

NIAGARA COUNTY
**ALL HAZARDS
MITIGATION
PLAN DRAFT**



Introductions



UB Regional Institute and faculty/students from UB's School of Architecture and Planning are engaged to update Niagara County's Hazard Mitigation Plan



Homeland Security and Emergency Services

Working in close partnership with Niagara County Emergency Services, NYS Division of Homeland Security and Emergency Services



HAZARD
MITIGATION
PLAN

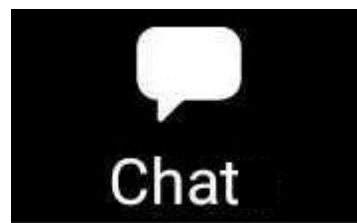


Looking to leverage this opportunity to build a hazard mitigation and preparation online tool that can serve as a resource for the county and local communities

Meeting Participation



Please stay on mute
until discussion



Type comments into
the Chat



Please raise your
hand if you wish to
speak up

Presentation will be
recorded

AGENDA

- Background
- Recap community and stakeholder feedback
- Review mitigation strategy
- Discuss mitigation actions
- Introduce draft plan website
- Next Steps



Why do a Hazard Mitigation Plan?

Hazards happen. We need to work together to come up with ways to minimize hazard impacts.





What is a Hazard Mitigation Plan

A hazard mitigation plan:

increases **awareness** of hazard risks

identifies **actions** to reduce risks

focuses **resources** on the greatest risks to **limit the impact** of disasters.

KEY REMINDERS

Required to **receive FEMA funding** for hazard mitigation actions

Must be **updated every 5 years**, Niagara County's last HMP was approved in 2017

NYS is transforming the local HMP process by using a **statewide online, interactive tools** to update county plans

New plan **needs to meet new requirements** from FEMA and NYS on HMPs



What goes into a Hazard Mitigation Plan?



Assess Risks

Identify the characteristics and potential consequences of hazards, and which communities and assets are vulnerable.



Develop a Mitigation Strategy

Set priorities, long-term strategies, and specific actions to minimize hazard impacts.



We are here

Adopt and Implement the Plan

The community reviews before local jurisdictions adopt the plan and work with partners on mitigation actions.

How is Niagara County updating the Hazard Mitigation Plan?

Mitigation Advisory Committee

Government representatives from Niagara County and municipalities provide project oversight and assistance with outreach and implementation



Community Meetings

Community members weigh in and help set priorities for hazard mitigation at a project kick-off, community survey, a plan launch meeting, and a draft plan review



