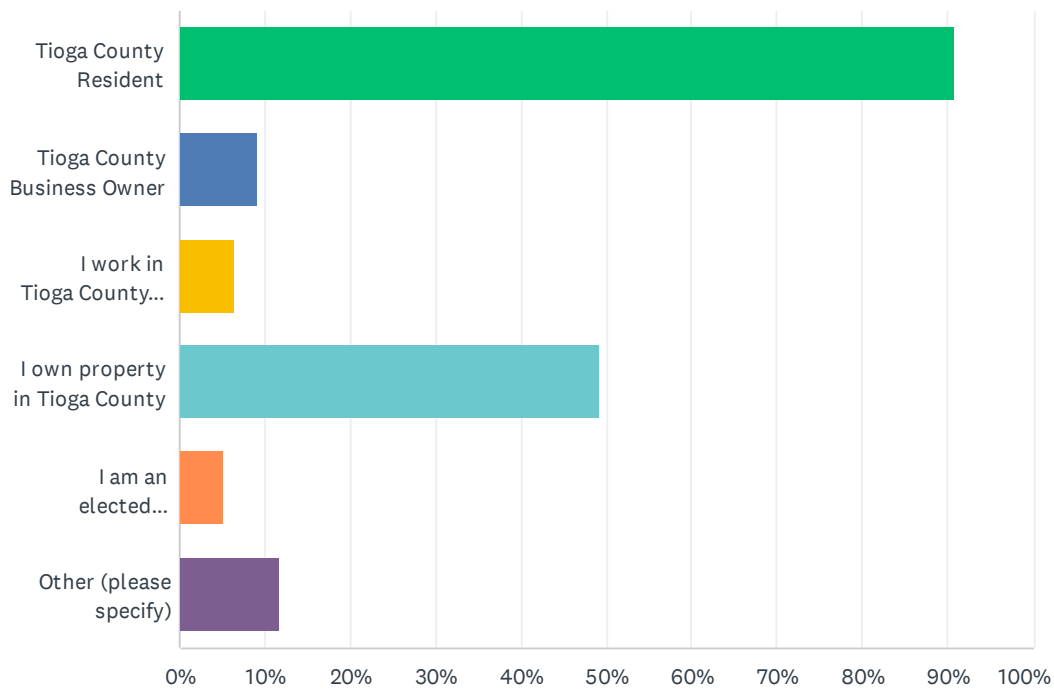
10. What topics are most important for the County to educate the public about, related to natural hazards?

11. What, in your opinion, would help make Tioga County be more resilient in the event of a natural disaster?

12. Additional comments

Q1 Which of the following describes your relationship to Tioga County? Select all that apply.

Answered: 77 Skipped: 0



ANSWER CHOICES	RESPONSES
Tioga County Resident	90.91% 70
Tioga County Business Owner	9.09% 7
I work in Tioga County, but do not live in Tioga County	6.49% 5
I own property in Tioga County	49.35% 38
I am an elected County/Town/Village official in Tioga County	5.19% 4
Other (please specify)	11.69% 9
Total Respondents: 77	

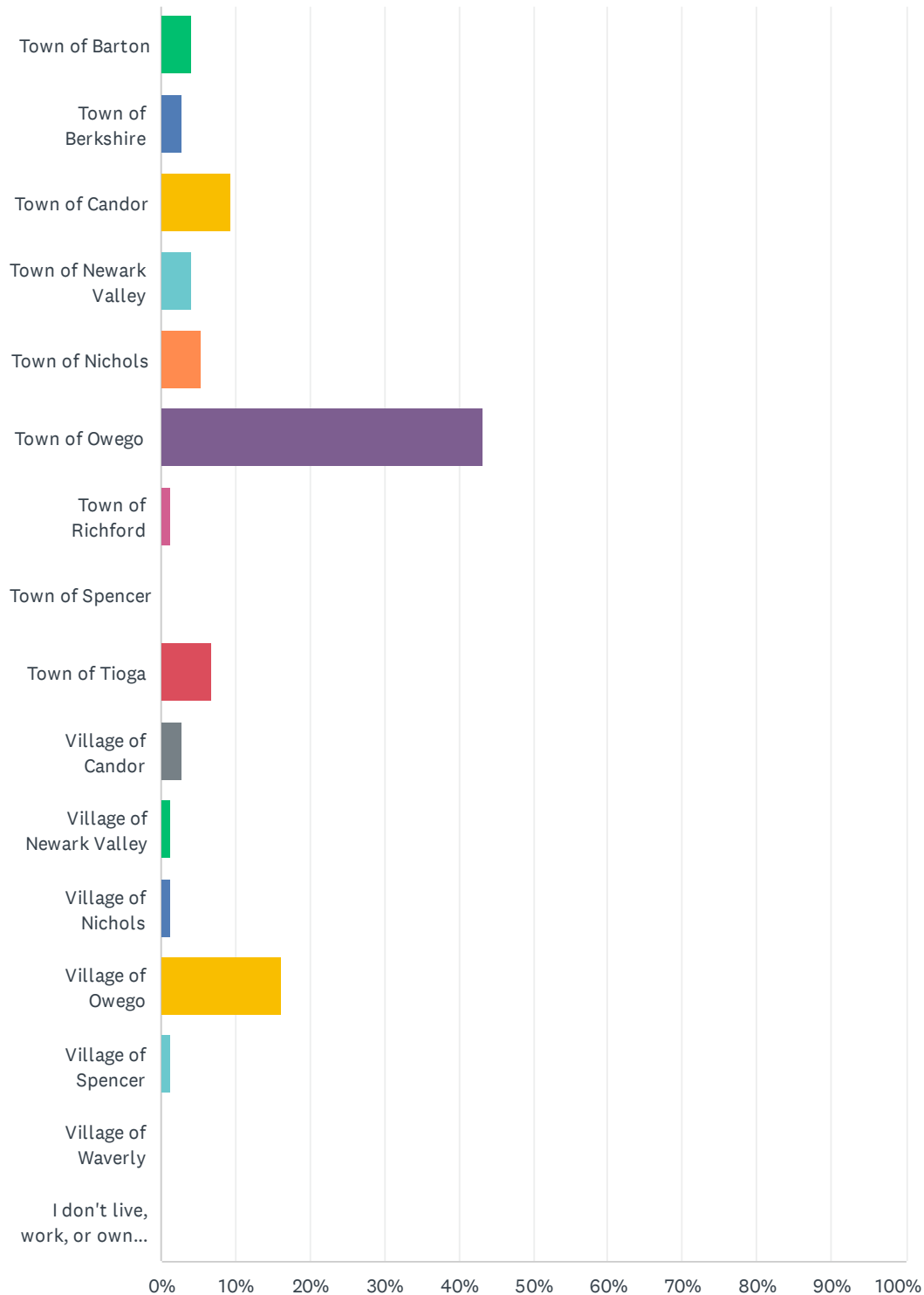
#	OTHER (PLEASE SPECIFY)	DATE
1	Town of Candor Code Officer	10/10/2023 8:21 AM
2	Tioga County Employee	10/6/2023 3:26 PM
3	Transplant to the County	10/6/2023 12:35 PM
4	Live and work in Tioga County	10/5/2023 1:38 PM
5	I work within the county.	10/5/2023 1:30 PM
6	and i work in Tioga	9/29/2023 10:36 AM
7	Children attend school in tioga county	9/28/2023 8:02 PM

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8	Work in Tioga County	9/22/2023 1:16 PM
9	Fire dept	9/20/2023 10:19 AM

Q2 If you are a resident, which Town or Village do you live in? (If you don't live in Tioga County, please choose the Town or Village where you work or own property.)

Answered: 74 Skipped: 3

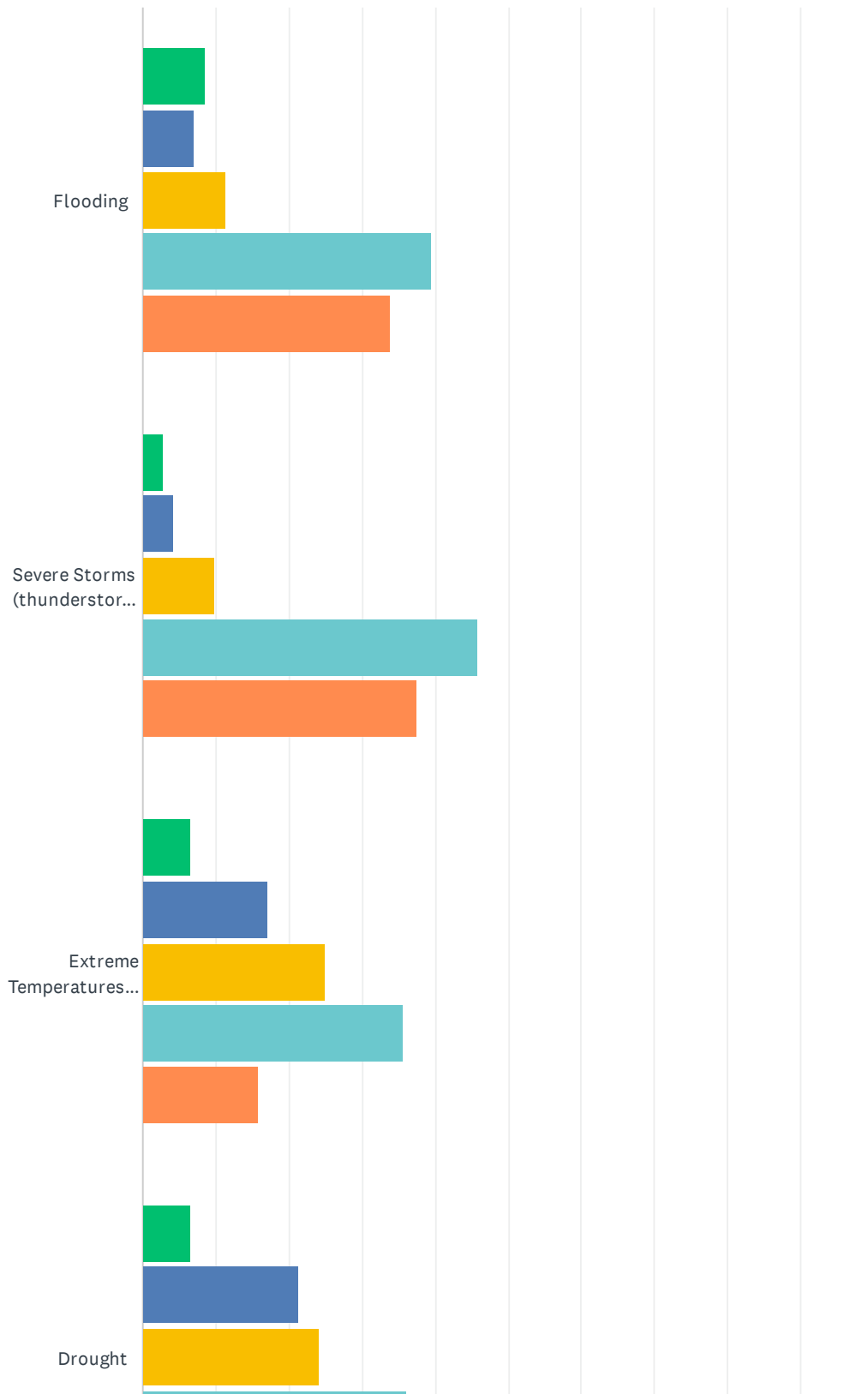


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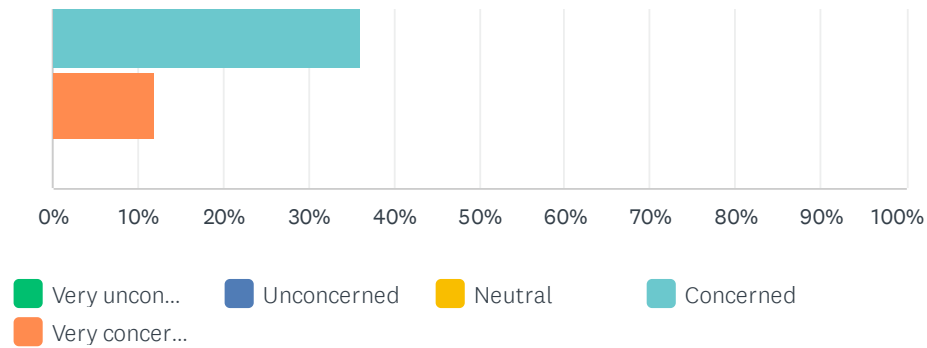
ANSWER CHOICES	RESPONSES	
Town of Barton	4.05%	3
Town of Berkshire	2.70%	2
Town of Candor	9.46%	7
Town of Newark Valley	4.05%	3
Town of Nichols	5.41%	4
Town of Owego	43.24%	32
Town of Richford	1.35%	1
Town of Spencer	0.00%	0
Town of Tioga	6.76%	5
Village of Candor	2.70%	2
Village of Newark Valley	1.35%	1
Village of Nichols	1.35%	1
Village of Owego	16.22%	12
Village of Spencer	1.35%	1
Village of Waverly	0.00%	0
I don't live, work, or own property in Tioga County.	0.00%	0
TOTAL		74

Q3 Please rate your level of concern about the following natural hazards' impact on you and your neighbors.

Answered: 77 Skipped: 0



Tioga County Hazard Mitigation Plan Update - Public Input Survey

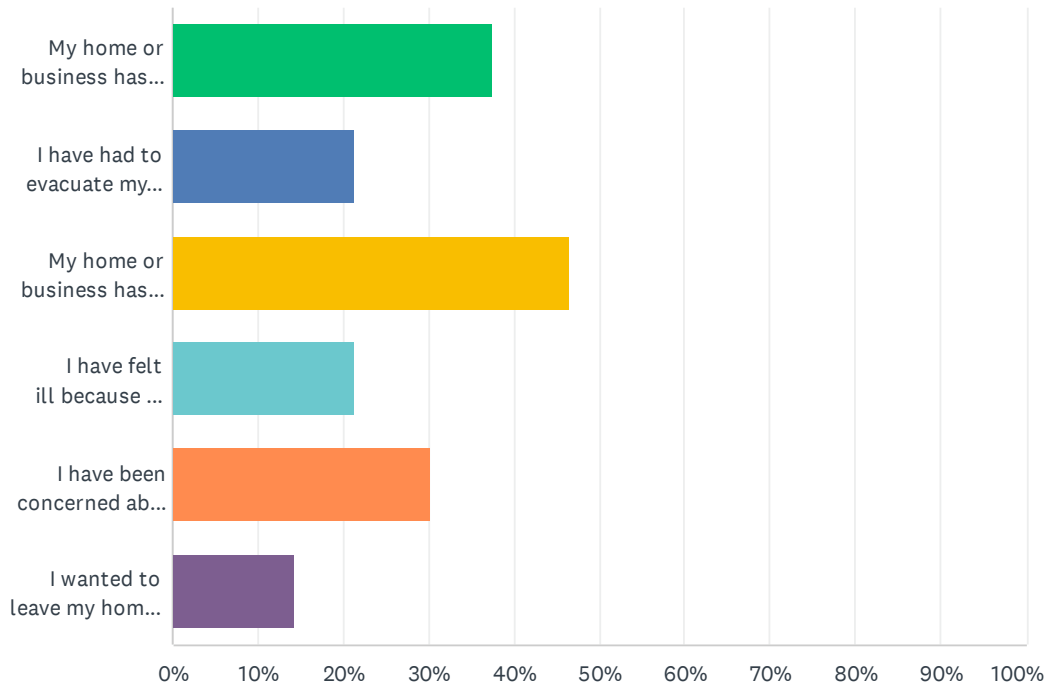


	VERY UNCONCERNED	UNCONCERNED	NEUTRAL	CONCERNED	VERY CONCERNED	TOTAL	WEIGHTED AVERAGE
Flooding	8.45% 6	7.04% 5	11.27% 8	39.44% 28	33.80% 24	71	3.83
Severe Storms (thunderstorms, lightning, hail, tornadoes, high winds, hurricanes, tropical storms, winter storms, any other storms)	2.78% 2	4.17% 3	9.72% 7	45.83% 33	37.50% 27	72	4.11
Extreme Temperatures (heat wave, cold wave)	6.58% 5	17.11% 13	25.00% 19	35.53% 27	15.79% 12	76	3.37
Drought	6.67% 5	21.33% 16	24.00% 18	36.00% 27	12.00% 9	75	3.25

#	OTHER NATURAL HAZARDS YOU'RE CONCERNED ABOUT (PLEASE DESCRIBE):	DATE
1	invasive species	11/1/2023 9:43 AM
2	Fat old men in right wing militias	10/31/2023 4:57 PM
3	radon exposure, air quality	10/6/2023 12:35 PM
4	Dying or dead trees falling and damaging property or injuring people.	10/5/2023 1:30 PM
5	Power outages (weather related or otherwise)	10/5/2023 1:07 PM
6	fires from dry land.	9/29/2023 2:41 PM
7	Gas wells and pipelines, aging railroad infrastructure	9/29/2023 12:42 AM
8	Wildfire smoke	9/28/2023 8:02 PM
9	loss of forest and other vegetation that reduce erosion during precipitation	9/28/2023 2:17 PM
10	Snow storms	9/20/2023 10:19 AM
11	Excessive snow, in an single event	9/19/2023 6:38 PM
12	Forest Fires due to restricted cutting on state lands for years	9/19/2023 10:47 AM
13	Invasion species	9/11/2023 7:40 PM
14	epidemics, infestations, smoke from fires	9/8/2023 9:25 AM

Q4 During the time you have lived, worked, or owned property in Tioga County, how have these natural hazards impacted you? Select all that apply.

