

# SUSSEX COUNTY

## MULTI-JURISDICTIONAL ALL HAZARDS MITIGATION PLAN

### 2025 Update

### Volume III

*Prepared for:*  
*Sussex County Sheriff's Office*  
*Division of Emergency Management*  
*39 High Street, Newton, NJ 07860*

## April 2025



**TETRA TECH**





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## APPENDIX A: RESOLUTIONS



The Sussex County and municipal adoption resolutions will be included in this appendix upon receipt of the Federal Emergency Management Agency (FEMA) Approval Pending Adoption (APA) status. Please refer to Chapter 2 (Planning Process) for additional information on plan adoption procedures.

This appendix also includes an example resolution to be submitted by Sussex County and participating jurisdictions authorizing adoption of the 2025 Sussex County Hazard Mitigation Plan Update.





**Sample Resolution**

(LOCAL GOVERNMENT, INCLUDING SPECIAL DISTRICTS), New Jersey

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE (LOCAL GOVERNMENT) ADOPTING THE 2025 SUSSEX COUNTY HAZARD  
MITIGATION PLAN

WHEREAS the (*local governing body*) recognizes the threat that natural hazards pose to people and property within (*local government*); and

WHEREAS the (*local government*) has prepared a multi-hazard mitigation plan, hereby known as the 2025 Sussex County Hazard Mitigation Plan in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the 2025 Sussex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in (*local community*) from the impacts of future hazards and disasters; and

WHEREAS adoption by the (*local governing body*) demonstrates their commitment to hazard mitigation and achieving the goals outlined in the 2025 Sussex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE (LOCAL COMMUNITY), New Jersey, THAT:

Section 1. In accordance with (*local rule for adopting resolutions*), the (*local governing body*) adopts the 2025 Sussex County Hazard Mitigation Plan. This plan, approved by the community, may be edited or amended after submission for review, but will not require the community to re-adopt any further iterations. This only applies to this specific plan and does not absolve the community from updating the plan in 5 years.

ADOPTED by a vote of \_\_\_\_ in favor and \_\_\_\_ against, and \_\_\_\_ abstaining, this \_\_\_\_ day of \_\_\_\_\_,  
\_\_\_\_\_.

By: \_\_\_\_\_

(print name)

ATTEST: By: \_\_\_\_\_

(print name)

APPROVED AS TO FORM: By: \_\_\_\_\_

(print name)



# Letters of Intent to Participate



**BOROUGH OF ANDOVER**  
137 Main Street  
Andover, New Jersey 07821  
973-786-6688 – office 973-786-7231 – fax  
[www.andoverboroughnj.org](http://www.andoverboroughnj.org)

Return to: [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com)

February 15, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                          Borough of Andover

Dear Mr. Haffner:

This is to confirm that the Borough of Andover is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Andover:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    -



## BOROUGH OF ANDOVER

137 Main Street

Andover, New Jersey 07821

973-786-6688 – office 973-786-7231 – fax

[www.andoverboroughnj.org](http://www.andoverboroughnj.org)

- Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Jessica Casella

Position/Department:

EMC, Code Enforcement Officer

Phone Number:

(973) 786-6688 ext. 4

Email Address:

jessiepw@yahoo.com

Alternate/Secondary POC:

Beth Brothman

Position/Department:

Municipal Clerk

Phone Number:

973-786-6688

Email Address:

clerk@andoverboroughnj.org



## BOROUGH OF ANDOVER

137 Main Street

Andover, New Jersey 07821

973-786-6688 – office 973-786-7231 – fax

[www.andoverboroughnj.org](http://www.andoverboroughnj.org)

### 4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Harold Pellow	Engineer
Phone Number:	Email Address:
(973) 948-6463	hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Harold Pellow	Engineer
Email Address:	
hpellow@hpellow.com	

Name (Lead Planner/Planning POC):	Position/Department:
Email Address:	

Name (Public Works):	Position/Department:
Email Address:	

Name (Emergency Management):	Position/Department:
Jessica Casella	Emergency Management Coordinator
Email Address:	
jessiepw@yahoo.com	



## BOROUGH OF ANDOVER

137 Main Street

Andover, New Jersey 07821

973-786-6688 – office 973-786-7231 – fax

[www.andoverboroughnj.org](http://www.andoverboroughnj.org)

Name (Elected Official/Administrator):

John Morgan

Position/Department:

Mayor

Email Address:

[j.morgan@andoverboroughnj.org](mailto:j.morgan@andoverboroughnj.org)

Name (Building Department/Code Enforcement):

Jessica Casella

Position/Department:

Code Enforcement Officer

Email Address:

[jessiepw@yahoo.com](mailto:jessiepw@yahoo.com)

Name (Municipal Clerk):

Beth Brothman

Position/Department:

Municipal Clerk

Email Address:

[clerk@andoverboroughnj.org](mailto:clerk@andoverboroughnj.org)

Name (Other Representative):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Borough of Andover





# TOWNSHIP OF ANDOVER

134 NEWTON-SPARTA RD NEWTON, NJ 07860

TEL: 973-383-4280 FAX: 973-383-9977

February 17, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Andover Township

Dear Mr. Haffner:

This is to confirm that the Andover Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, Andover Township:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: ERIC DANIELSON	Position/Department: CHIEF OF POLICE/OEM COORDINATOR
Phone Number: 973-383-5544 X123	Email Address: <a href="mailto:EDANIELSON@ATPD.ORG">EDANIELSON@ATPD.ORG</a>

Alternate/Secondary POC: GEORGE LAUDIS	Position/Department: DEPUTY OEM COORDINATOR
Phone Number: 973-383-5544 X123	Email Address: <a href="mailto:GLAUDIS@ATPD.ORG">GLAUDIS@ATPD.ORG</a>

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: CORY STONER	Position/Department: TOWNSHIP ENGINEER
Phone Number: 973-948-6463	Email Address: <a href="mailto:CSTONER@HPELLOW.COM">CSTONER@HPELLOW.COM</a>



5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

CORY STONER

Position/Department:

TOWNSHIP ENGINEER

Email Address:

[CSTONER@HPELLOW.COM](mailto:CSTONER@HPELLOW.COM)

Name (Planner):

JESSICA CALDWELL-DYKSTRA

Position/Department:

TOWNSHIP PLANNER

Email Address:

[JCALDWELL@JCALDWELLASSOCIATES.COM](mailto:JCALDWELL@JCALDWELLASSOCIATES.COM)

Name (Public Works):

ERIK MARRA

Position/Department:

SUPERVISOR PUBLIC WORKS

Email Address:

[EMARRA@ANDOVERTWP.ORG](mailto:EMARRA@ANDOVERTWP.ORG)

Name (Emergency Management):

ERIC DANIELSON

Position/Department:

CHIEF OF POLICE/OEM COORDINATOR

Email Address:

[EDANIELSON@ATPD.ORG](mailto:EDANIELSON@ATPD.ORG)

Name (Elected Official/Mayor):

THOMAS D. WALSH, JR.

Position/Department:

MAYOR

Email Address:

[TWALSH@ANDOVERTWP.ORG](mailto:TWALSH@ANDOVERTWP.ORG)

Name (Building Department/Code Enforcement):

CORY STONER

Position/Department:

ZONING OFFICER

Email Address:

[CSTONER@HPELLOW.COM](mailto:CSTONER@HPELLOW.COM)

Name (Administrator/Municipal Clerk):

PATRICIA BUSSOW

Position/Department:

ADMINISTRATOR/MUNICIPAL CLERK

Email Address:

[PBUSSOW@ANDOVERTWP.ORG](mailto:PBUSSOW@ANDOVERTWP.ORG)

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in cursive script that reads "Patricia L. Bussow".

Patricia L. Bussow, RMC  
Administrator/Municipal Clerk  
Township of Andover

# Borough of Branchville, N.J.

5 MAIN STREET, P.O. BOX 840  
BRANCHVILLE, NEW JERSEY 07826-0840

Return to: [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com) and [jenvanderwende@sussexcountysheriff.com](mailto:jenvanderwende@sussexcountysheriff.com)

02-16-2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:       Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Branchville Borough

Dear Mr. Haffner:

This is to confirm that the Branchville Borough is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Branchville

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website

- Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Jeff Lewis	Position/Department: OEM Coordinator
Phone Number: (973) 479-7203	Email Address: jlewis31@embarqmail.com

Alternate/Secondary POC: Kathryn Leissler	Position/Department: Clerk
Phone Number: (973) 948-4629	Email Address: branchvilleclerk@yahoo.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Harold Pellow	Position/Department: Municipal Engineer
Phone Number: (973) 948-6463	Email Address: hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): Harold Pellow	Position/Department: Municipal Engineer
Phone Number: (973) 948-6463	Email Address: hpellow@hpellow.com

Name (Planner): Harold Pellow	Position/Department: Municipal Engineer
Phone Number: (973) 948-6463	Email Address: hpellow@hpellow.com

Name (Public Works): Darren Haggerty	Position/Department: DPW Supervisor
Email Address: branchvillewater@gmail.com	

Name (Emergency Management): Jeff Lewis	Position/Department: OEM Coordinator
Email Address: jlewis31@embaraqmail.com	

Name (Elected Official/Administrator): Kathryn Leissler	Position/Department: Clerk
Email Address: branchvilleclerk@yahoo.com	

Name (Building Department/Code Enforcement): Mike Robinson	Position/Department: Construction
Email Address:	

Name (Municipal Clerk): Kathryn Leissler	Position/Department: Clerk
Email Address: branchvilleclerk@yahoo.com	

Name (Other Representatives):

Position/Department:

N/A

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to read "Anthony Frato Sr.", with a stylized, cursive script.

Anthony Frato Sr.  
Mayor of Branchville Borough



The Township of Byram  
10 Mansfield Drive  
Stanhope, New Jersey 07874

973-347-2500

[www.byramtwp.org](http://www.byramtwp.org)

February 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Byram Township

Dear Mr. Haffner:

This is to confirm that the Byram Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports, and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Joseph Sabatini Phone Number: (973) 347-2500 x129	Position/Department: Township Manager Email Address: jsabatini@byramtwp.org
Alternate/Secondary POC: Phil Crosson Phone Number: (973) 347-2500 x161	Position/Department: Deputy Township Manager Email Address: pcrosson@byramtwp.org

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Peter Karcher Phone Number: (973) 347-2500 x124	Position/Department: Construction Official Email Address: pkarcher@byramtwp.org
--	--

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below. Involvement of the Byram Township professionals will be at the direction of the Township Manager.

Name (Engineer): Cory Stoner Email Address: cstoner@hpellow.com	Harold E. Pellow & Associates, Inc.
Name (Planner): Paul Gleitz Email Address: pgleitz@latinigleitz.com	Position/Department: Latini & Gleitz Planning
Name (Public Works): Michael Orgera Email Address: morgera@byramtwp.org	Position/Department: Superintendent of Public Works
Name (Emergency Management): Todd Rudloff Email Address: EMC@byramtwp.org	Position/Department: EMC/Fire Chief
Name (Elected Official): Alex Rubenstein Email Address: arubenstein@byramtwp.org	Position/Department: Mayor
Name (Code Enforcement): Nicholas Cutrone Email Address: zoning@byramtwp.org	Position/Department: Zoning Officer
Name (Municipal Clerk): Cynthia Church Email Address: cchurch@byramtwp.org	Position/Department: Township Clerk



6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Joseph Sabatini  
Township Manager

cc: Byram Township Mayor and Council  
Phil Crosson, Deputy Manager  
Peter Karcher, Construction Official  
Michael Orgera, Superintendent of Public Works  
Todd Rudloff, EMC/Fire Chief  
Nicholas Cutrone, Zoning Officer  
Cory Stoner, Engineer  
Paul Gleitz, Planner



# FRANKFORD township

DAVID SILVERTHORNE  
Mayor

EDWIN RISDON, JR.  
Deputy Mayor

JAMES AYERS  
EMERY CASTIMORE, JR.  
NICHOLAS CIVITAN  
Committeemen

LORI NIENSTEDT, RMC, MBA, CMR  
Municipal Clerk  
Administrator

151 US Hwy. 206, Augusta, New Jersey 07822

Phone: 973-948-5566 \* Fax: 973-948-2612

Website: [www.frankfordtownship.org](http://www.frankfordtownship.org) \* E-mail: [clerk@frankfordtwp-nj.com](mailto:clerk@frankfordtwp-nj.com)

[2/21/2023]

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
[Frankford Twp]

Dear Mr. Haffner:

This is to confirm that the [Frankford Twp] is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the [Frankford Twp]:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website

- Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Jeff Lewis	Position/Department: OEM Coordinator
Phone Number: (973) 479-7203	Email Address: jlewis310@embarqmail.com

Alternate/Secondary POC: Lori Nienstedt	Position/Department: Administrator/Clerk
Phone Number: (973) 948-5566	Email Address: clerk@frankfordtwp-nj.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Harold Pellow	Position/Department: Municipal Engineer
Phone Number: (973) 948-6463	Email Address: hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

Harold Pellow

Position/Department:

Municipal Engineer

Email Address:

hpellow@hpellow.com

Name (Planner):

Harold Pellow

Position/Department:

Municipal Engineer

Email Address:

hpellow@hpellow.com

Name (Public Works):

Mark yetter

Position/Department:

CPWN

Email Address:

Name (Emergency Management):

Jeff Lewis

Position/Department:

OEM Coordinator

Email Address:

jlewis310@embarqmail.com

Name (Elected Official/Administrator):

Lori Nienstedt

Position/Department:

Administrator/Clerk

Email Address:

clerk@frankfordtwp-nj.com

Name (Building Department/Code Enforcement):

Ann Bell

Position/Department:

Zoning Officer

Email Address:

Zoning@frankfordtwp-nj.com

Name (Municipal Clerk):

Lori Nienstedt

Position/Department:

Administrator/Clerk

Email Address:

clerk@frankfordtwp-nj.com

Name (Other Representatives):

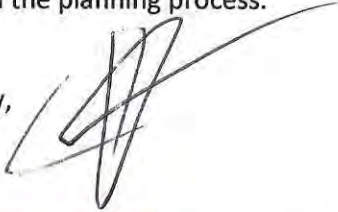
N/A

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



[Chief Elected Official]

[Municipality]

Frankford Twp.  
Dave Silverthorne





## **BOROUGH OF FRANKLIN**

**46 Main Street  
Franklin, NJ 07416  
[www.franklinborough.org](http://www.franklinborough.org)**

**John M. Sowden IV, Mayor  
Darlene J. Tremont, Municipal Clerk  
Phone: 973-827-9280  
Fax: 973-827-9279**

Return to: [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com)

February 15, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

**Subject:**           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                          Borough of Franklin

Dear Mr. Haffner:

This is to confirm that the Borough of Franklin is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Franklin:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.



## BOROUGH OF FRANKLIN

46 Main Street  
Franklin, NJ 07416  
[www.franklinborough.org](http://www.franklinborough.org)

John M. Sowden IV, Mayor  
Darlene J. Tremont, Municipal Clerk  
Phone: 973-827-9280  
Fax: 973-827-9279

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Jim Williams	Position/Department: OEM Coordinator
Phone Number: (973) 600-9081	Email Address: lauranjenna@gmail.com

Alternate/Secondary POC: Brian VanDenBroek	Position/Department: DPW Supervisor
Phone Number: (862) 268-7788	Email Address: bvandenbroek@Franklinborough.org



## BOROUGH OF FRANKLIN

46 Main Street  
Franklin, NJ 07416  
[www.franklinborough.org](http://www.franklinborough.org)

John M. Sowden IV, Mayor  
Darlene J. Tremont, Municipal Clerk  
Phone: 973-827-9280  
Fax: 973-827-9279

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Joe Butto	Construction Official
Phone Number:	Email Address:
(973) 823-7020	jbutto@hardyston.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Email Address:	

Name (Lead Planner/Planning POC):	Position/Department:
Email Address:	

Name (Public Works):	Position/Department:
Brian VanDenBroek	DPW Supervisor
Email Address:	
bvandenbroek@Franklinborough.org	

Name (Emergency Management):	Position/Department:
Jim Williams	OEM Coordinator
Email Address:	
lauranjenna@gmail.com	





## BOROUGH OF FRANKLIN

46 Main Street  
Franklin, NJ 07416  
[www.franklinborough.org](http://www.franklinborough.org)

John M. Sowden IV, Mayor  
Darlene J. Tremont, Municipal Clerk  
Phone: 973-827-9280  
Fax: 973-827-9279

Name (Elected Official/Administrator):  
Neil Spidaletto

Position/Department:  
Administrator

Email Address:  
[admin@franklinborough.org](mailto:admin@franklinborough.org)

Name (Building Department/Code Enforcement):  
Joe Butto

Position/Department:  
Construction Official

Email Address:  
[jbutto@hardyston.com](mailto:jbutto@hardyston.com)

Name (Municipal Clerk):  
Darlene Tremont

Position/Department:  
Municipal Clerk

Email Address:  
[clerk@franklinborough.org](mailto:clerk@franklinborough.org)

Name (Other Representative):  
Greg Cugliari

Position/Department:  
Police Chief

Email Address:  
[gcugliari@franklinpd.org](mailto:gcugliari@franklinpd.org)

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Borough of Franklin



**Township of Fredon**  
**443 Route 94, Newton, New Jersey 07860**  
**Tel. 973-383-7025 Fax 973-383-8711**

Return to: rhaffner@sussexcountysheriff.com

February 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Township of Fredon

Dear Mr. Haffner:

This is to confirm that the Township of Fredon is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Fredon:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk



**Township of Fredon**  
**443 Route 94, Newton, New Jersey 07860**  
**Tel. 973-383-7025 Fax 973-383-8711**

- Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Keith Fiesta	Position/Department: OEM Coordinator
Phone Number: (516) 456-1374	Email Address: Firecop1534@gmail.com

Alternate/Secondary POC: Carl Lazzaro	Position/Department: Deputy OEM Coordinator
Phone Number: (973) 464-5030	Email Address: Cfl1@ptd.net



**Township of Fredon**  
**443 Route 94, Newton, New Jersey 07860**  
**Tel. 973-383-7025 Fax 973-383-8711**

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Harold Pellow	Engineer
Phone Number:	Email Address:
(973) 948-6463	hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Harold Pellow	Engineer
Email Address:	
hpellow@hpellow.com	

Name (Lead Planner/Planning POC):	Position/Department:
Jessica Caldwell	Planner
Email Address:	
jcaldwell@jcaldwellassociates.com	

Name (Public Works):	Position/Department:
Matthew Lambert	Public Works Supervisor
Email Address:	
dpw@fredonnj.gov	

Name (Emergency Management):	Position/Department:
Keith Fiesta	OEM Coordinator
Email Address:	
Firecop1534@gmail.com	



**Township of Fredon**  
**443 Route 94, Newton, New Jersey 07860**  
**Tel. 973-383-7025 Fax 973-383-8711**

Name (Elected Official/Administrator):  
Glen Deitz

Position/Department:  
Mayor

Email Address:  
clerk@fredonnj.gov

Name (Building Department/Code Enforcement):  
Allison Larocca

Position/Department:  
Code Enforcement Official

Email Address:  
zoning@fredonnj.gov

Name (Municipal Clerk):  
Suzanne Boland

Position/Department:  
Municipal Clerk

Email Address:  
clerk@fredonnj.gov

Name (Other Representative):  
Patty Carlson

Position/Department:  
Land Use Board

Email Address:  
landuseboard@fredonnj.gov

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Township of Fredon



# Township of Green

P.O. BOX 65, 150 KENNEDY RD.  
TRANQUILITY, N.J. 07879  
TELEPHONE: (908) 852-9333  
FAX: (908) 852-1972

March 20, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike  
Newton, NJ 07860

**Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate - Township of Green**

Dear Mr. Haffner:

This is to confirm that the Township of Green is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Green:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas

- Identification of natural hazard events and losses that have impacted your community in the last five years
  - Identification of plans, studies, reports and ordinances addressing natural hazard risk
  - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:  
Mark Zschack  
Phone Number:  
(908) 852-9333 x18

Position/Department:  
Municipal Clerk / Administrator  
Email Address:  
clerkadmin@greentwp.com

Alternate/Secondary POC:  
Margaret "Peg" Phillips  
Phone Number:  
(908) 852-9333

Position/Department:  
Mayor  
Email Address:  
pphillips@greentwp.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:  
Mark Zschack  
Phone Number:  
(908) 852-9333 ext. 18

Position/Department:  
Municipal Clerk/Administrator  
Email Address:  
clerkadmin@greentwp.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): Cory Stoner	Position/Department: Township Engineer
Phone Number: (973)-948-6463 ext. 214	Email Address: cstoner@hpellow.com

Name (Planner): Jessica Caldwell	Position/Department: Principal Planner
Phone Number: (973) 300-5060 ext. 100	Email Address: jcaldwell@jcaldwellassociates.com

Name (Public Works): Jason Miller	Position/Department: Superintendent of Public Works
Phone Number: (862) 258-7249	Email Address: jmiller@greentwp.com

Name (Emergency Management): Chris Lopanik	Position/Department: OEM Coordinator
Phone Number: (201) 650-0640	Email Address: oem@greentwp.com

Name (Deputy Clerk): Patty DeClesis	Position/Department: Deputy Municipal Clerk
Phone Number: (908) 852-9333 ext. 11	Email Address: depclerkreg@greentwp.com

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Margaret Phillips, Mayor  
Township of Green





# Borough of Hamburg

16 Wallkill Avenue  
Hamburg, New Jersey 07419

Doreen Schott, Clerk  
Telephone: (973) 827-9230 x 4010  
Fax : (973) 827-0466  
Clerk@hamburgnj.org  
www.hamburgnj.org

March 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Borough of Hamburg

Dear Mr. Haffner:

This is to confirm that the Borough of Hamburg is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Hamburg:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:

- Providing notices of the planning project on your municipal website with links to a County project website
  - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
- Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:  
Keith Sukennikoff

Position/Department:  
OEM Coordinator

Phone Number:  
973-670-0105

Email Address:  
oem@hamburgnj.org

Alternate/Secondary POC:  
John Ruschke

Position/Department:  
Engineer

Phone Number:  
908-238-5000

Email Address:  
John.ruschke@mottmac.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:  
John Ruschke

Position/Department:  
Engineer

Phone Number:  
908-238-5000

Email Address:  
John.ruschke@mottmac.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): John Ruschke, Mott MacDonald Engineers	Position/Department: Borough Engineer
Email Address: Johh.ruschke@mottmac.com	

Name (Planner): Ken Nelson, Nelson Consulting	Position/Department: Borough Planner
Email Address: Kpn.ncg@gmail.com	

Name (Public Works): Alec Yanish	Position/Department: Supervisor
Email Address: ayanish@hamburgnj.org	

Name (Emergency Management): Keith Sukennikoff	Position/Department: OEM Coordinator
Email Address: oem@hamburgnj.org	

Name (Elected Official/Administrator): Richard Krasnomowitz	Position/Department: Mayor
Email Address: rkrasnomowitz@hamburgnj.org	

Name (Building Department/Code Enforcement): Hardyston Township	Position/Department: Construction Shared Service
Email Address: jButto@hardyston.com	

Name (Municipal Clerk): Doreen Scott	Position/Department: Municipal Clerk
Email Address: clerk@hamburgnj.org	

Name (Other Representatives):

Position/Department:

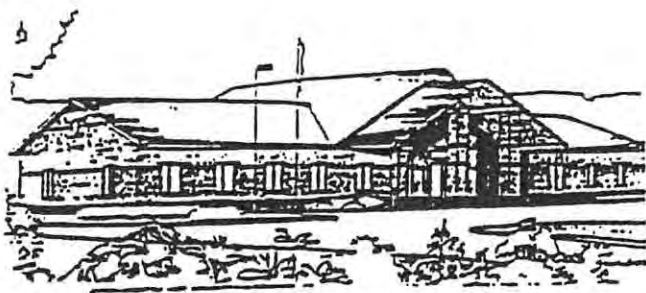
Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. Krasnomowitz', with a large, stylized 'K' and a long horizontal stroke.

Mayor Richard Krasnomowitz  
Borough of Hamburg



## **TOWNSHIP OF HAMPTON**

*1 Rumsey Way*

*Newton, NJ 07860*

*P: 973-383-5570 • F: 973-383-8969*

*www.hamptontownshipnj.info*

*Jessica M. Caruso*  
*Township CFO / Administrator*

*Kathleen Armstrong, RMC*  
*Township Clerk*

March 28, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:       Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Township of Hampton

Dear Mr. Haffner:

This is to confirm that the Township of Hampton is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Hampton:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk



- Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Jessica M. Caruso	Position/Department: Township Administrator
Phone Number: 973-383-5570	Email Address: administrator@hamptontwp-nj.org

Alternate/Secondary POC: Edward Hayes	Position/Department: Township OEM Coordinator
Phone Number: 973-592-2767	Email Address: Biged5679@yahoo.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Phone Number:	Email Address:

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): Harold Pellow	Position/Department: Township Engineer
Email Address: hpellow@hpellow.com	973-948-6463

Name (Planner):	Position/Department:
Email Address:	

Name (Public Works): Daniel Bayles	Position/Department: CPWM
Email Address: publicworks@hamptontwp-nj.org	973-383-8745

Name (Emergency Management): Edward Hayes	Position/Department: Township OEM Coordinator
Email Address: Biged5679@yahoo.com	973-592-2767

Name (Elected Official/Administrator): Timothy Dooley	Position/Department: Mayor
Email Address: timothydooley495@gmail.com	862-268-2539

Name (Building Department/Code Enforcement): Robert Huber	Position/Department: Construction Official/Zoning Officer
Email Address: constructionofficial@hamptontwp-nj.org	973-383-8845

Name (Municipal Clerk): Kathleen Armstrong	Position/Department: Municipal Clerk
Email Address:	



973-383-5570

clerk@hamptontwp-nj.org

Name (Other Representatives):

George Chattaway

Position/Department:

Deputy OEM Coordinator

Email Address:

Extricator48@gmail.com

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy S. Dooley". The signature is fluid and cursive, with the first name "Timothy" and last name "Dooley" clearly distinguishable.

Timothy S. Dooley, Mayor  
Township of Hampton



# TOWNSHIP OF HARDYSTON

HARDYSTON, NEW JERSEY 07419

Municipal Office  
149 Wheatsworth Road, Suite A  
Hardyston, NJ 07419  
(973) 823-7020 or (973) 697-4895  
Fax: (973) 823-7021

March 22, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:       Sussex County Hazard Mitigation Plan Update –  
                  Authorization and Letter of Intent to Participate  
                  Hardyston Township

Dear Mr. Haffner:

This is to confirm that the Hardyston Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Hardyston Township

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:

- Providing notices of the planning project on your municipal website with links to a County project website
  - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: William Hickerson	Position/Department: OEM
Phone Number: 973-615-5687	Email Address: <a href="mailto:wmhickerson@gmail.com">wmhickerson@gmail.com</a>

Alternate/Secondary POC: Carrine Piccolo kaufer	Position/Department: Township Manager
Phone Number: 973-823-7020	Email Address: <a href="mailto:cpiccolo@hardyston.com">cpiccolo@hardyston.com</a>

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Joe Butto	Position/Department: Construction Official
Phone Number: 973-823-7020	Email Address: <a href="mailto:jbutto@hardyston.com">jbutto@hardyston.com</a>

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): Mike Vreeland	Position/Department: Engineer
Email Address: mvreeland@vancleefengineering.com	

Name (Planner): Carrine Piccolo Kaufer	Position/Department: Township Planner
cpiccolo@hardyston.com	

Name (Public Works): Josh Raff	Position/Department: Director DPW
Email Address: JRaff@hardyston.com	

Name (Emergency Management): William Hickerson	Position/Department: OEM
Email Address: wmhickerson@gmail.com	

Name (Elected Official/Administrator): Brian Kaminski	Position/Department: Mayor
Email Address: Bkaminski@hardyston.com	

Name (Building Department/Code Enforcement): Joe Butto	Position/Department: Construction
Email Address: Jbutto@hardyston.com	

Name (Municipal Clerk):

Jane Bakalarczyk

Position/Department:

Municipal Clerk

Email Address: Jbakalarczyk@hardyston.com

Name (Other Representatives):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Brian Kaminski  
Mayor  
Hardyston Township



**Borough of Hopatcong  
Office of Municipal Clerk  
111 River Styx Road  
Hopatcong, NJ 07843  
973-770-1200 Ext 114**

Return to: rhaffner@sussexcountysheriff.com

February 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                          Borough of Hopatcong

Dear Mr. Haffner:

This is to confirm that the Borough of Hopatcong is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Hopatcong:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:

**Borough of Hopatcong  
Office of Municipal Clerk  
111 River Styx Road  
Hopatcong, NJ 07843  
973-770-1200 Ext 114**

- Providing notices of the planning project on your municipal website with links to a County project website
  - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Wade Crowley	Position/Department: Emergency Management Coordinator
Phone Number: (973) 390-0988	Email Address: wcrowley@hopatcong.org

Alternate/Secondary POC: Ron Tappan	Position/Department: Borough Administrator
Phone Number: (973) 770-1200	Email Address: rtappan@hopatcong.org

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Bill O'Connor	Position/Department: Construction Official
Phone Number: (973) 770-1200 ext. 137	Email Address: boconnor@hopatcong.org



**Borough of Hopatcong  
Office of Municipal Clerk  
111 River Styx Road  
Hopatcong, NJ 07843  
973-770-1200 Ext 114**

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer): John Ruschke	Position/Department: Engineer
Email Address: john.ruschke@mottmac.com	

Name (Lead Planner/Planning POC): Joseph Vuich	Position/Department: Planner
Email Address: jvuich@vcea.org	

Name (Public Works): Pat Mason	Position/Department: Superintendent
Email Address: pmason@hopatcong.org	

Name (Emergency Management): Wade Crowley	Position/Department: Emergency Management Coordinator
Email Address: wcrowley@hopatcong.org	

Name (Elected Official/Administrator): Ron Tappan	Position/Department: Borough Administrator
Email Address: rtappan@hopatcong.org	

Name (Building Department/Code Enforcement): Bill O'Connor	Position/Department: Construction Official
Email Address: boconnor@hopatcong.org	

**Borough of Hopatcong  
Office of Municipal Clerk  
111 River Styx Road  
Hopatcong, NJ 07843  
973-770-1200 Ext 114**

Name (Municipal Clerk):

Valerie Egan

Position/Department:

Municipal Clerk

Email Address:

VEgan@Hopatcong.org

Name (Other Representative):

Amy Mejia

Position/Department:

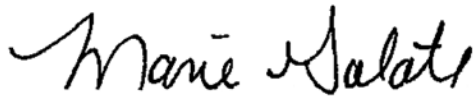
Land Use Board Secretary

Email Address:

landuse@hopatcong.org

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Borough of Hopatcong

Lafayette Township  
33 Morris Farm Rd  
Lafayette, NJ 07848

Richard Hughes, Mayor  
AnnaRose Fedish, RMC, Municipal Clerk  
Webpage: [LafayetteTwp.org](http://LafayetteTwp.org)

**March 15, 2023**

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                          **Lafayette Township**

Dear Mr. Haffner:

This is to confirm that Lafayette Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, Lafayette Township:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)

Lafayette Township  
33 Morris Farm Rd  
Lafayette, NJ 07848

Richard Hughes, Mayor  
AnnaRose Fedish, RMC, Municipal Clerk  
Webpage: [Lafayettetwp.org](http://Lafayettetwp.org)

- Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Rick Hughes	Position/Department: Emergency Mgt. Coord.
Phone Number: 973 985 5971	Email Address: <a href="mailto:hughesr22@gmail.com">hughesr22@gmail.com</a>

Alternate/Secondary POC: Jim Ando	Position/Department: DPW Foreman
Phone Number: 973 841 0412	Email Address: <a href="mailto:ltrd@ptd.net">ltrd@ptd.net</a>

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Rick Hughes	Position/Department: Emergency Mgt Coord.
Phone Number: 973 985 5971	Email Address: <a href="mailto:hughesr22@gmail.com">hughesr22@gmail.com</a>

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Lafayette Township  
33 Morris Farm Rd  
Lafayette, NJ 07848

Richard Hughes, Mayor  
AnnaRose Fedish, RMC, Municipal Clerk  
Webpage: [Lafayettetwp.org](http://Lafayettetwp.org)

Name (Engineer): Mike Vreeland Position/Department: Municipal Engineer

Email Address: [mvreeland@vancleefengineering.com](mailto:mvreeland@vancleefengineering.com)

Name (Planning Dept) : Stephanie Pizzulo Position/Department: Building / Planning

Email Address: [landuse@lafayettetwp.org](mailto:landuse@lafayettetwp.org)

Name (Public Works): Jim Ando Position/Department: DPW Foreman

Email Address: [ltrd@ptd.net](mailto:ltrd@ptd.net)

Name (Emergency Management): Rick Hughes Position/Department:

Email Address:

Name (Elected Official/Administrator): N/A Position/Department:

Email Address:

Name (Building Department/Code Enforcement): George Hutnick Position/Department: Zoning Officer

Email Address: [zoning@lafayettetwp.org](mailto:zoning@lafayettetwp.org)

Name (Municipal Clerk): AnnaRose Fedish Position/Department: RMC

Email Address: [lafayetteclk@lafayettetwp.org](mailto:lafayetteclk@lafayettetwp.org)

Name (Other Representatives): Position/Department:

Lafayette Township  
33 Morris Farm Rd  
Lafayette, NJ 07848

Richard Hughes, Mayor  
AnnaRose Fedish, RMC, Municipal Clerk  
Webpage: [Lafayettetwp.org](http://Lafayettetwp.org)

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink that reads "R J Hughes". The signature is written in a cursive, flowing style.

Richard Hughes, Mayor  
Lafayette Township



# ***Township of Montague***

***"The Top of New Jersey"***

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277 Clove Road, Montague, NJ 07827  
Phone 973-293-7300  
Fax 973-293-7467

February 17, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: **Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate for the Township of Montague.**

Dear Mr. Haffner:

This is to confirm that the Township of Montague is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Montague:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.



- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Dave Coss

Phone Number:

908-319-1811

Position/Department:

OEM Coordinator

Email Address:

[dpw@montaguenj.org](mailto:dpw@montaguenj.org)

Alternate/Secondary POC:

Jesse Brace-Revak

Phone Number: (908) 319-1813

Position/Department:

Deputy OEM Coordinator/ Flood Mitigation

Email Address: [jbrace81@yahoo.com](mailto:jbrace81@yahoo.com)

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:

Jesse Brace-Revak

Phone Number: (908) 319-1813

Position/Department:

Deputy OEM Coordinator/ Flood Mitigation

Email Address: [jbrace81@yahoo.com](mailto:jbrace81@yahoo.com)

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):	Position/Department:
Harold E. Pellow of Harold E. Pellow & Associates	Township Engineer
Email Address:	
<a href="mailto:hpellow@hpellow.com">hpellow@hpellow.com</a>	Phone: 973.948.6463, Ext. 201

Name (Planner):	Position/Department:
Tom Knutelsky of Harold E. Pellow & Associates	Township Planner
Email Address:	
<a href="mailto:tknutelsky@hpellow.com">tknutelsky@hpellow.com</a>	Phone: (973) 948-6463

Name (Public Works):	Position/Department:
Dave Coss	DPW Foreman
Email Address:	
<a href="mailto:dpw@montaguenj.org">dpw@montaguenj.org</a>	

Name (Emergency Management):	Position/Department:
Dave Coss	OEM Coordinator
Email Address:	
<a href="mailto:dpw@montaguenj.org">dpw@montaguenj.org</a>	

Name (Elected Official/Administrator):	Position/Department:
George Zitone	Mayor
Email Address:	
<a href="mailto:mayor@montaguenj.org">mayor@montaguenj.org</a>	

Name (Building Department/Code Enforcement):	Position/Department:
George Hutnick	Code Enforcement
Bob Huber	Building Official
Email Address: <a href="mailto:zoning@montaguenj.org">zoning@montaguenj.org</a>	
<a href="mailto:construction@montaguenj.org">construction@montaguenj.org</a>	

Name (Municipal Clerk):	Position/Department:
Eileen DeFabiis	Municipal Clerk
Dana Klinger	Deputy Municipal Clerk
Email Address: <a href="mailto:clerk@montaugenj.org">clerk@montaugenj.org</a>	
<a href="mailto:deputyclerk@montaguenj.org">deputyclerk@montaguenj.org</a>	

Name (Other Representatives):	Position/Department:
Kyle Gottemoller	Assistant DPW Fore
Email Address: <a href="mailto:kyledpw@gmail.com">kyledpw@gmail.com</a>	

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to read "George Zitone". The signature is fluid and cursive, with the first name "George" written in a larger, more prominent script than the last name "Zitone".

George Zitone, Mayor  
Township of Montague



# Newton Office of Emergency Management

May 2, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:       Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                    Town of Newton

Dear Mr. Haffner:

This is to confirm that the Town of Newton is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Town of Newton:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Daniel Finkle	Position/Department: Emergency Management Coordinator
Phone Number: (973) 383-2525 x266	Email Address: dfinkle@newtonoem.org

Alternate/Secondary POC: Jason Miller	Position/Department: Deputy Emergency Management Coordinator
Phone Number: (973) 383-3521 x279	Email Address: jmiller@newtonoem.org

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Harold Pellow	Position/Department: Town Engineer
------------------------------------	---------------------------------------



Phone Number:

(973) 948-6463

Email Address:

hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

Harold Pellow

Position/Department:

Town Engineer

Email Address:

hpellow@hpellow.com

Name (Planner):

Jessica Caldwell

Position/Department:

Town Planner

Email Address:

jcaldwell@jcaldwellassociates.com

Name (Public Works):

Adam Vough

Position/Department:

Public Works Supervisor

Email Address:

avough@newtontownhall.com

Name (Emergency Management):

Daniel Finkle

Position/Department:

Emergency Management Coordinator

Email Address:

dfinkle@newtonoem.org

Name (Elected Official/Administrator):

Thomas S. Russo, Jr.

Position/Department:

Town Manager

Email Address:

trusso@newtontownhall.com

Name (Building Department):

Joe Butto

Position/Department:

Construction Official

Email Address:  
jbutto@hardyston.com

Name (Municipal Clerk):  
Theresa Oswin

Position/Department:  
Municipal Clerk

Email Address:  
toswin@newtontownhall.com

Name (Other Representatives):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Thomas S. Russo, Jr., MPA, CPM, Harvard PLC  
Town Manager





14 Highland Avenue  
Ogdensburg, NJ 07439  
973-827-3444  
FAX 973-827-9602

ADMINISTRATIVE OFFICES  
George P. Hutnick, MAYOR  
Robin Hough, RMC/CMR

Return to: [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com) and [jenvanderwende@sussexcountysheriff.com](mailto:jenvanderwende@sussexcountysheriff.com)

February 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Borough of Ogdensburg

Dear Mr. Haffner:

This is to confirm that the Borough of Ogdensburg is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the [Borough of Ogdensburg]:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas

- Identification of natural hazard events and losses that have impacted your community in the last five years
  - Identification of plans, studies, reports and ordinances addressing natural hazard risk
  - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Richard Keslo	Position/Department: Emergency Management
Phone Number: 201-400-9873	Email Address: Ogdensburgoem@gmail.com

Alternate/Secondary POC: George P. Hutnick	Position/Department: Mayor
Phone Number: 973-903-1239	Email Address: oburgmayor@gmail.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
George P. Hutnick	Mayor
Phone Number:	Email Address:
973-903-1239	oburgmayor@gmail.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):	Position/Department:
Mike Vreeland	Borough Engineer
Email Address:	
<a href="mailto:mvreeland@vancleefengineering.com">mvreeland@vancleefengineering.com</a>	

Name (Planner):	Position/Department:
JoeVuich	Planner
Email Address:	
<a href="mailto:jvuich@vancleefengineering.com">jvuich@vancleefengineering.com</a>	

Name (Public Works):	Position/Department:
Chris Ross	DPW Supervisor
Email Address:	
<a href="mailto:dpw@gmail.com">dpw@gmail.com</a>	

Name (Police Department):	Position/Department:
Chief Stephen Gordon	Chief of Police
Email Address:	
<a href="mailto:sgordon.opd@gmail.com">sgordon.opd@gmail.com</a>	

Name (Municipal Clerk):	Position/Department:
Robin Hough	RMC/CMR
Email Address:	
<a href="mailto:clerk@ogdensburgnj.gov">clerk@ogdensburgnj.gov</a>	

Name (Other Representatives):

Mike Marceau

Position/Department:

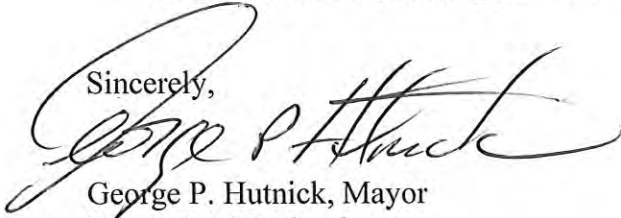
CFO

Email Address:

[cfo@ogdensburgnj.gov](mailto:cfo@ogdensburgnj.gov)

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to read "George P. Hutnick". The signature is fluid and cursive, with a large initial "G" and "H".

George P. Hutnick, Mayor  
Borough of Ogdensburg



# SANDYSTON TOWNSHIP

133 Route 645 - Sandyston, NJ 07826

Tel: 973.948.3520 • Fax: 973.948.0783

[www.sandystontownship.com](http://www.sandystontownship.com)

October 17, 2023

Steven Sugar, Deputy Coordinator  
Sussex County Division of Emergency Management  
1356 Morris Turnpike, Newton, NJ

Subject: Sussex County Hazard Mitigation Plan Update  
Authorization and Letter of Intent to Participate  
*Township of Sandyston*

Dear Mr. Sugar:

This is to confirm that the *Township of Sandyston* is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the *Township of Sandyston*:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Steven Sugar.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area



- Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Kevin Pumphrey	Position/Department: Emergency Mgmt Coord.
Phone Number: 973-948-3520 x301	Email Address: oem@sandystontownship.com

Alternate/Secondary POC: Amanda Lobban	Position/Department: Municipal Clerk
Phone Number: 973-948-3520 x200	Email Address: clerk@sandystontownship.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Robert W. Huber	Position/Department: Construction Official
Phone Number: 973-948-3520 x 201	Email Address: deputyclerk@sandystontownship.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer): Harold E. Pellow  
Harold E. Pellow & Assoc.

Position/Department: Engineer

Email Address:  
hpellow@hpellow.com/mcook@hpellow.com

Name (Lead Planner/Planning POC):  
Jessica Caldwell  
J. Caldwell & Associates

Position/Department: Planner

Email Address:  
jcaldwell@jcaldwellassociates.com

Name (Public Works): Roy C. McClain, CPWM

Position/Department: Road Foreman

Email Address: rc.mcclain@yahoo.com

Name (Emergency Management):  
Kevin Pumphrey

Position/Department: Emergency Mgmt Coord.

Email Address: oem@sandystontownship.com

Name (Elected Official/Administrator):  
George B. Harper, Jr., Mayor

Position/Department: Committeeman/Mayor

Email Address: mayor@sandystontownship.com

Name (Building Department): Robert W. Huber

Position/Department: Construction Official

Email Address:  
deputyclerk@sandystontownship.com

Name (Municipal Clerk): Amanda F. Lobban

Position/Department: Municipal Clerk

Email Address: clerk@sandystontownship.com

Name (Other Representative): Michael Johnson

Position/Department: Code Enforcement

Email Address: landuse@sandystontownship.com

Name (Other Representative): Beth Brothman

Position/Department: Land Use  
Administrator/Zoning Official/Planning Board  
Secretary

Email Address: landuse@sandystontownship.com

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



George B. Harper, Jr.  
Mayor





# SPARTA TOWNSHIP POLICE DEPARTMENT

65 MAIN STREET • SPARTA, NEW JERSEY 07871-1903  
PH: (973) 729-6121 • FAX: (973) 729-5073  
WWW.SPARTAPD.ORG



February 23, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Sparta Township Police Department

Dear Mr. Haffner:

This is to confirm that the Sparta Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Sparta Township

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:





# SPARTA TOWNSHIP POLICE DEPARTMENT

65 MAIN STREET • SPARTA, NEW JERSEY 07871-1903  
PH: (973) 729-6121 • FAX: (973) 729-5073  
WWW.SPARTAPD.ORG



- Providing notices of the planning project on your municipal website with links to a County project website
  - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
- Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:  
Jeffrey McCarrick

Position/Department:  
Chief (OEM Cord)/Sparta PD

Phone Number:  
973-726-4072

Email Address:  
jmccarrick@spartapd.org

Alternate/Secondary POC:  
Thomas McIntyre

Position/Department:  
Deputy OEM/Sparta PD and Sparta FD

Phone Number:  
973-729-6121

Email Address:  
tmcintyre@spartapd.org

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:  
Thomas McIntyre

Position/Department:  
Deputy OEM/Sparta PD and Sparta FD

Phone Number:

Email Address:



# SPARTA TOWNSHIP POLICE DEPARTMENT

65 MAIN STREET • SPARTA, NEW JERSEY 07871-1903  
PH: (973) 729-6121 • FAX: (973) 729-5073  
WWW.SPARTAPD.ORG



973-729-6121

tmcintyre@spartapd.org

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

Ed Haack

Position/Department:

Twp Engineer/Sparta Zoning and Planning

Email Address:

Ed.Haack@spartanj.org

Name (Planner):

Debbie Card

Position/Department:

Planning and Zoning/Sparta Twp

Email Address:

Debbie.Card@spartanj.org

Name (Public Works):

James Zepp

Position/Department:

DPW Director/Sparta Twp DPW

Email Address:

james.zepp@spartanj.org

Name (Emergency Management):

Jeffrey McCarrick

Position/Department:

Chief/Sparta Twp PD

Email Address:

jmccarrick@spartapd.org

Name (Elected Official/Administrator):

Sam Rome

Position/Department:

Email Address:

grant.rome@spartanj.org

Name (Building Department/Code Enforcement):

Phil Coleman

Position/Department:

Code Enf/Sparta Twp

Email Address:





# SPARTA TOWNSHIP POLICE DEPARTMENT

65 MAIN STREET • SPARTA, NEW JERSEY 07871-1903  
PH: (973) 729-6121 • FAX: (973) 729-5073  
WWW.SPARTAPD.ORG



PColeman@spartapd.org

Name (Municipal Clerk):

Kate Chambers

Position/Department:

Clerk/Sparta Township

Email Address:

Kathleen.Chambers@spartanj.org

Name (Other Representatives):

Thomas McIntyre

Position/Department:

Deputy OEM/Sparta Twp PD

Email Address:

tmcintyre@spartapd.org

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Chief Jeffrey L. McCarrick  
Sparta Township Police Department



*Borough of Stanhope*, Sussex County, New Jersey

77 MAIN STREET, STANHOPE, NJ 07874

TEL: 973-347-0159

Return to: rhaffner@sussexcountysheriff.com

February 17, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject:       Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                  Borough of Stanhope

Dear Mr. Haffner:

This is to confirm that the Borough of Stanhope is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Stanhope:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.



## *Borough of Stanhope*, Sussex County, New Jersey

77 MAIN STREET, STANHOPE, NJ 07874

TEL: 973-347-0159

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Brien McNeilly

Position/Department:

Borough Administrator

Phone Number:

(973) 347-0159 ext. 14

Email Address:

bmcneilly@stanhopenj.gov

Alternate/Secondary POC:

Eric Keller

Position/Department:

Borough Engineer

Phone Number:

(973) 291-2919

Email Address:

ekeller@bowmanconsulting.com



*Borough of Stanhope*, Sussex County, New Jersey

77 MAIN STREET, STANHOPE, NJ 07874

TEL: 973-347-0159

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Thomas Pershouse	Construction Official
Phone Number:	Email Address:
(973) 347-0159 ext. 20	tminniti@stanhopenj.gov

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Eric Keller	Borough Engineer
Email Address:	
ekeller@bowmanconsulting.com	

Name (Lead Planner/Planning POC):	Position/Department:
Email Address:	

Name (Public Works):	Position/Department:
Jason Titsworth	Superintendent
Email Address:	
stanhopedpw@stanhopenj.gov	

Name (Emergency Management):	Position/Department:
Wayne Anthony	Emergency Management Coordinator
Email Address:	





*Borough of Stanhope*, Sussex County, New Jersey

77 MAIN STREET, STANHOPE, NJ 07874

TEL: 973-347-0159

Name (Elected Official/Administrator):

Brien McNeilly

Position/Department:

Borough Administrator

Email Address:

bmcneilly@stanhopenj.gov

Name (Building Department/Code Enforcement):

Thomas Pershouse

Position/Department:

Construction Official

Email Address:

tminniti@stanhopenj.gov

Name (Municipal Clerk):

Ellen Horak

Position/Department:

Municipal Clerk

Email Address:

ehorak@stanhopenj.gov

Name (Other Representative):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Borough of Stanhope



# Stillwater Township

Sussex County  
964 Stillwater Road, Newton, NJ 07860  
(973) 383-9484  
Fax: (973) 383-8059

May 4, 2023

Jennifer Vanderwende, Deputy Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject: Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Stillwater Township

Dear Ms. Vanderwende:

This is to confirm that the Stillwater Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Stillwater:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:



- Providing notices of the planning project on your municipal website with links to a County project website
  - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
  - Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:	Position/Department:
Lisa Chamblings	OEM Coordinator
Phone Number:	Email Address:
973-903-3003	<a href="mailto:lchamblings@stillwatertwp.com">lchamblings@stillwatertwp.com</a>

Alternate/Secondary POC:	Position/Department:
Phone Number:	Email Address:

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Tom Dixon	Zoning/Code Enforcement Officer
Phone Number:	Email Address:
973-383-9484 x29	<a href="mailto:zoning@stillwatertwp.com">zoning@stillwatertwp.com</a>



5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer): Michael Vreeland (Van Cleef Engineering)	Position/Department:
Email Address: Mike Vreeland <mvreeland@vancleefengineering.com>	

Name (Planner): N/A	Position/Department:
Email Address:	

Name (Public Works): Paul Hawkins	Position/Department: Acting Supervisor
Email Address: <a href="mailto:DPW@stillwatertwp.com">DPW@stillwatertwp.com</a>	

Name (Emergency Management): Lisa Chamings	Position/Department: OEM Coordinator
Email Address: <a href="mailto:lchamings@stillwatertwp.com">lchamings@stillwatertwp.com</a>	

Name (Elected Official/Administrator): N/A	Position/Department:
Email Address:	

Name (Building Department/Code Enforcement): Richard Bizik, Jr.	Position/Department: Construction Official
Email Address: <a href="mailto:rbizik@stillwatertwp.com">rbizik@stillwatertwp.com</a>	

Name (Municipal Clerk): Lynda Knott	Position/Department: Municipal Clerk
Email Address: <a href="mailto:clerk@stillwatertwp.com">clerk@stillwatertwp.com</a>	

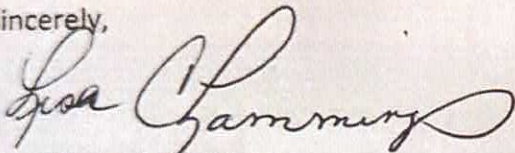


Name (Other Representatives):	Position/Department:
Tammy Leonard	CFO

Email Address:
<a href="mailto:CFO@stillwatertwp.com">CFO@stillwatertwp.com</a>

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lisa Chammings".

Lisa Chammings, Mayor  
Stillwater Township



**Borough of Sussex**  
**2 Main Street**  
**Sussex, NJ 07461**

**2023**

Antoinette Smith  
Municipal Clerk

Ph: 973-875-4831  
Fax: 973-875-6261

Melissa Morales  
Deputy Clerk

Return to: rhaffner@sussexcountysheriff.com

February 17, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject:       Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                    Borough of Sussex

Dear Mr. Haffner:

This is to confirm that the Borough of Sussex is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Borough of Sussex:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk



**Borough of Sussex**  
**2 Main Street**  
**Sussex, NJ 07461**

**2023**

Antoinette Smith  
Municipal Clerk

Ph: 973-875-4831  
Fax: 973-875-6261

Melissa Morales  
Deputy Clerk

- Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:  
Floyd Southard

Position/Department:  
Emergency Management Coordinator

Phone Number:  
(973) 534-7258

Email Address:  
oem@sussexboro.com

Alternate/Secondary POC:  
Robert Regavich

Position/Department:  
Deputy Emergency Management Coordinator

Phone Number:  
(973) 271-2047

Email Address:  
rregavich@gmail.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:





**Borough of Sussex**  
**2 Main Street**  
**Sussex, NJ 07461**

**2023**

Antoinette Smith  
Municipal Clerk

Ph: 973-875-4831  
Fax: 973-875-6261

Melissa Morales  
Deputy Clerk

Name of NFIP FPA:	Position/Department:
George Hutnick	Zoning and Code Enforcement Officer
Phone Number:	Email Address:
(973) 875-4831	zoning@sussexboro.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Harold Pellow	Engineer
Email Address:	
hpellow@hpellow.com	

Name (Lead Planner/Planning POC):	Position/Department:
Email Address:	

Name (Public Works):	Position/Department:
Email Address:	

Name (Emergency Management):	Position/Department:
Floyd Southard	Emergency Management Coordinator
Email Address:	
oem@sussexboro.com	

Name (Elected Official/Administrator):	Position/Department:
Robert Holowach	Councilman
Email Address:	
rhollowach@sussexboro.com	



**Borough of Sussex**  
**2 Main Street**  
**Sussex, NJ 07461**

**2023**

Antoinette Smith  
Municipal Clerk

Ph: 973-875-4831  
Fax: 973-875-6261

Melissa Morales  
Deputy Clerk

Name (Building Department/Code Enforcement): George Hutnick	Position/Department: Zoning and Code Enforcement Officer
Email Address: zoning@sussexboro.com	

Name (Municipal Clerk): Toni Smith	Position/Department: Municipal Clerk
Email Address: admin@sussexboro.com	

Name (Other Representative): Dixie Ferrington	Position/Department: Planning/Zoning Board Secretary
Email Address: dferrington@sussexboro.com	

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Borough of Sussex

March 15, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
                          Vernon Township

Dear Mr. Haffner:

This is to confirm that the Vernon Twp. is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Vernon Twp:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)

- Advertising and supporting public meetings in your area
  - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Ken Clark	Position/Department: OEM Coordinator
Phone Number: 973-600-7612	Email Address: kclark@vernontwp.com

Alternate/Secondary POC: Mark Vogel	Position/Department: Deputy OEM Coordinator
Phone Number: 973-903-6421	Email Address: mvogel@vernontwp.com

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Phone Number: 973-764-4055	Email Address:

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

Cory L Stoner

Position/Department:

Engineer

Email Address:

cstoner@hpellow.com

Name (Planner):

Jessica Caldwell

Position/Department:

Township Planner

Email Address:

jcaldwell@jcaldwellassociates.com

Name (Public Works):

Ed Babcock

Position/Department:

DPW Superintendent

Email Address:

Headofdpw@vernontwp.com

Name (Emergency Management):

Ken Clark

Position/Department:

OEM Coordinator

Email Address:

kclark@vernontwp.com

Name (Elected Official/Administrator):

Tina Kraus

Position/Department:

Business Administrator

Email Address:

Businessadmin@vernontwp.com

Name (Building Department/Code Enforcement):

Paul Black

Position/Department:

Construction Official

Email Address:

pblack@vernontwp.com

Municipal Clerk

Marcy Gianattasio

Position/Department:

Email Address:

townclerk@vernontwp.com

Name (Other Representatives):

Dan Young

Position/Department:

Police Chief/Deputy OEM Coordinator

Email Address:

973-764-6155

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

Howard L. Burrell

Mayor



# Walpack Township

9 Main Street

Walpack Center, NJ 07881

Phone and Fax: 973-948-6861

Office Hours: 9:00 a.m. to 1:00 p.m.

Direct Mail to: PO Box 813, Sussex NJ 07461

Return to: rhaffner@sussexcountysheriff.com

February 14, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
39 Trinity Street, Newton, NJ 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Township of Walpack

Dear Mr. Haffner:

This is to confirm that the Township of Walpack is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Township of Walpack:

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings over 6-8 months, including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years
    - Identification of plans, studies, reports and ordinances addressing natural hazard risk
    - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.

# Walpack Township

9 Main Street

Walpack Center, NJ 07881

Phone and Fax: 973-948-6861

Office Hours: 9:00 a.m. to 1:00 p.m.

Direct Mail to: PO Box 813, Sussex NJ 07461

- Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Completing data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve your local NFIP Floodplain Administrator in the planning process.
  - Review draft Plan sections when requested and provide comment and input as appropriate.
  - Adopt the Plan by resolution of their governing body after FEMA conditional approval.
  - Periodically provide the Steering Committee with reports of municipal staff and volunteer labor spent on the planning process.
3. Assigns the following persons to be the Points of Contact for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at municipal Planning Committee meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Victor Maglio	Position/Department: Mayor
Phone Number: (973) 479-6976	Email Address: walpackmayor@gmail.com

Alternate/Secondary POC: Christine Von Oesen	Position/Department: Municipal Clerk
Phone Number: (973) 479-6976	Email Address: walpackclerk@live.com

# Walpack Township

9 Main Street

Walpack Center, NJ 07881

Phone and Fax: 973-948-6861

Office Hours: 9:00 a.m. to 1:00 p.m.

Direct Mail to: PO Box 813, Sussex NJ 07461

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA:	Position/Department:
Michael Vreeland	Township Engineer
Phone Number:	Email Address:
(862) 284-1100	mvreeland@vancleefengineering.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Michael Vreeland	Township Engineer
Email Address:	
mvreeland@vancleefengineering.com	

Name (Lead Planner/Planning POC):	Position/Department:
Email Address:	

Name (Public Works):	Position/Department:
Email Address:	

Name (Emergency Management):	Position/Department:
Email Address:	

# Walpack Township

9 Main Street

Walpack Center, NJ 07881

Phone and Fax: 973-948-6861

Office Hours: 9:00 a.m. to 1:00 p.m.

Direct Mail to: PO Box 813, Sussex NJ 07461

Name (Elected Official/Administrator):

Victor Maglio

Position/Department:

Mayor

Email Address:

walpackmayor@gmail.com

Name (Building Department/Code Enforcement):

Greg Chontow

Position/Department:

Construction Official

Email Address:

gregchontow@msn.com

Name (Municipal Clerk):

Christine Von Oesen

Position/Department:

Municipal Clerk

Email Address:

walpackclerk@live.com

Name (Other Representative):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,



Township of Walpack

# Township of Wantage

888 State Route 23  
Wantage, New Jersey 07461-3318

Phone (973) 875-7192  
Fax (973) 875-0801  
[www.wantagetwp.com](http://www.wantagetwp.com)



March 16, 2023

Robert Haffner, Director  
Sussex County Office of Emergency Management  
135 Morris Turnpike, Newton, New Jersey, 07860

Subject:           Sussex County Hazard Mitigation Plan Update - Authorization and Letter of Intent to Participate  
Wantage Township

Dear Mr. Haffner:

This is to confirm that the Wantage Township is committed to participating in the Sussex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the Wantage Township

1. Authorizes Sussex County Division of Emergency Management and the Sussex County Hazard Mitigation Steering Committee ("Steering Committee"), to guide and direct this planning process, perform certain parts of the planning process, and prepare certain parts of the plan documents on our behalf.
2. Agrees to meet the minimum requirements of municipal participation (a.k.a. the Planning Partner Expectations), specifically:
  - Execute and return this "Authorization and Letter of Intent to Participate" letter to Sussex County Division of Emergency Management, attention: Robert Haffner.
  - Identify municipal representatives to serve as the planning point of contacts (POC), below. These people will be responsible for representing their community and assuring that these participation expectations are met by their community.
  - Support the Steering Committee selected to oversee the development of this plan.
  - Provide representation at municipal Planning Committee meetings (~ 3 meetings including a Kick-Off Meeting and a Mitigation Strategy Workshop).
  - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
    - Structure and facility inventory data
    - Identification of new development and anticipated development
    - Identification of natural hazard risk areas
    - Identification of natural hazard events and losses that have impacted your community in the last five years

- Identification of plans, studies, reports and ordinances addressing natural hazard risk
  - Identify mitigation activity in your community in the last five years, including progress on previously identified mitigation actions.
  - Support public outreach efforts in your community which may include:
    - Providing notices of the planning project on your municipal website with links to a County project website
    - Providing notice of the planning project, the availability of Plan documents, and notice of public meetings via available local media (e.g. newsletters, flyers, email blasts, social media, etc.)
    - Advertising and supporting public meetings in your area
    - Supporting outreach to National Flood Insurance Program (NFIP) Repetitive Loss and Severe Repetitive Loss property owners in your community.
  - Assist with the identification of stakeholders within your community that should be informed and potentially involved with the planning process.
  - Complete data and information collection survey forms in a timely manner.
  - Identify specific mitigation actions to address each of the natural hazards posing significant [or high or medium] risk to your community.
  - Involve the POCs listed below in the planning process.
  - Review draft plan sections when requested and provide comment and input as appropriate.
  - Adopt the plan by resolution of their governing body after FEMA conditional approval.
3. Assigns the following persons to be the POCs for our jurisdiction. We understand that these POCs are responsible for assuring municipal representation at Planning Committee meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Joe Konopinski	Position/Department: Township Emergency Manager
Phone Number: 973-875-7192	Email Address: oem@wantagetwp-nj.org

Alternate/Secondary POC: Michael L Restel CPWM	Position/Department: Township Administrator
Phone Number: 973-875-7192	Email Address: mike@wantagetwp-nj.org

4. Our designated local Floodplain Administrator (FPA) under the NFIP is:

Name of NFIP FPA: Harold Pellow	Position/Department: Township Engineer
Phone Number:	Email Address:



973-948-6463

hpellow@hpellow.com

5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for these municipal representatives are listed below.

Name (Engineer):

Harold Pellow

Position/Department:

Township Engineer

Email Address:

hpellow@hpellow.com

Name (Planner):

Harold Pellow

Position/Department:

Township Engineer

Email Address:

hpellow@hpellow.com

Name (Public Works):

Bob Wagner

Position/Department:

Superintendent of Public Works

Email Address:

Name (Emergency Management):

Joe Konopinski

Position/Department:

Township Emergency Manager

Email Address:

oem@wantagetwp-nj.org

Name (Elected Official/Administrator):

Michael L Restel CPWM

Position/Department:

Township Administrator

Email Address:

mike@wantagetwp-nj.org

Name (Building Department/Code Enforcement):

Steve Danner

Position/Department:

Code Enforcement

Email Address:

sdanner@wantagetwp-nj.org

Name (Municipal Clerk):

Position/Department:

Michael L Restel CPWM

Acting Clerk

Email Address: mike@wantagetwp-nj.org

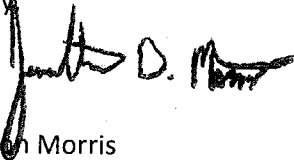
Name (Other Representatives):

Position/Department:

Email Address:

6. Recognizes that failure to meet the minimum participation expectations and deadlines, as determined by the County and Steering Committee will result in our municipality being excluded from the planning process.

Sincerely,

A handwritten signature in black ink, appearing to read "John D. Morris". The signature is written in a cursive, somewhat stylized font.

Mayor John Morris  
Township of Wantage



# Annex Sign Off Sheets

Jurisdictional Annex Review Sign Off Sheet

ANDOVER BOROUGH  
JURISDICTION NAME

Jessica Casella  
Name

OEM  
Title

[Signature]  
Signature

9/9/24  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

[Signature]  
Name

☐ Floodplain Administrator\*

Name

☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

[Signature]  
Name

☒ Administrator or Elected Official

[Signature]  
Name

☐ Public Works/  
Highway Manager

N/A  
Name

☒ Municipal Clerk

[Signature]  
Name  
Beth Brethman

☐ Planner

Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.


Jurisdictional Annex Review Sign Off Sheet

Andover Township

JURISDICTION NAME

Eric Danielson  
Name

Township O&M Coordinator  
Title

  
Signature

9/10/2024  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Eric Danielson - Chief of Police  
Name

☒ Floodplain Administrator\*

  
Name

☒ Engineer

  
Name

☐ Building/Code Enforcement/  
Construction Official

Name

☒ Administrator or Elected Official

Patricia Y. Busson  
Name

☒ Public Works/  
Highway Manager

  
Name

☒ Municipal Clerk

Patricia Y. Busson  
Name

☐ e: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Jurisdictional Annex Review Sign Off Sheet

Branchville

JURISDICTION NAME

Jeff Lewis OEM Coordinator  
Name Title

[Signature] 8/27/2024  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Jeff Lewis  
Name

☒ Floodplain Administrator\*

Dave Simmons  
Name

☒ Engineer

Harold Pellow  
Name

☒ Building/Code Enforcement/  
Construction Official

Rich Bizik  
Name

☒ Administrator or Elected Official

Anthony Fato  
Name

☒ Public Works/  
Highway Manager

Darren Haggerty  
Name

☒ Municipal Clerk

Kathryn Leissler  
Name

☒ Planner

Mike Clune  
Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



Jurisdictional Annex Review Sign Off Sheet

Byram Township  
JURISDICTION NAME

Joseph W. Sabatini

Name

Township Manager

Title

Signature

September 13, 2024

Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Daniel DeWald

Name

☒ Floodplain Administrator\*

Cory Stoner, P.E., P.P., C.M.E.

Name

☒ Engineer

Cory Stoner, P.E., P.P., C.M.E.

Name

☒ Building/Code Enforcement/  
Construction Official

Peter Karcher - Construction Official

Name

☒ Administrator or Elected Official

Joseph Sabatini

Name

☒ Public Works/  
Highway Manager

Michael Orgera

Name

☒ Municipal Clerk

Cynthia Church

Name

☐ Planner

N/A

Name

☒ Other

Township Deputy Manager

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

**Jurisdictional Annex Review Sign Off Sheet**

Frankford Twp

**JURISDICTION NAME**

Jeff Lewis OEM Coordinator  
Name Title

Jeff Lewis 9/10/2024  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Jeff Lewis  
Name

☒ Floodplain Administrator\*

Dave Simmons  
Name

☒ Engineer

Harold Pellow  
Name

☒ Building/Code Enforcement/  
Construction Official

Robert Huber  
Name

☒ Administrator or Elected Official

David Silverthorne  
Name

☒ Public Works/  
Highway Manager

Mark Yetter  
Name

☒ Municipal Clerk

Lori Nienstedt  
Name

☐ Planner

\_\_\_\_\_  
Name

☐ Other

\_\_\_\_\_  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

## Jurisdictional Annex Review Sign Off Sheet

Franklin Borough

JURISDICTION NAME

JOSEPH BUTTO CONSTRUCTION OFFICIAL  
Name Title

Joseph Butto 10/29/24  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Jim Williams, OEM Coordinator

Name

☒ Floodplain Administrator\*

see construction official

Name

☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

Joseph Butto/ Construction Official

Name

☐ Administrator or Elected Official

Name

☐ Public Works/  
Highway Manager

Name

☐ Municipal Clerk

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Jurisdictional Annex Review Sign Off Sheet

Township of Fredon  
JURISDICTION NAME

SUZANNE BOLAND  
Name

MUNICIPAL CLERK  
Title

[Signature]  
Signature

11/15/2024  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

[Signature]  
Keith Festa

☒ Floodplain Administrator\*

[Signature]  
Harold Pellow

☒ Engineer

[Signature]  
Harold Pellow

☒ Building/Code Enforcement/  
Construction Official

[Signature]  
Brad Moxen

☒ Administrator or Elected Official

[Signature]  
Glenn Deitz Mayor

☒ Public Works/  
Highway Manager

[Signature]  
Matthew Lambert

☒ Municipal Clerk

[Signature]  
Suzanne Boland

☒ Planner

[Signature]  
Jessica Caldwell

☐ Other

\_\_\_\_\_  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

## Jurisdictional Annex Review Sign Off Sheet

Green Township  
JURISDICTION NAME

Mark Zschack  
Name

Municipal Clerk  
Title

Signature



Date

10/29/2024

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Christopher Lopanik, EMC  
Name

☒ Floodplain Administrator\*

Cory Stoner, P.E., P.P., C.M.E.  
Name

☒ Engineer

Cory Stoner, P.E., P.P., C.M.E.  
Name

☐ Building/Code Enforcement/  
Construction Official

Greg Chontow, CO  
Name

☒ Administrator or Elected Official

Mark Zschack, RMC, CPWM  
Name

☒ Public Works/  
Highway Manager

Mark Zschack, RMC, CPWM  
Name

☒ Municipal Clerk

Mark Zschack, RMC, CPWM  
Name

☐ Planner

Jessica Caldwell, PP, AICP, LEED-GA  
Name

☐ Other

N/A  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



Jurisdictional Annex Review Sign Off Sheet

Hamburg Borough

JURISDICTION NAME

KEITH SUKERNIKOFF OEM  
Name Title

Keith Sukernikoff 9-19-2024  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Keith Sukernikoff Keith Sukernikoff OEM  
Name

☐ Floodplain Administrator\*

SEE Building / code official.  
Name

☒ Engineer

John K. Ruschke, PE John Ruschke  
Name

☒  
Building/Code Enforcement/  
Construction Official

Joseph Butto Joseph Butto  
Name

☒ Administrator or Elected Official

John Haig John Haig  
Name

☒ Public Works/  
Highway Manager

Alec Tanish Alec Tanish  
Name

☒ Deputy  
Municipal Clerk

Beth Martin Beth Martin  
Name

☐ Planner

\_\_\_\_\_  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

HAMPTON TOWNSHIP  
JURISDICTION NAME

Diana Juarez  
Signature

9-13-2024  
Date

<input checked="" type="checkbox"/> Emergency Manager/ Police Chief *	<u>George Chattaway</u> Name
<input checked="" type="checkbox"/> Floodplain Administrator*	<u>Harold E. Bellaw</u> Name
<input type="checkbox"/> Engineer	<u>                    </u> Name
<input checked="" type="checkbox"/> Building/Code Enforcement/ Construction Official	<u>Robert Huber</u> Name
<input checked="" type="checkbox"/> Administrator or Elected Official	<u>Diana Suarez</u> Name
<input checked="" type="checkbox"/> Public Works/ Highway Manager	<u>Daniel Bayles</u> Name
<input checked="" type="checkbox"/> Municipal Clerk	<u>Diana Suarez</u> Name
<input type="checkbox"/> Planner	<u>                    </u> Name
<input type="checkbox"/> Other	<u>                    </u> Name

<sup>26</sup> Review of the annex by this official is required.

## Jurisdictional Annex Review Sign Off Sheet

Hardyston Township New Jersey

**JURISDICTION NAME**

William Hickerson  
Name


OEM Coordinator Hardyston Township  
Title

  
Signature

9-3-24  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

  
Name

OEM Coordinator

☒ Floodplain Administrator\*

Name

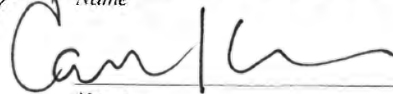
☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

 JOSEPH BUTTO CONSTRUCTION OFFICIAL.  
Name

☒ Administrator or Elected Official

  
Name

Township Manager

☐ Public Works/  
Highway Manager

Name

☐ Municipal Clerk

Name

☐ Planner

Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Hopatcong Borough  
**JURISDICTION NAME**

Emergency Management Coordinator  
Title

10/16/24  
Date


Name Chris McElroy

Name \_\_\_\_\_

Name John Paul

Name William O'Connor

Name Marie Salati

  
Name

Name Vaunne A. Egan

Name J. R. VIL

Name \_\_\_\_\_

**\* Review of the annex by this official is required.**

**Jurisdictional Annex Review Sign Off Sheet**

**Township of Lafayette** \_\_\_\_\_  
**JURISDICTION NAME**

\_\_\_\_\_  
Name Title

*Richard Hughes*

*Emergency Management Coordinator*

Signature

*[Handwritten Signature]*

Date

*10-17-2024*

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ **Emergency Manager/ Police Chief \***

*Richard Hughes*  
Name

☒ **Floodplain Administrator\***

*George Hutnick*  
Name

☒ **Engineer**

*Mike Vreeland*  
Name

☒ **Building/Code Enforcement/  
Construction Official**

*Leigh Witty*  
Name

☒ **Administrator or Elected Official**

*Allen Henderson, Mayor*  
Name

☒ **Public Works/  
Highway Manager**

*James Ando*  
Name

☒ **Municipal Clerk**

*Anna Rose Fedish*  
Name

☒ **Planner**

*David Banish*  
Name

☐ **Other**

*N/A*  
Name

**Note: Fill out checkbox and name of individuals.**

**\* Review of the annex by this official is required.**

Jurisdictional Annex Review Sign Off Sheet

Township of Montague  
JURISDICTION NAME

Dana Klinger  
Name

Municipal Clerk/Administrator  
Title

Dana Klinger  
Signature

9/13/2024  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Dave Cross  
Name

☒ Floodplain Administrator\*

Harold E. Sellow  
Name

☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

Name

☒ Administrator or Elected Official

Name

☒ Public Works/  
Highway Manager

Name

☒ Municipal Clerk

Name

☐ Planner

Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



## Jurisdictional Annex Review Sign Off Sheet

Town of Newton, New Jersey

*Daniel Finkle*  
Name

*Emergency Management Coordinator*  
Title

  
Signature

*September 13, 2024*  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ **Emergency Manager/ Police Chief \***

*Daniel Finkle / EMC*  
Name

☒ **Floodplain Administrator\***

*Harold Pellow, Harold E. Pellow & Associates, Inc.*  
Name

☐ **Engineer**

\_\_\_\_\_  
Name

☐ **Building/Code Enforcement/  
Construction Official**

\_\_\_\_\_  
Name

☐ **Administrator or Elected Official**

\_\_\_\_\_  
Name

☐ **Public Works/  
Highway Manager**

\_\_\_\_\_  
Name

☐ **Municipal Clerk**

\_\_\_\_\_  
Name

☐ **Planner**

\_\_\_\_\_  
Name

☐ **Other**

\_\_\_\_\_  
Name

**Note: Fill out checkbox and name of individuals.**

**\* Review of the annex by this official is required.**

# Jurisdictional Annex Review Sign Off Sheet

Ogdensburg

## JURISDICTION NAME

George P. Hutnick  
Name

Mayor  
Title

OEM Coordinator

Signature

Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☐ Emergency Manager/ Police Chief \*

Name Stephen Gordon, Chief of Police

☐ Floodplain Administrator\*

Name Mike Vreeland, Van Cleef Engineering

☐ Engineer

Name Mike Vreeland, Borough Engineer

☐ Building/Code Enforcement/  
Construction Official

Name

☐ Administrator or Elected Official

Name

☐ Public Works/  
Highway Manager

Name Jacob Kinney, Assistant DPW Supervisor

☐ Municipal Clerk

Name Robin Hough, RMC/CMR

☐ Planner

Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Jurisdictional Annex Review Sign Off Sheet

Sandyston Township  
JURISDICTION NAME

Amanda F. Lobban  
Name Title

Amanda F. Lobban 10/15/2024  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*  
Kevin Pumphrey

Kevin Pumphrey  
Name

☒ Floodplain Administrator\*  
Robert Huber

Robert Huber  
Name

☐ Engineer

\_\_\_\_\_  
Name

☒ Building/Code Enforcement/  
Construction Official Robert Huber

Robert Huber  
Name

☒ Administrator or Elected Official  
George B. Harper, Jr.

George B. Harper, Jr.  
Name

☒ Public Works/  
Highway Manager Roy C. McClain

Roy C. McClain  
Name

☒ Municipal Clerk Amanda F. Lobban

Amanda F. Lobban  
Name

☐ Planner

\_\_\_\_\_  
Name

☐ Other

\_\_\_\_\_  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Jurisdictional Annex Review Sign Off Sheet

Sparta Township

JURISDICTION NAME

Jeffrey L. McCarrick  
Name

Chief of Police / OEM Coordinator  
Title

Chy Jay M. Le  
Signature

09-03-2024  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Chy Jay M. Le  
Name

☒ Floodplain Administrator\*

[Signature]  
Name

☒ Engineer

[Signature]  
Name

☒ Building/Code Enforcement/  
Construction Official

Michael Wallace  
Name

☒ Administrator or Elected Official

[Signature]  
Name

☒ Public Works/  
Highway Manager

[Signature]  
Name

☒ Municipal Clerk

[Signature]  
Name

☒ Planner Land Use  
Dept. Head

Forrie Joy  
Name

☒ Other

[Signature] DEMC  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



Jurisdictional Annex Review Sign Off Sheet

BOROUGH OF STANHOPE

JURISDICTION NAME

BRIAN MCNEILLY

Name

ADMINISTRATOR

Title



Signature

12/16/2024

Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.



Emergency Manager/ Police Chief \*

WAYNE ANTHONY

Name



Floodplain Administrator\*

Name



Engineer

ERIC KELLER

Name



Building/Code Enforcement/  
Construction Official

Name



Administrator or Elected Official

BRIAN MCNEILLY

Name



Public Works/  
Highway Manager

Name



Municipal Clerk

Name

Planner



Other

Name

JASON TITSWORTH, DPW

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Jurisdictional Annex Review Sign Off Sheet

Stillwater Township  
JURISDICTION NAME

Lisa Chammings  
Name

Mayor / OEM Coordinator  
Title

Lisa Chammings  
Signature

9/13/24  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ ~~Police Chief~~ \*

Lisa Chammings  
Name

☒ Floodplain Administrator\*

Thomas A. Dyer  
Name

☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

[Signature]  
Name

☒ ~~Administrator or Elected Official~~  
Chief Financial Officer

[Signature]  
Name

☒ Public Works/  
Highway Manager

[Signature] Joseph Funari  
Name

☒ Municipal Clerk

Valerie Ingles - Valerie Ingles  
Name

☐ Planner

Name

☒ Other

Dawn Tighe, T.A.C.O.  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



# Jurisdictional Annex Review Sign Off Sheet

SUSSEX BOROUGH  
JURISDICTION NAME

JOSEPH BUTTO  
Name

CONSTRUCTION OFFICIAL  
Title

Joseph Butto  
Signature

10/29/24  
Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Floyd Southard, OEM Coordinator

Name

☒ Floodplain Administrator\*

George Hutnick, Zoning and Code Enforcement

Name

☐ Engineer

Name

☒ Building/Code Enforcement/  
Construction Official

Name

JOSEPH BUTTO

☐ Administrator or Elected Official

Name

☐ Public Works/  
Highway Manager

Name

☒ Municipal Clerk

Toni Smith, RMC, CMR

Name

☐ Planner

Name

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

## Jurisdictional Annex Review Sign Off Sheet

Township of Vernon

**JURISDICTION NAME**

Kenneth Clark

Name

OEM Coordinator

Title

Kenneth W Clark

Signature

Sept 5, 2024

Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

Kenneth Clark OEM Coordinator

Kenneth W Clark

Name

☒ Floodplain Administrator\*

Name

Paul Blach  
Paul Black

10-30-24

☒ Engineer

Cory L. Stoner, P.E., C.M.E., P.P.

Cory L. Stoner

Name

☒ Building/Code Enforcement/  
Construction Official

Name

Paul Blach  
Paul Black

10-30-24

☒ Administrator or Elected Official

Name

Tina Kraus  
Tina Kraus

☒ Public Works/  
Highway Manager

Name

Ed Babcock  
Ed Babcock

☒ Municipal Clerk

Name

Lauren Shaw  
Lauren Shaw

☒ Planner

Jessica Caldwell, PP, AICP

Name

Jessica Caldwell  
Jessica Caldwell

☐ Other

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

**Jurisdictional Annex Review Sign Off Sheet**

WALPACK TOWNSHIP  
JURISDICTION NAME

Christine M. Von Oesen Clerk  
Name Title

[Signature] 10/25/24  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☐ Emergency Manager/ Police Chief \* N/A  
Name

☐ Floodplain Administrator\* Michael Vreeland  
Name

☐ Engineer Michael Vreeland  
Name

☐ Building/Code Enforcement/  
Construction Official Greg Chontow  
Name

☐ Administrator or Elected Official Victor Maglio  
Name

☐ Public Works/  
Highway Manager N/A  
Name

☐ Municipal Clerk Christine M. Von Oesen  
Name

☐ Planner N/A  
Name

☐ Other N/A  
Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.

Victor Maglio  
[Signature]

Jurisdictional Annex Review Sign Off Sheet

WANTAGE TOWNSHIP

JURISDICTION NAME

Joseph Konopinski OEM Coordinator  
Name Title

Joseph Konopinski 9/4/24  
Signature Date

The individual above affirms that the following representatives of the above jurisdiction have reviewed and support the jurisdiction's annex and proposed mitigation strategy in the 2025 Sussex County Hazard Mitigation Plan Update.

☒ Emergency Manager/ Police Chief \*

JOE KONOPINSKI  
Name

☒ Floodplain Administrator\*

HAROLD PELLOW  
Name

☒ Engineer

HAROLD PELLOW  
Name

☒ Building/Code Enforcement/  
Construction Official

JOE BUTTO  
Name

☒ Administrator or Elected Official

MICHAEL RESTEL  
Name

☒ Public Works/  
Highway Manager

MARK LITTLE  
Name

☒ Municipal Clerk

MELISSA MORALES  
Name

Planner

☐

Name

Other

☐

Name

Note: Fill out checkbox and name of individuals.

\* Review of the annex by this official is required.



# Adoption Resolutions

## **APPENDIX B: MEETING DOCUMENTATION**





The matrix in Appendix B is intended to give a broad overview of FEMA, the State of New Jersey, county, municipal, and stakeholder personnel that participated in the Sussex County HMP update planning process. Meeting attendees and input provided are also included. During the planning process the consultant contacted each participant to offer support, explain the process, and facilitate the submittal and review of critical documents.

Participation is defined as having input to the hazard analysis (providing critical facility, hazard event, vulnerability data, etc.), and as having participated in the mitigation workshop or alternate annex meetings as described in the HMP for the purpose of creating a mitigation strategy to be included in each jurisdictional annex in Volume II. Various stakeholders were invited to participate in the planning process. Stakeholders were invited to meetings, asked to complete a stakeholder survey, requested to provide input on their involvement in Planning Area, and review and comment on the draft plan. A list of participating jurisdictions and stakeholders is found in Table B-1.

In preparation for the draft plan public review, each jurisdiction was asked to have their 'mitigation team' review their annex to ensure it was complete and accurate for posting to Sussex County's HMP website (<https://www.sussexcountynjhmp.com/>).



**Table B-1: Participation Matrix**

Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
<b>County of Sussex</b>													
Ashley Gottemoller	Division of Public Works; Office of Roads	X	X						X	X			
Autumn Sylvester	Planning and Economic Development	X							X	X			
Christine Florio	Administrator, Health Department	X							X	X			
David Kunz	Manager, GIS Management		X						X	X			
Scott House	Division of Public Works; Office of Roads		X						X	X			
Bill Koppenaal	Administrator, Division of Engineering								X	X			
Tom Drabic	Planning and Economic Development								X	X			
Lorraine Hentz	Division Director, Sussex County Division of Senior Services				X				X	X			
Steven Sugar	Deputy EMC		X	X	X		X	X	X	X		X	
Robert Haffner	Former Deputy EMC	X	X	X					X	X			
Jen Van Der Wende	Former Deputy EMC	X	X	X					X	X			
Eric Muller	Deputy EMC				X		X		X	X	X		
Trevor Floyd	Deputy EMC							X	X	X			
James Aumick	Former Deputy EMC			X	X		X		X	X			
Michael Strada	County Sheriff						X		X	X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
<b>Borough of Andover</b>													
Jessica Casella	Emergency Management Coordinator		X							X	X		
Beth Brothman	Municipal Clerk									X		X	
Harold Pellow	Engineer									X			X
John Morgan	Mayor									X			
Jessica Casella	Zoning and Code Enforcement Officer									X			
Rod Schmidt	Construction Official									X			
John Hoag	Former Emergency Management Coordinator									X			
<b>Township of Andover</b>													
Richard Bartlett	Deputy Emergency Management Coordinator		X							X			
Chief Eric Danielson	Emergency Management Coordinator		X	X		X	X	X		X	X		
Stephanie Pizzulo	Land Use Administrator		X							X			
Cory Stoner	Zoning Officer									X			X
Erik Marra	Public Works Supervisor									X			
Darren Dickinson	DPW Supervisor									X			
George Laoudis	Deputy Emergency Management Coordinator									X		X	
Patricia Bussow, RMC, CMR	Township Administrator, Municipal Clerk, Deputy Registrar			X						X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
<b>Borough of Branchville</b>													
Jeff Lewis	OEM Coordinator		X	X		X	X	X		X	X		
Anthony Frato, Sr.	Mayor									X			
Darren Haggerty	Public Works									X			
George Boesze	Zoning Officer									X			
Rich Bizik	Construction Official									X			
Karen Braun	Municipal Clerk, Deputy									X			
Kate Leissler	Municipal Clerk									X		X	
Michael Clune	Planning & Zoning Chairman									X			
Dave Simmons	Floodplain Administrator									X			X
Harold Pellow	Engineer									X			
<b>Township of Byram</b>													
Todd Rudloff	Fire Chief		X	X						X			
Joseph Sabatini	Township Manager		X							X	X		
Mike Orgera	Superintendent - DPW		X	X		X	X	X		X			
Phil Crosson	Deputy Manager		X			X	X			X		X	
Alex Rubenstein	Mayor									X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Ashleigh Frueholz	Chief Finance Officer									X			
Caitlin Phillips	Planning Board Secretary / Technical Assistant Land Use									X			
Cory Stoner	Engineer									X			
Daniel DeWald	Emergency Manager / Police Chief									X			
Cindy Church	Township Clerk / Registrar of Vital Statistics									X			
Nicholas Cutrone	Zoning and Code Enforcement Officer									X			
Peter Karcher	Construction Official									X			X
<b>Township of Frankford</b>													
Jeff Lewis	OEM Coordinator		X	X		X	X	X		X	X		
Ann Bell	Technical Assistant to the Construction Official; Zoning Official									X			
Dave Simmons	Floodplain Administrator									X			X
Robert Huber	Construction Official									X			
David Silverthorne	Mayor									X			
Lori Nienstedt	Administrator, Municipal Clerk, Public Info Officer									X		X	
Mark Yetter	DPW Supervisor									X			
Scott Klosterhoff	OEM Deputy Coordinator									X			
Harold Pellow	Engineer									X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
<b>Borough of Franklin</b>													
Brian VanDenBroek	DPW Supervisor									X		X	
Jim Williams	OEM Coordinator							X		X	X		
Joe Butto	Building Construction Official (Hardyston Twp)									X			X
Joseph Setticas	Zoning Officer									X			
<b>Township of Fredon</b>													
Harold Pellow	Engineer									X			X
Carl Lazzaro	Deputy OEM Coordinator									X		X	
Keith Festa	OEM Coordinator							X		X	X		
Matthew Lambert	Public Works Supervisor									X			
Brad Moxen	Enforcement Official									X			
Glen Deitz	Mayor									X			
Suzanne Boland	Municipal Clerk									X			
Jessica Caldwell	Planner									X			
Patty Carlson	Land Use Board									X			
<b>Township of Green</b>													
Christopher Lopanik	OEM Coordinator		X							X			





Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Craig Bollmann	Zoning Official									X			X
Greg Chontow	Construction Official									X			
Margaret 'Peg' Phillips	Mayor			X						X		X	
Mark Zschack	Municipal Clerk/Administrator									X	X		
<b>Borough of Hamburg</b>													
Keith Sukennikoff	OEM Coordinator		X	X		X	X	X		X	X		
Wendy Brick	Land Use Board		X							X			
Alec Yanish	Road Department Acting Supervisor									X			
John Haig	Elected Official												
Beth Martin	Deputy Municipal Clerk												
Jason Tangora	Chief of Police									X			
Joe Butto	Construction Official (Hardyston)									X			
Joseph Drossel	Zoning Officer/Property Maintenance Officer									X			
Regina Flammer	Water/Sewer Department									X			
John Ruschke	Engineer									X		X	X
<b>Township of Hampton</b>													
Edward Hayes	Former Emergency Management Coordinator		X	X	X	X	X		X	X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Jessica M. Caruso	Former Township Administrator		X	X	X	X	X		X	X			
Ann-Marie Wilhelm	Zoning Board									X			
Diana Juarez	Clerk/Acting Administrator							X			X		
George Chattaway	Emergency Management Coordinator											X	
Bob Huber	Construction Official/Code Enforcement Officer									X			
Daniel Bayles	Public Works Manager									X			
Dennis Sivulich	Planning Board									X			
Harold Pellow	Engineer									X			X
<b>Township of Hardyston</b>													
William Hickerson	OEM Coordinator		X	X				X		X	X		
Michael Vreeland	Engineer		X	X						X			
Carl Miller	Economic Development									X			
Carrine Piccolo-Kaufer	Township Manager									X		X	
Josh Raff	Public Works Director									X			
Joe Butto	Construction Official									X			X
<b>Borough of Hopatcong</b>													
Bill Donegan	Zoning Officer									X			



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Bill O'Connor	Construction Official									X			X
Dawn M. Edwards	Water & Sewer Collections Dept.									X			
Donald Schoelier	Former DPW Superintendent									X			
Wade Crowley	OEM Coordinator							X		X	X		
Pat Mason	Public Works Superintendent									X			
Valerie Egan	Municipal Clerk									X			
Marie Galate	Mayor									X			
John Ruschke	Engineer									X			
Meghan McCluskey	Police Chief									X			
Joseph Vuich	Planner									X			
Ron Tappan	Borough Administrator									X		X	
<b>Township of Lafayette</b>													
Jim Ando	Lafayette DPW		X							X		X	
Michael Vreeland	Engineer		X	X						X			
Richard Hughes	Committeeman/EMC		X							X	X		
Stephanie Pizzulo	Land Use Administrator		X			X				X			
Bill Macko	Road Foreman/Roads/DPW Foreman									X			



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AnnaRose Fedish	Municipal Clerk									X			
Allen Henderson	Mayor									X			
David Banish	Planner									X			
George Hutnick	Zoning Officer									X			X
Leigh Whittey	Construction Official									X			
<b>Township of Montague</b>													
Jesse Brace-Revak	OEM		X	X		X	X			X		X	
Dave Coss	OEM Coordinator, Foreman/Driver/Laborer		X							X	X		
Kyle Gottemoller	OEM		X							X			
Bob Huber	Construction Official									X			X
Eileen DeFabiis	Clerk									X			
George Hutnick	Zoning/Code Enforcement Official									X			
Glen Plotsky	Land Use Board Chairperson									X			
Dana Klinger	Municipal Clerk/Administrator									X			
Harold E. Pellow	Engineer									X			
George Zitone	Mayor									X			
Thomas Knutelsky, P.E.	Planner									X			



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<b>Town of Newton</b>													
Dan Finkle	OEM Coordinator		X	X			X	X		X	X		
Jason Miller	Deputy OEM Coordinator									X		X	
Harold Pellow	Floodplain Administrator									X			X
Jessica Caldwell	Planner									X			
Cory Stoner	Engineer									X			
Kimberly Williams	Community Development Director		X	X						X			
Adam Vough	Supervisor for Public Works									X			
Thomas Russo, Jr.	Town Manager									X			
Theresa Oswin	Municipal Clerk									X			
Joe Butto	Construction Official									X			
Michael Monaco	Code Enforcement Director									X			
<b>Borough of Ogdensburg</b>													
Michael Vreeland	Engineer		X	X						X			X
Chris Ross	DPW Supervisor									X			
George Hutnick	Land Use									X			
George P. Hutnick	Mayor									X		X	



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Michael Nardini	Water Department									X			
Richard Keslo	Emergency Management Coordinator									X	X		
<b>Township of Sandyston</b>													
Harold Pellow	Engineer									X			
Jessica Caldwell	Planner									X			
Roy McClain, CPWM	Road Foreman									X			
George Harper, Jr.	Mayor									X			
Michael Johnson	Code Enforcement									X			
Beth Brothman, RMC	Land Use Administrator/Zoning Official/Planning Board Secretary									X			
Robert W. Huber	Construction Official									X			X
Kevin Pumphrey	Emergency Management Coordinator									X	X		
Amy Lobban, RMC	Municipal Clerk			X						X		X	
Scott House	OEM		X							X			
<b>Township of Sparta</b>													
Tom McIntyre	Deputy OEM Coordinator		X			X		X		X		X	
Jeffrey McCarrick	OEM Coordinator		X							X	X		
James Zepp	Interim Township Manager		X							X			





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Diana Katzenstein	Planning and Zoning Board									X			
Cory Stoner	Engineer									X			X
Dorrie Fox	Land Use Administrator									X			
Joseph Straway	Public Works Director									X			
Andrew Coccio	Code Enforcement									X			
Daniel Chiariello	Mayor									X			
Michael Wallace	Construction Official									X			
Richard Bartlett	Deputy Emergency Management Coordinator		X				X			X			
Roxanne Landy	Clerk									X			
<b>Borough of Stanhope</b>													
Wayne Anthony	OEM		X							X			
Brian McNeilly	Borough Administrator		X							X	X		
Eric Keller	Borough Engineer									X		X	
Jason Titsworth	DPW Superintendent									X			
Tammy Minniti	Water and Sewer Department									X			
Thomas Dixon	Zoning & Code Enforcement									X			
Thomas Pershouse	Construction Official									X			X



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<b>Township of Stillwater</b>													
Lisa Chammings	OEM Coordinator/Mayor		X			X	X	X	X	X	X		
Jim Cantelmo	Deputy OEM			X		X		X		X		X	
Michael Vreeland	Engineer		X	X						X			
Paul Hawkins	Former Public Works Acting Supervisor									X			
Kevin Carhard	Deputy OEM									X			
Valerie Ingles	Municipal Clerk									X			
Jerry Leatham	Public Works Acting Supervisor									X			
Joseph Funari	Recycling Coordinator									X			
Dawn Tighe	Technical Assistant to the Construction Official									X			
Richard Bizik	Construction Official									X			
Lynda Knott	Former Municipal Clerk									X			
Tammy Leonard	CFO									X			
Tom Dixon	Zoning/Code Enforcement									X			X
<b>Borough of Sussex</b>													
Robert Regavich	Deputy OEM		X							X		X	
Floyd Southard	OEM Coordinator		X							X	X		



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Mario Poggi	Economic Development Committee		X							X			
Joe Butto	Building/Construction Official									X			
Dixie Ferrington	Planning/Zoning Board									X			
George Hutnick	Zoning and Code Enforcement Officer									X			X
Toni Smith, RMC, CMR	Clerk									X			
Robert Holowach	Councilman		X							X			
<b>Township of Vernon</b>													
Ken Clark	OEM Coordinator		X	X						X	X		
Mark Vogel	Former Deputy OEM Coordinator		X							X			
Dan Young	Police Chief/Deputy OEM Coordinator		X							X		X	
Ed Babcock	Director of Public Works		X							X			
Howie Iazier	Licensed Operator		X							X			
Allison Larocca	Zoning Officer									X			
Kimberley Decker	Land Use Administrator									X			
Jessica Caldwell	Planner									X			
Paul Black	Construction Official									X			
Marcy Gianattasio	Municipal Clerk									X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Tina Kraus	Business Administrator									X			
Lauren Shaw	Municipal Clerk									X			
Cory Stoner	Engineer									X			X
<b>Township of Walpack</b>													
Michael Vreeland	Engineer		X	X						X			X
Christine Von Oesen	Municipal Clerk							X		X		X	
Victor Maglio	Mayor									X	X		
Greg Chontow	Construction Official									X			
<b>Township of Wantage</b>													
Joe Konopinski	OEM	X	X	X		X	X	X	X	X	X		
Tom Madsen	OEM		X							X			
Michael Restel	Administrator		X							X		X	
Jeanne McBride	Land Use Board									X			
Mark Little	Public Works Superintendent												
Melissa Morles	Municipal Clerk												
Joe Butto	Construction Official									X			
Steve Danner	Zoning Official									X			



Name	Title / Position	Attended Steering Committee Kick-Off Meeting (03/15/23)	Attended Planning Partnership Kick-Off Meeting (03/15/23, AM or PM)	Attended HMP Refresher Meeting (09/27/23, AM or PM)	Attended Steering Committee Risk Assessment Meeting (04/09/24)	Attended Planning Partnership / Public Risk Assessment Meeting AM or PM (04/11/24)	Mitigation Strategy Workshop (05/08/24)	Attended Draft Review Meeting (11/21/24)	Steering Committee Member	Planning Partnership Member	Primary Point of Contact	Alternate Point of Contact	NFIP Administrator
Harold Pellow	Engineer									X			X
<b>Stakeholders</b>													
Manny Ayers	Newton Medical Center	X							X	X			
Steven Sarinelli	Newton Medical Center	X							X	X			
Thomas Varro, P.E.,	Executive Director, Sussex County Municipal Utilities Authority	X							X	X			
Clinton Pagano, SFC	NJOEM North Region		X						X	X			
Joseph Sesto	Chief Engineer, Sussex County Municipal Utilities Authority				X				X	X			
Mathias Banner	Purchasing Agent, Sussex County Central Purchasing Office						X			X			
Lisa Chamings	Chair, Sussex County Open Space Committee		X			X	X	X	X	X			
Sarah Friend	Environmental Scientist, New Jersey Highlands Council						X			X			

## **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>
<b>Agenda Summary:</b>	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 indicted 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>	
4	<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>
5	<p><b>Project Schedule</b></p> <ul style="list-style-type: none"> <li>● Steering Committee Kick-Off – March 15, 2023</li> </ul>	-

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



	<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>	
6	<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.

