

## **APPENDIX C: MEETING DOCUMENTATION**



Appendix C includes meeting agendas, sign-in sheets, and minutes (where applicable and available) for meetings convened during the development of the 2025 Sussex County Hazard Mitigation Plan Update.

**Steering Committee  
Kick-Off Meeting  
Materials**



**SUSSEX COUNTY MULTI-JURISDICTIONAL  
HAZARD MITIGATION PLAN - 2024 UPDATE  
Steering Committee Kick-Off Meeting – Agenda  
March 15, 2023, 10:00AM**



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## Introductions

### Scope and Schedule

- Brief review
- Plan approved by November/December 2024
- Letters of Intent to Participate
- In-Kind Tracking

### Steering Committee Role and Responsibilities

### Information and Data Collection

- Critical Facilities and Lifelines
  - *Critical facilities and infrastructure provide services and functions essential to a community, especially during and after a disaster.*
  - *A lifeline, a type of critical facility, enables the continuous operation of government functions and critical business and is essential to human health and safety or economic security.*
  - Previous 2021 critical facility list

### Public and Stakeholder Outreach

- County website
- Brochure
- News/Press release
- Social media content
- Stakeholder and Citizen Surveys
- Neighboring County Outreach

### Review 2021 HMP

- Hazards of Concern
- Goals and Objectives

### Next Steps

- Attend Municipal Kick-Off – Tonight, March 15 at 7:00PM (virtual)
- Provide update on 2021 County mitigation actions – *to be distributed*

### Contact Information

Alison Miskiman ([alison.miskiman@tetrattech.com](mailto:alison.miskiman@tetrattech.com); 973-630-8045)

Heather Apgar ([heather.apgar@tetrattech.com](mailto:heather.apgar@tetrattech.com); 973-630-8046)

Sussex County, NJ – Hazard Mitigation Plan 2024 Update  
Steering Committee Kick-Off Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Steering Committee Kickoff	
<b>Location of Meeting:</b>	Teleconference	
<b>Date of Meeting:</b>	March 15, 2023   10:00AM – 10:45AM	
<b>Attendees:</b>	<ul style="list-style-type: none"> <li>Robert Haffner, Sussex County Division of Emergency Management</li> <li>Jen Van Der Wende, Sussex County Division of Emergency Management</li> <li>Autumn Sylvester, Sussex County Division of Planning and Economic Development</li> <li>Christine Florio, Sussex County Health and Human Services – Division of Health</li> </ul>	<ul style="list-style-type: none"> <li>Manny Ayers, Newton Medical Center</li> <li>Joe Konopinski, Wantage</li> <li>Thomas Varro, P.E., Sussex County Municipal Utilities Authority</li> <li>Steven Sarinelli, Newton Medical Center</li> <li>Ashley Gottemoller, Sussex County DPW</li> <li>Alison Miskiman, Tetra Tech</li> <li>Heather Appgar, Tetra Tech</li> </ul>

**Agenda Summary:** The purpose of the meeting was to introduce the Steering Committee members and contract consultant, provide an overview of the hazard mitigation planning process, and to begin the information gathering processes and update the hazards of concern.

Item No.	Description	Action item(s):
1	<b>Introductions –</b> <ul style="list-style-type: none"> <li>Each person on the call introduced themselves.</li> </ul>	-
2	<b>Hazard Mitigation Overview</b> <ul style="list-style-type: none"> <li>Mitigation is a sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event</li> <li>A Hazard Mitigation Plan (HMP) provides an overview of the impacts of natural hazards on communities and is a roadmap to reducing the impact of these hazards.                             <ul style="list-style-type: none"> <li>Attendees were asked to take a quick poll related to the hazards occurring the most in the County since 2021; majority indicated severe storms and winter storms</li> </ul> </li> <li>For the 2024 update, we will be following the revised April 2023 FEMA guidance for local plans</li> </ul>	-
3	<b>Project Organization –</b> <ul style="list-style-type: none"> <li>To complete the HMP update, we will work with individuals, agencies, neighboring jurisdictions, businesses, and other partners</li> <li>The project is organized by the following –                             <ul style="list-style-type: none"> <li>Core Planning Team - made up of Sussex County OEM and Tetra Tech. This is a small group that will meet frequently to ensure the project stays on schedule and that we meet all State and FEMA requirements.</li> <li>Steering Committee - responsible for providing guidance and leadership throughout the planning process. They will actively contribute, review and provide feedback on plan sections, update the plans' goals and objectives, finalize the list of hazards of concern, and identify mitigation actions.</li> </ul> </li> </ul>	-



	<ul style="list-style-type: none"> <li>○ Planning Partnership – represents the participating jurisdictions. They will attend meetings, provide information, identify mitigation actions, and adopt the HMP.</li> <li>○ Stakeholders - must be engaged throughout the planning process. At a minimum, this group should include neighboring counties, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and nonprofit organizations. We will put together a draft list of stakeholders and ask for your input.</li> <li>○ NJOEM - provide the County guidance throughout the HMP update and will review/approve the plan before it is submitted to FEMA.</li> </ul>	
<p><b>4</b></p>	<p><b>Planning Process Overview</b></p> <ul style="list-style-type: none"> <li>● Following an 8-phase approach to update the HMP             <ol style="list-style-type: none"> <li>1. Planning Process – ongoing throughout the update</li> <li>2. Risk Assessment – identifies the risks of each hazard included in the plan                 <ul style="list-style-type: none"> <li>▪ Dam Failure</li> <li>▪ Disease Outbreak</li> <li>▪ Drought</li> <li>▪ Earthquake</li> <li>▪ Extreme Temperature</li> <li>▪ Flood</li> <li>▪ Geologic Hazards</li> <li>▪ Hurricane &amp; Tropical Storm</li> <li>▪ Infestation &amp; Invasive Species</li> <li>▪ Nor’Easter</li> <li>▪ Severe Weather</li> <li>▪ Severe Winter Weather</li> <li>▪ Wildfire</li> </ul> </li> <li>3. Public Involvement Strategy – ongoing throughout the plan update; we will use the County’s website and StoryMap to help with outreach</li> <li>4. Mitigation Strategy – review/finalize goals/objectives for 2024 HMP; review existing capabilities; review 2021 mitigation strategies and provide status; identify new strategies for the 2024 update</li> <li>5. Plan Maintenance – determine the maintenance schedule of the 2024 HMP</li> <li>6. Plan Update and Deliverables – update all sections of the HMP; provide to NJOEM and FEMA for review and approval</li> <li>7. Plan Adoption – the County and each participating municipality will adopt the plan after the HMP is approved by FEMA</li> <li>8. Project Management and Coordination – ongoing throughout the update</li> </ol> </li> </ul>	<p><b>Tetra Tech –</b></p> <ul style="list-style-type: none"> <li>● Provide survey link for input on critical facilities and lifelines</li> <li>● Provide outreach materials</li> </ul> <p><b>Steering Committee –</b></p> <ul style="list-style-type: none"> <li>● Provide input on the hazards of concern (<a href="https://www.surveymonkey.com/r/SussexHMPHOCs">https://www.surveymonkey.com/r/SussexHMPHOCs</a>)</li> <li>● Provide input on the goals/objectives (<a href="https://www.surveymonkey.com/r/SussexHMPGoals">https://www.surveymonkey.com/r/SussexHMPGoals</a>)</li> <li>● Assist with public outreach using materials provided by Tetra Tech</li> <li>● Provide input on 2021 mitigation actions</li> </ul>
<p><b>5</b></p>	<p><b>Project Schedule</b></p> <ul style="list-style-type: none"> <li>● Steering Committee Kick-Off – March 15, 2023</li> </ul>	<p>-</p>



	<ul style="list-style-type: none"> <li>• Planning Partnership Kick-Off – March 15, 2023</li> <li>• Finalize goals, objectives, and hazards of concern – mid-summer</li> <li>• Risk Assessment Meeting – late-summer</li> <li>• Mitigation Strategy Meeting – mid-late fall</li> <li>• Plan maintenance – end of 2023</li> <li>• Public Draft – February 2024</li> <li>• Draft to State for Review – May 2024</li> <li>• Final Draft to FEMA – August 2024</li> <li>• Plan Adoption – September-October 2024</li> </ul>	
<p><b>6</b></p>	<p><b>Next Steps –</b></p> <ul style="list-style-type: none"> <li>• Tetra Tech to provide access to OneDrive for document sharing/resources</li> <li>• Steering Committee and Planning Partnership to provide input on problem areas and new development             <ul style="list-style-type: none"> <li>○ Problem areas - <a href="https://survey123.arcgis.com/share/18182eea337346b1ae69abfb9240ff58">https://survey123.arcgis.com/share/18182eea337346b1ae69abfb9240ff58</a></li> <li>○ New Development - <a href="https://survey123.arcgis.com/share/1428c68aac87457e920c55a569b61241">https://survey123.arcgis.com/share/1428c68aac87457e920c55a569b61241</a></li> </ul> </li> <li>• Departments and Municipalities to share outreach materials and links to surveys/HMP website             <ul style="list-style-type: none"> <li>○ Please send screenshots/links to Tetra Tech so we can document in the plan</li> </ul> </li> </ul>	<p><b>Tetra Tech</b></p> <ul style="list-style-type: none"> <li>• Set up OneDrive and provide access to Steering Committee</li> </ul> <p><b>Steering Committee –</b></p> <ul style="list-style-type: none"> <li>• Provide input on problem areas - <a href="https://survey123.arcgis.com/share/18182eea337346b1ae69abfb9240ff58">https://survey123.arcgis.com/share/18182eea337346b1ae69abfb9240ff58</a></li> <li>• Provide input on new development - <a href="https://survey123.arcgis.com/share/1428c68aac87457e920c55a569b61241">https://survey123.arcgis.com/share/1428c68aac87457e920c55a569b61241</a></li> </ul>

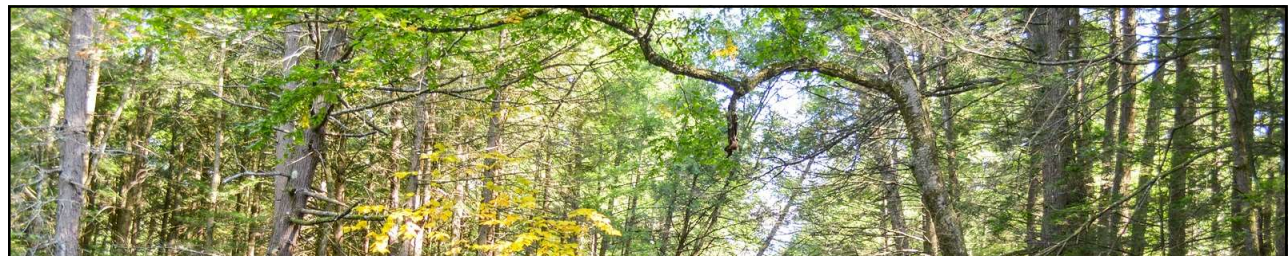


# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2024 Update

Steering Committee Kick-Off Meeting  
March 15, 2023 | 10:00 am

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

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## Today's Agenda

1. Welcome and Introductions
2. Hazard Mitigation Planning Overview
3. Project Organization
4. Steering Committee Responsibilities
5. Planning Process Overview
6. Schedule
7. Questions/Next Steps/Wrap Up



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## Hazard Mitigation Overview

Mitigation planning happens before a disaster strikes. It results in safer, more resilient communities – reducing risk for the residents, businesses, and critical services in Sussex County.

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## What is Hazard Mitigation?

Mitigation is a sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event



-or-

Any action taken to reduce future disaster losses




“provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability...” (CFR).

Sussex County Hazard Mitigation Plan Update


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## Hazard Mitigation Planning Overview


- What is hazard mitigation?
- How does this support resiliency and recovery?
- Why update the plan?
- What is the process?

- ✓ Authorized by the Disaster Mitigation Act of 2000
- ✓ Provides an overview of the impacts of natural hazards on communities
- ✓ Provides a roadmap to reducing the impact of these hazards
- ✓ Requires a FEMA-approved natural hazard mitigation plan to be eligible for Pre-Disaster Mitigation Funding
- ✓ 5-year updates required to maintain eligibility




Sussex County Hazard Mitigation Plan Update



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## Why Update?

- The mitigation plan update will:
  - Help prepare for and mitigate hazards
  - Eligibility for pre- and post-disaster mitigation funding
- What is at risk in Sussex County?
- Which hazard do you think occurred the most since 2021?
  - **Scan this code to vote!**



January 2021 – December 2022	
Hazard	Occurrences
Blizzard	0
Extreme Cold, Cold/Wind Chill	0
Drought	0
Heat, Excessive Heat	0
Flood/Flash Flood	1
Hail	1
Heavy Rain	0
Hurricane/ Tropical Storm/ Tropical Depression	1
Lightning/ Thunderstorm	28
Tornado/Funnel Cloud	0
Wind	0
Winter Weather	24
Wildfire	0
TOTAL	55

Source: NOAA NCEI Severe Weather Inventory 2022

Sussex County Hazard Mitigation Plan Update



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## Project Organization

Working with individuals, agencies, neighboring jurisdictions, businesses, and other partners for a successful mitigation planning process.

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## Project Organization



- 

**Core Planning Team**  
Sussex County  
Division of  
Emergency  
Management  
Tetra Tech
- 

**Steering Committee**
- Planning Partnership**


- 

**Stakeholders**
- 

**New Jersey  
Office of  
Emergency  
Management  
(NJOEM)**

Sussex County Hazard Mitigation Plan Update



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# Steering Committee Role and Responsibilities



Provide Guidance and Leadership



Oversee the Planning Process




Act as Points of Contact for Planning Partners and Stakeholders

Sussex County Hazard Mitigation Plan Update



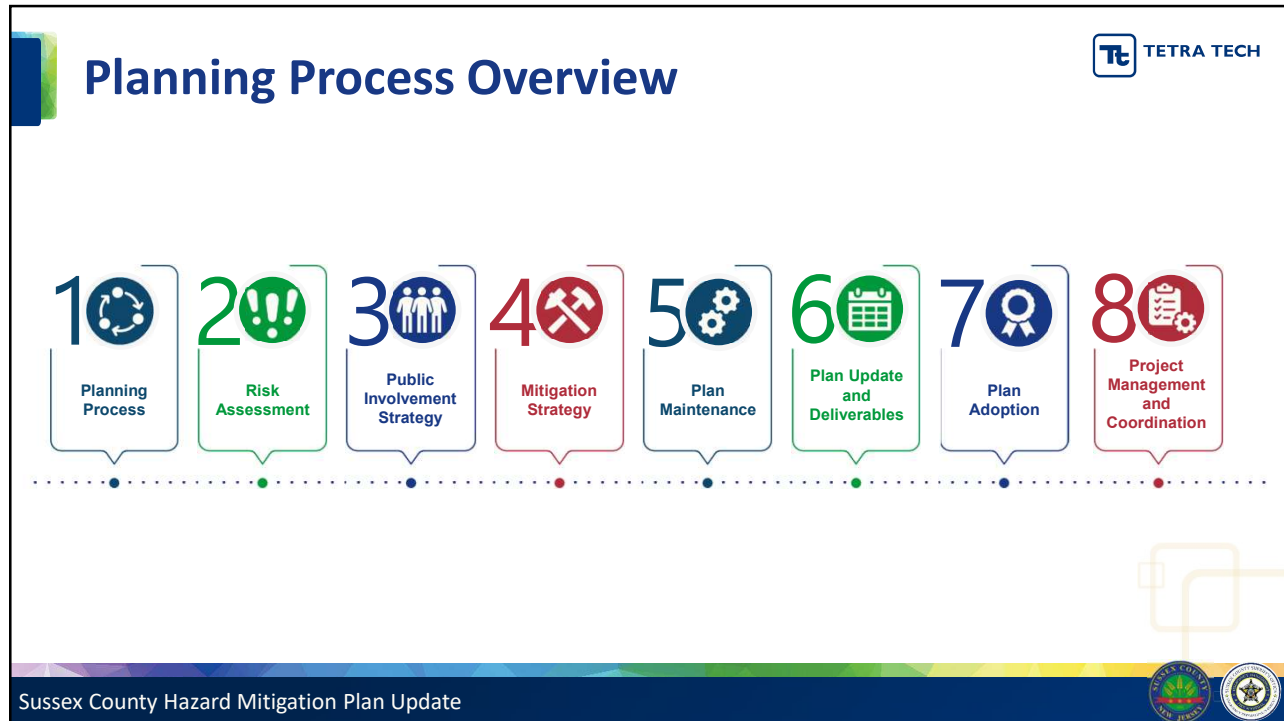
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## Planning Process Overview

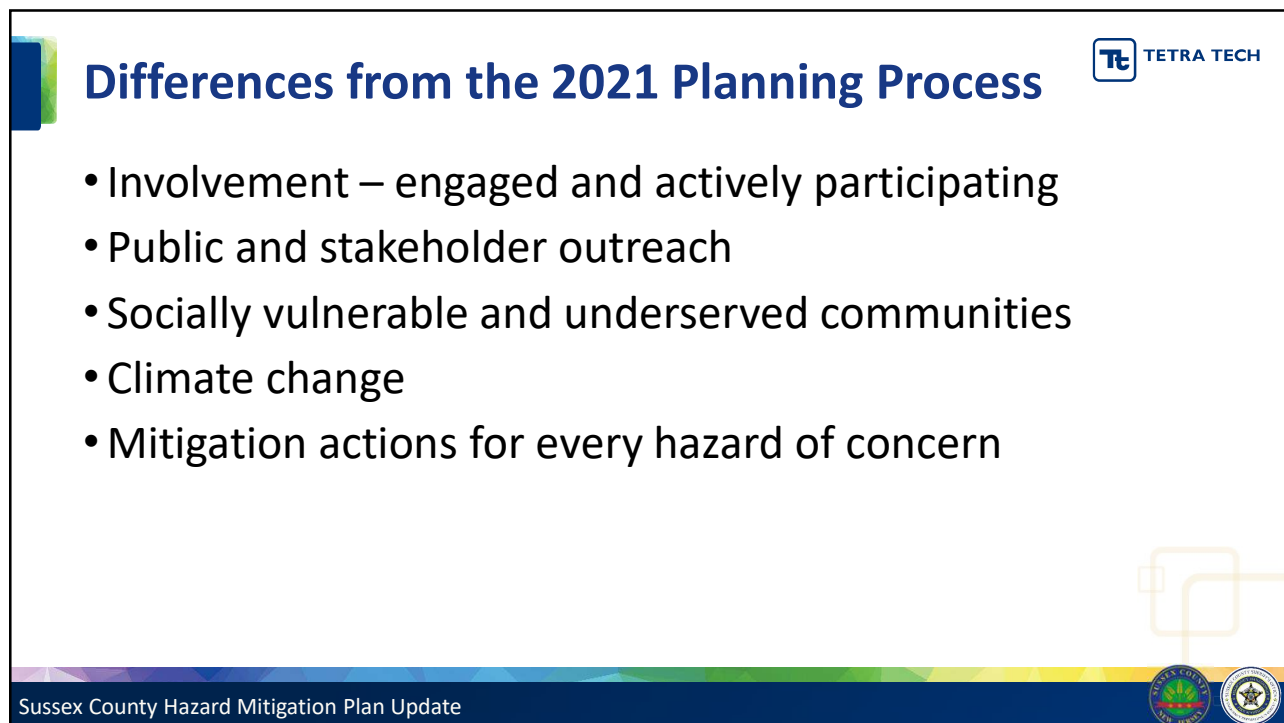


A well-defined planning process is essential to the success of Sussex County's HMP Update.

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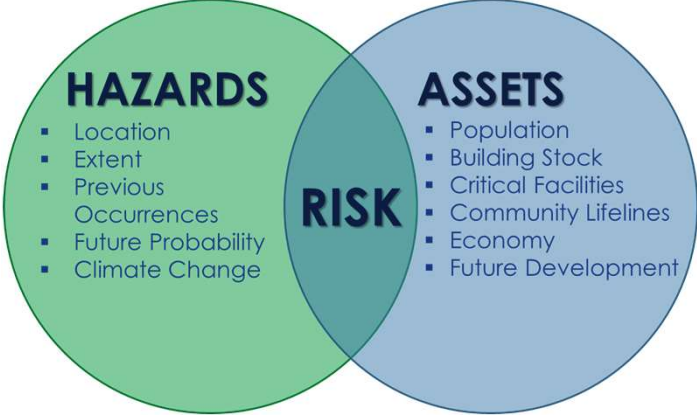
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# Update Risk Assessment





**HAZARDS**


- Location
- Extent
- Previous Occurrences
- Future Probability
- Climate Change

**ASSETS**

- Population
- Building Stock
- Critical Facilities
- Community Lifelines
- Economy
- Future Development


- Update Assets
- Examine Previous Impacts
- Analyze Risks
- Review with Steering Committee
- Risk Assessment Meeting

Sussex County Hazard Mitigation Plan Update




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# Hazards of Concern




Dam Failure




Disease Outbreak




Drought




Earthquake




Extreme Temperature




Flood




Geologic Hazards




Hurricane & Tropical Storm




Infestation & Invasive Species




Nor'Easter




Severe Weather




Severe Winter Weather



Wildfire



Sussex County Hazard Mitigation Plan Update



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## EXERCISE Confirming Hazards of Concern

- **Looking at the hazards included in the 2021 plan...**
  - Have additional hazards impacted the County since 2021?
  - Have hazards been mitigated and no longer cause damage?
  - Should hazards be regrouped to align with the current NJ State HMP?
  - Should additional hazards be included?
- **How have hazards impacted the county?**
- **Where are your problem areas?**
- **Input needed!**
  - Use the link in the chat (or scan the QR code) to complete a survey for the hazards of concern.



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## Critical Facilities and Community Lifelines



- **Critical Facilities** provide essential services to the community, especially before, during, and after a disaster.
- **Community Lifelines** provide services that allow continuity of operations of critical business and government functions, and crucial to health and safety of residents.








Sussex County Hazard Mitigation Plan Update





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## Critical Facilities and Community Lifelines




 <p><b>Safety and Security</b></p> <ul style="list-style-type: none"> <li>• Correctional</li> <li>• Dam</li> <li>• DPW</li> <li>• EOC</li> <li>• Fire/EMS</li> <li>• Government / Municipal Hall</li> <li>• Police</li> <li>• School</li> </ul>	 <p><b>Food, Water, Shelter</b></p> <ul style="list-style-type: none"> <li>• Potable Pump Station</li> <li>• Shelter</li> <li>• Wastewater Pump</li> <li>• Potable Well</li> </ul>	 <p><b>Health and Medical</b></p> <ul style="list-style-type: none"> <li>• EMS</li> <li>• Medical</li> <li>• Public Health</li> <li>• Senior Care Facilities</li> </ul>	 <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>• Electric Substation</li> </ul>
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Sussex County Hazard Mitigation Plan Update



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## Critical Facilities and Community Lifelines



 <p><b>Communications</b></p> <ul style="list-style-type: none"> <li>• Communication</li> </ul>	 <p><b>Transportation</b></p> <ul style="list-style-type: none"> <li>• Airport</li> </ul>	 <p><b>Hazardous Materials</b></p> <ul style="list-style-type: none"> <li>• None Identified</li> </ul>
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Sussex County Hazard Mitigation Plan Update

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• **What additional facilities and lifelines should we add? Types to consider:**

- Food pantries, grocery stores, senior nutrition
- Organizations that provide services to populations in need
- Others?

**EXERCISE**  
Review and Update  
Critical Facilities

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**Mitigation Strategy**




- **Goals**
  - What outcomes do you want to achieve?
- **Actions**
  - What specific actions will be taken to reduce hazard risk?
- **Action Plan**
  - How will the actions be prioritized and implemented?



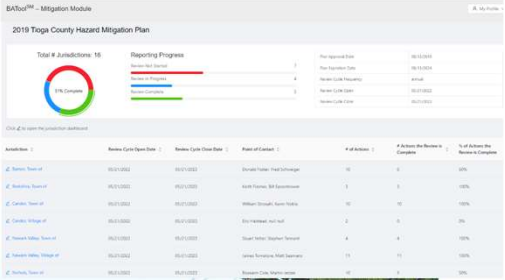

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# Review Your Previous Mitigation Strategy



## BATool<sup>SM</sup> Program



- Update the 2021 mitigation actions through the BATool<sup>SM</sup> – less paperwork!
- Refresher training for planning partners
- Populate 2024 mitigation actions

Sussex County Hazard Mitigation Plan Update


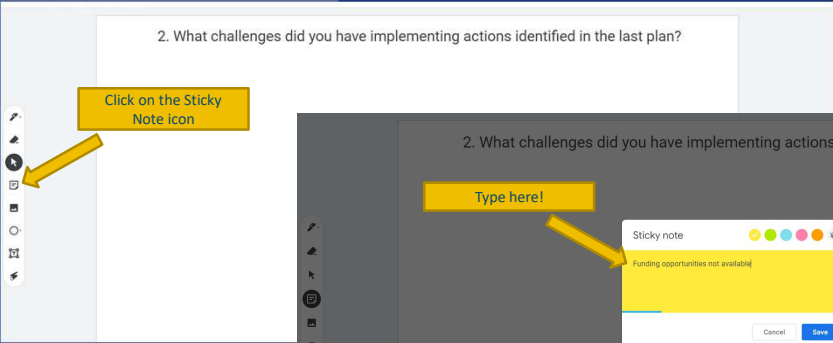
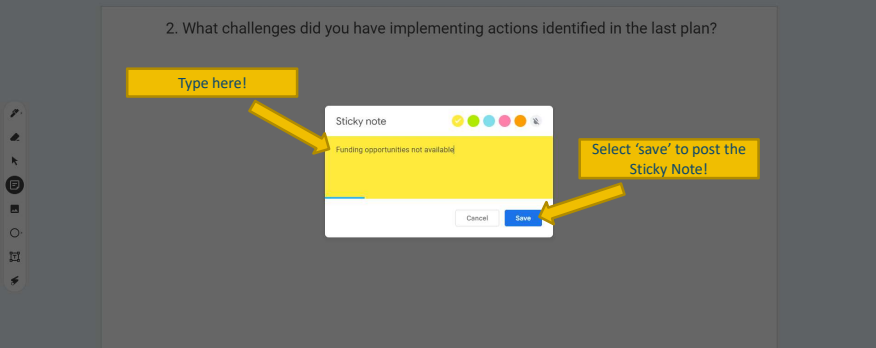



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# EXERCISE

## Implementing 2021 Actions

- Looking at the actions included in the 2021 plan...
  - What challenges did you have implementing these projects?

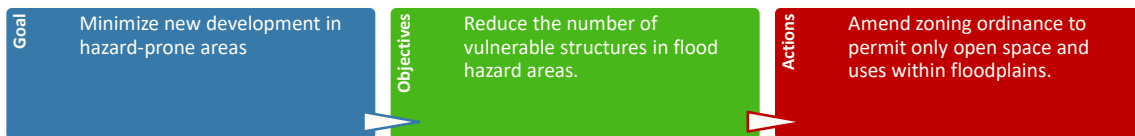




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# Goals and Objectives – Review and Update



Goal Number	Goal	Modify, Add, or Remove?
G-1	Protect Life	
G-2	Protect Property	
G-3	Increase Preparedness and Awareness	
G-4	Develop and Maintain an Understanding of Risks from Hazards	
G-5	Enhance Mitigation Capabilities to Reduce Hazard Vulnerabilities	
G-6	Support Continuity of Operations Pre-, During, and Post- Hazard Events	
G-7	Address Long-Term Vulnerabilities from High Hazard Dams	
Additional Goals?		

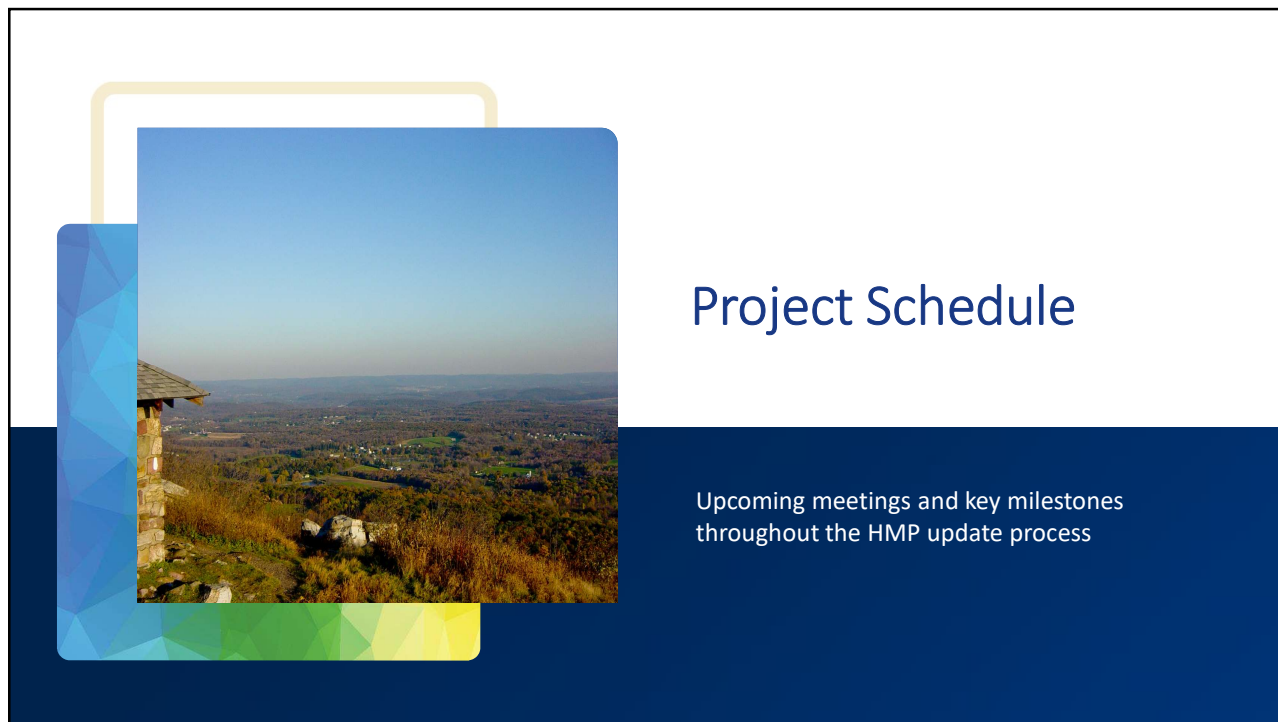


# Public Outreach Strategy



- Public Outreach Toolkit
  - Social media templates and posts
  - Press release templates
  - Printable materials
- Surveys
  - Stakeholders
  - Neighboring communities
  - Public
- County Website
- StoryMap

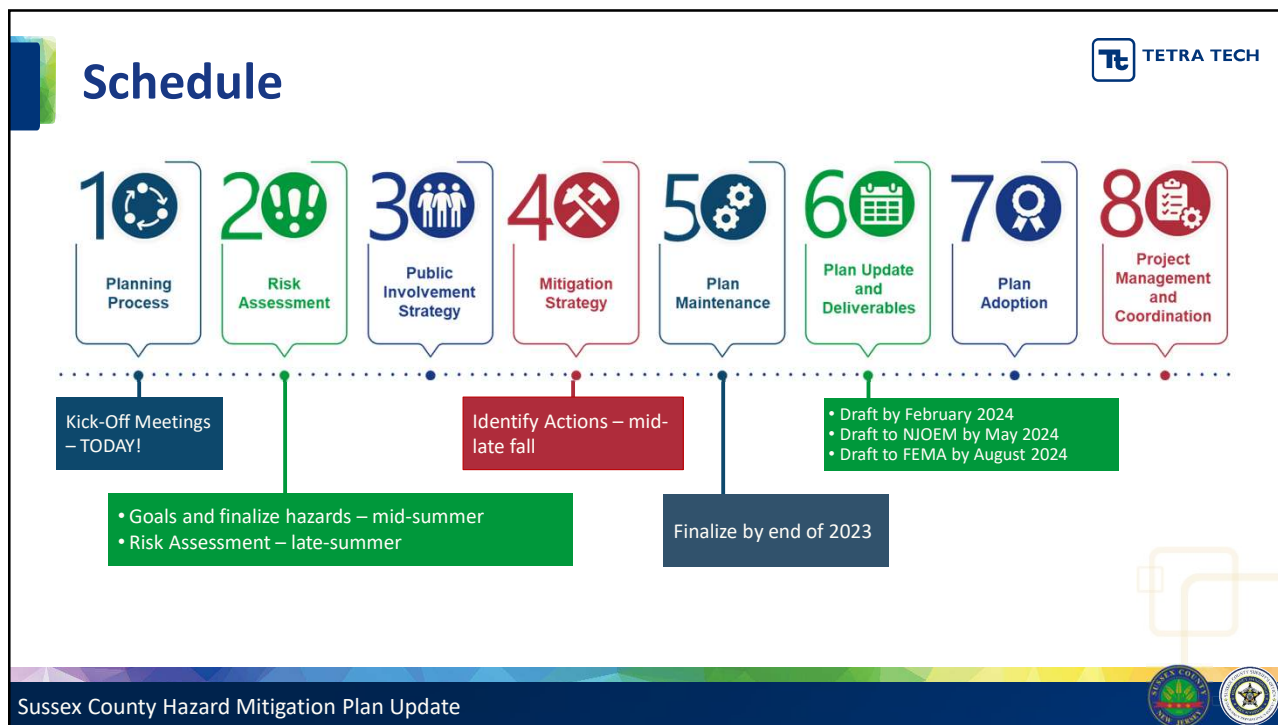




# Project Schedule

Upcoming meetings and key milestones throughout the HMP update process

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## Schedule

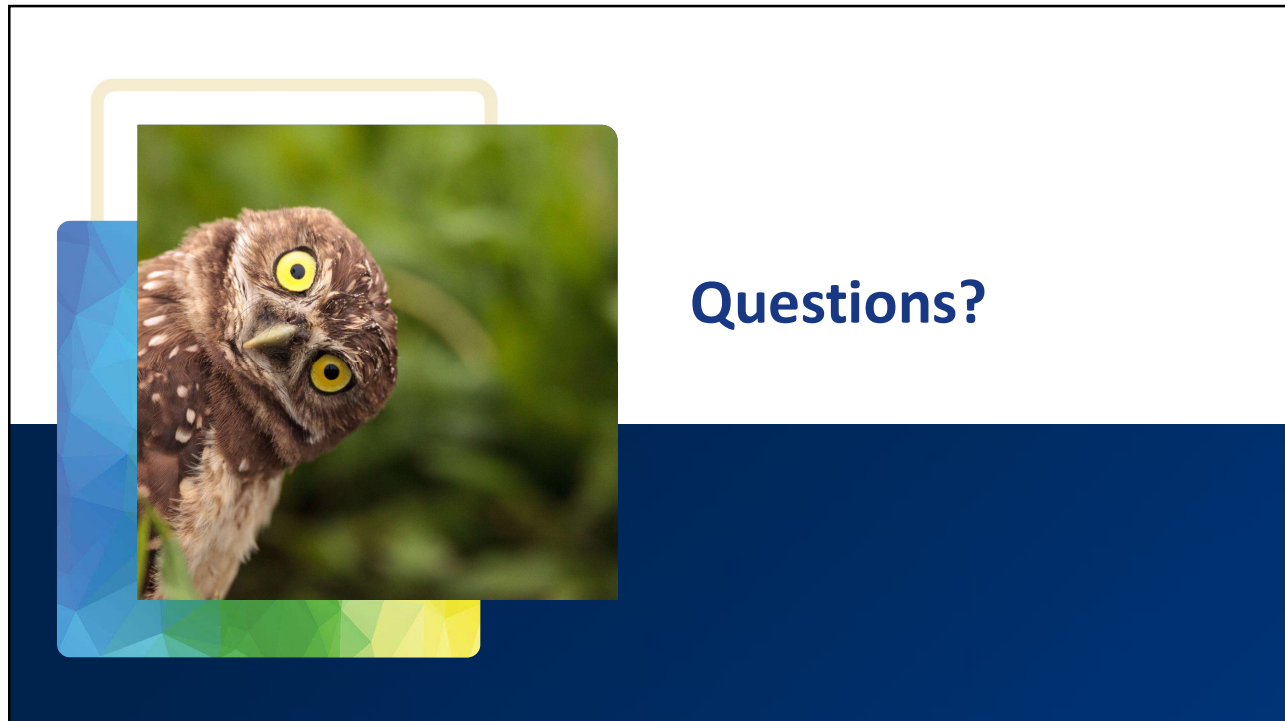
TETRA TECH

- 1 Planning Process**  
Kick-Off Meetings – TODAY!
- 2 Risk Assessment**  
• Goals and finalize hazards – mid-summer  
• Risk Assessment – late-summer
- 3 Public Involvement Strategy**
- 4 Mitigation Strategy**  
Identify Actions – mid-late fall
- 5 Plan Maintenance**  
Finalize by end of 2023
- 6 Plan Update and Deliverables**  
• Draft by February 2024  
• Draft to NJOEM by May 2024  
• Draft to FEMA by August 2024
- 7 Plan Adoption**
- 8 Project Management and Coordination**

Sussex County Hazard Mitigation Plan Update



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**Planning Partnership  
Kick-Off Meeting  
Materials**

**Sussex County, NJ – 2024 HMP Update  
Planning Partnership Kick-off | Meeting Agenda  
March 15, 2023 @ 7:00PM**



Call-In Number: 646-751-8477

Meeting ID: 212 854 133 277

Passcode: ziRzHd

[Join Online Here](#)

### Welcome & Introductions

#### Scope and Schedule

- Brief review of hazard mitigation planning
- Plan approved by December 2024
- In-Kind Tracking

#### Role and Responsibilities

- Organizing your Mitigation Team
- Outreach & Engagement
  - Municipal Website, Social Media, Newsletters
- Surveys:
  - Stakeholder: <https://www.surveymonkey.com/r/SussexStakeholderSurvey2026>
  - Citizen: <https://www.surveymonkey.com/r/SussexPublicSurvey2026>
- Letters of Intent to Participate
- Jurisdictional Annexes
  - Annex Development Workshops

#### Information and Data Collection

- Critical Facilities and Community Lifelines
  - Critical facilities and infrastructure provide services and functions essential to a community, especially during and after a disaster.
  - A community lifeline, a type of critical facility, enables the continuous operation of government functions and critical business and is essential to human health and safety or economic security.