Answered: 56 Skipped: 21



ANSWER CHOICES	RESPONSES	
My home or business has been flooded.	37.50%	21
I have had to evacuate my home because of a flood or other disaster.	21.43%	12
My home or business has been damaged by a storm.	46.43%	26
I have felt ill because of a heat wave or cold wave.	21.43%	12
I have been concerned about how to get water for my home, business, or farm.	30.36%	17
I wanted to leave my home for the day to get away from the heat, cold, storm, flood, or drought, but I had trouble finding transportation or a safe place to go.	14.29%	8
Total Respondents: 56		

Q5 Are there any specific people, locations, facilities, or resources in your community that you are most concerned about being impacted by natural hazards?

Answered: 44 Skipped: 33

#	RESPONSES	DATE
1	Water and sewer	11/1/2023 10:01 PM
2	sewage treatment, water treatment, the entire electrical distribution system	11/1/2023 9:43 AM
3	The entire NV government are inbred assholes.	10/31/2023 4:57 PM
4	Village of Owego, residents, businesses, schools, water source.	10/31/2023 11:34 AM
5	homeless	10/16/2023 10:09 AM
6	I am concerned about lower income people regarding flooding or other storms. I'm also concerned about travel during winter storms.	10/11/2023 12:22 PM
7	West Ave x North Ave (Drainage)	10/10/2023 12:53 PM
8	the elderly of which there are many in this town.	10/6/2023 12:35 PM
9	I am concerned for those who live near the Susquehanna River since it has flooded twice in my life time	10/6/2023 8:32 AM
10	The flats	10/5/2023 7:41 PM
11	Specific People: Elderly, disabled, impoverished, and those who live alone.	10/5/2023 2:33 PM
12	LOW-INCOME, ELDERLY. NURSING HOMES, TRAILER PARKS, DEAF	10/5/2023 2:26 PM
13	no	10/5/2023 2:05 PM
14	Electric Supply	10/5/2023 1:38 PM
15	Elderly, disabled, farms or grocery stores.	10/5/2023 1:30 PM
16	Those with access and functional needs, transportation	10/5/2023 1:07 PM
17	village of Owego. small business owners with limited funds to pay for expensive flood insurance required by mortgage companies. makes it hard to sell a business or property.	10/5/2023 12:05 AM
18	No	10/4/2023 7:32 PM
19	Electricity - power outages, regulations limiting critical outdoor wood burning stoves (given the frequency and duration of Winter power outages)	10/2/2023 8:49 AM
20	Village of Owego residents.	9/30/2023 7:48 AM
21	Dead ash trees over power lines	9/29/2023 5:12 PM
22	I am concerned by the lack of effort by the town to handle issues. They will hold off on plowing in heavy storms till the storm ends. If we are lucky we get our road plowed once a snow storm. I also worry about flooding on Route 38 by the south end of town. Many times the north bound lane will flood. The state, county and town do nothing till someone gets in an accident. NYSEG is also very slow to respond We average 2 weeks a year with out power in Berkshire due to storms and wires down. When we loose power we have no cell service at our home. We have no way to get information with out driving to Route 38. Route 79 has many dead spots also. Cell Service is horrible. We can not get alerts or information without going into the storms.	9/29/2023 2:50 PM
23	my mom lives on corner of Hayes Road & rt-79. Hayes road could be ditched better to prevent flooding her house. power outages and we have no cell phone service here.	9/29/2023 2:41 PM

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24	Long creek road	9/29/2023 10:36 AM
25	Electrical lines getting damaged and losing power. Dry weather in summer and lack of sufficient water for well pump.	9/29/2023 10:03 AM
26	Bridges in Newark Valley being flooded out	9/29/2023 8:55 AM
27	Climate change has ruined our old apple and pear orchards. We have not had fruit for 5 years now because of the abnormal spring and early summer temps. Between rain and cold it has killed blossoms. Where I live we have to build a greenhouse to be able to have some kind of working garden. This may not be what you are looking for but overall it is an effect from combined direct natural hazard and the unnatural extremes from weather.	9/29/2023 6:31 AM
28	Southside Owego no longer has a gas station that would be accessible if we were to have another major flood. That would not only impact fuel for vehicles, but for emergency generators. Emergency response times have become excessive since implementing ToO responses instead of nearest available. We also have a significant number of elderly, many of whom live alone.	9/29/2023 12:42 AM
29	Village of Owego is in a flood plain and has had minimal flood remediation over the years. The creeks have had no dredging, no downed tree removal which causes the streams to constantly overflow.	9/29/2023 12:01 AM
30	Owego Creek	9/28/2023 11:20 PM
31	Electricity, heating when power is out, getting to town for supplies when it is flooded or snowing	9/28/2023 10:53 PM
32	Young children and the elderly, no alerts for poor air quality days, high uv index days.	9/28/2023 8:02 PM
33	Candor schools	9/28/2023 6:47 PM
34	low lying areas for flooding, everyone for other natural hazards	9/28/2023 2:17 PM
35	The fire department. EMS, the school..	9/22/2023 6:02 PM
36	Entire Village of Owego, including Fire Station, Police Station, other EMS providers, and Sewage treatment facility	9/22/2023 1:16 PM
37	People living in the floodplain.	9/22/2023 8:15 AM
38	The elder housing on Spencer rd, route 96 does not have a generator. Many of these people have medical equipment, also what about heat in winter, cool in summer	9/20/2023 11:11 AM
39	Roadways	9/20/2023 10:19 AM
40	Elderly, others homebound	9/19/2023 6:38 PM
41	Lack of shelters for storms etc and lack of transportation by the government to the shelters also lack of EMS staffing FD Staffing and LE staffing in the county and slow response times because of the staffing let's small incidents escalate	9/19/2023 10:47 AM
42	434 at the area of Sweeneys market	9/19/2023 10:27 AM
43	Besides myself, a local dairy farm has had some issues. 2 of my neighbors basements have flooded as well as there yards	9/11/2023 7:40 PM
44	the old, Tioga County is full of childless elderly people that constantly need help with normal routines let alone an emergency event.	9/8/2023 9:25 AM

Q6 What other impacts do these natural hazards have on you and your neighbors? What other concerns do you have about them?

Answered: 38 Skipped: 39

#	RESPONSES	DATE
1	quality of life, will the plan strategies be implemented, are the Town leaders earnestly engaged or just going through the motions	11/1/2023 9:43 AM
2	Loss of power due to flooding.	10/31/2023 11:34 AM
3	We have been most impacted by winter storms. Lack of power and heat for an extended period is a serious issue and concern.	10/26/2023 6:27 PM
4	My main concerns are regarding necessary travel during winter storms.	10/11/2023 12:22 PM
5	Logging on neighbors properties affects water table and causes flooding.	10/10/2023 12:53 PM
6	the mental toll it takes to grieve the losses of residents in harm's way. Makes me anxious and ill at times.	10/6/2023 12:35 PM
7	We just had ground water from the last flood. Just flood concerns.	10/6/2023 8:32 AM
8	none	10/5/2023 2:05 PM
9	?	10/5/2023 1:38 PM
10	loss of electricity causes concerns about how to heat homes during sustained outages	10/5/2023 1:33 PM
11	I'm concerned that if NY follows California and creates brownouts during heat waves or cold snaps, that the elderly, infants, and disabled will be exceptionally adversely affected.	10/5/2023 1:30 PM
12	Not being able to evacuate due to access and/or functional needs, isolation from getting food or medical supplies, power being cut off for those that have power-dependent medical supplies	10/5/2023 1:07 PM
13	lowers ability to sell property. lowers funds to fix and maintain property.	10/5/2023 12:05 AM
14	Power outages due to strong storms. A severe weather event coming through.	10/4/2023 7:32 PM
15	Affordability of maintaining homes	10/2/2023 8:49 AM
16	Power outage.	9/30/2023 7:48 AM
17	drainage ditch upgrades	9/29/2023 5:12 PM
18	The neighbors and I have plowed our roads in heavy storms to keep people safe because the Berkshire Road crews may plow once a day at most. Roads barely have sand, salt anything on them. We take our equipment to make road safe. I have been told by the old supervisor to wait till morning. They plow right before school buses start. Some of us have to be at work at 6 am. I see Richford, Newark Valley Owego crews out while Berkshire stays in bed. When our Road had trees down we cut them because the town did not want to go out at 9pm.	9/29/2023 2:50 PM
19	town and state taking out trees and brush is why there is more flooding the trees keep the water from flooding. Plus removing trees and brush on property lines that border town & state roads let's people see what's on your land so they can steal from you. and i think there should be a siron on top of Richford hill the one in the town is in the valley so we can't hear it were we live.	9/29/2023 2:41 PM
20	Not being able to make it to work and losing my job and not being able to support my family.	9/29/2023 8:44 AM
21	The ditches in front of our homes are not properly maintained from debris. They need to be scoped out to a greater depth.	9/29/2023 6:39 AM
22	If there was another flood, Southside would be isolated from medical and mutual aid assistance. Emergency communication becomes an issue because most people have given	9/29/2023 12:42 AM

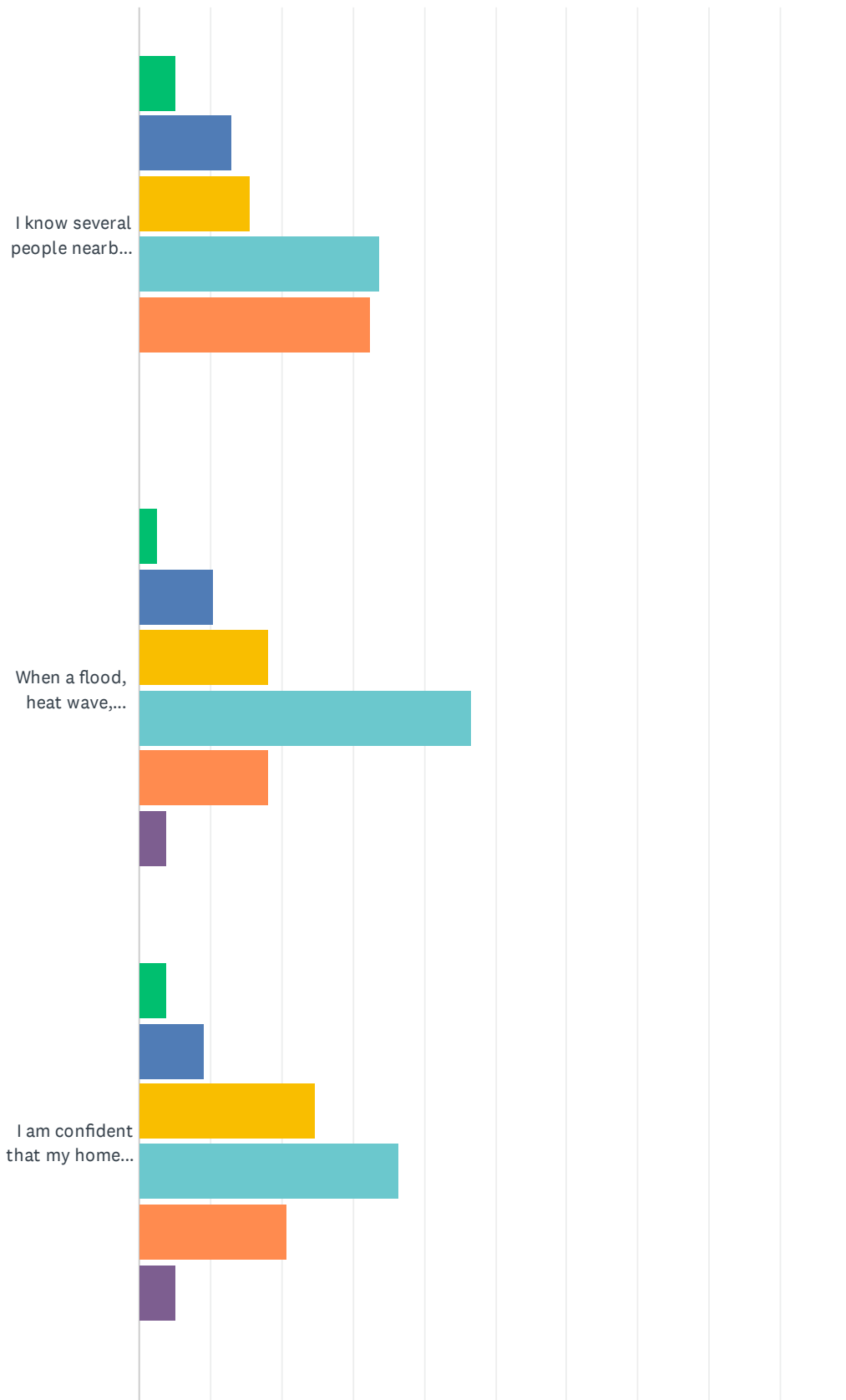
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up their landlines for internet phone service and cell service is sketchy - signal in many areas is poor to non-existent. If cable goes out, there's no signal for wifi. If there was some kind of disruption of /emergency with natural gas lines, there are several neighborhoods that could potentially be cut off from everything because of being completely surrounded by the pipelines.

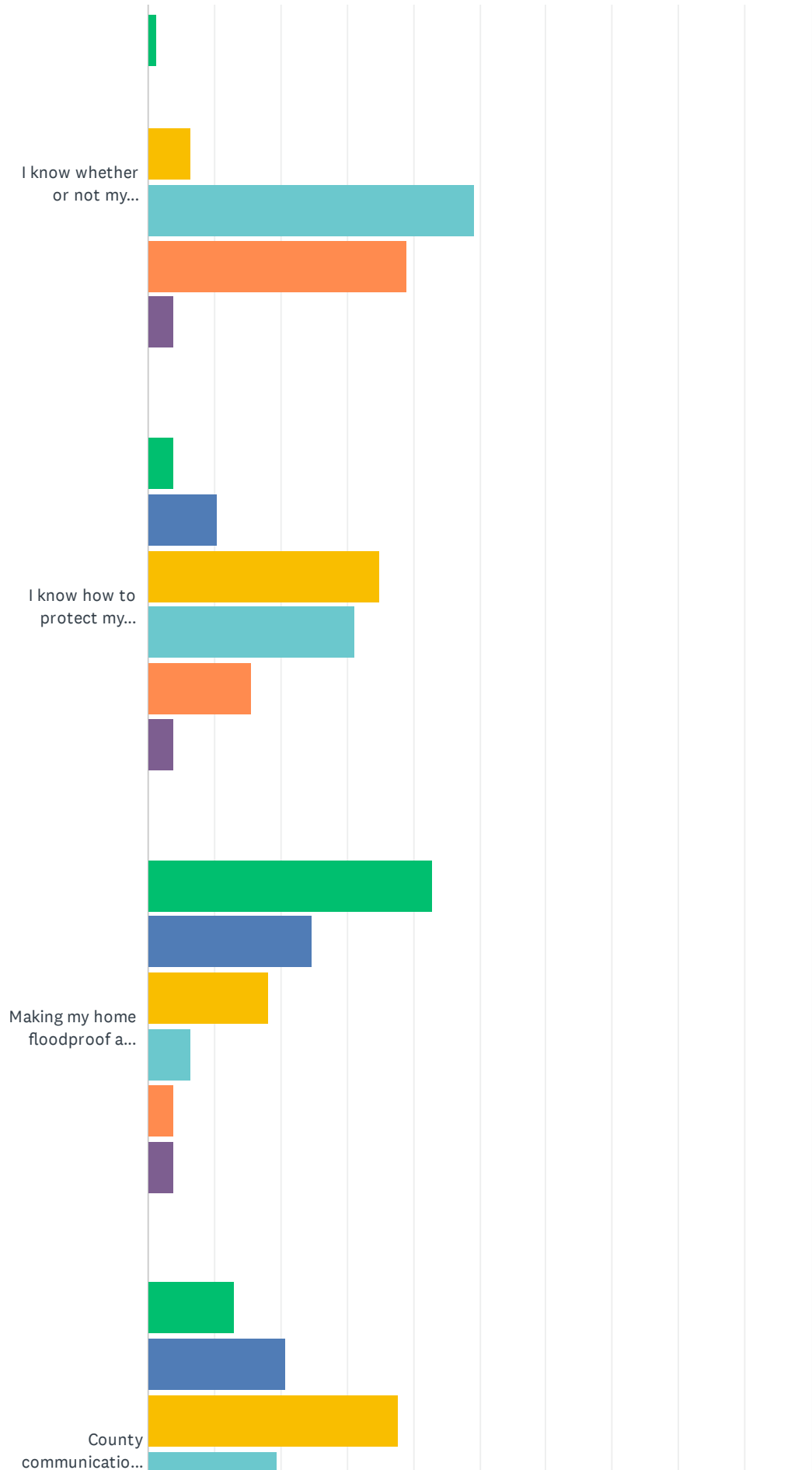
23	Power failures, downed wires, downed trees, no evacuation plans esp. for seniors in their own homes.	9/29/2023 12:01 AM
24	Creek needs to be dredged again. A lot of fallen trees and debris allowing water to back up.	9/28/2023 11:20 PM
25	- Late frost and swinging temps damaging crops -Stream banks eroding due to invasive plants like japanese knotweed and honeysuckle edging out native plants like willows which would stabilize the stream banks	9/28/2023 8:02 PM
26	The only fallout shelter available in the village and best of my knowledge is the high school. What happens when the schools are flooded and citizens can not get into the school for shelter?	9/28/2023 6:47 PM
27	Storms or flooding that interrupt power.	9/28/2023 6:10 PM
28	erosion	9/28/2023 2:17 PM
29	Contaminated water, power outages.	9/22/2023 6:02 PM
30	Huge long term costs for property owners, inc repair, insurance costs. Need better Tioga Cty Internet, Broadband communication system that is Disaster resistant.	9/22/2023 1:16 PM
31	People are misled by the "100 year floodplain" label. Thinking it is unlikely to occur. We know that storm events are increasing and intensifying every year. This trend is well documented and nation wide. We should be educating realtors, home buyers and also taking opportunities when they present themselves to remove homes from floodplains and leave as open space. Prevention of future damage is important.	9/22/2023 8:15 AM
32	Family has had home flooded	9/20/2023 12:33 PM
33	Travel / home heating / emergency services	9/20/2023 10:19 AM
34	Clean up cost, energy cost heating, cooling.	9/19/2023 6:38 PM
35	The cost of living here is climbing higher as you have to travel 30 minutes for medical care so most folks don't have generators etc due to cost and fixed income	9/19/2023 10:47 AM
36	Getting gas for generator	9/19/2023 10:27 AM
37	Loss of there property and I'm sure like me, we don't have flood insurance	9/11/2023 7:40 PM
38	watching elderly struggle, make me depressed and takes away time from providing for my family when I have to go out of my way to help them.	9/8/2023 9:25 AM

Q7 Please rate how well each of the following statements describes you.