1



## 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



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.


3

## 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



4

## 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
<b>TOTAL</b>	<b>55</b>

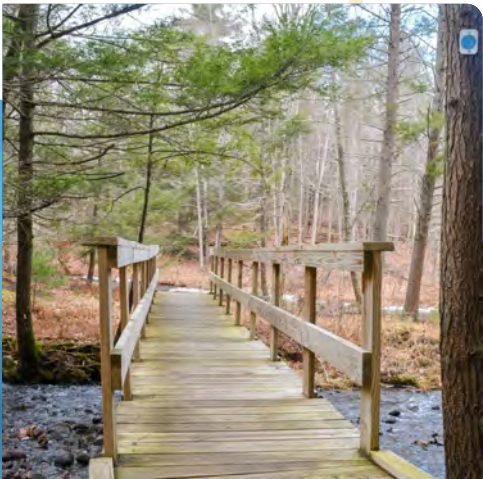
Source: NOAA NCEI Severe Weather Inventory 2022

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.

7

## Project Organization

**Tt TETRA TECH**



**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



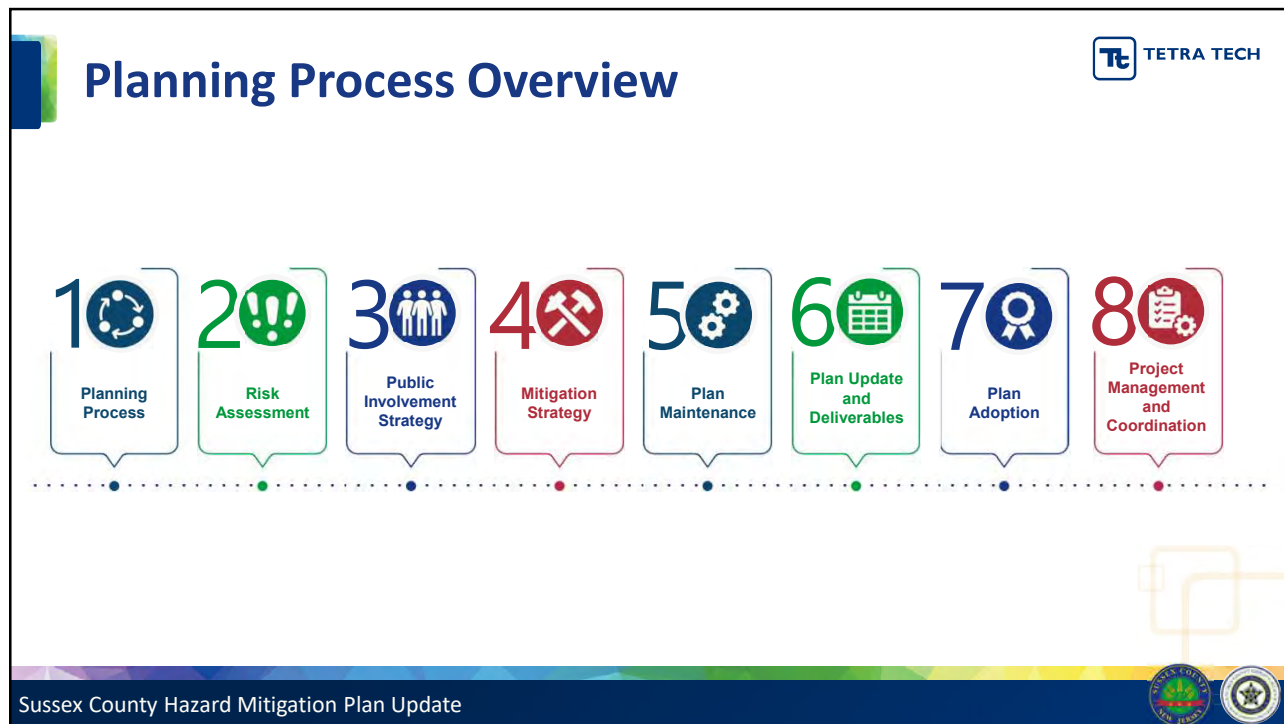

9

## Planning Process Overview

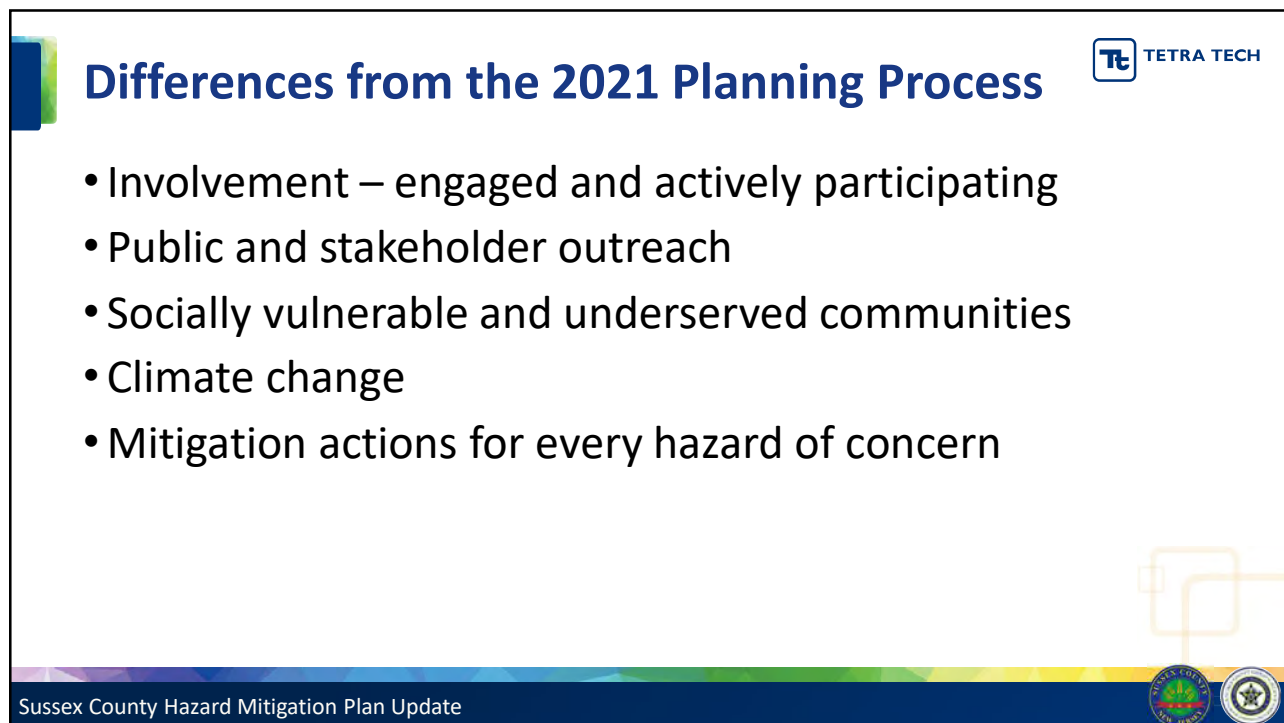


A well-defined planning process is essential to the success of Sussex County's HMP Update.

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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

**RISK**

- 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

 TETRA TECH


 <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>
--	---	--	--




Sussex County Hazard Mitigation Plan Update



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## Critical Facilities and Community Lifelines

 TETRA TECH

 <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>
--	--	---

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

What critical facilities and lifelines should we include in the 2024 Sussex County HMP?

Click on the Sticky Note icon

Type here!

Select 'save' to post the Sticky Note!

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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?

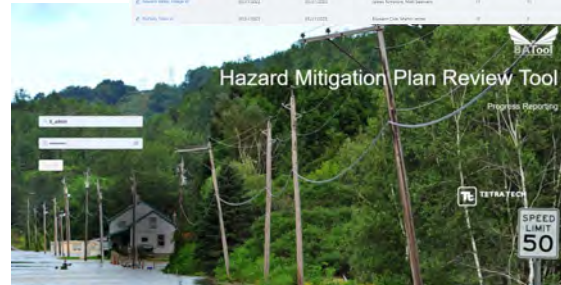
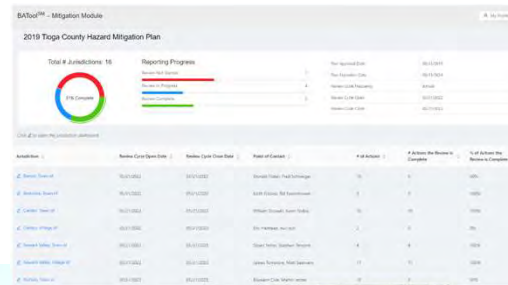


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## Review Your Previous Mitigation Strategy BATool<sup>SM</sup> Program



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

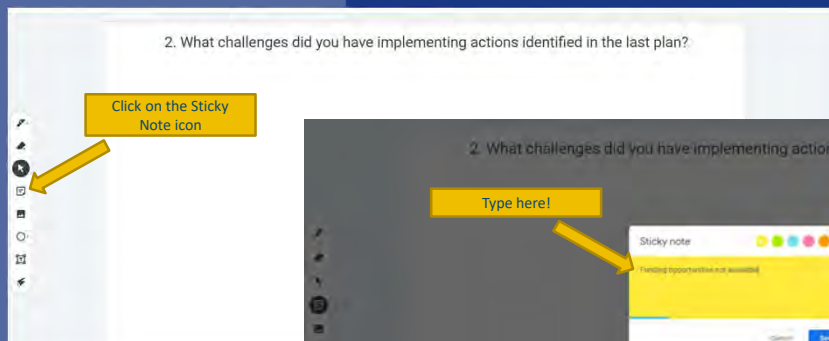


Sussex County Hazard Mitigation Plan Update

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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?

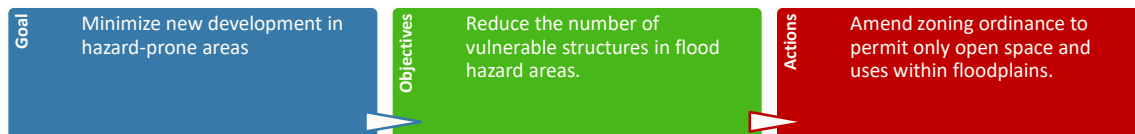


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## Goals and Objectives – Review and Update



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?		



Sussex County Hazard Mitigation Plan Update



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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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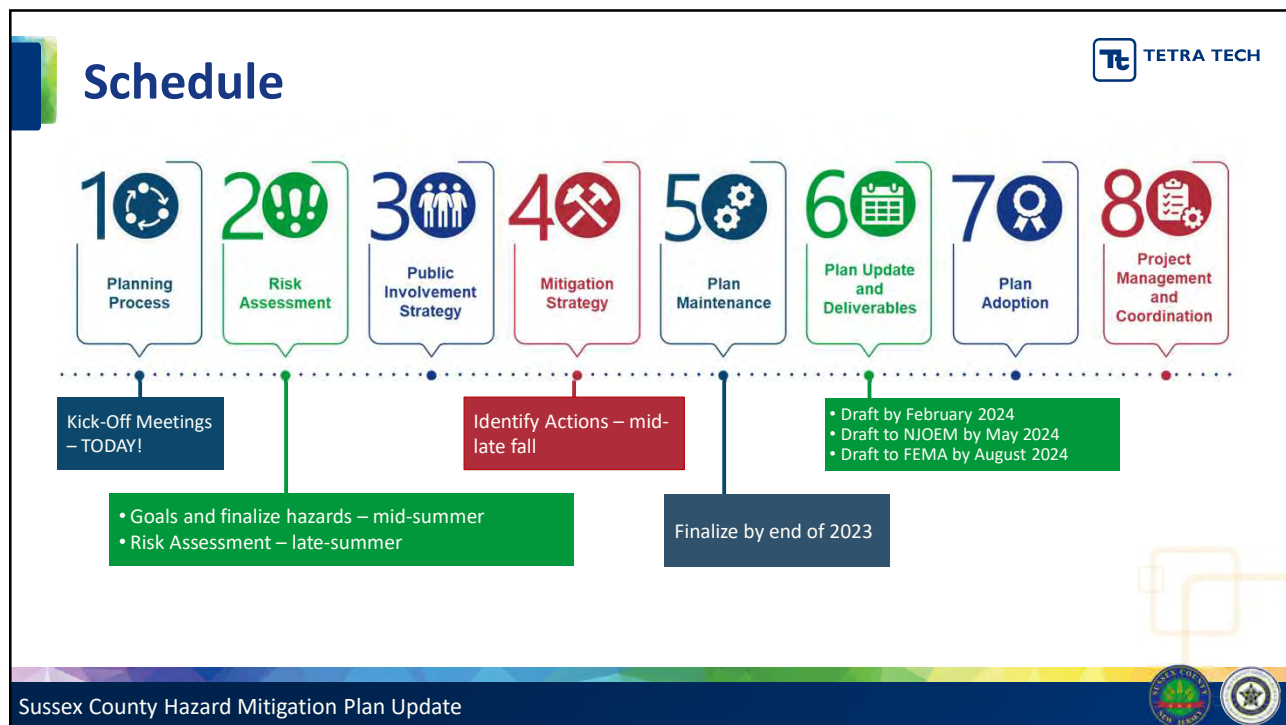




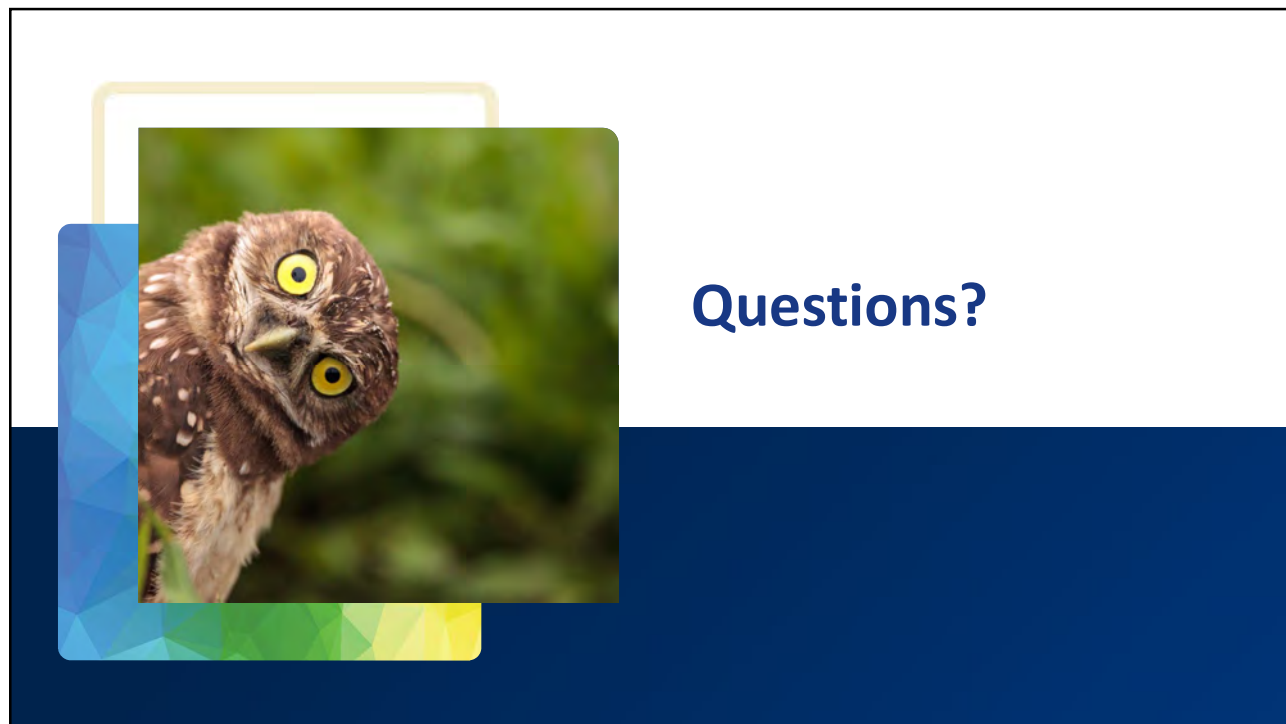
## Project Schedule

Upcoming meetings and key milestones throughout the HMP update process

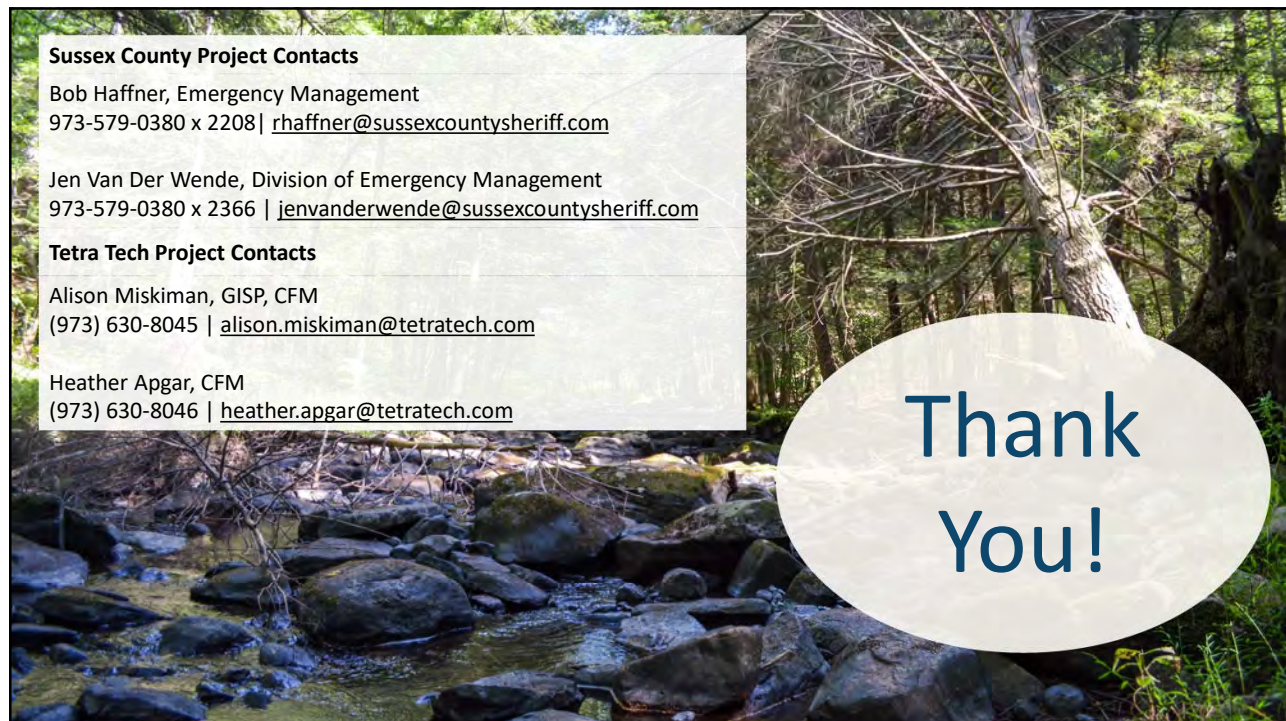
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# **Planning Partnership Kick-Off Meeting Materials**

**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
<b>Attendees:</b> <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> <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 Iazier</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>			
<b>Agenda Summary:</b> The purpose of the meeting was to introduce the Planning Partnership 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 was asked to include their name and municipality in the meeting chat.</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 indicted 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> <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> </li> </ul>	-
4	<b>Planning Process Overview</b> <ul style="list-style-type: none"> <li>Following an 8-phase approach to update the HMP <ol style="list-style-type: none"> <li>Planning Process – ongoing throughout the update</li> <li>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> </ul> </li> </ol> </li> </ul>	<b>Tetra Tech –</b> <ul style="list-style-type: none"> <li>Provide survey link for input on critical facilities and lifelines</li> <li>Provide outreach materials</li> <li>Provide tools to Planning Partnership to collect input on jurisdictional annexes</li> </ul> <b>Planning Partnership –</b> <ul style="list-style-type: none"> <li>Provide input on the hazards of concern (<a href="https://www.surveym">https://www.surveym</a>)</li> </ul>



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



	<ul style="list-style-type: none"> <li>▪ Severe Winter Weather</li> <li>▪ Wildfire</li> </ul> <ol style="list-style-type: none"> <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>	<p><a href="https://onkey.com/r/SussexHMPHOCs">onkey.com/r/SussexHMPHOCs</a>)</p> <ul style="list-style-type: none"> <li>• Assist with public outreach using materials provided by Tetra Tech</li> <li>• Provide input on 2021 mitigation actions</li> </ul>
5	<p><b>Project Schedule</b></p> <ul style="list-style-type: none"> <li>• Steering Committee Kick-Off – March 15, 2023</li> <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>	-
6	<p><b>Next Steps –</b></p> <ul style="list-style-type: none"> <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>• N/A</li> </ul> <p><b>Planning Partnership –</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, 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	
<b>Attendees:</b>	<div> <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> </ul> </li> <li>• <b>Andover (B)</b> <ul style="list-style-type: none"> <li>○ John Hoag, Emergency Management Coordinator</li> </ul> </li> <li>• <b>Andover (Twp)</b> <ul style="list-style-type: none"> <li>○ Richard Bartlett, Deputy Emergency Management 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>○ Todd Rudloff, OEM</li> </ul> </li> <li>• <b>Frankford (Twp)</b> <ul style="list-style-type: none"> <li>○ Jeff Lewis, OEM Coordinator</li> </ul> </li> <li>• <b>Green (Twp)</b> <ul style="list-style-type: none"> <li>○ Christopher Lopanik, OEM Coordinator</li> </ul> </li> <li>• <b>Hamburg (B)</b> <ul style="list-style-type: none"> <li>○ Keith Sukennikoff, OEM Coordinator</li> <li>○ Wendy Brick, Land Use Board</li> </ul> </li> <li>• <b>Hardyston (Twp)</b> <ul style="list-style-type: none"> <li>○ William Hickerson, OEM Coordinator</li> </ul> </li> <li>• <b>Montague (Twp)</b> <ul style="list-style-type: none"> <li>○ Jesse Brace-Revak, OEM</li> </ul> </li> </ul> </div> <div> <ul style="list-style-type: none"> <li>• <b>Newton (T)</b> <ul style="list-style-type: none"> <li>○ Dan Finkle, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Sparta (Twp)</b> <ul style="list-style-type: none"> <li>○ Jeffrey McCarrick, OEM Coordinator</li> <li>○ Tom McIntyre, Deputy OEM Coordinator</li> </ul> </li> <li>• <b>Stanhope (B)</b> <ul style="list-style-type: none"> <li>○ Wayne Anthony, OEM</li> </ul> </li> <li>• <b>Stillwater (Twp)</b> <ul style="list-style-type: none"> <li>○ Lisa Chamings, OEM Coordinator/Mayor</li> </ul> </li> <li>• <b>Sussex (B)</b> <ul style="list-style-type: none"> <li>○ Robert Regavich, Deputy OEM</li> <li>○ Water Department</li> </ul> </li> <li>• <b>Vernon (Twp)</b> <ul style="list-style-type: none"> <li>○ Ken Clark, OEM Coordinator</li> <li>○ Mark Vogel, OEM</li> </ul> </li> <li>• <b>Wantage (Twp)</b> <ul style="list-style-type: none"> <li>○ Joe Konopinski, OEM</li> <li>○ Tom Madsen, OEM</li> </ul> </li> <li>• <b>NJSP</b> <ul style="list-style-type: none"> <li>○ Clinton Pagano, SFC, NJOEM North Region</li> </ul> </li> <li>• Robert Holowach</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> </div>	
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Item No.	Description	Action item(s):
1	<b>Introductions –</b> <ul style="list-style-type: none"> <li>• Each person on the call was asked to include their name and municipality in the meeting chat.</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 indicted 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	<p><b>Project Organization –</b></p> <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> <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> </li> </ul>	-
4	<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>Planning Process – ongoing throughout the update</li> <li>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>Public Involvement Strategy – ongoing throughout the plan update; we will use the County's website and StoryMap to help with outreach</li> <li>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>Plan Maintenance – determine the maintenance schedule of the 2024 HMP</li> <li>Plan Update and Deliverables – update all sections of the HMP; provide to NJOEM and FEMA for review and approval</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> <li>Provide tools to Planning Partnership to collect input on jurisdictional annexes</li> </ul> <p><b>Planning Partnership –</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>Assist with public outreach using materials provided by Tetra Tech</li> <li>Provide input on 2021 mitigation actions</li> </ul>

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



	<ul style="list-style-type: none"> <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> </ul>	
5	<b>Project Schedule</b> <ul style="list-style-type: none"> <li>• Steering Committee Kick-Off – March 15, 2023</li> <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>	-
6	<b>Next Steps –</b> <ul style="list-style-type: none"> <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>	<b>Tetra Tech</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <b>Planning Partnership –</b> <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

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



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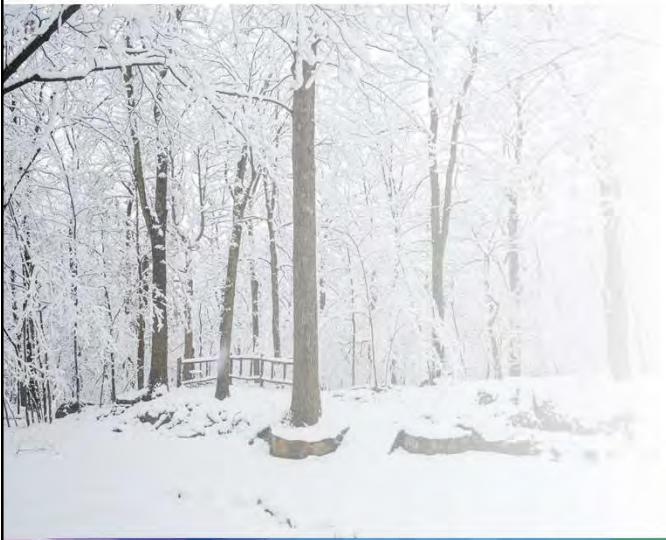




## Hazard Mitigation Overview

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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## Hazard Mitigation Planning Overview

**Tt TETRA TECH**

- ✓ 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



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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
  - 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



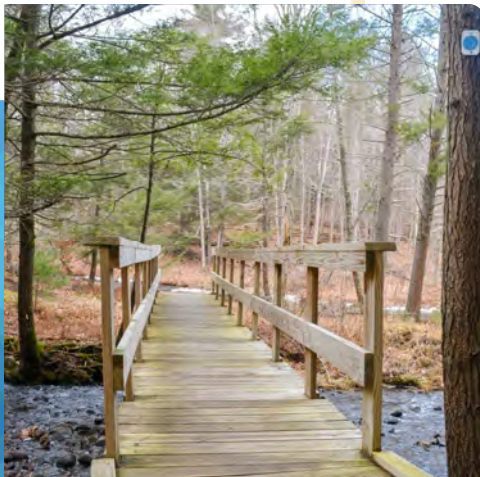
- Involvement – engaged and actively participating
- Public and stakeholder outreach
- Socially vulnerable and underserved communities
- Climate change
- Mitigation actions for every hazard of concern

Sussex County Hazard Mitigation Plan Update



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## Project Organization

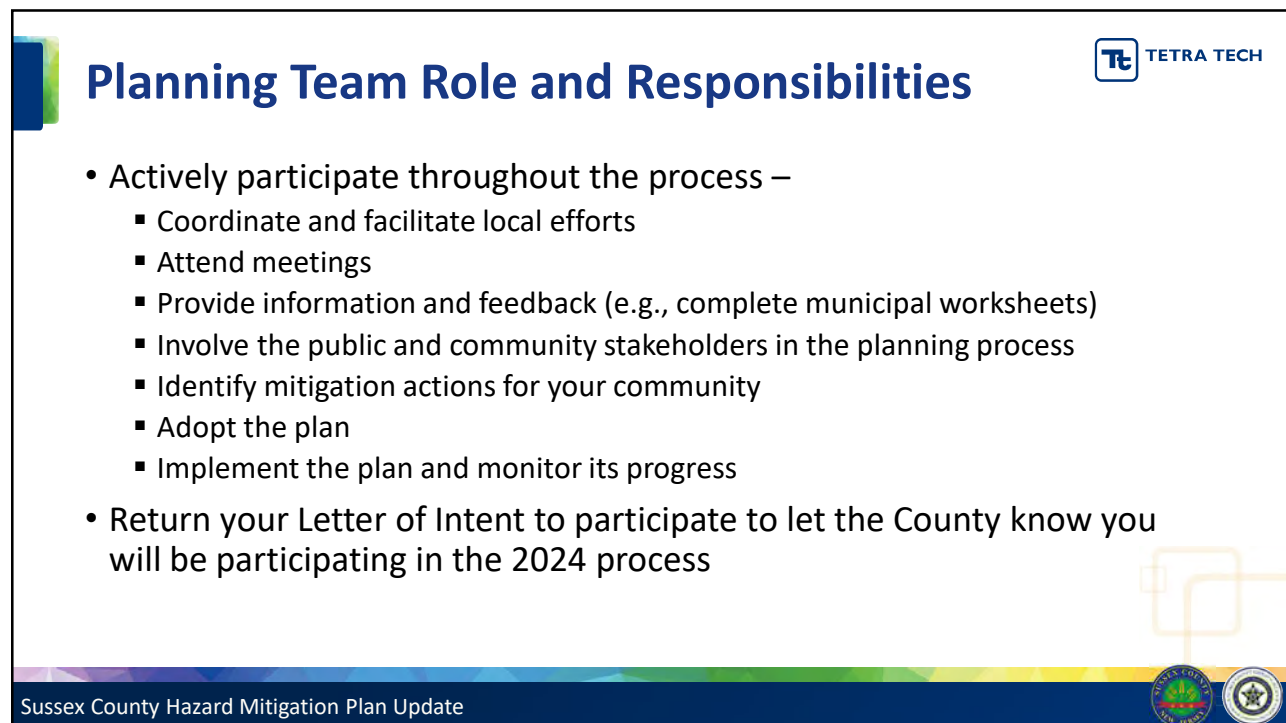


Working with individuals, agencies, neighboring jurisdictions, businesses, and other partners for a successful mitigation planning process.

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## 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



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## 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

TETRA TECH



- 1** Planning Process
- 2** Risk Assessment
- 3** Public Involvement Strategy
- 4** Mitigation Strategy
- 5** Plan Maintenance
- 6** Plan Update and Deliverables
- 7** Plan Adoption
- 8** Project Management and Coordination

Sussex County Hazard Mitigation Plan Update

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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

**RISK**

- 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

 TETRA TECH


 <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

 TETRA TECH

 <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>
--	--	---

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

What critical facilities and lifelines should we include in the 2024 Sussex County HMP?

Click on the Sticky Note icon

Type here!

Select 'save' to post the Sticky Note!

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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

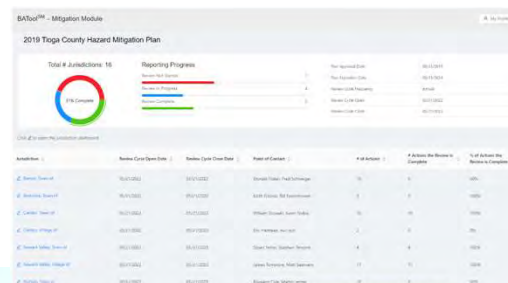


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## Review Your Previous Mitigation Strategy BATool<sup>SM</sup> Program



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



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

Sussex County Hazard Mitigation Plan Update




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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

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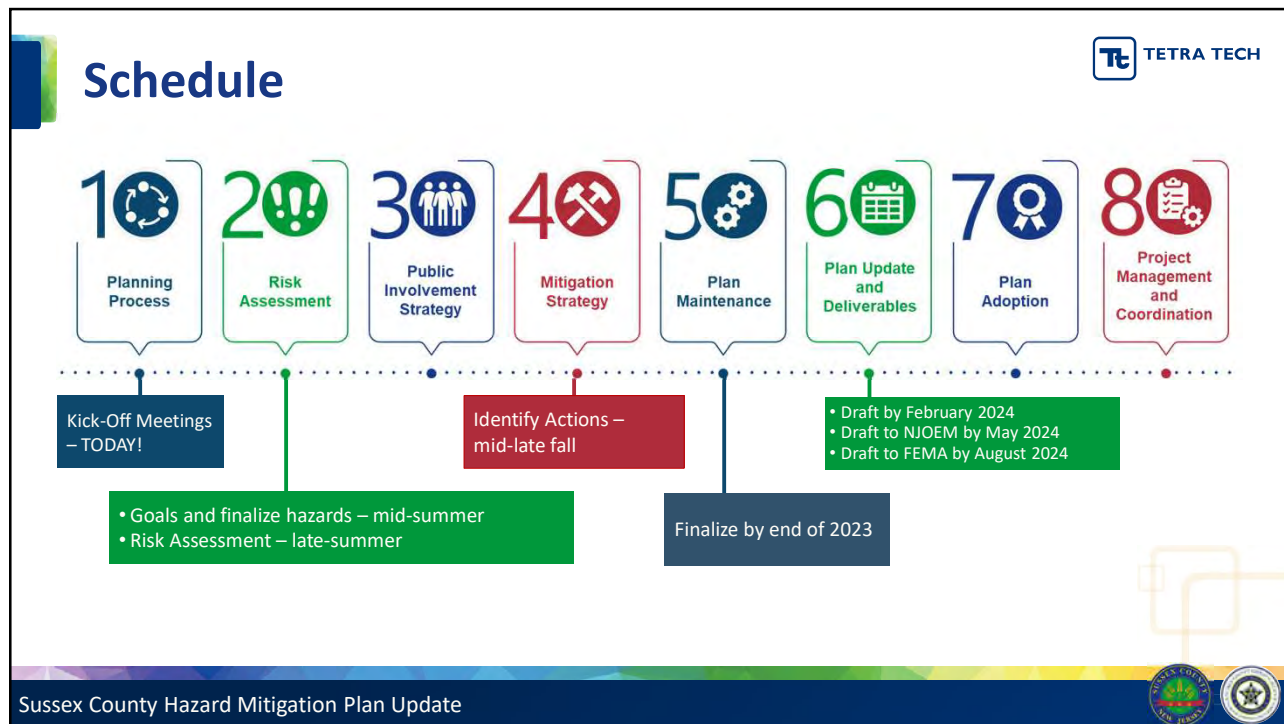


## Project Schedule

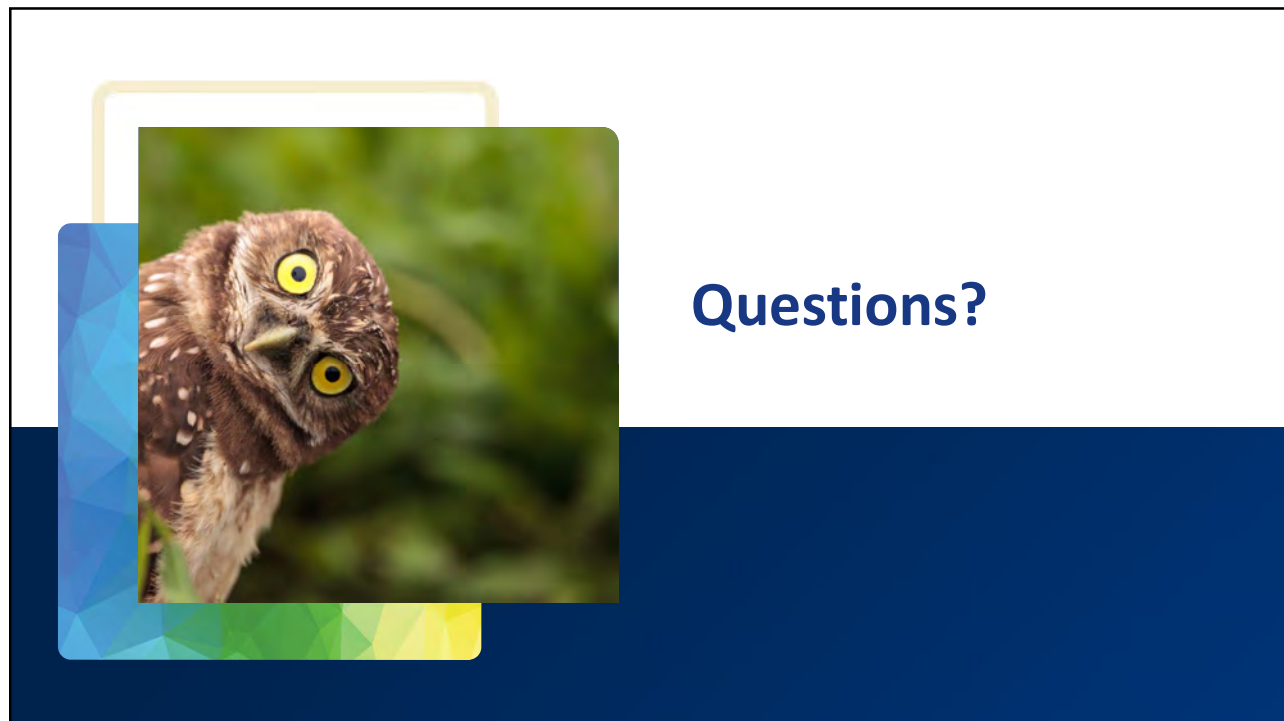
Upcoming meetings and key milestones throughout the HMP update process

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**Sussex County Project Contacts**

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973-579-0380 x 2208 | [rhaffner@sussexcountysheriff.com](mailto:rhaffner@sussexcountysheriff.com)

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**Tetra Tech Project Contacts**

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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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[jaumick@sussexcountysheriff.com](mailto:jaumick@sussexcountysheriff.com)

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Jessica Stokes, MSEM, NJCEM  
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**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>



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 <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>	-
4	<b>Risk Assessment Results</b> <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>	-
5	<b>Hazard Rankings</b> <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	<b>Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)</b>	<b>Steering Committee</b>



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



	<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	<b>Next Steps</b> <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	<b>Questions/Discussion</b> <ul style="list-style-type: none"> <li><b>Joe Sesto:</b> I think flood as medium risk is correct. We (the authority) have sufficient stormwater infrastructure.</li> <li><b>Joe Sesto:</b> 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. <ul style="list-style-type: none"> <li><b>Steve Sugar</b> agrees that the preliminary rankings look accurate.</li> </ul> </li> <li><b>Steve Sugar:</b> 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.</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

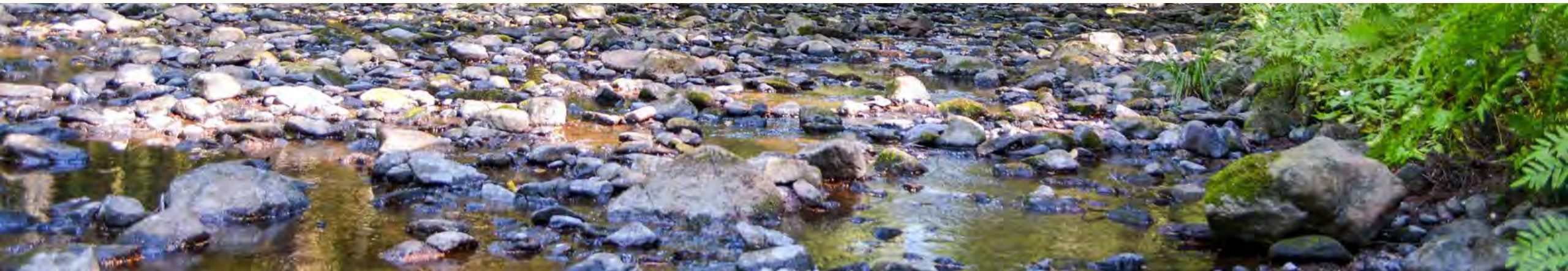
While waiting for the meeting to start, please enter your name, title, and department/agency in the chat.





# 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

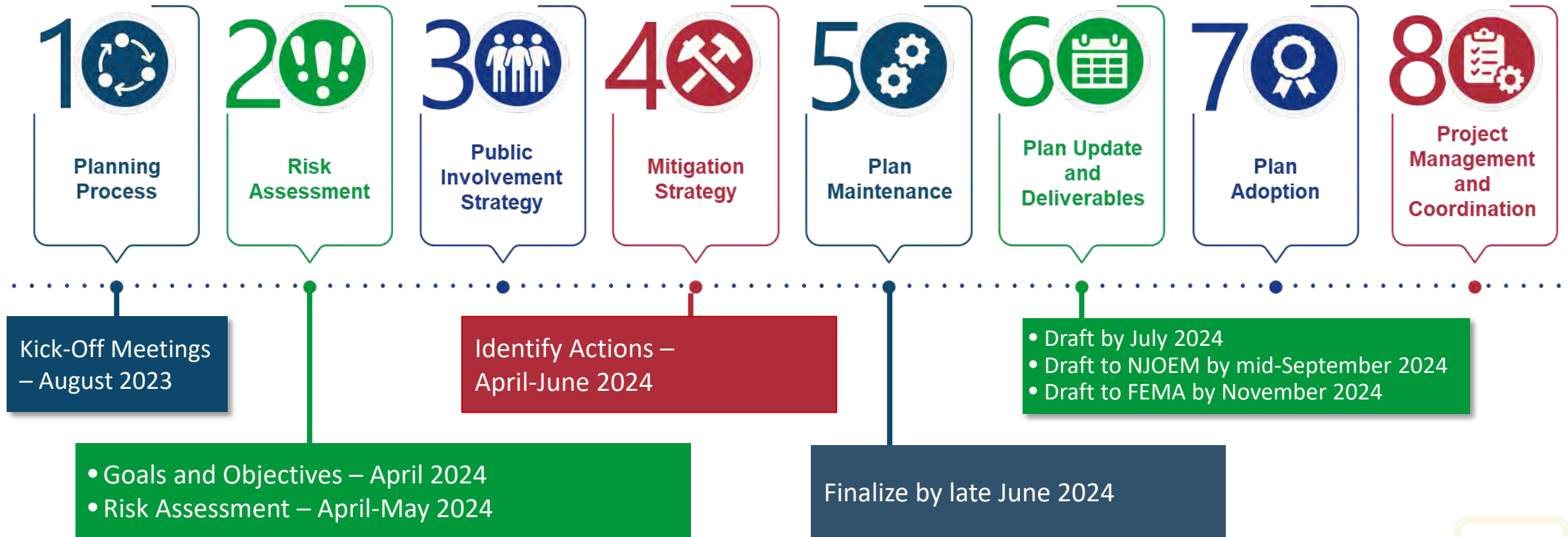




# Project Status



# Schedule



# Municipal Participation Status

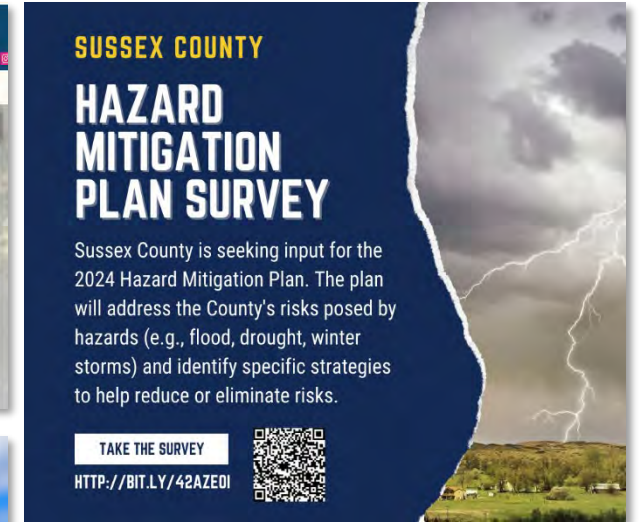
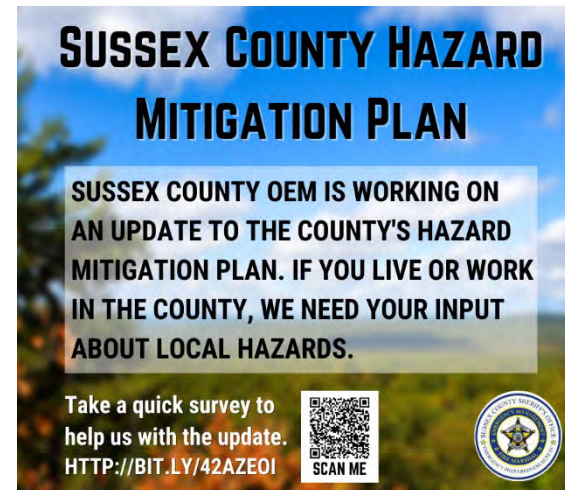
- To date, we have not received all municipal worksheets. The worksheets had a due date of April 3<sup>rd</sup>. Assigned planners will be reaching out to all participants.

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

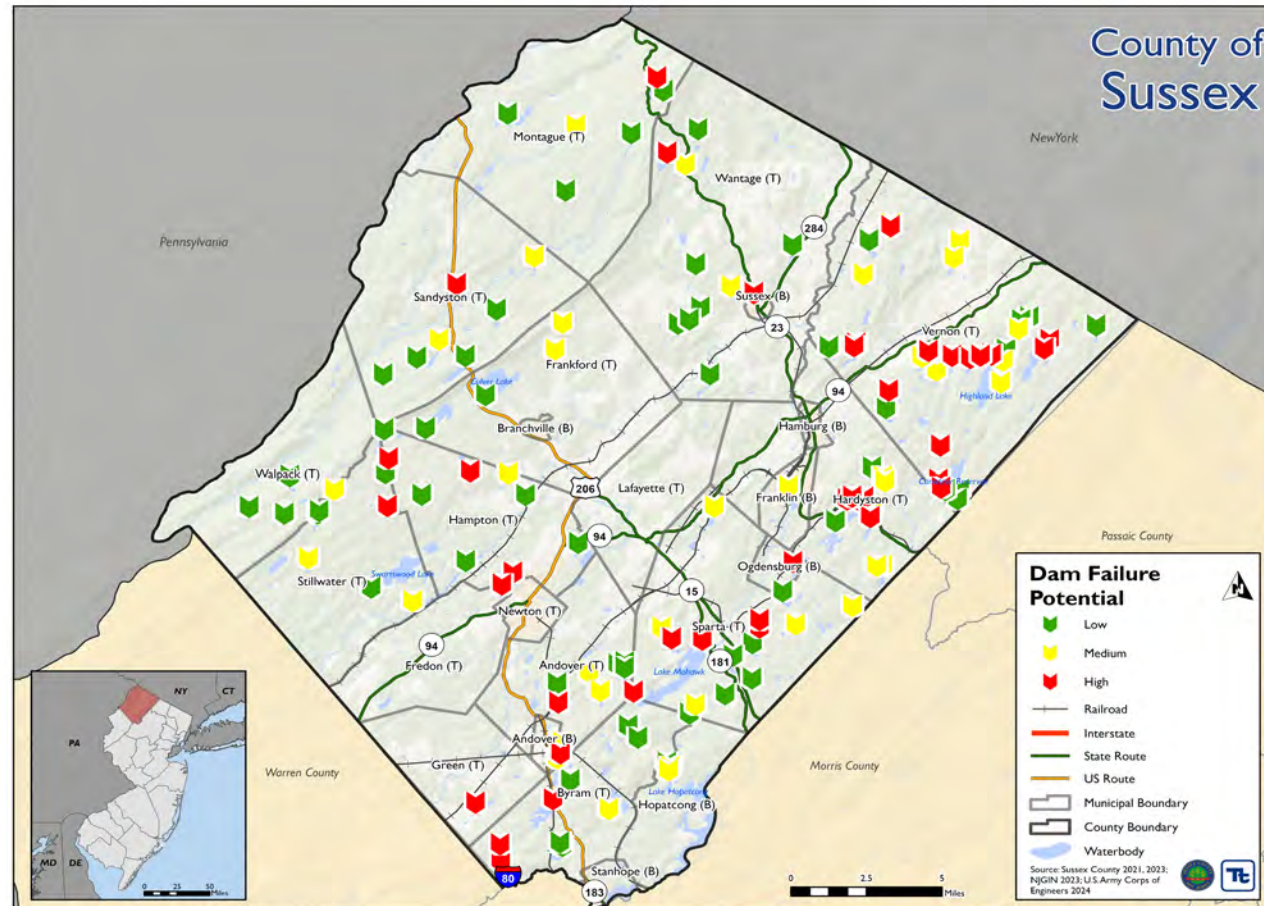
# 139

- 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.



# 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

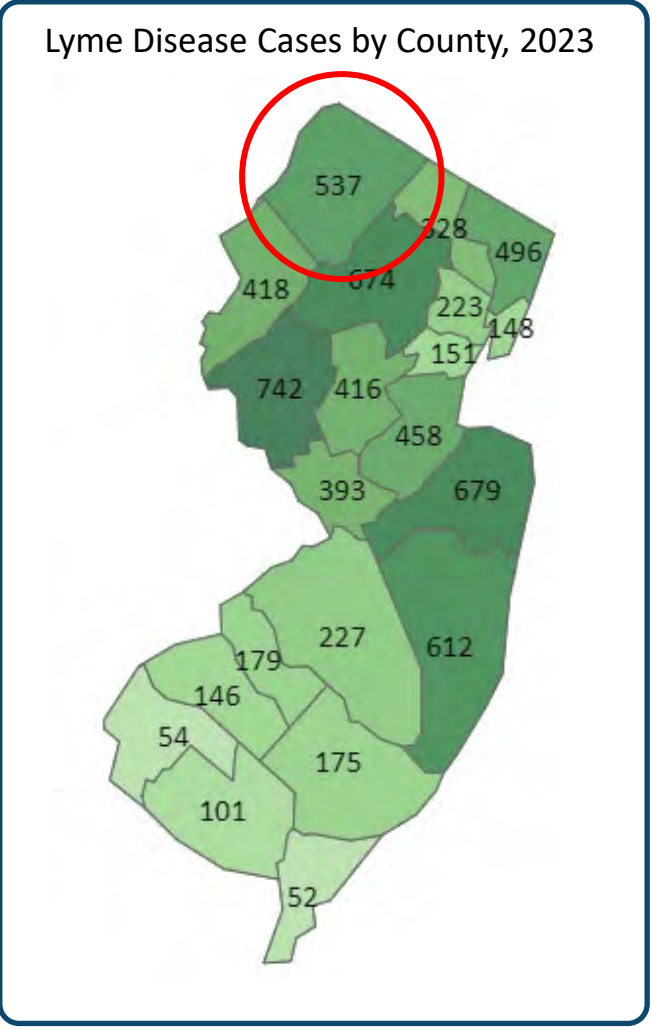
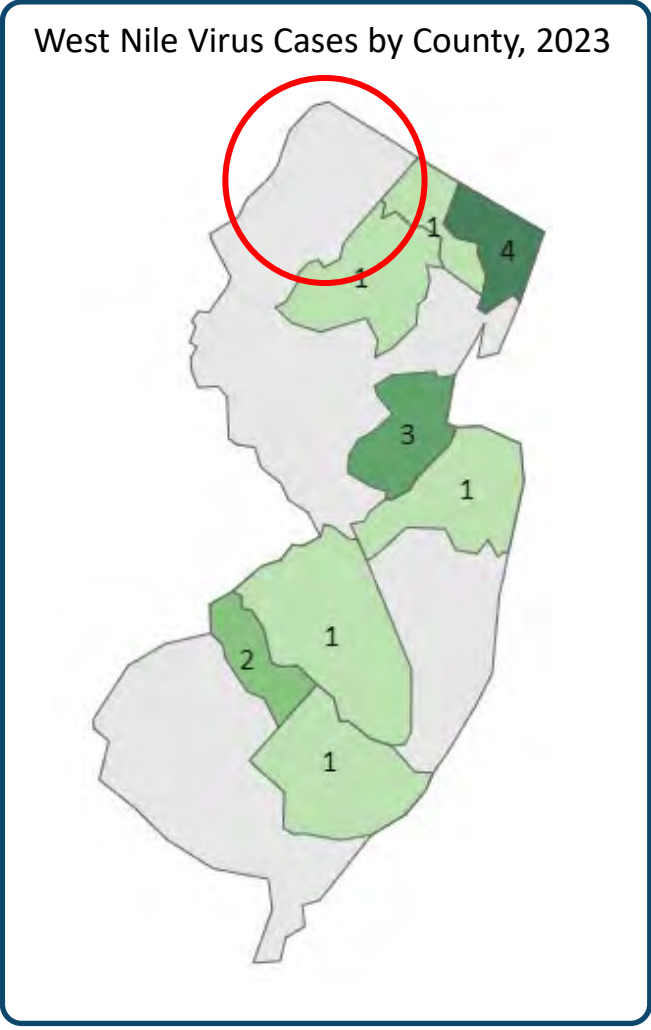
(100%)

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.



- 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

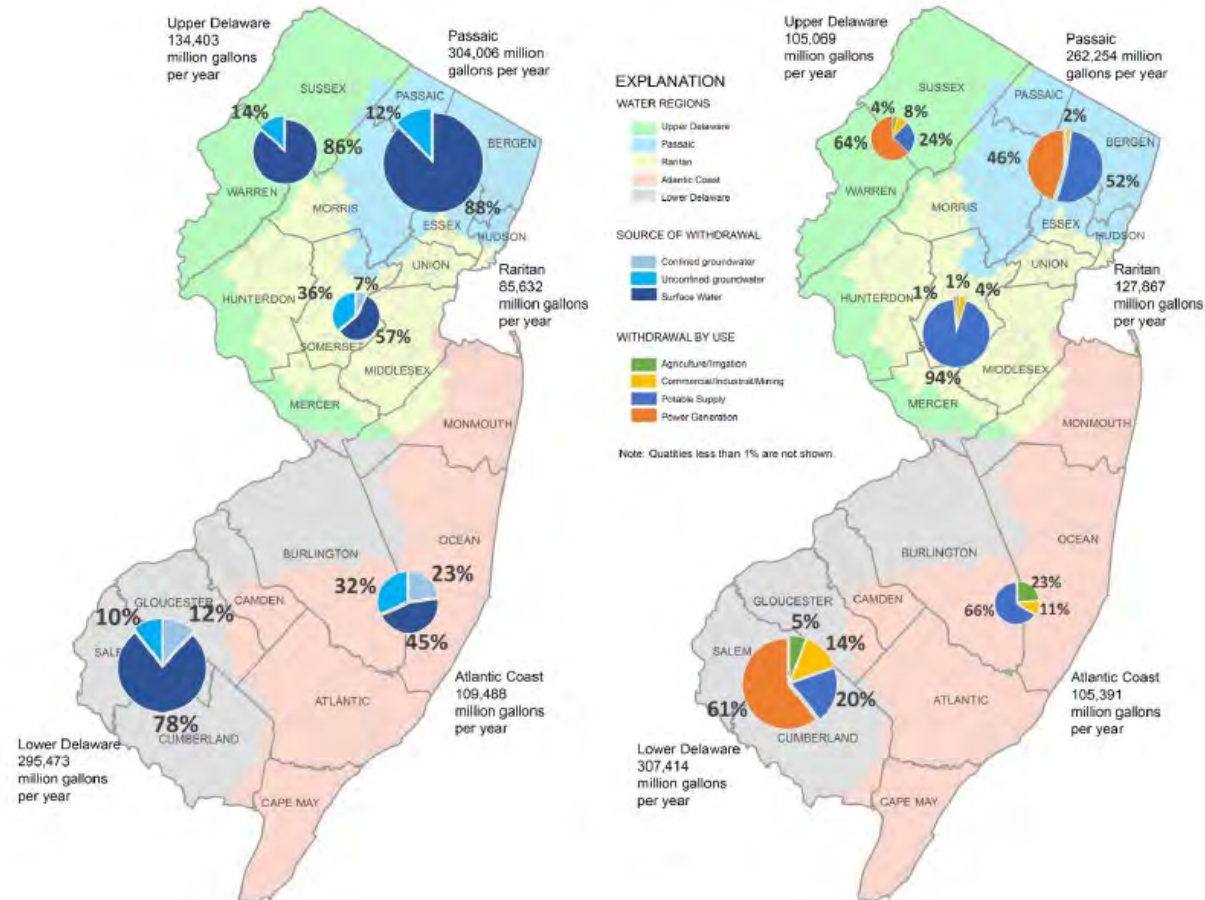
Drought Monitor, 2020-2023

- 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%)

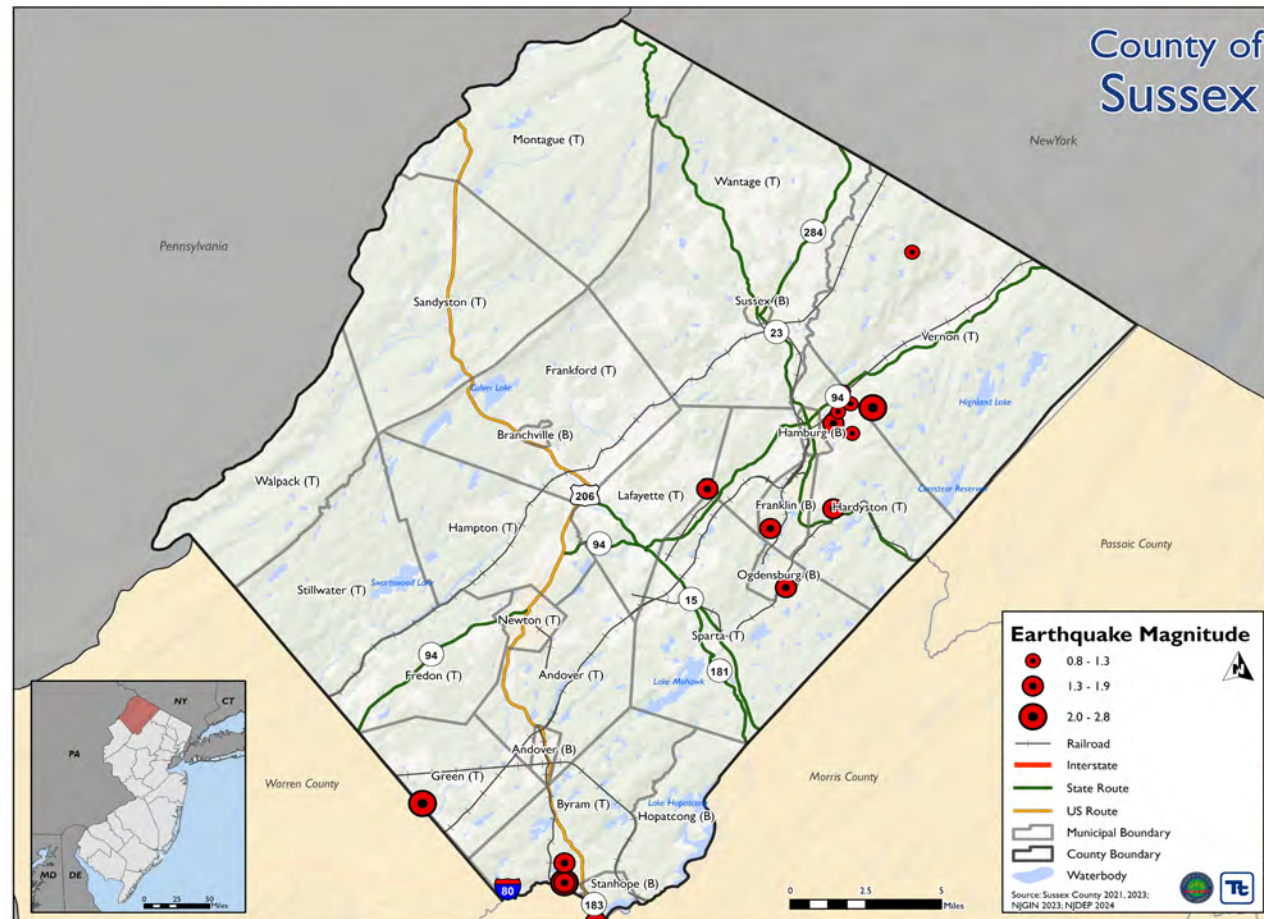
The entire County is susceptible

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

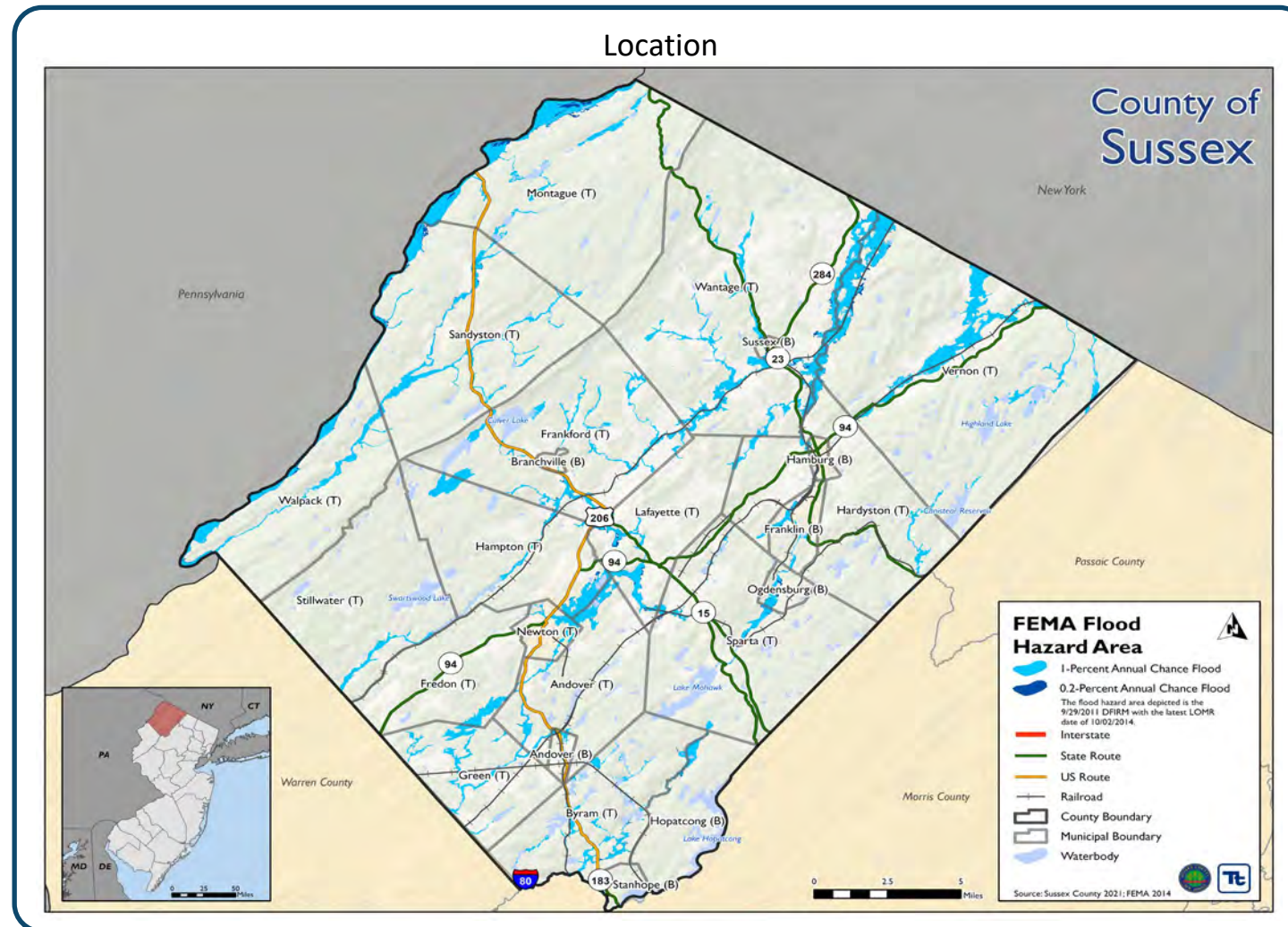
Flood Building Replacement Cost Value

**\$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 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

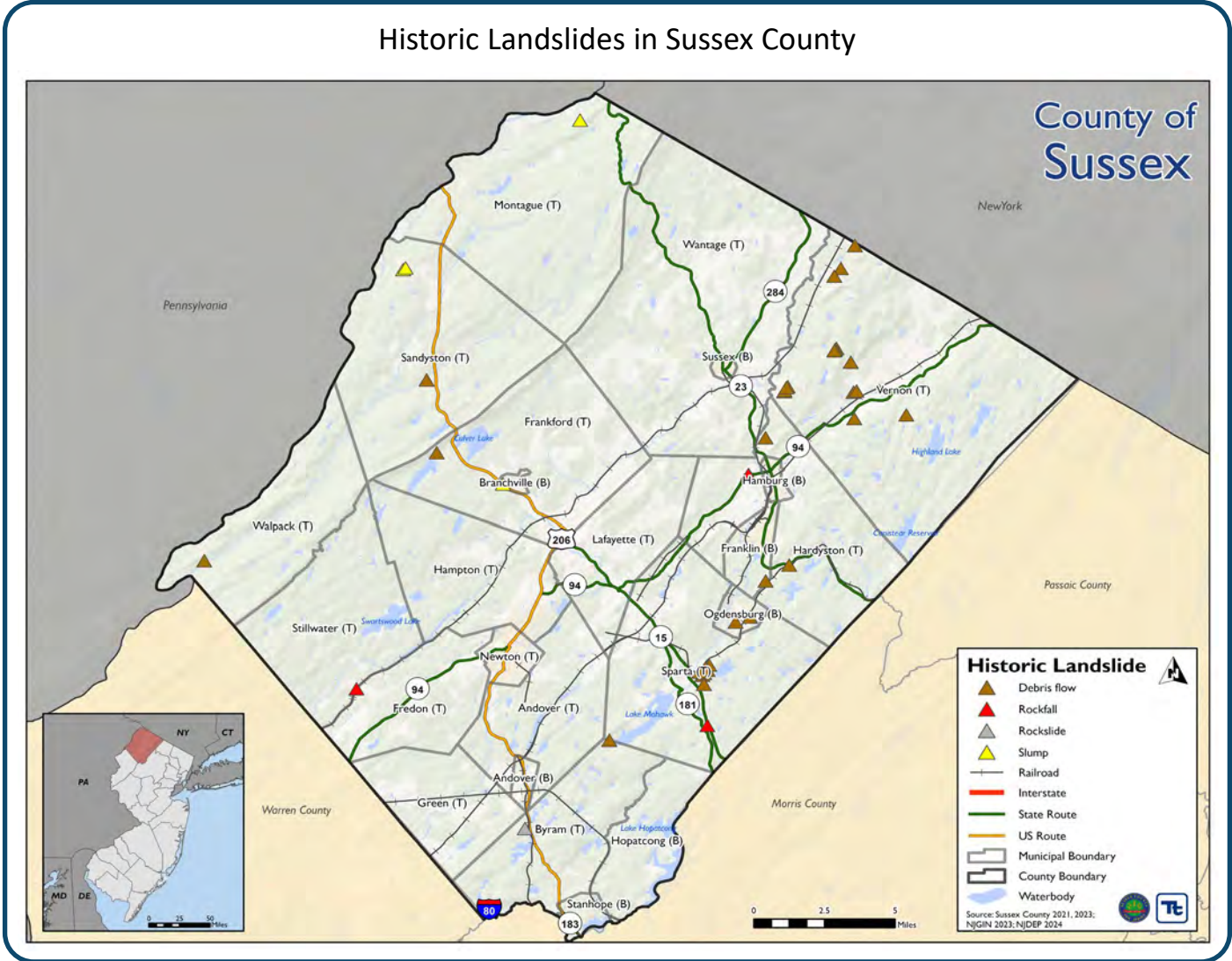
Within 0.25-miles of abandoned mines

10,107

In areas with >20% grade

7,714

In areas with 15% - 20% grade



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**

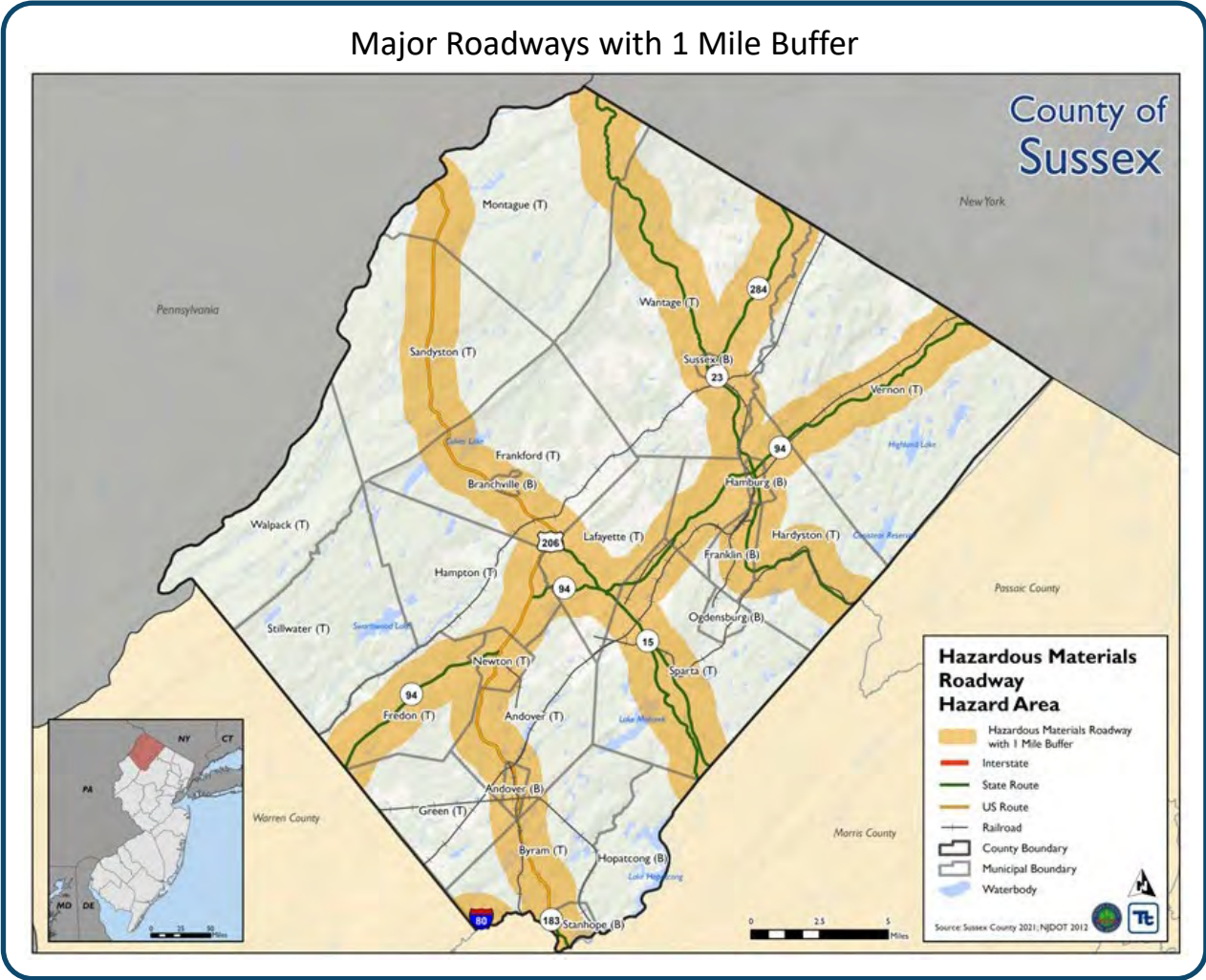
Within 1 mile of Hazardous Materials Roadway Routes

**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.



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**

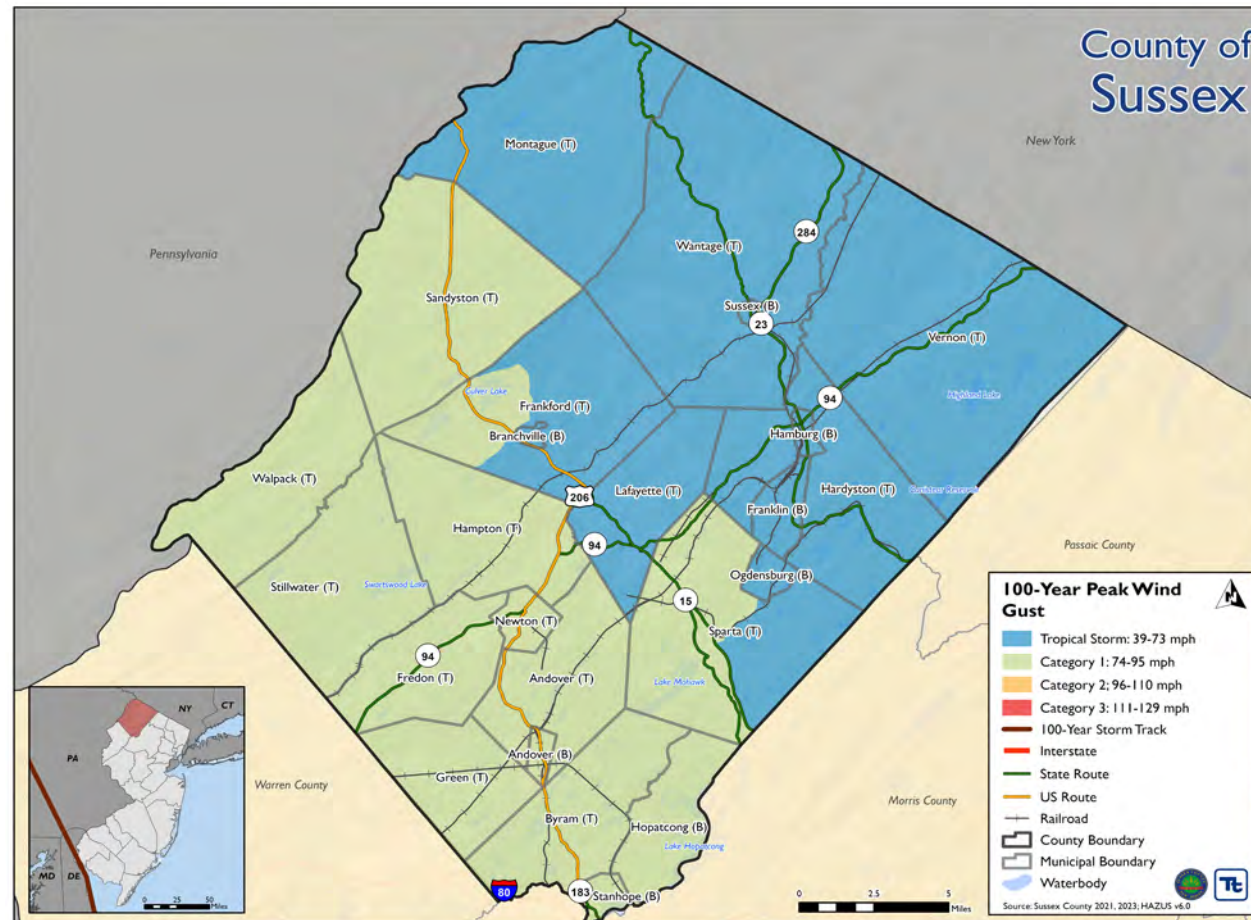
for the 100-Year Mean Return  
Period Hurricane Wind Event

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

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

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

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

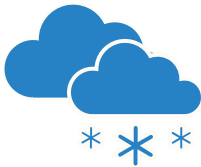


## Hazard Types





# 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**

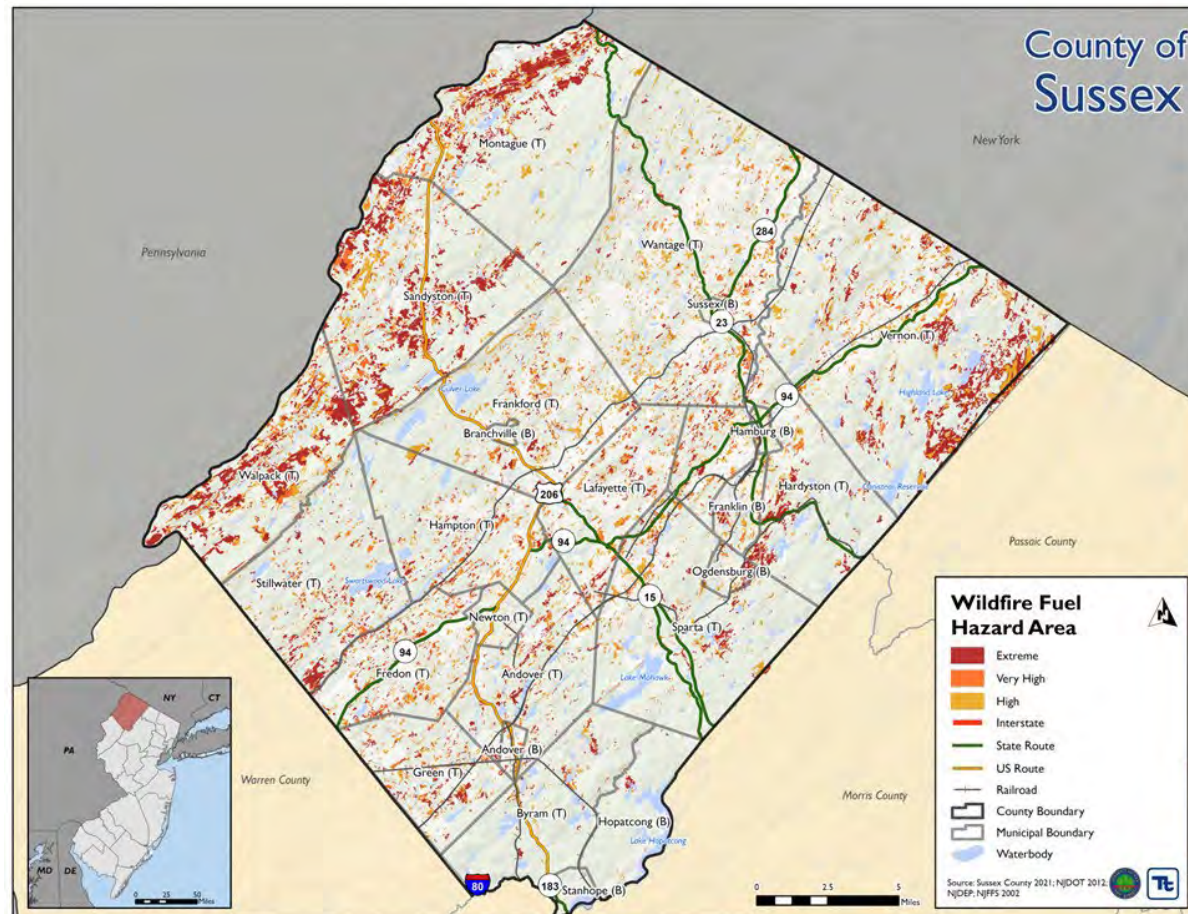
In Extreme, Very High, or High  
Wildfire Fuel Risk Hazard Area

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.

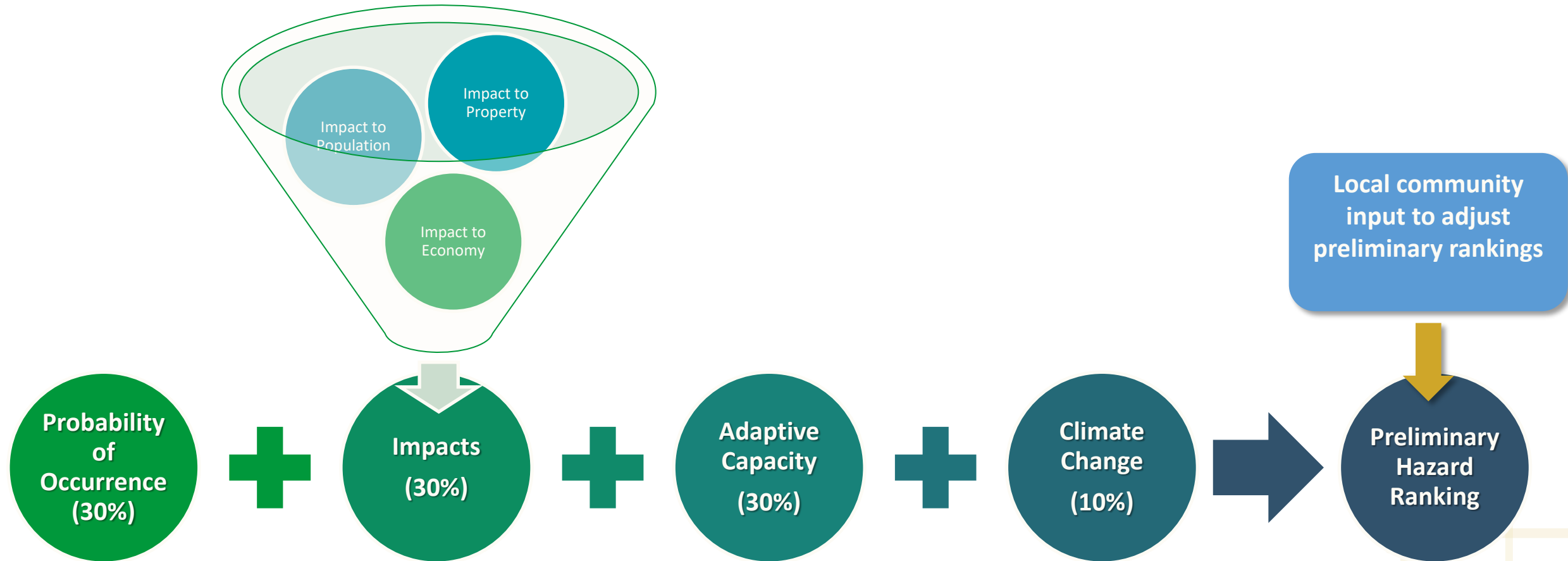


# Preliminary Hazard Ranking Methodology

- 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

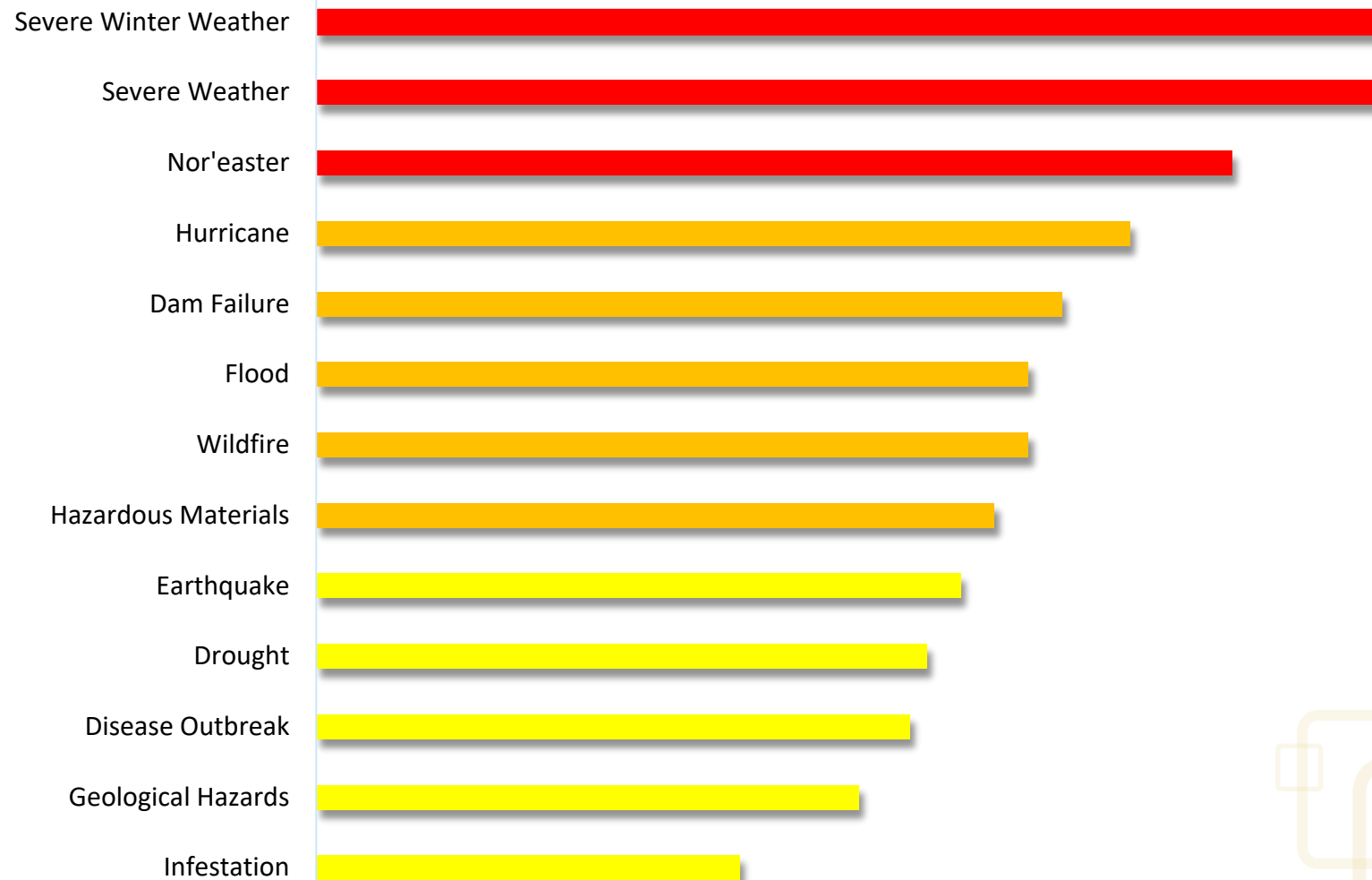
- Severe Winter Storm
- Severe Weather
- Nor'easter

## Medium

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

## Low

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



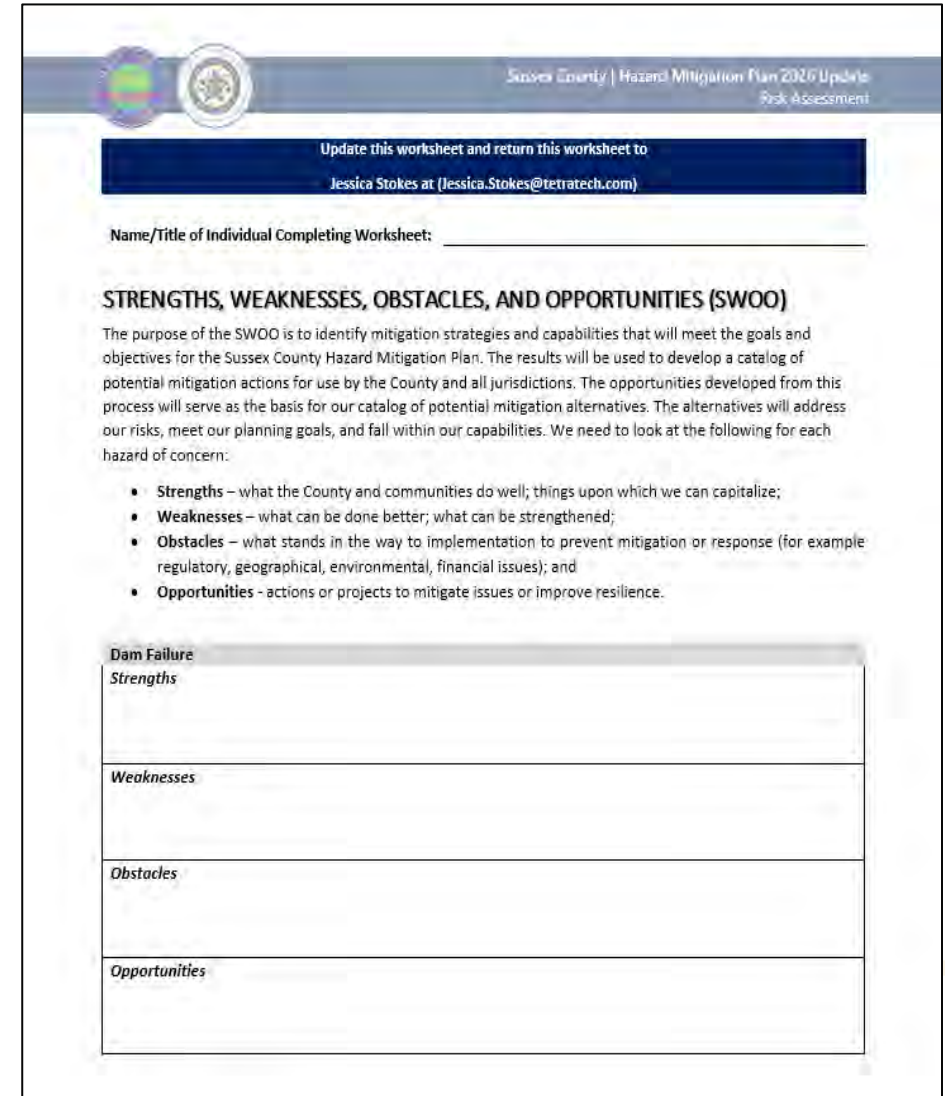




## STRENGTHS, WEAKNESSES, OBSTACLES, AND OPPORTUNITIES (SWOO)

# 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
Strengths
Weaknesses
Obstacles
Opportunities





# 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

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## **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  
(973) 630-8357 | [chris.huch@tetrattech.com](mailto:chris.huch@tetrattech.com)

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>
<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 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>	-
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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>▪ 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>	
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7	<b>Next Steps</b> <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	Questions/Discussion <ul style="list-style-type: none"><li>No questions or comments</li></ul>	-
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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>
<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 risk ranking worksheet to the Planning Partnership, and identify next steps.	
Item No.	Description	Action item(s):
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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>	
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# Sussex County Multi-Jurisdictional Hazard Mitigation Plan 2025 Update

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Planning Partnership Risk Assessment  
Meeting  
April 11, 2024

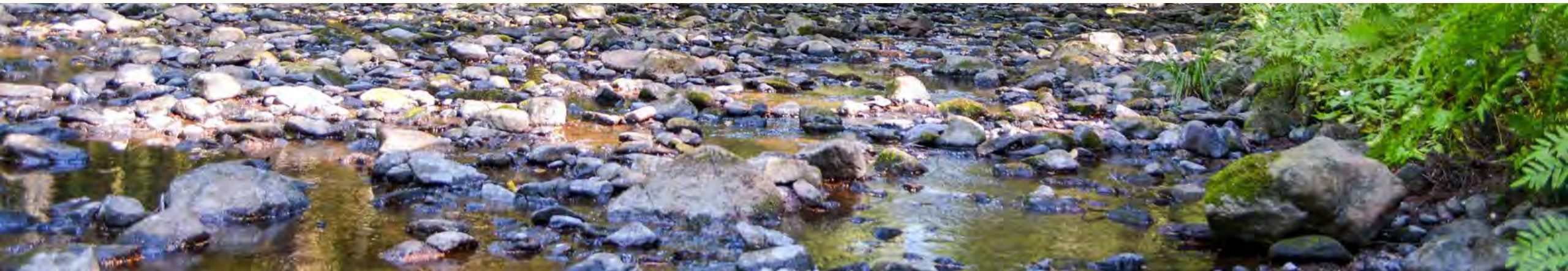
While waiting for the meeting to start, please enter your name, title, and department/agency in the chat.