#### Review 2021 HMP

- Hazards of Concern
- Mitigation Progress since 2021 & Updating the Mitigation Strategy

#### Next Steps

- Attend **one** Annex Development Workshop
- Provide update to critical facilities list

#### Contact Information

Alison Miskiman ([alison.miskiman@tetrattech.com](mailto:alison.miskiman@tetrattech.com); 973-630-8045)

Heather Apgar ([heather.apgar@tetrattech.com](mailto:heather.apgar@tetrattech.com); 973-630-8046)

Sussex County, NJ – Hazard Mitigation Plan 2024 Update  
 Planning Partnership Kick-Off Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Planning Partnership Kickoff
<b>Location of Meeting:</b>	Teleconference
<b>Date of Meeting:</b>	March 15, 2023   11:00AM – 12:00PM

<p><b>Attendees:</b></p> <ul style="list-style-type: none"> <li>• <b>Sussex County</b> <ul style="list-style-type: none"> <li>○ Robert Haffner, Sussex County Division of Emergency Management</li> <li>○ Jen Van Der Wende, Sussex County Division of Emergency Management</li> <li>○ Ashley Havens, Division of Public Works; Office of Roads</li> <li>○ David Kunz, Manager, GIS Management</li> <li>○ Scott House, Division of Public Works; Office of Roads</li> </ul> </li> <li>• <b>Andover (Twp)</b> <ul style="list-style-type: none"> <li>○ Chief Eric Danielson, Emergency Management Coordinator</li> <li>○ Stephanie Pizzulo, Land Use Administrator</li> </ul> </li> <li>• <b>Byram (Twp)</b> <ul style="list-style-type: none"> <li>○ Joseph Sabatini, Township Manager</li> <li>○ Mike Orgera, Superintendent - DPW</li> <li>○ Phil Crosson, Deputy Manager</li> </ul> </li> <li>• <b>Hampton (Twp)</b> <ul style="list-style-type: none"> <li>○ Edward Hayes, Emergency Management Coordinator</li> <li>○ Jessica M. Caruso, Township Administrator</li> </ul> </li> <li>• <b>Hardyston (Twp)</b> <ul style="list-style-type: none"> <li>○ Michael Vreeland, Engineer</li> </ul> </li> <li>• <b>Lafayette (Twp)</b> <ul style="list-style-type: none"> <li>○ Jim Ando, Lafayette DPW</li> <li>○ Michael Vreeland, Engineer</li> <li>○ Richard Hughes, Committeeman/EMC</li> <li>○ Stephanie Pizzulo, Land Use Administrator</li> </ul> </li> <li>• <b>Montague (Twp)</b> <ul style="list-style-type: none"> <li>○ Dave Coss, OEM Coordinator</li> <li>○ Kyle Gottemoller, OEM</li> </ul> </li> <li>• <b>Wantage (Twp)</b> <ul style="list-style-type: none"> <li>○ Michael Restel, Administrator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Newton (T)</b> <ul style="list-style-type: none"> <li>○ Dan Finkle, Deputy OEM Coordinator</li> <li>○ Kimberly Williams, Community Development Director</li> </ul> </li> <li>• <b>Ogdensburg (B)</b> <ul style="list-style-type: none"> <li>○ Michael Vreeland, Engineer</li> </ul> </li> <li>• <b>Sandyston (Twp)</b> <ul style="list-style-type: none"> <li>○ Scott House, OEM</li> </ul> </li> <li>• <b>Sparta (Twp)</b> <ul style="list-style-type: none"> <li>○ James Zepp, Director of Public Works</li> <li>○ Tom McIntyre, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Stanhope (B)</b> <ul style="list-style-type: none"> <li>○ Brian McNeilly, Borough Administrator</li> </ul> </li> <li>• <b>Stillwater (Twp)</b> <ul style="list-style-type: none"> <li>○ Michael Vreeland, Engineer</li> </ul> </li> <li>• <b>Sussex (B)</b> <ul style="list-style-type: none"> <li>○ Floyd Southard, OEM Coordinator</li> <li>○ Mario Poggi, Economic Development Committee</li> </ul> </li> <li>• <b>Vernon (Twp)</b> <ul style="list-style-type: none"> <li>○ Dan Young, Police Chief/Deputy OEM Coordinator</li> <li>○ Ed Babcock, Director of Public Works</li> <li>○ Howie lazier</li> </ul> </li> <li>• <b>Walpack (Twp)</b> <ul style="list-style-type: none"> <li>○ Michael Vreeland, Engineer</li> </ul> </li> <li>• <b>NJSP</b> <ul style="list-style-type: none"> <li>○ Clinton Pagano, SFC, NJOEM North Region</li> </ul> </li> <li>• <b>Tetra Tech</b> <ul style="list-style-type: none"> <li>○ Alison Miskiman, Tetra Tech</li> <li>○ Heather Apgar, Tetra Tech</li> </ul> </li> </ul>
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Sussex County, NJ – Hazard Mitigation Plan 2024 Update  
 Planning Partnership Kick-Off Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Planning Partnership Kickoff
<b>Location of Meeting:</b>	Teleconference
<b>Date of Meeting:</b>	March 15, 2023   7:00PM – 7:40PM

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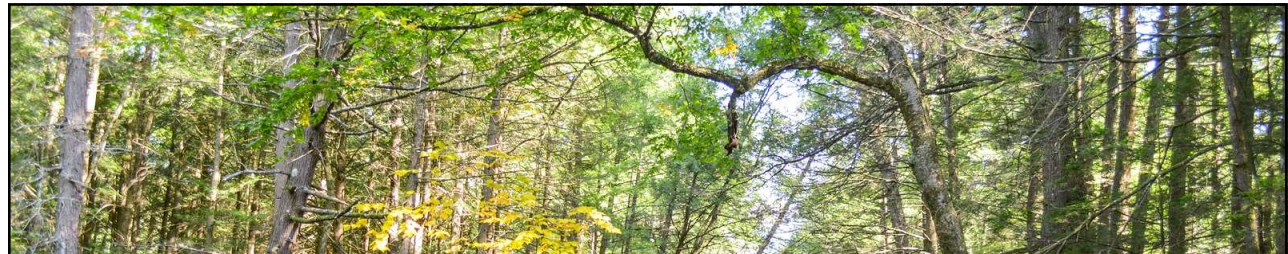


# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2024 Update

Planning Partnership Kick-Off Meeting  
March 15, 2023 | 11:00 am

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

1



## Today's Agenda

1. Welcome and Introductions
2. Hazard Mitigation Planning Overview
3. Project Organization
4. Planning Team Responsibilities
5. Planning Process Overview
6. Schedule
7. Questions/Next Steps/Wrap Up




2




## Hazard Mitigation Overview

Mitigation planning happens before a disaster strikes. It results in safer, more resilient communities – reducing risk for the residents, businesses, and critical services in Sussex County.

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## Hazard Mitigation Planning Overview



- ✓ Authorized by the Disaster Mitigation Act of 2000
- ✓ Provides an overview of the impacts of natural hazards on communities
- ✓ Provides a roadmap to reducing the impact of these hazards
- ✓ Requires a FEMA-approved natural hazard mitigation plan to be eligible for Pre-Disaster Mitigation Funding
- ✓ 5-year updates required to maintain eligibility

- What is hazard mitigation?
- Why update the plan?
- What is the process?

Sussex County Hazard Mitigation Plan Update

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# What is Hazard Mitigation?

Mitigation is a sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

-or-

Any action taken to reduce future disaster losses

“provides the blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and local ability...” (CFR).

Sussex County Hazard Mitigation Plan Update

5

# Why Update?

- The mitigation plan update will:
  - Help prepare for and mitigate hazards
  - Eligibility for pre- and post-disaster mitigation funding
  - Incorporate new FEMA requirements
- What is at risk in Sussex County?
- Which hazard do you think occurred the most since 2021?
  - Scan this code to vote!

January 2021 – December 2022	
Hazard	Occurrences
Blizzard	0
Extreme Cold, Cold/Wind Chill	0
Drought	0
Heat, Excessive Heat	0
Flood/Flash Flood	1
Hail	1
Heavy Rain	0
Hurricane/ Tropical Storm/ Tropical Depression	1
Lightning/ Thunderstorm	28
Tornado/Funnel Cloud	0
Wind	0
Winter Weather	24
Wildfire	0
<b>TOTAL</b>	<b>55</b>

Source: NOAA NCEI Severe Weather Inventory 2022

Sussex County Hazard Mitigation Plan Update

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## Differences from the 2021 Planning Process



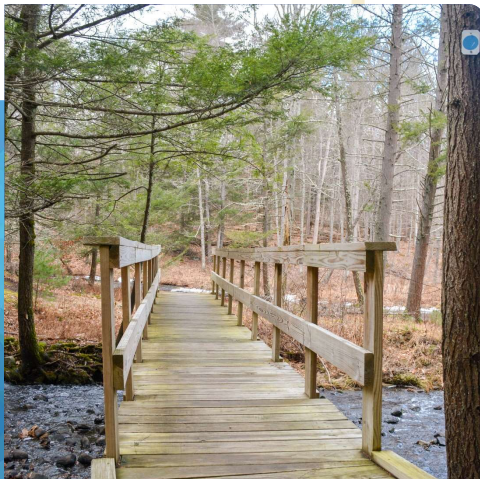
- Involvement – engaged and actively participating
- Public and stakeholder outreach
- Socially vulnerable and underserved communities
- Climate change
- Mitigation actions for every hazard of concern

Sussex County Hazard Mitigation Plan Update



7

## Project Organization

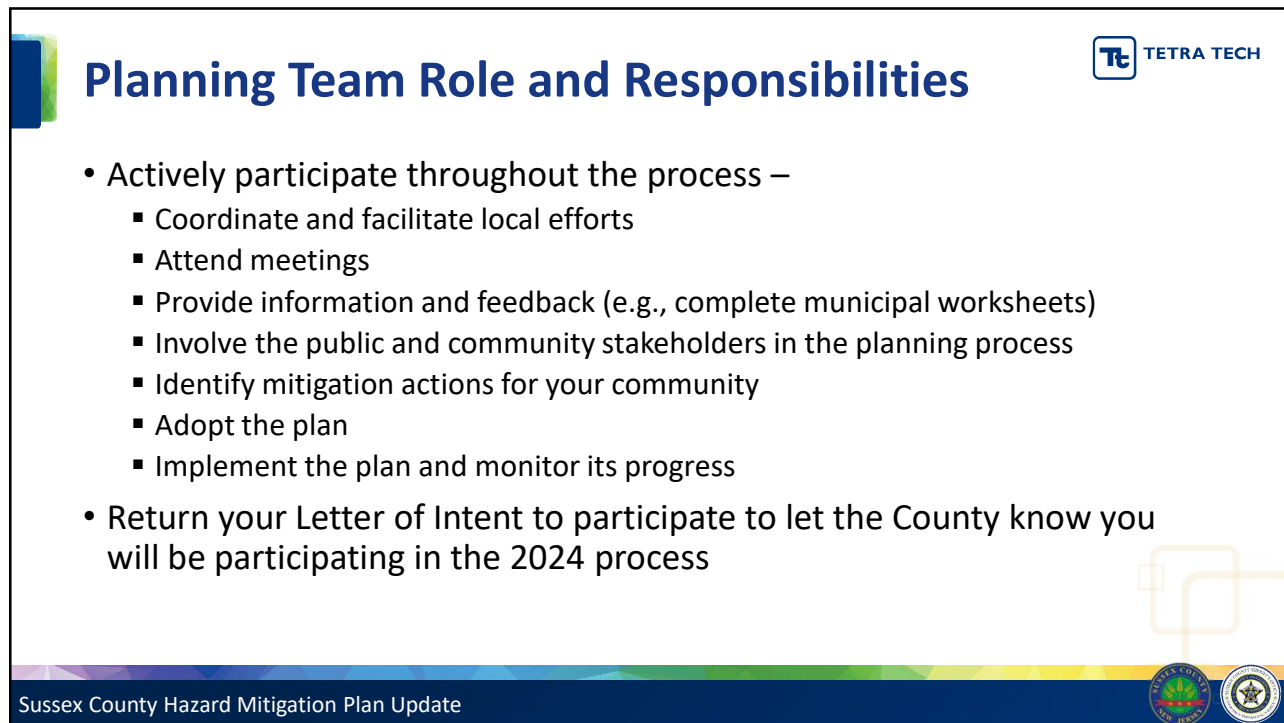


Working with individuals, agencies, neighboring jurisdictions, businesses, and other partners for a successful mitigation planning process.

8




9





10

## Letters of Intent to Participate




Jurisdiction	LOIP Received?	Jurisdiction	LOIP Received?
Andover (B)		Lafayette (Twp)	
Andover (Twp)	X	Montague (Twp)	X
Branchville (B)	X	Newton (T)	
Byram (Twp)	X	Ogdensburg (B)	X
Frankford (Twp)	X	Sandyston (Twp)	
Franklin (B)		Sparta (Twp)	X
Fredon (Twp)		Stanhope (B)	
Green (Twp)		Stillwater (Twp)	
Hamburg (B)		Sussex (B)	
Hampton (Twp)		Vernon (Twp)	
Hardyston (Twp)		Walpack (Twp)	
Hopatcong (B)		Wantage (Twp)	



Sussex County Hazard Mitigation Plan Update



11

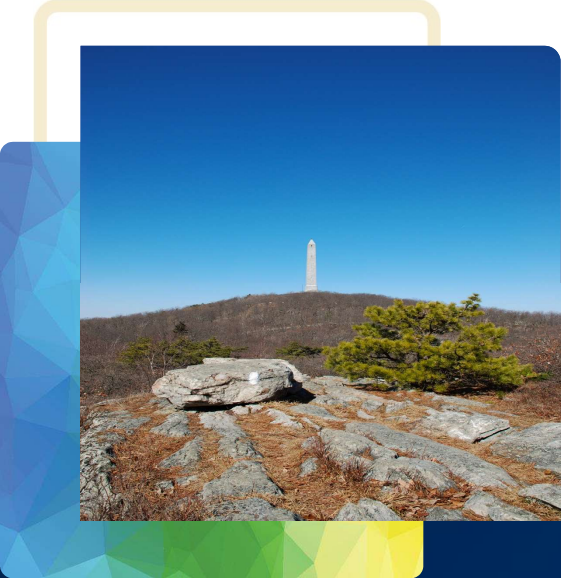
## How Do You Participate?



- Assist with the update of your jurisdictional annex
- Attend planning partnership meetings/workshops – like this one!
- Provide data and information in a timely manner
- Support public and stakeholder outreach in your jurisdiction
- Review and provide feedback on Draft and Final Plan documents
- Facilitate the adoption process – governing body must pass an Adoption Resolution
- Implement and Maintain the Plan

Sussex County Hazard Mitigation Plan Update



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## Planning Process Overview



A well-defined planning process is essential to the success of Sussex County's HMP Update.

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## Planning Process Overview





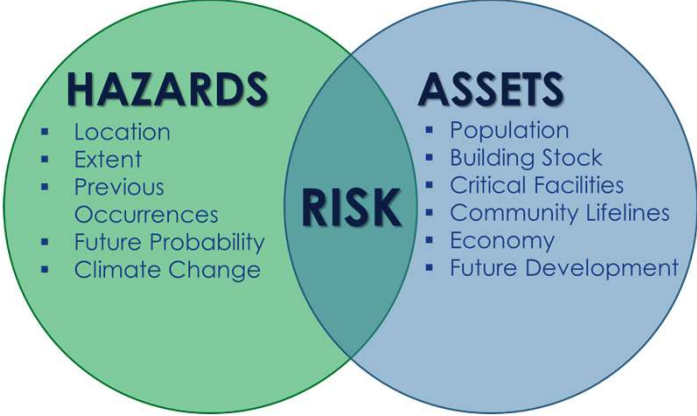
Sussex County Hazard Mitigation Plan Update

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# Update Risk Assessment






- Update Assets
- Examine Previous Impacts
- Analyze Risks
- Review with Steering Committee
- Risk Assessment Meeting

Sussex County Hazard Mitigation Plan Update




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# Hazards of Concern




Dam Failure




Disease Outbreak



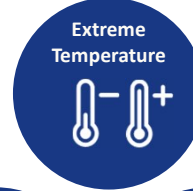
Drought




Earthquake




Extreme Temperature




Flood




Geologic Hazards




Hurricane & Tropical Storm




Infestation & Invasive Species




Nor'Easter




Severe Weather




Severe Winter Weather



Wildfire



Sussex County Hazard Mitigation Plan Update



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## EXERCISE Confirming Hazards of Concern

- **Looking at the hazards included in the 2021 plan...**
  - Have additional hazards impacted the County since 2021?
  - Have hazards been mitigated and no longer cause damage?
  - Should hazards be regrouped to align with the current NJ State HMP?
  - Should additional hazards be included?
- **How have hazards affected the county?**
- **Where are your problem areas?**
- **Input needed!**
  - Use the link in the chat (or scan the QR code) to complete a survey for the hazards of concern.



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## Critical Facilities and Community Lifelines



- **Critical Facilities** provide essential services to the community, especially before, during, and after a disaster.
- **Community Lifelines** provide services that allow continuity of operations of critical business and government functions, and crucial to health and safety of residents.








Sussex County Hazard Mitigation Plan Update





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## Critical Facilities and Community Lifelines




 <p><b>Safety and Security</b></p>	 <p><b>Food, Water, Shelter</b></p>	 <p><b>Health and Medical</b></p>	 <p><b>Energy</b></p>
<ul style="list-style-type: none"> <li>• Correctional</li> <li>• Dam</li> <li>• DPW</li> <li>• EOC</li> <li>• Fire/EMS</li> <li>• Government / Municipal Hall</li> <li>• Police</li> <li>• School</li> </ul>	<ul style="list-style-type: none"> <li>• Potable Pump Station</li> <li>• Shelter</li> <li>• Wastewater Pump</li> <li>• Potable Well</li> </ul>	<ul style="list-style-type: none"> <li>• EMS</li> <li>• Medical</li> <li>• Public Health</li> <li>• Senior Care Facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Electric Substation</li> </ul>




Sussex County Hazard Mitigation Plan Update



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## Critical Facilities and Community Lifelines



 <p><b>Communications</b></p>	 <p><b>Transportation</b></p>	 <p><b>Hazardous Materials</b></p>
<ul style="list-style-type: none"> <li>• Communication</li> </ul>	<ul style="list-style-type: none"> <li>• Airport</li> </ul>	<ul style="list-style-type: none"> <li>• None Identified</li> </ul>

Sussex County Hazard Mitigation Plan Update

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- **What additional facilities and lifelines should we add?**  
**Types to consider:**
  - Food pantries, grocery stores, senior nutrition
  - Organizations that provide services to populations in need
  - Others?

## EXERCISE

### Review and Update Critical Facilities

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## Public Outreach Strategy

- **Public Outreach Toolkit**
  - Social media templates and posts
  - Press release templates
  - Printable materials
- **Surveys**
  - Stakeholders
  - Neighboring communities
  - Public
- **County Website**
- **StoryMap**

Sussex County Hazard Mitigation Plan Update

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# Capability Assessment and Mitigation Strategy



- Capabilities
  - What does your municipality have to reduce risk to hazards?
- Goals
  - What outcomes do you want to achieve?
- Actions
  - What specific actions will be taken to reduce hazard risk?
- Action Plan
  - How will the actions be prioritized and implemented?



Sussex County Hazard Mitigation Plan Update



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# Review Your Previous Mitigation Strategy

## BATool<sup>SM</sup> Program



- Update the 2021 mitigation actions through the BATool<sup>SM</sup> – less paperwork!
- Refresher training for planning partners
- Populate 2024 mitigation actions



Assessment	Review Cycle Open Date	Review Cycle Close Date	Name of Category	# of Actions	# Actions On Review	% of Actions On Review & Complete
2021 Review	06/01/2021	06/01/2022	Stormwater Best Management Practices	10	0	0%
2021 Review	06/01/2021	06/01/2022	Wildfire Mitigation	10	0	0%
2021 Review	06/01/2021	06/01/2022	Public Safety	10	0	0%
2021 Review	06/01/2021	06/01/2022	Public Safety	10	0	0%
2021 Review	06/01/2021	06/01/2022	Public Safety	10	0	0%
2021 Review	06/01/2021	06/01/2022	Public Safety	10	0	0%



Hazard Mitigation Plan Review Tool

Process Reporting

Tetra Tech logo

SPEED LIMIT 50

Sussex County Hazard Mitigation Plan Update



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# EXERCISE

## Implementing 2021 Actions

- Looking at the actions included in the 2021 plan...
  - What challenges did you have implementing these actions?



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## Update Other Sections of the Plan



### Volume I

- Section 1 – Introduction
- Section 2 – Planning Process
- Section 3 – County Profile
- Section 4 – Risk Assessment
- Section 5 – Capability Assessment
- Section 6 – Mitigation Strategy
- Section 7 – Plan Maintenance

### Volume II

- Section 8 – Planning Partnership
- Section 9 – Jurisdictional Annexes
  - Each participating jurisdiction will have their own chapter

### Appendices


- A – Plan Adoption
- B – Participation Matrix
- C – Meeting Documentation
- D – Outreach
- E – Supplemental Data
- F – Critical Facilities
- G – Plan Review Tools
- H – Mitigation Strategy Tools
- I – Linkage Procedures




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## Plan Adoption & Integration



- Implementing your HMP...
  - Integration –
    - Link to local planning efforts
    - Hazard mitigation principles into your comprehensive master plan
    - Interagency coordination
  - Projects/Actions –
    - Explore funding options to complete projects
    - Develop grant applications
    - Implement the projects




How have YOU implemented the 2021 HMP?



Sussex County Hazard Mitigation Plan Update

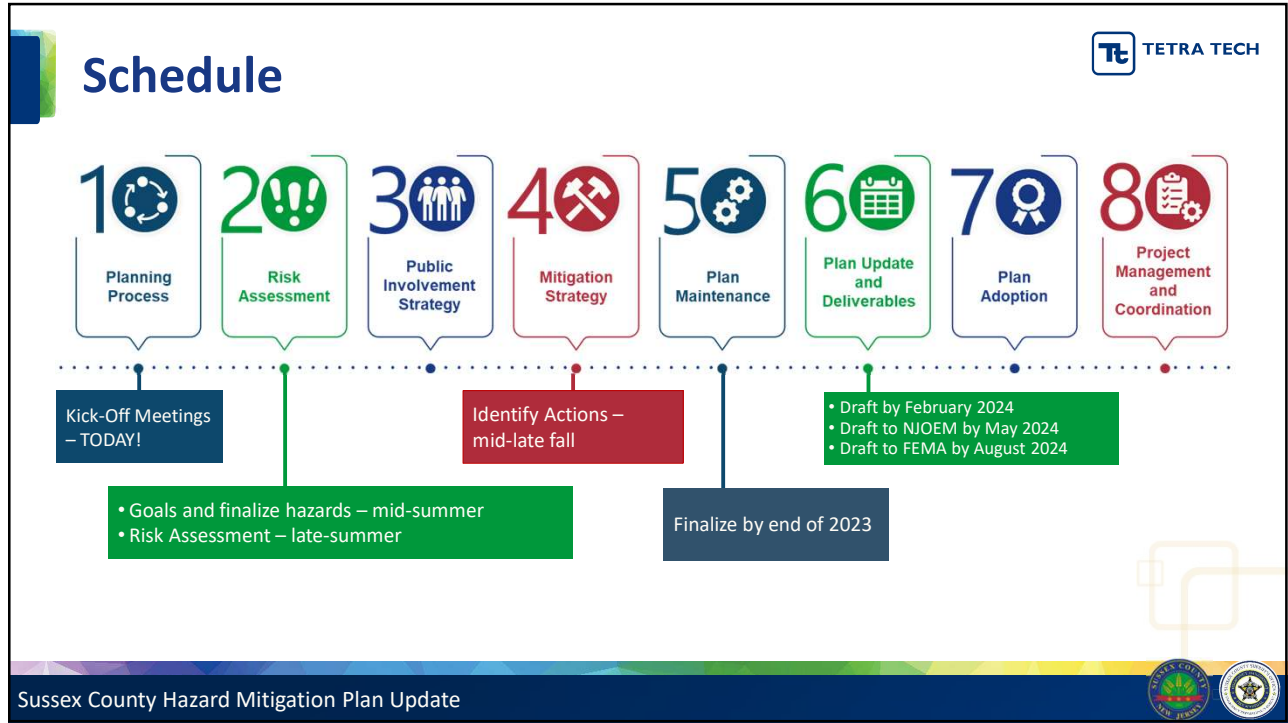
27



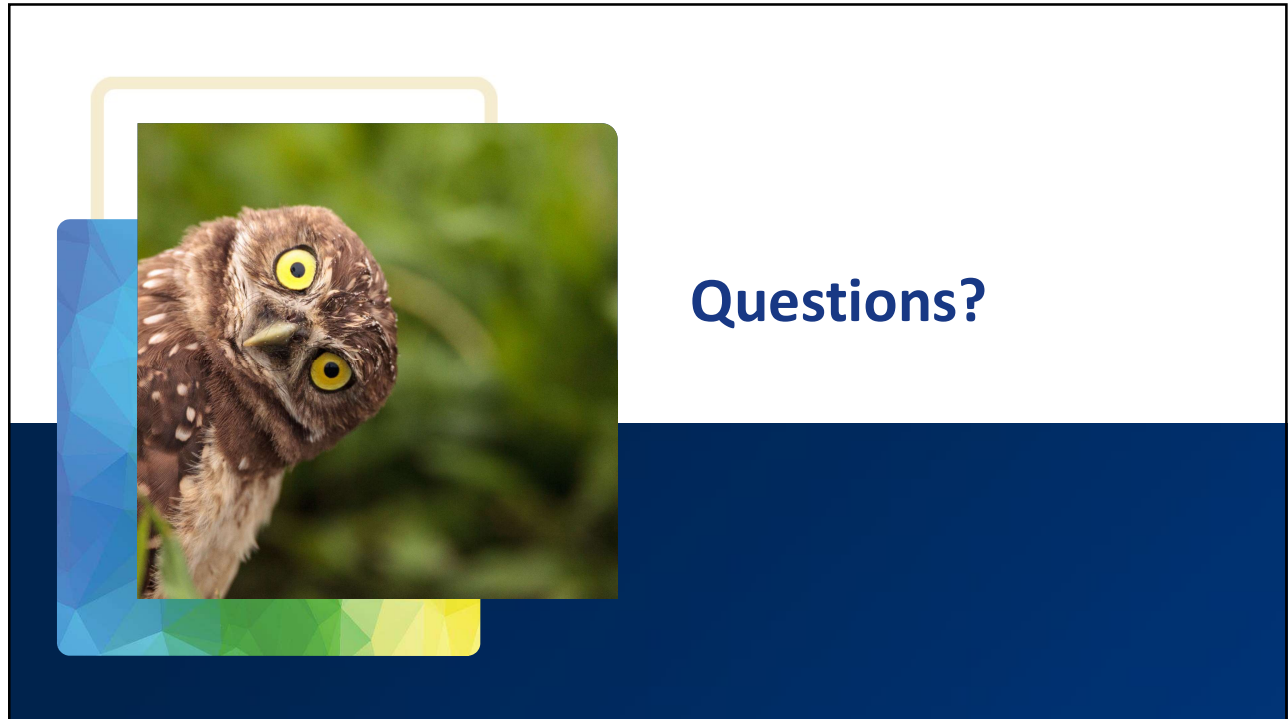
## Project Schedule

Upcoming meetings and key milestones throughout the HMP update process

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**Sussex County Project Contacts**

Bob Haffner, Emergency Management  
973-579-0380 x 2208 | [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com)

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Thank  
You!

