



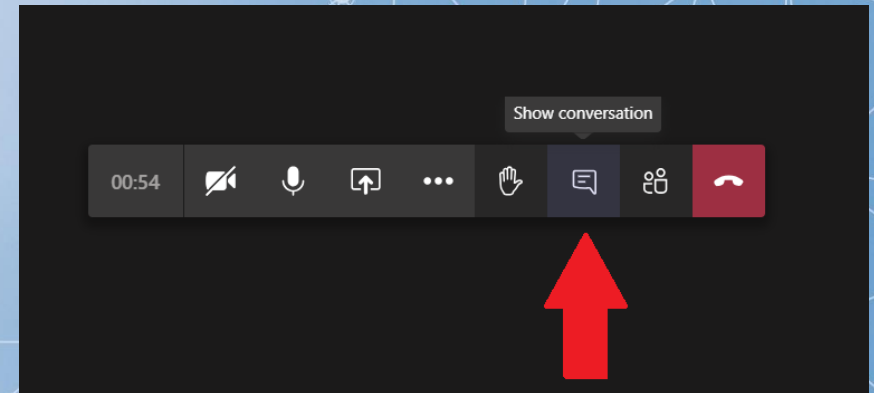
# Warren County, New York Hazard Mitigation Plan – 2023 Update

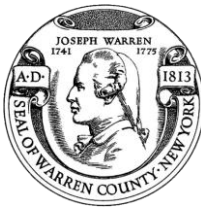
Steering Committee #5 Meeting | June 7, 2023 | 10:00 – 11:00 AM  
Draft Plan Review

## **WELCOME!**

*If you are attending the webinar on your computer, please add your name, title, and organization(s) to the chat box.*

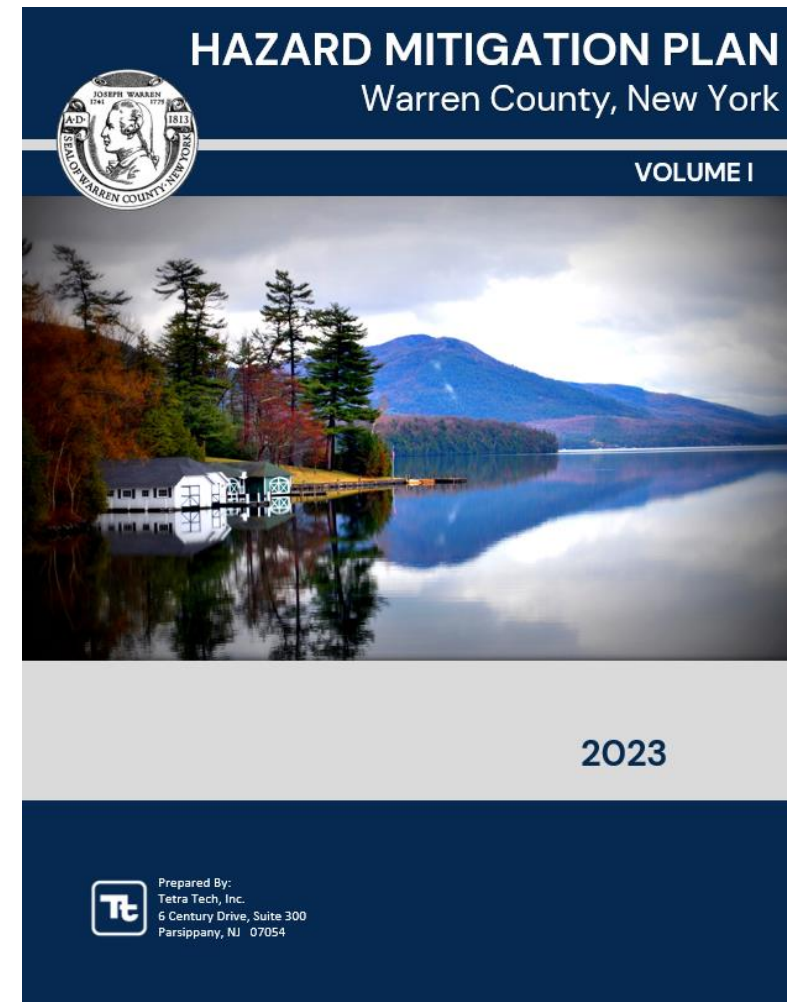
*This will assist in our attendance documentation.*

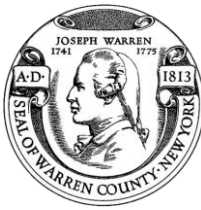




# Agenda

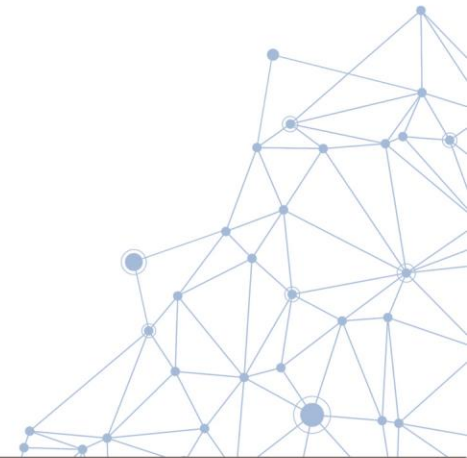
1. Introductions
2. Project Schedule
3. Draft Plan Review
  - What is New?
  - Survey Results
  - Section-by-Section Content Overview
  - Review Guidelines
  - Finalizing the Plan
  - County Mitigation Actions Discussion
4. Next Steps
5. Q&A

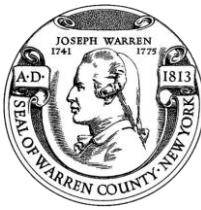




# Project Schedule Review

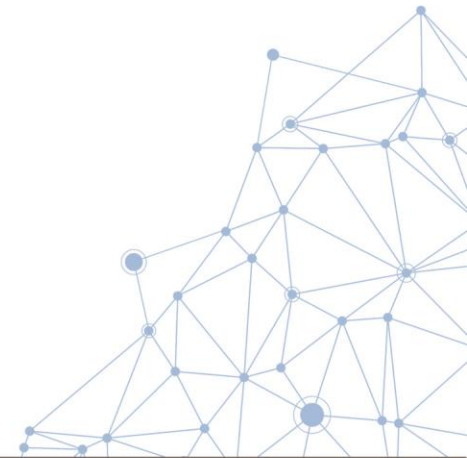
- |   |                         |  |
|---|-------------------------|--|
| ✓ | November 2, 2022        | Municipal Kick-Off Meeting                           |
| ✓ | November – December     | Data Collection                                      |
| ✓ | January 2023 – February | Update hazard profiles                               |
| ✓ | February 15, 2023       | Risk Assessment Presentation to Planning Partnership |
| ✓ | March 15, 2023          | Mitigation Strategy Workshop                         |
| ☐ | June/July 2023          | Review draft plan                                    |
| ☐ | September 2023          | Submit plan to NYSDHSES and FEMA                     |

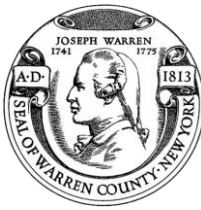




# What is new in the 2023 Update?

- Review of hazard impacts since last plan.
- Updated critical facility inventory, including Community Lifelines
- Updated annexes to align with new FEMA and NYSDHSES Guidance
- Supplementary information appendix to support policy and planning
- Climate Change impacts and Adaptive Capacity to reduce vulnerability used in hazard ranking





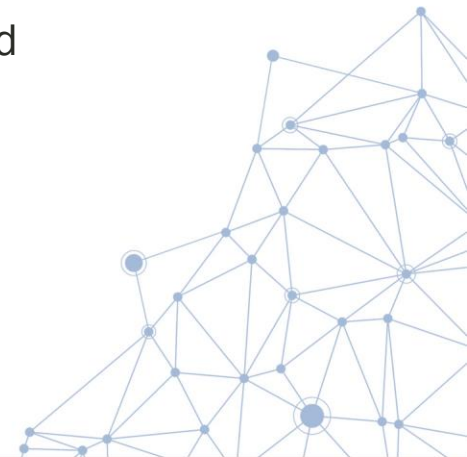
# Neighboring County Survey Results

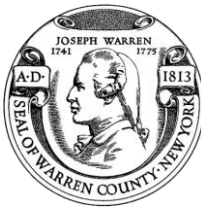
- **Saratoga (2 responses)**

- Indicated mutual agreements to deploy staff for emergency evacuations/disaster response
- Warren County was instrumental in helping us to develop many of our plans. They are a partner that could be asked for assistance in a variety of disasters.
- Emergency Managers work together to respond to incidents and may work together to mitigate against incidents along shared vulnerabilities.
- Shared hazards of concern: Flooding along the Hudson - which serves as the boundary between a good portion our counties. Additionally, various incidents along the Northway. Also, large scale incidents (e.g .brush fire) along our rural border; All dams/flooding along common county borders.
- Information shared with Saratoga communities by the hazard mitigation plan, intercommunity communication often by the highway department leadership.
- Multi-county evacuations would require collaboration. Historically we have collaborated on shared hazards/events

