

COUNTY OF ESSEX

HAZARD MITIGATION PLAN

2025 UPDATE



APPENDICES

APRIL 2025



BLACK & VEATCH



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APPENDIX A: PLAN ADOPTION

The Essex 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 Section 18 (Maintaining the Hazard Mitigation Plan) for additional information on plan adoption procedures.

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



Sample Adoption Resolution

(LOCAL GOVERNMENT, INCLUDING SPECIAL DISTRICTS), (STATE)

RESOLUTION NO.

A RESOLUTION OF (LOCAL GOVERNMENT) ADOPTING THE (TITLE AND DATE OF 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 (title and date of mitigation plan) in accordance with federal laws, including the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#), as amended; the [National Flood Insurance Act of 1968](#), as amended; and the [National Dam Safety Program Act](#), as amended; and

WHEREAS (title and date of mitigation plan) identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in (local government) from the impacts of future hazards and disasters; and

WHEREAS adoption by the (local governing body) demonstrates its commitment to hazard mitigation and achieving the goals outlined in the (title and date of mitigation plan).

NOW THEREFORE, BE IT RESOLVED BY THE (LOCAL GOVERNMENT), (STATE), THAT:

Section 1. In accordance with (local rule for adopting resolutions), the (local governing body) adopts the (title and date of mitigation plan). While content related to (local government) may require revisions to meet the plan approval requirements, changes occurring after adoption will not require (local government) to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

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)



COUNTY OF ESSEX NEW JERSEY
BOARD OF COUNTY COMMISSIONERS

State of New Jersey,}
County of Essex} ss

I Kathy Brown Deputy Clerk of the Board of County

Commissioners of the County of Essex in the State of New Jersey

Do Hereby Certify, the foregoing to be a true copy of a resolution adopted at a
meeting of said Board on Wednesday

the 14th day of May, 2025 together with the certification,
signatures and endorsements thereon.

RESOLUTION NO. R-2025-00553, 00554, 00555, 00563, 00564, 00565, 00591

*IN Testimony WHEREOF, I have hereunto set my
hand and affixed the official seal of said County at
Newark this 15th day
of May A.D. 2025*

Deputy Clerk of the Board

18

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS
COUNTY OF ESSEX

RESOLUTION NO. R-2025 CC565 AUTHORITY FOR RESOLUTION: N.J.S.A. 40:41A-38(n)

PROPOSED BY: COUNTY EXECUTIVE AUTHORITY FOR ACTION: N.J.S.A. 40:41A-36(i)

SUBJECT:

OFFICE OF THE SHERIFF - RESOLUTION AUTHORIZING THE ADOPTION OF THE 2025 ESSEX COUNTY ALL HAZARD MITIGATION PLAN UPDATE

WHEREAS Essex County recognizes the threat that natural hazards pose to people and property within the County; and

WHEREAS the Essex County Office of the Sheriff has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the **Robert T. Stafford Disaster Relief and Emergency Assistance Act**, as amended; the **National Flood Insurance Act of 1968**, as amended; and the **National Dam Safety Program Act**, as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the county from the impacts of future hazards and disasters; and

WHEREAS adoption by Essex County demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE ESSEX COUNTY BOARD OF COUNTY COMMISSIONERS, THAT:

1. In accordance with (local rule for adopting resolutions), the Essex County Office of the Sheriff adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the County may require revisions to meet the plan approval requirements, changes occurring after adoption will not require (local government) to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

2. That the Clerk of the Board will forward one (1) copy of this Resolution to the Office of the Sheriff.

RECEIVED
CLERK OF THE BOARD
2025 MAY -7 PM 2:02
ESSEX COUNTY
BOARD OF
COUNTY COMMISSIONERS

Approved as to form and legality _____ Date _____

ESSEX COUNTY COUNSEL

RECORD OF VOTE (X=Vote N.V.=Abstention ABS=Absent)

Moved by Commissioner

Second by Commissioner

Sebold
Cooper

Commissioner	Yes	No	N.V.	ABS	Commissioner	Yes	No	N.V.	ABS
Cooper, V.P.	✓				Pomares, Pres.	✓			
Gill	✓				Richardson				✓
Luciano				✓	Sebold	✓			
Mercado	✓				Sermons	✓			
Murray-Thomas	✓								

It is hereby certified that the foregoing Resolution was (✓) adopted () defeated () tabled by roll call vote at a regular meeting of the Board of County Commissioners of the County of Essex, New Jersey held on 5/14/25.

Is Publication Required () Yes () No

Date Published _____

Carlos M. Pomares
Carlos M. Pomares, President

2025 Hazard Mitigation Plan Update
4/30/2025

**TOWNSHIP OF BELLEVILLE
ESSEX COUNTY, NEW JERSEY**

RESOLUTION NO. 084-2025

DATE OF ADOPTION: April 22, 2025

TITLE:

A RESOLUTION OF THE TOWNSHIP OF BELLEVILLE, COUNTY OF ESSEX, NEW JERSEY, ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Township of Belleville recognizes the threat that natural hazards pose to people and property within the Township of Belleville; and

WHEREAS, the Township of Belleville has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Township of Belleville from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Mayor and Municipal Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE TOWNSHIP OF BELLEVILLE, NEW JERSEY, THAT:

Section 1. In accordance with (local rule for adopting resolutions), the Mayor and Municipal Council adopt the 2025 Essex County Hazard Mitigation Plan. While content related to the Township may require revisions to meet the plan approval requirements, changes occurring after adoption will not require (local government) to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

ADOPTED by a vote of 7 in favor and 0 against, and 0 abstaining, this 22nd day of April 2025.

By: Mayor and Municipal Council

ATTEST: By: Alberto Cabrera

APPROVED AS TO FORM: By: Mark Minichini


RESOLUTION#084-2025
APRIL 22, 2025

On a motion by Council Member GUARDABASCO

Seconded by Council Member COZZARELLI

Adopted by the Municipal Council of the Township of Belleville, N.J.									
COUNCIL RECORD OF VOTE									
Council Member	YES	NO	N.V.	AB.	Council Member	YES	NO	N.V.	AB.
COZZARELLI	X				MULDROW	X			
DE PEÑA	X				VELEZ	X			
GRAZIANO	X				MAYOR MELHAM	X			
GUARDABASCO	X								
X - Indicates Vote				N.V. - Not Voting			AB - Absent		

I, Alberto Cabrera, Registered Municipal Clerk, for the Township of Belleville, do hereby certify that the foregoing is a true copy of a resolution adopted by the Belleville Township Council at a meeting held on the 22ND day of APRIL, 2025.


Alberto Cabrera, Township Clerk


Steven Martino, Township Attorney

Mark Minichini
Chief of Police



Township Council
1 Municipal Plaza
Bloomfield, NJ 07003

Louise M. Palagano
Municipal Clerk

<http://www.bloomfieldtnj.com>

Meeting: 04/21/25 07:00 PM

2025 RESOLUTION APPROVAL

RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Township of Bloomfield recognizes the threat that natural hazards pose to people and property within the Township; and

WHEREAS, the Township of Bloomfield has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Bloomfield from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Mayor and Township Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan. **NOW, THEREFORE**,

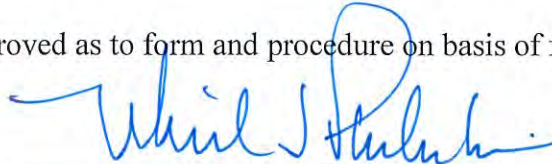
BE IT RESOLVED By the Mayor and Council of the Township of Bloomfield, New Jersey, that:

Section 1. In accordance with §5-22 of the Code of the Township of Bloomfield, the Mayor and Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of Bloomfield may require revisions to meet the plan approval requirements,

changes occurring after adoption will not require the Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

......*

Approved as to form and procedure on basis of facts set forth.



Director of Law-Township Attorney

I do hereby certify that the funding will be legally appropriated per the above information for the purpose specified in the attached contract. Furthermore, it has been represented to me that the contracts have been processed in accordance with the applicable provisions of New Jersey Local Public Contract Law and the Code of the Township of Bloomfield.

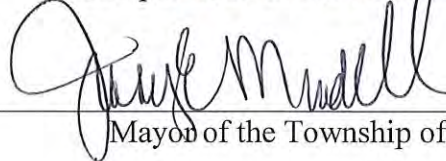


Chief Financial Officer

I hereby certify that the above resolution was duly adopted by the Mayor and Council of the Township of Bloomfield at a meeting of said Township Council held on April 21, 2025.



Municipal Clerk of the Township of Bloomfield



Mayor of the Township of Bloomfield

✓ Vote Record – Resolution						
<input type="checkbox"/> Adopt			Yes/Aye	No/Nay	Abstain	Absent
<input type="checkbox"/> Deny						
<input type="checkbox"/> Withdrawn						
<input type="checkbox"/> Table						
<input type="checkbox"/> Not Discussed						
<input type="checkbox"/> First Reading						
<input type="checkbox"/> Table with no Vote						
<input type="checkbox"/> Approve						
<input type="checkbox"/> Veto by Mayor						
<input type="checkbox"/> Discussion						
<input type="checkbox"/> Defeated						
<input type="checkbox"/> Discussion No Vote						
	Rosalee Gonzalez		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nicholas Joanow		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sarah Cruz		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Monica Charris Tabares		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Wartyna Davis		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Widney Polynice		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Jenny Mundell		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**BOROUGH OF CALDWELL
NEW JERSEY**

Resolution No: 4-120
Date of Adoption: April 15, 2025

TITLE:
A RESOLUTION OF THE BOROUGH OF CALDWELL ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Borough of Caldwell recognizes the threat that natural hazards pose to people and property within Caldwell; and

WHEREAS, the Borough of Caldwell has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#), as amended; the [National Flood Insurance Act of 1968](#), as amended; and the [National Dam Safety Program Act](#), as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in The Borough of Caldwell from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Borough Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE BROUGH OF CALDWELL, NEW JERSEY, THAT:

Section 1. In accordance with {local rule for adopting resolutions}, the Borough Council of the Borough of Caldwell adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Borough of Caldwell may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Borough Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

RECORD OF COUNCIL VOTE

Councilwoman Hunkele presented the following resolution - Seconded by: Councilwoman Buechner

COUNCIL MEMBER Yes No Absent Abstain COUNCIL MEMBER Yes No Absent Abstain

Daniolowicz	✓				Rodeffer	✓			
Brown	✓				Buechner	✓			
Jurgensen	✓				Hunkele	✓			

Brittany Heun
Brittany Heun, Borough Clerk

Garrett Jones
Garrett Jones, Mayor

This resolution, when adopted, must remain in the possession of the Municipal Clerk. Certified copies are available.

**TOWNSHIP OF CEDAR GROVE
ESSEX COUNTY, NEW JERSEY**

AGENDA ITEM: #7(g)

APRIL 21, 2025

**RESOLUTION OF THE TOWNSHIP OF CEDAR GROVE ADOPTING THE 2025
ESSEX COUNTY HAZARD MITIGATION PLAN**

WHEREAS, the Township of Cedar Grove recognizes the threat that natural hazards pose to people and property within the Township of Cedar Grove; and

WHEREAS, the Township of Cedar Grove has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan, in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, the National Flood Insurance Act of 1968, as amended, and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions and reduces or eliminates long term risks to people and property in the Township of Cedar Grove from future hazards and disasters; and

WHEREAS, adoption of this resolution by the Township Council of the Township of Cedar Grove demonstrates a commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of Cedar Grove that the Township Council hereby adopts the 2025 Essex County Hazard Mitigation Plan.

BE IT FURTHER RESOLVED that content related to the Township of Cedar Grove may require revisions to meet plan approval requirements and such changes occurring after adoption of this resolution will not require subsequent, additional adoptions codifying future iterations of the plan and that subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

INTRODUCED BY: Deputy Mayor Mega

SECONDED BY: Councilman Maceri

ROLL CALL VOTE				
COUNCILMEMBER	YES	NO	ABSTAIN	ABSENT
Maceri	X			
Peterson				X
Zazzali	X			
Mega	X			
Skabich	X			

**CERTIFIED TO BE A
TRUE COPY OF THE ORIGINAL**

0421060msn


**TOWNSHIP CLERK
CEDAR GROVE, NJ**

CITY COUNCIL OF EAST ORANGE

RESOLUTION OFFERED BY COUNCIL MEMBER GOMEZ

A RESOLUTION OF THE CITY OF EAST ORANGE ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the City of East Orange recognizes the threat that natural hazards pose to people and property within the City of East Orange; and

WHEREAS, the County of Essex in collaboration with the City of East Orange has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of East Orange from the impacts of future hazards and disasters; and

WHEREAS, adoption of this mitigation plan by the City Council of the City of East Orange demonstrates its commitment to hazard mitigation and to achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EAST ORANGE, NEW JERSEY, THAT, in accordance with applicable municipal procedures and regulations for adopting resolutions, the City Council hereby adopts the 2025 Essex County Hazard Mitigation Plan. While content specific to the City of East Orange may be revised to meet plan approval requirements, any changes made after this adoption will not require the City of East Orange to re-adopt subsequent iterations of this plan. Future updates following the approval period for this plan will require separate adoption by resolution.

I HEREBY CERTIFY THAT FOREGOING TO BE A TRUE COPY
OF RESOLUTION NO. 217 ADOPTED BY THE CITY
COUNCIL OF EAST ORANGE AT ITS MEETING HELD

June 16, 2025
Cynthia S. Brown
CITY CLERK, EAST ORANGE, NJ

Council Member	AYE	NAY	N.V.	AB	VETO
GOMEZ	✓				
MONK	✓				
LENEUS	✓				
LEWIS				✓	
FAUNTLEROY	✓				

Council Member	AYE	NAY	N.V.	AB	VETO
HOLMAN	✓				
GARRETT-WARD				✓	
AWE	✓				
JAMES	✓				
PULLINS, JR.	✓				

X - Indicates Vote A.B. - Absent
Action on Veto - ✓ To Sustain

N.V - Not Voting (Abstained or Excused)
✓ To Over-Ride

VOTES REQUIRED _____

Approved as to:
Factual Contents Cynthia S. Brown
Department Head

Appropriation _____
Comptroller

Form and Legality Cynthia S. Brown
Counsel

6/11/25

Tabled _____

Removed from Table _____

Presented to Mayor June 17, 2025

Adopted June 16, 2025

Approved Ted R. Green, Mayor

Vernon Pullins, Jr., City Council Chairman

Vetoed _____

Cynthia S. Brown, City Clerk

Mayor

Entered on Council Minutes, Page _____

BOROUGH OF ESSEX FELLS
RESOLUTION
2025-80

A RESOLUTION OF THE BOROUGH OF ESSEX FELLS ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS the Borough of Essex Fells recognizes the threat that natural hazards pose to people and property within Borough of Essex Fells; and

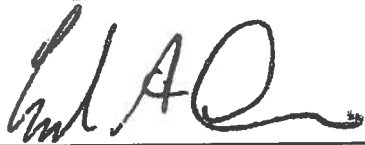
WHEREAS the Borough of Essex Fells has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Borough of Essex Fells from the impacts of future hazards and disasters; and

WHEREAS adoption by the Mayor and Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE BE IT RESOLVED, BY THE BOROUGH OF ESSEX FELLS, NEW JERSEY, the Mayor and Council adopt the 2025 Essex County Hazard Mitigation Plan. While content related to the Borough of Essex Fells may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Adopted: April 15, 2025


Edward A. Davis, Mayor

Attest: 
Francine T. Paserchia, Borough Clerk

	RECORDED VOTE		
	Ayes	Nays	Absent
Councilman CECERE	X		
Councilman D'AVELLA I	X		
Councilwoman GOLDMAN	X		
Councilman KING	X		
Councilwoman O'CONNOR II	X		
Councilman SULLIVAN	X		

**TOWNSHIP OF FAIRFIELD
RESOLUTION #2025-221**

**A RESOLUTION OF THE TOWNSHIP OF FAIRFIELD ADOPTING THE 2025 ESSEX COUNTY
HAZARD MITIGATION PLAN**

WHEREAS the Township of Fairfield recognizes the threat that natural hazards pose to people and property within Fairfield; and

WHEREAS, the Township of Fairfield has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

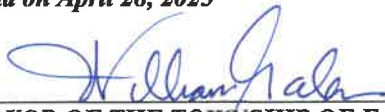
WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township of Fairfield from the impacts of future hazards and disasters; and

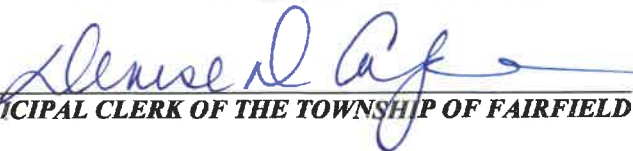
WHEREAS, adoption by the Mayor and Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE BE IT RESOLVED, by the Mayor and Council of the Township of Fairfield, County of Essex, State of New Jersey hereby adopts the 2025 Essex County Hazard Mitigation Plan; and

BE IT FURTHER RESOLVED, while content related to Township of Fairfield may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

I hereby certify that the above resolution was adopted by the Mayor and Council of the Township of Fairfield at a meeting of said Governing Body held on April 28, 2025


MAYOR OF THE TOWNSHIP OF FAIRFIELD


MUNICIPAL CLERK OF THE TOWNSHIP OF FAIRFIELD

Resolution By: Council President Campisi

Seconded By: Councilman McGlynn

ROLL CALL VOTE

GOVERNING BODY	AYES	NAYS	ABSTAIN	ABSENT	NOT VOTING
COUNCIL PRESIDENT JOSEPH CIFELLI	X				
COUNCILMAN MICHAEL B. MCGLYNN	X				
COUNCILMAN JOHN LAFORGIA	X				
COUNCILMAN PETER CAMPISI	X				
MAYOR WILLIAM GALESE	X				

Cc: OEM RJ Casecendino

S:\Reso 2025 OEM Adoption of the 2025 Hazardous Mitigation Plan April 28 2025



THE MAYOR AND BOROUGH COUNCIL
of the
BOROUGH OF GLEN RIDGE
County of Essex
State of New Jersey

Monday, April 28, 2025

RESOLUTION NO. 92-25

Offered by Councilor **HUGHES**
Seconded by Councilor **LEFKOVITS**

A RESOLUTION OF THE BOROUGH OF GLEN RIDGE ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS the Borough of Glen Ridge recognizes the threat that natural hazards pose to people and property within the Borough of Glen Ridge; and

WHEREAS the Borough of Glen Ridge has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Borough of Glen Ridge from the impacts of future hazards and disasters; and

WHEREAS adoption by the Mayor and Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE BOUGH OF GLEN RIDGE, NEW JERSEY, THAT in accordance with the Borough of Glen Ridge, New Jersey By-Laws of the Borough Council, the Mayor and Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Borough of Glen Ridge may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Borough of Glen Ridge to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

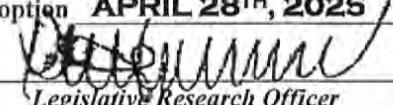
RECORDED VOTE:	Ayes		Nays		Abstained		Absent	
(Insert last name)	Lefkovits	Law	None		None		None	
	Hughes	Meyer						
	Zimet	Moody						

I, Michael P. Zichelli, Municipal Deputy Clerk of The Borough of Glen Ridge, in The County of Essex and in The State of New Jersey, do hereby certify the foregoing to be a true and correct copy of a Resolution adopted by The Mayor and The Borough Council on Monday, April 28, 2025.

Michael P. Zichelli
Deputy Municipal Clerk

RESOLUTION OF THE TOWNSHIP OF IRVINGTON, NEW JERSEY

No. **DF 25-0428-7**

Date of Adoption **APRIL 28TH, 2025**

Legislative Research Officer

APPROVED AS TO FORM AND LEGALITY ON THE BASIS OF FACTS SET FORTH BY

PRESENTED BY COUNCIL MEMBER **BROWN** SECONDED BY **BEASLEY**

A RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Municipal Council of the Township of Irvington recognizes the threat that natural hazards pose to people and property within Township of Irvington; and

WHEREAS, the Township of Irvington has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Township of Irvington from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Municipal Council of the Township of Irvington demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE MUNICIPAL COUNCIL OF THE TOWNSHIP OF IRVINGTON JERSEY, THAT the Municipal Council of the Township of Irvington adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of Irvington may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Township of Irvington to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

RECORD OF COUNCIL VOTE

X = Indicates Vote N.V. = No Vote A.B. = Absent									
COUNCIL MEMBER	YES	NO	N.V.	A.B.	COUNCIL MEMBER	YES	NO	N.V.	A.B.
ANTILUS	X				VAUSS, JR.	X			
BROWN	X				VICK				X
DR. FREDERIC, 2 ND VICE PRES.	X				BEASLEY, PRESIDENT	X			
DR. HUDLEY, 1 ST VICE PRES.	X								

PRESIDENT OF COUNCIL

I hereby certify that the foregoing is a true copy of a Resolution duly adopted by the Municipal Council. In witness whereof I have hereunto set my hand and the Corporate Seal of the Township of Irvington.

MUNICIPAL CLERK

DATE **APR 28 2025**



**TOWNSHIP OF LIVINGSTON
ESSEX COUNTY, NEW JERSEY**

RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Township of Livingston recognizes the threat that natural hazards pose to people and property within the Township of Livingston; and

WHEREAS, the Township of Livingston has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township of Livingston from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Township Council of the Township of Livingston demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED that the Township Council of the Township of Livingston adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of Livingston may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Township Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Adopted: April 28, 2025


Carolyn Mazzucco, RMC
Township Clerk

TOWNSHIP OF MAPLEWOOD



RESOLUTION NO. 137-25

RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Township of Maplewood recognizes the threat that natural hazards pose to people and property within Township of Maplewood; and

WHEREAS, the Township of Maplewood has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Township of Maplewood from the impacts of future hazards and disasters; and

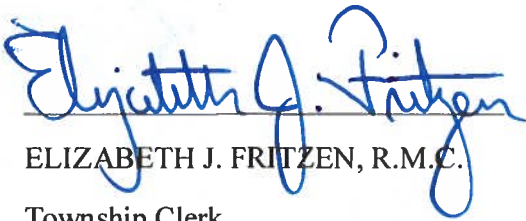
WHEREAS, adoption by the Township Committee demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED, by the Township Committee of the Township of Maplewood, County of Essex, State of New Jersey, that:

Section 1. The Township Committee adopts the 2025 Essex County Hazard Mitigation Plan. While content related to Township of Maplewood may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Township of Maplewood to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

I, Elizabeth J. Fritzen, Township Clerk of the Township of Maplewood, in the County of Essex and State of New Jersey, do hereby certify that the foregoing is a true and correct copy of a Resolution adopted by the Township Committee of the Township of Maplewood, County of Essex, State of New Jersey, at a regular meeting of said Committee held on April 15th, 2025.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Township of Maplewood in the County of Essex and State of New Jersey, on this 15th day of April 2025.

A handwritten signature in blue ink, reading "Elizabeth J. Fritzen", is written over a horizontal line. The signature is stylized with a large initial "E" and a prominent "F".

ELIZABETH J. FRITZEN, R.M.C.

Township Clerk

**TOWNSHIP OF MILLBURN
RESOLUTION 25-128
ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN**

WHEREAS the Township of Millburn recognizes the threat that natural hazards pose to people and property within Township of Millburn; and

WHEREAS the Township of Millburn has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan (<https://www.essexsheriff.com/oem/all-hazard-mitigation-plan/>) in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Township of Millburn from the impacts of future hazards and disasters; and

WHEREAS adoption by the Township Committee demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED BY THE TOWNSHIP OF MILLBURN, NEW JERSEY, THAT:

Section 1. The Millburn Township Committee adopts the 2025 Essex County Hazard Mitigation Plan. While content related to Township of Millburn may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Millburn Township to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Adopted by Township Committee on May 6, 2025

I, Christine A. Gatti, Municipal Clerk of the Township of Millburn, do hereby certify this document to be a true copy of the original which is on file in my office.

Date:

5/7/2025


Christine A. Gatti, Municipal Clerk
Township of Millburn

R-25-144
TOWNSHIP OF MONTCLAIR

**RESOLUTION OF TOWNSHIP OF MONTCLAIR ADOPTING THE 2025 ESSEX
COUNTY HAZARD MITIGATION PLAN**

May 20, 2025

WHEREAS the Township of Montclair recognizes the threat that natural hazards pose to people and property within the Township of Montclair; and

WHEREAS the Township of Montclair has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#), as amended; the [National Flood Insurance Act of 1968](#), as amended; and the [National Dam Safety Program Act](#), as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township of Montclair from the impacts of future hazards and disasters; and

WHEREAS adoption by the Mayor and Council of the Township of Montclair, in the County of Essex, demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan, and

NOW THEREFORE, BE IT RESOLVED by the Mayor and Council of the Township of Montclair, New Jersey, that:

Section 1. In accordance with § 161 of the Code of the Township of Montclair, the Mayor and Council of the Township of Montclair, in the County of Essex, adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of Montclair may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

RECORD OF COUNCIL VOTE						
COUNCIL MEMBER	MOVANT	SECOND	YES	NO	ABSTAIN	ABSENT
Deputy Mayor Andersen		✓	✓			
Councilor Birmingham			✓			
Councilor D'Amato			✓			
Councilor Loughman			✓			
Councilor Toler			✓			
Councilor Williams			✓			
Mayor Baskerville	✓		✓			

I HEREBY CERTIFY the foregoing to be a true copy of Resolution R-25-144 adopted by the Mayor and Council of the Township of Montclair, in the County of Essex, at its meeting held on May 20, 2025.


Angelese Bermúdez Nieves, Township Clerk



City of Newark

City Hall
920 Broad Street
Newark, New Jersey
07102

Resolution

7R9-b 05/21/2025

File ID: 25-0599

Type: Resolution

Status: Adopted

Dept/ Agency: Public Safety / Office of Emergency Management

Action: (X) Ratifying (X) Authorizing () Amending

Type of Service: 2025 Essex County Hazard Mitigation Plan

Purpose: Resolution authorizing the City of Newark to adopt Essex County All Hazard Mitigation Plan 2025

Entity Name: Essex County Sheriff's Office (Office of Emergency Management)

Entity Address: 560 Northfield Avenue, West Orange, New Jersey 07052

Contract Amount: No municipal funds required

Funding Source: N/A

Contract Period: N/A

Contract Basis: () Bid () State Vendor () Prof. Ser. () EUS

() Fair & Open () No Reportable Contributions () RFP () RFQ

() Private Sale () Grant () Sub-recipient (X) n/a

Additional Information:

WHEREAS, the City of Newark recognizes the threat that natural hazards pose to people and property within the City of Newark; and

WHEREAS, the County of Essex, in conjunction with the City of Newark Office of Emergency Management, has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan ("Plan") in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Newark from the impacts of future hazards and disasters; and

WHEREAS, adoption of the Plan by the City of Newark demonstrates its commitment to hazard mitigation and to achieving the goals outlined in the Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE MUNICIPAL COUNCIL OF THE CITY OF NEWARK, NEW JERSEY, THAT:

1. The 2025 Essex County Hazard Mitigation Plan ("Plan") is hereby adopted. While the

content of the Plan as it relates to the City of Newark may require revisions to meet the plan approval requirements, such revisions occurring after adoption of this Resolution will not require the Municipal Council to re-adopt any further iterations of the Plan. Subsequent Plan updates after the approval period for this specific Plan concludes will require separate Municipal Council approval.

STATEMENT


This resolution ratifies and authorizes the City of Newark ("City") to adopt the 2025 Essex County All Hazard Mitigation Plan as the City's Natural Hazard Mitigation Plan, and requires the City to execute the actions identified in the Plan that pertain to our jurisdiction, in an effort to address the natural hazards, and to remain in compliance with the Disaster Mitigation Act of 2000. No municipal funds are required.

Approval History

Version	Seq #	Action Date	Approver	Action	Due Date
1	1	4/24/2025	Tanya Fraser	Approved as Modified	4/25/2025
1	2	4/24/2025	John Sharpe James	Approved	4/28/2025
1	3	4/24/2025	Joseph Pastore	Approved	4/28/2025
1	4	4/24/2025	Jeannet Pavez	Delegated	
1	5	5/6/2025	Ronald Kleckley	Approved as Modified	4/28/2025
1	6	5/12/2025	Eric S. Pennington	Approved	5/8/2025
1	7	5/14/2025	Tatiana Hidalgo	Approved	5/19/2025
1	8	5/14/2025	Michelle Nelson	Approved	5/16/2025
1	9	5/14/2025	Kenyatta Stewart	Approved	5/16/2025

History of Legislative File

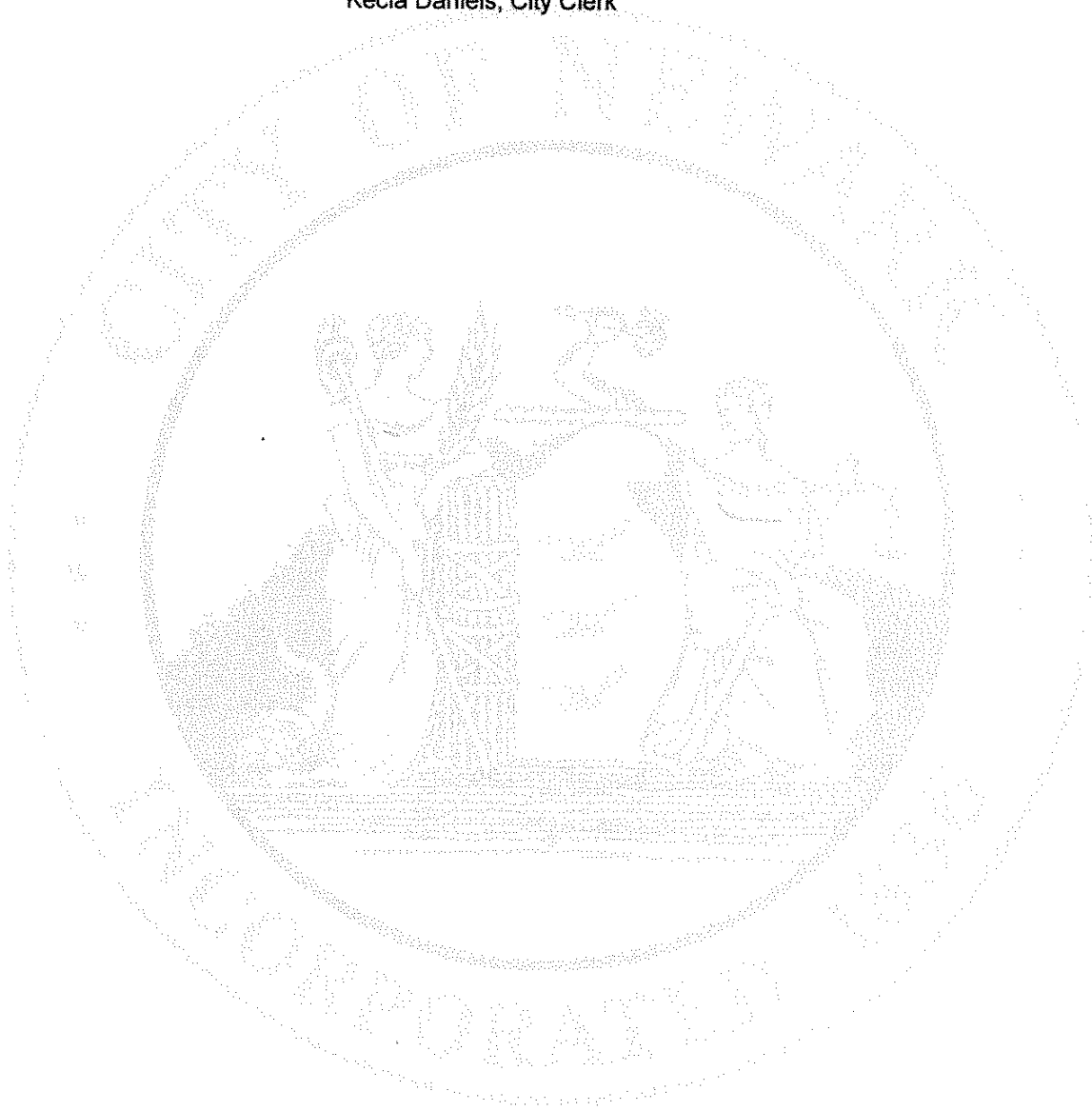
Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Municipal Council	05/21/2025	Adopt				Pass
Action Text: A motion was made by the Council of the Whole to Adopt. The motion was adopted by the following votes:							
Yes: 8 - Patrick Council, Carlos Gonzalez, Dupre' Kelly, Luis Quintana, Anibal Ramos Jr., Louise Scott-Rountree, Michael Silva and C. Lawrence Crump							

Certified By 
Kecia Daniels, City Clerk

CERTIFIED TO BY ME THIS

MAY 22 2025

Date _____



RESOLUTION

R-86-2025

BOROUGH OF NORTH CALDWELL, ESSEX COUNTY, NEW JERSEY

TITLE: A RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Borough of North Caldwell recognizes the threat that natural hazards pose to people and property within the Borough of North Caldwell; and

WHEREAS, the Borough of North Caldwell has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Borough of North Caldwell from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Borough of North Caldwell demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.


NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Borough of North Caldwell, County of Essex, State of New Jersey as follows:

1. The Borough of North Caldwell adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Borough of North Caldwell may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Mayor and Borough Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.
2. The Mayor, and all other officials of the Borough of North Caldwell, are hereby directed and authorized to take all necessary and appropriate actions, to carry out the subject and intent of this Resolution.
3. This Resolution shall take effect immediately upon passage and publication in accordance with law, if required.

Moved By: Councilwoman Stroeve
Seconded By: Councilman Tilton

COUNCIL MEMBER	YES	NO	ABSTAIN	ABSENT	COUNCIL MEMBER	YES	NO	ABSTAIN	ABSENT
ATLAS	X				STROEVER	X			
FLORIA-CALLORI	X				TILTON	X			
REES	X				WEINSTEIN	X			

IT IS HEREBY CERTIFIED THAT THE FOREGOING IS A TRUE AND CORRECT COPY OF A RESOLUTION ADOPTED BY THE BOROUGH COUNCIL OF THE BOROUGH OF NORTH CALDWELL AT A MEETING OF SAID COUNCIL HELD ON APRIL 22, 2025.


TAMI MICHELOTTI, BOROUGH CLERK


JOSHUA H. RAYMOND, MAYOR

BOARD OF COMMISSIONERS
TOWNSHIP OF NUTLEY, NEW JERSEY

Resolution

Introduced by: Commissioner Alphonse Petracco *Date:* April 15, 2025
Seconded by: Commissioner Joseph P. Scarpelli *No.* 107-25

**A RESOLUTION OF THE TOWNSHIP OF NUTLEY ADOPTING THE
2025 ESSEX COUNTY HAZARD MITIGATION PLAN**

WHEREAS, the Township of Nutley recognizes the threat that natural hazards pose to people and property within Nutley; and


WHEREAS, the Township of Nutley has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Township of Nutley from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Board of Commissioners, the Township of Nutley demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners, Township of Nutley, County of Essex, State of New Jersey, that the 2025 Essex County Hazard Mitigation Plan is hereby adopted and that while content related to the Township of Nutley may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Township of Nutley to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

. . .

I, , Township Clerk of the Township of Nutley, Essex County, NJ, do hereby certify that the foregoing is a true copy of a resolution adopted by the Board of Commissioners at a regular meeting held April 15, 2025

Record of Vote	Commissioner Thomas J. Evans	Commissioner Mauro G. Tucci	Commissioner Joseph P. Scarpelli	Commissioner Alphonse Petracco	Mayor John V. Kelly, III
<i>Yes</i>	X	X	X	X	X
<i>No</i>					
<i>Not Voting</i>					
<i>Absent/Excused</i>					

CITY COUNCIL**The City of Orange Township, New Jersey**DATE May 20, 2025NUMBER 271-2025**TITLE: RESOLUTION OF THE CITY OF ORANGE TOWNSHIP ADOPTING THE
2025 ESSEX COUNTY HAZARD MITIGATION PLAN**

WHEREAS, the City of Orange Township recognizes the threat that natural hazards pose to people and property within the City of Orange Township; and

WHEREAS, the City of Orange Township has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

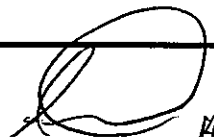
WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Orange Township from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Mayor and Council demonstrates its commitment to hazard mitigation and achieving the goals outline in the 2025 Essex County Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF ORANGE TOWNSHIP, NEW JERSEY, that:

Section 1. In accordance with applicable state, county and local law, the City of Orange Township, the Mayor and City Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the City of Orange Township may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Adopted: May 20, 2025


Joyce L. Lanter
City Clerk
Adrienne K. Wooten
Council President Michael Smith

RESOLUTION NO. 271- 2025

CONSENT AGENDA

REGULAR COUNCIL MEETING – May 20, 2025

MOTION TO ADOPT: Montague, III

SECOND: Hilbert

YEAS: Coley, Eason, Hilbert, Montague, III, Ross, Summers-Johnson & Council President Wooten

NAYS: None

ABSTENTIONS: None

ABSENCE: None

RESOLUTION NO. 166-2025

BOROUGH OF ROSELAND
COUNTY OF ESSEX, STATE OF NEW JERSEY

A RESOLUTION OF THE BOROUGH OF ROSELAND ADOPTING
THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, the Borough of Roseland recognizes the threat that natural hazards pose to people and property within the Borough of Roseland; and

WHEREAS, the Borough of Roseland has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Borough of Roseland from the impacts of future hazards and disasters; and

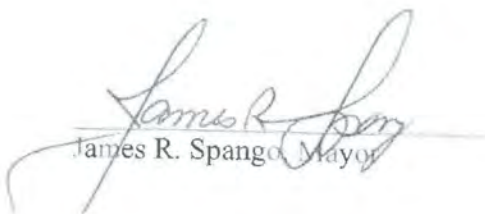
WHEREAS, adoption by the Mayor and Council of the Borough of Roseland demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

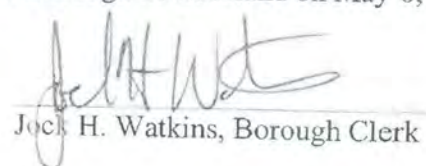
NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Borough of Roseland that:

Section 1. In accordance with N.J.S.A. 40:49-1, the Mayor and Council of the Borough of Roseland adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Borough of Roseland may require revisions to meet the plan approval requirements, changes occurring after adoption will not require (local government) to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

COUNCIL	MOTION	SECOND	AYE	NAY	ABSTAIN	RECUSE	ABSENT
Councilman Bardi							X
Council President Biront			X				
Councilwoman Perrotti		X	X				
Councilman Schroeder			X				
Councilwoman Tolli			X				
Councilman Trillo	X		X				
Mayor Spango (In case of tie)							
VOTE:			5	0			

I do hereby certify that the forgoing is a true and exact copy
of a Resolution adopted by the Mayor and Borough Council of
the Borough of Roseland on May 6, 2025.


James R. Spango, Mayor


Jock H. Watkins, Borough Clerk

SOUTH ORANGE VILLAGE
Municipal Offices
76 South Orange Ave
Suite 302
South Orange
Essex County
New Jersey 07079

www.southorange.org
P 973.378.7715
F 973.763.0987



RESOLUTION #2025-085

April 28, 2025

A RESOLUTION OF SOUTH ORANGE VILLAGE ADOPTING THE 2025 ESSEX COUNTY HAZARD MITIGATION PLAN

WHEREAS, South Orange Village recognizes the threat that natural hazards pose to people and property within South Orange Village; and

WHEREAS, South Orange Village has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in South Orange Village from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Village Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED by the Village Council of South Orange Village, New Jersey that, in accordance with applicable state, county and local law, the Village Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to South Orange Village may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Village Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Council Member	Motion	Second	Ayes	Nays	Abstain	Absent
Brown			X			
Greenberg						X
Haskins		X	X			
Jones	X		X			
Lewis-Chang			X			
Schnall						X



CERTIFICATION

I, Ojetti E. Davis, Village Clerk of South Orange Village, County of Essex, State of New Jersey, do hereby certify that this is a true and correct copy of the Resolution adopted by the South Orange Village Council at their regular meeting held on Monday, April 28, 2025.

Ojetti E. Davis
Village Clerk

**TOWNSHIP OF VERONA
COUNTY OF ESSEX, STATE OF NEW JERSEY**

RESOLUTION No. 2025-084

A motion was made by Deputy Mayor McEvoy; seconded by Councilwoman Holland that the following resolution be adopted:

**ADOPTING THE VERONA ANNEX OF THE ESSEX COUNTY
HAZARD MITIGATION PLAN**

WHEREAS, the Township of Verona recognizes the threat that natural hazards pose to people and property within Township of Verona; and

WHEREAS, the Township of Verona has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township of Verona, from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Township Council of the Township of Verona demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW THEREFORE, BE IT RESOLVED by the Township Council of the Township of Verona in the County of Essex, New Jersey:


SECTION 1. In accordance with (local rule for adopting resolutions), the Township Council of the Township of Verona adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of Verona may require revisions to meet the plan approval requirements, changes occurring after adoption will not require this governing body to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

ROLL CALL:

AYES: Holland, McGrath, Roman, McEvoy, Tamburro

NAYS:

THIS IS TO CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF A RESOLUTION ADOPTED BY THE TOWNSHIP COUNCIL OF THE TOWNSHIP OF VERONA AT A REGULAR MEETING HELD ON APRIL 21, 2025.


JENNIFER KIERNAN, CMC
MUNICIPAL CLERK



Resolution

Resolution No. 25-120

By: Councilwoman Canale

**RESOLUTION ADOPTING THE 2025 ESSEX COUNTY HAZARD
MITIGATION PLAN**

For the Meeting of April 15 in the Year of 2025

A RESOLUTION OF THE COUNCIL OF THE TOWNSHIP OF
WEST CALDWELL, ESSEX COUNTY, NEW JERSEY

WHEREAS the Township of West Caldwell recognizes the threat that natural hazards pose to people and property within the Township of West Caldwell; and

WHEREAS the Township of West Caldwell has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township of West Caldwell from the impacts of future hazards and disasters; and

WHEREAS adoption by the Mayor and Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

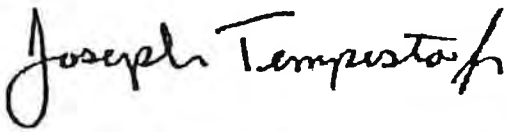
NOW THEREFORE, BE IT RESOLVED BY THE TOWNSHIP OF WEST CALDWELL, NEW JERSEY, THAT:

Section 1. The Township of West Caldwell Mayor and Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to the Township of West Caldwell may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the Mayor and Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

It is hereby certified by the Township Clerk that at a regular meeting of the Mayor and Council of the Township of West Caldwell, New Jersey, being held on the date of April 15, 2025, the foregoing Resolution was duly adopted.


Township Clerk

The foregoing Resolution, having been duly presented to me on April 16, 2025, I hereby **approve** the same.



Mayor



MEMBERS OF THE GOVERNING BODY	RECORDED VOTE			
	YES	NO	ABSTAIN	ABSENT
STEPHEN WOLSKY	X			
JOSEPH CECERE	X			
MICHAEL DOCTEROFF				X
KATHY L. CANALE	X			
MICHAEL CRUDELE				X
ROBERT SCHOTT				X
MAYOR TEMPESTA (IF TIE)				

127-25
May 6, 2025

RESOLUTION


WHEREAS, the Township of West Orange (the "Township") recognizes the threat that natural hazards pose to people and property within the Township; and


WHEREAS, the Township has prepared a multi-hazard mitigation plan, hereby known as the 2025 Essex County Hazard Mitigation Plan in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

WHEREAS, the 2025 Essex County Hazard Mitigation Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Township from the impacts of future hazards and disasters; and

WHEREAS, adoption by the Township Council demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2025 Essex County Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of West Orange, that the Township Council adopts the 2025 Essex County Hazard Mitigation Plan. While content related to Township may require revisions to meet the plan approval requirements, changes occurring after adoption will not require approval by the Township Council to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.


Karen J. Carnevale, R.M.C.
Municipal Clerk



Joe Krakoviak
Council President

Adopted: May 6, 2025



APPENDIX B: PARTICIPATION DOCUMENTATION

This appendix provides documentation to illustrate the significant efforts undertaken to support a broad and inclusive engagement of the participants during this hazard mitigation planning process.

1.1 MEETING AND WORKSHOP PARTICIPATION

Table B-1 provides a broad overview of state, county, municipal and stakeholder personnel that attended meetings and workshops throughout the Essex County HMP update planning process. All jurisdictions were encouraged to attend the kick-off meeting, risk assessment meeting, mitigation workshop and meet individually with the contract consultant. As discussed in Section 2 (Planning Process), primary and secondary points of contact were identified for each jurisdiction, but moreover, these points of contact were asked to work with their 'mitigation team' to ensure input was provided across all jurisdiction departments. Table X-22 in each jurisdictional annex (Volume II) summarizes the additional individuals that participated in each jurisdiction, as well as their method of participation. During the planning process the consultant contacted each participant to offer support, explain the process, and facilitate the submittal and review of critical documents. The participating jurisdictions agreed to abide by the Planning Partner Expectations and Planning Committee Guidelines which established the Steering Committee. Letters of Intent to Participate indicating municipal planning efforts are included in this appendix.



Table B-1. Essex County Hazard Mitigation Planning Participation

<i>Jurisdiction</i>	<i>Name</i>	<i>Title / Position</i>	<i>Primary Point of Contact</i>	<i>Alternate Point of Contact</i>	<i>Municipal Floodplain Administrator</i>	<i>Planning Partnership Kickoff Meeting</i>	<i>Steering Committee Kickoff Meeting</i>	<i>Risk Assessment Meeting</i>	<i>Mitigation Strategy Workshop</i>	<i>Steering Committee Draft Plan Meeting</i>
Essex County	Ryan Peter	Sergeant, OEM	X			X	X	X	X	X
Essex County	Jose Torres	OEM Coordinator/Detective				X				
Essex County	Dorothy Landrum	OEM Coordinator				X				
Essex County	Mark Steinberg	Detective				X	X			
Essex County	Matt Gifford	Essex Fire Coordinator				X				
Essex County	Nick Dasaro	Sergeant				X				
Essex County	James Simpson	EMS Coordinator				X	X			
Essex County	Denise Teague	Detective		X		X	X	X	X	
Essex County	Armando Fontoura	Sheriff				X				
Essex County	Carl E Hunte	Chief Information Officer/Assistant County Administrator								X
Essex County	Luke Ye	Systems Analyst					X			
Essex County	Sanjeev Varghese	County Engineer/Director					X			
Essex County	Richard Fernandez	Principal Engineer					X			
Essex County	Frank J. Del Gaudio	Director, Department of Health & Rehabilitation					X			
Essex County	Maya Harlow	Essex County Health Officer					X			X



Appendix B: Participation Documentation

<i>Jurisdiction</i>	<i>Name</i>	<i>Title / Position</i>	<i>Primary Point of Contact</i>	<i>Alternate Point of Contact</i>	<i>Municipal Floodplain Administrator</i>	<i>Planning Partnership Kickoff Meeting</i>	<i>Steering Committee Kickoff Meeting</i>	<i>Risk Assessment Meeting</i>	<i>Mitigation Strategy Workshop</i>	<i>Steering Committee Draft Plan Meeting</i>
Belleville (T)	John McAloon	Deputy OEM Coordinator/Detective Lt.		X		X		X	X	
Belleville (T)	Gerard Corbo	OEM Coordinator/Deputy Chief of Police	X			X		X	X	
Bloomfield (T)	Thomas Icolari	OEM Coordinator		X		X		X	X	
Bloomfield (T)	Brian McDade	Deputy OEM Coordinator				X				
Caldwell (B)	Mark Guiliano	OEM Coordinator/Zoning	X			X		X	X	
Cedar Grove (T)	Dan Donovan	OEM Coordinator				X				
Cedar Grove (T)	Jess Meely	OEM						X	X	
East Orange (C)	R. David Williams	OEM Coordinator	X			X		X	X	
East Orange (C)	Elizabeth Collins	City Engineer/Assistant Director of Public Works			X	X				
East Orange (C)	Natasha Ortiz	OEM & Grants		X		X				
East Orange (C)	Alexander McClean	Principal Planner				X		X	X	
Essex Fells (B)	Jim Egan	OEM Director	X			X		X	X	
Essex Fells (B)	Greg James	Deputy Director OEM						X	X	
Fairfield (T)	RJ Casedino	Lieutenant/OEM Coordinator	X			X		X	X	
Fairfield (T)	James Gasparini	Township Manager/Business Administrator		X		X				
Glen Ridge (B)	Dean Gnardelis	Deputy OEM Coordinator				X		X	X	



Appendix B: Participation Documentation

<i>Jurisdiction</i>	<i>Name</i>	<i>Title / Position</i>	<i>Primary Point of Contact</i>	<i>Alternate Point of Contact</i>	<i>Municipal Floodplain Administrator</i>	<i>Planning Partnership Kickoff Meeting</i>	<i>Steering Committee Kickoff Meeting</i>	<i>Risk Assessment Meeting</i>	<i>Mitigation Strategy Workshop</i>	<i>Steering Committee Draft Plan Meeting</i>
Glen Ridge (B)	Erik DeLine	Deputy Administrator, Director of Planning	X					X	X	
Glen Ridge (B)	Ann Marie Marrow	Council President				X		X	X	
Irvington (T)	William Mulligan	OEM				X		X	X	
Irvington (T)	John Brown	Deputy Director of Public Safety/OEM Coordinator	X			X				
Livingston (T)	Christopher Mullin	Fire Chief/ OEM Coordinator	X			X	X	X	X	
Livingston (T)	Stu Lukowiak	OES Coordinator				X				
Maplewood (T)	Patrick Wherry	Business Administrator / OEM Coordinator	X			X		X	X	
Millburn (T)	Robert Echavarria	Fire Chief/EMC	X				X	X	X	X
Millburn (T)	Mark Azzopardi	Millburn Police Department Captain/Deputy Emergency Management Coordinator		X		X				
Millburn (T)	Thomas Doty	DPW Director				X				
Montclair (T)	Michael Craig	Deputy OEM Coordinator				X				
Montclair (T)	Carmine Davino, Jr.	Deputy Coordinator	X			X		X	X	
Montclair (T)	Robert Romito	Deputy OEM Coordinator				X				
Newark (C)	Juba Dowdell	Deputy OEM Coordinator		X		X				
Newark (C)	John S. James	OEM Coordinator	X					X	X	



Appendix B: Participation Documentation

<i>Jurisdiction</i>	<i>Name</i>	<i>Title / Position</i>	<i>Primary Point of Contact</i>	<i>Alternate Point of Contact</i>	<i>Municipal Floodplain Administrator</i>	<i>Planning Partnership Kickoff Meeting</i>	<i>Steering Committee Kickoff Meeting</i>	<i>Risk Assessment Meeting</i>	<i>Mitigation Strategy Workshop</i>	<i>Steering Committee Draft Plan Meeting</i>
North Caldwell (B)	John Biront	Borough Engineer/DPW Director			X	X		X	X	
North Caldwell (B)	Karl Strodthoff	Police Chief				X		X	X	
North Caldwell (B)	Tim Peterson	Emergency Management Coordinator		X				X	X	
Nutley (T)	Will Cassidy	OEM Coordinator				X				
Nutley (T)	Don Santangelo	OEM Coordinator, Fire Captain	X			X		X	X	
Nutley (T)	Salvatore Ferraro			X	X			X	X	
Orange (C)	Elvin Padilla Jr	OEM Coordinator	X			X		X	X	
Orange (C)	Bill Bishop	Assistant to the OEM Deputy Coordinator/GIS				X		X	X	
Orange (C)	Todd Warren	Deputy OEM Coordinator		X				X	X	
Roseland (B)	John Matheis	OEM Coordinator	X			X		X	X	
Roseland (B)	Mark Azomanian	OEM				X				
South Orange (V)	Julie Doran	Business Administrator	X			X				
South Orange (V)	Scott Egelberg	OEM Coordinator		X		X				
South Orange (V)	David Battaglia	Engineering			X					
South Orange (V)	Joe Foligno	DPW Director				X				
South Orange (V)	Greer Patras	Planner				X		X	X	
South Orange (V)	Anthony Crenin	Director				X				
Verona (T)	Connor McCann	Deputy OEM/Fire Inspector				X				



Appendix B: Participation Documentation

<i>Jurisdiction</i>	<i>Name</i>	<i>Title / Position</i>	<i>Primary Point of Contact</i>	<i>Alternate Point of Contact</i>	<i>Municipal Floodplain Administrator</i>	<i>Planning Partnership Kickoff Meeting</i>	<i>Steering Committee Kickoff Meeting</i>	<i>Risk Assessment Meeting</i>	<i>Mitigation Strategy Workshop</i>	<i>Steering Committee Draft Plan Meeting</i>
Verona (T)	Joel Martin	VPD/ OEM Coordinator	X			X	X	X	X	
West Caldwell (T)	Lawrence Peter	OEM Coordinator	X			X		X	X	
West Orange (T)	Nick Allegrino	OEM Coordinator				X				
West Orange (T)	Edwin Diaz	Sergeant/Deputy Coordinator						X	X	



1.2 LETTER OF INTENT TO PARTICIPATE

Municipalities were provided a copy of the Planning Partner Expectations and asked to formally notify the County of their intent to participate via a Letter of Intent to Participate and to identify a primary and secondary planning point of contact to serve on a Planning Committee and represent the interests of their respective community. In addition, each municipal Floodplain Administrator (FPA) was identified and requested to actively participate in the planning process. Additional municipal officials that could support hazard mitigation were also requested to be identified. The signed Letters of Intent to Participate are included in this section.



Township of Belleville

Office of the Mayor

Michael A. Melham

December 10, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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:



Township of Belleville

Office of the Mayor

Michael A. Melham

- 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 Planning Partnership meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Gerard Corbo

Position/Department:

Deputy Chief of Police/ OEM Coordinator

Phone Number:

973-450-3588

Email Address:

gcorbo@bellevillenj.org

Alternate/Secondary POC:

John McAloon

Position/Department:

Detective Lt./ Deputy OEM Coordinator

Phone Number:

973-450-3361

Email Address:

jmcloon@bellevillenj.org

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

Name of NFIP FPA:

Frank DeLorenzo

Position/Department:

Construction Official

Phone Number:

973-450-9309

Email Address:

fdelorenzo@bellevillenj.org



Township of Belleville

Office of the Mayor

Michael A. Melham

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

Name (Engineer): Thomas Herits	Position/Department: TWSP Engineer
Email Address: therits@bellevillenj.org	

Name (Lead Planner/Planning POC): Brian Banda	Position/Department: TWSP Manager
Email Address: bbanda@bellevillenj.org	

Name (Public Works): Robert Welter	Position/Department: DPW Superintendent
Email Address: rwelter@bellevillenj.org	

Name (Emergency Management): Michael Melham	Position/Department: TWSP Mayor/ Deputy OEM Coordinator
Email Address: mmelham@bellevillenj.org	

Name (Elected Official/Administrator): Michael Melham	Position/Department: TWSP Mayor
Email Address: mmelham@bellevillenj.org	

Name (Building Department/Code Enforcement): Chris Souza	Position/Department: Assistant construction official
Email Address: csouza@bellevillenj.org	



Township of Belleville

Office of the Mayor
Michael A. Melham

Name (Municipal Clerk):

Albert Cabrera R.M.C.

Position/Department:

TWSP Clerk

Email Address:

acabrera@bellevillenj.org

Name (Other Representative):

Mark Minichini

Position/Department:

Chief of Police/ Deputy TWSP Manager

Email Address:

mminichini@bellevillenj.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.

Very truly yours,

Michael A. Melham, Mayor
Township of Belleville

JENNY MUNDELL
MAYOR



ANTHONY DEZENZO
TOWNSHIP
ADMINISTRATOR

TOWNSHIP OF BLOOMFIELD

*1 Municipal Plaza
Bloomfield, New Jersey 07003-3487
Phone: 973-680-4006*

November 27, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, New Jersey 07052

Subject: Essex County Hazard Mitigation Plan Update
Authorization and Letter of Intent to Participate
Township of Bloomfield

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.