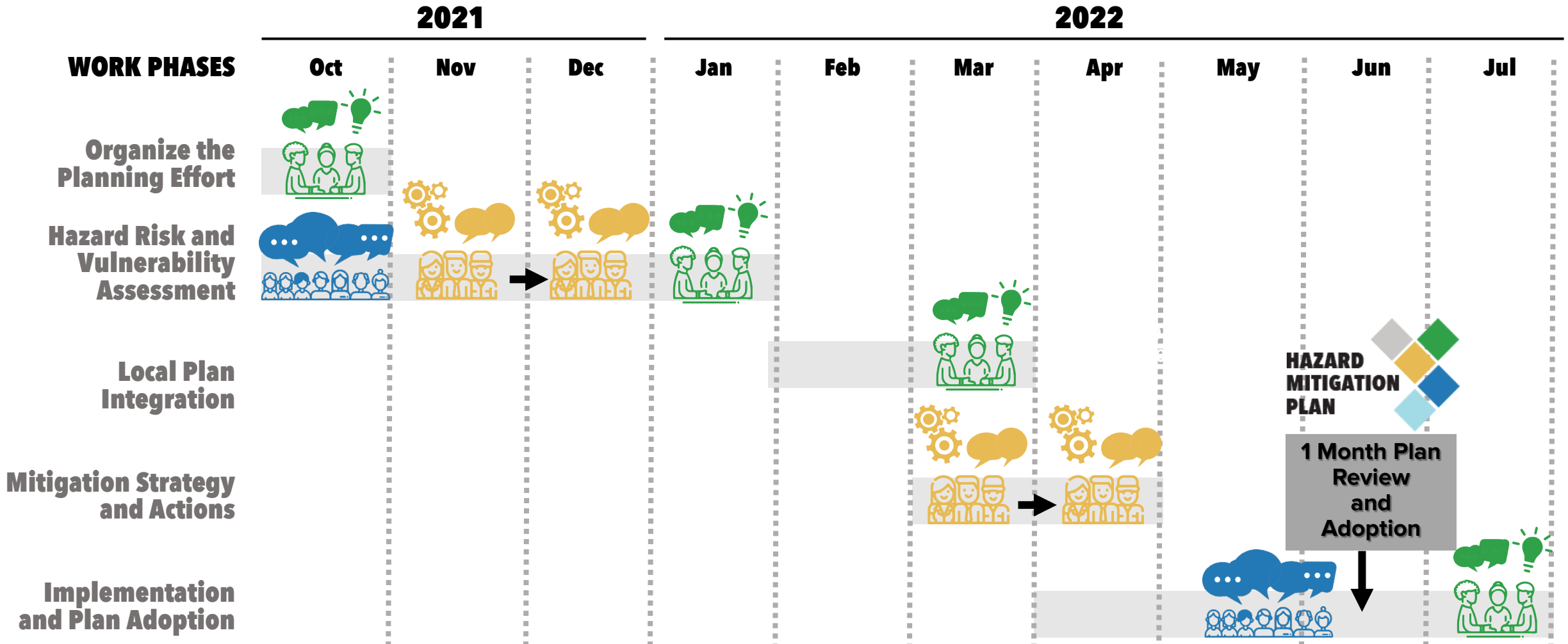
Stakeholder Workshops and Interviews

Focused sessions with stakeholders from each municipality to drill down on specific topics and understand local concerns





What does the process look like?





Key Terms for a Hazard Mitigation Plan



Hazard Risks

Likelihood of a hazard occurring and the expected impact it would have on people, services, facilities, and structures in a community.



Hazard Vulnerability

Limited capacity for the social, built, or natural environment to handle, avoid, or recover from hazard impacts.



Mitigation

Taking action to reduce the loss of life, personal injury, and property damage that may be caused by hazards.

Overview of Community and Stakeholder Feedback

- Community Survey
- Stakeholder Interviews
- Mitigation Action Workshops
- Key Findings





NIAGARA COUNTY

HAZARD MITIGATION PLAN

Community Survey



How We Promoted the Survey

- Social media posts
- Flyers distributed to libraries/community centers
- Municipality websites
- UBRI website/eNews
- Ads in local papers

Survey in a Snapshot

Timeframe: October 30, 2021 – March 31, 2022

Total Respondents: 130

Follow-up Steps

- Integrate survey findings into hazard risk assessment
- Incorporate survey findings into mitigation strategy development
- Share survey findings with local stakeholders in Hazard Mitigation Plan



NIAGARA COUNTY

HAZARD MITIGATION PLAN

Stakeholder Interviews



Interview Talking Points

- Feedback on community engagement and stakeholders
- Increased hazard risks / recent hazard events
- Hazard prone areas
- Vulnerable communities
- Critical assets and infrastructure
- Recent/potential development
- Mitigation suggestions, goals, aspirations

Interview Update

Timeframe: November 2021 – January 2022

Completed Interviews: 20 jurisdictions

Follow-up Steps

- Collect data from stakeholder surveys/discussions
- Integrate feedback into Hazard Risk Assessment
- Integrate feedback into Mitigation Strategy
- Prepare for second round of local stakeholder meetings in the Spring of 2022



NIAGARA COUNTY

HAZARD MITIGATION PLAN

Stakeholder Workshops



Mitigation Action Workshop Agenda

- Update status of 2016 HMP's mitigation actions
- Review problem statements from our last meeting and brainstorm solutions
- Propose and prioritize new mitigation actions
- Review local capabilities and resources
- Introduce working draft of 2022 HMP

Interview Update

Timeframe: February – April 2022

Completed Interviews: 20 jurisdictions

Next Steps

- Work with local municipalities to complete action updates and proposals
- Review and complete capability assessment
- Provide feedback on draft goals and objectives
- Prepare to review draft plan content



Top Hazard Concerns

Community Feedback



Which of the following natural hazards are you strongly concerned about in Niagara county?