- **No response**

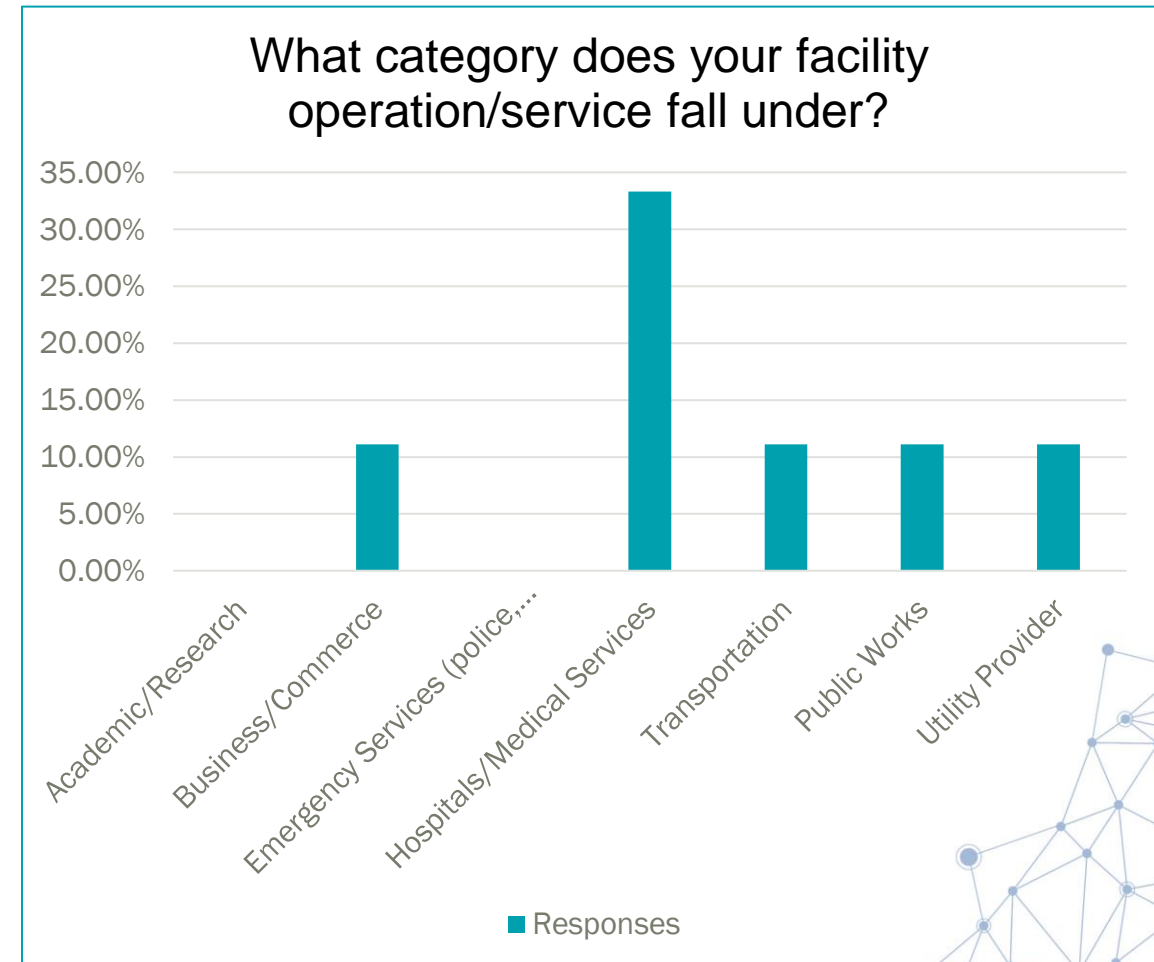
- Essex accessed survey (No data-will contact to discuss)
- Hamilton County
- Washington County

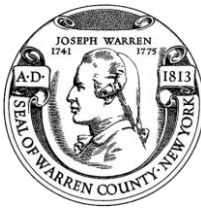




# Agency Survey Results

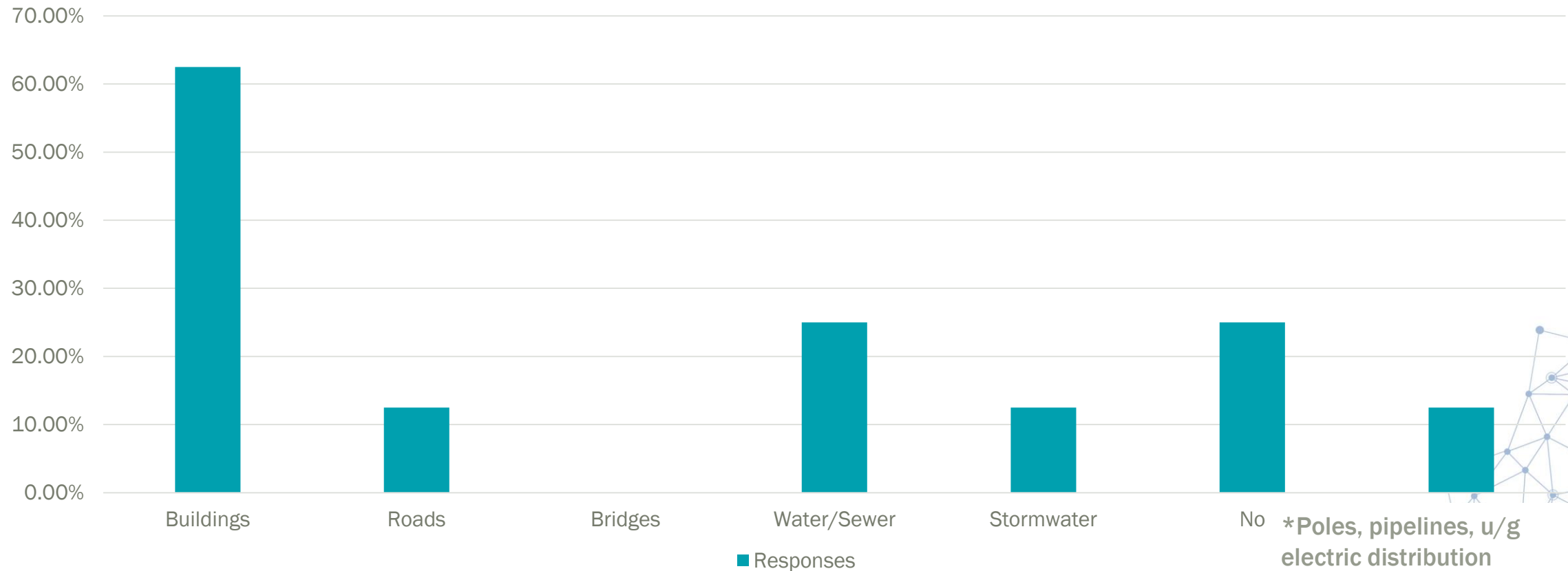
- 9 Respondents
  - National Grid
  - Warren County Health Services
  - SAIL
  - NYS Department of Health Glens Falls District Office
  - Lake George Regional Chamber of Commerce & CVB
  - Southern Adirondack Independent Living
  - Glens Falls Hospital
  - Greater Glens Falls Transit
  - Glens Falls Common Council





# Agency Survey Results

Does your organization maintain or manage any of the following within your designated service area?



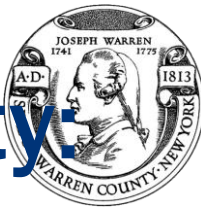
# Agency Survey - Hazard Vulnerability:



- Electric Substations and gas regulating stations. As we've all seen in the news with the recent vandalism with electric utility equipment, it is high on the priority list for our security teams.
- Salt mitigation to protect the lake. We currently use sand on the backside of our building/parking area and salt/sand mixture on the front. No other hazards as of this writing.
- Reliance on pre-identified municipal buildings and locations that are owned and maintained by City/Town municipalities for many of our activities.
- Our hub is the County Municipal Center. Vulnerabilities include fire, severe weather impacting the facility, loss of internet and utilities caused by weather or man-made factors"
- Road hazards - downed trees, winter driving conditions
- Industry along the river and watershed