# 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



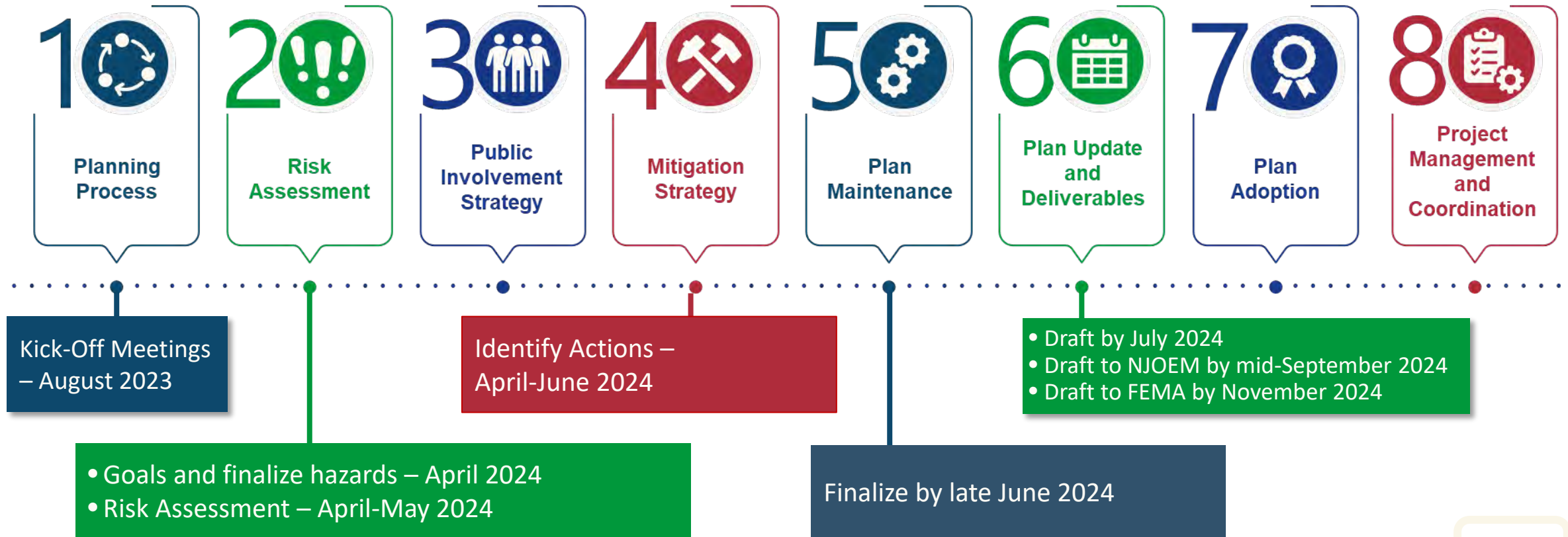


# Project Status





# Schedule



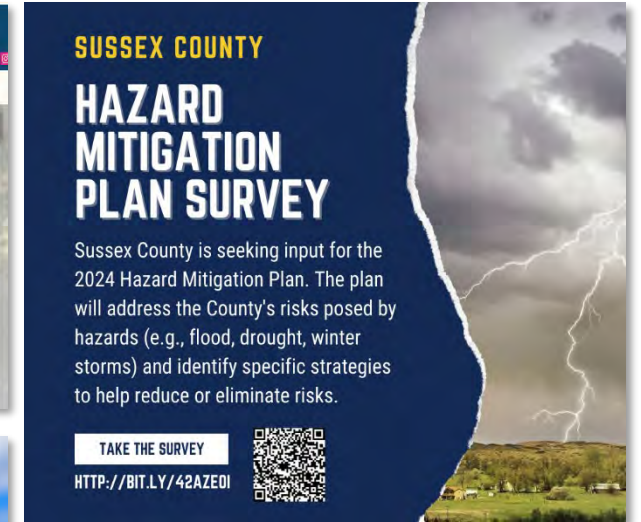
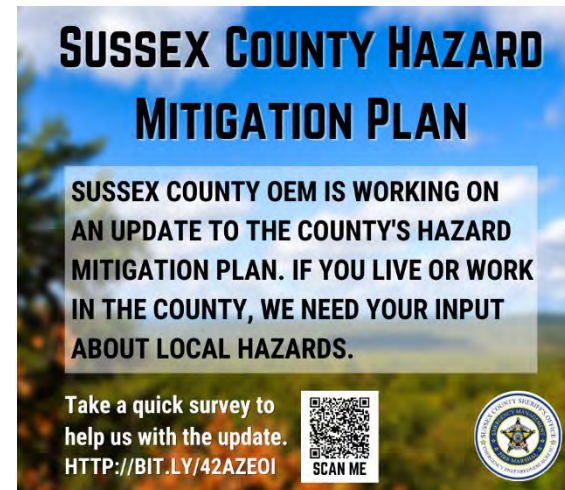
# Municipal Participation Status

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

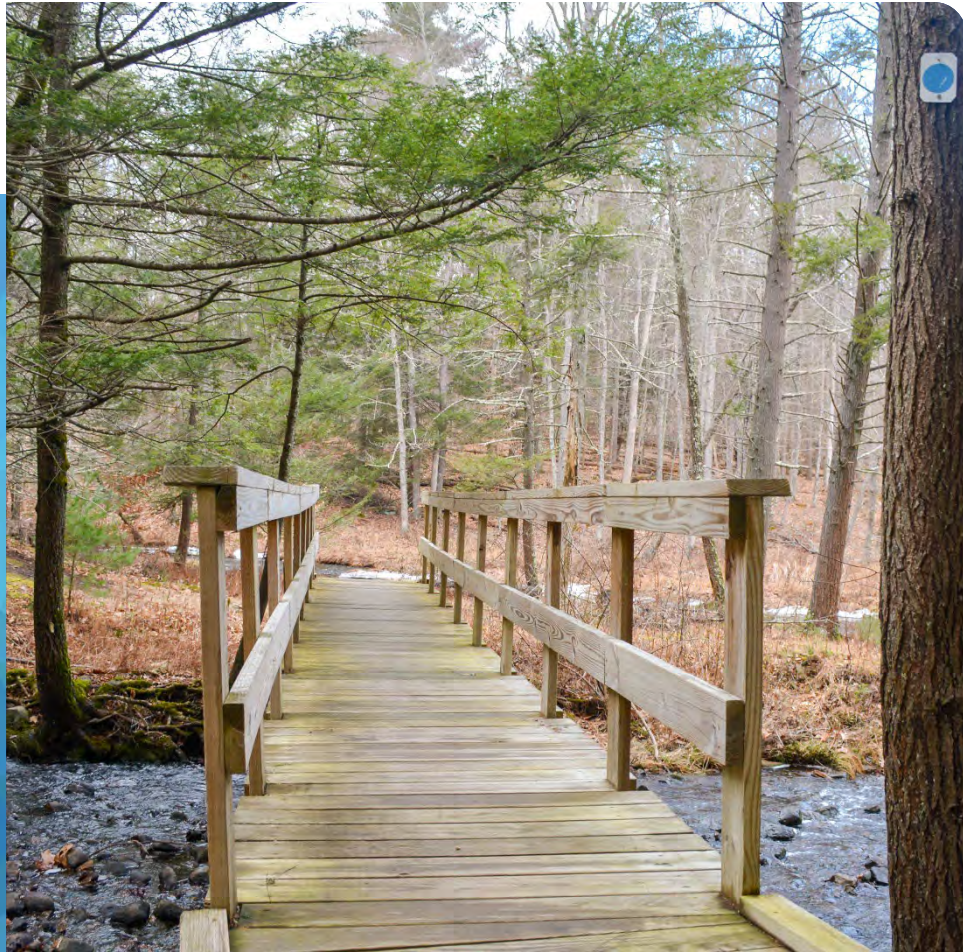
Municipality	Assigned Planner	Municipality	Assigned Planner	Municipality	Assigned Planner
Andover (B)	Grace	Hamburg (B)	Grace	Sandyston (Twp)	Jessica
Andover (Twp)	Grace	Hampton (Twp)	Grace	Sparta (Twp)	Jessica
Branchville (B)	Grace	Hardyston (Twp)	Grace	Stanhope (B)	Jessica
Byram (Twp)	Grace	Hopatcong (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

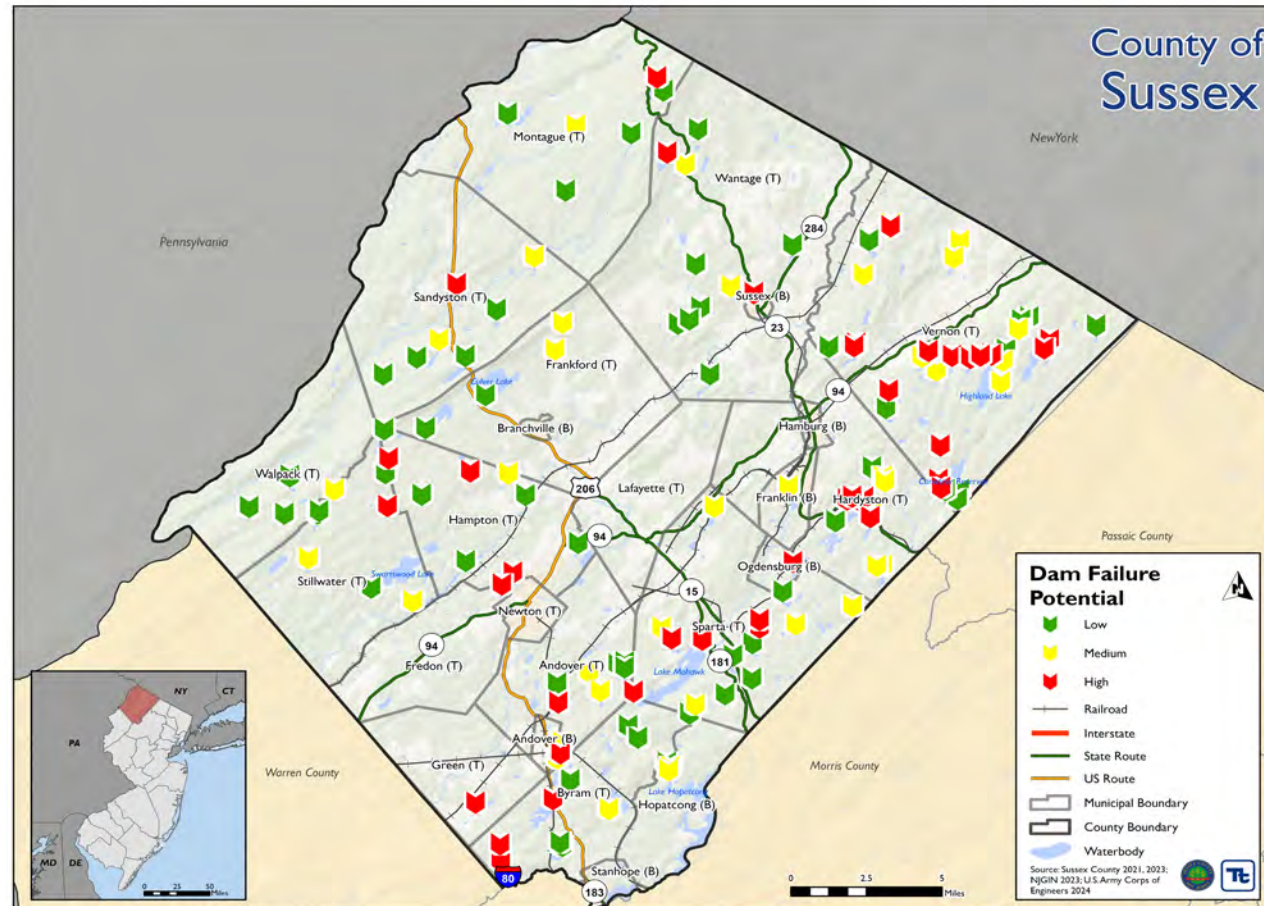
# 139

- 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

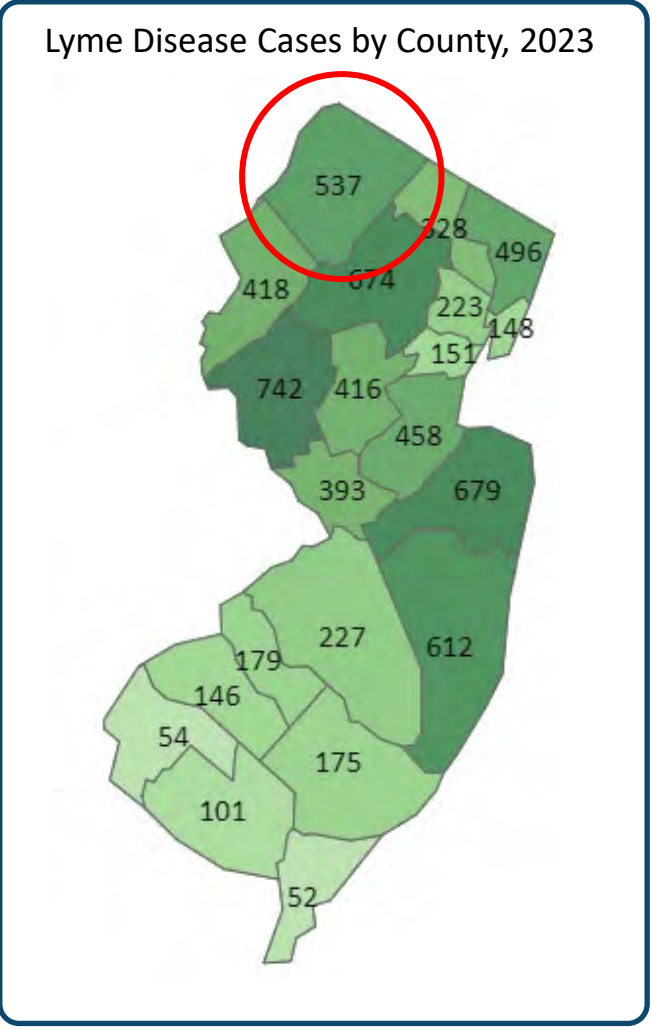
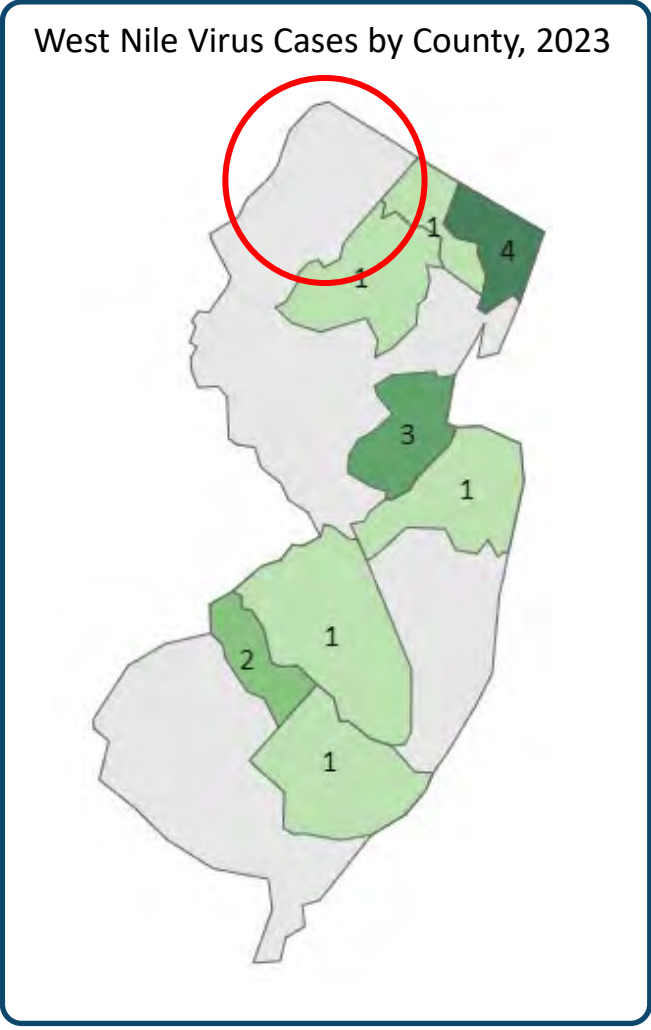
(100%)

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.



- 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

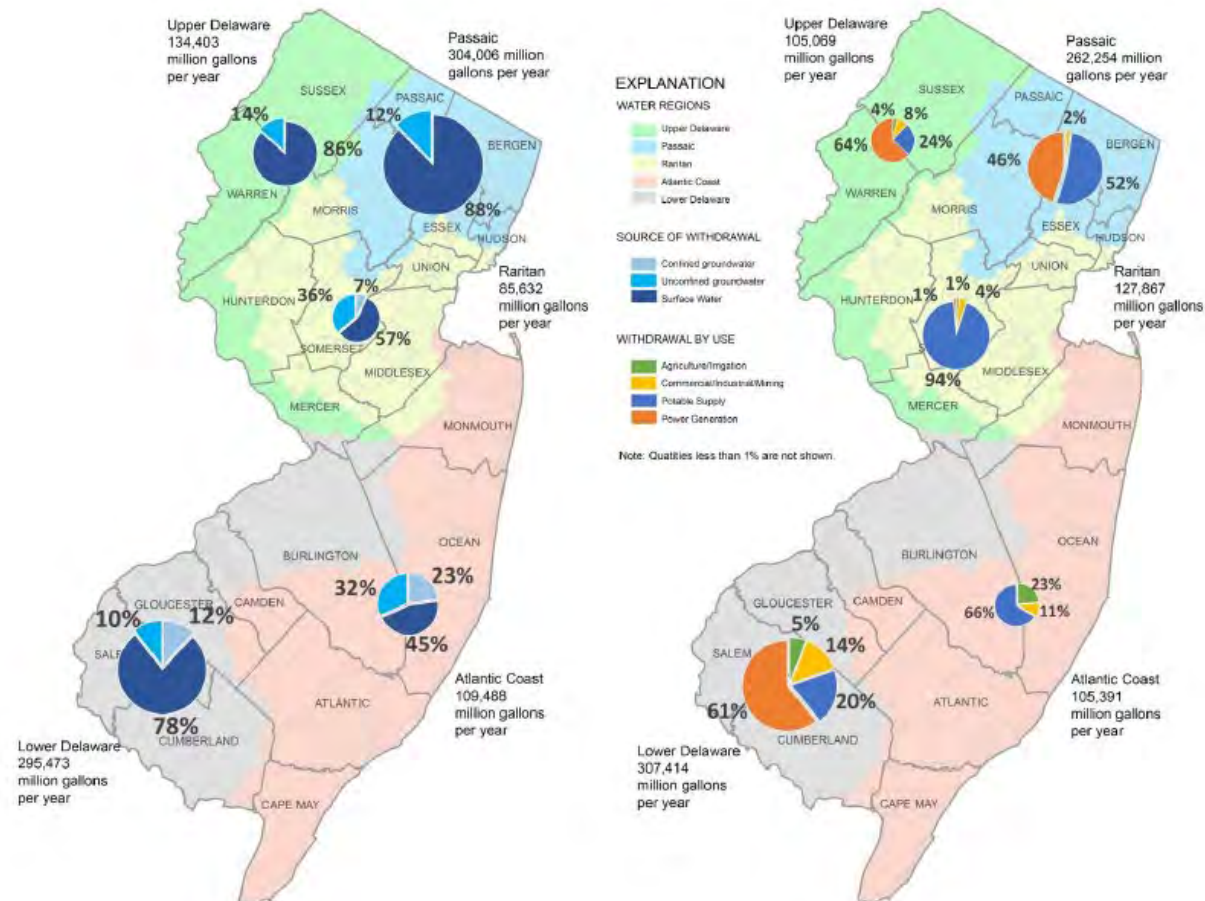
Drought Monitor, 2020-2023

- 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%)

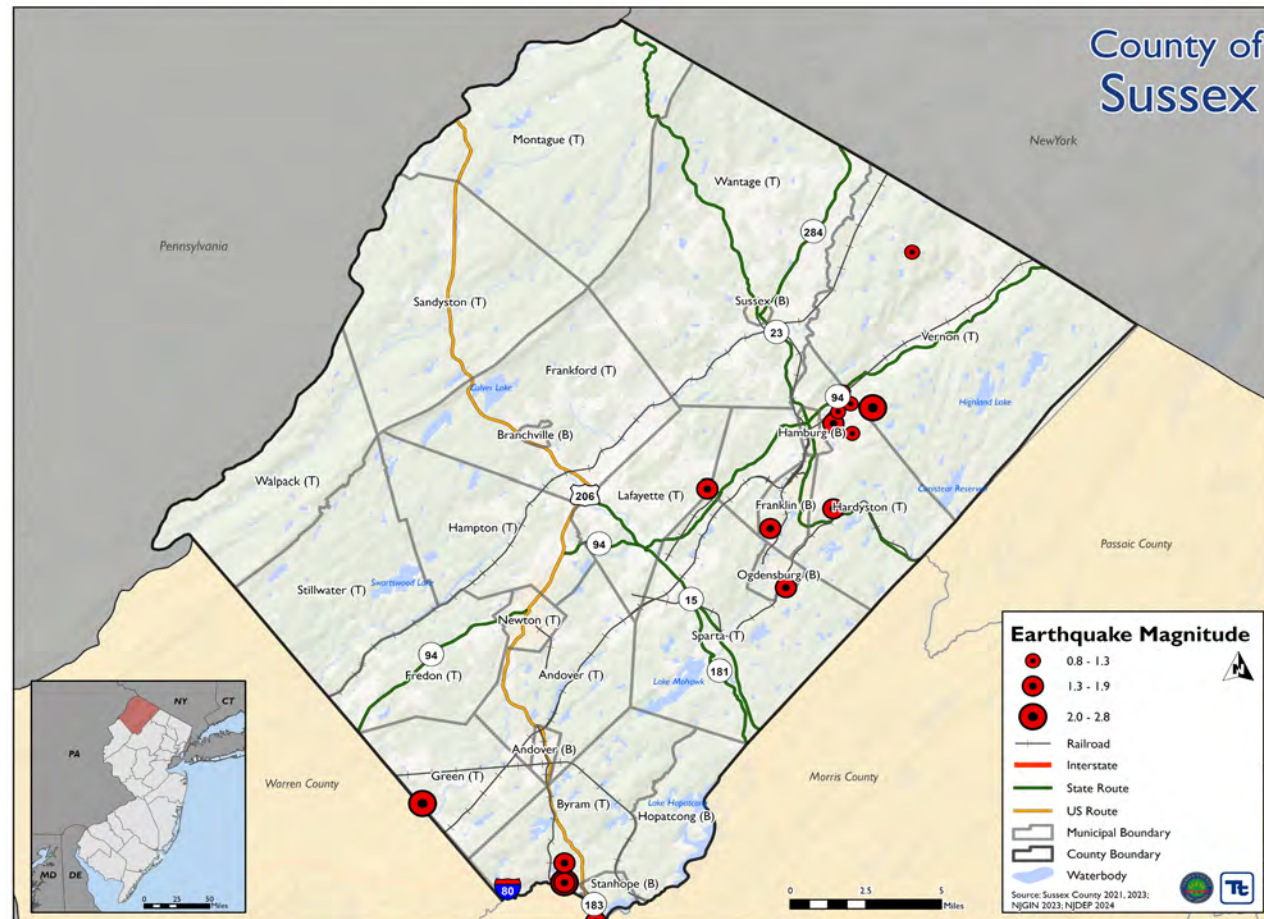
The entire County is susceptible

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

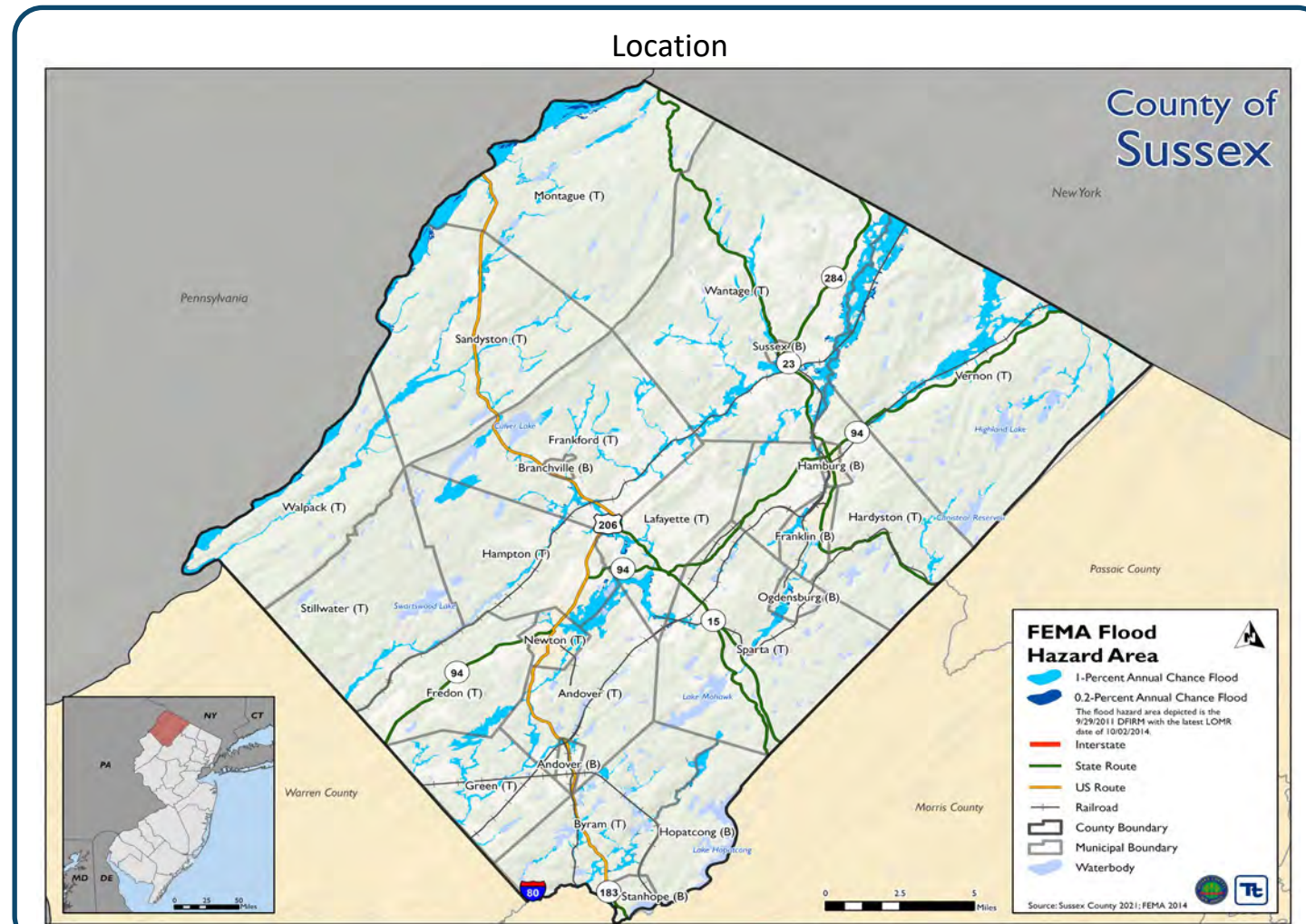
Flood Building Replacement Cost Value

**\$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

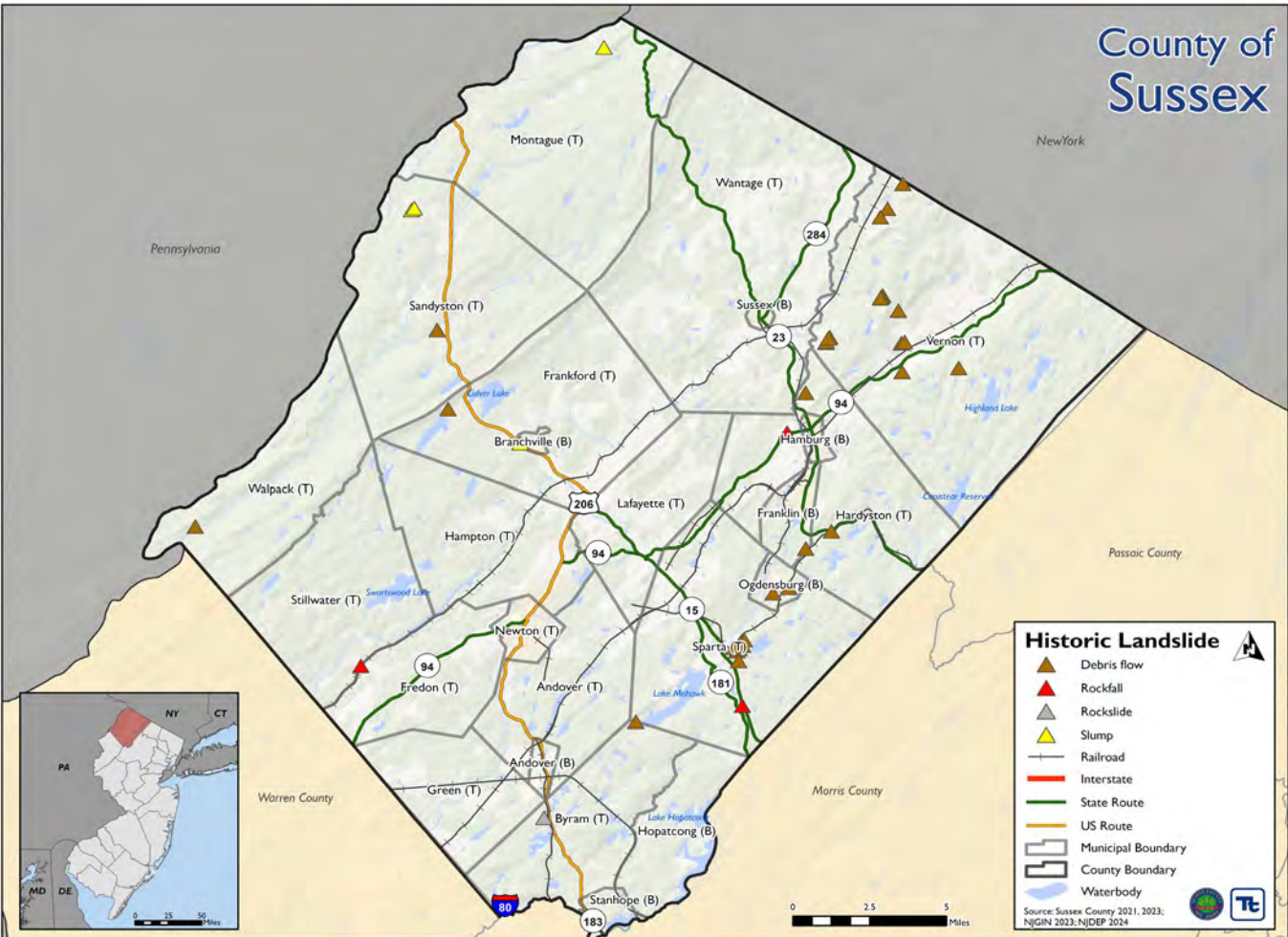
10,107

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**

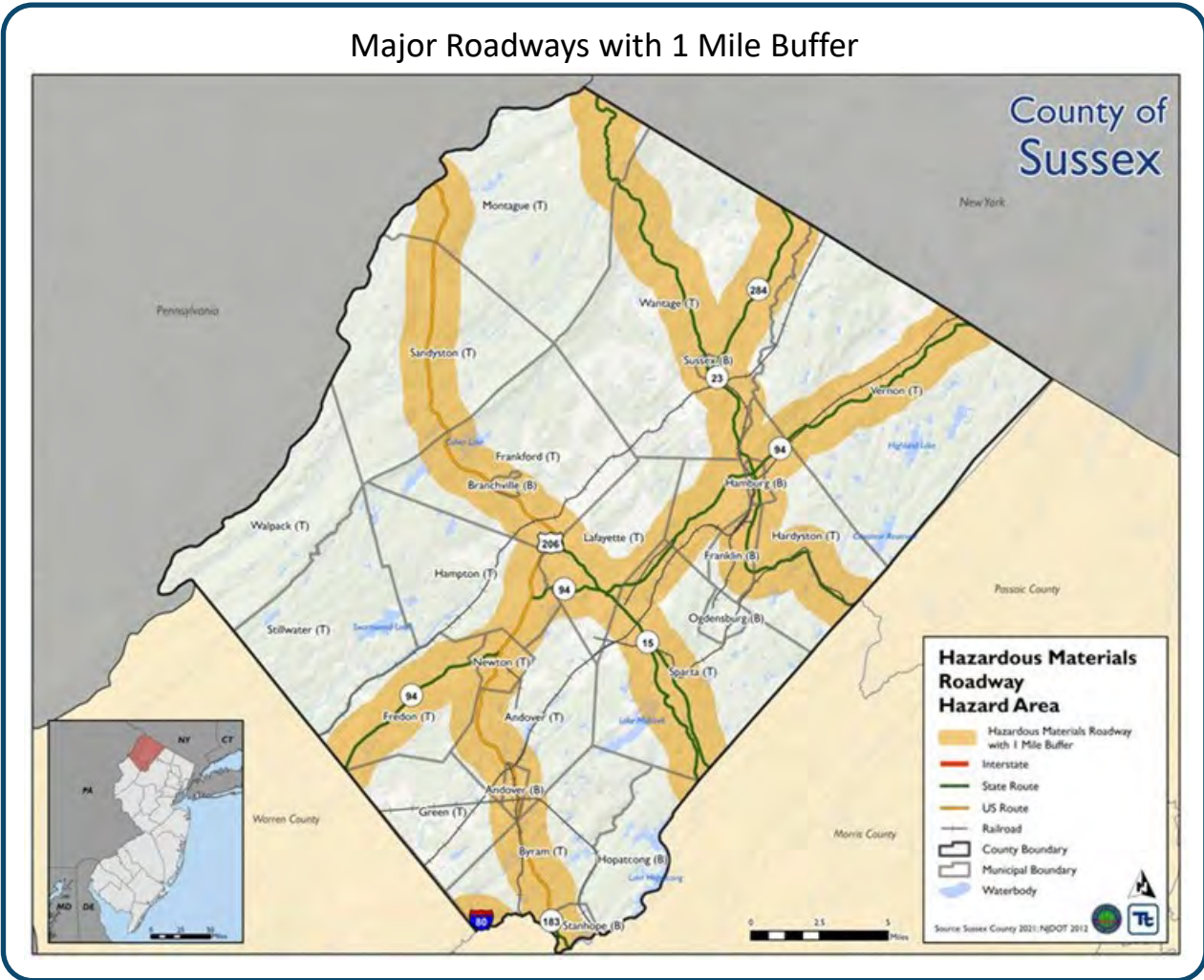
Within 1 mile of Hazardous Materials Roadway Routes

**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.



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**

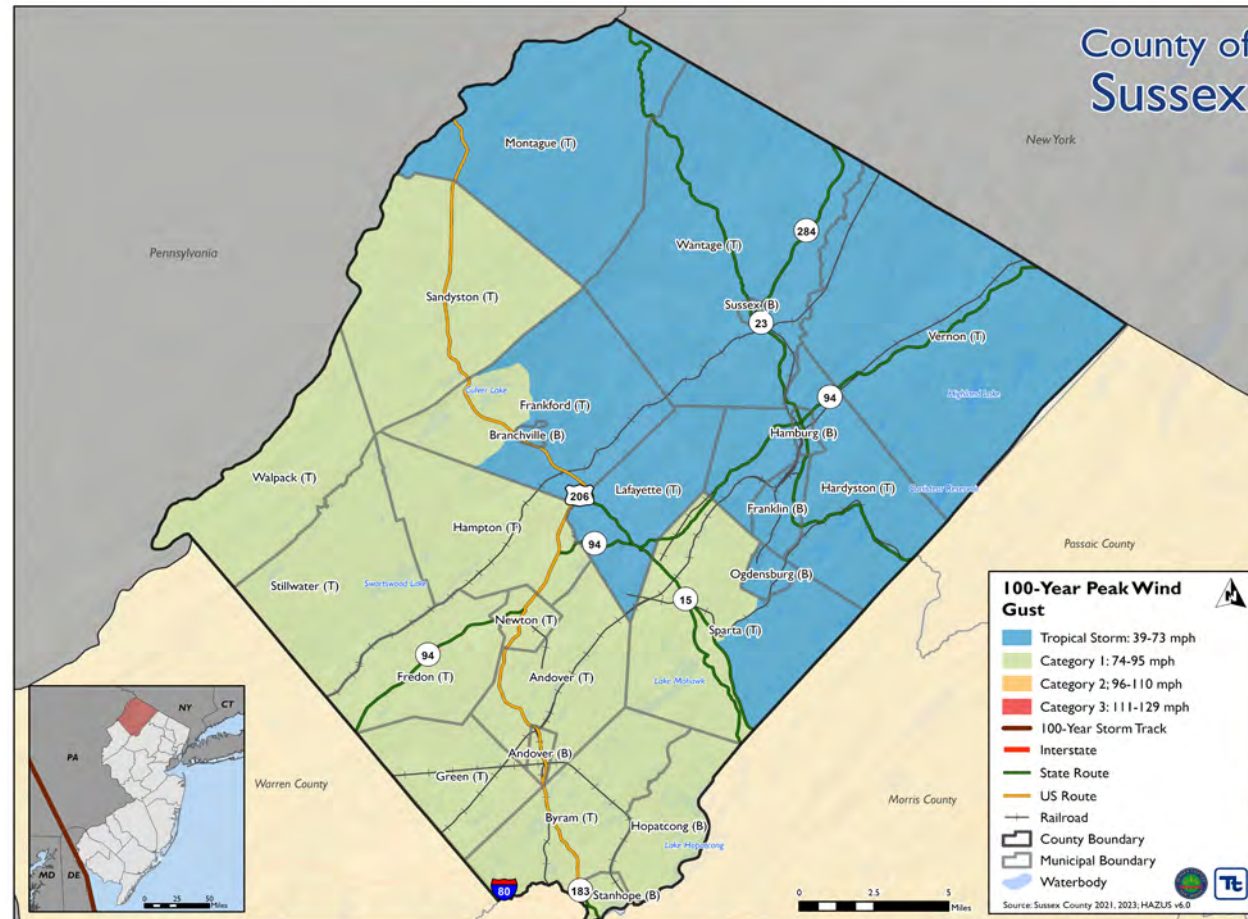
for the 100-Year Mean Return  
Period Hurricane Wind Event

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

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

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

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

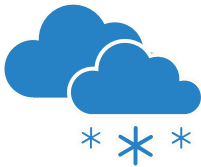
## Storm Damage in Stanhope



## Hazard Types



# 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**

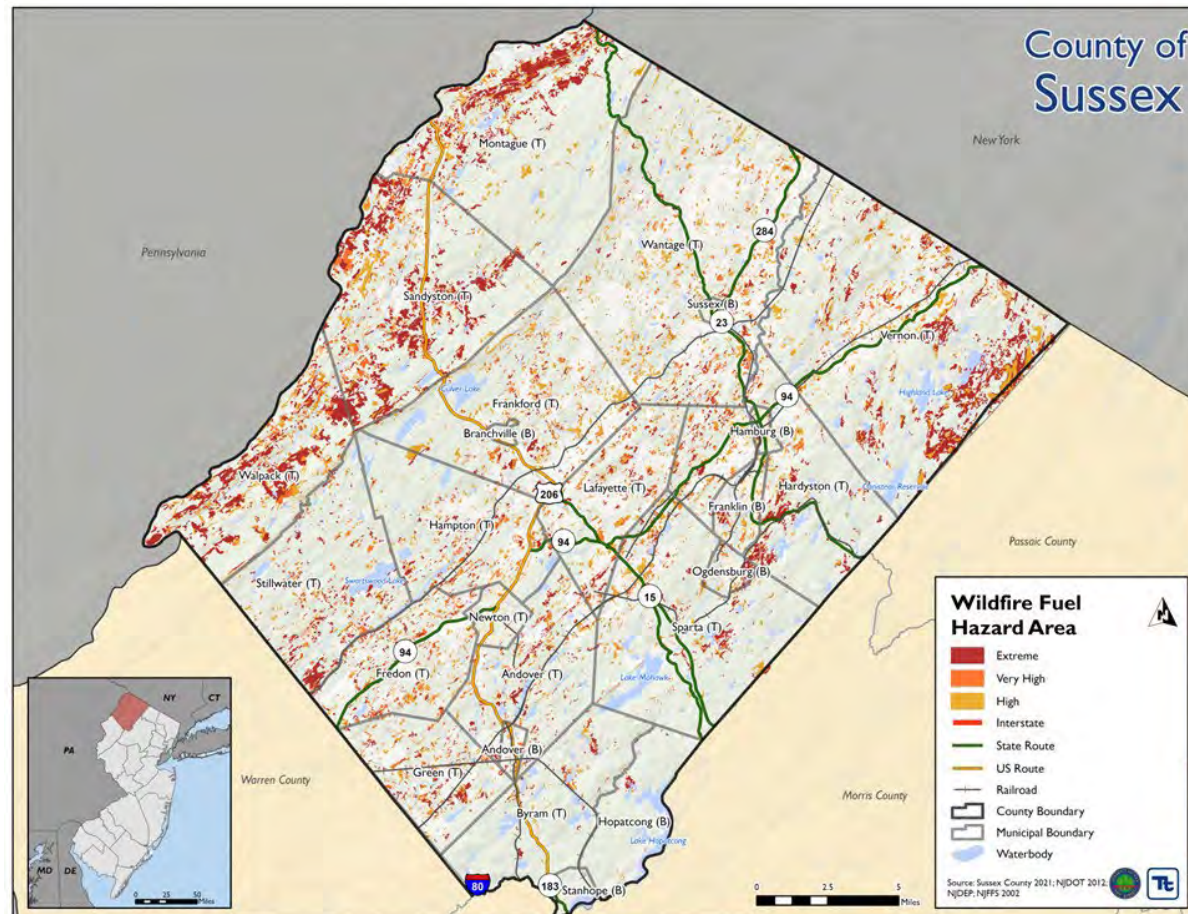
In Extreme, Very High, or High  
Wildfire Fuel Risk Hazard Area

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.

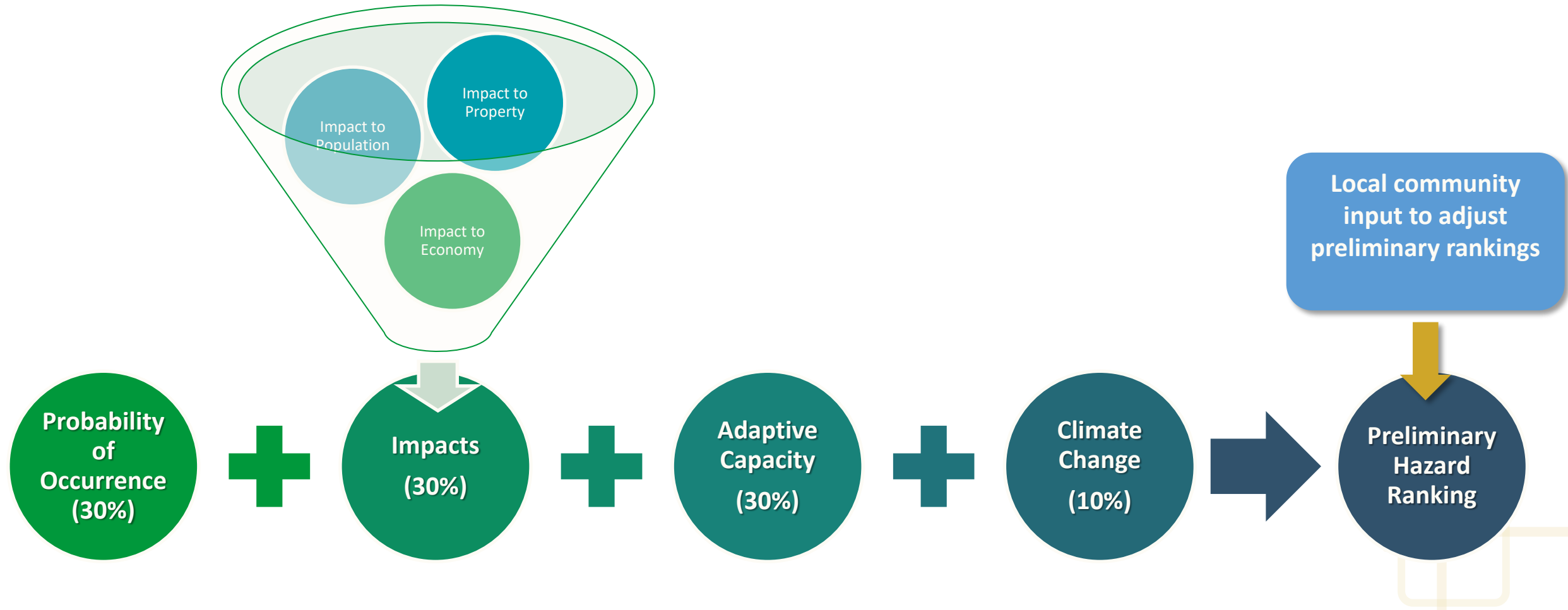


# Preliminary Hazard Ranking Methodology

- 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

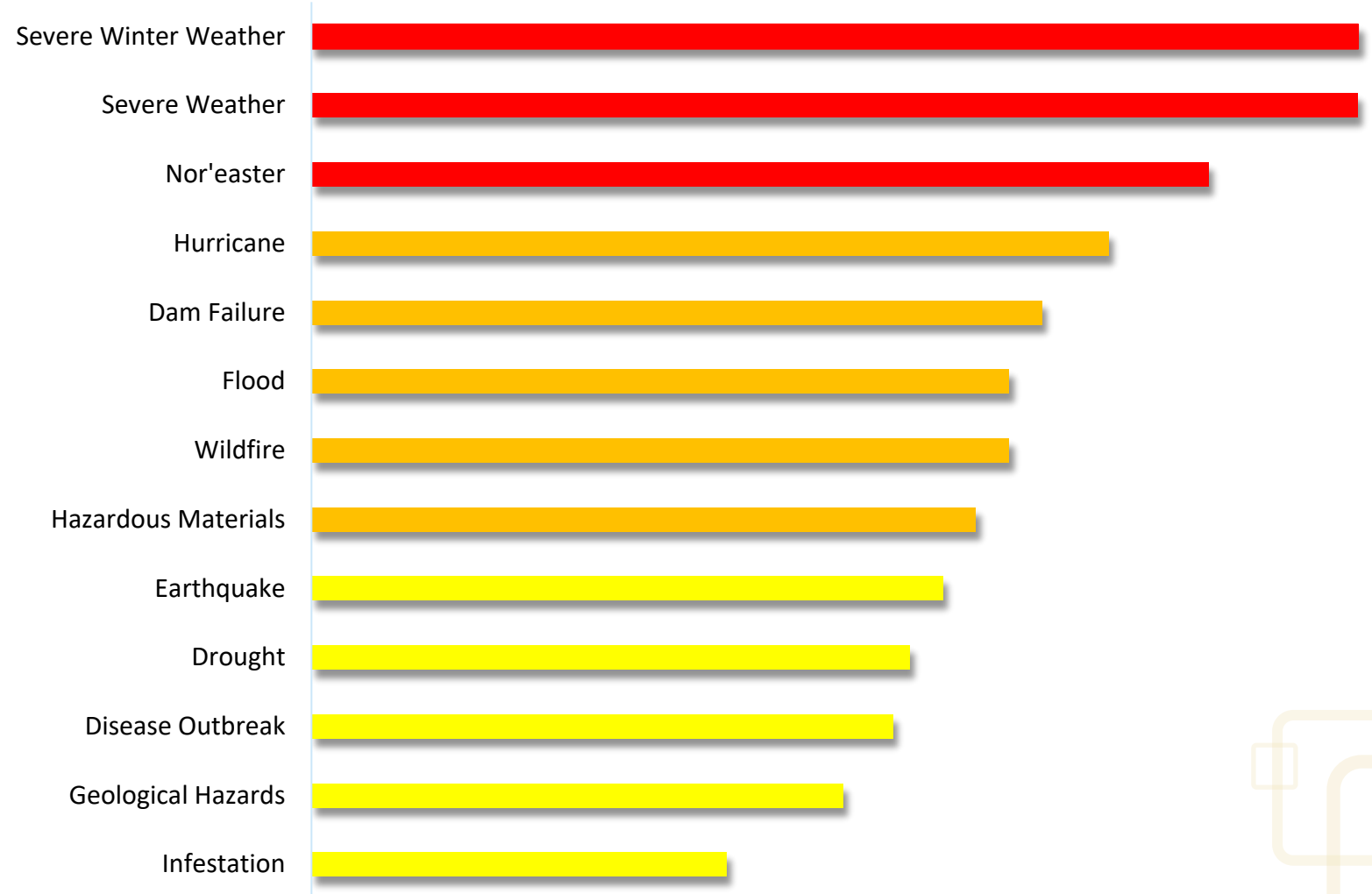
- Severe Winter Storm
- Severe Weather
- Nor'easter

## 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**

Steven Sugar, Deputy Coordinator

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

James Aumick, Deputy Coordinator

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## **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

**Sussex County Project Contacts**

Steven Sugar, Deputy Coordinator  
Sussex County OEM  
[mssugar@sussexcountysheriff.com](mailto:mssugar@sussexcountysheriff.com)

James Aumick, Deputy Coordinator  
Sussex County OEM  
[jaumick@sussexcountysheriff.com](mailto:jaumick@sussexcountysheriff.com)

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6 Century Drive, Parsippany, NJ 07054  
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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 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.	
<b>Attendees:</b>	<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>
<b>Agenda Summary:</b>	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 <u>Mitigation Strategy</u> include: <ul style="list-style-type: none"> <li><b>Mitigation Action Plan or Action Plan</b></li> <li><b>Mitigation Projects or Initiatives or 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>	
<b>3</b>	<b>Review Previous Actions</b> <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>	<b>Planning Partnership</b> <ul style="list-style-type: none"> <li>Complete outstanding worksheets and submit to Grace Altenburg.</li> </ul>
<b>4</b>	<b>Developing New Potential Actions</b> <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>	-
<b>5</b>	<b>Next Steps</b> <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>	-
<b>6</b>	<b>Questions/Discussion</b> <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

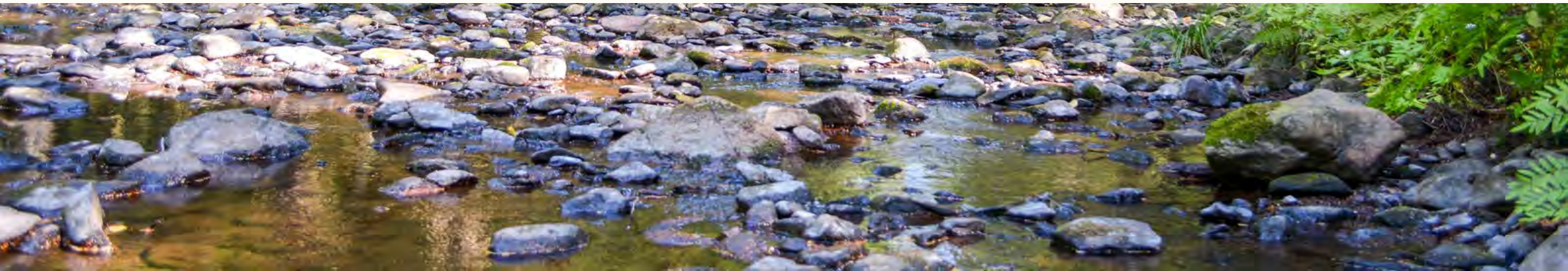
While waiting for the  
meeting to start, please do  
not forget to sign in!





# 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**

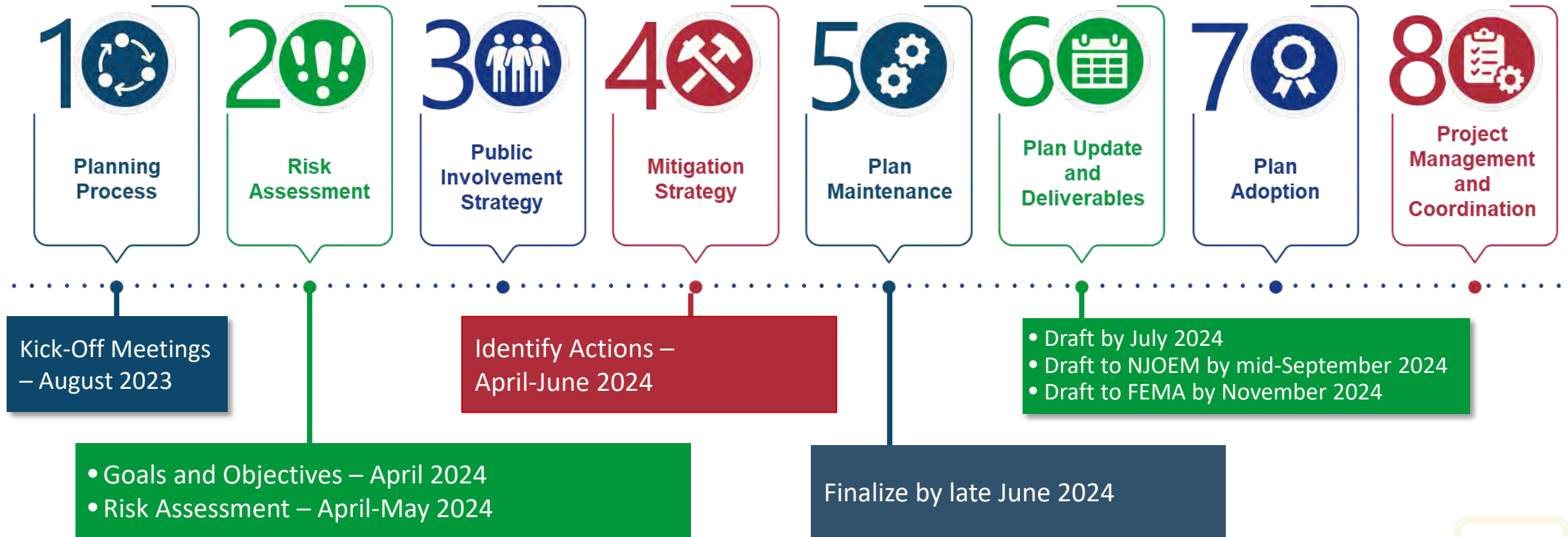




# Project Status



# 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.*

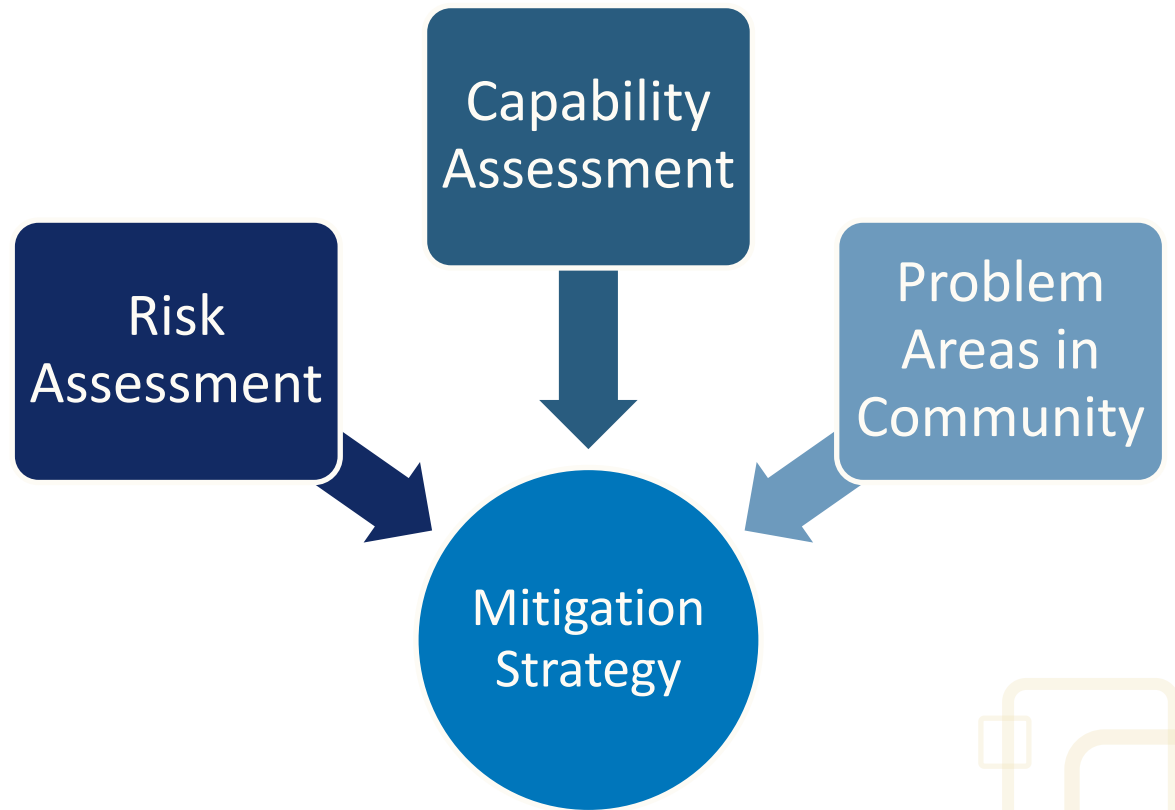
# Using Your Mitigation Strategy to Reduce Risk

- 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



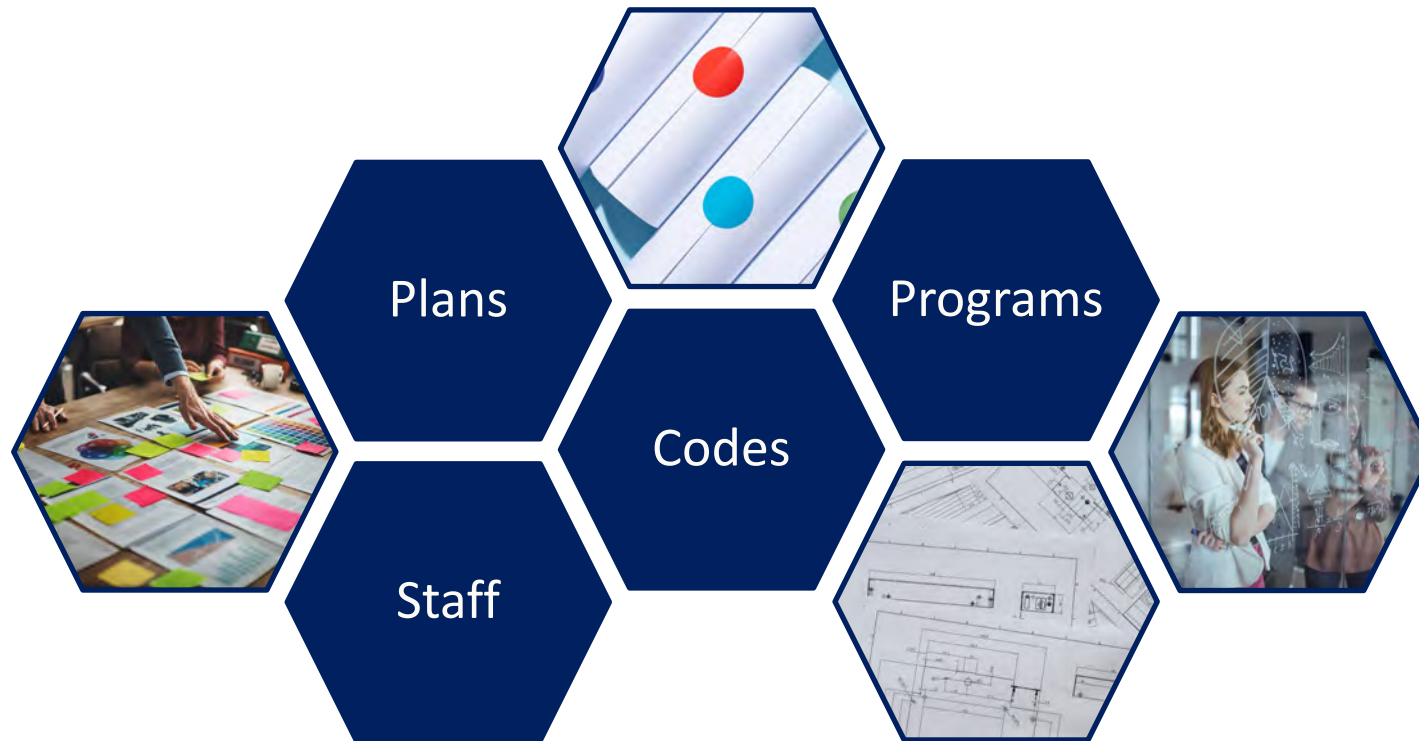
Wildfire





# 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.



Sussex County | Hazard Mitigation Plan 2025 Update  
Mitigation Strategy Workshop

### 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)

 TETRA TECH

2025 | HAZARD MITIGATION PLAN – SUSSEX COUNTY, NEW JERSEY





# 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



- 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**

Steven Sugar, Deputy Coordinator

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

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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.	
<b>Attendees:</b>	<div> <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> </div> <div> <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> </div>	
<b>Agenda Summary:</b>	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	<b>Project Status</b> <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>	<b>Steering Committee</b> <ul style="list-style-type: none"> <li>• Continue public outreach</li> </ul>
3	<b>HMP Draft Review</b> <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>	
5	<p><b>FEMA Approval Process</b></p> <ul style="list-style-type: none"> <li>• The plan is made available for public and State review. <ul style="list-style-type: none"> <li>○ Feedback and comments will be incorporated into a second draft.</li> </ul> </li> <li>• The second draft will be submitted to FEMA for review and approval. <ul style="list-style-type: none"> <li>○ If FEMA has questions or comments those will be addressed.</li> <li>○ FEMA will grant the plan 'Approvable Pending Adoption' status, meaning FEMA will approve the plan once it has been locally adopted.</li> </ul> </li> <li>• The County and municipalities will formally adopt the plan. <ul style="list-style-type: none"> <li>○ Resolution is submitted to FEMA and FEMA grants final approval.</li> </ul> </li> </ul>	-
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>	-





	<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 <i>describe task in more detail</i>
					\$		

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



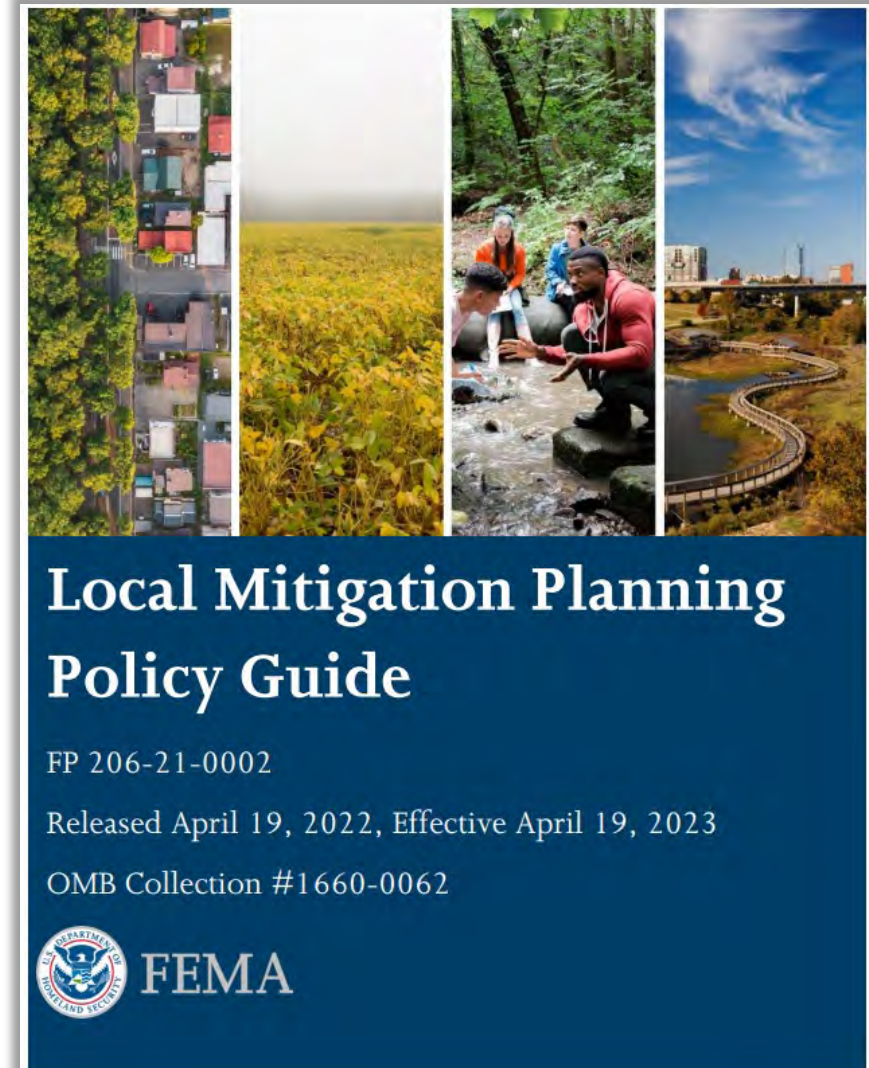
# HMP Draft Review





# 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

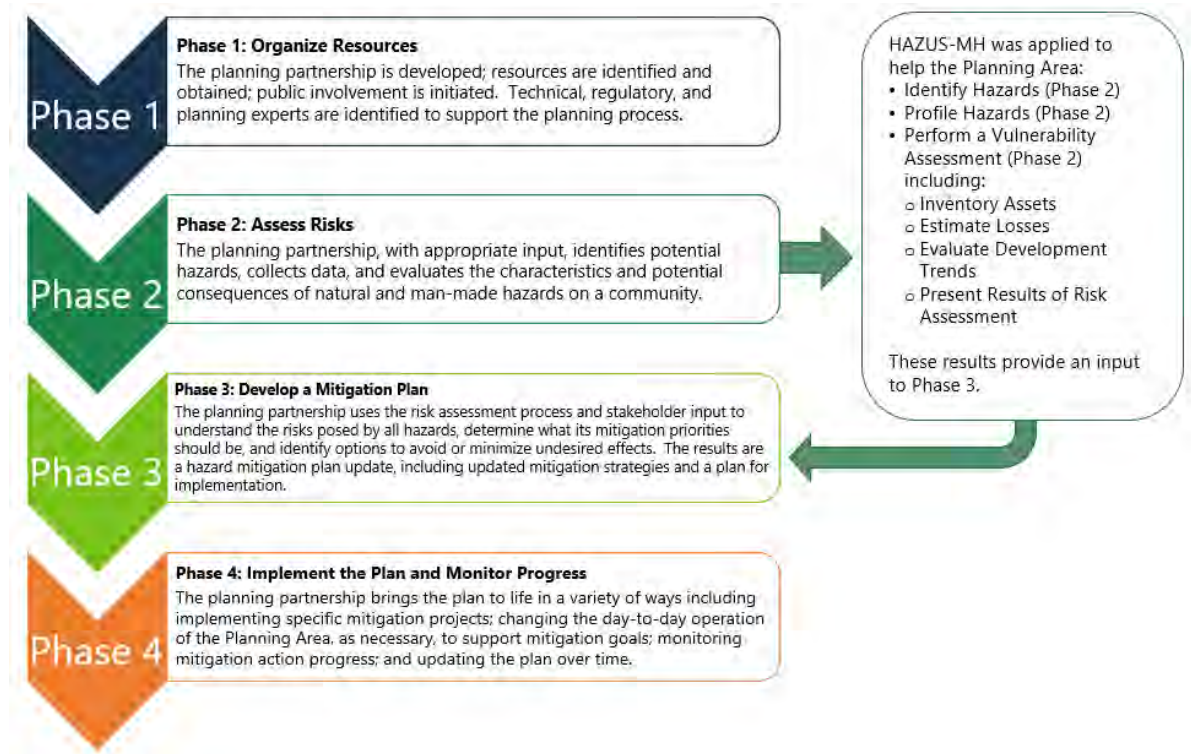
- Provides an overview of how the plan is laid out by describing the various chapters within the plan
  - Light summaries of key components of the HMP
    - Hazard Mitigation Overview
    - Planning Process
    - Involvement by Stakeholders and the Public
    - Risk Assessment for Local Hazards of Concern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



# Volume I

## 1. Introduction

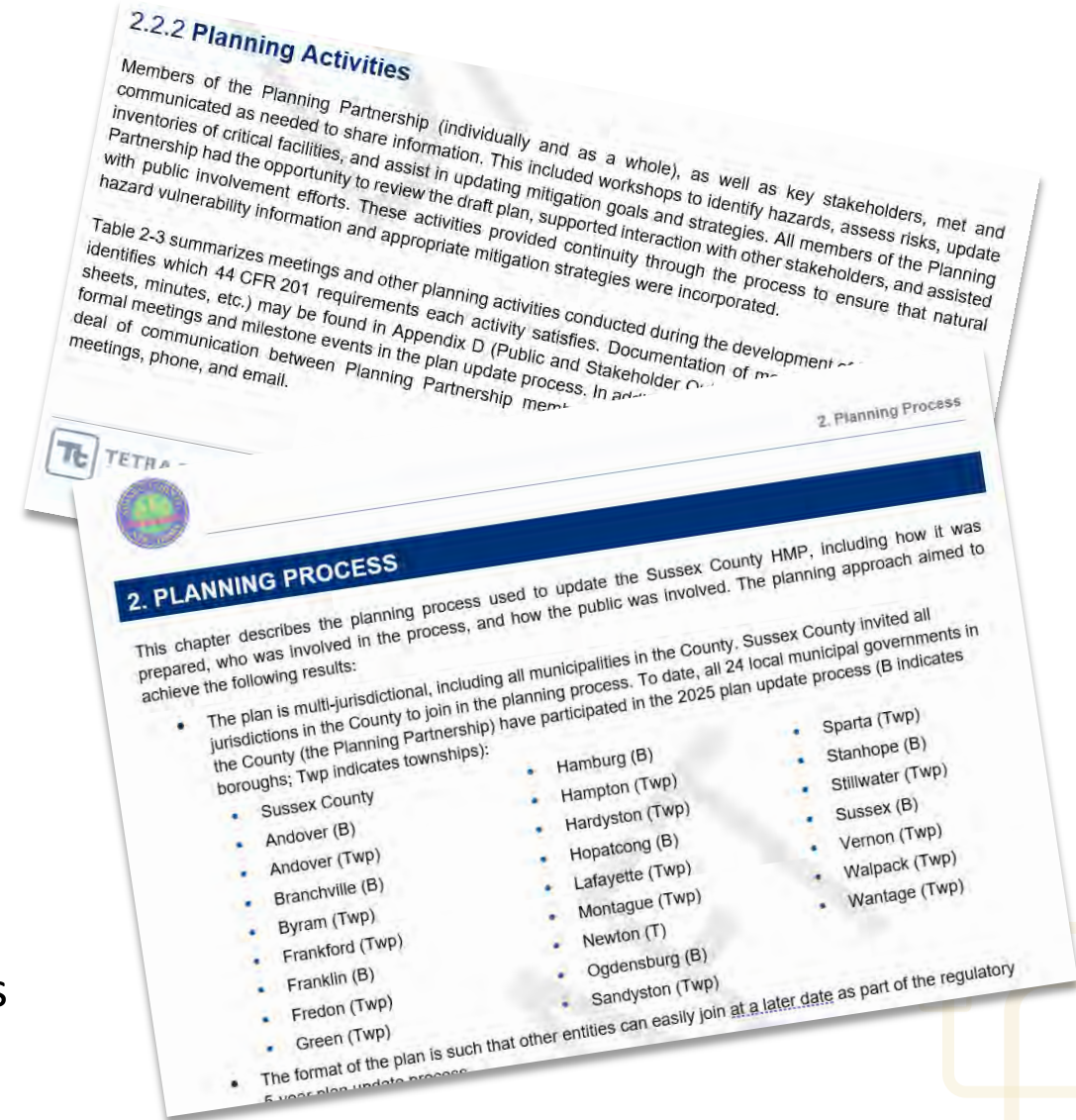
- Plan Purpose
- Background of the plan
- Plan Organization
- Planning Differences – 2021 HMP vs. 2025 HMP



# 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





## 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

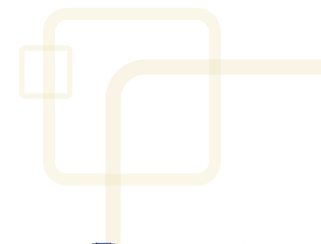
- **Chapter 1 – Introduction**
  - Participating jurisdictions
  - Introduction to jurisdictional annexes
- **Chapters 2-26 – Jurisdictional Annexes**
  - Points of Contact and Who Participated
  - Jurisdictional Profile
  - Capabilities
  - Risk Assessment
  - Status of Past Mitigation Actions
  - Current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





# Section Contents - Appendices

- Appendix A. Adoptions
- Appendix B. Participation
- Appendix C. Meeting Documentation
- 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



# 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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ssugar@sussexcountysheriff.com

Eric Muller, Deputy Coordinator  
emuller@sussexcountysheriff.com

## **Tetra Tech Project Contacts**

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(973) 630-8017 | jessica.stokes@tetrattech.com

Grace Altenburg | Lead Planner  
(352) 455-1822 | grace.altenburg@tetrattech.com



**Thank  
You!**



## **APPENDIX D: PUBLIC OUTREACH**



This appendix provides documentation of public and stakeholder outreach. Stakeholder involvement in this planning process was broad and productive as discussed and further documented in Chapter 2 (Planning Process). Public and stakeholder input has been incorporated throughout this HMP as appropriate, as identified in Chapter 2 and the References section, as well as within specific mitigation initiatives identified within the jurisdictional annexes (Volume II). Respondent feedback filtered by jurisdiction is included in each jurisdictional annex as available to provide an indication of community resident concerns related to natural hazards.

## SUSSEX COUNTY PUBLIC SURVEY RESULTS

This section contains information and results gathered from the Sussex County Public Survey. The main objective of this survey was to gather information from citizens regarding their level of knowledge regarding hazard vulnerability and knowledge of hazard mitigation information for their local communities. Over 130 respondents completed this survey. The survey was available on Sussex County website and the HMP website at: [www.sussexcountynjhmp.com](http://www.sussexcountynjhmp.com). The survey results are provided in the following pages, with personal information redacted.

## STAKEHOLDER SURVEYS

In addition to collecting information from residents of Sussex County, surveys were developed for the agencies and stakeholders in the County. Unlike steering committee or planning partnership members, stakeholders may not be involved in all stages of the planning process, but they may have information or input to provide. In order to gather that information, the surveys were sent to the following stakeholders: law enforcement, firefighters, emergency medical services, highway and public works, business and commerce, hospitals and health care providers, and utilities. Results of the surveys are provided in the following pages, with personal information redacted.

## NEIGHBORING COMMUNITY SURVEY

A neighboring community survey was sent to the surrounding communities of Sussex due to their proximity to the County and because the effects of hazard events that impact Sussex County would be similar to that of their neighbors. No responses were recorded for this survey.

## WEBSITE AND SOCIAL MEDIA POSTS

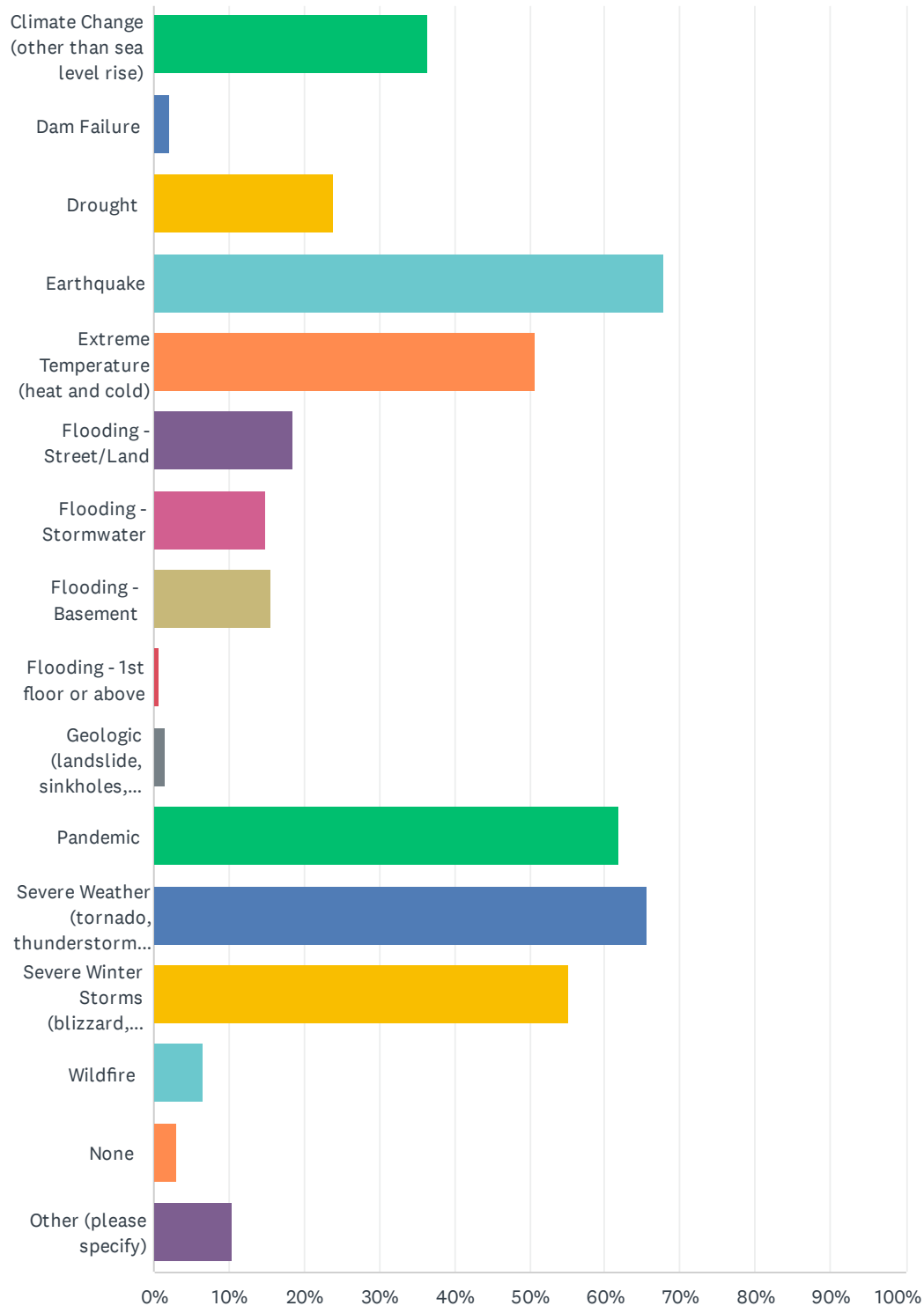
Examples of outreach materials for social media dispersed to the Planning Partnership can be found at the end of this appendix.



# **Public Survey Results Summary**

# Q1 In the last five years, which of the following hazard events have you experienced in Sussex County? Check all that apply.

Answered: 134 Skipped: 2



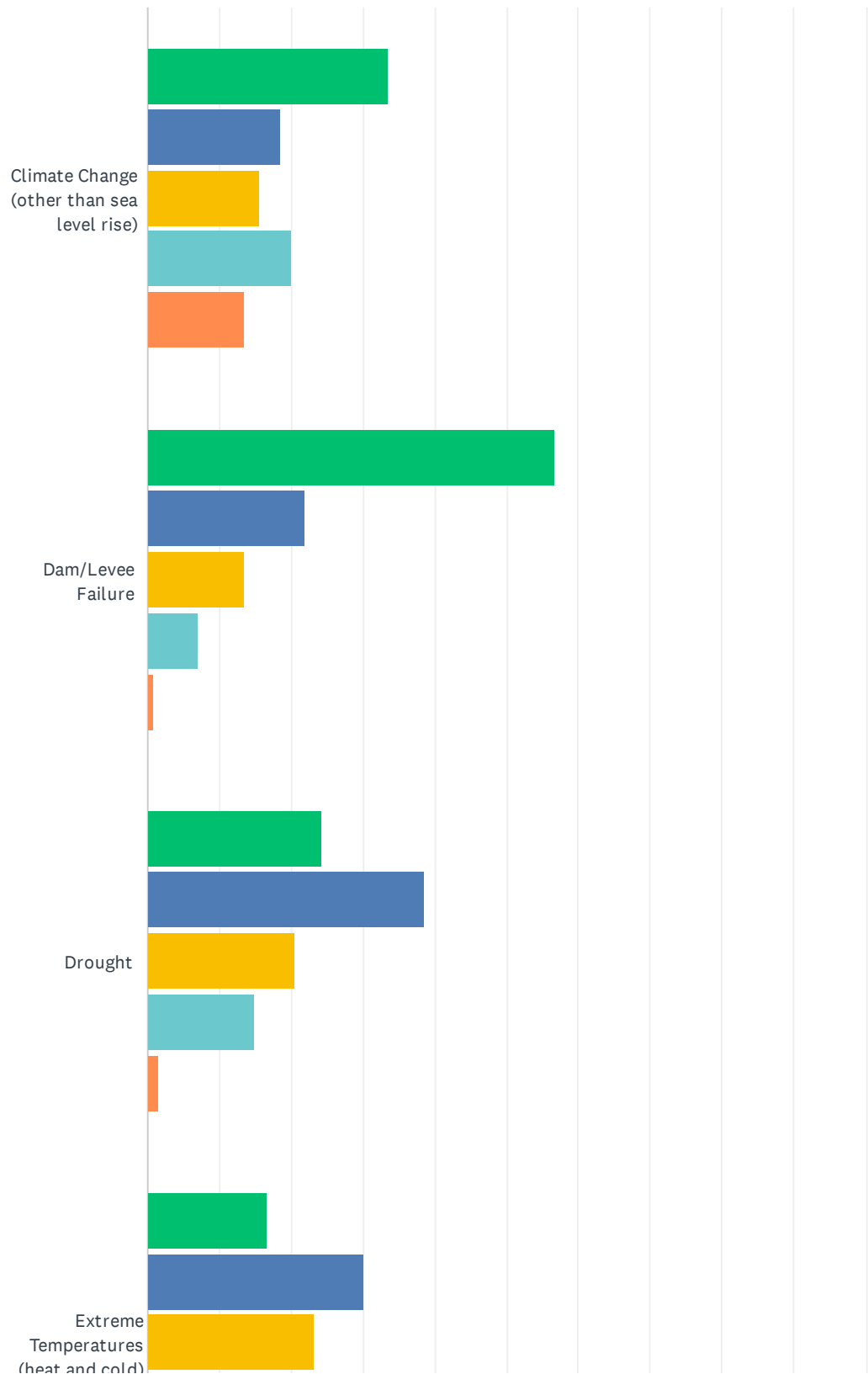
# Sussex County Hazard Mitigation Plan Update - Public Survey

ANSWER CHOICES	RESPONSES	
Climate Change (other than sea level rise)	36.57%	49
Dam Failure	2.24%	3
Drought	23.88%	32
Earthquake	67.91%	91
Extreme Temperature (heat and cold)	50.75%	68
Flooding - Street/Land	18.66%	25
Flooding - Stormwater	14.93%	20
Flooding - Basement	15.67%	21
Flooding - 1st floor or above	0.75%	1
Geologic (landslide, sinkholes, subsidence)	1.49%	2
Pandemic	61.94%	83
Severe Weather (tornado, thunderstorm, hail)	65.67%	88
Severe Winter Storms (blizzard, heavy snow, ice)	55.22%	74
Wildfire	6.72%	9
None	2.99%	4
Other (please specify)	10.45%	14
Total Respondents: 134		

#	OTHER (PLEASE SPECIFY)	DATE
1	loss of electrical power: trees falling	8/31/2024 11:37 AM
2	insect infestation	8/28/2024 5:36 AM
3	I don't consider COVID a pandemic - it was political hype	8/27/2024 11:03 PM
4	Groundhogs & mice & poison ivy	8/23/2024 10:39 AM
5	Trees going down	8/23/2024 8:30 AM
6	Power outages that took too long to fix	8/22/2024 4:30 PM
7	Wood burning	8/22/2024 3:54 PM
8	Frequent power outages	8/22/2024 2:31 PM
9	gas line road failures,collapes,water line damage	8/22/2024 2:25 PM
10	Frequent power outages000	8/22/2024 2:14 PM
11	Trees falling on power lines and roads, cutting service or access.	8/22/2024 1:58 PM
12	Continuous loss of power	8/22/2024 1:33 PM
13	Insects	8/22/2024 12:53 PM
14	Dying Trees falling over	8/22/2024 12:51 PM

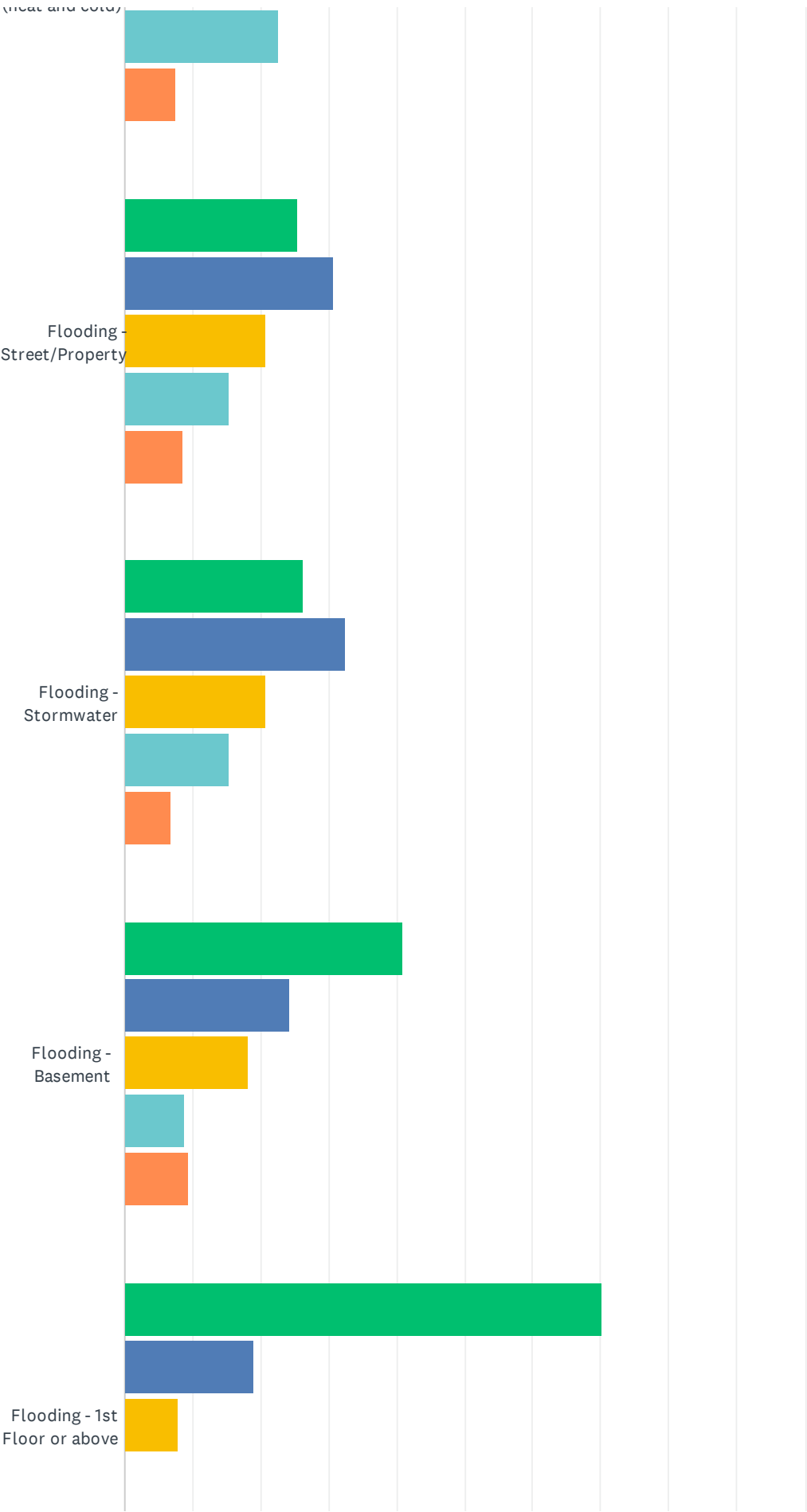
Q2 How concerned are you about the following hazards in Sussex County?  
Please check one for each hazard.