EXTREME COLD
HAIL SEICHE WIND LIGHTNING
DROUGHT EARTHQUAKE
LAND SUBSIDENCE WILDFIRE
TORNADO
LANDSLIDE SNOWSTORM
FLOODING HEAT
ICE STORM
WAVES

Stakeholder Feedback



What hazard concerns increased since the last HMP? How? Where?

- **Flooding**
 - Waterfront damage
 - Heavy rainfall – standing water
 - Sewer Systems overwhelmed
- **High Winds**
 - Falling dead trees
 - Build up in creeks
 - Private homes, powerlines etc.
- **Snow**
 - High winds intensify snow
 - Extreme cold weather



Hazard Events/ Hazard Prone Areas

Community Feedback



In the past 10 years what types of hazards have you experienced?

FLOODING
SNOWSTORM
EXTREME HEAT **WIND**
ICESTORM SEICHE WILDFIRE **HAIL**
TORNADO
DROUGHT **LIGHTNING**
EXTREME COLD

Stakeholder Feedback



What recent hazard events and areas of risk should we be planning for?

- **Flooding**
 - Creek debris build up
 - Lakefront (Inc. Ice jams & Seiche)
 - Lack of culverts
 - Low elevations
- **High Winds**
 - Falling trees
- **Rainstorms**
 - Overwhelms sewers and creeks
- **Snow / Hail**
 - Damages agriculture



Vulnerable Populations

Community Feedback



Please identify any vulnerable members or groups of your community that may be at risk before, during or after a hazard event.

HIGHEST



- Seniors / People 65+
- People with disabilities
- Households without internet/computer
- Children / People <18
- Households without a vehicle
- Individuals who don't speak English
- Adults without High School diploma

Stakeholder Feedback



What communities are most vulnerable to hazards?

HIGHEST



- Seniors / People 65+
- Individuals living in poverty/low income
- High renter populations
- Mobile homes
- People with disabilities
- Native American Reservation
- Households within floodplains



Vulnerable Assets and Infrastructure

Community Feedback



List locations or assets exposed to heightened hazard risks that may need hazard mitigation.

“We need to clean the sewer systems and street drains”

“Power lines are affected by high winds and falling trees”

“I have neighbors who lost their furnace, water heater, washer and dryer and have thousands of dollars in water damage that they can't afford to pay”



Stakeholder Feedback



Are critical assets and infrastructure in the floodplains or elsewhere vulnerable?

○ **Back-up Power**

- DPW buildings
- Fire Departments
- Municipal Buildings

○ **Flooding**

- Storm water / sewer system
- Lakefront / riverfront
- Reservoir / dam

○ **Utilities**

- Electric lines
- Pump stations



Natural Areas

Community Feedback



Please share any concerns you have on hazards and hazard mitigation for your community and/or Niagara County.

"I really love the old trees.. provides benefits to yards with water retention, shade, etc. but they need to be better maintained.. trimmed, etc."

"Multiple creek and streams are in need of maintenance"



Stakeholder Feedback



Are natural areas vulnerable to hazards, due to climate change, invasive species, developments or other factors?

- **Streams / Creeks / Ditches**
 - Debris build up – dead trees
 - Japanese Knotweed - invasive
- **Dead Ash Trees**
 - Power lines – high winds
- **Local Parks**
 - Susceptible to high winds
 - Standing water
- **Stronger & More Frequent Storms**
 - Climate Change



Developments

Stakeholder Feedback



What recent or potential developments exist? Do they increase the risk or vulnerability to hazards?



- **Solar Fields / Farms**
 - Affects farmland
 - Deforestation could affect floodplains
 - Mostly in rural areas
- **Residential Development**
 - Higher population
 - More vulnerable populations
 - Mostly in suburban areas
- **Waterfront Protection**
 - Lakeshore / Riverfront communities
 - REDI Projects
- **Commercial / Mixed-Use Development**
 - More hardscape

