February 8, 2024 Yates County – Steering Committee
10 a.m. – 11 a.m. EST

Attendees	1. Ryan Bailey – Yates County OES 2. Brian Winslow – Yates County OES 3. Grant Downs – Town of Torrey Councilman 4. Amy Ciller – Yates County DSS 5. Anthony Validzic – Milo 6. Kevin Clapp – DHSES 7. Diane Caves – Yates County OES 8. Roland Paperman – DHSES 9. Sandi Perl – The Living Well Mission 10. Michael Tarasoff – DHSES 11. Tim Growth – Yates County 12. Heather Apgar – Tetra Tech 13. Grace Altenburg – Tetra Tech

Agenda	- In-Kind Tracking
	- Schedule
	    o Progress Report
	    o Public and Stakeholder Outreach
	- Strengths, Weaknesses, Obstacles, and Opportunities
	- Risk Assessment Overview
	- Goals/Objectives
	- Questions/Next Steps/Wrap Up

In-Kind Tracking	- In-Kind Tracking Form: https://www.surveymonkey.com/r/YatesHMPInKind
Strengths, Weaknesses, Obstacles, and Opportunities	- SWOO survey: https://forms.office.com/r/qYQd3r93Tq - Helps us to identify mitigation actions for the March meeting. - Not mandatory but any feedback will be helpful. - Goal is to take weaknesses and obstacles and turn those into mitigation actions for the plan.

Risk Assessment Overview	- Risk Ranking Meeting Survey: https://forms.office.com/r/bfjaGpP9D3?origin=lprLink - Risk Ranking Post-Meeting Survey: Diane Caves: We have been fortunate to not have had any aviation accidents in the last 5 years, but if we were to go back 10 - 15 years we would find more. Diane Caves: Brian and I will talk more about Transportation Accidents. We think this may be a Medium Risk level. Brian Winslow: Every couples years we will have a train derail. We had a aircraft incidents in a 10 year span. Some of our busier roads there was a gas tanker accidents, with gas leak into tributaries. Some of these incidents may not be available online.
Goals/Objectives	- Goals and Objectives Survey: https://forms.office.com/r/2wnJ25JB0s - Add in socially vulnerable populations and community lifelines in Goal 1. Kevin Clapp: here are the states goals and objectives https://mitigateny.org/state_mitigation/goals_and_objectives
Questions	- Brian Winslow: well put together, thank you on behalf of the County.
Next Steps	-

TETRA TECH

Yates County Hazard Mitigation Plan Update

Steering Committee Meeting #2 – Review Preliminary Hazard Ranking and Goals/Objectives

February 8, 2024

While waiting for the meeting to start, please enter your name and department/agency in the chat.

Today's Agenda

1. In-Kind Tracking
2. Schedule
3. Progress Report
4. Public and Stakeholder Outreach
5. Risk Assessment Overview
6. Goals/Objectives
7. Questions/Next Steps/Wrap Up

In-Kind Tracking

Jurisdiction: _____

Name: _____ Title: _____

Date	Start Time	End Time	# hours	Task Description	Hourly Rate	Total # hours x rate	Comments describe task in more detail
					$		

Scan the UR code for the online form to enter your time.

-or-
https://www.surveymonkey.com/r/YatesHMPInKind

Project Schedule

- **Planning Process**
  - Ongoing

- **Update Risk Assessment**
  - Discuss risk assessment results – **TODAY!**
  - Discuss risk assessment with municipalities – **February 22nd**

- **Public and Stakeholder Outreach**
  - Ongoing

- **Capability Assessment**
  - Ongoing

- **Mitigation Strategy**
  - Continue working with municipalities
  - Mitigation Strategy Workshop with FEMA and State – **March 26th (in person)**

- **Plan Maintenance**
  - Finalize plan maintenance procedures by **March 2024**

- **Develop Plan**
  - Draft Plan to Steering Committee by **April 2024 (tentative)**
  - Draft Plan Presentation - **May 1st (tentative)**
  - Public Review Period – **May-June 2024 (tentative)**
  - Draft to NYS DHSES – **June 2024 (tentative)**
  - Draft to FEMA – **August/September 2024 (tentative)**
  - Adoption – **October/November 2024 (tentative)**
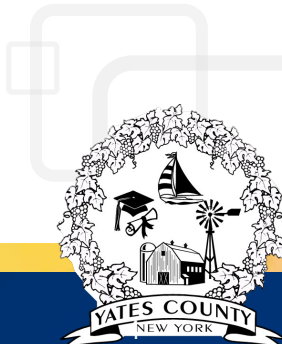
Public and Stakeholder Outreach

- Public Outreach Toolkit –
  - Social media templates and posts
  - Printable materials

- Surveys
  - Stakeholders
  - Neighboring communities
  - Public

- HMP website - https://www.yatescountynyhmp.com/

- StoryMap (coming soon!)

- Planning Partnership meetings open to the public and stakeholders

Risk Assessment Overview

How are the rankings calculated?
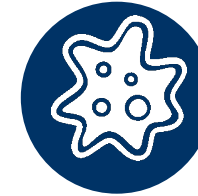*What is the preliminary ranking?*

Hazards of Concern (2024 HMP)

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- Dam Failure
- Disease Outbreak
- Drought
- Extreme Temperature
- Flood
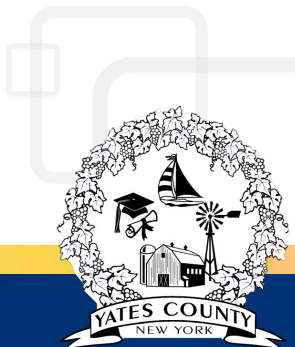- Harmful Algal Bloom
- Hazardous Materials
- Landslide
- Severe Storm
- Severe Winter Storm
- Transportation Accidents

What is Risk?

✓ Hazard
- Source of potential danger or adverse condition

✓ Exposure
- Manmade or natural features exposed to the hazard

✓ Vulnerability
- Damage susceptibility of the exposed features

✓ Adaptive Capacity (or capability)
- Plans/policies
- Response/recovery
- Financial resources

RISK = HAZARD x EXPOSURE

HAZARD VS RISK

A HAZARD is something that has the potential to harm you

RISK is the likelihood of a hazard causing harm

Conducting a Risk Assessment

Identify Hazards → Describe Hazards → Identify Community Assets → Analyze Impacts → Summarize Vulnerability

Preliminary Risk Assessment Results

Dam Failure

Dam failures in Yates County are a low-probability and high-consequence event. A dam failure can have devastating impacts on the County. While most dams have storage volumes small enough that failures would have little or no consequences, dams with large storage amounts could cause significant flooding downstream.

Number of Dams
66

- 24 - Low Hazard (A)
- 2 - Intermediate Hazard (B)
- 1 - High Hazard (C)
- 39 - Negligible Hazard (D)