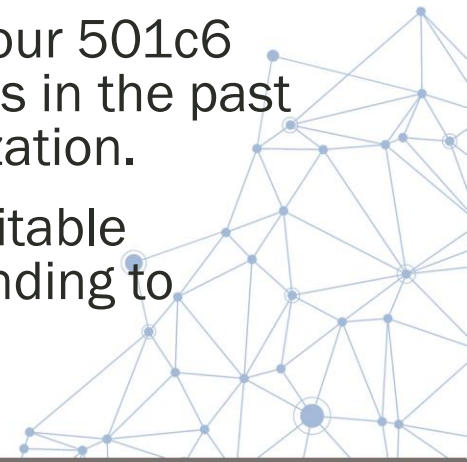


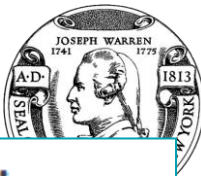




# Agency Survey - Programs to Reduce Vulnerability

- Tree Trimming program - each of our circuits are trimmed on 5-year cycles, that means every 5 years ""Main St in Queensbury"" will be inspected for danger trees and trimmed by one of our tree contractors.
- **"Computapole"** program. This is a program that has us inspect and get eyes on every piece of National Grid electric infrastructure throughout our territory. We identify potential hazards like rotting poles, broken or unbonded guy wires, blown lightning arrestors, or broken cross arms. Once they are reported, the issues are then sent to the field workers for repairs. This is also done in 5-year cycles for each of our circuits.
- We have a similar program for our gas distribution system regarding our Leak Prone Pipe program where we are replacing old cast iron mains and services with plastic. We have a gas corrosion team that inspects our pipelines to make sure they are still in spec.
- We were able to take advantage of the second round of PPP funding because of our 501c6 corporate status that helped us through the pandemic financially. Other strategies in the past have been to cut programs and not people to stay financially stable as an organization.
- Upgrading work from home opportunities if the facility is unusable, ensuring a suitable secondary location is available for staff that have to be in the office, providing funding to ensure IT and other equipment necessary to maintain operations is provided
- Sewage treatment plant power project





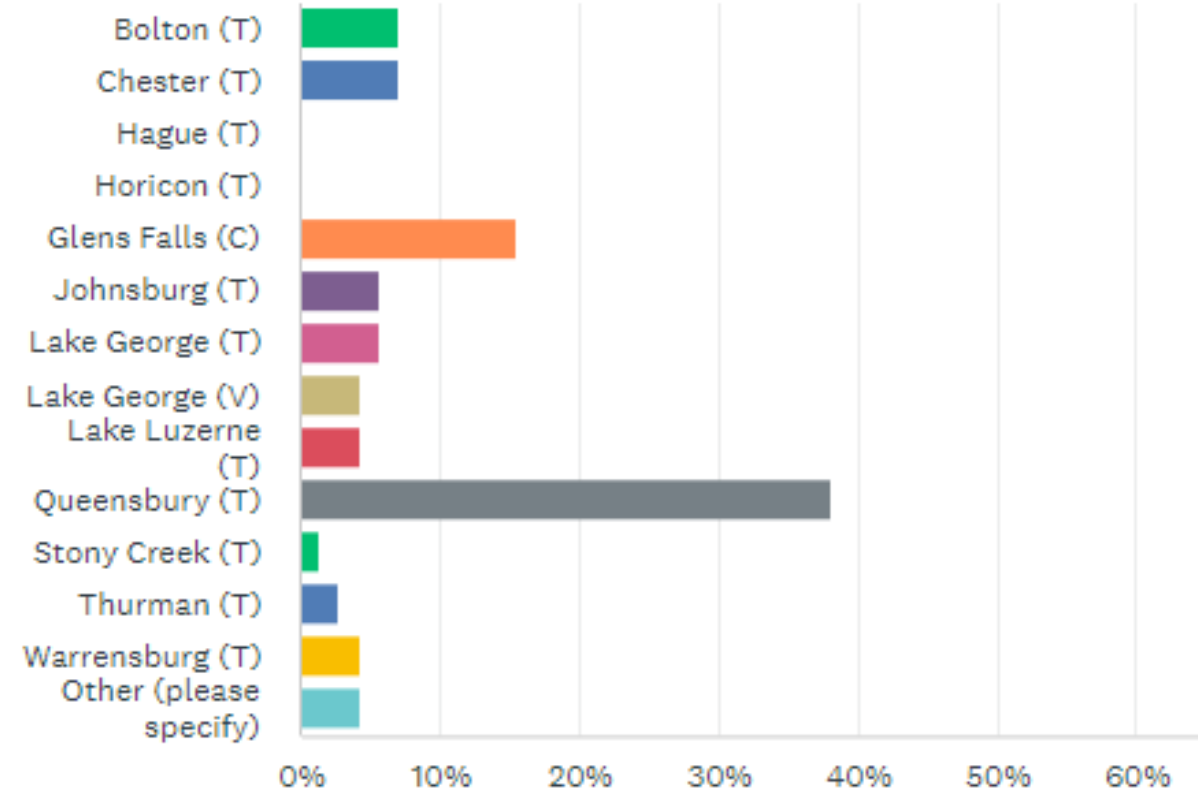
# Public Survey Results

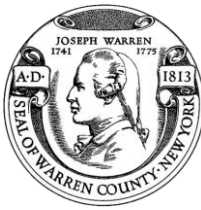
- 81 Responses
- 64% Completion Rate
- 8 Minutes to Complete (Avg)
- ~39 identified vulnerable areas/items

County streets Lake property Glens Falls Rd water due Road River  
flood drainage trees Hudson River None ice

Please indicate the municipality in which you live:

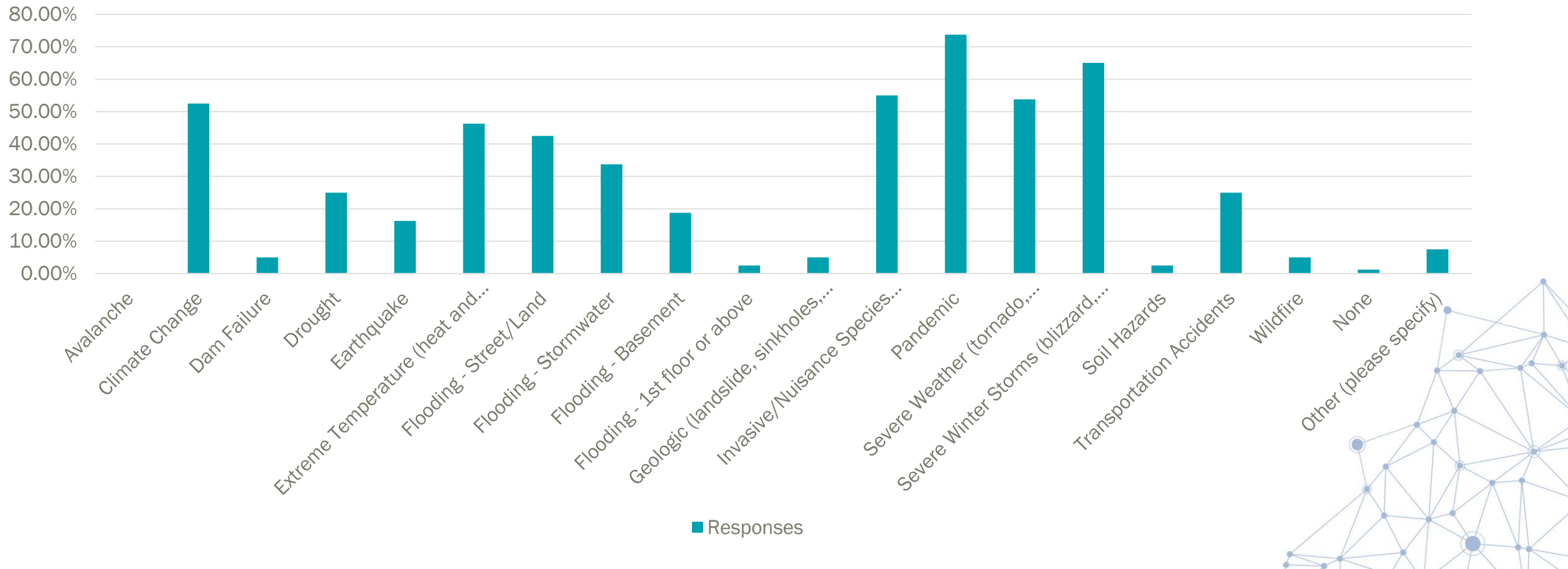
Answered: 71 Skipped: 10

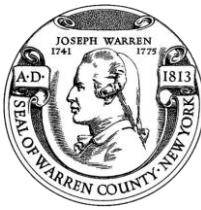




# Public Survey Results: Hazards Experienced

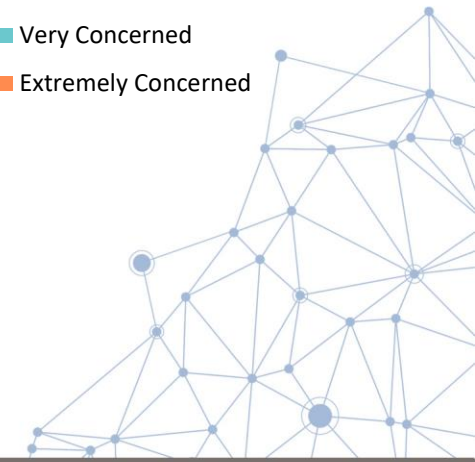
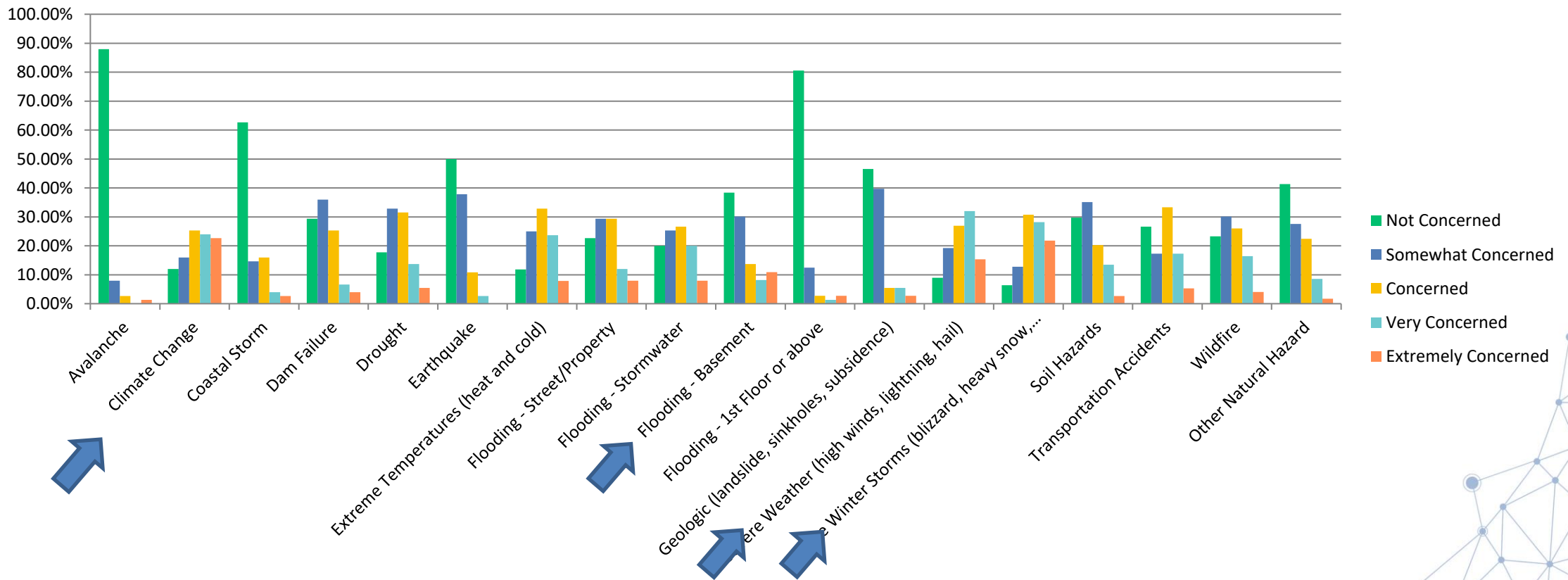
In the past 10 years, which of the following hazard events have you experienced in Warren County?

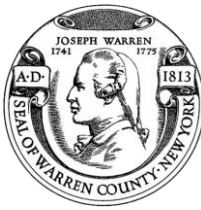




# Public Survey Results - Hazard Concerns

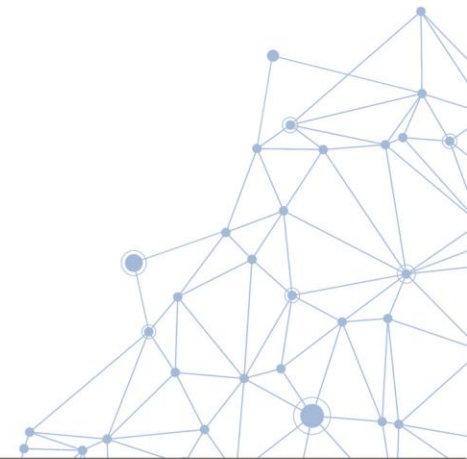
How concerned are you about the following hazards in Warren County? Please check one for each hazard.

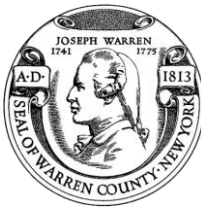




# Problem Areas

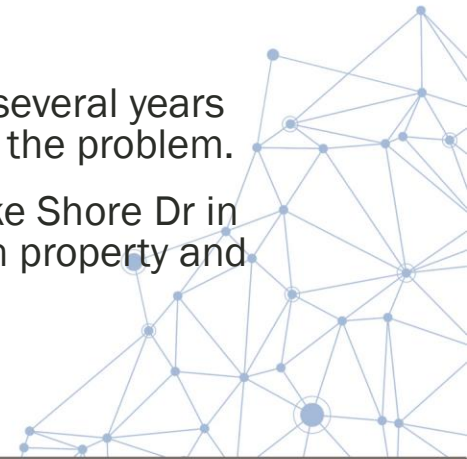
- Pine Tree Lane Diamond Point
- Always having power outages when others don't. They can last up to four days.
- Lack of back up power
- Loon Lake Dam Failure.
- Power outages due to lack of appropriate tree removal along power lines.
- Poor cell service. Lake Luzerne
- Queensbury boat launch, Glen Lake, Lake George, Hudson
- Susceptibility to flooding, poorly maintained dams owned by city of Glens Falls.
- Schools lack of back up power in the event power goes out and lack heating elements. Trees along residential roads that aren't cut back. Power drainage on roadways.
- Prone to power outages from trees on lines
- General back-up power, snow/ice blockage on highways
- Floodprone area on Meadowbrook Road @ Halfway Brook
- Low water levels in Kattskill by Lake George due to water management practices
- Apartment building for disabled and retired with all electric heat. No on demand generator.
- Located at 10 Manor Rd.

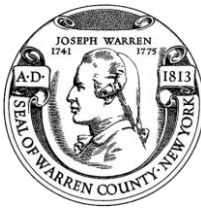




# Problem Areas, continued

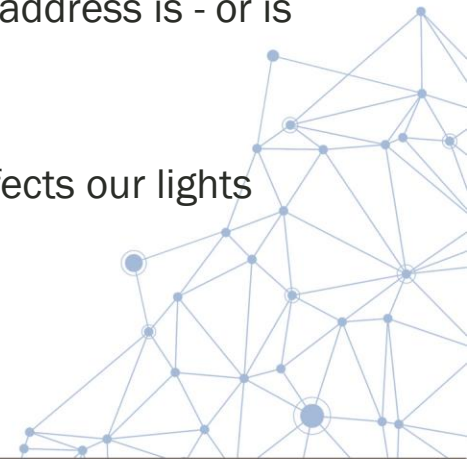
- 13th Lake Road, North River. The gabion walls are pushed out and look like they will give at any time. Also rocks fall in the middle of the road all the time.
- Flooding - 9N S/Hidden Valley Drive (Tubby Tubes-Lake Luzerne, NY 12846), due to a sewer drain that doesn't handle all the water, causing back up and ice/danger in winter. Trees down in my property from recent high winds (1275 Lake Avenue, Lake Luzerne, 12846)
- Water Tank control panel without power backup
- Ice jamming on Hudson River at 418 Bridge.
- Flooding on River Road
- Lake George sewage treatment plant has minimal security and is vulnerable to walk up attacks on infrastructure.
- Numerous roads and stream crossings could be subject to flood/storm damage.
- East End in Glens Falls is known for being a high water table area
- North Bolton Road at the foot of Church Hill Road is continually flooded due to the road having been raised several years ago. Raising the road removed all drainage possibilities and County officials refuse to do anything to correct the problem.
- Storm Drainage system that runs down the Lakeview Circle drive in the town of lake George and crosses Lake Shore Dr in the town of lake George and continues down to the lakefront between the Fairview Improvement association property and the lake view terrace property.

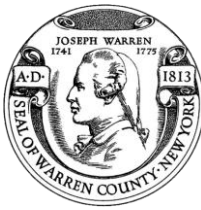




# Problem Areas, continued

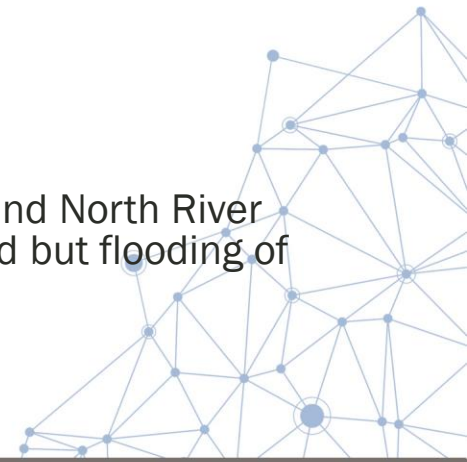
- Lack of municipal sewer and water
- Poor drainage for city streets (most streets in Glens Falls); raw sewage releases into the Hudson River (sometimes even if it only rains briefly); Poor tree maintenance causes downed branches in the high winds we now get for many months of the year.
- My road is collapsing into a stream. Many dead trees along the road. So called protected land around the watershed is not protected or monitored
- C/Glens Falls flood prone streets. Warren St, Mohican St, CR 19 T/Chester. SR 418 bridge & River Rd, Barton Mines RD  
Johnsburg
- Loon Lake Dam, Rt 8/9, Chestertown
- ZERO fragrance-free emergency shelters! Acute respiratory response / reactive airways when exposed for perfumes, scented products (ubiquitous), etc. ALSO: FEMA Flood Map makes ZERO sense! Unable to determine if my address is - or is not - in a flood plain: Fredella Avenue, Glens Falls, NY.
- Hudson River Basin Lake Luzerne to Corinth
- We have experienced power outages for as lengthy as 5 days. being on a deep well, the outage not only effects our lights and heat, but water as well.
- Electric
- Glens Falls dams on West Mountain