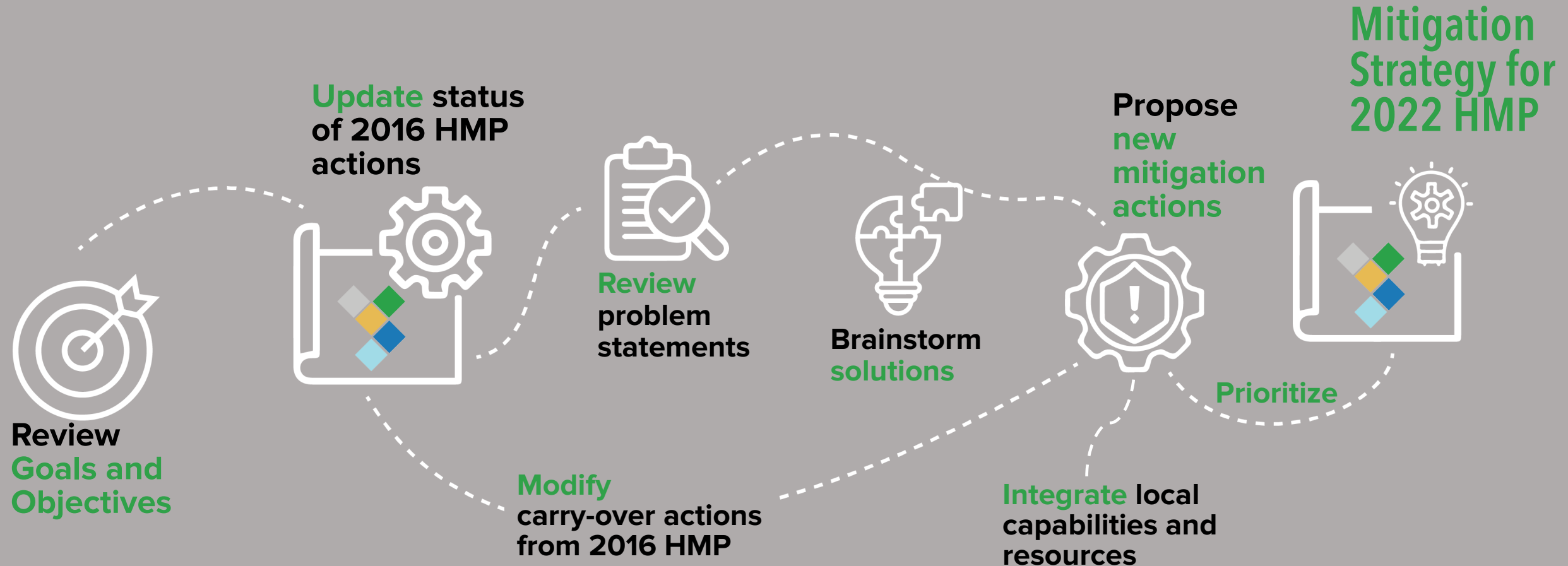


Other thoughts on feedback?
What concerns should be prioritized to mitigate hazards in Niagara County?

<https://jamboard.google.com/d/198le3ohpwcA4qDkVuBEET6KceqHe31MxAQsH0klbR3o/edit?usp=sharing>



Building the Mitigation Action Strategy





Hazard Mitigation Plan Goals and Objectives



Community
Meeting



Protect people and property from natural and man-made hazards

- *Protect people and existing property including public, historic, private structures, critical facilities and infrastructure, through structural upgrades, programs, policies, and activities.*

Increase resilience of infrastructure, structures, critical assets and facilities

- *Promote mitigation actions that emphasize sustainable construction, and design measures to reduce or eliminate the impacts of natural hazards now and in the future.*

Increase public awareness

- *Raise public awareness for hazard preparedness, risks, mitigation, and recovery strategies among residents, businesses, local governments and institutions.*

Utilize and restore natural systems to mitigate hazards

- *Encourage the development and implementation of long-term, cost effective, and resilient mitigation projects to preserve or restore the functions of natural systems.*

Increase cooperation between jurisdictions, and with different levels of government

- *Promote cooperation between governments for successful implementation of mitigation strategies, increase awareness of mitigation capabilities and promote efficient use of resources.*



Types of Mitigation Actions



Community
Meeting



Plans and Regulations

- Policies, government authorities, plans, studies, or codes to reduce risk, such as building codes.

Structure and Infrastructure

- New structures, or updates to existing structures or infrastructure to reduce hazard impacts.

Natural systems protection

- Mitigate hazard impacts by preserving, restoring or utilizing natural systems and functions.

Education and awareness

- Training or programs to inform and educate about hazard risks and mitigation options.