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 Planning Partnership meetings (^N 3 meetings over 6 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 o Identification of new development
and anticipated development o Identification of hazard risk areas

Identification of hazard events and losses that have impacted your community in the last five years o Identification of plans, studies, reports and ordinances addressing hazard risk o

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:

- o 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.)

o Advertising and supporting public meetings in your area

o 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 Planning Partnership 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: Town Administrator
Anthony DeZenzo	Email Address:adezenzo@bloomfieldtwpnj.com
Phone Number:973-680-4006	
Alternate/Secondary POC:	Position/Department: OEM Coordinator
Michael Venezia	Email Address: michaeljosephvenezia@gmail.com
Phone Number: 973-680-4006	

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

Name of NFIP FPA	Position/Department: Engineering
Paul Lasek	Email Address:plasek@bloomfieldtwpnj.com
Phone Number: 973-680-4130	

973-680-4130

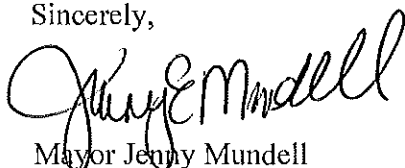
5. Meet participation expectations by including representatives from our community in the planning process. They will be invited to attend meetings, provide required information, and review the jurisdictional annex. Contact information for the different municipal representatives are included below.

Name (Engineer)	Position/Department: Engineering
Paul Lasek	
Email Address:plasek@bloomfieldwpnj.com	
Name (Lead Planner/Planning POC):	Position/Department: Fire Dept.
Chief Lou Venezia	
Email Address:lvenezia@bloomfieldwpnj.com	
Name (Public Works):	Position/Department: Director DPW
Sean Schwindt	
Email Address:sschwindt@bloomfieldwpnj.com	
Name (Emergency Management):	Position/Department: Fire Dept.
Brian McDade	
Email Address:bmcdade@bloomfieldwpnj.com	
Name (Elected Official/Administrator):	Position/Department:
Email Address:	
Name (Building Department/Code Enforcement):	Position/Department: Fire Dept.
Chief Lou Venezia	
Email Address:lvenezia@bloomfieldwpnj.com	

Name (Municipal Clerk):	Position/Department: Clerk
Louise Palagano	
Email Address: lpalagano@bloomfieldwpnj.com	
Name (Other Representative):	Position/Department: OEM/Admin
Tom Icolari	
Email Address: ticolari@bloomfieldnjpd.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,



Mayor Jenny Mundell
Township of Bloomfield



**BOROUGH OF CALDWELL
NEW JERSEY**

Twenty Four Small Avenue • Caldwell NJ, 07006 • 973-226-6100 • Fax 973-403-1355

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

11/21/24

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership 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:
Mark Guiliano	OEM Coordinator	
Phone Number:		Email Address:
(973) 403-4629		fireofficial@caldwell-nj.com

Alternate/Secondary POC:		Position/Department:
Gary Garamella	Deputy OEM Coordinator	
Phone Number:		Email Address:
(973) 403-4629		firepi@caldwell-nj.com

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

Name of NFIP FPA:		Position/Department:
Rachel Miller CARL THUNELL	Construction Official	CTHUNELL@CALDWELL-NJ.COM

Phone Number:

(973) 403-4626

Email Address:

pmilani@caldwell-nj.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):

Mike DeCarlo Assistant Engineer

Position/Department:

Email Address:

mdecarlo@caldwell-nj.com

Name (Lead Planner/Planning POC):

Alex Palumbo Municipal Business Administrator

Position/Department:

Email Address:

apalumbo@caldwell-nj.com

Name (Public Works):

Jake Pohlman Public Works Foreman

Position/Department:

Email Address:

jpohlman@caldwell-nj.com

Name (Emergency Management):

Mark Guiliano OEM Coordinator

Position/Department:

Email Address:

Fireofficial@caldwell-nj.com

Name (Elected Official/Administrator):

Garrett Jones Mayor

Position/Department:

Email Address:

gjones@caldwell-nj.com

Name (Building Department/Code Enforcement):

~~Paul Milani~~ Construction Official
CARL THUNELL

Position/Department:

Email Address:

~~pmilani~~@caldwell-nj.com
CTHUNELL

Name (Municipal Clerk):

Position/Department:

Brittany Heun Municipal Clerk

Email Address:

bheun@caldwell-nj.com

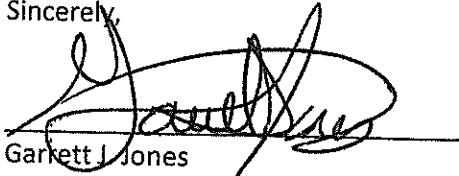
Name (Other Representative):

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,



Garrett J. Jones

Mayor – Borough of Caldwell

MAYOR
Melissa Skabich

DEPUTY MAYOR
Michele Mega

COUNCIL MEMBERS
Joseph Maceri
Kerry Peterson
John Zazzali



TOWNSHIP MANAGER
Joseph M. Zichelli, Esq.

MUNICIPAL CLERK
Dale A. Forde

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

November 25, 2024

Return to: essexoem@essexsheriff.com
Attn. Sgt. Ryan Peters

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
Township of Cedar Grove

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Jeffrey McElroy

Position/Department:

OEM Coordinator

Phone Number:

(973) 239 – 4100 x 262

Email Address:

jmcelroy@cedargroved.org

Alternate/Secondary POC:

Joseph M. Zichelli, Esq.

Position/Department:

Township Manager

Phone Number:

(973) 239 – 1410 x 202

Email Address:

zichelli@cedargrovenj.org

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

Name of NFIP FPA:	Position/Department:
Suburban Consulting Engineers	Engineers
Phone Number:	Email Address: ahandel@suburbanconsulting.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:
Alexandra Handel, PE, PP, CME	Township Engineer
Email Address:	
ahandel@suburbanconsulting.com	

Name (Lead Planner/Planning POC):	Position/Department:
Jason Kassler	Township Planner
Email Address:	
jason@kasslerassociates.com	

Name (Public Works):	Position/Department:
Jerry Vitiello	Director of Public Works
Michael Grasso	Water/Sewer Superintendent
Peter DiGeronimo	Automotive Superintendent
Email Address:	
vitiello@cedargrovenj.org	
mgrasso@cedargrovenj.org	
pdigeronimo@cedargrovenj.org	

Name (Emergency Management):	Position/Department:
Jeffrey McElroy	OEM Coordinator
Email Address:	
jmcelroy@cedargrovepd.org	

Name (Elected Official/Administrator):	Position/Department:
Joseph M. Zichelli, Esq.	Township Manager
Email Address:	
zichelli@cedargrovenj.org	

Name (Building /Code Enforcement):

James Hoffman

Position/Department:

Code Enforcement

Email Address:

hoffmann@cedargrovenj.org

Name (Municipal Clerk):

Dale A. Forde, CMC, RMC

Position/Department:

Township Clerk

Email Address:

dforde@cedargrovenj.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,



Mayor Melissa Skabich
Township of Cedar Grove



CITY OF EAST ORANGE

Mayor Ted R. Green

44 CITY HALL PLAZA
EAST ORANGE, NJ 07017
973.266.5151

December 30, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
City of East Orange

Dear Sheriff Fontoura:

This is to confirm that the City of East Orange is committed to participating in the Essex County Hazard Mitigation Plan (HMP) update project. By way of this letter, the City of East Orange

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, Attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports, and ordinances addressing 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.
1. 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 Planning Partnership meetings and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: R. David Williams	Position/Department: OEM Coordinator
Phone Number: 973-677-8924 201-704-7604	Email Address: David.Williams@eastorange-nj.gov

Alternate/Secondary POC: Natasha Ortiz	Position/Department: OEM & Grants
Phone Number: 862-220-2677	Email Address: Natasha.Ortiz@eastorange-nj.gov

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

Name of NFIP FPA: Elizabeth Collins	Position/Department: City Engineer/ Assistant Director Public Works
Phone Number: 973-266-5330	Email Address: Elizabeth.Collins@eastorange-nj.gov

3. 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): Elizabeth Collins	Position/Department: City Engineer/ Assistant Director Public Works
Email Address: Elizabeth.Collins@eastorange-nj.gov	

Name (Lead Planner/Planning POC): Alycia Cohen	Position/Department: Director/ Office of Planning, Policy & Development
Email Address: Alycia.Cohen@eastorange-nj.gov	

Name Rupert Bell:

Position/Department: Director/ East Orange
Public Works

Email Address: Rupert.Bell@eastorange-nj.gov

Name R. David Williams

Position/Department: Coordinator/ East Orange
OEM

Email Address: David.Williams@eastorange-
nj.gov

Name Solomon Steplight

Position/Department: City Administrator

Email Address: Solomon.Steplight@eastorange-
nj.gov

Name (Building Department/Code Enforcement):

Position/Department: Director/ Code
Enforcement

Eladio Negron

Email Address: Eladio.Negron@eastorange-nj.gov

Name (Municipal Clerk): Cynthia Brown

Position/Department: City Clerk

Email Address: Cynthia.Brown@eastorange-
nj.gov

Name (Other Representative):

Position/Department: OEM & Grants

Natasha Ortiz

Email Address:

Natasha.Ortiz@eastorange-nj.gov

4. 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,

A large, stylized handwritten signature in black ink, appearing to read 'T. Green', is written over the printed name and title.

Ted R. Green
Mayor



BOROUGH OF ESSEX FELLS

255 ROSELAND AVENUE
ESSEX FELLS, NEW JERSEY 07021

12/09/2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
Borough of Essex Fells

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Jim Egan	Position/Department: OEM Coordinator/Essex Fells Fire
Phone Number: 973-518-3011	Email Address: jimegan103@gmail.com

Alternate/Secondary POC: Capt. Paulo Gomes	Position/Department: Deputy Coordinator/Essex Fells Police
Phone Number: 973-202-9314	Email Address: pgomes@essexfellsd.org

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

Name of NFIP FPA: Mike Petry	Position/Department: Engineer/Essex Fells Borough
Phone Number: 973-303-8873	Email Address: mikepetry@petryengineering.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): Mike Petry	Position/Department: Borough Engineer/ Essex Fells Borough
Email Address: mikepetry@petryengineering.com	
Name (Lead Planner/Planning POC): Jim Egan	Position/Department: OEM Coordinator/ Essex Fells Fire
Email Address: jimegan103@gmail.com	
Name (Public Works): Anthony Sorisi	Position/Department: Superintendent/Essex Fells DPW
Email Address: operator@essexfellsboro.com	
Name (Emergency Management): Jim Egan	Position/Department: OEM Coordinator/ Essex Fells Fire
Email Address: jimegan103@gmail.com	
Name (Elected Official/Administrator): Francine T. Paserchia	Position/Department: Borough Administrator/Essex Fells Borough
Email Address: adminstrator@essexfellsboro.com	
Name (Building Department/Code Enforcement): Carl Thunell	Position/Department: Zoning Officer/Essex Fells Borough
Email Address: buildingta@essexfellsboro.com	
Name (Municipal Clerk): Francine Paserchia	Position/Department: Borough Clerk/Essex Fells Borough
Email Address: adminstrator@essexfellsboro.com	
Name (Other Representative): N/A	Position/Department: N/A

Email Address: N/A

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,

A handwritten signature in black ink, appearing to read 'E. Davis', with a stylized flourish at the end.

Mayor Edward Davis
Borough of Essex Fells



11/19/2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas

- Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Lt. RJ Casendino	Position/Department: Lieutenant/Police
Phone Number: 973-227-1400	Email Address: rcasendino@fairfieldnj.org

Alternate/Secondary POC: James Gasparini	Position/Department: Business Administrator
Phone Number: 973-227-1400	Email Address: jgasparini@fairfieldnj.org

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

Name of NFIP FPA: Steve Bury	Position/Department: Engineer
Phone Number: 973-882-2700	Email Address: sbury@fairfieldnj.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 the different municipal representatives are included below.

Name (Engineer): Steve Bury	Position/Department: SAA
Email Address: SAA	

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

Name (Public Works): Robert Payne	Position/Department: DPW Director
Email Address: rpayne@fairfieldnj.org	

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

Name (Elected Official/Administrator): James Gasparini	Position/Department: Business Admin
Email Address:	

Name (Building Department/Code Enforcement):	Position/Department:
--	----------------------

Email Address:

Name (Municipal Clerk): Denise Cafone

Position/Department: Twp Clerk

Email Address: Dcafone@fairfieldnj.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,

A handwritten signature in blue ink, appearing to read "William Galese", with a stylized flourish at the end.

Mayor William Galese
Fairfield Twp



December 12, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
Borough of Glen Ridge

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas

- Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Erik DeLine	Position/Department: Deputy Administrator
Phone Number: 973-748-8400 ext 240	Email Address: eideline@glenridgenj.org

Alternate/Secondary POC: Mike Zichelli	Position/Department: Administrator
Phone Number: 973-748-8400 ext 235	Email Address: eideline@glenridgenj.org

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

Name of NFIP FPA: Paul Ferriero

Position/Department: Engineer

Phone Number: 908-879-6209

Email Address: pferriero@boswellengineering.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): Paul Ferriero

Position/Department: Engineering

Email Address:

pferriero@boswellengineering.com

Name (Lead Planner/Planning POC): Erik DeLine

Position/Department: Planning

Email Address: eideline@glenridgenj.org

Name (Public Works): Bill Bartlett

Position/Department: Public Works

Email Address: wrbartlett@glenridgenj.org

Name (Emergency Management): Dean Gnardalis

Position/Department: Police

Email Address: djnardalis@glenridgenj.org

Name (Elected Official/Administrator): Debbie
Mans

Position/Department: Mayor

Email Address: dmans@glenridgenj.org

Name (Building Department/Code Enforcement):	Position/Department: Construction Official
Mike DeFrino	

Email Address: construction@glenridgenj.org

Name (Municipal Clerk): Tara Ventola	Position/Department: Clerk
--------------------------------------	----------------------------

Email Address: tventola@glenridgenj.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.

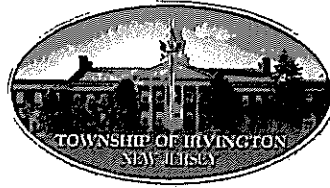
Sincerely,



Mayor Deborah Mans
Borough of Glen Ridge

THE HONORABLE
TONY VAUSS
Mayor of the Township of Irvington

MUSA MALIK
Business Administrator
mmalik@irvingtonnj.gov



TANYA R. WALKER
Executive Assistant & Scheduler
twalker@irvingtonnj.gov

SYESHA BENBOW
Secretary To The Mayor
sbenbow@irvingtonnj.gov

OFFICE OF THE MAYOR
1 Civic Square, Irvington, NJ 07111
Tel: (973) 399-6657 | Fax: (973) 399 0827

December 2, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

ATTENTION: Sergeant Ryan Peter

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: John Brown	Position/Department: Deputy Director of Public Safety/OEM Coordinator Department of Public Safety
Phone Number: 973-399-6555	Email Address: JBrown@irvingtonnj.gov

Alternate/Secondary POC: Shazil Grisham	Position/Department: Account Clerk Office of Business Administration
Phone Number: 973-399-6667	Email Address: sgrisham@irvingtonnj.gov

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

Name of NFIP FPA: John A. Wiggins, P.E.	Position/Department: Township Engineer
Phone Number: 973-399-6696	Email Address: Jwiggins@irvingtonnj.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): John A. Wiggins, P.E.	Position/Department: Township Engineer, Engineering Department
Email Address: Jwiggins@irvingtonnj.gov	

Name (Lead Planner/Planning POC): Kyana Woolridge	Position/Department: Director, Department of Community Development
Email Address: Kwoolridge@irvingtonnj.gov	

Name (Public Works): Cassandra Chatman	Position/Department: Director of Public Works Department of Public Works
Email Address: CChatman@irvingtonnj.gov	

Name (Emergency Management): John F. Brown	Position/Department: Deputy Director of Public Safety/OEM Coordinator Department of Public Safety
Email Address: JBrown@irvingtonnj.gov	

Name (Elected Official/Administrator): Musa Malik	Position/Department: Business Administrator
Email Address: MMalik@irvingtonnj.gov	

Name (Building Department/Code Enforcement): Joseph Ouseley	Position/Department: Director of Building Construction
Email Address: jouseley@irvingtonnj.gov	

Name (Municipal Clerk): Shawna Supel	Position/Department: Municipal Clerk
Email Address: SSupel@irvingtonnj.gov	

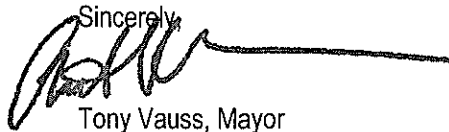
Name (Other Representative):

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,

A handwritten signature in black ink, appearing to read 'Tony Vauss', followed by a long horizontal line extending to the right.

Tony Vauss, Mayor
Township of Irvington



Christopher C. Mullin
Fire Chief/Fire Official
Emergency Management Coordinator



Fire Division

Fire Headquarters
62 S. Livingston Ave.
Livingston, NJ 07039

EMERGENCY: 911
Business: 973-992-2373
Fax: 973-535-2948
lfd@livingstonnj.org

December 4, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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:
 - o Structure and facility inventory data
 - o Identification of new development and anticipated development

- Identification of hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Christopher C. Mullin	Position/Department: Fire Chief/Fire Official/OEM Coordinator
Phone Number: (973) 992-2373	Email Address: Cmullin@livingstonnj.org

Alternate/Secondary POC: Rossana Mattia	Position/Department: Admin Assistant to the Fire Chief
Phone Number: (973) 992-2373	Email Address: Rmattia@livingstonnj.org

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

Name of NFIP FPA:	Position/Department:
Jeanette Harduby	Township Engineer / Engineering Dept.
Phone Number:	Email Address:
(973) 535-7949	Jharduby@livingstonnj.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 the different municipal representatives are included below.

Name (Engineer):	Position/Department:
Jeanette Harduby	Township Engineer / Engineering
Email Address:	
Jharduby@livingstonnj.org	

Name (Lead Planner/Planning POC):	Position/Department:
Jackie Coombs – Hollis	Land Use Administrator
Email Address:	
Jhollis@livingstonnj.org	

Name (Public Works):	Position/Department:
Chris Southworth	D.P.W. Superintendent
Email Address:	
Csouthworth@livingstonnj.org	

Name (Emergency Management):	Position/Department:
Christopher C. Mullin	O.E.M. Coordinator / Emergency Mgmt.
Email Address:	
Cmullin@livingstonnj.org	

Name (Elected Official/Administrator):	Position/Department:
Barry Lewis	Township Manager
Email Address:	
Blewis@livingstonnj.org	

Name (Building Department/Code Enforcement):	Position/Department:
Martin Chiarolanio	Construction Official
Email Address:	

Mchiarolanzio@livingstonnj.org

Name (Municipal Clerk):

Carolyn Mazzucco

Position/Department:

Township Clerk

Email Address:

Cmazzucco@livingstonnj.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,

A handwritten signature in black ink, appearing to read 'Barry Lewis', with a stylized flourish at the end.

Barry Lewis – Township Manager
Livingston Township.



Township of Maplewood

Municipal Building, 574 Valley Street
Maplewood, New Jersey 07040-2691
Telephone (973) 762-8120
Fax: (973) 762-3645

Patrick Wherry
Business Administrator

Miriam R. Perez
Assistant Business Administrator

December 10, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas

- Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:

Patrick Wherry

Phone Number:

973-762-8120 x2000

Position/Department:

Business Administrator, OEM Coordinator

Department of Administration

Email Address:

pwherry@maplewoodnj.gov

Alternate/Secondary POC:

Miriam Perez

Phone Number:

973-762-8120 x2003

Position/Department:

Assistant Business Administrator

Department of Administration

Email Address:

mperez@maplewoodnj.gov

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

Name of NFIP FPA:	Position/Department:
Darius Pokoj	Construction Official, Floodplain Administrator Department of Community Development
Phone Number:	Email Address:
973-762-8120 x3600	dpokoj@maplewoodnj.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:
Paul Kittner	Township Engineer, DPW Director Department of Engineering and Public Works
Email Address:	
pkittner@maplewoodnj.gov	

Name (Lead Planner/Planning POC):	Position/Department:
Paul Grygiel	Principal Planner, Phillips Preiss Grygiel Leheny Hughes, LLC
Email Address:	
pgrygiel@phillipspreiss.com	

Name (Public Works):	Position/Department:
Paul Kittner	Township Engineer, DPW Director Department of Engineering and Public Works
Email Address:	
pkittner@maplewoodnj.gov	

Name (Emergency Management):	Position/Department:
Patrick Wherry	Business Administrator, OEM Coordinator Department of Administration
Email Address:	
pwherry@maplewoodnj.gov	

Name (Elected Official/Administrator):	Position/Department:
Nancy Adams	Mayor
Email Address:	
nadams@maplewoodnj.gov	

Name (Building Department/Code Enforcement): Darius Pokoj	Position/Department: Construction Official Department of Community Development
Email Address: dpokoj@maplewoodnj.gov	

Name (Municipal Clerk): Liz Fritzen	Position/Department: Clerk Office of the Clerk
Email Address: lfritzen@maplewoodnj.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,



Nancy Adams, Mayor
Township of Maplewood



THE TOWNSHIP OF MILLBURN

375 MILLBURN AVENUE
MILLBURN, NEW JERSEY 07041

December 3, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years

- Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Robert Echavarria	Position/Department: Fire Chief/Emergency Management Coordinator
Phone Number: 908-65-0561	Email Address: rechavarria@millburntwp.org

Alternate/Secondary POC: Mark Azzopardi	Position/Department: Captain/Millburn Police Department/Deputy Emergency Management Coordinator
Phone Number: 973-564-7030	Email Address: mazopardi@millburntwp.org

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

Name of NFIP FPA:	Position/Department:
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Martha Callahan	Engineer/Engineering
Phone Number: 973-564-7052	Email Address: mcallahan@millburntwp.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 the different municipal representatives are included below.

Name (Engineer): Martha Callahan	Position/Department: Engineer/Engineering
Email Address: mcallahan@millburntwp.org	

Name (Lead Planner/Planning POC): Graham Petto, Topology	Position/Department: Topology
Email Address: g.petto@topology.is	

Name (Public Works): Tom Doty	Position/Department: Public Works
Email Address: tdoty@millburntwp.org	

Name (Emergency Management): Robert Echavarria	Position/Department: Fire Chief/Emergency Management Coordinator
Email Address: rechavarria@millburntwp.org	

Name (Elected Official/Administrator): Alexander McDonald	Position/Department: Business Administrator/Deputy Emergency Management Coordinator
Email Address: Amcdonald@millburntwp.org	

Name (Building Department/Code Enforcement): Frank Catanese	Position/Department: Construction Official/Building Department
Email Address:	

fcatanese@millburntwp.org

Name (Municipal Clerk):
Christine Gatti

Position/Department:
Register Municipal Clerk/Clerk

Email Address:
cgatti@millburntwp.org

Name (Other Representative):
Ted Beady

Position/Department:
Battalion Chief/Fire Department

Email Address:
tbeady@millburntwp.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,



Mayor Annette Romano
Township of Millburn



Township of Montclair • 205 Claremont Avenue • Montclair, NJ 07042 • telephone: 973-509-4927

Michael Lapolla, Esq.
Interim Township Manager
mlapolla@montclairnjusa.org

December 19, 2024

Sheriff Armando B. Fontoura
Essex County Sheriffs Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update -
Authorization and letter of Intent to Participate
Township of Montclair

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings(~ 3 meetings over 6 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



Michael Lapolla, Esq.
Interim Township Manager
mlapolla@montclairnjusa.org

- Identification of new development and anticipated development
 - Identification of hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.



Township of Montclair • 205 Claremont Avenue • Montclair, NJ 07042 • telephone: 973-509-4927

Michael Lapolla, Esq.
Interim Township Manager
mlapolla@montclairnjusa.org

Primary POC: Carmine Davino, Jr.	Position/Department: Supervisor/Division of Code Enforcement
Phone Number: 973-509-4904	Email Address: cdavinojr@montclairnjusa.org

Alternate/Secondary POC: Tony Fan	Position/Department: Chief Information Officer/Office of Information Technology
Phone Number: 973-509-4927	Email Address: tfan@montclairnjusa.org

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

Name of NFIP FPA: Norberto Hernandez	Position/Department: Township Engineer/Department of Community Services
Phone Number: 973-509-5707	Email Address: nhernandez@montclairnjusa.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 the different municipal representatives are included below.

Name (Engineer): Norberto Hernandez	Position/Department: Township Engineer/Department of Community Services
Email Address: nhernandez@montclairnjusa.org	

Name (Lead Planner/Planning POX): Janice Talley	Position/Department: Director/Department of Planning and Zoning
Email Address: jtalley@montclairnjusa.org	



Township of Montclair • 205 Claremont Avenue • Montclair, NJ 07042 • telephone: 973-509-4927

Michael Lapolla, Esq.
Interim Township Manager
mlapolla@montclairnjusa.org

Name (Public Works): Austin Ashley	Position/Department: Director/Department of Community Services
Email Address: aashley@montclairnjusa.org	

Name (Emergency Management): Rob Bianco	Position/Department: OEM Coordinator/Emergency Operations Center
Email Address: aashley@montclairnjusa.org	

Name (Elected Official/Administrator): Michael Lapolla	Position/Department: Interim Township Manager/Office of the Township Manager
Email Address: mlapolla@montclairnjusa.org	

Name (Building Department/Code Enforcement): Norma Tassy	Position/Department: Director/Division of Code Enforcement
Email Address: ntassy@montclairnjusa.org	

Name (Municipal Clerk): Angelese Bermudez Nieves	Position/Department: Township Clerk/ Office of the Township Clerk
Email Address: anieves@montclairnjusa.org	

Name (Other Representative): Mayor Rene Baskerville	Position/Department: Mayor/Mayor & Township Council
Email Address: MayorBaskerville@montclairnjusa.org	



Township of Montclair • 205 Claremont Avenue • Montclair, NJ 07042 • telephone: 973-509-4927

Michael Lapolla, Esq.
Interim Township Manager
mlapolla@montclairnjusa.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,

Michael Lapolla, Esq.
Interim Township Manager
Township of Montclair



City of Newark
DEPARTMENT OF PUBLIC SAFETY
Emergency Management Division
480 Clinton Avenue
Newark, NJ 07108
Tel: (973) 877-9259
Fax: (973) 792-9128



December 2, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
City of Newark

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing hazard risk



City of Newark
DEPARTMENT OF PUBLIC SAFETY
Emergency Management Division
480 Clinton Avenue
Newark, NJ 07108
Tel: (973) 877-9259
Fax: (973) 792-9128



- 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: John S. James

Position/Department: OEM Coordinator

Phone Number: (973) 991-8876

Email Address: jamesjoh@ci.newark.nj.us

Alternate/Secondary POC: Juba Dowdell

Position/Department: OEM Deputy Coordinator

Phone Number: (973) 902-1383

Email Address: dowdellj@ci.newark.nj.us



City of Newark
DEPARTMENT OF PUBLIC SAFETY
Emergency Management Division
480 Clinton Avenue
Newark, NJ 07108
Tel: (973) 877-9259
Fax: (973) 792-9128



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

Name of NFIP FPA: Delores M. Wooden	Position/Department: Director of Engineering
Phone Number: 973.733.8520	Email Address: : woodend@ci.newark.nj.us

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): Delores M. Wooden	Position/Department: Director of Engineering
Email Address: woodend@ci.newark.nj.us	

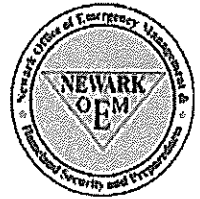
Name (Lead Planner/Planning POC): Pallavi Shinde	Position/Department: City Planner
Email Address: Shindep@ci.newark.nj.us	

Name (Public Works): Tyreek Rolon	Position/Department: Director of DPW
Email Address: rolont@ci.newark.nj.us	

Name (Emergency Management): John S. James	Position/Department: OEM Coordinator
Email Address: jamesjoh@ci.newark.nj.us	



City of Newark
DEPARTMENT OF PUBLIC SAFETY
Emergency Management Division
480 Clinton Avenue
Newark, NJ 07108
Tel: (973) 877-9259
Fax: (973) 792-9128



Name (Elected Official/Administrator): Eric Pennington	Position/Department: Business Administrator
---	---

Email Address: penningtone@ci.newark.nj.us

Name (Building Department/Code Enforcement): Abiodun Nance	Position/Department: Manager of Code Enforcement
---	--

Email Address: nancea@ci.newark.nj.us

Name (Municipal Clerk): Kecia Daniels	Position/Department: Municipal Clerk
---------------------------------------	--------------------------------------

Email Address: danielsk@ci.newark.nj.us

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,

Mayor Ras J. Baraka
City Of Newark



City of Newark
DEPARTMENT OF PUBLIC SAFETY
Emergency Management Division
480 Clinton Avenue
Newark, NJ 07108
Tel: (973) 877-9259
Fax: (973) 792-9128



Name (Elected Official/Administrator): Eric Pennington
Position/Department: Business Administrator
Email Address: penningtone@ci.newark.nj.us

Name (Building Department/Code Enforcement): Abiodun Nance
Position/Department: Manager of Code Enforcement
Email Address: nancea@ci.newark.nj.us

Name (Municipal Clerk): Kecia Daniels
Position/Department: Municipal Clerk
Email Address: danielsk@ci.newark.nj.us

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,

Mayor Ras J. Baraka
City Of Newark



Borough of North Caldwell
141 Gould Avenue
North Caldwell, New Jersey 07006
(973) 228-6410 www.northcaldwell.org

November 22, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052
Via email: essexoem@essexsheriff.com

Subject: Essex County Hazard Mitigation Plan Update –
 Authorization and Letter of Intent to Participate
 Borough of North Caldwell

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Glenn Domenick	Position/Department: Borough Administrator
Phone Number: 973-228-6410, x-101	Email Address: gdomenick@northcaldwell.org

Alternate/Secondary POC: Tim Peterson	Position/Department: Emergency Management Coordinator
Phone Number: 973-226-0800	Email Address: oem@northcaldwell.org

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

Name of NFIP FPA: John Biront	Position/Department: Borough Engineer, DPW Director
Phone Number: 973-228-6410, x-132	Email Address: jbiront@northcaldwell.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 the different municipal representatives are included below.

Name (Engineer): John Biront	Position/Department: Borough Engineer/DPW Director
Email Address: jbiront@northcaldwell.org	

Name (Lead Planner/Planning POC): John Biront	Position/Department: Borough Engineer/DPW Director
Email Address: jbiront@northcaldwell.org	

Name (Public Works): John Biront	Position/Department: DPW Director/Borough Engineer
Email Address: jbiront@northcaldwell.org	

Name (Emergency Management): Timothy Peterson	Position/Department: Emergency Management Coordinator
Email Address: oem@northcaldwell.org	

Name (Elected Official/Administrator): Glenn Domenick	Position/Department: Borough Administrator
Email Address: gdomenick@northcaldwell.org	

Name (Building Department/Code Enforcement): Paul Milani	Position/Department: Building/Construction Code Official
Email Address: pmilani@northcaldwell.org	

Name (Municipal Clerk): Tami Michelotti	Position/Department: Municipal Clerk, Deputy Borough Administrator
Email Address: tmichelotti@northcaldwell.org	

Name (Other Representative):

Karl Strodthoff, Police Chief

Position/Department:

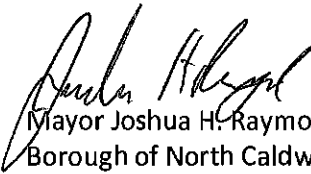
Deputy Emergency Management Coordinator

Email Address:

kstrodthoff@northcaldwell.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,



Mayor Joshua H. Raymond
Borough of North Caldwell



TOWNSHIP OF NUTLEY

DEPARTMENT OF PUBLIC AFFAIRS AND HEALTH
149 CHESTNUT STREET
NUTLEY, NEW JERSEY 07110
PHONE: (973) 284-4976
FAX: (973) 661-9411

JOHN V. KELLY, III
Mayor

January 16, 2025

Sheriff Amir D. Jones
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Jones:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Salvatore Ferraro	Position/Department: Engineering/Chief Project Coordinator
Phone Number: 973-284-4958 x 2254	Email Address: sferraro@nutleynj.org

Alternate/Secondary POC: Don Santangelo	Position/Department: OEM Coordinator
Phone Number: 973-284-4940 x 2124	Email Address: dsantangelo@nutleynj.org

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

Name of NFIP FPA: Salvatore Ferraro	Position/Department: Engineering/ Chief Project Coordinator
-------------------------------------	---


Phone Number: 973-284-4958 x 2254

Email Address: sferraro@nutleynj.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 the different municipal representatives are included below.

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,



Mayor John Kelly III
Township of Nutley



CITY OF ORANGE TOWNSHIP

MAYOR DWAYNE D. WARREN, ESQ.

29 North Day Street, Orange, New Jersey 07050

Phone: (973) 952-6102 Fax: (973) 676-7458

November 18, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update – Authorization and Letter of Intent to Participate City of Orange Township

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex County Hazard Mitigation 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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
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 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC:
Elvin Padilla Jr.

Position/Department:
OEM Coordinator

Phone Number:
862-438-0647

Email Address:
epadillajr@orangenj.gov

Alternate/Secondary POC:
Todd Warren

Position/Department:
Deputy OEM Coordinator

Phone Number:
(973) 952-6311

Email Address:
todd.warren@orangenjpolice.com

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

Name of NFIP FPA:
Marty Mayes

Position/Department:
Director of Public Works

Phone Number:
(973) 952-6081

Email Address:
mmayes@orangenj.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):

Derek Dorah

Email Address:

Position/Department:

Engineer

Remington & Vernick

Name (Lead Planner/Planning POC):

Laquana Best

Email Address:

lbest@orangenj.gov

Position/Department:

**Director of Planning & Economic
Development**

Name (Public Works):

Marty Mayes

Email Address:

mmayes@orangenj.gov

Position/Department:

Director of Public Works

Name (Emergency Management):

Bill Bishop

Email Address:

bbishop@orangenj.gov

Position/Department:

**Assistant to the OEM Deputy
Coordinator/GIS**

Name (Elected Official/Administrator):

Christopher Hartwyk

Email Address:

chartwyk@orangenj.gov

Position/Department:

Business Administrator

Name (Building Department/Code
Enforcement):

Ibin Raheem

Email Address:

Iraheem@orangenj.gov

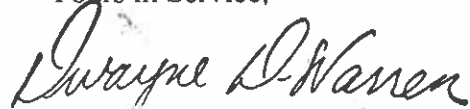
Position/Department:

**Construction Official/Building Subcode
Inspector**

Name (Municipal Clerk): Joyce Lanier	Position/Department: City Clerk
Email Address: jlainer@orangenj.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.

Yours in Service,

A handwritten signature in black ink, reading "Dwayne D. Warren". The signature is fluid and cursive, with the first name "Dwayne" being more prominent.

Mayor Dwayne D. Warren, Esq.
City of Orange Township



BOROUGH OF ROSELAND

OFFICE OF THE MAYOR

JAMES R. SPANGO
MAYOR

140 EAGLE ROCK AVENUE
ROSELAND, NEW JERSEY 07068
P: (973) 403-6023 · F: (973) 403-6031
JSPANGO@ROSELANDNJ.ORG

November 25, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office - Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update – Authorization and Letter of Intent to Participate
Borough of Roseland, New Jersey

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: John Matheis

Position/Department: Coordinator / Office of Emergency Management

Phone Number: Office 973-403-6840 Cell 973-449-4751

Email Address: jmatheis@roselandnj.org

Alternate/Secondary POC: Bill Collins

Position/Department: Deputy Coordinator / Office of Emergency Management

Phone Number: Office 973-403-6840 Cell 201-247-4891

Email Address: williamcollins3@gmail.com

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

Name of NFIP FPA: Boswell Engineer / Joseph Pomante

Position/Department: Engineer

Phone Number: 201-641-0770

Email Address: jpomante@boswellengineering.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): Boswell Engineering/ Joseph

Pomante

Position/Department: Engineer 201-641-0770

Email Address: jpomante@boswellengineering.com

Name (Lead Planner/Planning POC): Same as

Engineer

Position/Department:

Email Address:

Name (Public Works): Christopher Critcheet

Position/Department: Superintendent

Office 973-403-6856

Email Address: ccritchett@roselandnj.org

Name (Emergency Management): John Matheis

Position/Department: Coordinator

Office 973-403-6840 Cell 973-449-4751

Email Address: jmatheis@roselandnj.org

Name (Elected Official/Administrator): Maureen

Chumacas

Position/Department: Administrator

Office 973-403-6884 Cell 973-803-6747

Email Address: mchumacas@roselandnj.org

Name (Building Department/Code

Enforcement): Tom Jacobson

Position/Department: Construction Code Official

Office 973- 226-5566 Cell 973-650-6907

Email Address: construction@roselandnj.org

Name (Municipal Clerk): Jock Watkins

Position/Department: Boro Clerk Office 973-403-

6029 Cell 862-881-6313

Email Address: jwatkins@roselandnj.org

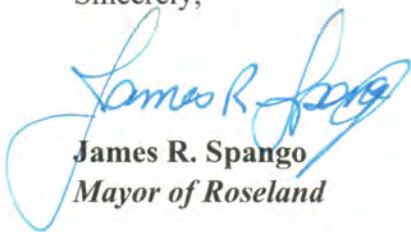
Name (Other Representative): N/A

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,



James R. Spango
Mayor of Roseland

SOUTH ORANGE VILLAGE
Municipal Offices
76 South Orange Ave
Suite 302
South Orange
Essex County
New Jersey 07079

www.southorange.org
P 973.378.7715
F 973.763.0987



RESOLUTION #2025-046

February 24, 2025

RESOLUTION AUTHORIZING EXECUTION OF LETTER OF INTENT TO PARTICIPATE IN THE ESSEX COUNTY HAZARD MITIGATION PLAN/UPDATE AND APPOINTING REPRESENTATIVES TO SERVE AS PLANNING POINT OF CONTACTS

WHEREAS, South Orange Village is a participating municipality in the Essex County Hazard Mitigation Plan and wishes to execute the attached Letter of Intent to Participate to update and continue to participate in the Essex County Hazard Mitigation Plan; and

WHEREAS, South Orange Village is obligated to appoint representatives to serve as Planning Point of Contacts.

NOW THEREFORE, BE IT RESOLVED by the Village Council of South Orange Village that Mayor Sheena Collum, or her designee, is hereby authorized to execute the Letter of Intent to Participate in the Essex County Hazard Mitigation Plan and Update; and

BE IT FURTHER RESOLVED that municipal representatives as designated in the attached Letter of Intent to Participate are hereby appointed to serve as Planning Point of Contacts.

Council Member	Motion	Second	Ayes	Nays	Abstain	Absent
Brown			X			
Greenberg			X			
Haskins		X	X			
Hartshorn Hilton						X
Jones	X		X			
Lewis-Chang			X			

CERTIFICATION

I, Ojetti E. Davis, Village Clerk of South Orange Village, County of Essex, State of New Jersey, do hereby certify that this is a true and correct copy of the Resolution adopted by the Village Council at their regular meeting held on Monday, February 24, 2025.


Ojetti E. Davis
Village Clerk

SOUTH ORANGE VILLAGE
Municipal Offices
76 South Orange Ave
Suite 302
South Orange
Essex County
New Jersey 07079

OFFICE OF THE
MAYOR

scollum@southorange.org
P 973.378.7715 ext 2
www.southorange.org
P 973.378.7890
F 973.761.4357

Sheena C. Collum
Mayor



February 20, 2025

Sergeant Ryan Peter
Essex County Sheriff's Office
Office Of Emergency Management
560 Northfield Avenue West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update - Authorization and
Letter of Intent to Participate
South Orange Village

Dear Sergeant Peter:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years



- Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Julie Doran

Position/Department: Village
Administrator

Phone Number: 973-378-7715 x2

Email Address:
jdoran@southorange.org



Alternate/Secondary POC: Scott Egelberg	Position/Department: Office of Emergency Management Coordinator
Phone Number: 973-378-7715 x2	Email Address: segelberg@southorange.org

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

Name of NFIP FPA: David Battaglia	Position/Department: Engineering
Phone Number: 973-378-7715 x3990	Email Address: engineer@southorange.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 the different municipal representatives are included below.

Name (Engineer): David Battaglia	Position/Department: Engineering
Email Address: engineer@southorange.org	

Name (Lead Planner/Planning POC): Greer Patras	Position/Department: Zoning Official
Email Address: zoningofficial@southorange.org	



Name (Public Works): Joe Foligno

Position/Department: Director of
Public Works

Email Address:
jfoligno@southorange.org

Name (Emergency Management):
Scott Egelberg

Position/Department: OEM
Coordinator

Email Address:
segelberg@southorange.org

Name (Elected Official/Administrator):

Sheena Collum

Position/Department:

Mayor

Email Address:
scollum@southorange.org

Name (Building Department/Code
Enforcement): Anthony Greci

Position/Department: Building Official

Email Address:
agreci@southorange.org

Name (Municipal Clerk): Ojetti Davis

Position/Department: Village Clerk

Email Address:
odavis@southorange.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,

A handwritten signature in cursive script, reading "Sheena C. Collum".

Sheena C. Collum

Mayor

South Orange Village

MAYOR
CHRISTOPHER H. TAMBURRO
DEPUTY MAYOR
JACK McEVOY
COUNCILMEMBERS
ALEX ROMAN
CHRISTINE McGRATH
CYNTHIA L. M. HOLLAND

TOWNSHIP OF VERONA
COUNTY OF ESSEX, NEW JERSEY



TOWNSHIP MANAGER
JOSEPH O. D'ARCO
TOWNSHIP CLERK
JENNIFER KIERNAN
TOWNSHIP ATTORNEY
BRIAN J. ALOIA, ESQ.

VERONA COMMUNITY CENTER
880 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044

MUNICIPAL BUILDING
600 BLOOMFIELD AVENUE
VERONA, NEW JERSEY 07044
(973) 239-3220
WWW.VERONANJ.ORG

DEPARTMENT OF PUBLIC WORKS
10 COMMERCE COURT
VERONA, NEW JERSEY 07044

November 25, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

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

Dear Sheriff Fontoura:

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

Authorizes Essex County Sheriff's Office and the Essex 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.

1. 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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.
2. 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Joel Martin	Position/Department: VPD/OEM Coordinator
Phone Number: 201-704-3074	Email Address: joel.martin@veronapolice.org

Alternate/Secondary POC: J. Christopher Kiernan	Position/Department: Police Chief
Phone Number: 862-596-0710	Email Address: Christopher.kiernan@veronapolice.org

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

Name of NFIP FPA: Boswell Engineering Peter Tenkate	Position/Department: Engineering
Phone Number: 201-424-4740	Email Address: Ptenkate@Boswellengineering.com

4. 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): Peter Tenkate Boswell Engineering	Position/Department: Township Engineer
Email Address: ptenkate@boswellengineering.com	

Name (Lead Planner/Planning POC): Kevin O'Sullivan	Position/Department: Deputy Twp Manager Administration
Email Address: KOSullivan@veronanj.org	

Name (Public Works): Chuck Molinaro	Position/Department: Superintendent P.W.
Email Address: CMolinaro@veronanj.org	

Name (Emergency Management): Joel Martin	Position/Department: OEM Coordinator/ VPD Officer
Email Address: Joel.martin@Veronapolice.org	

Name (Elected Official/Administrator): Kevin O'Sullivan	Position/Department: Deputy Township Manager
Email Address: Kosullivan@veronanj.org	

Name (Building Department/Code Enforcement): Tom Jacobsen, Construction Official	Position/Department: Building/Construction
Email Address: TJacobsen@veronanj.org	

Name (Municipal Clerk): Jennifer Kiernan	Position/Department: Municipal Clerk
Email Address: JKiernan@veronanj.org	

Name (Other Representative):
Connor McCann

Position/Department: Deputy OEM/Fire
Inspector

Email Address: cmccann@veronanj.org

5. 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,

A handwritten signature in blue ink, appearing to read "Chris", followed by a long horizontal flourish.

Christopher Tamburro, Mayor
Township of Verona

Township of West Caldwell



November 25, 2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
Township of West Caldwell

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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 Planning Partnership meetings (~ 3 meetings over 6 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 hazard risk areas
 - Identification of hazard events and losses that have impacted your community in the last five years
 - Identification of plans, studies, reports and ordinances addressing 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: Lawrence Peter	Position/Department: Emergency Management Coordinator
Phone Number: 973-747-9946	Email Address: lpeter@westcaldwell.com

Alternate/Secondary POC: John Medina	Position/Department: Deputy Emergency Management Coordinator
Phone Number: 973-226-2302	Email Address: jmedina@westcaldwell.com

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

Name of NFIP FPA: John Medina	Position/Department: Construction Official
Phone Number: 973-226-2302	Email Address: jmedina@westcaldwell.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): Jeffrey Betz	Position/Department: Township Engineer
Email Address: jeffrey.betz@collierseng.com	

Name (Lead Planner/Planning POC): Daniel Bloch	Position/Department: Township Planner / Zoning Officer
Email Address: dbloch@westcaldwell.com	

Name (Public Works): Michael Tempesta	Position/Department: Public Works Director
Email Address: mtempesta@westcaldwell.com	

Name (Emergency Management): Lawrence Peter	Position/Department: Emergency Management Coordinator
Email Address: lpeter@westcaldwell.com	

Name (Elected Official/Administrator): Joseph Tempesta, Jr.	Position/Department: Mayor
Email Address: jtempesta@westcaldwell.com	

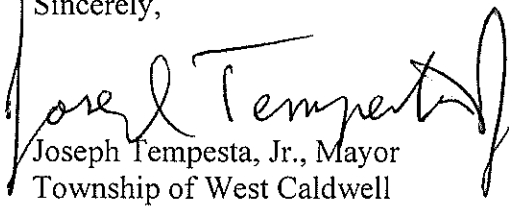
Name (Building Department/Code Enforcement): John Medina	Position/Department: Construction Official
Email Address: jmedina@westcaldwell.com	

Name (Municipal Clerk): Joann DeBlasis	Position/Department: Township Clerk
Email Address: jdeblasis@westcaldwell.com	

Name (Other Representative): Nikole Baltycki	Position/Department: Township Administrator/CFO
Email Address: nbaltycki@westcaldwell.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,

A handwritten signature in black ink, appearing to read "Joseph Tempesta, Jr.", with a stylized flourish at the end.

Joseph Tempesta, Jr., Mayor
Township of West Caldwell



TOWNSHIP OF WEST ORANGE

66 MAIN STREET, WEST ORANGE, N.J. 07052

OFFICE OF THE MAYOR

SUSAN McCARTNEY

Mayor

Tel: (973) 325-4100

Fax: (973) 669-0238

Email: Mayor@westorange.org

smccartney@westorange.org

11/26/2024

Sheriff Armando B. Fontoura
Essex County Sheriff's Office
Office of Emergency Management
560 Northfield Avenue
West Orange, NJ 07052

Subject: Essex County Hazard Mitigation Plan Update –
Authorization and Letter of Intent to Participate
Township of West Orange

Dear Sheriff Fontoura:

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

1. Authorizes Essex County Sheriff's Office and the Essex 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 Essex County Sheriff's Office, attention: Sergeant Ryan Peter.
 - 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.
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 - Provide data and information about your community as requested by the Steering Committee or the contract consultant, including:
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 - 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 Planning Partnership meetings, and assuring that the other minimum requirements of jurisdictional participation, as detailed in the Planning Partner Expectations above, are met.

Primary POC: ZAYIBETH CARBALLO	Position/Department: MUNICIPAL ENGINEER
Phone Number: 973-325-4160	Email Address: ZCARBALLO@WESTORANGE.ORG

Alternate/Secondary POC: LOU REYNOLDS	Position/Department: DIRECTOR. PUBLIC WORKS
Phone Number: 973-325-4067	Email Address: LREYNOLDS@WESTORANGE.ORG

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

Name of NFIP FPA: ZAYIBETH CARBALLO	Position/Department: MUNICIPAL ENGINEER
Phone Number: 973-325-4160	Email Address: ZCARBALLO@WESTORANGE.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 the different municipal representatives are included below.

Name (Engineer): ZAYIBETH CARBALLO

Position/Department: MUNICIPAL ENGINEER

Email Address: ZCARBALLO@WESTORANGE.ORG

Name (Lead Planner/Planning POC): GENIECE
GARY-ADAMS

Position/Department: PLANNING/ZONING

Email Address:
ZONINGOFFICIAL@WESTORANGE.ORG

Name (Public Works): LOU REYNOLDS

Position/Department: DIRECTOR, PUBLIC WORKS

Email Address: LREYNOLDS@WESTORANGE.ORG

Name (Emergency Management): NICK
ALLEGRINO

Position/Department: EMC

Email Address: NICKALLEGRINO@WOPD.ORG

Name (Elected Official/Administrator): SUSAN
McCARTNEY

Position/Department: MAYOR

Email Address: MAYOR@WESTORANGE.ORG

Name (Building Department/Code Enforcement):
TOM BIONDI

Position/Department: BUILDING DEPARTMENT

Email Address: TBIONDI@WESTORANGE.ORG

Name (Municipal Clerk): KAREN CARNEVALE

Position/Department: MUNICIPAL CLERK

Email Address:
KCARNEVALE@WESTORANGE.ORG

Name (Other Representative): PETER SMERALDO

Position/Department: ASST. BUSINESS
ADMINISTRATOR

Email Address: PSMERALDO@WESTORANGE.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,



Susan M. McCartney
Mayor, Township of West Orange



AN EQUAL OPPORTUNITY EMPLOYER
www.westorange.org



APPENDIX C: MEETING DOCUMENTATION

Appendix C includes meeting agendas, sign-in sheets, and meeting notes (where applicable and available) for meetings convened during the development of the Essex County HMP update.

MEETING AGENDA

Essex County Hazard Mitigation Plan

Project Kick-Off with Planning Partnership

December 4, 2024; 10:00 – 11:00 a.m.

Location: 560 Northfield Avenue, West Orange, NJ

- 1. Introductions**
- 2. Hazard Mitigation Planning Overview**
 - a. What is a Hazard Mitigation Plan**
 - b. Organization of the Planning Process**
 - i. Core Planning Team
 - ii. Steering Committee
 - iii. Planning Partnership
- 3. Hazards of Concern**
- 4. Public Outreach Strategy**
- 5. Jurisdictional Worksheets**
 - a. Capabilities
 - b. Floodplain Administration
 - c. New Development
 - d. Previous Events
 - e. Previous Mitigation Actions
- 6. What's Next**
- 7. Questions and Discussion**





1



2



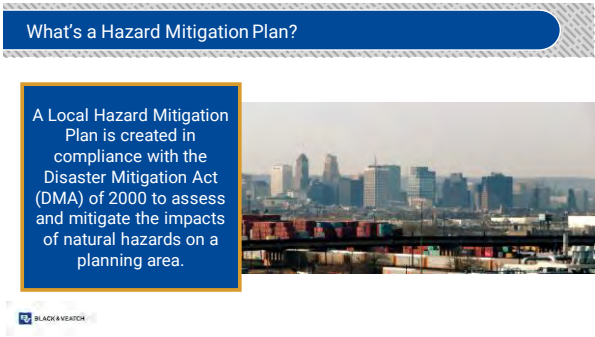
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6

Why Develop a Plan?



Essex County's HMP is set to expire



Helps reduce hazard impacts on people, property, infrastructure, and services



Establishes eligibility for mitigation grant funding



Fosters collaboration between the County, community members, and stakeholders

BLACK & VEATCH

7

Project Schedule & Milestones


	2024			2025							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Phase 1: Organize Resources											
Phase 2: Assess Risk											
Phase 3: Engage the Public											
Phase 4: Set Goals & Assess Capabilities											
Phase 5: Plan Maintenance Strategy											
Phase 6: Assemble & Adopt the Plan											

★ October 2024 – Project Kick-Off
 ★ December 2024 – Planning Partnership and Steering Committee Kickoffs
 ★ February 2025 – Public Meetings and Stakeholder Workshops
 ★ February 18, 2025 – Risk Assessment Meeting and Mitigation Strategy Workshop
 ★ March 2025 – Public Review and Plan Submission to NJDEM
 ★ April/May 2025 – Submission to FEMA and start of adoption process

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8

Core Planning Team (CPT)



WHO

- Leads from the Black & Veatch team
- Key County project management staff

WHEN

Meet bi-weekly or as needed (virtual)


WHAT

- Monitor plan progress milestones
- Identify input needs for the Planning Partnership

BLACK & VEATCH

9

Steering Committee (SC)



WHO

- Core Planning Team
- Key County and stakeholder representatives

WHEN

Meet bi-weekly or as needed (virtual)

WHAT

- Monitor plan progress milestones
- Identify input needs for the Planning Partnership

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10

Role of the Planning Partnership



11

Hazard Mitigation Planning Partnership (PP)



WHO

Representatives of each participating jurisdiction

WHEN

3 meetings through the planning process

WHAT

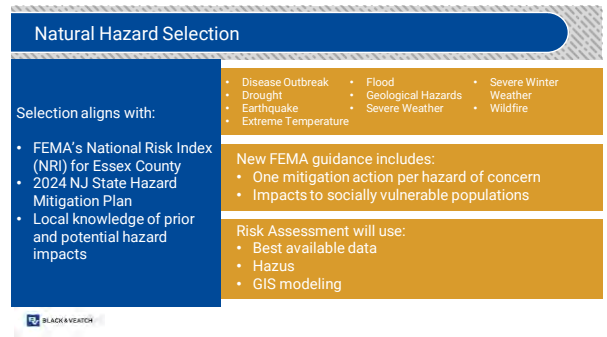
Develop jurisdictional annex, conduct outreach, and contribute to overall planning process

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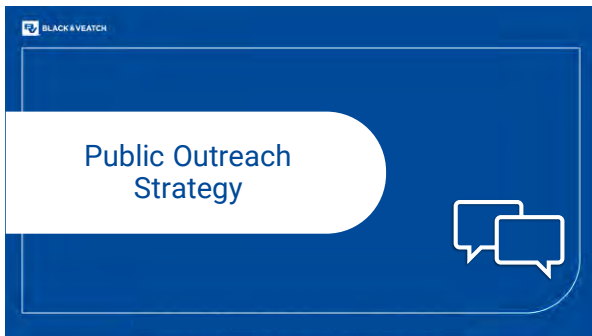
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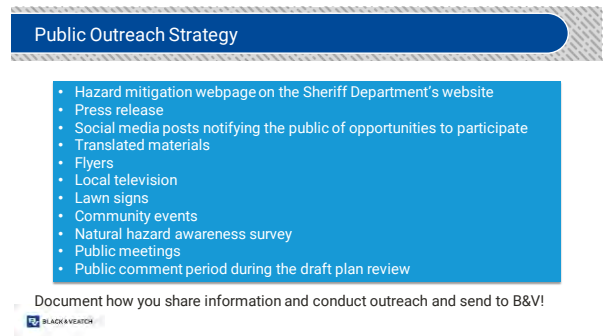
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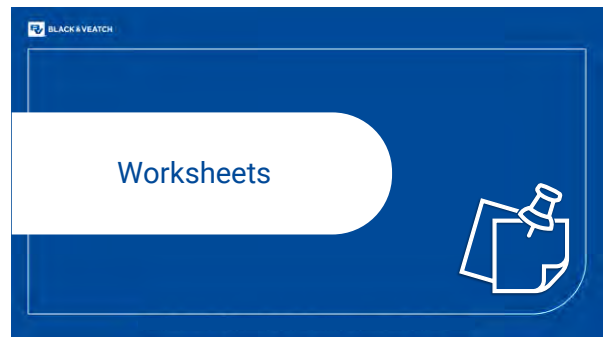
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16



17



18

Worksheet: Previous Events and Impacts

Worksheet: Previous Events and Impacts

Instructions: This worksheet is to be completed by the project sponsor or a designated representative of the project sponsor. It is to be completed for all projects that have been approved for funding by the Department of Transportation (DOT) and are currently in the process of construction or have been completed within the last 12 months.

Project Information:

Project Name: _____

Project Location: _____

Project Start Date: _____

Project End Date: _____

Previous Events and Impacts:

Provide a list of all previous events and impacts that have occurred during the project's construction or operation. Include the date, location, and a brief description of the event and its impact.

Date	Location	Event Description	Impact
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.

19

Worksheets: Capabilities

Worksheet: Capabilities

Instructions: This worksheet is to be completed by the project sponsor or a designated representative of the project sponsor. It is to be completed for all projects that have been approved for funding by the Department of Transportation (DOT) and are currently in the process of construction or have been completed within the last 12 months.

Project Information:

Project Name: _____

Project Location: _____

Project Start Date: _____

Project End Date: _____

Capabilities:

Provide a list of all capabilities that the project has or will have. Include the date, location, and a brief description of the capability and its impact.

Date	Location	Capability Description	Impact
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.

20

Worksheets: Floodplain Administration

Worksheet: Floodplain Administration

Instructions: This worksheet is to be completed by the project sponsor or a designated representative of the project sponsor. It is to be completed for all projects that have been approved for funding by the Department of Transportation (DOT) and are currently in the process of construction or have been completed within the last 12 months.