**Steering Committee  
Risk Assessment  
Meeting Materials**



**SUSSEX COUNTY HAZARD MITIGATION PLAN UPDATE**  
**Steering Committee Risk Assessment – AGENDA**  
**MEETING DATE: April 9, 2024 – 10:00 am – 11:00 am**



**Virtual Meeting**

**Dial-In Phone Number: +1 646-751-8477; Conference ID: 734 341 037#**

**Join by Meeting: <https://msteams.link/IDVJ>**

- 1. Opening Remarks**
- 2. Project Status** - where we are in the process, public outreach
- 3. Additional Outreach Efforts**
  - **General Public**
  - **Stakeholders**
  - **Neighbors**
  - **Socially Vulnerable Populations**
- 4. Risk Assessment Overview**
  - **Results of risk assessment for each hazard**
  - **Hazards of concern risk ranking**
  - **How will this information be used in the HMP?**
- 5. SWOO**
- 6. Feedback and Input**
- 7. Next Steps**
- 8. Questions**
- 9. Adjournment**

**Sussex County Project Contacts**

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James Aumick, Deputy Coordinator  
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(973) 630-8357 | [chris.huch@tetrattech.com](mailto:chris.huch@tetrattech.com)

Jessica Stokes, MSEM, NJCEM  
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(973) 630-8017 | [jessica.stokes@tetrattech.com](mailto:jessica.stokes@tetrattech.com)

Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
Steering Committee Risk Assessment Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Steering Committee Kickoff Risk Assessment Meeting	
<b>Location of Meeting:</b>	Teleconference	
<b>Date of Meeting:</b>	April 9, 2024   10:00 a.m. – 11:00 a.m. EST	
<b>Attendees:</b>	<ul style="list-style-type: none"> <li>• Sussex County                             <ul style="list-style-type: none"> <li>○ James Aumick, Deputy Coordinator</li> <li>○ Eric Muller</li> <li>○ Steven Sugar, Deputy Coordinator</li> <li>○ Lorrain Hentz, Vision Director</li> <li>○ Jessica Caruso, Administrator</li> <li>○ Ed Hayes, OEM Coordinator</li> <li>○ Joe Sesto, Executive Director</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Tetra Tech                             <ul style="list-style-type: none"> <li>○ Chris Huch</li> <li>○ Grace Altenburg</li> </ul> </li> </ul>
<b>Agenda Summary:</b>	The purpose of the meeting was to provide an overview of the hazard mitigation planning process, discuss public and stakeholder outreach efforts, review the risk assessment results, including the hazard ranking, and introduce the SWOO exercise to the Steering Committee, and identify next steps.	
Item No.	Description	Action item(s):
1	<b>Introductions –</b> <ul style="list-style-type: none"> <li>• Each person on the call identified themselves through the chat function.</li> </ul>	-
2	<b>Project Status</b> <ul style="list-style-type: none"> <li>• On schedule                             <ul style="list-style-type: none"> <li>○ Goals and Objectives – April 2024</li> <li>○ Risk Assessment – April-May 2024</li> <li>○ Identify Actions – April-June 2024</li> <li>○ Finalize Plan Maintenance – late June 2024</li> <li>○ Draft Plan – July 2024</li> <li>○ Draft to NJOEM – mid-September 2024</li> <li>○ Draft to FEMA – November 2024</li> </ul> </li> <li>• Municipal Participation Status                             <ul style="list-style-type: none"> <li>○ Have not yet received all worksheets from all municipalities. Assigned planner will be reaching out.</li> </ul> </li> <li>• Public Outreach and Engagement                             <ul style="list-style-type: none"> <li>○ Post links on social media and department/agency websites</li> <li>○ Stakeholder and neighboring community surveys have been distributed</li> <li>○ Make efforts to reach out to:                                     <ul style="list-style-type: none"> <li>▪ General Public</li> <li>▪ Stakeholders</li> <li>▪ Neighbors</li> </ul> </li> </ul> </li> <li>• Socially Vulnerable Populations</li> </ul>	<b>Steering Committee</b> <ul style="list-style-type: none"> <li>• Post links on social media and department/agency websites</li> <li>• Make efforts to reach out to general public, stakeholders, neighbors, and socially vulnerable populations</li> </ul>





<p>3</p>	<p><b>Risk Assessment Overview</b></p> <ul style="list-style-type: none"> <li>• Risk is defined as a function of :                     <ul style="list-style-type: none"> <li>○ Hazard                             <ul style="list-style-type: none"> <li>▪ Source of potential danger or adverse condition</li> </ul> </li> <li>○ Exposure                             <ul style="list-style-type: none"> <li>▪ Manmade or natural features that are exposed to the hazard</li> </ul> </li> <li>○ Vulnerability                             <ul style="list-style-type: none"> <li>▪ Damage susceptibility of the exposed features</li> </ul> </li> <li>○ Adaptive Capacity (or capability)                             <ul style="list-style-type: none"> <li>▪ Plans/policies</li> <li>▪ Response/recovery</li> </ul> </li> <li>○ Financial resources</li> </ul> </li> </ul>	<p>-</p>
<p>4</p>	<p><b>Risk Assessment Results</b></p> <ul style="list-style-type: none"> <li>• Provided an overview of the results from the risk assessment for each hazard. Results were a combination of qualitative and quantitative data.</li> <li>• Dam Failure: 136 dams in the County (40 are HDD). <b>MED 4.4</b></li> <li>• Disease Outbreak: Entire County is susceptible. <b>LOW 3.5</b></li> <li>• Drought: Entire County is susceptible; relies on surface water. <b>LOW 3.6</b></li> <li>• Earthquake: Entire County is susceptible. Recently an earthquake happened in April 2024. <b>LOW 3.8</b></li> <li>• Flood: 682 people/462 Buildings exposed to 1% and 856 people/562 Buildings exposed to 0.2%. <b>MED 4.2</b></li> <li>• Geological Hazards: over 41 thousand people exposed to Karst soils. <b>MED 4.1</b></li> <li>• Hazardous Materials: over 26 thousand people within a mile of a hazardous site. <b>MED 4.0</b></li> <li>• Hurricane: Entire county is susceptible. <b>MED 4.8</b></li> <li>• Infestation: The entire County is vulnerable. <b>LOW 2.5</b></li> <li>• Nor’easter: Entire County is exposed. <b>HIGH 5.4</b></li> <li>• Severe Weather: The entire County is susceptible. <b>HIGH 6.3</b></li> <li>• Winter Storm: The entire County is exposed. <b>HIGH 6.3</b></li> <li>• Wildfire: 2% of the population is exposed (2,834). Impacts from Wildfires occurring elsewhere can also have effects on the County. <b>MED 4.2</b></li> </ul>	<p>-</p>
<p>5</p>	<p><b>Hazard Rankings</b></p> <ul style="list-style-type: none"> <li>• The calculated probability of a hazard occurring based on historical data</li> <li>• <i>Impacts to <u>people</u>, <u>property</u>, and the <u>economy</u></i> based on GIS data and analysis of exposure.</li> <li>• The degree to which <i><u>climate change</u></i> will affect future occurrences based on best available data.</li> <li>• The degree to which existing <i><u>capabilities</u></i> (the ability of your community to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness) decrease overall risk.</li> <li>• Ranking:                     <ul style="list-style-type: none"> <li>○ <b>High:</b> Severe Winter Weather, Severe Weather, Nor’easter</li> <li>○ <b>Medium:</b> Hurricane, Dam Failure, Flood, Wildfire, Hazardous Materials</li> <li>○ <b>Low:</b> Earthquake, Drought, Disease Outbreak, Geological Hazards, Infestation</li> </ul> </li> </ul>	<p>-</p>
<p>6</p>	<p><b>Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)</b></p>	<p><b>Steering Committee</b></p>



	<ul style="list-style-type: none"> <li>• Strengths – what the County and communities do well; things upon which we can capitalize.</li> <li>• Weaknesses – what can be done better; what can be strengthened.</li> <li>• Obstacles – what stands in the way of implementation to prevent mitigation or response (for example regulatory, geographical, environmental, and financial issues).</li> <li>• Opportunities - actions or projects to mitigate issues or improve resilience.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete and return SWOO worksheet to Jessica Stokes.</li> </ul>
7	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Share information about the HMP Update via social media, community groups, and networks</li> <li>• Attend the Planning Partnership Risk Assessment Meeting on Thursday, April 11 @ 9:00 a.m. and 7:00 p.m. via Teams</li> <li>• Attend the Mitigation Strategy Workshop on Wednesday, May 8 at 10:00 a.m. in-person.</li> </ul>	-
8	<p><b>Questions/Discussion</b></p> <ul style="list-style-type: none"> <li>• <b>Joe Sesto:</b> <i>I think flood as medium risk is correct. We (the authority) have sufficient stormwater infrastructure.</i></li> <li>• <b>Joe Sesto:</b> <i>Having winter weather and severe weather as the top two high hazards is correct. These are high risks for us. We have seen a lot of really heavy rain in the last year.</i> <ul style="list-style-type: none"> <li>○ <b>Steve Sugar</b> <i>agrees that the preliminary rankings look accurate.</i></li> </ul> </li> <li>• <b>Steve Sugar:</b> <i>Thursday public meetings we will be in training, so we cannot make the day meeting. One of us from the County will be able to attend the PM meeting.</i></li> </ul>	-



# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2025 Update

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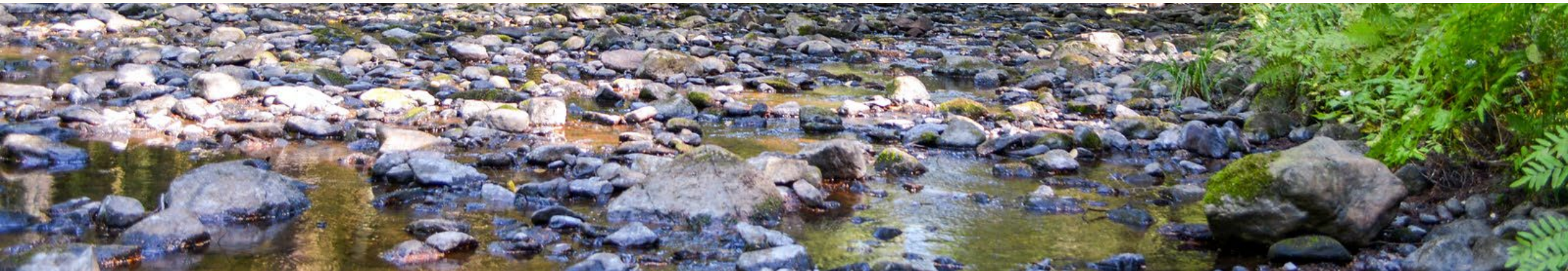
Steering Committee Risk Assessment  
Meeting  
April 9, 2024 | 10:00 am

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



# Today's Agenda

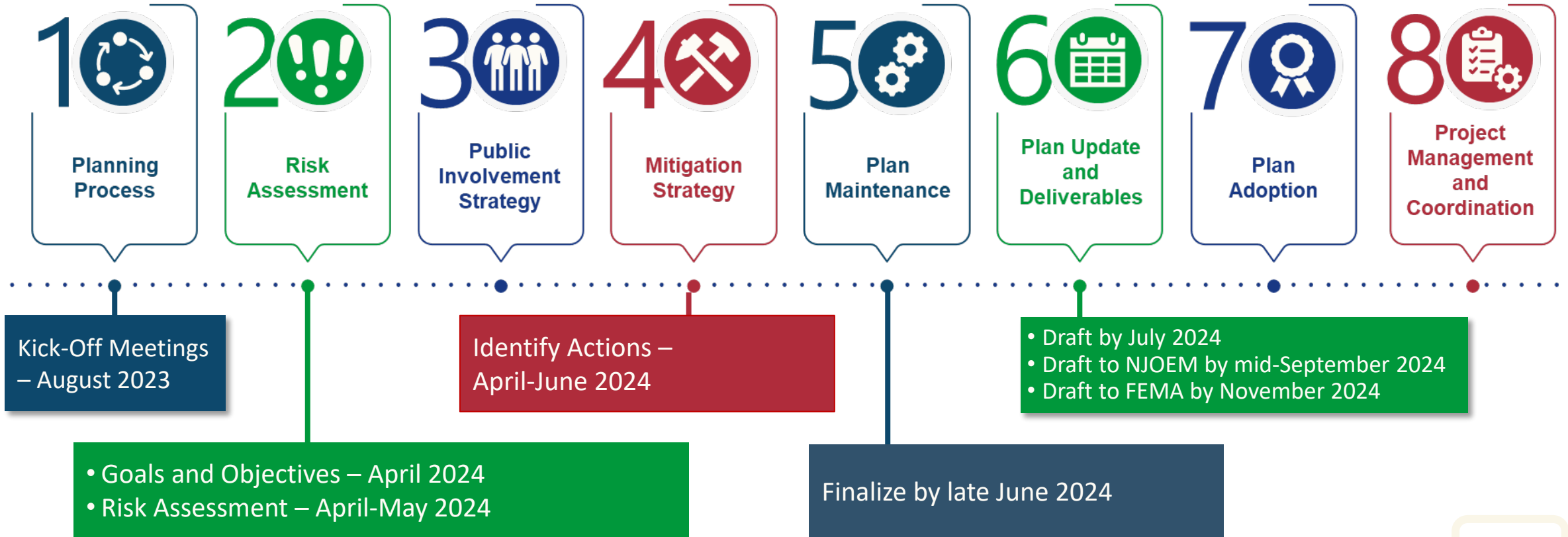
1. Welcome and Introductions
2. Project Status
3. Risk Assessment Overview
4. Feedback and Input
5. Next Steps
6. Questions/Wrap Up





# Project Status

# Schedule



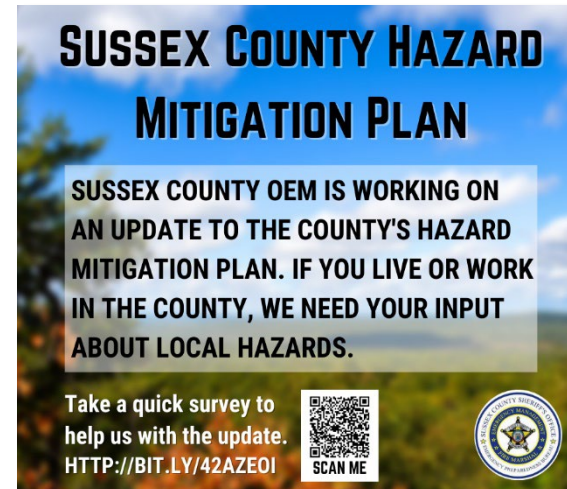
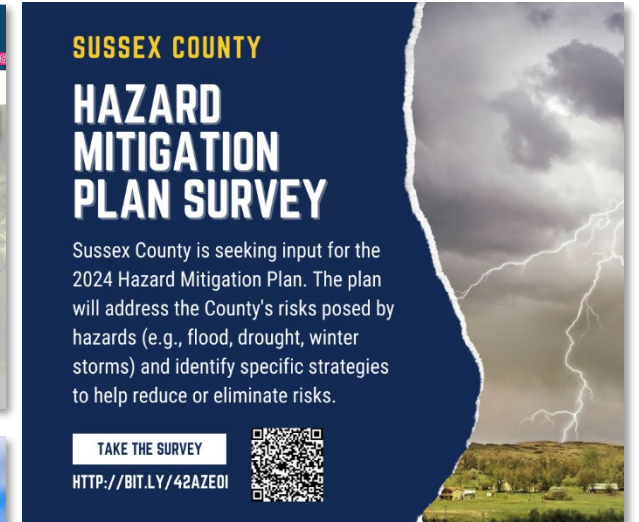
# Municipal Participation Status

- To date, we have not received all municipal worksheets. The worksheets had a due date of April 3<sup>rd</sup>. Assigned planners will be reaching out to all participants.

Municipality	Assigned Planner	Municipality	Assigned Planner	Municipality	Assigned Planner
Andover (B)	Grace	Hamburg (B)	Grace	Sandyston (Twp)	Jessica
Andover (Twp)	Grace	Hampton (Twp)	Grace	Sparta (Twp)	Jessica
Branchville (B)	Grace	Hardyston (Twp)	Grace	Stanhope (B)	Jessica
Byram (Twp)	Grace	Hopatcong (B)	Grace	Stillwater (Twp)	Jessica
Frankford (Twp)	Grace	Lafayette (Twp)	Jessica	Sussex (B)	Jessica
Franklin (B)	Grace	Montague (Twp)	Jessica	Vernon (Twp)	Jessica
Fredon (Twp)	Grace	Newton (T)	Jessica	Walpack (Twp)	Jessica
Green (Twp)	Grace	Ogdensburg (B)	Jessica	Wantage (Twp)	Jessica

# Public Outreach Strategy

- Public Outreach Toolkit
  - Social media templates and posts
  - Press release templates
  - Printable materials
- Surveys
  - Stakeholders
  - Neighboring communities
  - Public
- County Website
- StoryMap







# Risk Assessment Overview

# What is Risk?

Risk is defined as a function of :

- Hazard
  - Source of potential danger or adverse condition
- Exposure
  - Manmade or natural features that are exposed to the hazard
- Vulnerability
  - Damage susceptibility of the exposed features
- Adaptive Capacity (or capability)
  - Plans/policies
  - Response/recovery
  - Financial resources



# Purpose of Risk Assessment

- To get a better understanding of the risks you face
- Initial results based on available data
- Quantitative data (population/structures exposed, structural damages within hazard zones) used when available
- Qualitative community input (such as unmapped flood areas) integrated to adjust results
- Local community input to adjust relative rankings



# Preliminary Risk Assessment Results



# Dam Failure

Dam failures in Sussex 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

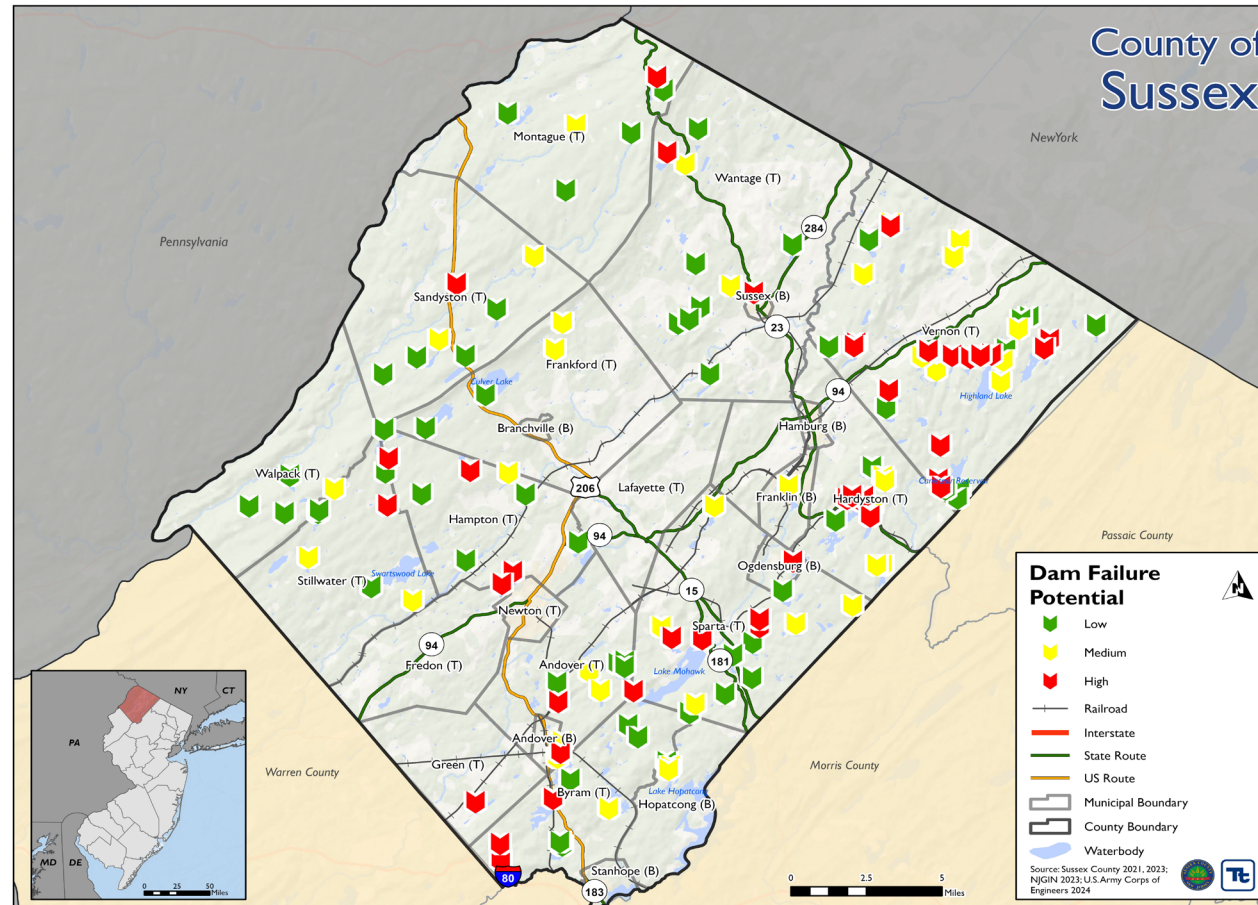
# 139

- 40 High Hazard
- 39 Significant Hazard
- 60 Low Hazard

## 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.

Dams by Class in Sussex County



## Notable Occurrence



On August 11-14, 2000, Heavy thunderstorms produced record amounts of rain, exceeding 14 inches in 4 days. Subsequent flooding completely destroyed the dams on Seneca Lake, Tomahawk Lake, Furnace Pond and Edison Pond in Sussex County, and caused damage to numerous other dams. Several bridges in the Township of Sparta and Borough of Ogdensburg collapsed.



# Drought



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

Population Exposed

**144,221**

(100%)

The entire County is susceptible

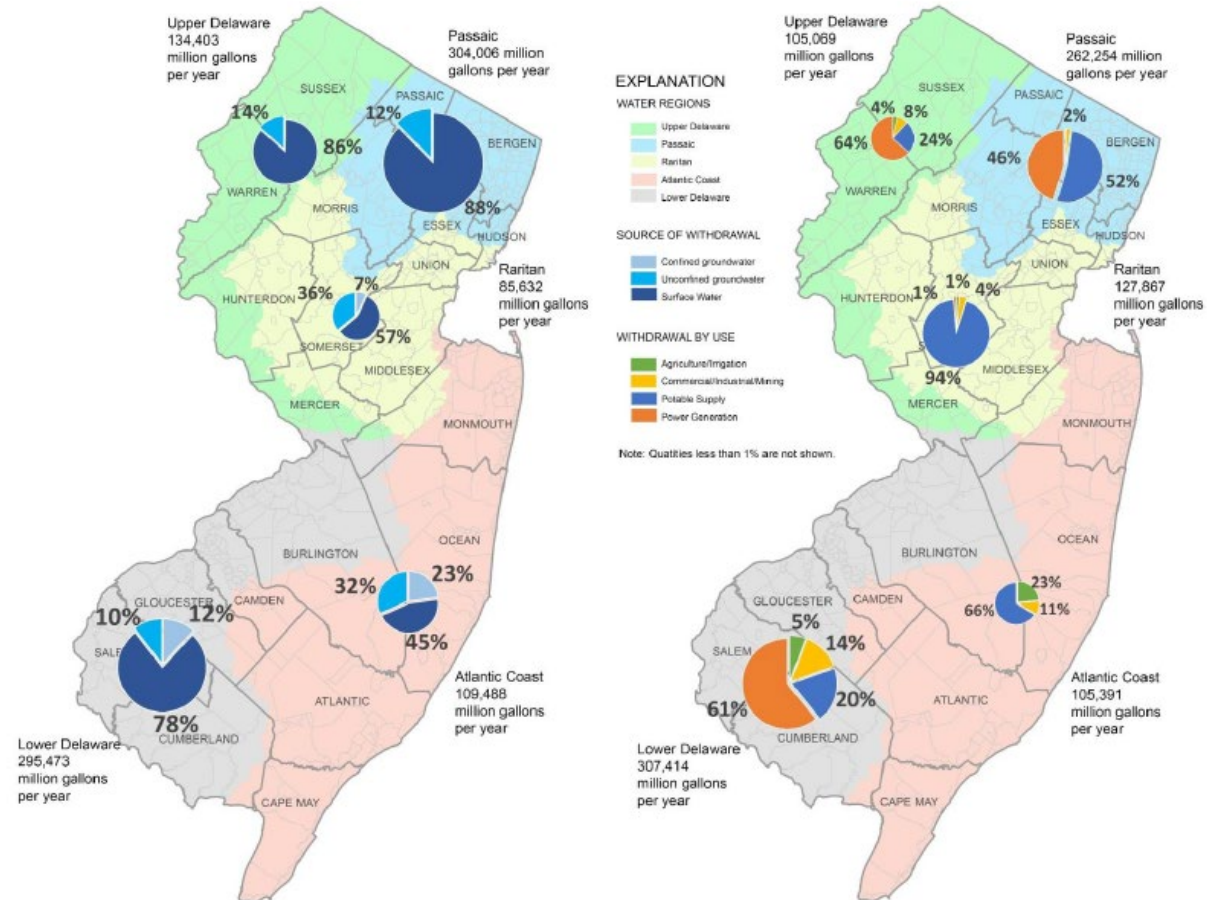
Drought Monitor, 2020-2023

- Abnormally dry conditions experienced 7 times.
- Moderate drought conditions experienced 4 times.
- 2 Statewide droughts.

Climate Change Impacts

It is anticipated that droughts lasting 3 to 6 months and longer may slightly increase in frequency under a low emissions scenario and will significantly increase under a high emissions scenario.

Water Regions, Sources and Withdrawal by Sector in New Jersey



Hazard Types



Meteorological



Hydrological



Agricultural



Socioeconomic

# Earthquake



Earthquakes in Sussex County are a low-probability and high-consequence event. An earthquake can have devastating impacts on the County. Ground shaking can lead to the collapse of buildings and bridges and disrupt gas lines, electricity, and phone service.

Population Exposed

144,221

(100%)

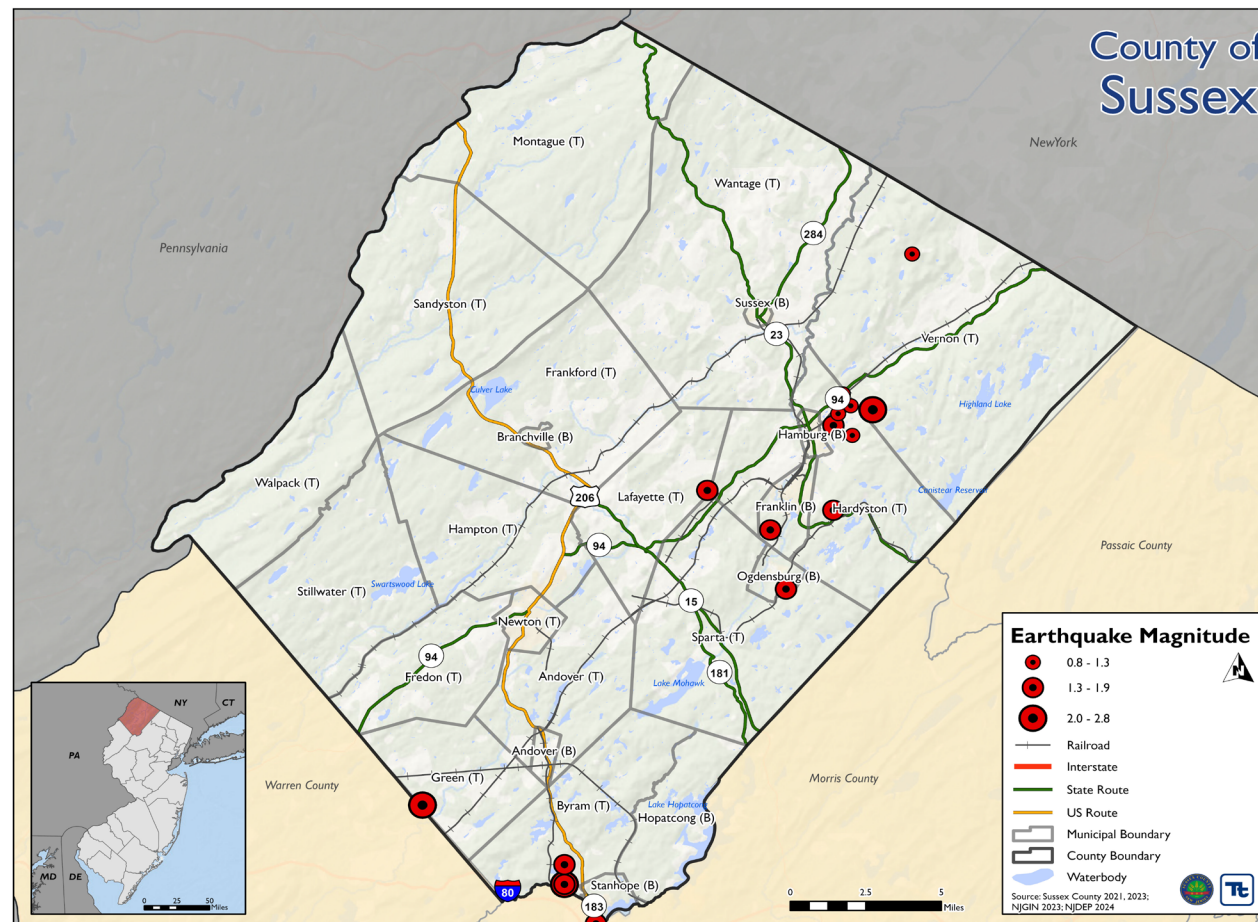
The entire County is susceptible

Notable Occurrences



Small earthquakes may occur several times a year and generally do not cause significant damage. The strongest earthquake with an epicenter in Sussex County was a 2.8 quake in Tranquility in November 1986.

Previous Earthquakes with Epicenters in Sussex County



Hazard Types

- Surface Faulting
- Ground Motion
- Liquefaction
- Tectonic Deformation

Recent Earthquakes

On September 9, 2020, a magnitude 3.1 earthquake in Marlboro, NJ was faintly felt in Sussex County.

On April 5, 2024, a magnitude 4.8 earthquake near Lebanon, NJ was felt in Sussex County.



# Flood

Floods can happen almost anywhere in County but tend to occur in and around areas near existing bodies of water. Sloped land in the County results in flowing water moving down steeper gradients and being naturally or artificially channelized through valleys and gullies.

Population Exposed

**682**

In 1% Annual Chance Flood Area

**856**

In 0.2% Annual Chance Flood Area

Number of Buildings Exposed

**462**

In 1% Annual Chance Flood Area

**562**

In 0.2% Annual Chance Flood Area

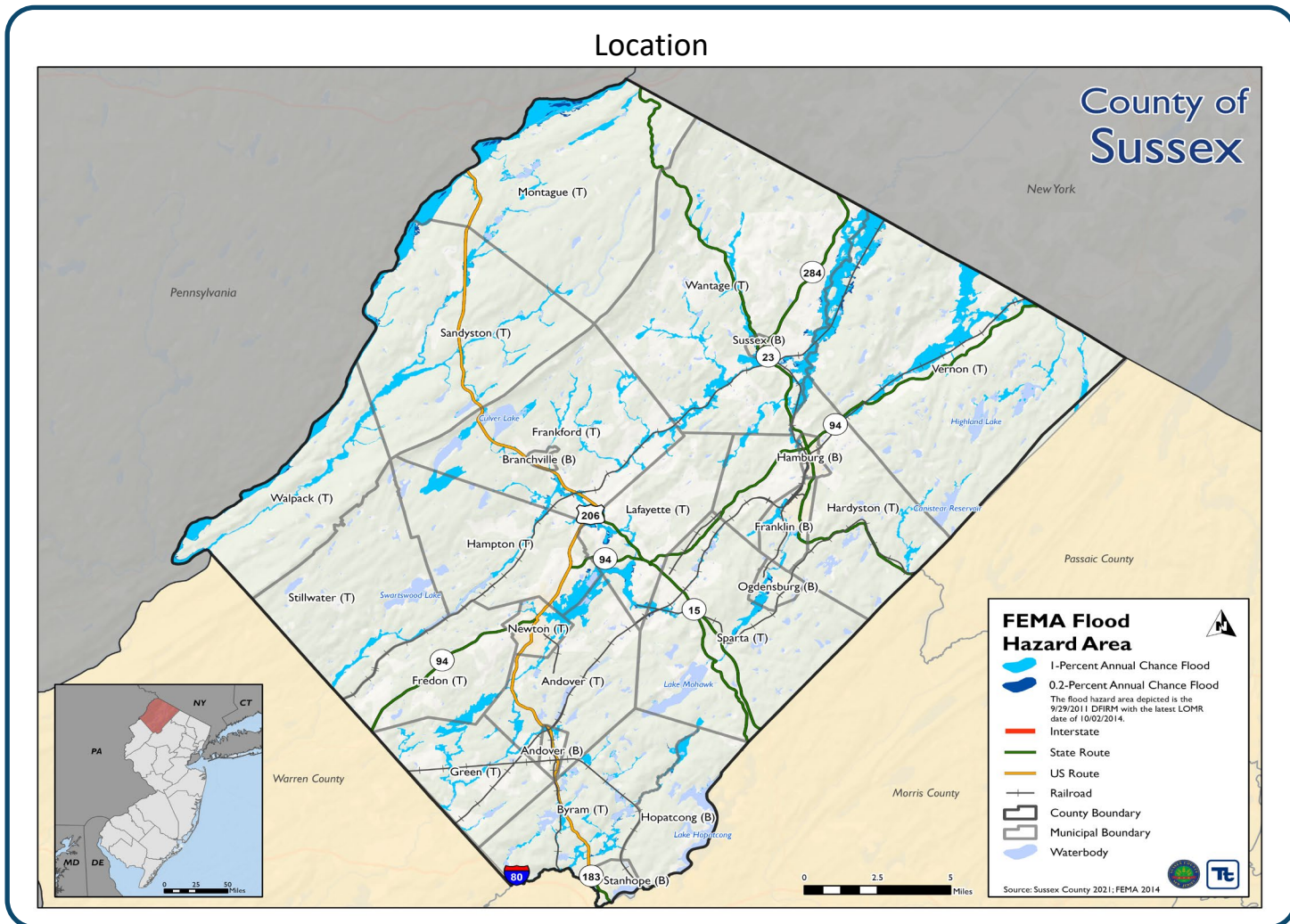
Flood Building Replacement Cost Value

**\$968,515,095**

In 1% Annual Chance Flood Area

**\$1,053,397,709**

In 0.2% Annual Chance Flood Area



Hazard Types



Riverine / Inland



Flash Flood



Urban / Stormwater



Coastal



Ice Jam

Land Exposed to Flood Hazard



**72,903**  
acres

# Geological Hazards

Landslides and subsidence sinkholes can occur in the State of New Jersey, primarily in northern regions. Expansion of urban and recreational developments into hillside areas exposes more people to the threat of landslides each year.

## Population Exposed

**41,329**

In areas with carbonate karst soils

**144,221**

Within 0.25-miles of abandoned mines

**20,921**

In areas with >20% grade

**16,335**

In areas with 15% - 20% grade

## Building Replacement Cost Value

**20,634**

In areas with carbonate karst soils

**3,035**

Within 0.25-miles of abandoned mines

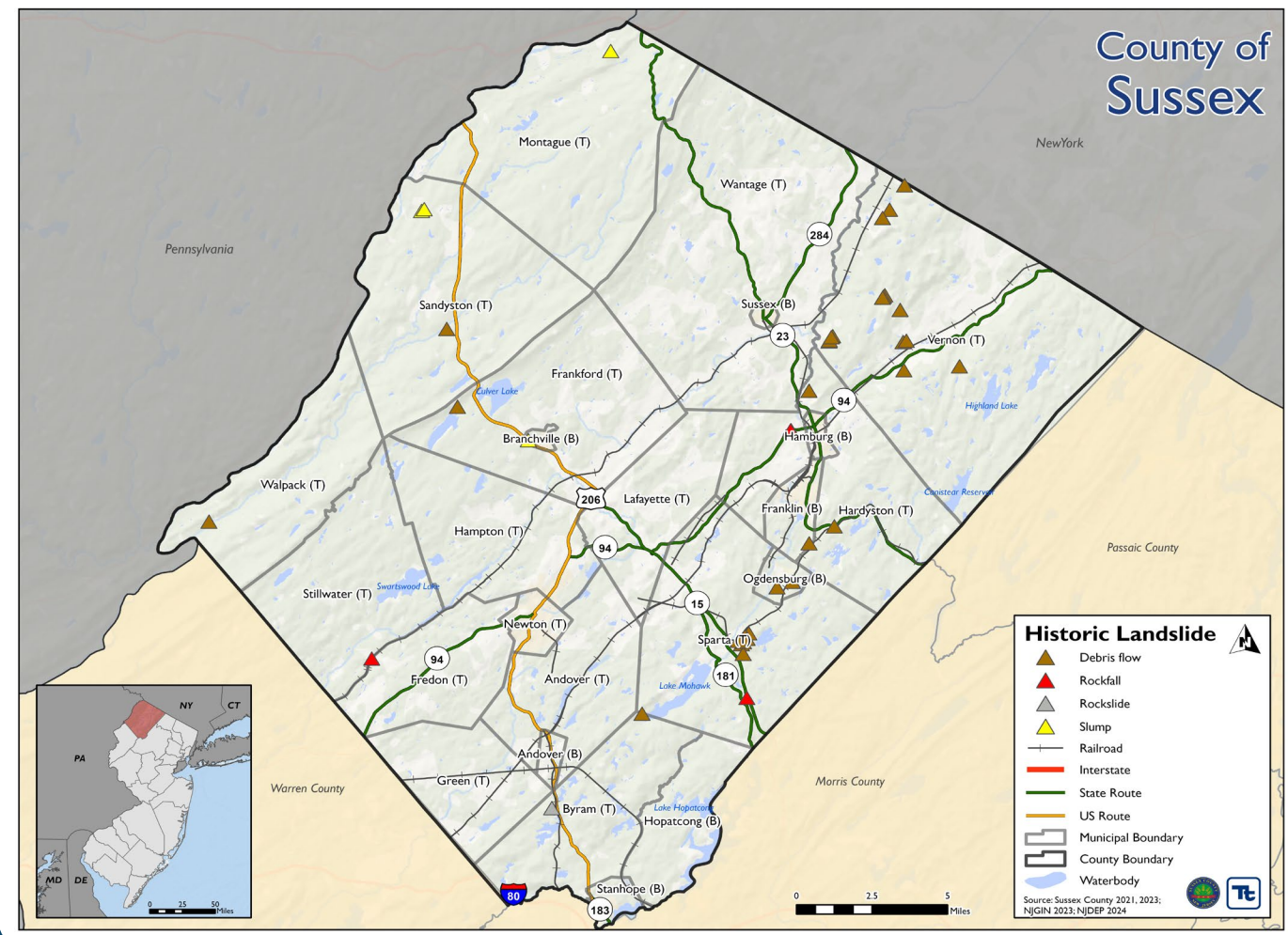
**10,107**

In areas with >20% grade

**7,714**

In areas with 15% - 20% grade

## Historic Landslides in Sussex County



## Hazard Types



Land Subsidence



Landslide



Urban Karst / Sinkhole

## Climate Change Impacts

Projected increases in precipitation events may result in the oversaturation of the ground causing it to become unstable.