HOW TO REDUCE RISK:

- **Manipulate hazard**
 - Ex: Structural flood control
- **Reduce/eliminate exposure**
 - Ex: Property acquisition
- **Reduce vulnerability**
 - Ex: Retrofit/upgrade infrastructure
- **Increase capability**
 - Ex: Funding, planning, technical assistance, partnerships





Common Mitigation Actions in Niagara County 2022 HMP

Themes from Stakeholder Feedback

- 1. Dead tree removal efforts**
- 2. Backup generators in critical assets**
- 3. Clearing ditches and streams**
- 4. Updating sewer systems**
- 5. Flooding mitigation (esp., lakeshore, flash floods)**





Opportunities for Partnership



**Community
Meeting**



Goals to work toward

- Increase cooperation
- Protect people and property
- Use natural systems
- Upgrade infrastructure and facilities
- Increase public awareness

Issues to address

- Dead tree removal efforts
- Backup generators in critical assets
- Clearing ditches and streams
- Updating sewer systems

Ways to work together

- Planning and Regulatory
- Administrative and Technical
- Education and Outreach
- Financial



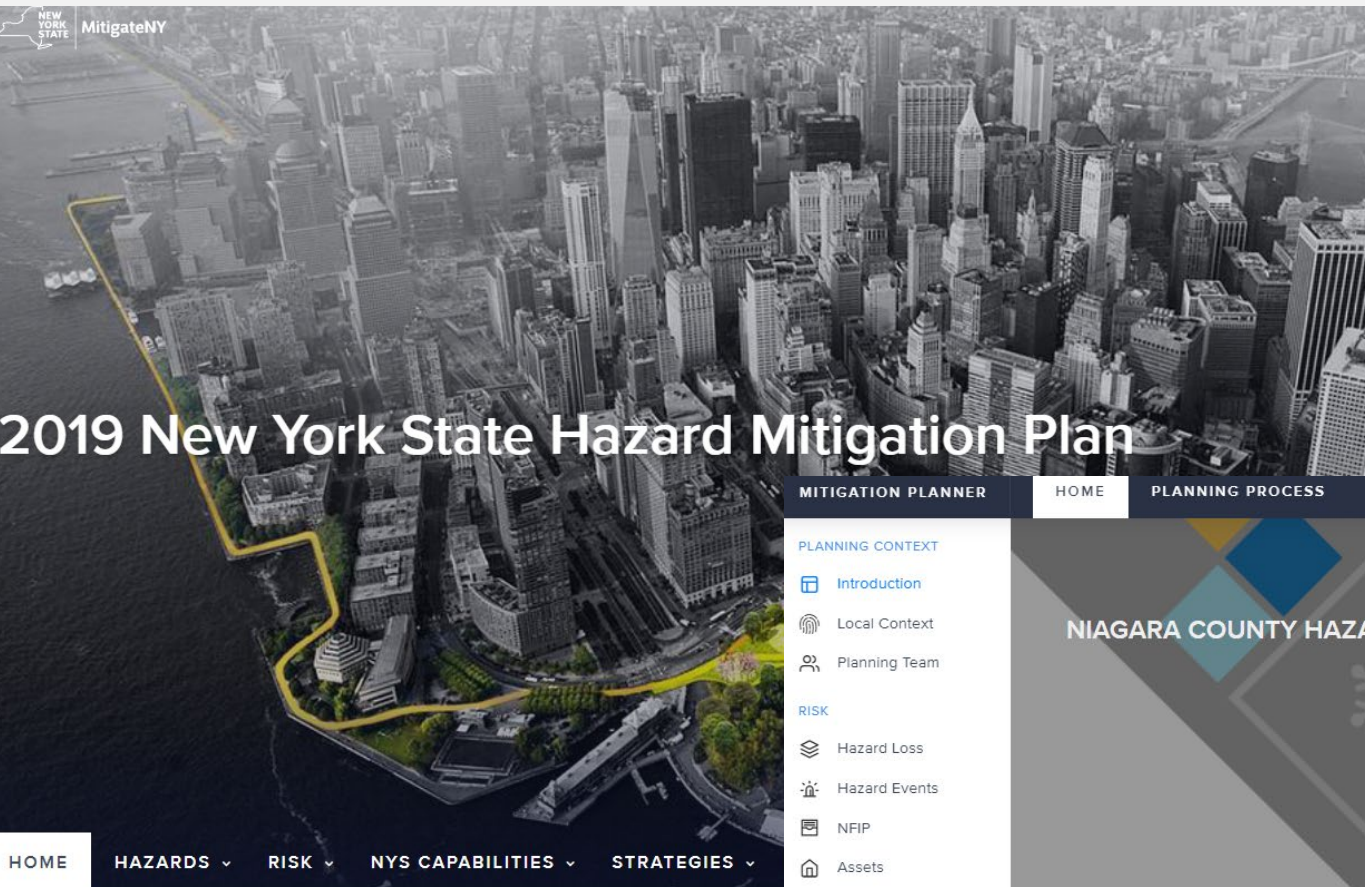
Discussion on Mitigation Actions



When taking steps to mitigate hazards in Niagara County, what actions should be prioritized?