Project Information:

Project Name: _____

Project Location: _____

Project Start Date: _____

Project End Date: _____

Floodplain Administration:

Provide a list of all floodplain administration activities that the project has or will have. Include the date, location, and a brief description of the activity and its impact.

Date	Location	Activity Description	Impact
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.

21

Worksheets: New Development

Worksheet: New Development

Instructions: This worksheet is to be completed by the project sponsor or a designated representative of the project sponsor. It is to be completed for all projects that have been approved for funding by the Department of Transportation (DOT) and are currently in the process of construction or have been completed within the last 12 months.

Project Information:

Project Name: _____

Project Location: _____

Project Start Date: _____

Project End Date: _____

New Development:

Provide a list of all new development activities that the project has or will have. Include the date, location, and a brief description of the activity and its impact.

Date	Location	Activity Description	Impact
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.

22

Worksheets: Previous Actions

Worksheet: Previous Actions

Instructions: This worksheet is to be completed by the project sponsor or a designated representative of the project sponsor. It is to be completed for all projects that have been approved for funding by the Department of Transportation (DOT) and are currently in the process of construction or have been completed within the last 12 months.

Project Information:

Project Name: _____

Project Location: _____

Project Start Date: _____

Project End Date: _____

Previous Actions:

Provide a list of all previous actions that the project has or will have. Include the date, location, and a brief description of the action and its impact.

Date	Location	Action Description	Impact
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.
10/15/2019	Project Location	Construction of the project began.	Construction of the project began.

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Next Steps




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What's Next

Next meeting: 9:30 am - noon, February 17, 2025.
Essex County Emergency Operations Center

- Worksheets due January 8, 2025
- Support public outreach! Emails will be sent with templates for social media, flyers, etc.


Sign up for your municipal annex support meeting:



25

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Questions



26

BLACK & VEATCH

Points of Contact

Essex County Sheriff's Office
Sergeant Ryan Peter
973-324-9750 | rpeter@essexsheriff.com

Black & Veatch Project Manager
Alison Miskiman CFM, GISP
201-977-4432 | MiskimanAM@bv.com

Black & Veatch Lead Planner
Chris Huch CFM
201-225-8077 | HuchJrC@bv.com

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MEETING SUMMARY

Essex County Hazard Mitigation Plan
 Project Kick-Off with Planning Partnership
 December 4, 2024; 10:00 – 11:00 a.m.
 Location: 560 Northfield Avenue, West Orange, NJ

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Introductions and Attendance	See sign-in sheet
2.	Hazard Mitigation Planning Overview	<p>An overview was provided on hazard mitigation and the importance of updating the current plan set to expire in June 2025. An adopted and current hazard mitigation plan is needed to access FEMA mitigation funding.</p> <p>The project schedule and milestones were reviewed.</p> <p>The Core Planning Team, Steering Committee, and Planning Partnership composition and roles were presented, and frequency of meetings.</p>
3.	Hazards of Concern	<p>The new FEMA guidance requirements were discussed including alignment with the National Risk Index, State Hazard Mitigation Plan, inclusion of impacts from climate change, and socially vulnerable populations. The hazards of concern will be limited to the natural hazards documented in the 2020 Essex County plan with the non-natural hazards moved to an appendix with no risk assessment.</p>
4.	Public Outreach Strategy	<p>The methods for public outreach that will be implemented for this plan were reviewed inclusive of leveraging the County's existing</p>



		hazard mitigation plan website; press releases; social media posts; flyers and lawn signs in English, Spanish, and Portuguese; online surveys for the public, stakeholders, and neighboring communities; public meetings and a public comment period during plan review. Each community will support the public outreach strategy by implementing one item; materials forthcoming.
5.	Jurisdictional Worksheets	Each jurisdiction will be responsible for completing and returning the following worksheets to Black & Veatch by January 8 th
	<i>Capabilities</i>	Document planning, regulatory, staffing, and programmatic capabilities supporting hazard mitigation and risk reduction.
	<i>Floodplain Administration</i>	Describe floodprone areas and NFIP floodplain administration.
	<i>New Development</i>	Document major developments that have taken place since January 1, 2020 or are anticipated in the next five years.
	<i>Previous Events</i>	Document impactful hazard events that have taken place since January 1, 2020.
	<i>Previous Mitigation Actions</i>	Report out on progress of previous mitigation actions identified in 2020 HMP.
6.	What's Next	<ul style="list-style-type: none"> • Schedule annex support meetings with Black & Veatch staff, before holiday break. • Support public outreach and send photographs to Black & Veatch. • Jurisdictional worksheets due January 8, 2025 • Mandatory Risk Assessment and Mitigation Strategy meeting on February 18, 2025
7.	Questions and Discussion	

Sign In Sheet

Essex County Hazard Mitigation Plan
 Meeting: Project Kick-Off with Planning Partnership
 December 4, 2024; 10:00 – 11:00 a.m.
 Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Nick DeSava	ECSC	Sergeant	NDeSava@essexsheriff.com
Connor McCann	VERONA	OEM	McCann@VERONA.NJ.org
Eugene Collins	EAST ORANGE	Asst Director	EugeneCollins@essexcounty.org
Thomas Icolari	Bloomfield	OEM Coor	thcolari@bloomfieldnj.org
Matt Gifford	Essex Fire	Coor	mattgifford@essexfire.org
Tim Gasparini	Fairfield	OEM Deputy	gasparini@fairfieldnj.org
Brian Blum	SEVEN HILLS	EMC	blum@sevenhillsnj.org
Joel Martin	Verona	Coordinator	joel.martin@veronaj.org
MARIE GUERIN	ORANGETOWN	COORDINATOR	FIRE OFFICE@ORANGETOWNNJ.org
Will Cessly	Nutley	Coordinator	willc@nutley.org
Don Santangelo	Nutley	OEM Coordinator	DSantangelo@nutley.org
Ernest Cusbo	Asheville	OEM	ECUSBO@asheville.org
RS ASARINO	FAIRFIELD	LT / OEM	RASARINO@FAIRFIELDNJ.org
Christopher Mullin	Livingston Twp.	Fire Chief / OEM Coor	cmullin@livingstonnj.org
Toby Dandell	VERMONT-NEWARK	Deputy Coor	Dandell@vermontnj.org



Sign In Sheet

Essex County Hazard Mitigation Plan
 Meeting: Project Kick-Off with Planning Partnership
 December 4, 2024; 10:00 – 11:00 a.m.
 Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Larry Peter	West Caldwell	DEM	L.Peter@westcaldwell.com
James Simpson	Essex CoEM	EMS Coord.	J.Simpson652@comcast.net
Michael Crevier	Mountair ODEM	DEM / EMS	DeputyChief@mountair-ems.org
David Williams	Essex ODEM	Coordinator	david.williams@essex-ems.org
Nafayla Othman	Essex ODEM	Deputy Coord	Nafayla.othman@essex-ems.org
John McLean	Belleville ODEM	DEM	JohnMcLean@bellevillemj.org
Nick Allegretto	West Orange	DEM	NickAllegretto@wopd.org
Star Rogers	DEM	RACES Coordinator	star@rogers.net
Mark Fazzopardi	Millburn	DEM - Deputy	mfazzopardi@millburnnj.org
Thomas Doty	Millburn	DEM	tdoty@millburnnj.org
John Matthews	Roseland	DEM	JMatthews@roselandnj.org
Dan Donnan	Cedar Grove	DEM	DDonnan@cedar Grove NJ.org
Syl Lukowski	Livingston	DES	Sylukowski@livingstonnj.org
Jim Egan	Essex Falls	DEM	JimEgan@essexfalls.org
William Muligan	Irvington	DEM	WilliamMuligan@irvingtonnj.org
Tony Outerbridge	Irvington	DEM	Tonyouterbridge@irvingtonnj.org
John Brown	Irvington	DEM	JBrown@IrvingtonNJ.org



Sign In Sheet

Essex County Hazard Mitigation Plan

Meeting: Project Kick-Off with Planning Partnership

December 4, 2024; 10:00 – 11:00 a.m.

Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Anthony Cimini	SO Orange	Mill Town	ACimini@cityoforange.com
Mark Strickling	ESCO DEM	Det.	markstrickling@essexsheriff.com
Kevin Faucean	ORANGE	Coordinator	kevin.faucean@orange.nj.gov
Dense Frazee	ESCO DEM	Det	dfrazee@essexsheriff.com
Patrick Wherry	Maplewood	Coordinator / B.A	pwherry@maplewood.nj.gov
Brian McAdams	Bloomfield	Dep. DEM Coord.	bmcadams@bloomfieldtwp.nj.gov
Scott Egelberg	South Orange	DEM Coordinator	segelberg@southorange.org
Robert Ronto	Montclair	DEM	rronto@montclair-nj.usa.org
Dean Gambell	Glen Ridge	DEM	dgambell@glengridgenj.org
AnnMarie Morrow	Glen Ridge	DEM Coord.	amorrow@glengridgenj.org
Joe Foligno	South Orange	Det.	jfoligno@southorange.org
Karl Stroethoff	North Caldwell	Chief of Police	Chief@northcaldwell.org
John Bivona	North Caldwell	DPW	JBivona@northcaldwell.org
Dorothy Landrum	ESCO-DEM		dlandrum@essexsheriff.com
Jose Torres	ESCO-DEM	Detective	Jtorres@essexsheriff.com



Sign In Sheet

Essex County Hazard Mitigation Plan

Meeting: Project Kick-Off with Planning Partnership

December 4, 2024; 10:00 – 11:00 a.m.

Location: 560 Northfield Avenue, West Orange, NJ

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Essex County Hazard Mitigation Plan

Meeting: Project Kick-Off with Planning Partnership

December 4, 2024; 10:00 – 11:00 a.m.

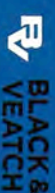
Location: 560 Northfield Avenue, West Orange, NJ

Geer Pans

Satz 1

Planner

Email: parv@software.org



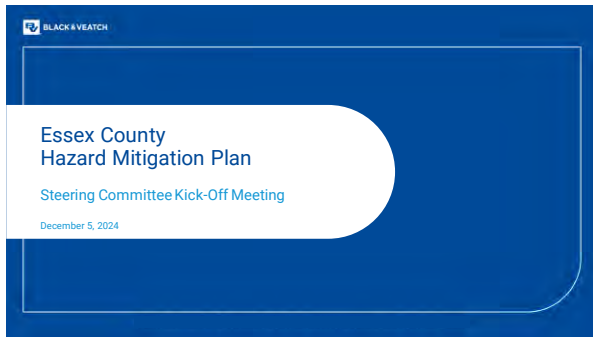
MEETING AGENDA

Essex County Hazard Mitigation Plan
Project Kick-Off with Steering Committee
December 5, 2024; 1:30 – 2:30 p.m.

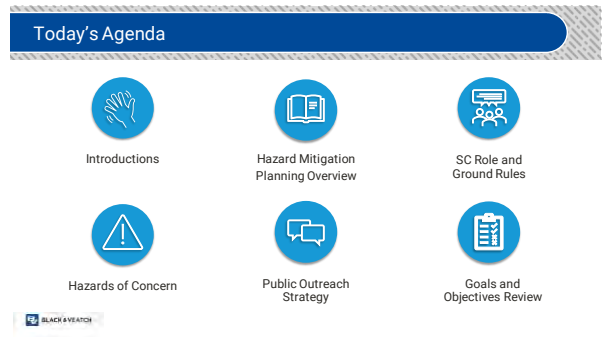
Microsoft Teams: [Join the meeting now](#) Meeting ID: 226 671 985 381; Passcode: tHhPB2 or
Dial in by phone 913-278-079; Phone conference ID: 402 924 617#

- 1. Introductions**
- 2. Hazard Mitigation Planning Overview**
 - a. What is a Hazard Mitigation Plan
 - b. Organization of the Planning Process
 - i. Core Planning Team
 - ii. Steering Committee
 - iii. Planning Partnership
- 3. Hazards of Concern**
- 4. Public Outreach Strategy**
- 5. Goals and Objectives Review and Update**
- 6. What's Next**
- 7. Questions and Discussion**

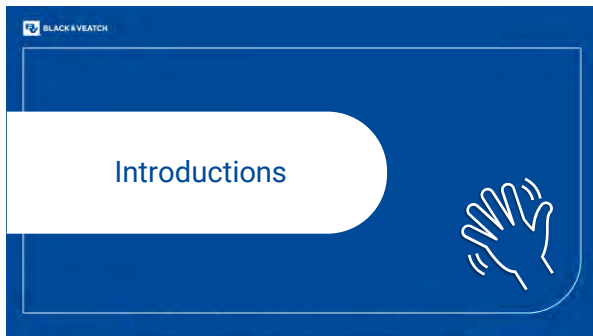




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Why Develop a Plan?



Essex County's HMP is set to expire



Helps reduce hazard impacts on people, property, infrastructure, and services



Establishes eligibility for mitigation grant funding

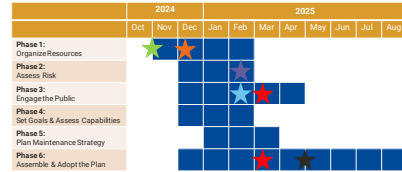


Fosters collaboration between the County, community members, and stakeholders



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Project Schedule & Milestones



- ★ October 2024 – Project Kick-Off
- ★ December 2024 – Planning Partnership and Steering Committee Kickoffs
- ★ February 2025 – Public Meetings and Stakeholder Workshops
- ★ February 18, 2025 – Risk Assessment Meeting and Mitigation Strategy Workshop
- ★ March 2025 – Public Review and Plan Submission to NJDEM
- ★ April/May 2025 – Submission to FEMA and start of adoption process



8

Core Planning Team (CPT)



WHO

- Leads from the Black & Veatch team
- Key County project management staff

WHEN

Meet bi-weekly or as needed (virtual)

WHAT

- Monitor plan progress milestones
- Identify input needs for the Planning Partnership



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Steering Committee (SC)



WHO

- Core Planning Team
- Key County and stakeholder representatives

WHEN

Roughly 4 meetings over the next 6 months

WHAT

- Monitor plan progress milestones
- Identify input needs for the Planning Partnership



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Hazard Mitigation Planning Partnership (PP)



WHO

Representatives of each participating jurisdiction

WHEN

3 to 4 meetings through the planning process

WHAT

Develop jurisdictional annex, conduct outreach, and contribute to overall planning process



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Ground Rules



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Ground Rules

For Discussion

- Chairperson
- Vice Chairperson
- Alternates
- Quorum

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Natural Hazards of Concern



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Natural Hazard Selection

Selection aligns with:

- FEMA's National Risk Index (NRI) for Essex County
- The 2024 NJ State Hazard Mitigation Plan
- Local knowledge of prior and potential hazard impacts

- Disease Outbreak
- Flood
- Wildfire
- Drought
- Geological Hazards
- Earthquake
- Severe Weather
- Extreme Temperature
- Severe Winter Weather

New FEMA guidance includes:

- Impacts from climate change
- Impacts to socially vulnerable populations

Risk Assessment will use:

- Best available data
- Hazus
- GIS modeling

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Public Outreach Strategy



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Public Outreach Strategy

- Hazard mitigation webpage on the County's website
- Press release
- Social media posts notifying the public of opportunities to participate
- Translated materials
- Flyers
- Local television
- Lawn signs
- Community events
- Natural hazard awareness survey
- Public meetings
- Public comment period during the draft plan review

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Goals and Objectives



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Goals and Objectives

- Goal 1: Protect Life
 - Objective 1.1: Improve warning and emergency communication systems
 - Objective 1.2: Reduce the impacts of hazards on people, property, and vulnerable populations
 - Objective 1.3: Integrate the hazard mitigation plan into existing county and local planning, building, codes, ordinances, and enforcement.



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Goals and Objectives

- Goal 2: Protect Property
 - Objective 2.1: Protect and increase resilience of critical facilities and lifelines to reduce disruption of essential activities during and after a hazard event.
 - Objective 2.2: Reduce repetitive and severe repetitive losses
 - Objective 2.3: Protect environmental resources that serve a natural hazard mitigation function
 - Objective 2.4: Encourage cost-effective and environmentally-sound development and land use by incorporating green infrastructure



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Goals and Objectives

- Goal 3: Increase public preparedness and awareness
 - Objective 3.1: Enhance and implement public education and outreach programs to increase awareness of hazard risks
 - Objective 3.2: Improve hazard information databases and maps and increase accessibility to those resources
 - Objective 3.3: Provide stakeholder training on mitigation and resilience-related topics to support the identification and implementation of projects and access to funding
 - Objective 3.4: Improve education of public officials, stakeholders, and the general public regarding the impacts of future conditions, sea level rise, and climate change on people, property, transportation assets, and the economy.



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Goals and Objectives

- Goal 4: Increase the understanding and awareness of risks from hazards
 - Objective 4.1: Review and incorporate updated hazard data into the County Hazard Mitigation Plan and other county and local planning mechanisms
 - Objective 4.2: Increase support for the development of local mitigation planning and projects
 - Objective 4.3: Incorporate new State and FEMA guidance, rules and regulations into the Plan
 - Objective 4.4: Strengthen understanding of, and adaptation to, a changing climate



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Goals and Objectives

- Goal 5: Enhance County and local mitigation capabilities to reduce hazard vulnerabilities
 - Objective 5.1: Implement and monitor the progress of on-going mitigation activities within the county
 - Objective 5.2: Encourage and support additional related training and education of public officials
 - Objective 5.3: Encourage the formation of partnerships to leverage and share mitigation resources
 - Objective 5.4: Integrate the County Hazard Mitigation Plan with other County, regional and local planning initiatives



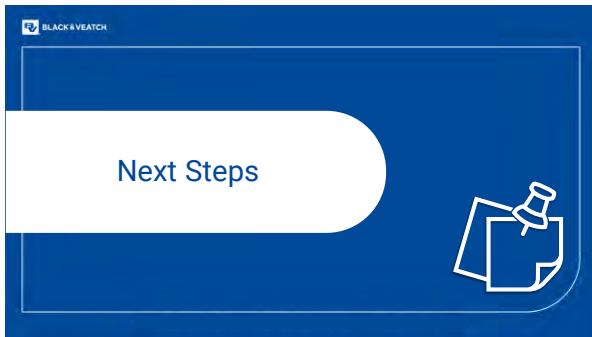
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Goals and Objectives

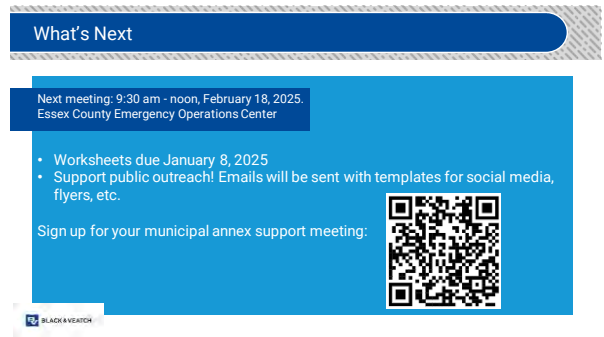
- Goal 6: Support continuity of operations pre-, during and post-hazard events
 - Objective 6.1: Ensure continuity of operations of essential county government services through training, planning and implementation of mitigation strategies
 - Objective 6.2: Increase resiliency by facilitating rapid disaster recovery ensuring that post-disaster efforts incorporate mitigation and adaptation strategies to minimize future losses.
 - Objective 6.3: Support and encourage the implementation of alternative and sustainable energy sources



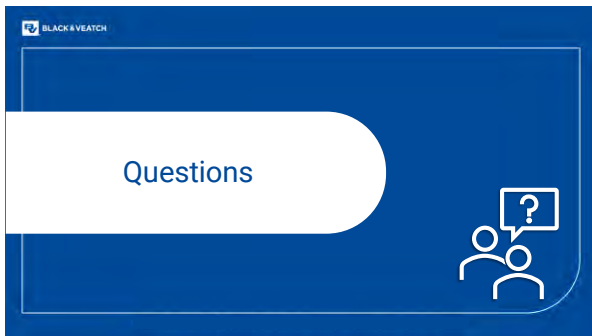
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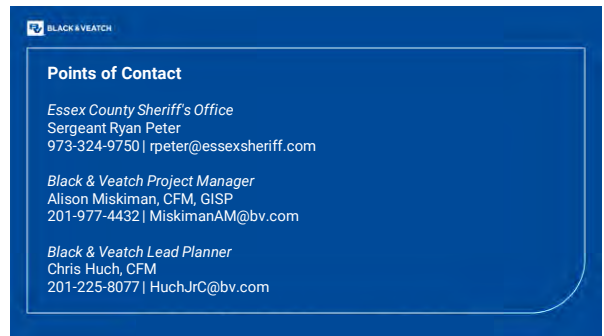
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MEETING SUMMARY

Essex County Hazard Mitigation Plan
Project Kick-Off with Steering Committee
December 5, 2024; 1:30 – 2:30 p.m.

Microsoft Teams: [Join the meeting now](#) Meeting ID: 226 671 985 381; Passcode: tHhPB2 or
Dial in by phone 913-278-079; Phone conference ID: 402 924 617#

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Introductions and Attendance	Each attendee introduced themselves and shared if they were involved in Essex County's previous hazard mitigation plan. Refer to page 4 for attendance.
2.	Hazard Mitigation Planning Overview <ul style="list-style-type: none"> • <i>What is a Hazard Mitigation Plan</i> • <i>Organization of the Planning Process</i> • <i>Core Planning Team</i> • <i>Steering Committee</i> • <i>Planning Partnership</i> 	<p>An overview was provided on hazard mitigation and the importance of updating the current plan set to expire in June 2025.</p> <p>The project schedule and milestones were reviewed.</p> <p>The Core Planning Team, Steering Committee, and Planning Partnership composition and roles were presented, and frequency of meetings.</p> <p>Essex County Sergeant Ryan Peter will chair the Steering Committee. Alternates to meetings will be allowed.</p>
3.	Natural Hazards of Concern	The new FEMA guidance requirements were discussed including alignment with the National Risk Index, State Hazard Mitigation Plan, inclusion of impacts from climate change, and socially vulnerable populations. The hazards of concern will be limited to the natural hazards documented in the 2020 Essex County plan with the non-natural hazards moved to an appendix with no risk assessment. Black & Veatch will send the disease outbreak list from the 2020 plan to



#	Agenda Item	Summary of Discussion and Decision Points
		Essex County Public Health for input on diseases to be included in the plan update.
4.	Public Outreach Strategy	<p>The methods for public outreach that will be implemented for this plan were reviewed inclusive of leveraging the County's existing hazard mitigation plan website; press releases; social media posts; flyers and lawn signs in English, Spanish, and Portuguese; online surveys for the public, stakeholders, and neighboring communities; public meetings and a public comment period during plan review.</p> <p>Carrie Martin recommended the Ironbound Community Corporation and South Ward Environmental Alliance be engaged in Newark; they have expressed interest in environmental justice and hazard mitigation. Black & Veatch will coordinate with Carrie Martin on this engagement.</p>
5.	Goals and Objectives Review and Update	<p>The 2020 plan goals and objectives were reviewed. All goals and objectives were agreed to remain in the 2025 with the following updates:</p> <ol style="list-style-type: none"> 1. Modify Goal 4 to align with the State HMP as follows: <i>Develop and maintain an understanding of increased risk from climate change impacts to natural hazards.</i> 2. Move 2020 Essex County HMP Objective 3.4 under the updated Goal 4: <i>Improve education of public officials, stakeholders, and the general public regarding the impacts of future conditions, sea level rise, and climate change on people, property, transportation assets, and the economy.</i> 3. Add new Goal 7 and all new objectives to align with the State HMP: <i>Goal 7: Reduce the risk of natural hazards for socially vulnerable populations and underserved communities</i>



#	Agenda Item	Summary of Discussion and Decision Points
		<p><i>7.1: Work with communities to identify the impacts of hazards on socially vulnerable populations</i></p> <p><i>7.2: Ensure hazard mitigation planning includes and is responsive to the entire community</i></p> <p><i>7.3: Direct resources to build capability in lower-resourced communities</i></p>
6.	What's Next	A summary of the upcoming meetings was presented including the mandatory Risk Assessment and Mitigation Strategy meeting for both the Steering Committee and Planning Partnership on February 18, 2025; and annex worksheets due January 8, 2025.
7.	Questions and Discussion	Meeting concluded at 2:20pm

Steering Committee Attendees

Essex County

- ☒ Mark Steinberg, OEM
- ☒ Denise Teague, OEM
- ☒ Ryan Peter, OEM
- ☒ Frank Del Gaudio, Department of Health & Rehabilitation
- ☒ Maya Harlow, Department of Public Health
- ☐ Carl Hunte, Chief Information Officer, Assistant County Administrator
 - ☒ Luke Yee, Systems Analyst attended on behalf of Carl
- ☒ James Simpson, EMS Coordinator
- ☒ Richard Fernandez, Principal Engineer
- ☒ Sanjeev Varghese, County Engineer
- ☒ Samantha Martinez-Mendoza, NJLINCS Coordinator, New Jersey Local Information Network Communications System (NJLINCS)
- ☐ Gerry Grande, Roads and Bridges
- ☐ Lauren T. Agnew, Public Information Officer
- ☐ Daniel Salvante, Director, Parks Department
- ☐ Anibal Ramos, Department of Citizen Services
- ☐ Robert D. Jackson, County Administrator

Municipal

- ☐ Ralph Casendino, Lieutenant/OEM Coordinator, Fairfield
- ☒ Robert Echavarria, Fire Chief, Township of Millburn
- ☐ Juba Dowdell, OEM Coordinator, City of Newark
- ☒ Christopher Mullin, Fire Chief, Township of Livingston
- ☒ Joel Martin, OEM Coordinator, Township of Verona

State

- ☒ Jordan Siegel, Assistant Unit Head, NJOEM
- ☒ Alyssa Meredith, Mitigation Planner, NJOEM
- ☒ Chris Testa, Mitigation Unit, NJOEM

FEMA

- ☐ Megan Wren, Planning, FEMA Region 2

Stakeholders

- ☒ Ashlyn Spector, Senior Research Specialist, Rutgers University-Bloustein
- ☒ Carrie Martin, Environmental Sustainability Planner, New Jersey Institute of Technology, Center for Community Systems
- ☐ Chris Obropta, Specialist, Rutgers Cooperative Extension Water Resources Program
- ☐ Jan Zientek, Department Head, Rutgers Cooperative Extension
- ☐ Janet Rekeius, District Manager, Hudson Essex Passaic Soil Conservation District
- ☐ Essex County Community Organizations Active in Disaster
- ☐ Patty Spango, Superintendent of Elections and Commissioner of Registration, League of Woman Voters of the Montclair Area



☐ NY/NJ Baykeeper

Black & Veatch

☒ Alison Miskiman

☒ Chris Huch



MEETING AGENDA

Essex County Hazard Mitigation Plan

Stakeholder Engagement Meeting

February 4, 2025; 10:00 – 11:00 a.m.

Microsoft Teams: [Join the meeting now](#) Meeting ID: 233 572 302 348; Passcode: na2dW6vY or

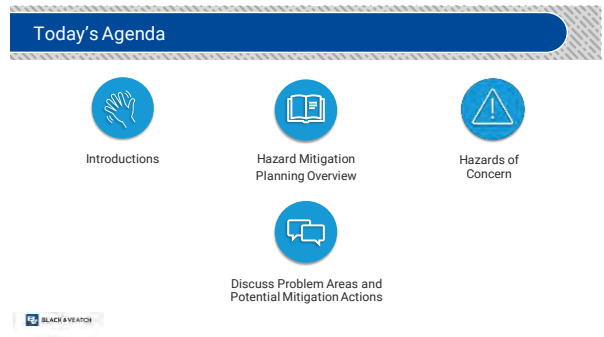
Dial in by phone: +1 913-278-0791, Phone conference ID: 43964446#

- 1. Introductions and Attendance**
- 2. Hazard Mitigation Planning Overview**
- 3. Project Schedule & Milestones**
- 4. Organization of the Planning Process**
- 5. Hazards of Concern**
- 6. Public Outreach**
- 7. Goals & Objectives**
- 8. Mitigation Actions**
- 9. Discussion of Problem Areas and Potential Actions**
- 10. Next Steps**
- 11. Points of Contact**

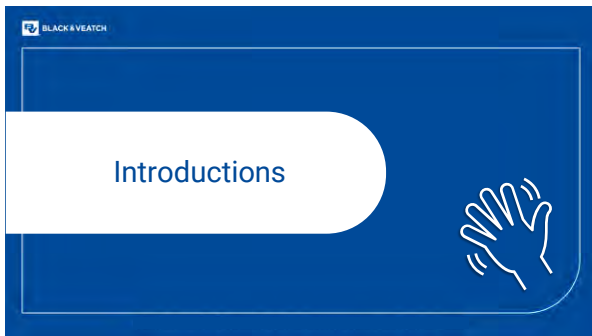




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Why Develop a Plan?



Essex County's HMP is set to expire



Helps reduce hazard impacts on people, property, infrastructure, and services



Establishes eligibility for mitigation grant funding



Fosters collaboration between the County, community members, and stakeholders



7

Project Schedule & Milestones



- ★ October 2024 – Project Kick-Off
- ★ December 2024 – Planning Partnership (PP) and Steering Committee (SC) Kickoffs
- ★ February 4, 2025 – Stakeholder Meeting
- ★ February 18, 2025 – Risk Assessment Meeting and Mitigation Strategy Workshop (PP and SC)
- ★ February 18, 2025 – Public Risk Assessment Meeting and Mitigation Strategy Workshop (Public & Stakeholders)
- ★ March 2025 – Public Review and Plan Submittal to NJDEM
- ★ April/May 2025 – Submittal to FEMA and start of adoption process



8

Organization of the Planning Process

Core Planning Team

- Leads from the Black & Veatch team and key County Project management staff
- Monitors plan progress milestones

Steering Committee

- Core Planning Team and key County and stakeholder representatives
- Identifies input needs for the Planning Partnership

Planning Partnership

- Representatives of each participating jurisdiction
- Responsible for input to the plan, supporting outreach, and development of jurisdictional annexes



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Natural Hazards of Concern



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Natural Hazard Selection

Selection aligns with:

- FEMA's National Risk Index (NRI) for Essex County
- The 2024 NJ State Hazard Mitigation Plan
- Local knowledge of prior and potential hazard impacts

- Disease Outbreak
- Drought
- Earthquake
- Extreme Temperature
- Flood*
- Geological Hazards
- Severe Weather
- Severe Winter
- Weather
- Wildfire

*Flood includes coastal erosion, urban flooding, sea level rise, and storm surge.

- New FEMA guidance includes:
- Impacts from climate change
 - Impacts to socially vulnerable populations

Risk Assessment will use:

- Best available data
- Hazus
- GIS modeling

Results of the Risk Assessment will be presented at the February 18th Public Meeting



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Public Outreach



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Public Outreach

- County and Municipal Websites
- Social Media Announcements
- Brochures, Electronic Signs, Lawn Signs
- Surveying
 - Public Survey
 - Stakeholder Survey
 - Neighboring Community Survey
- Public Meeting
 - February 18th at the Essex County Emergency Operations Center
- Public Review Period
 - Draft Plan will be posted for 30 days (estimated to be posted at the end of this month) with opportunities for comments and suggested edits



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Public and Stakeholder Engagement – Please support



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Goals and Objectives



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Goals and Objectives

- **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 to Natural Hazards
- **Goal 5:** Enhance County and Local Mitigation Capabilities to Reduce Hazard Vulnerabilities
- **Goal 6:** Support Continuity of Operations Pre-, During, and Post-Hazard Events
- **Goal 7:** Reduce the Risk of Natural Hazards for Socially Vulnerable Populations and Underserved Communities



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Mitigation Actions



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Mitigation Action Types



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Example 1: Substantial Damage Management Plans

Description of the Problem:	<p>Officials in NFP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"> Determine where the damage occurred within the community and if the damaged structures are in an SFHA. Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value. Require permits for floodplain development. <p>The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.</p> <p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 Developing a Substantial Damage Management Plan (https://resources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
Description of the Solution:	

Addresses any hazards that can result in structural damage to a home

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Example 2: Watershed Improvement Plans

Description of the Problem:	<p>The New Jersey Department of Environmental Protection (NJDEP) MS4 permits require that stormwater permittees develop or take part in the development of a regional Watershed Improvement Plan (WIP) to identify water quality and quantity problems affecting their subwatersheds and determine what improvements can be made to reduce their contribution.</p> <p>The purpose of the WIP is to identify opportunities to improve water quality, reduce MS4 contribution of pollutants to waterbodies with impairments, and Total Maximum Daily Loads (TMDLs), and to address stormwater flooding to protect human health and safety, and the environment.</p>
Description of the Solution:	<p>The municipality will develop a Watershed Improvement Plan. The plan will be organized in three phases. Phase 1 is to complete a stormwater inventory by mapping required features using the Township's updated Drainage Plan. Phase 2 will evaluate the information found in the first phase to determine what potential improvement projects may be implemented to address water quality and quantity concerns. In the final phase, the municipality will identify which of the potential quality and quantity improvement projects it will choose to implement, and on what schedule.</p> <p>Cost-effective projects identified in the WIP will be implemented.</p>

Addresses any flooding and hazards that may impact or be impacted by flooding

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Discussion:
Problem Areas and
Potential Actions



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Attendees

- Essex County Division of Community Health
- Port Authority of New York and New Jersey
- NJIT

Please help us identify problems/challenges/impacts caused by natural hazards in Essex County and any potential solutions you have in mind that can eliminate or less hazard impacts.

If you have information that can support another agency's ideas, please raise your hand on Teams.

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What's Next

Public Meeting:

- February 18, 2025. 1:00 pm at the Essex County Emergency Operations Center

Public Review Period:

- End of February-March
- Draft plan will be posted on the County OEM website for review and comment

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Points of Contact

Essex County Sheriff's Office
Sergeant Ryan Peter
973-324-9750 | rpeter@essexsheriff.com

Black & Veatch Project Manager
Alison Miskiman, CFM, GISP
201-977-4432 | MiskimanAM@bv.com

Black & Veatch Lead Planner
Chris Huch, CFM
201-225-8077 | HuchJrC@bv.com

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MEETING SUMMARY

Essex County Hazard Mitigation Plan
Stakeholder Engagement Meeting
February 4, 2025; 10:00 – 11:00 a.m.

Microsoft Teams: [Join the meeting now](#) Meeting ID: 233 572 302 348; Passcode: na2dW6vY or
Dial in by phone: +1 913-278-0791, Phone conference ID: 43964446#

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Introductions and Attendance	<p>Essex County Sheriff's Department welcomed the attendees.</p> <p>Each meeting participant introduced themselves via audio and the Teams chat:</p> <p>Chris Huch and Alison Miskiman – Black & Veatch</p> <p>Mark Steinberg – Essex County OEM</p> <p>Elizabeth Stamler - Procurement Specialist, Union County</p> <p>Joanne Beckerich - Maplewood Township; part of Sustainable Maplewood Committee, CERT, and Emergency Management Committee</p> <p>Alyssa Meredith – NJOEM Mitigation Unit</p> <p>Constance Lawrence – PANYNY Newark Airport</p> <p>Carrie Martin – NJIT Tech Assistance for Resiliency and Tech Assistance for Brownfield Communities</p> <p>Samantha Martinez-Mendoza – NJLINCS Coordinator/Emergency Preparedness- Essex County Health</p>



		<p>Angela Wong – PANYNJ Resilient and Sustainable Engineering Team</p> <p>Tiffany Chapman – PANYNJ Senior Manager, Strategic Preparedness</p>
2.	Hazard Mitigation Planning Overview	Review of what a hazard mitigation plan is, the importance of a robust planning process, and benefits of keeping a plan active
3.	Project Schedule & Milestones	Schedule review and presentation of upcoming meetings and milestones
4.	Organization of the Planning Process	Discussion of the core planning team, steering committee, and planning partners
5.	Hazards of Concern	Review of the natural hazards of concern and socially vulnerable populations
6.	Public Outreach	Overview presented of the public engagement to date; and opportunities for stakeholders to continue to be involved in the planning process
7.	Goals & Objectives	Presentation of the seven (7) updated goals of the Essex County Hazard Mitigation Plan
8.	Mitigation Actions	<p>Mitigation action types reviewed (prevention, property protection, public education and awareness, and natural resources protection)</p> <p>Example of mitigation actions that Essex County communities are including in their annex:</p> <p>1) Substantial Damage Management Plans; 2) Watershed Improvement Plans</p>
9.	Discussion: Problem Areas and Potential Actions	<p>Attendees participated in the discussion to identify problems/challenges/impacts caused by natural hazards in Essex County and any potential solutions in mind that can eliminate or less hazard impacts.</p> <p>Samantha Martinez-Mendoza: Need/Problem: Increased risk communication and backup plan when there are power outages during hazard events and public health threats need to be communicated rapidly.</p>

		<p>Potential Solutions: Additional tabletop exercises with stakeholders where flooding impacts transportation lines if no access to Wifi or electricity; use stakeholder groups to increase communication and awareness to public; everyone on the same command system.</p> <p>Problem: Emerging threats like Monkey Pox and Avian Flu (which has been detected in waterways in the County). There is a need to better understand strengths and weaknesses.</p> <p>Potential Solution 1: A Monkey Pox tabletop exercise took place in December 2024 with local hospitals, Essex County OEM, and other stakeholders at the County Correctional Facility; if inmate with a positive case and human transmission; increased communication needed and increased capacity.</p> <p>Potential Solution 2: In conversation with NJDOH and County health officers, track where live poultry markets (Newark has the most) are located and continue to closely monitor. Develop an avian flu tabletop exercise and use results to increase capabilities and improve health education on what it is, role that stakeholders play if positive case detected in the area.</p> <p>Tiffany Chapman, PANYNJ</p> <p>Problem: Significant flooding at Newark Airport from Hurricane Ida</p> <p>Potential Solution: Airport redevelopment planning considers natural hazards, builds mitigation measures into improvements, and works with engineering and risk assessment partners. New infrastructure is developed to the Climate Resiliency Guidelines that incorporates resiliency; a risk assessment is underway across facilities that will identify additional mitigation actions</p>
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	<p>Problem: Port Newark and Newark Airport are impacted by natural hazard events Potential Solution: PANYNJ is currently conducting risk assessments for each facility to identify additional mitigation actions to increase resilience.</p> <p>Happy to participate in future tabletop discussions in the future (Office of Medical Services) – connecting PANYNJ with Essex County Health with contact information as a result of this meeting</p> <p>Carrie Martin - NJIT</p> <p>Problem: Floodwaters mobilize contamination from brownfields leading to environmental and public health impacts Potential Solution: Actions identified in the Northeast ResilientNJ plan that apply to City of Newark and can be referenced.</p> <p>Problem: Stormwater and urban heat island effects exacerbated in urban environments Potential Solution: 2024 had a summit to review intersection of resilience and brownfields – replicate what occurred in Union County in Essex County – urban forestry efforts in City of Elizabeth to trap stormwater and tree canopy to assist with heat island impact; Essex County is updating their open space plan – layer in urban forestry/brownfields/heat. NJ Dept of Ag and NJDEP funding may be available.</p> <p>Problem: Ironbound Community Corporation is very concerned about floodwaters moving contamination from brownfield sites Potential Solution: Public awareness of contaminated floodwater.</p> <p>Problem: Redevelopment in West Orange that are brownfield sites – see above</p>
--	--

		<p>Potential Solution: NJDEP has brownfield development program MOU to focus state efforts on remediating; while redevelopment in West Orange, integrate green infrastructure and other resiliency efforts.</p> <p>Union County Problem: Wildfire is increased threat and discussion as a result of California events; Potential Solution: County to county discussions regarding shared resources to support for future events. Incorporate information into the Essex County wildfire planning efforts.</p> <p>Joanne Beckerich – Maplewood Township Problem: Main library sits on the river; during Hurricane Ida resulted in 8 feet of water in the basement Potential Solution: Redesigning for flood resilience and moving critical mechanicals to the roof; will include a green roof; challenge is maintaining the green roof.</p> <p>Problem: Public education is always a continued need Potential Solution: Increase public education about hazards</p> <p>Problem: Increased connection to socially vulnerable populations Potential Solution: Public health department has a list of most vulnerable populations, put in place during Covid due to lack of technology in the home. Continue to add to this list; have a senior advisory committee to address transportation issues and contact seniors when there is an event</p>
10.	What's Next	<p>Details shared on next opportunities for stakeholder engagement:</p> <p>Next public meeting is in person on February 18 at 1pm at the County EOC</p>

		Public review period at end of February/early March on Essex County OEM website
11.	Contact Information	Contact information shared: Essex County Sheriff's Office – Sgt Ryan Peter Black & Veatch – Alison Miskiman and Chris Huch



MEETING AGENDA

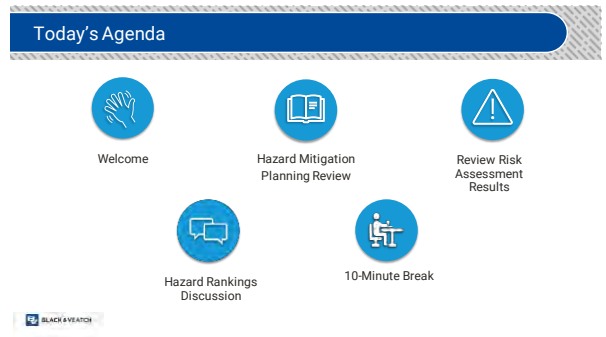
Essex County Hazard Mitigation Plan
Planning Partnership Risk Assessment Meeting
February 18, 2025; 9:30– 10:30 a.m.

- 1. Welcome**
- 2. Hazard Mitigation Planning Review**
- 3. Review Risk Assessment Results**
- 4. Capability Effectiveness**
- 5. Hazard Rankings**
- 6. Review Municipal Hazard Rankings**
- 7. Break**

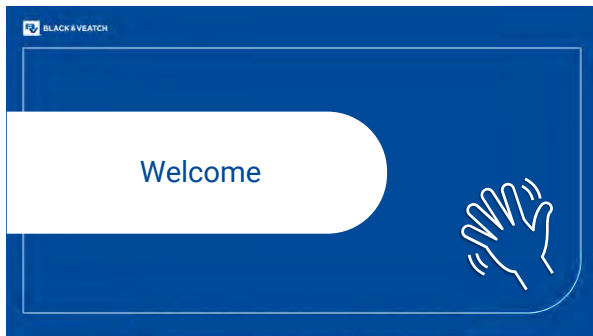




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Why Develop a Plan?



Essex County's HMP is set to expire



Helps reduce hazard impacts on people, property, infrastructure, and services



Establishes eligibility for mitigation grant funding



Fosters collaboration between the County, community members, and stakeholders



7

Risk Assessment Results



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Natural Hazard Selection

Selection aligns with:

- FEMA's National Risk Index (NRI) for Essex County
- 2024 NJ State Hazard Mitigation Plan
- Local knowledge of prior and potential hazard impacts

- Disease Outbreak
- Drought
- Earthquake
- Extreme Temperature
- Flood*
- Geological Hazards
- Severe Weather
- Severe Winter Weather
- Wildfire

New FEMA guidance includes:

- Impacts to socially vulnerable populations

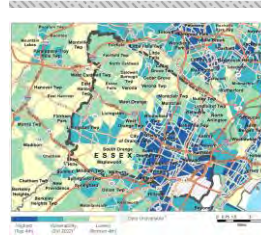
Risk Assessment used:

- Best available data
- Hazus
- GIS modeling

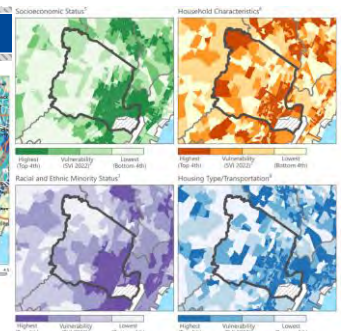


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Social Vulnerability



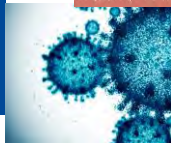
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Disease Outbreak

Qualitative Assessment

- Arboviruses
 - WNV
 - Encephalitis
- Respiratory Illnesses
 - Covid
 - Avian Flu
- Ebola
- Measles
- Tuberculosis
- Hepatitis A
- Monkey Pox

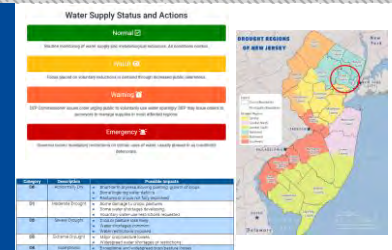


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Drought

Qualitative Assessment

- Water supply issues
 - Agriculture
 - Landscaping
 - Potable water
- Ecosystem impacts
- Increased wildfire risk (cascading impact)

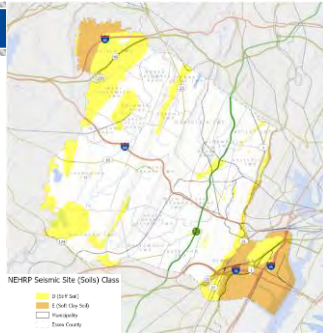


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Earthquake

Hazus Assessment

- NEHRP D & E soils are most prone to shaking
 - Common next to waterways
- April 2024 4.8 magnitude earthquake is strongest quake since 1700's
- Low frequency of quakes powerful enough to result in major damages.

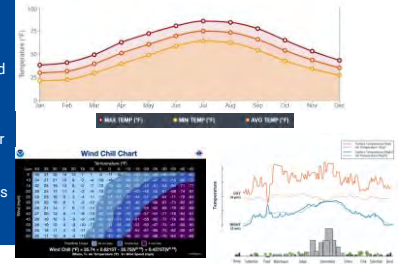


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Extreme Temperatures

Qualitative Assessment

- Analyzed extreme heat and extreme cold events
- Impacts to people are the greatest, but high impacts to energy supply and water services
- Urban heat island impacts are common in urban areas of Essex County

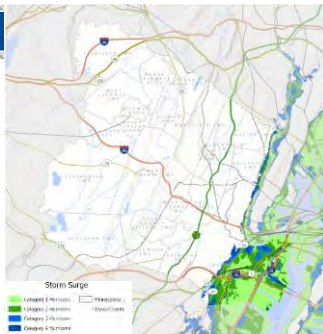


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Flood – Storm Surge

Hazus Assessment

- Category 1-4 Hurricanes
- Large impacts in Newark
- Lesser impacts along the Passaic River in Belleville and Nutley
- Biggest storm surge event on record is Superstorm Sandy in 2012, but historical writings describe much larger surge events with stronger hurricanes



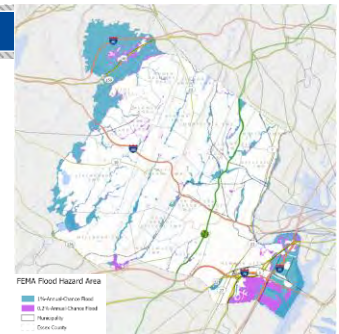
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Flood – SFHA

Hazus Assessment

- Special Flood Hazard Area
- 1% - 100 year event
- 0.2% - 500 year event

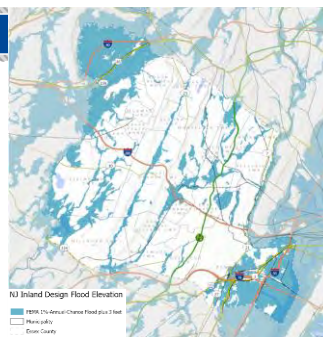
- National Flood Insurance Program**
- 4,280 flood insurance policies
 - 580 repetitive loss properties
 - 146 severe repetitive loss properties



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Flood – Inland Flood Rule

- NJDEP requirement became effective July 17, 2023
- Design Flood Elevation = BFE +3'
- Impacts all of Essex County



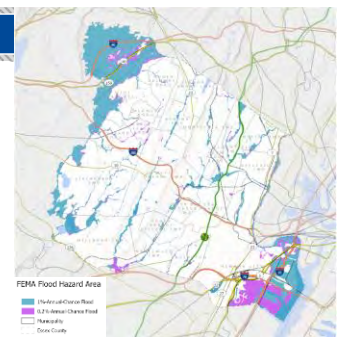
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Flood – SFHA

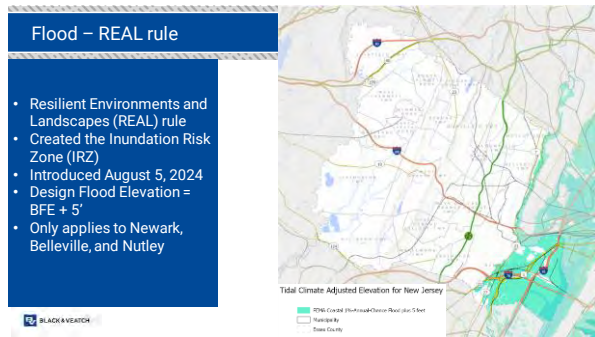
Hazus Assessment

- Special Flood Hazard Area
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- 0.2% - 500 year event

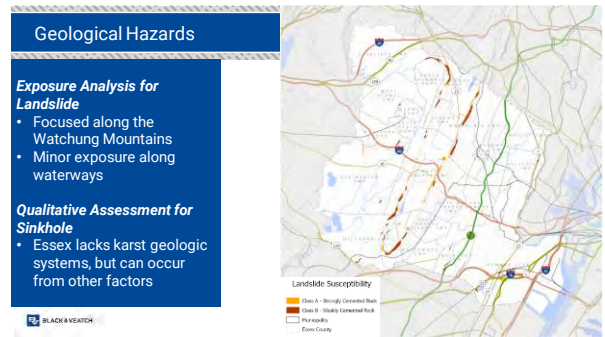
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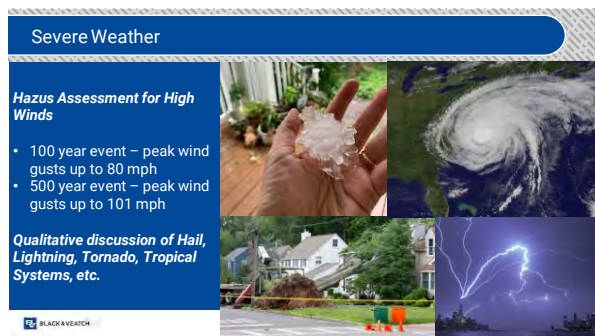
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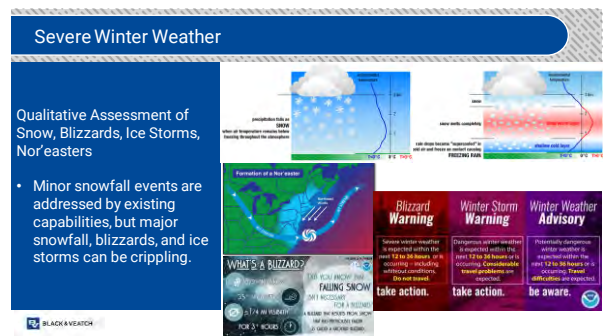
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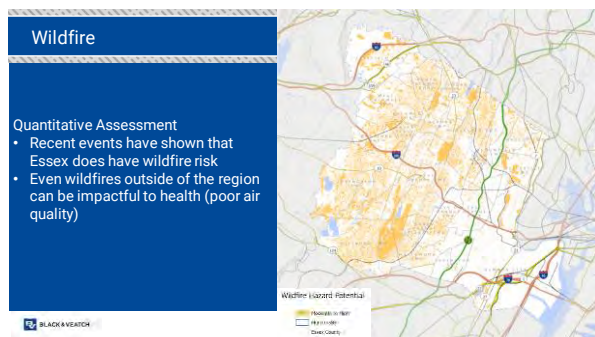
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Capability Effectiveness

- **Weak:** Weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.
- **Moderate:** Plans, policies, codes/ordinances in place and meet minimum requirements; mitigation strategies identified but not implemented on a widespread scale; county/jurisdiction can recover but needs outside resources; moderate county/Jurisdiction capabilities.
- **Strong:** Plans, policies, codes/ordinances in place and exceed minimum requirements; mitigation/protective measures in place; county/jurisdiction has ability to recover quickly because resources are readily available, and capabilities are high.

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Hazard Ranking

Category	Level	Criteria	Degree of Risk	
			Index Value	Assigned Weighting Factor
Probability	Unlikely	A hazard event is not likely to occur or is unlikely to occur with less than a 1% annual chance probability.	0	30%
	Rare	Between 1 and 10% annual probability of a hazard event occurring.	2	
	Occasional	Between 10 and 100% annual probability of a hazard event occurring.	3	
	Frequent	100% annual probability, a hazard event may occur multiple times per year.	4	
Impact (Sum of all 3)	Low	14% or less of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	1	30%
	Medium	15% to 29% of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	2	
	High	30% or more of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	3	

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Hazard Ranking

PRI Category	Level	Criteria	Degree of Risk	
			Index Value	Assigned Weighting Factor
Impact (Sum of all 3)	Low	14% or less of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	1	30%
	Medium	15% to 29% of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	2	
	High	30% or more of your population is exposed to a hazard with potential for measurable life safety impact, due to its extent and location.	3	
Property (Numeric Value x 3)	Low	Property exposure is 14% or less of the total number of structures for your community.	1	30%
	Medium	Property exposure is 15% to 29% of the total number of structures for your community.	2	
	High	Property exposure is 30% or more of the total number of structures for your community.	3	
Economy (Numeric Value x 3)	Low	Loss estimate is 14% or less of the total replacement cost for your community.	1	30%
	Medium	Loss estimate is 15% to 29% of the total replacement cost for your community.	2	
	High	Loss estimate is 30% or more of the total replacement cost for your community.	3	

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Hazard Ranking

PRI Category	Level	Criteria	Degree of Risk	
			Index Value	Assigned Weighting Factor
Capability Effectiveness	Weak	Weak/outdated/inconsistent plans, policies, codes/ordinances in place; no redundancies; limited to no deployable resources; limited capabilities to respond; long recovery.	1	30%
	Moderate	Plans, policies, codes/ordinances in place and meet minimum requirements; mitigation strategies identified but not implemented on a widespread scale; county/jurisdiction can recover but needs outside resources; moderate county/Jurisdiction capabilities.	0	
	Strong	Plans, policies, codes/ordinances in place and exceed minimum requirements; mitigation/protective measures in place; county/jurisdiction has ability to recover quickly because resources are readily available, and capabilities are high.	-1	

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Hazard Ranking

PRI Category	Level	Criteria	Degree of Risk	
			Index Value	Assigned Weighting Factor
Climate Change	Low	No local data is available; modeling projections are uncertain on whether there is increased future risk; confidence level is low (inconclusive evidence).	1	10%
	Medium	Studies and modeling projections indicate a potential for exacerbated conditions due to climate change; confidence level is medium to high (suggestive to moderate evidence).	2	
	High	Studies and modeling projections indicate exacerbated conditions/increased future risk due to climate change; very high confidence level (strong evidence, well documented and acceptable methods).	3	

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Hazard Ranking

HAZARD RANKING =

[PROBABILITY OF OCCURRENCE X .30] + [(IMPACT ON POPULATION X 3) + (IMPACT ON PROPERTY X 2) + (IMPACT ON ECONOMY X 1) X .30] + [CAPABILITY EFFECTIVENESS X .30] + [CLIMATE CHANGE X .10]

Low = Values less than or equal to 3.8
 Medium = Values between 3.9 and 4.9
 High = Values greater than or equal to 5.0.

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Hazard Rankings							
Hazard	Probability	Impact on Population	Impact on Property	Impact on Economy	Capability Effectiveness	Climate Change	Risk Ranking
Disease Outbreak	Occasional	Medium	Medium	Low	Moderate	High	Medium
Drought	Occasional	Medium	Low	Low	Moderate	High	Medium
Earthquake	Rare	Medium	Medium	Medium	Moderate	Low	Medium
Extreme Temperature	Frequent	Medium	Low	Low	Moderate	High	Medium
Flood	Frequent	Medium	Low	Low	Moderate	High	Medium
Geological Hazards	Rare	Low	Low	Low	Moderate	Medium	Low
Severe Weather	Frequent	Medium	High	High	Moderate	High	High
Severe Winter Weather	Frequent	Medium	Medium	Low	Strong	Medium	Medium
Wildfire	Occasional	Medium	Medium	Low	Moderate	High	Medium

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Municipal Worksheets

Jurisdiction: San Jose, CA
 Name/Title of Individual Completing Worksheet: _____
 Email: _____

HAZARD RANKING AND CAPABILITIES

The hazard ranking helps communities understand their overall vulnerability to each hazard of concern and to provide experts or activities for mitigation. The following table represents the preliminary rankings for each hazard for your community. If you would like to make changes, please log on online via this link: <https://www.blackveatch.com/hazard-ranking-worksheet> or scan the QR code.