# Hazardous Materials



Though hazardous materials incidents are considered rare events, the impacts which the County would experience could be detrimental to the economy, transportation, and in some cases the environment.

## Population Exposed

**26,521**

Within a Mile of a Hazardous Site

**19,930**

Within a Mile of Hazardous Materials Rail Routes

**68,535**

Within 1 mile of Hazardous Materials Roadway Routes

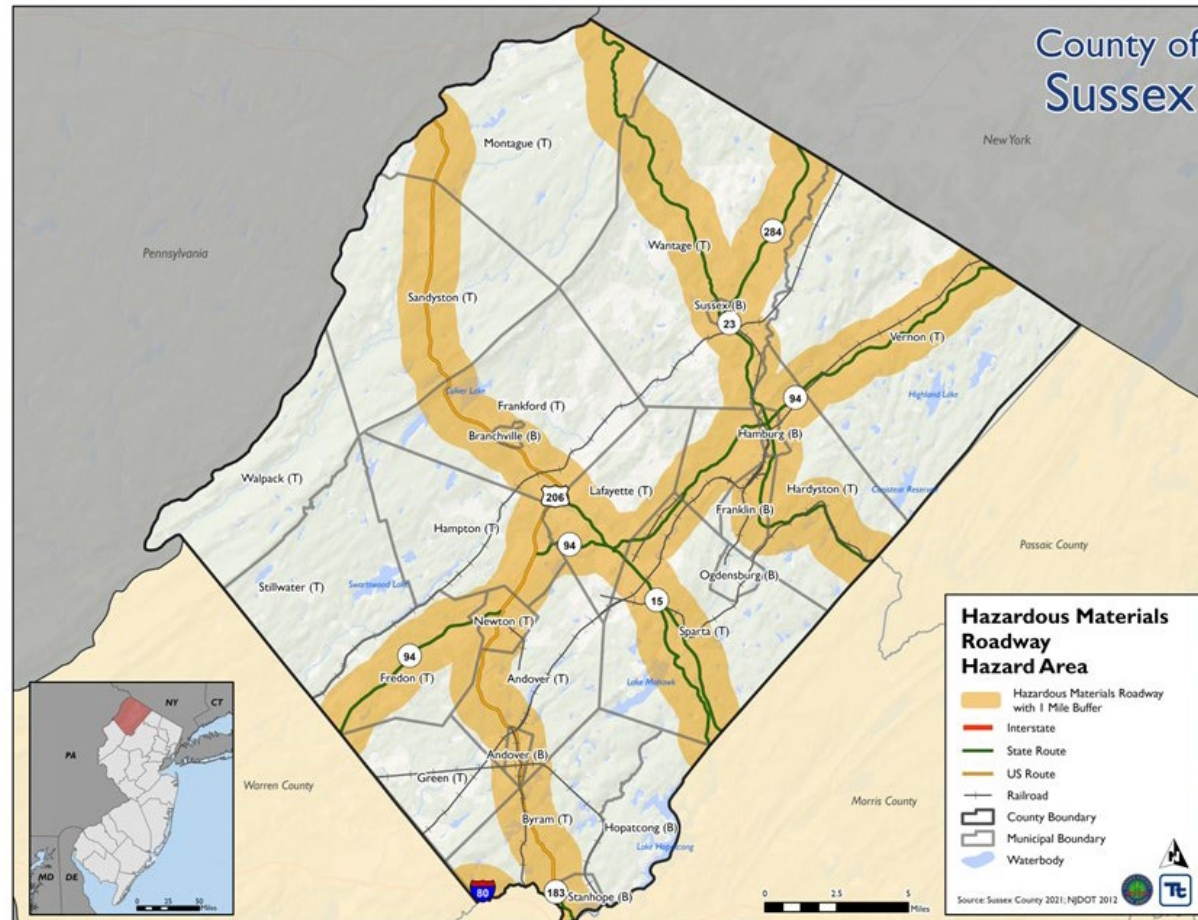
**142,717**

Within 50 Miles of Indian Point Energy Center

## Notable Occurrences

Between 2020 and 2022, over 580 pounds of ethylene oxide and lead were released at on-site facilities in Sussex County.

## Major Roadways with 1 Mile Buffer



## Hazard Types

- Hazardous Materials Site
- Hazardous Materials Rail Routes
- Hazard Materials Road Routes
- 50-Mile Incidence Area for Indian Point Center

## Climate Change Impacts

As temperatures change, excessive heat on aging structures and/or infrastructure may be adversely affected. Excessive heat on structures or containers containing hazardous materials may alter the material properties. In addition, hazardous substances stored at fixed locations in the floodplain may experience an increase in flood events.

# Hurricane

Sussex County is not located along the Atlantic Coast, but hurricanes and tropical storms can track inland, bringing heavy rainfall, strong winds, and flooding. These regional events can impact very large areas, hundreds to thousands of miles across over the life the storm.

Population Exposed

**144,221**

(100%)

the entire County is susceptible

Estimated Building Losses

**\$25,580,551**

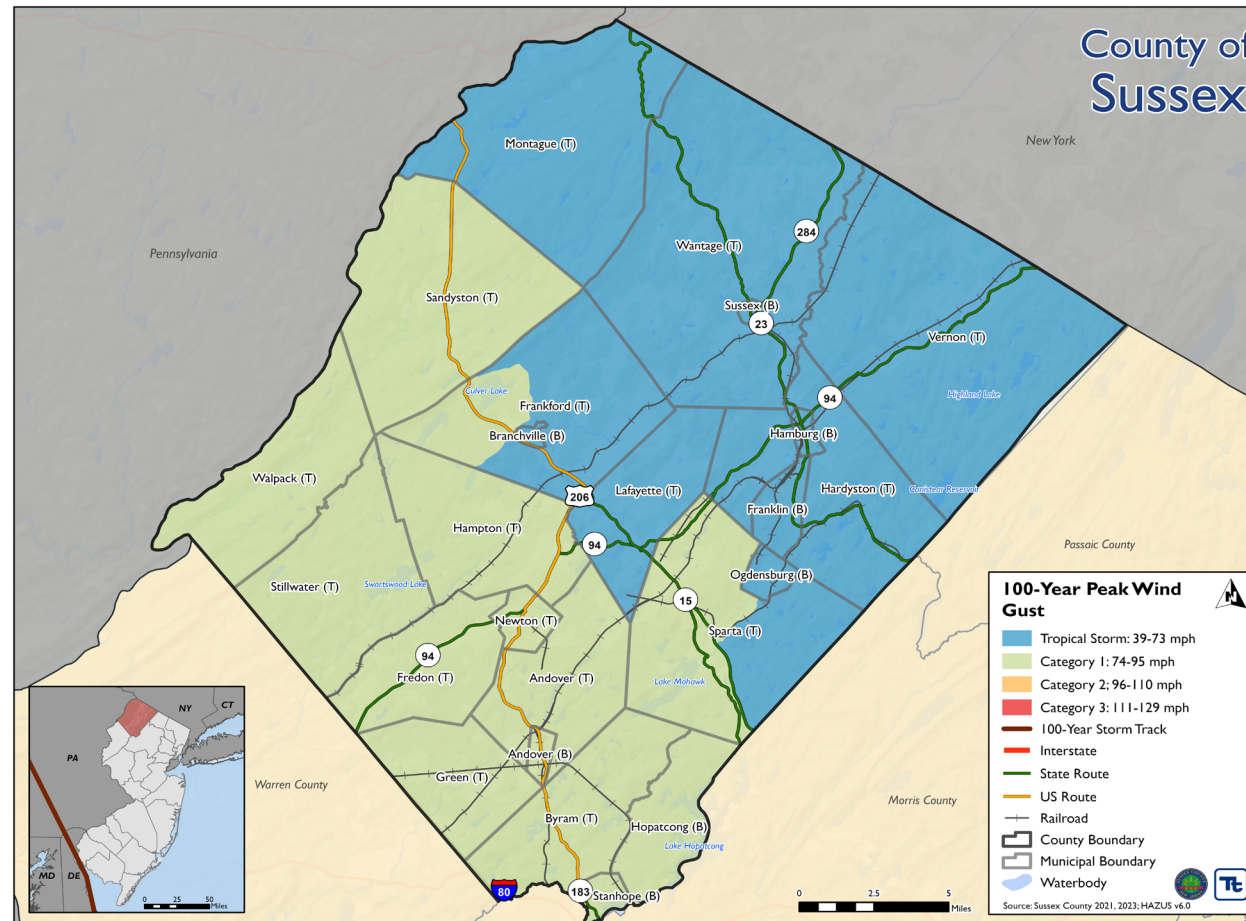
for the 100-Year Mean Return  
Period Hurricane Wind Event

Tons of Tree Debris

**4,230**

for the 100-Year Mean Return  
Period Hurricane Wind Event

Wind Speeds for the 100-Year Mean Return Period Hurricane Wind Event



Notable Occurrence

Tropical Storm Isaias brought high winds, heavy rain, several tornadoes, and coastal flooding to the mid-Atlantic region in August 2020, becoming the most impactful tropical cyclone to impact most of the region since Sandy in 2012. Several reports of downed trees and power lines were made.

Climate Change Impacts

Warming ocean waters are predicted to result in more powerful tropical systems though it is unknown if the frequency of tropical systems will increase. The typical hurricane season may lengthen. Steering currents that move tropical systems once they reach the shoreline may weaken, leading to more prolonged impacts.

# Infestation

Due to Sussex County's landscape diversity, the entire County has the potential to be impacted by each of the species identified. Bodies of water, including Lake Hopatcong, have the potential to be impacted by Harmful Algal Blooms.

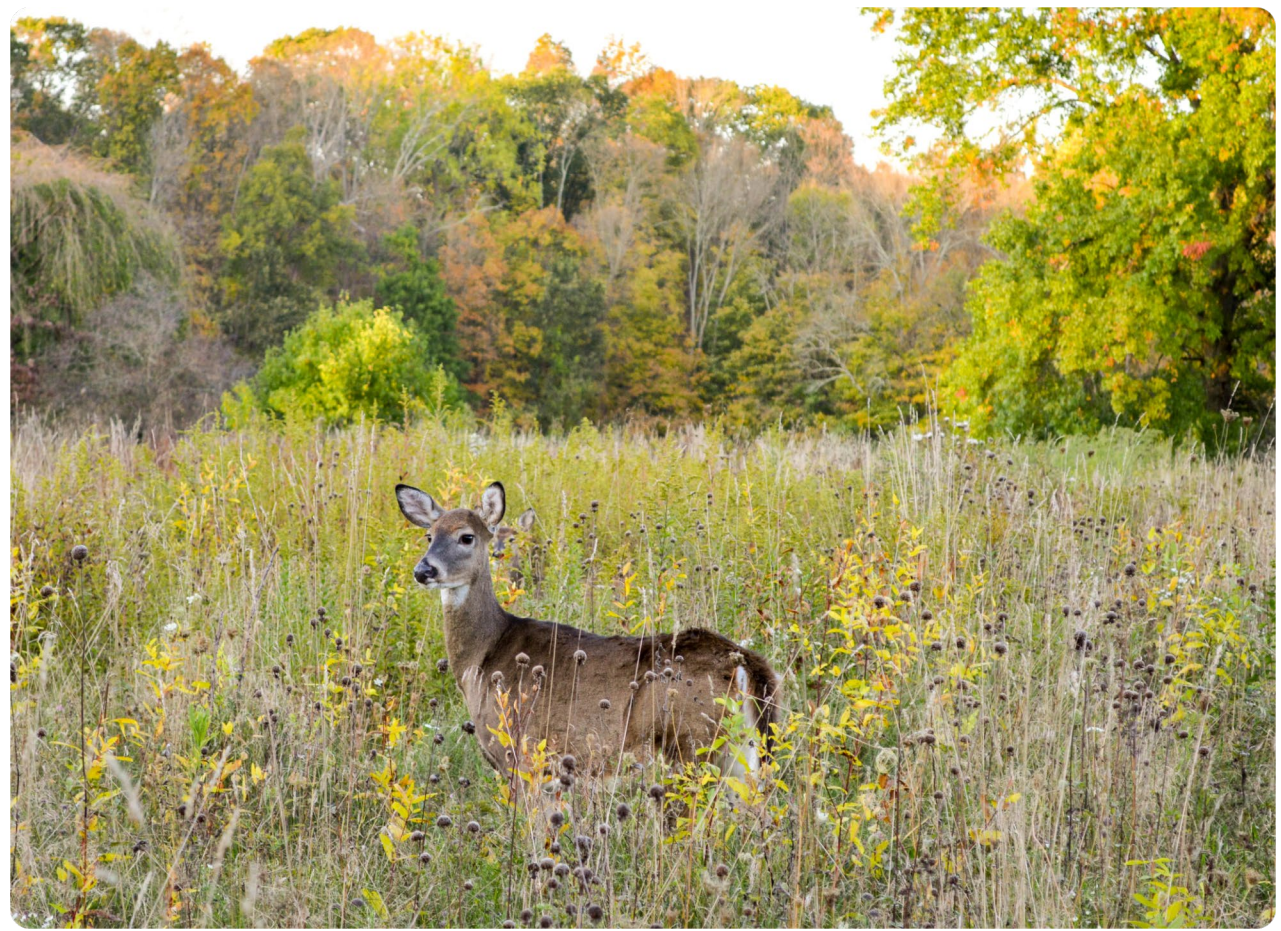
Population Exposed

**144,221**

(100%)

The entire County is vulnerable

White-Tailed Deer in a Meadow



### Hazard Types

- Canada Geese
- Emerald Ash Borer
- Harmful Algal Bloom
- Hemlock Woolly Adelgid
- Mosquitoes
- Spotted Lanternfly
- White-Tailed Deer

### Harmful Algal Bloom Alerts

These alerts occurred on the Swartswood Lake, Lake Hopatcong, Lake Owassa, Lake Neepaulin, Lake Musconetcong, and Highland Lake.

Year	Watch	Advisory
2023	12	5
2022	10	15
2021	13	8
2020	9	5

### Climate Change Impacts

A warming climate can foster the spread of invasive species. New species may enter a region in a northern pattern to try and live in a habitat that matches their needs. This will affect food webs and hierarchies in ecosystems which will alter the composition of the typical ecosystem.

# Nor'easter

Nor'easters can occur any time of the year but are most frequent and strongest between September and April; these storms have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

144,221

(100%)

The entire County is susceptible

Notable Occurrences



A March 2022 storm produced several inches of accumulating snow. Dropping temperatures led to instances of flash freezing. As the storm moved out to sea, winds increased, exacerbating impacts caused by wet snow, leading to scattered power outages.

Map of Nor'easter Moving up New Jersey Coast



Potential Impacts

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

Climate Change Impacts

New Jersey has experienced a 3.5° F increase in the State's average temperature. By 2050, temperatures in New Jersey are expected to increase by 4.1 to 5.7° F. Increases will be more conducive to increased frequency and intensity of severe storms (e.g., thunderstorms, tornados).

# Severe Weather



Severe weather can occur anywhere in the County at any time and have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

**144,221**

(100%)

The entire County is susceptible

Notable Occurrences

A July 2021 storm produced strong microbursts. Extensive tree and utility damage were reported. Many trees were reported snapped near Vernon. Power outages were also reported. Wind speeds were estimated to be 70 mph.

Potential Impacts

- Power Outages
- Traffic Accidents
- Downed Trees
- Property Damage
- Personal Injury / Loss of Life

Storm Damage in Stanhope



Hazard Types



High Wind



Tornado



Thunderstorm and Lightning

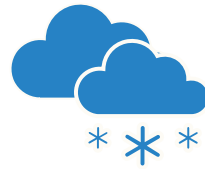


Hailstorms



Extreme Temperatures

# Severe Winter Weather



Severe winter weather can occur anywhere in the County and have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

**144,221**

(100%)

The entire County is susceptible

January 31 – February 2, 2021 Snow Event



Notable Occurrence



A winter storm in early 2021 resulted in reports of 24 inches to 32 inches of snow across Sussex County.

Hazard Types

- Heavy Snow
- Blizzard
- Ice Storm
  - Sleet
  - Freezing Rain

Climate Change Impacts

By 2050, temperatures in New Jersey are expected to increase by 4.1 to 5.7° F. The increase in temperatures is expected to be felt more during the winter months, resulting in less intense cold waves, fewer sub-freezing days, and less snow accumulation.



# Wildfire

Wildfire events in Sussex County typically occur toward the forested portions of the County, such as Stokes State Forest. Wildfires can have impacts on critical services, utilities, and properties, and may cause injury.

Population Exposed

**2,834**

(2%)

of the County is susceptible

Building Replacement Cost Value

**\$2,372,327,088**

In Extreme, Very High, or High Wildfire Fuel Risk Hazard Area

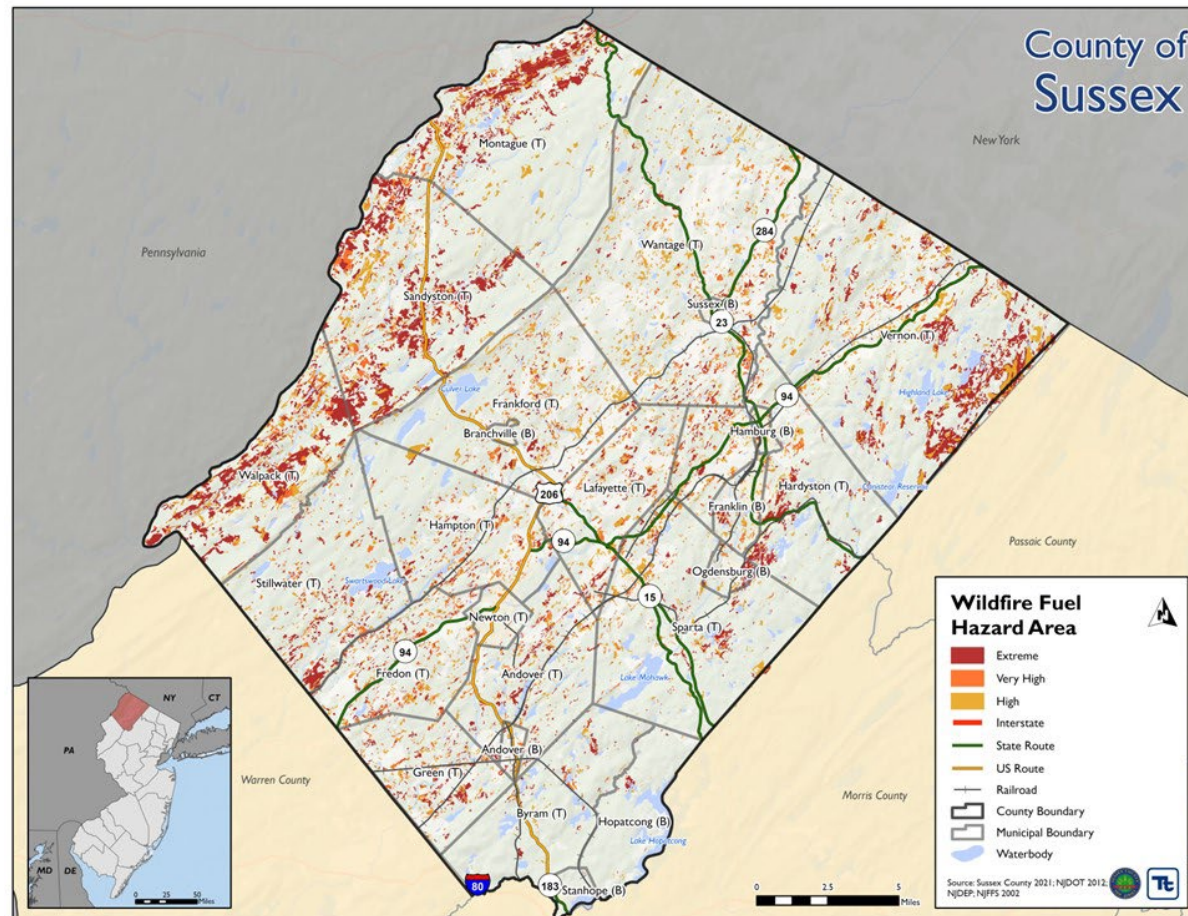
Number of Buildings Exposed

**1,494**

(2.1%)

In Extreme, Very High, or High Wildfire Fuel Risk Hazard Area

Location



Notable Occurrence

On May 12, 2015 a wildfire started shortly after 5:30 p.m. In addition to a home being destroyed, the wildfire consumed more than 6 acres before it was brought under control about 3 hours later.

Climate Change Impacts

Sussex County can expect warmer and drier conditions which may increase the frequency and intensity of wildfires. Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the likelihood of wildfires.

# Hazard Rankings

Review the calculated hazard rankings and provide your feedback.

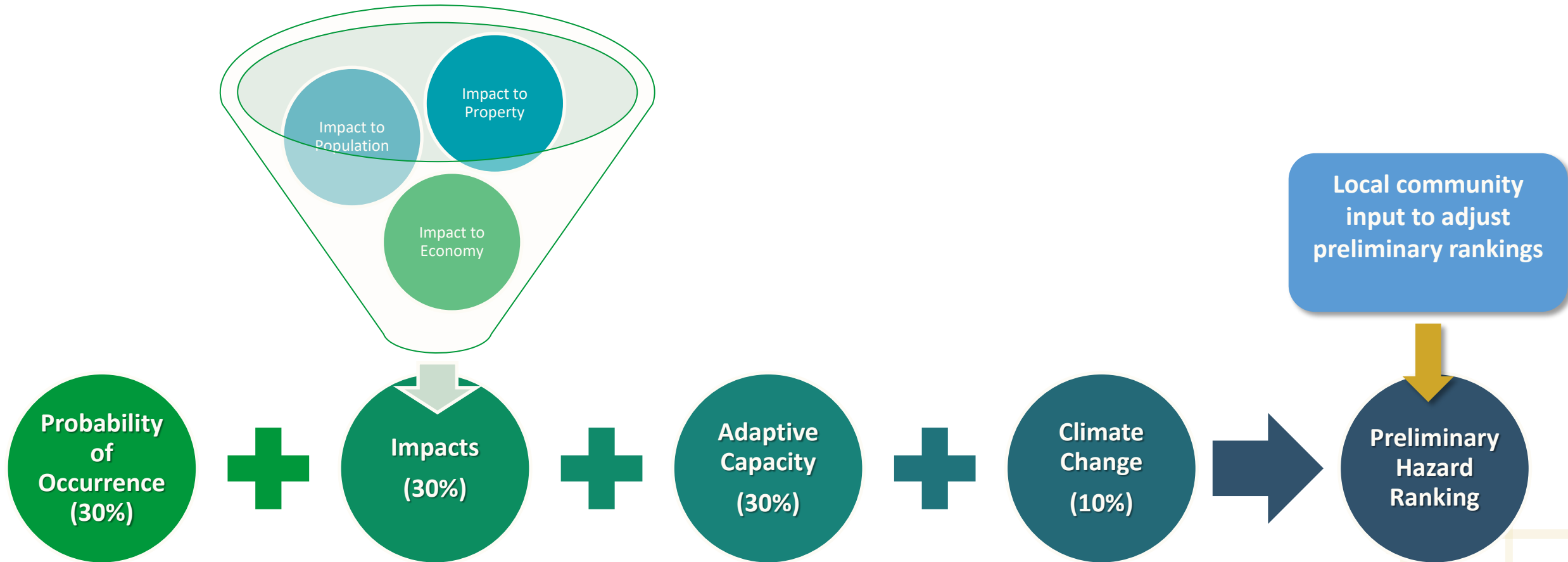


# Preliminary Hazard Ranking Methodology

- 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



# Preliminary Risk Ranking (County)

## High

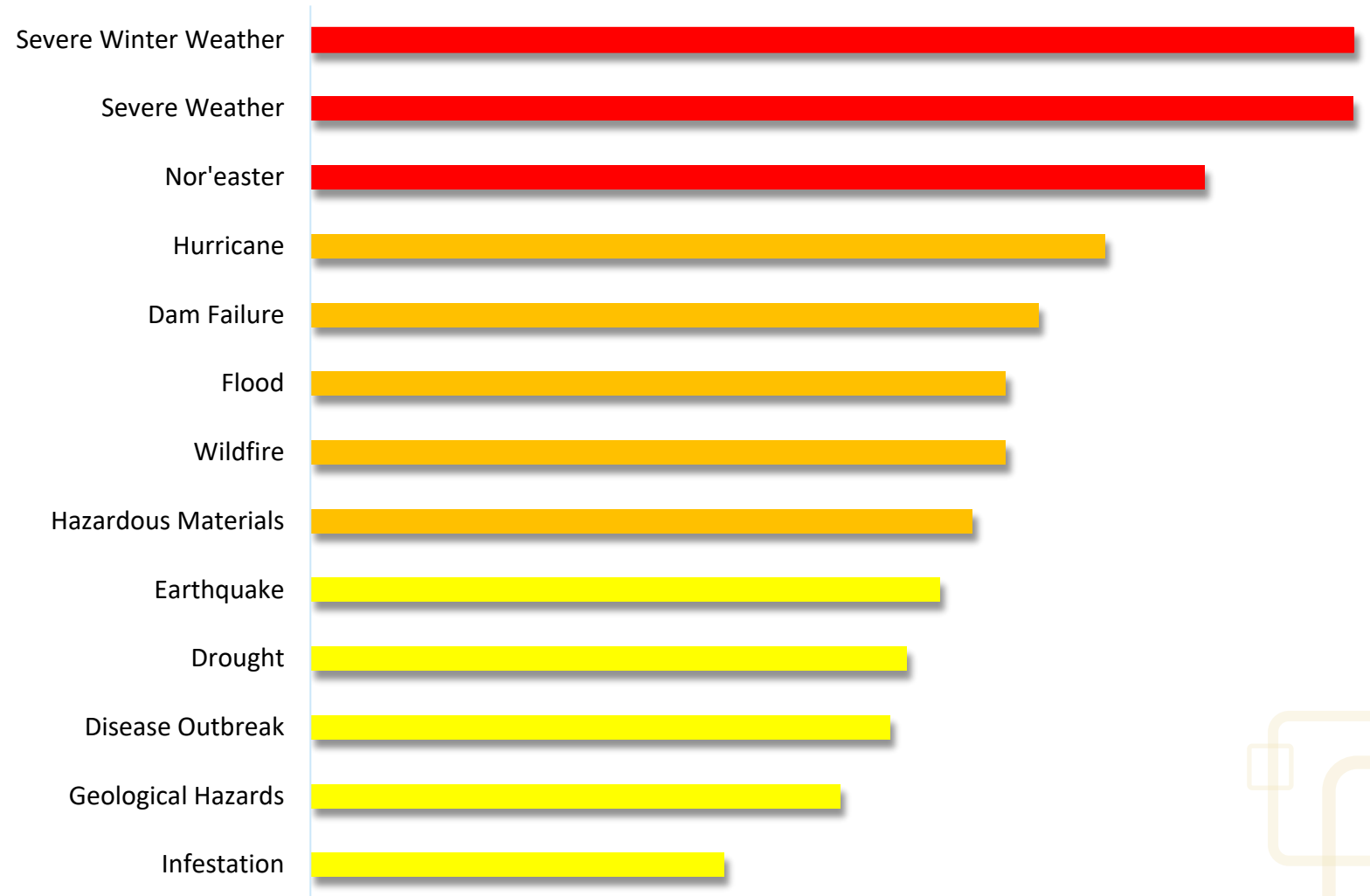
- Severe Winter Storm
- Severe Weather
- Nor'easter

## Medium

- Hurricane
- Dam Failure
- Flood
- Wildfire
- Hazardous Materials

## Low

- Earthquake
- Drought
- Disease Outbreak
- Geological Hazards
- Infestation

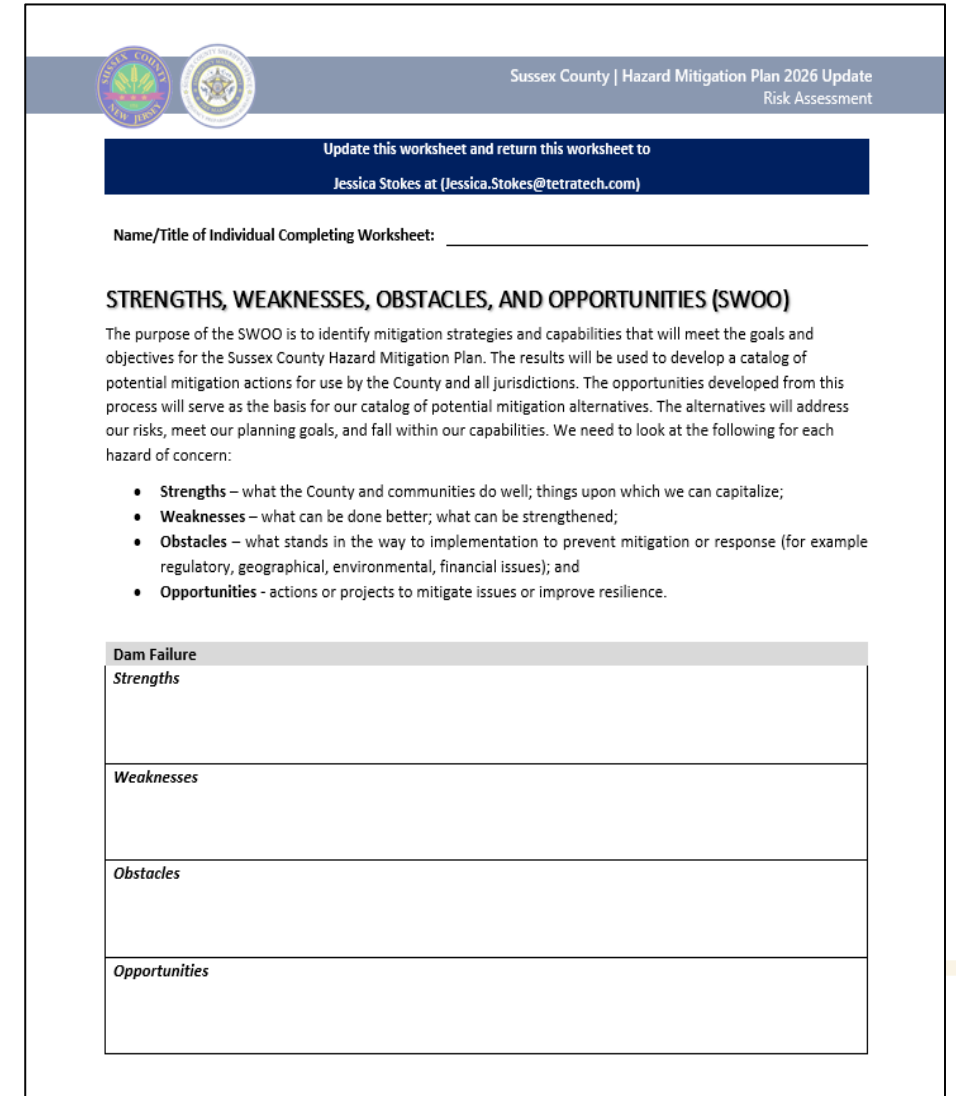




## STRENGTHS, WEAKNESSES, OBSTACLES, AND OPPORTUNITIES (SWOO)

# Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

- The purpose of the SWOO is to identify mitigation strategies and capabilities that will meet the goals and objectives for the Sussex County HMP. The results will be used to develop a catalog of potential mitigation actions for use by the County and all jurisdictions. 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.
- Return this sheet to Jessica Stokes ([Jessica.Stokes@tetrattech.com](mailto:Jessica.Stokes@tetrattech.com)) at Tetra Tech.



Sussex County | Hazard Mitigation Plan 2026 Update  
Risk Assessment

Update this worksheet and return this worksheet to  
Jessica Stokes at ([Jessica.Stokes@tetrattech.com](mailto:Jessica.Stokes@tetrattech.com))

Name/Title of Individual Completing Worksheet: \_\_\_\_\_

**STRENGTHS, WEAKNESSES, OBSTACLES, AND OPPORTUNITIES (SWOO)**

The purpose of the SWOO is to identify mitigation strategies and capabilities that will meet the goals and objectives for the Sussex County Hazard Mitigation Plan. The results will be used to develop a catalog of potential mitigation actions for use by the County and all jurisdictions. The opportunities developed from this process will serve as the basis for our catalog of potential mitigation alternatives. The alternatives will address our risks, meet our planning goals, and fall within our capabilities. We need to 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.

Dam Failure
<i>Strengths</i>
<i>Weaknesses</i>
<i>Obstacles</i>
<i>Opportunities</i>



**Questions?**



# Next Steps

- Share information about the HMP Update via social media, community groups, and networks
- Planning Partnership Risk Assessment Meeting on Thursday, April 11 at
  - 10:00 a.m. via Teams or
  - 7:00 p.m. via Teams
- Attend the Mitigation Strategy Workshop on Wednesday, May 8 @ 10:00 a.m. in person (location TBD)



## **Sussex County Project Contacts**

Steven Sugar, Deputy Coordinator  
973-579-0380 x 2531 | [ssugar@sussexcountysheriff.com](mailto:ssugar@sussexcountysheriff.com)

James Aumick, Deputy Coordinator  
973-579-0380 x 2531 | [jaumick@sussexcountysheriff.com](mailto:jaumick@sussexcountysheriff.com)

## **Tetra Tech Project Contacts**

Chris Huch, CFM | Project Manager  
(973) 630-8357 | [chris.huch@tetrattech.com](mailto:chris.huch@tetrattech.com)

Jessica Stokes, MSEM, NJCEM | Lead Planner  
(973) 630-8017 | [jessica.stokes@tetrattech.com](mailto:jessica.stokes@tetrattech.com)



**Thank  
You!**

**Planning  
Partnership Risk  
Assessment Meeting  
Materials**



**SUSSEX COUNTY HAZARD MITIGATION PLAN UPDATE**  
**Planning Partnership Risk Assessment – AGENDA**  
**MEETING DATE: April 11, 2024**



1. **Opening Remarks**
2. **Project Status** - where we are in the process, public outreach
3. **Additional Outreach Efforts**
  - **General Public**
  - **Stakeholders**
  - **Neighbors**
  - **Socially Vulnerable Populations**
4. **Risk Assessment Overview**
  - **Results of risk assessment for each hazard**
  - **Hazards of concern risk ranking**
  - **How will this information be used in the HMP?**
5. **Hazard Ranking Worksheet**
6. **Feedback and Input**
7. **Next Steps**
8. **Questions**
9. **Adjournment**

**Sussex County Project Contacts**

Steven Sugar, Deputy Coordinator  
Sussex County OEM  
ssugar@sussexcountysheriff.com

James Aumick, Deputy Coordinator  
Sussex County OEM  
jaumick@sussexcountysheriff.com

**Tetra Tech Project Contacts**

Chris Huch, CFM  
6 Century Drive, Parsippany, NJ 07054  
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Jessica Stokes, MSEM, NJCEM  
6 Century Drive, Parsippany, NJ 07054  
(973) 630-8017 | [jessica.stokes@tetrattech.com](mailto:jessica.stokes@tetrattech.com)

Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
 Planning Partnership Risk Assessment Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Planning Partnership Risk Assessment Meeting
<b>Location of Meeting:</b>	Teams
<b>Date of Meeting:</b>	April 11, 2023 @ 9:00 A.M.