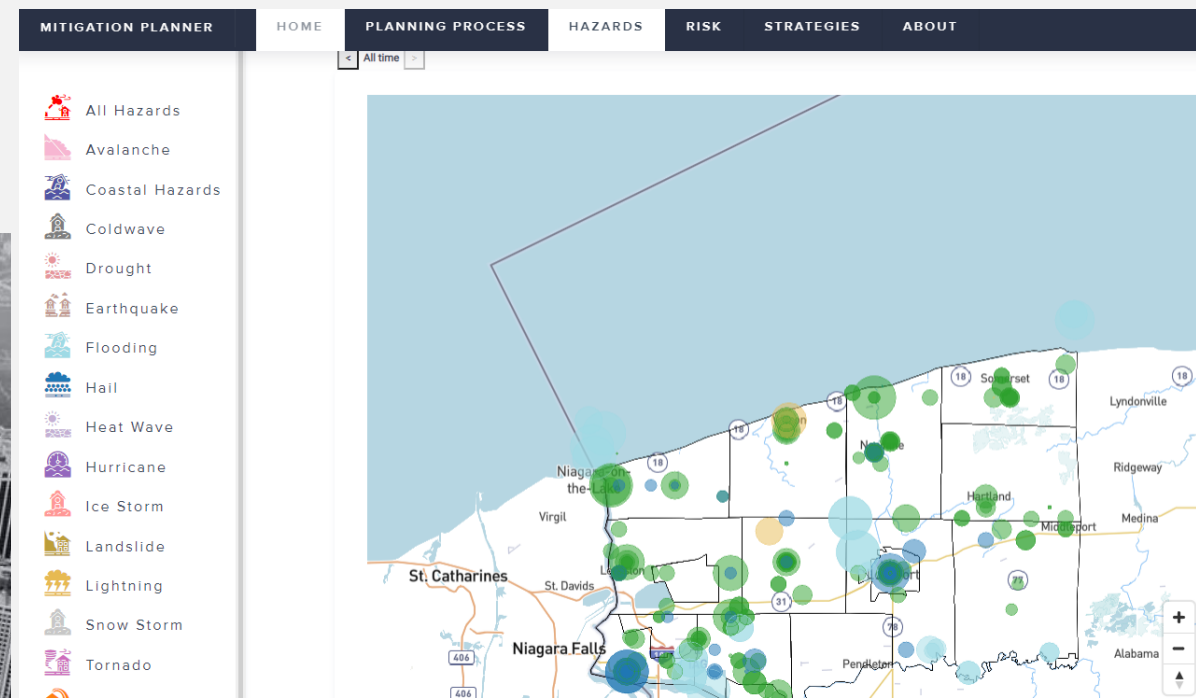


Mitigate NY Platform



HOME HAZARDS RISK NYS CAPABILITIES STRATEGIES

<https://niagara.mitigateny.org/>



MITIGATION PLANNER HOME PLANNING PROCESS HAZARDS RISK STRATEGIES ABOUT