Hazard of Concern	Community Effectiveness Ranking	Reduction Hazard Ranking
Disease Outbreak	Medium	Low
Drought	Medium	Medium
Earthquake	Medium	Low
Extreme Temperature	Medium	High
Flood	Medium	Medium
Geological Hazards	Medium	Low
Severe Weather	Medium	High

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Don't Agree With Your Rankings? Provide Edits!




Want to make changes to the draft Risk Ranking?




Curious what the 2020 HMP risk ranking was?



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Questions



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Short Break



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MEETING SUMMARY

Essex County Hazard Mitigation Plan
Planning Partnership Risk Assessment Meeting
February 18, 2025; 9:30– 10:30 a.m.

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Introductions, Welcome, and Attendance	See sign-in sheet
2.	Hazard Mitigation Planning Review	Alison Miskiman reviewed the hazard mitigation planning process and schedule.
3.	Review Risk Assessment Results	Black & Veatch staff reviewed the results of the risk assessment for each hazard of concern.
4.	Capability Effectiveness	Capability Effectiveness is a determination of how effective existing capabilities are to reduce risk. The HMP rates each jurisdiction's effectiveness as weak, moderate, or strong.
5.	Hazard Rankings	<p>The calculations for hazard ranking were discussed including probability, impact on population, impact on property, impact on economy, capability effectiveness, and impact of climate change.</p> <p>Essex County's hazard rankings were calculated as follows:</p> <ul style="list-style-type: none"> • disease outbreak: medium • drought: medium • earthquake: medium • extreme temperature: medium • flood: medium • geological hazards: low • severe weather: high • severe winter weather: medium • wildfire: medium



6.	Review Municipal Hazard Rankings	Each jurisdiction was tasked with reviewing the calculated hazard rankings for their jurisdiction and providing comments and edits.
7.	Break	

Sign In Sheet

Essex County Hazard Mitigation Plan

Meeting: Risk Assessment Presentation

February 18, 2024

Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Gerardo Corbo	Belleville	Off - OCM Coord	gcorbo@belleville.nj.gov
Mark Guilford	Caldwell	OCM Coord.	FIRESTREAR@Caldwell.nj.gov
Erin Prohara	Orange	Coordinator	epadhille@orange.nj.gov
Edwin Diaz	West Orange	Sergeant/Deputy Coordinator	EDiaz@WOPD.org
Joe Meyer	Cedar Grove	OCM	j.meyer@cedar Grove.PD.org
John James	Newark	OCM Coord	JJames@NJC.I.veatch.com
Todd Warren	Orange	Director OPD	todd.warren@orange.nj.gov
Christopher E. Mullin	Livingston	Fire Chief/OCM Coord	cmullin@livingston.nj.gov
Greg James	Essex Fells	Deputy Director OCM	gJames@anthony.com
RD Davis Williams	East Orange	OCM Coordinator	david.williams@eastorange-nj.gov
Bill Bishop	Orange	Deputy Coordinator	bishop@Orange.NJ.gov
Johnnie Wemy	Maplewood	BA / OCM Coordinator	johnnie@maplewood-nj.gov
Jim Egan	Essex Fells	OCM	JimEgan@EssexFells.com
Alex McLean	East Orange	Principal Trainer	alexander.mclean@eastorange-nj.gov
Carmine Davis	Montclair	OCM	cdavis@montclair.nj.gov
Greer Parnas	South Orange	Planner	gParnas@SouthOrange.com
Dennis Teague	Essex Dem	Detective	Teague@Essex.NJ
Ryan Peter	Essex Dem	Sgt	Peter@Essex.NJ



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Sign In Sheet

Essex County Hazard Mitigation Plan

Meeting: Risk Assessment Presentation

February 18, 2024

Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Joel Martin	Verona	Coordinator	joel.martin@veronapolice.org
Larry Peter	West Caldwell	CEM Coordinator	L.Peter@westcaldwell.com
Don Santangelo	Netey	CEM Cell Director	DonSantangelo@netey.org
Thomas E. Clark	Bloomfield	CEM Coordinator	thclark@bloomfieldnj.org
Salvatore Ferraro	Rutley	Sas. Coord.	sferraro@rutleynj.org
John McLean	Rockville	CEM	JohnMcLean@rockvillenj.org
John Matthews	Rooseland	CEM	JohnMatthews@rooselandnj.org
Dean Connolly	Glen Ridge	CEM	DeanConnolly@glenridge.org
Ann Marie Morlock	Glen Ridge	CEM	amorlock@glenridge.org
Erik DeLue	Glen Ridge	Deputy Admin	edelu@glengridgenj.org
William Mueller	Ferris	Deputy Fire Chief	WilliamMueller@ferrisnj.org
Tim Reforan	North Caldwell	CEM Coordinator	timreforan@northcaldwell.org
Robert Eichmayer	Millburn	Fire Chief/CEM	reichmayer@millburnnj.org
RT Casanova	Fairfield	CEM Coordinator	RCasanova@fairfieldnj.org
John Bironis	North Caldwell	DPW	JBironis@northcaldwell.org
Karl Shestakoff	North Caldwell	Police / CEM	KarlShestakoff@northcaldwell.org

Todd Warren

Orange

Director OPD

todd.warren@orange.nj.gov

Heather Appas

Black + Veatch

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Allison Mistlman

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MEETING AGENDA

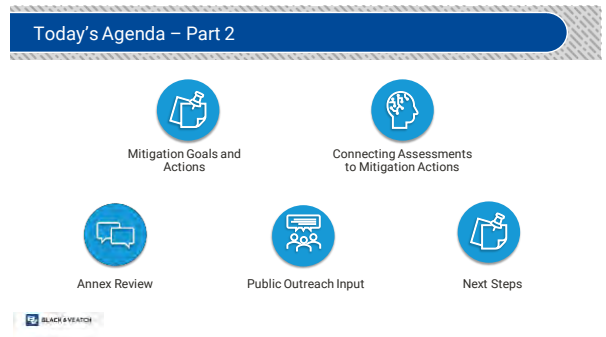
Essex County Hazard Mitigation Plan
Planning Partnership Mitigation Strategy Workshop
February 18, 2025; 10:30– 11:30 a.m.

- 1. Welcome**
- 2. Hazard Mitigation Plan Goals**
- 3. Mitigation Action Types**
- 4. Connecting the Risk and Capability Assessments to Mitigation Actions**
- 5. Public and Stakeholder Input**
- 6. Review Actions and Annexes**
- 7. Next Steps**
 - a. Reviews
 - b. Adoptions

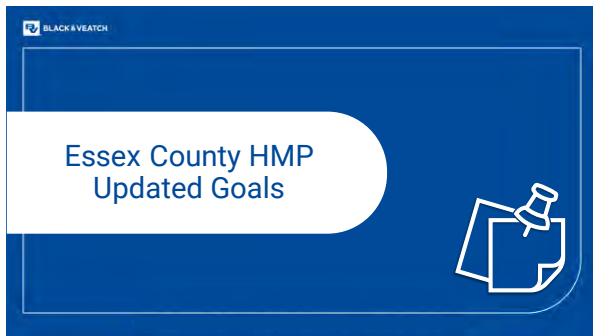




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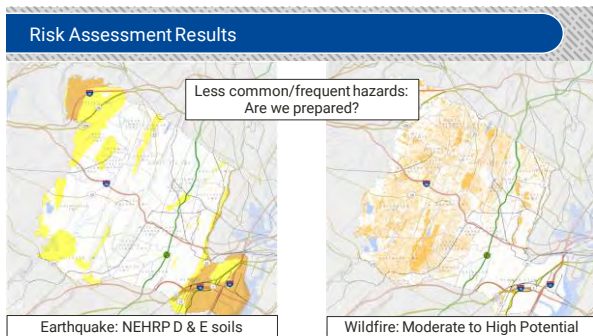
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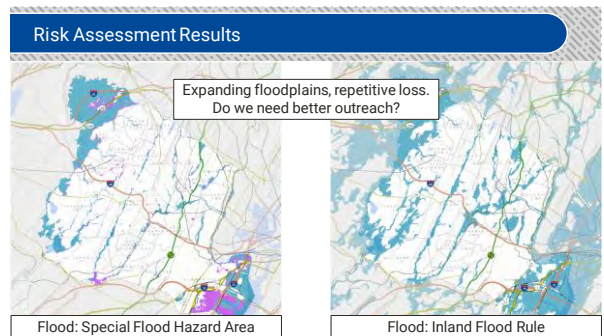
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Example: Addressing Repetitive Losses

Description of the Problem:	Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The City has four repetitive loss properties, but other properties may be impacted by flooding as well.
Description of the Solution:	NJOEM conducted outreach to all 14,036 property owners in the state in summer 2024 and asked property owners if they would be interested in elevation or acquisition. NJOEM is collecting contact information and will be contacting municipalities that had property owners interested in mitigation. After preferred mitigation measures are identified, the City will work with NJOEM to collect required property owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of residential homes in the flood-prone areas that experience frequent flooding (high risk areas).

Any municipality with repetitive losses is required to include an action to address this issue. Elevation or acquisition are the options available to homeowners. NJOEM recently conducted outreach to all repetitive loss properties in the state in summer 2024.

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Capability Assessment: Gaps, Weaknesses, Opportunities?

Consider your capability assessment to identify potential actions:

- Plans that require update or are required to be developed?
- Codes or ordinances that require strengthening?
- Staff that need additional training?
- Lack of internal funds to support mitigation, grant match?
- Emerging threats that require additional public outreach and education?



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Example: Substantial Damage Management Plans

<p>Description of the Problem:</p>	<p>Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:</p> <ul style="list-style-type: none"> • Determine where the damage occurred within the community and if the damaged structures are in an SFHA. • Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration. • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value. • Require permits for floodplain development. <p>The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations. The municipality will develop a Substantial Damage Management Plan, following the six-step planning process in 2023. Developing a Substantial Damage Management Plan (https://cresources.org/files/200/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>
<p>Description of the Solution:</p>	

Addresses any hazards that can result in structural damage to a home.



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Example: Watershed Improvement Plans

<p>Description of the Problem:</p>	<p>The New Jersey Department of Environmental Protection (NJDEP) MS4 permits require that stormwater permittees develop or take part in the development of a regional Watershed Improvement Plan (WIP) to identify water quality and quantity problems affecting their subwatersheds and determine what improvements can be made to reduce their contribution.</p>
<p>Description of the Solution:</p>	<p>The municipality will develop a Watershed Improvement Plan. The plan will be organized in three phases. Phase 1 is to complete a stormwater inventory by mapping required features using the Township's updated Drainage Plan. Phase 2 will evaluate the information found in the first phase to determine what potential improvement projects may be implemented to address water quality and quantity concerns. In the final phase, the municipality will identify which of the potential quality and quantity improvement projects it will choose to implement, and on what schedule.</p>

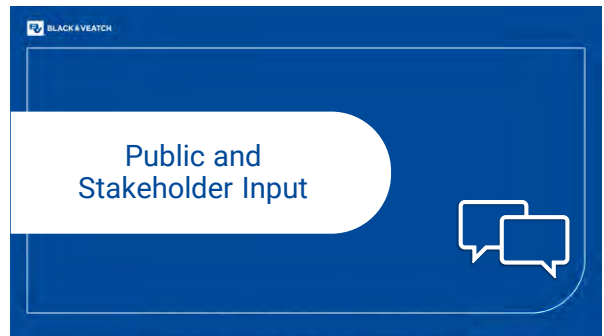
Essex County HMP | Watershed Improvement Plan Questionnaire



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Public and Stakeholder Input

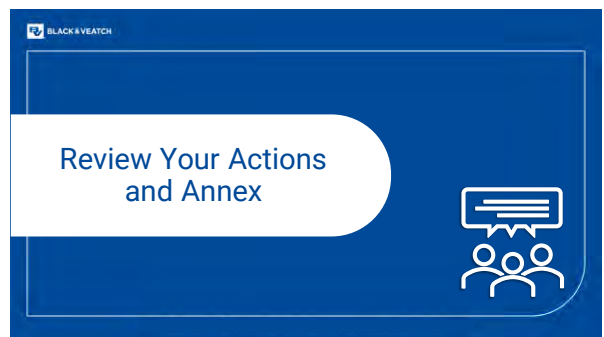
The Public Survey received 200 responses that contributed information on potential problems and solutions.

Problems and solutions supplied that were specific to your municipality are listed on your municipal worksheet.

Many of the issues are already addressed in draft actions, but are there any new problems or approaches you would like to consider adding?



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Review Your Draft Annex

The HMP draft, including your municipal annex, will be posted for public review at the end of the month. Public review will last for 30 days.

Review your draft annex and provide any necessary edits or additional actions prior to this Friday, February 21st. Missing information is highlighted.



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Public and NJOEM Review Timeline for Annexes

Black & Veatch will update your annex with your input on hazard rankings, capability effectiveness, and adaptive capacity from earlier today. Public version of your annex will be emailed to you by February 25th.

Please review and submit any changes prior to posting for public and NJOEM concurrent review by Friday, February 28th.

If we don't hear from you via email by 2/28, this means the annex is ready to be posted publicly.



20



Review and Adoption



21

Review and Adoption

Public Review and concurrent NJOEM review: March 2025

FEMA Review: April-May 2025

Black & Veatch will contact you if there are comments or edits needed to your annex following public review, NJOEM review, and FEMA review.

Once the draft is submitted to FEMA for review, Black & Veatch will contact you with instructions for local adoptions.



22



Next Steps



23

Finalize Hazard Ranking and Adaptive Capacity



Hazard Ranking – If you need to update from what is in your worksheet handed out today, fill out this form. If no changes are needed, do not submit a form.

Adaptive Capacity – If you need to update from what is in your worksheet handed out today, fill out this form. If no changes are needed, do not submit a form.



24

Provide Input on Watershed Improvement Plans



Watershed Improvement Planning – Please complete or share with your team to submit a response



25

What's Next

Final input on draft annex needed by **this Friday, February 21st**

Support public outreach! Emails will be sent with instructions to announce the public review period.

Black & Veatch will contact you if there are comments or edits needed to your annex following public review, NJOEM review, and FEMA review.

Once the draft is submitted to FEMA, Black & Veatch will contact you with instructions for local adoption (April 2025).



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BEFORE YOU LEAVE...
Check in with our team



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Stop by and see us if you are on this slide

Municipality	Annex Needs	Municipality	Annex Needs
Bellville (Twp)	-	Millburn (Twp)	LOIP: how does your jurisdiction inventory land available for new development? What percentage of your jurisdiction is available for new development?
Bloomfield (Twp)	New development worksheet, floodplain administrator worksheet, substantial damage details/procedures	Montclair (Twp)	LOIP
Caldwell (B)	Substantial damage details/procedures, need status on one previous mitigation action	Newark (C)	All worksheets
Clark Grove (Twp)	-	North Caldwell (B)	-
East Orange (C)	New development worksheet	Nutley (Twp)	LOIP: minor information on capabilities flagged in annex.
EssexFells (B)	Need details on several plans and ordinances, additional staff that worked on annex.	Orange (C)	Capability assessment worksheet, substantial damage details/procedures, status of 2020 mitigation actions
Fairfield (Twp)	-	Roseland (B)	Capability assessment worksheet, substantial damage details/procedures, floodplain administrator worksheet, status of 2020 mitigation actions
Glen Ridge (B)	Substantial damage details/procedures	South Orange (N)	LOIP: need details on several plans/codes, description of floodprone areas
Irvington (Twp)	Details on Null action, minor flags for more info on permitting	Verona (Twp)	Capability assessment tables – review and/or provide input
Livingston (Twp)	LOIP, percent of jurisdiction available for new development	West Caldwell (Twp)	-
Maplewood (Twp)	Confirm if FDPO has been adopted	West Orange (Twp)	Description of floodprone areas; substantial damage details/procedures; capability assessment tables – review and/or provide input; status of 2020 mitigation actions

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Questions



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Points of Contact

Essex County Sheriff's Office
Sergeant Ryan Peter
973-324-9750 | rpeter@essexsheriff.com

Black & Veatch Project Manager
Alison Miskiman CFM, GISP
201-977-4432 | MiskimanAM@bv.com

Black & Veatch Planners
Chris Huch CFM
201-225-8077 | Huch.JrC@bv.com

Heather Appgar CFM
201-977-6617 | ApgarH@bv.com

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MEETING SUMMARY

Essex County Hazard Mitigation Plan

Planning Partnership Mitigation Strategy Workshop

February 18, 2025; 10:30– 11:30 a.m.

Location: 560 Northfield Avenue, West Orange, NJ

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Introductions and Attendance	See sign-in sheet
2.	Hazard Mitigation Plan Goals	The goals for the 2025 update were reviewed.
3.	Mitigation Action Types	<p>The four mitigation action types were reviewed:</p> <ul style="list-style-type: none"> • Prevention • Property Protection • Public Education and Awareness • Natural Resources Protection
4.	Connecting the Risk and Capability Assessments to Mitigation Actions	<p>Instructions and examples for how to connect the results of the risk assessment and capability assessment to mitigation actions were given.</p> <p>Example actions included addressing repetitive loss, developing substantial damage response plans, and development watershed improvement plans.</p> <p>Attendees were asked to provide information on progress made on development of watershed improvement plans.</p>
5.	Public and Stakeholder Input	Comments received during the stakeholder workshop and surveys for the public, stakeholders, and neighboring communities were distributed to each jurisdiction for consideration in their mitigation strategies.



6.	Review Actions and Annexes	<p>Jurisdictions were directed to review the draft actions and their draft annexes as a whole, using information identified during the workshop.</p> <p>Jurisdictions then worked one on one with Black & Veatch staff to identify improvements to existing actions and potential new actions.</p>
7.	Next Steps	<p>Jurisdictions were presented with the remaining schedule for the planning process:</p> <ul style="list-style-type: none"> • March: Public Review and NJOEM Review • April-June: FEMA review and adoptions

Sign In Sheet

Essex County Hazard Mitigation Plan
 Meeting: Mitigation Strategy Workshop
 February 18, 2024
 Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Karl Smeltzer	N. Caldwell	Police Chief / OER	Chief@NorthCaldwellnj.org
Gerard Corbo	Belleville	D/C + OER Coor	gcorbo@belleville-nj.org
MARIE GILMUS	GUTZWILLER	OER COORDINATOR	FIGOFFICE@GUTZWILLER-NJ.GOV
JAC MEYER	Cedar Grove	OEM	smcley@cedargrove-pb.org
JOHN JAMES	NEWARK	OEM COORD	JamesJ@NEWARK.NJ.GOV
Edwin Dine	West Orange	Sargent/Deputy Coordinator	EDine@WOPD.Org
Christopher L. Muller	Livingston	Fire Chief / OEM Coord.	cmuller@livingstonnj.org
TODD WARREN	Orange	Director OPD	todd.warren@orange-nj-police.com
Greg James	CSEX Fells	Deputy Director OEM	GJames@DaihanShu.com
David Williams	East Orange	OEM Coordinator	David.Williams@eastorange-nj.gov
Bill Bishop	Orange	Deputy Supr	b.bishop@OrangeNJ.gov
John Libery	Maplewood	BA / Coordinator	john@maplewood-nj.org
Tom Fagan	ESSEX FMS	OEM	TomFagan103@Gmail.com
Carmine Davine	Montclair	OEM	Cdavinejr@montclairnj.gov
LEX McLym	East Orange	Principal Planner	
Greer Panas	South Orange	Planner	gpanas@southorange.org


Heather Appas
 Allison Miskunian

Black + Veatch
 Black + Veatch

Sign In Sheet

Essex County Hazard Mitigation Plan
 Meeting: Mitigation Strategy Workshop
 February 18, 2024
 Location: 560 Northfield Avenue, West Orange, NJ

Name	Jurisdiction	Title	Email
Joel Martin	Verona	Coordinator	joel.martin@vernapolice.org
Thomas Icolan	Bloomfield	Coordinator	thcolan@bloomfieldnsd.com
Larry Peter	West Caldwell	Coordinator	lpeter@westcaldwell.com
Don Santavilla	Nutley	Coordinator	DSantavilla@NutleyNJ.org
Sal Ferraro	Nutley	Eng. Coord.	sferraro@nutleynj.org
John Melcon	Willingboro	DEM A/C	John.melcon@willingboro.org
John Matthews	Boyleston	DEM	John.matt@boyleston.org
Dean Grondellis	Glenn Ridge	DEM	dgrondellis@glennridge.org
Ann Marie Mordau	Glenn Ridge	DEM	amordau@glennridge.org
Eric DeLine	Glenn Ridge	Deputy Admin	edeline@glennridge.org
Robert Elchavani	Millburn	Fire Chief / Eng	rchavani@millburnnj.org
William Mungar	Irvington	Deputy Fire Chief	wmungar@IrvingtonNJ.org
Tim Peterson	North Caldwell	DEM Coordinator	tim.peterson@northcaldwell.org
RS Caserino	Fairfield	DEM COORDINATOR	RCASERINO@FAIRFIELDNJ.ORG
Tom Bivand	North Caldwell	DEM	TBivand@northcaldwell.org
Kevin Pasco Jr	Orange	Coordinator	kpasco@OrangeNJ.gov


 Denis Reagan
 Essex County
 Essex Dem
 Detective
 D.Reagan@EssexCountyNJ.org
 SS+

Ryan Peter
 Essex Dem
 SS+

DEO@EssexCountyNJ.org
 BLACK & VEATCH

MEETING AGENDA

Essex County Hazard Mitigation Plan
Steering Committee Draft Plan Review

February 25, 2025; 1:00 – 2:00 p.m.

Microsoft Teams: [Join the meeting now](#) Meeting ID: 217 494 023 435 Passcode: 6yx7Hd7o

Dial in by phone +1 913-278-0791 Phone conference ID: 806 657 319#

1. Welcome

- a. Roll Call
- b. Review Schedule

2. Plan Maintenance Strategy

- a. How often the Planning Partnership should meet to review the plan (at least annually)
- b. When to meet?
- c. Who is responsible for organizing the meeting?

3. Draft Plan

4. Plan Review

- a. Public Review
- b. State Review
- c. FEMA Region 2 Review

5. Next Steps

6. Questions and Discussion



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Essex County Hazard Mitigation Plan

Steering Committee Draft Plan Review Meeting

February 25, 2025

1

Today's Agenda

- Welcome
- Plan Maintenance Strategy
- Draft Plan
- Plan Review Process
- Next Steps

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2

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Welcome

3

Project Schedule & Milestones

	2024			2025							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Phase 1: Organize Resources											
Phase 2: Assess Risk											
Phase 3: Engage the Public											
Phase 4: Set Goals & Assess Capabilities											
Phase 5: Plan Maintenance Strategy											
Phase 6: Assemble & Adopt the Plan											

- ★ October 2024 – Project Kick-Off
- ★ December 2024 – Planning Partnership and Steering Committee Kickoffs
- ★ February 2025 – Public Meetings and Stakeholder Workshops
- ★ February 18, 2025 – Risk Assessment Meeting and Mitigation Strategy Workshop
- ★ March 2025 – Public Review and Plan Submittal to NJDEM
- ★ April/May 2025 – Submittal to FEMA and start of adoption process

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4

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Plan Maintenance Strategy

5

Plan Maintenance Strategy

Local Plan Requirement D2 - 44 CFR Part 201.56(c)(4)(i)

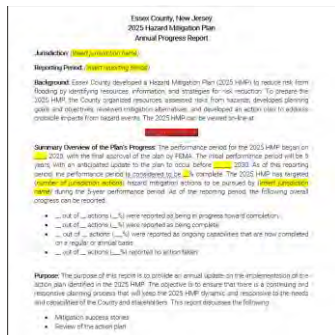
The plan shall include a plan maintenance process that includes a section describing the method and schedule of monitoring, evaluating and updating the mitigation plan within a five-year-cycle.

Plan Maintenance Strategy should include:

- How often the Planning Partnership should meet to review the plan (at least annually)
 - Annually?
- When to meet?
 - During a regular OEM Coordinator's meeting?
- Who is responsible for organizing the meeting?
 - Essex County Sheriff's Office

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6



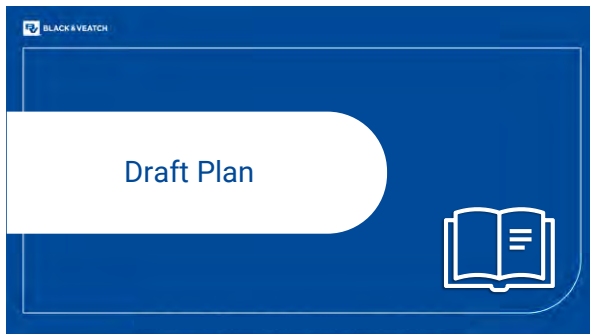
Appendix B: Summary of the Status of the Action Plan

Table 1: Action Plan Status

Action Item	Timeline	Priority	Status (Y, N, P)	Comments
Action 1: _____	_____	_____	_____	_____
Action 2: _____	_____	_____	_____	_____
Action 3: _____	_____	_____	_____	_____
Action 4: _____	_____	_____	_____	_____
Action 5: _____	_____	_____	_____	_____
Action 6: _____	_____	_____	_____	_____
Action 7: _____	_____	_____	_____	_____
Action 8: _____	_____	_____	_____	_____
Action 9: _____	_____	_____	_____	_____
Action 10: _____	_____	_____	_____	_____
Action 11: _____	_____	_____	_____	_____
Action 12: _____	_____	_____	_____	_____
Action 13: _____	_____	_____	_____	_____
Action 14: _____	_____	_____	_____	_____
Action 15: _____	_____	_____	_____	_____
Action 16: _____	_____	_____	_____	_____
Action 17: _____	_____	_____	_____	_____
Action 18: _____	_____	_____	_____	_____

7

8



9

Draft Plan – Volume I

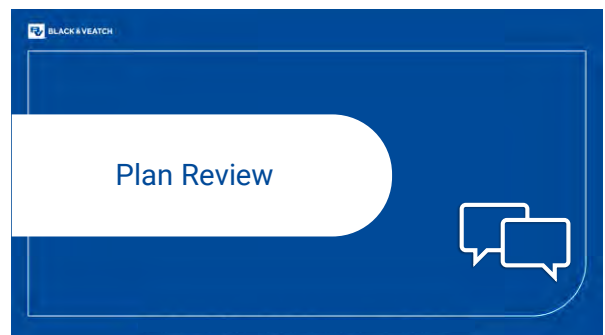
Volume I	Section
Section 1: Introduction	Section 11: Geological Hazards
Section 2: Planning Process	Section 12: Severe Weather
Section 3: County Profile	Section 13: Severe Winter Weather
Section 4: Hazards of Concern	Section 14: Wildfire
Section 5: Risk Assessment	Section 15: Hazard Ranking
Section 6: Disease Outbreak	Section 16: Capability Assessment
Section 7: Drought	Section 17: Mitigation Strategy
Section 8: Earthquake	Section 18: Maintaining the Hazard Mitigation Plan
Section 9: Extreme Temperatures	
Section 10: Flood	

10

Draft Plan – Volume II

Volume II	Section
Section 1: Essex County	Section 13: Township of Millburn
Section 2: Township of Belleville	Section 14: Township of Montclair
Section 3: Township of Bloomfield	Section 15: City of Newark
Section 4: Borough of Caldwell	Section 16: Borough of North Caldwell
Section 5: Township of Cedar Grove	Section 17: Township of Nutley
Section 6: City of East Orange	Section 18: City of Orange Township
Section 7: Borough of Essex Fells	Section 19: Borough of Roseland
Section 8: Township of Fairfield	Section 20: Township of South Orange Village
Section 9: Borough of Glen Ridge	Section 21: Township of Verona
Section 10: Township of Irvington	Section 22: Township of West Caldwell
Section 11: Township of Livingston	Section 23: Township of West Orange
Section 12: Township of Maplewood	

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Plan Review – Public Review

- Draft Plan to be posted for 30 days on the County website
- Social media announcements and requests for review from stakeholders
- Online form will allow members of the public and stakeholders to identify what part of the plan they are commenting on and provide their input.
- Black & Veatch will review comments
 - Address Volume I minor comments
 - Work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary
 - Work with Planning Partners on Volume II annex edits as necessary.



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Plan Review – State Review

- NJOEM will review the draft plan while it is in public review (estimated 30 days)
- Comments and requested edits from NJOEM will be submitted to the County.
- Black & Veatch will lead effort to review and address comments:
 - Black & Veatch will address Volume I minor comments
 - Black & Veatch will work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary
 - Black & Veatch will work with Planning Partners on Volume II annex edits as necessary.



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Plan Review – FEMA Review

- Following public review period and state review, Black & Veatch will submit the updated draft to FEMA Region 2 and request permission to begin adoptions.
- Comments and requested edits will be submitted to the County.
- Black & Veatch will lead effort to review and address comments:
 - Black & Veatch will address Volume I minor comments
 - Black & Veatch will work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary
 - Black & Veatch will work with Planning Partners on Volume II annex edits as necessary.



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Next Steps



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Next Steps

- Review the draft plan and submit comments via online form
- Help promote the public review process
- Stay tuned for updates on potential comments from the public, NJOEM, and FEMA Region 2

Thank you all for your continued commitment to this important project!



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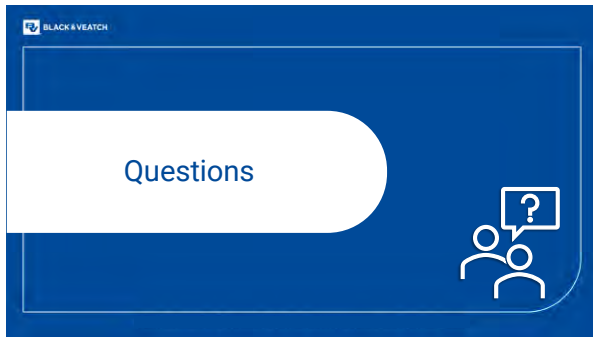
What's Next

Support public outreach!

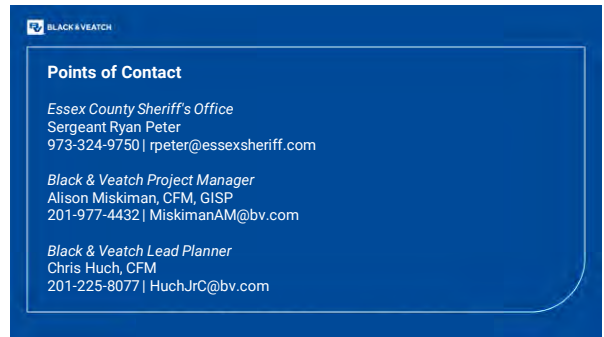
Emails will be sent with templates for social media, flyers, etc.



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19



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MEETING SUMMARY

Essex County Hazard Mitigation Plan
Steering Committee Draft Plan Review

February 25, 2025; 1:00 – 2:00 p.m.

Microsoft Teams: [Join the meeting now](#) Meeting ID: 217 494 023 435 Passcode: 6yx7Hd7o

Dial in by phone +1 913-278-0791 Phone conference ID: 806 657 319#

Agenda Item and Summary

#	Agenda Item	Summary of Discussion and Decision Points
1.	Welcome	Sergeant Peter and Chris Huch welcomed attendees and thanked them for their continued participation.
2.	Plan Maintenance Strategy	Mr. Huch explained that FEMA requires a plan maintenance strategy to be established to track progress, integration, and implementation of the HMP.
	<i>How often the Planning Partnership should meet to review the plan (at least annually)?</i>	The Steering Committee agreed that the Planning Partnership should meet annually.
	<i>When to meet?</i>	The Steering Committee agreed that the meeting to review the plan will take place at the June Essex County OEM Coordinator's Meeting each year.
	<i>Who is responsible for organizing the meeting?</i>	Essex County OEM will be responsible for organizing the meeting.
3.	Draft Plan	<p>Mr. Huch reviewed the organization and layout of Volume I and Volume II of the HMP draft.</p> <p>Volume I</p> <ul style="list-style-type: none"> • Section 1: Introduction • Section 2: Planning Process • Section 3: County Profile • Section 4: Hazards of Concern • Section 5: Risk Assessment Methodology and Tools



		<ul style="list-style-type: none"> • Section 6: Disease Outbreak • Section 7: Drought • Section 8: Earthquake • Section 9: Extreme Temperatures • Section 10: Flood • Section 11: Geological Hazards • Section 12: Severe Weather • Section 13: Severe Winter Weather • Section 14: Wildfire • Section 15: Hazard Ranking • Section 16: Capability Assessment • Section 17: Mitigation Strategy • Section 18: Maintaining the Hazard Mitigation Plan <p>Volume II</p> <ul style="list-style-type: none"> • Section 1: Essex County • Section 2: Township of Belleville • Section 3: Township of Bloomfield • Section 4: Borough of Caldwell • Section 5: Township of Cedar Grove • Section 6: City of East Orange • Section 7: Borough of Essex Fells • Section 8: Township of Fairfield • Section 9: Borough of Glen Ridge • Section 10: Township of Irvington • Section 11: Township of Livingston • Section 12: Township of Maplewood • Section 13: Township of Millburn • Section 14: Township of Montclair • Section 15: City of Newark • Section 16: Borough of North Caldwell • Section 17: Township of Nutley • Section 18: City of Orange Township • Section 19: Borough of Roseland • Section 20: Township of South Orange Village • Section 21: Township of Verona • Section 22: Township of West Caldwell • Section 23: Township of West Orange
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4.	Plan Review	Mr. Huch reviewed the process
	<i>Public Review</i>	<ul style="list-style-type: none"> • Draft Plan to be posted for 30 days on the County website • Social media announcements and requests for review from stakeholders • Online form will allow members of the public and stakeholders to identify what part of the plan they are commenting on and provide their input. • Black & Veatch will review comments <ul style="list-style-type: none"> • Address Volume I minor comments • Work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary • Work with Planning Partners on Volume II annex edits as necessary.
	<i>State Review</i>	<ul style="list-style-type: none"> • NJOEM will review the draft plan while it is in public review (estimated 30 days) • Comments and requested edits from NJOEM will be submitted to the County. • Black & Veatch will lead effort to review and address comments: <ul style="list-style-type: none"> • Black & Veatch will address Volume I minor comments • Black & Veatch will work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary • Black & Veatch will work with Planning Partners on Volume II annex edits as necessary.
	<i>FEMA Region 2 Review</i>	<ul style="list-style-type: none"> • Following public review period and state review, Black & Veatch will submit the updated draft to FEMA Region 2 and request permission to begin adoptions.

		<ul style="list-style-type: none"> • Comments and requested edits will be submitted to the County. • Black & Veatch will lead effort to review and address comments: <ul style="list-style-type: none"> • Black & Veatch will address Volume I minor comments • Black & Veatch will work with Core Planning Team and Steering Committee via email to discuss any substantial comments as necessary • Black & Veatch will work with Planning Partners on Volume II annex edits as necessary.
5.	Next Steps	<ul style="list-style-type: none"> • Review the draft plan and submit comments via online form • Help promote the public review process • Stay tuned for updates on potential comments from the public, NJOEM, and FEMA Region 2
6.	Questions and Discussion	

Steering Committee Attendees

Essex County

- ☐ Mark Steinberg, OEM
- ☐ Denise Teague, OEM
- ☒ Ryan Peter, OEM
- ☐ Frank Del Gaudio, Department of Health & Rehabilitation
- ☒ Maya Harlow, Department of Public Health
- ☒ Carl Hunte, Chief Information Officer, Assistant County Administrator
- ☐ James Simpson, EMS Coordinator
- ☐ Richard Fernandez, Principal Engineer
- ☐ Sanjeev Varghese, County Engineer
- ☒ Samantha Martinez-Mendoza, NJLINCS Coordinator, New Jersey Local Information Network Communications System (NJLINCS)
- ☐ Gerry Grande, Roads and Bridges
- ☐ Lauren T. Agnew, Public Information Officer
- ☐ Daniel Salvante, Director, Parks Department
- ☐ Anibal Ramos, Department of Citizen Services
- ☐ Robert D. Jackson, County Administrator

Municipal



- ☐ Ralph Casendino, Lieutenant/OEM Coordinator, Fairfield
- ☒ Robert Echavarria, Fire Chief, Township of Millburn
- ☐ Juba Dowdell, OEM Coordinator, City of Newark
- ☐ Christopher Mullin, Fire Chief, Township of Livingston
- ☐ Joel Martin, OEM Coordinator, Township of Verona

State

- ☐ Jordan Siegel, Assistant Unit Head, NJOEM
- ☒ Alyssa Meredith, Mitigation Planner, NJOEM
- ☐ Chris Testa, Mitigation Unit, NJOEM

FEMA

- ☐ Megan Wren, Planning, FEMA Region 2

Stakeholders

- ☒ Ashlyn Spector, Senior Research Specialist, Rutgers University-Bloustein
- ☒ Carrie Martin, Environmental Sustainability Planner, New Jersey Institute of Technology, Center for Community Systems
- ☐ Chris Obropta, Specialist, Rutgers Cooperative Extension Water Resources Program
- ☐ Jan Zientek, Department Head, Rutgers Cooperative Extension
- ☐ Janet Rekeius, District Manager, Hudson Essex Passaic Soil Conservation District
- ☐ Essex County Community Organizations Active in Disaster
- ☐ Patty Spango, Superintendent of Elections and Commissioner of Registration, League of Women Voters of the Montclair Area
- ☐ NY/NJ Baykeeper

Black & Veatch

- ☐ Alison Miskiman
- ☒ Chris Huch





APPENDIX D: PUBLIC AND STAKEHOLDER OUTREACH

This appendix provides documentation of public and stakeholder outreach. Public and stakeholder involvement in this planning process was broad and productive as discussed and further documented in Section 2 (Planning Process). Public and stakeholder input has been incorporated throughout this HMP as appropriate, as identified in Section 2 and the References section, as well as within specific mitigation initiatives identified within the jurisdictional annexes (Volume II).

1.1 STAKEHOLDER WORKSHOP

Essex County hosted a regional and local virtual stakeholder workshop on February 4, 2025. The invited stakeholders included all neighboring municipalities and counties in Union, Hudson, and Morris Counties, and stakeholders from academic, business/commerce, community/non-profit organizations, emergency services, hospital/medical, infrastructure, land use/development, natural/cultural resources, public works, and social equity sectors. Stakeholders invited to the workshop are documented in Section 2.6.3.2, Section 2.6.3.3, Section 2.6.3.4, and Section 2.6.3.5.

Figure D-1. Virtual Stakeholder Workshop Title Page



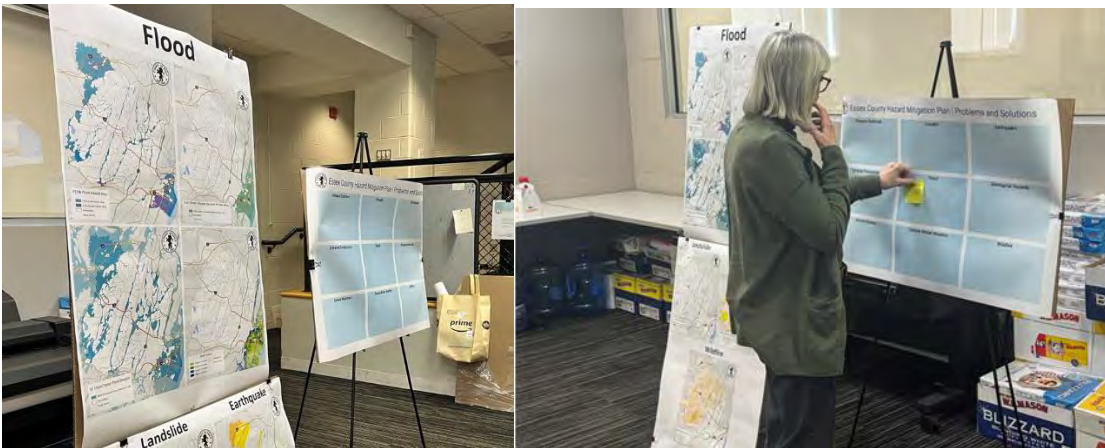
1.2 PUBLIC MEETING

A public meeting was held on February 18th, 2025 at the Essex County Emergency Operations Center. The meeting presented the concepts of hazard mitigation, the planning process for the 2025 HMP update, and the draft results of the risk assessment. Attendees were asked to provide input on problem areas and potential solutions they would like considered in the County and municipal mitigation strategies. Stakeholder groups were also invited to attend.

Figure D-2. February 2025 Public Meeting



Figure D-3. February 2025 Public Meeting, Problems and Solutions Exercise



1.3 WEBSITES, SOCIAL MEDIA, AND NEWS ARTICLES

The following provides screenshots of websites, social media posts, news articles and other forms of public outreach.

Figure D-4. Township of Belleville Facebook Post





Figure D-5. Township of Belleville Police Department Facebook Post

Belleville NJ Police Department · Follow
January 2 at 2:28 PM · 🌐

Let's Build a More Resilient Essex County! We're excited to be working on a Hazard Mitigation Plan to strengthen our community's resilience, and we'd love to hear your thoughts and experiences regarding natural hazards.

Please take a moment to share your thoughts by completing our survey.

🔗 Link to survey: <https://www.surveymonkey.com/r/EssexHMP>

🔗 Learn more about the County's HMP: <https://www.essexsheriff.com/oem-category/mitigation/>

HAZARD MITIGATION 2025

ESSEX COUNTY NEEDS YOUR INPUT!



WHAT IS HAZARD MITIGATION?

Mitigation is the effort to decrease loss of life and property by lessening the effects of disasters. It means taking steps now—before the next disaster happens—to minimize human and financial harm later (such as assessing risks, lowering risks, and getting insurance for risks).

WE NEED YOUR INPUT!
TAKE A QUICK SURVEY AND SHARE YOUR THOUGHTS.

<https://www.essexsheriff.com/oem-category/mitigation/>



WORKING TOGETHER TO BUILD A MORE RESILIENT ESSEX COUNTY!

Figure D-6. Township of Facebook Posts

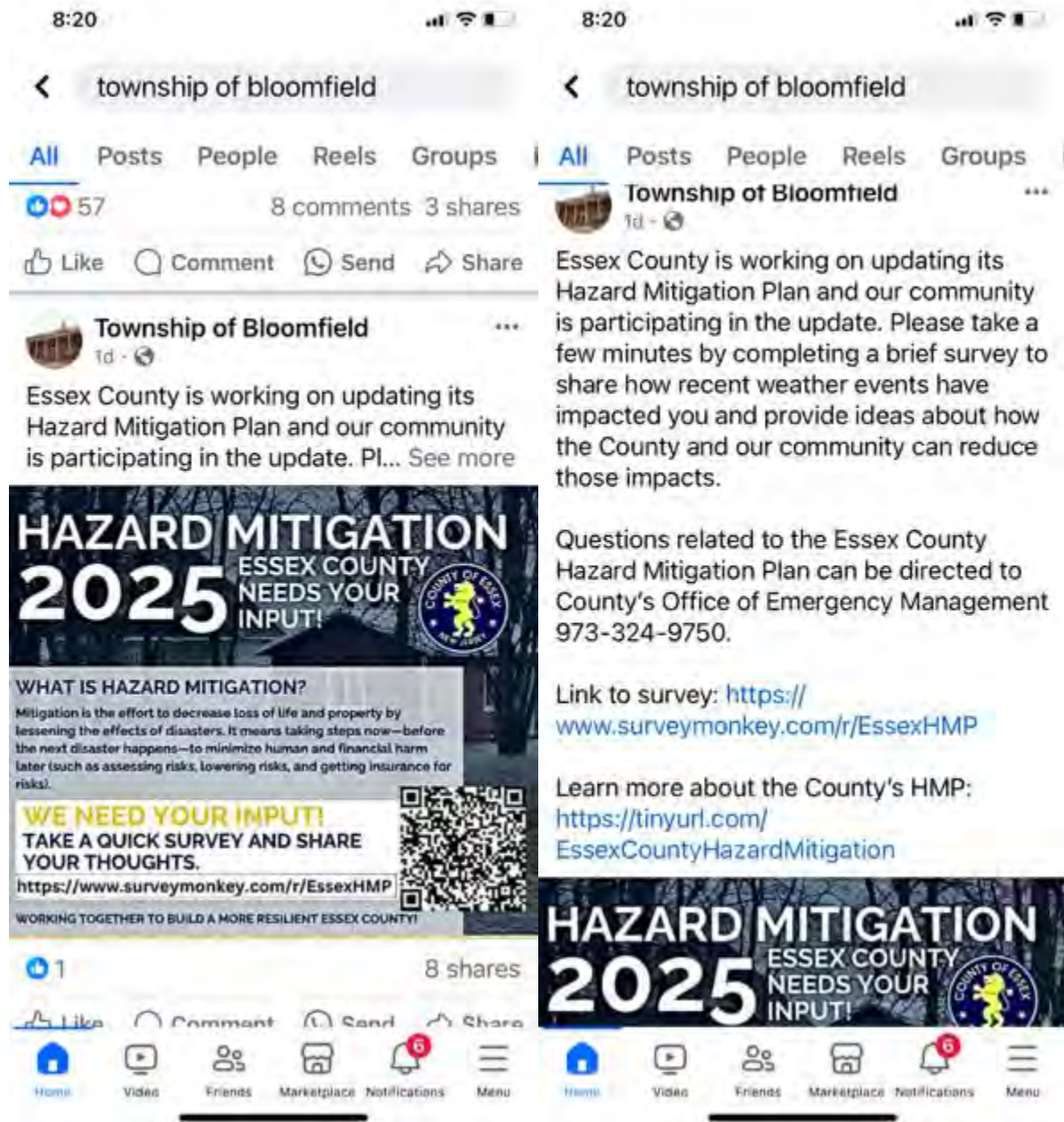




Figure D-7. Township of Bloomfield Website Post





Figure D-8. Bloomfield Democratic Action Facebook Post 1



Figure D-9. Bloomfield Democratic Action Facebook Post 2





Figure D-10. Bloomfield People for Storm Solutions Facebook Post





Figure D-11. Bloomfield Pulse Facebook Post



Figure D-12. Citizens of Bloomfield Facebook Post

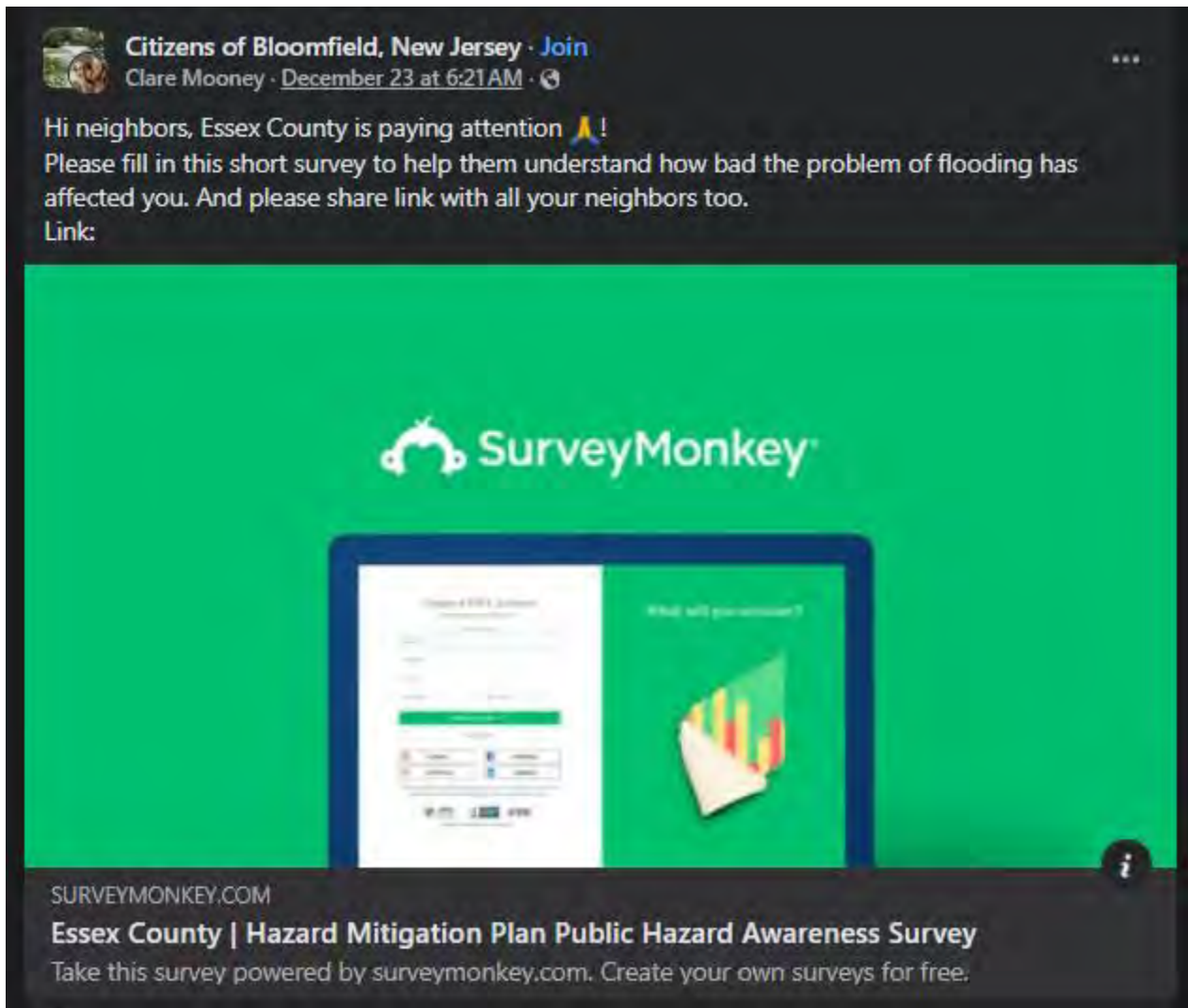


Figure D-13. Borough of Caldwell Facebook Post





Figure D-14. Borough of Caldwell Instagram Post



Figure D-15. Borough of Caldwell Website Post

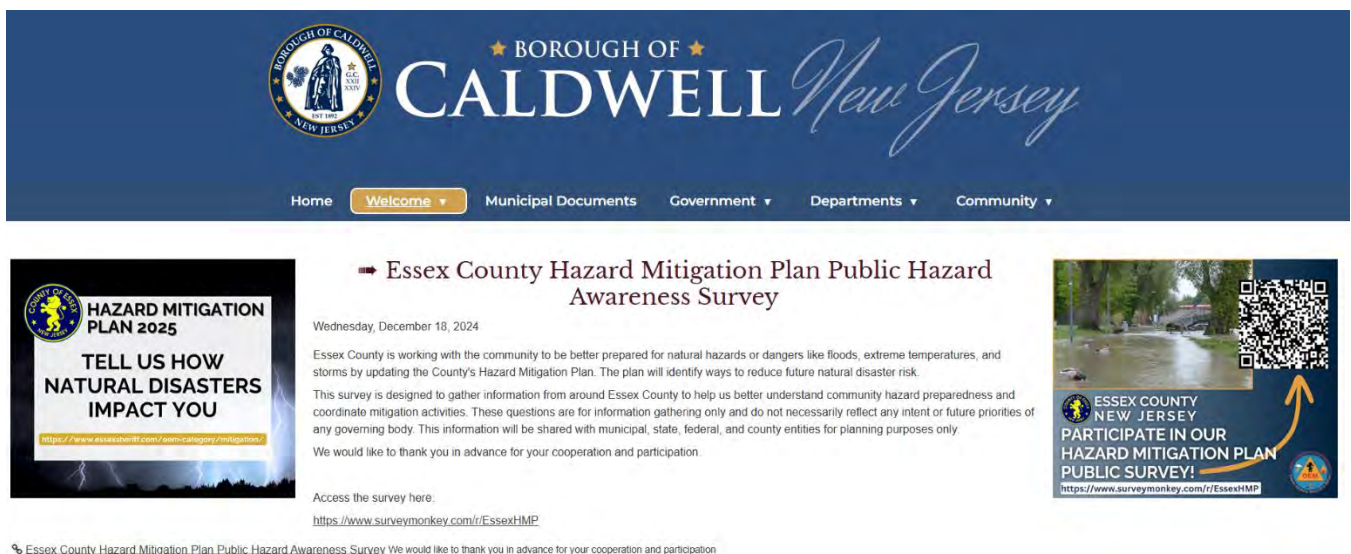




Figure D-16. Township of Livingston Website Post

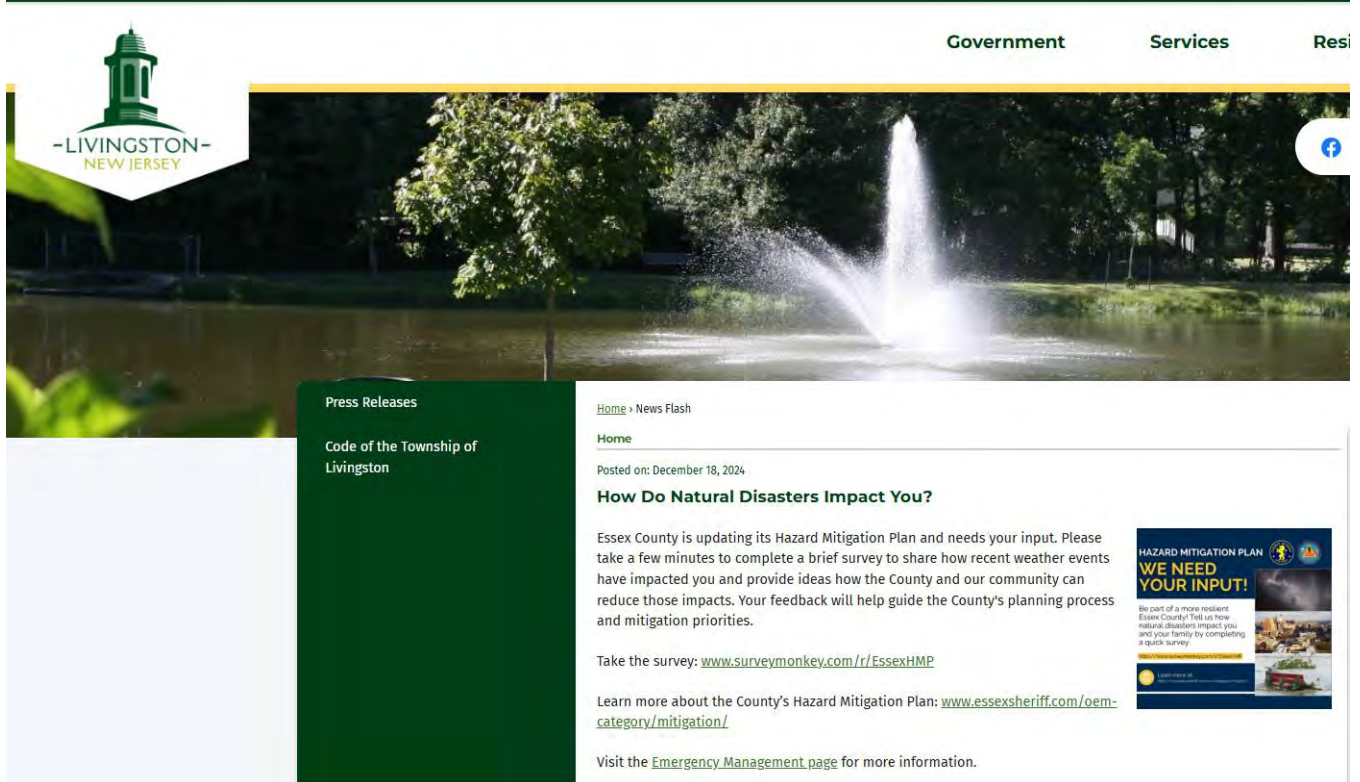


Figure D-17. Township of Livingston Facebook Post 1



Figure D-18. Township of Livingston Facebook Post 2



Figure D-19. Township of Livingston Facebook Post 3



Figure D-20. Township of Livingston Instagram Post



Figure D-21. Township of Livingston X Post



Livingston NJ @Livingston_NJ · 10s

⚠ Essex County is working on updating its Hazard Mitigation Plan and our community is participating in the update. Please take a few minutes to complete a brief survey.

Survey: surveymonkey.com/r/EssexHMP

Learn more about Essex County's HMP: essexsheriff.com/oem-category/mitigation/
#LTownNJ



The graphic is a promotional poster for a Hazard Mitigation Plan survey. It features a dark blue background with white and yellow text. At the top left, it says "HAZARD MITIGATION PLAN" in white, followed by "WE NEED YOUR INPUT!" in large yellow letters. Below this, it says "Be part of a more resilient Essex County! Tell us how natural disasters impact you and your family by completing a quick survey." in white. A yellow box contains the URL "https://www.surveymonkey.com/r/EssexHMP". At the bottom left, there is a yellow circle with a globe icon and the text "Learn more at: https://www.essexsheriff.com/oem-category/mitigation/". On the right side, there are three images: a lightning storm, an aerial view of a city, and a flooded area with a red and white structure partially submerged. In the top right corner, there are two circular logos: the County of Essex New Jersey logo and the Essex County Emergency Management (OEM) logo.