Impacts

- Dam failure can cut evacuation routes, limit emergency access, and/or create isolation issues.
- Severe flooding that follows a dam failure can cause extensive structural damage and withhold essential services.
- The environmental impacts of a dam failure can include significant water-quality and debris-disposal issues or severe erosion that can impact local ecosystems.
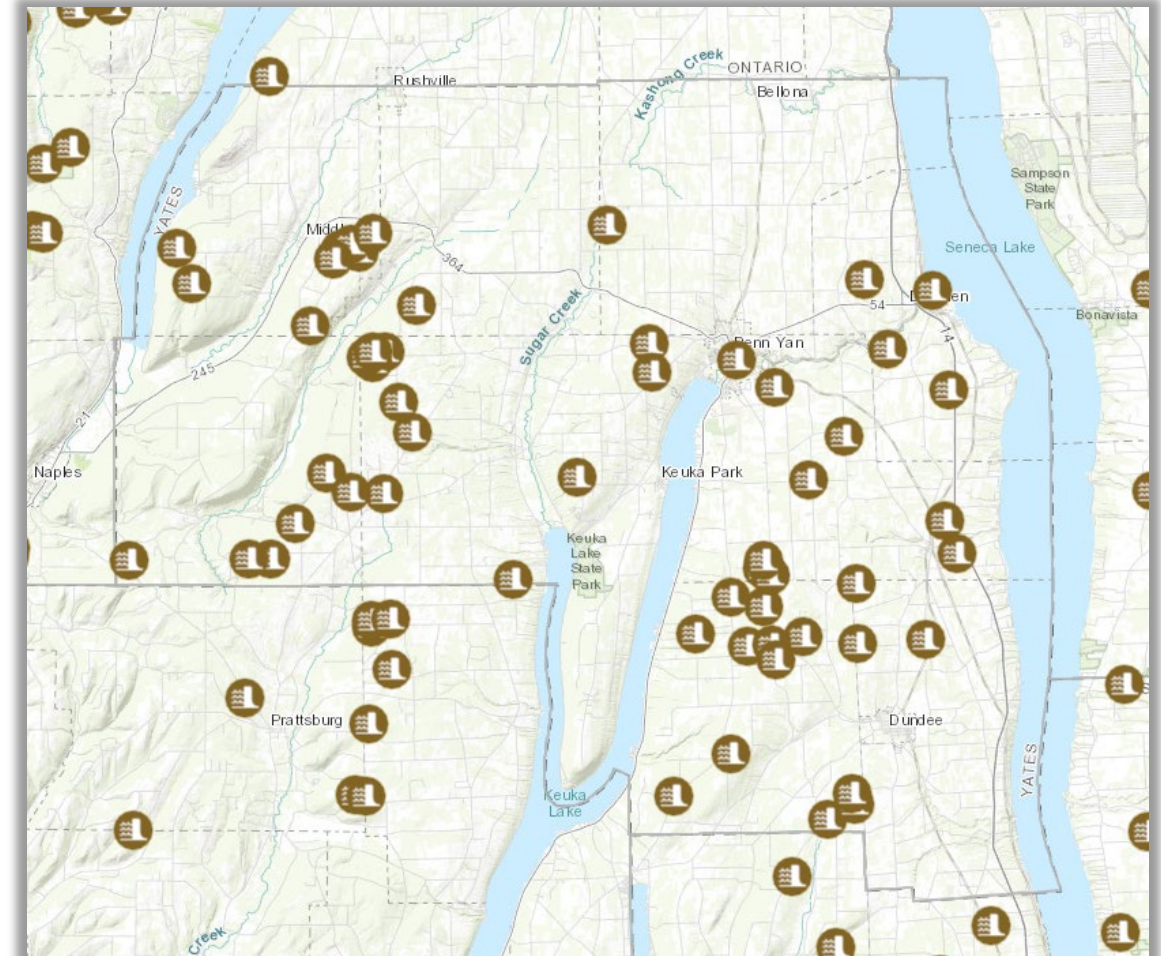
Disease Outbreak

Disease outbreaks can impact the entirety of Yates County. Emerging diseases are difficult to contain or treat and present significant challenges to risk communication since the mechanics of transmission, laboratory identification, and effective treatment protocols may be unknown.
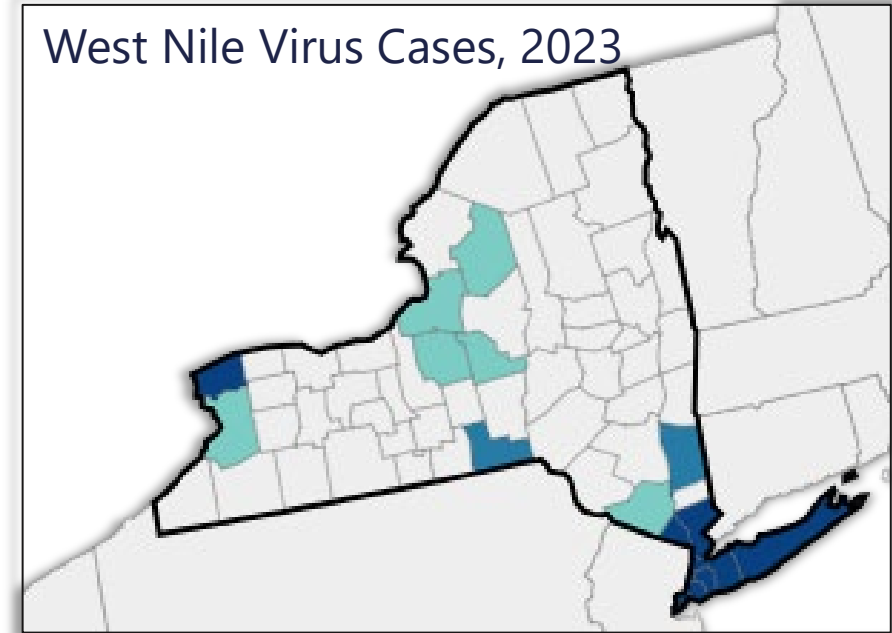
Population Exposed

24,773
(100%)
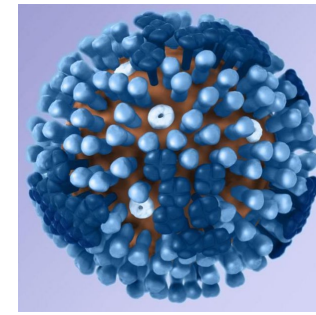The entire County is exposed and vulnerable

History

- Between 1999 and 2022, two human infections was reported.
- In 2020, there were 13 reported cases of Lyme disease
- For the 2023-2024 flu season, as of January 27th, there have been 126 confirmed cases of influenza.
- Since 2020, Yates County reported 4,544 positives cases of Covid-19 and 45 deaths related to Covid-19.

Hazard Types

- Influenza
- West Nile Virus
- Lyme Disease
- Coronavirus

Impacts

- Public health threats
- Economy
- Long-term health issues
- Fatalities

West Nile Virus Cases, 2023

Drought

Droughts can affect Yates County's industries and make day to day tasks more difficult to complete when water usage must be monitored.

Population Exposed
24,773
(100%)
The entire County is exposed and vulnerable

Agriculture
867 farms
$114.6 million in sales

Drought History (2000 to 2023)
17 reported impacts

Historical Drought Conditions for Yates County


U.S. Drought Monitor
Yates County, NY

D4 D3 D2 D1 D0
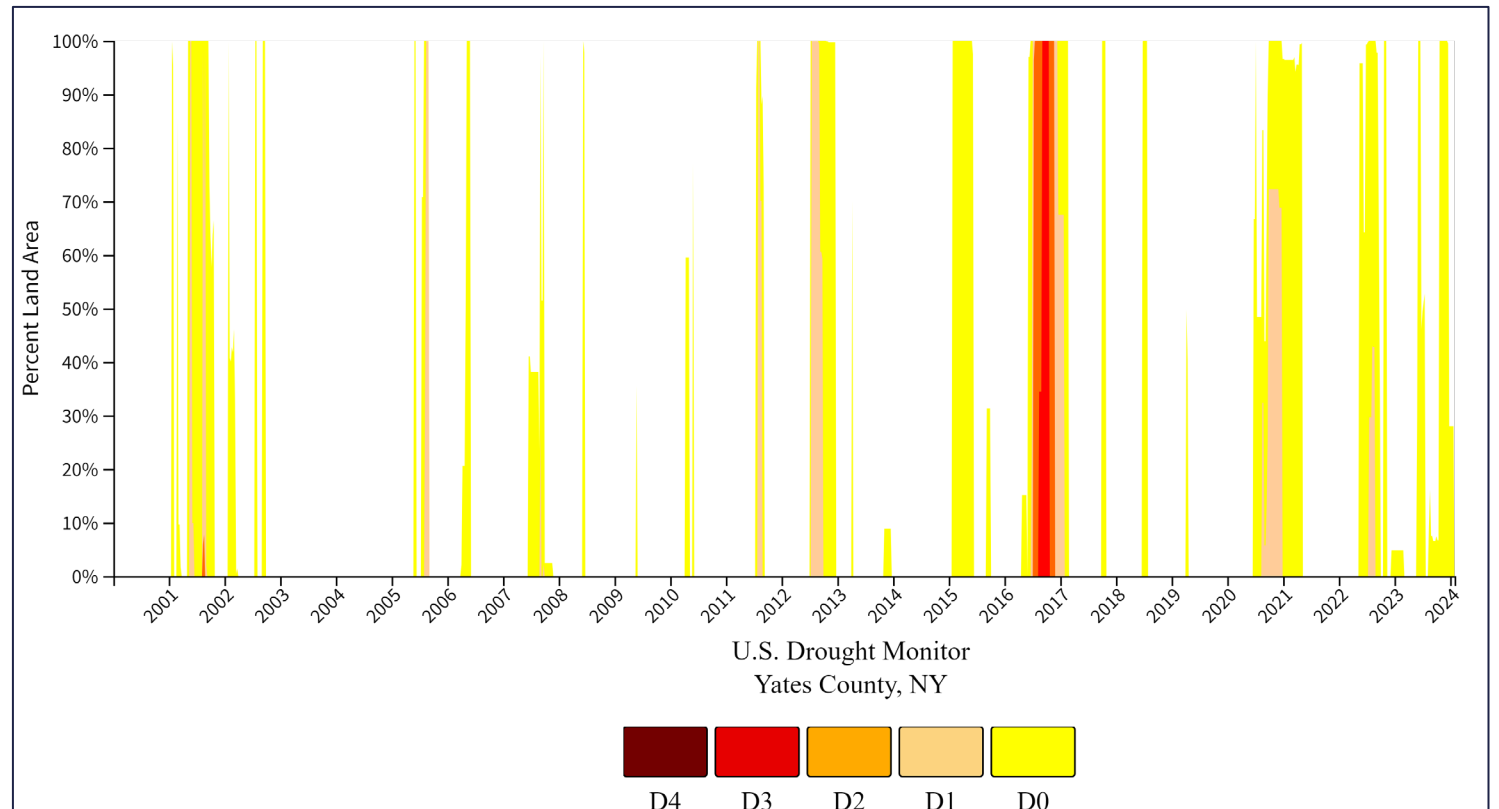
Extreme Temperature

Extreme temperature includes both heat and cold events, which affects the entire County including, human health and commercial/agricultural businesses. Extreme temperature events can have primary and secondary effects on infrastructure.