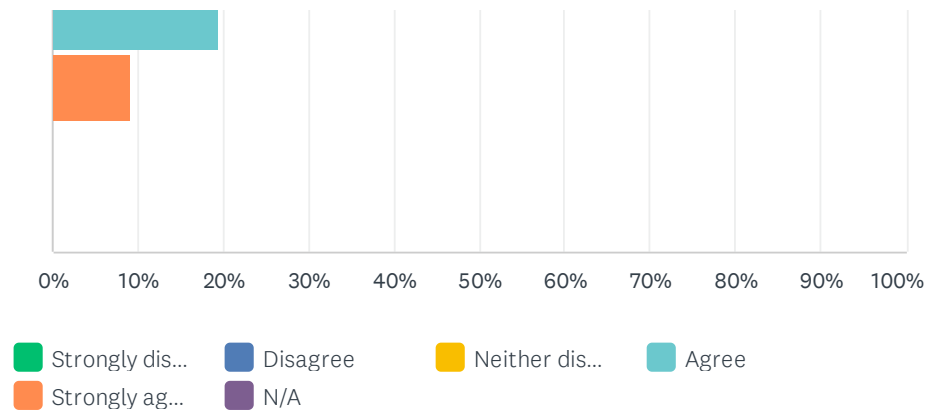
Answered: 77 Skipped: 0



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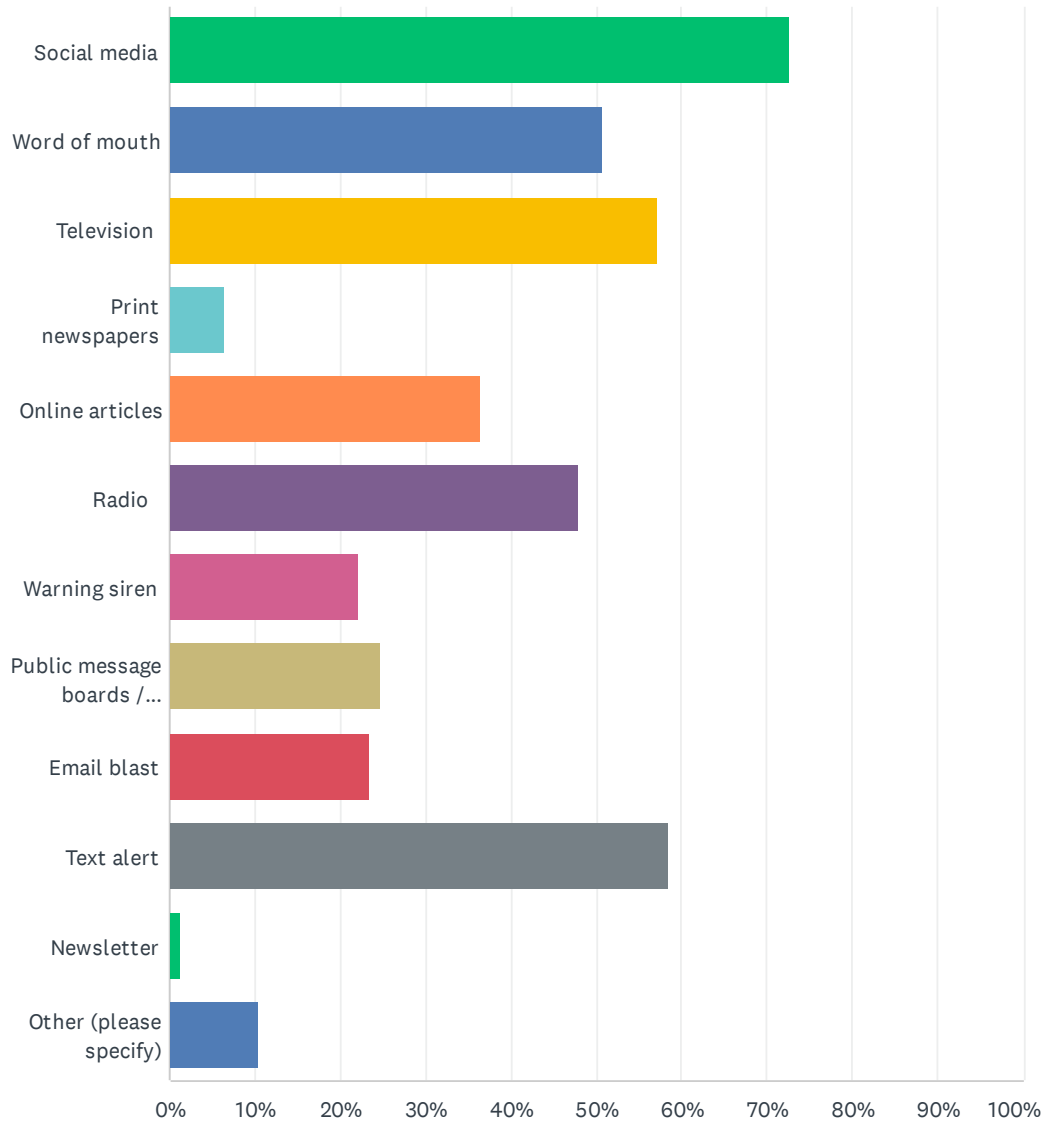
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	STRONGLY DISAGREE	DISAGREE	NEITHER DISAGREE NOR AGREE	AGREE	STRONGLY AGREE	N/A	TOTAL	WEIGHTED AVERAGE
I know several people nearby who I can call if I need help in a disaster.	5.19% 4	12.99% 10	15.58% 12	33.77% 26	32.47% 25	0.00% 0	77	3.75
When a flood, heat wave, storm, or other hazard hits, I usually check in on my neighbors.	2.60% 2	10.39% 8	18.18% 14	46.75% 36	18.18% 14	3.90% 3	77	3.70
I am confident that my home or business is adequately insured in the event of a major loss.	3.90% 3	9.09% 7	24.68% 19	36.36% 28	20.78% 16	5.19% 4	77	3.64
I know whether or not my home/business is in a floodplain.	1.30% 1	0.00% 0	6.49% 5	49.35% 38	38.96% 30	3.90% 3	77	4.30
I know how to protect my home/business from natural disasters.	3.90% 3	10.39% 8	35.06% 27	31.17% 24	15.58% 12	3.90% 3	77	3.46
Making my home floodproof and stormproof is affordable.	42.86% 33	24.68% 19	18.18% 14	6.49% 5	3.90% 3	3.90% 3	77	2.00
County communications about storms, floods, and other natural hazards are prompt and effective.	12.99% 10	20.78% 16	37.66% 29	19.48% 15	9.09% 7	0.00% 0	77	2.91

Q8 How do you receive your information concerning a disaster? (Select all that apply)

Answered: 77 Skipped: 0



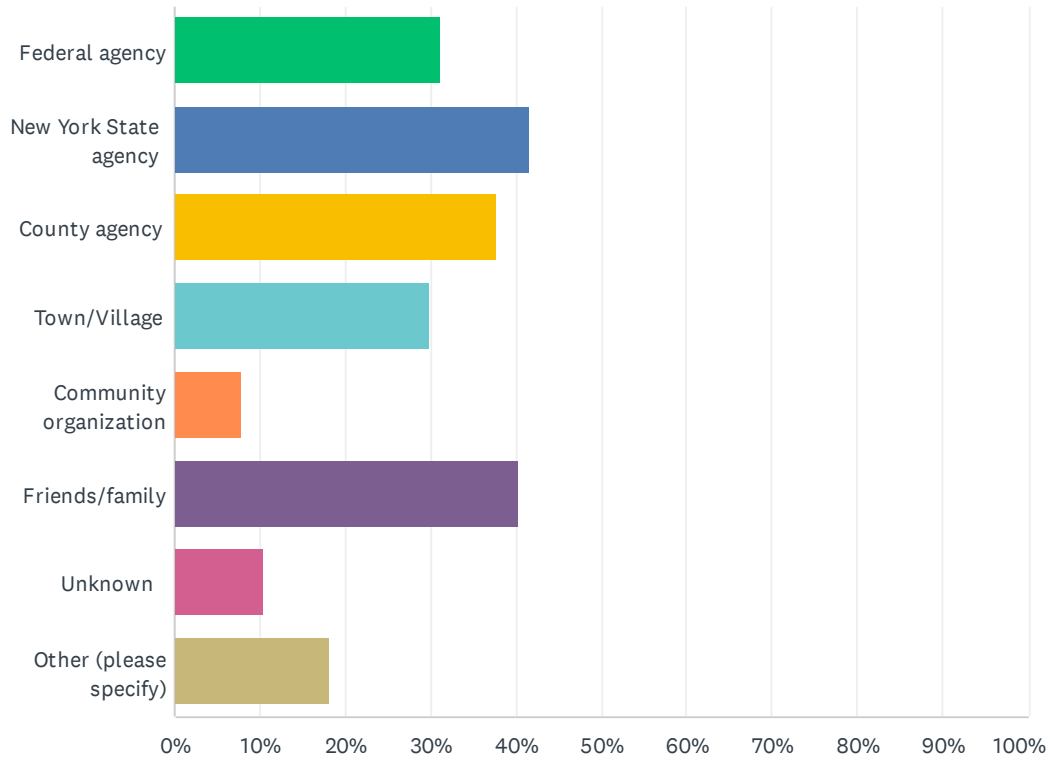
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ANSWER CHOICES	RESPONSES	
Social media	72.73%	56
Word of mouth	50.65%	39
Television	57.14%	44
Print newspapers	6.49%	5
Online articles	36.36%	28
Radio	48.05%	37
Warning siren	22.08%	17
Public message boards / display signs	24.68%	19
Email blast	23.38%	18
Text alert	58.44%	45
Newsletter	1.30%	1
Other (please specify)	10.39%	8
Total Respondents: 77		

#	OTHER (PLEASE SPECIFY)	DATE
1	telepathically	10/6/2023 12:35 PM
2	Town hall	10/5/2023 7:41 PM
3	Phone msg alerts from our Mayor.	10/5/2023 1:30 PM
4	Weather.gov	9/28/2023 8:02 PM
5	Weather App	9/28/2023 2:17 PM
6	Scanner	9/22/2023 6:02 PM
7	i look out my window to see if we are flooding when it rains hard	9/11/2023 6:37 PM
8	telepathically at times	9/8/2023 9:25 AM

Q9 When you hear about disasters, who does the information usually come from? Select all that apply.

Answered: 77 Skipped: 0



ANSWER CHOICES	RESPONSES
Federal agency	31.17% 24
New York State agency	41.56% 32
County agency	37.66% 29
Town/Village	29.87% 23
Community organization	7.79% 6
Friends/family	40.26% 31
Unknown	10.39% 8
Other (please specify)	18.18% 14
Total Respondents: 77	

#	OTHER (PLEASE SPECIFY)	DATE
1	local radio	11/1/2023 9:43 AM
2	Social Media	10/10/2023 12:53 PM
3	village of owego has a great phone notification system	10/5/2023 1:33 PM

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4	but if i'm out side or power out there it no way i would know of one	9/29/2023 2:41 PM
5	National weather service.	9/29/2023 8:44 AM
6	search local online media	9/29/2023 6:31 AM
7	News	9/28/2023 10:53 PM
8	Weather station, local news station	9/28/2023 6:10 PM
9	News/Weather apps and television reporters	9/28/2023 2:17 PM
10	National weather service	9/22/2023 6:02 PM
11	Media TV	9/20/2023 11:11 AM
12	Television	9/20/2023 10:19 AM
13	News outlet	9/11/2023 7:40 PM
14	facebook	9/11/2023 6:37 PM

Q10 What topics are most important for the County to educate the public about, related to natural hazards?

Answered: 48 Skipped: 29

#	RESPONSES	DATE
1	Flooding	11/1/2023 10:01 PM
2	we can help you, but first you need to help yourself, plan, plan, plan	11/1/2023 9:43 AM
3	Being prepared for an weather emergency, power outages.	10/31/2023 11:34 AM
4	Resources available during and immediately following the hazard.	10/26/2023 6:27 PM
5	Floods	10/13/2023 10:43 AM
6	River Levels	10/10/2023 12:53 PM
7	Having energy during a disaster where the electric is knocked out.	10/10/2023 8:21 AM
8	flooding, education about be ready for the next big one, explaining what is being done to prevent the next one	10/6/2023 12:35 PM
9	Just resources about what to do when a flood happens	10/6/2023 8:32 AM
10	Safety and advanced warnings	10/5/2023 7:41 PM
11	Locations prepared and capable of housing residents during the disaster, pre-designated information hubs, and surviving without utilities and phones.	10/5/2023 2:33 PM
12	SAFETY ZONES, PREPAREDNESS CHECKLISTS, CONTACT INFORMATION	10/5/2023 2:26 PM
13	flooding	10/5/2023 2:05 PM
14	Mitigate flood damage	10/5/2023 1:38 PM
15	How to self-rescue and resources to provide help in that. Due to lack of emergency services personnel, help could take a while to get there. Having prearranged sheltering locations with pre-staged resources could be helpful	10/5/2023 1:33 PM
16	Where to go for relief (heating stations, cooling stations) - I think public health does a good job with this. In the event of a flood or major power outage: where/how/when to evacuate and communication source for status updates and when it is safe/feasible to return.	10/5/2023 1:30 PM
17	flood	10/5/2023 1:11 PM
18	Evacuation plans, sheltering and emergency plan for pets, being ready/independent in the event of a disaster due to resources being cut off (due to the disaster, first responders being tied up, power outages, not being able to get medical supplies or household supplies, etc.)	10/5/2023 1:07 PM
19	funding for families and small businesses	10/5/2023 12:05 AM
20	Safe evacuation plans and routes	10/4/2023 7:32 PM
21	Contingency planning for evacuating with pets, safely operating backup/alternative heat sources	10/2/2023 8:49 AM
22	awerness	9/29/2023 5:12 PM
23	Prepare prior and to have better communication We live in areas with bad cell service. We loose power we have no way to know what is going on.	9/29/2023 2:50 PM
24	fire hurricanes anything that would Hert me or my home.	9/29/2023 2:41 PM
25	Evacuation routes or road closures	9/29/2023 8:55 AM
26	Making sure that the Creek in Newark Valley is free of debris, so it doesn't get jammed up. I'm	9/29/2023 8:44 AM

Tioga County Hazard Mitigation Plan Update - Public Input Survey

	making sure that the draining isn't clogged.	
27	Where to get information/ what agencies are in charge.	9/29/2023 6:39 AM
28	safe evacuation	9/29/2023 6:31 AM
29	Preparation- Prepare ahead of time, keeping at the very least a week's worth of food/water/medicine/pet supplies, having an emergency medical kit, and copies of important documents in case of evacuation. Evacuation plan, including what to take, where to go, and what to do if families get separated. Preplan for pets, most shelters can't accept them. Where they can get the most recent situational updates without calling 911	9/29/2023 12:42 AM
30	Where to go based on the emergency at hand-better education on what to do when faced with an emergency-current updates on the present threat so that people can make educated decisions on what is the most pressing issue at the time for them.	9/29/2023 12:01 AM
31	Where to go and how to get there.	9/28/2023 11:20 PM
32	What to do or where to go ahead of time. Like at school we have fire drills we know exactly what to do if there is an emergency. I would like to know on a good day with confidence what I will do if there was an emergency	9/28/2023 10:53 PM
33	Help that is available for flash flooding mitigation	9/28/2023 9:04 PM
34	-difference between a warning and a watch -turn around dont drown	9/28/2023 8:02 PM
35	What to do when the power goes out for another week, where is safe for individuals to get supplies from and what roads are open during flooding.	9/28/2023 6:47 PM
36	Where to info related to travel warnings during/prior to storms	9/28/2023 6:10 PM
37	how to be prepared, news about the current situation as it happens, how we can help make the county more resilient	9/28/2023 2:17 PM
38	Evacuations, safe zones, emergency preparations	9/22/2023 6:02 PM
39	Early AND continuing warning, Disaster Relief Stations, Internet Service	9/22/2023 1:16 PM
40	Preparing for a flood. Preventing damage. Not buying in the floodplain. Better land uses and practices and why it is important for prevent of damage.	9/22/2023 8:15 AM
41	Emergency services and town/county resources	9/20/2023 10:19 AM
42	How to communicate with others, we live in a dead zone, it effects power, telephone, internet every time power goes out.	9/19/2023 6:38 PM
43	How to keep perishables cold Hiw to get radio information how to get financial help for items like generaty	9/19/2023 10:47 AM
44	Flooding since it's happened twice that I remember	9/19/2023 10:27 AM
45	Climate Emergency	9/19/2023 10:16 AM
46	Flooding	9/11/2023 7:08 PM
47	flooding etc	9/11/2023 6:37 PM
48	where to get resources after an event	9/8/2023 9:25 AM

Q11 What, in your opinion, would help make Tioga County be more resilient in the event of a natural disaster?