Answered: 134    Skipped: 2

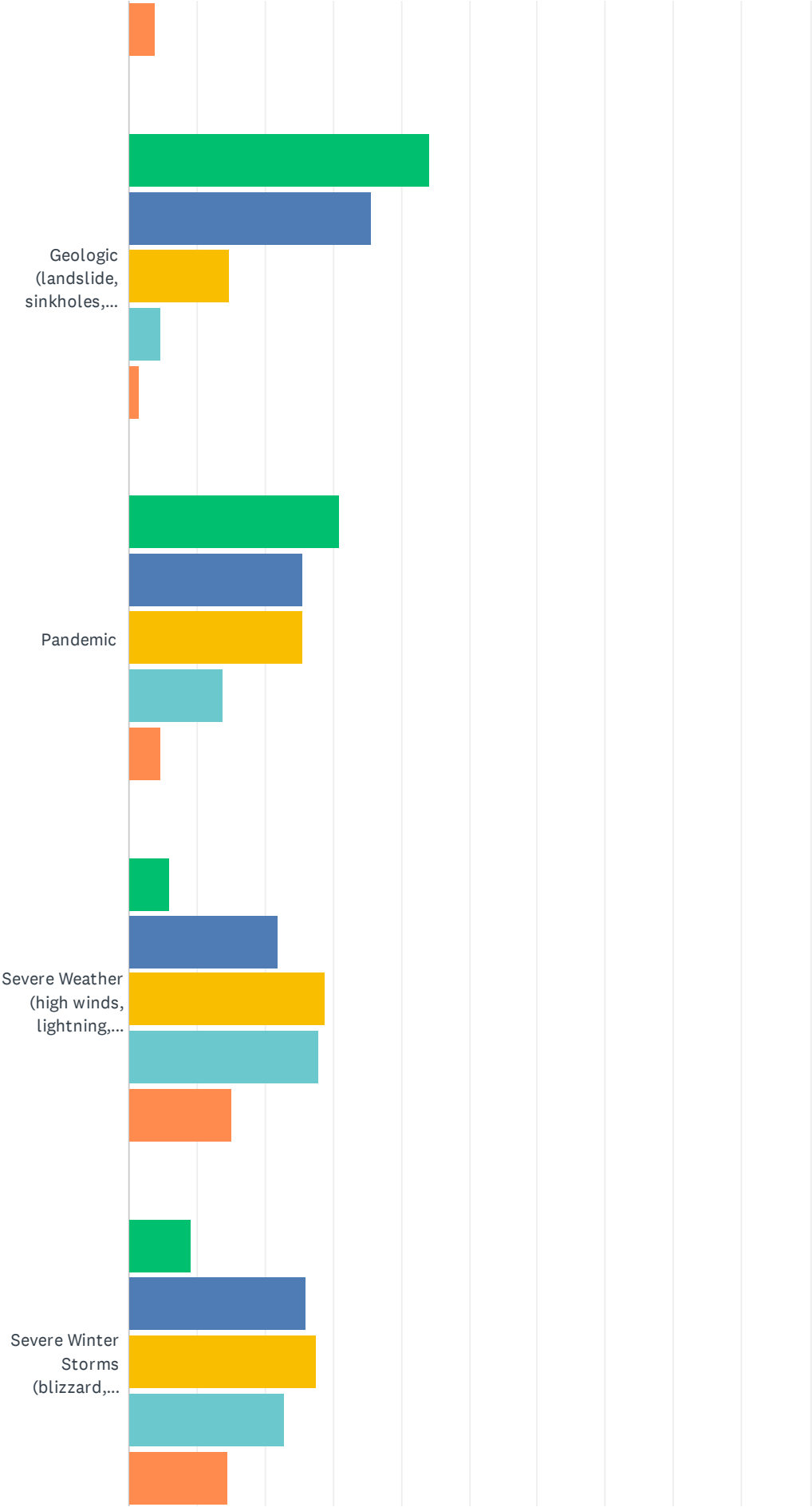




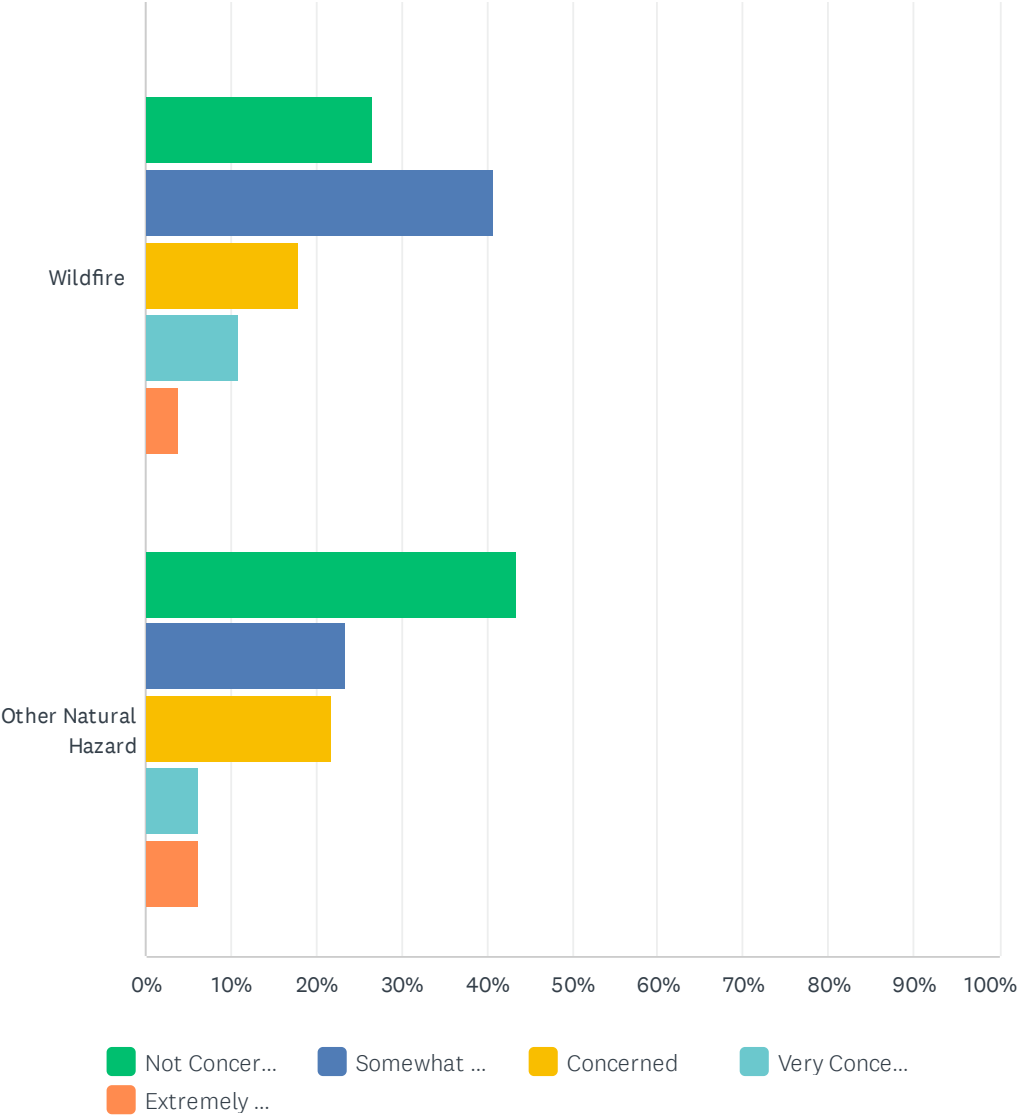
Sussex County Hazard Mitigation Plan Update - Public Survey



Sussex County Hazard Mitigation Plan Update - Public Survey



Sussex County Hazard Mitigation Plan Update - Public Survey



# Sussex County Hazard Mitigation Plan Update - Public Survey

	NOT CONCERNED	SOMEWHAT CONCERNED	CONCERNED	VERY CONCERNED	EXTREMELY CONCERNED	TOTAL RESPONDENTS
Climate Change (other than sea level rise)	33.58% 45	18.66% 25	15.67% 21	20.15% 27	13.43% 18	134
Dam/Levee Failure	56.69% 72	22.05% 28	13.39% 17	7.09% 9	0.79% 1	127
Drought	24.41% 31	38.58% 49	20.47% 26	14.96% 19	1.57% 2	127
Extreme Temperatures (heat and cold)	16.54% 22	30.08% 40	23.31% 31	22.56% 30	7.52% 10	133
Flooding - Street/Property	25.38% 33	30.77% 40	20.77% 27	15.38% 20	8.46% 11	130
Flooding - Stormwater	26.15% 34	32.31% 42	20.77% 27	15.38% 20	6.92% 9	130
Flooding - Basement	40.94% 52	24.41% 31	18.11% 23	8.66% 11	9.45% 12	127
Flooding - 1st Floor or above	70.08% 89	18.90% 24	7.87% 10	0.00% 0	3.94% 5	127
Geologic (landslide, sinkholes, subsidence)	44.19% 57	35.66% 46	14.73% 19	4.65% 6	1.55% 2	129
Pandemic	31.01% 40	25.58% 33	25.58% 33	13.95% 18	4.65% 6	129
Severe Weather (high winds, lightning, hail)	6.06% 8	21.97% 29	28.79% 38	28.03% 37	15.15% 20	132
Severe Winter Storms (blizzard, heavy snow, ice)	9.16% 12	25.95% 34	27.48% 36	22.90% 30	14.50% 19	131
Wildfire	26.56% 34	40.63% 52	17.97% 23	10.94% 14	3.91% 5	128
Other Natural Hazard	43.48% 50	23.48% 27	21.74% 25	6.09% 7	6.09% 7	115

#	OTHER (PLEASE SPECIFY)	DATE
1	residential brushfires	8/31/2024 11:37 AM
2	insects	8/28/2024 5:36 AM
3	Matthew 6:34	8/27/2024 11:03 PM
4	Ecosystem imbalance/change due to climate change	8/23/2024 11:59 AM
5	Groundhogs and mice and poison ivy	8/23/2024 10:39 AM
6	Lakes being overtaken with lily pads	8/22/2024 6:11 PM
7	humans (criminals or desperate people)	8/22/2024 4:55 PM
8	Wood burning	8/22/2024 3:54 PM
9	Earthquakes - somewhat concerned	8/22/2024 2:47 PM
10	tree damage, falling on homes,electric wires	8/22/2024 2:25 PM
11	Falling dead trees	8/22/2024 1:58 PM
12	Standing water in the canal attracting mosquitos	8/22/2024 1:49 PM

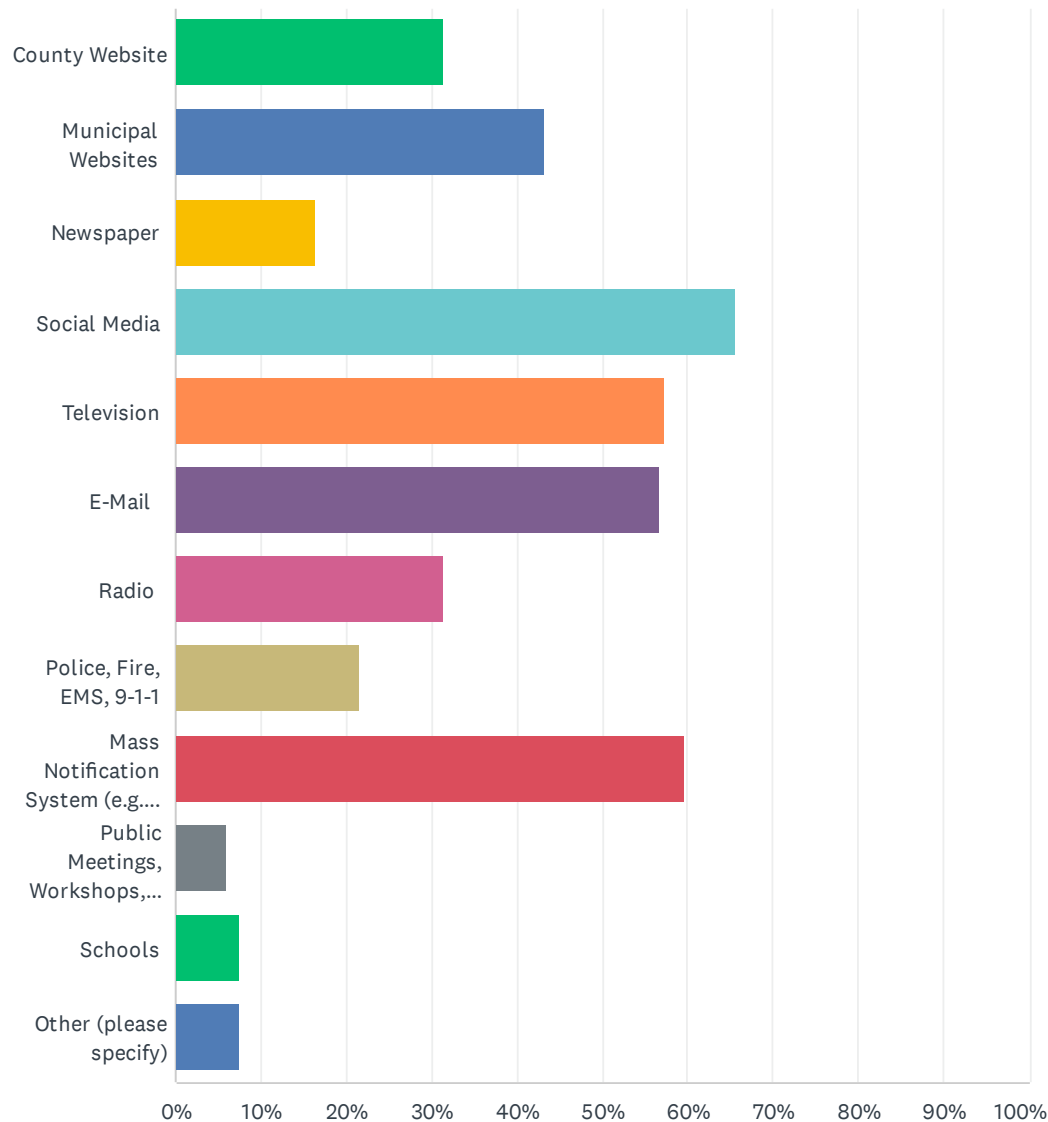


## Sussex County Hazard Mitigation Plan Update - Public Survey

13	Earthquake	8/22/2024 1:22 PM
14	Insect diseases	8/22/2024 12:53 PM
15	Dead trees falling	8/22/2024 12:51 PM
16	Get Steve Sugar out of OEM and put a real professional who knows their job and isn't a political appointee	8/22/2024 12:48 PM

Q3 How do you receive your information concerning a disaster? Check all that apply.

Answered: 134 Skipped: 2



# Sussex County Hazard Mitigation Plan Update - Public Survey

ANSWER CHOICES	RESPONSES	
County Website	31.34%	42
Municipal Websites	43.28%	58
Newspaper	16.42%	22
Social Media	65.67%	88
Television	57.46%	77
E-Mail	56.72%	76
Radio	31.34%	42
Police, Fire, EMS, 9-1-1	21.64%	29
Mass Notification System (e.g., Swift911, Register Ready)	59.70%	80
Public Meetings, Workshops, Public Awareness Events	5.97%	8
Schools	7.46%	10
Other (please specify)	7.46%	10
Total Respondents: 134		

#	OTHER (PLEASE SPECIFY)	DATE
1	local electronic message boards	8/31/2024 11:37 AM
2	text message	8/28/2024 5:36 AM
3	Internet searches of trustworthy sources (gov't agencies, etc.)	8/23/2024 11:59 AM
4	Observation	8/23/2024 10:39 AM
5	Nixle	8/22/2024 3:54 PM
6	Social media	8/22/2024 2:38 PM
7	Internet	8/22/2024 2:10 PM
8	nixle	8/22/2024 1:58 PM
9	Alexa warning	8/22/2024 1:20 PM
10	Weather apps	8/22/2024 12:58 PM

**Q4 In the past, has your home been damaged by a hazard event? For example, flood waters entering the first floor of your home or pipes freezing during periods of cold temperatures. If so, please describe the location, event, and damages/losses.**

Answered: 110 Skipped: 26

#	RESPONSES	DATE
1	no	9/11/2024 6:48 PM
2	No	9/11/2024 1:46 PM
3	No.	9/11/2024 12:48 PM
4	Strong winds and heavy snow have led to dying trees fall onto property. No damage to the home itself.	9/11/2024 12:41 PM
5	No	9/11/2024 11:39 AM
6	structural failure from snow loading, tree falling on house from Sandy	9/11/2024 11:33 AM
7	No	9/11/2024 11:04 AM
8	Yes, flooding	9/9/2024 1:33 AM
9	Animal, bear and deer, damaged fences, pools and structures	9/2/2024 3:05 PM
10	no	8/31/2024 11:37 AM
11	Our finished basement has flooded 3 times in the past 5 years. In the previous 30 years, it never flooded.	8/28/2024 8:59 PM
12	Tornado uprooting trees and damaging shed	8/28/2024 1:25 PM
13	Siding blown off our our home during a storm. Ceiling leaks from water being blown strongly at the house up and under the soffets/siding. Wantage Township	8/28/2024 9:46 AM
14	Yes, floodwaters compromised a retaining wall and flooded our basement. Insurance did not cover the costs.	8/28/2024 7:58 AM
15	basement flood during hurricanes	8/28/2024 5:36 AM
16	No	8/27/2024 11:18 PM
17	No	8/27/2024 11:03 PM
18	None	8/27/2024 9:12 PM
19	Fortunately no.	8/27/2024 7:02 PM
20	A tree fell on our house during a storm in Montague NJ. Montague has flooding from the Delaware and some sustain real damage	8/27/2024 5:55 PM
21	No	8/27/2024 5:40 PM
22	Home / property damage by trees falling in heavy winds.	8/27/2024 5:12 PM
23	Flood/rain water. Tree down on house.	8/26/2024 2:09 PM
24	No	8/26/2024 12:43 PM
25	No	8/24/2024 11:25 PM
26	Trees down from extreme weather tearing wires off the house and destroying patio furniture	8/24/2024 6:53 AM



## Sussex County Hazard Mitigation Plan Update - Public Survey

27	Pipes froze and broke in the crawl space	8/23/2024 2:37 PM
28	No	8/23/2024 1:41 PM
29	A stream running thru my property to a country drain consistently overflows and floods my yard, front porch, house foundation whenever we have big storms or snow melts.	8/23/2024 12:14 PM
30	None	8/23/2024 11:59 AM
31	No	8/23/2024 11:17 AM
32	Yes numerous times happens everywhere, in every state, going back couple of centuries or all time, it's how life is, we should plan ahead	8/23/2024 10:39 AM
33	First floor flooding from clogged street stormdrains and runoff from street flooding	8/23/2024 10:31 AM
34	No	8/23/2024 10:07 AM
35	Pipes freezing at home due to cold temperatures, loss of \$500. Tree falling over on property due to high winds, loss of \$1,500	8/23/2024 9:04 AM
36	No	8/23/2024 8:30 AM
37	Two floods in my basement since 2019. Lost books, tools I, craft items. A refrigerator. A dehumidifier.	8/23/2024 8:24 AM
38	Storm damage, tree branches/limbs down, once hitting a power line and causing fire in the street. Numerous times storm causing power outage, usually from tree parts hitting lines	8/23/2024 7:50 AM
39	Frozen Pipes and Tree Concerns	8/23/2024 7:20 AM
40	Water coming down driveway and coming in thru garage	8/23/2024 6:52 AM
41	no	8/23/2024 12:02 AM
42	No	8/22/2024 9:38 PM
43	No	8/22/2024 9:28 PM
44	We have had issues with flooding in our basement	8/22/2024 7:50 PM
45	No	8/22/2024 6:37 PM
46	Basement flooding due to power failure.	8/22/2024 5:39 PM
47	No	8/22/2024 4:50 PM
48	Nope. This must be a Democrat asking these questions. Trump 2024. Green new scam is bs	8/22/2024 4:30 PM
49	We have had floods twice. Once was during a hurricane and the other event was from a blizzard.	8/22/2024 4:04 PM
50	No	8/22/2024 3:57 PM
51	High wind resulting in uprooted trees	8/22/2024 3:54 PM
52	N/A	8/22/2024 3:52 PM
53	Basement. No losses. Dirt floor.	8/22/2024 3:37 PM
54	no	8/22/2024 3:30 PM
55	No	8/22/2024 3:07 PM
56	Lightening strike in yard. Wiped out some appliances, electronics, lights	8/22/2024 3:06 PM
57	No	8/22/2024 2:59 PM
58	Hurricane winds causing tree fall - Broken backyard fence.	8/22/2024 2:47 PM
59	Tree/limbs falling. Cost of removal \$2,000. 2023, but it took more than 9 months to find a compnay who could remove it due to large size, location, and demand from all the rest of the county tree damage at that time.	8/22/2024 2:44 PM
60	My basement floods with every heavy rain storm. Mold has become a problem. We often have	8/22/2024 2:38 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

to use space heaters in our basement/garage to keep pipes from freezing. My house is in Hamburg

61	No	8/22/2024 2:31 PM
62	N/A	8/22/2024 2:30 PM
63	Tree falling due to tornado or high wind.	8/22/2024 2:26 PM
64	house damage from fallings limbs	8/22/2024 2:25 PM
65	No	8/22/2024 2:14 PM
66	Lightning strike hit tree with lighting. The flood lights exploded. The power supply to that lightning caused damage to our TV, VCR player, DVD player, Wii, which were all on the ground floor. (We had to replace all electronics on ground floor.) Also had smoke come out of one of our light switches (luckily fire dept found no fire in wall). Also knocked out of well pump, but did not damage it.	8/22/2024 2:04 PM
67	Pipes freezing	8/22/2024 2:03 PM
68	NA	8/22/2024 1:58 PM
69	The earthquakes loosened the mortar holding our rock foundation together.	8/22/2024 1:49 PM
70	No	8/22/2024 1:43 PM
71	No	8/22/2024 1:43 PM
72	No	8/22/2024 1:33 PM
73	none	8/22/2024 1:23 PM
74	Hurricane Sandy tree fell on my house	8/22/2024 1:22 PM
75	downed branch's and tree limbs due to high winds, mostly dead ash trees	8/22/2024 1:22 PM
76	no	8/22/2024 1:20 PM
77	No damage	8/22/2024 1:09 PM
78	Yes. Tornado broke fence, tropical storm had tree break putting a hole in our roof, a healthy tree fell during hard wind storm.	8/22/2024 1:07 PM
79	No	8/22/2024 1:07 PM
80	no	8/22/2024 1:05 PM
81	None	8/22/2024 1:05 PM
82	Yes, during heavy rain storms the street creates a waterfall and all the water dumps onto my property to my basement. Also, we have had trees drop branches on our roof and roof leaks.	8/22/2024 1:00 PM
83	No	8/22/2024 12:58 PM
84	Some water in the basement	8/22/2024 12:58 PM
85	No	8/22/2024 12:57 PM
86	yes, a couple days ago a tree fell during a storm and broke a permanent awning on my house, also have had trees fall onto boat trailers and other parts of my property many times over the years	8/22/2024 12:57 PM
87	No	8/22/2024 12:56 PM
88	Pipes freezing. Garage. Caught before caused damage. Used propane heater to warm garage. Since have installed new garage door.	8/22/2024 12:54 PM
89	No	8/22/2024 12:53 PM
90	no	8/22/2024 12:51 PM
91	No	8/22/2024 12:51 PM

# Sussex County Hazard Mitigation Plan Update - Public Survey

92	Pipes freezing, basement flooding	8/22/2024 12:50 PM
93	NA	8/22/2024 12:49 PM
94	No	8/22/2024 12:48 PM
95	Before we fixed our property grade and drainage our bottom floor would flood. It cost us about 50k to waterproof old cinderblocks, install sump pum9s and drainage.	8/22/2024 12:44 PM
96	hurricane Iren	8/22/2024 12:43 PM
97	Flooding in basement during superstorm sandy.	8/22/2024 12:43 PM
98	No	8/22/2024 2:39 AM
99	Power loss and land loss due to flooding and heavy rains.	8/22/2024 1:50 AM
100	Pipes froze in the room above our garage	8/22/2024 1:16 AM
101	Basement flooding	8/21/2024 3:54 PM
102	No	8/21/2024 2:05 PM
103	No	8/21/2024 12:37 PM
104	No	8/21/2024 11:55 AM
105	NA	8/21/2024 11:06 AM
106	No	8/21/2024 9:55 AM
107	No	8/20/2024 2:47 PM
108	No	8/20/2024 2:43 PM
109	home pipes freezing in Sparta	8/20/2024 12:53 PM
110	No	8/20/2024 12:24 PM

## Q5 If you answered 'yes' above, did you report the damages to your local police or fire departments or to an emergency management agency?

Answered: 79   Skipped: 57

#	RESPONSES	DATE
1	No	9/11/2024 12:41 PM
2	No	9/11/2024 11:39 AM
3	no	9/11/2024 11:33 AM
4	Yes	9/9/2024 1:33 AM
5	Nothing they could do, repairs were made and paid for out-of-pocket	9/2/2024 3:05 PM
6	n/a	8/31/2024 11:37 AM
7	no	8/28/2024 8:59 PM
8	No	8/28/2024 1:25 PM
9	No	8/28/2024 9:46 AM
10	No, I was not aware that I should. Only contacted our insurance company and the damage was not covered.	8/28/2024 7:58 AM
11	no	8/28/2024 5:36 AM
12	N/A	8/27/2024 11:03 PM
13	No	8/27/2024 9:12 PM
14	DA	8/27/2024 7:02 PM
15	Yes	8/27/2024 5:55 PM
16	No	8/27/2024 5:12 PM
17	No	8/26/2024 2:09 PM
18	No	8/26/2024 12:43 PM
19	No	8/25/2024 8:12 PM
20	No	8/24/2024 6:53 AM
21	No	8/23/2024 2:37 PM
22	I told the municipality and local police.	8/23/2024 12:14 PM
23	No	8/23/2024 11:17 AM
24	Not usually, just get through it as best we can	8/23/2024 10:39 AM
25	Informed dpw and township manager	8/23/2024 10:31 AM
26	N/A	8/23/2024 10:07 AM
27	No	8/23/2024 9:04 AM
28	No	8/23/2024 8:24 AM
29	Yes for the tree striking power line causing fire. No for other occurrences	8/23/2024 7:50 AM
30	No, nothing that bad	8/23/2024 7:20 AM
31	No	8/23/2024 6:52 AM



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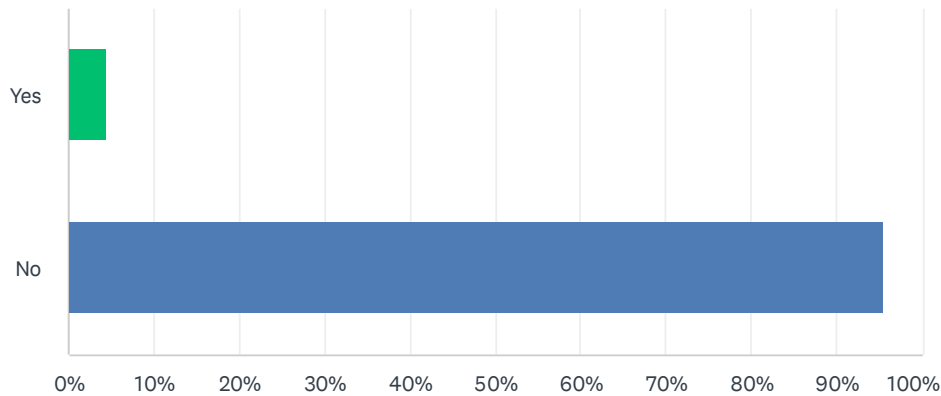
32	n/a	8/22/2024 9:38 PM
33	N/a	8/22/2024 9:28 PM
34	No	8/22/2024 7:50 PM
35	No	8/22/2024 5:39 PM
36	No	8/22/2024 4:30 PM
37	Yes	8/22/2024 4:04 PM
38	No	8/22/2024 3:54 PM
39	N/A	8/22/2024 3:52 PM
40	no	8/22/2024 3:30 PM
41	No	8/22/2024 3:06 PM
42	No	8/22/2024 2:47 PM
43	No	8/22/2024 2:44 PM
44	No	8/22/2024 2:38 PM
45	N/a	8/22/2024 2:31 PM
46	N/A	8/22/2024 2:30 PM
47	Yes we did.	8/22/2024 2:26 PM
48	no	8/22/2024 2:25 PM
49	Fire department was called at the time since we saw and smelled some smoke. Appears there must have been a flash, but no fire.	8/22/2024 2:04 PM
50	No	8/22/2024 2:03 PM
51	NA	8/22/2024 1:58 PM
52	No	8/22/2024 1:49 PM
53	Na	8/22/2024 1:43 PM
54	No	8/22/2024 1:43 PM
55	none	8/22/2024 1:23 PM
56	Yes	8/22/2024 1:22 PM
57	no, most damage was contained to our property	8/22/2024 1:22 PM
58	n/a	8/22/2024 1:20 PM
59	NA	8/22/2024 1:09 PM
60	Yes	8/22/2024 1:07 PM
61	Na	8/22/2024 1:07 PM
62	--	8/22/2024 1:05 PM
63	No, because there's nothing that they can do about it	8/22/2024 1:00 PM
64	No	8/22/2024 12:58 PM
65	Not effected	8/22/2024 12:57 PM
66	no	8/22/2024 12:57 PM
67	No	8/22/2024 12:54 PM
68	No	8/22/2024 12:50 PM
69	NA	8/22/2024 12:49 PM

# Sussex County Hazard Mitigation Plan Update - Public Survey

70	No	8/22/2024 12:44 PM
71	yes	8/22/2024 12:43 PM
72	Yes	8/22/2024 12:43 PM
73	Yes.	8/22/2024 1:50 AM
74	No	8/22/2024 1:16 AM
75	No	8/21/2024 3:54 PM
76	N/A	8/21/2024 11:55 AM
77	NA	8/21/2024 11:06 AM
78	no	8/20/2024 12:53 PM
79	N/A	8/20/2024 12:24 PM

Q6 To the best of your knowledge, is your property located in a designated floodplain? If you do not know, click here to find out.

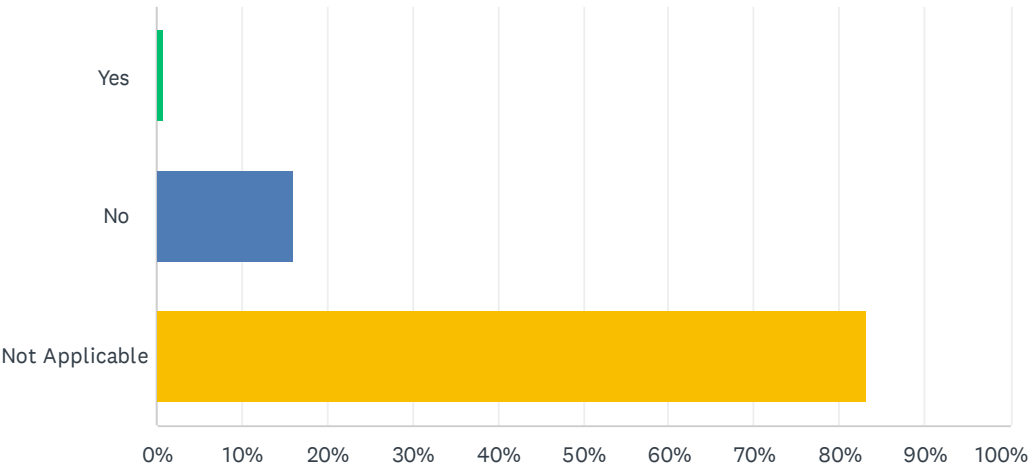
Answered: 134    Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	4.48%	6
No	95.52%	128
TOTAL		134

Q7 If your property is in the floodplain, do you have flood insurance?

Answered: 131    Skipped: 5

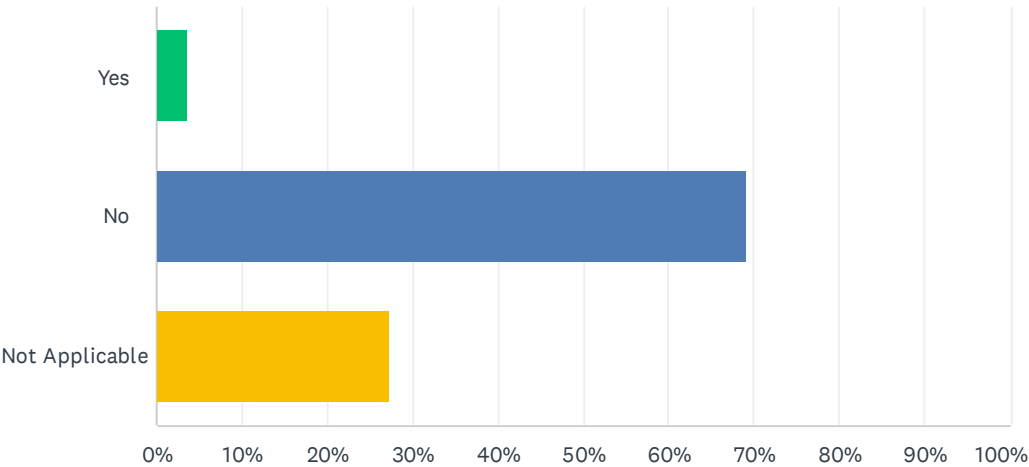


ANSWER CHOICES	RESPONSES	
Yes	0.76%	1
No	16.03%	21
Not Applicable	83.21%	109
TOTAL		131



Q8 If your property is located outside of the floodplain, do you have flood insurance?

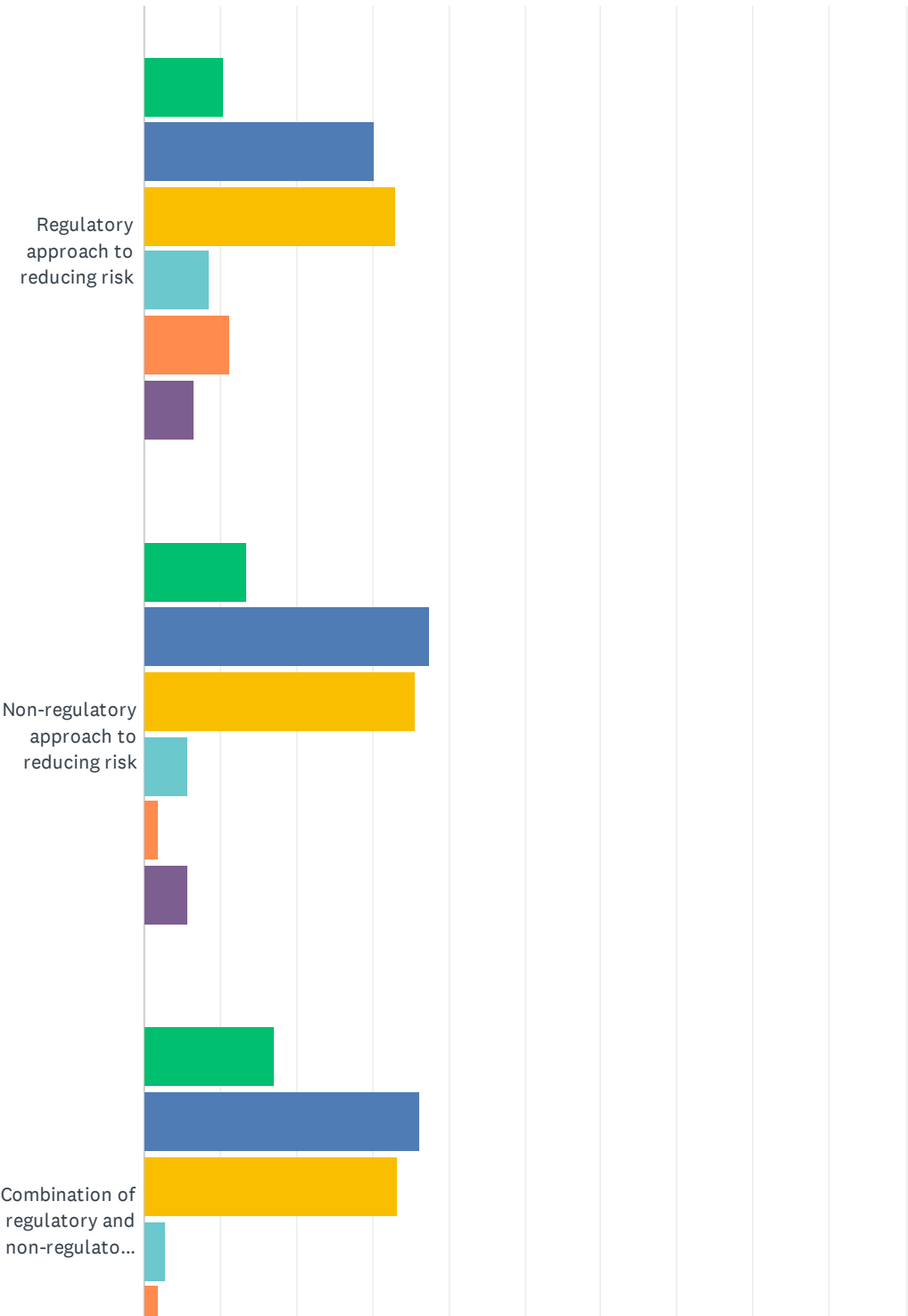
Answered: 136 Skipped: 0

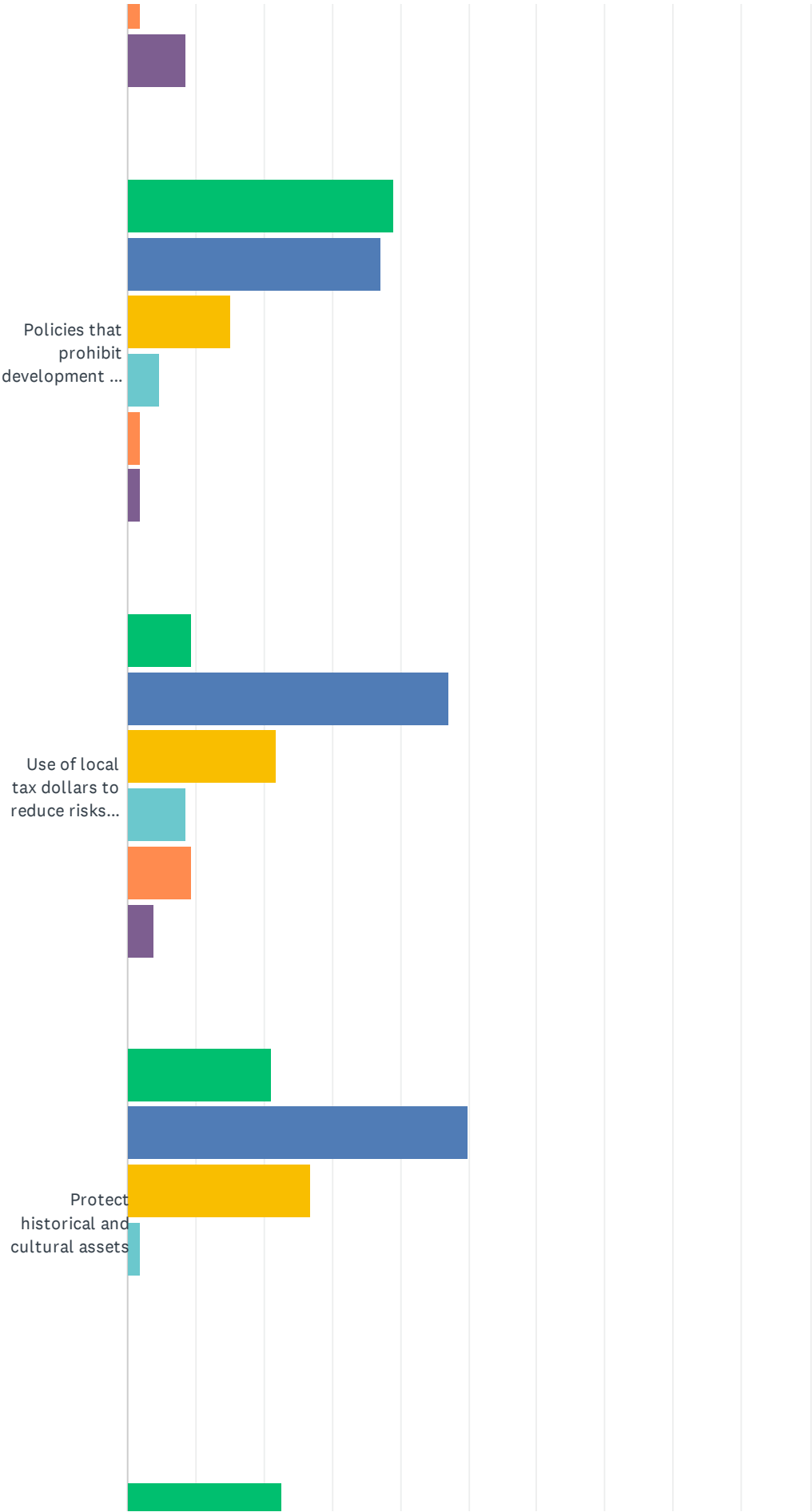


ANSWER CHOICES	RESPONSES	
Yes	3.68%	5
No	69.12%	94
Not Applicable	27.21%	37
TOTAL		136

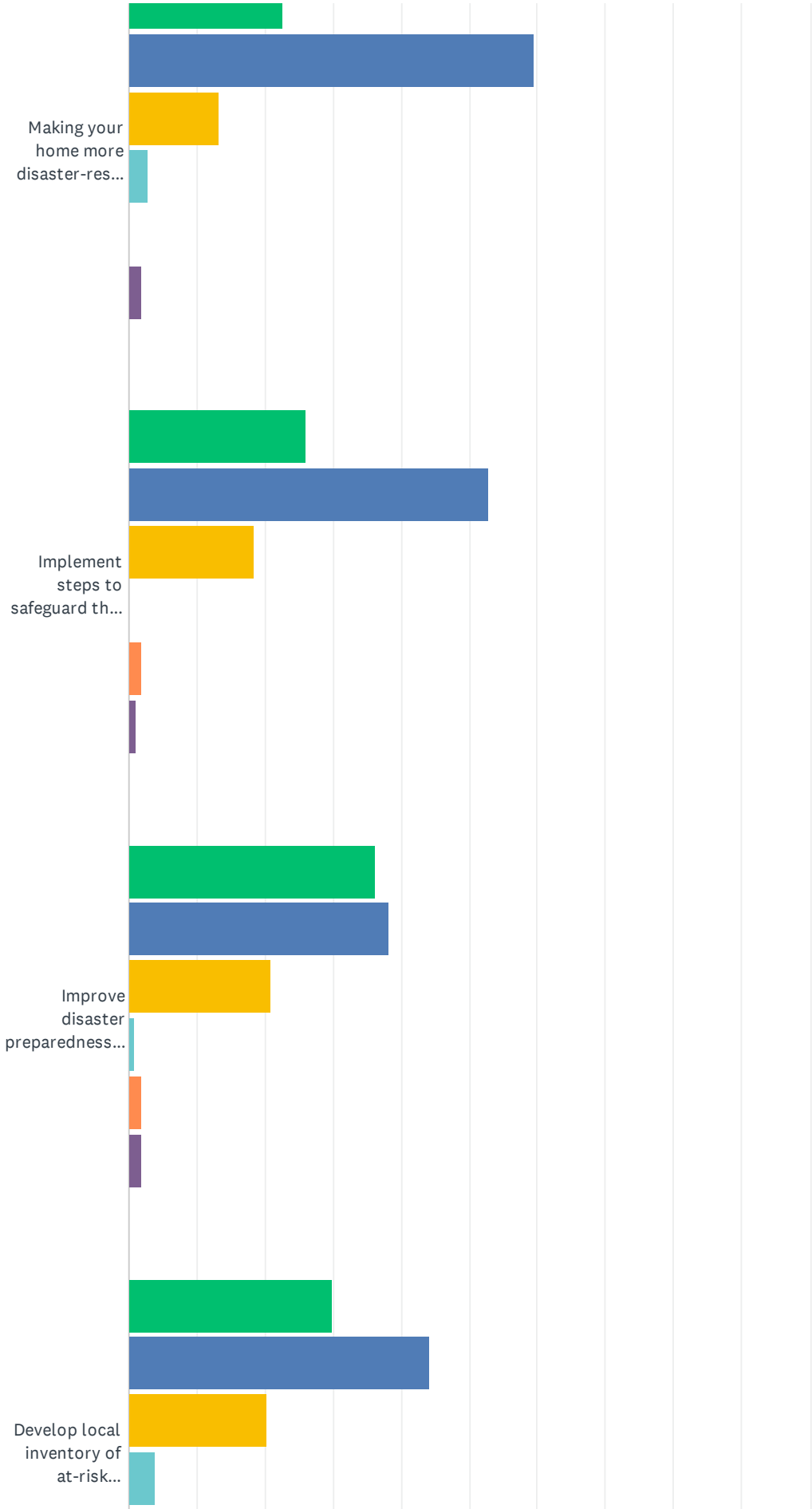
Q9 A number of activities can reduce your community's risk from natural hazards. These activities can be both regulatory and non-regulatory. Please check the box that best represents your opinion on the following strategies to reduce the risk and loss associated with natural hazards in Sussex County.

Answered: 107    Skipped: 29



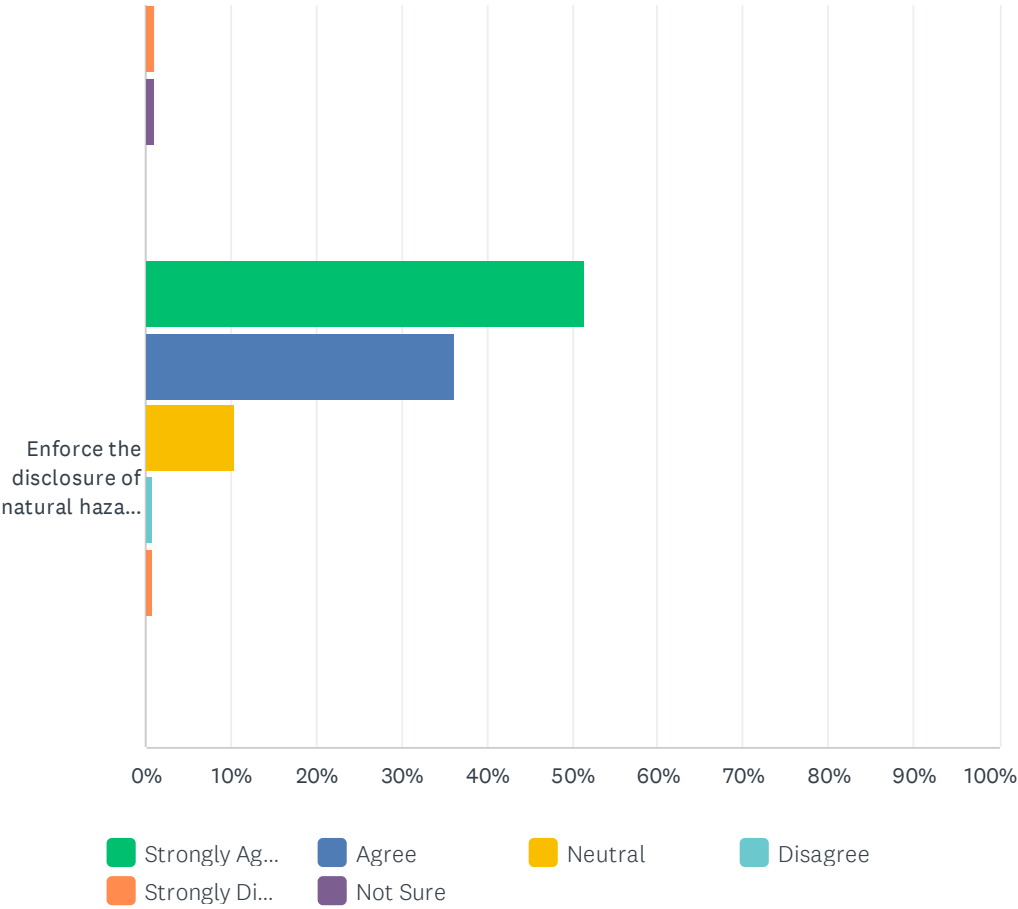


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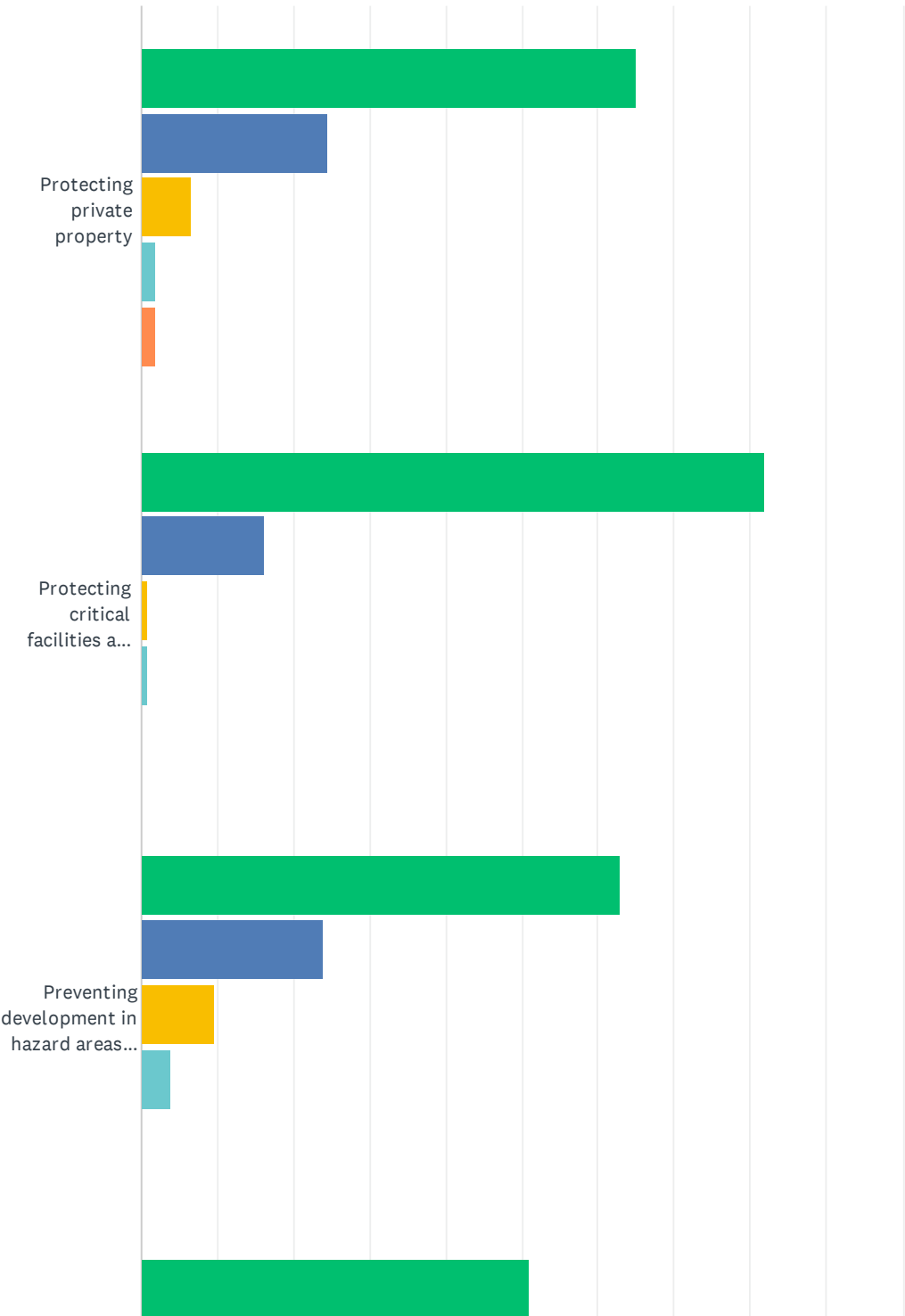
# Sussex County Hazard Mitigation Plan Update - Public Survey

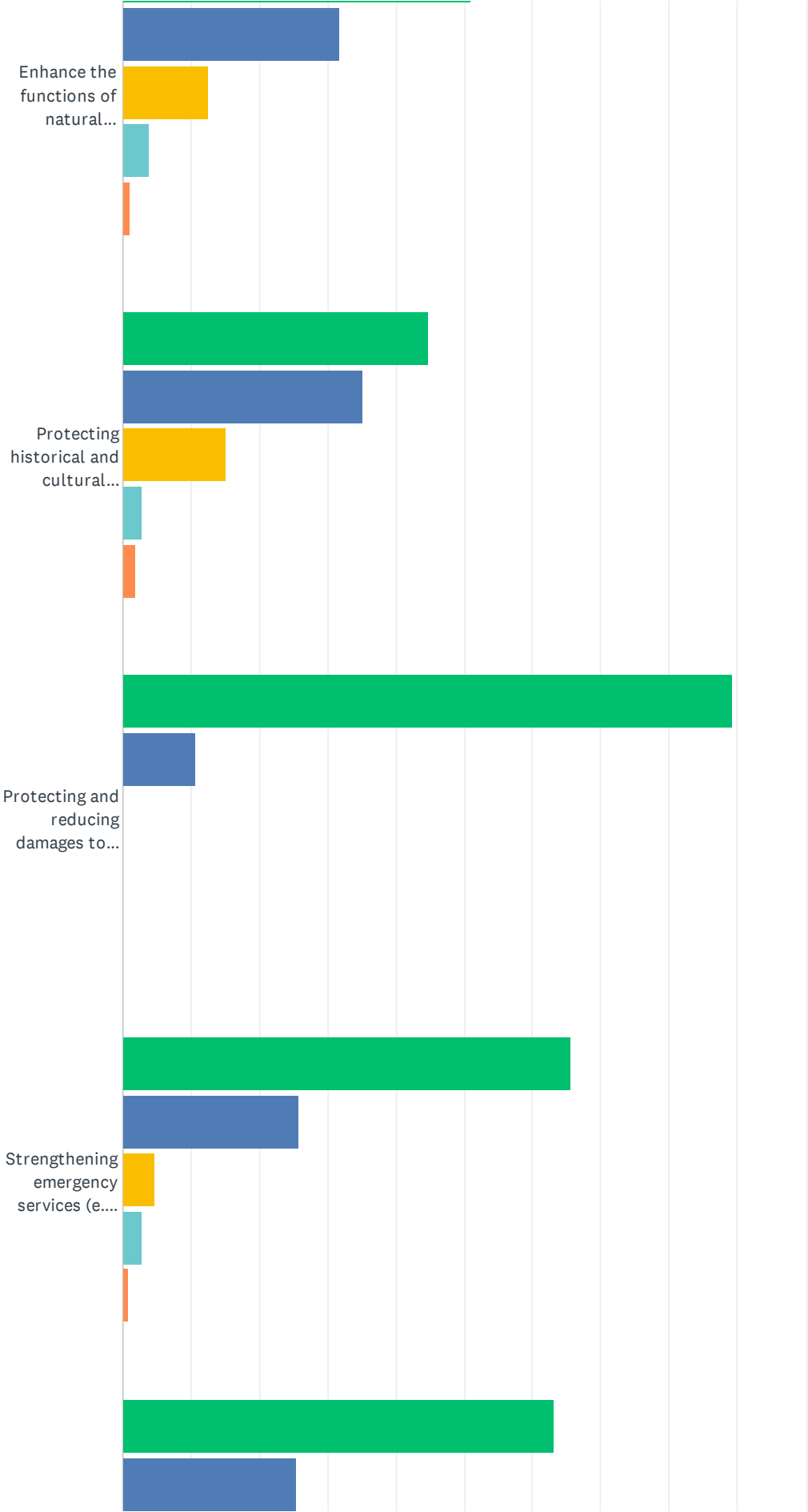
	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	NOT SURE	TOTAL
Regulatory approach to reducing risk	10.38% 11	30.19% 32	33.02% 35	8.49% 9	11.32% 12	6.60% 7	106
Non-regulatory approach to reducing risk	13.46% 14	37.50% 39	35.58% 37	5.77% 6	1.92% 2	5.77% 6	104
Combination of regulatory and non-regulatory approaches to reducing risk	17.14% 18	36.19% 38	33.33% 35	2.86% 3	1.90% 2	8.57% 9	105
Policies that prohibit development in areas subject to natural hazards	39.05% 41	37.14% 39	15.24% 16	4.76% 5	1.90% 2	1.90% 2	105
Use of local tax dollars to reduce risks and losses from natural hazards	9.43% 10	47.17% 50	21.70% 23	8.49% 9	9.43% 10	3.77% 4	106
Protect historical and cultural assets	21.15% 22	50.00% 52	26.92% 28	1.92% 2	0.00% 0	0.00% 0	104
Making your home more disaster-resilient	22.64% 24	59.43% 63	13.21% 14	2.83% 3	0.00% 0	1.89% 2	106
Implement steps to safeguard the local economy following a disaster	25.96% 27	52.88% 55	18.27% 19	0.00% 0	1.92% 2	0.96% 1	104
Improve disaster preparedness of local schools	36.19% 38	38.10% 40	20.95% 22	0.95% 1	1.90% 2	1.90% 2	105
Develop local inventory of at-risk buildings and infrastructure	29.81% 31	44.23% 46	20.19% 21	3.85% 4	0.96% 1	0.96% 1	104
Enforce the disclosure of natural hazard risks during real estate transactions	51.43% 54	36.19% 38	10.48% 11	0.95% 1	0.95% 1	0.00% 0	105

#	OTHER (PLEASE SPECIFY)	DATE
1	improve municipal readiness and involvement	8/31/2024 12:34 PM
2	I am just outside the flood zone and my mortgage co DEMANDS that I have flood insurance, which I can never collect on.	8/27/2024 11:18 PM
3	Wood burning	8/22/2024 3:59 PM

Q10 Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help us determine the priorities of our residents regarding planning for natural hazards in Sussex County. Please tell us how important each one is to you.

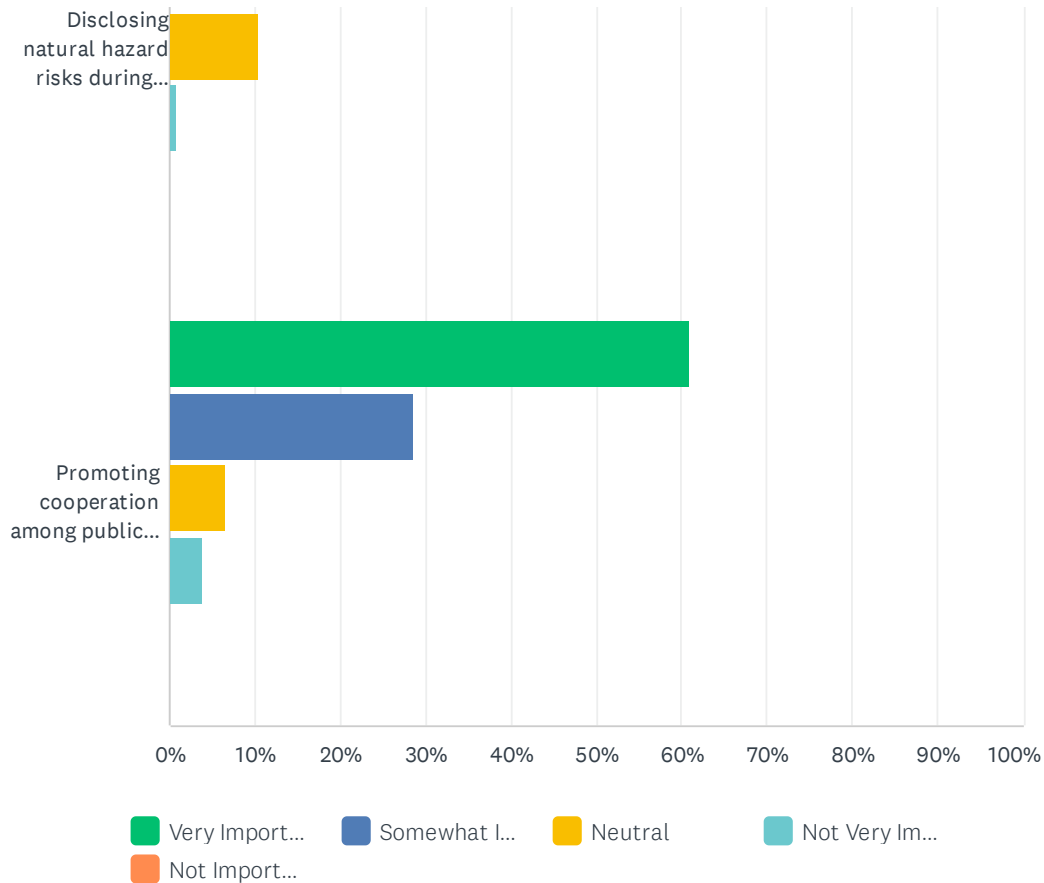
Answered: 106    Skipped: 30







# Sussex County Hazard Mitigation Plan Update - Public Survey



	VERY IMPORTANT	SOMEWHAT IMPORTANT	NEUTRAL	NOT VERY IMPORTANT	NOT IMPORTANT	TOTAL
Protecting private property	65.09% 69	24.53% 26	6.60% 7	1.89% 2	1.89% 2	106
Protecting critical facilities and community lifelines	81.90% 86	16.19% 17	0.95% 1	0.95% 1	0.00% 0	105
Preventing development in hazard areas (e.g., restrict building in the floodplain)	62.86% 66	23.81% 25	9.52% 10	3.81% 4	0.00% 0	105
Enhance the functions of natural features (e.g., streams, wetlands)	50.96% 53	31.73% 33	12.50% 13	3.85% 4	0.96% 1	104
Protecting historical and cultural landmarks	44.76% 47	35.24% 37	15.24% 16	2.86% 3	1.90% 2	105
Protecting and reducing damages to utilities	89.42% 93	10.58% 11	0.00% 0	0.00% 0	0.00% 0	104
Strengthening emergency services (e.g., police, fire, EMS)	65.71% 69	25.71% 27	4.76% 5	2.86% 3	0.95% 1	105
Disclosing natural hazard risks during real estate transactions	63.21% 67	25.47% 27	10.38% 11	0.94% 1	0.00% 0	106
Promoting cooperation among public agencies, residents, non-profit organizations, and local businesses	60.95% 64	28.57% 30	6.67% 7	3.81% 4	0.00% 0	105

#	OTHER (PLEASE SPECIFY)	DATE
1	more support for seniors and disabled	8/31/2024 12:34 PM

Sussex County Hazard Mitigation Plan Update - Public Survey

2	Trees trimmed, homes being built now have to protect against heavy rains. Every home at the bottom of a hill should have drainage system outside and inside. Future rains ate going to get worse. Trees need to be cut back away from poles and homes and roads.	8/23/2024 8:40 AM
3	Food pantries should have oversight to coordinate community needs	8/22/2024 1:22 PM

**Q11 Please identify any specific vulnerabilities that you are aware of in your city/township/village (e.g. flood-prone areas or specific properties, critical facilities that lack backup power, etc.). Please list street names and other specific identifiers if possible.**

Answered: 63    Skipped: 73

#	RESPONSES	DATE
1	utility line on poles instead of buried underground throughout Sparta. high school is a shelter but does not have a generator	9/11/2024 6:56 PM
2	Always seem to lose power up west mountain and all of the developments off of west mountain.	9/11/2024 12:53 PM
3	Limecrest Road in Andover Twp. that runs by Lake Iliff, Lake Aeroflex, and Kittantiny Valley State Park experiences roadway flooding during and after heavy rain events. This is most likely due to poor drainage; however, it leads to road closures and impacts a major roadway that connects to Route 206. Many of the dead end streets off of Skytop Road in Andover Twp. experience standing water after periods of heavy rain. Due to lack of storm drains on these streets, it is a common occurrence. This has damaged the roads and asphalt breaks off the road.	9/11/2024 12:52 PM
4	Seems like every year we lose power because of downed trees. Maybe more frequent pruning or inspections and removal of rotted trees before they become a problem	9/11/2024 11:44 AM
5	Power grid is fragile, small storm results in outages. This has gotten worse over time. Main street in Sparta has flooded in the past. There are many lakes and streams with dams in sussex county that should be more regularly inspected and maintained - private dams that could impact other areas should have some mechanism for protecting others in case of failure.	9/11/2024 11:40 AM
6	Tree trimming along roadways ineffective. Overhead electric, cable and telephone lines are frequently destroyed during severe weather events.	9/2/2024 3:12 PM
7	Veolia Water Company Brookwood Rd., Mountain Ave, Trout Brook Rd. Byram Twp.no backup power generators no backup power on traffic lights and gas stations on Rt. 206 Byram, JCP&L emergency services for loss of power	8/31/2024 12:34 PM
8	104 Lackawanna dr stormwater doesn't drain	8/29/2024 9:09 PM
9	The power goes out with every big storm. More trees and limbs need to be cut back. We showed the cutters trees along our streetline that were dead and resting on lines and they would not cut them!	8/28/2024 9:04 PM
10	Heavily wooded areas everywhere which always presents problems with winds and trees falling over. We need to better prune around utility structures so it doesn't occur everytime. We are very reactive.	8/28/2024 1:29 PM
11	Sandyston Township, specifically Cemetery Road, was without power for days, and weeks at a time during storms that weren't even hurricanes or blizzards	8/27/2024 11:18 PM
12	Route 23 South before the new ShopRite in Sussex floods during prolonged or heavy rain events. Also, Highland Ave in Sussex floods, water comes down from the mountainous property above. Highland Ave isn't paved and has no sewers. The road is blocked off on one end so there's only one way in and out (narrow road) which is concerning if landslide or fire were to happen.	8/27/2024 9:59 PM
13	All power north of Branchville is on a single line, any outage effects the entire area, better infrastructure, response to disasters etc not only effect the residents but the thousands of people who travel 206, 23 etc. We are often forgotten. Sussex county is the gate way from Orange County NY and pike county PA, all of those commuters travel these roads	8/27/2024 6:02 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

14	None.	8/26/2024 2:11 PM
15	Cell phone towers lack backup power when the electricity is out. Happens all the time here. No way to communicate or get information when that happens. I'm 70 years old and by myself. This is a big problem.	8/24/2024 11:32 PM
16	None	8/23/2024 1:47 PM
17	Stream flooding along Forest Lake Drive	8/23/2024 12:17 PM
18	608 Stanhope Sparta road. Cars , trucks, motorcycles and use of Jake brake while flying by our house at high speeds. Can't cross the road for mail without taking your life in your hands. Very dangerous and very loud. Need speed bumps.	8/23/2024 11:24 AM
19	Limitations of access due to one way in/out of neighborhood (Cranberry Lake, Byram).	8/23/2024 9:12 AM
20	All over Byram. Trees should be cut back away from roads, poles and homes. Homes of the future should have generators and water protected land and interior from heavy rains. Keep homes away from rivers, lakes and streams.	8/23/2024 8:40 AM
21	Not sure	8/23/2024 8:32 AM
22	Know of none	8/22/2024 9:44 PM
23	West.Brookwood, Byram was without power for 14 days during hurricane Sandy	8/22/2024 6:44 PM
24	Many lakes in Byram-hard to specify!	8/22/2024 6:25 PM
25	Flooding - River Road	8/22/2024 5:22 PM
26	Cell phone towers that are obsolete - Green Twp.	8/22/2024 4:55 PM
27	None around me	8/22/2024 4:34 PM
28	Stanhope has mixed electrical access (partially underground, partially poles) this has prompted issues where trees, snow and wind has taken out much of the area power sometimes for days.	8/22/2024 4:08 PM
29	We lose power frequently during severe storms in the Lake lackawanna area.	8/22/2024 4:04 PM
30	Waterloo road/love lane. Multiple municipalities debate over which parts of the road belong to them. When trees go down the road (which is a main road for Hackettstown hosp) typically remains closed for days. That should be unacceptable.	8/22/2024 3:42 PM
31	Many of Sussex County's housing developments are integrated with old tree growth forests. This makes the houses and power grid very susceptible to wind caused tree fall damage. Just a few example developments out of the many are - all of Lake Hopatcong, Forest Lakes, Brookwood East and West, Cranbury Lake, Lake Lackawanna, Lake Mohawk and Lake Lenape. When a hurricane or even strong thunderstorms come through, many of these housing developments lose power due to multiple trees falling on power lines, roads, houses and cars. There are people who have lost their lives from large trees falling on their house. It often takes days or even weeks to clear the damage and repair the power.	8/22/2024 3:38 PM
32	Clearing dead trees near power lines. Roseville Road	8/22/2024 3:00 PM
33	N/A	8/22/2024 2:42 PM
34	Not sure	8/22/2024 2:22 PM
35	South Shore Rd, Byram Twp. One no outlet road, one line of utilities that generally follows the road; any breakage cuts everyone past the break off.	8/22/2024 2:14 PM
36	Never ending power outages in Byram due to down trees, clean up our power lines	8/22/2024 1:53 PM
37	Powerlines are always coming down	8/22/2024 1:36 PM
38	Tamarack & Colby Drive - Byram Township Loss of electricity is common. Lack of cell service w/ Verizon, have 1 bar in most of my house. Optimum goes out w/frequent power outages so no internet.	8/22/2024 1:29 PM
39	dead ash trees near utility lines on road sides	8/22/2024 1:29 PM
40	There many large trees near Charles place, Charles street Canfield in Hopatcong (Stanhope	8/22/2024 1:25 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

mailing) homeowners can not afford to have trees cut down, some companies won't cut down it to close to wires. Storm drains on Charles street are always clogged, flooding the road.

41	Tamarack Rd in Byram is CONSTANTLY closed every time a minor breeze comes in. It's 3rd world level infrastructure on that road, why can't that be prioritized?	8/22/2024 1:24 PM
42	power goes out like every storm now . I did not do this like 15 years ago. Now everyone has a generator in the cranberry lake area	8/22/2024 1:23 PM
43	Byram Township has power outages frequently. The smallest bit of wind, and the power goes out. This can hinder the ability of sump pumps to work during heavy rain storms.	8/22/2024 1:22 PM
44	Out dated municipal complex in Byram	8/22/2024 1:22 PM
45	Traffic lights along route 206	8/22/2024 1:15 PM
46	My partner is on oxygen 24/7. Dead trees constantly falling power lines frequently losing power. All around Cranberry Lake area. Inability to get in touch with the power company. In on case the electric company, county, township and state have been notified. No one wants to take the responsibility with a dead tree near the road on public property.	8/22/2024 1:15 PM
47	I have lived in Forest Lakes since 1999 and have an increasing issue with water coming onto my property from the street, backing up in my driveway and then flowing back onto the street. The electric grid in our community is also aged and needs updating.	8/22/2024 1:11 PM
48	--	8/22/2024 1:10 PM
49	High to ga trail the street angle dumps rain water onto our property and our basement floods Loose power frequently during storms	8/22/2024 1:05 PM
50	Lake Lackawanna dam	8/22/2024 1:05 PM
51	None	8/22/2024 1:02 PM
52	I live on Cranberry Lake in Byram, it seems like every time we have even a slight storm, we lose power. I think JCPL needs to do a total revamp of our system but we also need tress to be cut down. I have a dead tree in my yard that if it falls, it will take out powerlines; but I can afford to have it cut down myself.	8/22/2024 1:02 PM
53	Dead Ash trees falling on power lines & losing power	8/22/2024 12:59 PM
54	Communal well doesn't have backup power in East brookwood in Byram. Local schools also do not have generators	8/22/2024 12:53 PM
55	For lake mohawk.Lake levels during drought. Water quality. Old septic tanks leaking.	8/22/2024 12:53 PM
56	N/a	8/22/2024 12:51 PM
57	High winds and rain or ice causing trees to fall	8/22/2024 2:45 AM
58	Most of wantage does not have backup power during critical power loss.	8/22/2024 1:56 AM
59	N/a	8/21/2024 3:57 PM
60	The Wallkill River overflow has caused impassable roads in times of flooding, sometimes cutting off travel to large portions of the surrounding towns.	8/21/2024 12:54 PM
61	Frequent power outages	8/21/2024 11:55 AM
62	Sussex Borough Hall does not have a backup generator.	8/21/2024 11:23 AM
63	Dying ash trees and tree maintenance around power lines.	8/20/2024 12:29 PM



**Q12 Please identify any specific vulnerabilities that you are aware of in Sussex County outside of your city/township/village (e.g. flood-prone areas or specific properties, critical facilities that lack backup power, etc.). Please list the city/town/village, street names, and other specific identifiers if possible.**

Answered: 46 Skipped: 90

#	RESPONSES	DATE
1	utility lines on poles instead of buried underground throughout the county	9/11/2024 6:56 PM
2	Frequent power outages as a result of aged infrastructure and utility poles. Aged infrastructure that was not made to withstand the amount of people living in the county. Population is growing but our utilities cannot handle the influx in people.	9/11/2024 12:52 PM
3	Flooding on major arteries throughout the county, 206 Andover	9/2/2024 3:12 PM
4	NJDOT construction project for Rt. 206 Andover tunnel	8/31/2024 12:34 PM
5	Stillwater loses power and has trees down with every storm. There are some totally unpaved roads in town (ie: Oriole) that wash out with every storm and are inaccessible if there is a major storm.	8/28/2024 9:04 PM
6	fleet mang building not protected with back up generators, only a portion is.	8/28/2024 5:49 AM
7	I don't know	8/27/2024 11:18 PM
8	?	8/27/2024 9:59 PM
9	As I said above...All power north of Branchville is on a single line, any outage effects the entire area, better infrastructure, response to disasters etc not only effect the residents but the thousands of people who travel 206, 23 etc. We are often forgotten. Sussex county is the gate way from Orange County NY and pike county PA, all of those commuters travel these roads	8/27/2024 6:02 PM
10	None.	8/26/2024 2:11 PM
11	None	8/23/2024 1:47 PM
12	None	8/23/2024 12:17 PM
13	Uninown	8/23/2024 11:24 AM
14	N/A	8/23/2024 9:12 AM
15	Not sure	8/23/2024 8:32 AM
16	Rt 206 flooding going into Newton.	8/22/2024 11:13 PM
17	Know of none	8/22/2024 9:44 PM
18	Roads, tunnels	8/22/2024 4:55 PM
19	None	8/22/2024 4:34 PM
20	N/A	8/22/2024 4:08 PM
21	Dams breaching or breaking in surrounding lakes: Tomahawk Lake, Seneca Lake.	8/22/2024 4:04 PM
22	Waterloo road	8/22/2024 3:42 PM
23	Many of Sussex County's housing developments are integrated with old tree growth forests. This makes the houses and power grid very susceptible to wind caused tree fall damage. Just a few example developments out of the many are - all of Lake Hopatcong, Forest Lakes,	8/22/2024 3:38 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

Brookwood East and West, Cranbury Lake, Lake Lackawanna, Lake Mohawk and Lake Lenape. When a hurricane or even strong thunderstorms come through, many of these housing developments lose power due to multiple trees falling on power lines, roads, houses and cars. There are people who have lost their lives from large trees falling on their house. It often takes days or even weeks to clear the damage and repair the power.

24	N/A	8/22/2024 3:00 PM
25	The bridges near the middle school in Sussex boro	8/22/2024 2:42 PM
26	Not sure	8/22/2024 2:22 PM
27	None	8/22/2024 1:53 PM
28	Power lines constant issue	8/22/2024 1:36 PM
29	don't have any	8/22/2024 1:29 PM
30	Waterloo road in Byram needs to have all trees cut back. The road closes during every storm. Road also floods. Route 206 south in Byram near the new gas station across from u turn for Acorn street is always flooded.	8/22/2024 1:25 PM
31	flooding in lower areas in route 46	8/22/2024 1:23 PM
32	Food banks. Project Self Sufficiency	8/22/2024 1:15 PM
33	Lack of power backup is very important in Byram Township Cranberry Lake.	8/22/2024 1:15 PM
34	Not sure if local grocery stores have generators.	8/22/2024 1:11 PM
35	--	8/22/2024 1:10 PM
36	None	8/22/2024 1:05 PM
37	I only know my town	8/22/2024 1:02 PM
38	See above	8/22/2024 12:59 PM
39	Na	8/22/2024 12:53 PM
40	Lack of back up power during critical power loss.	8/22/2024 1:56 AM
41	N/a	8/21/2024 3:57 PM
42	There are a huge amount of large dead trees that are a danger to road travel. I feel these trees need to be removed to prevent damage and injury.	8/21/2024 12:54 PM
43	Power outages	8/21/2024 11:55 AM
44	I am currently unaware of any specific areas.	8/21/2024 11:23 AM
45	Flooding in verson by the flats	8/20/2024 2:48 PM
46	Lack of volunteers for emergency services across the county.	8/20/2024 12:29 PM

## Q13 Do you have any other comments, questions, or concerns regarding hazard mitigation in Sussex County?

Answered: 53    Skipped: 83

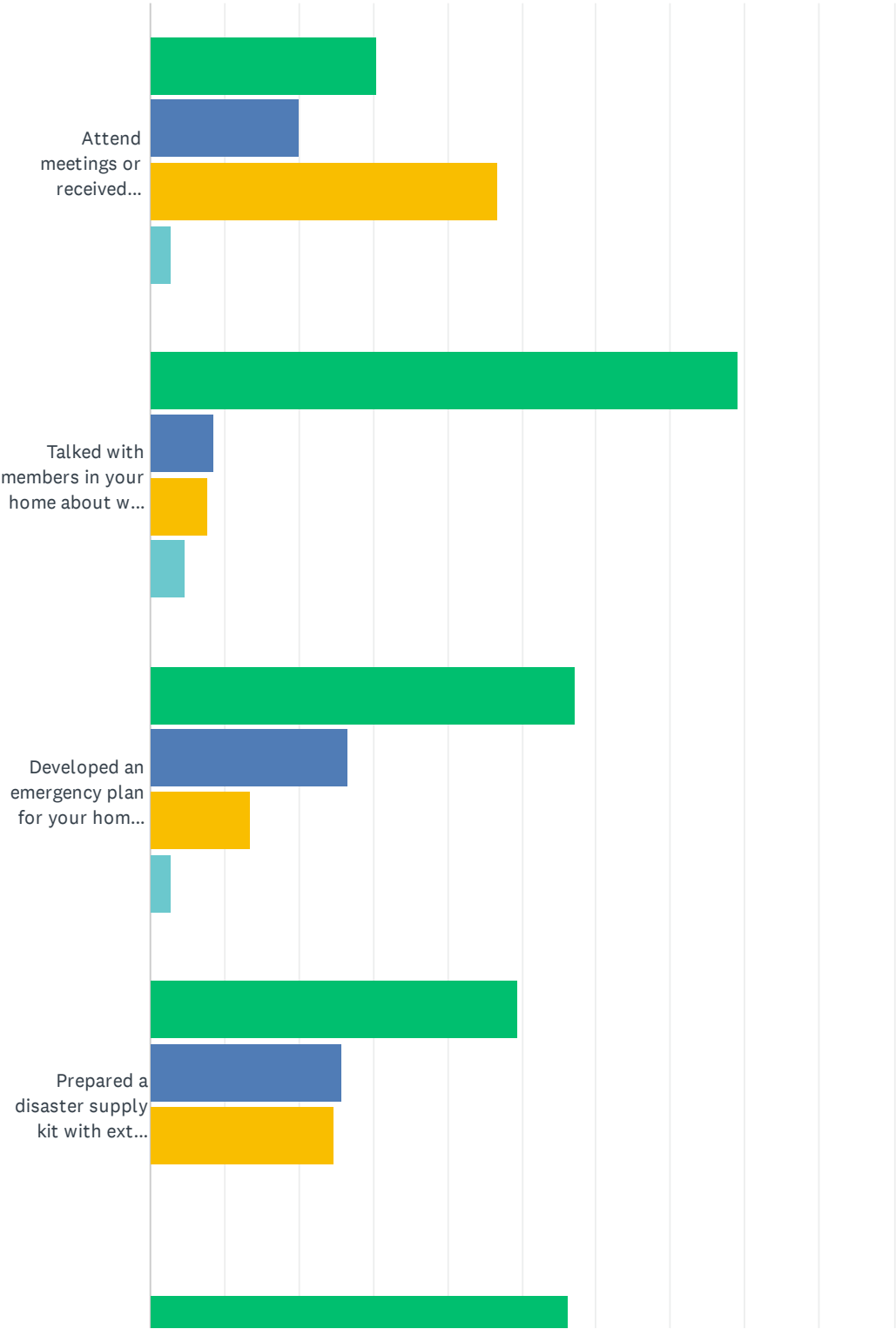
#	RESPONSES	DATE
1	The County is doing a great job and I'm looking forward to reading the HMP!	9/11/2024 12:52 PM
2	None. Good luck.	9/2/2024 3:12 PM
3	This type of survey does not provide adequate opportunity for input	8/31/2024 12:34 PM
4	no	8/28/2024 9:04 PM
5	Not really	8/27/2024 11:18 PM
6	?	8/27/2024 9:59 PM
7	Our infrastructure is terrible. Poles, lines, transformers are old and not well maintained.	8/27/2024 6:02 PM
8	No.	8/26/2024 2:11 PM
9	No	8/26/2024 12:45 PM
10	Don't overdo the regulatory approach. This always backfires.	8/24/2024 11:32 PM
11	We don't need more regulation	8/23/2024 1:47 PM
12	No	8/23/2024 12:17 PM
13	Some help to slow traffic in front of my house	8/23/2024 11:24 AM
14	None	8/23/2024 9:12 AM
15	911 slow response. Fire alarm and a Medical emergency. Called 911 it went to Sparta, Sparta had to transfer to Byram. Byram police come . Waited a long time for ambulance . Waited a long time for fire trucks.	8/23/2024 8:40 AM
16	Not at this time	8/23/2024 8:32 AM
17	No	8/22/2024 9:44 PM
18	No	8/22/2024 6:25 PM
19	I'm very libertarian on this subject, it is the county and local government's job to be reasonably prepared for long term power outage flooding, but it is an individual resident's problem to prepare their own home for loss of utilities, water, heat . . .	8/22/2024 5:01 PM
20	Need more policing of highways to reduce accidents.	8/22/2024 4:55 PM
21	Vote Red	8/22/2024 4:34 PM
22	N/A	8/22/2024 4:08 PM
23	No	8/22/2024 4:04 PM
24	Pesticides used to treat the county should be more thoroughly discussed.	8/22/2024 3:42 PM
25	No	8/22/2024 3:38 PM
26	no	8/22/2024 3:36 PM
27	Where is the funding coming from? Existing funds or new taxes?	8/22/2024 3:00 PM
28	No	8/22/2024 2:42 PM
29	No	8/22/2024 2:35 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

30	Enable and require power companies to improve their infrastructure to reduce power loss.	8/22/2024 2:22 PM
31	No	8/22/2024 1:53 PM
32	No	8/22/2024 1:36 PM
33	Improve cell service to my area. I have spoken to the police and they are aware and experience lack of cell service as well as residents and I've spoken to Verizon. Nothing has been done.	8/22/2024 1:29 PM
34	no	8/22/2024 1:29 PM
35	I have concerns with the safety of natural gas being installed. If not done properly it can be disastrous and I know some are hooking up their own. Also, My neighbor has a driveway that is not legal (as far as I know) and I feel that's why my tree may have fallen, I'm worried about my yard collapsing into their driveway and messing up my septic. It used to be all yard, but previous owner put in driveway for employees of new owners restaurant to park since home has been converted to accommodate the amount of people living there. 11 Charles street has a very large driveway. The second one worries me for my property	8/22/2024 1:25 PM
36	no	8/22/2024 1:23 PM
37	The loss of power during any bit of rain/snow storms is a huge concern.	8/22/2024 1:22 PM
38	No	8/22/2024 1:22 PM
39	No	8/22/2024 1:15 PM
40	Awareness is key	8/22/2024 1:12 PM
41	NO	8/22/2024 1:11 PM
42	--	8/22/2024 1:10 PM
43	No	8/22/2024 1:05 PM
44	No	8/22/2024 1:02 PM
45	no	8/22/2024 1:02 PM
46	N/A	8/22/2024 12:59 PM
47	No	8/22/2024 12:53 PM
48	Using our tax dollars wisely to invest in our current day and future.	8/22/2024 1:56 AM
49	N/a	8/21/2024 3:57 PM
50	A disabled neighbor friend, who relies on oxygen to survive, lives in fear of blackouts and possible downed tree damage during storms.	8/21/2024 12:54 PM
51	No	8/21/2024 11:55 AM
52	No	8/21/2024 11:23 AM
53	No	8/20/2024 12:29 PM

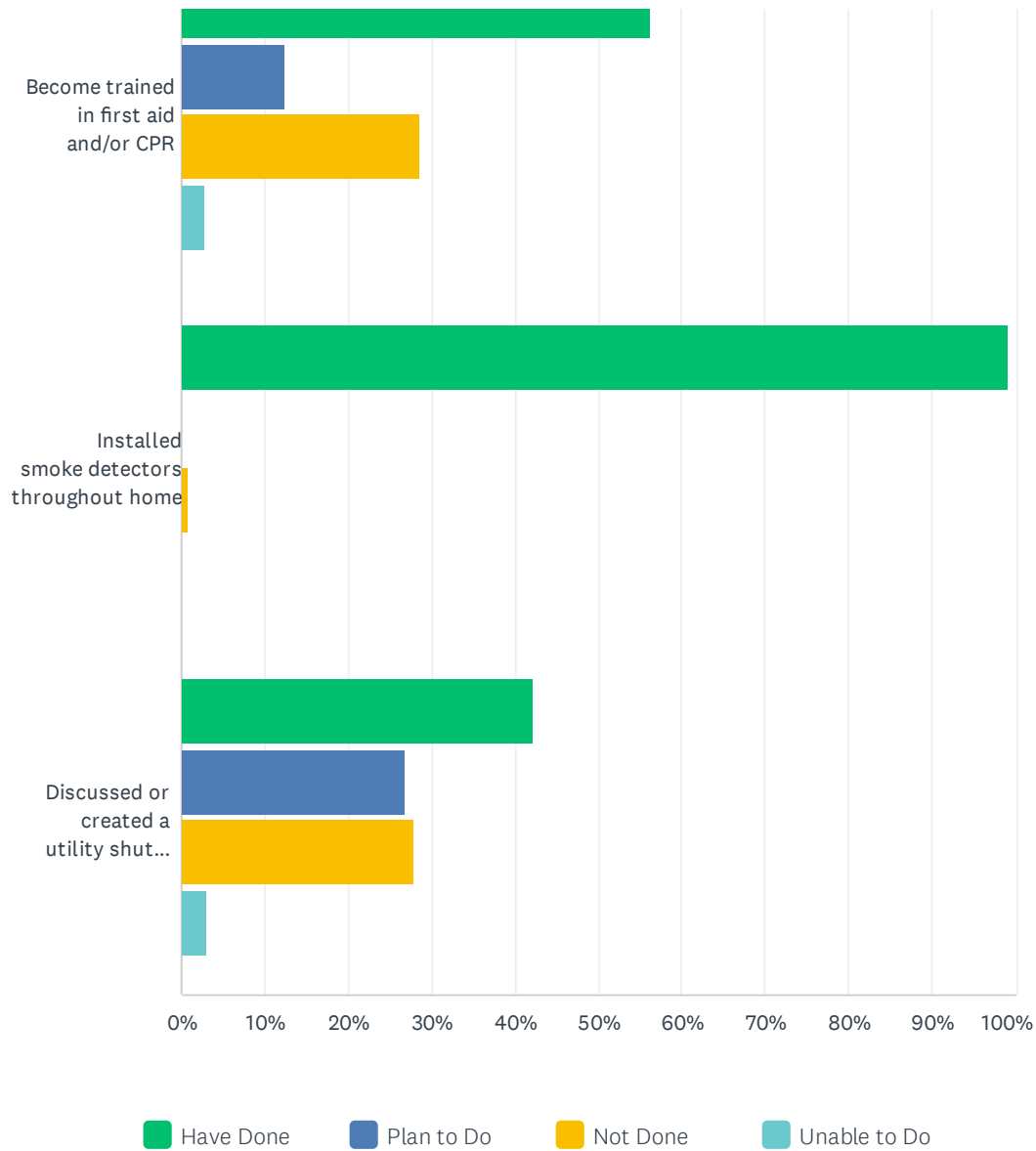
Q14 In the following list, please check those activities that you have done in your home, plan to do in the near future, have not done, or are unable to do. Please check one answer for each activity that you or someone in your household have done.