Population Exposed
24,773
(100%)
The entire County is exposed and vulnerable

USDA Declarations
3
3 frost/freeze events

Agriculture
867 farms
$114.6 million in sales

Average Mean Temperature
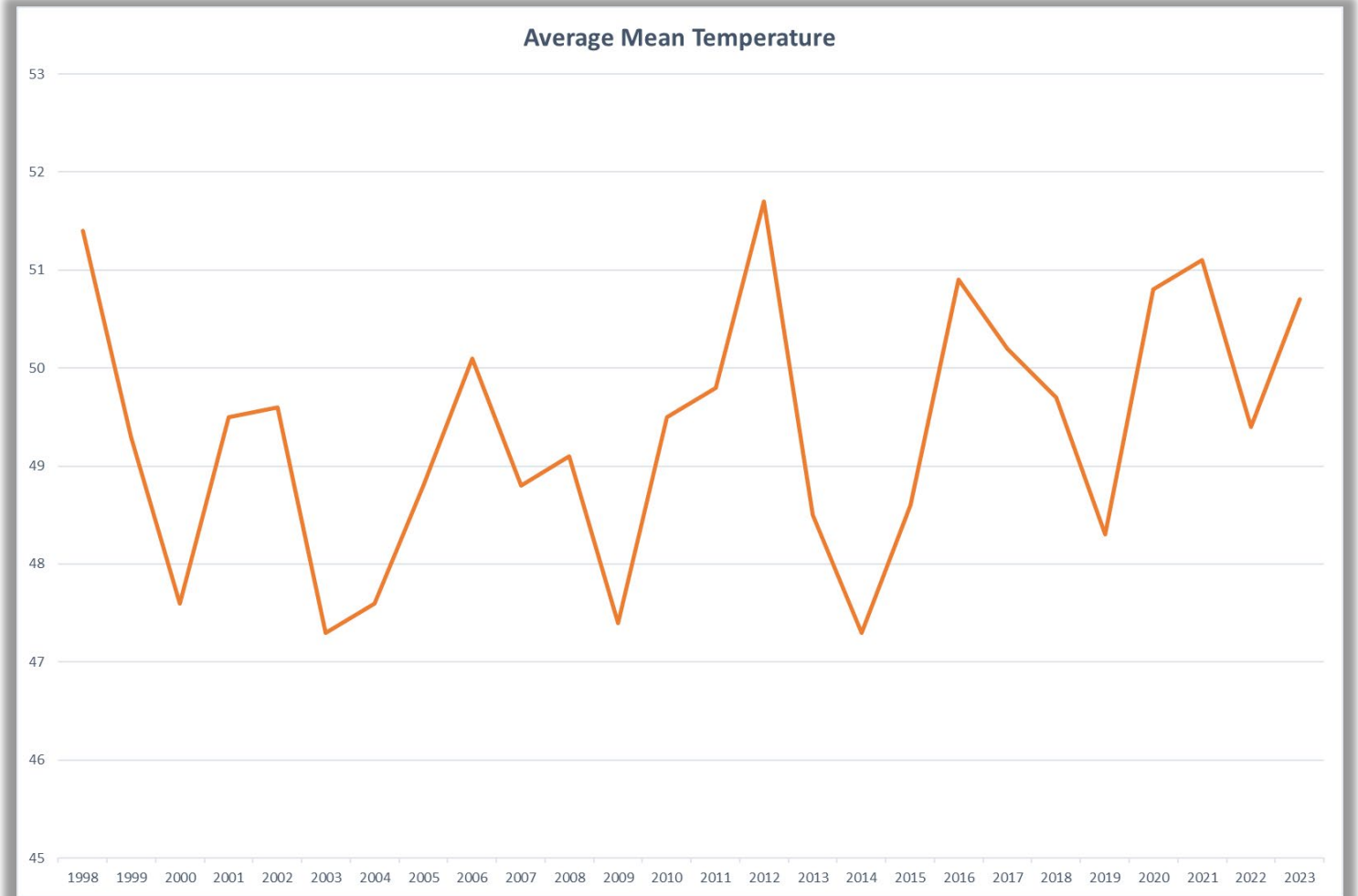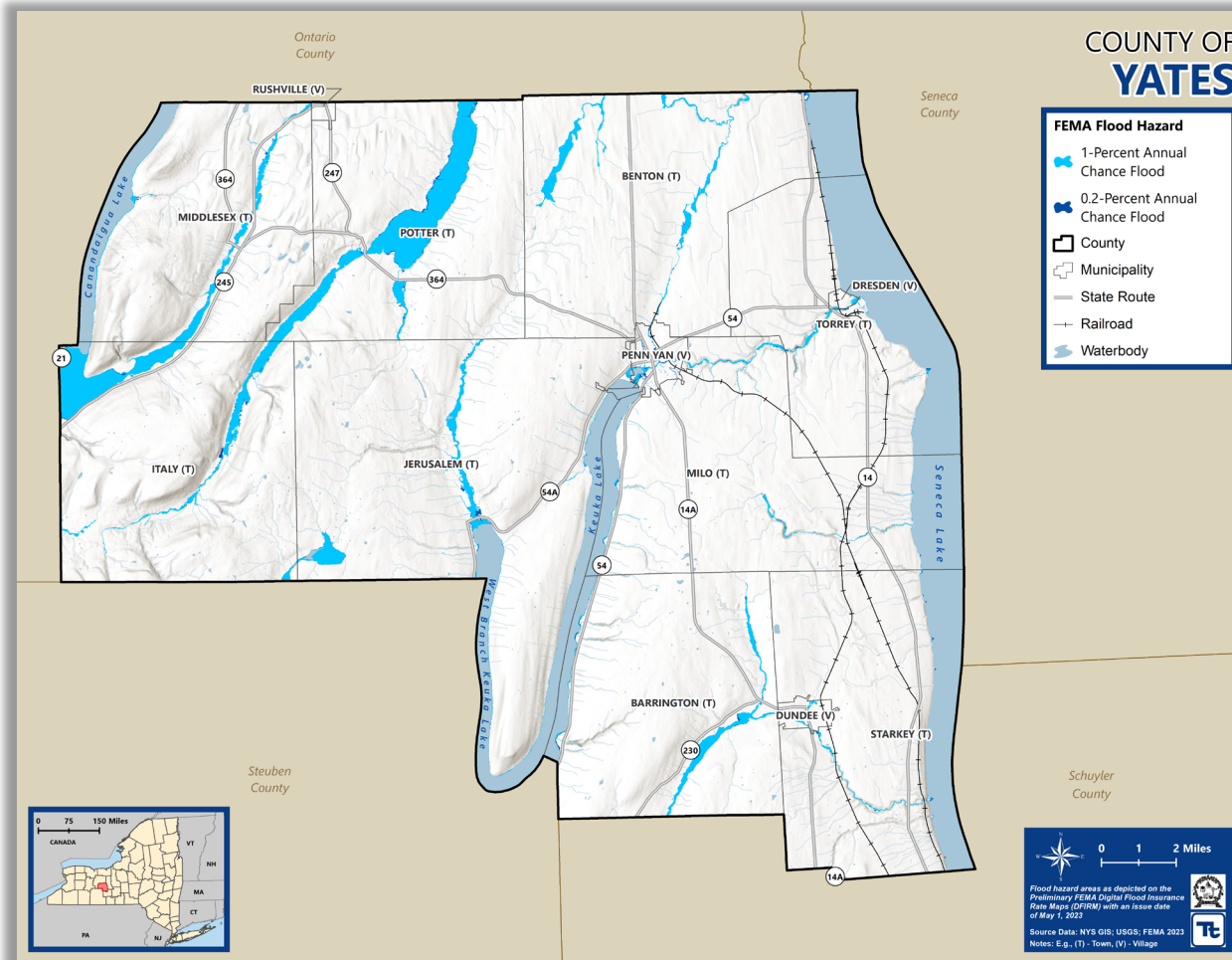
Flood

Floods are one of the costliest natural hazards in Yates County, leading to displaced residents and economic hardships, especially to communities located within floodprone areas or floodplains.