Answered: 45 Skipped: 32

#	RESPONSES	DATE
1	Infrastructure investment	11/1/2023 10:01 PM
2	readily accessible points of communication in the event of a disaster cant rely on social media or having power or newspaper. we have a very diverse population that needs to be notified in whatever form of communication they have available. radio, HAM radio...	11/1/2023 9:43 AM
3	Preparation, having an actionable plan and resources in place before the disaster.	10/11/2023 12:22 PM
4	Better Communication	10/10/2023 12:53 PM
5	Text alerts	10/10/2023 8:21 AM
6	making Hickories Park into a spillway to be utilized during high water events, reopening McMaster street to cross the RR in the Village of Owego-this would allow for more traffic flow in the area especially when the underpass east of there floods in the mildest rains	10/6/2023 12:35 PM
7	Have safe havens for floods.	10/6/2023 8:32 AM
8	An emergency plan as we are working on with the town of owego	10/5/2023 7:41 PM
9	1- Educating the public about locations prepared and capable of housing residents during the disaster, pre-designated information hubs, and surviving without utilities and phones. 2- Disaster-mitigating constructions in advance 3- Educating regarding the unsanitary status of flood waters	10/5/2023 2:33 PM
10	PRACTICE "FIRE DRILL" DAYS	10/5/2023 2:26 PM
11	get people home & off the roads so crews can do their job BEFORE we are in the midst of the emergency	10/5/2023 2:05 PM
12	Dredging creeks and the river	10/5/2023 1:38 PM
13	Having an organized CERT team or other resource pooling group to provide prompt response to disaster. Regular drills would also provide valuable information on both strengths and weaknesses	10/5/2023 1:33 PM
14	Cooperation between agencies/churches/public facilities in coordinating shelter options and communicating options to the public and how/when to access the locations. Assistance from Red Cross, National Guard, and local and external emergency services during major events like the 2011 flood. They were most helpful. Maybe actions to reduce the severity of the event, such as clearing out snagged trees and objects from the river and streams. Not dumping overflow from sewer discharge systems and businesses. Not cutting power to pump stations. Upgrading the (Village) sewer system to better handle drainage from excessive rain during storms.	10/5/2023 1:30 PM
15	mitigate flood areas, fix the creeks/ivers. dredge them. Care less about the tadpoles and fish getting disturbed than people loosing their homes they have worked their whole life for.	10/5/2023 1:11 PM
16	not sure	10/5/2023 12:05 AM
17	Coordinating healthcare, access to food and water, supporting impacted individual both in the immediate and long term. For those who are displaced and have pets, being able to care for the pets. Ensuring accessibility for all displaced individuals and having a plan for our elderly.	10/4/2023 7:32 PM
18	Centralized county funded animal support, support existing businesses to aid their ability to maintain operations and opportunities after the disaster (lower taxes and reduce onerous regulations to be competitive with neighboring counties).	10/2/2023 8:49 AM

Tioga County Hazard Mitigation Plan Update - Public Input Survey

19	Reduce soot in rivers by either dredging river or by collecting soot in major creeks and streams before it reaches the river. Soot settles and raises river levels leading to floods. Do something to stop river flooding vs notifications.	9/30/2023 7:48 AM
20	implement an alert plan and community response to pending crisis.	9/29/2023 5:12 PM
21	Get better communication to the public. Know that many of the towns have little to no cell service thus prohibiting people from getting information. Make the town highway departments more accountable for road conditions. They are horrible in Berkshire. Roads are not taken care of. They work 4 days a week usually off Fridays and in snow storms they do not start early enough. Other towns will go all night plowing and taking care of roads. Berkshire stays in bed gets up have coffee hang out at garage then go out to plow just before buses start. Many of us have jobs. If school is cancelled then they do not even start till 8-9 am Those of who work pray till we get to the main roads where at least state is going 24/7	9/29/2023 2:50 PM
22	more fire sirens, flashing hazard sign on rt-79. A do not pass sign should be on both sides of the road so when people go to pass 18 wheelers they know not to pass.	9/29/2023 2:41 PM
23	No matter what the DEC says the county should be cleaning out the smaller creeks of debris	9/29/2023 10:36 AM
24	Have NYSEG do a better job of trimming trees around power lines on Carmichael Road.	9/29/2023 10:03 AM
25	Transparency, have a consistent chain of command. Empower the people in charge to enact protocols.	9/29/2023 6:39 AM
26	Develop and maintain a strong community connection. Using classroom time to teach kids to be and how to stay prepared and safe. Make people aware of what local resources are available in case of emergency. Teach and encourage to be pro-active rather than reactive. Offer education and information tables at local gatherings like the chicken bbq's and pancake breakfasts/dinners.	9/29/2023 12:42 AM
27	We need younger, smarter Leaders with new ideas. Folks that really want to help their community.	9/28/2023 11:20 PM
28	Like I said above. Make a plan and make it known on good days so when something happens we know what to do.	9/28/2023 10:53 PM
29	Infrastructure upkeep, modernization	9/28/2023 9:04 PM
30	-Erosion control and streambank stabilization volunteer work-parties -using the same cooling/warming locations all year so seniors will always know where to go when they need help and the power is out -natural snowbreaks near major roads, plow garage and essential businesses	9/28/2023 8:02 PM
31	COMMUNICATION with residents about upcoming storm events. Fire alarms for tornado warnings and using social media for informing individuals.	9/28/2023 6:47 PM
32	Help households make plans for events that could impact them	9/28/2023 6:10 PM
33	less infrastructure in floodplains, more greenspace along streams, less encroachment on streams, more tree planting, better soil health and vegetation on all types of land but especially on farmland, more stormwater retention throughout the county, public understanding of these practices and benefits and therefore willingness to do them	9/28/2023 2:17 PM
34	A disaster plan, being prepared ahead of time	9/22/2023 6:02 PM
35	Improve disaster resistant Internet/Cell service, to improve resident access to Programs, Services that are available.	9/22/2023 1:16 PM
36	Remove activities in the floodplain. Adopt land use laws that limit any new activities and as properties are damaged by stores or up for sale to create open space or appropriate floodplain uses on those sites.	9/22/2023 8:15 AM
37	Need better communication when disaster happens where to help, resources, where do you go when disaster occurs	9/20/2023 11:11 AM
38	Better emergency services and town/county resources	9/20/2023 10:19 AM
39	Better communication methods	9/19/2023 6:38 PM
40	A Program to fund generators for those that cannot afford them and are vulnerable Biting the bullet and hiring paid EMS Fire to improve response times and increase police coverage from	9/19/2023 10:47 AM

Tioga County Hazard Mitigation Plan Update - Public Input Survey

	the present that has not increased from the early 1980s	
41	I don't believe that you can forecast Mother Nature in order to make Tioga county more resilient.	9/19/2023 10:27 AM
42	Better storm water drainage and marked evacuation routes	9/19/2023 10:16 AM
43	Stream stabilisation and stream maintenance	9/11/2023 7:40 PM
44	clean out the creeks that impact residents that continually flood and not have homeowners pay for it.	9/11/2023 6:37 PM
45	build a flood wall, possible turn hickories park into a flood plain when needed for excess water storage, open McMaster Street up to cross the railroad tracks in the village of Owego-this will provide necessary evac route and help the community grow, be proactive and remove dead trees (ash trees) from road and electrical right of ways before they restrict traffic and electrical flows.	9/8/2023 9:25 AM

Q12 Additional comments

Answered: 14 Skipped: 63

#	RESPONSES	DATE
1	this event is not even posted on the Towns website, luckily I saw the fine print in the Pennysaver. If preparedness is important to the Town, perhaps a mail campaign would reach more eyes.	11/1/2023 9:43 AM
2	please help us all!	10/6/2023 12:35 PM
3	none	10/5/2023 2:05 PM
4	While it's not a "natural" hazard, I'm concerned about whether there is a hazard mitigation plan in the event of a train derailment with hazardous materials involved. And please consider how train traffic or the tracks themselves affect potential evacuation.	10/5/2023 1:30 PM
5	n/a	10/5/2023 1:11 PM
6	were i live on Terrell & Rt-79 there has been many accidents in front of my place there is a small knoll where people in cars can't see to pass there should be double yellow lines there. I have asked Tioga County sheriffs to come more often, they say it's too far from there place because they are short staffed. i wrote this 9/29/2023....Dave Hayes..	9/29/2023 2:41 PM
7	Maybe preparedness workshops could be held at the schools, local fire stations, or churches, including emergency communication such as ham radio. Encourage neighborhoods to identify resources and skills available from the people living there if outside help isn't available.	9/29/2023 12:42 AM
8	Thank you	9/28/2023 10:53 PM
9	Town should have a plan to maintain drainage easements, minor rain events cause issues on my property, even after I've spent thousands out of pocket maintaining town easement	9/28/2023 9:04 PM
10	thank you for working on this	9/28/2023 2:17 PM
11	This survey is a good start. I hope you get a lot of responses.	9/22/2023 6:02 PM
12	I felt that the town did a great job of cleaning up after the floods	9/19/2023 10:27 AM
13	Even if fema decides to buy a property it takes years to get to the point where a homeowner can move (an thats only if a good offer is made) people wouldnt need to do this if streams rivers an creeks were properly maintained.	9/11/2023 6:37 PM
14	thank you for listening.	9/8/2023 9:25 AM

Q12 If you wish, please provide any ideas you have for how the County can address the following challenges.

Answered: 1 Skipped: 3

ANSWER CHOICES	RESPONSES
Flooding in mobile homes	0.00% 0
Transportation to shelters	100.00% 1
EMS calls during extreme heat	0.00% 0
Impacts of hazards on senior citizens	100.00% 1
Who else is impacted by hazards in the County and how?	100.00% 1

#	FLOODING IN MOBILE HOMES	DATE
	There are no responses.	
#	TRANSPORTATION TO SHELTERS	DATE
1	there is no transport in tioga county	9/11/2023 6:37 PM
#	EMS CALLS DURING EXTREME HEAT	DATE
	There are no responses.	
#	IMPACTS OF HAZARDS ON SENIOR CITIZENS	DATE
1	hard to get seniors out quickly	9/11/2023 6:37 PM
#	WHO ELSE IS IMPACTED BY HAZARDS IN THE COUNTY AND HOW?	DATE
1	kids, they loose their stuff in floods and become fearful of weather	9/11/2023 6:37 PM



Tioga County
NY

You can join us **In-person or on Zoom**

PUBLIC Information Meeting

October 4, 2023

Wednesday | 6:00 pm

Owego Nazarene Church Fellowship Center
(at the rear of the church & parking on right side of Church)

3732 Waverly Road, Owego NY

Join us via Zoom!

<https://bit.ly/tiogahmp10-4>

Or

call 646-558-8656

meeting ID: 874 2247 5601



scan me with your
camera app

Open for all...



HAZARD MITIGATION PLAN

Tioga County is updating the County's Hazard Mitigation Plan (HMP). A Hazard Mitigation Plan is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term. Tioga County's current Hazard Mitigation Plan was created in 2018 and will expire on August 12, 2024.

Your input is essential for making sure the plan reflects public priorities.

Please contact **Margaret Thurston** with any accessibility requests
by **September 20th**

mthurston@bartonandloguidice.com or 585-325-7190

Your Opinion Matters





Tioga County Hazard Mitigation Plan – 2024 Update

Agenda

1. What is Hazard Mitigation Planning?
2. Hazard Mitigation Plan Update
3. Preliminary Findings
4. Example Mitigation Actions
5. Next Steps



(Gaylord Stream Crossing Replacement Project, Owego, NY)

ONLINE POLLING

- Have a computer/mobile device available
- Submit answers via **pollev.com/gracedesantis875** (recommended) or by text message

Polling Exercise

Online Polling

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Which reason(s) brings you to today's meeting?

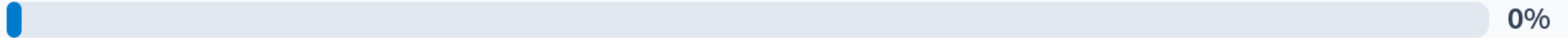


Which description(s) best represents your relationship with Tioga County?

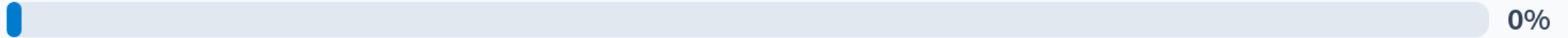


Where do you live?