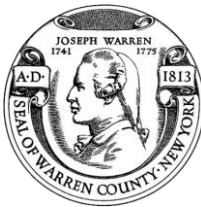


# Problem Areas, continued

- Federal Hill Rd
- Areas along Hudson River and Schroon River are flooded frequently
- Lack of internet service in rural areas.
- Queensbury - Halfway Brook Area/flooding
- Warrensburg - Schroon River Area/flooding
- Chester & Horicon - Schroon River Area/flooding
- Meadowbrook Road, Queensbury - Flooding
- Lakeview Circle Drive Town of Lake George
- GFWWTP releasing sewage into Hudson after every heavy rainstorm.
- Inadequate storm drainage on streets
- Power cybersecurity concerns
- Flooding of the Hudson River in the spring occasionally that affects the State rt. 28 between North Creek and North River and includes part of the town North Creek at the train station. The historic Train station has been preserved but flooding of the Hudson in the spring has caused concern a number of years in the past ten.
- Thurman bridge
- Downtown Warrensburg from Schroon River flooding

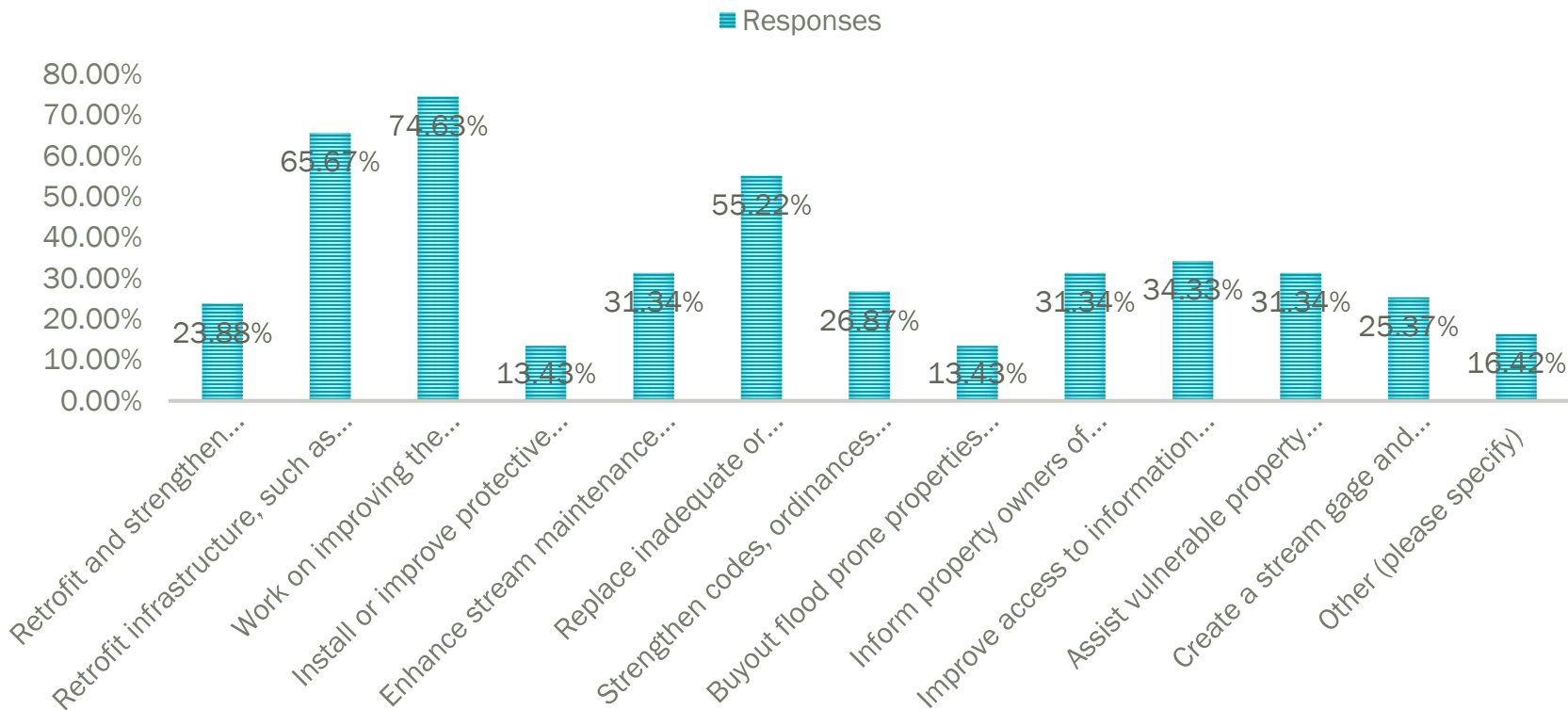






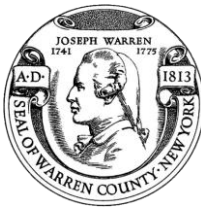
# Priority Projects

What types of projects do you believe local, county, state, or federal government agencies could be doing to reduce the damage and disruption of disasters in Warren County?



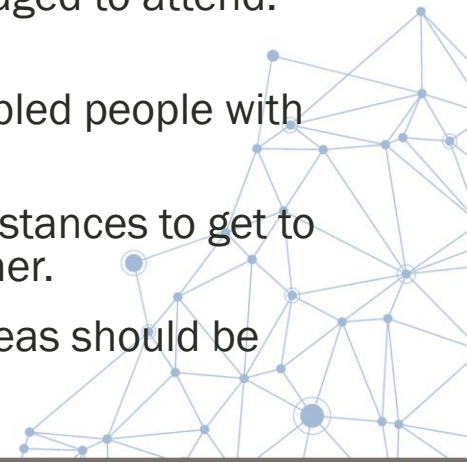
## Top 3 project types to fund:

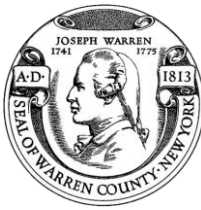
- 74.8% - Work on improving the damage resistance of utilities (electricity, communications, water/wastewater facilities etc.)
- 65.6% - Retrofit infrastructure, such as elevating roadways and improving drainage systems
- 55.2% - Replace inadequate or vulnerable bridges and causeways



# Concerns

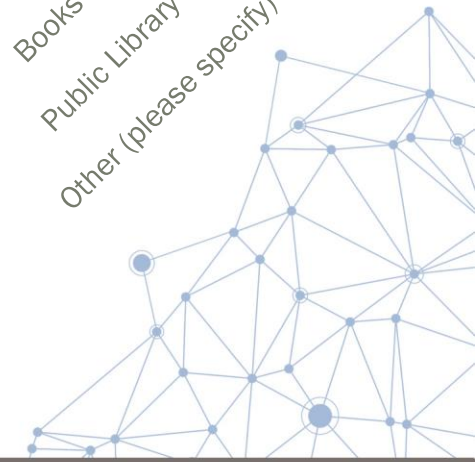
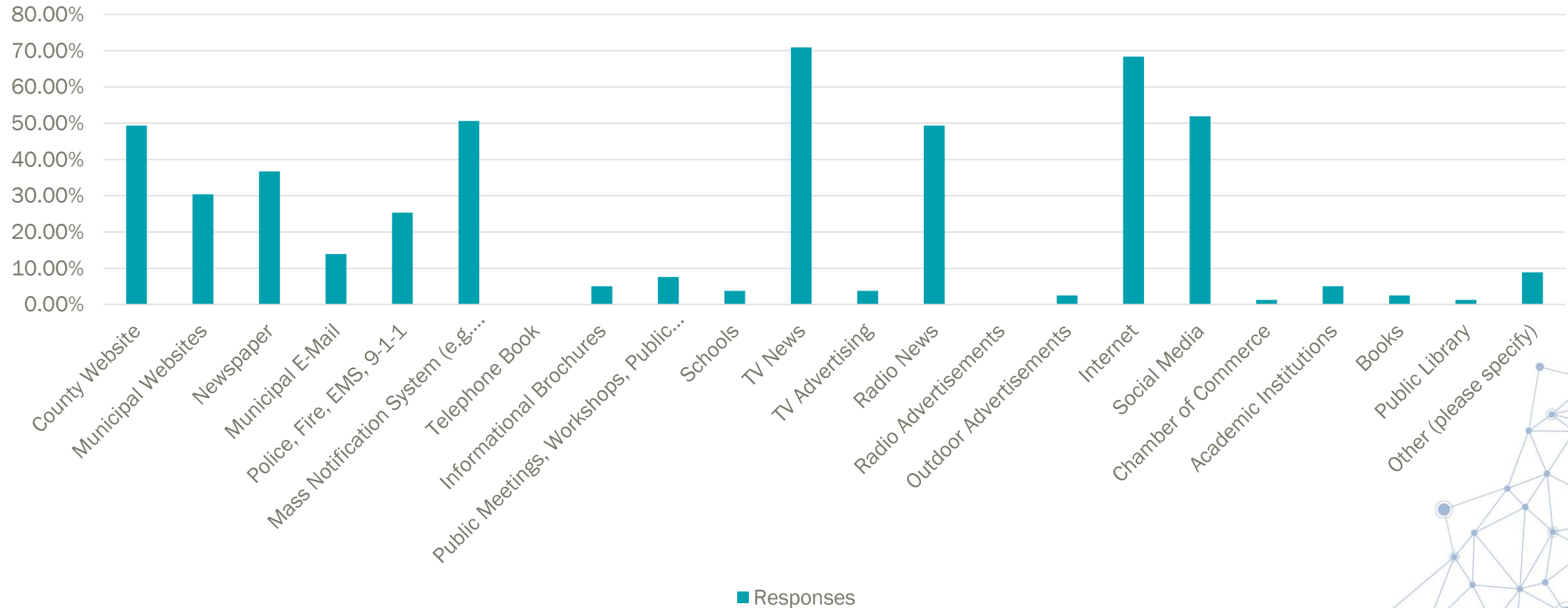
- Inadequate shelters in case of emergencies
- Remove tree limbs that hang over the 9L road before someone gets seriously injured
- I would appreciate receiving real time alerts from Warren County similarly to FEMA
- Each municipal government should be required to participate in this process. They should assess their community for potential hazards and develop a mitigation plan.
- Warren County needs to fix the drainage issue it CAUSED.
- I see that climate change is affecting us. One problem that we never experienced until recent years is algae blooms.
- I see climate change as one of the biggest concerns now and in the future that could and would impact a lot of weather -related hazard events. I think more projects that focus on taking care of our environment, like adopt a highway and stream clean up days, as a good thing to consider.
- Annual preparedness training at senior centers, at schools and in locations that citizens are encouraged to attend. create a citizen team to work with Emergency Management for Warren County
- Vastly improve ACCESSIBILITY for disabled people and Disaster Planning to include INPUT from disabled people with various disabilities; including respiratory
- During severe winter storms, county buildings need to close or open late as employees travel long distances to get to Warren County Municipal Center and should not have to use personal time in case of extreme weather.
- Extreme weather (heavy downpours and sudden storms) have increased greatly. Review of runoff areas should be reviewed.