Population Exposed
522
(2.1%)
In 1% Annual Chance Flood Hazard Area

Vulnerable Population
235
(1.8%)
In 1% Annual Chance Flood Hazard Area

Buildings
465
(2.1%)
In 1% Annual Chance Flood Hazard Area

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FEMA Flood Hazard
- 1-Percent Annual Chance Flood
- 0.2-Percent Annual Chance Flood
- County
- Municipality
- State Route
- Railroad
- Waterbody

Flood hazard areas as depicted on the Preliminary FEMA Digital Flood Insurance Rate Maps (DFIRM) with an issue date of May 1, 2023

Source Data: NYS GIS; USGS; FEMA 2023
Notes: E.g., (T) - Town, (V) - Village

Total Land in Flood Hazard Area
8,277 acres
(3.8%)

Incidents
Since 1954, FEMA included Yates County in 8 declarations.
- DR-487 (Storms, Rain, Flooding)
- DR-725 (Severe Storms and Flooding
- DR-1095 (Severe Storms and Flooding)
- DR-1335 (Severe Storms and Flooding)
- DR-1486 (Severe Storms, Flooding, Tornadoes
- DR-1534 (Severe Storms and Flooding)
- DR-1993 (Severe Storms, Flooding, Tornadoes, Wind)
- DR-4180 (Severe Storms and Flooding)

Harmful Algal Bloom

Harmful algal blooms (HABs) in freshwater (lakes, ponds, rivers, and streams) generally consist of visible patches of cyanobacteria, also called blue-green algae. Several types of cyanobacteria can produce toxins and other harmful compounds that can pose health risks to people and animals through ingestion, skin contact, or inhalation.

Population Exposed

24,773
(100%)

Entire population exposed; however, those that are located near impacted waters or rely on lakes for drinking water are more at risk

Event History

Since 2019, there have been 560 HAB reports in Yates County. Canandaigua Lake, Half Moon Lake, Keuka Lake, and Seneca Lake have all been impacted by HABs. In 2022, Beaches on Keuka Lake reported closure for a total of 32 days as a result of HABs.

Impacts

- Drinking water contamination
- Water quality
- Health issues (skin irritation, stomach issues)
- Depleting oxygen in water
- Economic losses from fisheries and recreational areas

Lost Beach Days Due to HABs (2022)

of Lost Beach Days:
- None
- < 20
- ≥ 20 to < 60
- ≥ 60 to < 100
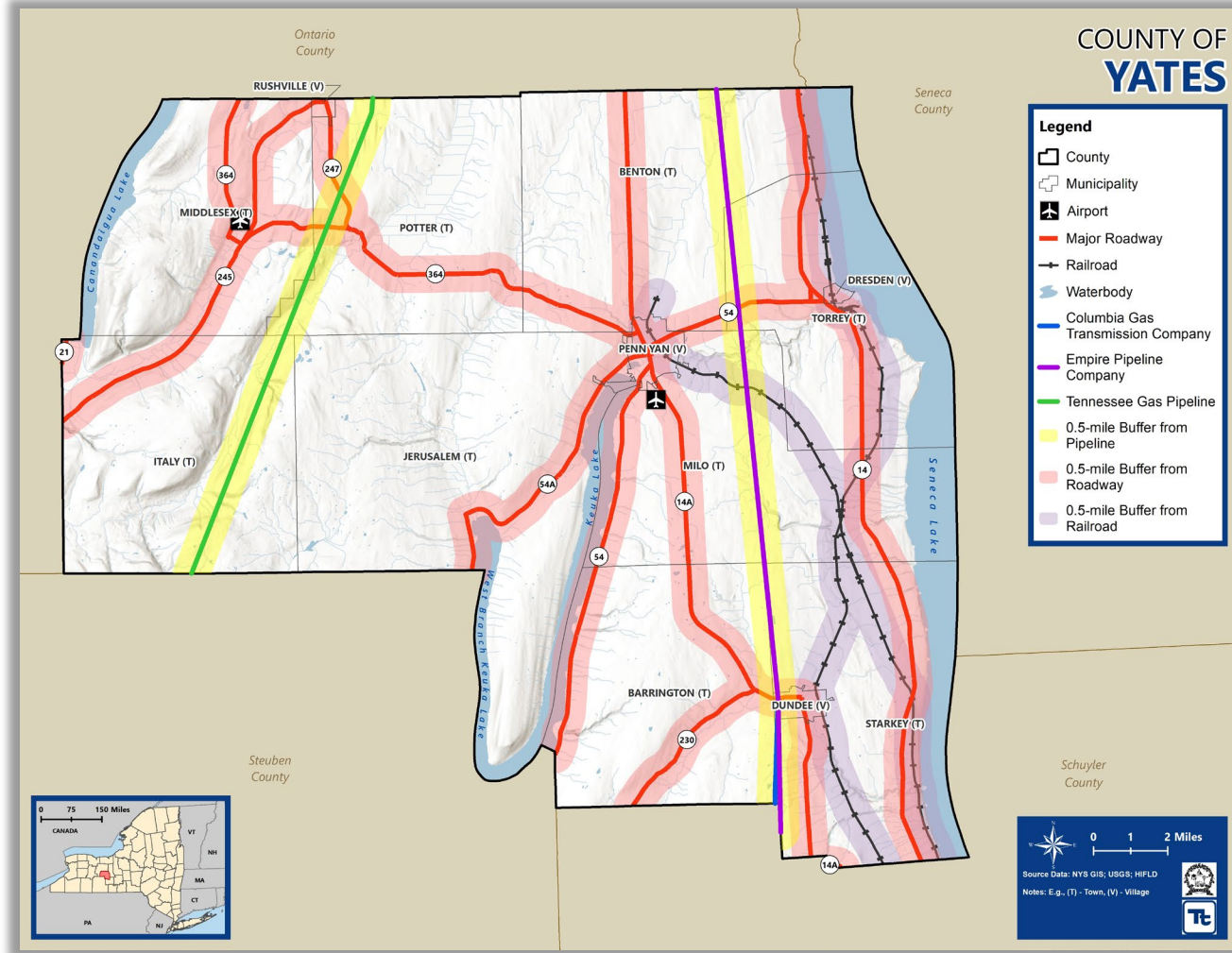- ≥ 100

Hazardous Materials

Hazardous material releases may happen during manufacturing, storage, transportation, or usage, both along transportation routes and at fixed-site facilities. These releases can cause harm to humans, wildlife, properties, and also lead to air, water, and soil contamination.

Population Exposed
14,553
(58.7%)
Population located within 0.5 miles of pipelines, major roadways, or railroads

Buildings Exposed
10,722
(48.5%)
Buildings located within 0.5 miles of pipelines, major roadways, or railroads

Potential Impacts

- Death
- Serious injury
- Long-lasting health effects
- Property damage
- Air and water contamination
- Closed or damaged transportation routes
- Loss of natural resources

⚠ **CAUTION**

⚠ Hazardous Materials

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Legend
- County
- Municipality
- ✈ Airport
- — Major Roadway
- —+— Railroad
- Waterbody
- — Columbia Gas Transmission Company
- — Empire Pipeline Company
- — Tennessee Gas Pipeline
- 0.5-mile Buffer from Pipeline
- 0.5-mile Buffer from Roadway
- 0.5-mile Buffer from Railroad

Source Data: NYS GIS; USGS; HIFLD
Notes: E.g., (T) - Town, (V) - Village
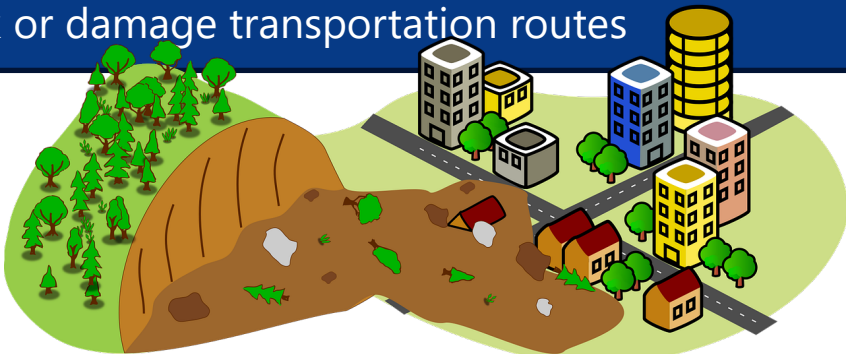
Landslides

Landslides are composed of natural rock, soil, artificial fill, or a combination and move along a downward slope. They flow rapidly, striking at avalanche speeds that can travel several miles, growing in size as they pick up trees, boulders, cars and other materials.