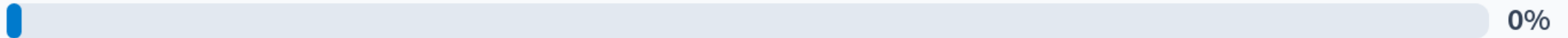
Barton, Town



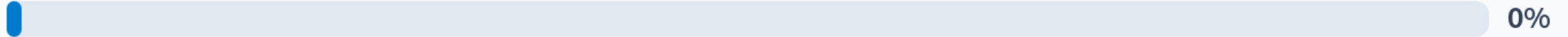
Berkshire, Town



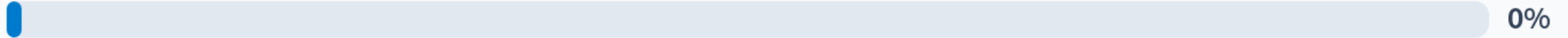
Candor, Town



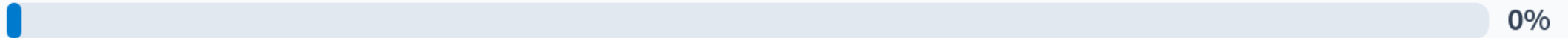
Candor, Village



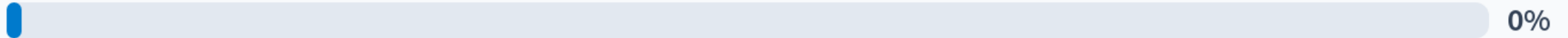
Newark Valley, Town



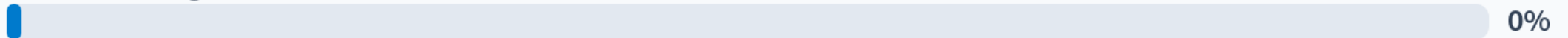
Newark Valley, Village



Nichols, Town



Nichols, Village

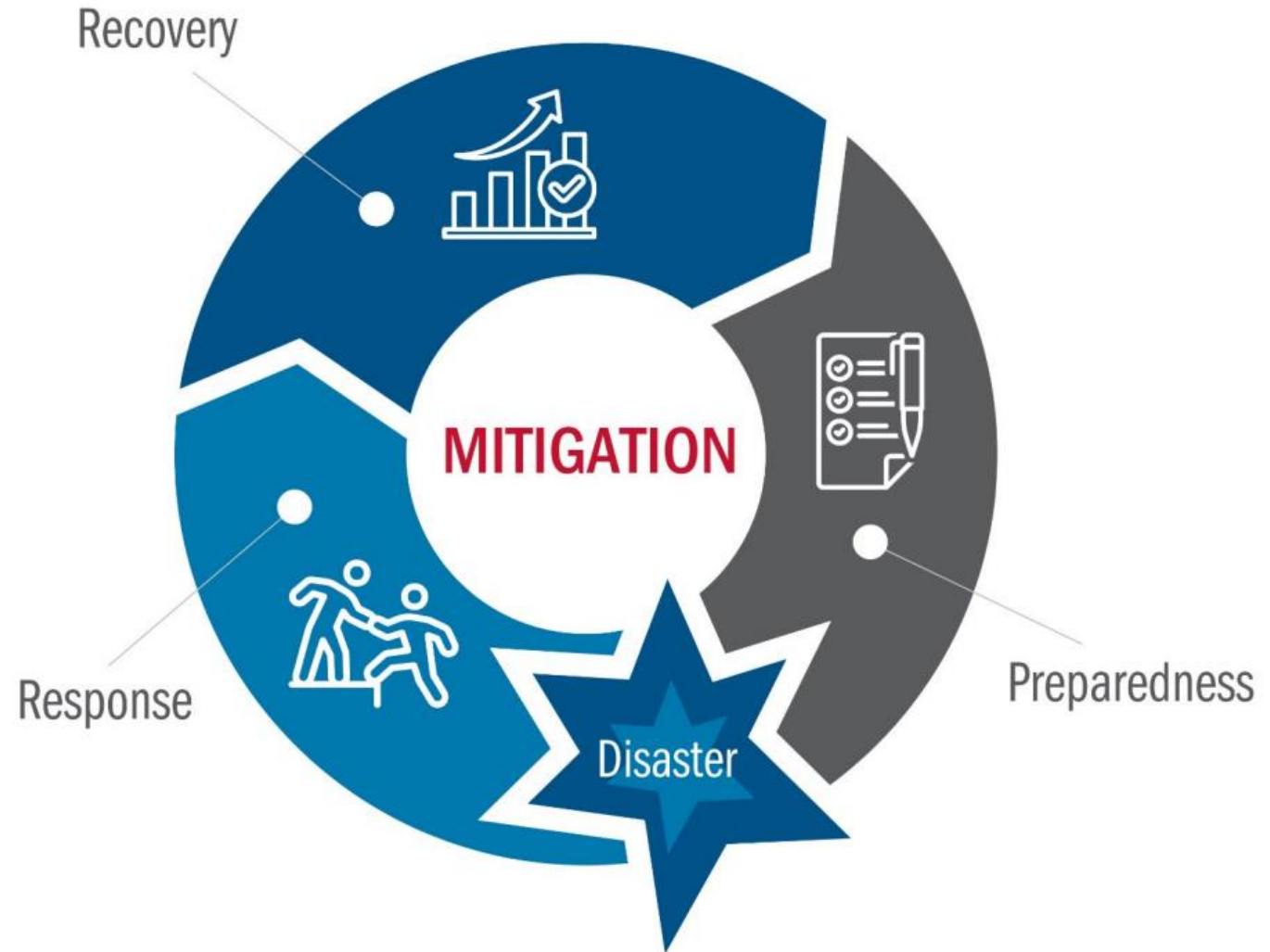


Owego, Town

What is Hazard Mitigation Planning?

What is Hazard Mitigation?

Hazard mitigation reduces the long-term risk that a community faces from disasters. It focuses on strategies to lessen the impact that disasters can have on people, property, and critical community assets. Without mitigation, the same people, property, and community lifelines are affected over and over again, but mitigation tries to reduce this risk more permanently.



Hazard Mitigation Planning

- The Disaster Mitigation Act of 2000 requires state, local, tribal, and territorial governments to have a FEMA-approved mitigation plan in order to be eligible for mitigation project funding.
 - Updates are required every 5 years
 - Follow the updated NYS and FEMA standards (2022 and 2023)



Hazard Mitigation Plan Update

Hazard Mitigation Plan Update

Tioga County received a grant from FEMA to update the 2018 Multi-Jurisdictional Hazard Mitigation Plan.

Hazards Profiled for 2024:

1. Drought
2. Flood
3. Extreme Temperatures
4. Severe Storm

Plan Components

- County Profile
- Planning Process
- Risk Assessment
- Hazard Profiles
- Hazard Vulnerability Assessment
- Mitigation Goals and Strategies
- Plan Implementation, Monitoring, and Maintenance
- Jurisdictional Annex for each municipality

Planning Participants

Core Planning Group

The Core Planning Group will take the lead on the development of the Hazard Mitigation Plan update for Tioga County. The Core Planning Group is composed of staff from several county departments, members of the consultant team, and representatives from New York State's Department of Homeland Security and Emergency Services (DHSES). The Core Planning Group will meet monthly during the hazard mitigation planning process.

Steering Committee

The Steering Committee will serve as an advisory board overseeing the development of Tioga County's Hazard Mitigation Plan update. The committee is composed of the Core Planning Group and several other key stakeholders within the County, and it will meet on an as-needed basis during the development of the plan update.

Jurisdictional Team

The Jurisdictional Team will be composed of two representatives from each jurisdiction within Tioga County. The Jurisdictional Team will meet with the Core Planning Group prior to the two public meetings and after other project milestones have been achieved.

Project Schedule



Polling Exercise

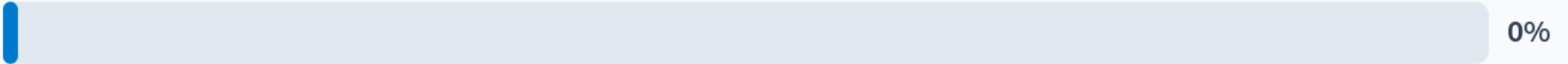
Online Polling

- I. Have a computer/mobile device available
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- III. Or, submit answers by *text message* by texting **gracedesantis875** to **22333**

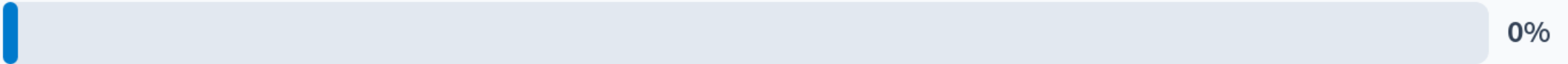


Which one of the following natural hazards impacts your community the most? Please consider damages to property, crops, people, etc.

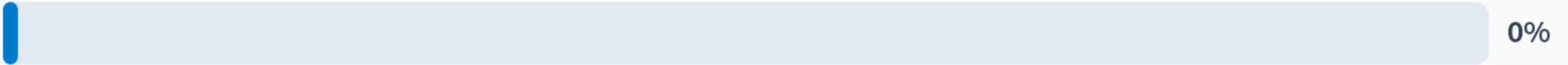
Flooding (coastal, riverine, ice jam)



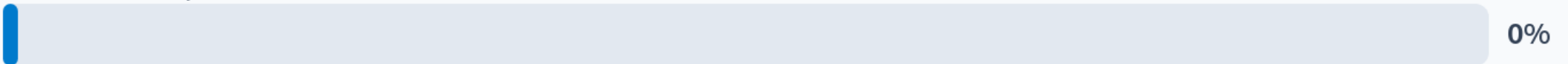
Drought



Severe storm (hail, ice storm, lightning, strong wind, winter weather, tornado, hurricane/tropical storm)



Extreme temperatures (cold wave, heat wave)



Are there any other natural hazards impacting your community, aside from the four listed in the previous question? If yes, please describe them.

Nobody has responded yet.

Hang tight! Responses are coming in.

Preliminary Findings

Key Findings (So Far...)

- Progress Made
 - Cooling Centers
 - Watershed-based assessments for flooding
 - Database of medical equipment
 - Upgrades to critical facilities
 - And more!
- Challenges
 - Flooding in mobile homes
 - Senior citizens vulnerable
 - Transportation to shelters
 - Downed tree limbs
 - EMS calls in extreme heat



Example Mitigation Actions

All Hazards

- Work with Towns and Villages to develop emergency plans.
- Educate residents on safety measures to protect their homes from natural hazards.



Flood

- Restore floodplains, protect wetlands, and install green infrastructure to reduce flash flooding along Owego Creek.
- Determine whether important locations like County buildings, police stations, and utilities are protected from flooding. Upgrade buildings to fix them if they are not protected.
- Educate farmers on ways to limit flooding, such as ponds, wetlands, and riparian buffers.
- Implement a basement cleanout program to help residents dispose of hazardous waste.
- Explore funding for additional waste collection and disposal programs to reduce debris during floods.
- Show road blockages via an app.
- Use rain gauges and signs showing flood levels to promote flood awareness.
- Complete watershed assessments to better understand flood risk and drainage patterns in the county.



Severe Storm

- Implement a tree management program. Assess and remove dangerous trees, conduct education and training, and plant new trees.
- Install message boards on main roads to warn of impending storms.



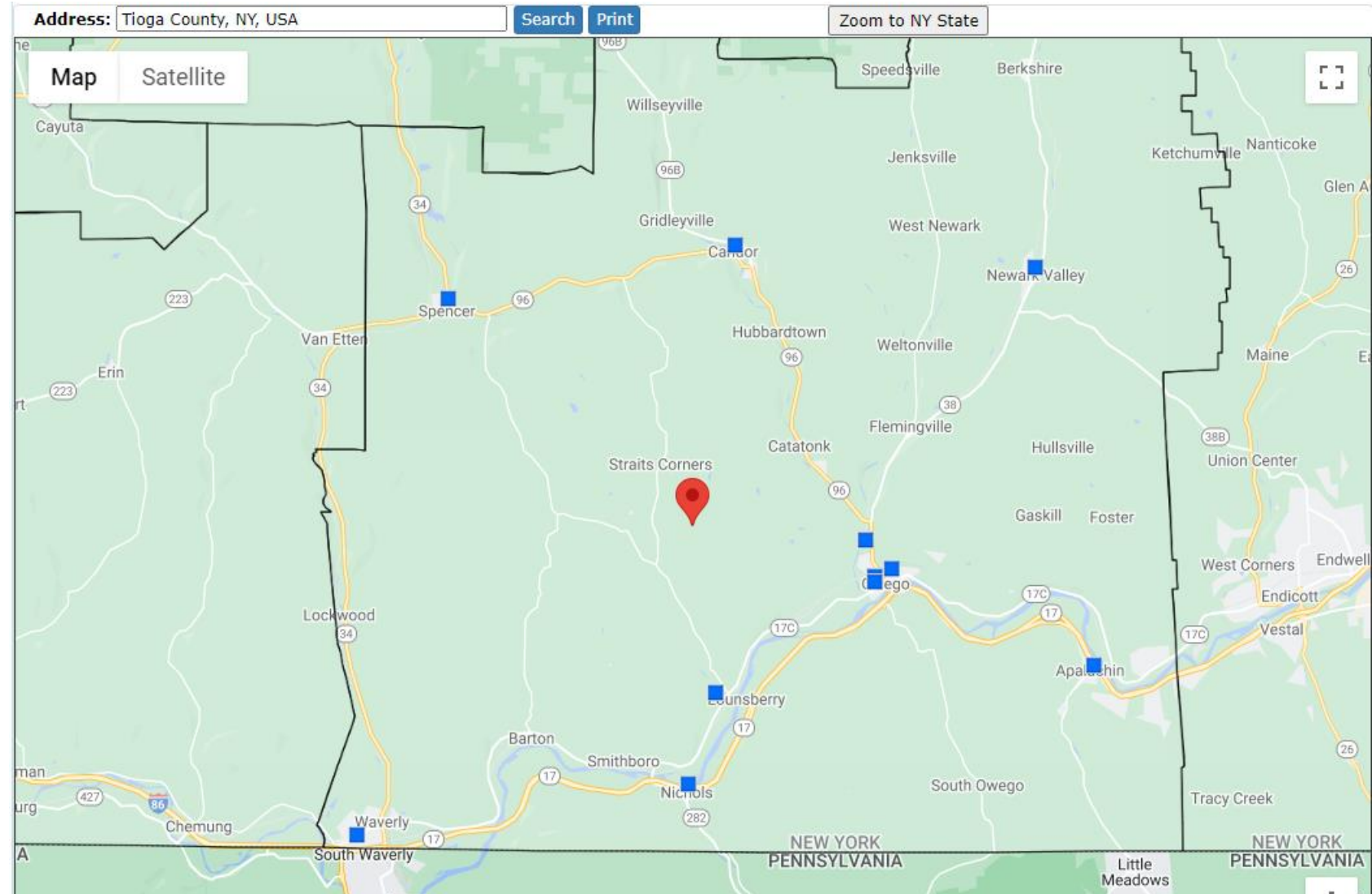
Drought

- Raise awareness of water saving measures for all residents and water storage practices on farms.



Extreme Temperatures

- Publicize existing cooling centers in the County.



Polling Exercise

Online Polling

- I. Have a computer/mobile device available
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- III. Or, submit answers by *text message* by texting **gracedesantis875** to **22333**



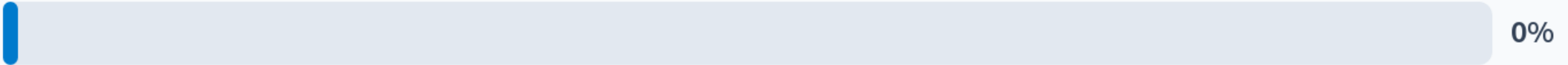
Do you have any feedback on the example natural hazard mitigation actions presented on the past few slides? If yes, please describe.

Nobody has responded yet.

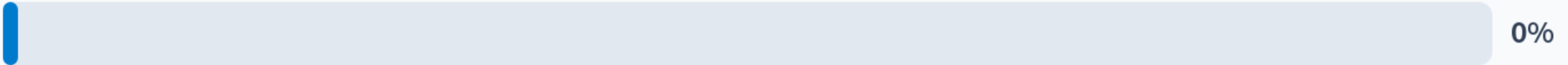
Hang tight! Responses are coming in.

Which type(s) of natural hazard mitigation action would you like to see prioritized in Tioga County?

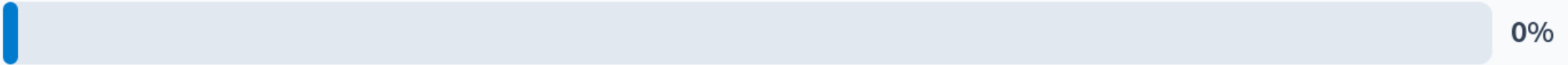
Local plans and regulations (e.g. zoning updates, building code revisions)



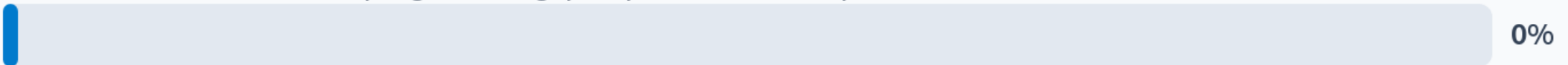
Structure and infrastructure projects (e.g. repair roads and bridges, resize culverts)



Natural systems protection and nature-based solutions (e.g. rain gardens, plant trees)



Education and awareness programs (e.g. pamphlets, workshops)



Keeping in mind the challenges, opportunities, and preliminary key findings discussed today, do you have any ideas for specific natural hazard mitigation strategies that you'd like to share? If yes, please describe.

Nobody has responded yet.

Hang tight! Responses are coming in.

Next Steps

Next Steps for B&L

1. Meet again with local officials
2. Finish Town/Village interviews and create section of plan for each Town/Village
3. Develop Draft Plan
4. Schedule second public information meeting
5. Revise plan, ensure it meets all requirements, and submit to NYS DHSES and FEMA

How Can I Get Involved?

Online Survey:

1. Attend the first Public Information Meeting
2. Fill out the online survey:
<https://www.surveymonkey.com/r/TiogaHMP>
3. Submit any additional comments to Tioga County Economic Development & Planning, or contact B&L
4. Attend the second Public Information Meeting (date TBD)
5. Contact your local Town/Village to encourage local adoption of the HMP Update



Contact Us

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mthurston@bartonandloguidice.com

Questions & Comments?