HAZARD MITIGATION PLAN
WE NEED YOUR INPUT!

Be part of a more resilient Essex County! Tell us how natural disasters impact you and your family by completing a quick survey.

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

Learn more at:
<https://www.essexsheriff.com/oem-category/mitigation/>

Figure D-22. Township of Livingston Electronic Sign Posting



Figure D-23. Livingston 411 Facebook Post

Livingston, NJ 411 · Join
 Seth Weisleder · January 6 at 11:04 PM · 🌐

FYI - Essex County is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan:
TAKE THE SURVEY: <https://surveymonkey.com/r/EsexHMP>



ESSEX COUNTY HAZARD MITIGATION PLAN 2025 Update

REDUCE THE VULNERABILITY TO HAZARDS TO PROTECT THE HEALTH, SAFETY, QUALITY OF LIFE, ENVIRONMENT AND ECONOMY OF ALL PEOPLE AND COMMUNITIES IN ESSEX COUNTY.

PURPOSE

The Essex County Office of Emergency Management is updating a countywide hazard mitigation plan (HMP) update. This plan is an opportunity to define potential natural hazards that could affect residents and shape the county and participating municipalities to remain eligible for future mitigation funding from the Federal Emergency Management Agency (FEMA).

The goal of the plan is to identify projects that reduce damages from future hazards. The plan will include a risk assessment and a hazard mitigation strategy. The primary natural hazards of concern in Essex County include disease outbreaks, drought, earthquakes, extreme temperatures, flood (prolonged rainfall, severe winter/spring storms and winter storms).

The survey will focus on existing buildings and potential future development, infrastructure and utility facilities that might be impacted. Critical facilities include, but are not limited to, municipal buildings and infrastructure such as power generation facilities, water utility, roadways, schools, and communication systems.

WHAT IS A HAZARD MITIGATION PLAN?

An HMP is "the representation of the jurisdiction's commitment to reduce risk from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards" 44 CFR 201.6. They establish and maintain eligibility for FEMA mitigation grant funds. The planning process is as important as the plan itself and is a critical framework for the community to



ESSEX COUNTY NEW JERSEY HAZARD MITIGATION PLAN 2025 UPDATE

OVERVIEW

Essex County is working on a Hazard Mitigation Plan (HMP) to help protect the county from natural disasters like floods, droughts and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county and municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, following state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

BENEFITS OF MITIGATION PLANNING

The goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During the planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential future impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

Essex County and its planning partners will be working on updating the HMP over several months. The following are goals of this process:

TAKE THE SURVEY!

Scan the QR code and tell us which natural disasters you think impact Essex County most, and what we can do to reduce their impact.



WE WANT TO HEAR FROM YOU!

Please share your mitigation project ideas with your local Office of Emergency Management (OEM).

©2024 Black & Veatch

Figure D-24. Maplewood Health Department Facebook Post



Maplewood Health Department · Follow
December 18 at 4:19 PM · 🌐

📅 We want to hear from you! Essex County is working on updating its Hazard Mitigation Plan and our community is participating in the update. Please take a few minutes by completing a brief survey to share how recent weather events have impacted you and provide ideas how the County and our community can reduce those impacts.

🔗 Link to survey: <https://www.surveymonkey.com/r/EssexHMP>

🔗 Learn more about the County's HMP: <https://www.essexsheriff.com/oem-category/mitigation/>

HAZARD MITIGATION PLAN WE NEED YOUR INPUT!

Be part of a more resilient Essex County! Tell us how natural disasters impact you and your family by completing a quick survey.

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

🌐 Learn more at:
<https://www.essexsheriff.com/oem-category/mitigation/>





Figure D-25. Maplewood Seniors Advisory Committee Facebook Post

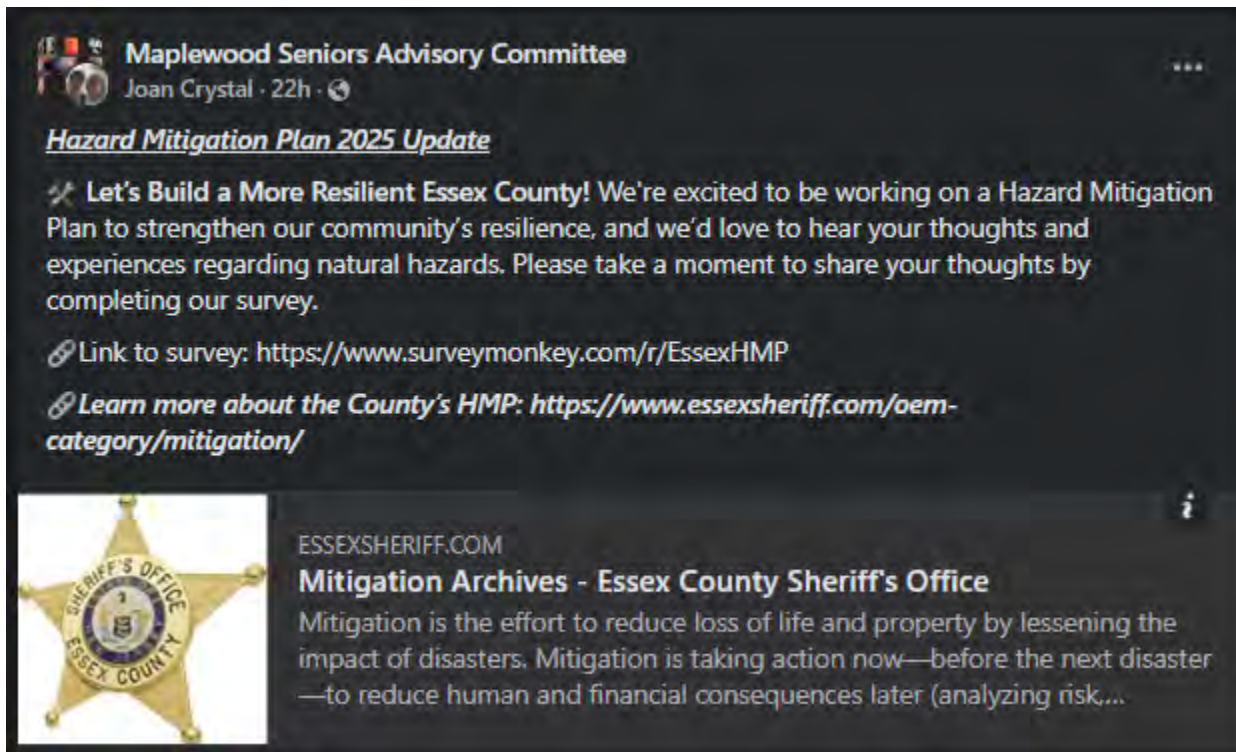


Figure D-26. Township of Millburn Facebook Post 1





Figure D-27. Township of Millburn Facebook Post 2

Borough of Roseland, NJ · Follow
January 2 at 3:01 PM · 🌐

Roseland's Office of Emergency Management, along with the Essex County Sheriff's Office, is encouraging residents to take a survey which is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan.

TAKE THE SURVEY: <https://www.surveymonkey.com/r/EssexHMP>

ESSEX COUNTY NEW JERSEY HAZARD MITIGATION PLAN 2025 UPDATE

OVERVIEW

Essex County is working on a Hazard Mitigation Plan (HMP) to protect the county from natural disasters like floods, hurricanes, and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

THE BENEFITS OF MITIGATION PLANNING

The goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During this planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

Essex County and its planning partners will be working on the HMP over several months. The following are goals of the process:

- Provide opportunities for community members to share their thoughts and ideas during the planning process.
- Conduct thorough studies of natural disaster risks using the best available data.
- Develop an action plan to minimize future impacts.
- Save money over time by reducing building damage and repair costs.
- Receive state and federal plan approval.
- Remain eligible to secure FEMA funding to proactively plan for future disasters.

ESSEX COUNTY HAZARD MITIGATION PLAN 2025 Update

REDUCE THE VULNERABILITY TO HAZARDS TO PROTECT THE HEALTH, SAFETY, QUALITY OF LIFE, ENVIRONMENT AND ECONOMY OF ALL PEOPLE AND COMMUNITIES IN ESSEX COUNTY.

PURPOSE

The Essex County Office of Emergency Management is updating the Hazard Mitigation Plan (HMP) to protect the county from natural disasters like floods, hurricanes, and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

WHAT IS A HAZARD MITIGATION PLAN?

A Hazard Mitigation Plan (HMP) is the responsibility of the jurisdiction to reduce the vulnerability of the community to natural disasters. It is a plan that identifies the hazards that threaten the community and the actions that can be taken to reduce the risk of damage and loss. The HMP is a living document that is updated as new information becomes available.

WHAT IS REQUIRED IN A HAZARD MITIGATION PLAN?

FEMA requires that the HMP be developed in accordance with the following requirements:

- Identification of hazards and vulnerable areas.
- Assessment of risk and vulnerability.
- Identification of mitigation measures.
- Implementation of mitigation measures.
- Evaluation of the effectiveness of mitigation measures.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THE HAZARD MITIGATION PLAN?

- Identification of hazards and vulnerable areas.
- Assessment of risk and vulnerability.
- Identification of mitigation measures.
- Implementation of mitigation measures.
- Evaluation of the effectiveness of mitigation measures.

HMP PROCESS

FOR MORE INFORMATION, VISIT OUR WEBSITE:
<https://www.essexsheriff.com/essex-hmp>

FOR MORE INFORMATION CONTACT:
Essex County Office of Emergency Management
Phone: (973) 324-9700
Email: essexoem@essexsheriff.com

USE IT OR LOSE IT: Take the survey!
Make your voice heard in the planning process.

Scan the QR code and tell us which natural disasters you think impact Essex County most, and what we can do to reduce their impact.

WE WANT TO HEAR FROM YOU!

Please share your mitigation plan ideas with your local Office of Emergency Management (OEM) Coordinator.

MORE INFO

Learn more about the HMP on the County OEM website:
<https://www.essexsheriff.com/essex-hmp>

Figure D-28. Aminah for Montclair Facebook Post

Aminah for Montclair · Follow
January 3 at 2:21PM · 🌐

FYI – Essex County is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan:
TAKE THE SURVEY: <https://surveymonkey.com/r/EssexHMP>

**ESSEX COUNTY
NEW JERSEY**
**HAZARD MITIGATION
PLAN 2025 UPDATE**



OVERVIEW

Essex County is working on a Hazard Mitigation Plan (HMP) to help protect the county from natural disasters like floods, droughts and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county and municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, following state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

BENEFITS OF MITIGATION PLANNING


The goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During this planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential future impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

Essex County and its planning partners will be working on updating the HMP over several months. The following are goals of this process:

- Provide opportunities for community members to share their thoughts and ideas during the planning process.
- Conduct thorough studies of natural disaster risks using the best available data.
- Develop an action plan to minimize future impacts.
- Save money over time by reducing building damage and repair costs.
- Receive state and federal plan approval.
- Remain eligible to secure FEMA funding to proactively plan for future disasters.

TAKE THE SURVEY!

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WE WANT TO HEAR FROM YOU!

Please share your mitigation project ideas with your local Office of Emergency Management (OEM) Coordinator.

MORE INFO

Learn more about the HMP on the County OEM website:
<https://www.essexsheriff.com/oem-category/mitigation/>




Figure D-29. Borough of Roseland Facebook Post 1

Borough of Roseland, NJ · Follow
December 24 at 12:00 PM · 🌐

Roseland's Office of Emergency Management, along with the Essex County Sheriff's Office, is encouraging residents to take a survey which is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan.

TAKE THE SURVEY: <https://www.surveymonkey.com/r/EssexHMP>



ESSEX COUNTY NEW JERSEY

HAZARD MITIGATION PLAN 2025 UPDATE

OVERVIEW

County is working on a Hazard Mitigation Plan (HMP) to protect the county from natural disasters like floods, droughts and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.


HMP is being updated with the help of Black & Veatch, a state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

BENEFITS OF MITIGATION PLANNING

Goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During the planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

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ESSEX COUNTY HAZARD MITIGATION PLAN 2025 Update

REDUCE THE VULNERABILITY TO HAZARDS TO PROTECT THE HEALTH, SAFETY, QUALITY OF LIFE, ENVIRONMENT AND ECONOMY OF ALL PEOPLE AND COMMUNITIES IN ESSEX COUNTY

PURPOSE

Essex County Office of Emergency Management is seeking a comprehensive hazard mitigation plan update. The plan will identify the hazards, potential risks, and the impact of these hazards on the county and its residents. The plan will also identify ways to reduce the risk of these hazards and the impact of these hazards on the county and its residents.

The goal of the plan is to identify hazards and risks, assess the vulnerability of the county and its residents, and develop a plan to reduce the risk of these hazards and the impact of these hazards on the county and its residents.

The plan will also identify ways to reduce the risk of these hazards and the impact of these hazards on the county and its residents.


WHAT IS A HAZARD MITIGATION PLAN?

A Hazard Mitigation Plan (HMP) is a document that identifies the hazards that threaten a community and the actions that can be taken to reduce the risk of these hazards. The HMP is a key component of a community's disaster preparedness and response plan.

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TAKE THE SURVEY

Scan the QR code and tell us which natural disasters you think impact Essex County most, and what we can do to reduce their impact.



WE WANT TO HEAR FROM YOU!

Please share your mitigation plan ideas with your local Office of Emergency Management (OEM) Coordinator.


MORE INFO


Learn more about the HMP or County OEM website: <https://www.essexsheriff.com/category/mitigation/>

For more information, visit our website: <https://www.essexsheriff.com/category/mitigation/>

OR MORE INFORMATION CONTACT:
Telephone: (973) 324-9750
Email: essexoem@essexsheriff.com

Use or work in Essex County? Take the survey: <https://www.surveymonkey.com/r/EssexHMP>





HMP PROCESS

The HMP process is a continuous cycle that involves the following steps:

1. Identify Hazards
2. Assess Vulnerability
3. Develop Mitigation Measures
4. Implement Mitigation Measures
5. Monitor and Evaluate



Figure D-30. Borough of Roseland Facebook Post 2

Borough of Roseland, NJ · Follow
January 2 at 3:01 PM · 🌐

Roseland's Office of Emergency Management, along with the Essex County Sheriff's Office, is encouraging residents to take a survey which is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan.

TAKE THE SURVEY: <https://www.surveymonkey.com/r/EssexHMP>

ESSEX COUNTY NEW JERSEY HAZARD MITIGATION PLAN 2025 UPDATE

OVERVIEW

County is working on a Hazard Mitigation Plan (HMP) to protect the county from natural disasters like floods, droughts, and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

THE BENEFITS OF MITIGATION PLANNING

The goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During this planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

County and its planning partners will be working on the HMP over several months. The following are goals of the process:

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ESSEX COUNTY HAZARD MITIGATION PLAN 2025 Update

REDUCE THE VULNERABILITY TO HAZARDS TO PROTECT THE HEALTH, SAFETY, QUALITY OF LIFE, ENVIRONMENT AND ECONOMY OF ALL PEOPLE AND COMMUNITIES IN ESSEX COUNTY.

PURPOSE

The Essex County Office of Emergency Management is updating the Hazard Mitigation Plan (HMP) to reflect the latest data and information. This plan is a key document for the county and its municipalities. It identifies the hazards that threaten the county and its communities, and it outlines the actions that need to be taken to reduce the risk of damage and loss from these hazards. The HMP is a living document that will be updated as new information becomes available.

WHAT IS A HAZARD MITIGATION PLAN?

A Hazard Mitigation Plan (HMP) is a document that outlines the actions that need to be taken to reduce the risk of damage and loss from natural hazards. It is a key document for the county and its municipalities. The HMP identifies the hazards that threaten the county and its communities, and it outlines the actions that need to be taken to reduce the risk of damage and loss from these hazards. The HMP is a living document that will be updated as new information becomes available.

WHAT IS REQUIRED IN A HAZARD MITIGATION PLAN?

FEMA requires an opportunity for the public to be engaged in all phases of the plan's development. The HMP should include an executive summary, a table of contents, a list of stakeholders, a list of hazards, a list of risks, a list of actions, and a list of resources. The HMP should also include a map of the county showing the locations of the hazards and the risks.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THE HAZARD MITIGATION PLAN?

- Awareness of risk and vulnerability
- Identification of emergency response strategies
- Reduction of hazard impact (loss of life, property and the local economy)
- Creation of partnerships and development of comprehensive approaches that embrace regional and local government cooperation
- Planning of resources and reduction of effort and existing structures of all
- Creation of more resilient communities
- Building resilience to disasters faster

HMP PROCESS

FOR MORE INFORMATION, VISIT OUR WEBSITE:
<https://www.essexsheriff.com/essex-hmp>

FOR MORE INFORMATION CONTACT:
essexhmp@essexsheriff.com
essexhmp@essexsheriff.com

USE IT TO WORK IN ESSEX COUNTY!
Take the survey!
Make your voice heard in the planning process.

WE WANT TO HEAR FROM YOU!
Please share your mitigation plan ideas with your local Office of Emergency Management (OEM) Coordinator.

MORE INFO
Learn more about the HMP on the County OEM website:
<https://www.essexsheriff.com/essex-hmp>



Figure D-31. Borough of Roseland Facebook Post 3

Borough of Roseland, NJ · Follow
January 6 at 6:00 PM · 🌐

Roseland's Office of Emergency Management, along with the Essex County Sheriff's Office, is encouraging residents to take a survey which is soliciting comments and suggestions regarding the County's Hazard Mitigation Plan.

TAKE THE SURVEY: <https://www.surveymonkey.com/r/EssexHMP>

ESSEX COUNTY NEW JERSEY

HAZARD MITIGATION PLAN 2025 UPDATE

OVERVIEW

Essex County is working on a Hazard Mitigation Plan (HMP) to protect the county from natural disasters like floods, hurricanes, and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

The HMP is being updated with the help of Black & Veatch, a state and federal rules. Once the plan is finished, the county and its partners will be better prepared for natural disasters and can access grant funding before and after they happen.

THE BENEFITS OF HAZARD MITIGATION PLANNING

The goal of the HMP is to keep people safe and protect communities in Essex County from natural disasters. During this planning process, county and local agencies will work together to identify risks, and develop an action plan to reduce potential impacts to residents, buildings, infrastructure, the environment and the economy from natural hazards.

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WE WANT TO HEAR FROM YOU!

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MORE INFO

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OR MORE INFORMATION CONTACT:
Telephone: (973) 524-9750
Email: info@essexsheriff.com

ESSEX COUNTY HAZARD MITIGATION PLAN 2025 Update

REDUCE THE VULNERABILITY TO HAZARDS TO PROTECT THE HEALTH, SAFETY, QUALITY OF LIFE, ENVIRONMENT AND ECONOMY OF ALL PEOPLE AND COMMUNITIES IN ESSEX COUNTY

PURPOSE

Essex County Office of Emergency Management is updating its Hazard Mitigation Plan to protect the county from natural disasters like floods, hurricanes, and severe storms. This plan will help identify ways to reduce natural disaster risk. The current HMP ensures the county municipalities remain eligible for Federal Emergency Management Agency (FEMA) hazard mitigation grant funding.

WHAT IS A HAZARD MITIGATION PLAN?

A Hazard Mitigation Plan (HMP) is a document that identifies the hazards that threaten a community and the actions that can be taken to reduce the risk of damage to people and property. The plan also identifies the resources that are available to help pay for the costs of mitigation.

WHAT IS REQUIRED IN A HAZARD MITIGATION PLAN?

FEMA requires that communities develop a plan that includes the following:

- Identification of risks and vulnerabilities.
- Identification of potential impacts.
- Identification of mitigation measures.
- Identification of funding sources.
- Identification of responsible agencies.
- Identification of implementation schedule.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THE HAZARD MITIGATION PLAN?

- Identification of risks and vulnerabilities.
- Identification of potential impacts.
- Identification of mitigation measures.
- Identification of funding sources.
- Identification of responsible agencies.
- Identification of implementation schedule.

HMP PROCESS

BLACK & VEATCH

2025 | HAZARD MITIGATION PLAN UPDATE - ESSEX COUNTY, NJ
D-28

Figure D-32. Turtle Back Zoo Holiday Lights Festival Lawn Sign Posting 1



Figure D-33. Turtle Back Zoo Holiday Lights Festival Lawn Sign Posting 2



Figure D-34. Essex County Website Public Review Period Announcement

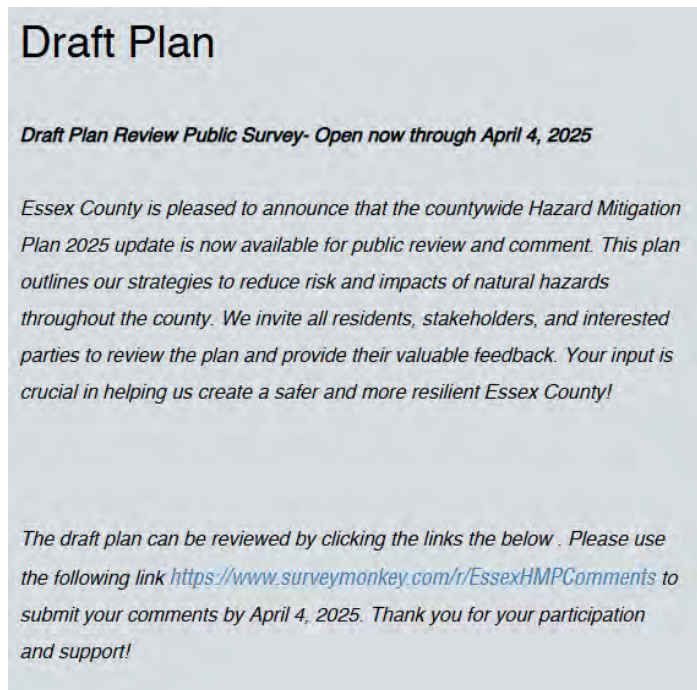


Figure D-35. Township of Bloomfield Public Review Period Facebook Post





1.4 PUBLIC SURVEY

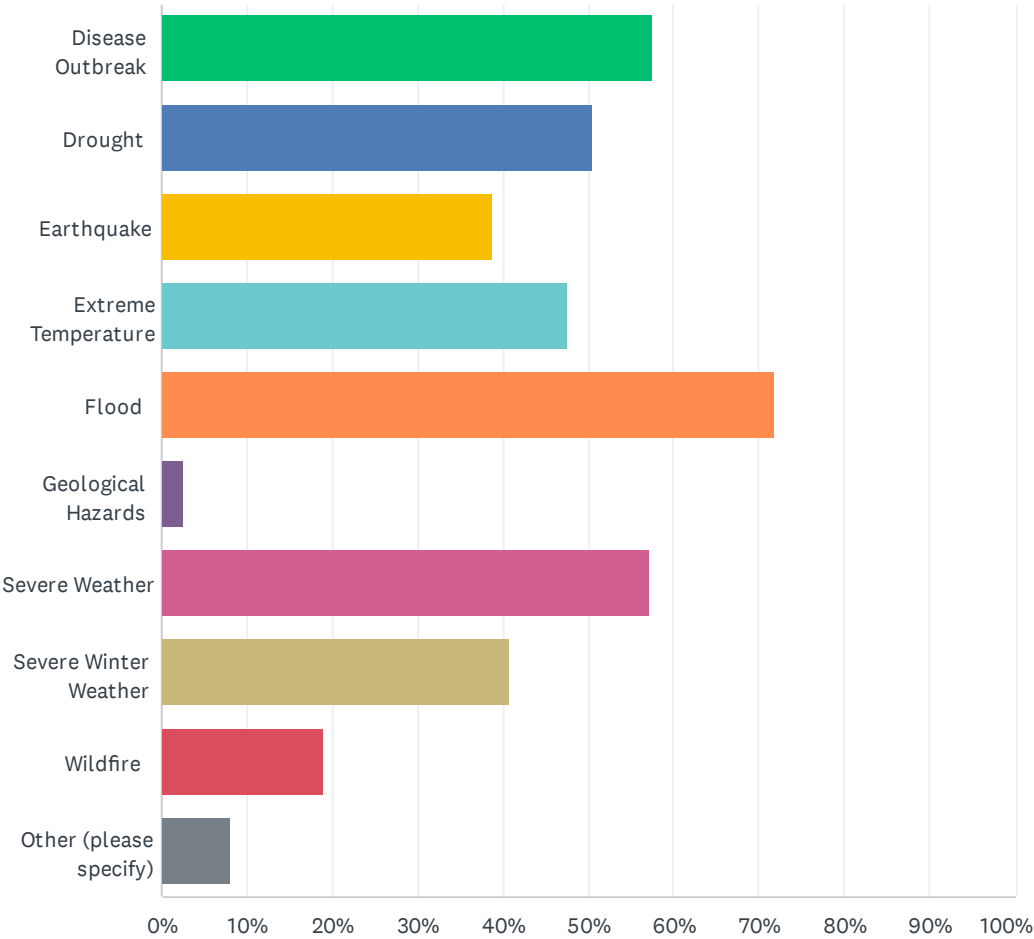
A public survey at the onset of the planning process. The survey was designed to capture data and information from members of the public, especially those who might not be able to attend public meetings or participate through other means in the planning process. The survey was posted from December 17, 2024, through February 5, 2025. The County posted the survey on the planning website and social media platforms. The Planning Partnership announced the availability of the survey on municipal social media accounts and electronic signage where available. A link to the electronic public survey was also shared with Steering Committee members and Stakeholders.

A total of 200 respondents completed this survey over a period of six months during the planning process. In total, the public survey yielded 200 responses. Flooding was ranked as the main hazard of concern from the majority of respondents. The majority of respondents receive information concerning a disaster from the internet (57%), followed by municipal email (53%) and television news (47%). 54% of respondents reported their home had previously been damaged by a hazard event, with only 33% of those damages being reported to the local municipality. Only 71% of respondents reported knowing their evacuation routes with 12% noting they would need assistance in the event of an evacuation. 30% of respondents noted their home was located in a floodplain but the majority (58%) of respondents did not know if their home was located in a hazard area. Of those in the floodplain, only one third had flood insurance. 4% of respondents noted they rely on services from the local government or non-profits. 3% of respondents spoke a language other than English. The majority of respondents (45%) have lived in Essex County more than 20 years. 90% reporting owning their place of residence and 10% reported renting.

The following pages provide the summary of the public survey.

Q1 Which of the following natural hazards have you experienced in Essex County? Choose all that apply.

Answered: 196 Skipped: 4

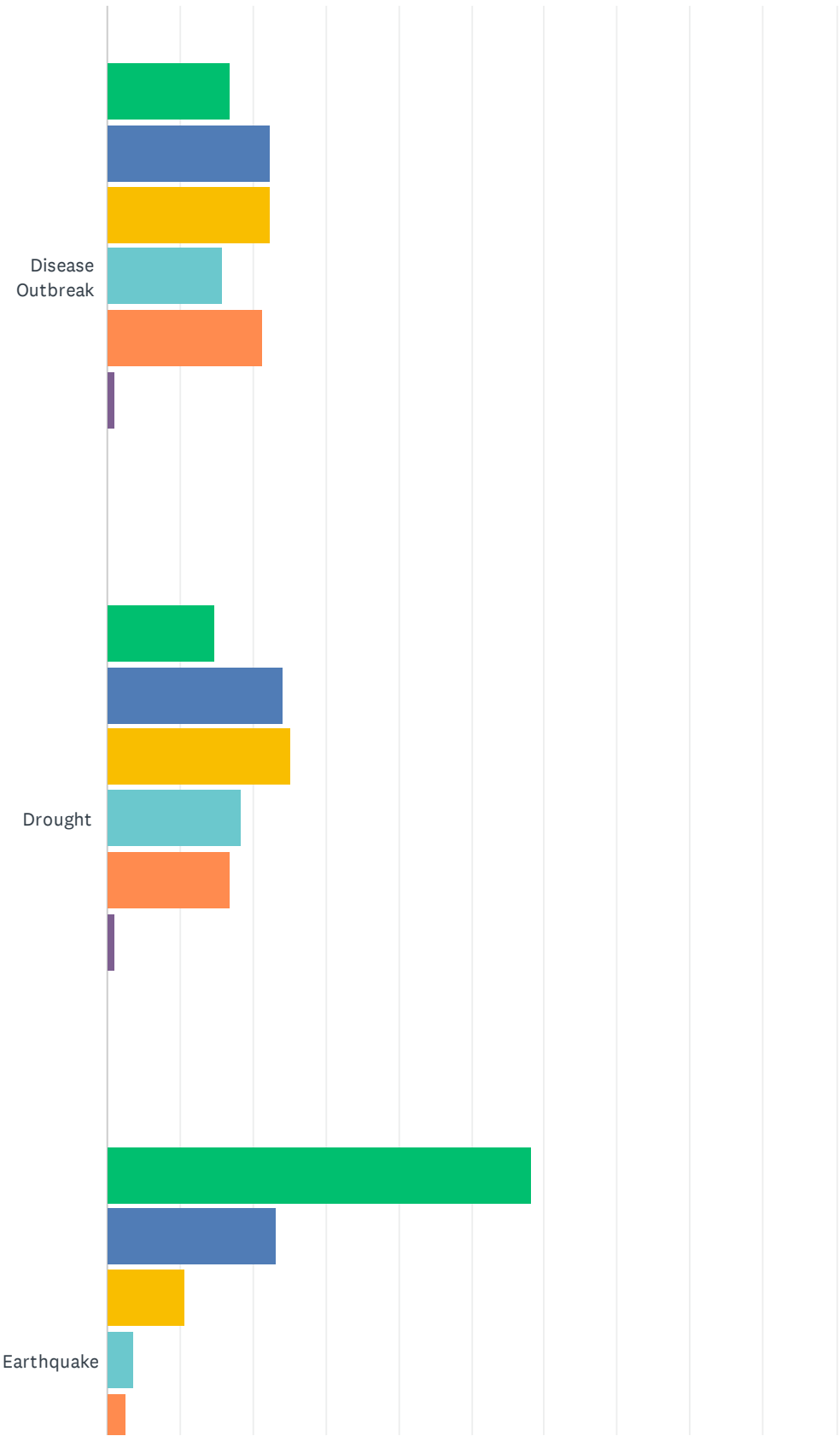


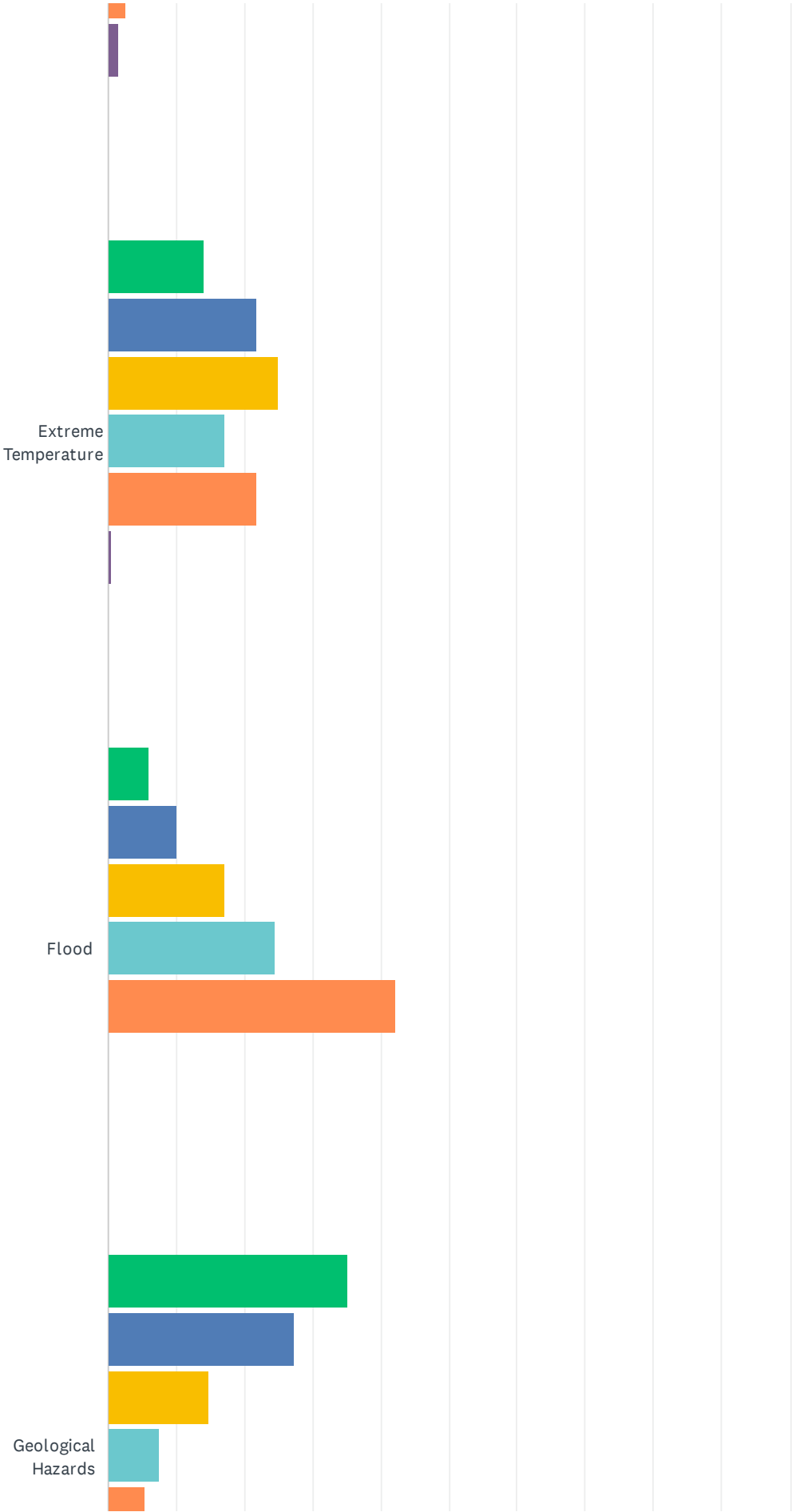
Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey

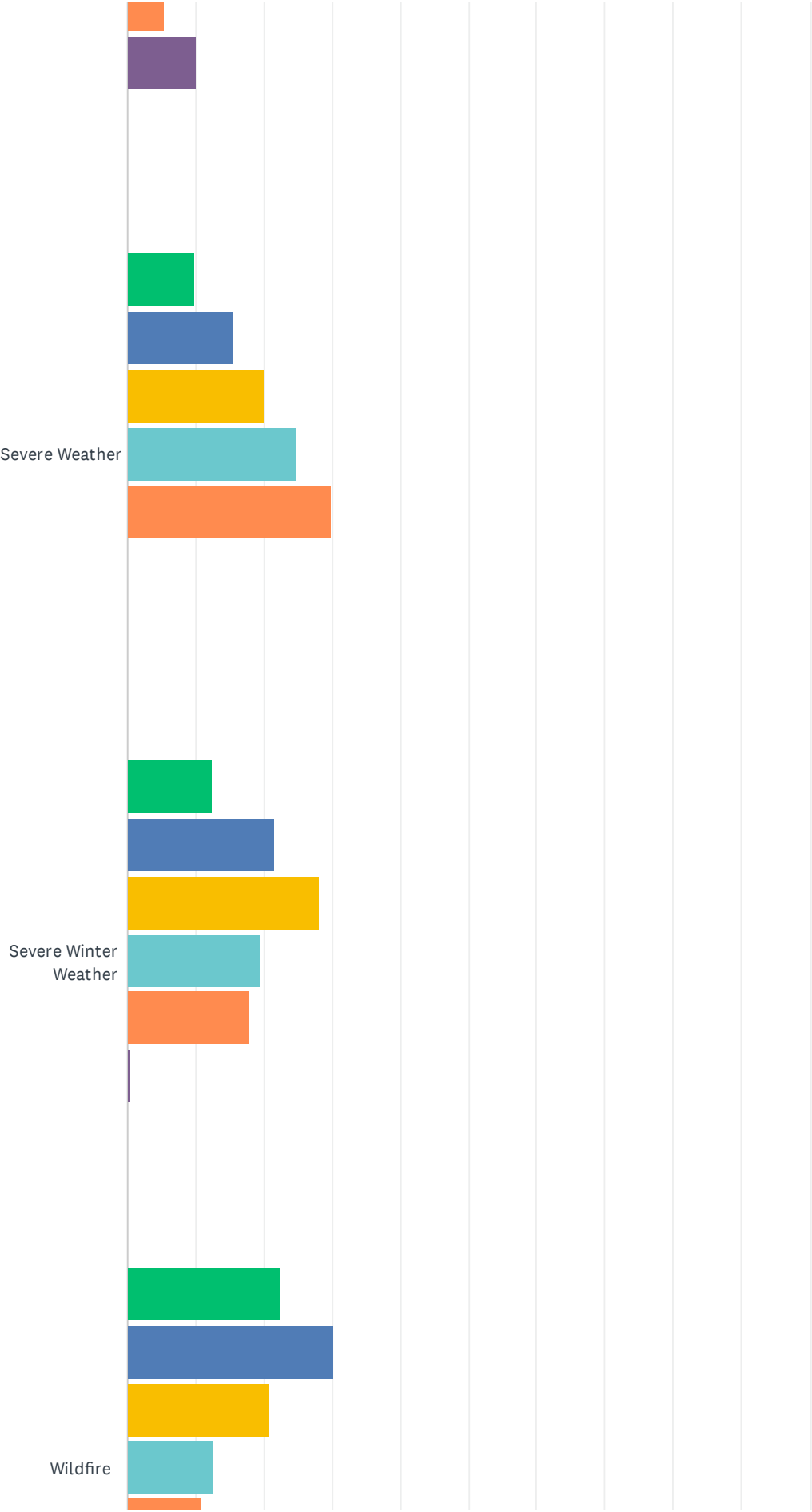
ANSWER CHOICES	RESPONSES	
Disease Outbreak	57.65%	113
Drought	50.51%	99
Earthquake	38.78%	76
Extreme Temperature	47.45%	93
Flood	71.94%	141
Geological Hazards	2.55%	5
Severe Weather	57.14%	112
Severe Winter Weather	40.82%	80
Wildfire	18.88%	37
Other (please specify)	8.16%	16
Total Respondents: 196		

Q2 How worried are you about these natural dangers in Essex County?

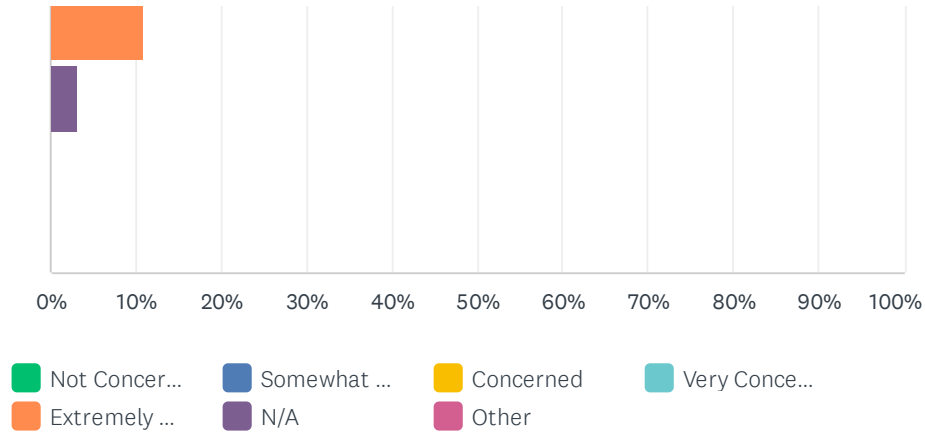
Answered: 200 Skipped: 0







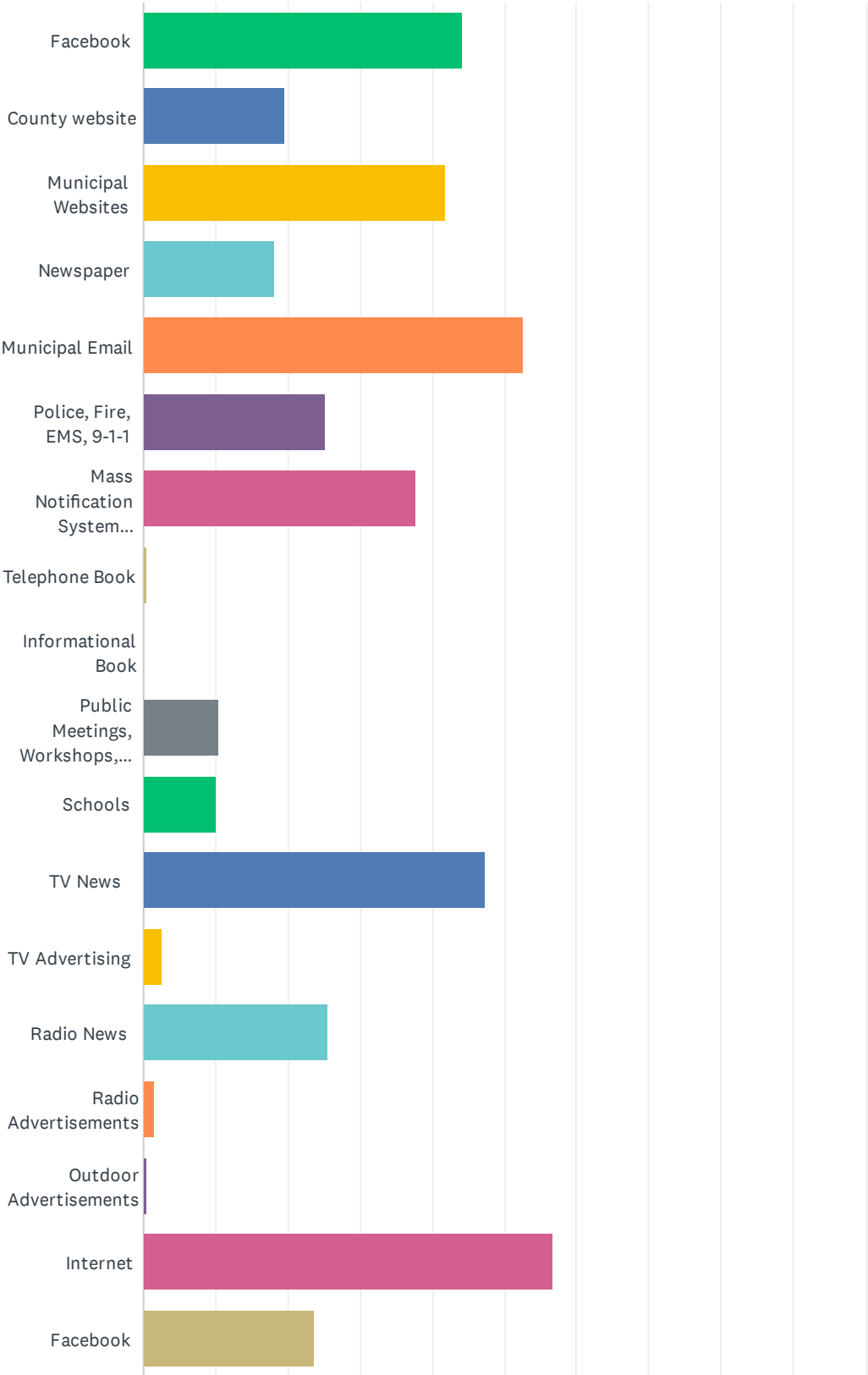
Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey



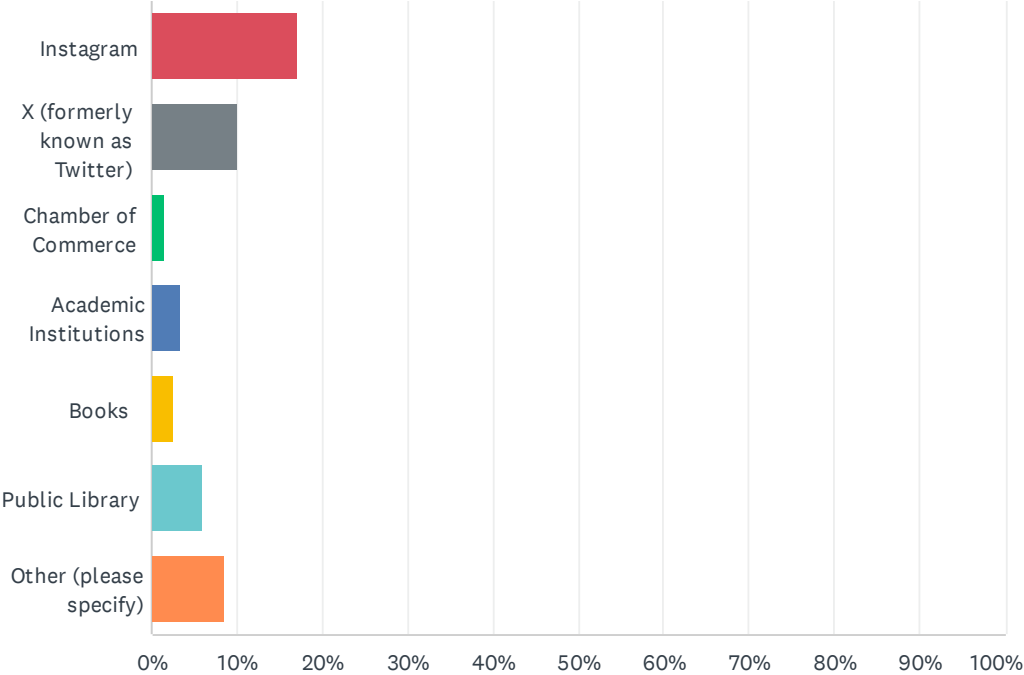
	NOT CONCERNED	SOMEWHAT CONCERNED	CONCERNED	VERY CONCERNED	EXTREMELY CONCERNED	N/A	OTHER	TOTAL
Disease Outbreak	16.84% 33	22.45% 44	22.45% 44	15.82% 31	21.43% 42	1.02% 2	0.00% 0	196
Drought	14.66% 28	24.08% 46	25.13% 48	18.32% 35	16.75% 32	1.05% 2	0.00% 0	191
Earthquake	58.20% 110	23.28% 44	10.58% 20	3.70% 7	2.65% 5	1.59% 3	0.00% 0	189
Extreme Temperature	13.99% 27	21.76% 42	24.87% 48	17.10% 33	21.76% 42	0.52% 1	0.00% 0	193
Flood	6.03% 12	10.05% 20	17.09% 34	24.62% 49	42.21% 84	0.00% 0	0.00% 0	199
Geological Hazards	35.26% 67	27.37% 52	14.74% 28	7.37% 14	5.26% 10	10.00% 19	0.00% 0	190
Severe Weather	9.79% 19	15.46% 30	20.10% 39	24.74% 48	29.90% 58	0.00% 0	0.00% 0	194
Severe Winter Weather	12.31% 24	21.54% 42	28.21% 55	19.49% 38	17.95% 35	0.51% 1	0.00% 0	195
Wildfire	22.40% 43	30.21% 58	20.83% 40	12.50% 24	10.94% 21	3.13% 6	0.00% 0	192

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

Answered: 199 Skipped: 1



Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey

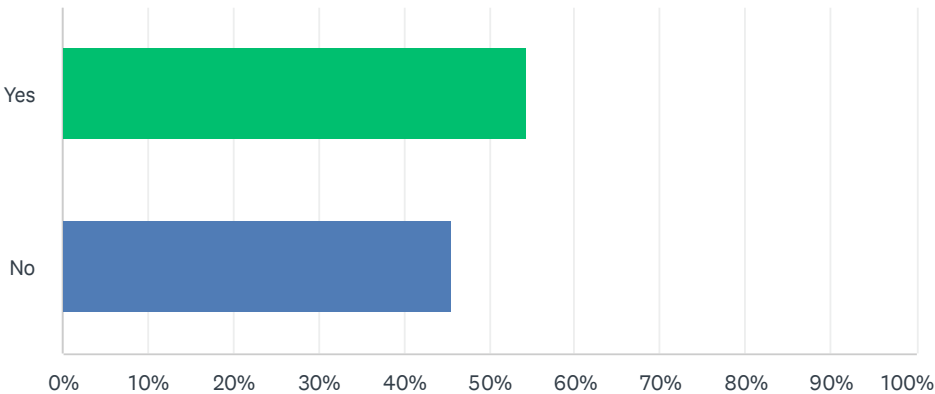


Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey

ANSWER CHOICES	RESPONSES	
Facebook	44.22%	88
County website	19.60%	39
Municipal Websites	41.71%	83
Newspaper	18.09%	36
Municipal Email	52.76%	105
Police, Fire, EMS, 9-1-1	25.13%	50
Mass Notification System (SJREADY)	37.69%	75
Telephone Book	0.50%	1
Informational Book	0.00%	0
Public Meetings, Workshops, Public Awareness Events	10.55%	21
Schools	10.05%	20
TV News	47.24%	94
TV Advertising	2.51%	5
Radio News	25.63%	51
Radio Advertisements	1.51%	3
Outdoor Advertisements	0.50%	1
Internet	56.78%	113
Facebook	23.62%	47
Instagram	17.09%	34
X (formerly known as Twitter)	10.05%	20
Chamber of Commerce	1.51%	3
Academic Institutions	3.52%	7
Books	2.51%	5
Public Library	6.03%	12
Other (please specify)	8.54%	17
Total Respondents: 199		

Q4 In the past, has your home been damaged by a hazard event? For example, flood waters entering your homes or wildfire damaging your structure?

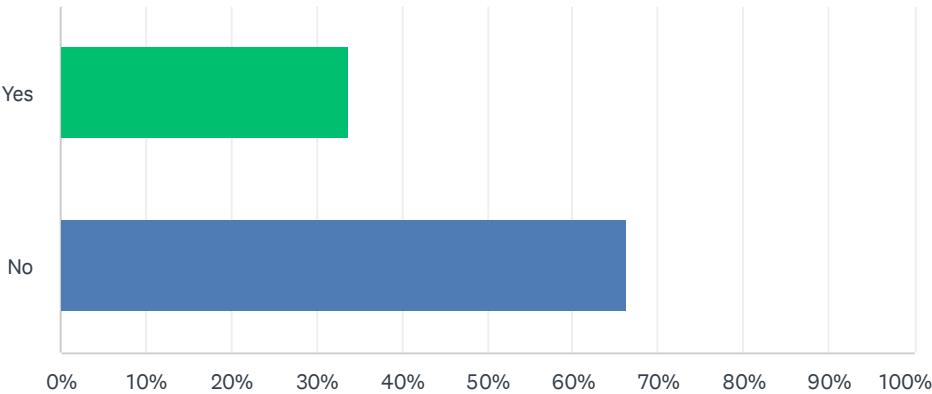
Answered: 199 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	54.27%	108
No	45.73%	91
TOTAL		199

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

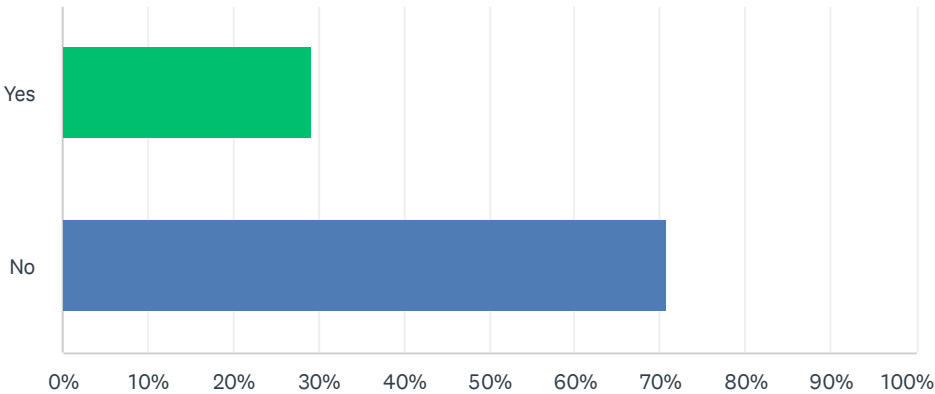
Answered: 119 Skipped: 81



ANSWER CHOICES		RESPONSES	
Yes		33.61%	40
No		66.39%	79
TOTAL			119

Q6 Do you know your evacuation routes in the event of an emergency?

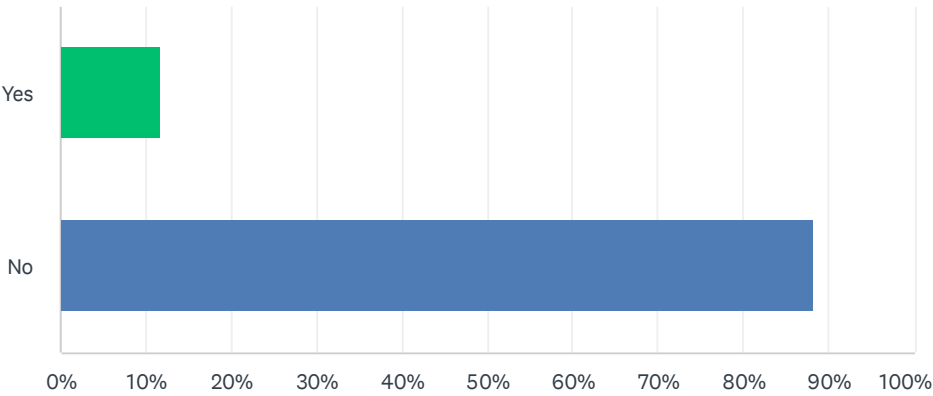
Answered: 198 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	29.29%	58
No	70.71%	140
TOTAL		198

Q7 In the event of an evacuation, do you require assistance in order to evacuate?

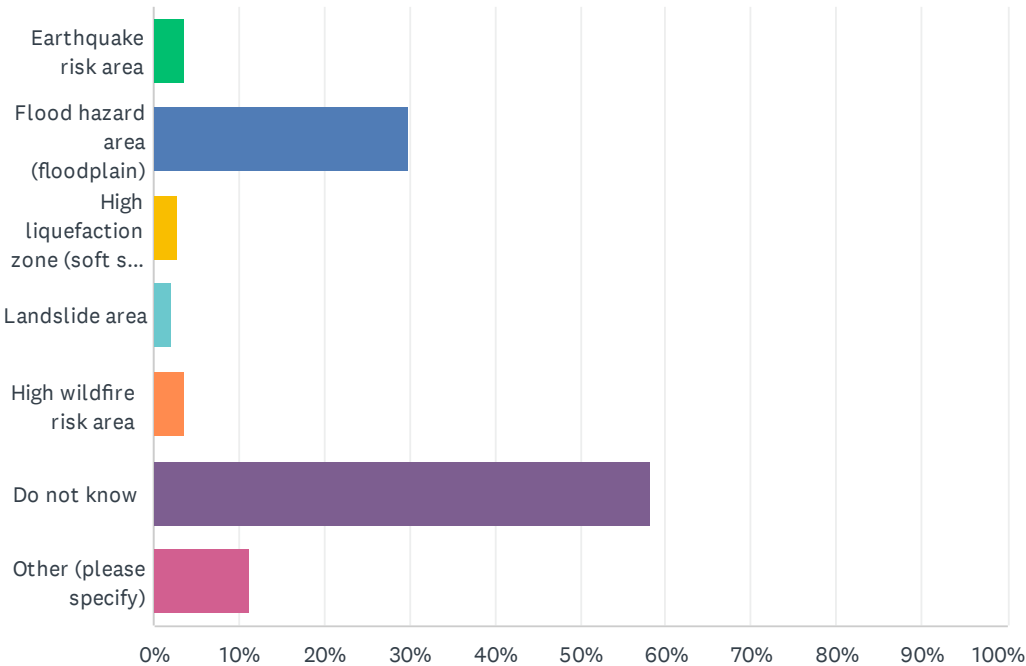
Answered: 196 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes	11.73%	23
No	88.27%	173
TOTAL		196

Q8 Is your home in any of these hazard areas? (Check all that apply)

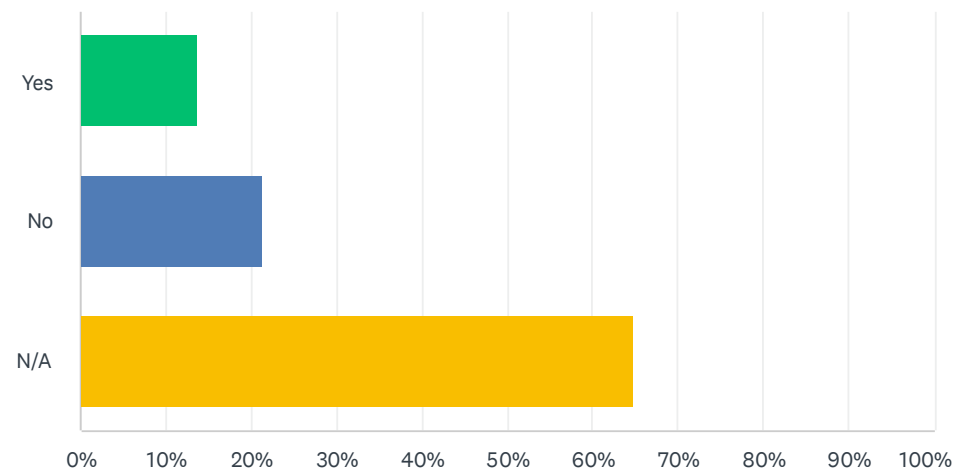
Answered: 141 Skipped: 59



ANSWER CHOICES	RESPONSES	
Earthquake risk area	3.55%	5
Flood hazard area (floodplain)	29.79%	42
High liquefaction zone (soft soil shaking during earthquakes)	2.84%	4
Landslide area	2.13%	3
High wildfire risk area	3.55%	5
Do not know	58.16%	82
Other (please specify)	11.35%	16
Total Respondents: 141		

Q9 If your property is in the floodplain, do you have flood insurance?