Population Exposed
1,490
(6%)
People living in moderate landslide susceptibility areas

Buildings Exposed
966
(4.4%)
Buildings located in moderate landslide susceptibility areas

Potential Impacts
- Utility disruptions and outages
- Loss of life
- Damaged infrastructure
- Loss of natural resources
- Flooding
- Block or damage transportation routes

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Legend

Landslide Susceptibility/ Incidence Hazard
- Low (less than 1.5% of area involved)
- Moderate (1.5% - 15% of area involved)
- County
- Municipality
- State Route
- Railroad
- Waterbody

Source Data: NYS GIS; USGS; NLHP
Notes: E.g., (T) - Town, (V) - Village
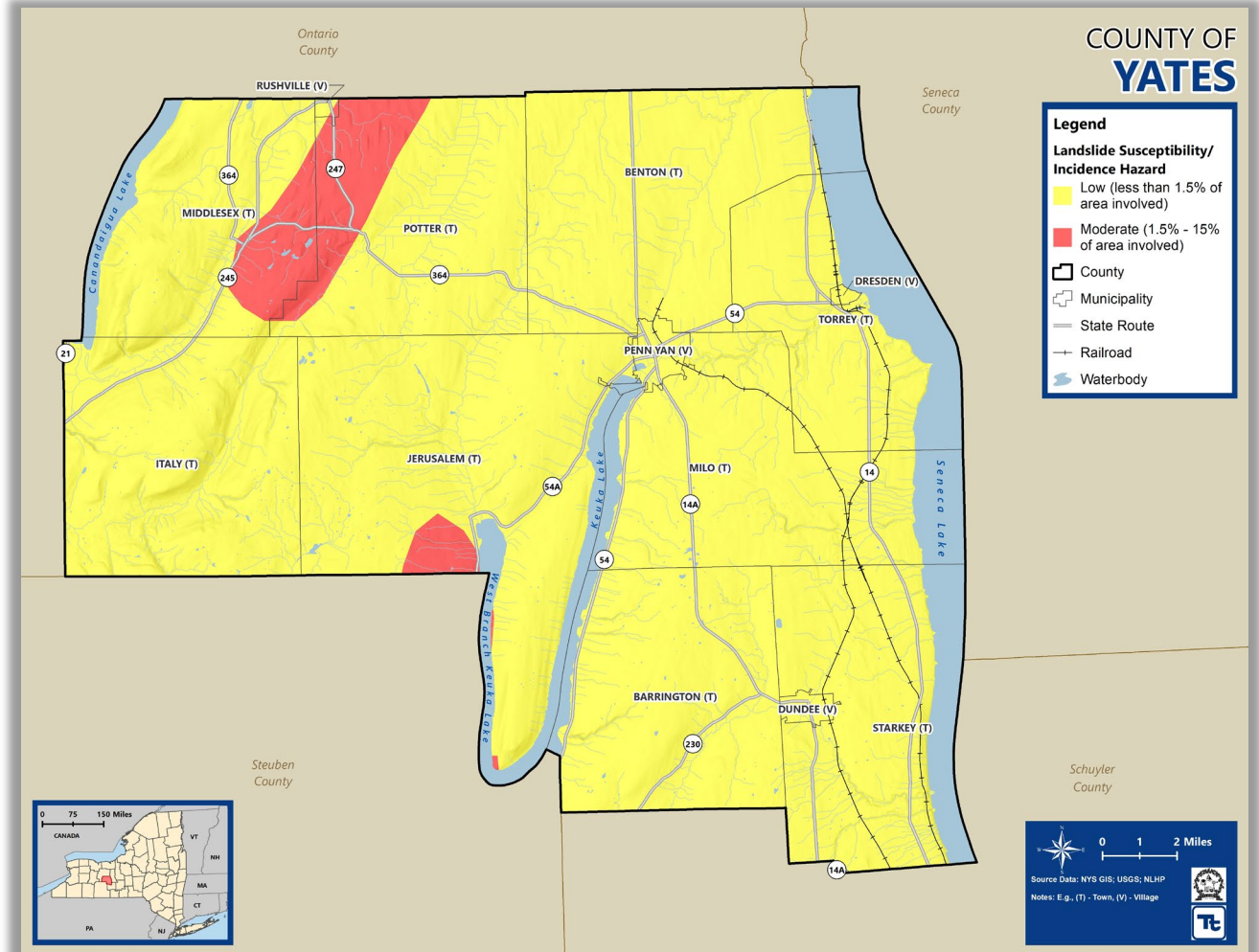
Severe Weather

Severe storm events are a common occurrence in Yates County. A variety of severe storm types, such as thunderstorms, lightning, hail, tornadoes, high winds, and tropical cyclones have damaged property and infrastructure, disrupt power, downing trees, and power lines, and causing injuries and fatalities.

Population Exposed
24,773
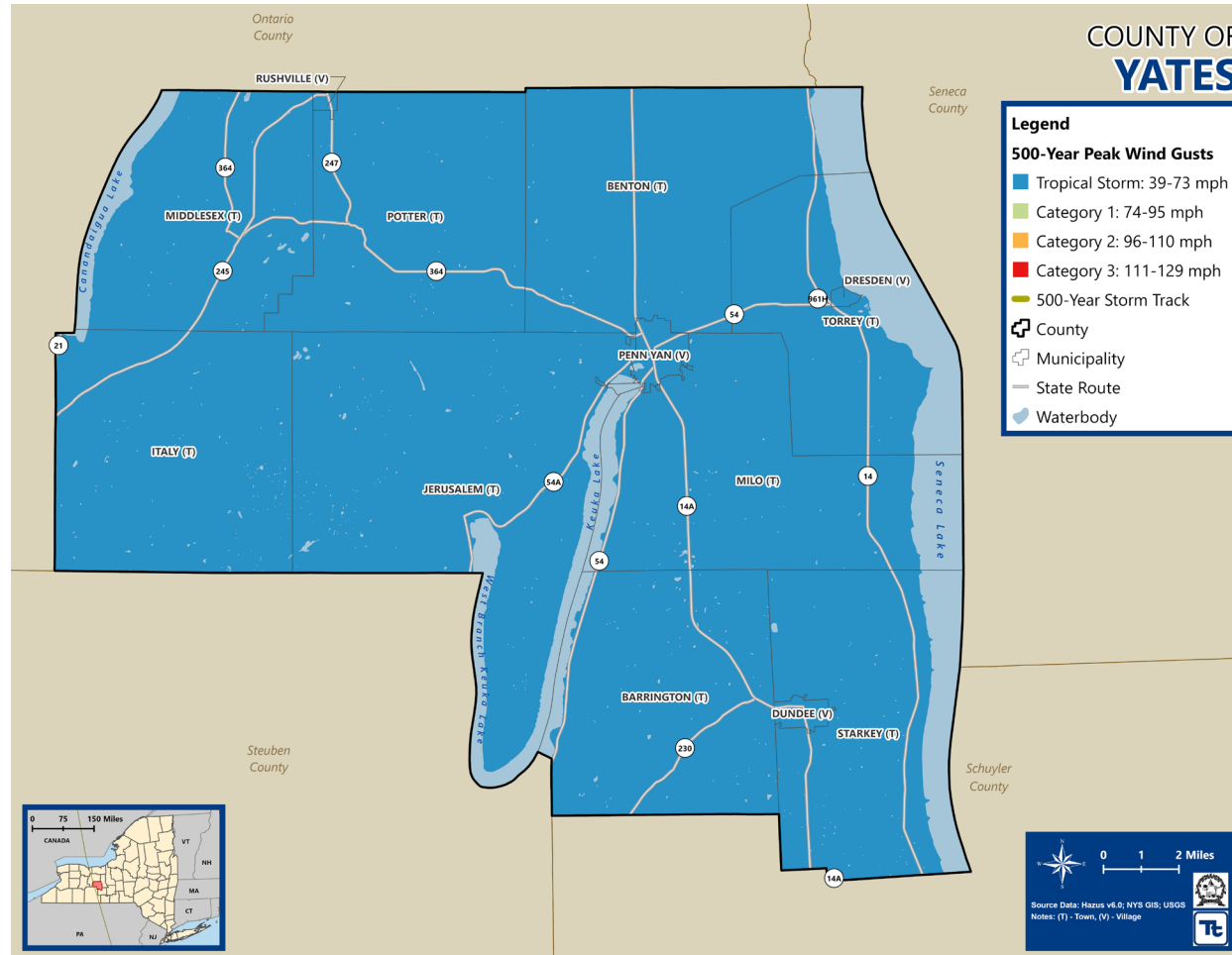**(100%)**
The entire County is vulnerable