Tioga HMP Public Information Meeting 10/4/23

Current run (last updated Oct 16, 2023 9:12am)

8

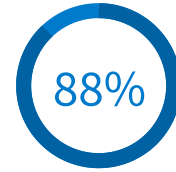
Activities

4

Participants

4

Average responses



Average engagement



Response options

Count Percentage

To learn more about the topic of natural hazard mitigation planning

0 0%



Engagement

To stay up-to-date on Tioga County's planning efforts

2 50%

4

Responses

To stay up-to-date on my Town/Village's planning efforts

0 0%

To share specific concerns about natural hazards within my community

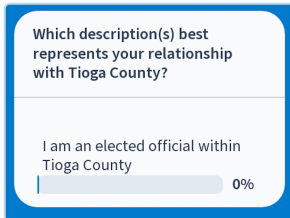
1 25%

To share ideas on how my community can mitigate the impacts of natural hazards

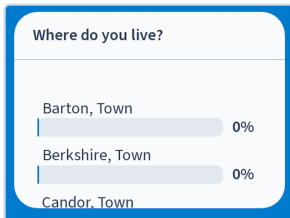
1 25%

None of the above

0 0%



Response options	Count	Percentage
I am an elected official within Tioga County	0	0%
I am a resident within Tioga County	2	50%
I am a business owner within Tioga County	1	25%
I visit or work within Tioga County, but do not live there	1	25%
None of the above	0	0%



Response options	Count	Percentage
Barton, Town	0	0%
Berkshire, Town	0	0%
Candor, Town	0	0%
Candor, Village	0	0%
Newark Valley, Town	0	0%
Newark Valley, Village	0	0%
Nichols, Town	0	0%
Nichols, Village	0	0%
Owego, Town	1	25%
Owego, Village	2	50%
Richford, Town	0	0%
Spencer, Town	0	0%
Spencer, Village	0	0%
Tioga, Town	0	0%
Waverly, Village	0	0%
I don't live in Tioga County	1	25%



Which one of the following natural hazards impacts your community the most? Please consider damages to property, crops, people, etc.

Flooding (coastal, riverine, ice jam)

Response options	Count	Percentage
Flooding (coastal, riverine, ice jam)	4	100%
Drought	0	0%
Severe storm (hail, ice storm, lightning, strong wind, winter weather, tornado, hurricane/tropical storm)	0	0%
Extreme temperatures (cold wave, heat wave)	0	0%



Engagement

4

Responses

Responses

None No No



Engagement

3

Responses

Do you have any feedback on the example natural hazard mitigation actions presented on the past few slides? If yes, please describe.

Responses

In the village of owego the critical infrastructure will be flooded. Ca. You address agreements with nearby municipalities?

No No



Engagement

3

Responses

Which type(s) of natural hazard mitigation action would you like to see prioritized in Tioga County?

Local plans and regulations (e.g. zoning updates, building code revisions)

Response options	Count	Percentage
Local plans and regulations (e.g. zoning updates, building code revisions)	2	20%
Structure and infrastructure projects (e.g. repair roads and bridges, resize culverts)	2	20%
Natural systems protection and nature-based solutions (e.g. rain gardens, plant trees)	4	40%
Education and awareness programs (e.g. pamphlets, workshops)	2	20%



Engagement

10

Responses

Keeping in mind the challenges, opportunities, and preliminary key findings discussed today, do you have any ideas for specific natural hazard mitigation strategies that you'd like to share? If yes, please describe.

- Responses
- Reassess village of owego floodplain management code. Put compensatory storage back in the code.
 - Explore ways to flood mitigate buildings and fund that work
 - Land use planning that considers setbacks from stream corridors



Engagement

3

Responses

Tioga County Hazard Mitigation Plan Update 2024
Public Information Meeting #1 – October 4, 2023

Feedback Request

1. Which reason(s) brings you to today's meeting? (Circle all that apply)

- a. To learn more about the topic of natural hazard mitigation planning
- b. To stay up-to-date on Tioga County's planning efforts
- c. To stay up-to-date on my Town/Village's planning efforts
- d. To share specific concerns about natural hazards within my community
- e. To share ideas on how my community can mitigate the impacts of natural hazards
- f. None of the above

2. Which description(s) best represents your relationship with Tioga County? (Circle all that apply)

- a. I am an elected official within Tioga County
- b. I am a resident within Tioga County
- c. I am a business owner within Tioga County
- d. I visit or work within Tioga County, but do not live there
- e. None of the above

3. Where do you live?

- | | |
|---------------------------------|-----------------------|
| a. Town of Barton | i. Town of Owego |
| b. Town of Berkshire | j. Village of Owego |
| c. Town of Candor | k. Town of Richford |
| d. Village of Candor | l. Town of Spencer |
| e. Town of Newark | m. Village of Spencer |
| f. Village of Newark Valley | n. Town of Tioga |
| g. Town of Nichols | o. Village of Waverly |
| h. Village of Nichols | |
| p. I don't live in Tioga County | |

4. Which one of the following natural hazards impacts your community the most? Please consider damages to property, crops, people, etc.

- a. Flooding (coastal, riverine, ice jam)
- b. Drought
- c. Severe storm (hail, ice storm, lightning, strong wind, winter weather, tornado, hurricane/tropical storm)
- d. Extreme temperatures (cold wave, heat wave)

1. I suggest an HMP is a NFIP requirement - is that not true?

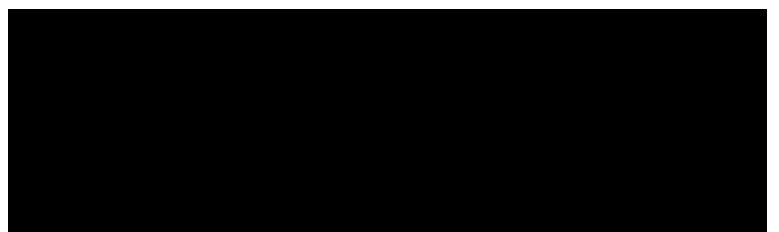
5. Are there any other natural hazards impacting your community, aside from the four listed in the previous question? If yes, please describe them.

6. Do you have any feedback on the example natural hazard mitigation actions presented in the Example Mitigation Actions slides? If yes, please describe.

7. Which type(s) of natural hazard mitigation actions would you like to see prioritized in Tioga County? (Circle all that apply)
 - a. Local plans and regulations (e.g. zoning updates, building code revisions)
 - b. Structure and infrastructure projects (e.g. repair roads and bridges, resize culverts)
 - c. Natural systems protection and nature-based solutions (e.g. rain gardens, plant trees)
 - d. Education and awareness programs (e.g. pamphlets, workshops)
8. Keeping in mind the challenges, opportunities, and preliminary key findings discussed today, do you have any ideas for specific natural hazard mitigation strategies that you'd like to share? If yes, please describe.

Other questions/comments/ideas:

Thank you for your input!



Tioga County Hazard Mitigation Plan Update 2024
Public Information Meeting #1 – October 4, 2023

Feedback Request

1. Which reason(s) brings you to today's meeting? (Circle all that apply)

- a. To learn more about the topic of natural hazard mitigation planning
- b. To stay up-to-date on Tioga County's planning efforts
- c. To stay up-to-date on my Town/Village's planning efforts
- d. To share specific concerns about natural hazards within my community
- e. To share ideas on how my community can mitigate the impacts of natural hazards
- f. None of the above

2. Which description(s) best represents your relationship with Tioga County? (Circle all that apply)

- a. I am an elected official within Tioga County
- b. I am a resident within Tioga County
- c. I am a business owner within Tioga County
- d. I visit or work within Tioga County, but do not live there
- e. None of the above

3. Where do you live?

- | | |
|--|--|
| <input type="checkbox"/> a. Town of Barton | <input type="checkbox"/> i. Town of Owego |
| <input type="checkbox"/> b. Town of Berkshire | <input type="checkbox"/> j. Village of Owego |
| <input type="checkbox"/> c. Town of Candor | <input type="checkbox"/> k. Town of Richford |
| <input type="checkbox"/> d. Village of Candor | <input type="checkbox"/> l. Town of Spencer |
| <input type="checkbox"/> e. Town of Newark | <input type="checkbox"/> m. Village of Spencer |
| <input type="checkbox"/> f. Village of Newark Valley | <input checked="" type="checkbox"/> n. Town of Tioga |
| <input type="checkbox"/> g. Town of Nichols | <input type="checkbox"/> o. Village of Waverly |
| <input type="checkbox"/> h. Village of Nichols | |
| <input type="checkbox"/> p. I don't live in Tioga County | |

4. Which one of the following natural hazards impacts your community the most? Please consider damages to property, crops, people, etc.

- a. Flooding (coastal, riverine, ice jam)
- b. Drought
- c. Severe storm (hail, ice storm, lightning, strong wind, winter weather, tornado, hurricane/tropical storm)
- d. Extreme temperatures (cold wave, heat wave)

5. Are there any other natural hazards impacting your community, aside from the four listed in the previous question? If yes, please describe them.

6. Do you have any feedback on the example natural hazard mitigation actions presented in the Example Mitigation Actions slides? If yes, please describe.

7. Which type(s) of natural hazard mitigation actions would you like to see prioritized in Tioga County? (Circle all that apply)
 - a. Local plans and regulations (e.g. zoning updates, building code revisions)
 - b. Structure and infrastructure projects (e.g. repair roads and bridges, resize culverts)
 - c. Natural systems protection and nature-based solutions (e.g. rain gardens, plant trees)
 - d. Education and awareness programs (e.g. pamphlets, workshops)
8. Keeping in mind the challenges, opportunities, and preliminary key findings discussed today, do you have any ideas for specific natural hazard mitigation strategies that you'd like to share? If yes, please describe.

Other questions/comments/ideas: Large trees come down Owego Creek & accumulate along the banks between towns of Owego & Tioga. These trees could be washed into the Susq. River in a flood. They are large enough to do significant damage to anything along the riverbank (docks, buildings, tied up boats, etc.) including bridges

Thank you for your input!

██████████ Focus Group—Hazard Mitigation

12 attendees

About: This was the first focus group held by Tioga Opportunities about the 2024 Hazard Mitigation Plan Update. The location of the meeting was ██████████
██████████ This is an income-based apartment complex for older adults (age 62+) or individuals with disabilities. 12 individuals were in attendance on 10/23/2023.

1. Out of the following hazards, which ones are you the most concerned about? Floods, storms, heat, cold, or drought?

Two people are worried about floods, storms, and extreme cold. One person is worried about extreme heat. They wanted to add two things not mentioned: two people are worried about fires and four people are worried about a train derailment as the apartment complex is extremely close to the train tracks.

2. During the time you have lived in the County, how have these hazards impacted you? OR what concerns do you have about how these hazards might impact you in the future?

The group discussed that during the flood they had increased fear and anxiety as the flood impacted travel, food/water, etc. The big snow storm a couple of years ago in December was also very nerve-wracking for them. Watching the snow fall they could see that plows couldn't keep up with it. They were worried about food/water, heat, etc. Both situations they weren't sure what would happen if they had a medical emergency.

3. Is there anything that would help you feel safer or better when you think about these hazards?

Clear communication from a county level; a system in place to make sure everyone hears/receives the same message. It would be nice to know specifics in advance instead of scrambling in the midst of a chaotic situation.

4. What, in your opinion, would help make Tioga County stronger in the face of flooding, storms, heat, cold, or drought?

Clean up broken/dead trees—if there's a wildfire, this would cause the fire to spread more quickly. Better/quicker communication. Where to go—who to contact during a hazard? If residents are displaced, where do they go? Is there a designated site? Answers to these questions before an emergency occurs would be most beneficial. Not everyone has access to the internet, is there a way to make the updated plan accessible to those without internet or who cannot/don't know how to access it.

Focus Group—Hazard Mitigation

6 attendees

About: This was the second focus group held by Tioga Opportunities about the 2024 Hazard Mitigation Plan Update. The location was at the [REDACTED]. Six were in attendance on 10/24/2023. Springview Apartments is an income-based building for older adults (age 62+) and people with disabilities (age 18+).

1. Out of the following hazards, which ones are you the most concerned about? Floods, storms, heat, cold, or drought?

Three people are worried about storms, whether it be snow, rain, etc. They aren't concerned about floods as they're on a bit of an elevation so if they had water, they would know there's a big problem elsewhere. Three people mentioned high winds (with storms seeming to be getting stronger, there isn't much protection from high winds).

The discussion of the overflow water from the Glenn—the field [REDACTED] fills with water in the summer and kids swim in it. In the wintertime kids test to see if they can walk and/or skate on the ice. The property belongs to either Waverly or the County, they're concerned about someone getting hurt or worse. Could there be a fence or just a warning posted?

2. During the time you have lived in the County, how have these hazards impacted you? OR what concerns do you have about how these hazards might impact you in the future?

Most of the attendees were in Tioga County for the flood of 2011. While they were all out of their previous homes and most living at [REDACTED] at the time (some were elsewhere), the homes that some attendees used to live in were all lost in the flood. The areas in Waverly at the time of the flood that were impacted were the ballparks, Broad Street, and near sewer drains. They were thankful that where [REDACTED] is located, they were all safe and dry. One attendee lost everything in the flood, so she gets triggered a bit when she sees the river levels elevate, but she knows that being at [REDACTED] she is in a much safer place.

With the winds getting stronger, there's not much protection. They do know that tornadoes touch down not too far away, but the hills provide protection to where they are. Strong winds in general though are what concern them.

3. Is there anything that would help you feel safer or better when you think about these hazards?

Share plans with Tioga County residents ahead of time (be proactive rather than reactive). Mail copies of the emergency plan to ALL residents in the County once

it's updated. A lot of people in the area don't have the internet/computers, or if they do, the service can be extremely spotty. In the midst of an emergency, people won't be thinking of pulling up information. If they're without power, they may not receive alerts.

Knowing in advance where to go when being evacuated or displaced—is there a protocol? Is there a designated location? If people lack transportation, how will they get there? Can Tioga County work with local churches?

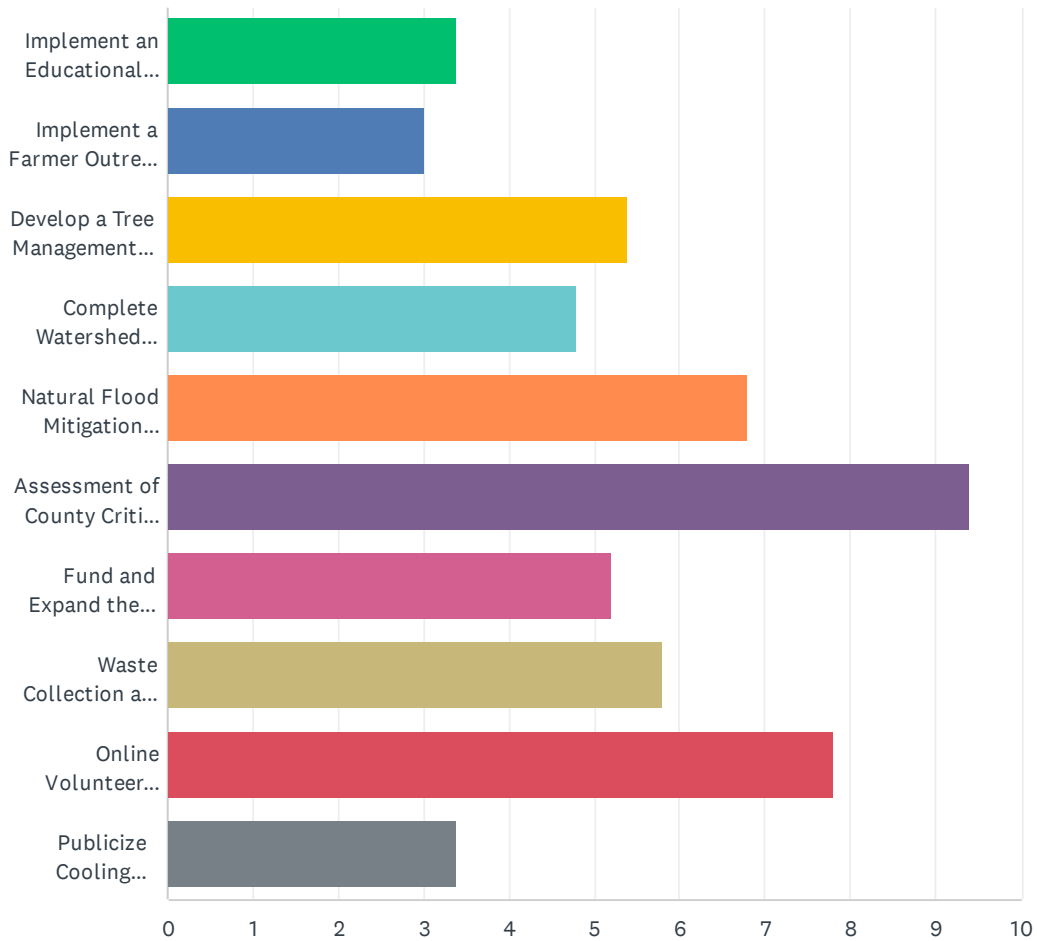
4. What, in your opinion, would help make Tioga County stronger in the face of flooding, storms, heat, cold, or drought?

There needs to be more awareness of emergency plans for the County. Attendees stated that they weren't aware of an emergency plan but were excited to be part of it and voice their thoughts. They suggested mailing the emergency plan to all residents; if it's lengthy, could there be a condensed version that's easier to read and follow? Perhaps there could be more community events to bring people together and get the word out of what would happen should an emergency take place (of any kind).