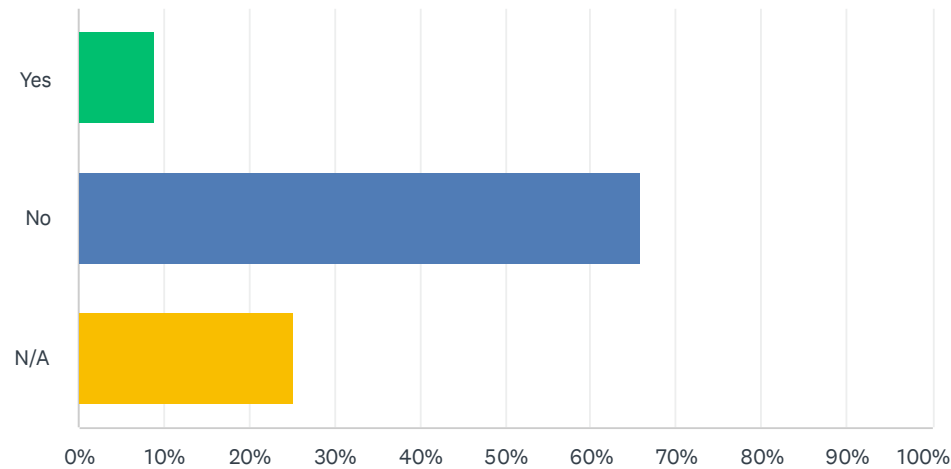
Answered: 182 Skipped: 18



ANSWER CHOICES	RESPONSES	
Yes	13.74%	25
No	21.43%	39
N/A	64.84%	118
TOTAL		182

Q10 If your property is outside the floodplain, do you have flood insurance?

Answered: 190 Skipped: 10



ANSWER CHOICES	RESPONSES	
Yes	8.95%	17
No	65.79%	125
N/A	25.26%	48
TOTAL		190

Q11 Please identify any specific vulnerabilities that you are aware of in your community (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: 118 Skipped: 82

Q12 Please identify any specific vulnerabilities that you are aware of in Essex County outside of your community. Please list the municipality, street names, and other specific identifiers if possible.

Answered: 48 Skipped: 152

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

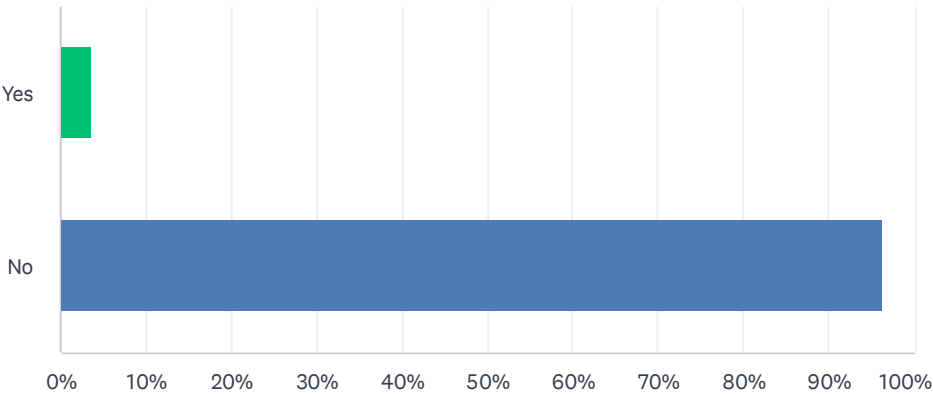
Answered: 60 Skipped: 140

Q14 Can you identify any groups in your community that work with or provide support to socially vulnerable populations?

Answered: 77 Skipped: 123

Q15 Do you rely on services from the local government or non-profits in your area, such as meals, visiting nurses, transportation services, etc.?

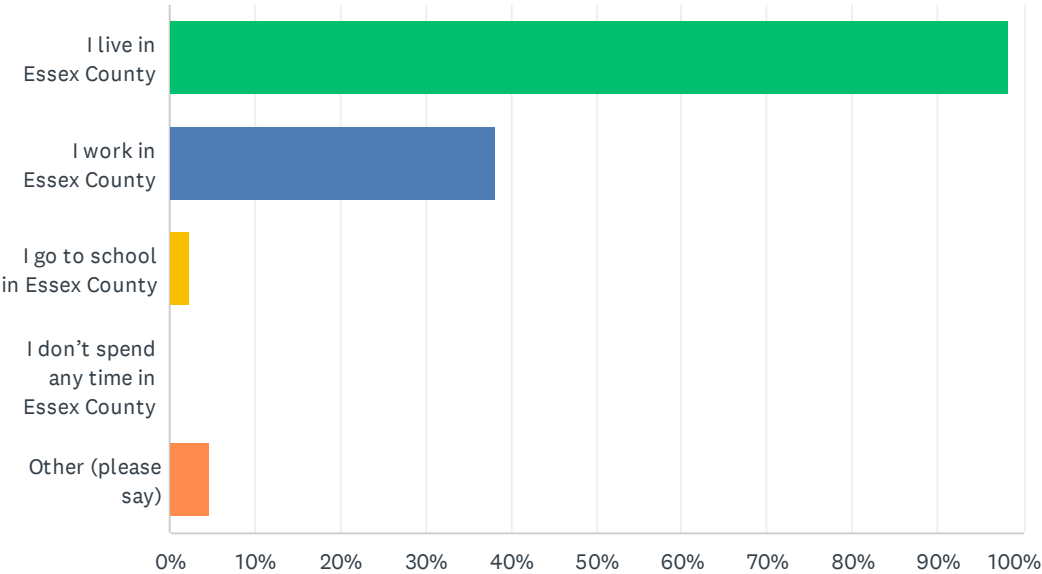
Answered: 166 Skipped: 34



ANSWER CHOICES		RESPONSES	
Yes		3.61%	6
No		96.39%	160
TOTAL			166

Q16 How do you spend your time in Essex County? Choose all that apply.

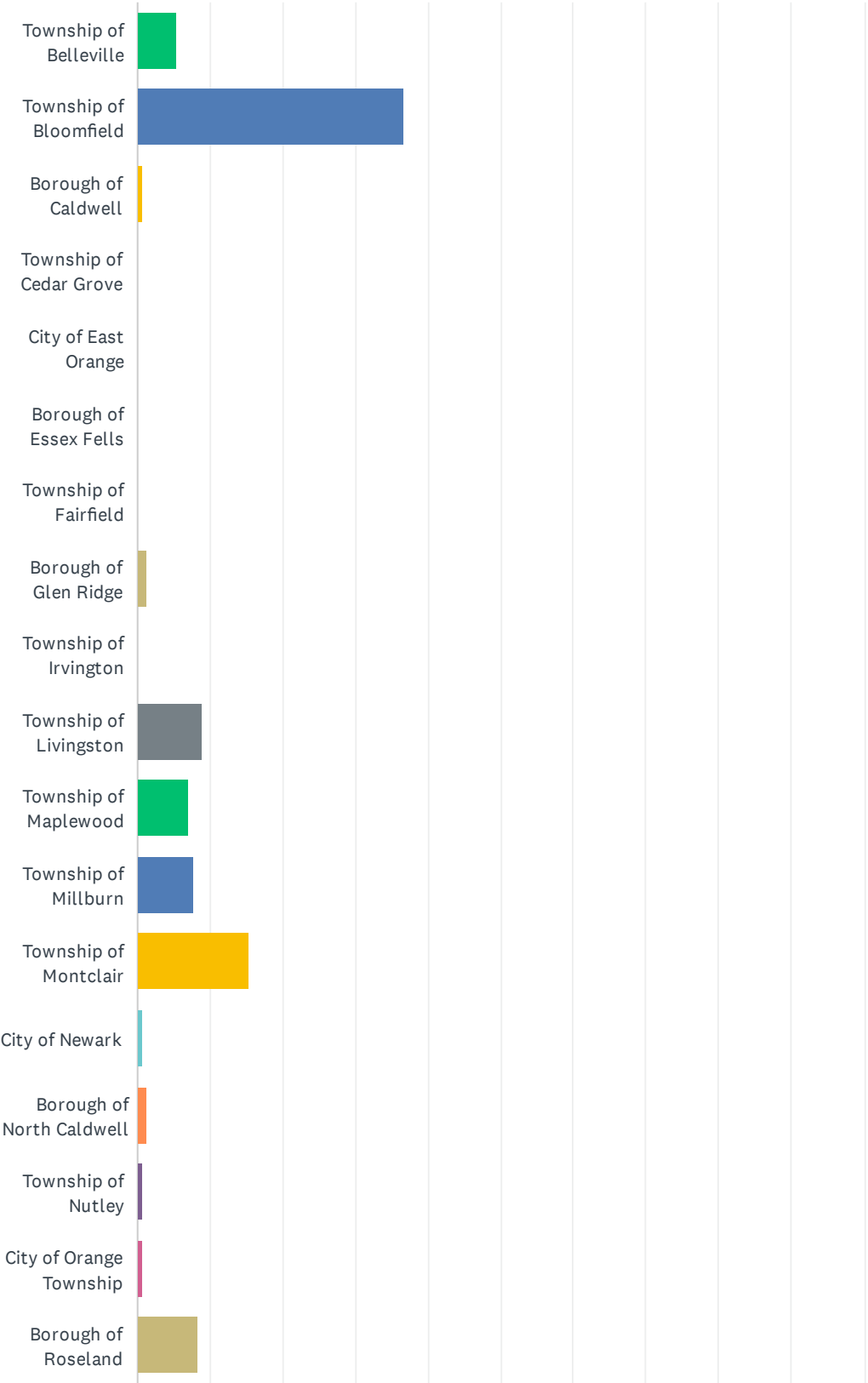
Answered: 168 Skipped: 32



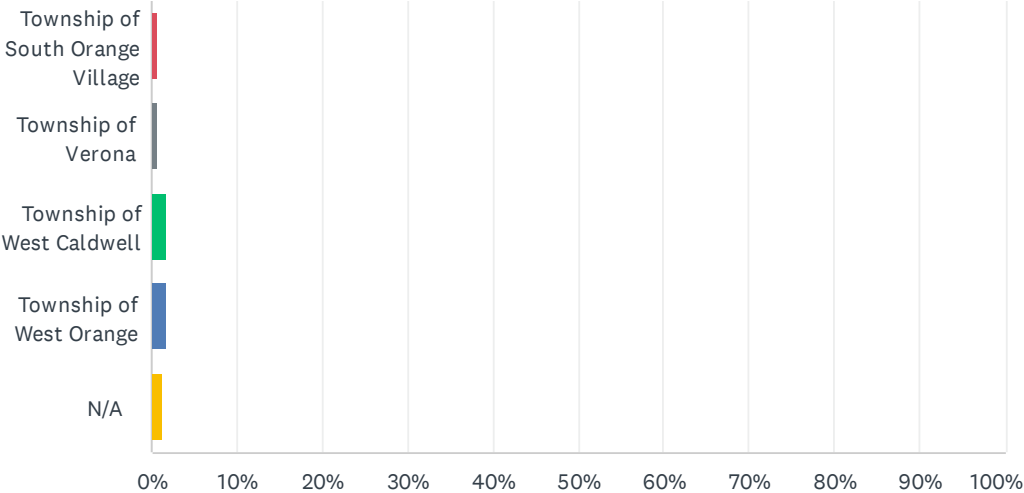
ANSWER CHOICES	RESPONSES	
I live in Essex County	98.21%	165
I work in Essex County	38.10%	64
I go to school in Essex County	2.38%	4
I don't spend any time in Essex County	0.00%	0
Other (please say)	4.76%	8
Total Respondents: 168		

Q17 If you live in Essex County, please indicate the municipality in which you live.

Answered: 169 Skipped: 31



Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey

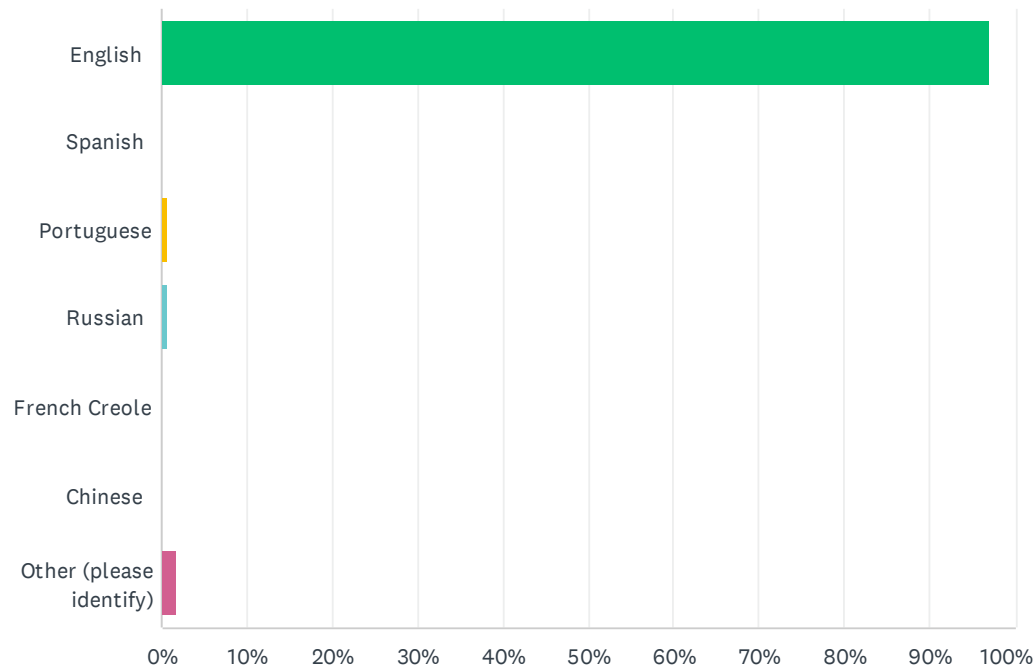


Essex County | Hazard Mitigation Plan Public Hazard Awareness Survey

ANSWER CHOICES	RESPONSES	
Township of Belleville	5.33%	9
Township of Bloomfield	36.69%	62
Borough of Caldwell	0.59%	1
Township of Cedar Grove	0.00%	0
City of East Orange	0.00%	0
Borough of Essex Fells	0.00%	0
Township of Fairfield	0.00%	0
Borough of Glen Ridge	1.18%	2
Township of Irvington	0.00%	0
Township of Livingston	8.88%	15
Township of Maplewood	7.10%	12
Township of Millburn	7.69%	13
Township of Montclair	15.38%	26
City of Newark	0.59%	1
Borough of North Caldwell	1.18%	2
Township of Nutley	0.59%	1
City of Orange Township	0.59%	1
Borough of Roseland	8.28%	14
Township of South Orange Village	0.59%	1
Township of Verona	0.59%	1
Township of West Caldwell	1.78%	3
Township of West Orange	1.78%	3
N/A	1.18%	2
TOTAL		169

Q18 What is the main language spoken or written in your home?

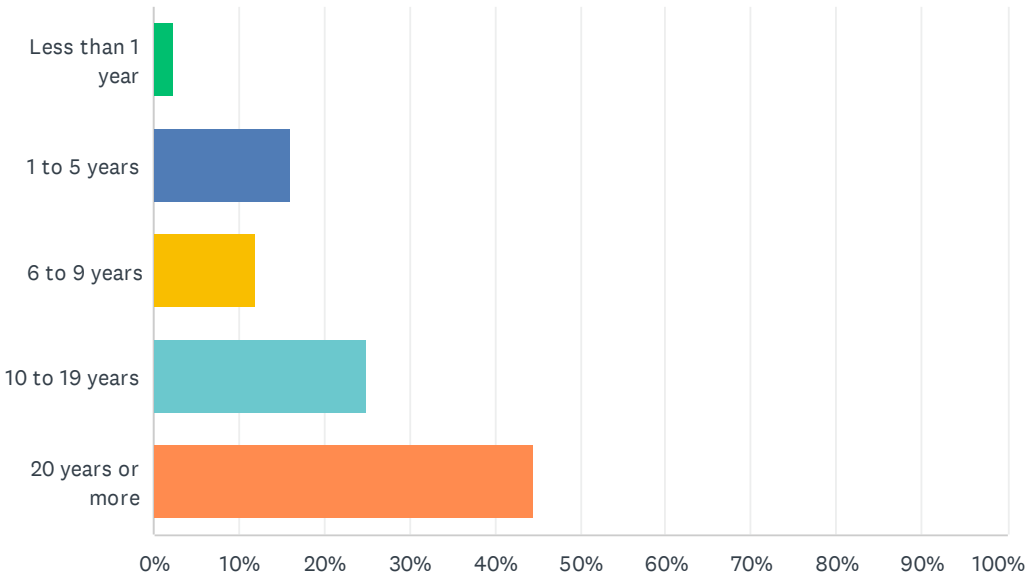
Answered: 169 Skipped: 31



ANSWER CHOICES	RESPONSES	
English	97.04%	164
Spanish	0.00%	0
Portuguese	0.59%	1
Russian	0.59%	1
French Creole	0.00%	0
Chinese	0.00%	0
Other (please identify)	1.78%	3
TOTAL		169

Q19 How long have you lived here?

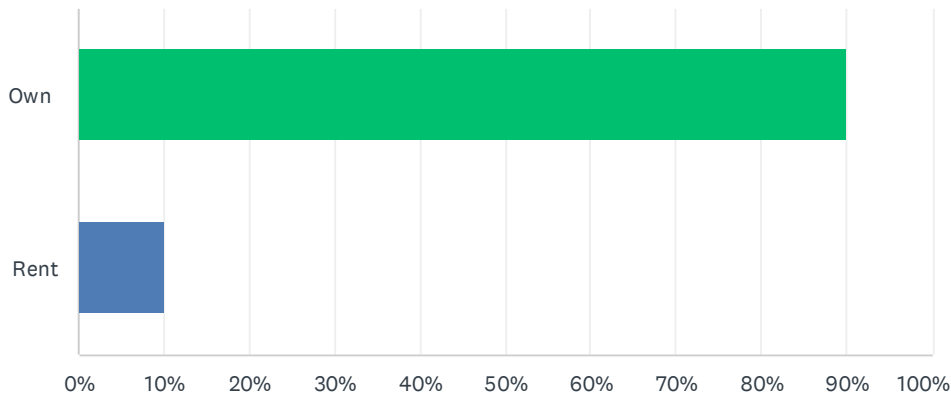
Answered: 168 Skipped: 32



ANSWER CHOICES		RESPONSES	
Less than 1 year		2.38%	4
1 to 5 years		16.07%	27
6 to 9 years		11.90%	20
10 to 19 years		25.00%	42
20 years or more		44.64%	75
TOTAL			168

Q20 Do you own or rent your place of residence?

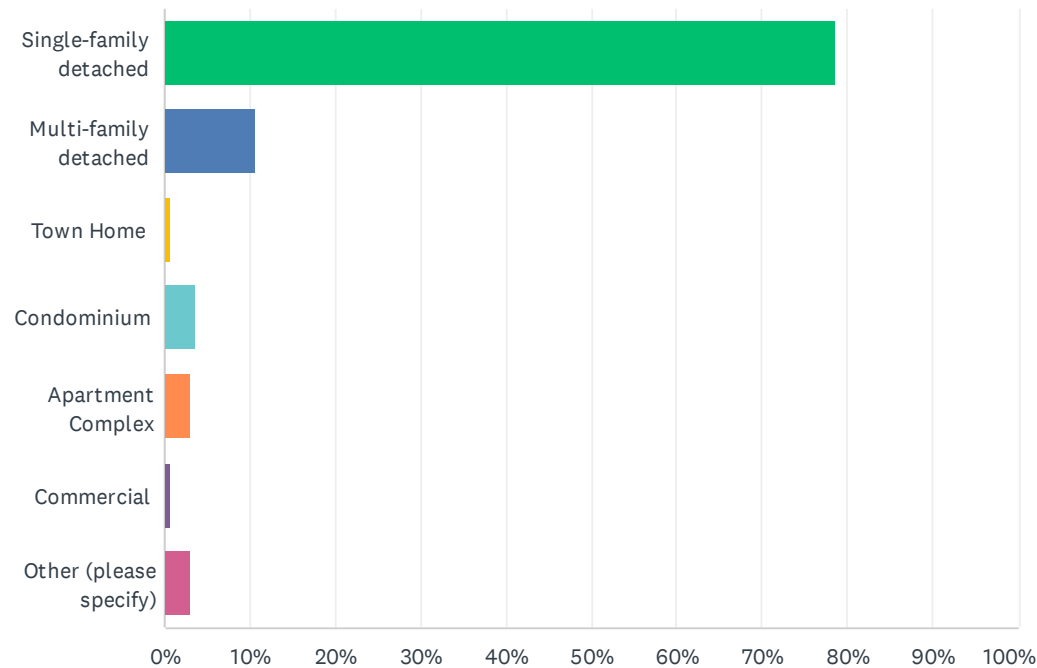
Answered: 168 Skipped: 32



ANSWER CHOICES	RESPONSES	
Own	89.88%	151
Rent	10.12%	17
TOTAL		168

Q21 What type of residence do you live in?

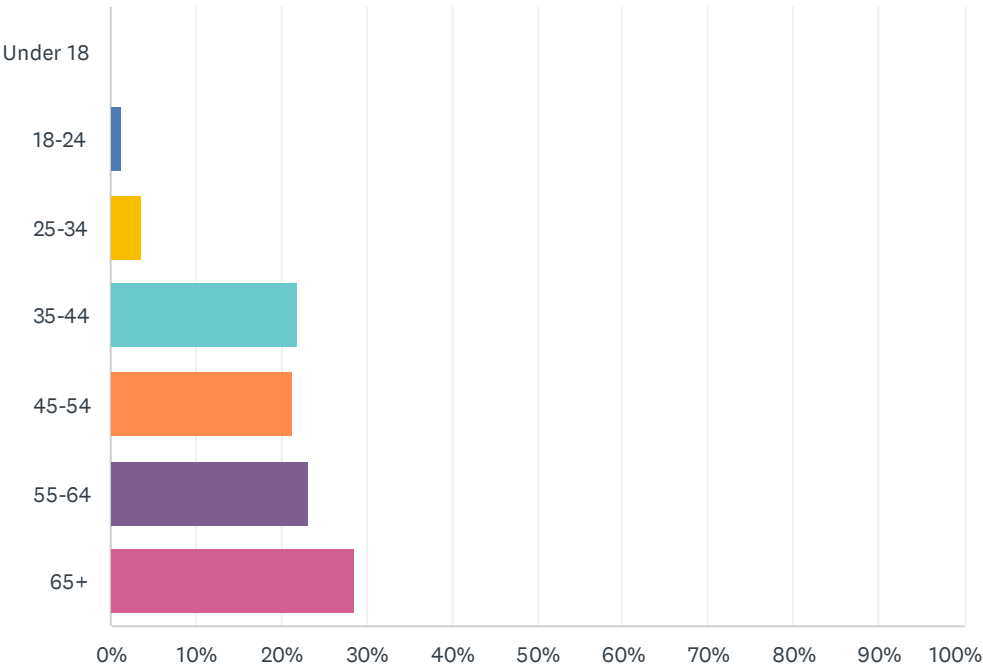
Answered: 169 Skipped: 31



ANSWER CHOICES	RESPONSES	
Single-family detached	78.70%	133
Multi-family detached	10.65%	18
Town Home	0.59%	1
Condominium	3.55%	6
Apartment Complex	2.96%	5
Commercial	0.59%	1
Other (please specify)	2.96%	5
TOTAL		169

Q22 Please indicate your age range:

Answered: 168 Skipped: 32



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18-24	1.19%	2
25-34	3.57%	6
35-44	22.02%	37
45-54	21.43%	36
55-64	23.21%	39
65+	28.57%	48
TOTAL		168

Q23 If you want to get emails with information about natural hazard awareness information, please provide your email address here (Optional):

Answered: 85 Skipped: 115

ANSWER CHOICES	RESPONSES	
Name	100.00%	85
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	98.82%	84
Phone Number	0.00%	0



1.5 STAKEHOLDER SURVEY

Stakeholders were invited to take part in the planning process through a stakeholder survey. Special emphasis was made to reach out to stakeholder groups that work with or support socially vulnerable populations and underserved communities. The stakeholder survey was open from January 8, 2025 through February 5, 2025. The following pages provide the summary of the stakeholder survey.

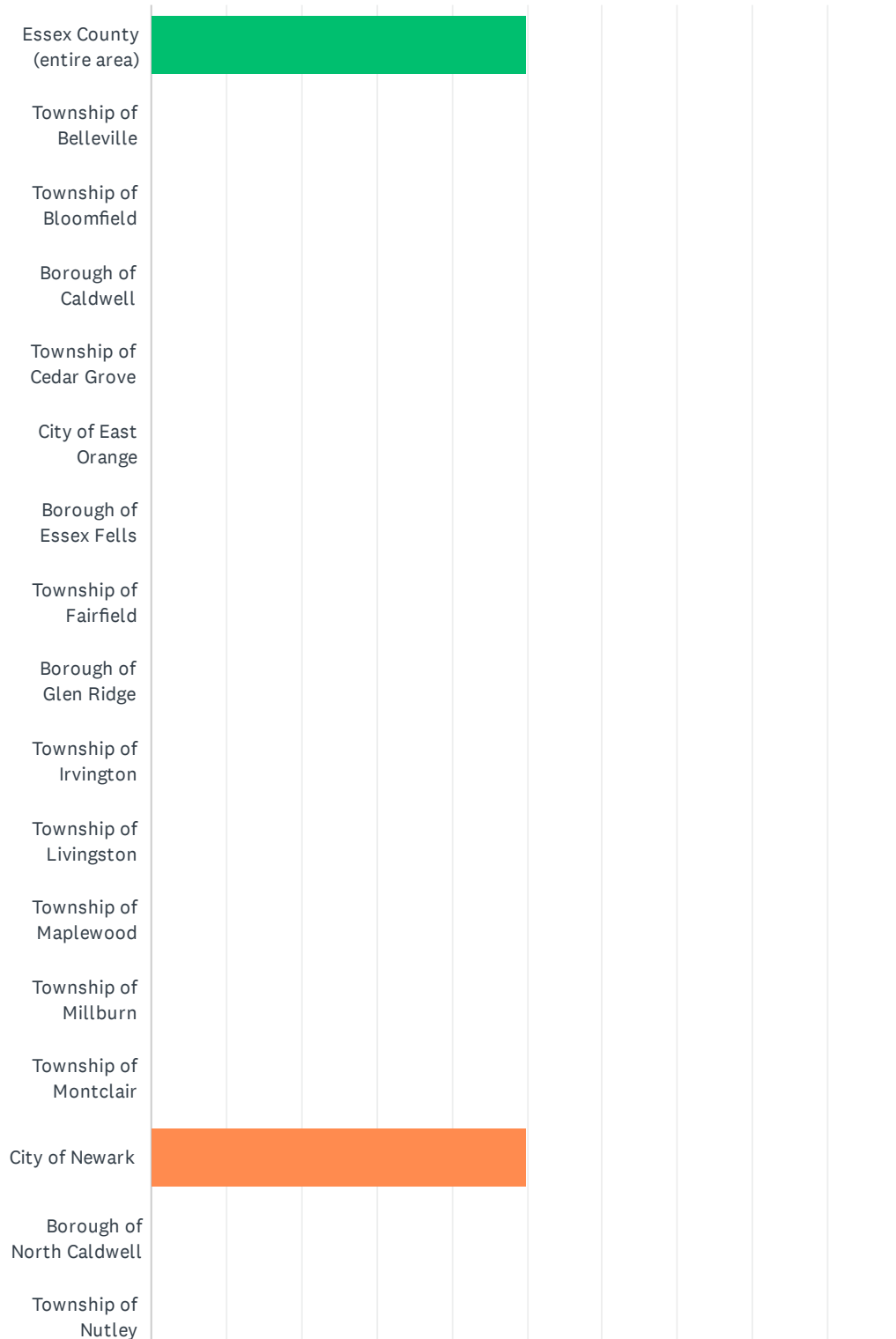
Q1 Contact Information

Answered: 2 Skipped: 0

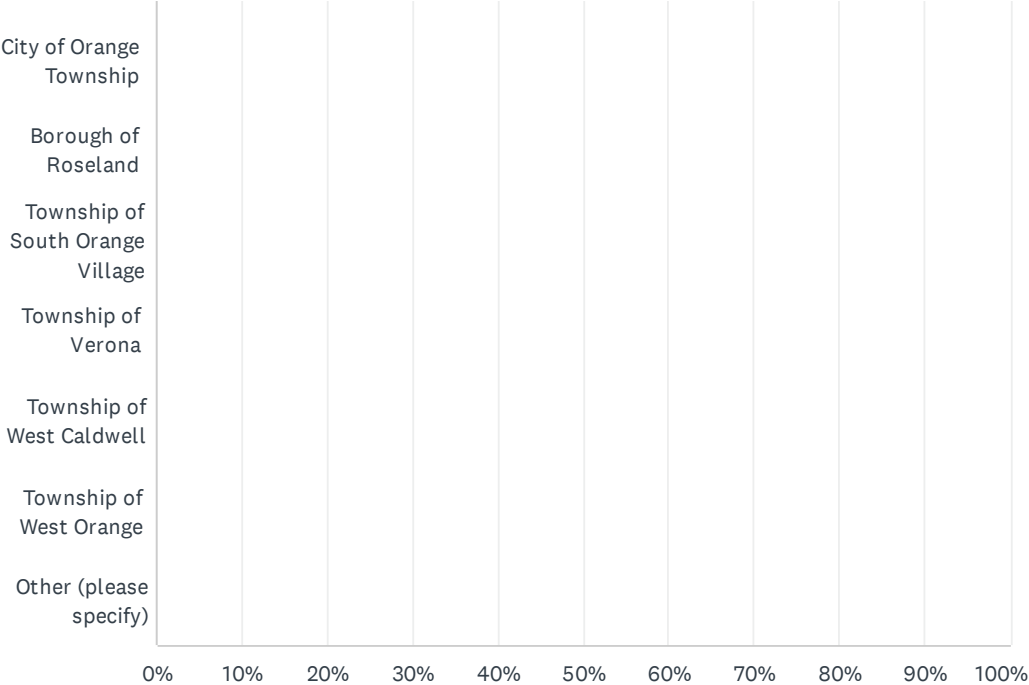
ANSWER CHOICES	RESPONSES	
Name	100.00%	2
Title and Organization/ Agency Name	100.00%	2
Primary Responsibility	100.00%	2
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	2
Phone Number	100.00%	2

Q2 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 "Essex County (entire area)" if your service area covers all of Essex County. Check all that apply.

Answered: 2 Skipped: 0



Essex County | Hazard Mitigation Plan Stakeholder Survey

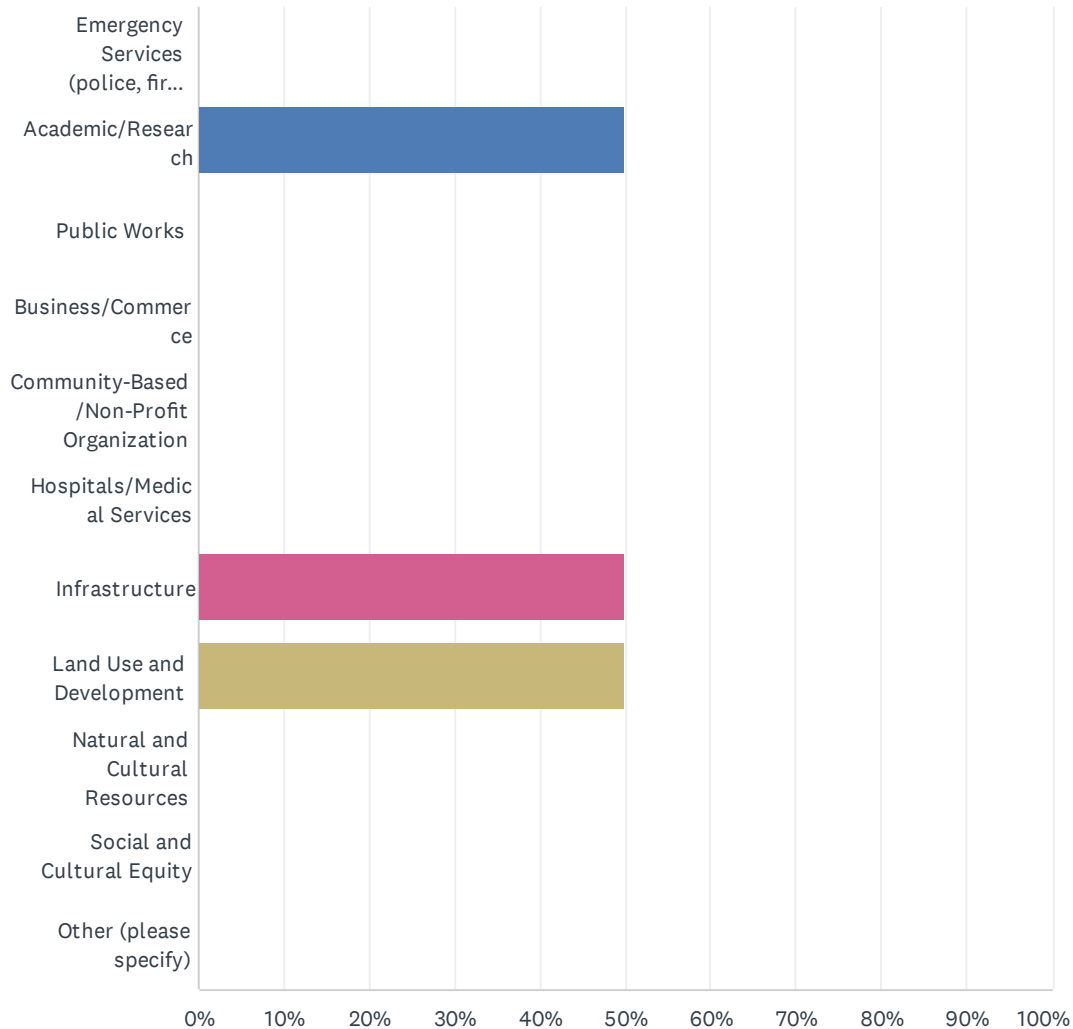


Essex County | Hazard Mitigation Plan Stakeholder Survey

ANSWER CHOICES	RESPONSES	
Essex County (entire area)	50.00%	1
Township of Belleville	0.00%	0
Township of Bloomfield	0.00%	0
Borough of Caldwell	0.00%	0
Township of Cedar Grove	0.00%	0
City of East Orange	0.00%	0
Borough of Essex Fells	0.00%	0
Township of Fairfield	0.00%	0
Borough of Glen Ridge	0.00%	0
Township of Irvington	0.00%	0
Township of Livingston	0.00%	0
Township of Maplewood	0.00%	0
Township of Millburn	0.00%	0
Township of Montclair	0.00%	0
City of Newark	50.00%	1
Borough of North Caldwell	0.00%	0
Township of Nutley	0.00%	0
City of Orange Township	0.00%	0
Borough of Roseland	0.00%	0
Township of South Orange Village	0.00%	0
Township of Verona	0.00%	0
Township of West Caldwell	0.00%	0
Township of West Orange	0.00%	0
Other (please specify)	0.00%	0
Total Respondents: 2		

Q3 Which of the following sectors and areas of expertise do you represent? Choose all that apply.

Answered: 2 Skipped: 0



Essex County | Hazard Mitigation Plan Stakeholder Survey

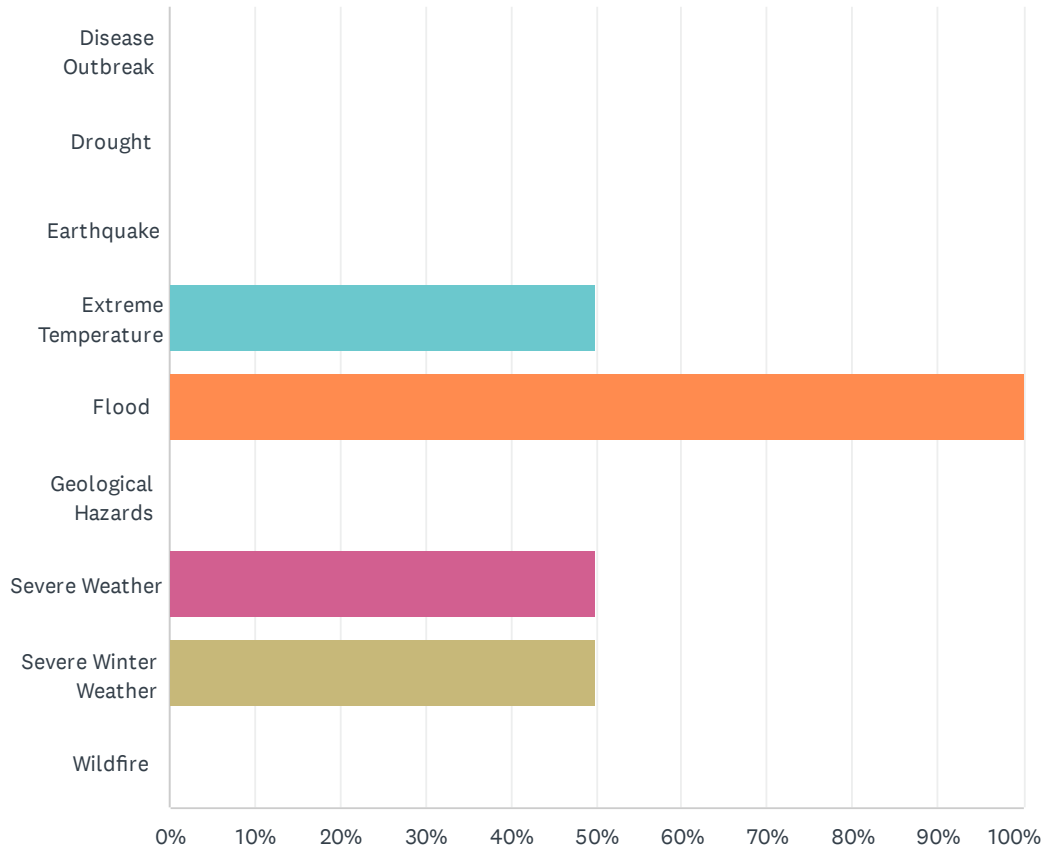
ANSWER CHOICES	RESPONSES	
Emergency Services (police, fire, EMS)	0.00%	0
Academic/Research	50.00%	1
Public Works	0.00%	0
Business/Commerce	0.00%	0
Community-Based/Non-Profit Organization	0.00%	0
Hospitals/Medical Services	0.00%	0
Infrastructure	50.00%	1
Land Use and Development	50.00%	1
Natural and Cultural Resources	0.00%	0
Social and Cultural Equity	0.00%	0
Other (please specify)	0.00%	0
Total Respondents: 2		

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

Answered: 2 Skipped: 0

Q5 For which natural hazard(s) do you feel that you or your organization have a special interest and/or expertise? Check all that apply.

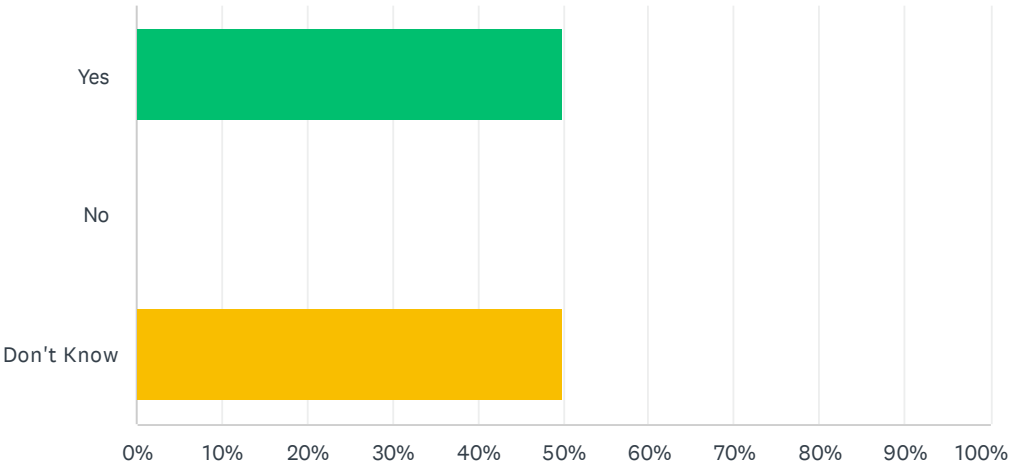
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Disease Outbreak	0.00%	0
Drought	0.00%	0
Earthquake	0.00%	0
Extreme Temperature	50.00%	1
Flood	100.00%	2
Geological Hazards	0.00%	0
Severe Weather	50.00%	1
Severe Winter Weather	50.00%	1
Wildfire	0.00%	0
Total Respondents: 2		

Q6 In the past, have buildings/facilities/structures your organization/agency has worked in or been responsible for maintaining been damaged by a hazard event? For example, flood waters entering the building or wildfire damaging your structure?

Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	50.00%	1
No	0.00%	0
Don't Know	50.00%	1
TOTAL		2

Q7 If you answered 'yes' above, 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.).

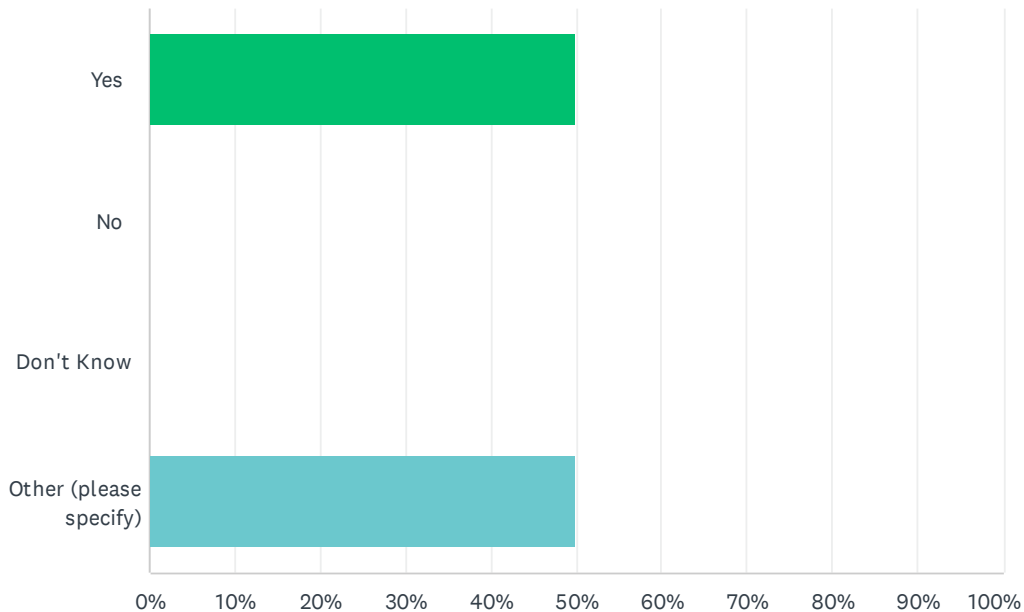
Answered: 1 Skipped: 1

Q8 Please identify vulnerabilities in your service area from the above hazards that could threaten your facilities or ability to provide services. Please include the municipality name(s), street names, and other specific identifiers if possible.

Answered: 1 Skipped: 1

Q9 Is your organization/agency currently involved in conducting any studies or developing any programs which would support Essex County's hazard mitigation program? Studies can include hazard-specific data gathering which supports risk assessments, including economic data, or statistical data of other types.

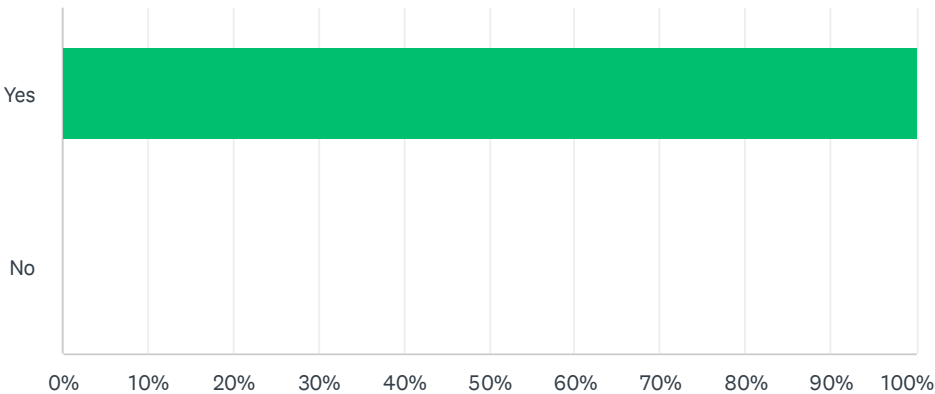
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	50.00%	1
No	0.00%	0
Don't Know	0.00%	0
Other (please specify)	50.00%	1
TOTAL		2

Q10 Has your organization/agency developed plans or is it covered by plans that relate to hazards? Examples include emergency operations plans, continuity of operations plans, and business continuity plans.

Answered: 1 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	100.00%	1
No	0.00%	0
TOTAL		1

Q11 Does your agency currently have any mitigation projects or activities underway? If so, please describe. Examples include structure hardening, stormwater improvements, hazard related outreach, etc.

Answered: 1 Skipped: 1

Q12 Please list any projects or programs that you have recently completed that will reduce your agency/organization's vulnerability to hazard events.

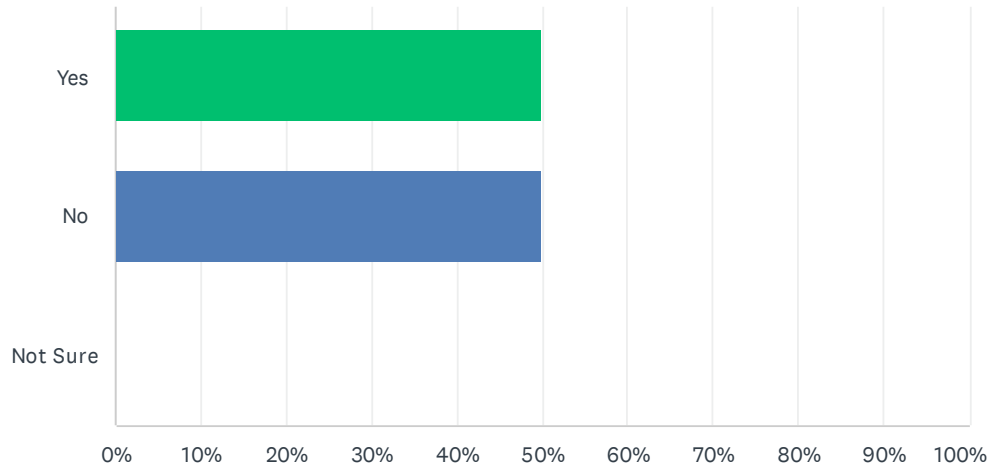
Answered: 0 Skipped: 2

Q13 Please provide a list of projects or programs that your organization/agency would like to complete in order to reduce your vulnerability to hazard events.

Answered: 0 Skipped: 2

Q14 Does your organization/agency provide assistance to any socially vulnerable populations or underserved communities in Essex County?

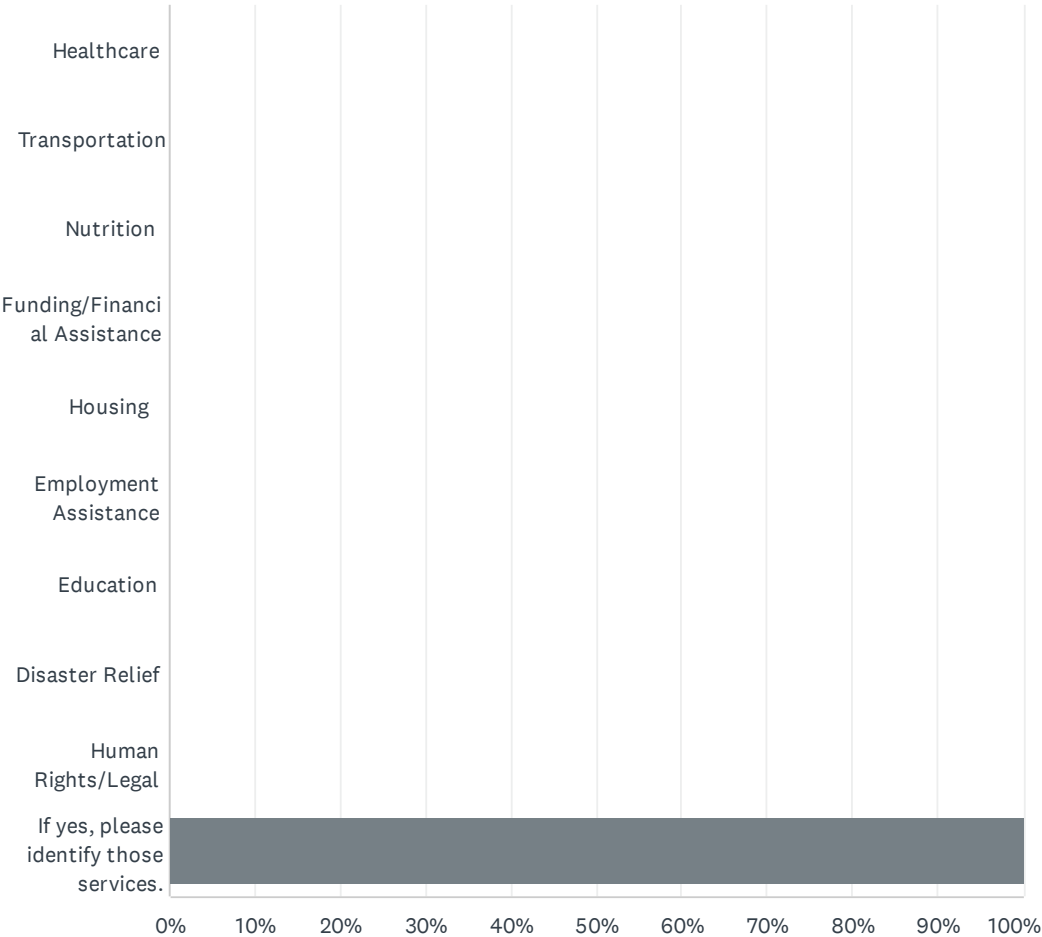
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	50.00%	1
No	50.00%	1
Not Sure	0.00%	0
TOTAL		2

Q15 If yes, what types of services do you provide?

Answered: 1 Skipped: 1



Essex County | Hazard Mitigation Plan Stakeholder Survey

ANSWER CHOICES	RESPONSES	
Healthcare	0.00%	0
Transportation	0.00%	0
Nutrition	0.00%	0
Funding/Financial Assistance	0.00%	0
Housing	0.00%	0
Employment Assistance	0.00%	0
Education	0.00%	0
Disaster Relief	0.00%	0
Human Rights/Legal	0.00%	0
If yes, please identify those services.	100.00%	1
Total Respondents: 1		

Q16 Please provide a list of the populations or communities served by your organization/agency.

Answered: 1 Skipped: 1

Q17 Can you identify any other groups in your community that work with or provide support to socially vulnerable populations?

Answered: 1 Skipped: 1

Q18 What barriers and community characteristics exist within the socially vulnerable populations and underserved communities within Essex County? This can include lack of outreach, access to transportation, low financial resources, etc.

Answered: 1 Skipped: 1

Q19 Do you have any questions or comments for Essex County?

Answered: 0 Skipped: 2



1.6 NEIGHBORING COMMUNITY SURVEY

All county and municipal governments that border Essex County were invited to provide input to the planning process. A request to complete a neighboring community survey was distributed to county and municipal contacts on January 8, 2025. The neighboring community survey was open from January 8, 2025 through February 5, 2025. The following pages provide the summary of the neighboring community survey.

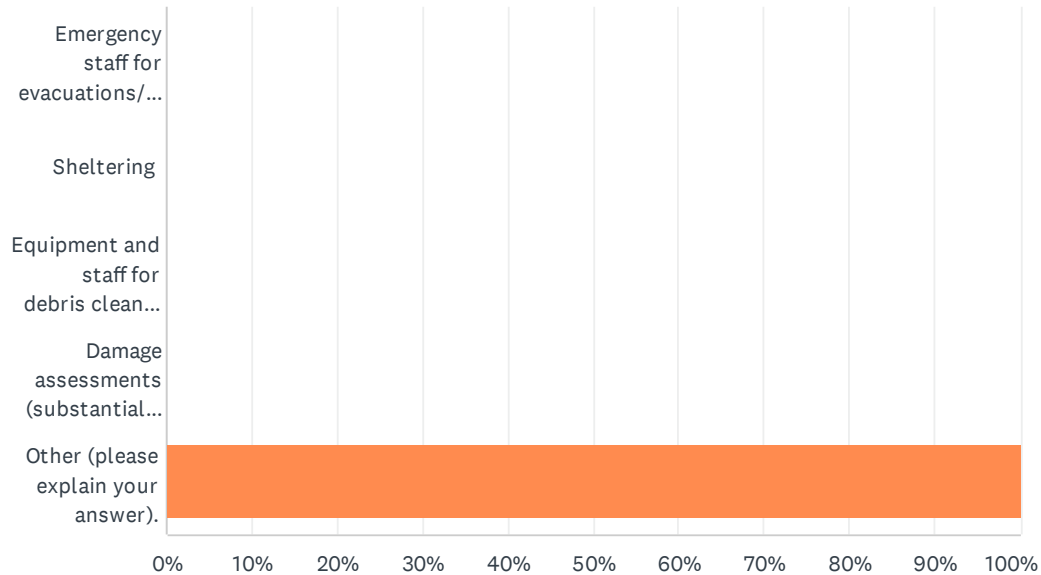
Q1 Contact Information

Answered: 2 Skipped: 0

ANSWER CHOICES	RESPONSES	
Name and Title	100.00%	2
Department/ Agency Name	100.00%	2
Primary Responsibility	0.00%	0
Address 2	0.00%	0
County/ Municipality	100.00%	2
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	2
Phone Number	100.00%	2

Q2 Do you have any shared service agreements or mutual aid agreements in place with Essex County for the following?

Answered: 1 Skipped: 1



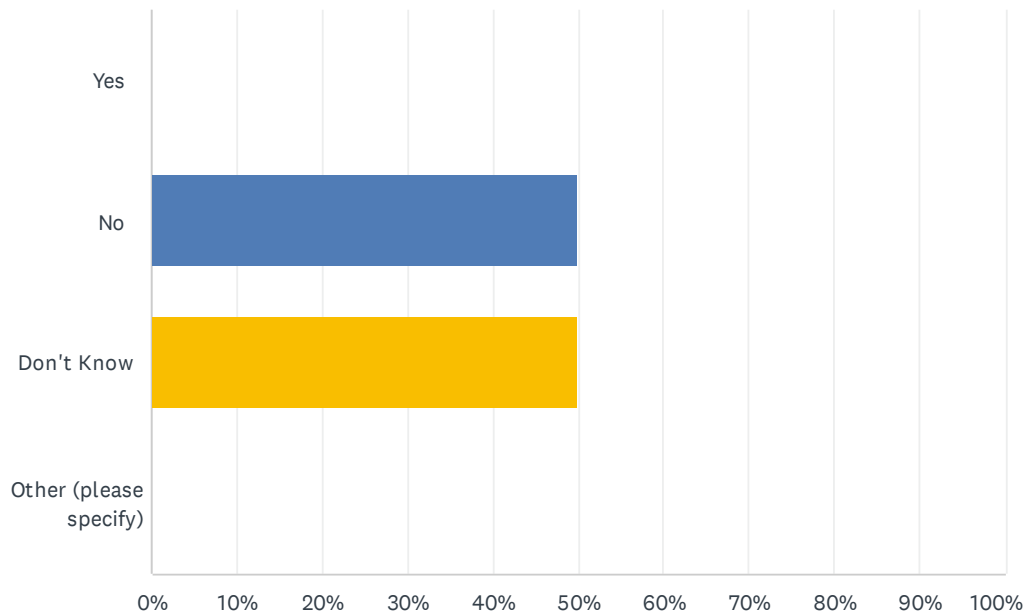
ANSWER CHOICES	RESPONSES	
Emergency staff for evacuations/disaster response	0.00%	0
Sheltering	0.00%	0
Equipment and staff for debris cleanup and removal	0.00%	0
Damage assessments (substantial damage determinations)	0.00%	0
Other (please explain your answer).	100.00%	1
Total Respondents: 1		

Q3 How are emergency operations and disaster response activities and needs communicated between your community and Essex County?