Buildings Exposed
22,096
(100%)
The entire County is vulnerable

Potential Impacts
- Essential Services Interruptions Power Outages
- Traffic Accidents
- Downed Trees
- Property Damage
- Personal Injury / Loss of Life

COUNTY OF YATES

Legend
500-Year Peak Wind Gusts
- Tropical Storm: 39-73 mph
- Category 1: 74-95 mph
- Category 2: 96-110 mph
- Category 3: 111-129 mph
- 500-Year Storm Track
- County
- Municipality
- State Route
- Waterbody

Source Data: Hazus v6.0; NYS GIS; USGS
Notes: (T) - Town, (V) - Village

Incidents
- Between 2018 and 2023, 49 severe weather events were recorded by NOAA NCEI.
- Since 1954, FEMA included Yates County in 11 declarations.
  - DR-338 (Tropical Storm Agnes)
  - DR-487 (Storms, Rain, Flooding)
  - DR-725 (Severe Storms and Flooding
  - DR-1095 (Severe Storms and Flooding)
  - DR-1335 (Severe Storms and Flooding)
  - DR-1486 (Severe Storms, Flooding, Tornadoes
  - DR-1534 (Severe Storms and Flooding)
  - DR-1993 (Severe Storms, Flooding, Tornadoes, Wind)
  - EM-3351 (Hurricane Sandy)
  - DR-4180 (Severe Storms and Flooding)
  - DR-4625 (Remnants of Tropical Storm Fred)

Severe Winter Weather

In Yates County, winter weather includes heavy snow, sleet, blizzards, and ice storms. These events occur frequently during the winter months and has the potential to be life-threatening.

Population Exposed
24,773
(100%)
The entire County is exposed and vulnerable

General Building Stock and Critical Facilities Exposed
22,096
(100%)
The entire County is exposed and vulnerable; however structural impacts are minimal.

Incidents
- Between 2018 and 2023, 13 winter weather events were recorded by NOAA NCEI.
- Since 1954, FEMA included Yates County in three declarations.
  - DR-898 (Severe Winter Storm)
  - EM-3107 (Severe Blizzard)
  - DR-1467 (Ice Storm)
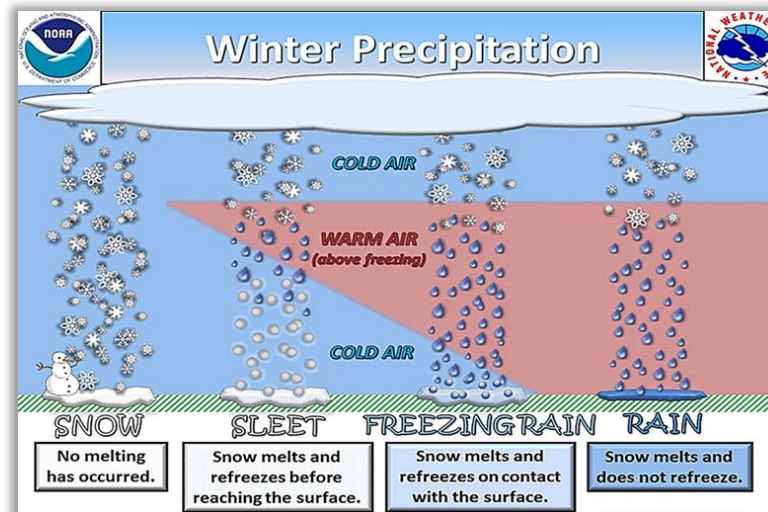
Hazard Types
- Heavy Snow
- Blizzard
- Sleet
- Ice Storm

Transportation Accidents

Transportation accidents include, vehicular accidents, aviation accidents, railway accidents, and hazardous materials in transit.

Incidents

Between 2018 and 2023, there have been over 3,900 vehicle crashes report to ITSMR throughout the County. No reports were found related to aviation or rail incidents or hazardous materials in transit.

Impacts

- While this is a manmade hazard, natural hazards can increase the potential of accidents to occur.
- Widespread hazard that can occur anywhere in Yates County.
- According to NYS Department of Health, Motor vehicle crash injuries are a leading cause of injury related deaths for Yates County residents.

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Legend
- County
- Municipality
- Airport
- Major Roadway
- Railroad
- Waterbody

Source Data: NYS GIS; USGS; HIFLD
Notes: E.g., (T) - Town, (V) - Village
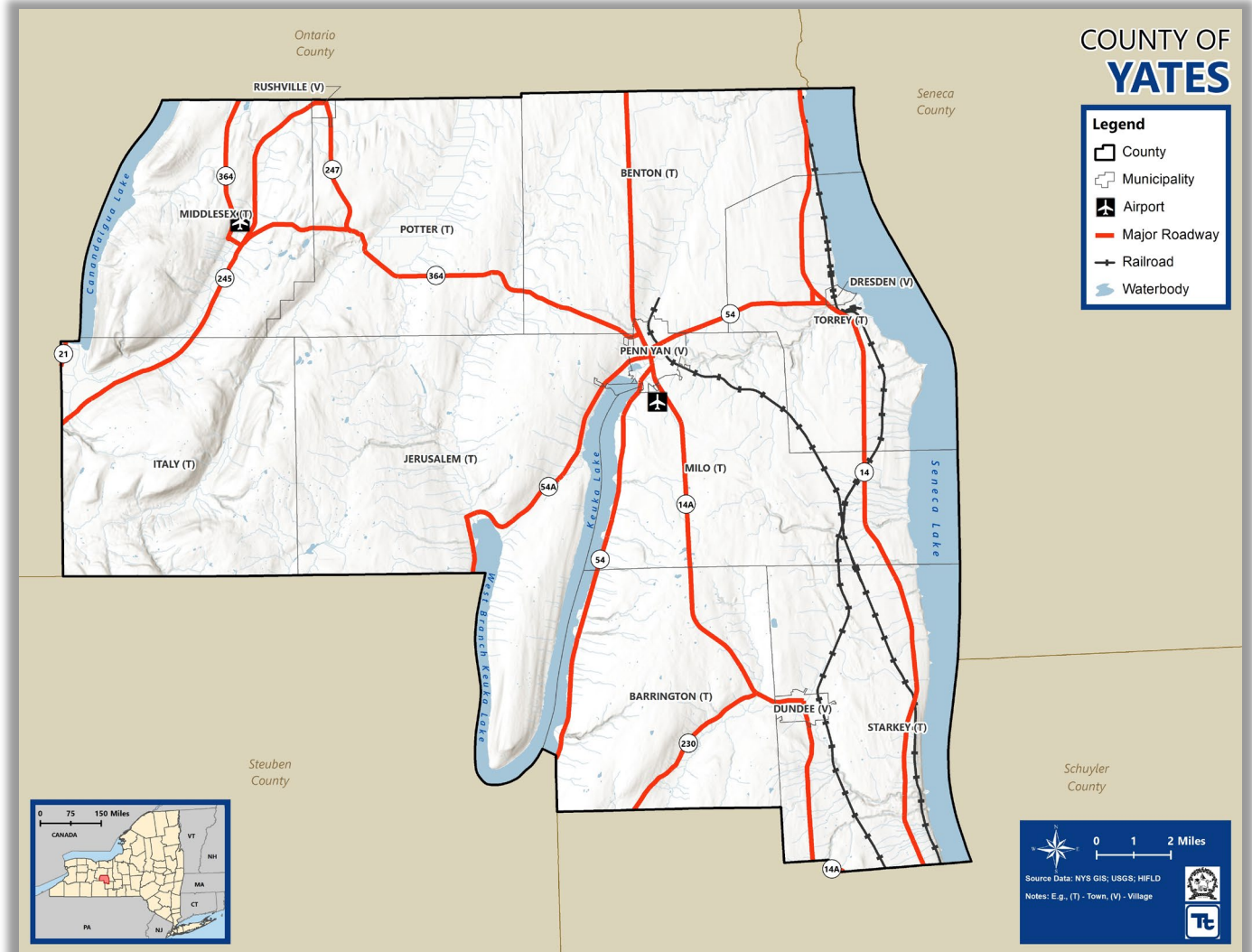
Preliminary Hazard Ranking Methodology

- The calculated probability of a hazard occurring based on historical data

- *Impacts to people, property, and the economy* based on GIS data and analysis of exposure.

- The degree to which *climate change* will affect future occurrences based on best available data.