Answered: 105    Skipped: 31





## Sussex County Hazard Mitigation Plan Update - Public Survey



	HAVE DONE	PLAN TO DO	NOT DONE	UNABLE TO DO	TOTAL
Attend meetings or received information on natural disasters or emergency preparedness	30.48% 32	20.00% 21	46.67% 49	2.86% 3	105
Talked with members in your home about what to do in case of a natural disaster or emergency	79.05% 83	8.57% 9	7.62% 8	4.76% 5	105
Developed an emergency plan for your home and family in order to decide what everyone will do in the event of a disaster or emergency	57.14% 60	26.67% 28	13.33% 14	2.86% 3	105
Prepared a disaster supply kit with extra food, water, batteries, etc.	49.52% 52	25.71% 27	24.76% 26	0.00% 0	105
Become trained in first aid and/or CPR	56.19% 59	12.38% 13	28.57% 30	2.86% 3	105
Installed smoke detectors throughout home	99.05% 104	0.00% 0	0.95% 1	0.00% 0	105
Discussed or created a utility shutoff procedure in the event of a natural disaster	42.31% 44	26.92% 28	27.88% 29	2.88% 3	104

# Sussex County Hazard Mitigation Plan Update - Public Survey

#	OTHER (PLEASE SPECIFY)	DATE
1	Utilize self-powered AM/FM radio	8/31/2024 12:34 PM
2	Need more info on shutting off utilities	8/23/2024 8:40 AM
3	Prepare food ahead of time and make ice. During Sandy we fed the neighborhood for a few days by being prepared. My son is an EMT and an Eagle Scout. We are always prepared	8/22/2024 1:25 PM
4	Allowed use of pool water for fire mitigation	8/22/2024 1:12 PM

## Q15 Do you have any relevant questions or comments for Sussex County?

Answered: 47   Skipped: 89

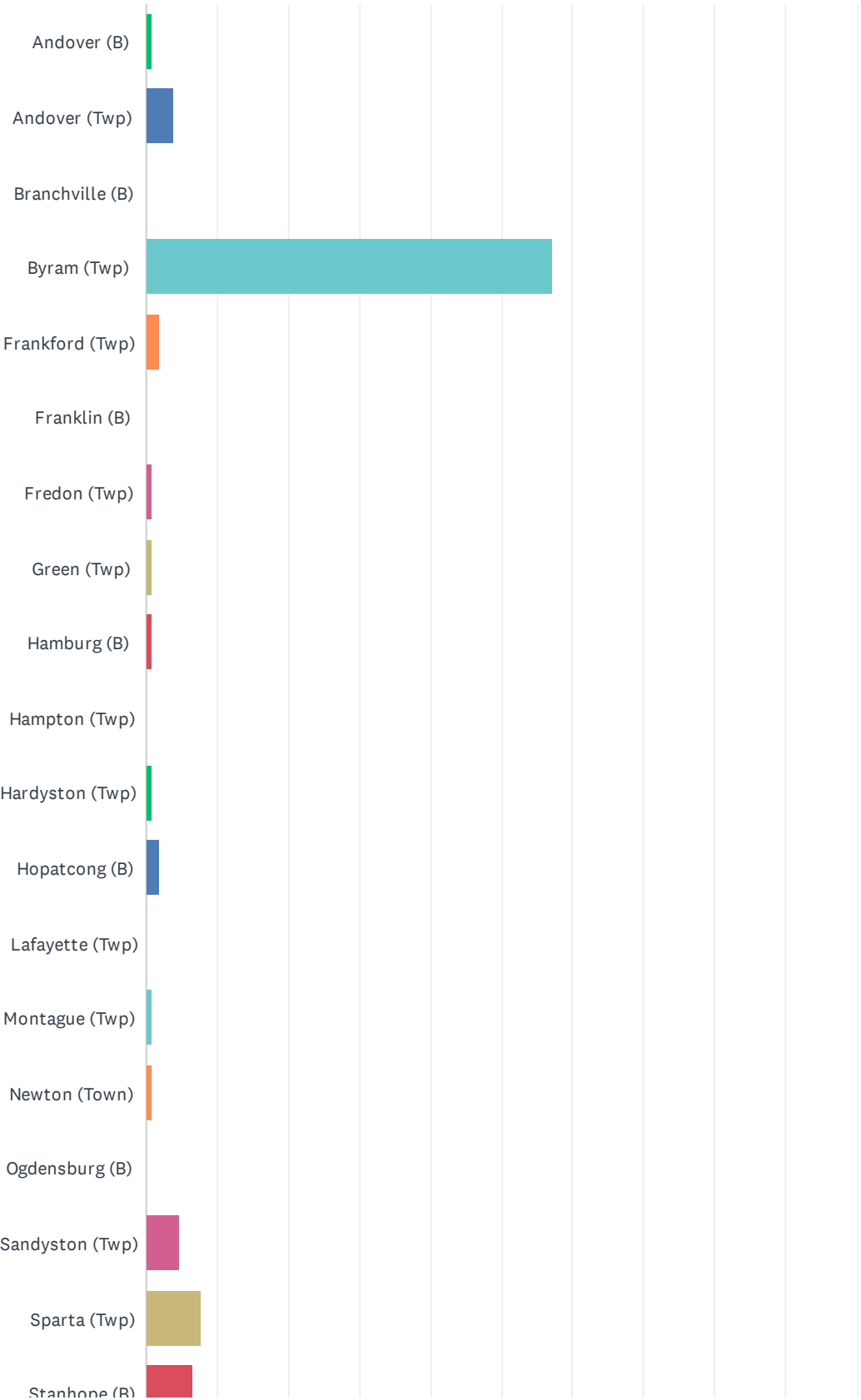
#	RESPONSES	DATE
1	Stop over developing please! Protect more farm land.	9/11/2024 12:53 PM
2	Many residents have home generators that they use during power outages. I think the County would enhance their education/outreach on how to properly use generators and the dos and don'ts of generator use.	9/11/2024 12:52 PM
3	No	9/11/2024 11:44 AM
4	Will the mitigation plans be disseminated to survey respondents?	9/2/2024 3:12 PM
5	Review of local emergency management plans yearly by Sussex County	8/31/2024 12:34 PM
6	no	8/28/2024 9:04 PM
7	No	8/27/2024 11:18 PM
8	No	8/27/2024 9:59 PM
9	Not at this time.	8/27/2024 7:17 PM
10	No.	8/26/2024 2:11 PM
11	No	8/26/2024 12:45 PM
12	No	8/23/2024 1:47 PM
13	No	8/23/2024 12:17 PM
14	None.	8/23/2024 9:12 AM
15	I love rhe idea of a disaster team and education. Prepare us to store food, set generator, fill tubs and toilets with water, shut off gas, etc.	8/23/2024 8:40 AM
16	Not at the moment	8/23/2024 8:32 AM
17	no	8/22/2024 9:44 PM
18	I think it would be nice if you could visit the schools to go over some important steps to take in an emergency grades 4 thru 12.	8/22/2024 6:25 PM
19	No	8/22/2024 4:55 PM
20	Leave my freedom alone	8/22/2024 4:34 PM
21	N/A	8/22/2024 4:08 PM
22	no	8/22/2024 4:04 PM
23	No	8/22/2024 3:38 PM
24	no	8/22/2024 3:36 PM
25	1/2 of the questions in this survey didn't load and I got an error message.	8/22/2024 3:07 PM
26	No	8/22/2024 2:42 PM
27	No	8/22/2024 2:35 PM
28	No	8/22/2024 2:22 PM
29	No	8/22/2024 2:14 PM
30	No	8/22/2024 1:53 PM

## Sussex County Hazard Mitigation Plan Update - Public Survey

31	Please get cell service near my home so I can stay in touch in an emergency. (Both Verizon and T-Mobile do not work here and it's unsettling.)	8/22/2024 1:29 PM
32	The electrical grid needs to be upgraded. Atleast in hopatcong. Any way to have the lines put underground ? Whenever power is lost we know it's going to be atleast a day or more without power.	8/22/2024 1:25 PM
33	Is the county 911 system up to date?	8/22/2024 1:22 PM
34	Why can't Sussex County or Byram Township partner with a tree company to cut down trees at an affordable fee? I have had many trees removed on my property at my own expense. Whereas some neighbors just can't afford to do so.	8/22/2024 1:15 PM
35	No	8/22/2024 1:11 PM
36	..	8/22/2024 1:10 PM
37	No	8/22/2024 1:05 PM
38	No	8/22/2024 1:02 PM
39	no	8/22/2024 1:02 PM
40	N/A	8/22/2024 12:59 PM
41	No	8/22/2024 12:57 PM
42	Hosting cpr and safety courses for town residents. Better information relay systems in place as well.	8/22/2024 1:56 AM
43	N/a	8/21/2024 3:57 PM
44	Are there any aggressive plans for removing all the dead trees that are a threat to road travel safety in the county?	8/21/2024 12:54 PM
45	No	8/21/2024 11:55 AM
46	No	8/21/2024 11:23 AM
47	No	8/20/2024 12:29 PM

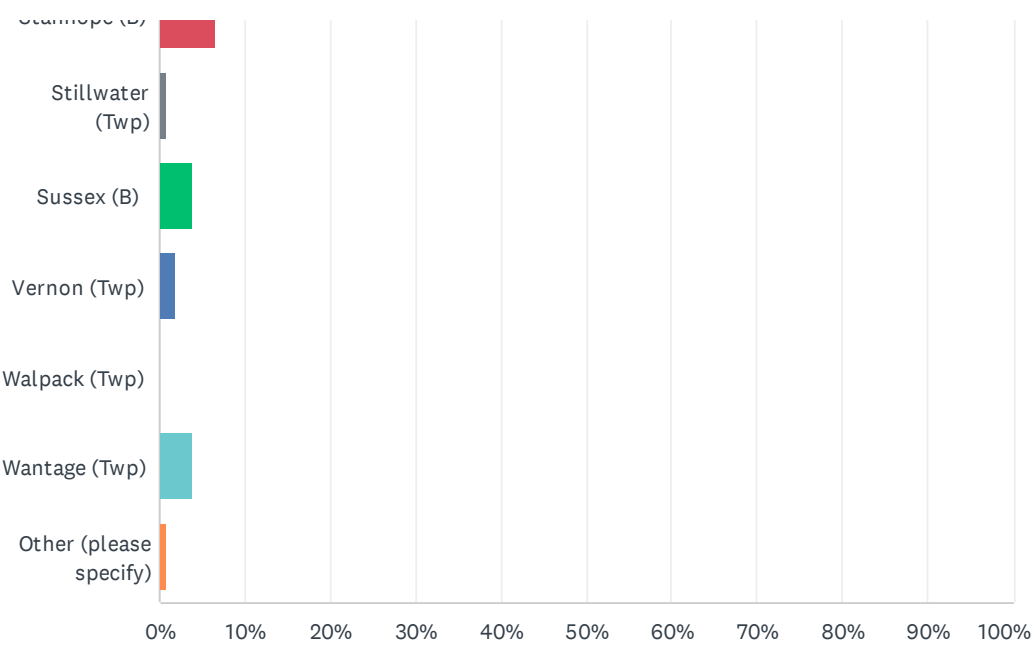
Q16 Please indicate the municipality in which you live:

Answered: 105    Skipped: 31





Sussex County Hazard Mitigation Plan Update - Public Survey



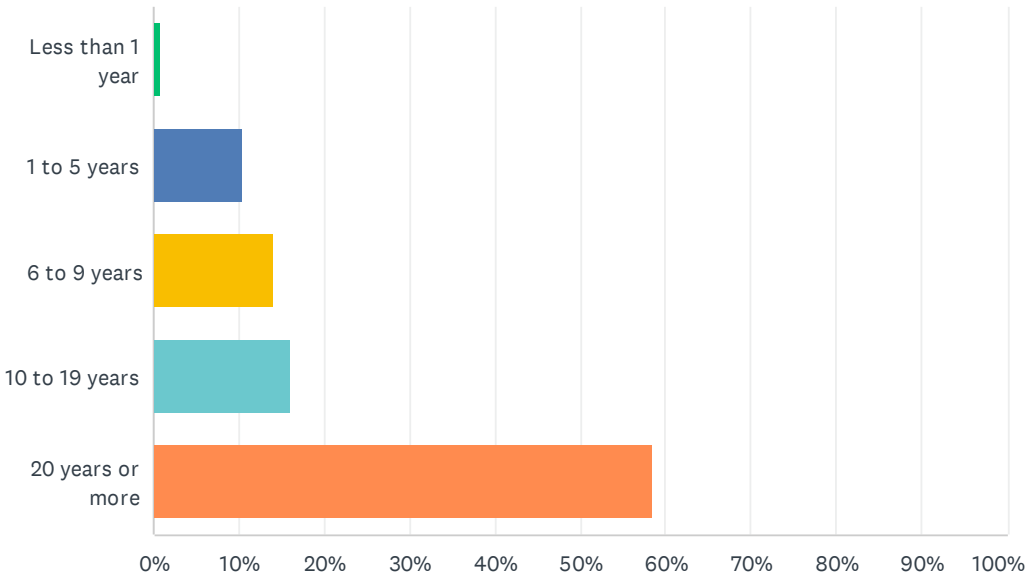
# Sussex County Hazard Mitigation Plan Update - Public Survey

ANSWER CHOICES	RESPONSES	
Andover (B)	0.95%	1
Andover (Twp)	3.81%	4
Branchville (B)	0.00%	0
Byram (Twp)	57.14%	60
Frankford (Twp)	1.90%	2
Franklin (B)	0.00%	0
Fredon (Twp)	0.95%	1
Green (Twp)	0.95%	1
Hamburg (B)	0.95%	1
Hampton (Twp)	0.00%	0
Hardyston (Twp)	0.95%	1
Hopatcong (B)	1.90%	2
Lafayette (Twp)	0.00%	0
Montague (Twp)	0.95%	1
Newton (Town)	0.95%	1
Ogdensburg (B)	0.00%	0
Sandyston (Twp)	4.76%	5
Sparta (Twp)	7.62%	8
Stanhope (B)	6.67%	7
Stillwater (Twp)	0.95%	1
Sussex (B)	3.81%	4
Vernon (Twp)	1.90%	2
Walpack (Twp)	0.00%	0
Wantage (Twp)	3.81%	4
Other (please specify)	0.95%	1
Total Respondents: 105		

#	OTHER (PLEASE SPECIFY)	DATE
1	Stockholm	8/26/2024 2:12 PM

Q17 How long have you lived here?

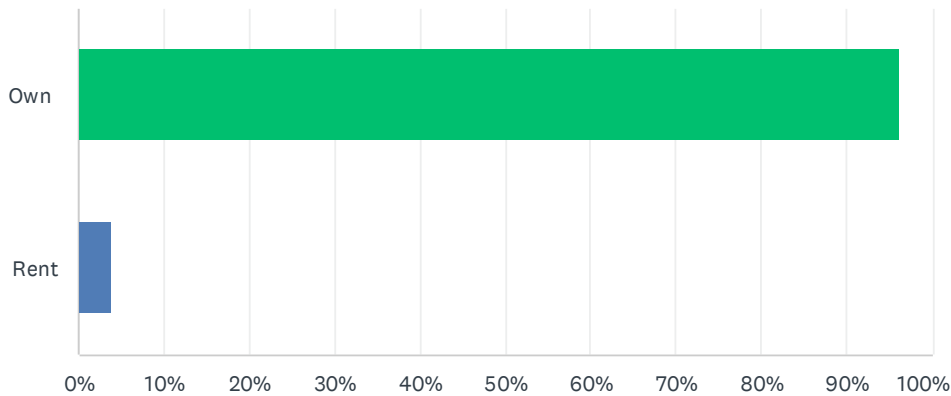
Answered: 106    Skipped: 30



ANSWER CHOICES	RESPONSES	
Less than 1 year	0.94%	1
1 to 5 years	10.38%	11
6 to 9 years	14.15%	15
10 to 19 years	16.04%	17
20 years or more	58.49%	62
TOTAL		106

Q18 Do you own or rent your place of residence?

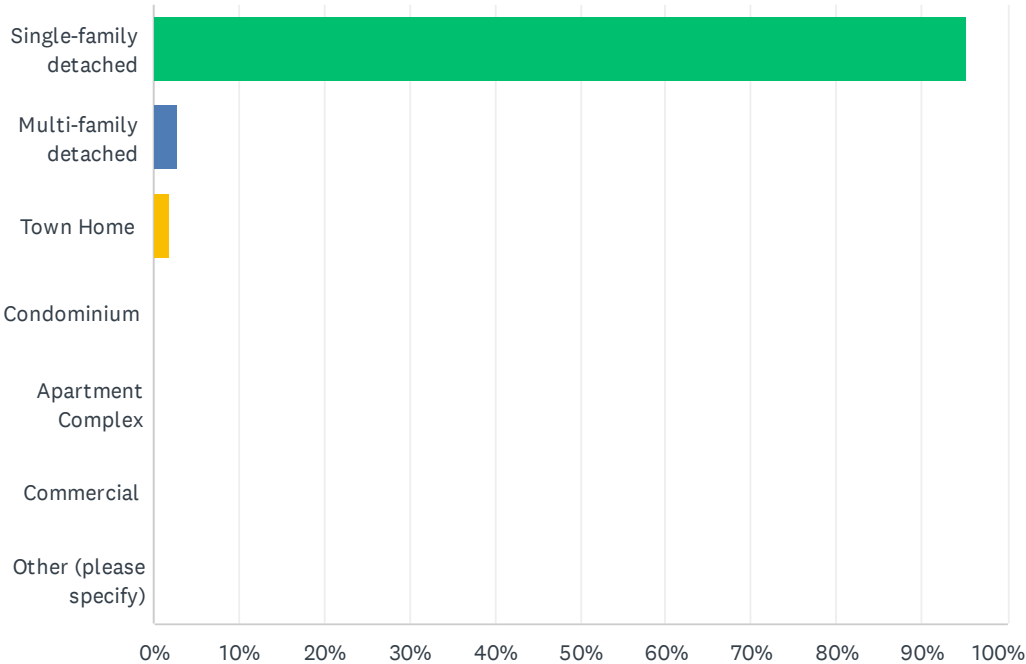
Answered: 106    Skipped: 30



ANSWER CHOICES	RESPONSES	
Own	96.23%	102
Rent	3.77%	4
TOTAL		106

Q19 What type of residence do you live in?

Answered: 105    Skipped: 31



ANSWER CHOICES	RESPONSES	
Single-family detached	95.24%	100
Multi-family detached	2.86%	3
Town Home	1.90%	2
Condominium	0.00%	0
Apartment Complex	0.00%	0
Commercial	0.00%	0
Other (please specify)	0.00%	0
TOTAL		105

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	



## Q20 What street is your property on? (optional, will be kept confidential - only used to identify hazard areas such as flooding)

Answered: 80   Skipped: 56

#	DATE
1	9/11/2024 1:50 PM
2	9/11/2024 12:52 PM
3	8/31/2024 12:37 PM
4	8/29/2024 9:10 PM
5	8/28/2024 9:05 PM
6	8/27/2024 11:19 PM
7	8/27/2024 10:00 PM
8	8/27/2024 7:18 PM
9	8/27/2024 6:03 PM
10	8/26/2024 2:12 PM
11	8/25/2024 8:17 PM
12	8/24/2024 11:33 PM
13	8/23/2024 7:12 PM
14	8/23/2024 5:58 PM
15	8/23/2024 1:48 PM
16	8/23/2024 12:18 PM
17	8/23/2024 12:09 PM
18	8/23/2024 11:26 AM
19	8/23/2024 10:37 AM
20	8/23/2024 10:12 AM
21	8/23/2024 9:12 AM
22	8/23/2024 8:41 AM
23	8/23/2024 8:33 AM
24	8/23/2024 7:54 AM
25	8/23/2024 7:27 AM
26	8/22/2024 11:14 PM
27	8/22/2024 9:44 PM
28	8/22/2024 8:41 PM
29	8/22/2024 6:45 PM
30	8/22/2024 6:27 PM
31	8/22/2024 5:46 PM

# Sussex County Hazard Mitigation Plan Update - Public Survey

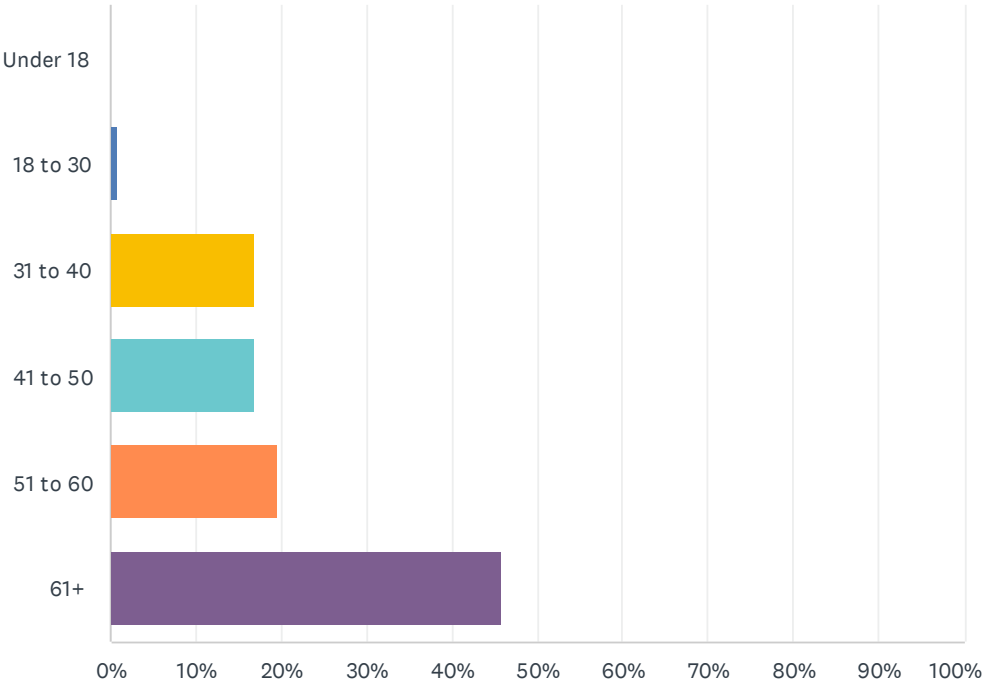
32	8/22/2024 5:23 PM
33	8/22/2024 5:02 PM
34	8/22/2024 4:56 PM
35	8/22/2024 4:35 PM
36	8/22/2024 4:33 PM
37	8/22/2024 4:08 PM
38	8/22/2024 4:05 PM
39	8/22/2024 4:00 PM
40	8/22/2024 3:43 PM
41	8/22/2024 3:39 PM
42	8/22/2024 3:37 PM
43	8/22/2024 2:36 PM
44	8/22/2024 2:33 PM
45	8/22/2024 2:29 PM
46	8/22/2024 2:23 PM
47	8/22/2024 2:15 PM
48	8/22/2024 1:54 PM
49	8/22/2024 1:37 PM
50	8/22/2024 1:30 PM
51	8/22/2024 1:30 PM
52	8/22/2024 1:26 PM
53	8/22/2024 1:25 PM
54	8/22/2024 1:24 PM
55	8/22/2024 1:23 PM
56	8/22/2024 1:23 PM
57	8/22/2024 1:16 PM
58	8/22/2024 1:15 PM
59	8/22/2024 1:13 PM
60	8/22/2024 1:12 PM
61	8/22/2024 1:10 PM
62	8/22/2024 1:08 PM
63	8/22/2024 1:06 PM
64	8/22/2024 1:06 PM
65	8/22/2024 1:03 PM
66	8/22/2024 1:03 PM
67	8/22/2024 12:59 PM
68	8/22/2024 12:58 PM
69	8/22/2024 12:57 PM

Sussex County Hazard Mitigation Plan Update - Public Survey

70	8/22/2024 12:54 PM
71	8/22/2024 12:50 PM
72	8/22/2024 12:48 PM
73	8/22/2024 2:46 AM
74	8/22/2024 1:56 AM
75	8/21/2024 3:58 PM
76	8/21/2024 12:55 PM
77	8/21/2024 11:56 AM
78	8/21/2024 11:23 AM
79	8/20/2024 2:49 PM
80	8/20/2024 12:29 PM

Q21 Please indicate your age range:

Answered: 107    Skipped: 29



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18 to 30	0.93%	1
31 to 40	16.82%	18
41 to 50	16.82%	18
51 to 60	19.63%	21
61+	45.79%	49
TOTAL		107

# **Stakeholder Survey Results Summary**



## Q1 Contact Information

Answered: 7   Skipped: 0

ANSWER CHOICES	RESPONSES
Name	100.00% 7
Department/Agency	100.00% 7
Primary Responsibility	100.00% 7
Phone Number	100.00% 7
Email Address	100.00% 7

#	NAME	DATE
1	Benjamin L. Spinelli, Esq.	10/1/2024 1:19 PM
2	Anthony DeFelice	8/30/2024 12:37 PM
3	Joe Van Kirk	8/23/2024 10:32 AM
4	Michael Lata	8/22/2024 8:00 AM
5	Greg Redden	8/21/2024 11:16 AM
6	Mark Yetter	8/20/2024 3:26 PM
7	jessica casella	8/20/2024 12:21 PM

#	DEPARTMENT/AGENCY	DATE
1	New Jersey Highlands Council	10/1/2024 1:19 PM
2	Sussex County ESC	8/30/2024 12:37 PM
3	Vernon Township School District	8/23/2024 10:32 AM
4	Operator	8/22/2024 8:00 AM
5	New Jersey State Police	8/21/2024 11:16 AM
6	Frankford Township DPW	8/20/2024 3:26 PM
7	ANDOVER BOROUGH	8/20/2024 12:21 PM

#	PRIMARY RESPONSIBILITY	DATE
1	Executive Director	10/1/2024 1:19 PM
2	Business Administrator	8/30/2024 12:37 PM
3	Director of Facilities	8/23/2024 10:32 AM
4	Water Operations	8/22/2024 8:00 AM
5	Station Commander	8/21/2024 11:16 AM
6	DPW Supervisor	8/20/2024 3:26 PM
7	OEM COORDINATOR	8/20/2024 12:21 PM

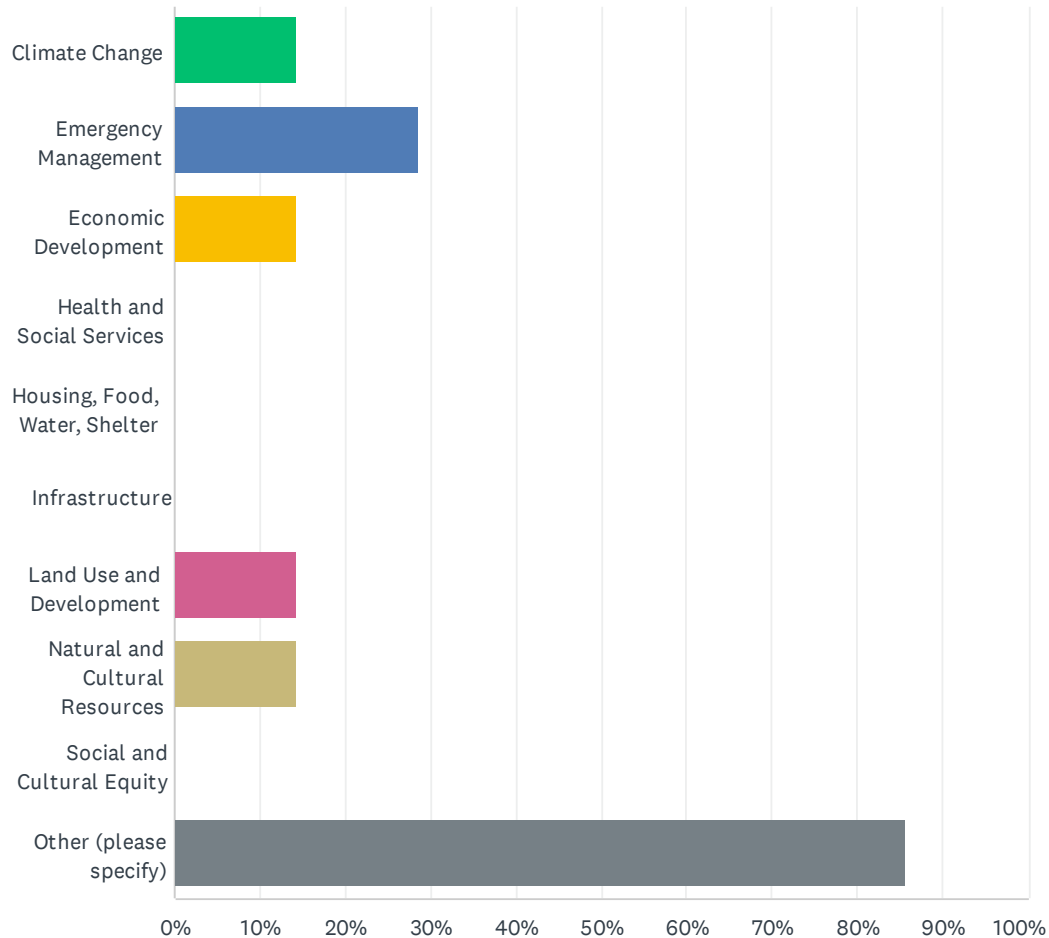
#	PHONE NUMBER	DATE
1	908-879-6737	10/1/2024 1:19 PM
2	9735796980	8/30/2024 12:37 PM

# Sussex County Hazard Mitigation Plan - Stakeholder Survey

3	9737646494	8/23/2024 10:32 AM
4	9735294694	8/22/2024 8:00 AM
5	9732224839	8/21/2024 11:16 AM
6	973-948-4230	8/20/2024 3:26 PM
7	973-786-5188	8/20/2024 12:21 PM
#	EMAIL ADDRESS	DATE
1	ben.spinelli@highlands.nj.gov	10/1/2024 1:19 PM
2	adefelice@sussexesc.org	8/30/2024 12:37 PM
3	jvankirk@vtsd.com	8/23/2024 10:32 AM
4	newearthwater@gmail.com	8/22/2024 8:00 AM
5	gregredde4@gmail.com	8/21/2024 11:16 AM
6	frankforddpw@frankfordtwp-nj.com	8/20/2024 3:26 PM
7	JESSIEPW@YAHOO.COM	8/20/2024 12:21 PM

## Q2 Which of the following sectors and areas of expertise do you represent? Mark all that apply.

Answered: 7 Skipped: 0



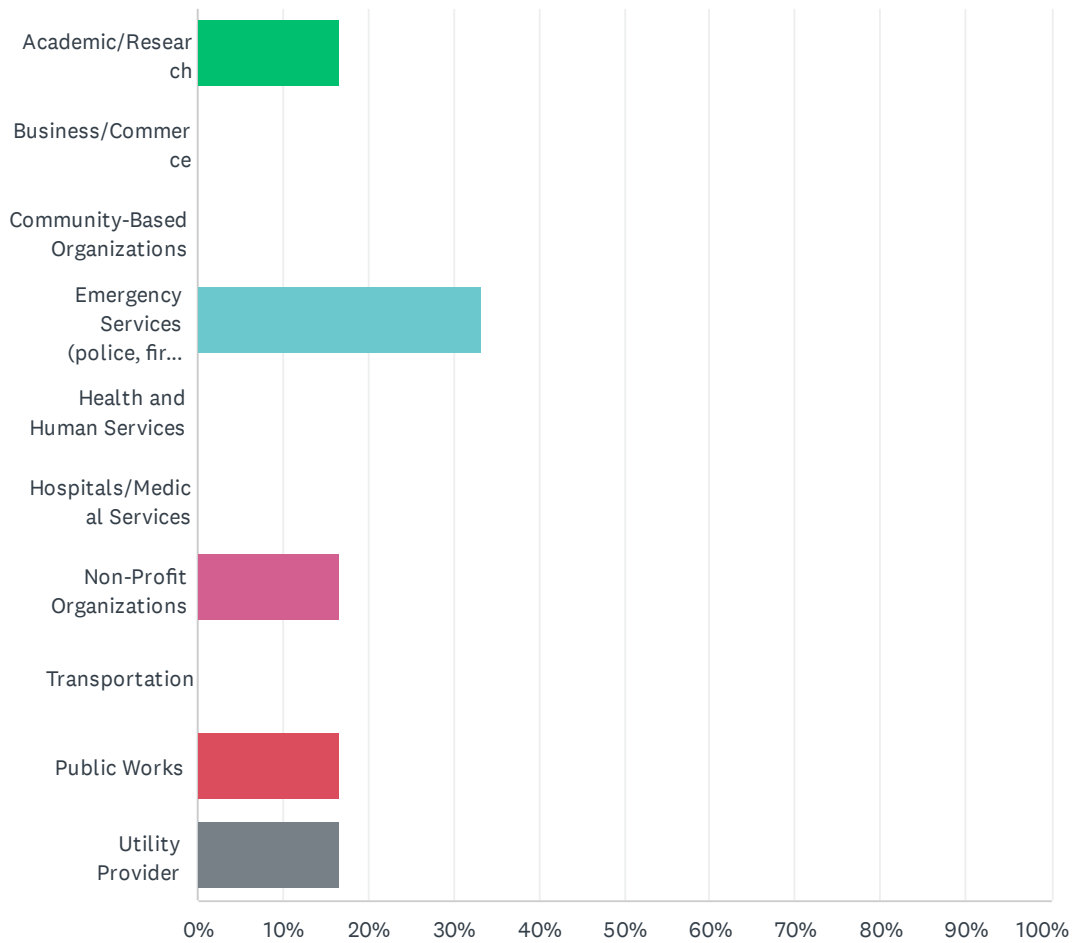
# Sussex County Hazard Mitigation Plan - Stakeholder Survey

ANSWER CHOICES	RESPONSES	
Climate Change	14.29%	1
Emergency Management	28.57%	2
Economic Development	14.29%	1
Health and Social Services	0.00%	0
Housing, Food, Water, Shelter	0.00%	0
Infrastructure	0.00%	0
Land Use and Development	14.29%	1
Natural and Cultural Resources	14.29%	1
Social and Cultural Equity	0.00%	0
Other (please specify)	85.71%	6
Total Respondents: 7		

#	OTHER (PLEASE SPECIFY)	DATE
1	Regional Planning	10/1/2024 1:19 PM
2	Education	8/30/2024 12:37 PM
3	School District	8/23/2024 10:32 AM
4	Water Operations	8/22/2024 8:00 AM
5	Law enforcement	8/21/2024 11:16 AM
6	Public Works	8/20/2024 3:26 PM

### Q3 What category does your facility operation/service fall under?

Answered: 6 Skipped: 1





## Sussex County Hazard Mitigation Plan - Stakeholder Survey

ANSWER CHOICES	RESPONSES
Academic/Research	16.67% 1
Business/Commerce	0.00% 0
Community-Based Organizations	0.00% 0
Emergency Services (police, fire, EMS)	33.33% 2
Health and Human Services	0.00% 0
Hospitals/Medical Services	0.00% 0
Non-Profit Organizations	16.67% 1
Transportation	0.00% 0
Public Works	16.67% 1
Utility Provider	16.67% 1
TOTAL	6

#	OTHER (PLEASE SPECIFY)	DATE
1	State Regional Planning Agency	10/1/2024 1:19 PM
2	K-12 School District	8/23/2024 10:32 AM

## Q4 Based on the above category, please provide additional description and information as to what your organization does or offers (please explain)

Answered: 6    Skipped: 1

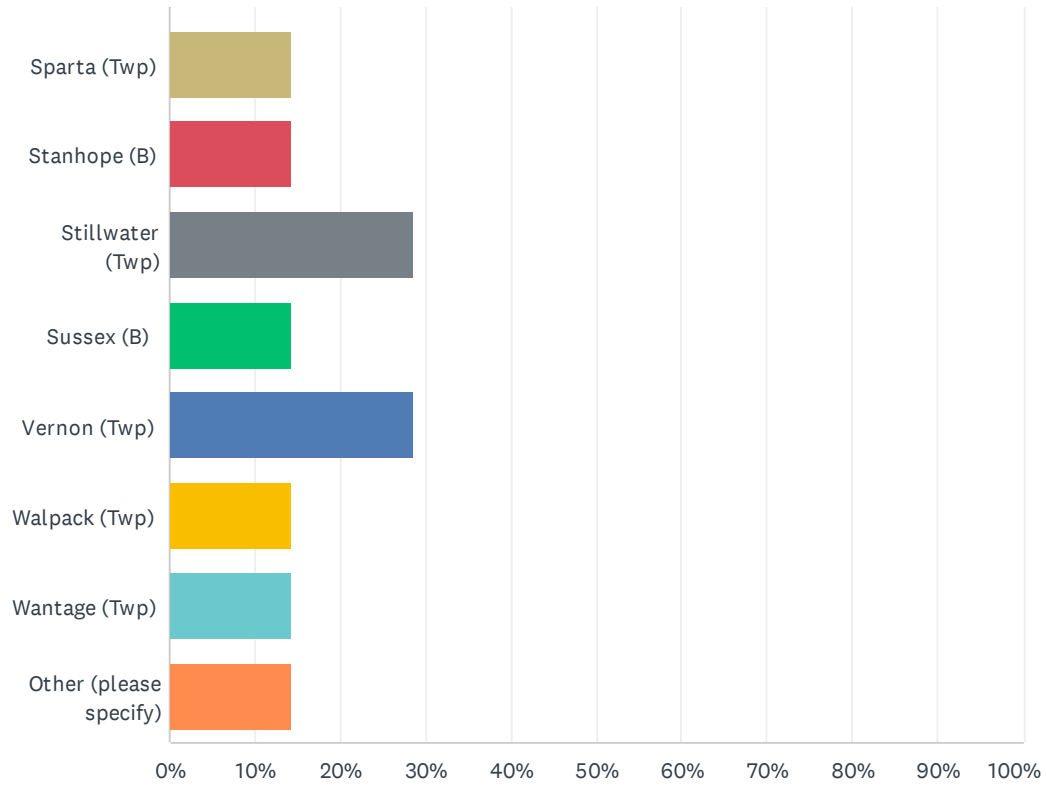
#	RESPONSES	DATE
1	The Highlands Council, established under the Highlands Water Protection and Planning Act (Highlands Act), is a regional planning agency tasked with implementing a comprehensive approach to protect natural and cultural resources while guiding future growth. To fulfill this responsibility, the Council adopted a Regional Master Plan (RMP) and collaborates with municipalities and counties to carry out its goals, policies, and objectives. A key component of this effort is planning grant funding, which plays a crucial role in supporting local governments and ensuring the successful implementation of the RMP, helping to achieve the broader objectives of the Highlands Act.	10/1/2024 1:19 PM
2	School, with special needs students.	8/30/2024 12:37 PM
3	Treat and deliver potable water supply	8/22/2024 8:00 AM
4	General police services for thirteen (13) townships	8/21/2024 11:16 AM
5	Maintain roads, parks, equipment and facilities.	8/20/2024 3:26 PM
6	ASSISTS WITH RESOURCES WHEN AN EMERGENCY OR WEATHER RELATED EVENT OCCURS	8/20/2024 12:21 PM

**Q5 Please identify the location of your facility(ies) and/ or primary service area. You may choose more than one if your service area covers multiple communities, or “Sussex County (entire area)” if your service area is county-wide:**

Answered: 7 Skipped: 0



## Sussex County Hazard Mitigation Plan - Stakeholder Survey



# Sussex County Hazard Mitigation Plan - Stakeholder Survey

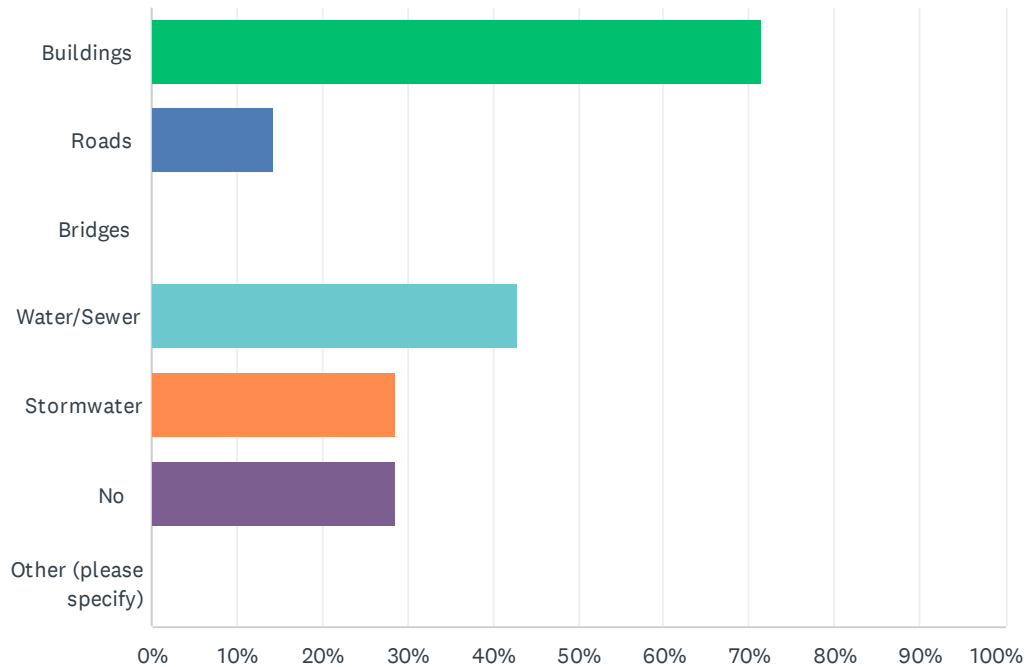
ANSWER CHOICES	RESPONSES	
Sussex County (entire area)	14.29%	1
Andover (B)	42.86%	3
Andover (Twp)	0.00%	0
Branchville (B)	14.29%	1
Byram (Twp)	28.57%	2
Frankford (Twp)	28.57%	2
Franklin (B)	14.29%	1
Fredon (Twp)	14.29%	1
Green (Twp)	28.57%	2
Hamburg (B)	14.29%	1
Hardyston (Twp)	14.29%	1
Hopatong (B)	14.29%	1
Lafayette (Twp)	28.57%	2
Montague (Twp)	14.29%	1
Newton (T)	14.29%	1
Ogdensburg (B)	14.29%	1
Sandyston (Twp)	14.29%	1
Sparta (Twp)	14.29%	1
Stanhope (B)	14.29%	1
Stillwater (Twp)	28.57%	2
Sussex (B)	14.29%	1
Vernon (Twp)	28.57%	2
Walpack (Twp)	14.29%	1
Wantage (Twp)	14.29%	1
Other (please specify)	14.29%	1
Total Respondents: 7		

#	OTHER (PLEASE SPECIFY)	DATE
1	Hampton Twp.	8/21/2024 11:16 AM



**Q6 Does your organization maintain or manage any of the following within your designated service area? If not, answer “No” at the bottom, otherwise check all that apply.**

Answered: 7 Skipped: 0

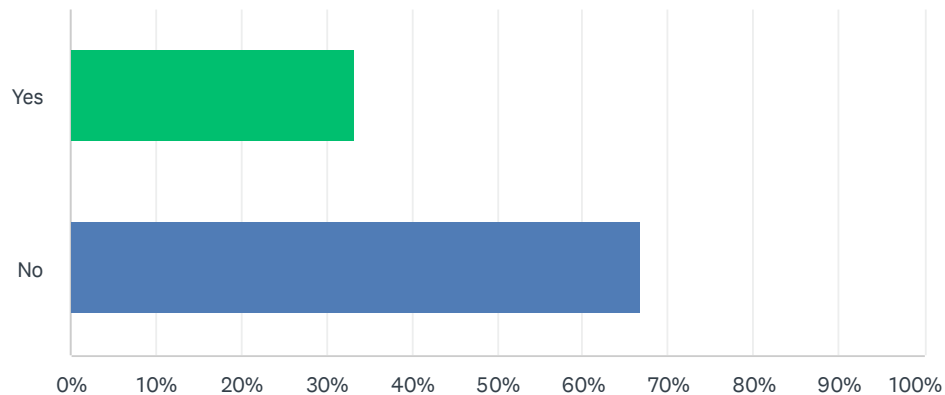


ANSWER CHOICES	RESPONSES	
Buildings	71.43%	5
Roads	14.29%	1
Bridges	0.00%	0
Water/Sewer	42.86%	3
Stormwater	28.57%	2
No	28.57%	2
Other (please specify)	0.00%	0
Total Respondents: 7		

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

**Q7 Does your organization work with or help support socially vulnerable populations that may be at higher risk for hazard impacts? Socially vulnerable populations may be considered "socially vulnerable" because of a variety of factors like socioeconomic status, household composition, minority status, limited proficiency to read or speak English, housing type, and transportation.**

Answered: 6   Skipped: 1

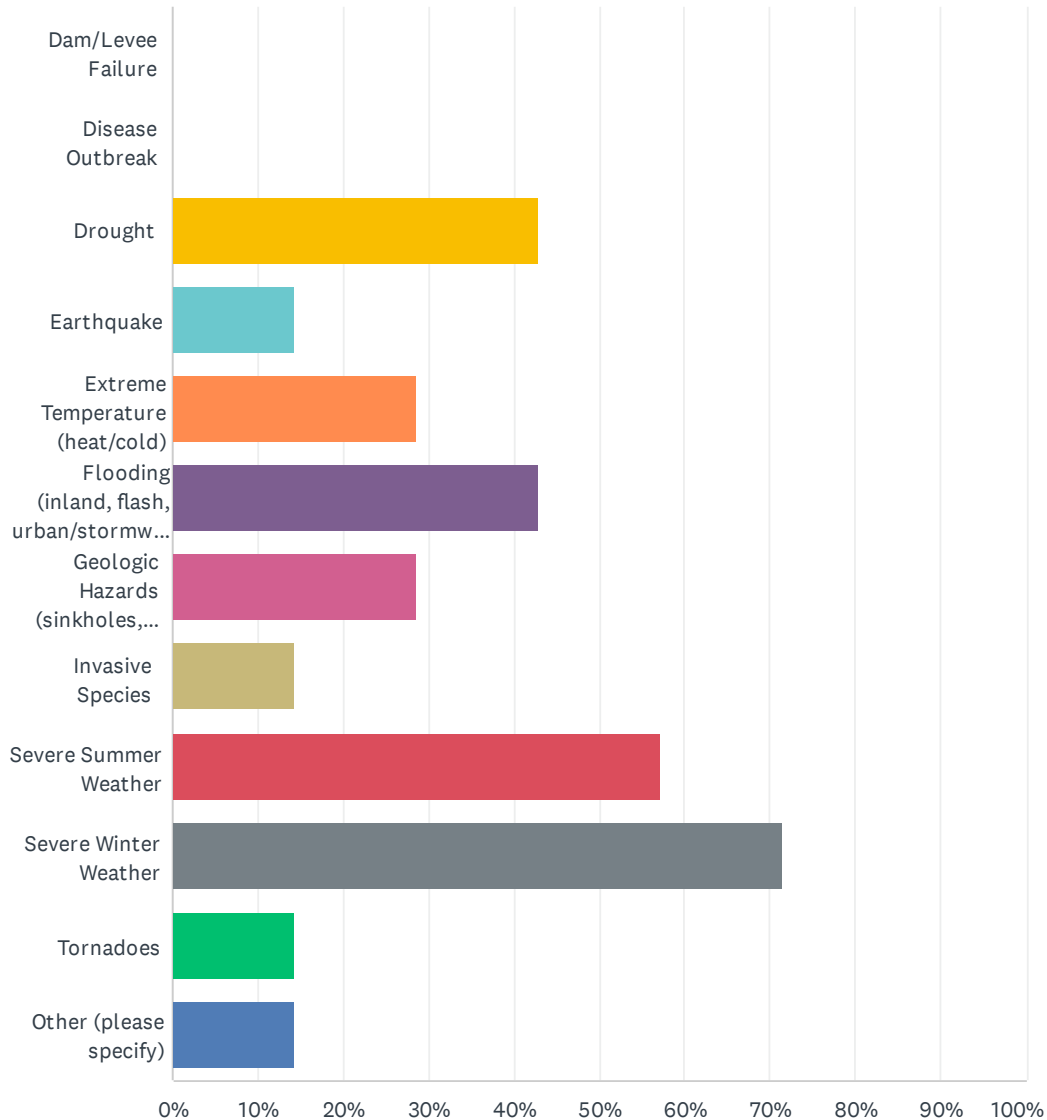


ANSWER CHOICES	RESPONSES
Yes	33.33% 2
No	66.67% 4
TOTAL	6

#	IF YOU ANSWERED YES, PLEASE DESCRIBE HOW YOUR ORGANIZATION WORKS WITH OR SUPPORTS SOCIALLY VULNERABLE POPULATIONS.	DATE
1	We work with children with special needs.	8/30/2024 12:37 PM
2	Afterschool programs , Free and reduced lunch , in-class support.	8/23/2024 10:32 AM

## Q8 For which hazard(s) do you feel that you or your organization have a special interest and/or expertise? Check all that apply.

Answered: 7 Skipped: 0



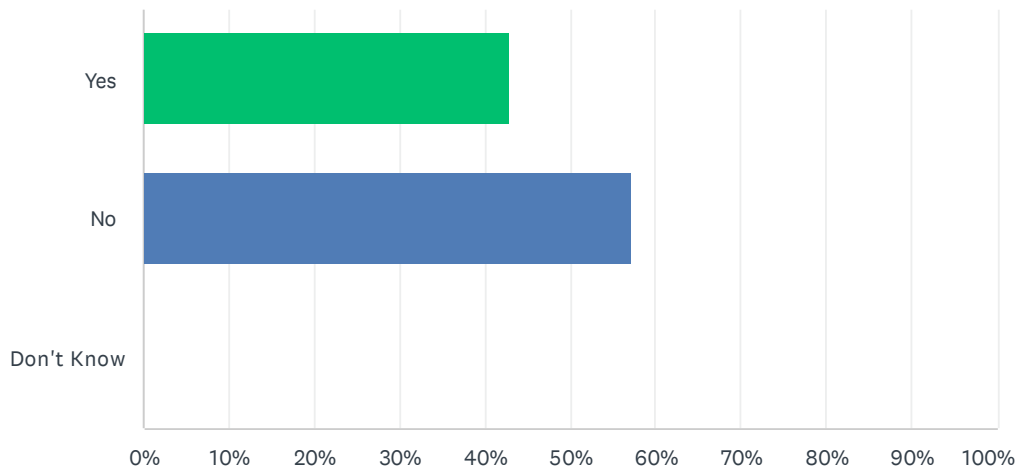
# Sussex County Hazard Mitigation Plan - Stakeholder Survey

ANSWER CHOICES	RESPONSES	
Dam/Levee Failure	0.00%	0
Disease Outbreak	0.00%	0
Drought	42.86%	3
Earthquake	14.29%	1
Extreme Temperature (heat/cold)	28.57%	2
Flooding (inland, flash, urban/stormwater, ice jam)	42.86%	3
Geologic Hazards (sinkholes, erosion)	28.57%	2
Invasive Species	14.29%	1
Severe Summer Weather	57.14%	4
Severe Winter Weather	71.43%	5
Tornadoes	14.29%	1
Other (please specify)	14.29%	1
Total Respondents: 7		

#	OTHER (PLEASE SPECIFY)	DATE
1	Illness	8/30/2024 12:40 PM

**Q9 Looking back at previous hazard events, have buildings/facilities/structures you have worked in and/ or are responsible for been impacted by a hazard (ex. damage/closures/etc.)?**

Answered: 7 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	42.86%	3
No	57.14%	4
Don't Know	0.00%	0
TOTAL		7



Q10 If you answered “Yes” to the above question, please describe the event that caused or is causing (if recurring) damage and loss of service/ property. If quantifiable data is available, please provide that as well (number of damaged structures, monetary loss, etc.) (please explain)

Answered: 4   Skipped: 3

#	RESPONSES	DATE
1	The Highlands Council office building in Chester, NJ sustained damages during Super Storm sandy (2012) and the October Snow storm (2011).	10/1/2024 1:25 PM
2	Closure due to water main break	8/30/2024 12:40 PM
3	N/A	8/21/2024 11:40 AM
4	COVID, WEATHER	8/20/2024 12:23 PM

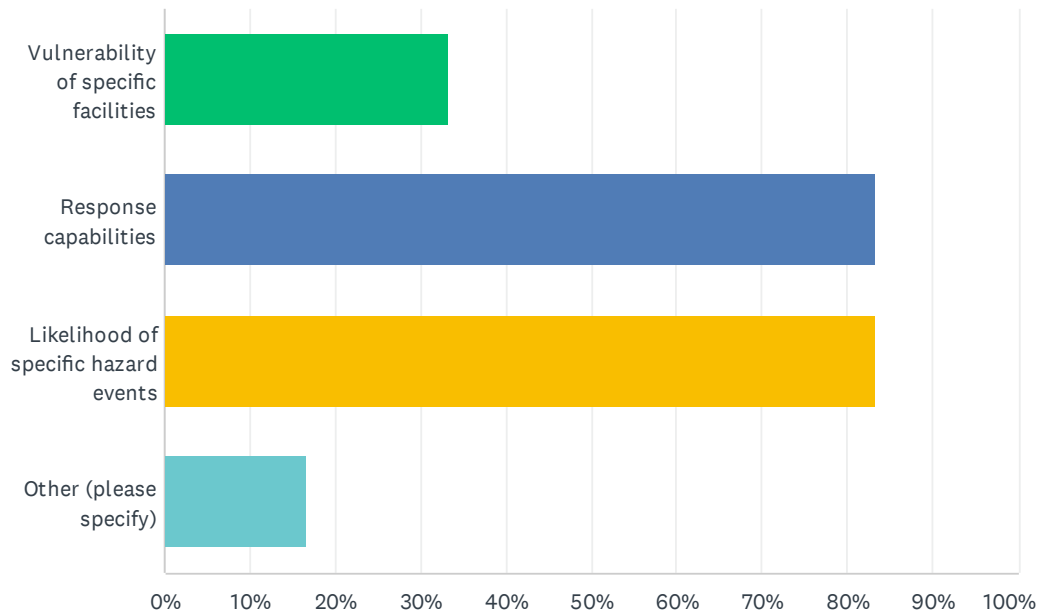
**Q11 Looking at where your facilities or services are located in Sussex County, what areas do you believe to be the most vulnerable to hazards? What are these hazards? (please explain).**

Answered: 5   Skipped: 2

#	RESPONSES	DATE
1	The Highlands Council collaborates with counties and municipalities across the Highlands region to safeguard and enhance its natural and cultural resources, many of which are increasingly vulnerable to various hazards. For instance, forests face threats from wind events, drought, wildfire, invasive species, pests, and disease. Surface water quality is at risk during heavy storms, where excessive runoff and flooding can cause significant damage. Agricultural businesses are also susceptible to crop losses due to drought, heavy precipitation, temperature fluctuations, and pest infestations. The region is at risk from flash flooding and mudslides, risks that are exacerbated by climate change, which is driving an increase in inland tropical weather events. Climate projections indicate that Sussex County could experience a 50% increase in precipitation associated with a 100-year storm by 2050-2099 (source: <a href="https://dep.nj.gov/wp-content/uploads/climatechange/nj-rainfall-studies-summary.pdf">https://dep.nj.gov/wp-content/uploads/climatechange/nj-rainfall-studies-summary.pdf</a> ). These severe storm events also pose a significant threat to critical utilities, such as the electrical grid and water systems, which are essential to residents' well-being.	10/1/2024 1:25 PM
2	Illness and facility environment	8/30/2024 12:40 PM
3	Draught & power failures that effect water & sewer system's	8/22/2024 8:05 AM
4	Severe weather	8/21/2024 11:40 AM
5	WATER MAINS	8/20/2024 12:23 PM

## Q12 What are your agency's primary concerns regarding hazards?

Answered: 6   Skipped: 1



ANSWER CHOICES		RESPONSES	
Vulnerability of specific facilities		33.33%	2
Response capabilities		83.33%	5
Likelihood of specific hazard events		83.33%	5
Other (please specify)		16.67%	1
Total Respondents: 6			

#	OTHER (PLEASE SPECIFY)	DATE
1	rescue efforts	8/21/2024 11:40 AM

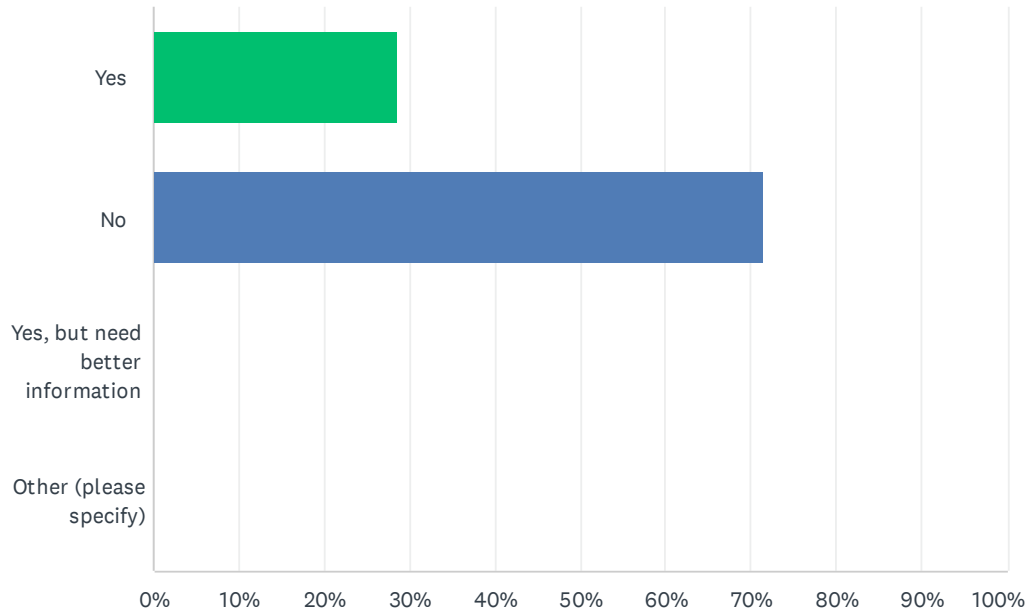
## Q13 What challenges or barriers to reducing vulnerability in Sussex County do you see?

Answered: 5   Skipped: 2

#	RESPONSES	DATE
1	Adequate funding for the planning and implementation of hazard mitigation remains a challenge for many municipalities.	10/1/2024 1:25 PM
2	Evacuation during an emergency	8/30/2024 12:40 PM
3	None	8/22/2024 8:05 AM
4	N/A	8/21/2024 11:40 AM
5	ONLY CERTAIN MUNICIPALITIES GET THINGS	8/20/2024 12:23 PM

## Q14 Are you aware of the number and location of vulnerable populations in your community/operating area?

Answered: 7 Skipped: 0



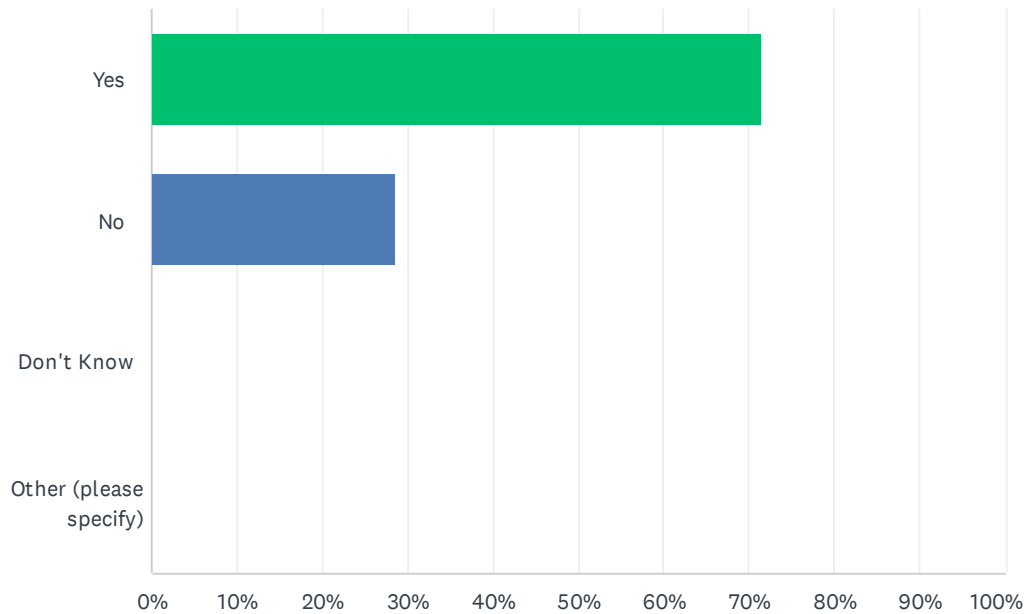
ANSWER CHOICES	RESPONSES	
Yes	28.57%	2
No	71.43%	5
Yes, but need better information	0.00%	0
Other (please specify)	0.00%	0
TOTAL		7

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	



## Q15 Does your agency own or lease facilities?

Answered: 7   Skipped: 0



ANSWER CHOICES		RESPONSES	
Yes		71.43%	5
No		28.57%	2
Don't Know		0.00%	0
Other (please specify)		0.00%	0
TOTAL			7

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

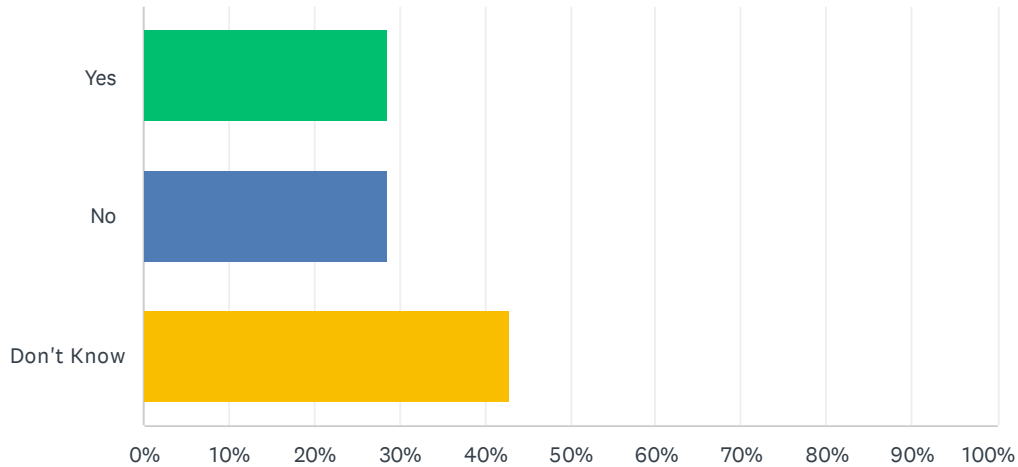
## Q16 Of those facilities that your agency owns or leases, are any viewed as critical facilities or community lifelines?

Answered: 7   Skipped: 0

#	RESPONSES	DATE
1	N/A	10/1/2024 1:27 PM
2	No	8/30/2024 12:41 PM
3	Yes	8/23/2024 10:36 AM
4	N/A	8/22/2024 8:06 AM
5	Yes	8/21/2024 11:41 AM
6	Town Hall is a shelter	8/20/2024 3:31 PM
7	YES	8/20/2024 12:24 PM

## Q17 Are your facilities susceptible to impacts from hazards? For example, your fire department is located in a floodprone area.

Answered: 7 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	28.57%	2
No	28.57%	2
Don't Know	42.86%	3
TOTAL		7

#	IF YES, PLEASE SPECIFY THE FACILITIES AND DAMAGES SUSTAINED.	DATE
1	Power failures	8/22/2024 8:06 AM
2	BAD WEATHER, FLOODING	8/20/2024 12:24 PM

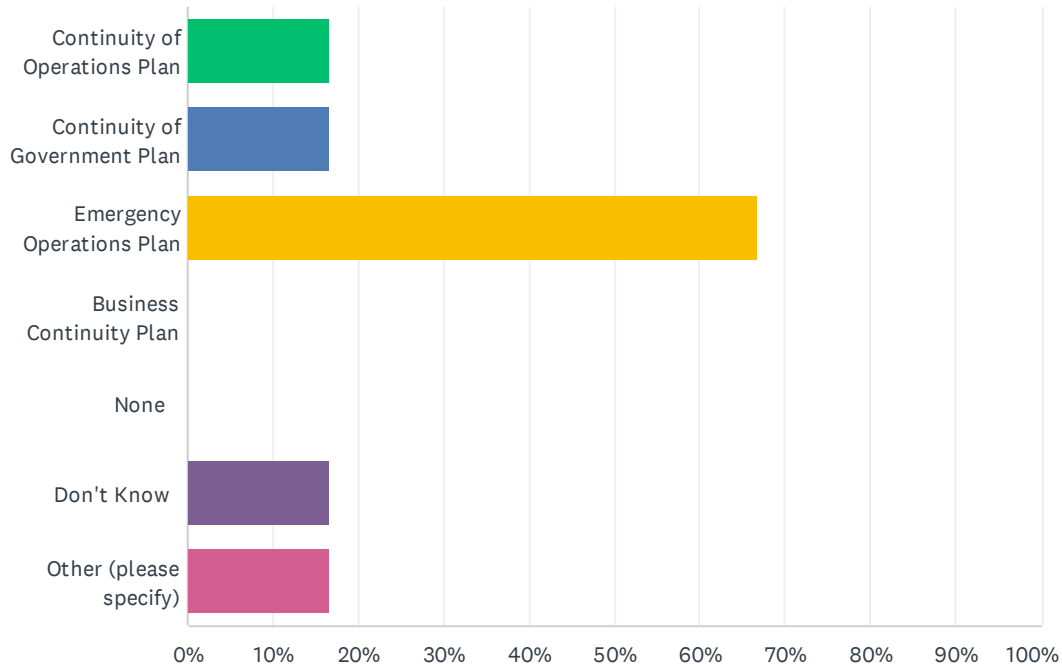
## Q18 What support does your organization need from Sussex County to help reduce vulnerabilities to your facilities?

Answered: 5   Skipped: 2

#	RESPONSES	DATE
1	N/A	10/1/2024 1:27 PM
2	Alert for emergencies	8/30/2024 12:41 PM
3	None	8/22/2024 8:06 AM
4	N/A	8/21/2024 11:41 AM
5	N/A	8/20/2024 12:24 PM

## Q19 Is your organization covered by any of the following plans? Check all that apply

Answered: 6 Skipped: 1



ANSWER CHOICES	RESPONSES	
Continuity of Operations Plan	16.67%	1
Continuity of Government Plan	16.67%	1
Emergency Operations Plan	66.67%	4
Business Continuity Plan	0.00%	0
None	0.00%	0
Don't Know	16.67%	1
Other (please specify)	16.67%	1
Total Respondents: 6		

#	OTHER (PLEASE SPECIFY)	DATE
1	The New Jersey Highlands Council is covered by any plan adopted by the State of New Jersey that is applicable to all state agencies and offices.	10/1/2024 2:39 PM



## Q20 What capabilities does your agency have to help address hazards?

Answered: 6   Skipped: 1

#	RESPONSES	DATE
1	Sustainable agriculture grants Watershed restoration planning Climate hazard vulnerability plan guidance and planning grants Stormwater assistance grants Natural resource protection and green infrastructure requirements for development projects	10/1/2024 2:39 PM
2	Procedures and special teams in place to deal with hazards	8/30/2024 12:42 PM
3	Administration and maintenance staff	8/23/2024 10:39 AM
4	Installation of back up power for suseptible areas	8/22/2024 8:09 AM
5	Emergency response	8/21/2024 11:42 AM
6	SURVEYS RESEARCH	8/20/2024 12:25 PM

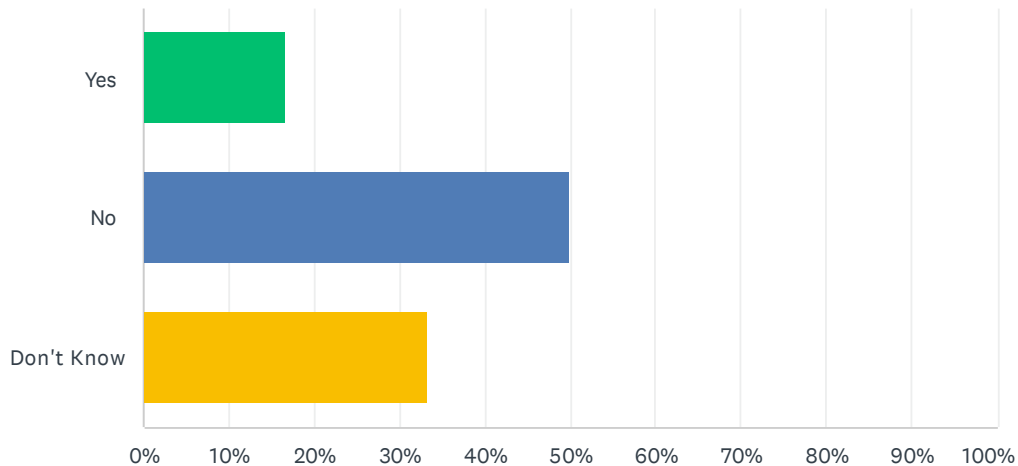
## Q21 What plans or studies has your agency developed that relate to hazards, the climate, new or existing facilities, vulnerable populations, or other areas related to hazard mitigation?

Answered: 5   Skipped: 2

#	RESPONSES	DATE
1	The Highlands Council is creating climate resilience guidelines and a grant program to assist municipalities in incorporating a "Climate Change-Related Hazard Vulnerability Assessment" (CCRHVA) into the Land Use Plan Element of their Municipal Master Plans. This initiative helps municipalities to identify, assess, and plan for their risks and responses to various climate-related hazards.	10/1/2024 2:39 PM
2	Emergency plans	8/30/2024 12:42 PM
3	Installation of back up power	8/22/2024 8:09 AM
4	Unk	8/21/2024 11:42 AM
5	PLANS IN CASE IT HAPPENS	8/20/2024 12:25 PM

**Q22 Is your agency currently involved in conducting any studies or developing any programs which would further support Sussex County's hazard mitigation program? Studies can include hazard-specific information, data gathering which supports risk assessments, including economic data, or statistical data of other types.**

Answered: 6 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	16.67%	1
No	50.00%	3
Don't Know	33.33%	2
TOTAL		6

#	IF YES, PLEASE BRIEFLY DESCRIBE THE TYPE OF STUDY UNDERWAY, AND LIST THE ANTICIPATED YEAR OF COMPLETION.	DATE
1	The Highlands Council has provided funding for multiple watershed management plans in Sussex County, including Hopatcong Borough, Byram Township, and Vernon Township. These plans aim to enhance stormwater conveyance systems and identify strategies to address water quality impairments, including the analysis of methods for pollutant removal.	10/1/2024 2:39 PM

## Q23 Does your agency currently have any mitigation projects or activities underway? If so, please describe.

Answered: 5   Skipped: 2

#	RESPONSES	DATE
1	Recognizing that effective stormwater management is vital to safeguarding water quality, the Highlands Council prioritized a substantial share of its grant funding last year to support municipalities in meeting the updated MS4 permit regulations.	10/1/2024 2:39 PM
2	No	8/30/2024 12:42 PM
3	Yes, installation of back up power	8/22/2024 8:09 AM
4	Unk	8/21/2024 11:42 AM
5	NO	8/20/2024 12:25 PM

**Q24 Please provide a list of projects or programs that your facility or organization would like to complete in order to reduce your vulnerability to damages and losses, including loss of operation/service, to hazard events.**

Answered: 3   Skipped: 4

#	RESPONSES	DATE
1	The Highlands Council would like all Highlands Municipalities and Sussex County to complete a CCRHVA and associated plans. The Highlands Council may provide funding for these plans through a planning grant.	10/1/2024 2:41 PM
2	None	8/22/2024 8:10 AM
3	N/A	8/21/2024 11:42 AM



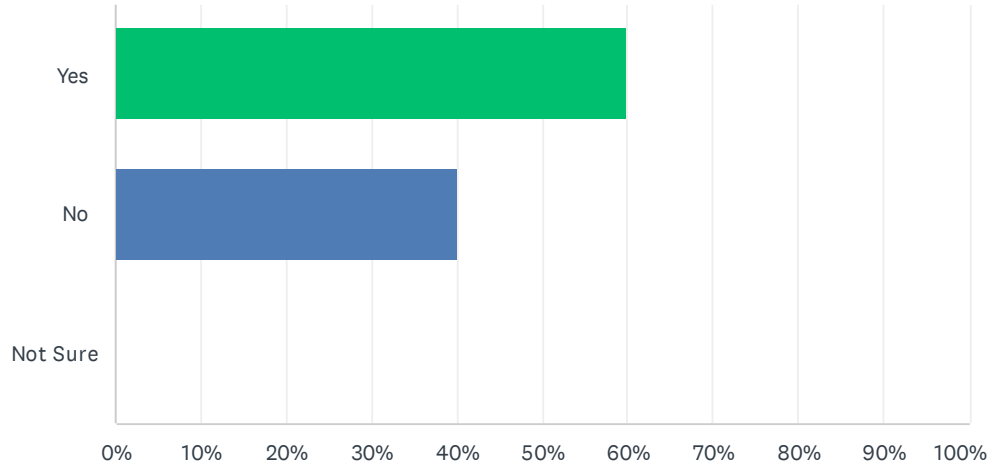
**Q25 Please list any projects or programs that you have recently implemented that will reduce your facility's/organization's vulnerability, damage, and losses, including loss of operation/service, to hazard events.**

Answered: 3   Skipped: 4

#	RESPONSES	DATE
1	The Highlands Council has recently supported improvements made with MS-4 Stormwater Permits by providing funding to municipalities. Additionally, the Highlands Council will soon be releasing a guidance document "Sustainability and Climate Adaptation Planning: An integrated Guide for Highlands Region Municipalities," that identifies areas of concern due to climate change specific to highlands municipalities, and how they can use supporting resources provided by the Highlands Council to conduct a CCRHVA and effectively integrate it into sustainability and land use planning.	10/1/2024 2:41 PM
2	Back up power	8/22/2024 8:10 AM
3	Upgraded generator system	8/21/2024 11:42 AM

## Q26 Does your agency provide assistance to any socially vulnerable or underserved populations in Sussex County?

Answered: 5   Skipped: 2

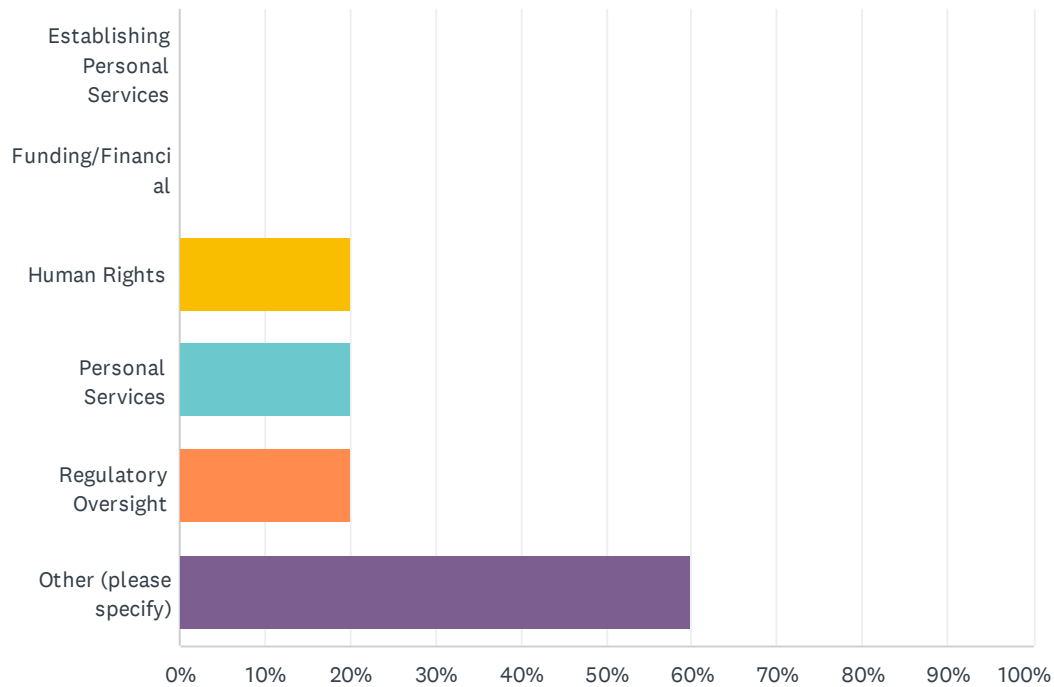


ANSWER CHOICES		RESPONSES	
Yes		60.00%	3
No		40.00%	2
Not Sure		0.00%	0
TOTAL			5

#	OTHER (PLEASE SPECIFY)	DATE
1	Not directly	10/1/2024 2:43 PM
2	N/a	8/22/2024 8:13 AM

## Q27 If yes, what types of services do you provide?

Answered: 5   Skipped: 2



ANSWER CHOICES	RESPONSES
Establishing Personal Services	0.00% 0
Funding/Financial	0.00% 0
Human Rights	20.00% 1
Personal Services	20.00% 1
Regulatory Oversight	20.00% 1
Other (please specify)	60.00% 3
Total Respondents: 5	

#	OTHER (PLEASE SPECIFY)	DATE
1	Highlands Council works with municipalities and Counties to provide planning grants and other environmental and agricultural programs that can help benefit socially vulnerable or underserved populations.	10/1/2024 2:43 PM
2	N/a	8/22/2024 8:13 AM
3	Emergency response	8/21/2024 11:49 AM

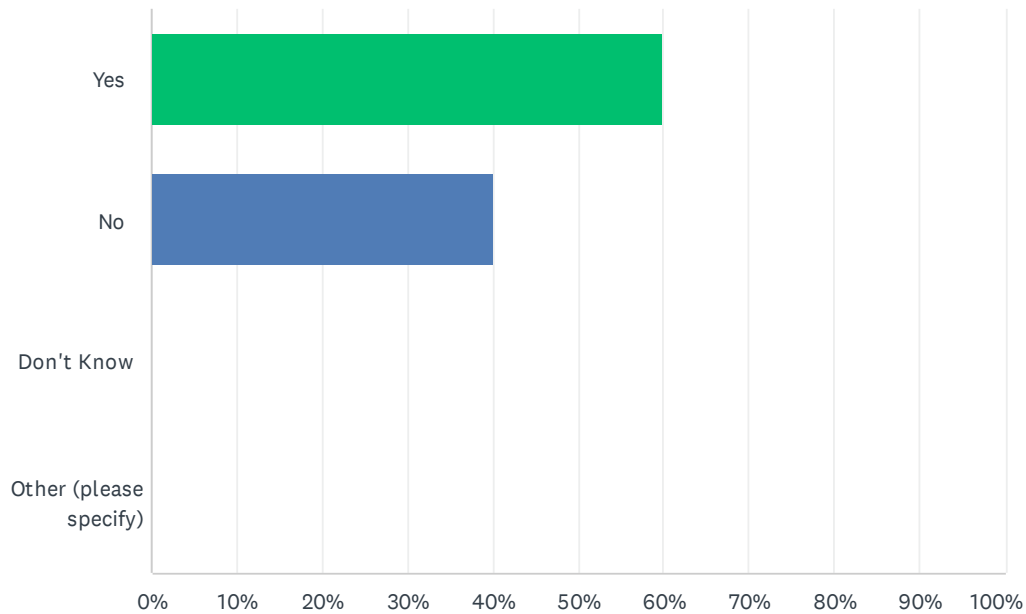
## Q28 Please provide a list of the populations or communities served by your agency.

Answered: 4   Skipped: 3

#	RESPONSES	DATE
1	Byram Township Franklin Borough Green Township Hamburg Borough Hardyston Township Hopatcong Borough Ogdensburg Borough Sparta Township Stanhope Borough Vernon Township	10/1/2024 2:43 PM
2	Special needs children	8/30/2024 12:43 PM
3	Stillwater District No1 Carriage Mobile Homes Cartridge Activated Devises Andover Professional Condo Bagel Station	8/22/2024 8:13 AM
4	13 townships	8/21/2024 11:49 AM

## Q29 Do you provide these services during times of disaster?

Answered: 5 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	60.00%	3
No	40.00%	2
Don't Know	0.00%	0
Other (please specify)	0.00%	0
TOTAL		5

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	



Q30 What barriers and community characteristics exist within Sussex County that may create additional vulnerabilities to hazards? This may include but is not limited to access to transportation, broadband access, economic disadvantages, physical health (chronic diseases), limited physical mobility, age (older adults and children), and rural communities.

Answered: 4   Skipped: 3

#	RESPONSES	DATE
1	No additional barriers recognized in addition to the examples provided above.	10/1/2024 2:43 PM
2	limited physical mobility	8/30/2024 12:43 PM
3	None	8/22/2024 8:13 AM
4	All that apply to rural communities	8/21/2024 11:49 AM

## Q31 Do you have any questions or comments for Sussex County?

Answered: 3   Skipped: 4

#	RESPONSES	DATE
1	The Highlands Council may offer grant funding to municipalities and counties to support local hazard mitigation planning. These plans would assess risks associated with extreme storm events and other hazards and outline actions to prevent or reduce hazardous situations. For instance, grants may fund stormwater management plans that incorporate green infrastructure, along with stormwater mitigation strategies. Having these plans in place before disaster strikes is critical for effective response and resilience.	10/1/2024 2:45 PM
2	None	8/22/2024 8:14 AM
3	No	8/21/2024 11:49 AM

# **Outreach Materials**



# SUSSEX COUNTY HAZARD MITIGATION PLAN

2024 Update

## WHAT IS A HAZARD MITIGATION?

Hazard mitigation is an action to help reduce long-term risks caused by hazards or disasters, such as flooding, earthquakes, or wildfires. The purpose of hazard mitigation is to protect people and structures, and minimize the costs of disaster response and recovery. Hazard mitigation can take many forms: capital projects, policies, education, and environmental protection.

Proactive mitigation leads to more cost-effective projects. By contrast, reactive mitigation, tends to lead to severe damage and often more costly fixes; it simply costs too much to address the effects of disasters only after they happen. A surprising amount of damage can be prevented if we can anticipate where and how disasters occur, and take steps to prevent those damages.

## WHAT IS A HAZARD MITIGATION PLAN?

Hazard Mitigation Plans (HMP) are prepared and adopted by counties and municipalities with the primary purpose of identifying, assessing, and reducing the long-term risk to life and property from hazard events. HMPs are most effective when they are based on a comprehensive, long-term plans developed before a disaster occurs.

Effective mitigation planning can break the cycle of disaster damage, reconstruction, and repeated damage. There are four key elements of an HMP: 1) a risk assessment, 2) capability assessment, 3) mitigation strategy, and 4) plan maintenance procedures.

The purpose of mitigation planning is to identify local policies and actions that can be implemented over the long term to reduce risk and future losses from hazards. These mitigation policies and actions are identified based on an assessment of hazards, vulnerabilities, and risks and the participation of a wide range of stakeholders and the public in the planning process.

## PURPOSE

The Sussex County Division of Emergency Management is leading the update of the Sussex County HMP. This plan is an opportunity to detail a variety of potential hazards that could affect some or all of the residents and will also allow the county and participating municipalities to be eligible for future mitigation funding from the Federal Emergency Management Agency (FEMA).

The goal of the plan is to identify projects that can reduce damages from future hazards. The plan will include a risk assessment and a hazard mitigation strategy. The primary hazards of concern in the county include: Dam Failure, Disease Outbreak, Drought, Earthquake, Extreme Temperature, Flood, Geological Hazards, Hurricanes/Tropical Storms, Infestation and Invasive Species, Nor'easter, Severe Weather, Severe Winter Storm, and Wildfire.

The study will focus on existing buildings and potential future development, infrastructure, and lifelines that might be impacted. Lifelines include but are not limited to municipal buildings and infrastructure such as power-generation facilities, water utilities, roadways, railroads and communication systems.





## WHAT ARE THE BENEFITS OF HAZARD MITIGATION?

Mitigation planning will help the county and the participating jurisdictions prepare for disasters, before they happen, to reduce impacts when a disaster occurs. Benefits include:

- Identifying actions for risk reduction that are agreed upon by stakeholders and the public,
- Focusing resources on the greatest risks and vulnerabilities,
- Building partnerships by involving citizens, organizations, and businesses,
- Increasing education and awareness of threats and hazards, as well as their risks,
- Communicating priorities to state and federal officials, and
- Aligning risk reduction with other community objectives.

## WHAT IS REQUIRED IN A HAZARD MITIGATION PLAN?

FEMA regulations require that the public must be engaged in all phases of the plan's development. The HMP should review and incorporate existing plans and programs that can support or enhance hazard mitigation. The plan must assess the risk to natural hazards that may impact the planning area and identify and prioritize mitigation actions that can be taken. The HMP must also include a strategy for maintaining the plan, which must be updated every 5 years.

## FAQs

**What is mitigation?** Any sustained action taken to reduce/eliminate long-term risk to life and property from a hazard event.

**How can you reduce/eliminate risk?** Identify mitigation actions/ projects/activities or processes that can include 1) Local plans and regulations; 2) Structure and infrastructure projects; 3) Natural systems protection; 4) Education and awareness programs.

**What grant funding is available?** FEMA Hazard Mitigation Assistance grant funding is available with a FEMA-approved Hazard Mitigation Plan (annual and post-disaster opportunities).

**How can I support the plan?** Take the public survey! This will help us obtain input and get a better understanding of public preparedness for hazard events.

**Where can I see the 2024 plan?** Sections of the draft plan will be available early-2024 for download, review and comment on the Sussex County HMP website at:  
<https://www.sussex.nj.us/cn/webpage.cfm?tpid=11091>

## PLANNING PROCESS



### FOR MORE INFORMATION, PLEASE VISIT OUR WEBSITE:

<https://www.sussex.nj.us/cn/webpage.cfm?tpid=11091>

### IF YOU HAVE QUESTIONS, CONTACT:



Jennifer Van Der Wende, Deputy Coordinator  
 Sussex County Sheriff's Office  
 Division of Emergency Management  
[jenvanderwende@sussexcountysheriff.com](mailto:jenvanderwende@sussexcountysheriff.com)

### LIVE OR WORK IN SUSSEX COUNTY? TAKE OUR SURVEY!


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

-or-

scan the QR code to complete the survey









# SUSSEX COUNTY HAZARD MITIGATION PLAN SURVEY


Sussex County is seeking input for the 2025 Hazard Mitigation Plan. The plan will address the County's risks posed by hazards (e.g., flood, drought, winter storms) and identify specific strategies to help reduce or eliminate risks.

**TAKE THE SURVEY**

[HTTPS://BIT.LY/4CX6SX9](https://bit.ly/4CX6SX9)



## WE NEED YOUR HELP




Sussex County is updating the Hazard Mitigation Plan and we want to hear from you.

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Tell us what you think the updated plan should focus on by taking a quick survey:

[HTTPS://BIT.LY/4CX6SX9](https://bit.ly/4CX6SX9)







## Sussex County Hazard Mitigation Plan

Tell us what you think: <https://bit.ly/4cx6Sx9>

Sussex County is seeking input for the 2025 HMP. The plan will address the County's risks posed by hazards (e.g., flood, drought, winter storms) and identify specific strategies to help reduce or eliminate risks.



**SCAN ME**



## WE NEED YOUR HELP TO UPDATE SUSSEX COUNTY'S HAZARD MITIGATION PLAN

 Sussex County is a beautiful place to live, but it is also at risk for natural disasters including flooding, winter storms, and drought.

 The County is currently updating the Hazard Mitigation Plan. The plan will assess the County's risk to hazards and disasters and develop a blueprint to reduce impacts and protect our county and residents.

 **TELL US WHAT YOU THINK THE UPDATED PLAN SHOULD FOCUS ON:**

 [HTTPS://BIT.LY/4CX6SX9](https://bit.ly/4cx6Sx9)



**SCAN ME**

# SUSSEX COUNTY HAZARD MITIGATION PLAN

SUSSEX COUNTY DIVISION OF EMERGENCY  
MANAGEMENT IS WORKING ON AN UPDATE TO  
THE COUNTY'S HAZARD MITIGATION PLAN. IF  
YOU LIVE OR WORK IN THE COUNTY, WE NEED  
YOUR INPUT ABOUT LOCAL HAZARDS.

Take a quick survey to  
help us with the update.

[HTTPS://BIT.LY/4CX6SX9](https://bit.ly/4CX6SX9)



SCAN ME



SUSSEX COUNTY

## HAZARD MITIGATION PLAN SURVEY

Sussex County is seeking input for the  
2025 Hazard Mitigation Plan. The plan  
will address the County's risks posed by  
hazards (e.g., flood, drought, winter  
storms) and identify specific strategies  
to help reduce or eliminate risks.

TAKE THE QUICK SURVEY

[HTTPS://BIT.LY/4CX6SX9](https://bit.ly/4CX6SX9)





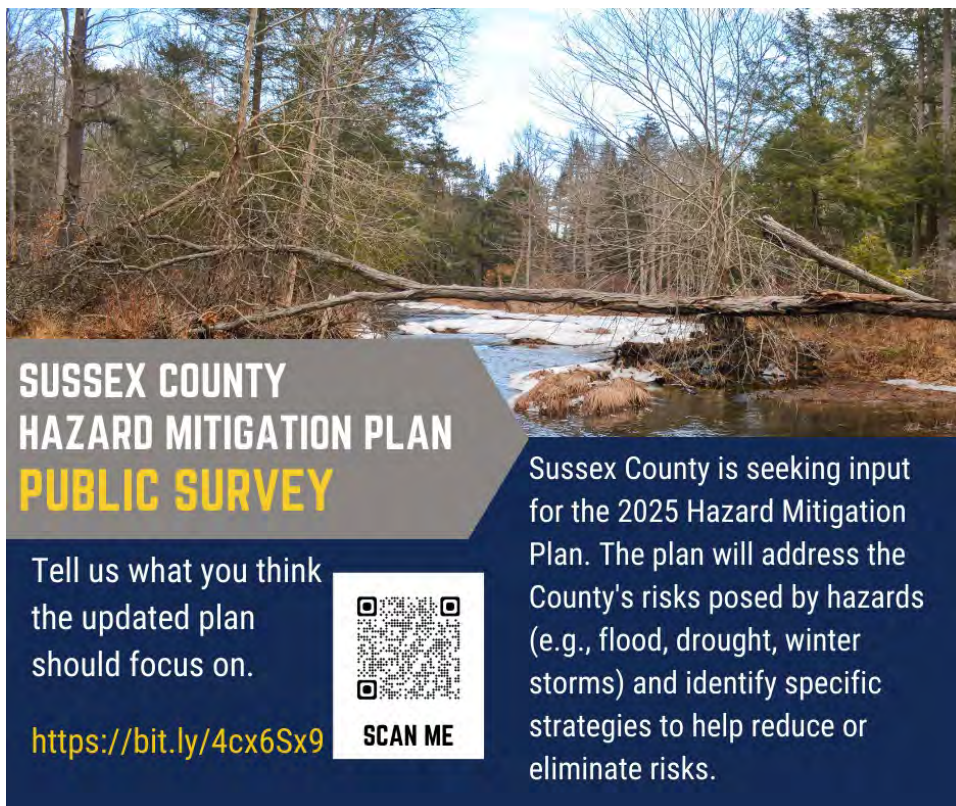


# WE NEED YOUR HELP

Sussex County is updating the Hazard Mitigation Plan, and we want to hear from you.