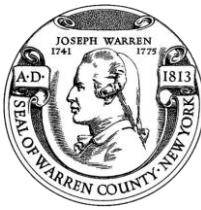




# Effective Messaging Resources

How do you receive your information concerning a disaster? Check all that apply.





# Document Review on Sharepoint

- Access for document review
- Review in “desktop app” in track changes

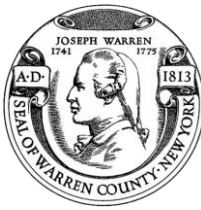
OneDrive interface showing the folder structure for Warren County (NY) HMP. The folders listed are GIS, Letters of Intent to Participate, Outreach Materials, Steering Committee, Survey, and SWCD. The 'Steering Committee' folder is circled in green, and a blue arrow points to it from the right.

OneDrive interface showing the contents of the 'Documents for Review' folder. The files listed are Old, Warren\_TOC.docx, 5.2 - HOC ID\_Warren\_rev.docx, Section 1-Introduction\_rev.docx, Section 2-Plan Adoption.docx, and Section 5.1\_Methodology\_rev.docx. The file '5.2 - HOC ID\_Warren\_rev.docx' is circled in green, and a blue arrow points to it from the left.

Name	Modified	Modified By	File size
Old	January 31	Bianco, Cynthia	6 items
Warren_TOC.docx	January 25	Bianco, Cynthia	205 KB
5.2 - HOC ID_Warren_rev.docx	6 days ago	Bianco, Cynthia	422 KB
Section 1-Introduction_rev.docx	6 days ago	Bianco, Cynthia	1.05 MB
Section 2-Plan Adoption.docx	January 25	masona@warrencountyny	360 KB
Section 5.1_Methodology_rev.docx	6 days ago	Bianco, Cynthia	517 KB

OneDrive interface showing the contents of the 'Steering Committee' folder. The folder 'Documents for Review' is circled in green, and a blue arrow points to it from the right.

Name	Modified	Modified By	File size	Sharing
Documents for Review	January 24	Bianco, Cynthia	6 items	Shared



# Draft Plan Review – Section Contents

## Volume I

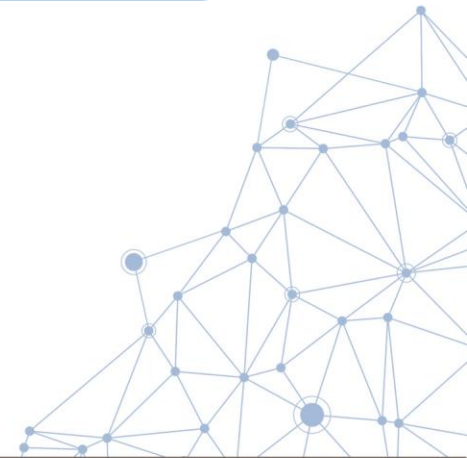
- **Section 1 – Introduction**
  - Mitigation Planning Overview
  - Participating Jurisdictions
  - 2023 Updates
- **Section 2 – Plan Adoption**
  - Adoption Process
- **Section 3 – Planning Process**
  - Participants
  - Activities
  - Ongoing Process

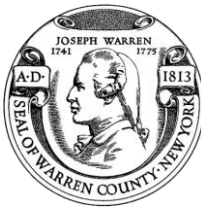


HAZUS-MH was applied to

- Identify Hazards (Phase 2)
- Profile Hazards (Phase 2)
- Perform a Vulnerability Assessment (Phase 2) including:
  - Inventory Assets
  - Estimate Losses
  - Evaluate Development Trends
  - Present Results of Risk Assessment

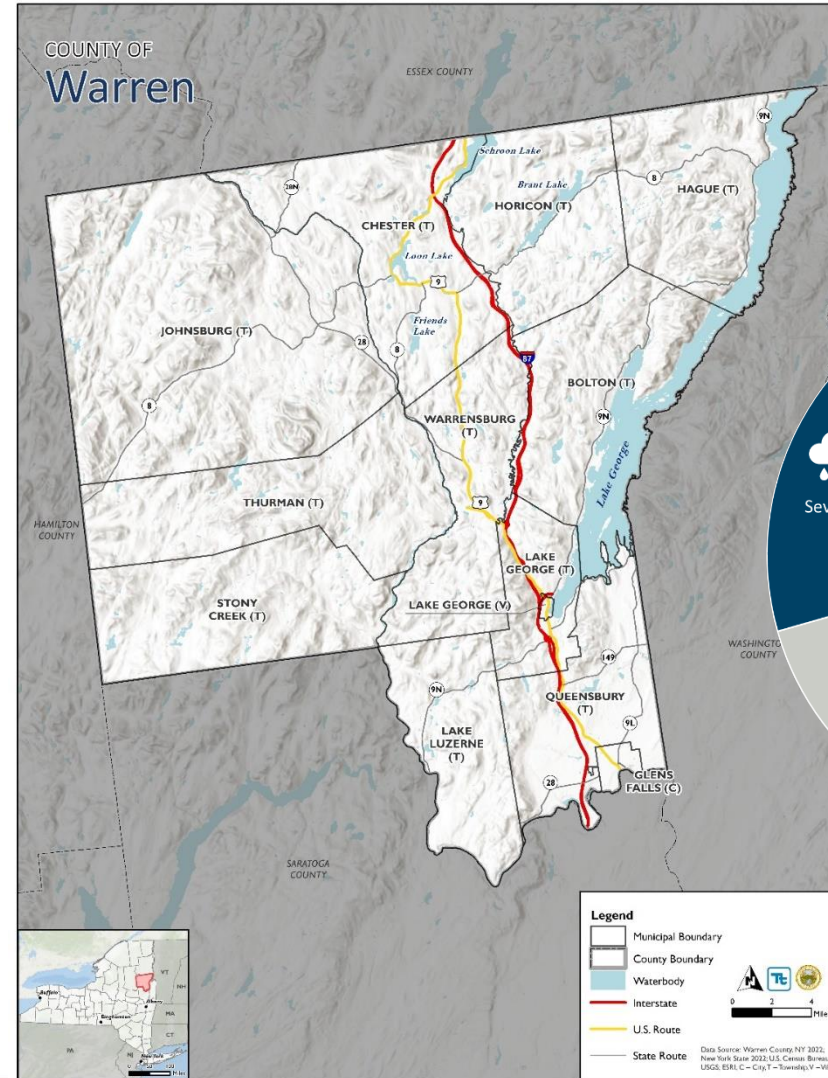
These results provide an input to Phase 3.