PLANNING CONTEXT

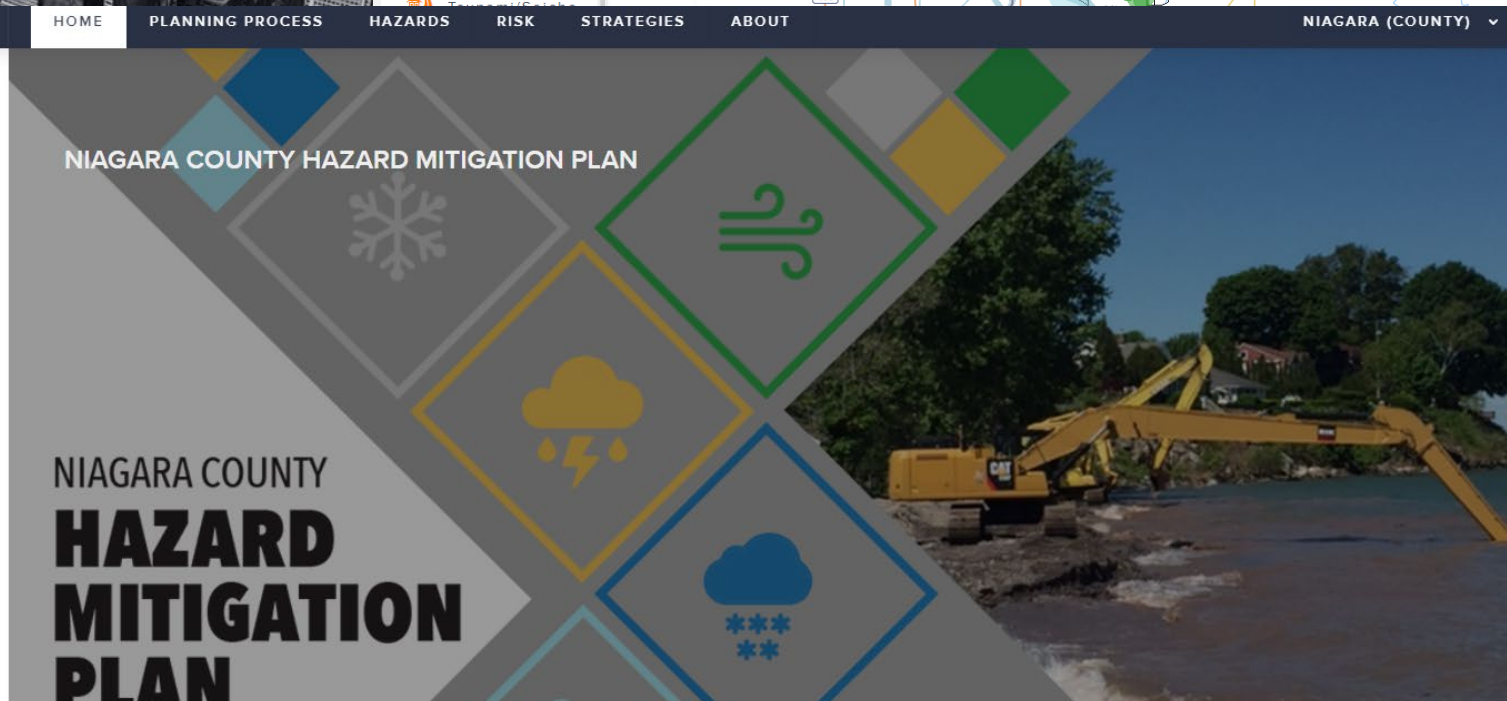
- Introduction
- Local Context
- Planning Team

RISK

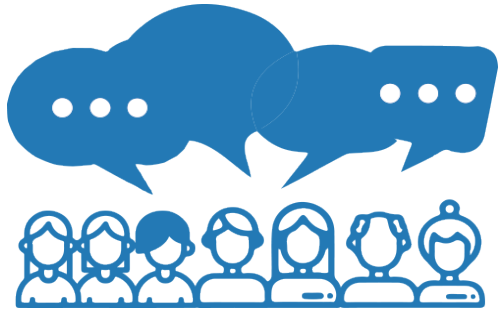
- Hazard Loss
- Hazard Events
- NFIP
- Assets