If Tioga County has plans for storms, tornadoes, extreme heat/cold, floods, etc. it should be shared in advance and regularly; don't wait until the last minute or during an emergency when people are panicking.

Q1 Please rearrange the following draft County-wide hazard mitigation actions in order of importance (top = highest importance, bottom = lowest importance).

Answered: 5 Skipped: 0



Tioga County HMP: Ranking of County Mitigation Actions

	1	2	3	4
Implement an Educational Campaign for Drought Awareness and Mitigation Implement a public education campaign that encourages residents to implement water conservation practices and raises awareness of when such water conservation measures should be taken. Moreover, the campaign would encourage farm operations to adopt climate resilient practices, such as water storage.	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Implement a Farmer Outreach Campaign for Flood Mitigation Measures Implement an outreach campaign to farmers to encourage the installation of stormwater retention ponds, wetlands, and riparian forest buffers to limit flooding within the watershed.	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Develop a Tree Management Program This action includes several sub-actions:(1) Conduct a tree inventory to estimate the varieties and types of trees along public right-of-ways and in public spaces;(2) Develop a standard tree assessment protocol to determine if trees are at high risk of failure;(3) Facilitate a training series for municipal staff on how to complete tree assessments and properly remove trees;(4) Implement a public education campaign to raise awareness on how to assess their own trees and who to contact with questions or concerns; and(5) Facilitate a tree planting program.	0.00% 0	0.00% 0	20.00% 1	20.00% 1
Complete Watershed Assessments Complete assessments for the remaining unassessed watersheds in the County to better understand the County's hydrologic conditions and flood risk zones. Utilize the findings to develop strategies for improving drainage patterns and reducing the risk of flooding.	0.00% 0	0.00% 0	20.00% 1	0.00% 0
Natural Flood Mitigation Solutions for Owego Creek Implement nature-based solutions to mitigate the extent and severity of flooding along Owego Creek. Such strategies may include, but are not limited to, restoring and reconnecting the Owego Creek floodplains, protecting and enhancing wetlands, and implementing green infrastructure for stormwater infiltration.	0.00% 0	20.00% 1	20.00% 1	20.00% 1
Assessment of County Critical Facilities Various County departments and agencies have included mitigation actions to address vulnerable critical facilities. These actions have been proposed in consideration of protection against 500-year events, or worst-case scenarios. It is recognized, however, that in the case of projects being funded through Federal mitigation programs, the level of protection may be influenced by cost-effectiveness as determined through a formal benefit-cost analysis. In the case of "self-funded" projects, local government authority may affect the ability to implement, and discretion must be recognized. Further, it must be recognized that the County has limited authority over privately-owned critical facility owners regarding mitigation at any level of protection.Tioga County DPW staff will conduct vulnerability assessments to the critical facilities identified in the County's annex to this HMP update, to determine their level of protection against a 0.2% chance flood event (or previous worst case flood, if greater than the 0.2% chance flood). This will serve as a first step toward protecting the facilities, if future funding becomes available. There are no local resources available at this time to conduct engineering design and retrofitting on these structures. Future efforts towards protecting these structures to an 0.2% chance flood event (or previous worst case flood event, if applicable) will be considered if funding becomes available. These may include engineering design, building retrofits, or other measures.Municipalities included mitigation actions to address vulnerable critical facilities. These actions have been proposed in consideration of protection against 500-year events, or worst-case scenarios. It is recognized, however, that in the case of projects being funded through Federal mitigation programs, the level of protection may be influenced by cost-effectiveness as determined through a formal benefit-cost analysis. In the case of "self-funded" projects, municipal discretion must be recognized. Further, it must be recognized that the municipalities have limited authority over privately-owned critical facility owners regarding mitigation at any level of protection.Local municipalities must also assess their critical facilities within their jurisdictions and the vulnerabilities of these facilities. Municipalities may choose to upgrade these facilities as needed, pending feasibility and the availability of funding.	80.00% 4	0.00% 0	0.00% 0	20.00% 1
Fund and Expand the Healthy Neighborhoods Program Fund and expand the Healthy Neighborhoods Program so that it can continue to focus on hazard mitigation and expand this focus. This may include, but is not limited to: • Educating residents on the importance of using carbon monoxide detectors and fire alarms in their homes, especially when heating with coal and wood stoves during extreme cold events. Supplying carbon monoxide detectors and fire alarms to residents to protect them from the dangers of heating using	0.00% 0	40.00% 2	0.00% 0	0.00% 0

Tioga County HMP: Ranking of County Mitigation Actions

coal and wood stoves in their homes during extreme cold events. • Supplying seals for windows and doors, in order to reduce the vulnerability of residents to extreme cold and severe storms in their homes, and to protect against rodent infestations which may occur during floods and during cold weather. • Educating residents on the effects of drought on water quality and health, and how to recognize the risks to health and take action. This may include supplying residents with water quality test kits or similar measures. • Expanding the program to include an increased emphasis on making home improvements that mitigate safety issues caused by flooding, storms, extreme temperatures, and/or drought, such as funding for sump pumps (to protect against flood), shutters (to protect against wind), and safer heating systems in order to increase the safety of homes against hazards. • Providing for other supplies and initiatives as needed to protect residents from the health impacts of hazards, such as mold from floods, and to mitigate these hazards. • Promoting the program to residents through print and/or online media.

Waste Collection and Disposal Programs Explore further funding for additional disposal or collection days, in order to expand the sustainability programs for disposal or recycling of old tires, kids toys, electronics, and other items in addition to hazardous waste (e.g. household chemicals, paint, and other). In addition, conduct education and outreach on ways that residents can keep their property prepared for a flood event, in relation to waste.	0.00% 0	0.00% 0	20.00% 1	40.00% 2
Online Volunteer System and Agency Contact List Establish an online system to organize volunteer corps. This system would be established in advance of natural hazard events, so that when these events do occur, people can be mobilized quickly and greatly lower the impact of hazards on residents. Before hazard events such as floods, severe storms, extreme temperatures, and drought, volunteers could be used for purposes such as calling residents to check in on them and make sure they have a safe place to go during a hazard and that their needs are taken care of. Volunteers can be used for other actions as needed. Additionally, maintain a contact list of current organizations who organize volunteers, such as faith-based groups, Tioga Opportunities, Rural Ministry, and other nonprofits.	20.00% 1	40.00% 2	0.00% 0	0.00% 0
Publicize Cooling Centers Educate residents on where they can go during extreme heat, by conducting additional publicity regarding cooling centers in the County. This may include making more residents aware of the existing map of cooling centers, found at https://apps.health.ny.gov/statistics/environmental/public_health_tracking/tracker/#/CCMap . Publicity strategies may include social media posts, flyers in buildings frequented by senior citizens and other vulnerable residents in the County, additional signage on County cooling center buildings, partnerships with media outlets to advertise the existence of the cooling centers, and/or other strategies. If resources allow, the County may also conduct an assessment of the barriers to residents of using these cooling centers.	0.00% 0	0.00% 0	20.00% 1	0.00% 0

Q2 Please use this space to provide any additional input:

Answered: 0 Skipped: 5

#	RESPONSES	DATE
	There are no responses.	

Q1 Have any County departments/agencies helped to carry out mitigation actions with Tioga County since their last HMP update in 2018? Please explain:

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Yes, previous manager was involved.	12/27/2023 10:25 AM
2	Not to my knowledge.	12/22/2023 9:59 AM
3	Broome County did not assist with implementation of any of the specific mitigation strategies identified in the 2018 HMP. It is worth noting, Broome County works with Tioga County on the Broome-Tioga Stormwater Coalition. Also, the Broome County Planning Department organizes a number of municipal trainings on a yearly basis which open to Tioga County officials; in the past we have provided trainings focused on flooding.	12/15/2023 10:47 AM
4	I'm not sure, however there may be town agencies along the county line that have helped, especially during an emergency.	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q2 Have there been any changes in your County's public support or priorities about hazard mitigation as a result of natural hazard events that occur in Tioga County?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Broome County is currently in the process of updating the Hazard Mitigation Plan	12/27/2023 10:25 AM
2	Yes, I think many are aware that some of Tioga County's flood events could have been seen in Tompkins County with just a slight shift northward in storm locations. That knowledge increases public support for mitigation efforts in Tompkins County.	12/22/2023 9:59 AM
3	To our knowledge, there are not any specific natural hazards that occur in Tioga County that do not also occur in Broome County. No notable changes of public support or priorities regarding hazard mitigation.	12/15/2023 10:47 AM
4	no changes.	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q3 Have there been any recent disaster events that occurred in Tioga County that have impacted your County? If so, how?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not recently	12/27/2023 10:25 AM
2	I am not sure. I think there have been some recent natural disasters that have impacted both Tioga and Tompkins, but I don't have the dates or names of those events.	12/22/2023 9:59 AM
3	Recent events including snow/ice storms, severe storms, floods, extreme temperatures, wildfire smoke occurred in both Broome County and Tioga County.	12/15/2023 10:47 AM
4	Not that I'm aware of. Last one being the major flooding that required nursing home evacuation where Tompkins County nursing facilities took some patients (without EM knowledge, all went through DOH), but I don't remember what year...2016?	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q4 Tioga County is profiling four (4) natural hazards: Flooding, Severe Storm, Drought, and Extreme Temperature. Should the list of hazards addressed in the Tioga County HMP be updated? If so, which hazards should be added or removed?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Flooding and severe storm events are likely the highest priorities	12/27/2023 10:25 AM
2	Tompkins County's 2021 HMP included 8 priority hazards, which you could also consider adding to Tioga's plan. These were: • Disease Outbreak • Drought (including wildfire) • Extreme Temperature • Flood (riverine, flash, stormwater, lakeshore, landslide, dam failure, and ice jam) • Infestation and Invasive Species • Harmful Algal Bloom (HAB) • Severe Storm (thunderstorm, lightning, hail, wind, tornado, and hurricane/tropical storm) • Severe Winter Storm	12/22/2023 9:59 AM
3	If Tioga County has high hazard dams, that should be added. If winter storms are not included in severe storm those should be added.	12/15/2023 10:47 AM
4	Severe Snow Storm, Wind	12/4/2023 3:09 PM
5	Wind Damage?	12/4/2023 1:24 PM
6	Cyber	12/4/2023 9:28 AM

Q5 Have there been any new issues with natural hazards in Tioga County that have impacted your County?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Generally speaking storm events that affect Tioga County generally impact Broome County	12/27/2023 10:25 AM
2	Nothing I can think of since our HMP Update in 2021.	12/22/2023 9:59 AM
3	Not to our knowledge, we typically share a lot of the same types of hazards and impacts. If Tioga County were unable to effectively communicate, or manage/maintain infrastructure and facilities during hazard events, we anticipate that would impact Broome County in a variety of ways.	12/15/2023 10:47 AM
4	not that I'm aware of.	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q6 Are any critical facilities or infrastructure in your County impacted by natural hazards that occur in Tioga County?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not to my knowledge	12/27/2023 10:25 AM
2	The closed Hillview Landfill in the Town of Danby, also lies partially in Tioga County.	12/22/2023 9:59 AM
3	Some of the primary facilities/infrastructure that are impacted by hazards. Roads and highways including NY Route 17, NYS Route 434, Wilson Medical Center, Lourdes Hospital, Binghamton-Johnson City Joint Sewage Treatment Plant, Government Plaza, dams/levees, hazardous material storage/production facilities, public safety facilities. See the Broome County 2019 HMP for maps of critical facilities.	12/15/2023 10:47 AM
4	not that I'm aware of other than roadways.	12/4/2023 3:09 PM
5	Recycling services.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q7 Are there critical facilities or infrastructure in Tioga County that your County depends on?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not to my knowledge I am sure Broome County would welcome	12/27/2023 10:25 AM
2	The landfill is capped and closed now, so Tompkins does not depend on it, but it is still actively monitored by the County. If you'd like more information, please contact Tompkins County Recycling and Materials Management Dept.	12/22/2023 9:59 AM
3	Without seeing a list of Tioga County's critical facilities, it is difficult to determine what directly impacts Broome County. Generally, major roads and highways including NY Route 17, NYS Route 79, NYS Route 434, possibly communication towers and telecommunication facilities, well/potable water supply, fire/public safety facilities.	12/15/2023 10:47 AM
4	not that I'm aware of.	12/4/2023 3:09 PM
5	Cortland County relies on a recycling facility located in Tioga County to receive and handle all recyclables produced in Cortland County.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q8 Does your County have any areas adjacent to Tioga County that is out of the Special Flood Hazard Area (SFHA)/floodplain that Tioga County can use to temporarily relocate its residents after a disaster?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	I am sure Broome County would welcome displaced Tioga County residence during a disaster	12/27/2023 10:25 AM
2	I do not know. Please contact the Tompkins Co Dept of Emergency Response. They work closely with the Red Cross to identify emergency shelter locations during disasters.	12/22/2023 9:59 AM
3	There are five municipalities including Vestal, Union, Maine, Nanticoke, and Lisle adjacent to Tioga County. Each of these municipalities have areas that are outside the SHFA, but further analysis would need to be conducted to determine which if any have areas that are appropriate for relocation. The Red Cross activates shelters during emergencies. See the 2019 HMP for a list of potential temporary housing sites for county residents displaced by a disaster.	12/15/2023 10:47 AM
4	Probably in Town of Caroline, depending on incident location.	12/4/2023 3:09 PM
5	I suggest contacting the Towns of Harford and Marathon.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q9 Have any changes in development trends occurred in your County that could create additional risks in Tioga County? Does any new development reduce risk?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not to my knowledge	12/27/2023 10:25 AM
2	More commercial and residential development is expected due to Micron and the Battery Hub in Binghamton. If not well managed, these could exacerbate flooding through additional impervious surfaces and stormwater management.	12/22/2023 9:59 AM
3	New development is largely focused in the urbanized/commercial areas of the county including Binghamton, Johnson City, Vestal, Endicott Chenango, etc. A breakdown of types of developments and location can be found in the Broome County construction data report. Renewable energy developments are becoming more common, there are multiple solar farms and a new wind farm in eastern Broome, battery energy storage systems.	12/15/2023 10:47 AM
4	not that I'm aware of.	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q10 Have any jurisdictions in your County adopted new policies, plans, regulations, or reports that could support the Tioga County HMP Update?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Updating of the Broome County H.M. Plan	12/27/2023 10:25 AM
2	The Countywide Resiliency and Recovery Plan (2022), as well as the Hazard Mitigation Plan (2021) - including the municipal annexes - may be found here: https://tompcinscountyny.gov/planning/climate-adaptation#2021%20HMP%20Update	12/22/2023 9:59 AM
3	USACE Comprehensive Flood Damage Reduction Feasibility Study Completion Report (2020) Broome County Sustainable Operations and Energy Action Plan (expected completion 2024) Susquehanna River Basin Commission's Susquehanna Flood Warning and Response System (expected 2025)	12/15/2023 10:47 AM
4	not that I'm aware of	12/4/2023 3:09 PM
5	You may refer to the Cortland County HMP.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q11 Does your County have different or new education and outreach programs and resources available to assist Tioga County in its mitigation activities?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not to my knowledge	12/27/2023 10:25 AM
2	We've put together some flood resources and been doing community education in preparation for FEMA issuing new FIRMS in Tompkins County. Here is the URL: https://tompkinscountyny.gov/flood-info	12/22/2023 9:59 AM
3	Broome County typically uses a mix of press releases, digital and social media postings, flyers and direct mailers for a variety of educational campaigns. There could be an opportunity to share information from Tioga County on our social media page.	12/15/2023 10:47 AM
4	not that I'm aware of	12/4/2023 3:09 PM
5	Not that I know of, perhaps our Emergency Management Facebook page that can links to out hyper reach system.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q12 Are there new projects to consider for long-term risk reduction that can be worked on together with Tioga County? Please explain:

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Broome County SWCD works closely with the Upper Susquehanna Coalition implementing BMPs addressing flood mitigation.	12/27/2023 10:25 AM
2	Debris management post disaster is an area we have been focused on since the 2022 Resiliency and Recovery Plan was done. Happy to talk more about that if there is interest in collaborating.	12/22/2023 9:59 AM
3	Perhaps buyouts or flood retrofits, natural based solutions.	12/15/2023 10:47 AM
4	Not sure, will have to think about this and confer with planning department.	12/4/2023 3:09 PM
5	Not that I can think of currently, perhaps the adjacent Towns know of other projects.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM

Q13 Do any challenges exist for collaboration on mitigation actions with Tioga County, and how can those be overcome over time?

Answered: 6 Skipped: 0

#	RESPONSES	DATE
1	Not to my knowledge	12/27/2023 10:25 AM
2	None come to mind.	12/22/2023 9:59 AM
3	Funding, staff capacity and capabilities.	12/15/2023 10:47 AM
4	Not sure, will have to think about this and confer with planning department.	12/4/2023 3:09 PM
5	Not that I know of.	12/4/2023 1:24 PM
6	No	12/4/2023 9:28 AM



**Tioga County
NY**

Join us remotely via **Zoom!** Open to all . . .