- The degree to which existing *capabilities* (the ability of your community to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness) decrease overall risk.
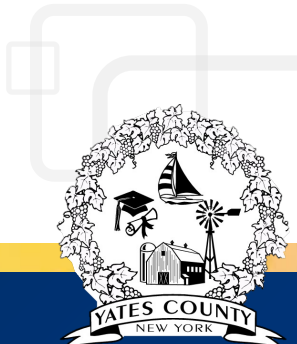
Preliminary Hazard Ranking Formula
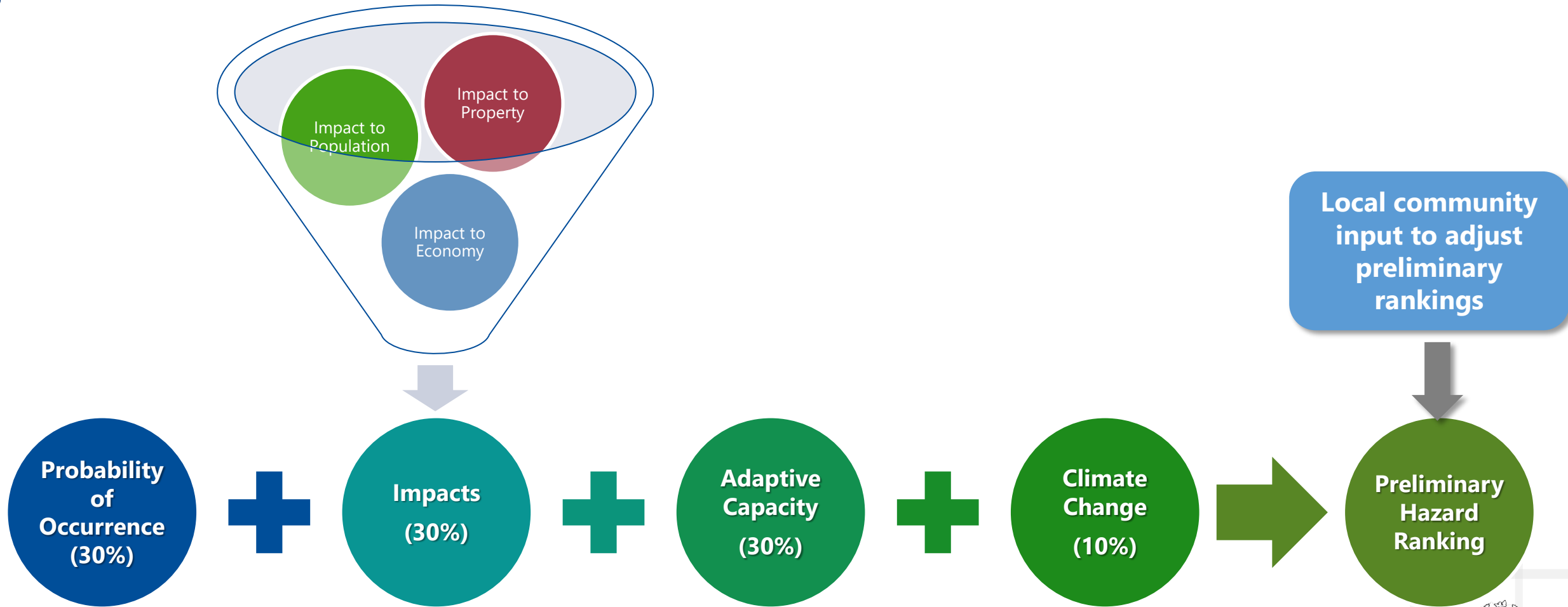
Hazard Ranking (Countywide)

- **Medium**
  - Severe Winter Weather
  - Severe Weather
  - Hazmat
  - HABs
  - Flood
  - Extreme Temp
 - Drought
  - Disease Outbreak
- **Low**
  - Transportation
  - Landslides
  - Dam Failure
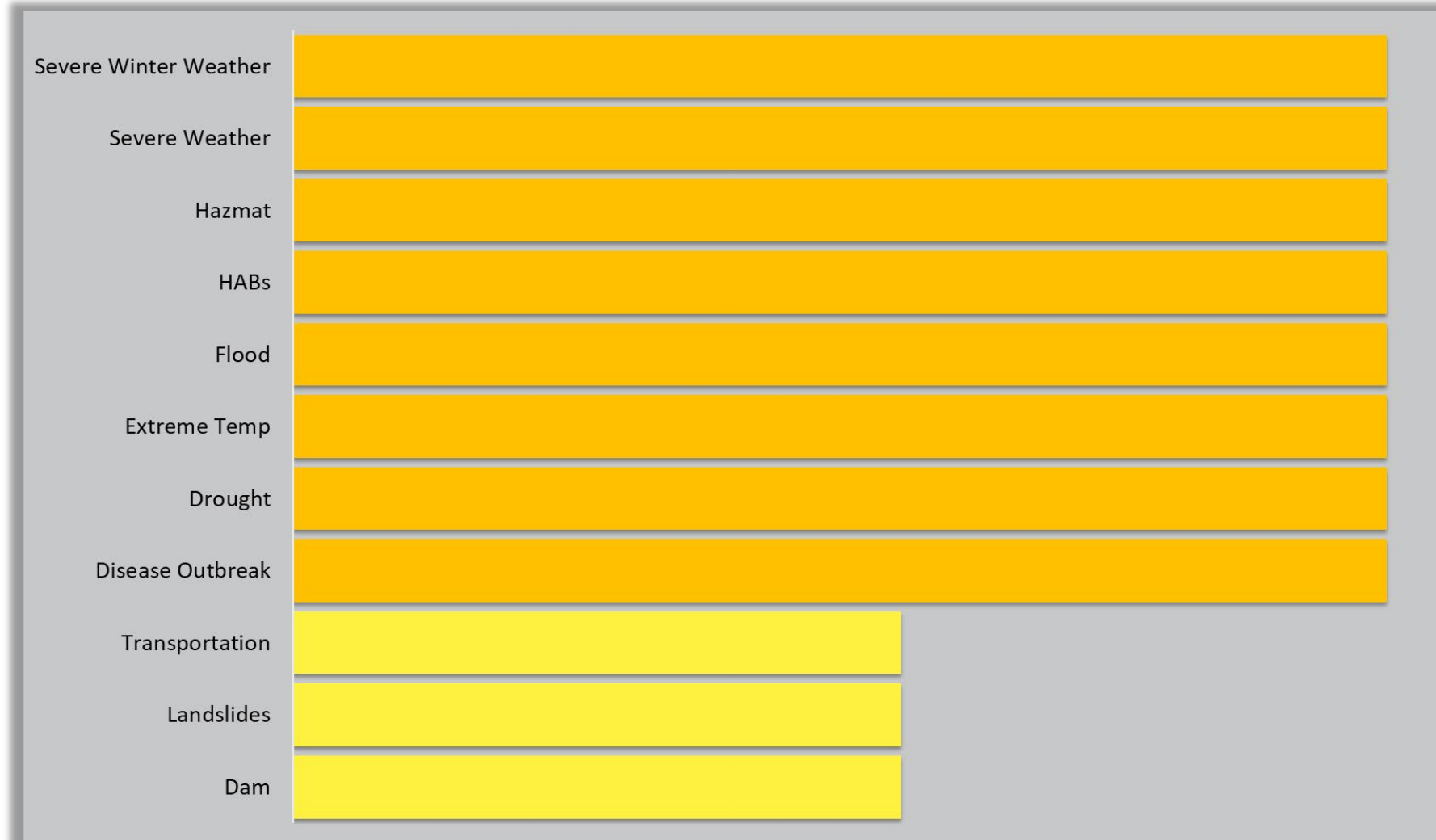
Preliminary Hazard Ranking (Municipal)

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Jurisdictions	Dam	Disease Outbreak	Drought	Extreme Temp	Flood	HABs	Hazmat	Landslides	Severe Weather	Severe Winter Weather	Transportation
					Hazard Ranking						
Barrington (T)	Low	Medium	Medium	Medium	Low	Medium	Low	Low	Medium	Medium	Low
Benton (T)	Low	Medium	Medium	Medium	Low	Medium	Low	Low	Medium	Medium	Low
Dresden (V)	Low	Medium	Medium	Medium	Low	Medium	Medium	Low	Medium	Medium	Low
Dundee (V)	Low	Medium	Medium	Medium	Low	Low	Medium	Low	Dumedium	Medium	Low
Italy (T)	Low	Medium	Medium	Medium	Low	Medium	Low	Low	Medium	Medium	Low
Jerusalem (T)	Low	Medium	Medium	Medium	Low	Medium	Medium	Low	Jerusalem	Medium	Low
Middlesex (T)	Low	Medium	Medium	Medium	Low	Medium	Medium	Low	Middium	Medium	Low
Milo (T)	Low	Medium	Medium	Medium	Medium	Medium	Low	Low	Milo	Medium	Low
Penn Yan (V)	Low	Medium	Medium	Medium	Low	Medium	Medium	Low	Penn Yium	Medium	Low
Potter (T)	Low	Medium	Medium	Medium	Low	Low	Low	Medium	Potter	Medium	Low
Rushville (V)	Low	Medium	Medium	Medium	Low	Low	Low	Medium	Rushville	Medium	Low
Starkey (T)	Low	Medium	Medium	Medium	Low	Medium	Low	Low	Starkey	Medium	Low
Torrey (T)	Low	Medium	Medium	Medium	Low	Medium	Low	Low	Torrey	Medium	Low
Yates County	**Low**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Medium**	**Medium**	**Low**
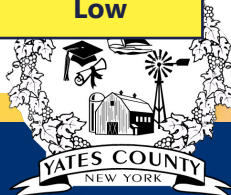
Do you agree with the rankings?