Answered: 2 Skipped: 0

Q4 Is Essex County involved in your community's comprehensive emergency operations planning, such as by participating on a planning team, or providing resources during an emergency?

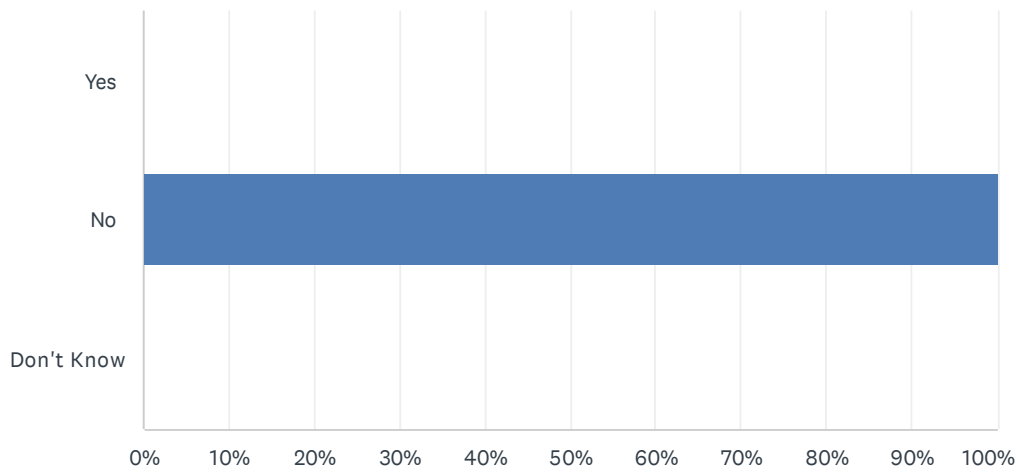
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	50.00%	1
Don't Know	50.00%	1
Other (please specify)	0.00%	0
TOTAL		2

Q5 Does your community and Essex County collaborate on emergency planning, such as by participating on a planning team or providing comments on draft plans? Emergency planning can include comprehensive emergency operations planning, continuity of government planning, evacuation and sheltering plans, etc.

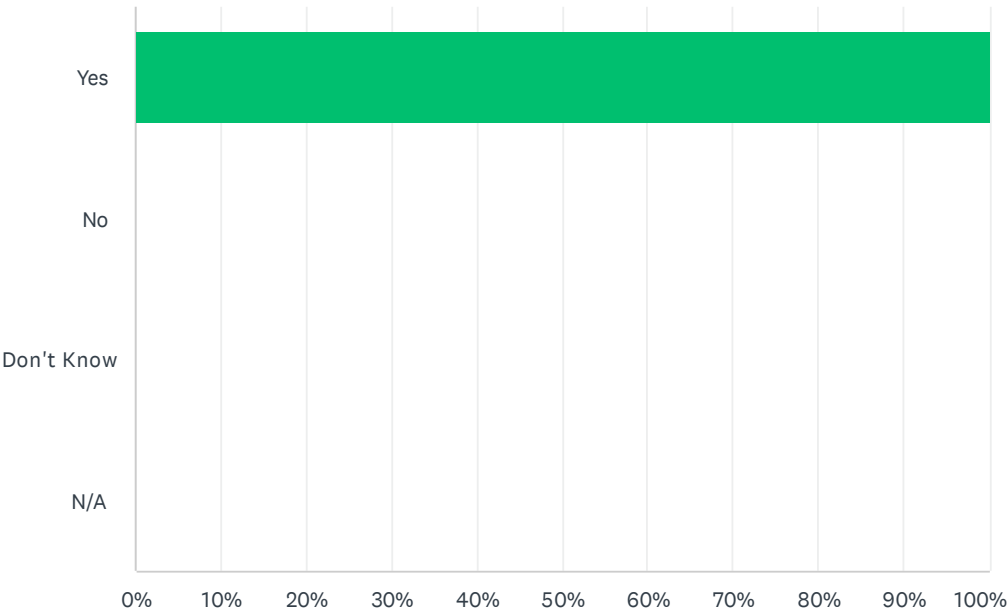
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	2
Don't Know	0.00%	0
TOTAL		2

Q6 Does your community have access to contact information for Essex County's emergency operations center?

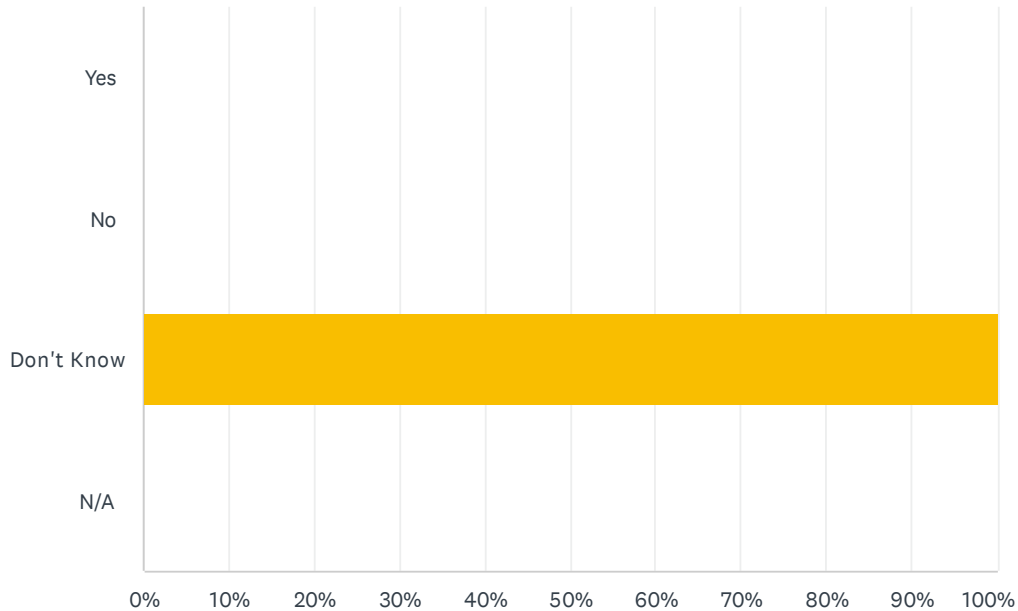
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	100.00%	2
No	0.00%	0
Don't Know	0.00%	0
N/A	0.00%	0
TOTAL		2

Q7 Does your community share risk and vulnerability assessments (e.g., flood mapping, GIS, Hazus, etc.) with Essex County?

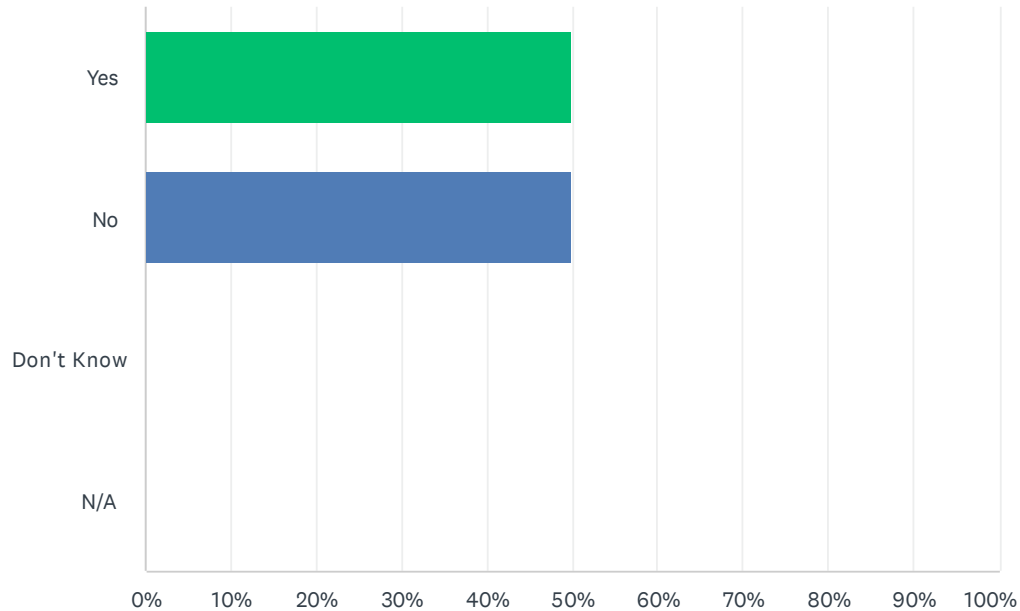
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	0.00%	0
Don't Know	100.00%	2
N/A	0.00%	0
TOTAL		2

Q8 Is information regarding mitigation projects shared during planning and implementation?

Answered: 2 Skipped: 0



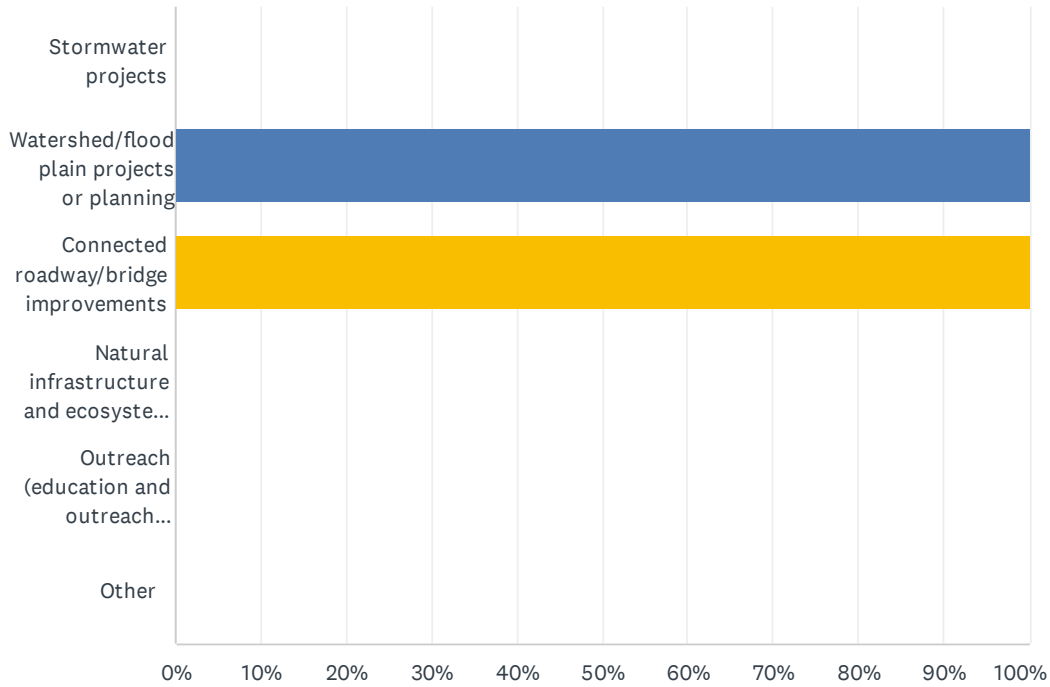
ANSWER CHOICES	RESPONSES	
Yes	50.00%	1
No	50.00%	1
Don't Know	0.00%	0
N/A	0.00%	0
TOTAL		2

Q9 Please describe any situations or hazards that are of concern to both your community and Essex County. For example, would flooding along a particular waterway impact both jurisdictions, or are there any facilities or infrastructure that would affect both jurisdictions if they failed?

Answered: 2 Skipped: 0

Q10 Are you aware of any projects for the following that requires cross-collaboration between jurisdictional boundaries?

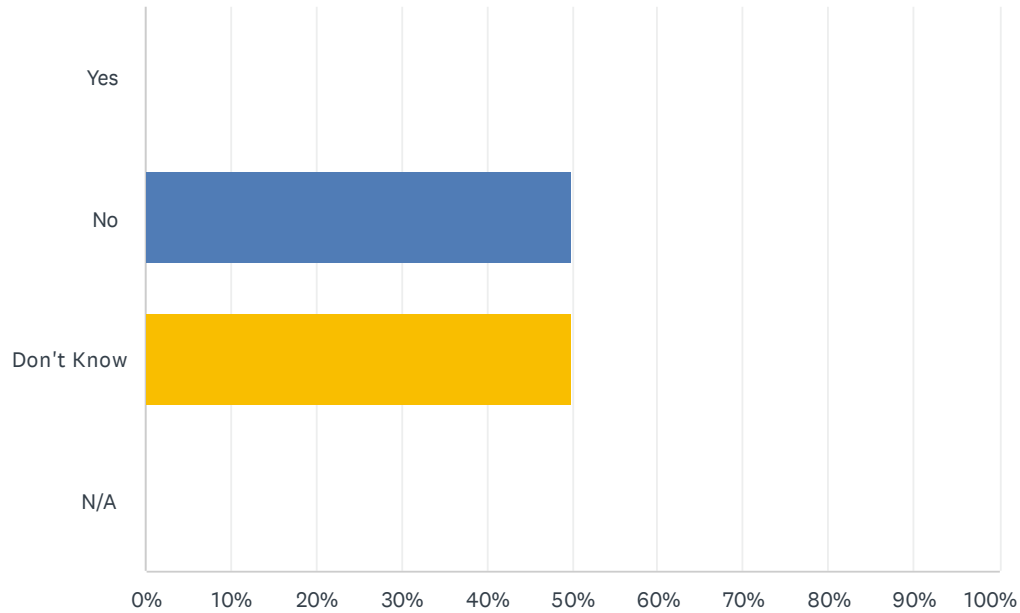
Answered: 1 Skipped: 1



ANSWER CHOICES	RESPONSES	
Stormwater projects	0.00%	0
Watershed/floodplain projects or planning	100.00%	1
Connected roadway/bridge improvements	100.00%	1
Natural infrastructure and ecosystems restoration	0.00%	0
Outreach (education and outreach campaigns, programs for public information, etc.)	0.00%	0
Other	0.00%	0
Total Respondents: 1		

Q11 Have your community and Essex County collaborated on hazard mitigation related grant applications?

Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	50.00%	1
Don't Know	50.00%	1
N/A	0.00%	0
TOTAL		2

Q12 Are you aware of any organizations that carry out education and outreach regarding hazards in both your community and Essex County?

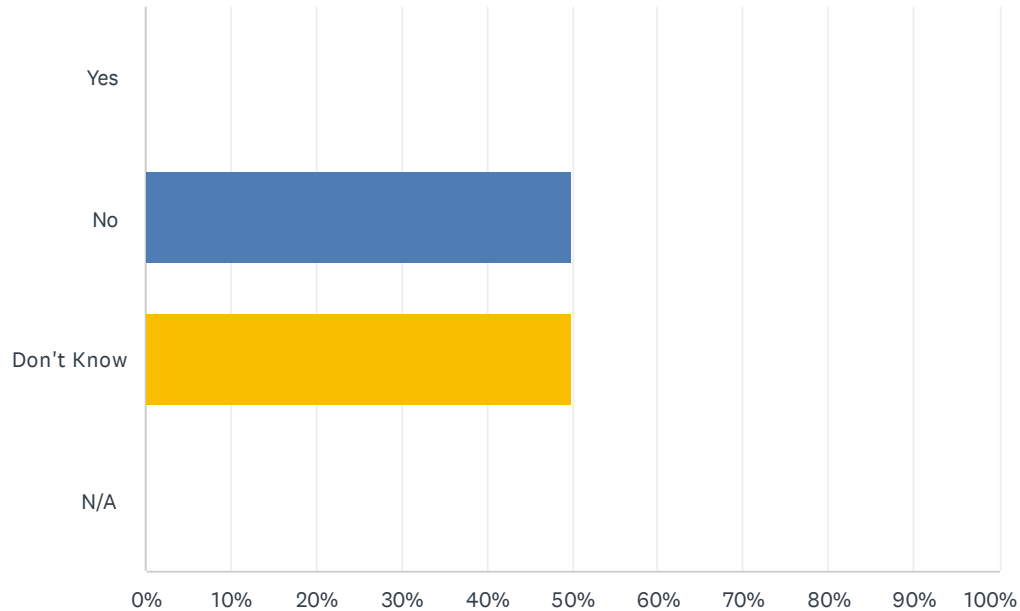
Answered: 1 Skipped: 1

Q13 What are opportunities or ideas to optimize cooperation with Essex County on emergency management operations and hazard mitigation projects?

Answered: 1 Skipped: 1

Q14 Do you collaborate with Essex County on establishing evacuation routes and alternate evacuation routes?

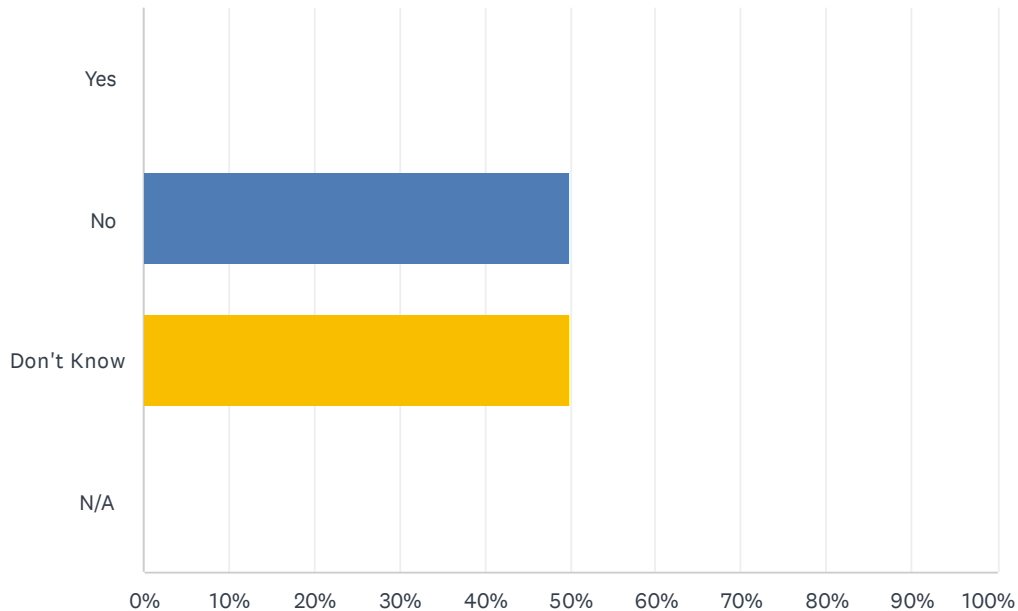
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	50.00%	1
Don't Know	50.00%	1
N/A	0.00%	0
TOTAL		2

Q15 Do you and Essex County consult with one another before making evacuation decisions that would impact one another (recommending evacuation routes into neighboring jurisdictions)?

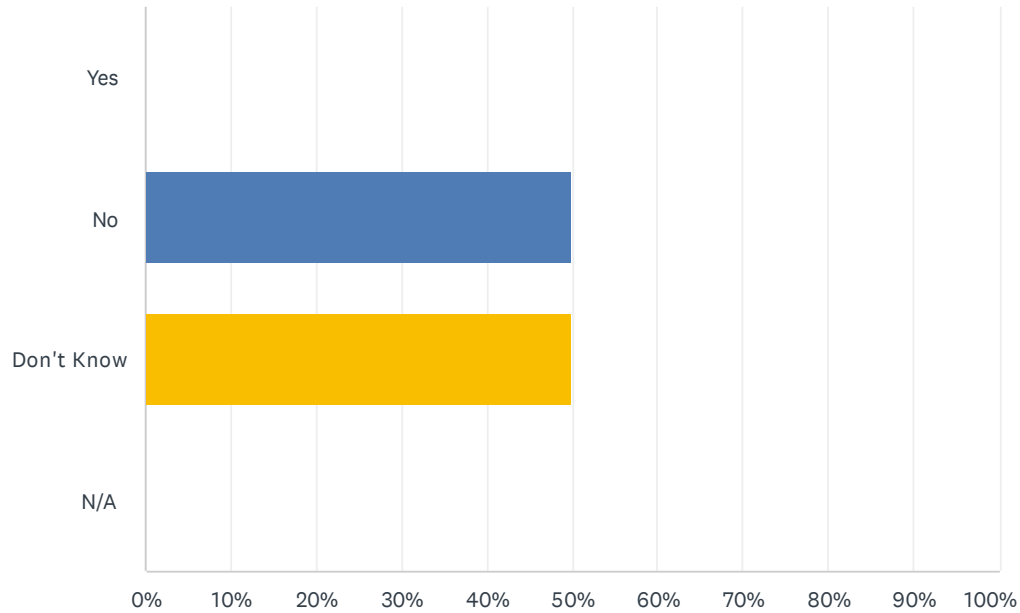
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	50.00%	1
Don't Know	50.00%	1
N/A	0.00%	0
TOTAL		2

Q16 Are evacuation routes maintained to the same level of protection across jurisdictional lines?

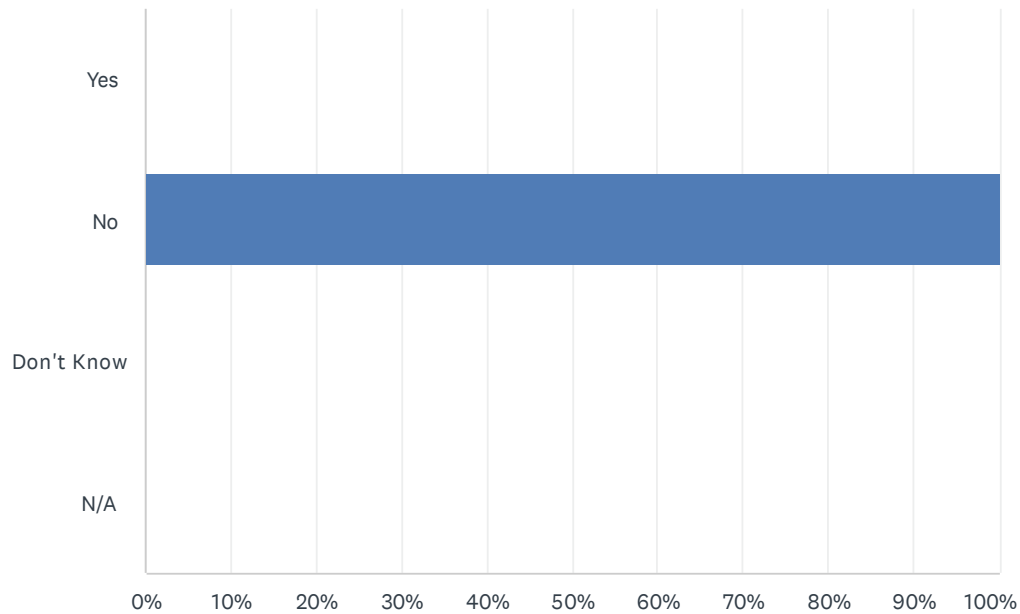
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	50.00%	1
Don't Know	50.00%	1
N/A	0.00%	0
TOTAL		2

Q17 Do you collaborate with Essex County on establishing shelters?

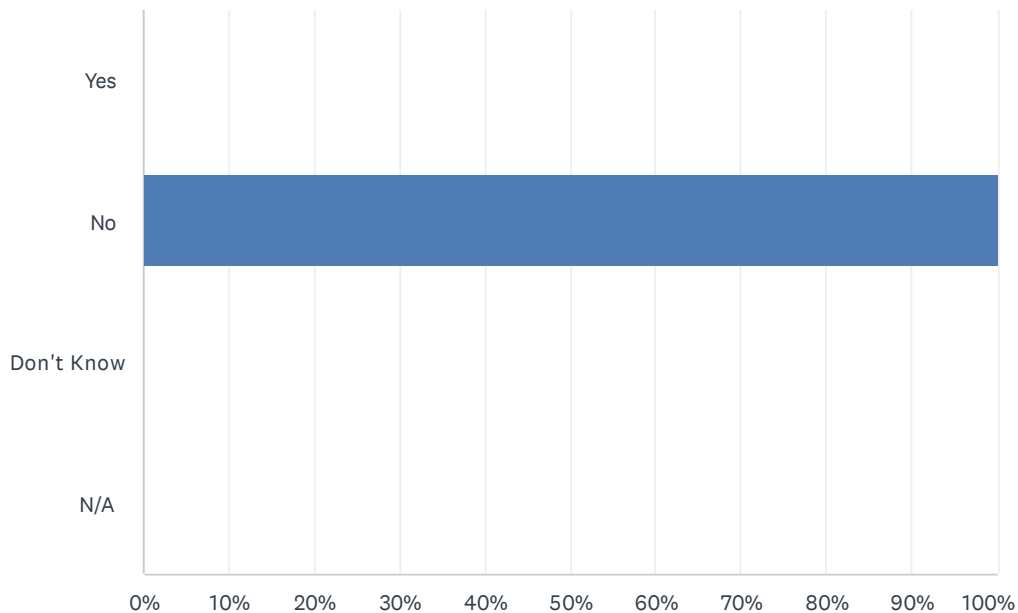
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	2
Don't Know	0.00%	0
N/A	0.00%	0
TOTAL		2

Q18 Do you and Essex County consult with one another before making sheltering decisions that would impact one another (recommending shelters in neighboring communities)?

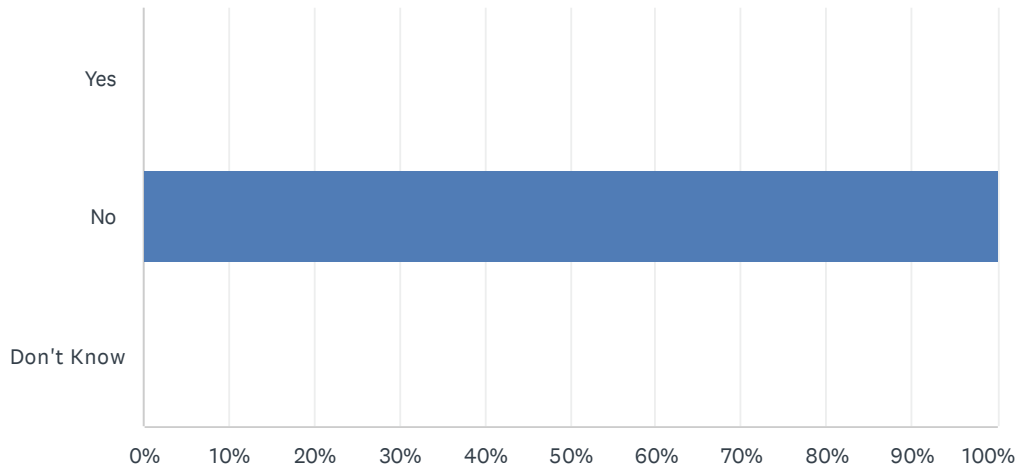
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	2
Don't Know	0.00%	0
N/A	0.00%	0
TOTAL		2

Q19 Do you and Essex County share any spaces suitable for temporary housing? This includes locations suitable to place temporary housing units to house residents displaced by a disaster.

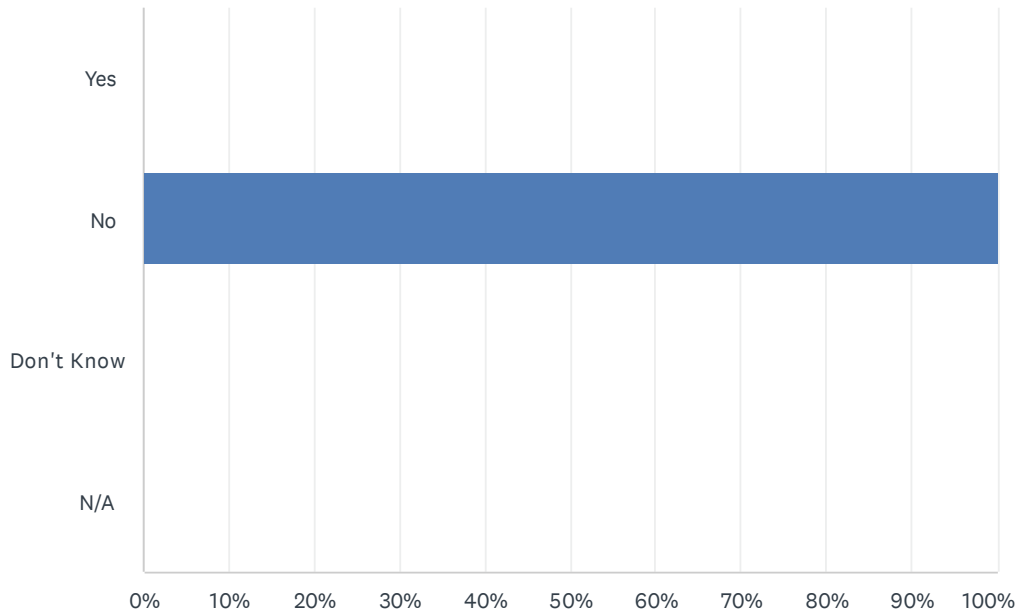
Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	2
Don't Know	0.00%	0
TOTAL		2

Q20 Do you and Essex County consult with one another before making evacuation decisions that would impact one another (recommending evacuation routes into neighboring jurisdictions)?

Answered: 2 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	2
Don't Know	0.00%	0
N/A	0.00%	0
TOTAL		2

Q21 Do you have any questions or comments for Essex County?

Answered: 0 Skipped: 2



APPENDIX E: RISK ASSESSMENT SUPPLEMENT

2020 Essex County Hazard Mitigation Plan included natural and non-natural hazards. Following review of the previous hazard list, FEMA's latest guidance, available funding resources, and the scope of other planning efforts including Emergency Operation Plans, the Essex County Steering Committee and Planning Partnership decided to have the 2025 Essex County Hazard Mitigation Plan focus on natural hazards. The previous natural hazards were maintained as hazards of concern with transportation failure and utility interruption included in the applicable hazards of concern as cascading impacts.

The following non-natural hazards were discontinued as hazards of concern and the previously developed information on the hazards is preserved in this appendix.

1.1 CIVIL DISORDER

1.1.1 Hazard Description

Civil disorder is a broad term that is typically used by law enforcement to describe one or more forms of unrest caused by a group of people. It involves a disruption of the typical social order that can involve a strike or protest, and it can be peaceful or involve violence (NJOEM 2019). Demonstrations, civil unrest, public disorder, and riots happen for a number of reasons that include economic hardships, social injustices, ethnic differences, objections to word organizations or certain governments, political grievances, and terrorist acts. An event can be triggered by a single cause or a combination of causes (U.S. Army 2005).

Civil disturbances can take the form of small gatherings or large groups blocking or impeding access to a building or disrupting normal activities by generating noise and intimidating people. Demonstrations can range from a peaceful sit-in to a full-scale riot, in which a mob burns or otherwise destroys property and terrorizes individuals. Even in its more passive forms, a group that blocks roadways, sidewalks, or buildings interferes with public order. Often protests intended to be a peaceful demonstration to the public and the government can escalate into general chaos (NJOEM 2019).

There are two types of large gatherings typically associated with civil disturbances: a crowd and a mob. A crowd can be identified as causal, cohesive, expressive, or aggressive (Blumer 1946):

- **Casual Crowd:** A casual crowd is a group of people who happen to be in the same place at the same time. Violent conduct does not occur.
- **Cohesive Crowd:** A cohesive crowd consists of members who are involved in some type of unified behavior. Members of this group are involved in some type of common activity, such as worshipping, dancing, or watching a sporting event. Members of these crowds may have intense internal discipline and require substantial provocation to arouse to action.
- **Expressive Crowd:** An expressive crowd is one held together by a common commitment or purpose. They may not be formally organized and are assembled as an expression of common sentiment or frustration. Members wish to be seen as a formidable influence. One of the best examples of this type is a group assembled to protest.



- **Aggressive Crowd:** An aggressive crowd is composed of individuals who have assembled for a specific purpose. This crowd often has leaders who attempt to arouse the members or motivate them to action. Members are noisy and threatening and will taunt authorities. They may be more impulsive and emotional and require only minimal stimulation to arouse violence. Examples of this type of crowd could include demonstrators and strikers, though not all demonstrators and strikers are aggressive.

A mob can be defined as a large disorderly crowd or throng. Mobs are usually emotional, loud, tumultuous, violent, and lawless. Similar to crowds, mobs have different levels of commitment, and can be classified into the following four categories (Alvarez and Bachman 2007):

- **Aggressive Mob:** An aggressive mob is one that attacks, riots, and terrorizes. The object of violence may be a person, property, or both. An aggressive mob is distinguished from an aggressive crowd only by lawless activity. Examples of aggressive mobs are the inmate mobs in prisons and jails, mobs that act out their frustrations after political defeat, or violent mobs at political protests or rallies.
- **Escape Mob:** An escape mob is attempting to flee from something such as a fire, bomb, flood, or other catastrophe. Members of escape mobs are generally difficult to control and can be characterized by unreasoning terror.
- **Acquisitive Mob:** An acquisitive mob is one motivated by a desire to acquire something. Riots caused by other factors often turn into looting sprees. This mob exploits an authority's lack of control in safeguarding property.
- **Expressive Mob:** An expressive mob is one that expresses fervor or revelry following some sporting event, religious activity, or celebration. Members experience a release of pent up emotions in highly charged situations.

Civil unrest and disturbances affect the following factions of society:

- **The Public:** The general population could serve as participants or targets in actions of civil unrest. Wide spread unrest could cause fear amongst the populace and cause them to be absent from school or work activities. During an event, bystanders may be harmed because of the activities of participants.
- **Responders:** Responses to civil unrest events are generally handled at the local level. In a large event, the resources of a local jurisdiction may be exceeded. In this instance, State resources would be activated to fill the need. During an event, responders may become targets, which could hamper their effectiveness.
- **Continuity of Operations, including delivery of services:** The outbreak of widespread rioting or looting could have potential impact on the State's ability to provide services and conduct its normal operations. Protesters could occupy government buildings and interrupt the normal functions of government, or targeted attacks on government facilities could interrupt operations entirely.
- **Property:** Private property often serves as a target in instances of civil unrest. Businesses can be targeted for looting or vandalism. If an event is particularly large, damage could reach millions of dollars and recovery could take years.
- **Facilities:** Often in acts of civil unrest government facilities become the focal point of protests or targets for vandalism. Damage suffered during an event or the inability of a worker to enter a facility may greatly reduce a facility's effective capacity or close it completely.



- Infrastructure: Similar to government facilities, public and private infrastructure can become targets of civil unrest. Damage to transportation, communications, or utilities infrastructure could further exacerbate the situation.
- Environment: Normally, instance of civil unrest will have a minimal impact on the environment. However, if petroleum or other chemical facilities were a target for vandalism or large-scale fires occurred, the impact on the environment could be significant.
- Economic Condition of the State: Civil unrest could prove economically crippling to the State of New Jersey. Large-scale events are usually accompanied by wide-spread absenteeism and damage to private property.
- Public Confidence in the State's Governance: If an event becomes prolonged or is perceived to be mismanaged, it could greatly decrease public confidence in the governance of the State. If the response is seen to be inadequate, individuals may attempt to protect their property by their own means and further degrade the situation.

Civil disturbances often occur with little to no warning; however, certain events may trigger riots. As demonstrated in the Previous Occurrences and Losses subsection and discussions regarding severity, riots can occur as a result of controversial court rulings, unfair working conditions, or general unrest. Riots can also be triggered as a result of favorable or unfavorable sports outcomes. Thus, generally there will be a certain degree of warning time that a riot may occur; however, achieving certainty that an incident is imminent is not possible.

Civil disorders can result in numerous secondary hazards. Depending on the size and scope of the incident, civil unrest may lead to widespread urban fire, utility failure, transportation interruption, and environmental hazards. There is potential for a mass casualty incident to occur during the course of a civil disorder event should rioters or protestors become violent and clash with law enforcement or opposing groups. This could lead to possible casualties or fatalities. The most significant impact of civil unrest is the secondary hazard of interruption of continuity of government, which can also lead to several of the aforementioned secondary hazards. The extent of secondary hazards will vary significantly based on the extent and nature of the civil unrest.

In the State of New Jersey, a municipality in which a civil disorder occurs bears the first and primary responsibility to control the disturbance. Civil unrest that remains uncontrolled warrants local mutual aid from neighboring municipal and/or county resources. If the civil unrest remains beyond the capabilities of local law enforcement agencies alone, limited State Police assistance may be requested. If the restoration of law and order is beyond local, county and state abilities, the Governor may declare a State of Emergency calling on federal support such as the New Jersey National Guard to restore order (NJOEM 2011).

Civil disorder can also be identified as crime, which is classified into four major classifications: violent crime, property crime, public order crime, and hate crime. Violent crimes are physical acts against an individual such as murder, robbery, or assault. Property crimes are acts against the property of others such as burglary, theft, or vandalism. Public order crimes are crimes that have no specific victim, such as prostitution, drugs, or insider trading. Hate crimes can be either violent or property crimes motivated by bias against a particular social group (Essex County HMP 2007).

1.1.2 Location

Government facilities, landmarks, prisons, and universities are common sites where crowds and mobs may gather. The concentration of buildings in and density of northeastern New Jersey, and State government buildings in Trenton may be targets of civil disturbance. New Jersey also has correctional facilities, treatment units, and youth development centers, as well as federal prison facilities and local and private facilities throughout the State that may be targets for civil unrest (NJOEM 2019). Figure 1 illustrates historic civil disorder events in the State since the early 1900's with several that have occurred in Essex County.



Figure 1 Locations of Civil Unrest Events in New Jersey from 1913 to Present

Source: NJOEM 2019

The red circle marks the location of Essex County.

1.1.3 Extent



The magnitude or severity of a civil disorder depends on the nature of the disturbance. They can take form as small gatherings or large groups blocking access to buildings or disrupting normal activities. They can range from peaceful sit-ins to a full-scale riot (NJOEM 2019).

1.2 CYBER ATTACK

1.2.1 Hazard Description

Cyber terrorism is the use of existing computers and information, particularly over the Internet, to cause physical or financial harm or a severe disruption of infrastructure service. Transportation, public safety, and utility services are all critical, and are highly dependent on information technology. The motive behind such disruptions can be driven by religious, political, or other objectives. Three kinds of attacks that can be conducted on computers include attacks of physical means, electronic means, and attacks using malicious code (NJOEM 2019).

Cyber-attacks differ by motive, attack type and vector, and perpetrator profile. Motives for cyber-attacks can vary, ranging from the pursuit of financial gain to political or social aims. Cyber threats are difficult to identify and comprehend. Types of threats include viruses erasing entire systems, intruders breaking into systems and altering files, intruders using someone's personal computer to attack others, or intruders stealing confidential information. The spectrum of cyber risks is limitless, with threats having a wide-range of effects on the individual, community, organizational, and national threat (FEMA 2013). These risks include:

- Organized cybercrime, state-sponsored hackers, and cyber espionage can pose national security risks to the U.S.
- Transportation, power, and other services may be disrupted by large scale cyber incidents. The extent of the disruption is highly uncertain as it will be determined by many unknown factors such as the target and size of the incident.
- Vulnerability to data breach and loss increases if an organization's network is compromised. Information about a company, its employees, and its customers can be at risk.
- Individually-owned devices such as computers, tablets, mobile phones, and gaming systems that connect to the internet are vulnerable to intrusion. Personal information may be at risk without proper security (FEMA 2013).

Cyber terrorism is the use of existing computers and information, particularly over the Internet, to cause physical or financial harm or a severe disruption of infrastructure service. Transportation, public safety, and utility services are all critical, and are highly dependent on information technology. The motive behind such disruptions can be driven by religious, political, or other objectives. Three kinds of attacks that can be conducted on computers include attacks of physical means, electronic means, and attacks using malicious code (Waldron 2011). Specifically, these types of include:

- Directing conventional kinetic weapons against computer equipment, a computer facility, or transmission lines to create a physical attack that disrupts the reliability of equipment.



- The power of electromagnetic energy, most commonly in the form of an electromagnetic pulse (EMP), can be used to create an electronic attack (EA) directed against computer equipment or data transmissions. By overheating circuitry or jamming communications, an EA disrupts the reliability of equipment and the integrity of data.
- Malicious code can be used to create a cyber-attack, or computer network attack (CNA), directed against computer processing code, instruction logic, or data. The code can generate a stream of malicious network packets that can disrupt data or logic through exploiting vulnerability in computer software, or a weakness in the computer security practices of an organization. This type of cyber-attack can disrupt the reliability of equipment, the integrity of data, and the confidentiality of communications (Wilson and Clay 2007).

Cyber terrorists typically have two broad motivations to carry out an attack. These motivations include:

- Effects-based: Cyber terrorism exists when computer attacks result in effects that are disruptive enough to generate fear comparable to a traditional act of terrorism.
- Intent-based: Cyber terrorism exists when unlawful or politically motivated computer attacks are done to intimidate or coerce a government or people to further a political objective, or to cause grave harm or severe economic damage (Rollins and Clay 2007).

In terms of specific attacks on computers, cyber terrorists have the ability to attack several types of computer systems in a variety of ways. The systems are summarized in Table 1 Computer Systems that can be Attacked.

Table 1 Computer Systems that can be Attacked

Computer System	Description
All system and network devices BIND weaknesses	The Berkeley Internet Name Domain (BIND) package is the most widely used implementation of Domain Name Service (DNS) by which systems on the Internet are located by name, without having to know specific Internet protocol (IP) addresses. In a typical example of a BIND attack, intruders erase system logs and install tools to gain administrative access. They then compile and install Internet Relay Chat (IRC) utilities and network scanning tools, which are used to scan more than a dozen class-B networks in search of additional systems running vulnerable versions of BIND. In a matter of minutes, they can use the compromised system to attack hundreds of remote systems.
Vulnerable Common Gateway Interface (CGI) programs and application extensions (such as ColdFusion) installed on Web servers (multiple UNIX and Linux systems)	Most Web servers support CGI for data collection and verification. Intruders are known to have exploited vulnerable CGI programs to vandalize Web pages and steal credit cards.
RPC weaknesses (all Web servers)	Remote procedure calls (RPC) allow programs on one computer to execute programs on a second computer. They are widely used to access network services



Computer System	Description
	such as shared files in the Network File System (NFS). There is compelling evidence that the vast majority of service attacks launched during 1999 and early 2000 were executed by systems that had been victimized because they had RPC vulnerabilities. In 1998, the broadly successful attack on U.S. military systems during the Solar Sunrise incident also exploited an RPC flaw found on hundreds of Department of Defense systems.
RDS security hole in Microsoft IIS (multiple UNIX and Linux systems)	Programming flaws in Microsoft's Internet Information Server (IIS) used to host websites deployed on Microsoft Windows NT and Windows 2000 are employed by malicious users to run remote commands with administrator privileges. Experts who developed the "Top Ten" list of the most exploited internet security flaws believe that exploits of other IIS flaws, such as .HTR files, are at least as common as exploits of Remote Desktop Services (RDS).
Sadmind (Solaris machines only)	Global file sharing and inappropriate information sharing via NetBIOS and Windows NT ports allow file sharing over networks. When improperly configured, they can expose critical system files or give full file system access to hostile parties.
User IDs, especially root/administrator with no or weak passwords (UNIX, Windows, and Macintosh systems)	Some systems come with "demo" or "guest" accounts with no passwords or with widely- known default passwords. Service workers often leave maintenance accounts with no passwords, while some database management systems install administration accounts with default passwords. In addition, busy system administrators often select system passwords that are easily guessable ("love," "money," "wizard" are common) or use a blank password. Many attackers try default passwords and then try to guess passwords before resorting to more sophisticated methods.
IMAP and POP buffer overflow vulnerabilities or incorrect configuration (all systems)	Internet message access protocol (IMAP) and Post Office Protocol (POP) are popular remote access mail protocols, allowing users to access their e-mail accounts. The "open access" nature of these services makes them especially vulnerable to exploitation because openings are frequently left in firewalls to allow for external e-mail access. Attackers who exploit flaws in IMAP or POP often gain instant root- level control.
Default SNMP community strings set to "public" and "private" (multiple UNIX and Linux systems)	The Simple Network Management Protocol (SNMP) is widely used by network administrators to monitor and administer all types of network-connected devices, ranging from routers to printers to computers. SNMP uses an unencrypted "community string" as its only authentication mechanism. Lack of encryption creates one level of security vulnerability, but the default community string used by the vast majority of SNMP devices is "public," with a few clever network equipment vendors changing the string to "private," which presents a greater security risk. Attackers can use this vulnerability in SNMP to reconfigure or shut down devices remotely.

Source: NJOEM 2019

In addition to the motivations for cyber terrorism and the vulnerable systems, cyber-attacks can be further divided by the complexity of the attack. The categories of attacks include:

- Simple-Unstructured: Simple-unstructured attacks are the most common. These are amateurish attacks with relatively minimal consequences.



- **Advanced-Structured:** Advanced-structured attacks are more sophisticated and consequential and have a greater emphasis on targeting victims prior to an attack, resulting in a more debilitating effect.
- **Complex-Coordinated:** Complex-coordinated attacks are the most advanced and most troublesome type of attack where success could mean a network shutdown.

Because virtually all critical systems are reliant upon computer systems, the secondary hazards that could result from a cyber terrorism attack could be devastating. For example, many of New Jersey's roadway systems rely on sophisticated traffic control systems that prevent gridlock and accidents daily. Without these systems, the risk of not only auto accidents increases but also hazardous materials in-transit incidents. Additionally, a cyber-attack on a nuclear power plant could have devastating consequences should the plant suffer an intentional catastrophic failure. A cyber-attack could also completely incapacitate the communications infrastructure not only in New Jersey but across the United States, leading to disturbing secondary consequences and hazards. Public Safety Answering Points could be targeted by cyber-attacks, and if affected, there could be significant impacts to public safety response and dispatching of emergency services.

Because the power grid is also largely controlled by computer systems, a widespread power outage is also a possibility. A failure of the power grid would impact individuals reliant on power such as those with medical needs. The number of critical systems reliant on computer systems are numerous, thus disruption of one or more of the systems would cause severe secondary-cascading hazards. Secondary impacts could also affect private structures and systems within them: HVAC systems, life support systems, and security systems. Power outage caused from cyber attacks can also affect individuals who are dependent on medical equipment.

Since cyber security is a fairly new concept, there are limited regulations in place. The United States Department of Homeland Security (DHS) recognizes the threat of a potential cyber-attack and has an established approach meant to safeguard critical infrastructure in cyberspace. DHS coordinates with other agencies and partners to share information on and analysis of cyber threats and vulnerabilities and recognizes cyber security as a main aspect of their risk management strategy (NJOEM 2019).

In Essex County, the Prosecutor's Office formed a Cyber Crimes Unit in December 2010. This was created to investigate child pornography, computer fraud, cyber-stalking, cyber bullying, and the use of the internet and other technology in crimes. The Cyber Crimes Unit works with local, state and federal law enforcement agencies (Essex County Prosecutors Office 2019).

The New Jersey Cybersecurity and Communications Integration Cell (NJCCIC) was established in 2015 in order to address New Jersey's vulnerability to potential occurrences of a cyber-attack. NJCCIC focuses on information sharing, threat analysis and incident reporting with the intent of promoting awareness of the potential threat New Jersey faces to cyber-attack (NJOEM 2019).

1.2.2 Location

Cyber threats to critical infrastructures can be posed by anyone with the capability, technology, opportunity, and intent to do harm. Potential threats can be foreign or domestic, internal or external, State-sponsored



or a single rogue element. Terrorists, insiders, disgruntled employees, and hackers are included in this profile. The fact that most of the nation's vital services are delivered by private companies creates a significant challenge in assigning the responsibility for protecting our critical infrastructures from cyber-attacks. Across New Jersey, countless systems rely on computers for day-to-day operations including but not limited to traffic signals, power plants, HVAC systems, as well as systems responsible for ensuring New Jersey's State government can operate. While these are just a few examples of critical systems vulnerable to cyber-attacks, it should be noted that an attack could cripple not only the operations of New Jersey's systems but also the economy (NJOEM 2019).

New Jersey remains a valuable target as it possesses a wealth of critical information infrastructure, much of which is inherently interdependent. New Jersey is strategically located along a heavy transit corridor for people and goods, and is a major node along the fiber path through the northeastern United States, connecting New Jersey to Philadelphia and Washington, D.C. Furthermore, New Jersey is one of the wealthiest states in the country and is home to many Fortune 500 companies. Any disruption to the State's economy could have a drastic impact on the national economy and thus the nation's economic stability (New Jersey Office of Homeland Security and Preparedness [NJ OHSP] 2008).

In Essex County, there are several Fortune 500 companies. Prudential Financial is located in Newark, ranking 2nd in the State for revenue (\$59.7 million). Automatic Data Processing is located in Roseland, ranking 9th in the State for revenue (\$12.4 million). Lastly, Public Service Enterprise Group is located in Newark and ranks 13th in the State for revenue (\$9.1 million) (Choose New Jersey 2019). Any disruption in the County's government could have an impact on the State's economy.

1.2.3 Extent

The magnitude of extent of an incident will vary greatly based on the extent and duration of the impact. Additionally, the extent will vary based upon which specific system is affected by an attack, the warning time, and ability to preempt an attack.

A cyber-attack can affect a variety of sectors with potentially severe consequences. The following areas may be affected by an attack:

- **Android:** Malicious software designed to exploit the Android operating systems (OS) running on smartphones, tablets, and other devices. Some variants of Android malware have the capability of disabling the device, allowing a malicious actor to remotely control the device, track the user's activity, lock the device, or encrypt or steal personal information transmitted from or stored on the device. As users are increasingly turning to mobile devices for both business and personal use, cyber threat actors are devoting their efforts to developing malware designed to compromise the device software.
- **Botnets:** A group of internet-connected computers and devices that have been infected by malware that allows a malicious actor to control them remotely. The malicious actor then uses the botnet for nefarious purposes such as sending spam email, stealing data, spreading additional malware infections to other devices, generating illicit advertising revenue through click-fraud, mining cryptocurrencies, or conducting distributed denial-of-service (DDoS) attacks. In the cases where botnets are used to conduct DDoS attacks, these infected devices are used to generate an excessive



amount of network traffic designed to overwhelm a website, server, or online service to the point that legitimate users cannot access it.

- **Exploit Kits:** Toolkits that automate the exploitation of vulnerabilities in popular software applications to maximize successful infections and serve as a platform to deliver malicious payloads such as Trojans, spyware, ransomware, and other malicious software. Most users will encounter EKs from visiting seemingly legitimate, high-traffic websites that either contain links to EKs embedded within malicious advertising (malvertising) or have malicious code hidden directly within the website itself. Malicious URLs linking to EKs are commonly distributed through spam email and spear-phishing campaigns.
- **ICS:** A collective term for several types of control systems and other equipment used to operate and/or automate industrial processes and includes supervisory control and data acquisition (SCADA) systems often incorrectly used interchangeably with ICS – and distributed control systems (DCS). **iOS:** Malicious software designed to exploit Apple's iOS operating system running on smartphones, tablets, and other devices. Some variants of iOS malware have the capability of disabling the device, allowing a malicious actor to remotely control the device, track the user's activity, lock the device, or encrypt or steal personal information transmitted from or stored on the device. As users are increasingly turning to mobile devices for both business and personal use, cyber threat actors are increasingly devoting their efforts to developing malware designed to compromise mobile devices, including operating systems, like iOS, and applications, like those available in the App Store. Android devices have historically seen more malware threats than iOS largely due to the open-source operating system; however, malware specifically targeting iOS has increased in the last two years.
- **MACOS:** Though the majority of known malware targeting operating systems are made to exploit Microsoft Windows, devices running macOS are vulnerable as well. Furthermore, as macOS has become increasingly popular, more malware has been created to target macOS. More macOS malware was discovered in the second quarter of 2017 than in all of 2016.
- **Point of Sale (PoS):** Malicious software designed to steal credit and debit card data from payment processing systems, known as point-of-sale (PoS) terminals.
- **Ransomware:** Malicious software (malware) that attempts to extort money from victims by restricting access to a computer system or files. The most prevalent form of this profit-motivated malware is crypto-ransomware, which encrypts files into encoded messages that can only be decrypted (decoded) with a key held by the malicious actor.
- **Trojans:** A type of malware that, unlike viruses and worms, does not self-replicate. Named after the mythological wooden horse used to sneak Greek warriors through the gates of Troy, trojans are often disguised as legitimate software to avoid detection or trick users into installing the trojan onto their system. Users can be exposed to trojans through numerous vectors, such as clicking on links or opening attachments in phishing emails, other forms of social engineering, malicious advertising (malvertising), or by visiting compromised websites, known as drive-by downloads. Once a trojan executes, it often downloads other malware onto the system or provides an attacker with a backdoor to gain access and conduct further malicious activity, such as stealing, deleting, or modifying data (NJCCIC 2019).



The extent, nature, and timing of cyber incidents are impossible to predict. There may or may not be any warning. Some cyber incidents take a long time (weeks, months or even years) to be discovered and identified (FEMA 2013). The magnitude of severity of an incident will vary greatly based on the extent and duration of the impact. The extent will also vary based upon which specific system is affected by an attack, the warning time, and the ability to preempt an attack.

A cyber terrorism attack can occur with relatively little or no warning. The New Jersey Office of Homeland and Preparedness is charged with gathering intelligence and monitoring cyber terrorism threats affecting the State. At the federal level, numerous agencies (such as FBI and CIA) are working collaboratively to thwart cyber terrorism attacks. The warning time depends upon the ability of these agencies to recognize that a threat exists and their ability to stop the attack. Even with these agencies on task to monitor cyber threats, a cyber-attack can occur with no warning (NJOEM 2019).

The Multi-State Information Sharing and Analysis Center (MS-ISAC) created the Cyber Alert Level Indicator. It shows the current level of malicious cyber activity and reflects the potential for, or actual damage. There are five cyber alert levels: low, guarded, elevated, high, and severe. Each level is indicated by a color. The following is additional information regarding these levels:

- **Low** – Indicates a low risk. No unusual activity exists beyond the normal concern for known hacking activities, known viruses, or other malicious activity.
- **Guarded** – Indicates a general risk of increased hacking, virus, or other malicious activity. The potential exists for malicious cyber activities, but no known exploits have been identified, or known exploits have been identified but no significant impact has occurred.
- **Elevated** – Indicates a significant risk due to increased hacking, virus, or other malicious activity which compromises systems or diminishes service. At this level, there is known vulnerabilities that are being exploited with a moderate level of damage or disruption, or the potential for significant damage or disruption is high.
- **High** - Indicates a high risk of increased hacking, virus or other malicious cyber activity which targets or compromises core infrastructure, causes multiple service outages, multiple system compromises or compromises critical infrastructure. At this level, vulnerabilities are being exploited with a high level of damage or disruption, or the potential for severe damage or disruption is high.
- **Severe** - Indicates a severe risk of hacking, virus or other malicious activity resulting in wide-spread outages and/or significantly destructive compromises to systems with no known remedy or debilitates one or more critical infrastructure sectors. At this level, vulnerabilities are being exploited with a severe level or widespread level of damage or disruption of Critical Infrastructure Assets.

1.3 ECONOMIC COLLAPSE

1.3.1 Hazard Description

Economic collapse is a breakdown in normal commerce facilitated by actions such as the destabilization of currency and/or hyperinflation, which results in social chaos or civil unrest. The term describes a variety



of economic conditions from severe depressions with high unemployment and bankruptcy such as the Depression of the 1930s in the United States, to breakdowns of normal economic conditions such as hyperinflation or the effects of a sharp decline in population that causes an economic downturn. Although a true economic collapse has never occurred in the United States, the Great Depression was the closest that the United States came to suffer a true collapse (NJOEM2019).

1.3.2 Location

An economic collapse, depending on the severity, may impact all of Essex County. Economic collapse would likely affect beyond the geographic boundary of Essex County and could impact a larger region or the United States. Surrounding counties or regions could be impacted by displaced population from Essex County or instances of civil disorder which could potentially occur.