<b>Attendees:</b>	<ul style="list-style-type: none"> <li>• <b>Andover (Twp)</b> <ul style="list-style-type: none"> <li>○ Chief Eric Danielson, Emergency Management Coordinator</li> </ul> </li> <li>• <b>Byram (Twp)</b> <ul style="list-style-type: none"> <li>○ Mike Orgera, Superintendent - DPW</li> <li>○ Phil Crosson, Deputy Manager</li> </ul> </li> <li>• <b>Hamburg (B)</b> <ul style="list-style-type: none"> <li>○ Keith Sukennikoff, OEM Coordinator</li> </ul> </li> <li>• <b>Hampton (Twp)</b> <ul style="list-style-type: none"> <li>○ Edward Hayes, Emergency Management Coordinator</li> <li>○ Jessica M. Caruso, Township Administrator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lafayette (Twp)</b> <ul style="list-style-type: none"> <li>○ Stephanie Pizzulo, Land Use Administrator</li> </ul> </li> <li>• <b>Sparta (Twp)</b> <ul style="list-style-type: none"> <li>○ Tom McIntyre, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Wantage (Twp)</b> <ul style="list-style-type: none"> <li>○ Joe Konopinski, OEM Coordinator</li> </ul> </li> <li>• <b>Tetra Tech</b> <ul style="list-style-type: none"> <li>○ Chris Huch, Project Manager</li> <li>○ Jessica Stokes, Lead Planner</li> </ul> </li> </ul>
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**Agenda Summary:** The purpose of the meeting was to provide an overview of the hazard mitigation planning process, discuss public and stakeholder outreach efforts, review the risk assessment results, including the hazard ranking, and introduce the risk ranking worksheet to the Planning Partnership, and identify next steps.

Item No.	Description	Action item(s):
1	<b>Introductions –</b> <ul style="list-style-type: none"> <li>• Each person on the call identified themselves through the chat function.</li> </ul>	-
2	<b>Project Status</b> <ul style="list-style-type: none"> <li>• On schedule                             <ul style="list-style-type: none"> <li>○ Goals and Objectives – April 2024</li> <li>○ Risk Assessment – April-May 2024</li> <li>○ Identify Actions – April-June 2024</li> <li>○ Finalize Plan Maintenance – late June 2024</li> <li>○ Draft Plan – July 2024</li> <li>○ Draft to NJOEM – mid-September 2024</li> <li>○ Draft to FEMA – November 2024</li> </ul> </li> <li>• Municipal Participation Status                             <ul style="list-style-type: none"> <li>○ Have not yet received all worksheets from all municipalities. Assigned planner will be reaching out.</li> </ul> </li> <li>• Public Outreach and Engagement                             <ul style="list-style-type: none"> <li>○ Post links on social media and department/agency websites</li> <li>○ Stakeholder and neighboring community surveys have been distributed</li> <li>○ Make efforts to reach out to:                                     <ul style="list-style-type: none"> <li>▪ General Public</li> <li>▪ Stakeholders</li> <li>▪ Neighbors</li> </ul> </li> </ul> </li> <li>• Socially Vulnerable Populations</li> </ul>	<b>Planning Partnership</b> <ul style="list-style-type: none"> <li>• Post links on social media and department/agency websites</li> <li>• Make efforts to reach out to general public, stakeholders, neighbors, and socially vulnerable populations</li> </ul>
3	<b>Risk Assessment Overview</b> <ul style="list-style-type: none"> <li>• Risk is defined as a function of :                             <ul style="list-style-type: none"> <li>○ Hazard                                     <ul style="list-style-type: none"> <li>▪ Source of potential danger or adverse condition</li> </ul> </li> <li>○ Exposure                                     <ul style="list-style-type: none"> <li>▪ Manmade or natural features that are exposed to the hazard</li> </ul> </li> <li>○ Vulnerability</li> </ul> </li> </ul>	-



	<ul style="list-style-type: none"> <li>▪ Damage susceptibility of the exposed features                             <ul style="list-style-type: none"> <li>○ Adaptive Capacity (or capability)                                     <ul style="list-style-type: none"> <li>▪ Plans/policies</li> <li>▪ Response/recovery</li> </ul> </li> </ul> </li> <li>• Financial resources</li> </ul>	
4	<p><b>Risk Assessment Results</b></p> <ul style="list-style-type: none"> <li>• Provided an overview of the results from the risk assessment for each hazard. Results were a combination of qualitative and quantitative data.</li> <li>• Dam Failure: 136 dams in the County (40 are HHD). <b>MED 4.4</b></li> <li>• Disease Outbreak: Entire County is susceptible. <b>LOW 3.5</b></li> <li>• Drought: Entire County is susceptible; relies on surface water. <b>LOW 3.6</b></li> <li>• Earthquake: Entire County is susceptible. Recently an earthquake happened in April 2024. <b>LOW 3.8</b></li> <li>• Flood: 682 people/462 Buildings exposed to 1% and 856 people/562 Buildings exposed to 0.2%. <b>MED 4.2</b></li> <li>• Geological Hazards: over 41 thousand people exposed to Karst soils. <b>MED 4.1</b></li> <li>• Hazardous Materials: over 26 thousand people within a mile of a hazardous site. <b>MED 4.0</b></li> <li>• Hurricane: Entire county is susceptible. <b>MED 4.8</b></li> <li>• Infestation: The entire County is vulnerable. <b>LOW 2.5</b></li> <li>• Nor'easter: Entire County is exposed. <b>HIGH 5.4</b></li> <li>• Severe Weather: The entire County is susceptible. <b>HIGH 6.3</b></li> <li>• Winter Storm: The entire County is exposed. <b>HIGH 6.3</b></li> <li>• Wildfire: 2% of the population is exposed (2,834). Impacts from Wildfires occurring elsewhere can also have effects on the County. <b>MED 4.2</b></li> </ul>	
5	<p><b>Hazard Rankings</b></p> <ul style="list-style-type: none"> <li>• The calculated probability of a hazard occurring based on historical data</li> <li>• <i>Impacts to <u>people</u>, <u>property</u>, and the <u>economy</u></i> based on GIS data and analysis of exposure.</li> <li>• The degree to which <i><u>climate change</u></i> will affect future occurrences based on best available data.</li> <li>• The degree to which existing <i><u>capabilities</u></i> (the ability of your community to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness) decrease overall risk.</li> <li>• Ranking:                             <ul style="list-style-type: none"> <li>○ <b>High</b>: Severe Winter Weather, Severe Weather, Nor'easter</li> <li>○ <b>Medium</b>: Hurricane, Dam Failure, Flood, Wildfire, Hazardous Materials</li> <li>○ <b>Low</b>: Earthquake, Drought, Disease Outbreak, Geological Hazards, Infestation</li> </ul> </li> </ul>	
6	<p><b>Risk Ranking Worksheet</b></p> <ul style="list-style-type: none"> <li>• Review the calculated rankings and indicate whether or not you want to adjust the ranking. If you are changing the ranking, please provide detail as to why you are changing the ranking.</li> </ul>	<p><b>Planning Partnership</b></p> <ul style="list-style-type: none"> <li>• Complete and return Risk Ranking worksheet by April 19.</li> </ul>
7	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Share information about the HMP Update via social media, community groups, and networks</li> <li>• Attend the Planning Partnership Risk Assessment Meeting on Thursday, April 11 @ 9:00 a.m. and 7:00 p.m. via Teams</li> <li>• Attend the Mitigation Strategy Workshop on Wednesday, May 8 at a “to-be-determined” location.</li> </ul>	

Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
Planning Partnership Risk Assessment Meeting | Meeting Minutes



8	Questions/Discussion <input type="radio"/> No questions or comments	-
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Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
 Planning Partnership Risk Assessment Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Planning Partnership Risk Assessment Meeting	
<b>Location of Meeting:</b>	Teams	
<b>Date of Meeting:</b>	April 11, 2023 @ 7:00 P.M.	
<b>Attendees:</b>	<ul style="list-style-type: none"> <li>• <b>Branchville (B)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Frankford (Twp)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Montague (Twp)</b> <ul style="list-style-type: none"> <li>○ Jesse Brace-Revak, Deputy OEM Coordinator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Stillwater (Twp)</b> <ul style="list-style-type: none"> <li>○ Lisa Chammings, OEM Coordinator/Mayor</li> <li>○ Jim Cantelmmo, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Tetra Tech</b> <ul style="list-style-type: none"> <li>○ Chris Huch, Project Manager</li> <li>○ Jessica Stokes, Lead Planner</li> </ul> </li> </ul>
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Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
 Planning Partnership Risk Assessment Meeting | Meeting Minutes



	<ul style="list-style-type: none"> <li>Financial resources</li> </ul>	
4	<p><b>Risk Assessment Results</b></p> <ul style="list-style-type: none"> <li>Provided an overview of the results from the risk assessment for each hazard. Results were a combination of qualitative and quantitative data.</li> <li>Dam Failure: 136 dams in the County (40 are HHD). <b>MED 4.4</b></li> <li>Disease Outbreak: Entire County is susceptible. <b>LOW 3.5</b></li> <li>Drought: Entire County is susceptible; relies on surface water. <b>LOW 3.6</b></li> <li>Earthquake: Entire County is susceptible. Recently an earthquake happened in April 2024. <b>LOW 3.8</b></li> <li>Flood: 682 people/462 Buildings exposed to 1% and 856 people/562 Buildings exposed to 0.2%. <b>MED 4.2</b></li> <li>Geological Hazards: over 41 thousand people exposed to Karst soils. <b>MED 4.1</b></li> <li>Hazardous Materials: over 26 thousand people within a mile of a hazardous site. <b>MED 4.0</b></li> <li>Hurricane: Entire county is susceptible. <b>MED 4.8</b></li> <li>Infestation: The entire County is vulnerable. <b>LOW 2.5</b></li> <li>Nor'easter: Entire County is exposed. <b>HIGH 5.4</b></li> <li>Severe Weather: The entire County is susceptible. <b>HIGH 6.3</b></li> <li>Winter Storm: The entire County is exposed. <b>HIGH 6.3</b></li> <li>Wildfire: 2% of the population is exposed (2,834). Impacts from Wildfires occurring elsewhere can also have effects on the County. <b>MED 4.2</b></li> </ul>	-
5	<p><b>Hazard Rankings</b></p> <ul style="list-style-type: none"> <li>The calculated probability of a hazard occurring based on historical data</li> <li><i>Impacts to people, property, and the economy</i> based on GIS data and analysis of exposure.</li> <li>The degree to which <i>climate change</i> will affect future occurrences based on best available data.</li> <li>The degree to which existing <i>capabilities</i> (the ability of your community to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness) decrease overall risk.</li> <li>Ranking:             <ul style="list-style-type: none"> <li><b>High:</b> Severe Winter Weather, Severe Weather, Nor'easter</li> <li><b>Medium:</b> Hurricane, Dam Failure, Flood, Wildfire, Hazardous Materials</li> <li><b>Low:</b> Earthquake, Drought, Disease Outbreak, Geological Hazards, Infestation</li> </ul> </li> </ul>	-
6	<p><b>Risk Ranking Worksheet</b></p> <ul style="list-style-type: none"> <li>Review the calculated rankings and indicate whether or not you want to adjust the ranking. If you are changing the ranking, please provide detail as to why you are changing the ranking.</li> </ul>	<p><b>Planning Partnership</b></p> <ul style="list-style-type: none"> <li>Complete and return Risk Ranking worksheet by April 19.</li> </ul>
7	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>Share information about the HMP Update via social media, community groups, and networks</li> <li>Attend the Planning Partnership Risk Assessment Meeting on Thursday, April 11 @ 9:00 a.m. and 7:00 p.m. via Teams</li> <li>Attend the Mitigation Strategy Workshop on Wednesday, May 8 at a "to-be-determined" location.</li> </ul>	-
8	<p><b>Questions/Discussion</b></p> <ul style="list-style-type: none"> <li><b>No questions or comments</b></li> </ul>	-



# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2025 Update

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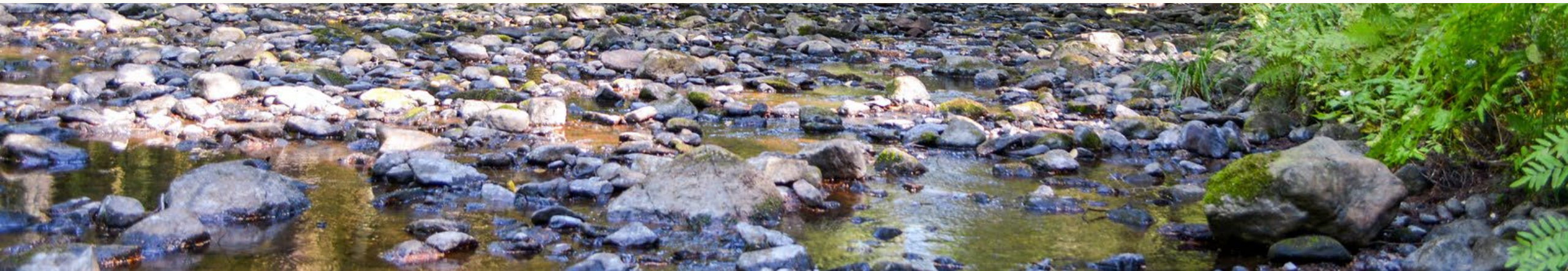
Planning Partnership Risk Assessment  
Meeting  
April 11, 2024

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



# Today's Agenda

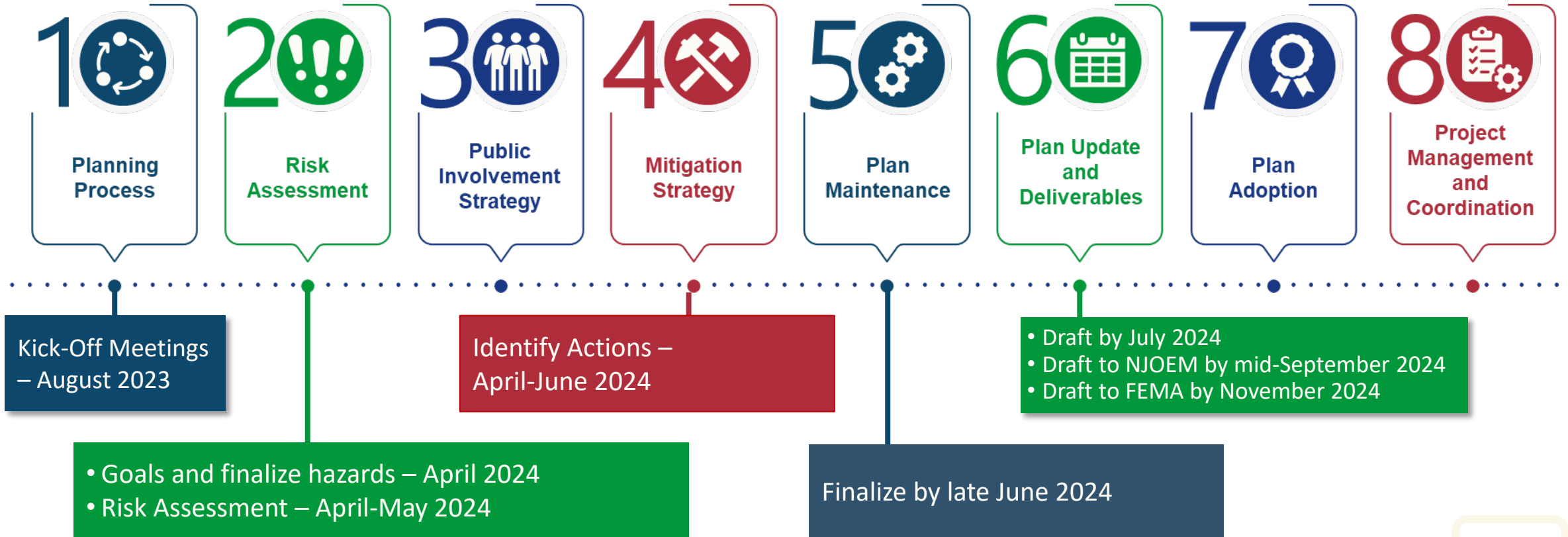
1. Welcome and Introductions
2. Project Status
3. Risk Assessment Overview
4. Feedback and Input
5. Next Steps
6. Questions/Wrap Up





# Project Status

# Schedule



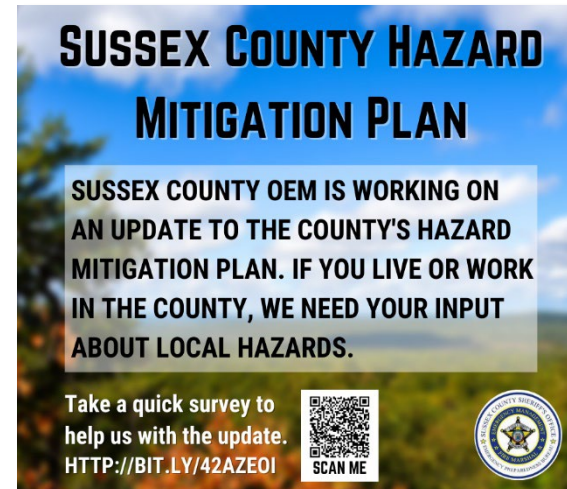
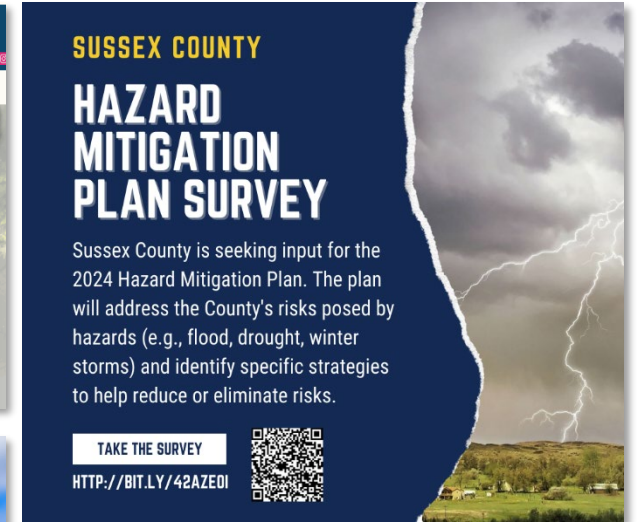
# Municipal Participation Status

- To date, we have not received all municipal worksheets. Your assigned Tetra Tech planner will be sending a summary of information needed.

Municipality	Assigned Planner	Municipality	Assigned Planner	Municipality	Assigned Planner
Andover (B)	Grace	Hamburg (B)	Grace	Sandyston (Twp)	Jessica
Andover (Twp)	Grace	Hampton (Twp)	Grace	Sparta (Twp)	Jessica
Branchville (B)	Grace	Hardyston (Twp)	Grace	Stanhope (B)	Jessica
Byram (Twp)	Grace	Hopatcong (B)	Grace	Stillwater (Twp)	Jessica
Frankford (Twp)	Grace	Lafayette (Twp)	Jessica	Sussex (B)	Jessica
Franklin (B)	Grace	Montague (Twp)	Jessica	Vernon (Twp)	Jessica
Fredon (Twp)	Grace	Newton (T)	Jessica	Walpack (Twp)	Jessica
Green (Twp)	Grace	Ogdensburg (B)	Jessica	Wantage (Twp)	Jessica

# Public Outreach Strategy

- Public Outreach Toolkit
  - Social media templates and posts
  - Press release templates
  - Printable materials
- Surveys
  - Stakeholders
  - Neighboring communities
  - Public
- County Website
- StoryMap





# Risk Assessment Overview



# What is Risk?

Risk is defined as a function of :

- Hazard
  - Source of potential danger or adverse condition
- Exposure
  - Manmade or natural features that are exposed to the hazard
- Vulnerability
  - Damage susceptibility of the exposed features
- Adaptive Capacity (or capability)
  - Plans/policies
  - Response/recovery
  - Financial resources



# Purpose of Risk Assessment

- To get a better understanding of the risks you face
- Initial results based on available data
- Quantitative data (population/structures exposed, structural damages within hazard zones) used when available
- Qualitative community input (such as unmapped flood areas) integrated to adjust results
- Local community input to adjust relative rankings



# Preliminary Risk Assessment Results



# Dam Failure

Dam failures in Sussex 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

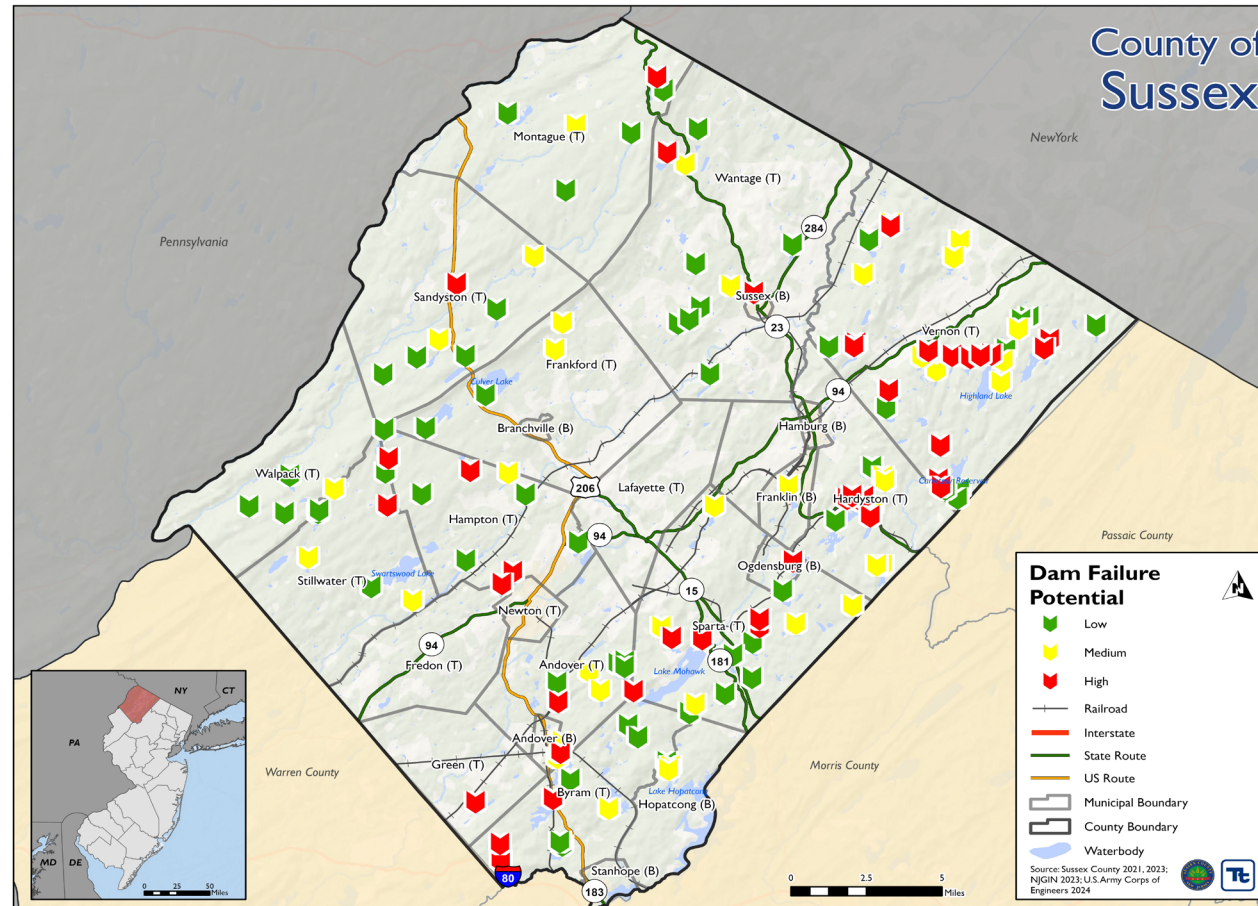
# 139

- 40 High Hazard
- 39 Significant Hazard
- 60 Low Hazard

## 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.

Dams by Class in Sussex County

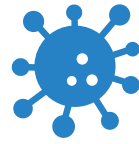


## Notable Occurrence



On August 11-14, 2000, Heavy thunderstorms produced record amounts of rain, exceeding 14 inches in 4 days. Subsequent flooding completely destroyed the dams on Seneca Lake, Tomahawk Lake, Furnace Pond and Edison Pond in Sussex County, and caused damage to numerous other dams. Several bridges in the Township of Sparta and Borough of Ogdensburg collapsed.

# Disease Outbreak



Disease outbreaks can impact the entirety of Sussex 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

144,221

(100%)

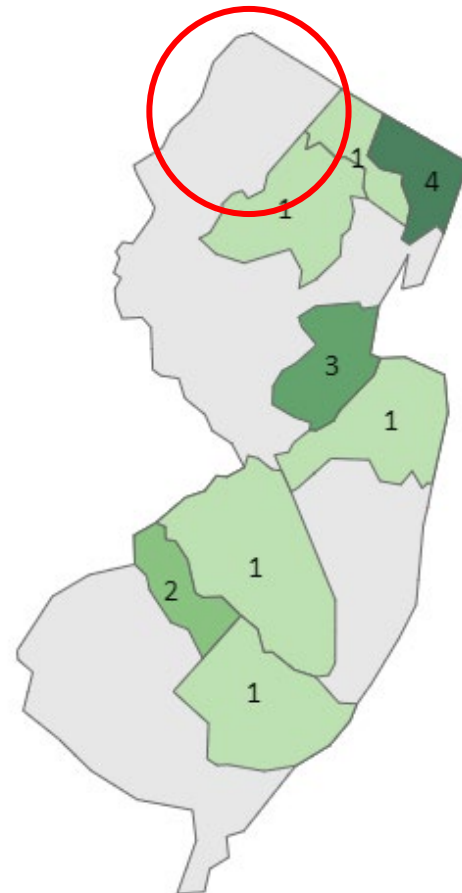
The entire County is susceptible

Notable Occurrences

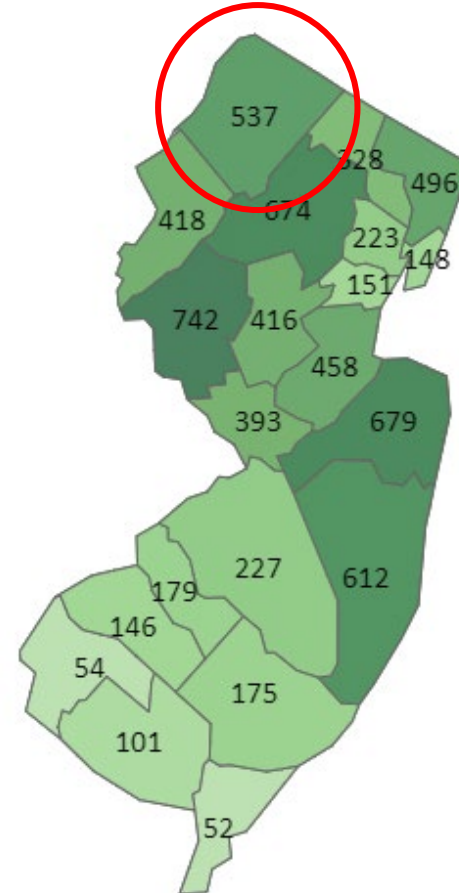


- In 2023, there were 539 confirmed cases of Lyme Disease.
- Since March 2020, Sussex County reported 38,996 positive cases of COVID-19 and 437 deaths.

West Nile Virus Cases by County, 2023



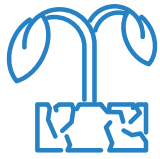
Lyme Disease Cases by County, 2023



Hazard Types

- West Nile Virus
- Eastern Equine Encephalitis
- St. Louis Encephalitis
- Lyme Disease
- Influenza
- Ebola Virus
- Coronavirus

# Drought



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

Population Exposed

**144,221**

(100%)

The entire County is susceptible

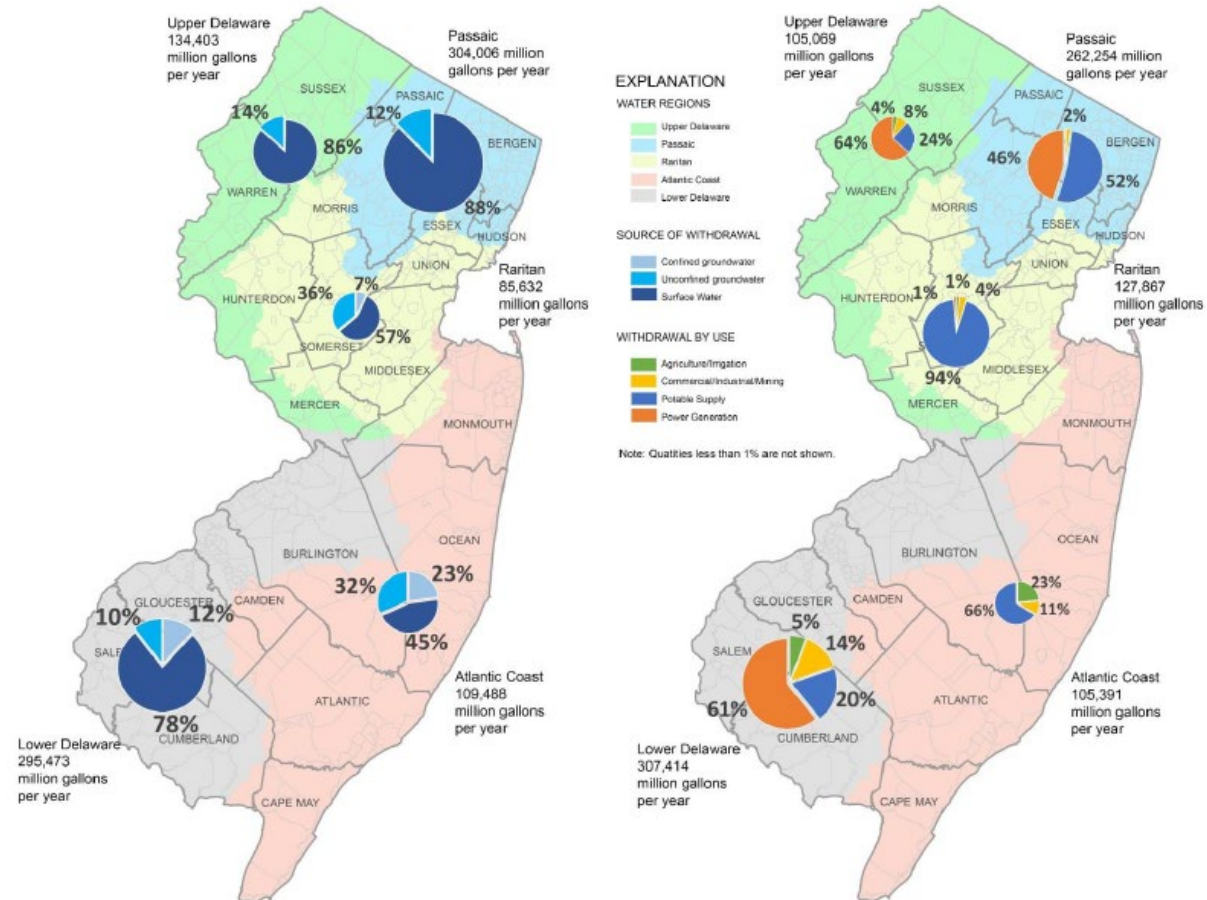
Drought Monitor, 2020-2023

- Abnormally dry conditions experienced 7 times.
- Moderate drought conditions experienced 4 times.
- 2 Statewide droughts.

Climate Change Impacts

It is anticipated that droughts lasting 3 to 6 months and longer may slightly increase in frequency under a low emissions scenario and will significantly increase under a high emissions scenario.

Water Regions, Sources and Withdrawal by Sector in New Jersey



Hazard Types



Meteorological



Hydrological



Agricultural



Socioeconomic

# Earthquake



Earthquakes in Sussex County are a low-probability and high-consequence event. An earthquake can have devastating impacts on the County. Ground shaking can lead to the collapse of buildings and bridges and disrupt gas lines, electricity, and phone service.

Population Exposed

144,221

(100%)

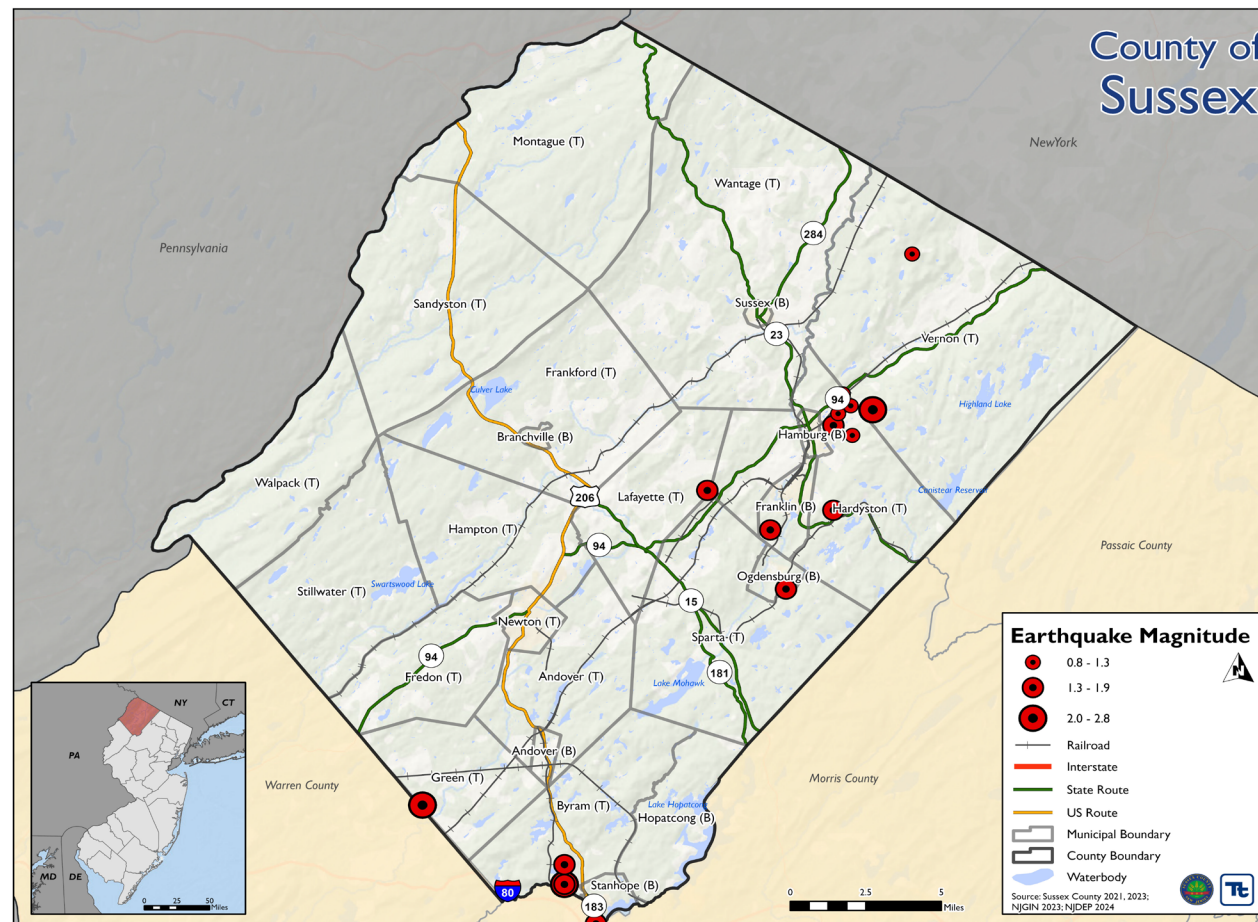
The entire County is susceptible

Notable Occurrences



Small earthquakes may occur several times a year and generally do not cause significant damage. The strongest earthquake with an epicenter in Sussex County was a 2.8 quake in Tranquility in November 1986.