- Use the online form to let us know if you agree with the rankings.

- If you do not agree, what should the ranking be?

- Click the link in the chat or scan the QR code

Yates County - Hazards of Concern

Yates County - Hazards of Concern (for meeting)

Please use this form to provide feedback about the preliminary hazard rankings for Yates County.

* Required

1. Do you agree with the preliminary rankings for Yates County? *

	Yes	No
Dam Failure - **LOW**	○	○
Disease Outbreak - **MEDIUM**	○	○
Drought - **MEDIUM**	○	○
Extreme Temperature - **MEDIUM**	○	○
Flood - **MEDIUM**	○	○
HABs - **MEDIUM**	○	○
Hazmat - **MEDIUM**	○	○
Landslides - **LOW**	○	○
Severe Weather - **MEDIUM**	○	○
Severe Winter Weather - **MEDIUM**	○	○
Transportation Accidents - **LOW**	○	○

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Goals and Objectives

Goals and Objectives – Review and Update

Goal Number	Goal	Modify, Add, or Remove?
1	Reduce the likelihood and impacts of hazards on life, property, and the environment.	
2	Protect life, property, critical infrastructure, the environment, and the economy from hazard impacts.	
3	Educate the public, officials, and other stakeholders about the hazards they face and what can be done to mitigate hazard impacts.	

Goal: Minimize new development in hazard-prone areas

Objectives: Reduce the number of vulnerable structures in flood hazard areas.

Actions: Amend zoning ordinance to permit only open space and uses within floodplains.

Goals and Objectives Review and Update

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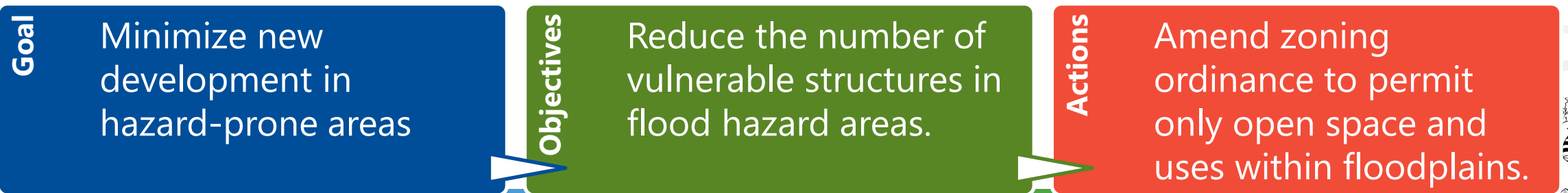
| Objective Number	Objectives
1	Develop and/or update local regulations based on current information and best practices.
2	Maintain natural systems to reduce the impacts of hazards.
3	Acquire, retrofit, or relocate structures from flood-prone areas.
4	Retrofit critical infrastructure to protect against hazard impacts.
5	Enhance stormwater management infrastructure.
6	Ensure that critical facilities can continue to function during and after hazard impacts.
7	Encourage residents and business owners to insure their property against hazard impacts, including through flood insurance through the National Flood Insurance Program (NFIP).
8	Work with legislators to develop and enact legislation that reduces long-term vulnerability to hazards.
9	Ensure that local officials attend current training on regulatory issues and best practices.
10	Provide information to individuals throughout the county on the hazards they face and what property protection measures they can take.

Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

- Look at the following for each hazard of concern:
  - **Strengths** – what the County and communities do well; things upon which we can capitalize;
  - **Weaknesses** – what can be done better; what can be strengthened;
  - **Obstacles** – what stands in the way to implementation to prevent mitigation or response (for example regulatory, geographical, environmental, financial issues); and
  - **Opportunities** - actions or projects to mitigate issues or improve resilience.
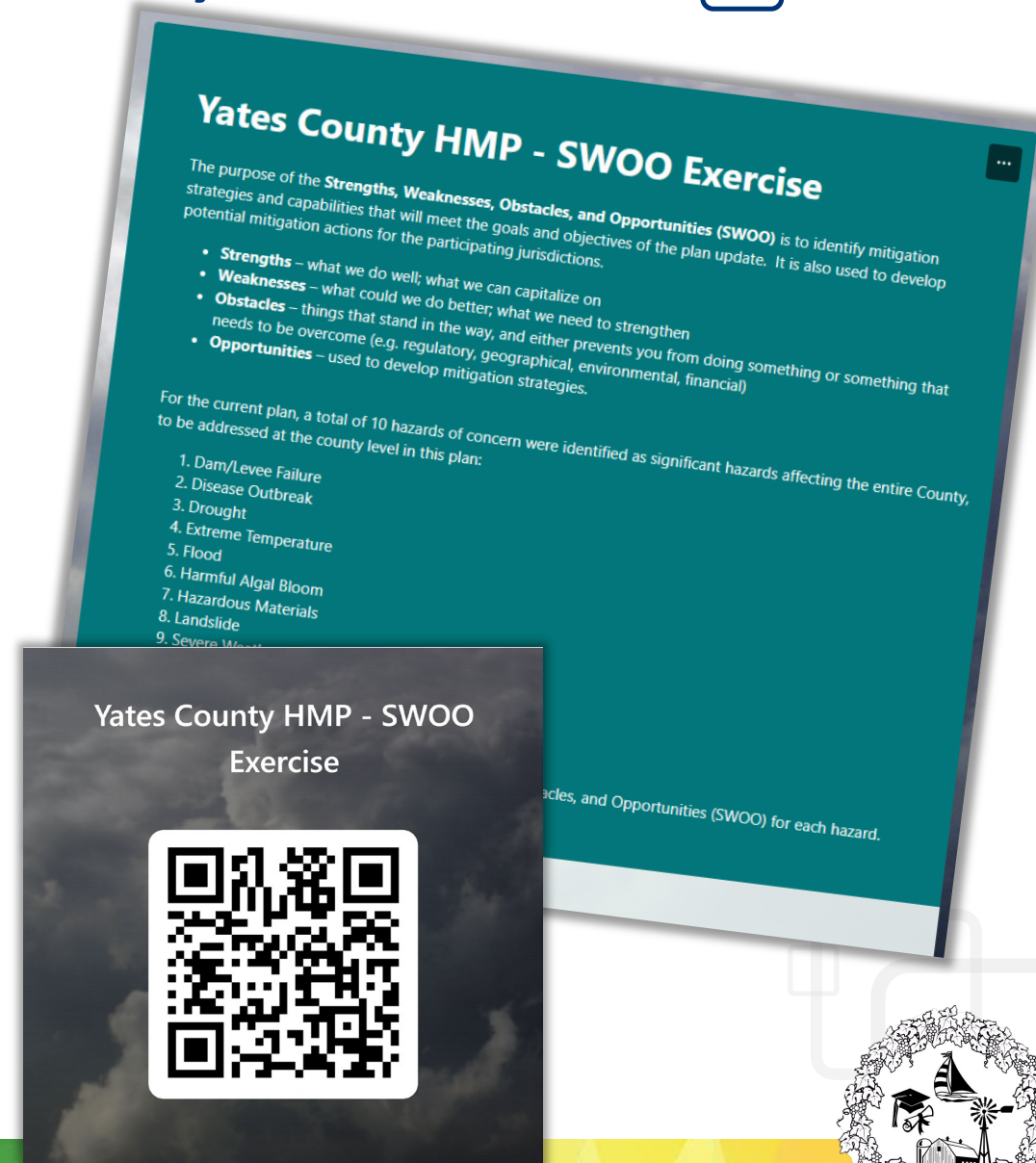
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Questions?

Yates County Project Contacts

Diane Caves, Deputy Director
Yates County Emergency Services
315-536-3000 | dcaves@yatescounty.org

Tetra Tech Project Contacts

Heather Apgar, CFM
(973) 630-8046 | heather.apgar@tetratech.com

Thank You!