1.3.3 Extent

Economic collapse could have significant impacts on Essex County. The working population of Essex County would be directly impacted by an economic collapse due to reduced or total loss of income. The 2013-2017 American Community Survey 5-Year Estimates indicates approximately 371,793 people are employed age 16 years and older in Essex County (U.S. Census Bureau, 2018). This number may not include the number of people who commute into Essex County from surrounding communities. Significant changes in population may occur if individuals move to find other means of employment or areas with lower cost of living similar to what occurred during the Great Depression (Spector 2012). Businesses may shutdown and go out of business which would lead to a reduction in tax revenue for Essex County.

Secondary impacts from economic collapse could be outbreaks of civil disorder and a general breakdown of law and order in Essex County. Utility companies may go out of business and therefore cause mass power outage. The number of abandoned or blighted properties would increase as a result of population decreases in the County. The quality of housing can contribute to general well-being or cause poor health. Exposure to poor indoor air quality, mold, lead, and rodent and cockroach infestations can lead to asthma and other respiratory illnesses, lead poisoning, learning and behavioral problems, and other serious health issues (de Leon & Schilling 2017). Disease outbreak is also a possible secondary hazard should there be a breakdown in public health and medical services.

1.4 HAZARDOUS SUBSTANCES

1.4.1 Hazard Description

Hazardous substances are substances that are considered severely harmful to human health and the environment, as defined by the United States Environmental Protection Agency (USEPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Superfund Law). Many are commonly used substances which are harmless in their normal uses but are quite dangerous if released. The Superfund law designates more than 800 substances as hazardous and identifies many more as potentially hazardous due to their characteristics and the circumstances of their release (USEPA 2013). Superfund's definition of a hazardous substance includes the following:



- Any element, compound, mixture, solution, or substance designated as hazardous under section 102 of CERCLA.
- Any hazardous substance designated under section 311(b)(2)(a) of the Clean Water Act (CWA), or any toxic pollutant listed under section 307(a) of the CWA. There are over 400 substances designated as either hazardous or toxic under the CWA.
- Any hazardous waste having the characteristics identified or listed under section 3001 of the Resource Conservation and Recovery Act.
- Any hazardous air pollutant listed under section 112 of the Clean Air Act, as amended. There are over 200 substances listed as hazardous air pollutants under the Clean Air Act (CAA).
- Any imminently hazardous chemical substance or mixture which the EPA Administrator has "taken action under" section 7 of the Toxic Substances Control Act (USEPA 2013).

If released or misused, hazardous substances can cause death, serious injury, long-lasting health effects, and damage to structures and other properties, as well as the environment. Many products containing hazardous substances are used and stored in homes and these products are shipped daily on highways, railroads, waterways, and pipelines.

Transportation of hazardous substances on highways involves tanker trucks or trailers, which are responsible for the greatest number of hazard substance release incidents. New Jersey is composed of approximately 39,000 miles of highway, many of which are used to transport hazardous substances (New Jersey Department of Transportation [NJDOT] 2019). These roads cross rivers and streams at many points; hazardous substance spills on roads have the potential to pollute watersheds that serve as domestic water supplies for parts of the State. Potential also exists for hazardous substance releases to occur along rail lines as collisions and derailments of train cars can result in large spills.

Pipelines can also transport hazardous liquids and flammable substances such as natural gas and petroleum. Incidents can occur when pipes corrode, when they are damaged during excavation, incorrectly operated, or damaged by other forces. In New Jersey, most of the large pipeline leaks have been caused by marine traffic hitting or the anchors of ships effecting pipelines in the waterways. In addition, hazardous substances can be transported by aircraft or by watercraft. Crashes, spills of materials, and fires on these vessels can pose a hazard.

Essex County hazardous materials response program has been in effect since 1999 with Nutley as the sole subcontractor for the County Environmental Health Act (CEHA) program. In 2004, Newark also became a subcontractor for hazardous material response for the CEHA program. Nutley handles all of the low concern and emergency responses within Essex County on a daily basis. The partnership between the Essex County Health Department (ECHD), Nutley and Newark have enabled Essex County to increase response capacity. Further, the County has created a mass decontamination program comprised of 10 Essex County municipal fire departments. The decontamination program includes the New Jersey Department of Health decontamination trailer that is operated by Belleville Fire Department. Because of several grants and other initiatives available much needed emergency equipment was purchased that is utilized for low concern, environmental emergency response and terrorist attacks.



1.4.2 Location

The following provides information regarding the location of hazardous substance incidents.

1.4.2.1 Hazardous Substances Fixed Site

Many years ago, numerous wastes were dumped on the ground, in rivers, or left out in the open. As a result, thousands of uncontrolled or abandoned contaminated sites were created. These sites included abandoned warehouses, manufacturing facilities, processing plants, and landfills. In response to concerns regarding health and environmental risks, Congress established the Superfund program in 1980 to clean up these sites. The Superfund program is administered by the USEPA in cooperation with individual states. In New Jersey, the Department of Environmental Protection (NJDEP) Site Remediation Program oversees the Superfund program (NJDEP 2013).

Federal regulations include the CERCLA and the Superfund Amendments and Reauthorization Act (SARA) required that a National Priorities List (NPL) of sites throughout the United States be maintained and revised at least annually (NJDEP 2013).

Fixed-site facilities that use, manufacture, or store hazardous substances in New Jersey pose risk and must comply with Title III of the federal SARA. SARA was signed into law on October 17, 1986. It is a federal law that applies nationwide. It must be realized that this law is linked to N.J.S.A. 34:5A, the New Jersey Worker and Community Right to Know Act. SARA requires the governor of each state to establish a State Emergency Response Commission (SERC). New Jersey's SERC was established by Executive Order on February 13, 1987.

SARA also requires that the emergency planning districts be established by the SERC. The Act specified that these districts can be existing political subdivisions. The function of the emergency planning district is to facilitate preparation and implementation of emergency plans. In New Jersey, all municipalities and counties have been designated emergency planning districts (total of 588). The Local Emergency Planning Committees (LEPC) is the policy body for the emergency planning district (New Jersey Division of Fire Safety 2011).

The State enacted the Toxic Catastrophe Prevention Act (TCPA), N.J.S.A. 13:1K-19 et seq. Currently, implementation of the requirements established under this Act is facilitated by the TCPA Program. Certain industrial facilities using materials considered extraordinarily hazardous must take steps to prevent releases and protect public safety. New Jersey has also mandated that facilities storing large quantities of hazardous substances take preventative measures to reduce the likelihood of a leak or discharge. Established under the New Jersey Spill Compensation and Control Act (N.J.S.A. 58:10-23.11), these requirements include testing and inspection of storage tanks, training of employees, and emergency response planning. The Discharge Prevention Containment and Countermeasure (DPCC) program facilitates implementation of these requirements. Regulations related to reporting of chemical and petroleum discharges are also administered under this program. The Program is sometimes referred to by the acronym DPCC, which refers to an important preparedness document that major facilities develop under the program (NJDEP 2018).



The Community Right to Know (CRTK) program collects, processes, and disseminates the chemical inventory, environmental release and materials accounting data required to be reported under the New Jersey Worker and Community Right to Know Act, N.J.S.A.34:5A and the federal Emergency Planning and Community Right to Know Act of 1986 (EPCRA). EPCRA is also known as Title III of the SARA. This information is used by the public, emergency planners, and first responders to determine the chemical hazards in the community (NJDEP 2012).

The U.S. EPA Hazardous Waste Report, which is a biennial report, collects data on the generation, management, and minimization of hazardous waste. This report provides detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage, and disposal facilities. This report lists 56 facilities in Essex County, with a majority of them located in the City of Newark (U.S. EPA 2017).

Superfund is a program administered by the U.S. EPA to locate, investigate, and cleanup the worst hazardous waste sites throughout the U.S. Data from the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database indicated that Essex County has 75 Superfund sites located throughout the County, with a majority of the sites located in the City of Newark (U.S. EPA 2019).

New Jersey employers, whose businesses are assigned North American Industry Classification System (NAICS) codes listed in the New Jersey Worker and Community Right to Know (CRTK) regulations, are required to submit CRTK surveys listing the environmental hazardous substances (EHSs) present at their facilities in quantities that exceed 500 pounds, unless the EHS is on the federal Emergency Planning and Community Right to Know Act (EPCRA) Section 302 list of extremely hazardous substances with a lower reporting threshold. In addition, Section 312 of EPCRA requires owners and operators of federal facilities and private sector facilities that are subject to the United States Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard to report their inventories of any chemical that requires a Materials Safety Data Sheet (MSDS) and is present on site in quantities that exceed 10,000 pounds, unless the chemical is an Extremely Hazardous Substance with a lower reporting threshold (NJDEP 2014).

Owners and operators of manufacturing, and select non-manufacturing companies, having the equivalent of 10 or more full-time employees, and manufacturing, importing, processing or otherwise using toxic chemicals listed on the EPCRA Section 313 (TRI) list in quantities that exceed specified thresholds, are required to annually report their releases of these chemicals for the previous year. Approximately 500 New Jersey companies are required to file federal Toxic Chemical Release Inventory (TRI) forms. TRI Form R requires the listing of environmental releases, on-site waste management and off-site transfers while the simplified Form A Certification Statement requires the listing of the chemical only. These companies are also required to submit to NJDEP the Release and Pollution Prevention Report (RPPR) listing the quantities of environmental release, on-site waste management, waste transfer, and chemical throughput information. Most of these facilities are also subject to Pollution Prevention Planning Requirements and, therefore, required to report pollution prevention progress information on the RPPR (NJDEP 2014).



The NJDEP maintains a list of Known Contaminated Sites of New Jersey (KCSNJ). It is an inventory that includes all sites in the State where contamination is known to exist. The remediation for these sites is currently active or pending in the NJDEP's Site Remediation Program (SRP). As of 2017, there are over 14,000 KCSNJ sites in New Jersey, with 1,592 of those sites in Essex County.

1.4.2.2 Hazardous Substances In-Transit

Incidents involving hazardous substances in transit can occur anywhere in the State. In Essex County, the major transportation routes include: The Garden State Parkway; I-280; I-80; and I-78. In total, there is approximately 1,767 miles of roadway in the County. Figure 2 shows the major transportation routes in the County.

Hazardous substances incidents may also occur along railways in Essex County. The NJDOT has a vital interest in preserving and improving the rail freight part of its transportation network. Rail shipments allow cost-effective movement of goods with less stress on the State's highway system. Major commodities shipped by rail entail petrochemicals (including plastic pellets), construction materials, food products, raw materials, and finished goods for manufacturers. Of concern for this hazard are rail cars carrying hazardous substances. An accident or release could pose a public safety hazard to the community.

Hazardous substances can also be transported via pipeline across the State. New Jersey has an extensive network of natural gas and petroleum pipelines. Several of the petroleum pipelines originate in the Gulf Coast region (Colonial Pipeline and Buckeye Pipeline). Figure 3 shows the extent and locations of pipelines throughout the northeastern United States.

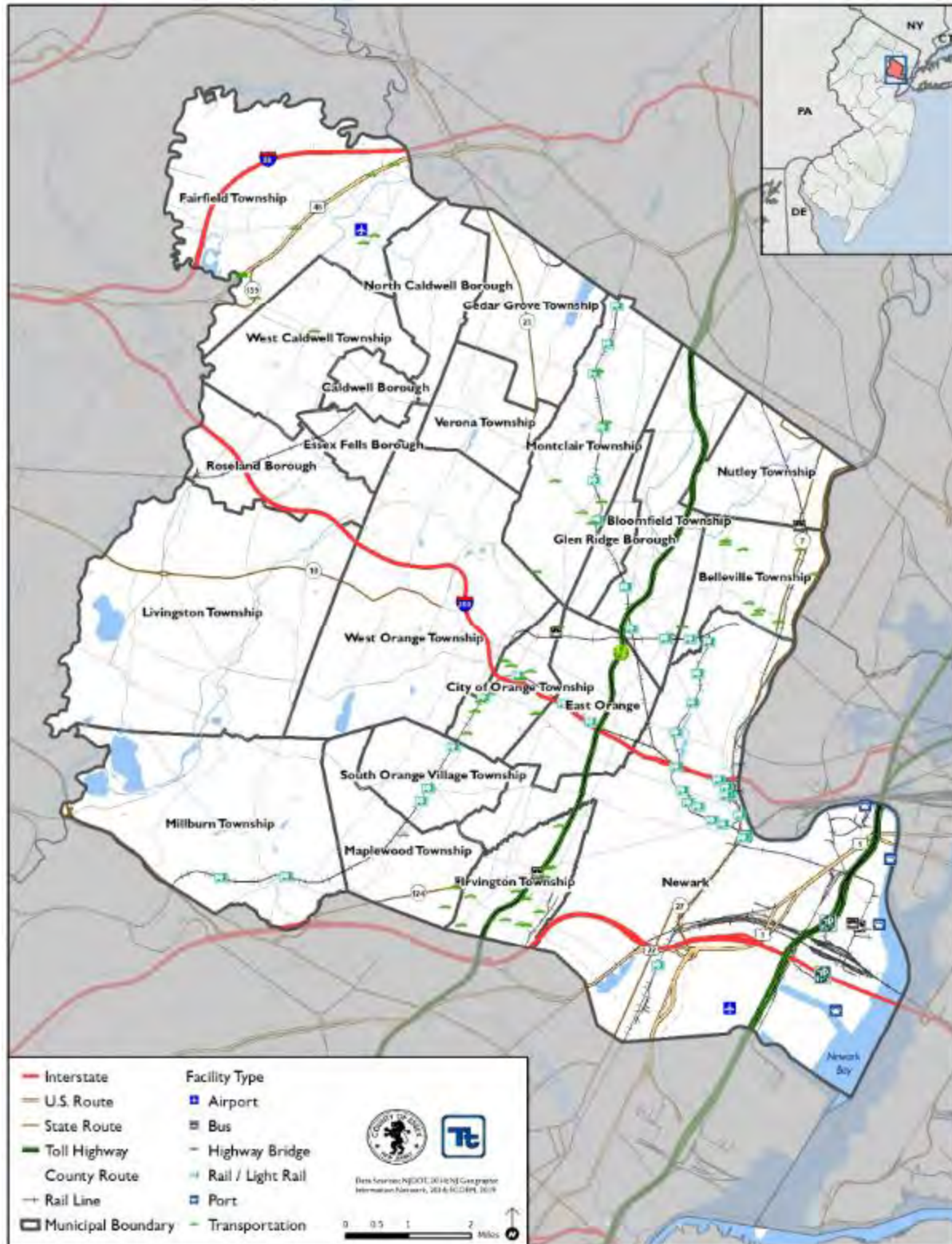


Figure 2 Major Transportation in Essex County



Figure 3 Interstate Natural Gas Pipelines in the Northeast

1.4.2.3 Hazardous Substances Offshore

Offshore hazardous substance incidents have the potential to affect New Jersey because of its vast coastline consisting of rivers, bays, and oceans. New Jersey is a vital link in marine transportation in the Northeast. The State has 14 ports, including the Port of New York and New Jersey, which are a critical link for shipping worldwide. The potential for a hazardous substances incident offshore is possible given the volume of shipping traffic around the State.

New Jersey features the Port of New York and New Jersey system, which includes the New Jersey ports of Port Newark, Elizabeth-Port Authority Marine Terminal, and Port Jersey. The Port of New York and New Jersey is the gateway to one of the most concentrated and affluent consumer markets in the world. It is the largest port on the east coast, and the third-largest port in the nation. In 2016 79,844,000 tons of cargo moved through Port facilities. This included over 6.25 million boxes (PANYNJ Port Planning Summit, 2017). The dollar value of all cargo that moved through the Port exceeded \$200 billion (PANYNJ, 2016). The Port ships a variety of goods, many of which are hazardous. Figure 4 shows the location of the Port of New York and New Jersey. Port Newark is located in the City of Newark, Essex County. Port Newark is managed by the Port Authority of New York and New Jersey (PANYNJ). The Port Newark Container Terminal (PNCT) is located in Port Newark and occupies 259 acres. It handles over 600,000 containers each year and is one of the largest infrastructure projects in New Jersey (PNCT 2014).



Figure 4 Port of New York and New Jersey

Source: Port Authority of New York and New Jersey 2013



1.4.3 Extent

The extent of a hazardous substance release will depend on whether it is from a fixed or mobile source, the size of impact, the toxicity and properties of the substance, duration of the release, and the environmental conditions (for example, wind and precipitation, terrain, etc.).

Hazardous substance releases can contaminate air, water, and soils, possibly resulting in death and/or injuries. Dispersion can take place rapidly when the hazardous substance is transported by water and wind. While often accidental, releases can occur as a result of human carelessness, intentional acts, or natural hazards. When caused by natural hazards, these incidents are known as secondary events. Hazardous substances can include toxic chemicals, radioactive substances, infectious substances, and hazardous wastes. Such releases can affect nearby populations and contaminate critical or sensitive environmental areas.

With a hazardous substance release, whether accidental or intentional, several potentially exacerbating or mitigating circumstances will affect its severity or impact. Mitigating conditions are precautionary measures taken in advance to reduce the impact of a release on the surrounding environment. Primary and secondary containment or shielding by sheltering-in-place measures protects people and property from the harmful effects of a hazardous substance release. Exacerbating conditions, characteristics that can enhance or magnify the effects of a hazardous substance release, include:

- Weather conditions, which affect how the hazard occurs and develops
- Micro-meteorological effects of buildings and terrain, which alters dispersion of hazardous substances on-compliance with applicable codes (such as building or fire codes)
- Maintenance failures (such as fire protection and containment features), which can substantially increase the damage to the facility itself and to surrounding buildings

As discussed earlier, the severity of the incident is dependent not only on the circumstances described above, but also with the type of substance released and the distance and related response time for emergency response teams. The areas proximate to the releases are generally at greatest risk; however, depending on the agent, a release can travel great distances or remain present in the environment for a long period of time (i.e. centuries to millennia).

The severity of offshore hazardous substances incidents will vary based on the amount of hazardous substance spilled, the location of the spill, and the prevailing currents. The effects of an accident can have a devastating impact on the environment. An example of the worst-case scenario was the Deepwater Horizon oil spill in 2010, which affected the gulf and the coastline from Texas to Florida and was one of the worst environmental disasters in the United States.

1.5 TERRORISM



1.5.1 Hazard Description

Terrorism is the use of force or violence against persons or property with the intent to intimidate or coerce. Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber-attacks (computer-based attacks); and the use of chemical, biological, nuclear, and radiological weapons (FEMA 2009).

In 1985, the Federal Bureau of Investigation (FBI) and the New Jersey State Police (NJSP) entered into a partnership to combat domestic and international terrorism operations. Since then, a contingent of Counter Terrorism Bureau detectives have been assigned to participate in the Joint Terrorism Task Forces (JTTF) coordinated through the FBI in Newark, New Jersey, New York City, New York and Philadelphia, Pennsylvania (NJSP 2019). The New Jersey Domestic Security Preparedness Act, signed into law on October 4, 2001, created the Domestic Security Preparedness Task Force as the State's cabinet-level body responsible for setting homeland security and counter-terrorism policy after September 11, 2001. The State Police established a Counter Terrorism Bureau (CTB) in 2003 and the New Jersey Regional Operations Intelligence Center (ROIC) was activated in 2005. The New Jersey Joint Terrorism Task Force (JTTF) North Unit, also known as the Newark JTTF, covers most of the State, while the Philadelphia JTTF covers the Camden area. The U.S. attorney chairs an Anti-Terrorism Advisory Council (ATAC) in Newark (Washington Post 2009).

All county prosecutors are required to designate a Counter-Terrorism Coordinator in their respective counties. The Counter-Terrorism Coordinator is the primary link between all law enforcement agencies in the county and the New Jersey Office of Homeland Security and Preparedness (OHSP). The Essex County Counter-Terrorism Coordinator has obtained the necessary clearances in order to receive classified homeland security briefings from the FBI and the U.S. Department of Homeland Security (Essex County Prosecutor's Office 2010).

In addition to the Counter-Terrorism Coordinator, who also serves as the Chief Assistant Prosecutor in charge of the Homicide, Visible Intermodal Prevention and Response (VIPR) and Arson Units, the Homeland Security Unit is staffed by a Risk Mitigation Planner, who performs vulnerability assessments at the numerous critical infrastructures in the County (Essex County Prosecutor's Office 2010).

The Counter-Terrorism Coordinator also oversees the operations of the Essex County Rapid Deployment Team (RDT), consisting of over 100 sworn law enforcement officers from all law enforcement agencies in the County. The RDT serves as "force-multiplier" capable of deploying quickly to assist other law enforcement agencies in matters of civil disorder, crowd control, infrastructure protection, and natural disaster relief (Essex County Prosecutor's Office 2010). Various types of terrorism are discussed in the sections below.

1.5.1.1 Armed Attacks and Assassinations

Armed attacks include raids and ambushes. Assassinations are the killing of a selected victim, usually by bombings or small arms. Drive-by shootings is a common technique employed by unsophisticated or loosely organized terrorist groups. Historically, terrorists have assassinated specific individuals for psychological effect.



1.5.1.2 Arson and Firebombing

Incendiary devices are inexpensive and easy to hide. Arson and firebombing are easily conducted by terrorist groups that may not be as well organized, equipped, or trained as a major terrorist organization. An act of arson or firebombing against a utility, hotel, government building, or industrial center portrays an image to the public that the ruling government is incapable of maintaining order.

1.5.1.3 Bioterrorism

Bioterrorism refers to the intentional release of toxic biological agents to harm and terrorize civilians, in the name of a political or other cause. The United States Centers for Disease Control and Prevention (CDC) has classified the viruses, bacteria, and toxins that could be used in an attack. Category A Biological Diseases are those most likely to do the most damage. They include:

- Anthrax (*Bacillus anthracis*)
- Botulism (*Clostridium botulinum* toxin)
- The Plague (*Yersinia pestis*)
- Smallpox (*Variola major*)
- Tularemia (*Francisella tularensis*)
- Hemorrhagic Fever, due to Ebola Virus or Marburg Virus

1.5.1.4 Bombings and Explosive Attacks

Explosive attack can be defined as an attack in which a bomb and or destructive device is used to destroy, incapacitate, harass, or distract. Bombings are the most common type of terrorist act. Typically, improvised explosive devices are inexpensive and easy to make. Modern devices are smaller and harder to detect and contain very destructive capabilities. Terrorists such as those responsible for this bombing can use materials that are readily available to the average consumer to construct a bomb.

1.5.1.5 Cyber Terrorism

Cyber terrorists use information technology to attack civilians and draw attention to the terrorists' cause. This may mean that they use information technology, such as computer systems or telecommunications, as a tool to orchestrate a traditional attack. More often, cyber terrorism refers to an attack on information technology itself in a way that would radically disrupt networked services. For example, cyber terrorists could disable networked emergency systems or hack into networks housing critical financial information. There is wide disagreement over the extent of the existing threat by cyber terrorists. A full discussion of cyber terrorism is presented in Section 4.3.12 (Cyber Attack).

1.5.1.6 Ecoterrorism

Ecoterrorism is a recently coined term describing violence in the interests of environmentalism. In general, environmental extremists sabotage property to inflict economic damage on industries, businesses, or persons perceived as harming animals or the natural environment. Targets of ecoterrorist attacks have included fur companies, logging companies, and animal research laboratories.

1.5.1.7 Electromagnetic Pulse (EMP)



An EMP is a high-intensity burst of electromagnetic energy caused by the rapid acceleration of charged particles. In an attack, these particles interact and send electrical systems into chaos in three ways: First, the electromagnetic shock disrupts electronics, such as sensors, communications systems, protective systems, computers, and other similar devices. The second component has a slightly smaller range and is similar in effect to lightning. Although protective measures have long been established for lightning strikes, the potential for damage to critical infrastructure from this component exists because it rapidly follows and compounds the first component. The final component is slower than the previous two but has a longer duration. It is a pulse that flows through electricity transmission lines-damaging distribution centers and fusing power lines. The combination of the three components can easily cause irreversible damage to many electronic systems (Heritage Foundation 2008).

1.5.1.8 Hijackings and Skyjackings

Hijacking is the seizure by force of a surface vehicle, its passengers, and/or its cargo. Skyjacking is the taking of an aircraft, which creates a mobile, hostage barricade situation; provides terrorists with hostages from many nations; and draws heavy media attention. Skyjacking also provides mobility for the terrorists to relocate the aircraft to a country that supports their cause and provides them with a human shield, making retaliation difficult.

1.5.1.9 Kidnappings and Hostage-Takings

Terrorists use kidnapping and hostage-taking to establish a bargaining position and to elicit publicity. Kidnapping is one of the most difficult acts for a terrorist group to accomplish, but, if a kidnapping is successful, it can gain terrorists money, release of jailed comrades, and publicity for an extended period. Hostage-taking involves the seizure of a facility or location and the taking of hostages present in that facility. Unlike a kidnapping, hostage-taking provokes a confrontation with authorities. It forces authorities to either make dramatic decisions or to comply with the terrorist's demands. It is overt and designed to attract and hold media attention. The terrorists' intended target is the audience affected by the hostage's confinement, not the hostage.

1.5.1.10 Nuclear Terrorism

Nuclear terrorism refers to a number of different ways nuclear materials might be exploited as a terrorist tactic. These include attacking nuclear facilities, purchasing nuclear weapons, or building nuclear weapons or otherwise finding ways to disperse radioactive materials.

1.5.2 Location

Terrorist attacks can occur anywhere; however, the State of New Jersey is a particularly attractive target of a potential terrorist activity because of its dense population and location relative to major urban areas. The State also houses the busiest commuter rail system in the United States, as well as the headquarters of major corporations in economically vital sectors such as the financial and pharmaceutical industries.

Additional targets in New Jersey include the State's critical infrastructure such as utilities, roadways, bridges, tunnels, hospitals, schools, civic centers, and other high-profile venues such as Met Life Stadium and the Prudential Center (City of Newark). The link between New Jersey Transit and New York City also makes this transportation system a target for terrorists. In Essex County, transportation systems available



include large, interconnected rail, roadway, and water transportation networks. Major highways accessible to Essex County includes the Garden State Parkway; New Jersey Turnpike; Interstates 78, 80, and 280; Routes 1-9, 21, 22, 23, 24, and 46; and the Eisenhower Parkway. Public roads have a total mileage of 1,673 miles; total interstate mileage is 27 miles; state highway mileage is 59 miles; county road mileage is 233 miles; and municipal road mileage of 1,330 miles. The County also has three of the nation's major transportation centers, which includes Newark Liberty International Airport, Port Newark, and Penn Station (Essex County 2014).

Jersey City/Newark is one of the 64 urban metropolitan areas that have been designated by the federal government as "high-threat, high-density" with regard to acts of terrorism (Washington Post 2014).

1.5.3 Extent

Any acts of terrorism can occur anywhere at any time of day. The National Terrorism Advisory System (NTAS) communicates information about terrorist threats by providing detailed information to the public, government agencies, first responders, airports and other transportation hubs, and the private sector. When there is a threat, an NTAS Alert will be announced by the Secretary of Homeland Security and will be shared with the public. It may include specific information about the nature of the threat, including the geographic region, mode of transportation, or critical infrastructure potentially affected, as well as steps that individuals and communities can take to protect themselves and help prevent, mitigate or respond to the threat. The alert indicates whether the threat is elevated or imminent. Elevated threats are when there is no specific information about the timing or location. Imminent threats are when it is believed the threat is impending or very soon. The alerts will be posted online and released to the news media for distribution. The United States Department of Homeland Security (DHS) will also distribute alerts through its social media channels (U.S. DHS 2013).

The effect of a terrorism event can vary depending on the type of attack and the magnitude of the event or events. A terrorism event can cause public fear regarding the use of mass transportation or leaving their homes in the event of a biological or nuclear attack. Communication systems, both public and private, can fail because of an overwhelming amount of usage or damage to its infrastructure. Healthcare facilities can become quickly inundated and must be prepared to triage injured patients, handle mass casualties, and conduct decontamination operations.

In terms of explosive attacks, Figure 5 summarizes the capacity of different explosives.

Threat	Threat Description	Explosive Capacity	Building Evacuation Distance	Outdoor Evacuation Distance
	Small Package/letter	1 lb	40 ft	900 ft
	Pipe Bomb	5 lb	70 ft	1,200 ft
	FedEx Package	10 lb	90 ft	1,600 ft
	Vest/Container Bombs	20 lb	110 ft	1,700 ft
	Parcel Package	50 lb	150 ft	1,850 ft
	Compact Car	500 lb	320 ft	1,900 ft
	Full Size Car/Minivan	1,000 lb	400 ft	2,400 ft
	Van/SUV/Pickup Truck	4,000 lb	640 ft	3,800 ft
	Delivery Truck	10,000 lb	660 ft	5,100 ft

Figure 5 Capacity of Different Explosives

Source: NJOEM 2019

There is often very little if any warning time that a terrorist attack is about to occur. It is possible, however, to thwart terrorist attacks through aggressive intelligence monitoring and monitoring of individuals who exhibit radical tendencies. Some terrorist attacks may show warning signs that an incident may occur, such as a suspicious package left unattended. Local, state, and federal officials as well as the general public are responsible for recognizing the warning signs of terrorism incidents and for taking appropriate actions to mitigate against possible attacks. In New Jersey, the coordination, direction, and control of all law enforcement personnel and resources fall under the purview of the Attorney General. Additionally, the New Jersey Office of Homeland Security and Preparedness administers, coordinates, leads, and supervises New Jersey's counter-terrorism efforts.

In New Jersey, the NJOEM, New Jersey Office of Homeland Security and Preparedness (OHSP), and the Regional Operations Intelligence Center (ROIC) have introduced NJ Alert, a mass text and email emergency notification system. During an emergency, NJ Alert assists these agencies in delivering emergency messages to the public through their handheld devices or computers, in addition to the Emergency Alert Systems and Amber Alert (NJOEM 2009)



APPENDIX F: MITIGATION STRATEGY SUPPLEMENT

This appendix summarizes additional activities and resources provided to plan participants to support the update of the mitigation strategy.

1.1 MITIGATION STRATEGY WORKSHOP RESOURCES

On February 18, 2025, a Mitigation Strategy Workshop was held for all plan participants. Resources available at the workshop included the following to assist with the identification of mitigation alternatives and the development of the mitigation strategy workshops found in Volume II (Jurisdictional Annexes).

- Maps of hazard areas
- NFIP statistics for each jurisdiction
- List of critical facilities and hazard exposure for each jurisdiction
- Public, stakeholder, and neighboring community survey identified problem areas and potential mitigation actions for each jurisdiction

1.2 MITIGATION CATALOG

The following tables presents mitigation ideas organized by hazard of concern and approach to mitigation:

- Manipulate the hazard
- Reduce exposure and vulnerability to the hazard
- Build local capacity to respond to or prepare for the hazard
- Nature-based opportunities

Disease Outbreak

DISEASE OUTBREAK
Mitigation Ideas
<ul style="list-style-type: none">• Manipulate the hazard:<ul style="list-style-type: none">○ None identified• Reduce exposure and vulnerability to the hazard:<ul style="list-style-type: none">○ PPE○ Social distancing○ Distanced work environment○ Regular cleaning of work environment• Build local capacity to respond to or prepare for the hazard:<ul style="list-style-type: none">○ Storage of PPE○ Equipment for monitoring/treatment○ Trainings for staff○ Public outreach○ Maintain strong health regulations• Nature-based opportunities:<ul style="list-style-type: none">○ Restore systems to reduce standing water that can breed mosquitos.

**Drought**

DROUGHT	
Mitigation Ideas	
<ul style="list-style-type: none">• Manipulate the hazard:<ul style="list-style-type: none">○ Encourage better groundwater recharge through stormwater management, floodplain management• Reduce exposure and vulnerability to the hazard:<ul style="list-style-type: none">○ Consider stored water/captured water techniques during dry seasons○ Reduce private water system losses○ Regularly check for leaks to minimize water supply losses○ Install low-flow water saving showerheads and toilets○ Turn water flow off while brushing teeth or during other cleaning activities○ Adjust sprinklers to water the lawn and not the sidewalk or street○ Run the dishwasher and washing machine only when they are full○ Check for leaks in plumping or dripping faucets○ Install rain-capturing devices for irrigation○ Install graywater systems in homes to encourage water reuse○ Identify alternate water supply sources○ Identify and create groundwater back up sources○ Create /identify new impounded water supply points○ Developing new or upgrading existing water delivery systems to eliminate breaks and leaks○ Water use conflict regulations○ Distribute water saving kits○ Encourage citizens to take water-saving measures• Build local capacity to respond to or prepare for the hazard:<ul style="list-style-type: none">○ Practice active water conservation techniques.○ Seek ways to operate wells in such a way to enhance their functional longevity and supply capability.○ Develop a COOP○ Create a water conservation plan○ Public education on drought resistance○ Identify alternative water supplies for time of drought○ Mutual aid agreements with alternative suppliers○ Develop a drought contingency plan○ Develop criteria-"triggers" for drought related actions Improve accuracy of water supply forecasts○ Provide incentives to influence active water conservation techniques such as water user rate reductions○ Establish protocol for saltwater de-salinization to be implemented during conditions of severe drought○ Consider providing incentives to property owners that utilize drought resistant landscapes in the design of their homes○ Use of water buffalo tankers	

**DROUGHT**

- Promote well usage techniques that strive to enhance functional longevity and supply capability of private water supply wells
- Develop an ordinance to restrict the use of public water resources for non-essential usage, such as landscaping, washing cars, filling swimming pools, etc.
- **Nature-based opportunities:**
 - Identify sites ideally suited for ground water recharge
 - Promote and use reclaimed water supplies
 - Implement natural stormwater retention in regions ideally suited for groundwater recharges
 - Utilize drought resistant landscapes on private and community owned facilities

Earthquake**EARTHQUAKE****Mitigation Ideas**

- **Manipulate the hazard:**
 - None
- **Reduce exposure and vulnerability to the hazard:**
 - Locate personal residences outside of hazard area (off soft soils)
 - Locate/relocate critical facilities or mission critical functions outside hazard area where possible
 - Retrofit structures (anchor house structure to foundation)
 - Secure household items that can cause injury or damage such as water heaters, bookcases, and other appliances
 - Build to higher design standards
 - Build redundancy for critical functions/facilities
 - Retrofit critical buildings/areas housing mission critical functions
 - Harden infrastructure
 - Provide redundancy for critical functions
 - Adopt higher regulatory standards for structures
 - 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
- **Build local capacity to respond to or prepare for the hazard:**
 - Practice "drop, cover and hold"
 - Develop household mitigation plan, such as creating a retrofit savings account, communication capability with outside, 72 hr. self-sufficiency during an event
 - Increase capability by having cash reserves for reconstruction
 - Become informed on the hazard and risk reduction alternatives available.
 - Develop a post-disaster action plan for your household
 - Adopt higher standard for new construction -- Consider "performance-based design" when building new structures
 - Increase capability by having cash reserves for reconstruction
 - Inform employees on the possible impacts of earthquake and how to deal with them at work facilities
 - Develop a Continuity of Operations Plan (COOP)

**EARTHQUAKE**

- Provide better hazard maps
- Provide technical information and guidance
- Enact tools to help manage development in hazard areas: tax incentives, information
- Include retrofitting/replacement of critical system elements in CIP
- Develop strategy to take advantage of post disaster opportunities
- Warehouse critical infrastructure components such as pipe, power line, and road repair material.
- Develop and adopt a Continuity of Operations / Continuity of Government Plan (COOP/COG)
- Initiate triggers guiding improvements such as: (< 50% substantial damage/improvements)
- Further enhance seismic risk assessment to target high hazard buildings for mitigation opportunities
- Develop a post disaster action plan that includes a grant funding and debris removal components
- Utilize warning systems
- Educate builders and developers on seismic construction standards
- **Nature-based opportunities:**
 - Adopt land use regulations and policies that restrict or prohibit development in areas with high liquefaction susceptibility and preserve these areas for open space uses

Extreme Temperature**EXTREME TEMPERATURE****Mitigation Ideas**

- **Manipulate the hazard:**
 - None
- **Reduce exposure and vulnerability to the hazard:**
 - Insulate structure
 - Provide redundant power.
 - Air condition non-conditioned buildings
 - Install backup heat (e.g. wood burning stoves)
 - Air condition public buildings
 - Create redundancy to power supply to deal with power grid vulnerability during high demands
- **Build local capacity to respond to or prepare for the hazard:**
 - Be aware of impending heat and cold waves
 - Inform public on the do's and don'ts during heat and cold waves
 - Have fans available for use during peak demands in lieu of air conditioning
 - Install back-up generators
 - Know the location of cooling and warming shelters
 - Inform employees of the seriousness of heat and cold waves
 - Monitor weather forecasts
 - Establish a COOP
 - Identify populations vulnerable to extreme heat and cold (elderly, poor) for early warning during potential heat and cold waves
 - Enhance weather forecasting capability
 - Distribute fans and heating sources to vulnerable populations

**EXTREME TEMPERATURE**

- Promote selective approaches to cooling your residences and businesses during peak demands
- **Nature-based opportunities:**
 - Incorporate "green building" methods (e.g. green roofs)
 - Plant native vegetation and appropriate trees near home ("Right tree, right place" National Arbor Day Foundation Program)
 - Solutions that convert built environments to natural environments such as forests, wetlands, and vegetation

Flood**FLOOD****Mitigation Ideas**

- **Manipulate the hazard:**
 - Clear stormwater drains and culverts
 - Providing retention and detention areas
 - Structural flood control: levees, dams, channelization, revetments.
 - Construct regional stormwater control facilities
 - Separate CSOs
 - Permeable pavement
- **Reduce exposure and vulnerability to the hazard:**
 - Locate or re-locate personal residences, businesses, and critical facilities outside of hazard area
 - Relocate critical infrastructure, such as power lines, underground
 - Institute low impact development techniques on property
 - Retrofit existing structures and utilities above Base Flood Elevation (BFE) and Design Flood Elevation (DFE)
 - Floodproof existing structures and when new critical infrastructure must be located in floodplains (wet- or dry floodproofing)
 - Store hazardous materials above BFE or outside of flood prone areas
 - Build redundancy for critical functions/ retrofit critical buildings
 - Harden structures and infrastructure (wet and dry-floodproofing)
 - Acquire or relocate identified repetitive loss properties
 - Adopt land development criteria such as PUD's, density transfers, clustering
 - Pass an ordinance to incorporate additional zoning classifications into flood zones within each municipality
 - Increase floodplain standards within municipality
 - Provide redundancy for critical functions and infrastructure
 - Adopt appropriate regulatory standards such as cumulative substantial improvement/damage, freeboard, lower substantial damage threshold, compensatory storage
 - Enhance stormwater management regulations
 - Add a Flood and/or a Utility Master Plan element to master planning
 - Adopt "no-adverse impact" floodplain management policies that strive to not increase the flood risk on down-stream communities.
 - Participate in the Community Rating System (CRS)

**FLOOD**

- Implement as-built regulatory requirements
- Implement site review ordinances/requirements
- Incorporate retrofitting/replacement of critical facilities and infrastructure in Capital Improvement Plans (CIPs)
- Purchase flood insurance
- Support sustainable and resilient land use and community development
- Recognize sea level rise and erosion areas as a hazard overlay for planning
- Limit new development and critical infrastructure inside the sea level rise area
- Develop design standards for development inside sea level rise hazard area
- Incentivize improved flood risk management
- ***Build local capacity to respond to or prepare for the hazard:***
 - Develop household mitigation plan, such as retrofit savings, communication capability with outside, 72-hr. self-sufficiency during and after an event
 - Buy flood insurance; encourage property owners to purchase flood insurance
 - Improve awareness of hazard and insurance options
 - Increase capability by having cash reserves for reconstruction
 - Develop and adopt a Continuity of Operations Plan (COOP)
 - Solicit "cost-sharing" through partnerships with private sector stakeholders on projects with multiple benefits.
 - Dam owner/operators should continue to be aware of and understand dam inspection and reporting requirements.
 - Ensure that all dam EAP's are kept in compliance with State regulations
 - Produce better hazard maps, and improve access to flood hazard mapping
 - Capture/survey "high-water" marks during flood events
 - Provide technical information and guidance on appropriate mitigation options available to businesses and homeowners
 - Enact tools to help manage development in hazard areas (stronger controls, tax incentives, information)
 - Establish an additional layer of zoning within flood hazard areas
 - Improve compliance with and enforcement of the NFIP Develop mitigation partnerships with regional stakeholders
 - Join Community Rating System (CRS) program, or improve level of participation in CRS
 - Develop and implement a public information strategy for flood hazard awareness, flood insurance (NFIP) and mitigation
 - Maintain existing data as well as gather new data needed to define risks and vulnerability.
 - Create a building and elevation inventory of structures in the floodplain
 - Identify flood prone areas that may be in need of new flood studies
 - Establish a program to identify and educate owners of flood-prone properties of potential mitigation options (e.g. elevations, relocations)
 - Charge a hazard mitigation fee on all new permits to create a hazard mitigation funding source for initiatives or grant cost share requirements.
 - Integrate floodplain management policies into other planning mechanisms within the planning area.
 - Establish a stormwater utility fee based on amount of impermeable surfaces that contribute to stormwater flooding
 - Establish a Stormwater Utility to deal with urban drainage/flooding issues

**FLOOD**

- Establish incentives to promote flood hazard mitigation of private property (e.g. permit fee waivers)
- Adopt ordinances/standards for cumulative damages and/or improvements
- Upgrade NFIP Floodplain ordinance, as well as other ordinances to current or above current standards
- Develop and adopt a COOP
- Join NWS "StormReady" Program
- Participate in county and regional training programs
- Provide additional training/certification to NFIP floodplain administrators and code officials
- Implement annual training to account for high turnover of municipal officials
- Maintain and enhance flood forecasting ability, including the establishment and maintenance of critical stream gages
- Promote awareness and participation in alert systems Support and participate in regional flood management efforts, such as the Flood Mitigation Task Force or similar efforts
- Support and implement hazard disclosure for the sale/re- sale of property in identified risk zones
- Provide continued and enhanced training for emergency responders
- Establish a revolving "bank" or budget line item to fund grant application support
- 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
- Provide trainings for FPA's on the NFIP/Floodplain Best Practices and also pursue CFM accreditation for municipal FPA's
- Build and maintain relationships to develop regional watershed/floodplain mitigation solutions
- Pursue grant funding opportunities to fund repairs of catchments and infrastructure on a proactive basis
- Explore grant funding opportunities related to climate change to fund mitigation projects
- Develop a Watershed Improvement Plan
- **Nature-based opportunities:**
 - Promote open space uses in identified high hazard areas via techniques such as: PUD's, easements, setbacks, greenways, sensitive area tracks
 - Acquire vacant land or promote open space uses in developing watersheds to control increases in runoff
 - Establish stream maintenance programs with stakeholders
 - Promote the use of vegetation/plants as green erosion control measures to reduce localized flooding
 - Build rain gardens
 - Develop guidance and checklist for developers to assist with integration and incorporation of green and sustainable approaches
 - Restore and reconnect floodplains that have been degraded by development and structural flood control
 - Preserve floodplain storage capacity by limiting or prohibiting the use of fill in floodplain
 - Lead and develop a county-wide stream clearing strategy including the development of thresholds for response/action.



Geologic Hazards

GEOLOGIC HAZARDS	
Mitigation Ideas	
<ul style="list-style-type: none">• Manipulate the hazard:<ul style="list-style-type: none">○ None• Reduce exposure and vulnerability to the hazard:<ul style="list-style-type: none">○ Consider hazard areas in land-use planning, zoning and development siting○ Acquire structures in highest hazard areas (demolish and convert to restricted open space)○ Relocation of structures in high risk locations for landslide or subsidence○ Open space preservation○ Consider hazard areas in land-use planning and development siting○ Stabilize vulnerable slopes near structures and infrastructure○ Work with stakeholders to develop appropriate risk reduction strategies• Build local capacity to respond to or prepare for the hazard:<ul style="list-style-type: none">○ Increase understanding of hazard areas (e.g. Landslide Susceptibility Maps) -geotechnical surveys, LIDAR and mapping○ Work with stakeholders such as USGS, NJDEP to develop appropriate risk reduction strategies○ Support and implement hazard disclosure for the sale/re- sale of property in identified risk zones○ Develop county-level programs to document slide events (landslide inventory), and maintain its currency• Nature-based opportunities:<ul style="list-style-type: none">○ Replace or restore native vegetation known to stabilize steep slope areas○ Hybrid solutions refer to conventional engineering solutions that are combined with nature-based solutions using appropriate vegetation	

Severe Weather

SEVERE WEATHER	
Mitigation Ideas	
<ul style="list-style-type: none">• Manipulate the hazard:<ul style="list-style-type: none">○ None• Reduce exposure and vulnerability to the hazard:<ul style="list-style-type: none">○ Retrofit structures (improved roofing, glazing, insulation, etc.)○ Provide for redundant heat and power○ Contact municipality or utilities to trim or remove trees that could affect power lines; trimming trees back from power lines○ Relocate critical infrastructure, such as power lines, underground○ Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations○ Harden infrastructure such as locating utilities underground○ Adopt ordinances that regulate the type and quantity of trees planted near utility lines• Build local capacity to respond to or prepare for the hazard:	

**SEVERE WEATHER**

- Improve awareness of impending severe weather (e.g. obtain a NOAA weather radio)
- Promote 72-hour self-sufficiency Provide for redundant heat and power
- Participate in NOAA's SKYWARN training to increase knowledge and awareness of hazard
- Create redundancy (e.g. backup generators)
- Develop a Continuity of Operations Plan (COOP)
- Monitor impending storm events so that you can release employees in such a manner as to not negatively impact emergency response personnel/services
- Support programs that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
- Increase communication alternatives
- Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines
- Promote awareness and participation in alert systems
- Provide NOAA weather radios to the public
- Create/Enhance "mutual aid" agreements for response to all emergencies
- Create/identify evacuation routes to be utilized during severe storm events.
- Develop debris management plans
- Join NWS "StormReady" program
- Provide early warning of impending severe storm events to identified critical or essential facilities
- Promote emergency power supplies to private property
- Improve, expand or harden communications facilities and services
- Recruit additional emergency personnel or use mutual aid agreements
- Increase sheltering capabilities
- Increase capability to respond to power outages and downed power lines
- Establish partnerships with utility providers through pro-active planning
- **Nature-based opportunities:**
 - Plant appropriate trees near home and power lines ("Right tree, right place" National Arbor Day Foundation Program)
 - Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors

Severe Winter Weather**SEVERE WINTER WEATHER****Mitigation Ideas**

- **Manipulate the hazard:**
 - None
- **Reduce exposure and vulnerability to the hazard:**
 - Insulate homes to provide greater thermal efficiency and reduce heat loss
 - Provide redundant heat and power
 - Ensure natural gas input/release valves do not get covered in snow
 - Relocate critical infrastructure, such as power lines, underground
 - Reinforce or relocate critical infrastructure such as powerlines so that it meets performance expectations

**SEVERE WINTER WEATHER**

- Install tree wire
- Harden infrastructure such as locating utilities underground where appropriate.
- Trimming trees back from power lines
- Designate snow routes and strengthen critical road sections and bridges
- Adopt codes and regulations that address the issues of parking of vehicles along roadways during severe weather events
- Develop or enhance the capacity/capability of stormwater conveyance systems
- Provide backup power sources at vital critical facilities
- ***Build local capacity to respond to or prepare for the hazard:***
 - Trim or remove trees that could affect power lines
 - Enforce building codes to withstand wind speeds
 - Prepare emergency food and supplies to be self-sufficient for at least 72 hours in the event of a severe winter storm
 - Be aware of inclement weather conditions and move your vehicles off of the street as severe weather systems approach
 - Retrofit structures
 - Create redundancy in utilities and communications
 - Develop a Continuity of Operations Plan (COOP) to address operations before, during and after coastal storm events
 - Utilize weather radios at the workplace to keep your employees aware of severe weather conditions
 - Support programs such as "Tree Watch" that proactively manage problem areas by use of selective removal of hazardous trees, tree replacement, etc.
 - Establish and enforce building codes that require all roofs to withstand snow loads-- Develop/Improve/Enforce building Codes in Hazard Areas
 - Increase communication alternatives
 - Modify landscape and other ordinances to encourage appropriate planting near overhead power, cable, and phone lines
 - Provide weather radios to vulnerable populations
 - Enhance public awareness campaigns to address those issues of alert and warning and actions to take during severe weather events.
 - Utilize the best available technology to enhance the warning systems for all severe weather events
 - Coordinate severe weather warning capabilities and the dissemination of warning amongst those agencies within the planning are with the highest degree of capability.
 - Increase tree management programs
 - Join NWS "StormReady"
 - Retrofit critical structures and promote hazard resistant construction
 - Keep open communications and education of hazards for mobile home communities
 - Retrofit above-ground utilities to underground facilities if appropriate
 - Create a salt reserve or research alternates to stretch salt reserve
 - Ensure accessibility to hospitals and other critical facilities
 - Provide better debris logistics and removal
 - Provide better communication systems and back-up communication systems to inform public of hazards and to communicate during the hazard event
- ***Nature-based opportunities:***

**SEVERE WINTER WEATHER**

- Plant appropriate trees near home and power lines (“Right tree, right place” National Arbor Day Foundation)
- Modify land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors
- Encourage local ordinances for planting tree near lines and join Tree City USA

Wildfire**WILDFIRE****Mitigation Ideas**

- **Manipulate the hazard:**
 - None
- **Reduce exposure and vulnerability to the hazard:**
 - Create, clean and maintain defensible space around structures and infrastructure
 - Provide water onsite
 - Locate outside hazard area
 - Use fire-retardant building materials
 - Higher regulatory standards
 - Establish water main supply and hydrants in unhydranted areas
 - Decrease hydrant spacing
- **Build local capacity to respond to or prepare for the hazard:**
 - Employ Firewise techniques to safeguard your home
 - Identify alternative water supply points proximate to your home such as swimming pools, lakes, streams
 - Support local fire department
 - Be aware of weather conditions that support/enhance the probability of wildfires
 - Support Firewise community initiatives
 - More public outreach and education efforts including an active “Firewise” program
 - Identify fire response and alternative evacuation routes Seek alternative water supplies in urban wildland interface areas
 - Become a “Firewise” community
 - 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
 - Develop/implement wildfire management plans
 - Establish Mutual Aid Agreements with the Tender Task Force
 - Attend the Tender Apparatus Response Plan (TARP) training conducted by Kean University
 - Develop a Water Supply Plan
- **Nature-based opportunities:**
 - Manage invasive species that are susceptible to increased wildfire risk
 - Incorporate nature-based wildfire risk reduction buffers into existing ecosystem-friendly land uses (e.g., green space, trails, or community parklands)
 - Implement and fund ecological thinning and prescribed fire and cultural fire and, where appropriate, manage wildfire for resource benefit



APPENDIX G: PLAN MAINTENANCE TOOLS

This appendix includes an annual progress report template to facilitate plan maintenance and review by the Essex County Steering Committee and Planning Partnership.



Essex County, New Jersey
2025 Hazard Mitigation Plan
Annual Progress Report

Jurisdiction: *(Insert jurisdiction name)*

Reporting Period: *(Insert reporting period)*

Background: Essex County developed a Hazard Mitigation Plan (2025 HMP) to reduce risk from flooding by identifying resources, information, and strategies for risk reduction. To prepare the 2025 HMP, the County organized resources, assessed risks from hazards, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from hazard events. The 2025 HMP can be viewed on-line at:

INSERT WEBSITE

Summary Overview of the Plan's Progress: The performance period for the 2025 HMP began on , 2025, with the final approval of the plan by FEMA. The initial performance period will be 5 years, with an anticipated update to the plan to occur before , 2030. As of this reporting period, the performance period is considered to be % complete. The 2025 HMP has targeted *(number of jurisdiction actions)* hazard mitigation actions to be pursued by *(Insert jurisdiction name)* during the 5-year performance period. As of the reporting period, the following overall progress can be reported:

- out of actions (%) were reported as being in progress toward completion.
- out of actions (%) were reported as being complete.
- out of actions (%) were reported as ongoing capabilities that are now completed on a regular or annual basis.
- out of actions (%) reported no action taken.

Purpose: The purpose of this report is to provide an annual update on the implementation of the action plan identified in the 2025 HMP. The objective is to ensure that there is a continuing and responsive planning process that will keep the 2025 HMP dynamic and responsive to the needs and capabilities of the County and stakeholders. This report discusses the following:

- Mitigation success stories
- Review of the action plan

Mitigation Success Stories: *(Insert brief overview of mitigation accomplishments during the reporting period)*



Review of the Action Plan: Table 1 reviews the action plan, reporting the status of each action. Reviewers of this report should refer to the 2025 HMP for more detailed descriptions of each action and the prioritization process.

Address the following in the "status" column of the following table:

- *Was any element of the action carried out during the reporting period?*
- *If no action was completed, why?*
- *Is the timeline for implementation for the action still appropriate?*
- *If the action was completed, does it need to be changed or removed from the action plan?*

Table 1. Action Plan Matrix

Action Take? (Yes or No)	Timeline	Priority	Status (X, O, ✓)	Comment
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				



Action Take? (Yes or No)	Timeline	Priority	Status (X, O, ✓)	Comment
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				
Action #__—[description]				

Completion status legend:
✓= Project Completed
O = Action ongoing toward completion
X = No progress at this time



APPENDIX H: LINKAGE PROCEDURES

1.1 ADMINISTRATIVE PROCESS FOR "LINKAGE" TO THE ESSEX COUNTY HAZARD MITIGATION PLAN

Even though that initial development of the Essex County Hazard Mitigation Plan (HMP) included all municipalities in the County, not 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 governments and other 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 Essex 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 of these non-participating local governments may choose to "link" to the plan at some point in time to gain eligibility for programs under the Disaster Mitigation Act (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 Essex 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.

1.2 INCREASING THE PARTNERSHIP THROUGH LINKAGE

1.2.1 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 DMA.
- 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 and lifelines were included in the critical facility, lifeline and infrastructure risk assessment completed during the 2025 plan development process.

1.2.2 Requirements

It is expected that linking jurisdictions will complete the requirements outlined below and submit their completed template to the Hazard Mitigation Planning Coordinator - Essex County Office of Emergency Management – for review within six months of beginning the linkage process:



1. The Essex County 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 Essex County Hazard Mitigation Planning Coordinator for the plan and requests a "Linkage Package". The Essex County Hazard Mitigation Planning Coordinator is:

Sergeant Ryan Peter
Essex County Office of Emergency Management
560 Northfield Road
West Orange, New Jersey 07052
Essexoem@EssexSheriff.com

3. The Essex County Hazard Mitigation Planning Coordinator will provide a linkage package that includes:
 - o Copy of Volume 1 and 2 of the plan (electronic)
 - o Planning Partner's Expectations Sheet
 - o A Sample "Letter of Intent" to Link to the Plan
 - o A Jurisdictional Template and Instructions
 - o Catalog of Hazard Mitigation Alternatives or the Mitigation Catalog
 - o 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:
 - o The Essex County risk assessment
 - o The plan's goals and objectives
 - o Plan implementation and maintenance procedures
 - o Catalog of potential mitigation actions
 - o 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 Essex County Hazard Mitigation Planning 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 Essex County Hazard Mitigation Planning Coordinator or any other resource within the Planning Partnership such as a member of the HMP Steering Committee, Planning Partnership, or a currently participating jurisdiction. The Essex County Hazard Mitigation Planning 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 1 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 1 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 Essex County Hazard Mitigation Planning Coordinator for a pre-adoption review to ensure conformance with the Regional plan format.
7. The Essex County Hazard Mitigation Planning Coordinator will review for the following:
 - o Documentation of public involvement and mitigation action development strategies
 - o Conformance of template entries with guidelines outlined in instructions
 - o Chosen actions are consistent with goals, objectives, and mitigation catalog of Essex County Hazard
 - o Mitigation Plan
 - o Designated point of contact

The Essex County Hazard Mitigation Planning Coordinator may utilize members of the HMP Planning 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 – Mitigation Unit (NJOEM).

8. Plans approved and accepted by the HMP Planning 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 2 reviews the new jurisdiction's plan in association with the approved plan to ensure DMA compliance. Region 2 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 2 review or outstanding corrected shortfalls, the new jurisdiction governing authority adopts the plan (if not already accomplished) and forwards adoption resolution to Region 2 with copies to lead agency and NJOEM.
13. Region 2 Director notifies new jurisdiction governing authority of plan approval.

The new jurisdiction plan is then included with Essex County HMP and the linking jurisdiction is committed to participate in the ongoing plan implementation and maintenance identified in Volume 1 of the HMP.



APPENDIX I: CRITICAL FACILITY INVENTORY

The critical facility inventory is a non-public facing appendix for the 2025 Essex County HMP. The appendix documents the critical facilities identified and analyzed for the 2025 risk assessment.



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