PUBLIC Information Meeting

Tuesday, February 13, 2024

12:00 pm

OR

5:00 pm

<https://bit.ly/tiogahmp2-13-12>

<https://bit.ly/tiogahmp2-13-5>



scan QR Code with
your camera app



call: 646-518-9805
meeting ID: 870 5399 9366

call: 646-518-9805
meeting ID: 874 7268 4439



HAZARD MITIGATION PLAN

A Hazard Mitigation Plan (HMP) is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term. Tioga County's current HMP was created in 2018 and will expire on August 12, 2024. Over the past several months, Tioga County has been developing an update to its HMP, and the Draft HMP is now ready for public review! To read the Draft HMP, please visit the following website, scroll down, and click on the box titled "Tioga County Multi Jurisdictional Hazard Mitigation Plan."

<https://www.tiogacountyny.gov/departments/emergency-services/>

Your input is essential for making sure the HMP reflects public priorities.

Please contact **Grace DeSantis** with any accessibility requests
by **February 6**
gdesantis@bartonandloguidice.com or 716-436-7857

Your Opinion Matters





Emergency Services

Contact

Mike Simmons
Director of Emergency
Services

[Send Email](#)

Telephone:
607-687-2023

Location & Phone

103 Corporate Drive
Lower Level
Owego, NY 13827

Main Phone:
607-687-8466

Tioga County is holding a second public meeting to hear public input on the 2024 Draft Hazard Mitigation Plan Update

Last Updated: 2/2/2024

Tioga County is holding two virtual meetings on **Tuesday, February 13th, 2024** to solicit public input on its 2024 Draft Hazard Mitigation Plan Update. The times are Noon and 5:00 PM.

Please [click](#) on the flyer below for details.



Share This Article





Emergency Services

Contact ▾

Mike Simmons
Director of Emergency
Services

[Send Email](#)

Telephone:
607-687-2023

Location & Phone ▾

103 Corporate Drive
Lower Level
Owego, NY 13827

Tioga County's DRAFT 2024 Hazard Mitigation Plan Update is ready for public input

Last Updated: 2/2/2024

Tioga County is updating the County's Hazard Mitigation Plan (HMP). A Hazard Mitigation Plan is a way to identify natural hazards the County faces, evaluate people and property at risk, and create strategies to minimize damages in the long term.

Tioga County's Draft 2024 Hazard Mitigation Plan Update is ready for public input. This updated plan incorporates FEMA's new guidelines. The Plan can be found at

<https://www.tiogacountyny.gov/departments/emergency-services/> then scroll down and click the box titled Tioga County Multi Jurisdictional Hazard Mitigation Plan.

Please contact either Wendy Walsh, Tioga County Soil & Water Conservation District Manager by email at walshw@tiogacountyny.gov or Elaine Jardine, Tioga County Planning Director, by email at jardinee@tiogacountyny.gov if you have questions or comments.

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Tioga County Hazard Mitigation Plan – 2024 Update

Agenda

1. Background
2. Overview of Draft Plan
 - Introduction
 - Hazards
 - Mitigation Strategy
3. Next Steps



(Gaylord Stream Crossing Replacement Project, Owego, NY)

Background

What is Hazard Mitigation?

Hazard mitigation reduces the long-term risk that a community faces from disasters. It focuses on strategies to lessen the impact that disasters can have on people, property, and critical community assets. Without mitigation, the same people, property, and community lifelines are affected over and over again, but mitigation tries to reduce this risk more permanently.



Hazard Mitigation Plan Update

Tioga County received a grant from FEMA to update the 2018 Multi-Jurisdictional Hazard Mitigation Plan.

Hazards Profiled for 2024:

1. Drought
2. Flood
3. Extreme Temperatures
4. Severe Storm



Project Schedule



May 3, 2023

Jurisdictional Team Kickoff Meeting



October 4, 2023

Public Meeting #1



February 13, 2024

Public Meeting #2



April 2024 (Tentative)

Submit Final Plan to
NYS DHSES and FEMA

May to September 2023

Data Collection
County Roundtable (May 17, 2023)
Jurisdictional Meetings



May 2023 to January 2024

Risk Assessment
Jurisdictional Team Meeting #2 (October 5, 2023)
Departmental Interviews & Focus Groups
Mitigation Strategy
Development of Draft Plan



January to March 2024 (Tentative)

Revise and Finalize Plan to Ensure Compliance
with State and Federal Requirements



Presentation of Draft Plan to NYS DHSES

Draft Plan Overview

Contents

Main Report

1. Introduction
2. Tioga County Profile
3. Plan Participation
4. Capabilities
5. Hazard Identification and Ranking
6. Hazard Profiles
7. Assets
8. Impacts and Overall Hazard Vulnerability
9. Mitigation Strategy
10. Plan Maintenance
11. Works Cited

Appendices

- A. Jurisdictional Annexes
- B. Sample Plan Adoption Resolution
- C. Community Engagement Plan
- D. Core Planning Group Meeting Summaries
- E. Stakeholder and Public Outreach Documentation
- F. HAZUS Data Reports
- G. Plan Update Checklist
- H. Dam Information
- I. New Mitigation Actions

Tioga County

2024 Multi-Jurisdictional Hazard Mitigation Plan Update

Prepared for:



Tioga County Office of Emergency Services
103 Corporate Dr. Lower Level
Owego, NY 13827

Prepared by:



59 Court St, Suite 712
Binghamton, NY 13901

1-4. Introductory Sections

1. Introduction

Introduces hazard mitigation planning, as well as the plan's purpose, process, and jurisdictions involved.

2. Tioga County Profile

Overview of geography, climate, demographics, economic characteristics, land use, and development in Tioga County.

3. Plan Participation

Plan participants included a Core Planning Group, towns and village representatives, government agencies, nonprofits, neighboring communities, and the public.

4. Capabilities

Highlights key resources for hazard mitigation and emergency preparedness, on a county, state, federal, and municipal level.

Highlights

- Several new developments, although overall population decreasing
- Existing capabilities: flood damage prevention local laws, Citizen Preparedness events, SWCD, County programming

<u>Engagement Strategies</u>		
<u>Towns/Villages</u> <ul style="list-style-type: none">• Interview with each town & village• 2 meetings for town/village representatives	<u>Stakeholders</u> <ul style="list-style-type: none">• County Roundtable• Committee membership• Interviews with County departments & Tioga Opportunities• Neighboring community survey• Presentations at Local Emergency Planning Meeting, Council of Governments Meeting• Surveys	<u>Public</u> <ul style="list-style-type: none">• Online survey (77 responses)• 2 public meetings• 2 focus groups for older adults and people with disabilities

5-8. Risk Assessment

5. Hazard Identification and Ranking

Identifies the natural hazards to focus on in the plan, based on historical hazards and other studies. Ranks the County's vulnerability to each hazard.

6. Hazard Profiles

Describes each hazard and its location, severity, effects on people and property, past events, and future likelihood.

7. Assets

Who and what could be affected by these hazards? Describes people, businesses, roads, buildings, historical resources, etc. that could be affected

8. Impacts and Overall Vulnerability

Summarizes the impacts of the hazards and describes priorities of the County, towns and villages, and the public.

Hazard Impacts

Flood

- Damage to homes & businesses
- Road closures
- Debris
- Loss of time & income
- Displacement

Downtown Owego after 2011 flood

Severe Storm

- Power outages
- Property damage
- Transportation delays
- Safety hazards

Drought

- Farming disruptions
- Drinking water quality
- Lost time & income

Extreme Temperatures

- Increase in EMS calls in heat
- Health effects – e.g. from smoke (wood stoves) and heat

Hazard Impacts: Who and What



Hazard Impacts

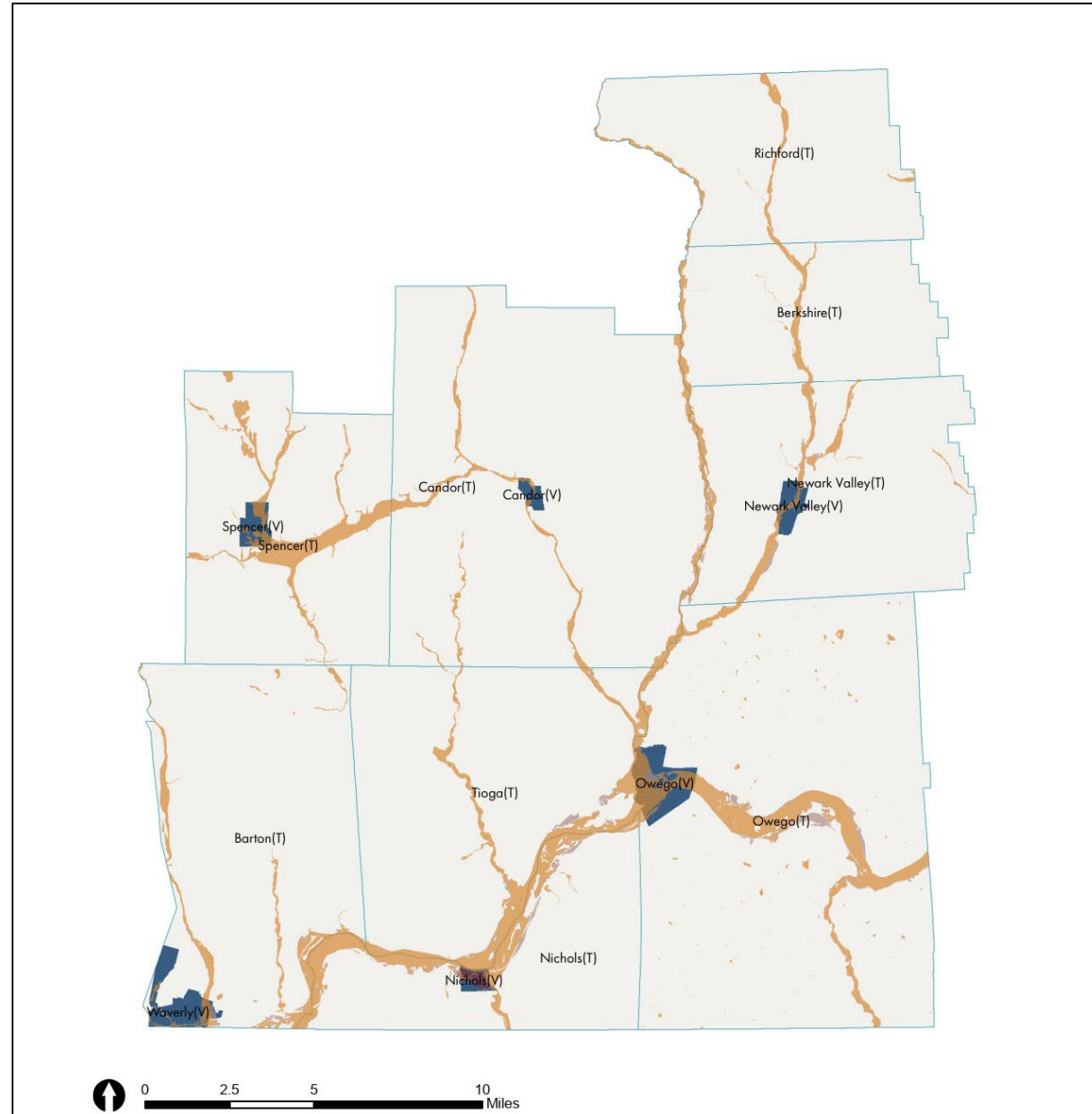
Flood Plains

Tioga County

Data Sources:

FEMA National Flood Hazard Layer, 2019

- 1% annual chance flood
- 0.2% annual chance flood
- Reduced flood risk due to levee
- Village
- Town
- County



Hazard Impacts

Expected Annual Loss:

- Flooding: \$5.9 million
- Severe Storm*: \$1.5 million
- Extreme Temperatures: \$262,000
 - Cold: \$233,000
 - Heat: \$29,000
- Drought**: \$0

Source: FEMA. Based on historical data only.

*Severe Storm includes hail, hurricane, lightning, strong wind, tornado, winter weather

**Drought estimates may not include all damages.

Future predictions:

- Flooding: increase
- Severe Storm: more thunderstorms & wind & hail, less winter storms
- Extreme Temperatures: more heat, less cold
- Drought: increase

9-11. Mitigation Strategy & Appendices

9. Mitigation Strategy

Describes actions the County can take to reduce the impact of these hazards, and how the actions will be implemented.

10. Plan Maintenance

Describes how progress on the plan will be monitored, and how the plan will be evaluated and updated.

11. Works Cited

Lists sources consulted in creating the plan.

Appendices and Annexes

Contains a document for each town and village, plus the County. Also contains supplemental information.

Ongoing Actions (Countywide, 2018)

- Install Message Boards on Roads
- Map Relief Supply Routes
- App Showing Road Blockages
- Rain Gauges (Flood Warning)
- County Flood Response Plan
- Municipal Emergency Plans
- Mark Flood Levels at Community
- Flood Awareness Signs
- Basement Cleanout Program for Hazardous Waste
- Online Tool for Recording Losses & Damages



New Actions (Countywide)

- Drought Awareness Campaign
- Flood Outreach Campaign (Farmers)
- Tree Management Program
- Complete Watershed Assessments
- Natural Flood Mitigation Solutions for Owego Creek
- Assess Critical Facilities
- Expand Healthy Neighborhoods Program
- Waste Collection & Disposal Programs
- Online Volunteer System and Agency Contact List
- Publicize Cooling Centers
- Post-Flood Emergency Stream Intervention Training



Additionally, each Town and Village in the County has its own set of actions.

Implementation and Updates

- Quarterly jurisdictional team meetings
- Additional County-led meetings (as necessary)
- Periodic evaluation of plan
- Updates every 5 years



Jurisdictional Team Kickoff Meeting, May 2023

Next Steps

Next Steps for B&L

1. Revise plan based on public feedback (Feb-March 2024)
2. Submit draft plan to NYS DHSES (March 2024)
3. Incorporate any revisions from NYS DHSES, then submit final plan to FEMA (Spring 2024)

How Can I Get Involved?

1. To read the Draft HMP, please visit the following website, scroll down, and click on the box titled “Tioga County Multi Jurisdictional Hazard Mitigation Plan.”

www.tiogacountyny.gov/departments/emergency-services/

2. Contact your local Town/Village to encourage local adoption of the HMP Update.

New York Radio System Assessment Executive Report

[Tioga County Multi Jurisdictional Hazard Mitigation Plan](#)

Tioga County's **2024** Multi-Jurisdictional Hazard Mitigation Plan Update is now in DRAFT form. Please see below for links to sections open to public review. If you have any questions or comments please contact Wendy Walsh, CPESC, CCA by email at walshw@tiogacountyny.gov or Elaine Jardine, County Planning Director by email at jardinee@tiogacountyny.gov.

Last Updated 02.02.24

**Tioga County Hazard Mitigation Plan Update DRAFT
Feb 2024**

 PDF, 3997 KB

Appendix A (Jurisdictional Annexes) DRAFT 020124

 PDF, 12794 KB

**Appendix C (Community Engagement Plan) DRAFT
020124**

 PDF, 1106 KB

**Appendix D (CPG Meeting Summaries) DRAFT
020124**

 PDF, 443 KB


**Appendix E (Stakeholder And Public Outreach)
DRAFT 020124**

 PDF, 17980 KB

Appendix F (HAZUS Data Reports) FINAL

 PDF, 9049 KB

Appendix G (Plan Update Checklist) FINAL

 PDF, 140 KB

Tioga County Public Informational Handout

 PDF, 750 KB

Contact Us

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Questions & Comments?

Public Information Meeting #2 Summary

Date/Time: February 13, 2024 | Session 1: 12:00pm, Session 2: 5:00 pm

Format: Zoom Webinar

Public Participants: 4 (3 of which participated in polling)

Polling Results

Which reason(s) brings you to today's meeting?

- To stay up-to-date on Tioga County's planning efforts (2)

Which description(s) best represents your relationship with Tioga County?

- I visit or work within Tioga County, but do not live there (1)

Where do you live?

- I don't live in Tioga County (1)

Which of the following natural hazards do you feel impacts your community the most? Please consider damages to property, crops, people, etc.

- Flooding (coastal, riverine, ice jam) (2)

What impacts from hazards in Tioga County are you most concerned about? Keep in mind yourself as well as your family and neighbors.

- Home or business being flooded (2)

Do you have any additional comments about the impact of these hazards?

- Home flooding (1)

Please choose your top 3 mitigation actions that you would like to see the County prioritize.

- Post Flood Emergency Stream Intervention Training (train staff and contractors on methods to prevent further damage to infrastructure) (1)
- Natural Flood Mitigation Solutions for Owego Creek (1)

Do you have additional comments or ideas about mitigation actions the County can take?

- All flood related options i would select (1)

Other questions or comments?

- Will send comments. (1)

Note: Value in parentheses indicates number of times that response was provided.