Previous Earthquakes with Epicenters in Sussex County



Hazard Types

- Surface Faulting
- Ground Motion
- Liquefaction
- Tectonic Deformation

Recent Earthquakes

On September 9, 2020, a magnitude 3.1 earthquake in Marlboro, NJ was faintly felt in Sussex County.

On April 5, 2024, a magnitude 4.8 earthquake near Lebanon, NJ was felt in Sussex County.

# Flood

Floods can happen almost anywhere in County but tend to occur in and around areas near existing bodies of water. Sloped land in the County results in flowing water moving down steeper gradients and being naturally or artificially channelized through valleys and gullies.

Population Exposed

**682**

In 1% Annual Chance Flood Area

**856**

In 0.2% Annual Chance Flood Area

Number of Buildings Exposed

**462**

In 1% Annual Chance Flood Area

**562**

In 0.2% Annual Chance Flood Area

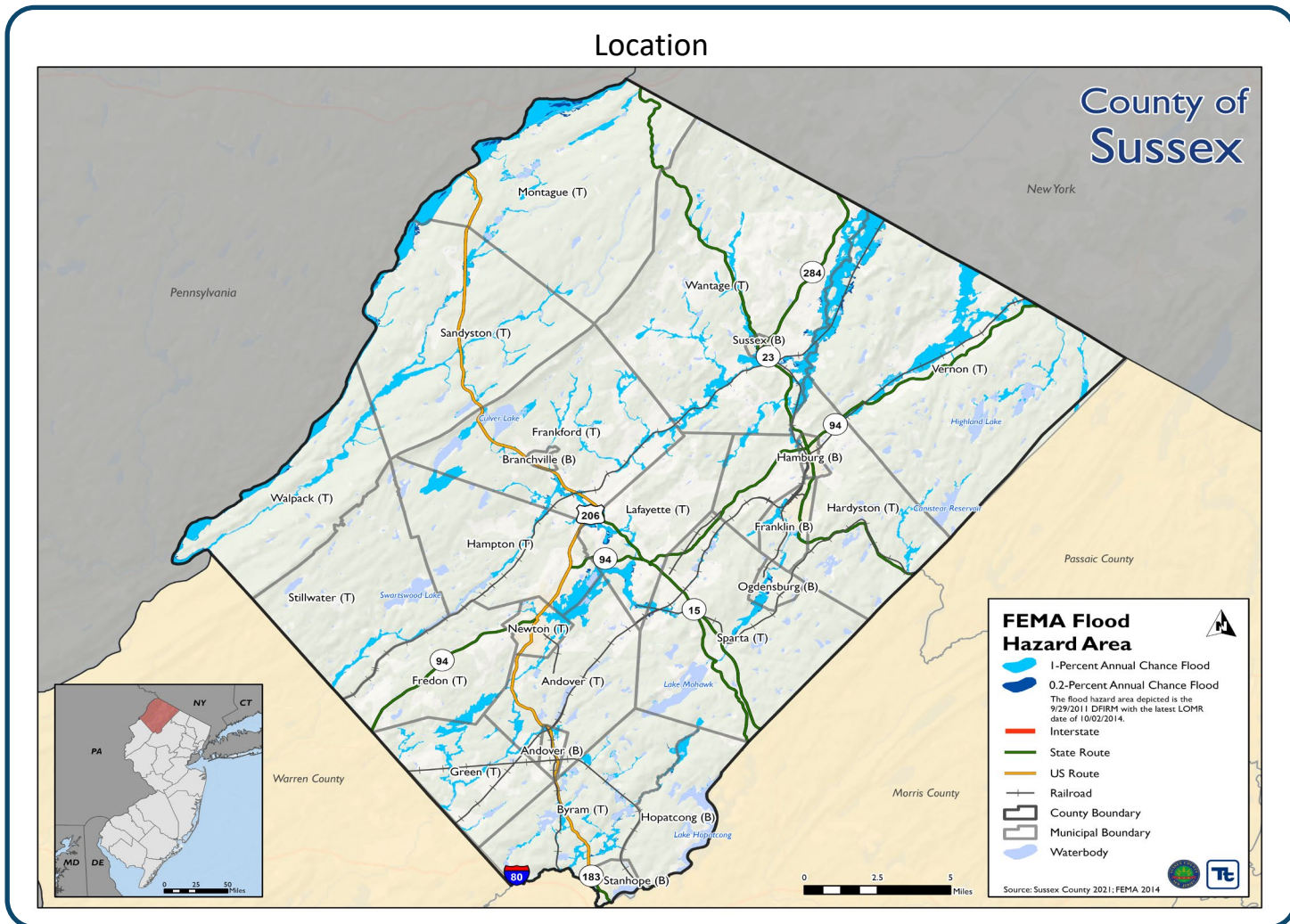
Flood Building Replacement Cost Value

**\$968,515,095**

In 1% Annual Chance Flood Area

**\$1,053,397,709**

In 0.2% Annual Chance Flood Area



Hazard Types



Riverine / Inland



Flash Flood



Urban / Stormwater



Coastal



Ice Jam

Land Exposed to Flood Hazard



**72,903**  
acres



# Geological Hazards

Landslides and subsidence sinkholes are common in the State of New Jersey, primarily in northern regions. Expansion of urban and recreational developments into hillside areas exposes more people to the threat of landslides each year.

Population Exposed

**41,329**

In areas with carbonate karst soils

**144,221**

Within 0.25-miles of abandoned mines

**20,921**

In areas with >20% grade

**16,335**

In areas with 15% - 20% grade

Building Replacement Cost Value

**20,634**

In areas with carbonate karst soils

**3,035**

Within 0.25-miles of abandoned mines

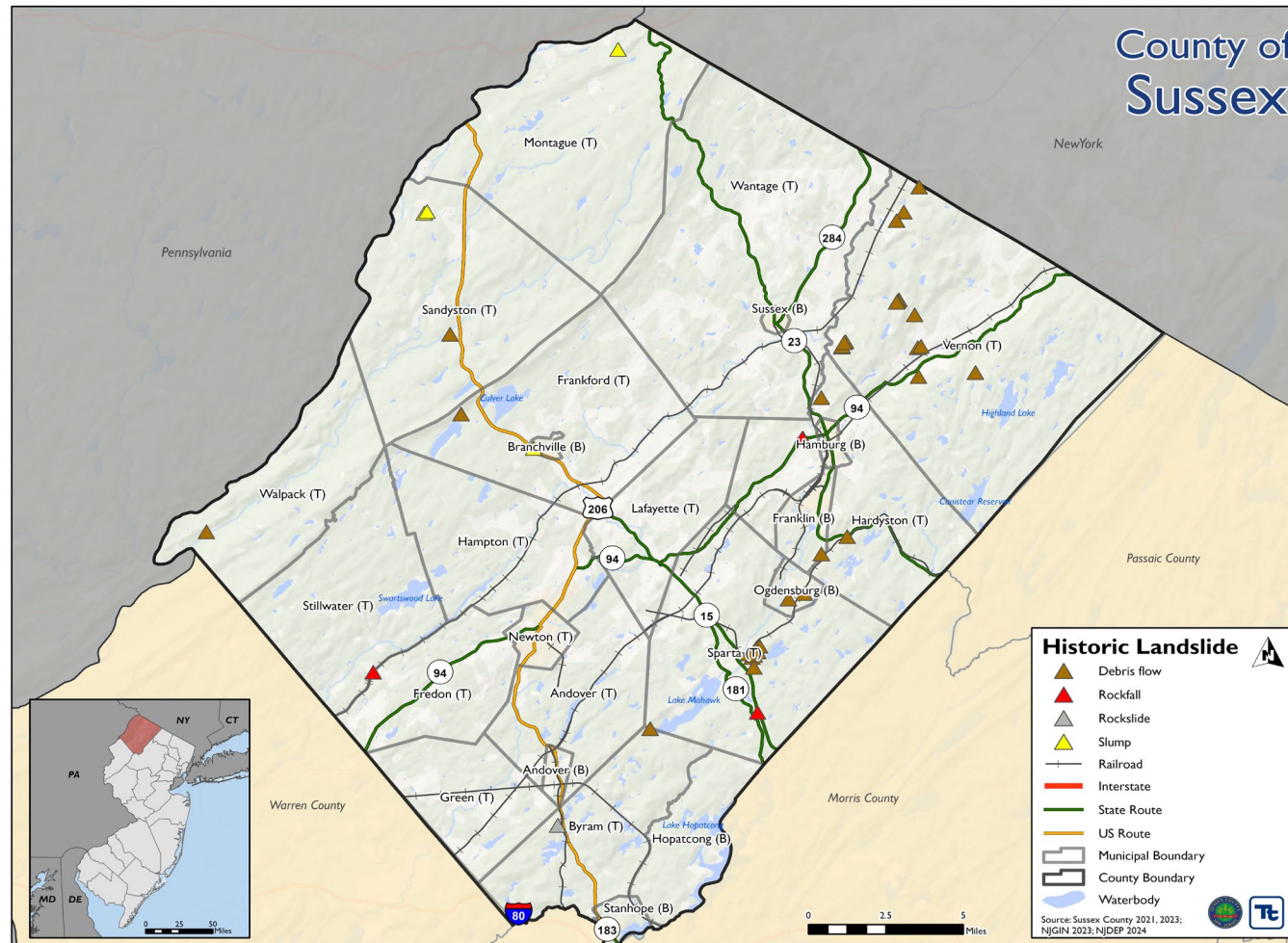
**10,107**

In areas with >20% grade

**7,714**

In areas with 15% - 20% grade

## Historic Landslides in Sussex County



## Hazard Types



Land Subsidence



Landslide



Urban Karst / Sinkhole

## Climate Change Impacts

Projected increases in precipitation events may result in the oversaturation of the ground causing it to become unstable.

# Hazardous Materials



Though hazardous materials incidents are considered rare events, the impacts which the County would experience could be detrimental to the economy, transportation, and in some cases the environment.

## Population Exposed

**26,521**

Within a Mile of a Hazardous Site

**19,930**

Within a Mile of Hazardous Materials Rail Routes

**68,535**

Within 1 mile of Hazardous Materials Roadway Routes

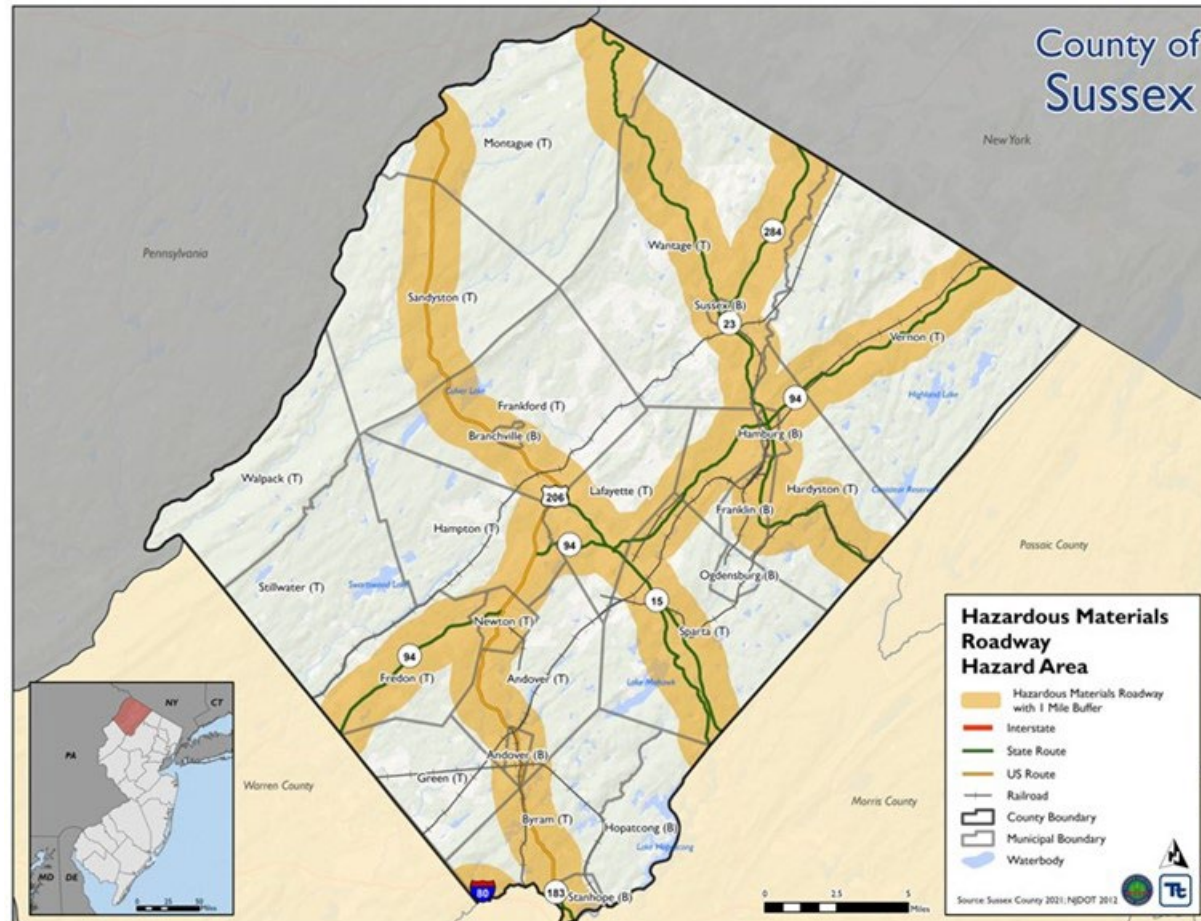
**142,717**

Within 50 Miles of Indian Point Energy Center

## Notable Occurrences

Between 2020 and 2022, over 580 pounds of Ethylene oxide and Lead were released at on-site facilities in Sussex County.

## Major Roadways with 1 Mile Buffer



## Hazard Types

- Hazardous Materials Site
- Hazardous Materials Rail Routes
- Hazard Materials Road Routes
- 50-Mile Incidence Area for Indian Point Center

## Climate Change Impacts

As temperatures change, excessive heat on aging structures and/or infrastructure may be adversely affected. Excessive heat on structures or containers containing hazardous materials may alter the material properties. In addition, hazardous substances stored at fixed locations in the floodplain may experience an increase in flood events.

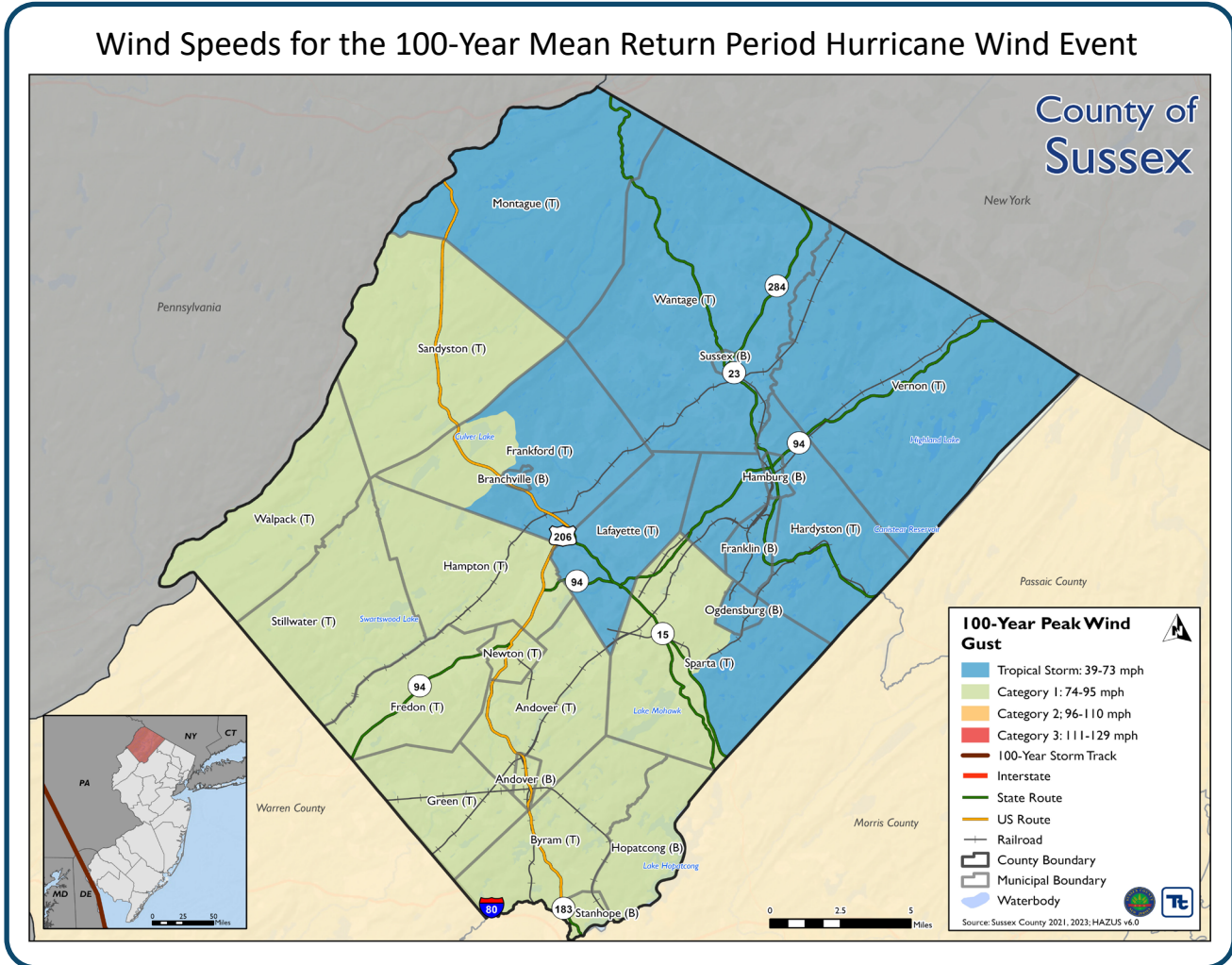
# Hurricane

Sussex County is not located along the Atlantic Coast, but hurricanes and tropical storms can track inland, bringing heavy rainfall, strong winds, and flooding. These regional events can impact very large areas, hundreds to thousands of miles across over the life the storm.

Population Exposed  
**144,221**  
 (100%)  
 the entire County is susceptible

Estimated Building Losses  
**\$25,580,551**  
 for the 100-Year Mean Return  
 Period Hurricane Wind Event

Tons of Tree Debris  
**4,230**  
 for the 100-Year Mean Return  
 Period Hurricane Wind Event



### Notable Occurrence

Tropical Storm Isaias brought high winds, heavy rain, several tornadoes, and coastal flooding to the mid-Atlantic region in August 2020, becoming the most impactful tropical cyclone to impact most of the region since Sandy in 2012. Several reports of downed trees and power lines were made.

### Climate Change Impacts

Warming ocean waters are predicted to result in more powerful tropical systems though it is unknown if the frequency of tropical systems will increase. The typical hurricane season may lengthen. Steering currents that move tropical systems once they reach the shoreline may weaken, leading to more prolonged impacts.

# Infestation

Due to Sussex County's landscape diversity, the entire County has the potential to be impacted by each of the species identified. Bodies of water, including Lake Hopatcong, have the potential to be impacted by Harmful Algal Blooms.

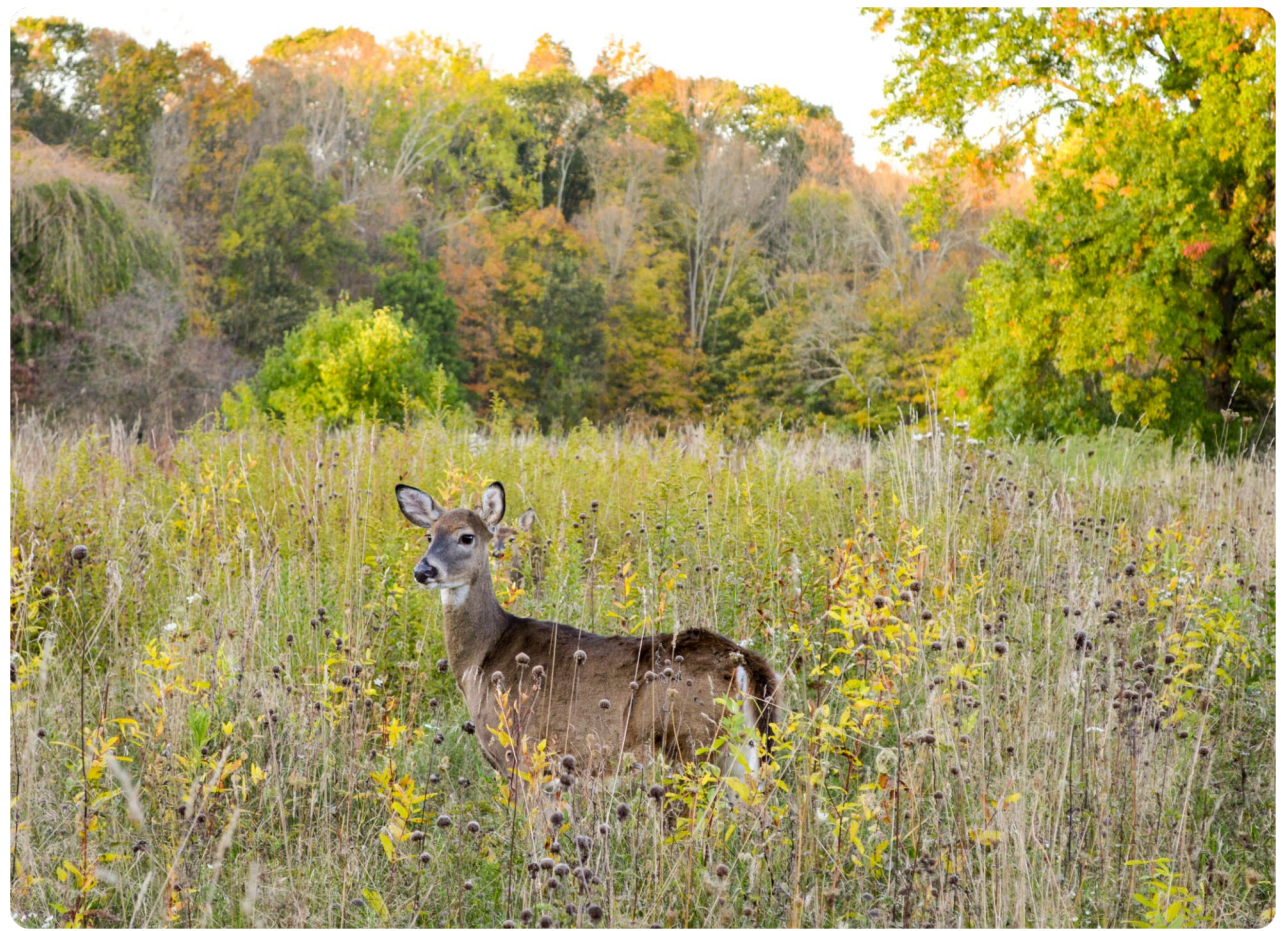
Population Exposed

**144,221**

(100%)

The entire County is vulnerable

White-Tailed Deer in a Meadow



Hazard Types

- Canada Geese
- Emerald Ash Borer
- Harmful Algal Bloom
- Hemlock Woolly Adelgid
- Mosquitoes
- Spotted Lanternfly
- White-Tailed Deer

## Harmful Algal Bloom Alerts

These alerts occurred on the Swartswood Lake, Lake Hopatcong, Lake Owassa, Lake Neepaulin, Lake Musconetcong, and Highland Lake.

Year	Watch	Advisory
2023	12	5
2022	10	15
2021	13	8
2020	9	5

## Climate Change Impacts

A warming climate can foster the spread of invasive species. New species may enter a region in a northern pattern to try and live in a habitat that matches their needs. This will affect food webs and hierarchies in ecosystems which will alter the composition of the typical ecosystem.

# Nor'easter

Nor'easters can occur any time of the year but are most frequent and strongest between September and April; these storms have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

**144,221**

(100%)

The entire County is susceptible

Notable Occurrences



A March 2022 storm produced several inches of accumulating snow. Dropping temperatures led to instances of flash freezing. As the storm moved out to sea, winds increased, exacerbating impacts caused by wet snow, leading to scattered power outages.

Map of Nor'easter Moving up New Jersey Coast



Potential Impacts

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

Climate Change Impacts

New Jersey has experienced a 3.5° F increase in the State's average temperature. By 2050, temperatures in New Jersey are expected to increase by 4.1 to 5.7° F. Increases will be more conducive to increased frequency and intensity of severe storms (e.g., thunderstorms, tornados).

# Severe Weather



Severe weather can occur anywhere in the County at any time and have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

**144,221**

(100%)

The entire County is susceptible

Notable Occurrences

A July 2021 storm produced strong microbursts. Extensive tree and utility damage were reported. Many trees were reported snapped near Vernon. Power outages were also reported. Wind speeds were estimated to be 70 mph.

Potential Impacts

- Power Outages
- Traffic Accidents
- Downed Trees
- Property Damage
- Personal Injury / Loss of Life

Storm Damage in Stanhope



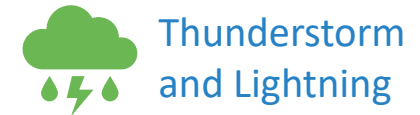
Hazard Types



High Wind



Tornado



Thunderstorm and Lightning

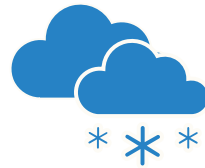


Hailstorms



Extreme Temperatures

# Severe Winter Weather



Severe winter weather can occur anywhere in the County and have the potential to be life-threatening. It is critical for the community to prepare and be aware of forecasts in their local jurisdictions.

Population Exposed

**144,221**

(100%)

The entire County is susceptible

January 31 – February 2, 2021 Snow Event



Notable Occurrence



A winter storm in early 2021 resulted in reports of 24 inches to 32 inches of snow across Sussex County.

Hazard Types

- Heavy Snow
- Blizzard
- Ice Storm
  - Sleet
  - Freezing Rain

Climate Change Impacts

By 2050, temperatures in New Jersey are expected to increase by 4.1 to 5.7° F. The increase in temperatures is expected to be felt more during the winter months, resulting in less intense cold waves, fewer sub-freezing days, and less snow accumulation.

# Wildfire

Wildfire events in Sussex County typically occur toward the forested portions of the County, such as Stokes State Forest. Wildfires can have impacts on critical services, utilities, and properties, and may cause injury.

Population Exposed

**2,834**

(2%)

of the County is susceptible

Building Replacement Cost Value

**\$2,372,327,088**

In Extreme, Very High, or High Wildfire Fuel Risk Hazard Area

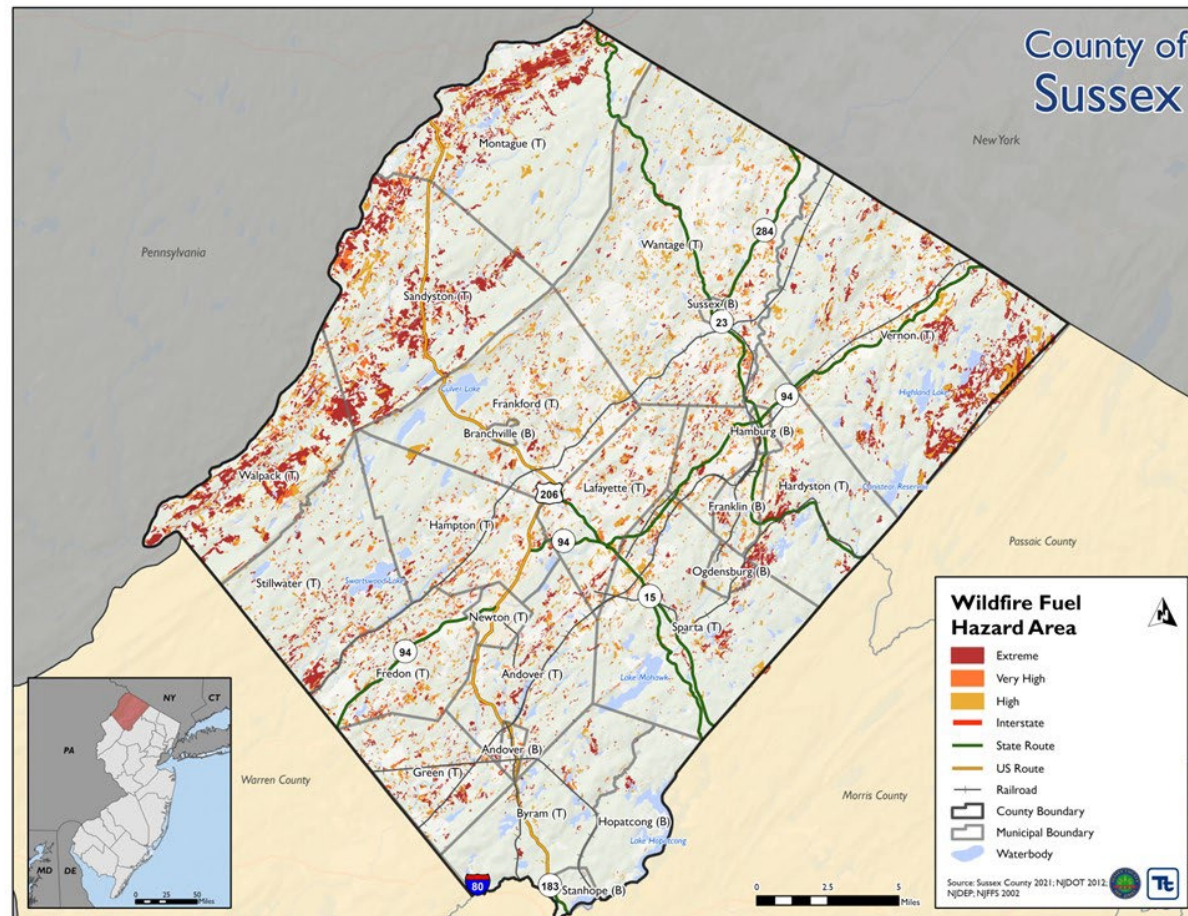
Number of Buildings Exposed

**1,494**

(2.1%)

In Extreme, Very High, or High Wildfire Fuel Risk Hazard Area

Location



Notable Occurrence

On May 12, 2015 a wildfire started shortly after 530 p.m. In addition to a home being destroyed, the wildfire consumed more than 6 acres before it was brought under control about 3 hours later.

Climate Change Impacts

Sussex County can expect warmer and drier conditions which may increase the frequency and intensity of wildfires. Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the likelihood of wildfires.



# Hazard Rankings

Review the calculated hazard rankings and provide your feedback.