Tell us what you think the updated plan should focus on by taking a quick survey.


**TAKE THE QUICK SURVEY**



## SUSSEX COUNTY HAZARD MITIGATION PLAN PUBLIC SURVEY

Tell us what you think the updated plan should focus on.

<https://bit.ly/4cx6Sx9>



**SCAN ME**

Sussex County is seeking input for the 2025 Hazard Mitigation Plan. The plan will address the County's risks posed by hazards (e.g., flood, drought, winter storms) and identify specific strategies to help reduce or eliminate risks.

# SUSSEX COUNTY HAZARD MITIGATION PLAN

**SUSSEX COUNTY OEM IS WORKING ON  
AN UPDATE TO THE COUNTY'S HAZARD  
MITIGATION PLAN. IF YOU LIVE OR WORK  
IN THE COUNTY, WE NEED YOUR INPUT  
ABOUT LOCAL HAZARDS.**

**Scan the code to complete a quick  
survey to help us with the update.**



## **ARE YOU PREPARED FOR A DISASTER?**

- DO YOU HAVE A PLAN?
- DO YOU HAVE AN EMERGENCY KIT?
- ARE YOU READY FOR THE NEXT BIG STORM?

**ANSWER THESE QUESTIONS  
BY TAKING A QUICK SURVEY**







## SUSSEX COUNTY HAZARD MITIGATION PLAN 2025 UPDATE

Sussex County is making efforts to build a stronger community and could really use your assistance! Would you mind taking a quick survey below and letting us know how you keep yourself safe when natural disasters strike?



<https://bit.ly/4cx6Sx9>



## Sussex County Hazard Mitigation Plan 2025 Update

The Sussex County Division of Emergency Management is seeking public input regarding the potential natural hazards occurring in our county. We invite you to complete a quick survey to express your concerns and share your insights on the different natural hazards.

Use the link or scan below to take the survey:  
<https://bit.ly/4cx6Sx9>





# WE NEED YOUR *feedback*



Join us for a review of the draft Sussex County Hazard Mitigation Plan (HMP) on Thursday, November 21 at 7:00 PM EST. through the provided URL or by scanning the QR code below.

<https://msteams.link/TADH>



The draft HMP will be available for review via the County's HMP website for 30 days.

Visit the  
County's HMP  
Website:

<https://www.sussexcountynjhmp.com/draft-plans/>



## Your Opinion Matters!

Join the Sussex County Planning Partnership for a review of the draft Hazard Mitigation Plan (HMP) on Thursday, November 21 at 7:00 PM, EST. Following this meeting, the draft HMP will be available for public review for 30 days on the County's HMP website: <https://www.sussexcountynjhmp.com/draft-plans/>

Join through this URL or by scanning the QR Code below  
<https://msteams.link/TADH>







# Your Opinion Matters!

Review the draft 2025 Sussex County Hazard Mitigation Plan (HMP) now through December 21, 2024! The draft HMP will be available for public review on the County's HMP website:  
<https://www.sussexcountynjhmp.com/draft-plans/>

Use this URL or scan the QR Code below to open the review survey  
[https://www.surveymonkey.com/r/SussexCoHMP\\_PublicReview](https://www.surveymonkey.com/r/SussexCoHMP_PublicReview)

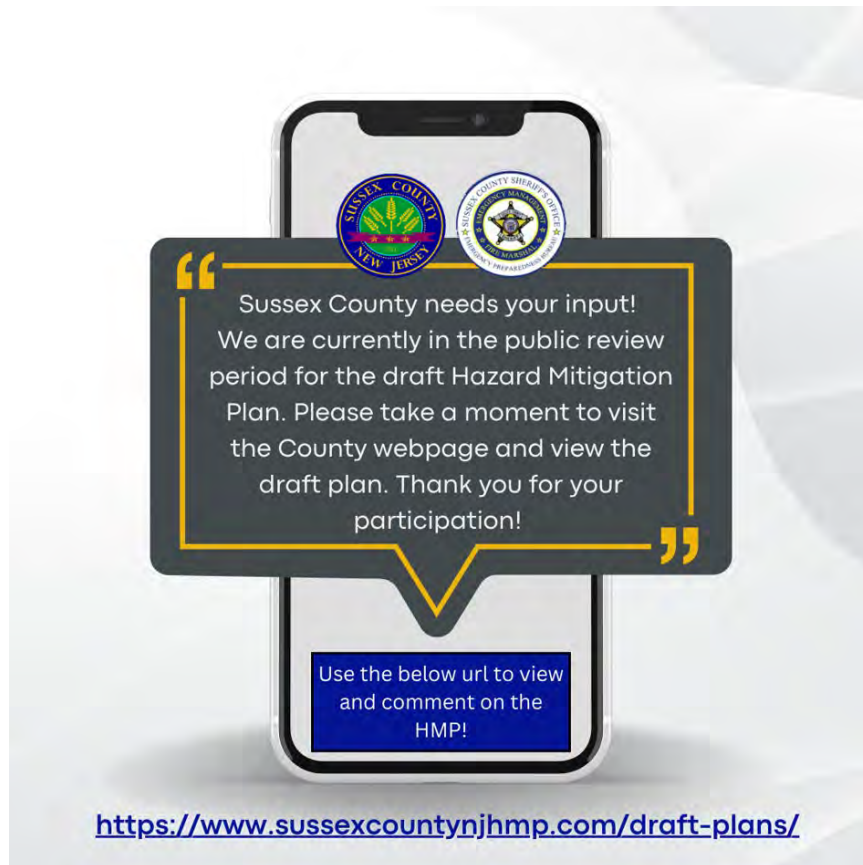


**The Public Review Period is Open!**  
Visit  
<https://www.sussexcountynjhmp.com/draft-plans/> to review the draft HMP  
now through December 21, 2024.

**Access the survey to submit your  
comments:**









# WE NEED YOUR *feedback*

[www.sussexcountynjhmp.com](https://www.sussexcountynjhmp.com) 

The Sussex County Hazard Mitigation Plan draft is ready for review. The public commenting period is open until **December 21, 2024.**

Visit the County HMP webpage to view the draft plan!



Submit your feedback through online survey:  
[https://www.surveymonkey.com/r/SussexCoHMP\\_PublicReview](https://www.surveymonkey.com/r/SussexCoHMP_PublicReview)





# SUSSEX COUNTY

## HAZARD MITIGATION PLAN UPDATE



**The County needs your help!**

***The public review period for the draft HMP is open until December 21, 2024.***

***You can access the draft HMP through the County Hazard Mitigation Webpage.***

Scan the QR code to submit your comments on the HMP!  
or go to <https://www.sussexcountynjhmp.com/draft-plans/>





## SUSSEX COUNTY HAZARD MITIGATION PLAN UPDATE

[Home](#)[About](#)[What's Mitigation](#)[Calendar](#)[Meetings](#)[Explore the Plan](#)[Websites](#)

Welcome to the Sussex County Hazard Mitigation Plan (HMP) Website. This website provides project updates, resources, and links to hazard mitigation in support of the HMP update.

The goal of the project is to save lives and property through the reduction of hazard vulnerability for the entire county. During the course of this planning project, county and local leaders and the community will work in tandem to identify risks, assess capabilities, and formulate a strategy to reduce disaster vulnerability.

Public participation and feedback is a vital part of the hazard mitigation planning process. The Sussex County Hazard Mitigation Steering Committee has developed a Mitigation Survey to assist in providing the public an outlet to contribute to the Sussex County HMP update. This survey will be used to develop portions of the HMP. Thank you for participating in this important initiative by providing us with your anonymous survey contribution.

Keep checking back regularly for information on upcoming events, to take our public survey, and to review and comment on the draft plan. If you would like to get in touch with the project team, please use the following contact information:

A graphic with a blue background and white text. It features a collage of images: a lighthouse, a forest, a body of water, and a close-up of rocks. The text reads: "SUSSEX COUNTY HAZARD MITIGATION PLAN 2025 UPDATE". Below this, it says: "Sussex County is making efforts to build a stronger community and could really use your assistance! Would you mind taking a quick survey below and letting us know how you keep yourself safe when natural disasters strike?". At the bottom left is a QR code, and at the bottom right is the URL "https://bit.ly/4cx6Sx9".

**SUSSEX COUNTY  
HAZARD MITIGATION PLAN  
2025 UPDATE**

Sussex County is making efforts to build a stronger community and could really use your assistance! Would you mind taking a quick survey below and letting us know how you keep yourself safe when natural disasters strike?

<https://bit.ly/4cx6Sx9>

## Drafted Press Releases

### **Sussex County to Present the 2025 Draft Hazard Mitigation Plan**

Sussex County Emergency Management is continuing the process of updating its Hazard Mitigation Plan for the County and its municipalities. The plan focuses on existing and future buildings, infrastructure, and critical facilities that might be impacted by natural disasters. Ultimately, the mitigation projects identified and implemented will reduce vulnerability and enable communities to become more resilient to disasters.

To date, the County has completed a risk assessment to identify hazards that may impact Sussex County and its municipalities, profiled the relevant hazards and their potential consequences, identified assets that are subject to losses or damage, estimated the potential losses that could result from each type of hazard, and developed hazard mitigation strategies. A public meeting will be held in the upcoming weeks, as listed below, to review the sections of the draft 2025 Sussex County Hazard Mitigation Plan:

- A public meeting will be held to review the draft Hazard Mitigation Plan via Teams on Wednesday, November 13 at 7:00 P.M. EST. The meeting can be accessed here <https://msteams.link/TADH>.

The update of this plan allows the County and participating jurisdictions to continue to be eligible for future pre-disaster mitigation funding from FEMA. Example of grant-eligible projects include home acquisitions or elevations – to either remove houses located in the floodplain to generate open space and increase flood storage or to raise their first floor above the FEMA base flood elevation – and local flood control measures.

Information about the Hazard Mitigation Plan is posted on the Sussex County HMP plan website at <https://www.sussexcountynjhmp.com/draft-plans/>.

## Sussex County is Updating its Hazard Mitigation Plan

Sussex County Division of Emergency Management has begun the process of updating the 2021 Hazard Mitigation Plan for the County and its 24 municipalities. The plan focuses on existing and future buildings, infrastructure, and critical facilities that might be impacted by natural disasters. Ultimately, the mitigation projects identified and implemented will reduce vulnerability and enable communities to become more resilient to disasters.

The 2025 HMP update will include a risk assessment to identify hazards that may impact Sussex County and its municipalities, profile the relevant hazards and their potential consequences, identify assets that are subject to losses or damage, and estimate the potential losses that could result from each type of hazard. Following the risk assessment, the County will develop a hazard mitigation strategy, including the identification of hazard mitigation goals and a prioritized list of actions designed to reduce losses.

The update of this plan allows Sussex County and participating jurisdictions to continue to be eligible for future pre- and post-disaster mitigation funding from FEMA. Example of grant-eligible projects include home acquisitions or elevations and local flood control measures.

Sussex County is asking members of the public to contribute to the planning process by taking a survey. This survey is designed to gather information from around the County to help us better coordinate activities and reduce the risk of injury or property damage. These questions are for information-gathering only and responses will only be shared with municipal, state, federal and county entities for planning purposes. To access the public survey and to find out more about the planning process, please visit the Sussex County Pre-Hazard Mitigation Plan website (<https://www.sussexcountynjhmp.com/>).

## Neighboring Community Survey Outreach Letter

Greetings,

Sussex County is currently updating our Hazard Mitigation Plan. The HMP provides the County an opportunity to re-evaluate potential hazards that could affect all residents in the community. As well, updating our HMP also allows the County to remain eligible for FEMA's pre- and post-disaster mitigation funding.

The HMP will address FEMA requirements for updating HMPs and will include a risk assessment and mitigation strategy. We will be looking at existing and potential development, infrastructure, critical facilities, and lifelines.

As part of the requirements, Sussex County is reaching out to our neighboring communities asking each to provide input during our planning process. We have developed a survey (<https://www.surveymonkey.com/r/SussexNeighborSurvey2025>) to help us collect input regarding planning and project collaboration for natural hazards.

We encourage you to check out our website (<https://www.sussexcountynihmp.com/>) for more details on the planning process and upcoming meetings. Once a draft HMP is developed, sections of the plan will be available on the website to review.

Please forward this email to any local jurisdictions which are in close proximity to Sussex County.

Thank you in advance, your time and input are very much appreciated!

## Stakeholder Survey Outreach Letter

Greetings,

On behalf of the Sussex County Division of Emergency Management we are writing to inform you that the County and its 24 municipalities are currently updating their Hazard Mitigation Plan (HMP). The plan provides an opportunity for us to detail an array of potential hazards that could affect all our residents and will allow us to remain eligible for future Hazard Mitigation Assistance (HMA) funding from FEMA.

The HMP serves as a “blueprint” for Sussex County and municipalities, to help us make coordinated, cost-effective efforts towards reducing losses and becoming more resilient to natural disasters. As part of the planning process, we are asking stakeholders for input on hazard mitigation in Sussex County. To collect input, we are asking each stakeholder to complete a quick survey. The survey can be accessed by clicking on the following link:  
<https://www.surveymonkey.com/r/SussexStakeholderSurvey2025>

Additionally, if you live or work in Sussex County, please take our public survey (<https://www.surveymonkey.com/r/SussexPublicSurvey2025>) to help us collect input on preparedness for hazard events.

Please help us by visiting the sites referenced above and completing the short surveys. This will help us obtain valuable information for the planning process and mitigation strategy. Sections of the plan will be available for download and review at the Sussex County Hazard Mitigation Plan website (<https://www.sussexcountynjhmp.com/>).

Thank you in advance, your time and input are very much appreciated!



## **APPENDIX E: ACTION WORKSHEET TEMPLATE**



This appendix includes the instructions and template provided for the development of Mitigation Strategy Action Worksheets. These worksheets are included in each jurisdictional annex of the plan in compliance with NJOEM Mitigation Guidance.

<b>Action Name:</b>											
<b>Lead Agency:</b>											
<b>Supporting Agencies:</b>											
<b>Hazard(s) of Concern:</b>	<input type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Flood <input type="checkbox"/> Geological Hazards <input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input type="checkbox"/> Nor'easter <input type="checkbox"/> Severe Weather <input type="checkbox"/> Severe Winter Weather <input type="checkbox"/> Wildfire									
<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>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)									
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)									
<b>Priority</b>	<input type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low								
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem continues</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>	Action	Evaluation	No Action	Current problem continues						
Action	Evaluation										
No Action	Current problem continues										

## GUIDANCE TO COMPLETE THE MITIGATION ACTION WORKSHEET

The following provides additional guidance on how to complete the Mitigation Action Worksheet. Please note that NJOEM requires a minimum of two proposed mitigation activities.



## ACTION WORKSHEET

---

**Action Name:** Each action must have a unique project number referenced here and in the Action Tables.

**Lead Agency:** Identify the name of a department or agency responsible for implementation, not the jurisdiction.

**Supporting Agencies:** Identify the name of any departments or agencies which will support the efforts of the lead agency.

**Hazard(s) of Concern:** Please identify the hazard(s) being addressed with this action. The Hazards of Concern included in the Sussex County Hazard Mitigation Plan include:

- Dam Failure
- Disease Outbreak
- Drought
- Earthquake
- Flood
- Geological Hazards
- Hazardous Materials
- Hurricane
- Infestation
- Nor'easter
- Severe Weather
- Severe Winter Weather
- Wildfire

**Description of the Problem:** Provide a detailed narrative of the problem. Describe the natural hazard you wish to mitigate, its impacts to the jurisdiction, past damages, and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.

**Description of the Solution:** Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).

**Estimated Cost:** Provide an estimated cost for implementation; rough dollar figures are preferred, but if unknown, a specified range is acceptable. Consider all costs associated with implementation. (Low <\$10,000, Medium \$10,000-\$100,000, High >\$100,000).

**Potential Funding Source(s):** Multiple sources of potential funding should be listed when appropriate.



**Estimated Time Required for Project Implementation:** Provide the estimated time required to complete the project from start to end. (Short-term, Long-term, or On-going/Continuous)

**Goals Met:**

- Goal 1: Protect life
- Goal 2: Protect property
- Goal 3: Increase public preparedness and awareness
- Goal 4: Develop and maintain an understanding of increased risk from climate change impacts on natural hazards
- Goal 5: Enhance mitigation capabilities to reduce hazard vulnerabilities
- Goal 6: Support continuity of operations before, during, and after hazard events
- Goal 7: Reduce the risk of natural hazards for socially vulnerable populations
- Goal 8: Address long-term vulnerabilities from high hazard dams

**Benefits:** Identify the benefits that implementation of this project will provide. If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.

**Impact on Socially Vulnerable Populations:** Provide a narrative on how this action will impact socially vulnerable populations within the jurisdiction and other impacted areas. These impacts can be positive or negative.

**Impact on Future Development:** Provide a narrative on how this action will impact future development within the jurisdiction and other impacted areas. These impacts can be positive or negative.

**Impact on Critical Facilities/Lifelines:** Provide a narrative on how this action will impact critical facilities and community lifelines within the jurisdiction and other impacted areas. These impacts can be positive or negative.

**Impact on Capabilities:** Provide a narrative on how this action will impact capabilities within the jurisdiction and other impacted areas. These impacts can be positive or negative.

**Climate Change Considerations:** Provide a brief narrative on how climate change may exacerbate conditions which could impact this action.

**Mitigation Action Type:**

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.



**CRS Category:**

- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

**Prioritization:** Please enter High/Medium/Low. Refer to the prioritization exercise and table.

**Actions/Projects Considered:** Please consider three different options to mitigate the problem identified. One alternative is always to accept the current level or risk (tolerate the vulnerability/problem) by deciding to take no action at this time. If you choose to take no action, please complete the worksheet up to and including this section and this will be noted in the Plan.

Please include the name of the action considered and a brief reason as to why the action was not selected. The reasoning documents the consideration of these alternatives.

## GUIDANCE TO COMPLETE THE PRIORITIZATION TABLE

Complete this table to help evaluate and prioritize each mitigation action being considered by your municipality. Please use these 14 criteria to assist in evaluating and prioritizing new mitigation actions identified. Specifically, for each new mitigation action, assign a numeric rank (-1, 0, or 1) for each of the 14 evaluation criteria in the provided table, defined as follows:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

Use the numerical results of this exercise to help prioritize your actions as “Low”, “Medium” or “High” priority. Your municipality may recognize other factors or considerations that affect your overall prioritization; these should be identified in narrative in the Priority field of the worksheet. The 14 evaluation/prioritization criteria are:

1. Life Safety—How effective will the action be at protecting lives and preventing injuries? Will the proposed action adversely affect one segment of the population?





2. Property Protection—How significant will the action be at eliminating or reducing damage to structures and infrastructure?
3. Cost-Effectiveness—Are the costs to implement the action commensurate with the benefits achieved?
4. Political—Is there overall public support for the action? Is there the political will to support it? Is the action at odds with development pressures?
5. Legal—Does the jurisdiction have the authority to implement the action?
6. Fiscal—Is funding for the action available under existing program budgets or would it require a new budget authorization or funding from another source, such as grants?
7. Environmental—What are the potential environmental impacts of the action? Will it comply with environmental regulations? Are there co-benefits of this action?
8. Social Vulnerability—Does the action benefit socially vulnerable populations and underserved communities?
9. Administrative—Does the jurisdiction have the staff and administrative capabilities to implement the action and maintain it or will outside help be necessary? Does the scale and scope of the action align with the jurisdiction's capabilities?
10. Hazards of Concern—Does the action address one or more of the jurisdiction's high-ranked hazards?
11. Climate Change—Does the action incorporate climate change projections? Is the action designed to withstand or address long-term conditions?
12. Timeline—Can the action be completed in less than five years?
13. Community Lifelines—Does the action benefit community lifelines?
14. Other Local Objectives—Does the action advance other local objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of other plans and programs?

## **APPENDIX F: PLAN MAINTENANCE TOOLS**

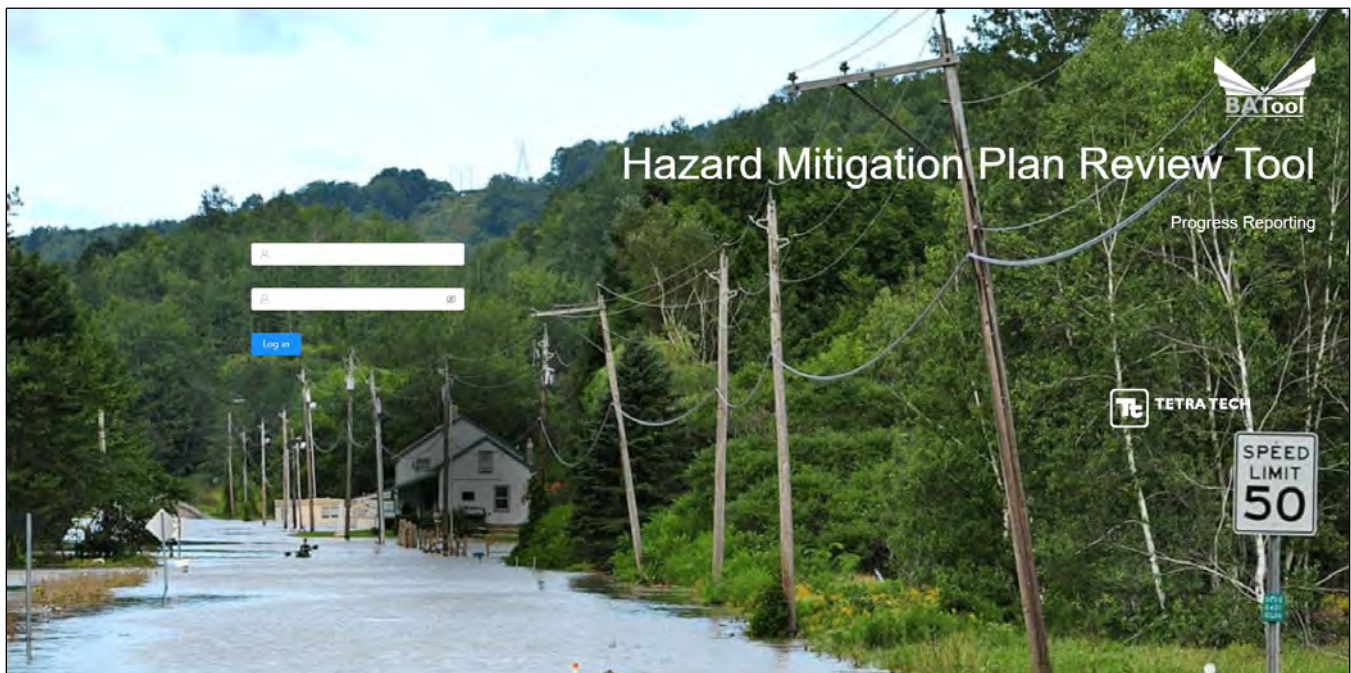


This appendix includes tools and worksheets to facilitate plan maintenance and review by the Sussex County Steering Committee and Planning Partnership.

In the first year of the performance period, an online performance progress reporting system, the BATool<sup>SM</sup> will provide municipal and county representatives direct access to their mitigation initiatives to easily update the status of each project, document successes or obstacles to implementation, add or delete projects to maintain mitigation project implementation. This online program will capture information and roll all input into a report to summarize mitigation strategy progress.



Figure F-1. BATool<sup>SM</sup> Screenshot



The FEMA 386-4 guidance worksheets are also available to assist with progress reporting. These worksheets are provided in this section for ease of access to the HMP Coordinator and Planning Partnership to maintain the 2025 HMP throughout its period of performance.

**Worksheet #1****Progress Report****step 2***Page 1 of 3*

Progress Report Period: \_\_\_\_\_ to \_\_\_\_\_  
(date) (date)

Project Title: \_\_\_\_\_ Project ID#: \_\_\_\_\_

Responsible Agency: \_\_\_\_\_

Address: \_\_\_\_\_

City/County: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #(s): \_\_\_\_\_ email address: \_\_\_\_\_

List Supporting Agencies and Contacts:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Project Cost: \_\_\_\_\_

Anticipated Cost Overrun/Underrun: \_\_\_\_\_

Date of Project Approval: \_\_\_\_\_ Start date of the project: \_\_\_\_\_

Anticipated completion date: \_\_\_\_\_

Description of the Project (include a description of each phase, if applicable, and the time frame for completing each phase): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Milestones	Complete	Projected Date of Completion



**Plan Goal(s)/Objective(s) Addressed:**

Goal: \_\_\_\_\_

Objective: \_\_\_\_\_

**Indicator of Success** (e.g., losses avoided as a result of the acquisition program):

*In most cases, you will list losses avoided as the indicator. In cases where it is difficult to quantify the benefits in dollar amounts, you will use other indicators, such as the number of people who now know about mitigation or who are taking mitigation actions to reduce their vulnerability to hazards.*

**Status** (Please check pertinent information and provide explanations for items with an asterisk. For completed or canceled projects, see Worksheet #2 — to complete a project evaluation):

**Project Status**

☐ Project on schedule

☐ Project completed

☐ Project delayed\*

\*explain: \_\_\_\_\_

☐ Project canceled

**Project Cost Status**

☐ Cost unchanged

☐ Cost overrun\*

\*explain: \_\_\_\_\_

☐ Cost underrun\*

\*explain: \_\_\_\_\_

**Summary of progress on project for this report:**

A. What was accomplished during this reporting period?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. What obstacles, problems, or delays did you encounter, if any?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

C. How was each problem resolved?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





**Next Steps:** What is/are the next step(s) to be accomplished over the next reporting period?

**Other comments:**

Sussex County Hazard Mitigation Plan



## Worksheet #2 Evaluate Your Planning Team **step 3**

*When gearing up for the plan evaluation, the planning team should reassess its composition and ask the following questions:*

	YES	NO
Have there been local staffing changes that would warrant inviting different members to the planning team?		
<b>Comments/Proposed Action:</b>		
Are there organizations that have been invaluable to the planning process or to project implementation that should be represented on the planning team?		
<b>Comments/Proposed Action:</b>		
Are there any representatives of essential organizations who have not fully participated in the planning and implementation of actions? If so, can someone else from this organization commit to the planning team?		
<b>Comments/Proposed Action:</b>		
Are there procedures (e.g., signing of MOAs, commenting on submitted progress reports, distributing meeting minutes, etc.) that can be done more efficiently?		
<b>Comments/Proposed Action:</b>		
Are there ways to gain more diverse and widespread cooperation?		
<b>Comments/Proposed Action:</b>		
Are there different or additional resources (financial, technical, and human) that are now available for mitigation planning?		
<b>Comments/Proposed Action:</b>		

*If the planning team determines the answer to any of these questions is "yes," some changes may be necessary.*

**Worksheet #3 Evaluate Your Project Results****step 3**

page 1 of 2

Project Name and Number: \_\_\_\_\_

Project Budget: \_\_\_\_\_

Project Description: \_\_\_\_\_

Associated Goal and Objective(s): \_\_\_\_\_

Indicator of Success (e.g., losses avoided): \_\_\_\_\_

*Insert location map.  
Include before and after  
photos if appropriate.*

Was the action implemented? ☐ YES ☐ NOIF **NO**

Why not?

Was there political support for the action?

Were enough funds available?

Were workloads equitably or realistically distributed?

Was new information discovered about the risks or community that made implementation difficult or no longer sensible?

Was the estimated time of implementation reasonable?

Were sufficient resources (for example staff and technical assistance) available?

YES NO

☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐☐ ☐IF **YES**

What were the results of the implemented action? \_\_\_\_\_

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	YES	NO
Were the outcomes as expected? If No, please explain:		
Did the results achieve the goal and objective(s)? Explain how:		
Was the action cost-effective? Explain how or how not:		
What were the losses avoided after having completed the project?		
If it was a structural project, how did it change the hazard profile?		
Additional comments or other outcomes:		

Date: \_\_\_\_\_

Prepared by: \_\_\_\_\_

**Worksheet #4 Revisit Your Risk Assessment step 4**

Risk Assessment Steps	Questions	YES	NO	COMMENTS
Identify hazards	Are there new hazards that can affect your community?			
Profile hazard events	Are new historical records available?			
	Are additional maps or new hazard studies available?			
	Have chances of future events (along with their magnitude, extent, etc.) changed?			
	Have recent and future development in the community been checked for their effect on hazard areas?			
Inventory assets	Have inventories of existing structures in hazard areas been updated?			
	Is future land development accounted for in the inventories?			
	Are there any new special high-risk populations?			
Estimate losses	Have loss estimates been updated to account for recent changes?			

*If you answered "Yes" to any of the above questions, review your data and update your risk assessment information accordingly.*



**Worksheet #5****Revise the Plan****step 4**

page 1 of 4

**Prepare to update the plan.***When preparing to update the plan:**Check the box when addressed:*

1. Gather information, including project evaluation worksheets, progress reports, studies, related plans, etc.	
Comments:	
2. Reconvene the planning team, making changes to the team composition as necessary (see results from Worksheet #2).	
Comments:	

**Consider the results of the evaluation and new strategies for the future.***When examining the community consider:**Check the box when addressed:*

1. The results of the planning and outreach efforts.	
Comments:	
2. The results of the mitigation efforts.	
Comments:	



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3. Shifts in development trends.

Comments:

4. Areas affected by recent disasters.

Comments:

5. The recent magnitude, location, and type of the most recent hazard or disaster.

Comments:

6. New studies or technologies.

Comments:

7. Changes in local, state, or federal laws, policies, plans, priorities, or funding.

Comments:



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8. Changes in the socioeconomic fabric of the community.	
Comments:	
9. Other changing conditions.	
Comments:	

**Incorporate your findings into the plan.**

*When examining the plan consider:*

*Check the box when addressed:*

1. Revisit the risk assessment. (See Worksheet #4)	
Comments:	
2. Update your goals and strategies.	
Comments:	
3. Recalculate benefit-cost analyses of projects to prioritize action items.	
Comments:	

## **APPENDIX G: CRITICAL FACILITY INVENTORY**



Due to the sensitive nature of this information, details of critical facilities have been redacted for the public document. A full list of critical facilities identified for the vulnerability analysis is available at the Sussex County Division of Emergency Management and Homeland Security. Contact the Deputy Emergency Management Coordinator, Steve Sugar, to view the list.



## APPENDIX H: SUPPLEMENTARY DATA



This appendix contains information and details to support information provided in Chapters 6 through 18 (Hazard Profiles).

## HISTORY OF HAZARD EVENTS WITHIN THE COUNTY

To supplement the information provided in this plan, events prior to the update of this plan are included below by hazard of concern type. Many sources provided historical information regarding previous occurrences and losses associated with hazards throughout New Jersey and Sussex County. It is noted that, with a number of sources reviewed for the purpose of this HMP, loss and impact information for many events could vary depending on the sources.

For more information on past events and impacts, refer to the 2021 Sussex County Hazard Mitigation Plan.

### DAM FAILURE

Known dam failure events that have impacted The State of New Jersey and Sussex County between 1996 and 2019 are identified in Table H-1. Many sources were researched for historical information regarding dam failure events in Sussex County; therefore, Table H-1 may not include all dam failure events that have impacted the County.

Table H-1. Dam Failure Events in Sussex County Between 1996 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
December 2, 1996	N/A	N/A	Township of Vernon	Failure, seepage incident occurred at the Upper East Highland Lake Dam in the Township of Vernon.
September 16, 1999	EM-3148	Yes	Township of Vernon	Hurricane Floyd struck New Jersey, causing widespread damage throughout the state. A peak flow of 628 cfs was recorded at USGS Gage No. 01445000 on the Pequest River at Huntsville, which corresponded to one of the largest peak flows on record. Damage occurred to the Mountain Creek Pond Dam in the Township of Vernon. A Federal Disaster was declared on September 17 for damages associated with Hurricane Floyd.
August 11, 2000 – August 14, 2000	DR-1337	Yes	Township of Sparta, Township of Stanhope, Borough of Ogdensburg	Heavy thunderstorms produced record amounts of rain, exceeding 14 inches in 4 days. Peak flows on Lake Musconetcong and Musconetcong River exceeded the 1-percent annual chance flows. A peak flow of 1,900 was recorded at USGS Gage No. 01455500 on the Musconetcong River at the outlet of Lake Hopatcong. The flood 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. A Federal Disaster was declared on August 16 for damages associated with the severe storm.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
April 4, 2011	N/A	N/A	Township of Andover	A non-failure event occurred on April 4, 2011 at the Lake Lenape Dam in Andover Township due to the cofferdam being undermined during construction.

Sources: Stanford University 2018; FEMA 2024; USGS 2024; Association of State Dam Safety Officials 2021

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

USGS United States Geological Survey

N/A Not Applicable

FEMA Federal Emergency Management Administration

## DISEASE OUTBREAK

Known disease outbreak events that have impacted The State of New Jersey and Sussex County between 2014 and 2019 are identified in Table H-2. Many sources were researched for historical information regarding disease outbreak events in Sussex County; therefore, Table H-2 may not include all disease outbreak events that have impacted the County.

Table H-2. Disease Outbreak Events in Sussex County Between 2014 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
2014	N/A	N/A	Countywide	In 2014, 65 cases of influenzas were reported in Sussex County.
2014	N/A	N/A	Countywide	In 2014, 258 cases of Lyme disease were reported in Sussex County.
2015	N/A	N/A	Countywide	In 2015, 43 cases of influenza were reported in Sussex County.
2015	N/A	N/A	Countywide	In 2015, 309 cases of Lyme disease were reported in Sussex County.
2016	N/A	N/A	Countywide	In 2016, 54 cases of influenza were reported in Sussex County.
2016	N/A	N/A	Countywide	In 2016, 260 cases of Lyme disease were reported in Sussex County.
2017	N/A	N/A	Countywide	In 2017, 151 cases of influenza were reported in Sussex County.
2017	N/A	N/A	Countywide	In 2017, 331 cases of Lyme disease were reported in Sussex County.
2017	N/A	N/A	Countywide	In 2017, one case of West Nile Virus was reported in Sussex County.
2017	N/A	N/A	Countywide	In 2017, one case of Zika virus was reported in Sussex County.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
2018	N/A	N/A	Countywide	In 2018, 306 cases of influenza were reported in Sussex County.
2018	N/A	N/A	Countywide	In 2018, 246 cases of Lyme disease were reported in Sussex County.
2019	N/A	N/A	Countywide	In 2019, 251 cases of influenza were reported in Sussex County.
2019	N/A	N/A	Countywide	In 2019, 246 cases of Lyme disease were reported in Sussex County.

Sources: FEMA 2020; NJDOH 2021

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

FEMA Federal Emergency Management Administration

NJDOH New Jersey Department of Health

## DROUGHT

Known drought events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-3. Many sources were researched for historical information regarding drought events in Sussex County; therefore, Table H-3 may not include all drought events that have impacted the County.

Table H-3. Drought Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 2009	N/A	N/A	Countywide	The NJ State Climatologist records indicate this year is one of the top 5 on record for lowest amounts of precipitation in the month of February since 1893. The recorded amount was 0.74 inches.
June 1 to September 30, 2010	N/A	N/A	Countywide	The New Jersey Herald issued an article that aid was being made available to all farmers affected by the summer drought. In addition, Sussex County, along with 15 other counties in the state were listed as natural disaster areas.
July 7, 2010	N/A	N/A	Countywide	The New Jersey Herald issued an article urging residents to conserve water.
September 8, 2010	N/A	N/A	Countywide	The New Jersey Herald issued an article notifying residents of a drought watch in the State.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 1-30, 2010	N/A	N/A	Countywide	September was another unseasonably warm month in New Jersey. Statewide it was the 4th warmest September on record since 1895 with an average temperature of 69.2°F. Because of the heavy rain on the last day of the month, September averaged closer to normal rainfall. It was the 7th warmest (71.0°F) September on record at the Atlantic City International Airport and the warm season as a whole established a new record for the number of days that the maximum temperature reached or exceeded 90°F(46 days). The NJDEP issued a drought watch for the entire state on September 8th. The NJDEP asked all state residents to voluntarily conserve water. The hot and dry summer taxed reservoir stream and groundwater levels. Shallow groundwater (private) wells were also starting to show stress.
October 1-26, 2010	N/A	N/A	Countywide	<p>The wet weather on September 30th and October 1st started to recharge water supplies in the state of New Jersey. On October 26th, the NJDEP cancelled the drought watch for most of the state, except for Monmouth and Ocean Counties. Despite improvements elsewhere, conditions in those counties showed that the combination of reservoir storage remained below the long-term average and severely dry and shallow ground water levels were still occurring.</p> <p>The summer drought took its toll on New Jersey farmers and the United States Secretary of Agriculture Thomas Vilsack declared all counties in southern, central and northwest New Jersey natural disaster areas in November. The declaration made farm operators eligible for assistance from the Farm Service Agency. The assistance included low interest loans which could cover up to 100 percent of the dollar value of the crop losses.</p> <p>The statewide October monthly precipitation average for New Jersey was 4.88 inches, about one hundred forty percent of normal and 1.37 inches wetter than average.</p>
February 2012	N/A	N/A	Countywide	The NJ State Climatologist records indicate this year is one of the top 5 on record for lowest amounts of precipitation in the month of February since 1893. The recorded amount was 0.97 inches.
March 2012	N/A	N/A	Countywide	The NJ State Climatologist records indicate this year is one of the top 5 on record for lowest amounts of precipitation in the month of March since 1893. The recorded amount was 1.37 inches.
April 4, 2012	N/A	N/A	Countywide	The New Jersey Herald issued an article warning residents that dry conditions had heightened the wildfire alert level.
June 2, 2012	N/A	N/A	Countywide	USDA 2012 Disaster Designation issued for Sussex County. No damages were listed. No end date to the event was listed.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 15, 2014	N/A	N/A	Countywide	USDA 2012 Disaster Designation issued for Sussex County. No damages were listed. No end date to the event was listed.
May 2015	N/A	N/A	Countywide	The NJ State Climatologist records indicate this year is one of the top 5 on record for lowest amounts of precipitation in the month of May since 1893. The recorded amount was 0.93 inches.
August 26, 2014 – June 29, 2015	N/A	N/A	Countywide	<p>According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from August 26, 2014 – May 18, 2015; D1 or “moderate drought” status from May 19, 2015 – June 22, 2015; D0 or “abnormally dry” from June 23, 2015 – June 29, 2015.</p> <p>Residents around Lake Hopatcong, concerned about the lake level, sought a reduction in water release.</p>
August 11, 2015 – January 11, 2016	N/A	N/A	Countywide	<p>According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from August 11, 2015 – January 11, 2016.</p> <p>Boats were pulled early from Lake Hopatcong. Water restrictions were placed in Newton.</p>
February 2-28, 2016	N/A	N/A	Countywide	According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from February 2-28, 2016.
March 29, 2016 – April 10, 2017	N/A	N/A	Countywide	<p>According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from March 29, 2016 – June 13, 2016; D1 or “moderate drought” status from June 14, 2016 – August 15, 2016; D0 or “abnormally dry” status from August 16, 2016 – September 12, 2016; D1 or “moderate drought” status from September 13, 2016 – October 17, 2016; D2 or “severe drought” from October 18, 2016 – March 20, 2017; D1 or “moderate drought” from– March 20, 2017 – April 10.</p> <p>Warm, low waters negatively impacted New Jersey trout. A drought watch was issued in July 2016. A drought warning was issued in October 2016. Water conservation was urged in northern New Jersey. The warning was lifted in April 2017.</p>
October 3-30, 2017	N/A	N/A	Countywide	According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from October 3-30, 2017.
November 28, 2017 – February 12, 2018	N/A	N/A	Countywide	According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from November 28, 2017 – February 12, 2018.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 24, 2019 – November 11, 2019	N/A	N/A	Countywide	According to the U.S. Drought Monitor, conditions held at a D0 or “abnormally dry” status across Sussex County from September 24, 2019 – November 11, 2019.  A fire restriction was issued in northern New Jersey.

Sources: NOAA-NCDC 2015; FEMA 2015; Drought Reporter – University of Nebraska-Lincoln 2015; USDA 2020, NDMC 2020, FEMA 2020, US Drought Monitor 2020

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

FEMA Federal Emergency Management Administration

USDA United States Department of Agriculture

NDMC National Drought Mitigation Center

## EARTHQUAKE

Known earthquake events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-4. Many sources were researched for historical information regarding earthquake events in Sussex County; therefore, Table H-4 may not include all earthquake events that have impacted the County.

Table H-4. Earthquake Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 2, 2009	N/A	N/A	Victory Gardens, NJ	The earthquake occurred at 10:34:19 p.m. at the epicenter, at a depth of 5 km (3.1 miles). There is a horizontal location uncertainty of +/- 0.4 km (0.2 miles). The earthquake was reported by the Lamont-Doherty Cooperative Seismographic Network. It was also reported by 1,126 people in 153 ZIP codes. The earthquake was a magnitude 3.0.  There was no documentation of impacts or damages to the County from this event.
February 3, 2009	N/A	N/A	Rockaway, NJ	This earthquake occurred at 3:34:19, with a depth of 5 km. Its epicenter was 3.5 km SSW of Rockaway, NJ (Morris County). The earthquake was a magnitude 3.0.  There was no documentation of impacts or damages to the County from this event.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 14, 2009	N/A	N/A	Near Rockaway Valley and Montville, NJ	<p>This earthquake had a depth of 2 km, and it occurred at 17:22:22. It was reported by 97 people in 26 ZIP codes, with a maximum intensity of light. The earthquake was a magnitude 2.4.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 16, 2009	N/A	N/A	Dover, NJ	<p>This earthquake occurred at 6:42:35, with a depth of 4 km. Its epicenter was 2 km SSE of Dover, NJ (Morris County). The earthquake was a magnitude 2.3.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 18, 2009	N/A	N/A	Kinnelon, NJ	<p>This earthquake occurred at 18:17:55, with a depth of 2 km. Its epicenter was 3 km SSW of Kinnelon, NJ (Morris County). The earthquake was a magnitude 1.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 18, 2009	N/A	N/A	Victory Gardens, NJ	<p>This earthquake had a depth of 4 km, and it occurred at 01:42:35. It was reported by 63 people in 23 ZIP codes, and it had a maximum intensity of weak. The earthquake was a magnitude 2.3.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
December 26, 2009	N/A	N/A	Morris Plains, NJ	<p>This earthquake had a depth of 6 km, and it occurred at 23:53:14. Its epicenter was 8 km NW of Morris Plains, NJ (Morris County). It was reported by 31 people in 14 ZIP codes, and it had a maximum intensity of weak. The earthquake was a magnitude 2.0.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 9, 2010	N/A	N/A	Wanaque, NJ	<p>This earthquake occurred at 20:17:31, with a depth of 7km. The earthquake was a magnitude 2.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 10, 2010	N/A	N/A	Wanaque, NJ	<p>This earthquake had a depth of 4 km, and it occurred at 01:17:30. Its epicenter was 1 km W of Wanaque, NJ (Passaic County). The earthquake was a magnitude 2.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 21, 2010	N/A	N/A	Peapack Gladstone, NJ	<p>This earthquake had a depth of 5 km, and it occurred at 08:59:25. It was reported by 870 people in 83 ZIP codes, and it had a maximum intensity of light. The earthquake was a magnitude 2.6.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
February 21, 2010	N/A	N/A	Bedminster, NJ	<p>This earthquake occurred at 12:31:57, with a depth of 5 km. It was reported by 150 people in 40 ZIP codes, with a maximum intensity of light. The earthquake was a magnitude 2.3.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
December 25, 2010	N/A	N/A	Clifton, NJ	<p>This earthquake had a depth of 2 km, and it occurred at 18:32:31. Its epicenter was 1 km W of Clifton, NJ (Passaic County). The earthquake was a magnitude 2.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
May 5, 2011	N/A	N/A	Clifton, NJ	<p>This earthquake had a depth of 5.6 km, and it occurred at 12:32:00. Its epicenter was 1.2 km W of Clifton, NJ (Passaic County). The earthquake was a magnitude 1.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
August 23, 2011	N/A	N/A	State of Virginia	<p>A moderate earthquake occurred in central Virginia and was felt throughout most of the east, from Georgia to southern Canada and from Indiana to coastal Maine. It was followed by four aftershocks. The earthquake was a magnitude 5.9.</p> <p>In New Jersey, the intensity ranged from 1 to 4 (weak to light). Areas underlain by thick silt and clay felt a stronger ground motion than did those where rock was very close to the surface. There was minor scattered power outages reported throughout the State. There was no documentation of impacts or damages to the County from this event.</p>
July 17, 2012	N/A	N/A	Morristown, NJ	<p>This earthquake's epicenter is 16 km NW of Morristown, NJ (Morris County), and it had a depth of 2 km. It occurred at 2:25:45. The earthquake was a magnitude 1.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
July 18, 2012	N/A	N/A	Morristown, NJ	<p>This earthquake's epicenter was 18 km NW of Morristown, NJ (Morris County), and it had a depth of 2 km. It occurred at 8:94:10. The earthquake was a magnitude 1.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 23, 2012	N/A	N/A	Ringwood, NJ	<p>This earthquake had a depth of 5.2 km, and it occurred at 15:57:36. Its epicenter was 1.4 km E of Ringwood, NJ (Passaic County). The earthquake was a magnitude 1.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
November 5, 2012	N/A	N/A	Mahwah, NJ	<p>This earthquake had a depth of 5 km, and it occurred at 01:19:11. It was reported by 54 people in 32 ZIP codes, with a maximum intensity of light. The earthquake was a magnitude 2.0.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
April 18, 2013	N/A	N/A	Kinnelon, NJ	<p>This earthquake had a depth of 3 km, and it occurred at 1-:15:20. It was reported by 6 people in 6 ZIP codes, with a maximum intensity of weak. The earthquake was a magnitude 2.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
June 23, 2013	N/A	N/A	Rockaway, NJ	<p>This earthquake occurred at 15:54:40, with a depth of 2 km. Its epicenter was 1 km E of Rockaway, NJ (Morris County). The earthquake was a magnitude 2.1.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
May 31, 2014	N/A	N/A	Boonton, NJ	<p>This earthquake occurred at 9:28:36, with a depth of 8 km. Its epicenter is 6 km N of Boonton, NJ (Morris County). The earthquake was a magnitude 1.0.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
July 18, 2015	N/A	N/A	Ringwood, NJ	<p>This earthquake had a depth of 5 km, and it occurred at 15:43:50. Its epicenter was 4 km SW of Ringwood, NJ (Passaic County). The earthquake was a magnitude 1.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>
July 12, 2015	N/A	N/A	Wanaque, NJ	<p>This earthquake occurred at 4:05:55, with a depth of 2 km. Its epicenter was 2 km N of Wanaque, NJ (Passaic County). The earthquake was a magnitude 1.2.</p> <p>There was no documentation of impacts or damages to the County from this event.</p>





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 14, 2015	N/A	N/A	Between Bernardsville and Morristown, NJ	This earthquake had a depth of 3 km, and it occurred at 3:41:24 a.m. with its epicenter in Somerset County, New Jersey. Approximately 276 people reported having felt this event. The earthquake was a magnitude 2.7.  Sparta Township in Sussex County had reports of nearly 1,246 residents being without power as a result of the earthquake. Power was restored to all residents by 9:10 a.m.
January 2, 2016	N/A	N/A	Ringwood, NJ	A magnitude 2.1 earthquake in Ringwood, NJ was faintly felt in eastern areas of Sussex County.
November 30, 2017	N/A	N/A	Dover, DE	A magnitude 4.1 earthquake in Dover, DE was felt throughout the mid-Atlantic region. The quake was felt from central Virginia to Massachusetts.

Sources: NJGWS 2015; USGS 2015; New Jersey State HMP 2014; Miller 2015; FEMA 2020; NOAA-NCEI 2020; NWS 2020; SPC 2020; NJOEM 2019

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NJ The State of New Jersey

KM Kilometers

SSW South-Southwest

SSE South-Southeast

NW Northwest

W West

E East

N North

DE The State of Delaware

NJGWS New Jersey Geological and Water Survey

USGS United States Geological Survey

HMP Hazard Mitigation Plan

FEMA Federal Emergency Management Administration

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

NWS National Weather Service

SPC Storm Prediction Center

NJOEM New Jersey Office of Emergency Management

## FLOOD

Known flood events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-5. Many sources were researched for historical information regarding flood events in Sussex County; therefore, Table H-5 may not include all flood events that have impacted the County.



Table H-5. Flood Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 12-13, 2008	N/A	N/A	Lafayette Township, Andover Borough, Walpack Township, Hopatcong, Township	<p>A protracted precipitation event that started as a wintry mix and then changed to rain caused flooding across the Passaic and Raritan Basins in northern New Jersey. The heaviest rain fell during the first half of the day and into the early afternoon on the 13th. The combination of the heavy rain and snow and ice melt caused flooding of many creeks and rivers as well as poor drainage flooding in urban areas. Clogged catch basins exacerbated the problems. Storm totals averaged between two and three and a half inches.</p> <p>Runoff from the heavy rain and ice melt caused flooding across Sussex County. Twenty-one county roads were blocked either by downed trees and wires or flooding. Much of the flooding resulted from blocked storm drains. U.S. Route 206 was flooded in several portions, and New Jersey State Route 15 was shut down in Lafayette Township due to an overflowing river. Precipitation totals included 2.91 inches in Andover Borough, 2.41 inches in Flatbrookville (Walpack Township) and 2.06 inches in Hopatcong Borough. No property damages were reported.</p>
March 4-5, 2008	N/A	N/A	Walpack Township, Andover Borough, Hamburg Borough	<p>The combination of a prolonged period of rain and melting snow caused poor drainage flooding throughout northwestern New Jersey as well as flooding of some of the rivers and streams. Rain began during the morning of the 4th and ended on the morning of the 5th.</p> <p>In Sussex County, the runoff from the heavy rain and snow melt caused flooding along the Flat Brook. The Flat Brook at Flatbrookville (Walpack Township) was above its estimated 6 foot flood stage from the 5th through the 6th. It crested at 6.75 feet at 5:15pm on the 5th. Storm total precipitation included 2.31 inches in Andover Borough, 2.14 inches in Walkill (Hamburg Borough) and 1.85 inches in Sussex Borough. No property damages were reported.</p>
July 8, 2008	N/A	N/A	Montague Township, Sandyston Township	<p>A pair of thunderstorms with heavy rain caused flooding of smaller streams and poor drainage areas in and around Hainesville in Montague and Sandyston Townships. No property damages were reported.</p>
January 27, 2009	N/A	N/A	Montague Township	<p>An ice jam on the Delaware River at Minisink Island was reported to be creating several feet of backwater in the vicinity of Old Mine Road in Montague Township. No property damages were reported.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 12-15, 2010	N/A	N/A	Sparta Township, Ogdensburg Borough, Walpack Township, Sussex Borough, Wantage Township	<p>Four days of rain, heaviest on the 13th, combined with snowmelt culminated in major flooding in the Passaic and Raritan Basins and flooding throughout New Jersey. It was the worst flooding in the Raritan Basin since April 2007 and the worst flooding in the Passaic Basin since April 1984. New Jersey Governor Chris Christie declared a state of emergency on March 14th. Periods of rain started during the morning of the 12th and fell at its heaviest on the 13th. The heaviest rain fell during the morning in the southern third of the state, afternoon in the central part of the state and in the afternoon into the evening in the northern third of the state. Periods of lighter rain persisted into the 14th and 15th which slowed the recession of streams and rivers in the area.</p> <p>In Sussex County, the worst reported flooding was along its eastern border. In Sparta Township, Lower Main Street was closed due to its undermining by flood waters. Edison Road in Ogdensburg Borough was closed because of washouts. New York Susquehanna and Western Railroad suspended service because of the flooding. The Flat Brook at Flatbrookville (Walpack Township) was above its 6-foot flood stage on the 14th. It crested at 6.81 feet at 1230 p.m. Event precipitation totals were 3.89 inches in Andover Borough, 2.94 inches in Sussex Borough and 2.75 inches in Wantage Township. No property damages were reported.</p>
October 1, 2010	N/A	N/A	Walpack Township, Andover Borough, Hardyston Township, Sparta Township	<p>A series of low-pressure systems that moved north along a slowly moving cold front brought heavy rain into the western half of New Jersey on September 30th and October 1st. Event precipitation totals average three to seven inches. Several streams and rivers flooded across the area and there was also poor drainage flooding. The first round of heavy rain occurred mainly west of New Jersey during the early morning of September 30th. The second and heavier round of precipitation moved in during the evening of September 30th and continued into the morning of October 1st. The rain ended by the early afternoon of October 1st.</p> <p>In Sussex County, the Flat Brook at Flatbrookville (Walpack Township) was above its 6-foot flood stage on the 1st. It crested at 6.27 feet at 530 p.m. Event precipitation totals included 5.50 inches in Andover Borough and Hardyston Township, 5.20 inches in Sparta Township and 5.01 inches in Stockholm (Hardyston Township). No property damages were reported.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 31, 2011	N/A	N/A	Montague Township	Solid ice cover was observed on the Delaware River upstream from the Milford-Montague toll bridge. There was significant backwater from ice at the Montague Township gaging station. There was an ice jam upstream in the area of Mashipacong Island. No property damages were reported.
March 6-7, 2011	N/A	N/A	Franklin Borough, Hampton Township, Stillwater Township, Walpack Township, Hardyston Township, Sussex Borough, Andover Borough, Wantage Township, Vernon Township	<p>A slow-moving cold front with waves of low pressure that developed along it brought a precipitation event that dropped between 1.5 and four inches of water equivalent across Northern New Jersey from the early morning of the 6th into the early morning of the 7th. Melting snow contributed to the runoff. The heaviest rain fell during the late afternoon and evening of the 6th. Precipitation ended briefly as snow over the higher terrain of northwest New Jersey during the early morning on the 7th.</p> <p>Governor Christie declared a state of emergency before the start of the second round of heavy rain on March 9th. Some rivers did not fall below flood stage until after Eastern Daylight Time began (on March 13th). Throughout the state, 683 dwellings were affected by both flooding events and 207 suffered at least major damage.</p> <p>A few streams and rivers flooded in Sussex County from the combination of heavy rain and melting snow. In Franklin Borough, Newton Road was flooded by the Walkill River. In Hampton Township, Parson Road was flooded by the Paulinskill River. Vernon Crossing was overrun by the Black Creek. In Stillwater Township, on Swartswood Road some basement homes were flooded by a brook. The Flat Brook at Flatbrookville (Walpack Township) was above its 6-foot flood stage on the 7th. It crested at the moderate flooding level threshold of 8.00 feet at 1030 a.m. Event precipitation totals are 2.95 inches in Hardyston Township, 2.57 inches in Sussex Borough, 2.25 inches in Andover Borough, Wantage Township and Sussex Borough and 2.02 inches in Vernon Township. The County had approximately \$10,000 in property damage.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 11-12, 2011	N/A	N/A	Walpack Township, Sparta Township, Wantage Township, Vernon Township, Andover Township	<p>For the second time within a week, heavy rain fell across New Jersey, especially the northern half of the state. An additional two to five inches of precipitation fell and caused continued flooding in the Passaic Basin and renewed flooding on the Delaware and Raritan Rivers. Snowmelt in the upper reaches of the Delaware Basin contributed to the flooding. Governor Christie declared a state of emergency before the start of the second round of heavy rain on March 9th. Throughout the state, 683 dwellings were affected by both flooding events and 207 suffered at least major damage. The second round of rain started during the early morning of the 10th, fell heavy at times during the daylight hours and evening on the 10th and ended between four a.m. and eight a.m. on the morning on the 11th.</p> <p>In Sussex County, the Flat Brook at Flatbrookville (Walpack Township) was above its six-foot flood stage from 956 a.m. through 837 p.m. EST on the 11th. It crested at 6.46 feet at 215 p.m. Event precipitation totals included 3.18 inches in Sparta Township, 2.61 inches in Walpack Township, 2.54 inches in Wantage Township, 2.42 inches in Flatbrookville (Walpack Township), 2.29 inches in Vernon Township and 2.23 inches in Andover Township. No property damages were reported.</p>
June 23, 2011	N/A	N/A	Andover Borough, Hampton Township, Sparta Township, Andover Township	<p>Thunderstorms moved over Sussex and northwestern Morris Counties and caused flash flooding of smaller streams across southeastern sections of Sussex County. Event precipitation totals averaged two to 4.5 inches. In Andover Borough, U.S. Route 206 was closed near Stickle Pond Road. High Street was closed in the Town of Newton and parking lots off U.S. Route 206 were flooded in Hampton Township. Precipitation totals included 4.47 inches in Sparta and 2.93 inches in Andover Township. No property damages were reported.</p>





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 26-30, 2011	DR-4021	Yes	Branchville Borough, Ogdensburg Borough, Frankford Township, Hampton Township, Hardyston Township, Vernon Township, Town of Newton, Walpack Township, Wantage Township, Sandyston Township, Stillwater Township	<p>Hurricane Irene moved north along the Atlantic Coast, making landfall near Cape Lookout, North Carolina, on August 27th. The hurricane moved back over open water before making landfall for a second time at Little Egg Inlet in New Jersey on August 28th. This was the first time since 1903 that a hurricane made landfall in New Jersey. Rain fell for an 18-hour period, with totals ranging from six to eight inches across New Jersey. Higher amounts were observed in southwestern, central, and northeastern New Jersey. Irene brought tropical storm force winds, destructive storm surge, and record-breaking freshwater inland flooding across northeast New Jersey. There were thousands of mandatory and voluntary evacuations along the coast and rivers from surge and freshwater flooding, and widespread power outages that lasted for up to two weeks. The Governor of New Jersey declared a state of emergency on August 25th.</p> <p>In Sussex County, flooding impacted Branchville and Ogdensburg boroughs, Frankford, Hampton, Hardyston, and Vernon townships, and the Town of Newton. These municipalities were the hardest hit in the County. Flooding forced the closure of over 100 roadways in the county including U.S. Route 206 as well as state and County Routes 94, 15, 23, 517 and 628. The Borough of Branchville was literally cut off after flooding occurred along the Dry Brook. About 100 people were evacuated within the Borough. The Flat Brook at Flatbrookville (Walpack Township) had major flooding and its second highest crest since Hurricane Diane in 1955. The brook was above its six-foot flood stage from 810 a.m. on the 28th through 404 p.m. EDT on the 29th. It crested at 10.59 feet at 1215 a.m. on the 29th.</p> <p>Over 100 bridges in the County were damaged and nine bridges were lost (two in Vernon, one in Wantage, three in Frankford, two in Sandyston, and in Stillwater there were bridges down to one lane due to lost stream banks). In Vernon Township, eight families were cut off after another bridge washed out. In Montague, two culverts were lost.</p> <p>A few county facilities were damaged as a result of Hurricane Irene as well. The County record retention center flooded, the County-owned DPW garage in Vernon Township flooded and a tree fell on the County jail. Two regional shelters were open for residents – Sussex County VoTech High School and Hopatcong High School. There were utility outages across the County. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office, and the Health Department. The County had \$12.5 million in damages from Hurricane Irene.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 5-14, 2011	DR-4039	Yes	Green Township, Andover Township, Sparta Township, Hardyston Township, Vernon Township, Franklin Township, Hopatcong Township, Stillwater Township, Branchville Borough, Walpack Township	<p>The remnants of Tropical Storm Lee arrived in New Jersey on September 5, 2011, bringing heavy rains throughout the State. Parts of Trenton and other municipalities along the Delaware River were inundated. Hundreds of residents along the Passaic River and its tributaries had to evacuate. There were a total of 162 roads closed due to flooding throughout the State of New Jersey. Storm totals ranged from three to eight inches of rain. The heavy rain and flooding impacted crops, with farmers reporting up to 75% losses of pumpkin and tomato crops. The State had an estimated \$11.5 million in damages.</p> <p>The heavy rain caused widespread flooding and flash flooding of smaller streams in Sussex County as well as poor drainage flooding across eastern Sussex County from Green Township northeast through parts of Andover, Sparta, Hardyston, and Vernon Townships. Many roadways were closed. Schools were closed on the 8th in Vernon and Sparta Townships. A few homes were flooded in Andover Township. Sections of New Jersey State Route 23 and 94 were closed in Franklin Township and Stockholm (Hardyston Township). There were road and culvert washouts in Hopatcong, Stillwater, and Sparta. Areas that were impacted during Irene were also affected again from Lee.</p> <p>The Flat Brook flooded a few homes in southwest Sussex County. A flash flood along the Culver Creek in Branchville Borough led to a State of Emergency declaration after the creek tore away the Mill Street Bridge in the borough. Ten homes had over eight feet of water in them, the most severely damaged were at the end of Mill Street. Residents from about 50 homes evacuated, with residents from all but one home being able to return at Noon that day. The Flat Brook at Flatbrookville (Walpack Township) had moderate flooding and was above its 6-foot flood stage from 903 a.m. EDT on the 7th through 905 a.m. EDT on the 9th. It crested at 8.90 feet at 600 p.m. EDT on the 8th.</p> <p>The County opened two regional shelters – Sussex County VoTech and Hopatcong High School – both of which were still opened from Hurricane Irene. County-owned facilities experienced damage from wind; windows were damaged, and shingles were blow-off the buildings. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office, and the Health Department. Overall, the County approximately \$1 million in damages from this event.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 28, 2011	N/A	N/A	Andover Township, Byram Township, Green Township, Sparta Township, Stanhope Borough, Town of Newton, Walpack Township	<p>In eastern Sussex County, thunderstorms with heavy downpours caused flash flooding along smaller streams and roadways mainly in the County. The heavy rain primarily affected Andover, Byram, Green, and Sparta Townships and Stanhope Borough. Several roads were also closed in Sparta Township and one school was evacuated because a nearby creek flooded. Ponds also overflowed in the township along Stanhope Road. In Andover Township, one home was evacuated along Limecrest Road. Road closures were also reported in and around the Town of Newton because of the flooding. The runoff from the heavy rain that fell earlier in the day on the 28th also led to flooding along the Flat Brook that lasted into the 30th.</p> <p>The Flat Brook at Flatbrookville (Walpack Township) was above its six-foot flood stage from 640 p.m. on the 28th through 1204 p.m. on the 30th. It crested at 6.54 feet at 1115 p.m. on the 28th. Event precipitation totals included 4.16 inches in Andover Township and 3.83 inches in the Town of Newton. No property damages were reported.</p>
July 23, 2012	N/A	N/A	Sandyston Township, Walpack Township	<p>A warm front that was moving through the state into New England helped trigger strong to locally severe thunderstorms in the northern half of New Jersey during the afternoon of the 23rd. Besides pockets of damaging winds, the severe thunderstorms were prolific hail producers.</p> <p>In Sussex County, the storms knocked down several trees in Sandyston Township and caused flash flooding of streams and poor drainage flooding on roadways. A lightning strike injured a 12-year-old camper and an 18-year-old counselor at Kittatinny Lake in Sandyston Township, when the bolt struck a tree and traveled into the foundation of their cabin in Stokes State Forest. Rainfall totals ranged from 2.5 inches in Sandyston Township to 3.54 inches in Walpack Township. No property damages were reported.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 4, 2012	N/A	N/A	Montague Township, Sandyston Township, Walpack Township, Wantage Township	Thunderstorms with torrential downpours associated with the remnants of Hurricane Isaac overnight on the 4th caused flash flooding of streams and poor drainage flooding in Montague, Sandyston, Walpack and Wantage Townships in western Sussex County. In Sandyston Township, several driveways were washed away. County Route 560 was closed for debris clean-up. Firefighters pumped water from basements on Bevans Road and County Route 560. Flooded roadways were reported in Montague Township. New Jersey State Route 23 was flooded and closed in Wantage Township. Event precipitation totals included 3.47 inches in Montague Township and 3.44 inches in Wantage Township. Doppler Radar storm total estimates reached 6 inches in parts of Sandyston and Walpack Townships. The County had approximately \$10,000 in property damage from this event.
August 9, 2013	N/A	N/A	Walpack Township, Stillwater Township, Frankford Township	Showers and thunderstorms with torrential downpours brought two to six inches of rain to northwestern New Jersey. The heavy rains resulted in flash flooding of smaller streams and poor drainage flooding. In Sussex County, rainfall totals ranged from 2.5 inches in Walpack and Stillwater Townships to over five inches in Sandyston Township. The Papakating Creek at Pelletstown (Frankford Township) was above its four-foot flood stage from 737 a.m. on the 9th through 700 a.m. on the 10th. It crested at 5.10 feet at 1015 p.m. on the 9th.
April 30 – May 1, 2014	N/A	N/A	Montague Township, Sandyston Township	A pair of thunderstorms with heavy rain caused flooding of smaller streams and poor drainage areas in and around Hainesville in Montague and Sandyston Townships. No property damages were reported.
July 3, 2014	N/A	N/A	Montague Township	An ice jam on the Delaware River at Minisink Island was reported to be creating several feet of backwater in the vicinity of Old Mine Road in Montague Township. No property damages were reported.
July 26, 2015	N/A	N/A	Montague	<p>A cold front over the Finger Lakes region of New York State helped trigger a cluster of showers and thunderstorms with very heavy rain that moved over northwest New Jersey mainly during the evening of the 26th. The heaviest rain fell over western parts of Warren County and especially in far northwest Sussex County. Doppler Radar storm total estimates exceeded 4 inches in the latter.</p> <p>A cluster of thunderstorms with torrential rain caused poor drainage and small creek flash flooding in the Shimers Brook Basin in Montague Township. Event precipitation totals included 4.74 inches in Montague. A mesonet site within Montague measured 2.57 inches of rain in 70 minutes.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 24, 2016	N/A	N/A	Frankford Township, Walpack Township	A strong low-pressure system moving north through the Great Lakes region, combined with its associated warm front and cold front, copious amounts of moisture, and low level jet, produced strong to severe thunderstorms, heavy rain, flash flooding, and stream flooding in New Jersey late Wednesday afternoon and evening, February 24th, with stream flooding continuing into Thursday, February 25th. Thousands were without power for a period across the state, focused in South Jersey.  Route 615 was closed due to flooding between Pompey Ridge Road and Flatbrook Bridge on the morning of 2/25.
October 2, 2018	N/A	N/A	Town of Newton, Hampton Township	Thunderstorms brought locally heavy rain to northern New Jersey on the evening of October 2. Sections of US Route 206 and NJ Route 94 were closed in Newton and in Hampton Township due to flooding.

Sources: FEMA 2015; NOAA-NCDC 2015; FEMA 2020; NOAA-NCDC 2020; NWS 2020; SPC 2020; NJOEM 2019

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

FEMA Federal Emergency Management Administration

NWS National Weather Service

SPC Storm Prediction Center

NJ The State of New Jersey

N/A Not Applicable

## GEOLOGICAL HAZARDS

Known geological hazard events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-6. Many sources were researched for historical information regarding geological hazard events in Sussex County; therefore, Table H-6 may not include all geological hazard events that have impacted the County.

Table H-6. Geological Hazard Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
December 2010	N/A	N/A	Sparta Township	A small landslide in development lot of new housing development is approximately 40 feet long by 20 feet deep.
March 13, 2010	N/A	N/A	Ogdensburg Borough	A mudslide about 70 feet long and 40 feet wide forced a three-quarter mile section of Edison Avenue to be closed. The debris flow damaged the road and the guardrail on the side of the tracks and covered the railroad tracks.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 13, 2010	N/A	N/A	Sparta Township	A mudslide about 40 feet deep and 40 feet wide occurred near the intersection of Route 517 and Station Road. A quarter mile section of Rt. 517 was closed for three days for cleanup and repairs.
August 2011	N/A	N/A	Sandyston Township	Debris flow occurred along the Flat Brook probably during Tropical Storm Irene.
August 15, 2011	N/A	N/A	Vernon Township	A massive landslide in Great Gorge Village occurred along Steamboat Drive near the Minerals resort and at ski slope due to the heavy rain in an area of underground pipeline work.
August 28, 2011	N/A	N/A	Sparta Township, Frankford Township, Ogdensburg Township, Branchville Borough, Vernon Township	<p>The following debris flows occurred as a result of the heavy rain from Hurricane Irene. While the majority of these events caused localized damages, a few did not. Events are summarized by jurisdiction:</p> <ul style="list-style-type: none"> <li>• Sparta Township: Two debris flows (one large and one small mudslide) occurred on Holland Circle. Both led to damages, temporary road closures, and evacuations.</li> <li>• Frankford Township: One debris flow occurred along Owassa Road. This event did not lead to damages.</li> <li>• Ogdensburg Borough: A moderate sized debris flow occurred on a steep slope along Rt. 517, resulting in damages.</li> <li>• Branchville Borough: A large slump on a steep hill occurred above Culvers Creek.</li> <li>• Vernon Township: Multiple debris flows occurred in the Township, including: <ul style="list-style-type: none"> <li>• One on Lake Walkill Road near Owens Station Road, leading to temporary road closure.</li> <li>• One along Macpeek Road, leading to temporary road closure.</li> <li>• One small debris flow, no specific location noted.</li> <li>• A massive landslide in Great Gorge Village in an area of underground pipeline work.</li> <li>• One along Drew Mt. Road on a steep slope. No damages were recorded.</li> <li>• Two debris flows along Lake Walkill Rd., one of which occurred near the state line and led to a temporary road closure.</li> <li>• Five small debris flows along County Rt. 565 (Glenwood Rd.) between Babtown Rd and Lake Pochung Rd.</li> <li>• One small debris flow along County Rt. 565 (Glenwood Rd.) near Lake Pochung Rd.</li> </ul> </li> </ul>
September 9, 2011	N/A	N/A	Sparta Township	Debris flow along lower end of Holland Circle was triggered by heavy rain from Tropical Storm Lee.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
2014	N/A	N/A	Stillwater Township	A small rockfall occurred along old Susquehanna and Western railway bed which is now a hiking trail. While discovered in 2014, it could have happened earlier.
January 13, 2015	N/A	N/A	Town of Newton	A sinkhole and emergency construction on Route 206 forced a shutdown of northbound traffic in Newton. The sinkhole was first reported at 9:56 a.m. As of 1:10 p.m., northbound lanes were still closed.
March 2021	N/A	N/A	Vernon Township	The Township of Vernon had a relatively small sinkhole form as a result of heavy rain, snow melt and lake run off at the National Winter Activity Center in March 2021. It was approximately 30" x 24" a 6' deep that connected to a spill way basin that ties into a stream. It was kept under watch and is being remediated with a dam replacement project.

Sources: NJDEP 2012; NOAA-NCDC 2015; NJ.Com 2015; NJ State HMP 2014; NOAA-NCDC 2020

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

NWS National Weather Service

NJ The State of New Jersey

NJDEP New Jersey Department of Environmental Protection

## HAZARDOUS MATERIALS

Known hazardous material events that have impacted The State of New Jersey and Sussex County between 2015 and 2019 are identified in Table H-6. Many sources were researched for historical information regarding hazardous material events in Sussex County; therefore, Table H-6 may not include all hazardous material events that have impacted the County.

Table H-7. Hazardous Material Events in Sussex County Between 2015 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 22, 2010	N/A	N/A	Hamburg Township	A cargo tank motor vehicle experienced a hazardous materials incident on the highway in Hamburg, NJ. This was not classified as serious, and the total amount of estimated damages was \$0.
August 9, 2012	N/A	N/A	Sparta Township	A cargo tank motor vehicle experienced a hazardous materials incident on the highway in Sparta, NJ. This was not classified as a serious incident, and the amount of estimated damages was \$5,000.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
October 17, 2013	N/A	N/A	Andover Borough	A cargo tank motor vehicle experienced a hazardous materials incident on the highway in Andover, NJ. This was classified as a serious incident, and the amount of estimated damages was \$0.
August 3, 2015	N/A	N/A	Vernon Township	The Action Park was forced to close early after several people were made sick by fumes from the Roaming Springs section of the Park. The Sussex County HAZMAT team investigated, and several lifeguards were treated for eye and respiratory irritation.
2015	N/A	N/A	Countywide	In 2015, 11,374 pounds of chemicals were released on-site in Sussex County.
2015	N/A	N/A	Countywide	In 2015, Sussex County experienced 1 rail accident involving hazardous materials.
2016	N/A	N/A	Countywide	In 2016, 10,578 pounds of chemicals were released on-site in Sussex County.
2017	N/A	N/A	Countywide	In 2017, 8,853 pounds of chemicals were released on-site in Sussex County.
2018	N/A	N/A	Countywide	In 2018, 6,155 pounds of chemicals were released on-site in Sussex County.
2019	N/A	N/A	Countywide	In 2019, 261 pounds of chemicals were released on-site in Sussex County.

Sources: NJ HMP 2019; EPA TRI Explorer 2020; PHMSA 2015

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NJ The State of New Jersey

HMP Hazard Mitigation Plan

EPA Environmental Protection Agency

TRI Toxic Release Inventory

PHMSA Pipeline and Hazardous Materials Safety Administration

## HURRICANE

Known hurricane events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-8. Many sources were researched for historical information regarding hurricane events in Sussex County; therefore, Table H-8 may not include all hurricane events that have impacted the County.



Table H-8. Hurricane Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 6, 2008	N/A	N/A	Sussex Borough, Hardyston Township, Town of Newton, Wantage Township	<p>Heavy rain associated with Tropical Storm Hanna caused widespread heavy rain and poor drainage flooding, especially in the northern part of New Jersey. The runoff also caused some isolated flooding along some of the smaller streams and creeks in the area. Rain moved into the region around noon EDT, fell heavy at times during the late afternoon and early evening and ended during the late evening. Storm totals ranged from around 2 to around 5 inches with the highest amounts in northern New Jersey.</p> <p>In Sussex County, event precipitation totals included 4.44 inches in Sussex Borough, 3.98 inches in Hardyston, 2.85 inches in Newton Township and 2.35 inches in Wantage Township.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 26-30, 2011	N/A	N/A	Branchville Borough, Ogdensburg Borough, Frankford Township, Hampton Township, Hardyston Township, Vernon Township, Town of Newton, Walpack Township, Sandyston Township, Stillwater Township, Montague Township	<p>Hurricane Irene moved north along the Atlantic Coast, making landfall near Cape Lookout, North Carolina, on August 27th. The hurricane moved back over open water before making landfall for a second time at Little Egg Inlet in New Jersey on August 28th. This was the first time since 1903 that a hurricane made landfall in New Jersey. Rain fell for an 18-hour period, with totals ranging from six to eight inches across New Jersey. Higher amounts were observed in southwestern, central, and northeastern New Jersey. Irene brought tropical storm force winds, destructive storm surge, and record-breaking freshwater inland flooding across northeast New Jersey. There were thousands of mandatory and voluntary evacuations along the coast and rivers from surge and freshwater flooding, and widespread power outages that lasted for up to two weeks. The Governor of New Jersey declared a state of emergency on August 25th.</p> <p>In Sussex County, flooding impacted Branchville and Ogdensburg boroughs, Frankford, Hampton, Hardyston, and Vernon townships, and the Town of Newton. These municipalities were the hardest hit in the County. Flooding forced the closure of over 100 roadways in the county including U.S. Route 206 as well as state and County Routes 94, 15, 23, 517 and 628. The Borough of Branchville was literally cut off after flooding occurred along the Dry Brook. About 100 people were evacuated within the Borough. The Flat Brook at Flatbrookville (Walpack Township) had major flooding and its second highest crest since Hurricane Diane in 1955. The brook was above its six foot flood stage from 810 a.m. on the 28th through 404 p.m. EDT on the 29th. It crested at 10.59 feet at 1215 a.m. on the 29th.</p> <p>Over 100 bridges in the County were damaged and nine bridges were lost (two in Vernon, one in Wantage, three in Frankford, two in Sandyston, and in Stillwater there were bridges down to one lane due to lost stream banks). In Vernon Township, eight families were cut off after another bridge washed out. In Montague, two culverts were lost.</p> <p>A few county facilities were damaged as a result of Hurricane Irene as well. The County record retention center flooded, the County-owned DPW garage in Vernon Township flooded and a tree fell on the County jail. Two regional shelters were open for residents – Sussex County VoTech High School and Hopatcong High School. There were utility outages across the County. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office and the Health Department. The County had \$12.5 million in damages from Hurricane Irene.</p>





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 5-14, 2011	N/A	N/A	Green Township, Andover Township, Sparta Township, Hardyston Township, Vernon Township, Franklin Township, Hopatcong Borough, Stillwater Township, Branchville Borough, Walpack Township	<p>The remnants of Tropical Storm Lee arrived in New Jersey on September 5, 2011, bringing heavy rains throughout the State. Parts of Trenton and other municipalities along the Delaware River were inundated. Hundreds of residents along the Passaic River and its tributaries had to evacuate. There were a total of 162 roads closed due to flooding throughout the State of New Jersey. Storm totals ranged from three to eight inches of rain. The heavy rain and flooding impacted crops, with farmers reporting up to 75% losses of pumpkin and tomato crops. The State had an estimated \$11.5 million in damages.</p> <p>The heavy rain caused widespread flooding and flash flooding of smaller streams in Sussex County as well as poor drainage flooding across eastern Sussex County from Green Township northeast through parts of Andover, Sparta, Hardyston and Vernon Townships. Many roadways were closed. Schools were closed on the 8th in Vernon and Sparta Townships. A few homes were flooded in Andover Township. Sections of New Jersey State Route 23 and 94 were closed in Franklin Township and Stockholm (Hardyston Township). There were road and culvert washouts in Hopatcong, Stillwater and Sparta. Areas that were impacted during Irene were also affected again from Lee.</p> <p>The Flat Brook flooded a few homes in southwest Sussex County. A flash flood along the Culver Creek in Branchville Borough led to a State of Emergency declaration after the creek tore away the Mill Street Bridge in the borough. Ten homes had over eight feet of water in them, the most severely damaged were at the end of Mill Street. Residents from about 50 homes evacuated, with residents from all but one home being able to return at Noon that day. The Flat Brook at Flatbrookville (Walpack Township) had moderate flooding and was above its 6 foot flood stage from 903 a.m. EDT on the 7th through 905 a.m. EDT on the 9th. It crested at 8.90 feet at 600 p.m. EDT on the 8th.</p> <p>The County opened two regional shelters – Sussex County VoTech and Hopatcong High School – both of which were still opened from Hurricane Irene. County-owned facilities experienced damage from wind; windows were damaged and shingles were blow-off the buildings. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office, and the Health Department. Overall, the County approximately \$1 million in damages from this event.</p>



October 26 – November 8, 2012	N/A	N/A	Walpack Township, Vernon Township, Wantage Township, Hopatcong Borough, Montague Township, Sussex Borough	<p>Hurricane Sandy was the costliest natural disaster by far in the State of New Jersey. Record-breaking high tides and wave action combined with sustained winds as high as 60 to 70 mph with wind gusts as high as 80 to 90 mph to batter the State. Statewide, Sandy caused an estimated \$29.4 billion in damage, destroyed or significantly damaged 30,000 homes and businesses, affected 42,000 additional structures, and was responsible directly or indirectly for 38 deaths.</p> <p>Sussex County suffered relatively less damage than counties farther to the east, and the strongest winds occurred late in the evening on the 7th. The largest issue was fallen trees. The only township to report widespread damage was Walpack Township. Peak wind gusts in the County included 79 mph at High Point Monument (Montague Township), 75 mph at Sussex Borough, and 70 mph at Wantage Township. Representative snowfall included 3.0 inches in Highland Lakes (Vernon Township) and 2.1 inches in Wantage Township. Snow related traffic accidents were reported in Vernon Township and Hopatcong Borough. Widespread power outages impacted the entire County. Evacuations occurred in the County as well. There were road closures due to debris throughout the County. Private homes were destroyed due to wind, debris and downed trees.</p> <p>The County opened two regional shelters at Sussex County VoTech and Hopatcong High School and they remained open for up to three weeks. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office and the Health Department. According to NOAA-NCDC storm events database, the County had approximately \$100 million in damages and losses from this event. Hurricane Sandy was the costliest natural disaster by far in the State of New Jersey. Record-breaking high tides and wave action combined with sustained winds as high as 60 to 70 mph with wind gusts as high as 80 to 90 mph to batter the State. Statewide, Sandy caused an estimated \$29.4 billion in damage, destroyed or significantly damaged 30,000 homes and businesses, affected 42,000 additional structures, and was responsible directly or indirectly for 38 deaths.</p> <p>Sussex County suffered relatively less damage than counties farther to the east, and the strongest winds occurred late in the evening on the 7th. The largest issue was fallen trees. The only township to report widespread damage was Walpack Township. Peak wind gusts in the County included 79 mph at High Point Monument (Montague Township), 75 mph at Sussex Borough, and 70 mph at Wantage Township. Representative snowfall included 3.0 inches in Highland Lakes (Vernon Township) and 2.1 inches in Wantage Township. Snow related traffic accidents were reported in Vernon Township and Hopatcong Borough. Widespread power outages impacted the entire County. According to NOAA-NCDC</p>
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Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
				storm events database, the County had approximately \$100 million in damages and losses from this event.

Sources: NCDC 2015; ONJSC Rutgers University 2013a; SPC 2015; FEMA 2015

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

ONJSC Office of the New Jersey State Climatologist

SPC Storm Prediction Center

FEMA Federal Emergency Management Administration

NJ The State of New Jersey

## INFESTATION

Known infestation events that have impacted The State of New Jersey and Sussex County between 2015 and 2019 are identified in Table H-9. Many sources were researched for historical information regarding infestation events in Sussex County; therefore, Table H-9 may not include all infestation events that have impacted the County.

Table H-9. Infestation Events in Sussex County Between 2015 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
2017	N/A	N.A	Countywide	Emerald Ash Borer was first identified in Sussex County in 2017 and has continued to impact additional municipalities in the last several years.
2019	N/A	N.A	Countywide	Recreational use of Lake Hopatcong was severely limited due to harmful algal blooms. Freeholder boards in Sussex and Sussex counties have agreed to allocate a total of \$50,000 in matching funds to support an application by the Lake Hopatcong Commission for a potential \$500,000 state grant to study and reduce harmful algal blooms (HABs)

Sources: NJDEP 2021; Sussex County 2020; NJDEP 2020; Northjersey.com 2020

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

(2): Many invasive species have been in Sussex County for an extended period of time, including the Hemlock Woolly Adelgid, many species of mosquito, white-tailed deer, and Canada geese.

N/A Not Applicable

NJDEP New Jersey Department of Environmental Protection



## NOR'EASTER

Known nor'easter events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-10. Many sources were researched for historical information regarding nor'easter events in Sussex County; therefore, Table H-10 may not include all nor'easter events that have impacted the County.

Table H-10. Nor'easter Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 1-2, 2009	N/A	N/A	Countywide	A winter storm impacted most of New Jersey bringing between six and 12 inches of snow across the region. This event was caused by a Nor'easter that moved east across the region. Many snow emergencies were declared in parts of the State. The combination of strong winds and heavy snow made travel difficult. Numerous schools, businesses and local and county officers were closed. Snowfall totals in Sussex County ranged from 10.6 inches in Hopatcong Borough to 6 inches in the Town of Newton.
October 15, 2009	N/A	N/A	Countywide	A Nor'easter brought an early season measurable snow to the higher terrain of Northwest New Jersey from the afternoon of the 15th into the morning of the 16th. Accumulations on the higher terrain averaged one to four inches. Specific accumulations included 4.0 inches in Vernon, 2.7 inches in Wantage and 1.0 inch in Sparta. Because the ground was still warm, most of the accumulations occurred on non-paved surfaces, bridges, and overpasses as well as clinging to the trees and leaves. A few accidents were reported. Northeast winds averaged 10 to 20 mph. This was strong enough to remove some of the snow off the trees and power outages were generally isolated.
December 19-20, 2009	N/A	N/A	Countywide	A Nor'easter was responsible for a major winter storm that impacted New Jersey. This event brought heavy snow across all of New Jersey, except for Sussex County which received lesser amounts of precipitation. The heaviest snow fell along and east of the Interstate 95 corridor. Snowfall totals averaged around three inches in Sussex County to 24 inches in central and southern New Jersey. In Sussex County, snowfall totals reached 3.9 inches in Sparta Township.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 13-16, 2010	N/A	N/A	Sparta Township, Ogdensburg Borough, Walpack Township, Andover Township, Sussex Borough, Wantage Township	<p>A Nor'easter developed off the Delmarva peninsula which produced an extended period of heavy rainfall across the area as it tracked very slowly to the northeast. This caused widespread flooding across portions of northeast New Jersey. Wind gusts up to 60 mph were reported along the Delaware coast, with gusts of up to 50 mph reported along the southern coast of New Jersey. The storm also impacted inland portions of New Jersey, with four days of rain and major flooding in the Passaic and Raritan River Basins. Flooding was also reported throughout New Jersey. The four-day storm totals ranged from 2.5 inches to six inches with the highest amounts in the Raritan and Passaic Basins. Governor Christie declared a state of emergency. The State had over \$85 million in property damage from this event.</p> <p>The worst reported flooding in the county was along its eastern border. In Sparta Township, Lower Main Street was closed due to its undermining by flood waters. Edison Road in Ogdensburg was closed because of washouts. New York Susquehanna and Western Railroad suspended service because of the flooding. The Flat Brook at Flatbrookville was above its 6-foot flood stage from 727 a.m. EDT through 820 p.m. EDT on the 14th. It crested at 6.81 feet at 1230 p.m. EDT. Event precipitation totals were 3.89 inches in Andover, 2.94 inches in Sussex and 2.75 inches in Wantage.</p>
October 29, 2011	DR-4048	Yes	Countywide	<p>A late October winter storm dropped heavy snow across parts of central and all northwest New Jersey and caused widespread power outages due to many trees still having leaves on them. Sussex, Warren, Morris, Hunterdon, Somerset, and Middlesex Counties were identified as major federal disaster areas. Over 800,000 utility customers lost power. Some areas did not have power restored until November 4th. Governor Christie declared a state of emergency and urged people to stay off the roads. Many municipalities opened warming stations and shelters. About 25 major roadways were closed throughout the State. In addition to the snow and rain, there were strong northerly and northeasterly winds, ranging from 15 to 25 mph and gusting up to 35 mph in the impacted areas. These strong winds also contributed to the downed trees, electric lines and power outages. The 19.1-inch snowfall in Barry Lakes (Sussex County) established a new October snowfall record for the state of New Jersey and is higher than any November snowfall record.</p> <p>Snowfall totals in Sussex County included 19.1 inches in Barry Lakes, 15.5 inches in Wantage Township, and 8.3 inches in the Town of Newton.</p>





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
November 7-8, 2012	N/A	N/A	Countywide	<p>A strong Nor'easter caused high winds along the coast, heavy snow in east central New Jersey, ten-foot waves along the ocean front and minor tidal flooding along the ocean front with the overnight high tide on the 7th. It caused setbacks with restoration efforts caused by post tropical storm Sandy and forced some coastal area evacuations again. Elsewhere across the state, winds were lighter, but accumulating snows occurred in most areas. Snowfall averaged 1 to 5 inches in most of the state. The combination of heavy snow and wind brought down additional trees, poles, and wires and upwards of an additional 150,000 mainly Jersey Central Power and Light customers lost power.</p> <p>Snow related traffic accidents were reported in Vernon and Hopatcong in Sussex County. Representative snowfall included 3 inches in Vernon and Highland Lakes, and 2.1 inches in Wantage Township. Peak wind gusts included 50 mph at High Point and 46 mph in Wantage Township.</p>
March 7-8, 2013	N/A	N/A	Countywide	<p>A departing Nor'easter and an upper low disturbance brought heavy snow to Sussex and Morris County and an accumulating snow through central New Jersey. Snowfall totals ranged from two to 10 inches. Snowfall totals in Sussex County ranged from 8.8 inches in Hardyston Township to 10.5 inches in Wantage Township and 11.8 inches in Highland Lakes (Vernon Township).</p>
November 26, 2014	N/A	N/A	Countywide	<p>A winter storm struck the day before Thanksgiving, dropping heavy snow over parts of northwest New Jersey and caused power outages to approximately 23,000 customers and travel difficulties. Governor Christie declared a state of emergency and speed limits were reduced on all major roadways. The weight of the heavy, wet snow tore down tree limbs, trees, and power lines in the northwest portion of New Jersey.</p> <p>In Sussex County, Sussex Rural Electric Cooperative reported about 1,150 members without power at 10 a.m. EST on the 27th, with the greatest concentration in Scenic Lakes, Lake Wallkill, and Pleasant Valley Lake areas. In Hardyston Township, a destroying house fire was believed to have been started by a surge when power was restored. Representative snowfall (this included the sleet along the Interstate 95 corridor) included 11.5 inches in Highland Lakes (Vernon Township), 10.7 inches in Wantage Township, and 8.9 inches in Sussex Borough.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 22-24, 2016	DR-4264	No	Countywide	<p>An impulse from the west coast traversed the midsection of the country, then developed into a low-pressure system as it tracked across the Gulf states before intensifying along the Carolina coast into a major nor'easter, producing record snowfall in parts of New Jersey on January 23rd. It then moved out to sea after passing by the mid-Atlantic coast early on January 24th.</p> <p>Snow began falling during the Friday afternoon commute on January 22nd, then continued, heavy at times, Friday night into early Sunday morning. Wind gusts up to 60 MPH produced blizzard conditions as visibilities dropped to one-quarter mile or less in spots. Representative snowfall totals include 16.0 inches in Stockholm (Sussex).</p>
January 24, 2017	N/A	N/A	Countywide	Just over 2 inches of rain fell in association with the Nor'easter.
March 14, 2017	N/A	N/A	Countywide	Low pressure systems across the Ohio Valley and Carolinas phased. This led to a rapidly developing storm which tracked just offshore. Wind and a foot of snow were reported across Sussex County.
March 2, 2018	N/A	N/A	Countywide	A heavy, wet snow accumulated to a depth of over 16 inches in the higher elevations of the county, and around 6 inches or so in the valleys. Some snowfall totals include 16.5 inches in Branchville, 14.0 inches in Highland Lakes, 13.5 inches at High Point, 8 inches near Wantage, 7.0 inches in Stockholm, and 2.3 inches near Sussex. A wind gust of 48 MPH was reported at High Point Monument at 1125EST on the 2nd. Blowing and drifting snow made travel hazardous Friday afternoon and evening. Numerous power outages, some lasting over two weeks, were widespread throughout the county due to tree and wire damage. Warming centers were established around the county for affected residents.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 7, 2018	DR-4368	No	Countywide	<p>Narrative A broad area of low pressure extending from the Ohio Valley to the Piedmont of South Carolina consolidated off the Virginia Capes during the early morning of March 7th. This new primary low moved northeast and gradually deepened as it passed east of the Delaware and New Jersey coasts on March 7th.</p> <p>The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages across portions of New Jersey, especially where the heaviest snow was reported. Many customers were still without power from the previous storm when this storm struck. Governor Murphy estimated about 350,000 customers state-wide lost power as a result of this second storm.</p> <p>Although all portions of the county experienced significant snowfall from this event, the higher amounts occurred over the central and eastern portions of the county which were closer to the low-pressure system. Some reported snowfall totals include: 21.0 inches in Highland Lakes, 17.0 inches in Stockholm, 16.0 inches in Sparta, 15.5 inches in Hardyston Township, 15.0 inches in Vernon, 13.5 inches in Wantage, 12.7 inches in Montague, and 12.0 inches in Newton.</p>
March 21-22, 2018	N/A	N/A	Countywide	<p>A complex area of low pressure over the middle Atlantic, which involved several individual centers, slowly consolidated off the Virginia Capes Tuesday morning, March 20th into Wednesday March 21st along a frontal boundary. This primary low, the fourth nor'easter of March, gradually moved northeast Wednesday night, to a position southeast of the 40 North/70 West Benchmark coordinates on Thursday morning.</p> <p>Precipitation began as a wet, heavy snow during the evening hours on March 20th. After a lull during the overnight hours, a drier snow began falling, heavy at times, during the afternoon and evening hours on March 21st. The heaviest snow from this event fell in the southern one-half of the county, with a sharp drop off in the far north. Some snowfall reports include: 10.0 inches in both Stockholm and Byram Township, 9.5 inches in Fredon, 8.5 inches in both Hardyston Township and Newton, 7.0 inches in Ogdensburg, 7.0 inches in Andover, Sparta, and Franklin, 2.5 inches in Vernon Valley, 1.3 inches in Sussex, 1.1 inches in Wantage, and 0.2 inches in Montague.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 3-4, 2019	N/A	N/A	Countywide	An offshore low-pressure system brought a period of heavy precipitation to the mid-Atlantic. A mix of rain, sleet, and snow was observed, with snow confined mainly to interior areas and sleet and rain more abundant near the coast. Snowfall totals inland approached 10, with snowfall rates exceeding one inch per hour for several hours. A sharp gradient in snowfall with a steep drop in snow totals was observed just west of the Interstate 95 corridor. A trained spotter in Highland Lakes reported 8.2 inches of snow.