STRATEGIES

- Overview
- Goals & Objectives
- Capabilities Table
- Actions



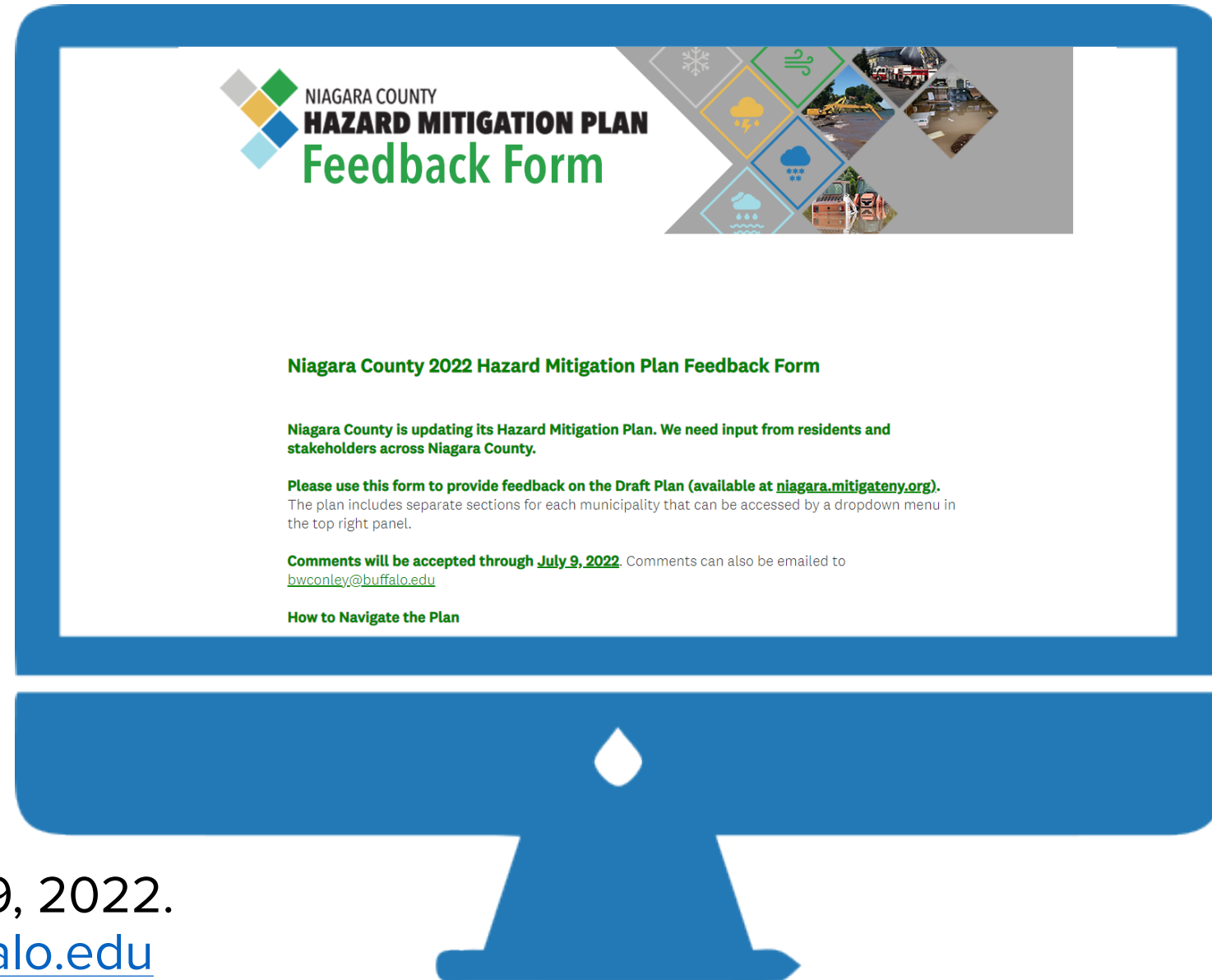
SHARE YOUR FEEDBACK!



Please share your thoughts on the draft plan—fill out our online feedback form.

www.surveymonkey.com/r/NCHMP_2022

Comments accepted through July 9, 2022.
You can also email bwconley@buffalo.edu



Next Steps

- ✓ Please **provide your feedback** on the Draft Plan
https://www.surveymonkey.com/r/NCHMP_2022
Comments accepted through **July 9, 2022.**
Comments can also be emailed to bwconley@buffalo.edu
- ✓ Comments will be incorporated into the plan
- ✓ Local jurisdictions reviewing and will adopt the plan
- ✓ FEMA and NYS will review and approve the plan



**THANK YOU FOR
PARTICIPATING!**