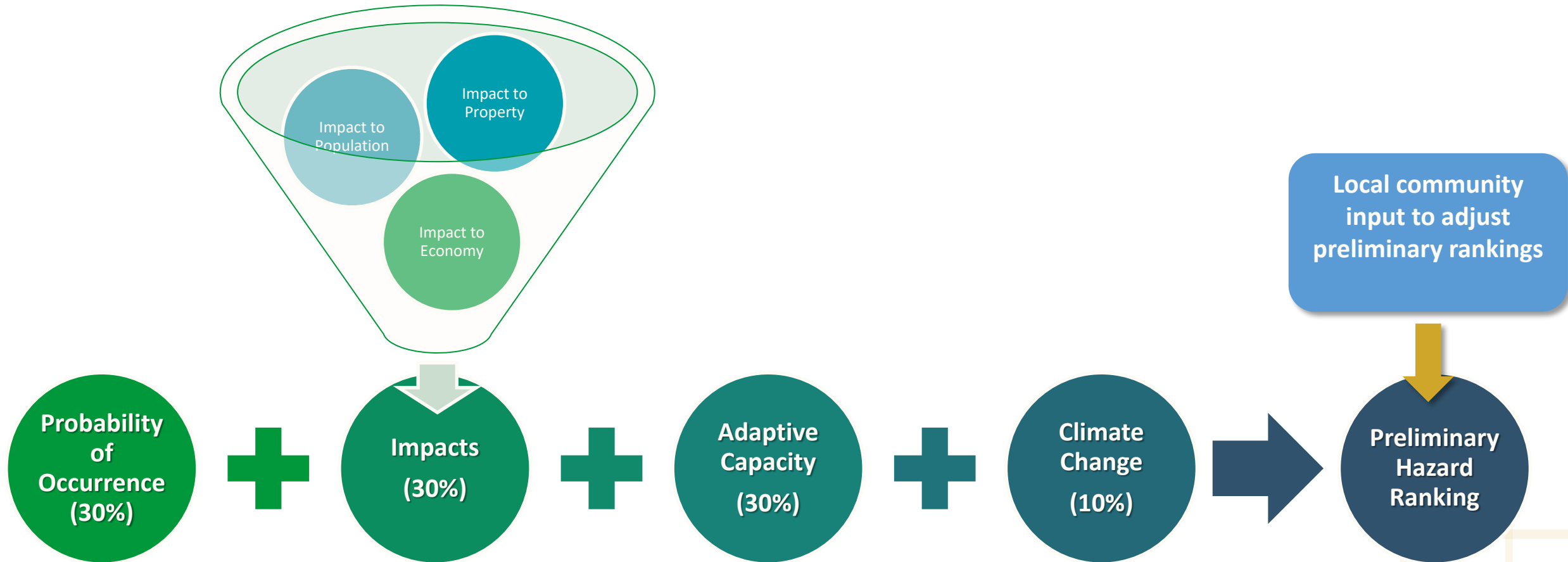


# Preliminary Hazard Ranking Methodology

- 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



# Preliminary Risk Ranking (County)

## High

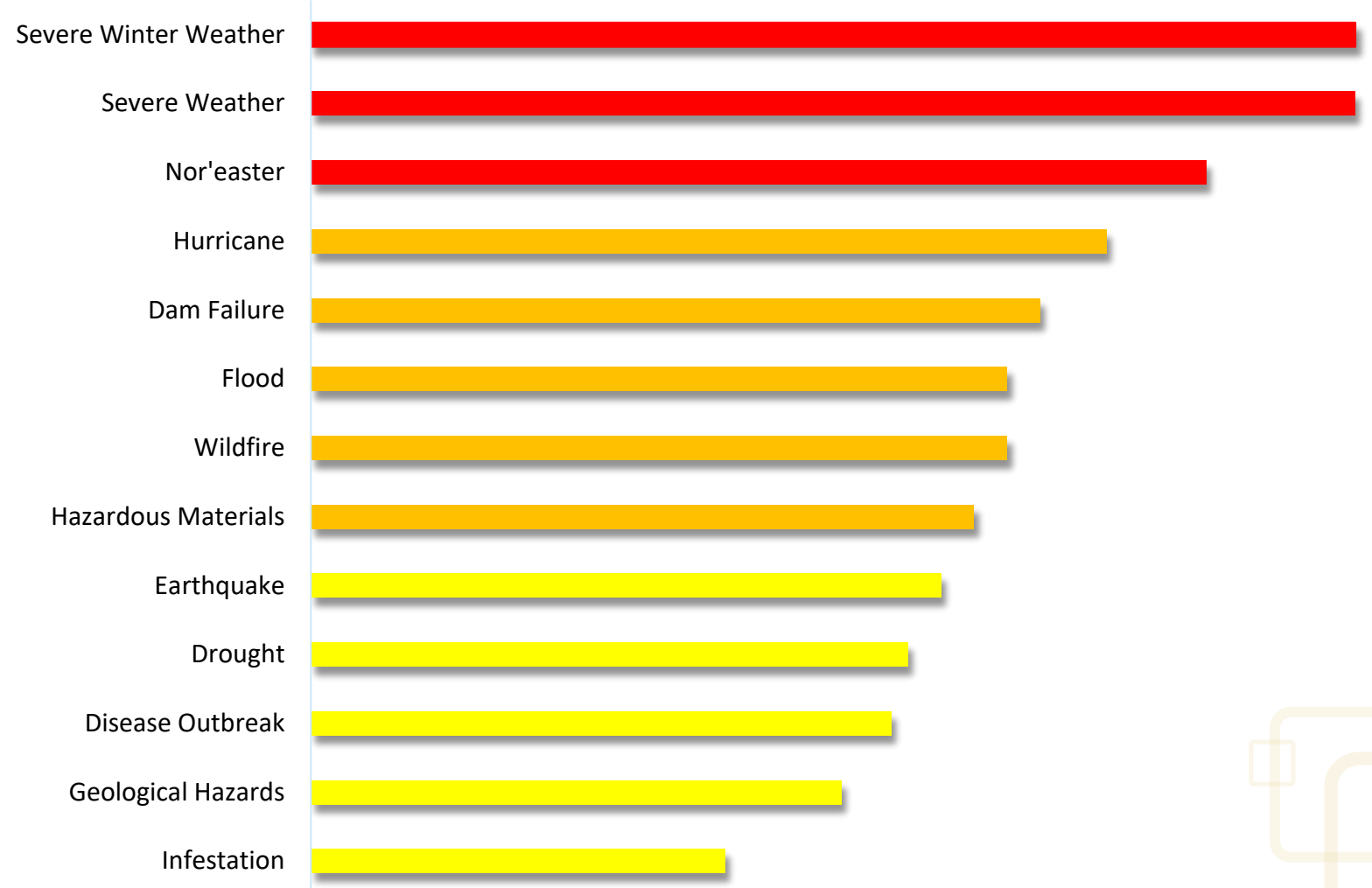
- Severe Winter Storm
- Severe Weather
- Nor'easter

## Medium

- Hurricane
- Dam Failure
- Flood
- Wildfire
- Hazardous Materials

## Low

- Earthquake
- Drought
- Disease Outbreak
- Geological Hazards
- Infestation



# Review Preliminary Rankings



# Review Preliminary Rankings



Please send all electronic Word versions by April 19, 2024 to:  
Grace Altenburg, Tetra Tech | Grace.Altenburg@tetratech.com

Jurisdiction: \_\_\_\_\_

Name/Title of Individual Completing Worksheet: \_\_\_\_\_

### What is a Hazard Ranking?

Hazard Ranking is used to understand your community's vulnerabilities to hazards and to prioritize projects and activities for mitigation.

Hazard Ranking is determined by quantitative and qualitative factors including:

1. The calculated probability of a hazard occurring based on historical data.
2. Impacts to people, property, and the economy based on GIS data and analysis of exposure.
3. The degree to which climate change will affect future occurrences based on best available data.
4. Adaptive Capacity, which is the ability your community has to respond to the hazard based on ordinances, mitigation strategies and procedures, and readiness.

### What is my Hazard Ranking?

The following table represent the calculated rankings for the hazards of concern for your community. Please review the calculated rankings and indicate whether or not you want to adjust the ranking. If you are changing the ranking, please provide detail as to why you are changing the ranking. **REMEMBER, for every hazard of concern, you need at least one mitigation action.**

Continued on next page.

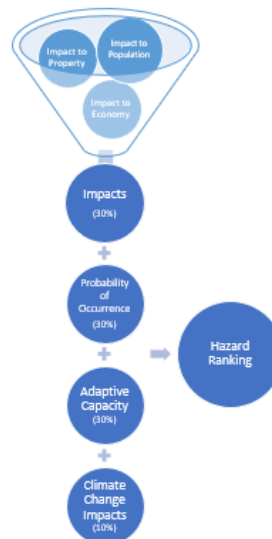


Table 1. 2025 HMP Municipal Hazard Rankings

Hazard	Draft 2025 Preliminary Ranking	Agree with preliminary ranking (Y/N)? If No, indicate preferred ranking.	What local information or conditions have resulted in the adjustment in hazard ranking?

### What is Adaptive Capacity?

Adaptive capacity describes a jurisdiction's current ability to protect from or withstand a hazard event.

- **Weak** adaptive capacity means the jurisdiction does not have the capability to effectively respond, which leads to an increase in vulnerability. Examples include weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.
- **Moderate** adaptive capacity means minimum requirements are in place; moderate capabilities; mitigation measures are identified but not implemented widespread; jurisdiction can recover but needs outside resources.
- **Strong** adaptive capacity means the jurisdiction does have the capability to effectively respond, plans/policies exceed minimum requirements; deployable resources all of which decreases vulnerability.

Table 2. 2025 HMP Municipal Adaptive Capacity

Hazard	Preliminary Ranking	What should we indicate for your community's adaptive capacity for each hazard?

Note: \*Adaptive capacity was assumed Moderate for all hazards.



# Next Steps

- Share information about the HMP Update via social media, community groups, and networks
- Attend the Mitigation Strategy Workshop on Wednesday, May 8 @ 10:00 a.m. in person (location to be determined).





**Questions?**



## **Sussex County Project Contacts**

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973-579-0380 x 2531 | [ssugar@sussexcountysheriff.com](mailto:ssugar@sussexcountysheriff.com)

James Aumick, Deputy Coordinator  
973-579-0380 x 2531 | [jaumick@sussexcountysheriff.com](mailto:jaumick@sussexcountysheriff.com)

## **Tetra Tech Project Contacts**

Chris Huch, CFM | Project Manager  
(973) 630-8357 | [chris.huch@tetrattech.com](mailto:chris.huch@tetrattech.com)

Jessica Stokes, MSEM, NJCEM | Lead Planner  
(973) 630-8017 | [jessica.stokes@tetrattech.com](mailto:jessica.stokes@tetrattech.com)



**Thank  
You!**

**Planning  
Partnership  
Mitigation Strategy  
Workshop Materials**



**SUSSEX COUNTY HAZARD MITIGATION PLAN UPDATE**  
**Mitigation Action Workshop – AGENDA**  
**MEETING DATE/TIME: May 8, 2024 – 10:00 am – 12:00 pm**



**In-Person Meeting**  
**Sussex County Emergency Operations Center**  
**135 Morris Turnpike Newton, NJ 07860**

- 1. Opening Remarks**
- 2. Project Status** - where we are in the process, public outreach
- 3. Identifying and Developing Mitigation Strategies**
- 4. Review Previous Actions**
- 5. Developing New Potential Actions**
- 6. Next Steps** – continue developing actions and work with Tetra Tech staff to complete outstanding worksheets prior to leaving today
- 7. Questions**
- 8. Workshop** – work with the Tetra Tech staff to develop mitigation strategies and complete outstanding worksheets

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Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
 Planning Partnership Mitigation Strategy Workshop | Meeting Minutes



<b>Purpose of Meeting:</b>	Planning Partnership Mitigation Strategy Workshop
<b>Location of Meeting:</b>	Sussex County Emergency Operations Center (135 Morris Turnpike Newton, NJ 07860)
<b>Date of Meeting:</b>	May 8, 2024 @ 10:00 A.M.

<p><b>Attendees:</b></p> <ul style="list-style-type: none"> <li>• <b>Sussex County</b> <ul style="list-style-type: none"> <li>○ Steven Sugar, OEM Deputy Coordinator</li> <li>○ James Aumick, OEM Deputy Coordinator</li> <li>○ Michael Strada, Sussex County Sheriff</li> <li>○ Eric Muller, OEM Deputy Coordinator</li> </ul> </li> <li>• <b>Andover (Twp)</b> <ul style="list-style-type: none"> <li>○ Chief Eric Danielson, OEM Coordinator</li> </ul> </li> <li>• <b>Branchville (B)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Byram (Twp)</b> <ul style="list-style-type: none"> <li>○ Phil Crosson, Deputy Township Manager</li> <li>○ Mike Orgera, Public Works Superintendent</li> </ul> </li> <li>• <b>Frankford (Twp)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Hamburg (B)</b> <ul style="list-style-type: none"> <li>○ Keith Sukennikoff, OEM Coordinator</li> </ul> </li> <li>• <b>Hampton (Twp)</b> <ul style="list-style-type: none"> <li>○ Jessica M. Caruso, Township Administrator</li> <li>○ Edward Hayes, OEM Coordinator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Montague (Twp)</b> <ul style="list-style-type: none"> <li>○ Jesse Brace-Revak, OEM Coordinator</li> </ul> </li> <li>• <b>Newton (T)</b> <ul style="list-style-type: none"> <li>○ Dan Finkle, OEM Coordinator</li> </ul> </li> <li>• <b>Sparta (Twp)</b> <ul style="list-style-type: none"> <li>○ Richard Bartlett, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Stillwater (Twp)</b> <ul style="list-style-type: none"> <li>○ Lisa Chamings, Mayor/OEM Coordinator</li> </ul> </li> <li>• <b>Wantage (Twp)</b> <ul style="list-style-type: none"> <li>○ Joe Konopinski, OEM Coordinator</li> </ul> </li> <li>• <b>Tetra Tech</b> <ul style="list-style-type: none"> <li>○ Chris Huch, Project Manager</li> <li>○ Jessica Stokes, Lead Planner</li> </ul> </li> </ul>
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**Agenda Summary:** The purpose of the meeting was to describe the contains within the mitigation strategy, provide an opportunity for jurisdictions to review their previous mitigation actions, complete outstanding worksheets with assistance from Tetra Tech planners, discuss what makes a good mitigation action, and identify potential 2025 mitigation actions.

Item No.	Description	Action item(s):
1	<b>Introductions</b>	-
2	<b>Project Status</b> <ul style="list-style-type: none"> <li>• Tetra Tech provided an overview on the status of the project, including the anticipated timeline.</li> </ul>	-
2	<b>Identifying and Developing Mitigation Strategies</b> <ul style="list-style-type: none"> <li>• The <b>Mitigation Strategy</b> is the County’s roadmap to reduce the risk of hazards identified in the HMP. The strategy is based on hazard impacts, asset vulnerability, and the County’s capabilities.</li> <li>• <b>Mitigation Actions</b> are specific activities, such as policies, projects, and studies, that stakeholders identify to reduce risk.                             <ul style="list-style-type: none"> <li>○ Forward-looking and incorporate changing conditions for the life of the County’s assets</li> <li>○ Consider changing demographics, development patterns, impacts of climate change.</li> <li>○ Examples of actions may include elevating electrical and HVAC equipment to reduce the likelihood of damage from floodwaters or planting trees to lower temperatures exacerbated by pavement.</li> </ul> </li> <li>• What is a <b>Mitigation Strategy</b>?                             <ul style="list-style-type: none"> <li>○ A group of projects or actions to reduce the impacts of the hazards of concern on your community</li> </ul> </li> </ul>	-

Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
 Planning Partnership Mitigation Strategy Workshop | Meeting Minutes



	<ul style="list-style-type: none"> <li>▪ Plans and Regulations</li> <li>▪ Structure and Infrastructure Studies and Projects</li> <li>▪ Natural Systems Protection Studies and Projects</li> <li>▪ Education and Awareness Programs</li> </ul> <ul style="list-style-type: none"> <li>• Terms to describe the <i>Mitigation Strategy</i> include:                             <ul style="list-style-type: none"> <li>○ <b>Mitigation Action Plan</b> or <b>Action Plan</b></li> <li>○ <b>Mitigation Projects</b> or <b>Initiatives</b> or <b>Actions</b></li> </ul> </li> <li>• Need a clear connection between vulnerabilities identified in the risk assessment and proposed mitigation actions.</li> <li>• The capability assessment can provide insight into challenges and opportunities for the mitigation strategy.</li> <li>• All actions proposed in the mitigation strategy must have a factual basis tied to the results of the risk and capability assessments (<i>this shouldn't be a wish list!</i>)</li> </ul>	
3	<p><b>Review Previous Actions</b></p> <ul style="list-style-type: none"> <li>• Review the mitigation actions your jurisdiction identified in the previous HMP by providing a brief status narrative. Begin by providing the status headings below and then add details (what has been accomplished, what funding was used, anything holding back progress):                             <ul style="list-style-type: none"> <li>○ IN PROGRESS: Started but not complete</li> <li>○ ONGOING CAPABILITY: An action you now complete on a regular basis (maintenance, annual outreach, etc.). These actions will be included in your capabilities moving forward.</li> <li>○ NO PROGRESS: Not started</li> <li>○ COMPLETE: Finished!</li> </ul> </li> <li>• Actions that are COMPLETE or ONGOING will not be carried forward.</li> </ul>	<p><b>Planning Partnership</b></p> <ul style="list-style-type: none"> <li>• Complete outstanding worksheets and submit to Grace Altenburg.</li> </ul>
4	<p><b>Developing New Potential Actions</b></p> <ul style="list-style-type: none"> <li>• Quality not quantity                             <ul style="list-style-type: none"> <li>○ Each action needs detailed information on the why, who, what, and when of the action.</li> </ul> </li> <li>• 2021 projects                             <ul style="list-style-type: none"> <li>○ If a project is not finished and still a priority, include in 2025 HMP</li> <li>○ Remove general projects or make more specific</li> <li>○ Remove ongoing capabilities like maintenance or annual outreach</li> </ul> </li> <li>• <b>Each hazard needs at least one mitigation action</b></li> <li>• If your jurisdiction has Repetitive Loss Properties - an action is needed to mitigate the properties (elevation or acquisition) with specifics (street or neighborhood names, not specific addresses)</li> <li>• Four types of Mitigation Actions                             <ul style="list-style-type: none"> <li>○ Plans and regulations</li> <li>○ Structure and Infrastructure</li> <li>○ Natural systems protection</li> <li>○ Education and awareness</li> </ul> </li> </ul>	-
5	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Share information about the HMP Update via social media, community groups, and networks</li> <li>• Submit all outstanding worksheets to Tetra Tech</li> </ul>	-
6	<p><b>Questions/Discussion</b></p> <ul style="list-style-type: none"> <li>• No questions</li> </ul>	-



# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2025 Update

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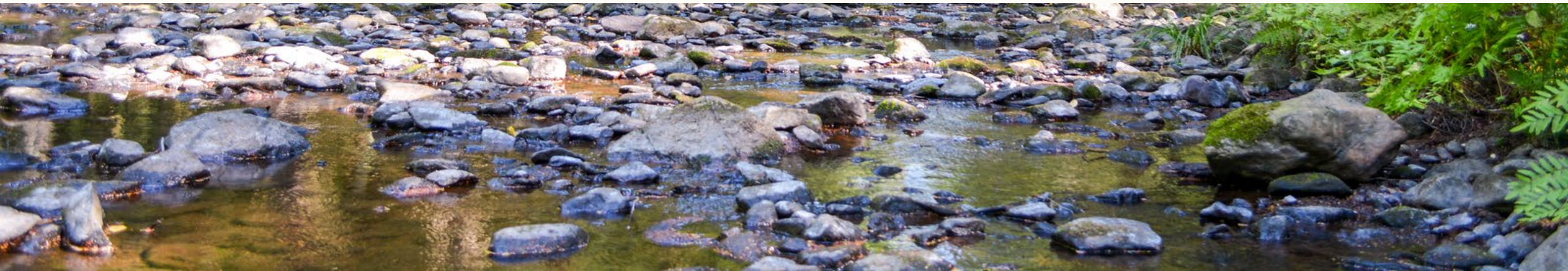
Mitigation Strategy Workshop  
May 8, 2024 | 10:00 am

While waiting for the meeting to start, please do not forget to sign in!



# Today's Agenda

1. Identifying and Developing Mitigation Strategies
2. Review Previous Actions
3. Developing New Potential Actions
4. Workshop to Review Previous Actions, Identify New Actions, Complete Municipal Annexes
5. **Check in with Tetra Tech staff before leaving**

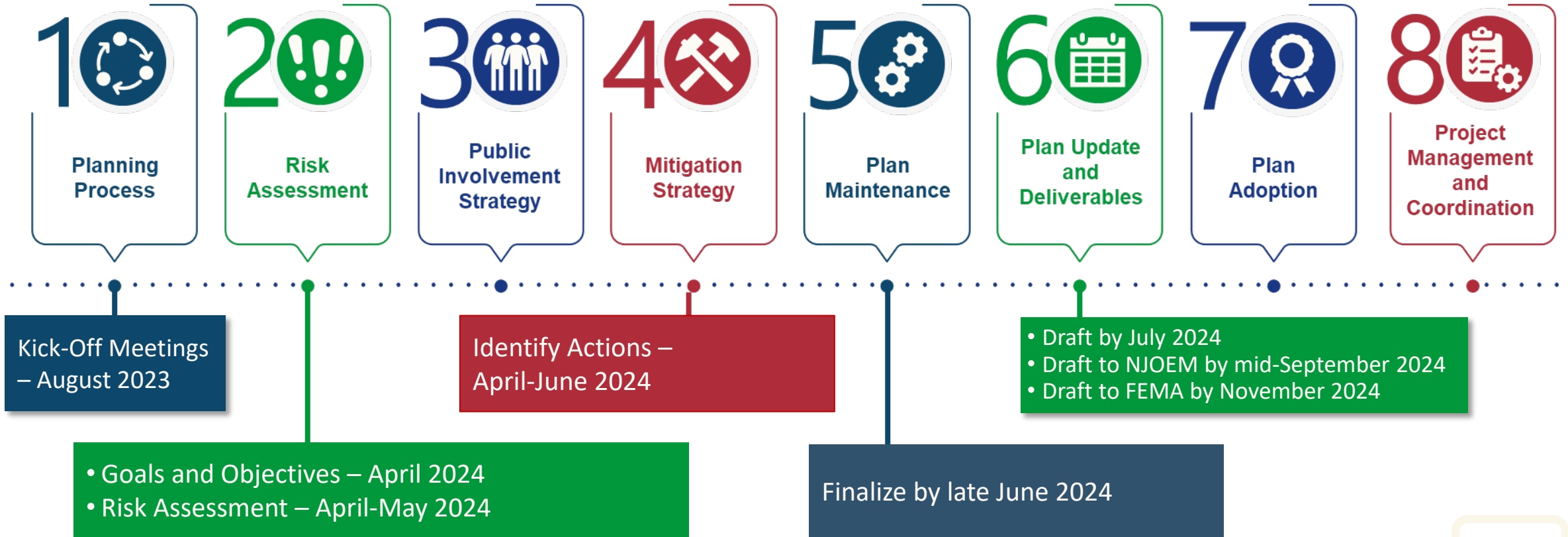




# Project Status



# Schedule



# Identifying and Developing Mitigation Strategies



# Purpose of Mitigation Strategy

- The **Mitigation Strategy** is the County's roadmap to reduce the risk of hazards identified in the HMP. The strategy is based on hazard impacts, asset vulnerability, and the County's capabilities.
- **Mitigation Actions** are specific activities, such as policies, projects, and studies, that stakeholders identify to reduce risk.
  - Forward-looking and incorporate changing conditions for the life of the County's assets
  - Consider changing demographics, development patterns, impacts of climate change.
  - Examples of actions may include elevating electrical and HVAC equipment to reduce the likelihood of damage from floodwaters or planting trees to lower temperatures exacerbated by pavement.
  - ***Actions included in the plan are eligible for certain types of FEMA funding.***

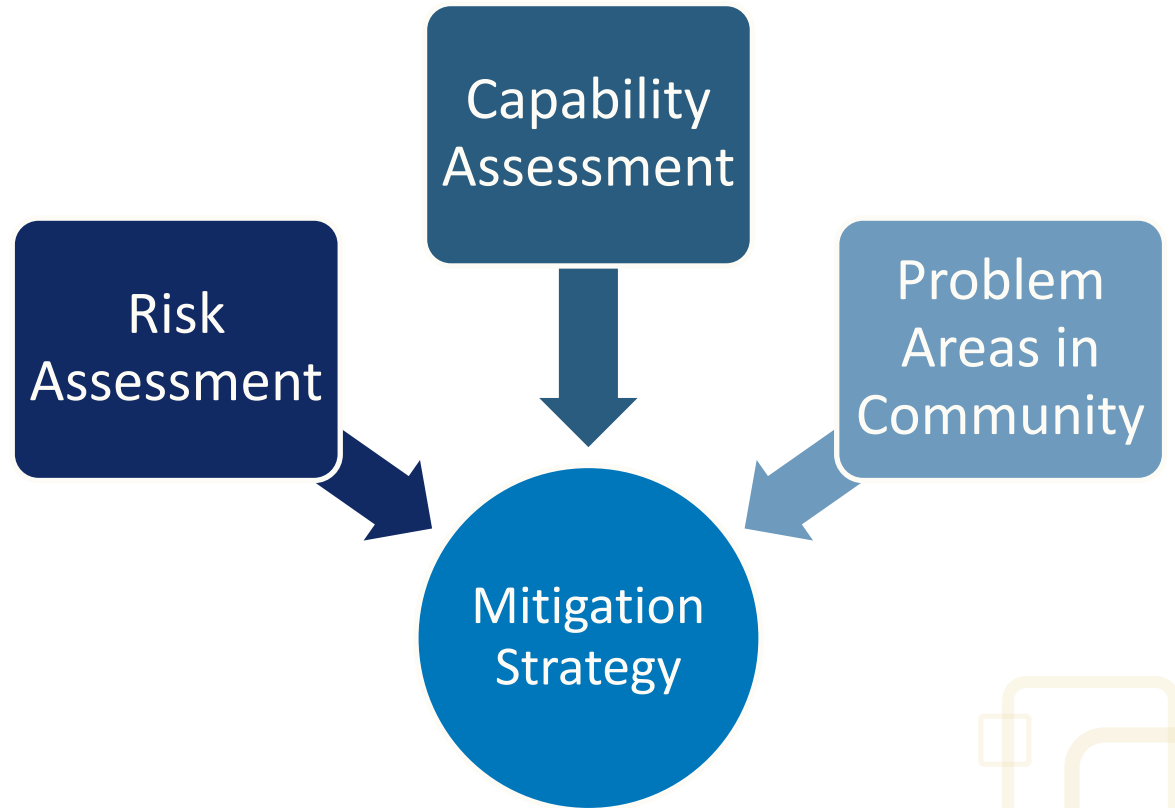
# Using Your Mitigation Strategy to Reduce Risk

- What is a ***Mitigation Strategy***?
  - A group of projects or actions to reduce the impacts of the hazards of concern on your community
    - Plans and Regulations
    - Structure and Infrastructure Studies and Projects
    - Natural Systems Protection Studies and Projects
    - Education and Awareness Programs
- Terms to describe the ***Mitigation Strategy*** include:
  - **Mitigation Action Plan** or **Action Plan**
  - **Mitigation Projects** or **Initiatives** or **Actions**

Your Mitigation Strategy is included in your annex. Each action will be developed on individual Action Worksheets to include detailed information that can serve as starting points for grant applications and guide implementation

# Connecting to the Mitigation Strategy

- Need a clear connection between vulnerabilities identified in the risk assessment and proposed mitigation actions.
- The capability assessment can provide insight into challenges and opportunities for the mitigation strategy.
- All actions proposed in the mitigation strategy must have a factual basis tied to hazards (*this shouldn't be a wish list!*)



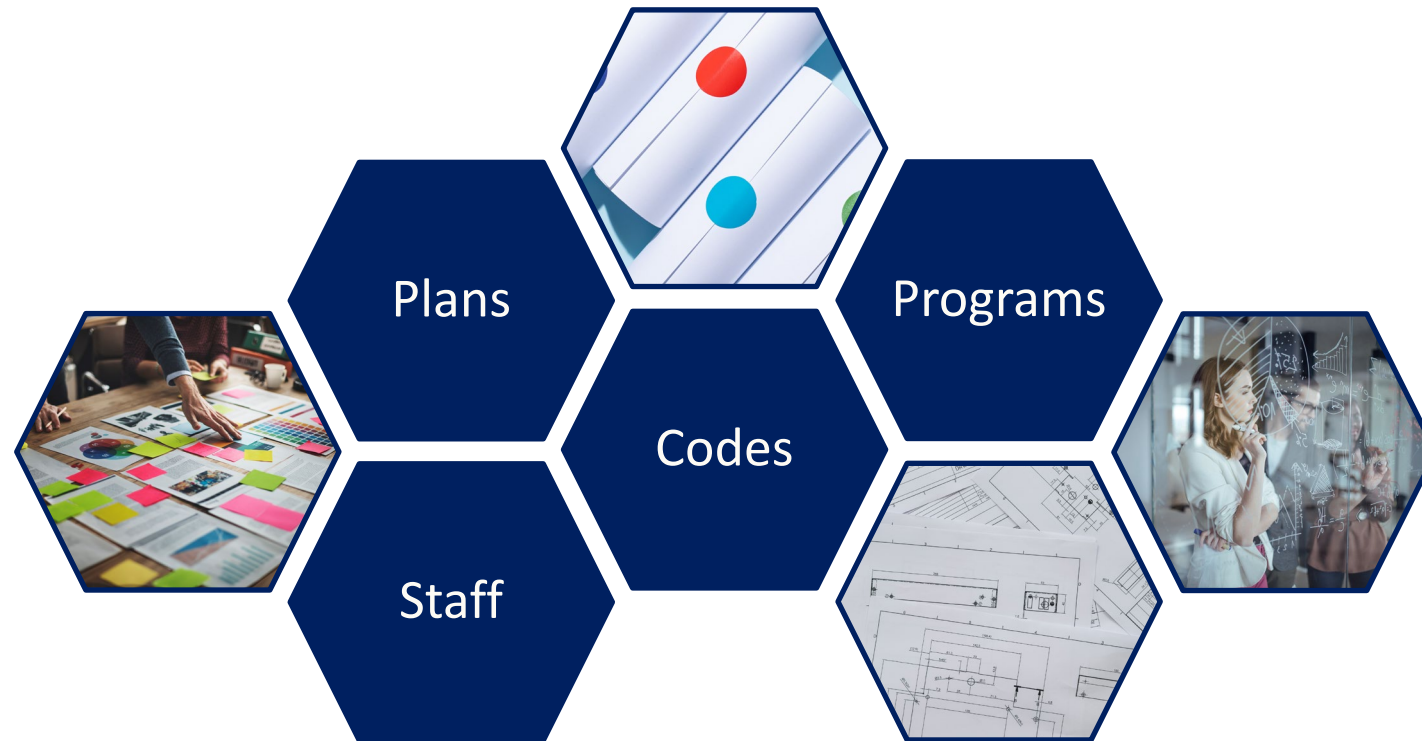
# Hazards of Concern

- Dam Failure**
- Disease Outbreak**
- Drought**
- Earthquake**
- Flood**
- Geologic Hazards**
- Hazardous Materials**
- Hurricane & Tropical Storm**
- Infestation & Invasive Species**
- Nor'Easter**
- Severe Weather**
- Severe Winter Weather**
- Wildfire**



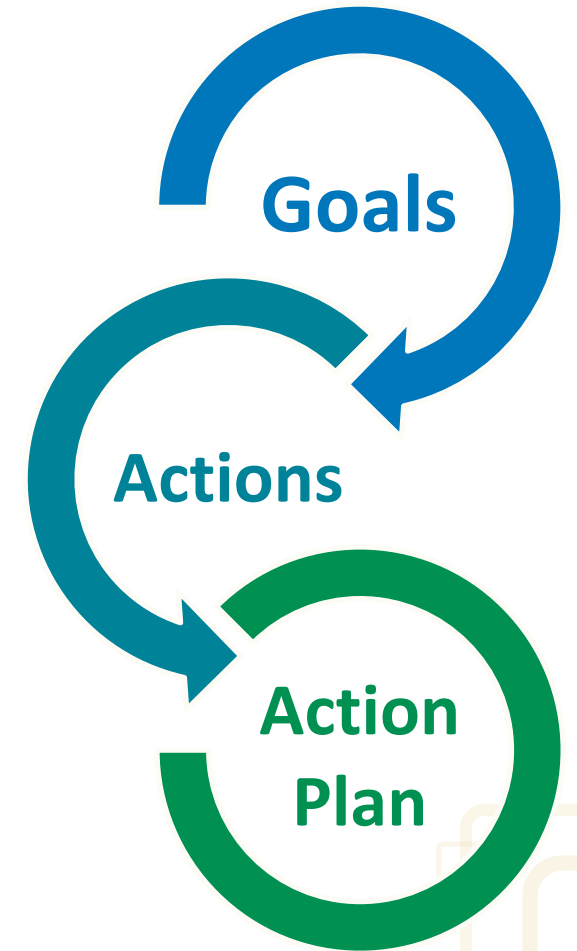
# Capability Assessment

- Capabilities
  - What does your jurisdiction use to reduce risk to hazards?



# Mitigation Strategy

- Goals
  - What outcomes do you want to achieve?
- Actions
  - What specific actions will be taken to reduce hazard risk?
- Action Plan
  - How will the actions be prioritized and implemented?





# 2025 HMP Goals

	Goal
1	Protect life
2	Protect property
3	Promote a sustainable economy
4	Protect the environment
5	Increase public awareness
6	Support continuity of operations pre-, during, and post-hazard events
7	Reduce the risk of natural hazards for socially vulnerable populations and underserved communities

# Review Previous Actions



# Previous Actions Review

If you have not done so:

Review the mitigation actions your jurisdiction identified in the previous HMP by providing a brief status narrative. Begin by providing the status:

- **IN PROGRESS:** Started but not complete
- **ONGOING CAPABILITY:** An action you now complete on a regular basis (maintenance, annual outreach, etc.). These actions will be included in your capabilities moving forward.
- **NO PROGRESS:** Not started
- **COMPLETE:** Finished!

Actions that are **COMPLETE** or **ONGOING** will not be carried forward.

### STATUS OF PREVIOUS MITIGATION ACTIONS

Review the mitigation actions your jurisdiction identified in the previous HMP by providing a brief narrative. Begin by providing a status update for each action listed in your last annex:

- **IN PROGRESS:** Started but not complete
- **ONGOING CAPABILITY:** An action you now complete on a regular basis (maintenance, annual outreach, etc.). These actions will be included in your capabilities moving forward.
- **NO PROGRESS:** Not started
- **COMPLETE:** Finished!

Actions that are **COMPLETE** or **ONGOING** will not be carried forward. Indicate if **NO PROGRESS** or **IN PROGRESS** actions should be carried forward!

Table 3. Status of Previous Mitigation Actions

Project #	Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed)  Provide details including the funding source, cost, phases completed, obstacles to progress, etc.	If you did not complete the action, should the action be included in the 2024 HMP (i.e., there is still a need, this is still a priority)?		
				Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses), any updates to the action needed.	Hazard(s) of Concern addressed (refer to the hazards on page 1)



## Developing New Potential Actions

# Requirements for the Mitigation Strategy Update

- Quality not quantity
  - Each action needs detailed information on the why, who, what, and when of the action.
- 2021 projects
  - If a project is not finished and still a priority, include in 2025 HMP
  - Remove general projects or make more specific
  - Remove ongoing capabilities like maintenance or annual outreach
- **Each hazard needs at least one mitigation action**
- If your jurisdiction has Repetitive Loss Properties - an action is needed to mitigate the properties (elevation or acquisition) with specifics (street or neighborhood names, not specific addresses)

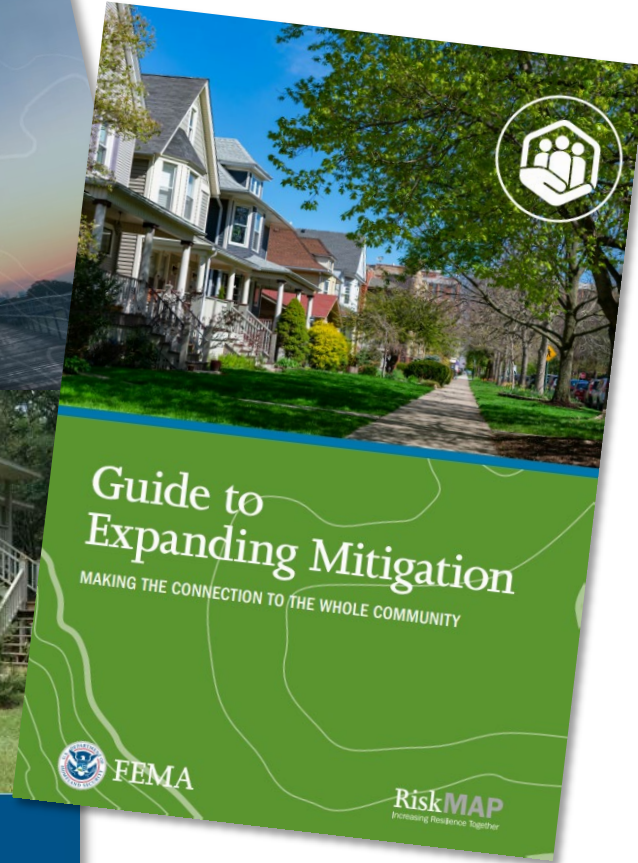
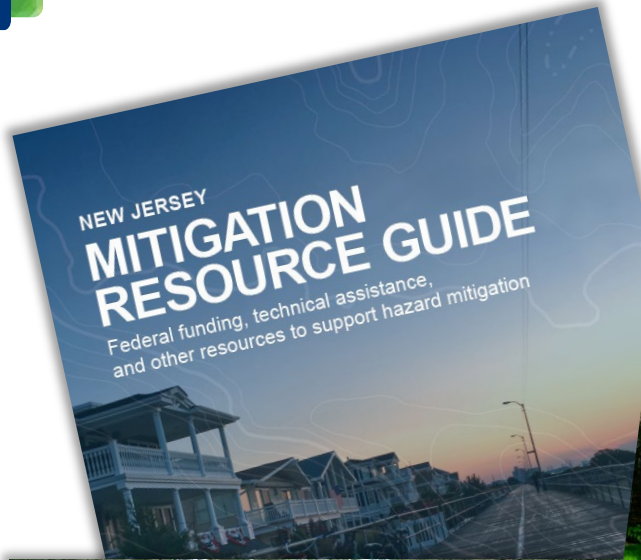


# Where do you need to focus?

- **Stronger connection** between the risk assessment and mitigation strategy
- **More specific, achievable actions**
  - Specific projects, in specific locations, in a specific timeframe
  - Focus on socially vulnerable populations and underserved communities
- **Diverse actions**
  - You need at least **one action per hazard of concern**. Think about actions that can cover multiple hazards.
  - Include a variety of action types (e.g., plans, floodproof critical facilities, outreach programs, etc.)