Sources: NOAA-NCDC Storm Database 2015; NWS 2015; FEMA 2015; NOAA NCEI 2020, NJ HMP 2019, SHELDUS

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

NWS National Weather Service

FEMA Federal Emergency Management Administration

NJ The State of New Jersey

HMP Hazard Mitigation Plan

SHELDUS Spatial Hazard Events and Losses Database

## SEVERE WEATHER

Known severe storm events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-11. Many sources were researched for historical information regarding severe storm events in Sussex County; therefore, Table H-11 may not include all severe storm events that have impacted the County.

Table H-11. Severe Storm Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 11, 2008	N/A	N/A	Countywide	Following the passage of an arctic front on the 10th, the coldest air mass of the season settled into New Jersey. On the morning of the 11th, lingering winds between two systems in surrounding regions, coupled with a very cold air mass, produced low wind chill readings during the morning of the 11th. Wind chill values were as low as 20°F below zero over the higher terrain of Sussex County. The morning low temperature was 1 degree below zero at High Point (Montague Township) and in the single numbers elsewhere in Sussex County.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
June 7 – 10, 2008	N/A	N/A	Countywide	The most oppressive heat wave of the meteorological summer affected New Jersey from June 7th through the 10th. The combination of high temperatures well into the 90s to around 100 and dew point temperatures in the 70s produced apparent temperatures or heat indices values as high as around 100°F in northern New Jersey and around 105°F in southern New Jersey. Highest temperatures in Sussex County included 96°F in Andover Township.
July 16 – 22, 2008	N/A	N/A	Countywide	The longest heat wave of the summer affected New Jersey from July 16th through the 22nd. The heat wave ended in about the northern two thirds of the state on the 22nd as thunderstorms kept temperatures below 90°F. High temperatures were mainly in the lower to mid-90s throughout the heat wave. The hottest days occurred on the 18th, 19th or 20th. The combination of the temperatures and dew points produced apparent temperatures or heat indices of around 100°F. Temperatures ranged from 93°F to 98°F, with a high of 93°F in the Borough of Sussex.
October 28, 2008	N/A	N/A	Countywide	Gusty winds of up to 66 mph occurred across New Jersey. The combination of the strong winds, heavy wet snow, and trees still with leaves caused widespread power outages in northwest New Jersey. In Sussex County, there were 443 weather related calls in Sparta Township alone. New Jersey State Route 15 was closed during the afternoon. Peak wind gusts in Sussex County included 52 mph at High Point (Montague Township). Overall, the County had approximately \$500,000 in property damage.
February 16, 2009	N/A	N/A	Countywide	A large arctic high-pressure system moved toward the area during the 16th and 17th, bringing gusty winds and keeping maximum temperatures in the single digits across northwestern New Jersey. Some areas, mainly in the northern part of the state, where the wind was able to drop off considerably, dropped to well below zero. Low temperatures on the 16th included: -15°F at the Sussex Airport (Wantage Township), -12°F in Walpack Township, -1°F in Wantage Township, and -6°F at Andover Township. Low temperatures on the 17th included -15°F in the Borough of Sussex Borough, -12°F in Walpack Township, and -8°F in Andover Township.
February 12, 2009	N/A	N/A	Countywide	Peak wind gusts of 50 to 60 mph impacted New Jersey, knocking down power lines, tree limbs and trees. About 86,000 homes and businesses were without power. The strongest winds and most damage was in central and northern New Jersey. In Sussex County, peak wind gusts included 69 mph at the High Point Monument (Montague Township). Damages to the County were approximately \$30,000.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 28, 2009	N/A	N/A	Countywide	Isolated severe thunderstorms developed during the afternoon of the 28th in northern New Jersey. Thunderstorm winds with estimated gusts of 64.4 mph knocked down a few trees and wires in Andover Township, where the roof of an apartment building was also damaged. Estimated gusts of 40mph were reported in Ogdensburg Borough, where a tree was knocked down onto the roof of a house during a thunderstorm. Overall, the County had approximately \$35,000 in property damage.
July 29, 2009	N/A	N/A	Wantage Township	An EF2 tornado touched down in Wantage Township at about 2:48 p.m. on July 29. It was the first confirmed tornado in Sussex County since August 1990, the first tornado of F2 or EF2 strength ever in the county since records started in 1950 and the first tornado to reach EF2 or F2 strength in New Jersey since the Manalapan tornado of May 27, 2001. The tornado remained on the ground for 6.6 miles before it crossed the border into New York State. Its maximum width was about 100 yards, and its highest estimated wind speed was 120 mph. Approximately \$800,000 in property damage and \$200,000 in crop damage.
August 21, 2009	N/A	N/A	Countywide	A couple of severe thunderstorms caused wind damage across Sussex County, hitting the southeast half the hardest. The combination of damaging winds and lightning caused about 12,000 homes and businesses to lose power. Twenty-one of the twenty-four municipalities within the county reported power outages. Trees were reported down in Branchville and Franklin boroughs, Fredon, Green, Walpack, and Stillwater townships, and the Town of Newton. Wires were also reported knocked down on U.S. Route 206 and New Jersey State Route 94 in the Town of Newton. Trees fell on vehicles in Newton, Franklin Borough and Green Township. In Green Township, a woman was trapped in her vehicle when live power lines came down on it. A deck was damaged in Franklin Borough and a boat was damaged in Stillwater Township. Power was not fully restored in the county until the 24th. In addition to the severe weather, two lifeguards were struck and injured by lightning at Crystal Springs in Vernon Township. They were thrown to the ground by the strike, were dazed, lost their hearing for a short while and had smoking feet. No wind related injuries were reported. \$50,000 in property damage was reported in Sussex County.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 3, 2010	N/A	N/A	Countywide	Strong and gusty west to northwest winds occurred for nearly twenty-four hours across New Jersey from the evening of the 2nd through the afternoon of the 3rd. Peak wind gusts measured around 70 mph in the higher terrain of Sussex County. The strong winds downed weak trees, tree limbs and power lines and resulted in widely scattered power outages. Peak wind gusts included 73 mph in Wantage Township, 68 mph at the High Point State Monument (Montague Township). Sussex County had an estimated \$10,000 in property damage.
July 5, 2010	N/A	N/A	Countywide	The hottest weather of the summer season occurred on July 5th through the 7th throughout the state of New Jersey. Temperatures ranged from 90°F to 105°F. Highest temperatures included 101°F in Sussex Borough.
October 11, 2010	N/A	N/A	Countywide	Strong to locally severe thunderstorms formed in central and northern New Jersey during the evening of the 11th. In Sussex County, lightning struck the electrical box in the front of a log cabin home in Hopatcong Borough and ignited a fire that engulfed the unoccupied dwelling. The fire was under control within an hour, but the interior of the cabin was gutted with extensive smoke and fire damage on both floors. The County reported an estimated \$100,000 in property damage.
December 1, 2010	N/A	N/A	Countywide	Strong south winds moved across New Jersey during the late morning and early afternoon on December 1st. Enhanced wind gusts preceded a line of showers and isolated thunderstorms that moved in during the late morning and early afternoon. Peak wind gusts average 45 to 50 mph and knocked down weak tree limbs and wires and caused scattered power outages. The heavy rain made it easier for shallow rooted trees to be knocked over. About 34,000 homes and businesses lost power. Most power was restored by the 2nd. Peak wind gusts included 54 mph in Wantage Township. Sussex County had \$10,000 in property damage.
December 27, 2010	N/A	N/A	Countywide	Strong to high winds that started during an afternoon winter storm on the 26th persisted into the evening of the 27th. Peak wind gusts were around 50 mph, except in the higher terrain of Sussex County where gusts reached into the 60s. The strong to high winds knocked down some weak tree limbs and power lines. The largest effect though was the considerable blowing and drifting of the snow the wind caused. This hampered plowing and clean-up operations after the snow ended throughout the day on the 27th. Many roadways and ramps remained closed. About 7,000 homes and businesses lost power. \$10,000 in property damage was reported in Sussex County.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 24, 2011	N/A	N/A	Countywide	An arctic high-pressure system brought in the coldest air mass of the season to New Jersey. Many places saw morning lows that were the coldest during that winter. Northwest winds produced wind chill factors below zero in most of the State. Sussex County experienced a wind chill of -15°F. Actual low temperatures in Sussex County included -17°F in Pelletstown Hamlet, and -11°F in Sussex Borough.
February 19, 2011	N/A	N/A	Countywide	Strong to high west to northwest winds affected New Jersey from the evening of the 18th into the evening of the 19th. Peak wind gusts averaged around 55 mph. The winds tore down trees, tree limbs and wires and caused power outages. About 22,000 homes and businesses lost power, and some were without power until the evening of the 20th. Peak wind gusts included 58 mph in Wantage Township. Sussex County had \$10,000 in property damage.
July 3, 2011	N/A	N/A	Countywide	A warm front acted as a focus for strong to severe thunderstorms during the early morning of the 3rd in northwestern New Jersey and during the late afternoon and early evening of the 3rd across central New Jersey. In Sussex County, penny size hail fell in Franklin Township and quarter size hail in Sparta Township. Thunderstorm winds knocked down numerous trees in Sparta Township on and around West Mountain Road, Grandview Terrace, and Sterling Hill Road. One property lost between fifteen and twenty trees and suffered roof damage to its home. About 150 homes in the County lost power. Power was fully restored by 3 p.m. that afternoon. The County reported a total of \$50,000 in property damage.
July 21, 2011	N/A	N/A	Countywide	One of the most oppressive heat waves since July 1995. It caused two deaths and hundreds of heat-related injuries. Many locations had high temperatures that were more than 100°F. July 22 was the hottest, with heat index values of 110°F to 120°F. Many counties and municipalities opened cooling centers for its residents. Temperatures ranged from 100°F in Cumberland and Cape May Counties, to 106°F in Mercer County. In Sussex County, a high temperature of 101°F was reported in Andover Township.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 29, 2011	N/A	N/A	Countywide	<p>An approaching cold front helped trigger strong to severe thunderstorms across central and northern New Jersey during the early evening of the 29th. In Sussex County, a powerful and damaging microburst occurred in Vernon Township during the early evening of the 29th. Estimated maximum wind speeds were 90 mph. Wind damage began near Silver Fox Lane and moved southeast for about two miles and ended near the intersection of State Route 94 and Sand Hill Road. Most of the wind damage was seen in the roughly 100 downed trees, as well as downed wires. Several homes sustained roof damage from the combination of either trees falling on them, or the winds themselves. In the Tall Timbers Mobile Home Park in Sussex Borough, a number of trees also fell on vehicles and damaged mobile homes. One home on Edsall Drive suffered significant roof damage, and the family was subsequently sheltered at the Crystal Springs Resort. A few other families in the area had to leave their home because of wind damage. An amateur radio antenna on Edsall Drive was bent in half. In addition to Edsall Drive, tree wind damage was extensive on Black Walnut Mountain Road, Basswood Drive and Shebe Drive. About 2,000 Jersey Central Power and Light Customers lost power, 500 still did not have power restored on the afternoon of the 30th. The County had \$100,000 in property damage.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 26-30, 2011	DR-4021	Yes	Branchville Borough, Ogdensburg Borough, Frankford Township, Hampton Township, Hardyston Township, Vernon Township, Town of Newton, Walpack Township, Sandyston Township, Stillwater Township, Montague Township	<p>Hurricane Irene moved north along the Atlantic Coast, making landfall near Cape Lookout, North Carolina, on August 27th. The hurricane moved back over open water before making landfall for a second time at Little Egg Inlet in New Jersey on August 28th. This was the first time since 1903 that a hurricane made landfall in New Jersey. Rain fell for an 18-hour period, with totals ranging from six to eight inches across New Jersey. Higher amounts were observed in southwestern, central, and northeastern New Jersey. Irene brought tropical storm force winds, destructive storm surge, and record-breaking freshwater inland flooding across northeast New Jersey. There were thousands of mandatory and voluntary evacuations along the coast and rivers from surge and freshwater flooding, and widespread power outages that lasted for up to two weeks. The Governor of New Jersey declared a state of emergency on August 25th.</p> <p>In Sussex County, flooding impacted Branchville and Ogdensburg boroughs, Frankford, Hampton, Hardyston, and Vernon townships, and the Town of Newton. These municipalities were the hardest hit in the County. Flooding forced the closure of over 100 roadways in the county including U.S. Route 206 as well as state and County Routes 94, 15, 23, 517 and 628. The Borough of Branchville was literally cut off after flooding occurred along the Dry Brook. About 100 people were evacuated within the Borough. The Flat Brook at Flatbrookville (Walpack Township) had major flooding and its second highest crest since Hurricane Diane in 1955. The brook was above its six foot flood stage from 810 a.m. on the 28th through 404 p.m. EDT on the 29th. It crested at 10.59 feet at 1215 a.m. on the 29th.</p> <p>Over 100 bridges in the County were damaged and nine bridges were lost (two in Vernon, one in Wantage, three in Frankford, two in Sandyston, and in Stillwater there were bridges down to one lane due to lost stream banks). In Vernon Township, eight families were cut off after another bridge washed out. In Montague, two culverts were lost.</p> <p>A few county facilities were damaged as a result of Hurricane Irene as well. The County record retention center flooded, the County-owned DPW garage in Vernon Township flooded and a tree fell on the County jail. Two regional shelters were open for residents – Sussex County VoTech High School and Hopatcong High School. There were utility outages across the County. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office and the Health Department. The County had \$12.5 million in damages from Hurricane Irene.</p>





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 5-14, 2011	DR-4039	Yes	Green Township, Andover Township, Sparta Township, Hardyston Township, Vernon Township, Franklin Township, Hopatcong Borough, Stillwater Township, Branchville Borough, Walpack Township	<p>The remnants of Tropical Storm Lee arrived in New Jersey on September 5, 2011, bringing heavy rains throughout the State. Parts of Trenton and other municipalities along the Delaware River were inundated. Hundreds of residents along the Passaic River and its tributaries had to evacuate. There were a total of 162 roads closed due to flooding throughout the State of New Jersey. Storm totals ranged from three to eight inches of rain. The heavy rain and flooding impacted crops, with farmers reporting up to 75% losses of pumpkin and tomato crops. The State had an estimated \$11.5 million in damages.</p> <p>The heavy rain caused widespread flooding and flash flooding of smaller streams in Sussex County as well as poor drainage flooding across eastern Sussex County from Green Township northeast through parts of Andover, Sparta, Hardyston and Vernon Townships. Many roadways were closed. Schools were closed on the 8th in Vernon and Sparta Townships. A few homes were flooded in Andover Township. Sections of New Jersey State Route 23 and 94 were closed in Franklin Township and Stockholm (Hardyston Township). There were road and culvert washouts in Hopatcong, Stillwater and Sparta. Areas that were impacted during Irene were also affected again from Lee.</p> <p>The Flat Brook flooded a few homes in southwest Sussex County. A flash flood along the Culver Creek in Branchville Borough led to a State of Emergency declaration after the creek tore away the Mill Street Bridge in the borough. Ten homes had over eight feet of water in them, the most severely damaged were at the end of Mill Street. Residents from about 50 homes evacuated, with residents from all but one home being able to return at Noon that day. The Flat Brook at Flatbrookville (Walpack Township) had moderate flooding and was above its 6 foot flood stage from 903 a.m. EDT on the 7th through 905 a.m. EDT on the 9th. It crested at 8.90 feet at 600 p.m. EDT on the 8th.</p> <p>The County opened two regional shelters – Sussex County VoTech and Hopatcong High School – both of which were still opened from Hurricane Irene. County-owned facilities experienced damage from wind; windows were damaged and shingles were blow-off the buildings. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office, and the Health Department. Overall, the County approximately \$1 million in damages from this event.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
October 29, 2011	DR-4048	Yes	Countywide	<p>A late October winter storm dropped heavy snow across parts of central and all northwest New Jersey and caused widespread power outages due to many trees still having leaves on them. Sussex, Warren, Morris, Hunterdon, Somerset, and Middlesex Counties were identified as major federal disaster areas. Over 800,000 utility customers lost power. Some areas did not have power restored until November 4th. Governor Christie declared a state of emergency and urged people to stay off the roads. Many municipalities opened warming stations and shelters. About 25 major roadways were closed throughout the State. In addition to the snow and rain, there were strong northerly and northeasterly winds, ranging from 15 to 25 mph and gusting up to 35 mph in the impacted areas. These strong winds also contributed to the downed trees, electric lines, and power outages. The 19.1-inch snowfall in Barry Lakes (Sussex County) established a new October snowfall record for the state of New Jersey and is higher than any November snowfall record.</p> <p>Snowfall totals in Sussex County included 19.1 inches in Barry Lakes, 15.5 inches in Wantage Township, and 8.3 inches in the Town of Newton.</p>
February 25, 2012	N/A	N/A	Countywide	<p>Strong winds downed weak trees, tree limbs and power lines and caused scattered outages in Sussex County. Peak wind gusts included 62 mph in Wantage Township. The County reported \$12,500 in property damage.</p>
March 1 – April 9, 2012	N/A	N/A	Countywide	<p>Strong winds impacted Sussex County and knocked down some weak tree limbs and power lines and caused isolated outages. In addition to downing weak trees, tree limbs and wires, the strong winds enhanced the spread of wildfires due to the recent dry weather and low relative humidity levels. The string of events led Sussex County to be included in two USDA disaster designations, S3249 and S3251, (as a contiguous county). Sussex County reported nearly \$10,000 in wind damage from four wind events in this time.</p> <p>Peak wind gusts recorded in Sussex County were as follows: 47 mph at High Point (Montague Township) on March 3rd; 49 mph at High Point and 47 at Wantage Township on March 8th; 56 mph at High Point and 52 at Wantage Township on March 26th; and 48 mph at Wantage Township on April 9th.</p>
June 2, 2012	N/A	N/A	Countywide	<p>Sussex County was included as a contiguous county in USDA disaster designation S3427 for drought and excessive heat.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
June 20 – 22, 2012	N/A	N/A	Countywide	A three-day heat wave occurred throughout the entire State, bringing temperatures between 94°F and 99°F. In Sussex County, the heat caused some telephone pole and power line fires in Hopatcong Borough on the 21st. Highest temperatures included 95°F in Andover Township and Sussex Borough. The heat wave broke dramatically when a series of severe thunderstorms impacted New Jersey.
July 17-18, 2012	N/A	N/A	Countywide	<p>An unseasonably hot and humid air mass affected New Jersey on the 17th and 18th, with high temperatures in the mid to upper 90s and heat indices near 100°F on the 17th and high temperatures around 100°F and heat indices between 105°F and 110°F on the 18th. Highest temperatures in Sussex County temperatures ranged from 100°F in Walpack Township to 97°F in Sussex Borough. The hot weather ended the afternoon of the 18th, as scattered strong to severe thunderstorms moved across northern New Jersey.</p> <p>Additionally, thunderstorms impacted the County by downing trees that blocked SR 23 south of SR 94, and SR 94 near North Church Road in Hamburg Borough. Outages were reported in Byram, Sparta, and Hardyston townships, Hamburg and Sussex boroughs, and the Town of Newton. Wind speeds of 60 mph were recorded in the Hamlet of Hardystownville, Andover Township, and Sayreville Borough, and 58 mph in Beaver Lake (Hardyston Township).</p> <p>Some roadway flooding also occurred. Nickel size hail was reported in Sussex Borough and Andover Township. The storms also brought lightning throughout Sussex County. Lightning struck a home on Havens Road in Wantage Township, causing fire damage to its roof. The Selective Insurance Company in Branchville Borough was evacuated after a lightning strike triggered a chemical fire suppression system – several employees were treated for chemical inhalation. Another strike ignited bales of hay inside of a barn on Wykertown Road in Frankford Township. Four fire companies battled the blaze that caused minimal damage.</p> <p>About 3,000 homes and businesses lost power throughout Sussex County. \$15,000 in property damage, and \$5,000 in crop damage was reported from the storms.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 23, 2012	N/A	N/A	Countywide	<p>A warm front that was moving through the state into New England helped trigger strong to locally severe thunderstorms in the northern half of new Jersey during the afternoon of the 23rd. Besides pockets of damaging winds, the severe thunderstorms were prolific hail producers.</p> <p>In Sussex County, the storms knocked down several trees in Sandyston Township. A lightning strike injured a 12-year-old camper and an 18-year-old counselor at Kittatinny Lake in Sandyston Township, when the bolt struck a tree and traveled into the foundation of their cabin in Stokes State Forest. The storms dropped half dollar size hail in Sandyston Township; quarter size hail in Walpack Township, Middleville (Stillwater Township), and Myrtle Grove (Hampton Township); quarter size hail in Hainesville (Sandyston Township); and nickel size hail in Branchville Borough.</p>



October 26 – November 8, 2012	DR-4086	Yes	Walpack Township, Vernon Township, Wantage Township, Hopatcong Borough, Montague Township, Sussex Borough	<p>Hurricane Sandy was the costliest natural disaster by far in the State of New Jersey. Record-breaking high tides and wave action combined with sustained winds as high as 60 to 70 mph with wind gusts as high as 80 to 90 mph to batter the State. Statewide, Sandy caused an estimated \$29.4 billion in damage, destroyed or significantly damaged 30,000 homes and businesses, affected 42,000 additional structures, and was responsible directly or indirectly for 38 deaths.</p> <p>Sussex County suffered relatively less damage than counties farther to the east, and the strongest winds occurred late in the evening on the 7th. The largest issue was fallen trees. The only township to report widespread damage was Walpack Township. Peak wind gusts in the County included 79 mph at High Point Monument (Montague Township), 75 mph at Sussex Borough, and 70 mph at Wantage Township. Representative snowfall included 3.0 inches in Highland Lakes (Vernon Township) and 2.1 inches in Wantage Township. Snow related traffic accidents were reported in Vernon Township and Hopatcong Borough. Widespread power outages impacted the entire County. Evacuations occurred in the County as well. There were road closures due to debris throughout the County. Private homes were destroyed due to wind, debris and downed trees.</p> <p>The County opened two regional shelters at Sussex County VoTech and Hopatcong High School and they remained open for up to three weeks. Costs to the County included overtime for OEM, DPW, Engineering, Sheriff's Office, Prosecutors Office and the Health Department. According to NOAA-NCDC storm events database, the County had approximately \$100 million in damages and losses from this event. Hurricane Sandy was the costliest natural disaster by far in the State of New Jersey. Record-breaking high tides and wave action combined with sustained winds as high as 60 to 70 mph with wind gusts as high as 80 to 90 mph to batter the State. Statewide, Sandy caused an estimated \$29.4 billion in damage, destroyed or significantly damaged 30,000 homes and businesses, affected 42,000 additional structures, and was responsible directly or indirectly for 38 deaths.</p> <p>Sussex County suffered relatively less damage than counties farther to the east, and the strongest winds occurred late in the evening on the 7th. The largest issue was fallen trees. The only township to report widespread damage was Walpack Township. Peak wind gusts in the County included 79 mph at High Point Monument (Montague Township), 75 mph at Sussex Borough, and 70 mph at Wantage Township. Representative snowfall included 3.0 inches in Highland Lakes (Vernon Township) and 2.1 inches in Wantage Township. Snow related traffic accidents were reported in Vernon Township and Hopatcong Borough. Widespread power outages impacted the entire County. According to NOAA-NCDC</p>
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Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
				storm events database, the County had approximately \$100 million in damages and losses from this event.
June 28 – Nov. 8, 2012	N/A	N/A	Countywide	The combined effects of a series of severe weather events over four months led to Sussex County's designation as a primary county in USDA disaster designation S3487. In Sussex County during this period, NOAA-NCDC reported one day of excessive heat, nine days of hail, 18 days of high, strong, or thunderstorm wind, and two lightning incidents, leading to a total of over \$one million in property damages. \$67,984.64 in USDA indemnity payments went to Sussex County farmers for lost corn crops in 2012.
May 1, 2013	N/A	N/A	Countywide	Sussex County was included as a contiguous county in USDA disaster designation S3593. USDA reported making \$32,371.30 in indemnity payments to Sussex County farmers for lost corn crops in 2013.
July 7 – 20, 2013	N/A	N/A	Countywide	This was the 5th warmest July in New Jersey since records commenced in 1895. The average temperature for the month was 78.2°F. In Sussex County, the warmest temperatures occurred on the 7th, 15th, and 18th, with temperatures ranging from 93°F in Walpack Township on the 7th to 97°F in Andover Township on the 15th and the 18th. Numerous cooling centers were opened across the County.
September 12, 2013	N/A	N/A	Countywide	A strong cold front helped trigger a line of strong to severe thunderstorms that moved through northern and central New Jersey during the early evening on the 12th. In Sussex County, downed trees and wires and blocked roadways were reported along and around Kennedy Road in Green Township and across SR 517 in Ogdensburg Borough. Several downed trees led to closure of Alpine and South Shore Trails in Sparta Township, where strong winds also tore siding off some homes. Wind speeds of 60 mph were recorded in Tranquility (Green Township) and Ogdensburg Borough, and 64 mph in Sparta Township. About 5,000 homes and businesses in Sussex County lost power. Power was not fully restored until later in the day on the 13th. Sussex County had roughly \$20,000 in property damage.
January 4-7, 2014	N/A	N/A	Countywide	One of the harshest arctic outbreaks in years occurred in New Jersey in the first week of January. Low temperatures on the morning of the 4th included -10°F in Pelletstown Hamlet, -9°F in Sussex Borough. A strong cold front with gusty winds on the 6th saw wind speeds of 44 mph in Sussex Borough. Low temperatures on the 7th included zero in Sussex Borough, and the lowest wind chill factor that day was -20°F in Wantage Township.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 22, 2014	N/A	N/A	Countywide	Strong northwest winds coupled with another arctic air mass to drop low temperatures on the morning of the 22nd to below zero lows in the northwest New Jersey. Lowest hourly wind chills included -14°F at Sussex Borough. Actual low temperatures included -5°F below zero in Wantage Township and -2°F in Andover Township.
March 12, 2014	N/A	N/A	Countywide	The high winds in Sussex County led to the death of a 74-year-old man when an 80-foot-tall tree fell completely through his home on Maxim Drive in Hopatcong Borough on the afternoon of the 13th. The tree also damaged the neighboring home. Roofing debris on a kerosene heater started a small fire. A police officer rescued two dogs in the house and was injured extinguishing the fire. Sussex County reported \$100,000 in property damage.
July 2-3, 2014	N/A	N/A	Countywide	<p>A hot start to July peaked on the 2nd in interior New Jersey with high temperatures in the lower to mid-90s and afternoon heat index values reaching 100 to 105 degrees. In Sussex County, highest temperatures included 93°F in Sussex Borough.</p> <p>The heat subsided as an approaching cold front then triggered a series of severe thunderstorms in the second half of the day on the 3rd. About 33,000 homes and businesses lost power throughout the state from the combination of wind damage and lightning strikes. A tree fell down into a house in Frankford Township. A lightning strike injured three people walking along Mackerley Road in Green Township. Another lightning strike and ensuing fire burned a barn to the ground in Frankford Township. The County had approximately \$60,000 in property damages and \$10,000 in crop damage over the two days.</p>
January 4, 2015	N/A	N/A	Countywide	A strong cold frontal passage brought strong winds in its wake into New Jersey during the evening and overnight on the 4th. The strongest winds occurred in eastern New Jersey and over the higher terrain of northwest New Jersey. Peak gusts in those locations averaged 50 to 55 mph, while elsewhere most peak gusts were between 40 and 45 mph. The strong winds knocked down weak tree limbs, trees and wires and caused isolated power outages. Peak wind gusts included 54 mph in High Point (Sussex County). \$2K in property damage was reported.
January 7-8, 2015	N/A	N/A	Countywide	Narrative The arrival of an arctic air mass brought one of the coldest mornings of the month of January to most of New Jersey. Morning low temperatures were mainly in the single numbers above zero. In addition, gusty northwest winds continued into the morning and lowest hourly wind chill factors reached around degrees below zero throughout the state.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 2, 2015	N/A	N/A	Countywide	Strong, gusty northwest winds occurred in the wake of a departing and intensifying low pressure system during the late afternoon into the middle of the evening on the 2nd in New Jersey. Peak wind gusts average around 50 mph and knocked down weak trees, tree limbs and wires. Scattered power outages occurred. This was further exacerbated by snow and ice on tree limbs in the northwest part of the state. Peak winds included 56 mph in Wantage (Sussex County). \$7K in property damage was reported.
February 12-13	N/A	N/A	Countywide	Strong gusty northwest winds occurred behind a secondary cold frontal passage in New Jersey during the evening and overnight on the 12th. Peak wind gusts averaged around 55 mph over the higher terrain of Sussex County. \$5K in property damage was reported.
February 15, 2015	N/A	N/A	Countywide	The increasing pressure difference (gradient) between a rapidly intensifying low-pressure system offshore and an arctic high pressure system moving east from the Great Lakes caused strong to high damaging northwest winds to occur in New Jersey from the late evening of the 14th into the afternoon of the 15th. Strong wind gusts started late in the evening on the 14th, peaked during the morning of the 15th and continued into the afternoon of the 15th. The highest winds occurred in the southern half of the state and in the higher terrain of Sussex County. In these latter locations, peak wind gusts averaged around 60 mph. \$10K in property damage was reported. The combination of strong to high winds and an approaching arctic air mass-produced wind-chill factors of 10 to 15 degrees below zero during the first half of the day on the 15th in New Jersey.
February 19-20, 2015	N/A	N/A	Countywide	The arrival of another arctic air mass brought some of the lowest wind chills as well as the lowest temperatures of the winter season to New Jersey on the 20th and 21st. As far as wind chill factors went, the first half of the day on the 20th was colder with wind chill factors as low as around 20 degrees below zero during the morning. Actual low temperatures were around zero. On the morning of the 21st, little, if any, wind was present as the arctic high-pressure system was nearby. Low temperatures in more rural inland areas were lower, many were below zero, some well below zero. But, because of the lack of wind, wind chill factors nearly matched the air temperatures and it felt relatively warmer on the morning of the 21st.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 24, 2015	N/A	N/A	Countywide	The high-pressure system responsible for third and last arctic blast of the month of February arrived in New Jersey on the morning of the 24th. Unlike the two previous arctic outbreaks earlier this month, this one was not accompanied by strong winds during the first half of the day. Air and wind chill temperatures were nearly the same. The calm conditions and snow cover combined to give many locations in northwest New Jersey the coldest morning of the winter season and comparably cold to the 20th and 21st weather in the rest of the state. Actual low temperatures included 19 degrees below zero in Walpack (Sussex County) and 15 degrees below zero in Sussex (Sussex County).
April 4, 2015	N/A	N/A	Countywide	Strong, gusty northwest winds circulating around an intensifying low-pressure system and approaching high pressure system had the greatest impact across northern New Jersey and coastal southern New Jersey during the second half of the morning into the afternoon on the 4th. Peak wind gusts in these areas reached between 45 mph and 50 mph and knocked down weak tree limbs and wires. In the rest of the southern half of the state, while still windy, most peak wind gusts were less than 40 mph.
May 16, 2015	N/A	N/A	Wantage Township	Peak wind gusts included 48 mph in Wantage (Sussex County).
June 12, 2015	N/A	N/A	Green Township, Fredon Township, Town of Newton	A lee side trough preceding a cold front combined with an unseasonably hot and humid air mass to trigger scattered strong to locally severe thunderstorms in northwest New Jersey during the late afternoon and early evening of the 12th. A severe thunderstorm knocked down trees and wires in Green Township. The same severe thunderstorm knocked down multiple trees in Fredon Township. A severe thunderstorm also knocked down trees and wires in Newton.
June 21, 2015	N/A	N/A	Wantage Township	Scattered strong thunderstorms moved through western New Jersey during the afternoon and evening of the 21st. An isolated severe thunderstorm occurred in Sussex County. A severe thunderstorm tore down power lines in Wantage Township.
June 23, 2015	N/A	N/A	Wantage Township, Veron Township	A severe thunderstorm knocked down a few trees along Central School Road in Wantage Township. A severe thunderstorm knocked down a few trees in Vernon Township.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 19, 2015	N/A	N/A	Countywide	Unseasonably hot and humid weather affected most of New Jersey on the 19th and 20th. High temperatures in most areas reached into the lower to mid-90s both days. The 19th was slightly hotter and more humid overall. The combination of heat and humidity brought afternoon heat index values as high as 100F to 105F on the 19th. These were some of the highest heat index values of the entire summer. A dissipating cold front on the 20th brought slightly drier air into the region during the afternoon of the 20th and heat index values peaked around 100F. A re-enforcing cold frontal passage on the 21st brought even cooler and drier air into the area and by the 22nd all high temperatures were less than 90 degrees in New Jersey.
January 4-5, 2016	N/A	N/A	Countywide	Northwest winds that persisted into the morning of the 5th, combined with an arctic air mass - the coldest of the season so far - produced wind chill factors between minus 10 and minus 30 degrees below zero. The coldest wind chill factors were in the higher elevations where the wind was strongest and temperatures the lowest. The lowest hourly wind chill factor at High Point was minus 27 degrees, which occurred at 0310EST, and minus 15 degrees near Flatbrookville, which occurred at 0314EST. Actual morning low temperatures were in the above zero single numbers and included 4 degrees in Sussex, 5 degrees at Sussex Airport, and 6 degrees in Pelletstown. The unseasonably cold arctic air mass and low wind chill factors were caused by the strong northwest wind flow over 30 MPH produced by a deepening mid-level trough over the eastern part of the country, and an arctic high-pressure system moving east into the region. Cold temperatures were repeated the following night, but with less wind, wind chill factors were closer to the actual air temperatures.
February 13-14, 2016	N/A	N/A	Countywide	Wind Chill values dropped to 25 degrees below zero at 0553EST at Sussex County Airport, with northwest wind gusts as high as 25 MPH. The actual air temperature at this time was 6 degrees below zero. The highest wind gust reported at this station was 30 MPH at 1353EST Saturday, February 13th. A wind chill value of 46 degrees below zero was reported at a Safetynet site at Highpoint at 0530EST.
February 24, 2016	N/A	N/A	Wantage Township	A strong low-pressure system moving north through the Great Lakes region, combined with its associated warm front and cold front, copious amounts of moisture, and low-level jet, produced strong to severe thunderstorms, heavy rain, flash flooding, and stream flooding in New Jersey late Wednesday afternoon and evening, February 24th, with stream flooding continuing into Thursday, February 25th. Thousands were without power for a period across the state, focused in South Jersey. A 55 MPH thunderstorm wind gust was measured in Wantage.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
April 3, 2016	N/A	N/A	Countywide	A strong cold front associated with a low-pressure system moving through New York State swept across the area during the late evening hours of April 2nd and early morning hours of April 3rd, accompanied by thunderstorms, very strong convectively driven winds, and small hail. As colder air behind this front drained south, precipitation changed to snow, with up to three inches falling in the higher elevations of northwest New Jersey and lesser amounts in isolated spots through most of New Jersey. The parent low pressure system then quickly intensified as it continued to move northeast away from the area. The gradient between this low-pressure system and incoming high pressure produced strong winds gusting over 60 MPH in some localities from late overnight through the morning hours of April 3rd. Numerous reports of downed trees and wires throughout the county due to high winds.
June 5, 2016	N/A	N/A	Wantage Township, Fredon Township	A cold front moving into an unstable air mass over New Jersey set off numerous showers and thunderstorms during the late afternoon hours on the 5th. Lightning with these thunderstorms was somewhat limited, so straight-line winds and heavy downpours were the major threat as these storms moved through the area. Thousands of people lost power because of the storms. Many wind gusts from 60 to over 70 MPH were recorded across the region. The highest gust was in Gloucester TWP at 74 mph. Rainfall amounts across the northern parts of the state did surpass an inch with the highest total 1.58 inches in Wantage. Downed trees due to winds leading to road closures were reported in Wantage. Trees and branches were downed in Fredon.
July 25, 2016	N/A	N/A	Five Points	A trough of low pressure led to the development of afternoon and evening showers and thunderstorms which became severe in spots and produced locally heavy rains. 40,000 were left without power across the state. Several trees downed due to thunderstorm winds in Five Points.
August 16, 2016	N/A	N/A	Montague Township, Five Points	Trees, poles and wires were taken down due to thunderstorm winds in Montague, and Five Points.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
September 14, 2016	N/A	N/A	Town of Newton, Hopatcong Borough, Sparta Township	A cluster of thunderstorms developed ahead of a cold front and moved across northern New Jersey during the late afternoon hours of the 14th. Some of the thunderstorms produced damaging winds. Trees were downed by thunderstorm wind gusts closing a few roads in Newton. Several trees were taken down due to thunderstorm winds in Cranberry Lake. One large tree fell onto and downed power lines. A 52 kt wind gust was recorded in Hopatcong. A 63 kt wind gust was reported in Lake Mohawk. Several trees taken down due to thunderstorm winds blocking access to the local marina. Two boats broke anchor as the attachment was torn off from thunderstorm winds. Several trees were taken down due to thunderstorm wind gusts in Sparta.
February 13, 2017	N/A	N/A	Hopatcong Borough, Byram Township	High winds blew through the area after a cold frontal passage, enough to lead to downed trees and wires during the day of the 13th and from a severe squall line early on the 13th. Temperatures were also cold enough with the main low-pressure system along the front to produce a wintry mix across northern portions of the state.
February 25, 2017	N/A	N/A	Branchville Borough	In terms of freezing rain across northern portions of the state, accumulations were generally light with 0.01 inches at the Sussex ASOS. Winds behind the front were also gusty. Several thousand power outages were reported with some lasting 24 hours in Sussex and Morris counties. Wires taken down due to wind throughout the county. A tree fell across Mason Drive and a pole was taken down in Hopatcong on Brooklyn Stanhope Road. A tree fell onto route 613 in Byram Twp.
March 2, 2017	N/A	N/A	Countywide	An unseasonably warm, very moist, and unstable air mass, characterized by temperatures in the 70s and Dew Points in the upper 50s to lower 60s, was conducive to maintaining a line of thunderstorms along a pre-frontal trough, as they crossed the Appalachians and moved through portions of southern NJ. Although there was little in the way of lightning associated with these storms, pockets of significant wind damage occurred. A large tree fell onto a house and fence.
March 14, 2017	N/A	N/A	Countywide	Low pressure systems across the Ohio Valley and Carolinas phased. This led to a rapidly developing storm which tracked just offshore. A wind gust of 51 kts was measured in Sussex County.
June 13, 2017	N/A	N/A	Hamburg Township	A severe thunderstorm impacted Sussex County, NJ. This storm produced a 46-mph wind gust and nickel size hail. Lightning also downed a tree which landed on a house. Another tree was downed due to wind on highway 23. Hail lasted for roughly 5 minutes. Tree downed on highway 23 due to wind at the highway 94 intersection in Hamburg.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
August 2, 2017	N/A	N/A	Fredon Township	A hot and humid airmass with weak boundaries led to slow moving strong to severe thunderstorms with damaging winds, hail, and flooding. Over 2,000 people lost power. Wires were down on Stillwater Road in Fredon.
October 24, 2017	N/A	N/A	Pellettown	A strong low-pressure system over the Great Lakes and a departing high-pressure system to our east lead to a tight pressure gradient and a round of strong winds. Over 25,000 homes and businesses lost power. Several school districts had to close because of the power loss. A CWOP measured gust of 39 kts was reported just southeast of Pellettown.
January 4, 2018	N/A	N/A	Countywide	An area of low pressure tracked up the east coast interacting with a cold front which led to rapid development of a winter storm across the state. This storm quickly moved out by the 5th. However, snowfall accumulations and gusty winds occurred with the storm. Blizzard conditions occurred along many coastal locations. Top wind gusts were generally around 40 mph across the state. Snow amounts were highest in southern and coastal New Jersey with over 6 inches, totals were only a few inches further northwest. A state of Emergency was declared during the height of the storm. Several hundred vehicles were stranded, and hundreds of thousands were without power at some point. Severe cold continued for the next week leading to many locations going to code blue operations and closing of the Cape May Lewes Ferry.
March 2, 2018	N/A	N/A	Countywide	Numerous trees and power lines were knocked down from strong winds. Nearly 30 roads throughout the county were closed because of downed trees. As of 10 PM Saturday, March 3rd, 23,503 customers were still without power. Free water and ice was provided to affected residents. A wind gust of 48 MPH was reported by a NJWXNET weather station at High Point Monument at 1125EST on March 2nd. A 41-year-old man was killed on Friday evening at 1845EST when he came in contact with live wires on Lenape Avenue in Andover, NJ that had been knocked down by the strong winds. He was pronounced dead on the scene.
April 4, 2018	N/A	N/A	Countywide	Low pressure developed over the Central Plains on April 3rd, deepening as it moved into the Saint Lawrence Valley on April 3rd and to Prince Edward Island on April 4th, due to a significant contrast in air masses with Continental Polar air to the north and Maritime Tropical air to the south. This led to a strong cold frontal passage across the region on April 4th. In the wake of this front, colder air moving into the area and a tight pressure gradient lead to widespread damaging west-northwest wind gusts in excess of 50 mph on April 4th. A mesonet site in High Point Monument recorded a wind gust of 58 mph at 4 PM on April 4th.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 1, 2018	N/A	N/A	Countywide	Temperatures in the middle to upper 90s and dew points in the upper 60s to lower 70s led to excessive heat across portions of southeastern Pennsylvania. Heat indices reached 106 degrees at the Andover Airport AWOS on July 3rd.
October 2, 2018	N/A	N/A	Branchville Borough	Supercellular severe thunderstorms caused 2 tornadoes, wind damage, and hail across the region all part of a record-breaking tornado outbreak across Pennsylvania. Cranberry Lake reported localized power outages and trees down. Branchville reported localized tree damage and power outages.
February 25, 2019	N/A	N/A	Countywide	A departing very deep cyclone combined with strong high pressure to the west yielded a strong pressure gradient from the Plains eastward to the northern Mid-Atlantic and New England regions. High winds gusting 50-60 mph resulted in scattered power outages and trees down across the region. Some minor structural damage also occurred.
April 15, 2019	N/A	N/A	Stillwater Township	A severe weather outbreak impacted much of the East Coast, causing widespread straight line wind damage and a few tornadoes. An approaching frontal system with strong wind fields moving into an unusually moist April air mass contributed to the formation of a well-organized line of severe convection. This line moved through the mid-Atlantic during the predawn hours of April 15. Several thunderstorm related damage reports were received. Multiple trees and power lines were reported down in Stillwater Twp. The
May 19, 2019	N/A	N/A	Sandyston Township	A warm front moved through the mid-Atlantic on the morning of May 19. This set the stage for the warmest day of the year to that point for most of the region. The combination of daytime heating and a pre-frontal trough ahead of an approaching cold front led to thunderstorm development late in the day. Thunderstorms organized into a line which produced pockets of wind damage over eastern Pennsylvania and northern New Jersey. A brief tornado also occurred in Pennsylvania. With the loss of daytime heating, storms weakened as they moved to the northeast. A tree was reported down on Layton-Hainesville Rd. in Sandyston Twp. A tree was reported down on E Shore Rd. near Lake Owassa.
May 28, 2019	N/A	N/A	Hopatcong Borough, Stanhope Township	Severe supercellular storms developed and moved into the region from the west during the mid to late afternoon hours. Storms produced large hail, damaging wind gusts, and 2 tornadoes. Tree reported down into a house on Helen Street in Hopatcong.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
June 29, 2019	N/A	N/A	Countywide	A frontal boundary that had been stalled over the mid-Atlantic had lifted north of the region by the morning of June 29. Later that day and into the evening, the front once again approached, this time as a strong cold front, as low pressure tracked through New England and began to intensify offshore in the Gulf of Maine. The combination of strong frontal forcing and a warm, unstable environment ahead of the front led to widespread severe thunderstorms developing. Numerous reports of damaging wind, as well as some hail, were received in association with these storms. Numerous trees and telephone poles and wires were reported down in the Cranberry Lake area. A tree fell on US-206 north of I-80, closing all lanes in Brookwood.
July 17, 2019	N/A	N/A	Hampton Township, Branchville Borough	The remnants of Hurricane Barry moved near and west of the mid-Atlantic on July 17, in tandem with a frontal system which was absorbing the former tropical cyclone. A hot air mass existed east of this system, and the tropical moisture associated with Barry combined with the heat to create an unstable environment primed for heavy rainfall and severe weather. Widespread convection developed, with several storms producing damaging wind. A tree was reported down in Hampton Twp. Tree blown down on N Shore Rd in the Cranberry Lake area.
July 20, 2019	N/A	N/A	Branchville, Frankford Township	An excessively hot air mass was in place over the mid-Atlantic on July 20. While the air mass was hot, the environment was otherwise generally unfavorable for convection due to mid-level capping. However, some thunderstorms did develop where the cap was weaker, especially in New York but also as far south as northern New Jersey. These isolated cells produced localized wind damage. Several downed trees blocked CR-519 near Branchville. Numerous trees and power lines were downed in and near Frankford Twp.
July 21, 2019	N/A	N/A	Andover Township, Hopatcong Borough	A slow-moving cold front was approaching a very hot air mass over the mid-Atlantic on July 21. Strong instability and high moisture levels were present ahead of the front. Relatively weak shear and some mid-level dry air were limiting factors, but the frontal forcing helped to trigger scattered thunderstorms, some of which became strong to severe and produced areas of wind damage. Downed trees and power lines were reported in the Andover and Hopatcong areas.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
July 22, 2019	N/A	N/A	Hopatcong Borough	A frontal boundary stalled over the mid-Atlantic on July 22. An approaching upper-level trough helped spur the development of a wave of low pressure along the front. A very favorable environment for convection and severe weather developed along and south of this boundary. Extremely high moisture content was present in the air mass, allowing moderate to strong instability to build during the heating of the day. The frontal boundary and developing low also helped to enhance both low level and deep layer shear to respectably strong values for midsummer. The result was a day of widespread severe weather. Discrete storms early in the afternoon gave way to a powerful mesoscale convective system in the evening which produced widespread damaging winds with considerable damage over a large area. Trees and powerlines were downed throughout Hopatcong.
August 8, 2019	N/A	N/A	Town of Newton, Andover Township	Behind a cold front, an upper-level trough moved over the mid-Atlantic on August 8. Multiple shortwave impulses rotated through the broader trough over the day. The upper-level energy combined with daytime heating in an otherwise marginally favorable environment to produce scattered showers and thunderstorms. A few storms became strong to severe, producing gusty winds. Tree and wires downed on Swartwood Rd in Newton. Tree and wires downed on Crescent Dr in Andover.
October 31, 2019	N/A	N/A	Hopatcong Borough	A severe weather outbreak impacted the mid-Atlantic from the evening of October 31 through the pre-dawn hours of November 1. A strong area of low pressure moved through the eastern Great Lakes on the 31st. Ahead of it, strong southerly flow advected an unseasonably warm and moist air mass into the mid-Atlantic. This generated enough instability, combined with extremely strong wind fields, to produce a low topped line of severe convection which tracked across the entire region. Widespread damaging wind occurred as the squall line moved through, along with a couple of short-lived embedded tornadoes. A photo in Hopatcong showed a large tree down on power lines. The report also indicated several additional trees down on power lines with multiple transformer fires in the area. A tree was downed on NJ-23 south of Beaver Lake Rd.

Sources: FEMA 2015; NOAA-NCDC 2015; SPC 2015; ONJSC 2015; FEMA 2020; NOAA-NCDC 2020; NWS 2020; SPC 2020; NJOEM 2019; NHC 2020

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

FEMA Federal Emergency Management Administration

SPC Storm Prediction Center

ONJSC Office of the New Jersey State Climatologist

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center



NWS National Weather Service  
NJOEM New Jersey Office of Emergency Management  
NHC National Hurricane Center

## SEVERE WINTER WEATHER

Known severe winter storm events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-12. Many sources were researched for historical information regarding severe winter storm events in Sussex County; therefore, Table H-12 may not include all severe winter storm events that have impacted the County.

Table H-12. Severe Winter Storm Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 12-13, 2008	N/A	N/A	Countywide	<p>A winter storm of snow, sleet and freezing rain affected northwest New Jersey and most of the Raritan River Basin. The wintry mix led to slippery road conditions which led to early dismissals of schools. The storm also led to power outages due to ice covered trees, limbs and wires which were knocked down. Approximately 45,000 homes and businesses were without power.</p> <p>In Sussex County, the wintry mix led to widespread problems. Twenty-one county roads had blockages due to downed trees and wires. Power outages were widespread, as JCP&amp;L reported 30,000 customers in Sussex County lost power mainly in the Newton area and parts of Sparta Township. The Sussex Rural Electric Cooperative, which serves 12,000 members in the northern regions of the county, reported that the Highland Lakes and Barry Lakes sections of Vernon Township were the hardest hit. The County had to remove debris throughout the County as well. In the Town of Newton, a Department of Public Works truck sustained severe fire damage when live wires, weighted down by ice, fell on it on Overlook Road. The driver was uninjured. The Newton Memorial Hospital sustained leaks due to a build-up of snow and ice on the roof. Also in Newton, large trees were completely toppled over due to the ice build-up, with their root ball still attached. In Franklin Borough, trees were downed on Sterling Street. In Sparta Township, ice covered trees toppled over into some roads, even blocking some. Snow and sleet accumulations included 4.0 inches in Wantage Township and 3.5 inches in Hopatcong Borough. The county sustained \$150,000 in damages from the storm.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
December 10, 2008	N/A	N/A	Countywide	Up to one inch of ice accrued on exposed surfaces and knocked down numerous tree limbs, trees, and power lines. Hardest hit was the Highland Lakes region of Vernon Township, but ice damage also affected areas of Sandyston, Sparta, Walpack, Wantage, and Montague Townships. Ice damage started at elevations greater than 1,000 feet.
February 22-23, 2010	N/A	N/A	Countywide	A protracted winter storm dropped a wintry mix of snow, sleet, and freezing rain from in northwest New Jersey and affected Sussex County the most. Representative snowfall included 11.0 inches in Wantage Township, 8.7 inches in Sussex borough, 8.0 inches in Beemerville (Wantage Township), and 6.6 inches in Sparta and Vernon Townships.
January 26-27, 2011	N/A	N/A	Countywide	A protracted winter storm affected nearly all of New Jersey from the early morning of the 26th into the early morning of the 27th. Snow and sleet accumulations reached 12 to 18 inches in southwest New Jersey and the Passaic and Raritan Basins with lesser amounts elsewhere. The continued onslaught of winter weather was causing numerous municipalities to exhaust their snow removal budgets. The heavy snow also took its toll on plows as many needed to be repaired after this event. The one-two punch hit central and southwest New Jersey the hardest. Many municipalities declared snow emergencies. In Sussex County, over 20 vehicles drove off roadways, the most in Sparta Township. Representative snowfall included 8.9 inches in Sparta Township and 6.9 inches in the Town of Newton.
February 1-2, 2011	N/A	N/A	Countywide	A winter storm dropped several inches of sleet and snow on Sussex County and northwest New Jersey, including a long period of freezing rain that produced ice accretions of approximately a half inch. The ice accretions took down weak trees, tree limbs, and power lines. Approximately 36,000 homes and businesses were without power. Many schools and businesses were closed due to this event. In Sussex County, numerous vehicles skidded off roadways. In Sparta, an ambulance and postal truck collided, but no injuries occurred. Representative snow and sleet accumulations included 5.2 inches in Wantage Township and 3.5 inches in Fredon Township. Overall, the County had overtime costs for snow and debris removal.
March 23-24, 2011	N/A	N/A	Countywide	Snow accumulations averaged two to 10 inches in northwestern New Jersey and one to four inches in the Raritan Basin. A band of heavier snow that fell across southern Sussex County, Warren County, and western Morris County accounted for the highest snowfall totals. Ice accretions averaged a tenth of an inch or less. Representative snowfall included 8.8 inches in Andover Township, 8.0 inches in Fredon Township, and 4.3 inches in Wantage Township.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
October 29, 2011	DR-4048	Yes	Countywide	<p>A late October winter storm dropped heavy snow across parts of central and all northwest New Jersey and caused widespread power outages due to many trees still having leaves on them. Sussex, Warren, Morris, Hunterdon, Somerset, and Middlesex Counties were identified as major federal disaster areas. Over 800,000 utility customers lost power. Some areas did not have power restored until November 4th. Governor Christie declared a state of emergency and urged people to stay off the roads. Many municipalities opened warming stations and shelters. About 25 major roadways were closed throughout the State. In addition to the snow and rain, there were strong northerly and northeasterly winds, ranging from 15 to 25 mph and gusting up to 35 mph in the impacted areas. These strong winds also contributed to the downed trees, electric lines and power outages. The 19.1-inch snowfall in Barry Lakes (Sussex County) established a new October snowfall record for the state of New Jersey and is higher than any November snowfall record.</p> <p>Snowfall totals in Sussex County included 19.1 inches in Barry Lakes, 15.5 inches in Wantage Township, and 8.3 inches in the Town of Newton.</p>
December 26-27, 2012	N/A	N/A	Countywide	<p>An intense low-pressure system brought a winter storm to Sussex County and a wintry mix in the rest of northwestern New Jersey. A combination of snow, sleet, and freezing rain occurred. Snowfall averaged one to four inches, except around six inches in Sussex County. Ice accumulations averaged one tenth of an inch.</p> <p>Sussex County hit the hardest by the storm. In Sparta alone there were twenty reported accidents. In Frankford Township, a mail truck drove through a guard rail on U.S. Route 206. The driver was uninjured. Representative snowfall included 7.2 inches in Highland Lakes (Vernon Township), 6.0 inches in Wantage Township, 5.9 inches in Hardyston Township, 5.5 inches in Montague Township, 5.2 inches in Vernon Township, and 5.0 inches in Sparta Township.</p>
February 8-9, 2013	N/A	N/A	Countywide	<p>A winter storm caused scattered power outages reported as result of the gusty winds in Sussex County. Peak wind speeds included 53 mph in Wantage Township, 51 mph at the High Point Monument in Montague Township. Total snowfall accumulations included 14.1 inches in Vernon Township.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 7-8, 2013	N/A	N/A	Countywide	The combination of wraparound moisture from the departing Nor'easter and a new upper low disturbance brought heavy snow to Sussex and Morris Counties and an accumulating snow through central New Jersey from the late afternoon on March 7th through March 8th. The snow impacted the morning commute and travel on the 8th and caused about 1,500 homes and businesses to lose power in northwest New Jersey. Representative snowfall included 11.8 inches in Highland Lakes (Vernon Township), 10.5 inches in Wantage Township, and 8.8 inches in Hardyston Township.
February 5, 2014	N/A	N/A	Countywide	<p>A major winter storm brought heavy snow and sleet to northwest New Jersey and a wintry mix which included a significant accumulation of ice to the central third of New Jersey. Snowfall reached one foot in Sussex County and ice accumulations were as high as half an inch. The snow that was still on the trees from the just concluded winter storm was a major contributing factor to the power outages. The weight of the snow, then sleet and freezing rain on limbs all collaborated to cause more tree damage than would have occurred if trees were bare at the start of the event. It was the worst ice related outages in the Public Service Electric and Gas's service area since 1999. Governor Chris Christie declared a State of Emergency and all New Jersey State offices were closed on the 5th for all non-essential workers. Except in the southeast part of the state, schools were closed. Rutgers University was closed also. New Jersey State Police responded statewide to about 170 accidents and around 180 calls for assistance from disabled motorists.</p> <p>Representative snowfall and sleet accumulations included 11.0 inches in Wantage and Montague Townships and 8.0 inches in Highland Lakes (Vernon Township).</p>
February 13, 2014	N/A	N/A	Countywide	A winter storm dropped heavy snow and sleet as well as some freezing rain across most of New Jersey, except for the immediate coast. Snowfall and sleet totals average 10 to 20 inches from around the Interstate 95 corridor northwestward with the highest amounts in Warren and Sussex Counties. Governor Chris Christie declared a state of emergency and New Jersey State Offices were closed and non-essential personnel did not have to report to work. Representative snowfall included 22.8 inches in Montague Township, 19.2 inches in Highland Lakes (Vernon Township), and 17.2 inches in Wantage Township.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
November 26, 2014	N/A	N/A	Countywide	<p>A winter storm struck the day before Thanksgiving, dropping heavy snow over parts of northwest New Jersey and caused power outages to approximately 23,000 customers and travel difficulties. Governor Christie declared a state of emergency and speed limits were reduced on all major roadways. The weight of the heavy, wet snow tore down tree limbs, trees and power lines in the northwest portion of New Jersey.</p> <p>In Sussex County, Sussex Rural Electric Cooperative reported about 1,150 members without power at 10 a.m. EST on the 27th, with the greatest concentration in Scenic Lakes, Lake Wallkill and Pleasant Valley Lake areas. In Hardyston Township, a destroying house fire was believed to have been started by a surge when power was restored. Representative snowfall (this included the sleet along the Interstate 95 corridor) included 11.5 inches in Highland Lakes (Vernon Township), 10.7 inches in Wantage Township, 8.9 inches in Sussex Borough.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
January 24, 2015	N/A	N/A	Countywide	<p>A winter storm dropped heavy snow in Northwest New Jersey and a mixture of snow, sleet and freezing rain in the central and southwest part of New Jersey on the evening of the 23rd into the morning of the 24th. Overall less wintry precipitation (a faster switch to rain) occurred progressively farther to the south and southeast in the state. Snowfall averaged 5 to 9 inches in northwest New Jersey; 2 to 5 inches in central New Jersey and less than two inches across southwest New Jersey. No snow fell in southeast New Jersey. Ice accumulations were generally around a trace. The snow caused traveling difficulties as well as postponement of social activities on the 24th. There were over 100 reported accidents in the state. The snow and accidents caused about 2,000 homes and businesses to lose power. New Jersey Transit cross-honored all commuting tickets. The onshore flow from the winter storm also caused minor tidal flooding in southern New Jersey during the morning high tide cycle on the 24th. Precipitation started as snow on the evening of the 23rd from southwest New Jersey northward between 9 p.m. EST and Midnight EST. In Northwest New Jersey, the snow fell at its heaviest during the pre-dawn hours on the 24th and ended between 8 a.m. EST and 10 a.m. EST on the 24th. In the Raritan Valley, snow also fell at its heaviest during the pre-dawn hours on the 24th, but then changed to freezing rain and sleet between 4 a.m. EST and 6 a.m. EST on the 24th. Precipitation in some areas changed to plain rain before ending later that morning. In the central third of New Jersey, a change to rain (with some sleet at the transition time) worked its way to the northwest from coastal areas and occurred between 1 a.m. EST and 5 a.m. EST on the 24th and remained rain until it ended around 8 a.m. EST on the 24th. Throughout the state, about 20 high schools postponed SAT testing. Representative snowfall included 9.0 inches in Highland Lakes (Sussex County).</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
February 1-2, 2015	N/A	N/A	Countywide	<p>A winter storm brought a heavy mixture of snow, some sleet and freezing rain to the Raritan Valley and northwest New Jersey with less of a wintry impact to the rest of central and southwest New Jersey on the first into the second. The storm greatly impacted the morning commute on the 2nd in the northwest part of the state.</p> <p>Precipitation started as snow throughout the northern half and southwest part of New Jersey during the evening of the 1st. Precipitation fell as rain in the southeast part of the state throughout the event. In southwest New Jersey, the snow transitioned briefly to sleet and then rain early on the 2nd. The rain briefly changed to snow before ending in the mid afternoon on the 2nd. In the Raritan Valley and in Mercer and Monmouth Counties, precipitation transitioned to rain during the early morning on the 2nd and then changed back to freezing rain, then sleet and ultimately snow during the second half of the morning and early afternoon. The snow ended during the mid afternoon on the 2nd. In northwest New Jersey including the Passaic Basin, the snow transitioned to a sleet and/or freezing rain mixture during the morning of the 2nd, then changed back to snow by early afternoon and ended during the middle of the afternoon on the 2nd.</p> <p>Speed restrictions were in place on most major roadways in central and northern New Jersey on the 2nd. Many schools in northwest New Jersey were closed on the 2nd. Representative snowfall included 8.0 inches in Montague (Sussex County).</p>
January 22-24, 2016	DR-4264	No	Countywide	<p>An impulse from the west coast traversed the midsection of the country, then developed into a low pressure system as it tracked across the Gulf states before intensifying along the Carolina coast into a major nor'easter, producing record snowfall in parts of New Jersey on January 23rd. It then moved out to sea after passing by the mid-Atlantic coast early on January 24th.</p> <p>Snow began falling during the Friday afternoon commute on January 22nd, then continued, heavy at times, Friday night into early Sunday morning. Wind gusts up to 60 MPH produced blizzard conditions as visibilities dropped to one-quarter mile or less in spots. Representative snowfall totals include 16.0 inches in Stockholm (Sussex).</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
November 20, 2016	N/A	N/A	Countywide	<p>An area of low pressure near James Bay Canada lead to a strong cold frontal passage across the middle Atlantic Saturday evening November 19. Northwestern winds increased substantially immediately following the cold frontal passage, with several reports of gusts generally in the 45 to 55 mph range over New Jersey. These strong wind gusts persisted around 48 hours, through Monday November 21. The High Point, NJ mesonet site recorded a peak wind gust of 60 mph at 14:40EST on November 21.</p> <p>Following the cold frontal passage Saturday evening November 19, low pressure developed over New England, and provided a sufficiently cold and moist air mass to produce the seasons first significant snowfall. Snow overspread portions of the middle Atlantic late Saturday evening November 19, shortly after the cold frontal passage. By 01:00EST Sunday November 20, some of the higher terrain of northern New Jersey received around two inches of snowfall. The highest amount as of this time was 2.0 inches in Highland Lakes, New Jersey.</p> <p>The snow continued to fall into Sunday morning November 20. Around 08:00EST, amounts up to around 6 inches were observed across the higher terrain of Sussex county New Jersey.</p>
February 9, 2017	N/A	N/A	Countywide	<p>A strong cold front moved through the region with a temperature drop from the 50's and 60's all the way down close to freezing. Low pressure developed along the front with precipitation northwest of the boundary. The precipitation changed to snow across most of the state. Northern locations had all snow with higher totals. Further south the precipitation was mainly rain for an extended period resulting in much lower accumulations. Gusty winds also occurred as the low departed the region. Some higher snowfall amounts include 11.1 inches in Highland Lakes, 10.3 inches in Wantage, 10.0 inches in Vernon, and 9.0 inches in Stockholm.</p>
March 14, 2017	N/A	N/A	Countywide	<p>Low pressure systems across the Ohio Valley and Carolinas phased. This led to a rapidly developing storm which tracked just offshore. Wind and a foot of snow were reported across Sussex County.</p>
January 17, 2018	N/A	N/A	Countywide	<p>Several inches of snow fell across the northern portions of the state. Snowfall averaged around 6 inches of snow in Sussex county. Further south, across most of Northern Jersey totals ranged from 3-5 inches with totals closer to an inch in southern portions of the state. Several area schools closed due to the storm. A few hundred people also lost power in Sussex county. Snowfall averaged around 6 inches in the county.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 2, 2018	N/A	N/A	Countywide	A heavy, wet snow accumulated to a depth of over 16 inches in the higher elevations of the county, and around 6 inches or so in the valleys. Some snowfall totals include 16.5 inches in Branchville, 14.0 inches in Highland Lakes, 13.5 inches at High Point, 8 inches near Wantage, 7.0 inches in Stockholm, and 2.3 inches near Sussex. A wind gust of 48 MPH was reported at High Point Monument at 1125EST on the 2nd. Blowing and drifting snow made travel hazardous Friday afternoon and evening. Numerous power outages, some lasting over two weeks, were widespread throughout the county due to tree and wire damage. Warming centers were established around the county for affected residents.
March 7, 2018	DR-4368	No	Countywide	<p>Narrative A broad area of low pressure extending from the Ohio Valley to the Piedmont of South Carolina consolidated off the Virginia Capes during the early morning of March 7th. This new primary low moved northeast and gradually deepened as it passed east of the Delaware and New Jersey coasts on March 7th. The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages across portions of New Jersey, especially where the heaviest snow was reported. Many customers were still without power from the previous storm when this storm struck. Governor Murphy estimated about 350,000 customers state-wide lost power as a result of this second storm.</p> <p>Although all portions of the county experienced significant snowfall from this event, the higher amounts occurred over the central and eastern portions of the county which were closer to the low pressure system. Some reported snowfall totals include: 21.0 inches in Highland Lakes, 17.0 inches in Stockholm, 16.0 inches in Sparta, 15.5 inches in Hardyston Township, 15.0 inches in Vernon, 13.5 inches in Wantage, 12.7 inches in Montague, and 12.0 inches in Newton.</p>
March 21-22, 2018	N/A	N/A	Countywide	A complex area of low pressure over the middle Atlantic, which involved several individual centers, slowly consolidated off the Virginia Capes Tuesday morning, March 20th into Wednesday March 21st along a frontal boundary. This primary low, the fourth nor'easter of March, gradually moved northeast Wednesday night, to a position southeast of the 40 North/70 West Benchmark coordinates on Thursday morning.





Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
April 2, 2018	N/A	N/A	Countywide	Precipitation began as a wet, heavy snow during the evening hours on March 20th. After a lull during the overnight hours, a drier snow began falling, heavy at times, during the afternoon and evening hours on March 21st. The heaviest snow from this event fell in the southern one-half of the county, with a sharp drop off in the far north. Some snowfall reports include: 10.0 inches in both Stockholm and Byram Township, 9.5 inches in Fredon, 8.5 inches in both Hardyston Township and Newton, 7.0 inches in Ogdensburg, 7.0 inches in Andover, Sparta, and Franklin, 2.5 inches in Vernon Valley, 1.3 inches in Sussex, 1.1 inches in Wantage, and 0.2 inches in Montague.
November 15-16, 2018	N/A	N/A	Countywide	Early season winter storm. Additional trace amounts of snow were reported in Cape May County. Totals ranged from 12.6 in Montague to 6.5 in Sparta Township.
February 12-13, 2019	N/A	N/A	Countywide	This event was the second part of a multi-day storm that impacted the region with light snow changing to a wintry mix and then to rain. Snow and ice totals were less across Delmarva than other locations farther north and west. A trained spotter reported 3.0 of snow in Lebanon. 0.04 of ice was reported at the Sussex County Airport.
March 3-4, 2019	N/A	N/A	Countywide	An offshore low pressure system brought a period of heavy precipitation to the mid-Atlantic. A mix of rain, sleet, and snow was observed, with snow confined mainly to interior areas and sleet and rain more abundant near the coast. Snowfall totals inland approached 10, with snowfall rates exceeding one inch per hour for several hours. A sharp gradient in snowfall with a steep drop in snow totals was observed just west of the Interstate 95 corridor. A trained spotter in Highland Lakes reported 8.2 inches of snow.
December 1-3, 2019	N/A	N/A	Countywide	A complex, long duration winter storm impacted parts of the mid-Atlantic over the first three days of December. Impacts from the storm came mainly in two phases. Initially, weakening low pressure moved into the Midwest and Great Lakes region on December 1, bringing a widespread area of overrunning precipitation to the mid-Atlantic. Cold air in place ahead of the precipitation led to heavy mixed precipitation in interior areas, with most though not all areas eventually seeing a gradual change to rain. On December 2nd, developing secondary low pressure brought additional precipitation to the region, which took the form of rain changing to snow. The rapidly strengthening secondary low finally pulled away from the area during the early hours of December 3rd.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
December 16-17, 2019	N/A	N/A	Countywide	A heavy mix of snow, sleet, and freezing rain occurred. The highest snowfall report was 14.3 inches in Highland Lakes, with a widespread 8 to 12 inches of snow throughout the county. Up to a third of an inch of glaze ice also fell. The Sussex Airport ASOS (KFWN) measured 0.32 inches of glaze ice. Widespread power outages occurred with a number of downed trees and wires, including the KFWN ASOS which failed late in the storm's duration due to loss of power.

Sources: NOAA NCDC 2015; FEMA 2015; NWS 2015; NOAA-NCDC 2020; NJOEM 2019; NWS 2020; FEMA 2020

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

NWS National Weather Service

NJOEM New Jersey Office of Emergency Management

## WILDFIRE

Known wildfire events that have impacted The State of New Jersey and Sussex County between 2008 and 2019 are identified in Table H-13. Many sources were researched for historical information regarding wildfire events in Sussex County; therefore, Table H-13 may not include all wildfire events that have impacted the County.

Table H-13. Wildfire Events in Sussex County Between 2008 and 2019

Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
March 23, 2009	N/A	N/A	Wantage Township	A series of brush fires occurred across New Jersey on the 23rd. Most were in the northern part of the state as the combination of strong north winds, low humidity levels and a very dry March made it easy for fires to spread rapidly. The peak wind gusts on the 23rd at both Philadelphia and Newark Liberty International Airports were 38 mph. In Sussex County, a brush fire affected just over ten acres near a residential community in Wantage Township. The wildfire was in a grass field adjacent to houses. Forest Fire volunteers managed to protect the homes.



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
April 7, 2010	N/A	N/A	Frankford Township	<p>Unseasonably warm and dry weather coupled with gusty southwest winds made it easy for wildfires to spread in New Jersey on the 7th. Two large wildfires occurred in Burlington and Sussex Counties.</p> <p>In Sussex County, a wildfire occurred at the intersection of County Route 521 and Katey Lane in Frankford Township. The fire was located in a very remote area near Culver's Gap west of Lake Owassa. The fire was reported at 421 p.m. By early that evening, the fire continued to grow with an estimated 40 acres consumed. An extreme smoke condition existed. A precautionary evacuation of Kittatinny Lake Community took place. Two firefighters were treated for minor non-life-threatening injuries. The Salvation Army supplied a water canteen for fire fighters at the scene. No forced evacuations and no danger to any structures occurred. The fire was contained the next day.</p>
March 26, 2012	N/A	N/A	Hopatcong Borough	<p>The combination of strong winds, low humidity levels and an unseasonably dry start to 2012 led to several wildfires throughout New Jersey on the 26th. Through March 27th, there were 315 wildfires that consumed 254 acres throughout New Jersey. By comparison to date in 2011 there were only 167 wildfires that consumed 176 acres. March 2012 was not only the warmest (49.7°F statewide average), but also the 10th driest March on record since 1895. The statewide average precipitation total of 1.97 inches was only forty-six percent of normal and the driest March since 2006 in New Jersey.</p> <p>In Hopatcong Borough (Sussex County), a brush fire occurred during the evening of the 26th on Stevens Trail.</p>
April 6, 2012	N/A	N/A	Vernon Township	<p>There was a wildfire on the 6th in Sussex County in Vernon Township at Wawayanda State Park. The Pinwheel Fire was a brush fire that was brought under control by the late morning of the 6th. New Jersey Forest Fire Services (also used helicopters) and Department of Environmental Protection firefighters battled the blaze. The steep terrain and gusty winds caused difficulty for the firefighters. There was no impact to properties or roadways.</p>



Date(s) of Event	FEMA Declaration Number	County Designated?	Location Impacted	Losses / Impacts
April 8, 2012	N/A	N/A	Vernon Township	Two separate wildfires occurred in Wawayanda State Park near the Appalachian Trail on the 8th in Sussex County. One burned about 10 acres, the second about five acres. The Appalachian Trail in Wawayanda between New Jersey State Route 94 and Barrett Road in Vernon Township was closed due to the wildfire in vicinity of Pinwheel's Vista. Other smaller wildfires were reported in New Jersey in Warren, Morris, Hunterdon, Middlesex Ocean, and Cape May Counties. Both fires were contained by that evening. Gusty northwest winds on the 8th (with many peak gusts near 40 mph) helped spread the fires more rapidly. There were 57 reported wildfires in New Jersey on the weekend of the 7th and 8th.
April 6, 2014	N/A	N/A	Vernon Township	A few smaller wildfires occurred in Sussex County from the 6th into the night of the 7th. The largest was a 75-acre wildfire on a mountain ridge behind an A&P Supermarket on County Route 515 in Vernon Township. Forty firefighters battled the blaze and water from Highland Lake was used to extinguish it. Smaller brush fires charred nine acres along U.S. Route 206 in Byram Township. Other brush fires occurred along State Route 15 in Sparta Township and Twin Oaks Road in Stillwater Township.
April 21-22, 2014	N/A	N/A	Vernon Township	A brush fire began in Vernon Township, about 6:30 p.m. By the following morning, it had spread to cover about 100 acres. Local fire departments from Vernon and Highland Lakes responded to the event. No injuries were reported, and the fire was not close enough to residences or structures to require any evacuations.
May 12, 2015	N/A	N/A	Montague Twp	A wildfire destroyed a home on Doremus Lane in Montague Township in Sussex County on the 12th. The wildfire started shortly after 530 p.m. EDT on the 12th. In addition to the home being destroyed, the wildfire consumed more than 6 acres before it was brought under control shortly after 8 p.m. EDT on the 12th. May 12th was an unseasonably warm and windy day which made it easy for wildfires to spread more rapidly. The peak wind gust at Wantage was 40 mph and the minimum relative humidity was 22 percent. No serious injuries were reported.

Sources: NOAA-NCDC 2014; FEMA 2014; NJFFS 2015; NJ.Com 2015; FEMA 2020; NOAA-NCEI 2020; NJOEM 2019

Note (1): Monetary figures within this table were U.S. Dollar (USD) figures calculated during or within the approximate time of the event. If such an event would occur in the present day, monetary losses would be considerably higher in USDs as a result of increased U.S. Inflation Rates.

N/A Not Applicable

FEMA Federal Emergency Management Administration

NJFFS New Jersey Forestry Fire Service

NOAA-NCDC National Oceanic Atmospheric Administration – National Climatic Data Center

NJ The State of New Jersey

NJOEM New Jersey Office of Emergency Management

## APPENDIX I: MITIGATION STRATEGIES





This appendix summarizes additional activities and resources provided to plan participants to support the update of the mitigation strategy.

## 2021 GOALS AND OBJECTIVES REVIEW

Sussex County's planning documents and recent policies changes were reviewed and discussed with the Planning Team to help inform the review and update of the goals and objectives. Table I-1 and Table I-2 summarize the goals and objectives for the 2025 HMP update, respectively.

Table I-1. 2025 Goals

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

Table I-2. 2025 Objectives

Objective Number	2025 Objectives
1	Develop, enhance, and protect early warning and emergency communications systems.
2	Improve and support Comprehensive Regional Evacuation Plan.
3	Strengthen County and local planning, building codes, ordinances, and enforcement.
4	Identify the need for, and acquire, any special emergency services, training, and equipment to enhance response capabilities for specific hazards.
5	Enhance sheltering capabilities at the local level.
6	Protect, maintain, and increase resilience of infrastructure and critical facilities.
7	Reduce repetitive and severe repetitive losses.
8	Assure coordination between communities and encourage shared services in acquiring, maintaining and providing emergency services.
9	Reduce the risk of utility failure.
10	Review existing local laws and ordinances, safety inspection procedures, and applicable rules to help ensure that they employ the most recent and generally accepted standards for the protection of buildings and environmental resources.
11	Identify and pursue funding opportunities to develop and implement local and county mitigation activities.
12	Provide/Improve flood protection with flood control structures, and drainage maintenance plans.



Objective Number	2025 Objectives
13	Enhance stakeholder education and training about hazard risks and mitigation.
14	Review and incorporate updated hazard data into the County Hazard Mitigation Plan and other county and local planning mechanisms.
15	Increase support for the development of local mitigation planning and projects that provide co-benefits and support a healthy and equitable environment.
16	Better characterize flood/stormwater hazard events by conducting additional hazard studies and identify inadequate stormwater facilities and poorly drained areas.
17	Prevent (or discourage) new development in hazardous areas or ensure that if building occurs in high-risk areas that it is done in such a way as to minimize risk.
18	Strengthen understanding of, and adaptation to, a changing climate.
19	Encourage the use of green and natural infrastructure.
20	Coordinate with local, County, state, federal, international, and other stakeholder agencies to maintain natural systems, including wetlands, parks, and riverine and coastal areas.
21	Ensure continuity of government operations, emergency services and essential facilities during and immediately after disaster and hazard events.
22	Increase resiliency by facilitating rapid disaster recovery.
23	Support and encourage the implementation of alternative energy source.
24	Implement mitigation measures that promote the reliability of lifeline systems.
25	Promote sustainable and equitable land development practices that direct future development away from vulnerable areas.
26	Encourage and support multi-jurisdictional mitigation projects that leverage funding and support from multiple levels of government and community organizations.
27	Encourage the establishment of policies to help ensure the prioritization and implementation of mitigation actions and/or projects designed to benefit socially vulnerable populations and underserved communities.
28	Ensure that dam infrastructure is maintained
29	Support the identification and access to funding to repair, rehabilitate, or replace dams

## MITIGATION STRATEGY WORKSHOP RESOURCES

On May 8, 2024, a Mitigation Strategy Workshop was held for all plan participants. The workshop was held in-person at the Sussex County Emergency Operations Center (135 Morris Turnpike, Newton, NJ 07860) and was led by the contract consultant. Following the meeting, participating jurisdictions had the opportunity to work in-person with the contracting consultant. Furthermore, this meeting was supplemented by emails and phone calls between Sussex County and the contract consultant, for all participants to support the development of focused problem statements based on the impacts of natural hazards in the county and their communities. These problem statements were intended to provide a detailed description of the problem area, including its impacts to the jurisdiction; past damages; loss of service; etc. An effort was made to include the street address of the property/project location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing conditions (topography, terrain, hydrology) of the site. These problem statements formed a bridge between the hazard risk assessment which quantifies impacts to each community with the development of actionable mitigation strategies. Resources available at the workshop and follow up discussions included the following to assist with the identification of mitigation alternatives and the development of the mitigation strategy workshops found in Section 9 (Annexes).



1. FEMA Local Mitigation Handbook
2. Public Survey Results
3. FEMA Mitigation Action Types (Table I-3)
4. FEMA Mitigation Ideas
5. FEMA Project Useful Life Factsheet
6. Mitigation Funding Sources at the Federal, State, and Local levels (Table I-4)
7. FEMA Region 2 Funding Sources for New Jersey
8. FEMA Ecosystem Services
9. Mitigation Catalog

## Types of Mitigation Actions

A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process.

The primary types of mitigation actions to reduce long-term vulnerability are:

- Local Plans and Regulations (LPR)
- Structure and Infrastructure Projects (SIP)
- Natural Systems Protection (NSP)
- Education and Awareness Programs (EAP)

Table I-3. FEMA Mitigation Action Types

Mitigation Type	Description	Examples
Local Plans and Regulations	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	<ul style="list-style-type: none"> <li>• Comprehensive plans</li> <li>• Land use ordinances</li> <li>• Subdivision regulations</li> <li>• Development review</li> <li>• Building codes and enforcement</li> <li>• NFIP Community Rating System</li> <li>• Capital improvement programs</li> <li>• Open space preservation</li> <li>• Stormwater management regulations and master plans</li> </ul>
Structure and Infrastructure Projects	<p>These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p> <p>Many of these types of actions are projects eligible for funding through the FEMA Hazard Mitigation Assistance program.</p>	<ul style="list-style-type: none"> <li>• Acquisitions and elevations of structures in flood prone areas</li> <li>• Utility undergrounding</li> <li>• Structural retrofits</li> <li>• Floodwalls and retaining walls</li> <li>• Detention and retention structures</li> <li>• Culverts</li> <li>• Safe rooms</li> </ul>



Mitigation Type	Description	Examples
Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	<ul style="list-style-type: none"><li>• Sediment and erosion control</li><li>• Stream corridor restoration</li><li>• Forest management</li><li>• Conservation easements</li><li>• Wetland restoration and preservation</li></ul>
Education and Awareness Programs	These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions.	<ul style="list-style-type: none"><li>• Radio or television spots</li><li>• Websites with maps and information</li><li>• Real estate disclosure</li><li>• Presentations to school groups or neighborhood organizations</li><li>• Mailings to residents in hazard-prone areas</li><li>• StormReady</li><li>• Firewise Communities</li></ul>



### 1.1.1 Potential Mitigation Funding Sources

While it is important to recognize the mitigation strategies for Sussex County to help achieve the mitigation goals and objectives of the HMP, it is also important to provide sources for funding to implement these strategies. The table below provides a list of programs, descriptions, and links for those seeking funding sources. Please note that this table is not intended to be a comprehensive list, but rather a starting point to help identify potential sources of funding for the identified mitigation strategies.