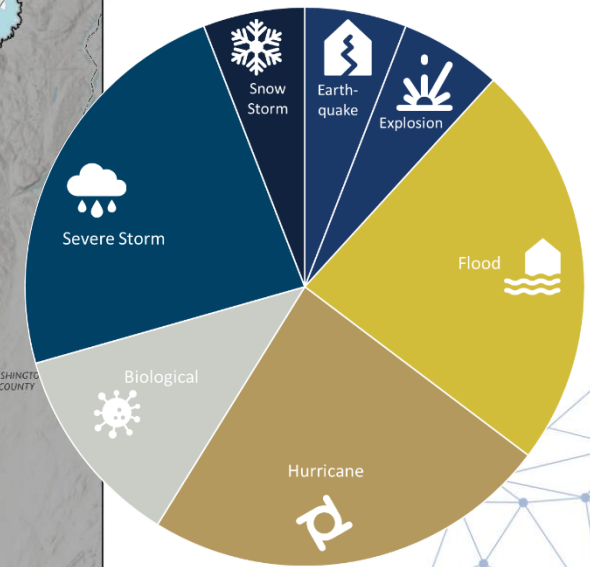


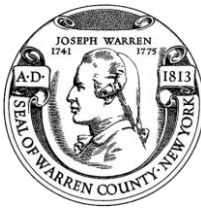
# Draft Plan Review – Section Contents

- **Section 4 – County Profile**
  - History & Physical Setting
  - Population and Demographics
  - Major Hazard Event History
  - General Building Stock
  - Land Use and Population Trends
  - Critical Facilities & Lifelines
- **Section 5 – Risk Assessment**
  - Hazards of Concern
  - Hazard Ranking
  - Hazard Profiles

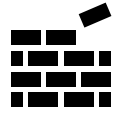


Warren County Hazard Events





# Hazards Profiles – Section 5.4



- Dam Failure



- Disease Outbreak



- Earthquake



- Extreme Temperature



- Flood



- Infestation and Invasive Species



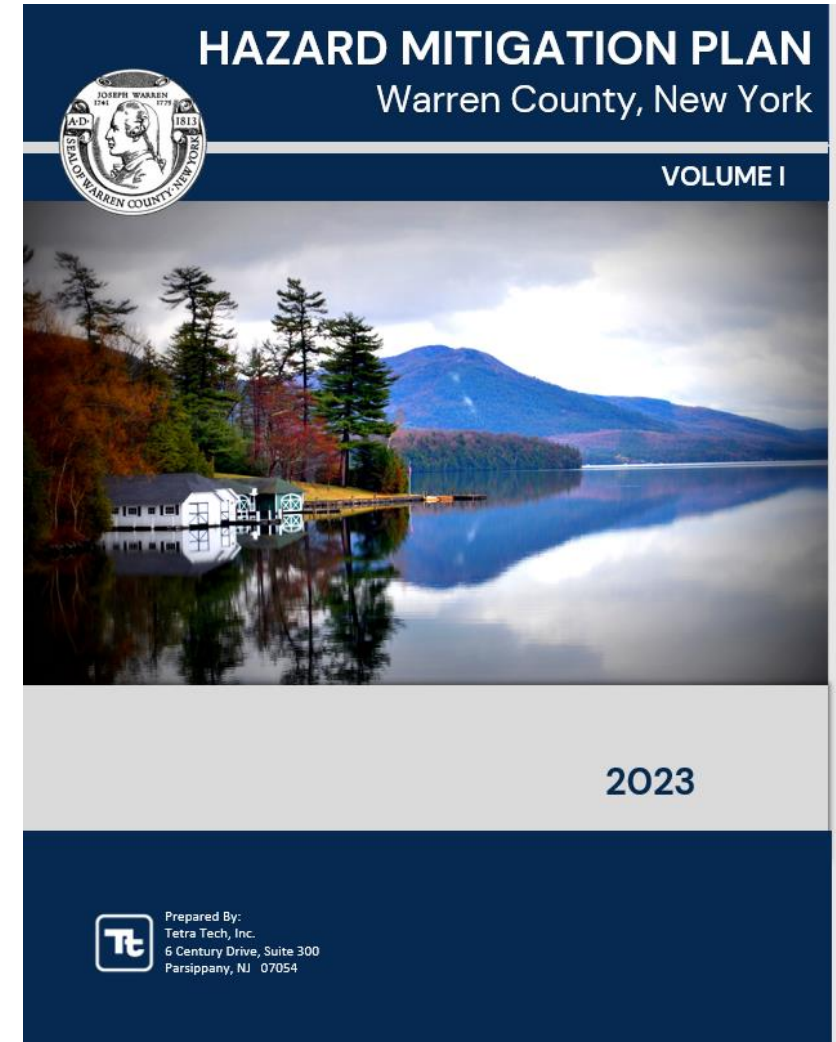
- Severe Storm

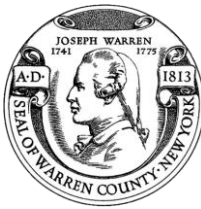


- Severe Winter Storm



- Wildfire





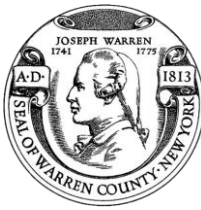
# Draft Plan Review – Section Contents

- Section 6 – Mitigation Strategies
  - Past accomplishments
  - Goals and Objectives
  - Capability Assessment
    - Available plans, programs, & resources
    - Administrative and technical capabilities
    - Fiscal capabilities
  - Mitigation strategy development and update
    - Action identification
    - Evaluation and prioritization
    - Benefit/cost review

*To create communities whose daily activities reflect a comprehensive commitment by government, business, non-profit organizations, socially vulnerable populations, and the public to eliminate or reduce risks and adverse impacts from natural, **and human-caused** hazards.*

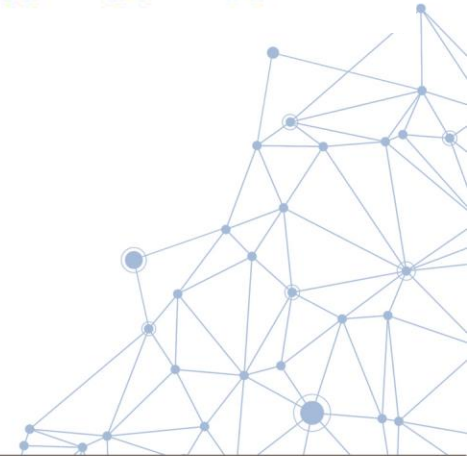
Discussion item: Omit human-caused hazards to align with FEMA HMP focus.

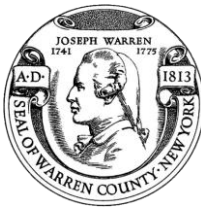




# Draft Plan Review – Section Contents

- Section 7 – Plan Maintenance
  - HMP Coordinator
  - Ongoing Planning Committee
  - Monitoring
  - Continuous evaluation and progress reports
    - FEMA Worksheets and BATool<sup>SM</sup>
  - Updating
  - Integration of hazard mitigation with existing and future programs
  - Continued public involvement





# BATool<sup>SM</sup>

- Online progress reporting for individual mitigation actions – pre-populated by Tetra Tech

Prev Action \* Action ID: TPQ - 1 [Next Action](#)

*Review of this Action has not started* [Add New Action](#)

> View Update History

Please review and update this action by following the steps below and updating any/all fields (as needed).

**Step 1: Enter your name as the 'Reviewer' (then step 2 will be enabled for selection).**

\* Reviewer:

**Step 2: Update the 'Action Status' field. Please continue to review and update all other fields, as needed.**

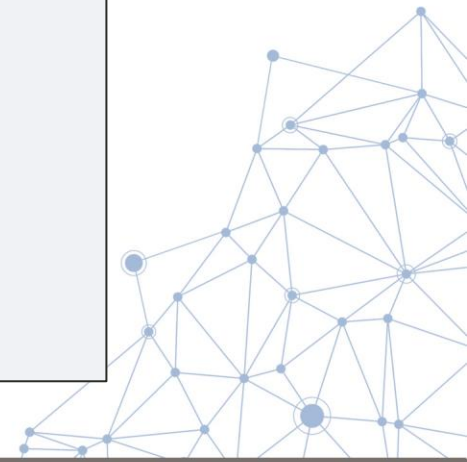
Previous Action Status:

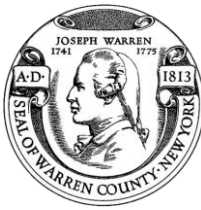
Project/Action Status Comments:

\* Description of the Action:

Specific Problem Mitigated:

*Note: A yellow arrow points to the 'Project/Action Status Comments' field.*

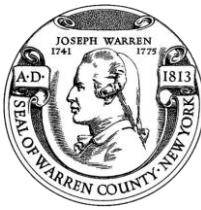




# Plan Maintenance Matrix

Task	Approach	Timeline	Lead Responsibility	Support Responsibility
<b>Monitoring</b>	Preparation of status updates and action implementation tracking as part of submission <b>for Annual Progress Report.</b>	January or upon major update to Comprehensive Plan or major disaster	Jurisdictional points of contact identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)	Jurisdictional implementation lead identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)
<b>Integration</b>	In order for integration of mitigation principles action to become an organic part of the ongoing county and municipal activities, <b>the county will incorporate the distribution of the safe growth worksheet (see 7.1.2 below) for annual review</b> and update by all participating jurisdictions.	January each year with interim email reminders to address integration in county and municipal activities.	HMP Coordinator and jurisdictional points of contact identified in Section 8 (Planning Partnership) and Section 9 (Jurisdictional Annexes)	HMP Coordinator
<b>Evaluation</b>	Review the status of previous actions as submitted by the monitoring task lead and support to assess the effectiveness of the plan; compile and finalize the Annual Progress Report	Finalized progress report completed by January 15 of each year	Steering Committee; Plan Maintenance element	Jurisdictional points of contacts identified in Section 9 (Jurisdictional Annexes)
<b>Update</b>	<b>Reconvene the planning partners</b> , at a minimum, every 5 years to guide a comprehensive update to review and revise the plan.	Every 5 years or upon major update to Comprehensive Plan or major disaster	Warren County HMP Coordinator	Jurisdictional points of contacts identified in Section 9 (Jurisdictional Annexes)

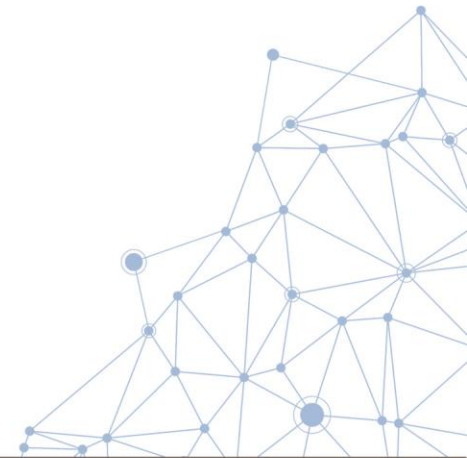


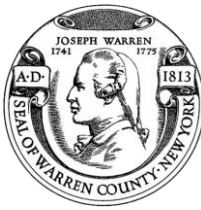


# Draft Plan Review – Section Contents

## Volume II

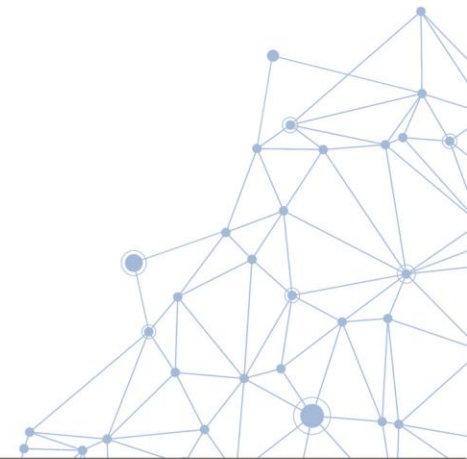
- **Section 8 – Planning Partnership**
  - Participating jurisdictions
  - Introduce jurisdictional annexes
- **Section 9 – Municipal Annexes**
  - Point of Contact
  - Municipal Profile
  - Capabilities
  - NFIP Participation
  - Risk Assessment
  - Critical Facilities
  - Status of Past Mitigation Actions
  - Current Mitigation Actions
  - Future Needs

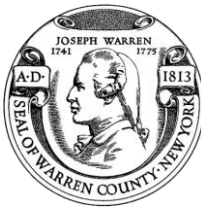




# Draft Plan Review – Section Contents

- Appendices
  - Appendix A – Plan Adoption
  - Appendix B – Participation Matrix
  - Appendix C – Meeting Documentation
  - Appendix D – Public and Stakeholder Outreach Documentation
  - Appendix E – County Profile and Risk Assessment Supplementary Data
  - Appendix F – Critical Facilities
  - Appendix G – FEMA Plan Review Tools
  - Appendix H – NYS DHSES 2017 Mitigation Planning Standards

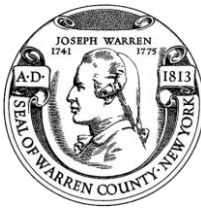




# Steering Committee Review Guidance

- Documents posted on OneDrive for collaborative review
  - OneDrive guidance will provide direction on how to edit/comment
- Input requested
  - Provide additional or specific information
  - Correct errors or omissions
- All feedback requested on or before July 12<sup>th</sup>
  - Feedback will be incorporated as appropriate before Public Review
- Plan sections to be posted on the Warren HMP website for a 30-day review period
- Public feedback to be incorporated as appropriate prior to submittal to NYSDHSES/FEMA for agency review





# Plan Adoption and Timeline

- Information on the planning process is available here: (<https://www.warrencountynewyorkhmp.com>)
- Draft plan sections will be posted for public review and comment beginning August 1st for 30 days
- The plan will be submitted for review and approval by NYSDHSES and FEMA in November
- Adoption of the plan by the community is required to be deemed **APPROVED** by FEMA.

**WARREN COUNTY HAZARD MITIGATION PLAN  
2023 UPDATE**

Home About What Is Mitigation Meetings Calendar Explore the Plan Additional Information

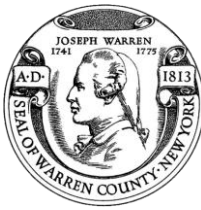
### Explore the Plan

2023 Warren County Hazard Mitigation Plan Update

Sections of the 2023 Warren County HMP update will be posted as available.

### Municipal Annexes

• 9.02_Town of Bolton	Download
• 9.03_Town of Chester	Download
• 9.04_City of Glens Falls	Download
• 9.05_Town of Hague	Download
• 9.06_Town of Horicon	Download
• 9.07_Town of Johnsbury	Download
• 9.08_Town of Lake George	Download
• 9.09_Village of Lake George	Download
• 9.10_Town of Lake Luzerne	Download



# In-Kind Services Tracking

- Use on-line survey: <https://www.surveymonkey.com/r/WarrenNYHMPIInKind>
- Submit form to Jim Lieberum at jimli@warrenswcd.org

Name of Team Member:							
Correspondence Type	Meeting Name, Municipality	Date	Start Time	End Time	# of Hours	Agenda/Sign In?	Notes (include meeting topic, how HMP was discussed, etc.)
Meeting	Chiefs and Fire Advisory Board Meeting					Yes - sign-in	Discussed the HMP update
Meeting	Town of ?? Board Meeting						Discussed the HMP update
Phone Call	Town of ?? phone call					No	Spoke with the Town about the HMP process and their responsibilities in participating
Meeting	Town of ?? Board Meeting					Yes - agenda	

### Warren County HMP - In-Kind Tracker

Warren County received FEMA funding to update the Hazard Mitigation Plan (HMP). To help meet the required 25% match, the County will use in-kind services.

Please use this form to document your time spent working on the HMP. This includes attending meeting, conference calls, working on your municipal annex, reviewing sections of the plan, etc.

If you have any questions, please reach out to Cynthia Bianco (cynthia.bianco@tetratech.com | 973.630.8044).

\* Name

\* Title

\* Jurisdiction

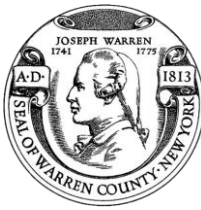
Please document your time spent working on the HMP:

Date

# Hours

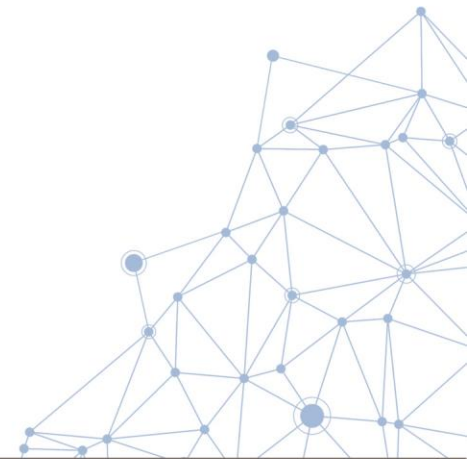






# Next Steps

- Finalize Jurisdictional Annexes – in progress, drafts posted on OneDrive and [www.warren](http://www.warren)
- Steering Committee Plan Review – Now through July 12th
- Update Plan Based on Steering Committee Feedback
- Draft Posted for Public Review and Comment – August 1<sup>st</sup> – 30 Days
- Submit to NYS DHSES and FEMA – September 2023
  - Estimated 45-day review period
- BATool<sup>SM</sup> Webinar to Review Plan Maintenance
- Plan Adoption by County and Participating Municipalities



Questions?



## Warren County Emergency Services Project Contacts

Jim Lieberum, CPESC  
[jiml@warrenswcd.org](mailto:jiml@warrenswcd.org)

Ann Marie Mason  
Emergency Services Director  
[masona@WarrenCountyNY.gov](mailto:masona@WarrenCountyNY.gov)

## Tetra Tech Project Contacts

Cynthia Addonizio-Bianco, Project Manager  
(973) 630-8044 | [cynthia.bianco@tetrattech.com](mailto:cynthia.bianco@tetrattech.com)

Heather Apgar, CFM, Lead Planner  
(973) 630-8046 | [heather.apgar@tetrattech.com](mailto:heather.apgar@tetrattech.com)



Thank  
You!