# Other Mitigation Actions to Consider



## Mitigation Ideas

A Resource for Reducing Risk to Natural Hazards

- Local Disaster Debris Management Plans
- Substantial Damage Management Plan
- Actions to address high-hazard or significant-hazard dams
- Public education and outreach programs
- Generators at critical facilities and community lifelines
- Floodproofing critical facilities and community lifelines
- Addressing repetitive and severe repetitive loss properties

# Mitigation Action Types



**Plans and regulations** include government authorities, policies, or codes that encourage risk reduction, such as building codes and state planning regulations. This may also include planning studies.



**Structure and infrastructure projects** involve modifying existing structures and infrastructure or constructing new structures to reduce the impact of hazards.



**Natural systems protection projects** minimize losses while also preserving or restoring the function of natural systems.



**Education and awareness programs** include long-term, sustained programs to inform and educate citizens and stakeholders about hazards and mitigation options. This category could also include training.





Table 1. Mitigation Action Worksheet

<b>Lead Agency:</b>		
<b>Supporting Agencies:</b>		
<b>Hazard(s) of Concern:</b>		
<b>Description of the Problem:</b>		
<b>Description of the Solution:</b>		
<b>Estimated Cost:</b>		
<b>Potential Funding Sources:</b>		
<b>Implementation Timeline:</b>		
<b>Goals Met:</b>		
<b>Benefits:</b>		
<b>Impact on Socially Vulnerable Populations:</b>		
<b>Impact on Future Development:</b>		
<b>Impact on Critical Facilities/Lifelines:</b>		
<b>Impact on Capabilities:</b>		
<b>Climate Change Considerations:</b>		
<b>Mitigation Category</b>		
<b>CRS Category</b>		
<b>Priority</b>		
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>



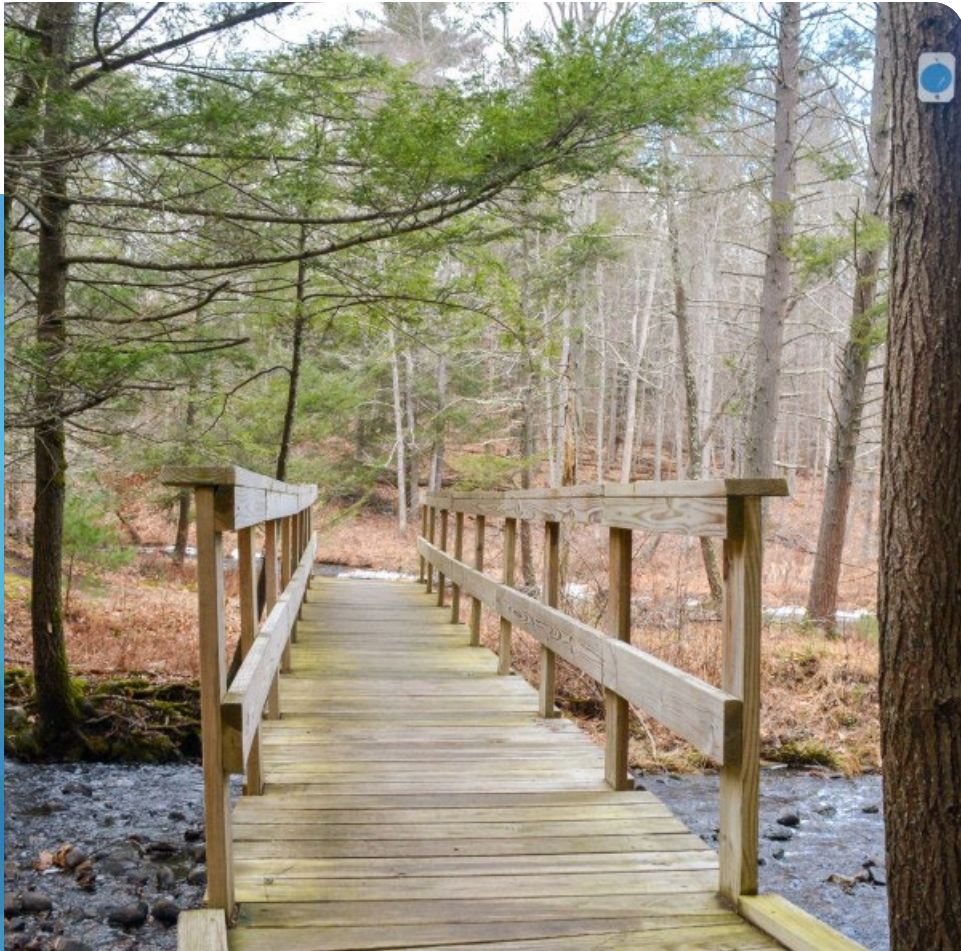
# Next Steps

- **NOW:** Complete your worksheets, ask questions, and provide to Tetra Tech staff
- **NOW:** Provide update to Tetra Tech staff on any missing worksheets, when you will submit them, and how Tetra Tech can assist you
- **AFTER WORKSHOP:** Continue to share information about the HMP Update via social media, community groups, and networks. Let us know who you share information with!
- **NEXT MONTH:** Work with Tetra Tech planners to complete annexes and finalize actions.





**Questions?**



# Workshop

Review previous mitigation actions, identify new actions, complete missing areas in your annex.

**Before you leave, check in with Tetra Tech staff!**

## **Sussex County Project Contacts**

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## **Tetra Tech Project Contacts**

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Jessica Stokes, MSEM, NJCEM | Lead Planner  
(973) 630-8017 | [jessica.stokes@tetrattech.com](mailto:jessica.stokes@tetrattech.com)



**Thank  
You!**

# **Draft Plan Review Meeting Materials**



**SUSSEX COUNTY HAZARD MITIGATION PLAN UPDATE**  
**Draft Plan Review Meeting – AGENDA**  
**MEETING DATE/TIME: November 21, 2024 7:00 PM – 8:00 PM EST.**



**Virtual Meeting**

**Dial-In Phone Number: +1 213-357-2812; Conference ID: 348 389 030#**

**Join by Meeting: <https://msteams.link/TADH>**

- 1. Welcome and Introduction**
- 2. In Kind Tracking**
- 3. Public and Stakeholder Engagement**
- 4. HMP Draft Review**
  - **What's New?**
  - **2025 Framework**
  - **Review Process**
- 5. Next Steps**
- 6. Questions/Wrap Up**

**Sussex County Project Contacts**

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Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
Draft Plan Review Meeting | Meeting Minutes



<b>Purpose of Meeting:</b>	Draft Plan Review Meeting
<b>Location of Meeting:</b>	Teleconference
<b>Date of Meeting:</b>	November 21, 2024 @ 7:00 P.M.

<p><b>Attendees:</b></p> <ul style="list-style-type: none"> <li>• <b>Sussex County Division of Emergency Management</b> <ul style="list-style-type: none"> <li>○ Trevor Floyd, Deputy Coordinator</li> <li>○ Steven Sugar, Deputy Coordinator</li> </ul> </li> <li>• <b>Sussex County Central Purchasing Office</b> <ul style="list-style-type: none"> <li>○ Mathias Banner, Purchasing Agent</li> </ul> </li> <li>• <b>Sussex County Open Space Committee</b> <ul style="list-style-type: none"> <li>○ Lisa Chammings, Chair</li> </ul> </li> <li>• <b>New Jersey Highlands Council</b> <ul style="list-style-type: none"> <li>○ Sarah Friend, Environmental Scientist</li> </ul> </li> <li>• <b>Andover (Twp)</b> <ul style="list-style-type: none"> <li>○ Eric Danielson, OEM Coordinator</li> </ul> </li> <li>• <b>Branchville (B)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Byram (Twp)</b> <ul style="list-style-type: none"> <li>○ Michael Orgera, DPW</li> </ul> </li> <li>• <b>Frankford (Twp)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Franklin (B)</b> <ul style="list-style-type: none"> <li>○ Jim Williams, OEM Coordinator</li> </ul> </li> <li>• <b>Fredon (Twp)</b> <ul style="list-style-type: none"> <li>○ Keith Festa, OEM Coordinator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Hamburg (Twp)</b> <ul style="list-style-type: none"> <li>○ Keith Sukennikoff, OEM</li> </ul> </li> <li>• <b>Hampton (Twp)</b> <ul style="list-style-type: none"> <li>○ Diana Juarez, Clerk/Administrator</li> </ul> </li> <li>• <b>Hardyston (Twp)</b> <ul style="list-style-type: none"> <li>○ William Hickerson, OEM Coordinator</li> </ul> </li> <li>• <b>Hopatcong (B)</b> <ul style="list-style-type: none"> <li>○ Wade Crowley, OEM Coordinator</li> </ul> </li> <li>• <b>Newton (T)</b> <ul style="list-style-type: none"> <li>○ Dan Finkle, OEM Coordinator</li> </ul> </li> <li>• <b>Sparta (Twp)</b> <ul style="list-style-type: none"> <li>○ Tom McIntyre, OEM Coordinator</li> </ul> </li> <li>• <b>Stillwater (Twp)</b> <ul style="list-style-type: none"> <li>○ Lisa Chammings, OEM Coordinator</li> <li>○ Jim Cantelmo, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Walpack (Twp)</b> <ul style="list-style-type: none"> <li>○ Chris Von Oesen, Clerk</li> </ul> </li> <li>• <b>Wantage (Twp)</b> <ul style="list-style-type: none"> <li>○ Joe Konopinski, OEM Coordinator</li> </ul> </li> <li>• <b>Tetra Tech</b> <ul style="list-style-type: none"> <li>○ Jessica Stokes, Project Manager</li> <li>○ Grace Altenburg, Lead Planner</li> </ul> </li> </ul>
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**Agenda Summary:** The purpose of the meeting was to provide an update on the planning process and status update, provide an opportunity for the Steering Committee, Planning Partnership, and the Public to comment on the draft 2025 Sussex County HMP framework, discuss the Plan Maintenance strategy for the 2025 HMP, review the FEMA Approval Process, discuss next steps, and address any questions or comments.

Item No.	Description	Action item(s):
1	<b>Introductions</b>	-
2	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li>• In Kind Tracking</li> <li>• Public Outreach and Engagement                             <ul style="list-style-type: none"> <li>○ Post links on social media and department/agency websites</li> <li>○ Make efforts to reach out to:                                     <ul style="list-style-type: none"> <li>▪ General Public</li> <li>▪ Stakeholders</li> <li>▪ Neighbors</li> <li>▪ Socially Vulnerable Populations</li> </ul> </li> </ul> </li> </ul>	<p><b>Steering Committee</b></p> <ul style="list-style-type: none"> <li>• Continue public outreach</li> </ul>
3	<p><b>HMP Draft Review</b></p> <ul style="list-style-type: none"> <li>• What's New in the 2025 Update?</li> <li>• New FEMA requirements</li> <li>• Updated critical facilities inventory and included community lifelines</li> <li>• Incorporated new hazards of concern and performed new risk analysis</li> <li>• Enhanced the capability assessment for each participating jurisdiction</li> </ul>	-
4	<b>2025 HMP Framework</b>	-





	<ul style="list-style-type: none"> <li>• Volume I                     <ul style="list-style-type: none"> <li>○ Executive Summary                             <ul style="list-style-type: none"> <li>▪ Provides an overview of how the plan is laid out by describing the various chapters within the plan</li> </ul> </li> <li>○ Chapter 1 Introduction                             <ul style="list-style-type: none"> <li>▪ This is the introduction of the HMP, explains the update process, who participated, and what changes have been made since the last plan.</li> </ul> </li> <li>○ Chapter 2 Planning Process                             <ul style="list-style-type: none"> <li>▪ Provides a timeline of how the planning process was done and everything that went into developing the plan. It includes meeting dates, activities, and plan participants.</li> </ul> </li> <li>○ Chapter 3 County Profile                             <ul style="list-style-type: none"> <li>▪ Provides general information for the Planning Area and critical facilities/lifelines located within the area.</li> </ul> </li> <li>○ Chapter 4 Risk Assessment                             <ul style="list-style-type: none"> <li>▪ Provides a foundation for the rest of the planning process – which focuses on identifying and prioritizing actions to reduce risk to hazards.</li> </ul> </li> <li>○ Chapter 5 Hazard of Concern identification                             <ul style="list-style-type: none"> <li>▪ Describes the process to review all potential hazards and identify the hazards that have the potential to impact the Planning Area</li> </ul> </li> <li>○ Chapters 6 through 18 Hazard Profiles                             <ul style="list-style-type: none"> <li>▪ Documents the general description of the hazard and the outcome of the risk analysis. It is broken down into 2 sections – hazard profile and vulnerability assessment</li> </ul> </li> <li>○ Chapter 19 Hazard Ranking                             <ul style="list-style-type: none"> <li>▪ Provides information on the methodology used to determine the preliminary hazard rankings</li> </ul> </li> <li>○ Chapter 20 Capability Assessment                             <ul style="list-style-type: none"> <li>▪ Identifies the primary types of capabilities – planning and regulatory, administrative, and technical, financial, and education and outreach –existing plans, policies, programs, etc. available at the county, state, and federal level to help the County and municipalities accomplish mitigation.</li> </ul> </li> <li>○ Chapter 21 Mitigation Strategy                             <ul style="list-style-type: none"> <li>▪ Gives an overview of the process and then in each annex, we show the projects and procedures you all will do to reduce or eliminate future losses from hazards.</li> </ul> </li> <li>○ Chapter 22 Plan Maintenance                             <ul style="list-style-type: none"> <li>▪ Describes how the County will keep the hazard mitigation plan up to date over the next five years.</li> </ul> </li> </ul> </li> <li>• Volume II                     <ul style="list-style-type: none"> <li>○ Chapter 1 Introduction                             <ul style="list-style-type: none"> <li>▪ Gives an overview of how each jurisdiction participated in the plan and how the annexes are laid out.</li> </ul> </li> <li>○ Chapters 2 through 26 Jurisdictional Annexes                             <ul style="list-style-type: none"> <li>▪ Where the individual jurisdictional annexes of the plan are located. It shows us who participated in the plan, gives a general description of the municipality, outlines and summarizes your capabilities at the local level, provides the</li> </ul> </li> </ul> </li> </ul>	
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	<p>jurisdictional hazard ranking, includes a status of mitigation actions from 2021 and then includes mitigation actions for the 2025 HMP.</p> <ul style="list-style-type: none"> <li>• Appendices: This is where you’ll find a draft adoption/resolution for when you need to adopt the plan, tables of who participated in the process and how; meeting documentation (minutes, presentations, etc.), public and stakeholder outreach; mitigation strategy data; plan maintenance tools; critical facilities (the list of facilities will not be posted for public review due to their sensitive nature); and linkage procedures for anyone who didn’t participate this time around and would like to join the plan in the next 5 years.                     <ul style="list-style-type: none"> <li>○ Appendix A. Adoptions</li> <li>○ Appendix B. Participation</li> <li>○ Appendix C. Meeting Documentation</li> <li>○ Appendix D. Outreach</li> <li>○ Appendix E. Action Worksheet</li> <li>○ Appendix F. Plan Maintenance</li> <li>○ Appendix G. Critical Facilities</li> <li>○ Appendix H. Risk Assessment Supplement</li> <li>○ Appendix I: Mitigation Strategy Supplement</li> <li>○ Appendix J: NJOEM Guidance</li> <li>○ Appendix K: Linkage Procedures</li> </ul> </li> </ul>	
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6	<p><b>Review the Draft Plan</b></p> <ul style="list-style-type: none"> <li>• The entire plan will be posted on the Sussex County HMP website for a 30-day review period (starting today, October 9!)                     <ul style="list-style-type: none"> <li>○ <a href="https://www.sussexcountynjhmp.com/draft-plans/">https://www.sussexcountynjhmp.com/draft-plans/</a></li> <li>○ You can review the plan during the public review, and we will incorporate any applicable revisions into the final deliverable to the State and FEMA</li> </ul> </li> <li>• NJOEM will begin their review after the public review period</li> <li>• Public feedback to be incorporated as appropriate prior to submittal to NJOEM/FEMA for their review                     <ul style="list-style-type: none"> <li>○ If needed, we will hold a brief meeting to discuss public comments and how to incorporate – date TBD</li> </ul> </li> </ul>	-
7	<p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• Draft Plan Review Meeting – TODAY!                     <ul style="list-style-type: none"> <li>○ Planning Partnership/Public Draft Plan Review Meeting is tonight at 7:00PM (<a href="https://msteams.link/TADH">https://msteams.link/TADH</a>).</li> </ul> </li> <li>• Public Review Period (30 days) – November 21, 2024 to December 21, 2024</li> <li>• Submit Draft Plan for NJOEM Review by end of December</li> <li>• Submit Draft Plan for FEMA Review by mid-February</li> <li>• FEMA approves plan (early April 2025); begin adoption</li> </ul>	-
8	<p><b>Questions/Discussion</b></p>	-

Sussex County, NJ – Hazard Mitigation Plan 2025 Update  
Draft Plan Review Meeting | Meeting Minutes



	<ul style="list-style-type: none"><li>• Jessica Stokes sent the draft plan review link in the chat: <a href="#">Explore the Plan - Sussex County Hazard Mitigation Plan Update</a></li><li>• Lisa Chammings: Thank you Jessica and all others as part of this review process and plan.</li></ul>	
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# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2025 Update

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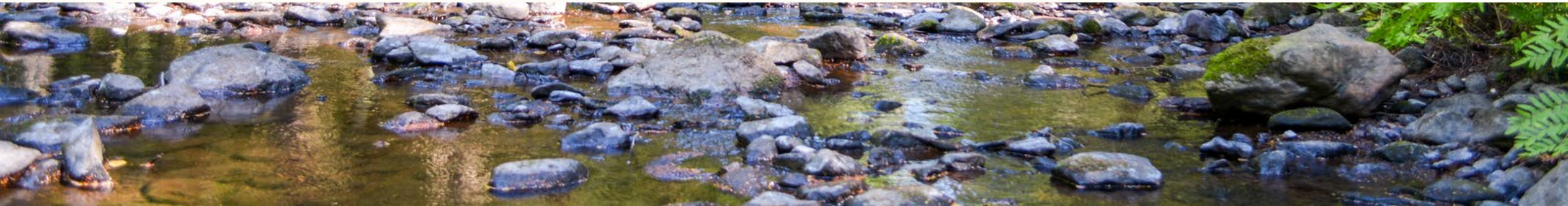
Draft Plan Review Meeting  
November 21, 2024 | 7:00 pm

While waiting for the meeting to start, please place your name, title, and jurisdiction in the chat!



# Today's Agenda

1. Welcome and Introductions
2. In Kind Tracking
3. Public and Stakeholder Outreach
4. HMP Draft Review
  - What's New?
  - 2025 Framework
  - Review Process
5. Next Steps
6. Questions/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 QR code for the online form to enter your time.



-or-

[https://www.surveymonkey.com/r/SussexCo\\_InKindTracker](https://www.surveymonkey.com/r/SussexCo_InKindTracker)



# Public Outreach and Engagement

- Public Outreach Toolkit –
  - Social media templates and posts
  - Printable materials
- Surveys
  - Input on draft plan
- HMP website  
<https://www.sussexcountynjhmp.com/>
- Make efforts to reach out to:
  - General Public
  - Stakeholders
  - Neighbors
  - Socially Vulnerable Populations



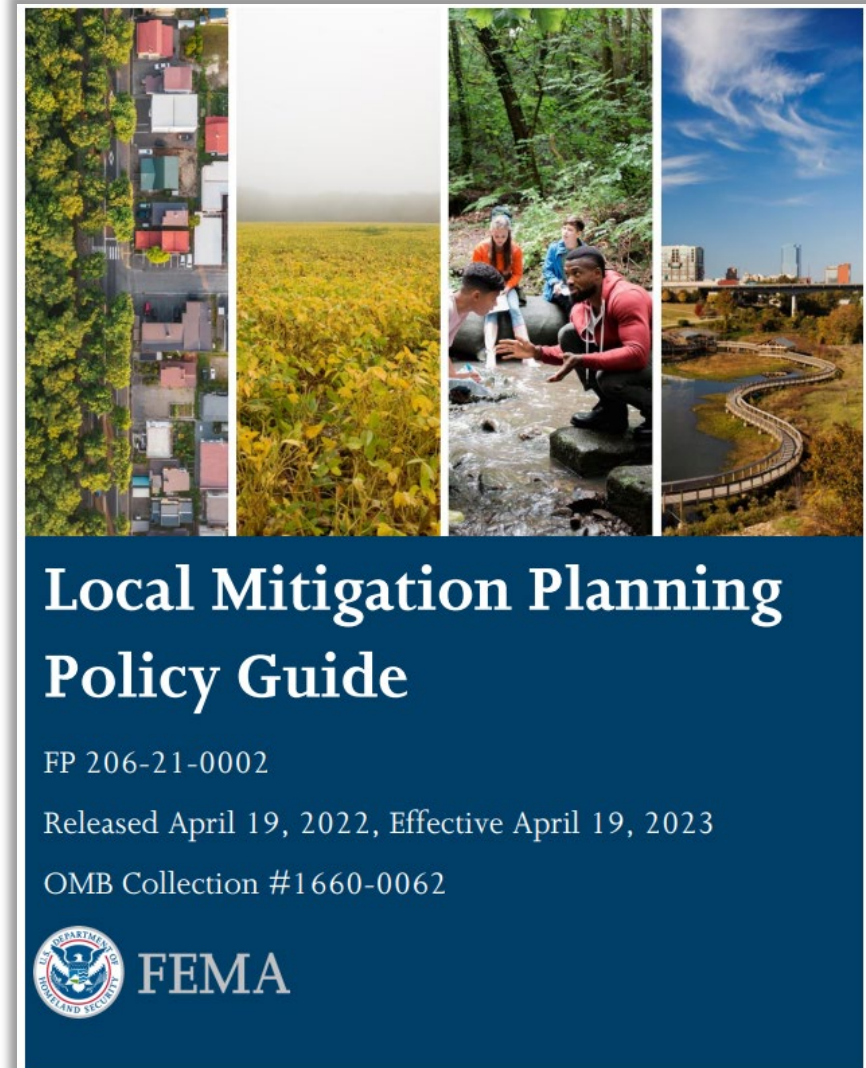


# HMP Draft Review



# What's New in the 2025 Update?

- New FEMA requirements
  - Participation – engaged and actively participating throughout the process
  - Stakeholder involvement
  - Community lifelines
  - Socially vulnerable populations
  - Effects of future conditions (i.e., climate change) on hazards
  - Current and future capabilities integrating hazard mitigation
  - One mitigation action per hazard



# What's New in the 2025 Update?

- **Critical facilities reorganized as Lifeline facilities –**
  - This includes – airports, bridges, cell towers, correctional facilities, dams, schools/daycares, EMS, fire, hazmat, hospitals/health care, police, utilities, tornado sirens, wastewater
  - Inventory has been updated



# What's New in the 2025 Update?

- **Hazards of Concern –**

- Incorporated new hazards, and concise hazard profiles, including recent events
- Risk assessments for each hazard
- Climate change impacts incorporated into the probability of future occurrences
- Adaptive capacity to reduce vulnerability used in hazard ranking
- Impacts on population (general and socially vulnerable), buildings, lifelines, and economy



# What's New in the 2025 Update?

- **Jurisdictional Annexes**

- Enhanced capability assessment including how hazard mitigation is integrated
- One mitigation action for every hazard of concern



# 2025 HMP Framework

## Volume I

- Executive Summary
- Chapter 1. Introduction
- Chapter 2. Planning Process
- Chapter 3. County Profile
- Chapter 4. Risk Assessment Methodology
- Chapter 5. Hazards of Concern ID
- Chapters 6-18. Hazard Profiles
  - Dam Failure, Disease Outbreak, Drought, Earthquake, Flood, Geological Hazards, Hazardous Materials, Hurricane, Infestation, Nor'easter, Severe Weather, Severe Winter Weather, Wildfire
- Chapter 19. Hazard Ranking
- Chapter 20. Capability Assessment
- Chapter 21. Mitigation Strategy
- Chapter 22. Plan Maintenance



# 2025 HMP Framework

## Volume II

- Chapter 1. Planning Partnership
- Chapters 2-26. Jurisdictional Annexes

## Appendices

- Appendix A. Adoptions
- Appendix B. Participation
- Appendix C. Meeting Documentation
- Appendix D. Outreach
- Appendix E. Action Worksheet
- Appendix F. Plan Maintenance
- Appendix G. Critical Facilities
- Appendix H. Risk Assessment Supplement
- Appendix I: Mitigation Strategy Supplement
- Appendix J: NJOEM Guidance
- Appendix K: Linkage Procedures

# Volume I

## Executive Summary

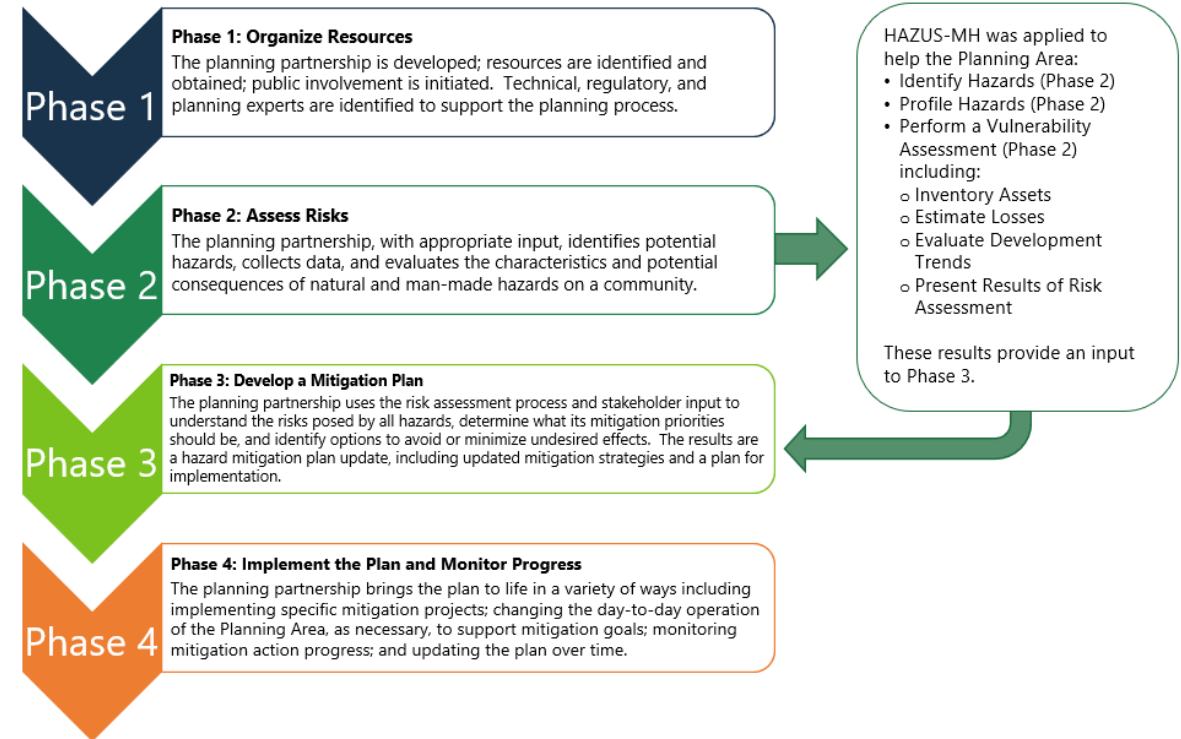
- Provides an overview of how the plan is laid out by describing the various chapters within the plan
  - Light summaries of key components of the HMP
    - Hazard Mitigation Overview
    - Planning Process
    - Involvement by Stakeholders and the Public
    - Risk Assessment for Local Hazards of Concern
    - Capability Assessment and Plan Integration
    - Mitigation Strategy



# Volume I

## 1. Introduction

- Plan Purpose
- Background of the plan
- Plan Organization
- Planning Differences – 2021 HMP vs. 2025 HMP





# Volume I

## 2. Planning Process

- Introduction
- Organization of the Planning Process
  - Organization of the Planning Partnership
  - Planning Activities
- Stakeholder Outreach and Involvement
  - Federal, State, and County Agencies
  - Regional and Local Stakeholders
  - Stakeholder and Neighbor Survey Summaries
- Public Participation – Public Involvement
  - Public Survey Summary
- Plan Integration
- Integration with Planning Mechanisms and Programs
- Continued Public Involvement



# Volume I

## 3. County Profile

- General Information
- Major Past Hazard Events
- Physical Setting
  - Location
  - Hydrography and Hydrology
  - Topography and Geography
  - Climate
  - Land Use and Land Cover
- Population and Demographics
  - General Population Characteristics
  - Vulnerable Populations
  - Population Trends
- General Building Stock
  - Development Trends and New Development
- Lifeline Facilities
  - Formerly discussed as Critical Facilities



## 4. Risk Assessment Methodology

- Describes the various procedures and tools used to complete the risk assessment
- Steps to do so included:
  - Identifying and profiling each hazard of concern
  - Determine exposure to each hazard
  - Assess the vulnerability of exposed population/buildings/economy



## 5. Hazard of Concern Identification

- Describes the process to review all potential hazards and identify the hazards that have the potential to impact the Planning Area
  - Input from all participating jurisdictions
  - Review of the New Jersey State Hazard Mitigation Plan
  - Review of the 2021 Sussex County HMP
  - Research on the frequency, magnitude, and costs associated with hazards that have previously or could feasibly impact the region
  - Qualitative information regarding natural (not human-caused) hazards and the perceived vulnerability of the study area's assets to them.



- Created individual chapters for each hazard of concern.
- Each chapter includes:
  - Hazard Profile – description, location, extent, worst-case scenario, previous occurrences, climate change projections, and probability of future events
  - Vulnerability Assessment – impact on life/health/safety, impact on building stock and critical facilities, impact on economy, future changes that may impact vulnerability, impacts to natural, historical, and cultural resources, and changes in vulnerability since the last plan



- Provides a preliminary ranking (high, medium, low) of each hazard to show the Planning Area's hazards of greatest risk
- Provides information on the methodology used to determine the preliminary hazard rankings



# Volume I

## 20. Capability Assessment

- What is currently available at the federal, state, and county level to support mitigation in Sussex County
  - Available plans, programs, & resources
  - Administrative and technical capabilities
  - Fiscal capabilities
  - Education and outreach



# Volume I

## 21. Mitigation Strategy

- Past accomplishments
- Goals and Objectives
- Mitigation strategy development and update
  - Action identification
  - Evaluation and prioritization
  - Benefit/cost review

Goal Number	2025 Goals
1	Protect Life
2	Protect Property
3	Increase public preparedness and awareness
4	Develop and maintain an understanding of increased risk from climate change impacts to natural hazards
5	Enhance mitigation capabilities to reduce hazard vulnerabilities
6	Support continuity of operations pre-, during, and post-hazard events
7	Reduce the risk of natural hazards for socially vulnerable populations
8	Address long-term vulnerabilities from High Hazard Dams.



# Volume I

## 22. Plan Maintenance

- Ongoing Planning Partnership – meet annually to discuss HMP
- Monitoring
- Continuous evaluation and progress reports
- Updating
- Integrating the HMP with existing and future programs
- Continued public involvement



# Volume II

- **Chapter 1 – Introduction**
  - Participating jurisdictions
  - Introduction to jurisdictional annexes
- **Chapters 2-26 – Jurisdictional Annexes**
  - Points of Contact and Who Participated
  - Jurisdictional Profile
  - Capabilities
  - Risk Assessment
  - Status of Past Mitigation Actions
  - Current Mitigation Actions



# Section Contents - Appendices

- Appendix A. Adoptions
- Appendix B. Participation
- Appendix C. Meeting Documentation
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# FEMA Approval Process


- The plan is made available for public review.
- The second draft will be submitted to NJOEM and FEMA for review and approval.
- The third draft will be submitted to FEMA for review and approval
  - Once approved, FEMA will grant the plan 'Approvable Pending Adoption' status, meaning FEMA will approve the plan once it has been locally adopted.
- The County and municipalities will formally adopt the plan.
  - Resolution is submitted to FEMA and FEMA grants final approval.



# Review the Draft Plan

- The entire plan will be posted on the Sussex County HMP website for a 30-day review period (starting today, November 21, 2024)
  - Review the plan during the public review, and we will incorporate any applicable revisions into the final deliverable to the State and FEMA
- NJOEM will begin their review after the public review period
- Public feedback to be incorporated as appropriate prior to submittal to NJOEM/FEMA for their review
  - If needed, we will hold a brief meeting to discuss public comments and how to incorporate – date TBD

# Next Steps

- Draft Plan Review Meeting – TODAY!
- Public Review Period (30 days) – November 21 through December 21
- Submit Draft Plan for NJOEM Review by end of December 2024
- Submit Draft Plan for FEMA Review by mid-February; begin adoption
- FEMA approves plan (early April); continue adoption
- Implement Projects and Maintain the Plan  Increase Resilience!





**Questions?**

## **Sussex County Project Contacts**

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## **Tetra Tech Project Contacts**

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**Thank  
You!**