Table I-4. New Jersey Mitigation Funding Sources

Program	Description	Lead Agency	Website
<b>Federal</b>			
Hazard Mitigation Assistance (HMA)	Grants to provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages – includes FMA, HMGP, PDM	FEMA	<a href="https://www.fema.gov/hazard-mitigation-assistance">https://www.fema.gov/hazard-mitigation-assistance</a>
Flood Mitigation Assistance (FMA)	Program Grants to States and communities for pre-disaster mitigation planning and projects to help reduce or eliminate the long-term risk of flood damage to structures insurable under the National Flood Insurance Program	FEMA	<a href="https://www.fema.gov/flood-mitigation-assistance-grant-program">https://www.fema.gov/flood-mitigation-assistance-grant-program</a>
Hazard Mitigation Grant Program (HMGP)	Grants to States and communities for planning and projects providing long-term hazard mitigation measures following a major disaster declaration	FEMA	<a href="https://www.fema.gov/hazard-mitigation-grant-program">https://www.fema.gov/hazard-mitigation-grant-program</a>
Building Resilient Infrastructure and Communities (BRIC)	Supports states, local communities, tribes and territories to undertake hazard mitigation projects by reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program.	FEMA	<a href="https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities">https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities</a>
Public Assistance: Hazard Mitigation Funding Under Section 406	Hazard mitigation discretionary funding available under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act following a Presidentially declared disaster	FEMA	<a href="https://www.fema.gov/press-release/20220328/fema-hazard-mitigation-grants-404-and-406">https://www.fema.gov/press-release/20220328/fema-hazard-mitigation-grants-404-and-406</a>





Program	Description	Lead Agency	Website
Assistance to Firefighters Grant Program	The primary goal of the Assistance to Firefighters Grants (AFG) is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments, nonaffiliated Emergency Medical Services organizations, and State Fire Training Academies. This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operations efficiencies, foster interoperability, and support community resilience.	FEMA	<a href="https://www.fema.gov/welcome-assistance-firefighters-grant-program">https://www.fema.gov/welcome-assistance-firefighters-grant-program</a>
High Hazard Potential Dams (HHPD) Rehabilitation Grant	The Rehabilitation of High Hazard Potential Dams Grant Program (HHPD) provides technical, planning, design, and construction assistance in the form of grants to non-Federal governmental organizations or nonprofit organizations for rehabilitation of eligible high hazard potential dams.	FEMA	<a href="https://www.grants.gov/web/grants/view-opportunity.html?oppld=316238">https://www.grants.gov/web/grants/view-opportunity.html?oppld=316238</a>
Fire Management Assistance Grant Program	Assistance for the mitigation, management, and control of fires on publicly or privately-owned forests or grasslands that threaten such destruction as would constitute a major disaster. Provides a 75% Federal cost share and the State pay the remaining 25% for actual cost.	FEMA	<a href="https://www.fema.gov/fire-management-assistance-grant-program">https://www.fema.gov/fire-management-assistance-grant-program</a>
Disaster Housing Program	Emergency assistance for housing, including minor repair of home to establish livable conditions, mortgage, and rental assistance	HUD	<a href="https://www.hud.gov/program_offices/public_indian_housing/publications/dhap">https://www.hud.gov/program_offices/public_indian_housing/publications/dhap</a>
HOME Investment Partnerships Program	Grants to local and state government and consortia for permanent and transitional housing, (including financial support for property acquisition and rehabilitation for low-income persons)	HUD	<a href="https://www.hud.gov/program_offices/comm_planning/affordablehousing/programs/home/">https://www.hud.gov/program_offices/comm_planning/affordablehousing/programs/home/</a>
HUD Disaster Recovery Assistance	Grants to fund gaps in available recovery assistance after disasters (including mitigation)	HUD	<a href="https://www.hud.gov/info/disasterresources">https://www.hud.gov/info/disasterresources</a>
Section 108 Loan Guarantee	Enables states and local governments participating in the Community Development Block Grant (CDBG) program to obtain federally guaranteed loans for disaster-distressed areas	HUD	<a href="https://www.hudexchange.info/programs/section-108/">https://www.hudexchange.info/programs/section-108/</a>
Smart Growth Implementation Assistance (SGIA) program	The SGIA program focuses on complex or cutting-edge issues, such as stormwater management, code revision, transit-oriented development, affordable housing, infill development, corridor planning, green building, and climate change. Applicants can submit proposals under 4 categories: community resilience to disasters, job creation, the role of manufactured homes in sustainable neighborhood design or medical and social service facilities siting.	EPA	<a href="https://www.epa.gov/smartgrowth">https://www.epa.gov/smartgrowth</a>



Program	Description	Lead Agency	Website
Partners for Fish and Wildlife	Financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats	U.S. Fish and Wildlife Service	<a href="https://www.fws.gov/partners/">https://www.fws.gov/partners/</a>
FHWA Emergency Relief Program	Fund for the repair or reconstruction of Federal-aid highways that have suffered serious damage as a result of (1) natural disasters or (2) catastrophic failures from an external cause	U.S. Department of Transportation (DOT)	<a href="https://www.fhwa.dot.gov/programadmin/erelief.cfm">https://www.fhwa.dot.gov/programadmin/erelief.cfm</a>
Transportation Investment Generating Economic Recovery (TIGER)	Investing in critical road, rail, transit, and port projects across the nation	U.S. DOT	<a href="https://www.transportation.gov/tags/tiger-grants">https://www.transportation.gov/tags/tiger-grants</a>
Community Facilities Direct Loan & Grant Program	This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial, or business undertakings.	USDA	<a href="https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program">https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program</a>
Emergency Loan Program	USDA's Farm Service Agency (FSA) provides emergency loans to help producers recover from production and physical losses due to drought, flooding, other natural disasters, or quarantine	USDA	<a href="https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index">https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index</a>
Emergency Watershed Protection (EWP) Program	Provide assistance to relieve imminent hazards to life and property caused by floods, fires, drought, windstorms, and other natural occurrences	NRCS	<a href="https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/">https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/</a>
Financial Assistance	Financial assistance to help plan and implement conservation practices that address natural resource concerns or opportunities to help save energy, improve soil, water, plant, air, animal and related resources on agricultural lands and non-industrial private forest land	NRCS	<a href="https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/">https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/</a>
Emergency Management Performance Grants (EMPG) Program	Assist local, tribal, territorial, and state governments in enhancing and sustaining all-hazards emergency management capabilities	FEMA, U.S. DHS	<a href="https://www.fema.gov/emergency-management-performance-grant-program">https://www.fema.gov/emergency-management-performance-grant-program</a>
Reimbursement for Firefighting on Federal Property	Provides reimbursement only for direct costs and losses over and above normal operating costs.	U.S. DHS	<a href="https://www.usfa.fema.gov/grants/firefighting_federal_property.html">https://www.usfa.fema.gov/grants/firefighting_federal_property.html</a>



Program	Description	Lead Agency	Website
Department of Homeland Security Grant Program (HSGP)	HSGP is composed of three interconnected grant programs including the State Homeland Security Program (SHSP), Urban Areas Security Initiative (UASI), and the Operation Stonegarden (OPSG). Together, these competitive grant programs fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration.	U.S. DHS	<a href="https://www.dhs.gov/homeland-security-grant-program-hsgp">https://www.dhs.gov/homeland-security-grant-program-hsgp</a>
Land & Water Conservation Fund	Matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities (as well as funding for shared federal land acquisition and conservation strategies)	National Park Service	<a href="https://www.nps.gov/subjects/lwcf/index.htm">https://www.nps.gov/subjects/lwcf/index.htm</a>
Land and Water Conservation Fund	Funding to states, local and conservation organizations for outdoor recreational development, renovation, land acquisition, and planning.	U.S. Department of the Interior	<a href="https://www.doi.gov/lwcf">https://www.doi.gov/lwcf</a>
USSBA	Small Business Administration (SBA) provides low-interest disaster loans to homeowners, renters, business of all sizes, and most private nonprofit organizations. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.	Small Business Administration (SBA)	<a href="https://www.sba.gov/funding-programs/disaster-assistance">https://www.sba.gov/funding-programs/disaster-assistance</a>
<b>State</b>			
New Jersey Clean Energy Program (NJCEP)	<p>NJCEP promotes increased energy efficiency and the use of clean, renewable sources of energy, including solar, wind, geothermal, and sustainable biomass. The results for New Jersey are a stronger economy, less pollution, lower costs, and reduced demand for electricity. NJCEP offers financial incentives, programs, and services for residential, commercial, and municipal customers. Refer to <a href="https://www.njcleanenergy.com/main/about-njcep/about-njcep">https://www.njcleanenergy.com/main/about-njcep/about-njcep</a> for additional details on NJCEP.</p> <p>The program also offers a Community Energy Plan Grant for government entities (e.g., municipality, county, Green Team or environmental commission, or other Sustainable Jersey organization within a community or county). The grant will provide funding for an entity to create a Community Energy Master Plan to align local communities with the State Energy Master Plan.</p>	New Jersey Board of Public Utilities	<a href="https://www.njcleanenergy.com/main/about-njcep/about-njcep">https://www.njcleanenergy.com/main/about-njcep/about-njcep</a>



Program	Description	Lead Agency	Website
NJDEP Grant and Loan Programs	NJDEP offers a wide variety of funding opportunities for local governments and other types of organizations to fund numerous environmentally based projects involving mitigation of hazards such as flooding and wildfires. This includes funding for: air quality, energy, and sustainability; compliance and enforcement; engineering and construction; land use management; local government assistance; natural and historic resources; site remediation and waste management programs; and water resource management. Information on each of the programs can be found on the NJDEP website: <a href="https://www.nj.gov/dep/grantandloanprograms/">https://www.nj.gov/dep/grantandloanprograms/</a> .	NJDEP	<a href="https://dep.nj.gov/grantandloanprograms/">https://dep.nj.gov/grantandloanprograms/</a>
Green Acres Program	Together with public and private partners, Green Acres has protected well over a million and a half acres of open space and provided hundreds of outdoor recreational facilities in communities around the State. Green Acres provides low interest (2 percent) loans and grants to municipal and county governments to acquire open space and develop outdoor recreation facilities. Green Acres also provides matching grants to nonprofit organizations to acquire land for public recreation and conservation purposes. Over the years, voters have authorized \$3.3 billion in Green Acres funding, approving every bond referendum put before them.	NJDEP	<a href="https://dep.nj.gov/greenacres/">https://dep.nj.gov/greenacres/</a>
Blue Acres Program	The Blue Acres Program purchases flood-prone properties. This land preservation program assists local government units and nonprofits in their efforts to increase and preserve permanent outdoor recreation areas for public use and enjoyment, and conservation areas for the protection of natural resources such as waterways, wildlife habitat, wetlands, forests, and view sheds. A secondary benefit of these laws and rules is that flood-prone properties are often purchased and not available for future development. Funding for Blue Acres is a combination of dedicated state funding from the cooperate business tax and federal grants. To date, the program has received five state funding appropriations from 2009-2019, ranging from \$3 million to \$12 million to effectuate buyouts in flood-prone areas. Most recently, the 3 Garden State Preservation Trust appropriation recommendation proposed Blue Acres receive an infusion of \$10.5 million (\$10 million for buyouts and \$500,000 for administrative costs).	NJDEP	<a href="https://dep.nj.gov/blueacres/">https://dep.nj.gov/blueacres/</a>



Program	Description	Lead Agency	Website
Open Space and Farmland Preservation Programs	Farmland and open space preservation programs are often funded partially through grants administered by the NJ State Agriculture Development Committee and the New Jersey Green Acres Program. The objective of these programs is to expand the existing county and municipal park systems. Many counties in New Jersey also support land preservation acquisition through open space funding.	Counties, NJ State Agriculture Development Committee, and the New Jersey Green Acres Program	<a href="https://www.nj.gov/agriculture/sadc/farmpreserve/">https://www.nj.gov/agriculture/sadc/farmpreserve/</a>
New Jersey Water Bank (NJWB)	<p>NJWB is a partnership between the NJDEP and the New Jersey Environmental Infrastructure Trust (NJEIT) to provide low-cost financing for the design, construction, and implementation of projects that help protect and improve water quality and help ensure safe and adequate drinking water.</p> <p>The NJWB finances projects by utilizing two funding sources. The Trust issues revenue bonds which are used in combination with zero percent interest funds to provide very low-interest loans for water infrastructure improvements. The NJDEP administers a combination of Federal State Revolving Fund capitalization grants, as well as the State's matching funds, loan repayments, State appropriations, and interest earned on such funds.</p>	NJDEP, NJEIT	<a href="https://dep.nj.gov/wiip/njwb-process/about-us/">https://dep.nj.gov/wiip/njwb-process/about-us/</a>
NJDEP Dam Restoration and Inland Water Projects Loan Program	The New Jersey Dam Restoration and Inland Water Projects Loan Program was established by the "Green Acres, Clean Water, Farmland and Historic Preservation Bond Act of 1992", P.L. 1992, c. 88. The purpose is to provide loans to dam owners for dam restoration or inland waters projects.	NJDEP Dam Safety Program	<a href="https://dep.nj.gov/grantandloanprograms/dam-restoration-inland-water-projects-loan-program/">https://dep.nj.gov/grantandloanprograms/dam-restoration-inland-water-projects-loan-program/</a>
Dam Restoration Loan Program	The New Jersey Dam Restoration Loan Program was established by the "Dam, Lake, Stream, Flood Control, Water Resources and Wastewater Treatment Project Bond Act of 2003", P.L. 2003, c. 162. The purpose is to provide loans to dam owners for dam restoration projects.	NJDEP Dam Safety Program	<a href="https://dep.nj.gov/wlm/drec/dam-safety/dam-restoration-loan-program/">https://dep.nj.gov/wlm/drec/dam-safety/dam-restoration-loan-program/</a>
New Jersey Redevelopment Authority (NJRA)	NJRA is an independent state financing authority committed exclusively to the redevelopment of New Jersey's urban areas. NJRA offers several financing resources, including site acquisition funding, predevelopment assistance, several development assistance resources, and technical assistance.	NJRA	<a href="https://www.njra.us/project-financing">https://www.njra.us/project-financing</a>





Program	Description	Lead Agency	Website
New Jersey Department of Community Affairs	The New Jersey Department of Community Affairs (NJDCA) is a state agency created to provide administrative guidance, financial support, and technical assistance to local governments, community development organizations, businesses, and individuals to improve the quality of life in New Jersey. NJDCA offers a wide range of programs, funding, and services that respond to issues of public concern, including fire and building safety, housing production, community planning and development, and local government management and finance. Among other funding sources, NJDCA administers CDBG funding and is typically the CDBG-Disaster Relief funding recipient for the State of New Jersey.	NJDCA	<a href="https://nj.gov/dca/dhcr/grants/index.shtml">https://nj.gov/dca/dhcr/grants/index.shtml</a>
New Jersey Board of Public Utilities (BPU)	The New Jersey BPU works with private utility companies to provide analysis of natural hazard information affecting the provision of electric power, telecommunications, public water, sewage collection and treatment, and other regulated public utilities. The data are used during response and recovery efforts in the event of emergency or disaster and is also used to analyze impact of mitigation plans and projects. BPU also provides technical assistance for the Energy Resiliency Program	BPU	<a href="https://www.nj.gov/bpu/home/grants.html">https://www.nj.gov/bpu/home/grants.html</a>
Environmental Infrastructure Financing Program	Qualified borrowers receive loans in two equal parts: Approximately one half to three quarters comes from a 0-percent interest State Revolving Fund maintained by the NJDEP. The other portion comes from proceeds of highly rated tax-exempt revenue bonds sold by the Trust. Combining these two funds results in a loan that is 50 to 75 percent lower than traditional loan rates.	NJDEP	<a href="https://dep.nj.gov/wp-content/uploads/wiip/docs/iup-archives/cwf_overview.pdf#:~:text=It%20was%20created%20by%20the%20legislature%20to%20provide,acquisition%20and%20remedial%20action%20activities%20like%20brownfields%20restoration.">https://dep.nj.gov/wp-content/uploads/wiip/docs/iup-archives/cwf_overview.pdf#:~:text=It%20was%20created%20by%20the%20legislature%20to%20provide,acquisition%20and%20remedial%20action%20activities%20like%20brownfields%20restoration.</a>
New Jersey Small Cities Communities Development Block Grants	The New Jersey Small Cities Communities Development Block Grants provide funds for economic development, housing rehabilitation, community revitalization, and public facilities designated to benefit people with low and moderate incomes or to address recent local needs for which no other source of funding is available to non-entitlement counties and municipalities. Information on the program is available on the website: <a href="https://www.nj.gov/dca/divisions/dhcr/offices/neighborhood.html">https://www.nj.gov/dca/divisions/dhcr/offices/neighborhood.html</a> .	NJDCA	<a href="https://www.nj.gov/dca/divisions/dhcr/offices/neighborhood.html">https://www.nj.gov/dca/divisions/dhcr/offices/neighborhood.html</a>



Program	Description	Lead Agency	Website
New Jersey Conservation Foundation (NJCF)	NJCF is a private, not-for-profit organization. Through acquisition and stewardship, NJCF protects strategic lands, promotes strong land use policies, and forges partnerships to achieve conservation goals. Grants are used to help fund preservation activities. Information on the program is available on the website: <a href="https://www.njconservation.org/what-we-do/">https://www.njconservation.org/what-we-do/</a> .	NJCF	<a href="https://www.njconservation.org/what-we-do/">https://www.njconservation.org/what-we-do/</a>
The New Jersey Infrastructure Bank	The New Jersey Infrastructure Bank is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, regional authorities, and water purveyors in New Jersey. Two programs provide and administer low interest rate loans to qualified municipalities, counties, regional authorities, and water purveyors in New Jersey. Approximately \$350 million is awarded annually. 1. NJEIT for the purpose of financing water quality infrastructure projects that enhance ground and surface water resources, ensure the safety of drinking water supplies, protect the public health, and make possible responsible and sustainable economic development. 2. The New Jersey Transportation Infrastructure Bank (NJTIB) is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, and regional authorities in New Jersey for the purpose of financing transportation quality infrastructure projects. The New Jersey Infrastructure Bank provides principal forgiveness opportunities and better financing packages for those projects that implement climate change resilience measures. Information on the program is available on the website: <a href="https://www.njib.gov/">https://www.njib.gov/</a> .	NJDEP	<a href="https://www.njib.gov/">https://www.njib.gov/</a>
Drinking Water State Revolving Fund	The DWSRF program assists water systems in financing the cost of infrastructure through the use of federal and New Jersey Infrastructure Trust funds. Additionally, the Water Supply program provides operator licensing and training support as well as financial assistance through the DWSRF program. Information on the program is available on the website: <a href="https://www.state.nj.us/dep/watersupply/dws_loans.html">https://www.state.nj.us/dep/watersupply/dws_loans.html</a> .	NJDEP	<a href="https://www.state.nj.us/dep/watersupply/dws_loans.html">https://www.state.nj.us/dep/watersupply/dws_loans.html</a>



Program	Description	Lead Agency	Website
New Jersey Department of Transportation (NJDOT) Local Aid and Economic Development	NJDOT is committed to advancing projects that enhance safety, renew the aging infrastructure and the State's economy, and support new transportation opportunities. The Transportation Trust Fund (TTF) provides the opportunity for State assistance to local governments for the funding of road, bridge, and other transportation projects. Annually, the TTF provides \$400 million in State Aid to municipalities and counties for local transportation improvements. In addition, several programs which provide funding to counties and municipalities are funded with federal monies available through the Transportation Equity Act for the 21st Century (TEA 21) legislation. Information on the program is available on the website: <a href="https://www.state.nj.us/transportation/business/localaid/funding.shtm">https://www.state.nj.us/transportation/business/localaid/funding.shtm</a> .	NJDOT	<a href="https://www.nj.gov/transportation/business/localaid/">https://www.nj.gov/transportation/business/localaid/</a>



Program	Description	Lead Agency	Website
Environmental Aid Act (N.J.S.A. 13:1H – 1 to 7) Office of Environmental Services Matching Grants Program for Local Environmental Agencies (N.J.A.C.7:5)	<p>State aid may be granted by the department to a local environmental agency for any activity that the agency is authorized to perform by law and for the preparation of an environmental index. An environmental index shall be a report on environmental conditions within the locality and community objectives concerning open areas, parks, water supply, solid waste, wildlife protection, soil resources, air pollution, water pollution, and other related issues. The department may provide technical assistance in addition to (or in lieu of) State aid to any local environmental agency for the purpose indicated in this act. The purpose of the funding dedicated under this act is to assist local environmental commissions and soil conservation districts with funding for a variety of local environmental projects, including community education projects; environmental resource inventories; beach monitoring and management projects; environmental trail designs; lake rehabilitation studies; stream and water quality testing; wellhead delineation; GIS mapping projects; National Environmental Performance Partnership System indicator projects; and surveys of threatened and endangered species. The maximum annual grant is \$2,500. Applicants must match at least 50 percent of the total cost of the project (NJDEP n.d.).</p> <p>Projects funded by this grant are reported online. Examples of mitigation projects that have been funded in the past include Waterways Beach Monitoring and Management Strategy, Dune Project, Beach Protection and Storm Drainage Plan, Beach Storm Water Drainage Analysis, Stream Corridor/Greenway Protection Plan, Shoreline Bioengineering Demonstration and Outreach Project, Stream, and the Pamphlet/Education Project.</p>	NJDEP Office of Environmental Services	<a href="https://www.nj.gov/dep/rules/proposals/041306.pdf">https://www.nj.gov/dep/rules/proposals/041306.pdf</a>



Program	Description	Lead Agency	Website
Sewage Infrastructure Improvement Act Grants (N.J.A.C.7:22)	<p>New Jersey Sewage Infrastructure Improvement Act establishes comprehensive requirements for NJDEP and municipalities/authorities to address combined sewer overflows and stormwater management.</p> <p>NJDEP issues permits and provides below-market interest rate loans through the Environmental Infrastructure Financing Program to municipalities for capital improvements that improve water quality. To prioritize wastewater projects under the Environmental Infrastructure Financing Program, projects are ranked to address higher State priorities or high-water quality problems or improvements.</p>	NJDEP	<a href="https://dep.nj.gov/wp-content/uploads/rules/rules/njac7_22a.pdf">https://dep.nj.gov/wp-content/uploads/rules/rules/njac7_22a.pdf</a>
Water Pollution Control Quality Act (N.J.S.A. 58:10A-1 to 60) Water Quality Management Planning Rules (N.J.A.C.7:15)	<p>This Act phased out the Construction Grants Program and required states to establish a State Revolving Fund Loan Program. The last year in which construction grants were made available for new projects in New Jersey was 1989. Grant awards are available currently to cover increased allowable costs for projects that previously received a construction grant. The rules serve two basic functions: (1) to establish the Department's general regulatory framework for water quality planning and (2) to supplement other Department rules pertaining to wastewater management.</p> <p>This Act is implemented through a number of regulations and programs throughout NJDEP, including but not limited to Freshwater Wetlands Protection Act (NJAC 7:7A), Stormwater Management (NJAC 7:8), Water Pollution Control (NJAC 7:9), Surface Water Quality Standards (NJAC 7:9B), Safe Drinking Water Act (NJAC 7:10), Flood Hazard Control Act (NJAC 7:13), Pollutant Discharge Elimination System (NJAC 7:14A), and Water Quality Management (NJAC 7:15). Through these rules, NJDEP regulates development location and intensity of uses, protects floodplain capacity and riparian buffers, funds restoration of lakes and streams, and funds infrastructure improvements that primarily provide environmental health. Secondly, the rules allow NJDEP to provide mitigation in the form of reduced losses due to infrastructure failure. Wastewater Management Plans (WMP) are integral components of area-wide Water Quality Management Plans. WMPs are the vehicle through which the continuing planning process integrates local and regional planning into the area-wide Water Quality Management Plans.</p>	NJDEP	<a href="https://www.nj.gov/dep/landuse/download/58_10a.pdf">https://www.nj.gov/dep/landuse/download/58_10a.pdf</a>





Program	Description	Lead Agency	Website
New Jersey Department of Environmental Protection: WRM, Municipal Finance and Construction Element New Jersey Environmental Infrastructure Financing Program (NJEIFP)	NJEIFP is a revolving loan program for the construction of drinking water facilities, wastewater treatment facilities, sludge management systems, combined sewer overflow abatement, stormwater, and other non-point source management projects. The program also offers funding to publicly and privately-owned drinking water systems for the construction or upgrade of drinking water facilities, transmission and distribution systems, storage facilities, and source development. NJEIFP also offers a disaster relief fund that will be able to provide short-term or bridge loans to entities that are in need of an upfront cash flow (NJDEP 2017).	NJDEP	<a href="https://dep.nj.gov/wp-content/uploads/wiip/ffiy2023-sfy2024-final-dwsrf-iup-12-20-2023.pdf">https://dep.nj.gov/wp-content/uploads/wiip/ffiy2023-sfy2024-final-dwsrf-iup-12-20-2023.pdf</a>
New Jersey Turnpike Authority: Capital Program	<p>The New Jersey Turnpike Authority (Authority) is dedicated to the safe and efficient movement of people and goods over two of the busiest toll roads in the United States – the New Jersey Turnpike (NJTP) and the Garden State Parkway (GSP). The Authority's highways are a critical link in the transportation network of the Northeast Corridor. Under the current 10-year, \$7 billion capital program adopted in 2008, the Authority has expanded capacity, repaired deteriorating bridges, reconfigured entrance and exit ramps, improved maintenance yards and toll plazas, and expanded the use of technology for collecting and communicating information about roadway conditions. Under this capital program, the following projects have been advanced addressing hazard mitigation: Bridge Security Program, Forest Fire Prevention, Roadside Weather Information System (RWIS), Coastal Evacuation.</p> <p>Through the Asset Management Program, the Turnpike Authority invests approximately \$50 million annually on drainage-related projects to better equip the Authority's roadways in response to major rainfall events.</p>	New Jersey Turnpike Authority	<a href="https://www.nj.gov/transportation/capital/cpd/">https://www.nj.gov/transportation/capital/cpd/</a>



Program	Description	Lead Agency	Website
New Jersey Department of Transportation (NJDOT): Local Aid and Economic Development	NJDOT is committed to advancing transportation projects that enhance safety, renew aging infrastructure, and support new transportation opportunities at the county and municipal level. The Transportation Trust Fund and the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFE-TEA) legislation provide the opportunity for funding assistance to local governments for road, bridge, and other transportation projects. NJDOT has established several local aid programs that provide financial support to counties and municipalities for capital improvements to transportation infrastructure.	NJDOT	<a href="https://www.nj.gov/transportation/business/localaid/">https://www.nj.gov/transportation/business/localaid/</a>
Coastal Engineering and Restoration Projects	Funding for coastal engineering and restoration projects is available from a variety of state funding sources, including: <ul style="list-style-type: none"><li>• Coastal Engineering</li><li>• Coastal and Land Use Enforcement</li><li>• Dam Safety</li><li>• Flood Control</li><li>• Land Resource Protection</li><li>• Resilience Engineering and Construction</li><li>• Tidelands</li></ul>	NJDEP	<a href="https://dep.nj.gov/wlm/drec/ce/">https://dep.nj.gov/wlm/drec/ce/</a>



## 1.1.2 Mitigation Catalog

The table below provides a list of potential personal, corporate, and government scale mitigation actions for each of the identified natural hazards in the Sussex County HMP. Please note that this table is not intended to be a comprehensive list, but rather a starting point to help identify potential actions for participating jurisdictions. This catalog of potential actions was provided to participating jurisdictions at the Mitigation Strategy Workshop.

Table I-5. Sussex County Mitigation Catalog

DAM FAILURE		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>• Manipulate the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Relocate out of dam failure inundation areas.</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Elevate home to appropriate levels.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Learn about risk reduction for the dam failure hazard.</li><li>• Learn the evacuation routes for a dam failure event.</li><li>• Educate yourself on early warning systems and the dissemination of warnings.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the hazard:<ul style="list-style-type: none"><li>• Remove dams.</li><li>• Harden dams.</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Replace earthen dams with hardened structures.</li><li>• Relocate facilities out of dam failure inundation areas.</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Floodproof facilities within dam failure inundation areas.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Educate employees on the probable impacts of a dam failure.</li><li>• Develop a continuity of operations plan.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the hazard:<ul style="list-style-type: none"><li>• Remove dams.</li><li>• Harden dams.</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Replace earthen dams with hardened structures.</li><li>• Relocate critical facilities out of dam failure inundation areas.</li><li>• Consider open space land use in designated dam failure inundations areas.</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Adopt higher floodplain standards in mapped dam failure inundation areas.</li><li>• Retrofit critical facilities within dam failure inundation areas.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Map dam failure inundation areas.</li><li>• Enhance emergency operations plans to include a dam failure component.</li><li>• Institute monthly communications checks with dam operators.</li><li>• Inform the public on risk reduction techniques.</li><li>• Adopt real-estate disclosure requirements for the re-sale of property located within dam failure inundation areas.</li><li>• Consider the probable impacts of climate change in assessing the risk associated with the dam failure hazard.</li></ul></li></ul>



DAM FAILURE		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Establish early warning capability downstream of listed high-hazard dams.</li><li>• Consider the residual risk associated with protection provided by dams in future land use decisions.</li></ul>



DISEASE OUTBREAK		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Proper hygiene.</li><li>PPE.</li><li>Social distancing.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Focus on personal health.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Storage of PPE.</li><li>Storage of supplies and food to reduce need to enter public spaces.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>PPE.</li><li>Social distancing.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Distanced work environment.</li><li>Regular cleaning of work environment.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Storage of PPE.</li><li>Equipment for monitoring.</li><li>Trainings for staff.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>PPE.</li><li>Social distancing.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Distanced work environment.</li><li>Regular cleaning of work environment.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Storage of PPE.</li><li>Equipment for monitoring/treatment.</li><li>Trainings for staff.</li><li>Public outreach.</li></ul></li></ul>





DROUGHT		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Consider stored water/captured water techniques during dry seasons.</li><li>Establishing an irrigation time/scheduling program or process so that all agricultural land gets the required amount of water. Through incremental timing, each area is irrigated at different times so that all water is not consumed at the same time. Spacing usage may also help with recharge of groundwater.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Drought resistant landscapes.</li><li>Reduce water system losses.</li><li>Regularly check for leaks to minimize water supply losses.</li><li>Install low-flow water saving showerheads and toilets.</li><li>Turn water flow off while brushing teeth or during other cleaning activities.</li><li>Adjust sprinklers to water the lawn and not the sidewalk or street.</li><li>Run the dishwasher and washing machine only when they are full.</li><li>Check for leaks in plumping or dripping faucets.</li><li>Install rain-capturing devices for irrigation.</li><li>Install graywater systems in homes to encourage water reuse.</li><li>Rotate crops by growing a series of different types of crops on the same fields every season to reduce soil erosion.</li><li>Planting “cover crops,” such as oats, wheat, and buckwheat, to prevent soil erosion.</li></ul></li><li>Increase Capability:</li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Consider stored water/captured water techniques during dry seasons.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Drought resistant landscapes.</li><li>Reduce private water system losses.</li><li>Identify alternate water supply sources.</li><li>Install low-flow water saving showerheads and toilets.</li><li>Adjust sprinklers to water the lawn and not the sidewalk or street.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Practice active water conservation.</li><li>Develop a COOP.</li><li>Create a water conservation plan.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Ground Water Recharge through stormwater management.</li><li>Implement cloud seeding techniques during dry seasons.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Identify and create ground water back up sources.</li><li>Create /identify new impounded water supply points.</li><li>Developing new or upgrading existing water delivery systems to eliminate breaks and leaks.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Water use conflict regulations.</li><li>Reduce water system losses.</li><li>Distribute water saving kits.</li><li>Identify sites ideally suited for ground water recharge.</li><li>Implement stormwater retention in regions ideally suited for groundwater recharges.</li><li>Utilize drought resistant landscapes on community owned facilities.</li><li>Encourage citizens to take water-saving measures.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Public education on drought resistance.</li><li>Identify alternative water supplies for time of drought. Mutual aid agreements with alternative suppliers.</li><li>Develop a drought contingency plan.</li><li>Develop criteria-“triggers” for drought related actions.</li><li>Improve accuracy of water supply forecasts.</li><li>Provide incentives to influence active water conservation techniques such as water user rate reductions.</li></ul></li></ul>



DROUGHT		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>• Practice active water conservation techniques.</li><li>• Seek ways to operate wells in such a way to enhance their functional longevity and supply capability.</li></ul>		<ul style="list-style-type: none"><li>• Consider providing incentives to property owners that utilize drought resistant landscapes in the design of their homes.</li><li>• Use of water buffalo tankers.</li><li>• Promote well usage techniques that strive to enhance functional longevity and supply capability of private water supply wells.</li><li>• Develop an ordinance to restrict the use of public water resources for non-essential usage, such as landscaping, washing cars, filling swimming pools, etc.</li></ul>



EARTHQUAKE		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Locate outside of hazard area (off soft soils).</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Retrofit structure (anchor house structure to foundation).</li><li>Secure household items that can cause injury or damage such as water heaters, bookcases, and other appliances.</li><li>Build to higher design standards.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Practice "drop, cover and hold"</li><li>Develop household mitigation plan, such as creating a retrofit savings account, communication capability with outside, 72 hr. self-sufficiency during an event.</li><li>Increase capability by having cash reserves for reconstruction.</li><li>Become informed on the hazard and risk reduction alternatives available.</li><li>Develop a post-disaster action plan for your household.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Locate/relocate mission critical functions outside hazard area where possible.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Build redundancy for critical functions/facilities.</li><li>Retrofit critical buildings/areas housing mission critical functions.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Adopt higher standard for new construction -- Consider "performance-based design" when building new structures.</li><li>Increase capability by having cash reserves for reconstruction.</li><li>Inform your employees on the possible impacts of earthquake and how to deal with them at your work facility.</li><li>Develop a Continuity of Operations Plan (COOP).</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Locate critical facilities or functions outside of hazard area where possible.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Harden infrastructure.</li><li>Provide redundancy for critical functions.</li><li>Adopt higher regulatory standards for structures.</li><li>Conduct "rapid screening" programs for critical facilities to identify facilities that may be particularly prone to EQ damage, then develop investigation/action plans to address such structures.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Provide better hazard maps.</li><li>Provide technical information and guidance.</li><li>Enact tools to help manage development in hazard areas: tax incentives, information.</li><li>Include retrofitting/replacement of critical system elements in CIP.</li><li>Develop strategy to take advantage of post disaster opportunities.</li><li>Warehouse critical infrastructure components such as pipe, power line, and road repair material.</li><li>Develop and adopt a Continuity of Operations / Continuity of Government Plan (COOP/COG).</li><li>Initiate triggers guiding improvements such as: (&lt; 50% substantial damage/improvements).</li><li>Further enhance seismic risk assessment to target high hazard buildings for mitigation opportunities.</li></ul></li></ul>



EARTHQUAKE		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Develop a post disaster action plan that includes a grant funding and debris removal components.</li><li>• Utilize warning systems.</li><li>• Educate builders and developers on seismic construction standards.</li></ul>



FLOOD		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• Clear stormwater drains and culverts.</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Locate or re-locate outside of hazard area.</li><li>• Institute low impact development techniques on property.</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Retrofit existing structures and utilities above Base Flood Elevation (BFE).</li><li>• Floodproof existing structures (wet- or dry floodproofing).</li><li>• Store hazardous materials above BFE or outside of floodprone areas.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Develop household mitigation plan, such as retrofit savings, communication capability with outside, 72-hr. self-sufficiency during and after an event.</li><li>• Buy flood insurance.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• Clear stormwater drains and culverts.</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Locate business critical facilities or functions outside hazard area.</li><li>• Institute low impact development techniques on property.</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Build redundancy for critical functions/ retrofit critical buildings.</li><li>• Provide flood-proofing measures when new critical infrastructure must be located in floodplains.</li><li>• Harden structures and infrastructure (wet and dry-floodproofing).</li><li>• Store hazardous materials above BFE or outside of floodprone areas.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Increase capability by having cash reserves for reconstruction.</li><li>• Develop and adopt a Continuity of Operations Plan (COOP).</li><li>• Solicit 'cost-sharing' through partnerships with private sector stakeholders on projects with multiple benefits.</li><li>• Dam owner/operators should continue to be aware of and understand dam inspection and reporting requirements.</li><li>• Ensure that all dam EAP's are kept in compliance with State Regulations.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• Clear stormwater drains and culverts</li><li>• Dredging, levee construction, providing retention areas.</li><li>• Structural flood control: levee's, dams, channelization, revetments.</li><li>• Construct regional stormwater control facilities.</li><li>• Lead and develop a county-wide stream clearing strategy including the development of thresholds for response/action.</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Locate/re-locate critical facilities outside of hazard area.</li><li>• Acquire or relocate identified repetitive loss properties.</li><li>• Promote open space uses in identified high hazard areas via techniques such as: PUD's, easements, setbacks, greenways, sensitive area tracks.</li><li>• Adopt land development criteria such as PUD's, Density transfers, clustering.</li><li>• Institute low impact development techniques on property.</li><li>• Acquire vacant land or promote open space uses in developing watersheds to control increases in runoff.</li><li>• Pass an ordinance to incorporate additional zoning classifications into flood zones within each municipality.</li><li>• Increase floodplain standards within municipal ordinances and include provisions for enforcing best practice standards.</li><li>• Consider increasing minimum freeboard beyond state requirements.</li></ul></li></ul>





FLOOD		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Continue development application reviews by County Planning Board to reduce risky development practices.</li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Harden structures and infrastructure (wet and dry-floodproofing).</li><li>• Provide redundancy for critical functions and infrastructure.</li><li>• Adopt appropriate regulatory standards such as cumulative substantial improvement/damage, freeboard, lower substantial damage threshold, compensatory storage.</li><li>• Stormwater management regulations and master planning.</li><li>• Adopt "no-adverse impact" floodplain management policies that strive to not increase the flood risk on down-stream communities.</li><li>• Participate in the Community Rating System (CRS).</li><li>• Implement as-built regulatory requirements.</li><li>• Implement site review ordinances/requirements.</li><li>• Establish stream maintenance programs with stakeholders (e.g. Soil and Water Conservation District) - support county leads of such efforts.</li><li>• Incorporate retrofitting/replacement of critical facilities and infrastructure in Capital Improvement Plans (CIPs).</li><li>• Promote the use of vegetation/plants as green erosion control measures to reduce localized flooding.</li><li>• Work with environmental groups to address removal of debris, log jams, etc. in flood vulnerable stream sections.</li></ul></li><li>• Increase Capability:</li></ul>



FLOOD		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Produce better hazard maps, and improve access to flood hazard mapping</li><li>• Capture/survey "high-water" marks during flood events.</li><li>• Provide technical information and guidance on appropriate mitigation options available to businesses and homeowners.</li><li>• Enact tools to help manage development in hazard areas (stronger controls, tax incentives, information).</li><li>• Establish an additional layer of zoning within flood hazard areas.</li><li>• Develop strategy to take advantage of post disaster opportunities.</li><li>• Improve compliance with and enforcement of the NFIP.</li><li>• Develop mitigation partnerships with regional stakeholders.</li><li>• Join Community Rating System (CRS) program, or improve level of participation in CRS.</li><li>• Develop and implement a public information strategy for flood hazard awareness, flood insurance (NFIP) and mitigation.</li><li>• Maintain existing data as well as gather new data needed to define risks and vulnerability.</li><li>• Create a building and elevation inventory of structures in the floodplain</li><li>• Identify flood prone areas that may be in need of new flood studies.</li><li>• Establish a program to identify and educate owners of flood-prone properties of potential mitigation options (e.g. elevations, relocations).</li><li>• Charge a hazard mitigation fee on all new permits to create a hazard mitigation</li></ul>



FLOOD		
Personal Scale	Corporate Scale	Government Scale
		<p>funding source for initiatives or grant cost share requirements.</p> <ul style="list-style-type: none"><li>• Integrate floodplain management policies into other planning mechanisms within the planning area.</li><li>• Establish a Stormwater Utility to deal with urban drainage/flooding issues.</li><li>• Establish incentives to promote flood hazard mitigation of private property (e.g. permit fee waivers).</li><li>• Adopt ordinances/standards for cumulative damages and/or improvements.</li><li>• Upgrade NFIP Floodplain ordinance, as well as other ordinances to current or above current state and federal standards.</li><li>• Develop and adopt a COOP.</li><li>• Join "Storm Ready" Program.</li><li>• Participate in county and regional training programs.</li><li>• Provide additional training/certification to NFIP floodplain administrators and code officials.</li><li>• Implement annual training to account for turnover of municipal officials.</li><li>• Maintain and enhance flood forecasting ability, including the establishment and maintenance of critical stream gages.</li><li>• Explore grant funding opportunities and potential partnerships to help maintain existing gages and install additional gages to improve forecasting and flood warning ability.</li><li>• Promote awareness and participation in alert systems.</li><li>• Support and participate in regional flood management efforts.</li></ul>



FLOOD		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones.</li><li>• Provide continued and enhanced training for emergency responders.</li><li>• Establish a revolving "bank" or budget line item to fund grant application support.</li><li>• Continue to review updated Flood Insurance Rate Maps to ensure accuracy as well as maintaining lines of communication with homeowners to make them aware of potential changes related to their property status.</li><li>• Provide trainings for FPA's on the NFIP/Floodplain Best Practices and also pursue CFM accreditation for municipal FPA's.</li><li>• Build and maintain relationships to develop regional watershed/floodplain mitigation solutions.</li><li>• Pursue grant funding opportunities to fund repairs of catchments and infrastructure on a proactive basis.</li><li>• Explore grant funding opportunities related to climate change to fund mitigation projects.</li></ul>



GEOLOGICAL HAZARDS		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep slopes.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>None</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>None</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Implement reinforcement measures in high-risk areas.</li><li>Use debris flow measures that may reduce damage in sloping areas, such as stabilization, emergency dissipation, and flow control measures.</li><li>Apply soil stabilization measures, such as planting soil stabilizing vegetation on steep, publicly owned slopes.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Consider hazard areas in land-use planning, zoning, and development siting.</li><li>Acquire structures in highest hazard areas (demolish and convert to restricted open space).</li><li>Relocation of Structures.</li><li>Open Space Preservation.</li><li>Create or increase setback limits on parcels near high-risk parcels.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Consider hazard areas in land-use planning and development siting.</li><li>Stabilize vulnerable slopes near structures and infrastructure.</li><li>Work with stakeholders such as USGS to develop appropriate risk reduction strategies.</li><li>Install catch-fall nets for rocks at steep slopes near roadways.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Increase understanding of hazard areas (e.g. Landslide Susceptibility Maps) - geotechnical surveys, LIDAR and mapping.</li><li>Assessing vegetation in wildfire-prone areas to prevent landslides after fires (e.g. encourage plants with strong root systems).</li></ul></li></ul>





GEOLOGICAL HAZARDS		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Work with stakeholders such as USGS to develop appropriate risk reduction strategies.</li><li>• Support and implement hazard disclosure for the sale/re-sale of property in identified risk zones.</li><li>• Develop county-level programs to document slide events (landslide inventory), and maintain its currency.</li></ul>



HAZARDOUS MATERIALS		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Identify and eliminate sources of potential hazardous material spills.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Increase distance between hazardous material sites and development.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Personal planning for potential event.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Identify and eliminate sources of potential hazardous material spills.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Increase inspection of hazardous material facilities and transport vehicles.</li><li>Conduct training for response.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Identify and eliminate sources of potential hazardous material spills.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Increase inspection of hazardous material facilities and transport vehicles.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Increase inspection of hazardous material facilities and transport vehicles.</li><li>Conduct training for response.</li><li>Public outreach.</li></ul></li></ul>



HURRICANE		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Retrofit structures (improved roofing, glazing, insulation, etc.).</li><li>Provide for redundant heat and power.</li><li>Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>Promote 72-hour self-sufficiency.</li><li>Provide for redundant heat and power.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Relocate critical infrastructure, such as power lines, underground</li><li>Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>Create redundancy (e.g. backup generators).</li><li>Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>Develop a Continuity of Operations Plan (COOP).</li><li>Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Harden infrastructure such as locating utilities underground.</li><li>Trimming trees back from power lines.</li><li>Designate and strengthen critical road sections and bridges.</li></ul></li><li>Adopt ordinances that regulate the type and quantity of trees planted near utility lines.</li><li>Relocate critical infrastructure, such as power lines, underground.</li><li>Require minimum temperatures in housing/landlord codes.</li><li>Increase Capability:<ul style="list-style-type: none"><li>Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.</li><li>Enforce building codes.</li><li>Increase communication alternatives.</li><li>Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.</li><li>Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines.</li><li>Promote awareness and participation in alert systems.</li><li>Provide NOAA weather radios to the public.</li><li>Create/Enhance "mutual aid" agreements for response to all emergencies.</li><li>Create/identify evacuation routes to be utilized during severe storm events.</li><li>Develop debris management plans.</li></ul></li></ul>



HURRICANE		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Join "Storm-Ready" program.</li><li>• Provide early warning of impending hurricane events to identified critical or essential facilities. This would include facilities such as large employments centers, schools, hospitals.</li><li>• Promote emergency power supplies to private property.</li><li>• Improve, expand, or harden communications facilities and services.</li><li>• Recruit additional emergency personnel or use mutual aid agreements.</li><li>• Increase sheltering capabilities.</li><li>• Increase capability to respond to power outages and downed power lines.</li><li>• Establish partnerships with utility providers through pro-active planning.</li></ul>



INFESTATION		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Participate in quarantine, control, or eradication programs.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Comply with harmful algal bloom rules and regulations to minimize the exposure to HAB.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Form citizen action groups to promote awareness and best practices on local levels.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Regularly check the NJ DEP HAB and Invasive Species information page for updated information.</li><li>Comply with Invasive Species rules and regulations to minimize the chance for invasive species to spread.</li><li>Broaden collaborations focused on ecosystem restoration and ecosystem-based management.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Build and maintain partnerships with government agencies, academia, and stakeholders to coordinate information sharing, and response for Invasive Species and Harmful Algal Blooms throughout the county/region.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Work with Federal/State agencies on quarantine, control, or eradication programs for invasive species.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Create/disseminate planting guides which explain which types of plants and vegetation are safe to plant within the county.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Pass municipal ordinances to enforce best practices for invasive species at the local level.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Build and maintain partnerships with other stakeholders to coordinate information sharing, and response for Invasive Species throughout the county/region.</li><li>Work with federal/state agencies to disseminate information to local municipalities regarding Invasive Species from the NJ DEP and US EPA.</li><li>Disseminate information to the general public to educate them on Invasive Species.</li><li>Work with stakeholders to identify and expand resources for prevention and early detection of invasive species.</li><li>Broaden collaborations focused on ecosystem restoration and ecosystem-based management.</li><li>Build ecological restoration planning into IS management projects.</li></ul></li></ul>





NOR'EASTER		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Retrofit structures (improved roofing, glazing, insulation, etc.).</li><li>• Provide for redundant heat and power.</li><li>• Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>• Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>• Promote 72-hour self-sufficiency.</li><li>• Provide for redundant heat and power.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Relocate critical infrastructure, such as power lines, underground.</li><li>• Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>• Create redundancy (e.g. backup generators).</li><li>• Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>• Develop a Continuity of Operations Plan (COOP).</li><li>• Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Harden infrastructure such as locating utilities underground.</li><li>• Trimming trees back from power lines.</li><li>• Designate and strengthen critical road sections and bridges.</li><li>• Adopt ordinances that regulate the type and quantity of trees planted near utility lines.</li><li>• Relocate critical infrastructure, such as power lines, underground.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.</li><li>• Enforce building codes.</li><li>• Increase communication alternatives.</li><li>• Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.</li><li>• Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines.</li><li>• Promote awareness and participation in alert systems.</li><li>• Provide NOAA weather radios to the public.</li><li>• Create/Enhance "mutual aid" agreements for response to all emergencies.</li><li>• Create/identify evacuation routes to be utilized during severe storm events.</li><li>• Develop debris management plans.</li><li>• Join "Storm-Ready" program.</li></ul></li></ul>



NOR'EASTER		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Provide early warning of impending nor'easter events to identified critical or essential facilities. This would include facilities such as large employments centers, schools, hospitals.</li><li>• Promote emergency power supplies to private property.</li><li>• Improve, expand, or harden communications facilities and services.</li><li>• Recruit additional emergency personnel or use mutual aid agreements.</li><li>• Increase sheltering capabilities.</li><li>• Increase capability to respond to power outages and downed power lines.</li><li>• Establish partnerships with utility providers through pro-active planning.</li></ul>



SEVERE WEATHER		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Increase tree plantings.</li><li>Installation of green roofs to provide shade and remove heat.</li><li>Use cool roofing products that reflect sunlight and heat away from a building.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Retrofit structures (improved roofing, glazing, insulation, etc.).</li><li>Provide for redundant heat and power.</li><li>Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program.</li><li>Retrofit pipes including locating water pipes on the inside of building insulation or keeping them out of vulnerable spaces to extreme cold.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>Promote 72-hour self-sufficiency.</li><li>Provide for redundant heat and power.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Increase tree plantings.</li><li>Installation of green roofs to provide shade and remove heat.</li><li>Use cool roofing products that reflect sunlight and heat away from a building.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Relocate critical infrastructure, such as power lines, underground.</li><li>Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.</li><li>Retrofit pipes including locating water pipes on the inside of building insulation or keeping them out of vulnerable spaces to extreme cold.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Contact municipality or utilities to trim or remove trees that could affect power lines.</li><li>Create redundancy (e.g. backup generators).</li><li>Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio).</li><li>Develop a Continuity of Operations Plan (COOP).</li><li>Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services.</li><li>Set rules restricting outdoor work during extreme temperature events.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Increase tree plantings.</li><li>Encourage installation of green roofs to provide shade and remove heat.</li><li>Encourage the use of cool roofing products that reflect sunlight and heat away from a building.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Harden infrastructure such as locating utilities underground.</li><li>Trimming trees back from power lines.</li><li>Designate and strengthen critical road sections and bridges.</li><li>Adopt ordinances that regulate the type and quantity of trees planted near utility lines.</li><li>Relocate critical infrastructure, such as power lines, underground.</li><li>Require minimum temperatures in housing/landlord codes.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.</li><li>Enforce building codes.</li><li>Increase communication alternatives.</li><li>Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.</li><li>Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines.</li><li>Promote awareness and participation in alert systems.</li><li>Provide NOAA weather radios to the public.</li></ul></li></ul>



SEVERE WEATHER		
Personal Scale	Corporate Scale	Government Scale
		<ul style="list-style-type: none"><li>• Create/Enhance "mutual aid" agreements for response to all emergencies.</li><li>• Create/identify evacuation routes to be utilized during severe storm events.</li><li>• Develop debris management plans.</li><li>• Join "Storm-Ready" program.</li><li>• Provide early warning of impending severe storm events to identified critical or essential facilities. This would include facilities such as large employment centers, schools, hospitals.</li><li>• Promote emergency power supplies to private property.</li><li>• Improve, expand, or harden communications facilities and services.</li><li>• Recruit additional emergency personnel or use mutual aid agreements.</li><li>• Increase sheltering capabilities.</li><li>• Increase capability to respond to power outages and downed power lines. Establish partnerships with utility providers through pro-active planning.</li><li>• Educate citizens regarding the dangers of extreme heat and cold and the steps they can take to protect themselves when extreme temperatures occur.</li><li>• Establish warming and cooling centers.</li><li>• Establish extreme temperature planning in emergency operation plans.</li><li>• Create a database to track those individuals at high risk of death such as the elderly, homeless, etc.</li></ul>



SEVERE WINTER WEATHER		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation).</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Insulate House to provide greater thermal efficiency and reduce heat loss.</li><li>• Provide redundant heat and power.</li></ul></li><li>• Insulate Structure.<ul style="list-style-type: none"><li>• Ensure natural gas input/release valves do not get covered in snow.</li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Trim or remove trees that could affect power lines.</li></ul></li><li>• Prepare emergency food and supplies to be self-sufficient for at least 72 hours in the event of a severe winter storm.</li><li>• Be aware of inclement weather conditions and move your vehicles off the street as severe weather systems approach.</li><li>• Retrofit structures.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Relocate critical infrastructure, such as power lines, underground.</li><li>• Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations.</li><li>• Install tree wire.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Trim or remove trees that could affect power lines.</li><li>• Create redundancy in utilities and communications.</li><li>• Develop a Continuity of Operations Plan (COOP) to address operations before, during and after coastal storm events.</li><li>• Utilize weather radios at the work place to keep your employees aware of severe weather conditions.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manipulate the Hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce exposure to the hazard:<ul style="list-style-type: none"><li>• None</li></ul></li><li>• Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>• Harden infrastructure such as locating utilities underground where appropriate.</li><li>• Trimming trees back from power lines.</li><li>• Designate snow routes and strengthen critical road sections and bridges.</li><li>• Adopt codes and regulations that address the issues of parking of vehicles along roadways during severe weather events.</li><li>• Develop or enhance the capacity/capability of stormwater conveyance systems.</li><li>• Provide backup power sources at vital critical facilities.</li></ul></li><li>• Increase Capability:<ul style="list-style-type: none"><li>• Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.</li><li>• Establish and enforce building codes that require all roofs to withstand snow loads-- Develop/Improve/Enforce building Codes in Hazard Areas.</li><li>• Increase communication alternatives.</li><li>• Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors.</li><li>• Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines.</li><li>• Provide weather radios to vulnerable populations.</li><li>• Enhance public awareness campaigns to address those issues of alert and warning</li></ul></li></ul>





SEVERE WINTER WEATHER		
Personal Scale	Corporate Scale	Government Scale
		<p>and actions to take during severe weather events.</p> <ul style="list-style-type: none"><li>• Utilize the best available technology to enhance the warning systems for all severe weather events (i.e.: tornado warning systems).</li><li>• Coordinate severe weather warning capabilities and the dissemination of warning amongst those agencies within the planning are with the highest degree of capability.</li><li>• Encourage local ordinances for planting tree near lines and join Tree City USA.</li><li>• Increase tree management programs.</li><li>• Join the Community Rating System.</li><li>• Join "Storm-Ready".</li><li>• Retrofit critical structures and promote hazard resistant construction.</li><li>• Keep open communications and education of hazards for mobile home communities.</li><li>• Retrofit above-ground utilities to underground facilities if appropriate.</li><li>• Create a salt reserve or research alternates to stretch salt reserve.</li><li>• Ensure accessibility to hospitals.</li><li>• Provide better debris logistics and removal.</li><li>• Provide better communication systems and back-up communication systems to inform public of hazards and to communicate during the hazard event.</li></ul>



WILDFIRE		
Personal Scale	Corporate Scale	Government Scale
<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>Clear potential fuels on property; dry, overgrown underbrush; diseased trees.</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Clean and maintain defensible space around structures.</li><li>Locate outside hazard area.</li><li>Mow regularly.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Create and maintain defensible space around structures, provide water on site.</li><li>Use fire-retardant building materials.</li><li>Create defensible spaces around your home.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Employ Firewise techniques to safeguard your home.</li><li>Identify alternative water supply points proximate to your home such as swimming pools, lakes, streams.</li><li>Support your local fire department.</li><li>Be aware of weather conditions that support/enhance the probability of wildfires.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Create and maintain defensible space around structure and infrastructure and provide water onsite.</li><li>Use fire-retardant building materials.</li><li>Provide stored water to be utilized for firefighting with appropriate fire department connections at facilities not equipped with fire hydrants or inadequate fire hydrant spacing.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>Support Firewise community initiatives.</li></ul></li></ul>	<ul style="list-style-type: none"><li>Manipulate the Hazard:<ul style="list-style-type: none"><li>None</li></ul></li><li>Reduce exposure to the hazard:<ul style="list-style-type: none"><li>Clear fuels (dry underbrush, diseased trees) on land that can trigger and maintain wildfires.</li><li>Implement Best Management Practices on public lands.</li></ul></li><li>Reduce vulnerability to the hazard:<ul style="list-style-type: none"><li>Create and maintain defensible space around structure and infrastructure.</li><li>Higher regulatory standards.</li><li>Establish water main supply and hydrants in unhydranted areas.</li><li>Decrease hydrant spacing.</li></ul></li><li>Increase Capability:<ul style="list-style-type: none"><li>More public outreach and education efforts including an active "Firewise" program.</li><li>Identify fire response and alternative evacuation routes.</li><li>Seek alternative water supplies in urban wildland interface areas.</li><li>Become a "Firewise" community.</li><li>Increase capability to fight wildfires utilizing equipment that can support wildfire fighting such as: tankers, engines with "pump-and-run" capabilities, dump tanks for tanker shuttle operations.</li><li>Develop/implement wildfire management plans.</li><li>Establish Mutual Aid Agreements with the Tender Task Force</li><li>Develop a Water Supply Plan.</li></ul></li></ul>

## **APPENDIX J: NJOEM PLANNING GUIDANCE**



This appendix includes the 2019 NJOEM planning standards and guidelines for hazard mitigation planning.



**Purpose:** To establish policy and procedures for the most efficient operation of the New Jersey Office of Emergency Management Hazard Mitigation Planning Section.

### Hazard Mitigation Planning

The Hazard Mitigation Planning process is the first step in supporting the mission of mitigation. The purpose of hazard mitigation planning is to identify policies and actions that can be implemented long term to reduce risk and future losses. Hazard Mitigation Plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repetitive damages. The planning process is as important as the plan itself. It creates a framework for risk-based decision making to reduce damages to lives, property, and the economy from future disasters. More importantly, it is meant to be an open process by which the community is actively involved in the development of their hazard mitigation plan. Community participation is a vital component of this process.

State and Local governments benefit from Mitigation Planning by:

- Identifying cost effective actions for risk reduction that are agreed upon by stakeholders and the public
- Focusing resources on the greatest risks and vulnerabilities
- Building partnerships by involving people, organizations, and businesses
- Increasing education and awareness of hazards and risk
- Communicating priorities to state and federal officials
- Aligning risk reduction with other community objectives

### Procedures

In an effort to facilitate the Hazard Mitigation Planning process, the New Jersey Office of Emergency Management will adhere to the following procedures:

**Plans Received** - Local governments will submit all FEMA funded County hazard mitigation plans to the NJOEM Hazard Mitigation Planning section for review. Once plans have been submitted to NJOEM, they will be entered into a spreadsheet that captures the *name of plan, date received, stage of development, who reviewed the plan, and date the review was completed*. Plans may be submitted in the following stages of development:

- **Preliminary Hazard Mitigation Plan** – must include hazard identification, risk assessment and mitigation strategy. It is being submitted as it being developed to ensure the local government is adhering to the regulations as stipulated by 44 CFR 201.6 and is actually on track to becoming approvable pending adoption and subsequent approval status.
- **Draft Plan** – plan is complete, but has not been adopted yet.
- **Final Plan** – plan is complete, with all resolutions and ready for final review. Plan will not be adopted until final FEMA approval.





**Documentation** – It is necessary to document the “life” of the project from application to closeout. This will assist in any potential auditing situations.

**Filing System** - All of the information will be documented in each plan’s file. The filing system will include, but will not be limited to the following documents: all correspondence (letters and pertinent emails), financial information, sub-grantee agreements, and closeout information.

**Letters** - Various letters will be created and disseminated according to the activity in an effort to document the review and approval process. The letters are as follows:

- Submittal letter for planning grant application to FEMA
- Transmittal letters
  - Preliminary Hazard Mitigation Plan
  - Plan Update
  - Electronic Transmissions of the Hazard Mitigation Plan through physical flash drives or internet-based transmittals, along with Adoption Resolutions
- Extension request letter
- NJOEM Extension approval letter
- End of period of performance letter
- APA (approvable pending adoption) letter for Hazard Mitigation Plan
- APP (approved) letter for Hazard Mitigation Plan
- APP (approved) letter for additional jurisdictions
- APA (approvable pending adoption) letter for jurisdictions that have not adopted
- Final FEMA Approval
- Closeout procedures

**Hazard Mitigation Plan Deliverables** will include the following:

- **Preliminary Plan** deliverable will be reviewed by NJOEM and FEMA Region II and will include:
  - Letter of Transmittal;
  - Two (2) individual flash drives containing electronic copies of the Hazard Mitigation Plan, including at a minimum the hazard identification/risk assessment and mitigation strategy sections of the plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and Microsoft Word (DOCX) format.
- **Draft Plan** deliverable will be reviewed by NJOEM and FEMA Region II and will include:
  - Letter of Transmittal;
  - Two (2) individual flash drives containing electronic copies of the Hazard Mitigation Plan, including a complete hazard mitigation plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and Microsoft Word (DOCX) format. This deliverable will incorporate review comments from the Preliminary Plan deliverable and will conform to all requirements of 44CFR Part 201.6 with the exception of resolution(s) of adoption.
- **Final Plan** deliverable will include the following:
  - Letter of Transmittal;
  - Two (2) individual flash drives containing electronic copies of the Hazard Mitigation



Plan, including an entire adopted and approved hazard mitigation plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and Microsoft Word (DOCX) format.

In an effort to receive official approval of a Hazard Mitigation Plan, all items outlined in the Final Plan deliverable must be submitted. All counties and municipalities are required, per the 44 CFR 201.6, to officially adopt the Hazard Mitigation Plan in order to receive official approval and qualify for the following FEMA funding:

- HMA Programs
  - HMGP (Hazard Mitigation Grant Program)
  - FMA (Flood Mitigation Assistance)
  - PDM (Pre Disaster Mitigation)

### **NJOEM State Hazard Mitigation Planners/Community Planners**

All of the activities mentioned heretofore will be facilitated by NJOEM State Hazard Mitigation Planners or Community Planners. Typical duties are as follows:

- Review local mitigation plans for compliance with regulations, policies, and guidance
- Provide written recommendations to local governments for plan improvements
- Under the direction of the Team Lead or Senior Planner, provide technical assistance to local and State officials on the preparation, revision, or updating of mitigation plans to comply with Federal requirements
- Tracks assigned plans through all elements of the review process, including data entry, and drafting of crosswalk review, submittal letters, and approval letters, etc.
- Participates in team review sessions and coordinates closely with local contacts
- Provide planning related training to the other pertinent areas of the State as well as local governments.
- Working knowledge of pertinent laws, regulations, policies, and precedents that affect the use of program and related support resources in the State.
- Ensure that there is a comprehensive knowledge of the major issues, program goals and objectives, work processes, and administrative operations of the organization.
- Basic knowledge of the NFIP being that there has been an inclusion of those elements in the Planning Guidance.

### **Briefings and Meetings**

As part of their duties, State Hazard Mitigation Planners/Community Planners will travel to the county to explain the specifics of the Hazard Mitigation Planning Process funded through the Hazard Mitigation Grant Program and Pre-Disaster Mitigation Programs – Federal programmatic requirements, local, state, and Federal reporting responsibilities, financial requirements, and procurement requirements.

Additionally, State Hazard Mitigation Planners/Community Planners will attend meetings (when available) to ensure locals are implementing the components of the grant to the specifications of Federal requirements and State guidelines.





## **PUBLIC NOTICE**

### **[Name] County Hazard Mitigation Planning Grant**

[Name] County has been approved for the Hazard Mitigation Planning Grant through the State of New Jersey Office of Emergency Management (NJOEM). The [Name] County is seeking the services of a qualified consulting firm to create a Hazard Mitigation Plan.

The procedures for selection of the firm will be in accordance with procurement requirements set forth by the **State/Federal Governments**. All responses received will be evaluated in accordance with the selection criteria and corresponding point system, which is further explained in the Request for Qualifications Package. The package also identifies the scope of services to be performed by the chosen firm.

Interested parties are invited to secure a Request for Qualifications Package from **Contact Person, Address, City, New Jersey Zip Code** or by calling **000-000-0000** with your request or by emailing your request to [email address](#). The package is available beginning **Date**. The response to this request must be hand delivered or mailed to the Point of Contact at the address above in such a manner that it is received no later than **Date**.

[Name] County is an Equal Opportunity Employer. We encourage all small and minority-owned businesses to apply.



## **Name of County**

### **Request for Statements of Qualifications and Cost Proposals Implementation of FEMA Hazard Mitigation Planning Grant**

#### *Create a Multi-Jurisdictional Hazard Mitigation Plan*

### **PROPOSAL PACKET**

#### **INTRODUCTION:**

**Name of County** has secured a grant through the Hazard Mitigation Grant Program and is seeking a consulting firm for implementation purposes. This grant provides for the creation of a Multi-jurisdictional Hazard Mitigation Plan for the **Name of County** and its corresponding jurisdictions.

#### **PART 1 – MANAGEMENT AND ADMINISTRATION:**

**Name of County** will negotiate a fixed price basis contract. The **scope of services**, which the consultant must be prepared and qualified to provide, **are as follows**:

##### **Project Scope of Work**

###### **Planning Process** – documentation will identify:

- Who was involved as part of a Hazard Mitigation Planning Committee, the roles and responsibilities of each committee member and how they contributed to the process.
- Opportunities for public participation;
- Opportunities for participation by other agencies, communities, interested parties, etc.;
- Document outreach to adjacent counties and communities to assure consistency in risk, vulnerability and HM planning; and,
- Integration of other related plans and documents.

###### ○ **Plan Update:**

- The plan **must** identify all participating jurisdictions, new or continuing and, if known, jurisdictions that no longer participate in the plan.
- The plan **shall** describe the process used to review and analyze each section of the plan (i.e. Planning Process, Risk Assessment, Mitigation Strategy, and Plan Maintenance).
- If the planning team or committee concludes that some sections of the plan warrant an update and others did not, the team or committee **must** document the process used to make that determination.
- The plan maintenance section requires a description of how the community was kept involved during the plan maintenance process (44 CFR 201.6(c)(4)(iii)) over the past five years. However, since this contributes to the planning process, the community may elect to describe this within the planning process section of the plan.
- The plan **must** include an endorsement from each participating jurisdiction. The endorsement **must** include, at a minimum, that the jurisdiction's professional





staff (i.e., Engineer, Planner, Zoning/Code Officer, and Flood Plain Manger) have reviewed the plan and certify that the plan is consistent with the professional duties of their offices.

**Risk Assessment** – the risk assessment will include:

- Description of all natural hazards that can affect the assets of our county;
- Identification of the location, extent, previous occurrences, and probability of future occurrences for each of the identified hazards;
- Assessment of the vulnerability of assets and the potential impact of each hazard; and,
- Estimates of potential losses based on best available data and predictive models and the risk assessment should address both existing and future assets.

○ **Plan Update:**

- The local risk assessment **shall**, at a minimum, report risk in a consistent manner with the Standardized Risk Template identified in the New Jersey State Hazard Mitigation Plan (State HMP). Innovative methods to measuring risk and vulnerability are encouraged; however, the standardized risk template allows for equal comparison of risk across plans.
- Plan updates **may** reference scientific and technical information of hazards identified within the State HMP to make hazard profiles within jurisdictional plans more concise. Jurisdictions are encouraged to focus on specific changes within the community that may have lessened or increased risk to the profiled hazards since the previous plan.
- The local risk assessment update **shall** address any newly identified hazards that have been determined to pose a threat.
- The plan update **shall** continue to describe occurrences of hazards included in the previously approved plan, and discuss new occurrences of hazard events. The updated plan **shall** incorporate any new historical records, or hazard data related to profiling hazards.
- Any maps included in the updated plan, **must** be consistent with the updated information.
- The vulnerability overview in the updated plan **shall** describe any changes, clarifications, or refinements to the summary described in the previously approved plan. It **shall** continue to include, by type of hazard, a general description of the types of structures affected by the hazard.
- All Local Mitigation Plans approved by FEMA **must** address repetitive loss structures in the risk assessment by describing the types (residential, commercial, institutional, etc.) and estimate the numbers of repetitive loss properties located in identified flood hazard areas.
- If new hazards and risks have been identified in the multi-jurisdictional risk assessment, the information **must** be attributed to the appropriate jurisdiction(s) or to the whole planning area or whichever applies.
- Where vulnerability to previously identified hazards has changed, the plan **must** incorporate this information into the updated multi-jurisdictional risk assessment and it **must** be attributed to the appropriate jurisdiction(s) or to the whole planning area or whichever applies.
- If the previously approved plan identified that data deficiencies would be addressed at a later time, then the resolved deficiencies **shall** be incorporated in





the updated plan. If the data deficiencies have not been resolved, they **must** be addressed along with an explanation of why they have not been resolved.

**Mitigation Strategy** – will include:

- Developing mitigation goals and identifying appropriate mitigation actions based on the results of the risk assessment;
- Actions that address the full range of identified hazards;
- Actions that address both existing and future assets;
- An implementation strategy that includes prioritization of mitigation actions including consideration of relative costs and benefits, identification of parties responsible for implementation, funding mechanisms and timelines for implementation.

○ **Plan Update:**

- HMP-plan **must** identify the completed, deleted, or deferred actions or activities from the previously approved plan as a benchmark for progress. If the mitigation actions or activities remain unchanged from the previously approved plan, the updated plan **shall** include in its prioritization any new mitigation actions identified since the previous plan was approved or through the plan update process.
- The plan update provides an opportunity for local jurisdictions to reconsider the range of specific actions. If the mitigation actions remain unchanged from the previous plan, then the update **should** indicate why changes are not necessary.
- All Local Mitigation Plans **must** describe each jurisdiction's participation in the NFIP and must identify, analyze, and prioritize actions related to continued compliance with the NFIP.
- Each participating jurisdiction **shall** have its own appendix to highlight and detail the jurisdiction's mitigation actions.
- Each participating jurisdiction **must** provide valid and specific mitigation action(s) for Repetitive Loss and Severe Repetitive Loss properties within the jurisdiction.

**Plan Maintenance** – will describe the process to be used after the plan is adopted and approved to:

- Incorporate the goals and actions of the mitigation plan into other available mechanisms and/or plans for implementation, such as county and local land use plans and development ordinances;
- Provide for continued public involvement;
- Monitor and evaluate the plan and its implementation; and
- The method and schedule for future required plan updates.

○ **Plan Update:**

- The jurisdiction updating the plan **shall** review and consider items included in FEMA's and State's review. If items are not addressed, then the jurisdiction should provide an explanation.
- The updated plan **shall** include an executive summary of changes to the plan



and a crosswalk tool to track changes.

- As part of the planning process, the community reviews and analyzes the previously approved plan's method and schedule for monitoring and updating the plan, such as strengths and weaknesses and what elements, if any, have changes. The updated plan **must** include the method and schedule that will be used over the next five years to monitor, evaluate, and update the plan.
- The updated plan shall continue to describe how the mitigation strategy, including goals and objectives, and mitigation actions will be incorporated into other planning mechanisms, such as county and local land use plans and development ordinances, and also indicate how information contained in the plan, including hazard identification and the risk assessment, will be integrated into other planning mechanisms.
- Jurisdictions are encouraged to make updated plans available online for viewing or download.
- When the community prepares the plan update, the process used to keep the community involved over the previous five years must be explained, but is suggested that it is captured in the planning process. However, the updated plan **shall** describe the process used to solicit public involvement during the plan maintenance process over the next five years.
- Plan maintenance **shall** be discussed during at least one County Office of Emergency Management Coordinator meeting per year and a summary submitted to NJOEM.

**Hazard Mitigation Plan Deliverables** will include the following:

**Preliminary Plan** deliverable will be reviewed by NJOEM and FEMA Region II and will include:

- Letter of Transmittal;
- Two (2) individual flash drives containing electronic copies of the Hazard Mitigation Plan, including at a minimum the hazard identification/risk assessment and mitigation strategy sections of the plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and Microsoft Word (DOCX) format.

**Draft Plan** deliverable will be reviewed by NJOEM and FEMA Region II and will include:

- Letter of Transmittal;
- Two (2) individual flash drives containing electronic copies of the Hazard Mitigation Plan, including a complete hazard mitigation plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and Microsoft Word (DOCX) format. This deliverable will incorporate review comments from the Preliminary Plan deliverable and will conform to all requirements of 44CFR Part 201.6 with the exception of resolution(s) of adoption.

**Final Plan** deliverable will include the following:

- Letter of Transmittal;
- Two (2) individual flash drives containing electronic copies of the Hazard Mitigation Plan, including an entire adopted and approved hazard mitigation plan. Each Flash drive shall contain copies of the plan in a Portable Document Format (PDF) format and





Microsoft Word (DOCX) format.

## PART 2 – PROPOSALS:

Proposals will be accepted by the **Name of County**, in the **Name of Location**, **Address, City**, New Jersey **Zip Code** until **0:00 PM on Day, Month Date, Year**.

In order to be considered, proposals must be received prior to the time and date specified herein. The **County** reserves the right to reject any or all responses. All responses should be sealed and the outside of the envelope marked: REQUEST FOR STATEMENTS OF QUALIFICATIONS AND COST PROPOSALS, Implementation of FEMA Hazard Mitigation Planning Grant Program, Creation of **Name of County** Hazard Mitigation Plan.

Consultants should possess qualifications and expertise in the following areas:

- Hazard Mitigation Planning
- Hazard Mitigation Grant Program
- State of New Jersey Mitigation Priorities

All proposals will be scored and ranked with the highest rated firm being awarded a contract. The proposal must include a (1) A detailed budget (2) brief history of the firm and a resume' of each person in the firm who will be assigned to the project; (3) documentation of the responder being a "qualified third party provider" or the responder must be in good standing with the Secretary of State; and (4) a list of projects and contact person name, address and telephone number for which the individual/firm has completed similar projects. This list will be used for reference purposes.

**Two (2) copies of the proposal and required supplemental information should be provided.**

## PART 3 – SELECTION CRITERIA:

All responses to the solicitation will be evaluated according to the following criteria and corresponding point system. The proposal will be evaluated on the basis of written materials. Sufficient information must be included in the response to ensure that the correct numbers of points are assigned. Incomplete or incorrect information may result in a lower score.

Experience/Knowledge with	
Hazard Mitigation Planning and Hazard Mitigation Grant Program	25 points
Experience/Knowledge in Civil Engineering and Cost Estimation	
Hazard Mitigation Projects	25 points
Experience/Knowledge in Benefit Cost Analysis	25 points
Experience/Knowledge in Environmental and Cultural Resource considerations	<u>25 points</u>
<b>Total points for required and optional considerations</b>	<b>100 points</b>



#### **PART 4 – EVALUATION OF PROPOSALS:**

It is the intent of the **County** to conduct a fair and impartial evaluation of proposals received in response to this RFQ. The purpose of this evaluation will be to select the most qualified Consultant. The evaluation will be conducted in the stages as follows:

- A. Selection of Responsive Proposals**  
The purpose of this stage is to determine whether each proposal meets the specifications of this RFQ and is sufficiently responsive to the RFQ to permit a complete evaluation. A responsive proposal must comply with the instructions stated in this RFQ with regard to content, organization, number of copies and timely delivery.
- B. Evaluation of Proposals**  
During this stage, the Evaluation Team members will individually review each responsive proposal, identifying areas requiring clarification and preliminary scoring the responses. Following these individual reviews, the Evaluation Team will meet to identify questions requiring clarifications, if any. The **County** will notify Proposers in writing if it has questions/issues requiring clarification. Proposers must respond in writing within a specific time.
- C. Selection of Best Qualified Proposer**  
At the conclusion of the proposal evaluation, the best qualified Proposer will be identified by the Evaluation Team and notified that they have been selected.
- D. Recommendation of Award**  
The Evaluation Team will document the results of the evaluation process and recommend the award of a contract to the selected Consultant.
- E. Contract Award**  
The **County** will provide a contract agreement to the selected Consultant. Once the contract agreement is signed and returned to the **County**, an official "Notice to Proceed" will be issued. The Consultant will have ten (10) working days to initiate work after the Notice to Proceed is issued.



Questions concerning this proposal should be addressed to:

**The Name of County**

**Name of Location**

**Address**

**City, New Jersey Zip**

Proposals may be either mailed or hand-delivered to:

**The Name of County**

**Name of Location**

**Address**

**City, New Jersey Zip**

**The deadline for submission is Month Date, Year at 0:00 PM.**

**Name of County OEM**

**OEM**

**County**

**PUBLICATION DATES: Month Date, Year; Month Date, Year**



**Contract for Professional Services****Contract#:** \_\_\_\_\_

This Contract is made as of the \_\_\_\_\_ day of \_\_\_\_\_, 2013 by and between \_\_\_\_\_, county government located in the State of New Jersey, by and through its Board of Freeholders, hereinafter referred to as the (CLIENT), and (name of business) doing business as an individual [ ], a partnership [ ], or a corporation [ ], authorized to do business in the State of New Jersey, hereinafter referred to as the CONSULTANT, whose Federal ID or Social Security Number is \_\_\_\_\_.

**ARTICLE 1 – SERVICES**

The CONSULTANTS responsibility under this Contract is to provide professional/consultation services in the area of Hazard Mitigation Planning, as more specifically set forth in the Scope of Work detailed in Exhibit "A".

(CLIENT) representative/liaison during the performance of this Contract shall be \_\_\_\_\_, whose contact number is \_\_\_\_\_.

**ARTICLE 2 – SCHEDULE**

The CONSULTANT shall commence services on \_\_\_\_\_, 2013.

Reports and other items shall be delivered or completed in accordance with the detailed schedule set forth in Exhibit "A".

Any order issued during the effective date of this contract, but not completed within that period, shall be completed by the CONSULTANT within the time specified in the order. The Contract shall govern the CONSULTANT and (CLIENT)'s rights and obligations with respect to the extent as if the order were completed during the contract's performance period.

**ARTICLE 3 – PAYMENT TO CONSULTANT**

- A. The total amount to be paid by the (CLIENT) under this Contract for services and minor materials shall not exceed \$250,000. The CONSULTANT will bill (CLIENT) in progress payments of 10% Start-Up, 30% Upon Acceptance of First Draft, 30% upon acceptance of second draft and 30% upon Final acceptance. Specifics of each payment are outlined in Exhibit "A".
- B. Invoices received from the CONSULTANT pursuant to the Contract will be reviewed and approved by the initiating (CLIENT) Department, indicating that services have been rendered in conformity with the Contract and then will sent to the Finance Department for payment. Invoices must reference this contract number.
- C. Final Invoice: In order for both parties herein to close their books and records, the CONSULTANT will clearly state "final invoice" on the CONSULTANT'S final/last billing to the (CLIENT). This certifies that all services have been properly performed and all charges and costs have been



invoiced to the (CLIENT). Since this account will be thereupon be closed, any and other further changes if not properly included on this final invoice are waived by the CONSULTANT.

#### **ARTICLE 4 – TRUTH IN NEGOTIATION CERTIFICATE**

Signature of this Contract by the CONSULTANT shall act as the execution of the truth-in negotiation certificate certifying that the wage rates and costs used to determine the compensation provided for in this Contract are accurate, complete and current as of the date of the Contract and no higher than those charged the CONSULTANT'S most favored customer for the same substantially similar service.

The said rates and costs shall be adjusted to exclude any significant sums should \_\_\_\_\_ determine that the rates and costs were increased due to inaccurate, incomplete or non-current wage rates or due to inaccurate representations of fees paid to outside consultants. \_\_\_\_\_ shall exercise its rights under this "Certificate" within one year (1) following final payment.

#### **ARTICLE 5 – TERMINATION**

##### **A. Termination for Default:**

\_\_\_\_\_ may, by written notice to the CONSULTANT, terminate this contract for default in whole or in part (release orders, if applicable) if the CONSULTANT fails to:

1. Provide products or services that comply with the specifications herein or fails to meet the (CLIENT) performance standards.
2. Deliver the supplies or perform the services within the time specified in this contract or any extension.
3. Make progress so as to endanger performance of this contract.
4. Perform any of the other provisions of this contract.

Prior to termination for default, (CLIENT) will provide adequate written notice to the CONSULTANT through the Purchasing Director, affording him/her the opportunity to cure the deficiencies or to submit a specific plan to resolve the deficiencies within ten (10) days (or the period specified in the notice) after receipt of the notice. Failure to adequately cure the deficiency shall result in termination action. Such termination may also result in suspension or debarment of the CONSULTANT in accordance with applicable Louisiana procurement statutes. The CONSULTANT and its sureties (if any) shall be liable for any damage to the (CLIENT) resulting from the CONSULTANT'S default of the contract. This liability includes any increased costs incurred by the (CLIENT) in completing contract performance.

In the event of termination by the (CLIENT) for any cause, the (CLIENT) will have, in no event, any claim against the (CLIENT) for lost profits or compensation for lost opportunities.





After a receipt of a Termination Notice and except as otherwise directed by (CLIENT) the CONSULTANT shall:

- A. Stop work on the date and to the extent specified.
- B. Terminate and settle all order and subcontracts relating to the performance of the terminated work.
- C. Transfer all work in progress, completed work, and other materials related to the terminated work as directed by the (CLIENT).
- D. Continue and complete all parts of that work that have not been terminated (if applicable).

Neither CONSULTANT nor (CLIENT) shall be liable, nor may cancel this contract for default, when delays arise out of causes beyond the control of CONSULTANT or (CLIENT). Such causes may include, but are not restricted to acts of God, acts of (CLIENT) in sovereign capacity, fires, floods, lightning strikes, epidemics, quarantine restrictions, strikes, freight embargoes, wars, civil disturbances, work stoppage, power failures, laws, regulations, ordinances, acts or orders of any governmental agency or official thereof, and unusually severe weather. In every case, the delay must be beyond the control of the claiming party. If CONSULTANT is delayed in its performance as a result of the above causes, (CLIENT) shall upon written request of CONSULTANT, agree to equitably adjust the provisions of this contract, including price and delivery, as may be affected by such delay. However, this provision shall not be interpreted to limit the (CLIENT)'s right to terminate for convenience.

**B. Termination for Convenience**

(CLIENT), by written notice, may terminate this contract, in whole or in part, when it is in the best interest for (CLIENT). If this contract is terminated, (CLIENT) shall be liable only for goods and services delivered and accepted. (CLIENT) Notice of Termination may provide the CONSULTANT thirty (30) days prior notice before it becomes effective. However, at (CLIENT)'s sole option, a termination for convenience may be effective immediately and may apply to release orders (if applicable) or to the contract in whole.

**ARTICLE 6 – PERSONNEL**

The CONSULTANT represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with (CLIENT).

All of the services required hereinunder shall be performed by the CONSULTANT or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under state and local law to perform such services.

Any changes or substitutions in the CONSULTANT'S key personnel, as may be listed in Exhibit "A", must be made known to the (CLIENT)'s representative and written approval must be granted by



\_\_\_\_\_(CLIENT)\_\_\_\_\_ before said change or substitution can become effective.

The CONSULTANT warrants that all services shall be performed by skilled and competent personnel to the highest professional standards in the field.

#### **ARTICLE 7 – SUBCONTRACTING**

\_\_\_\_\_(CLIENT)\_\_\_\_\_ reserves the right to accept the use of a subcontractor or to reject the selection of a particular subcontractor and to inspect all facilities of any subcontractors in order to make a determination as to the capability of the subcontractor to perform properly under this Contract. The CONSULTANT is encouraged to seek minority and women business enterprises for participation in subcontracting opportunities. If a subcontractor fails to perform or make progress, as required by this Contract, and it is necessary to replace the subcontractor to complete the work in a timely fashion, the CONSULTANT shall promptly do so, subject to acceptance of the new subcontractor by the

\_\_\_\_\_(CLIENT)\_\_\_\_\_.

#### **ARTICLE 8 – FEDERAL AND STATE TAX**

\_\_\_\_\_(CLIENT)\_\_\_\_\_ is exempt from payment of New Jersey State Sales and Use Taxes *(do not know if this law applies)*. \_\_\_\_\_(CLIENT)\_\_\_\_\_ will sign an exemption certificate and submit to the CONSULTANT. The CONSULTANT shall not be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with \_\_\_\_\_(CLIENT)\_\_\_\_\_, not is the CONSULTANT authorized to use \_\_\_\_\_(CLIENT)\_\_\_\_\_'s Tax Exemption letter in securing such materials.

The CONSULTANT shall be responsible for payment of its own and its share of its employee FICA and Social Security benefits with respect to this Contract.

#### **ARTICLE 9 – AVAILABILITY OF FUNDS**

\_\_\_\_\_(CLIENT)\_\_\_\_\_'s performance and obligation to pay under this Contract is contingent upon an annual appropriation for its purpose.

#### **ARTICLE 10 – INSURANCE**

A. Before execution of the contract by \_\_\_\_\_(CLIENT)\_\_\_\_\_ and commencement of the operations and/or services to be provided, during the duration of the contract, the CONSULTANT shall file with \_\_\_\_\_(CLIENT)\_\_\_\_\_, current certificates of all required insurance on forms acceptable to \_\_\_\_\_(CLIENT)\_\_\_\_\_, with the Certificate Holder listed as \_\_\_\_\_(CLIENT NAME OF BUSINESS)\_\_\_\_\_, which shall include the following provisions:

1. All insurance policies shall be issued by companies authorized to do business under the laws of the State of New Jersey and acceptable to \_\_\_\_\_(CLIENT)\_\_\_\_\_.
2. The Certificates shall clearly indicate that the CONSULTANT has obtained insurance of the type, amount and classification as required for strict compliance with the insurance section.







3. No material change or cancellation of the insurance shall be effective without thirty (30) days prior written notice to (CLIENT).
- B. The CONSULTANT shall require and ensure that each of its subcontractors providing services hereunder (if any) procures and maintains, until the completion of the services, insurance of the types and to the limits specified herein.
- C. Coverages Required:
  1. Worker's Compensation – The CONSULTANT shall provide coverage for its employees with statutory workers' compensation limits, and no less than \$100,000.00 for Employer's Liability.
  2. Commercial General Liability – The CONSULTANT shall provide coverage for all operations including, but not limited to Contractual, Products and Completed Operations, and Personal Injury. The limits shall be not less than \$250,000.00, per occurrence, Combined Single Limits (CSL) or its equivalent. The General Aggregate limit shall either apply separately to this Contract or shall be at least twice the required occurrence limit.
  3. Business Automobile Liability – The CONSULTANT shall provide coverage for all owned, non-owned and hired vehicles with limits of not less than \$25,000, per occurrence, Combined Single Limits (CSL) or its equivalent.

#### **ARTICLE 11 – INDEMNIFICATION**

If there are any claims for damages attributable to the negligence, errors or omissions of the CONSULTANT, their agents or employees while providing the services called for herein, it is understood and agreed the CONSULTANT shall indemnify and hold harmless AUDUBON from any and all losses, costs, liability, damages and expenses arising out of such claims or litigation asserted as a result hereof. However, the CONSULTANT shall not be responsible for acts or omissions of (CLIENT), its agents or employees, or of third parties which result in bodily injury to persons or property.

#### **ARTICLE 12 – SUCCESSORS AND ASSIGNS**

(CLIENT) and the CONSULTANT each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Contract and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Contract. Except as above, neither (CLIENT) nor the CONSULTANT shall assign, sublet, convey or transfer its interest in this Contract without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of (CLIENT) which may be a party hereto, not shall it be construed as giving any rights or benefits hereunder to anyone other than (CLIENT) and the CONSULTANT.



**ARTICLE 13 – REMEDIES**

This Contract shall be governed by the laws of the State of New Jersey. No remedy herein conferred upon any party is intended to be exclusive of any other remedy, and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or at equity or by statute or otherwise. No single or partial exercise by any party of any right, power, or remedy hereunder shall preclude any other or further exercise thereof.

**ARTICLE 14 – CONFLICT OF INTEREST**

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance or services required hereunder, as provided for, the CONSULTANT further represents that no person having any interest shall be employed for said performance.

The CONSULTANT shall promptly notify (CLIENT) in writing by certified mail of all potential conflicts of interest for any prospective business association, interest or other circumstance which may influence or appear to influence the CONSULTANT'S judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the CONSULTANT may undertake and request an opinion of (CLIENT) as to whether the association, interest or circumstance would, in the opinion of (CLIENT), constitute a conflict of interest if entered into by the CONSULTANT. (CLIENT) agrees to notify the CONSULTANT of its opinion by certified mail within thirty (30) days of receipt of the notification by the CONSULTANT. If, in the opinion of (CLIENT), the prospective business association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to (CLIENT) by the CONSULTANT under the terms of this Contract.

**ARTICLE 15 – EXCUSABLE DELAYS**

The CONSULTANT shall not be considered in default by reason of any failure in performance if such failure arises out of causes reasonably beyond the control of the CONSULTANT or its subcontractors and without their fault or negligence. Such causes include, but are not limited to: actions of God; natural or public health emergencies; labor disputes; freight embargoes; and abnormally severe and unusual weather conditions.

Upon the CONSULTANT'S request, (CLIENT) shall consider the facts and extent of any failure to perform the work and, if the CONSULTANT'S failure to perform was without it or its subcontractor's fault or negligence, the Contract Schedule and/or any other affected provision of this Contract shall be revised accordingly; subject to the (CLIENT)'s right to change, terminate, or stop any or all work at any time.

**ARTICLE 16 – ARREARS**

The CONSULTANT shall not pledge the (CLIENT)'s credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien, or any form of indebtedness. The CONSULTANT





further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this contract.

#### **ARTICLE 17 – DISCLOSURE AND OWNERSHIP OF DOCUMENTS**

The CONSULTANT shall deliver to (CLIENT) for approval and acceptance, and before being eligible for final payment or any amounts due, all documents and materials prepared by and for (CLIENT) under this Contract.

All oral and written information not in the public domain or not previously known, and all information and data obtained, developed or supplied by the (CLIENT), or at its expense, will be kept confidential by the CONSULTANT and will not be disclosed to any other party, directly or indirectly, without the (CLIENT)'s prior written consent unless required by a lawful order. All drawings, maps, sketches, programs, data base, reports and other data developed, or purchased, under this Contract for or at the (CLIENT)'s expense shall be and remain the (CLIENT)'s property and may be reproduced at the discretion of the (CLIENT).

All covenants, agreements, representations, and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Contract and the consummation of the transactions contemplated hereby.

#### **ARTICLE 18 – INDEPENDENT CONTRACTOR RELATIONSHIP**

The CONSULTANT is, and shall be, in the performance of all work services and activities under this Contract, an Independent Contractor, and not an employee, agent or servant of the COUNTY. All persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the CONSULTANT'S sole discretion, supervision, and control. The CONSULTANT shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the CONSULTANT'S relationship and the relationship of its employees to (CLIENT) shall be that of an Independent Contractor and not as employees or agents of (CLIENT).

The CONSULTANT does not have the power of authority to bind (CLIENT) in any promise, agreement or representation other than as specifically provided for in this Agreement.

#### **ARTICLE 19 – CONTINGENT FEES**

The CONSULTANT warrants that it has not employed or retrained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Contract and that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract.

**ARTICLE 20 – ACCESS AND AUDITS**

The CONSULTANT shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the work for at least three (3) years after completion of the contract,

(CLIENT) shall have access to all records, documents and information collected and/or maintained by others in the course of the administration of the contract. This information shall be made accessible at the CONSULTANT'S local place of business to (CLIENT), including the Comptroller's Office and/or designees, for purposes of inspection, reproduction and audit without restriction. If records are unavailable local, it shall be the CONSULTANT'S responsibility to ensure that all required records are provided to (CLIENT) at the CONSULTANT'S expense.

**ARTICLE 21 – NONDISCRIMINATION**

The CONSULTANT warrants and represents that all of its employees are treated equally during employment without regard to race, color, religion, physical disabilities, sex, sexual orientation, age, or national origin.

**ARTICLE 22 – ENTIRETY OF CONTRACTUAL AGREEMENT**

(CLIENT) and the CONSULTANT agree that this Contract sets for the entire agreement between parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to deleted, modified, superseded, or otherwise altered, except by written instrument executed by the parties hereto.

**ARTICLE 23 – ENFORCEMENT COSTS**

If any legal action or other proceeding is brought for the enforcement of this Contract, or because of an alleged dispute, breach, default or misrepresentation in connection with any provisions of this Contract, the successful or prevailing party or parties shall be entitled to recover reasonable attorney's fees, court costs and all expenses (including taxes) even if not taxable as court costs (including without limitation, all such fees, costs and expenses incident to appeals), incurred in that action or proceeding, in addition to any other relief to which such party or parties may be entitled.

**ARTICLE 24 – AUTHORITY TO PRACTICE**

The CONSULTANT hereby represents and warrants that it has and will continue to maintain all licenses and approvals required to conduct its business, and that it will at all times conduct its business activities in a reputable manner. Proof of such licenses and approvals shall be submitted to (CLIENT) upon request.

**ARTICLE 25 – SEVERABILITY**

If any term or provision of the Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Contract, or the application of such terms or provision, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Contract shall be deemed valid and enforceable to the extent permitted by law.



**ARTICLE 26 – MODIFICATIONS OF WORK**

(CLIENT) reserves the right to make changes in the work, including alterations, reductions therein or additions thereto. Upon receipt by the CONSULTANT OF (CLIENT)'s notification of a contemplated change, the CONSULTANT shall (1) if requested by (CLIENT), provided an estimate for the increase or decrease in cost due to the contemplated change, (2) notify (CLIENT) of any estimated change in the completion date, and (3) advise (CLIENT) in writing if the contemplated change shall affect the CONSULTANT'S ability to meet the completion dates or schedules of this Contract.

If (CLIENT) so instructs, in writing, the CONSULTANT shall suspend work on that portion of the work affected by a contemplated change, pending (CLIENT)'s decision to proceed with the change.

If (CLIENT) elects to make the change, (CLIENT) shall issue a Modification or Change Order and the CONSULTANT shall not commence work on any such change until written amendment or change order has been issued and signed by each of the parties.

**ARTICLE 27 – NOTICE**

All notices required in this Contract shall be sent to (CLIENT) shall be mailed to:

(CLIENT)

Street Address

\_\_\_\_\_, New Jersey [Zip Code]

IN WITNESS WHEREOF, (CLIENT) has made and executed this Contract as hereunto set its hand the day and year above written.

By: \_\_\_\_\_ [NAME], [TITLE]

Date: \_\_\_\_\_

By: \_\_\_\_\_ [NAME], [TITLE]

Date: \_\_\_\_\_

CONSULTANT: \_\_\_\_\_ [NAME], [TITLE]

Company Name:

Date: \_\_\_\_\_





**EXHIBIT "A"**  
**REQUEST FOR QUALIFICATIONS**



## **APPENDIX K: LINKAGE PROCEDURES**



This Appendix contains the linkage procedures for the Sussex County Hazard Mitigation Plan.

## ADMINISTRATIVE PROCESS FOR “LINKAGE” TO THE SUSSEX COUNTY HAZARD MITIGATION PLAN

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The development of the Sussex County Hazard Mitigation Plan 2025 Update (the Plan) included the County and all eligible local governments within the defined planning area are included in this plan. Completed jurisdictional annexes are presented in Volume II. Any non-participating local jurisdictions such as Fire Districts, Utility Districts, School Districts, and any other eligible local government as defined in 44 CFR 201.2 within the Sussex County planning area can join this plan as a participating jurisdiction and to ultimately achieve approved status by following the linkage procedures defined in this appendix.

It is assumed that some or all these local jurisdictions may choose to “link” to the Plan at some point in time to gain eligibility for programs under the DMA. In addition, some of the current partnership may not continue to meet eligibility requirements due to the lack of active participation as prescribed by the plan. These “linkage” procedures will define the requirements established by the Sussex County HMP Steering Committee and all planning partners for dealing with the increase or decrease in planning partners linked to this plan. It should be noted that currently non-participating jurisdictions within the defined planning area are not obligated to link to this plan. These jurisdictions can choose to do their own “complete” plan that addresses all required elements of section 201.6 of 44CFR.

## INCREASING THE PARTNERSHIP THROUGH LINKAGE

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### Eligibility

Eligible jurisdictions located in the planning area may link to this plan at any point during the plan’s performance period. Eligible jurisdictions located in the planning area may link to this plan at any point during the plan’s performance period (5 years after final approval). Eligibility will be determined by the following factors:

- The linking jurisdiction is a local government as defined by the Disaster Mitigation Act.
- The boundaries or service area of the linking jurisdiction is completely contained within the boundaries of the planning area established during the 2025 hazard mitigation plan development process.
- The linking jurisdiction’s critical facilities were included in the critical facility and infrastructure risk assessment completed during the 2025 plan development process.

### 1.1.1 Requirements

It is expected that linking jurisdictions will complete the requirements outlined below and submit their completed template to the lead agency Sussex County Division of Emergency Management for review within six months of beginning the linkage process:

1. The Sussex County Hazard HMP Steering Committee has established an annual window for which linkage to the plan can occur. Linking jurisdictions are instructed to complete the following procedures during this time frame.
2. The current non-participating jurisdiction contacts the Sussex County HMP Coordinator for the Plan and requests a “Linkage Package”. The Sussex County HMP Coordinator is:



Steve Sugar, Deputy Emergency Management Coordinator  
Division of Emergency Management, Sussex County Sheriff's Office  
135 Morris Turnpike  
Newton, New Jersey 07860  
(973) 579-0380  
Email: [ssugar@sussexcountysheriff.com](mailto:ssugar@sussexcountysheriff.com)

3. The Sussex County HMP Coordinator will provide a linkage package that includes:
  - Copy of Volume I and II of the Plan (CDROM).
  - Planning Partner's Expectations Sheet.
  - A Sample "Letter of Intent" to Link to the Plan.
  - A Jurisdictional Template and Instructions.
  - Catalog of Hazard Mitigation Alternatives or the Mitigation Catalog.
  - A copy of Section 201.6 of Chapter 44, the Code of Federal Regulations (44CFR), which defines the federal requirements for a local hazard mitigation plan.
4. The new jurisdiction will be required to review both volumes of the Plan which includes the following key components for the planning area:
  - The Sussex County risk assessment;
  - The plan's goals and objectives;
  - Plan implementation and maintenance procedures;
  - Catalog of potential mitigation actions; and
  - County-wide initiatives.

Once this review is complete, the jurisdiction will complete its specific jurisdictional annex by following the template and its instructions for completion provided by the Sussex County HMP Coordinator. Technical assistance can be provided upon request by completing the request for technical assistance (TA) form provided in the linkage package. This TA may be provided by the Sussex County HMP Coordinator or any other resource within the Planning Partnership such as a member of the HMP Steering Committee or a currently participating jurisdiction. The Sussex County HMP Coordinator will determine who will provide the TA and the possible level of TA based on resources available at the time of the request.

5. The new jurisdiction will also be required to develop a public involvement strategy that ensures their public's ability to participate in the plan development process. At a minimum, the new jurisdiction must make an attempt to solicit public opinion on hazard mitigation at the onset of this linkage process and a minimum of one public meeting to present their draft jurisdiction specific annex for comment, prior to adoption by the governing body. The Planning Partnership will have available resources to aid in the public involvement strategy such as the Plan website. However, it will be the new jurisdiction's responsibility to implement and document this strategy for incorporation into their annex.

It should be noted that the Jurisdictional Annex templates do not include a section for the description of the public process. This is because the original partnership was covered under a uniform public involvement



strategy that covered the operational area that is described in Volume I of the plan. Since the new partner was not addressed by that strategy, they will have to initiate a new strategy, and add a description of that strategy to their annex. For consistency, new partners are encouraged to follow the public involvement format utilized by the initial planning effort as described in Volume I of the Plan.

6. Once their public involvement strategy is completed and they have completed their template, the new jurisdiction will submit the completed package to the Sussex County HMP Coordinator for a pre-adoption review to ensure conformance with the regional plan format.
7. The Sussex County HMP Coordinator will review for the following:
  - Documentation of public involvement and mitigation action development strategies;
  - Conformance of template entries with guidelines outlined in instructions;
  - Chosen actions are consistent with goals, objectives, and mitigation catalog of Sussex County Hazard Mitigation Plan; and
  - Designated point of contact.

The Sussex County HMP Coordinator may utilize members of the HMP Steering Committee or other resources to complete this review. All proposed linked annexes will be submitted to the HMP Planning Committee for their review and comment prior to submittal to the New Jersey Office of Emergency Management (NJOEM).

8. Plans approved and accepted by the HMP Steering Committee will then be forwarded to NJOEM for review with cover letter stating the forwarded plan meets local approved plan standards and whether the plan is submitted with local adoption or for criteria met/plan not adopted review.
9. NJOEM will review plans for state and federal compliance. Non-compliant plans are returned to the jurisdiction for correction. Compliant plans are forwarded to FEMA Region II office for review with annotation as to the adoption status.
10. FEMA Region II reviews the new jurisdiction's plan in association with the approved plan to ensure DMA compliance. Region II notifies new jurisdiction of results of review with copies to NJOEM and approved planning authority.
11. New jurisdiction corrects plan's shortfalls (if necessary) and resubmits to NJOEM through the approved plan lead agency.
12. For plans with no shortfalls that have not been adopted from the Region II review or outstanding corrected shortfalls, the new jurisdiction governing authority adopts the plan (if not already accomplished) and forwards adoption resolution to Region II with copies to lead agency and NJOEM.
13. Region II Director notifies new jurisdiction governing authority of plan approval.
14. The new jurisdiction plan is then included with the Sussex County HMP and the linking jurisdiction is committed to participate in the ongoing plan implementation and maintenance identified in Volume I of the HMP.