

## 9.10: City of Estell Manor – Jurisdictional Annex

### Summary of Hazards and Actions

Summary of Hazard Ranking and Actions, City of Estell Manor			
Hazard	Hazard Ranking	# of Related Actions	Action #s
<b>Atmospheric Hazards</b>			
Extreme Temperatures	M	6	3, 5, 6, 7, 8, 9
Extreme Wind	M	6	3, 5, 6, 7, 8, 9
Hail	L	6	3, 5, 6, 7, 8, 9
Hurricane & Tropical Storm	H	6	3, 5, 6, 7, 8, 9
Lightning	L	6	3, 5, 6, 7, 8, 9
Nor'easter	M	6	3, 5, 6, 7, 8, 9
Tornado	L	6	3, 5, 6, 7, 8, 9
Winter Storm	M	6	3, 5, 6, 7, 8, 9
<b>Hydrologic Hazards</b>			
Coastal Erosion	M	6	3, 5, 6, 7, 8, 9
Sea Level Rise	H	6	3, 5, 6, 7, 8, 9
Dam Failure	L	6	3, 5, 6, 7, 8, 9
Levee Failure	N/A		
Drought	L	6	3, 5, 6, 7, 8, 9
Flood	H	7	2, 3, 5, 6, 7, 8, 9
Tsunami	L	6	3, 5, 6, 7, 8, 9
Storm Surge	M	6	3, 5, 6, 7, 8, 9
Wave Action	L	6	3, 5, 6, 7, 8, 9
<b>Geologic Hazards</b>			
Earthquake	L	6	3, 5, 6, 7, 8, 9
<b>Other Natural Hazards</b>			
Wildfire	M	7	1, 3, 5, 6, 7, 8, 9

## Mitigation Strategy for Risk Reduction

Overview of Municipal Mitigation Strategy, City of Estell Manor				
Project Number	Project Description	Hazard(s) Addressed	Priority	Goals
1	Install Dry Hydrants	Wildfire	H	3
2	Drainage improvements - storm drains throughout the city	Flood	L	3
3	Public Outreach	All	H	1
5	State building codes - code enforcement ( <b>Action 4 in 2016 Plan</b> )	All	M	4
6	Incorporate hazard mitigation concepts into the master plan	All	M	2
7	County website updates	All	H	1
8	Conduct workshops on hazards and hazard mitigation	All	L	2
9	Add into master plan - information on hazards and hazard mitigation	All	H	4

More detailed information on these individual actions is presented at the end of this annex.

## Contact Information

City of Estell Manor's Statement of Authority to Participate identified a Primary Point of Contact and an Alternate for this hazard mitigation plan update. These individuals represented the jurisdiction on the county-wide Core Planning Group and led a local team of Jurisdictional Assessment Team Members who undertook various local activities related to the plan update.

HAZARD MITIGATION PLAN POINTS OF CONTACT						
Primary Point of Contact			Alternate Point of Contact			
Name: Jay Repko Title: Emergency Management Coordinator Department: Emergency Management Address: 981 11 <sup>th</sup> Avenue, Mays Landing, NJ 08330 Phone Number: 609-204-9750 E-mail Address: jrepko@estellmanor.org			Name: Jeff Cornew Title: Foreman Department: Public Works Address: 148 Cumberland Avenue, Estell Manor, NJ 08319 Phone Number: 609-476-2692 E-mail Address: publicworks2@estellmanor.org			
Jurisdictional Assessment Team Members						
Please fill in the contact details for the person filling in this page:						
Name:	Jay Repko					
Title:	OEM Emergency Management Coordinator					
Community Name:	Atlantic County, NJ					
County:	Atlantic County, NJ					
Email:	jrepko@estellmanor.org					
Phone:	609 204-9750					
*Note: If your community does not have someone filling the role of a position title in Column A, please insert the word "none" in Column B. Thank you.						
Local Jurisdiction Role/Position	Name	Email	Phone	Date of Invitation	Method of Invitation	Agreed to participate?
Mayor/Supervisor Administrator	Joseph Venezia	jvenezia@estellmanor.org	609 703-4017	01/13/21	Phone	Yes
Clerk	Jud Moore	cityclerk@estellmanor.org	609 476-2692	01/13/21	Office Visit	Little as needed
Engineer	Michael Fralinger	info@fralinger.com	609 451-2990	08/03/21	Phone call	Tech Support
Attorney	Randolph Lafferty	rlafferty@cooperlevenson.com	609 572-7390			
Building Code Official	Wayne Caregnato	zoning@estellmanor.com		07/28/21	Office Visit	Annually
Emergency Manager	Jay Repko	jrepko@estellmanor.org	609 204-9750			
Fiscal/Budget Officer	Judson Moore	finance@estellmanor.org	609 204-2692	01/13/21	Office Visit	Little as needed
Floodplain Manager						
Planner						
Public Works Director	Jeff Cornew	publicworks2@estellmanor.org	609 476-2692	01/13/21	Office Visit	Yes
Other						

City of Estell Manor has reported undertaking the following internal activities in preparation of its mitigation plan:

Subject of JAT Activity (Meeting Notice, Emails, Etc.)	Date	INVOLVED PARTIES - Place an 'x' for any position title that participated										
		Mayor/ Supervisor	Administrator	Clerk	Engineer	Attorney	Building Code Official	Emergency Manager	Fiscal/Budget Officer	Floodplain Manager	Planner	Public Works Director
Authenticate Process	01/13/21	x		x								
Prescribed burn of local Forest to mitigate fires	01/14/21	x		x								x
Prescribed Burn more areas in Estell Manor	01/20/21	x		x								x
Winter Weather Advisory and Planning	01/29/21	x		x								x
Snow Plow operators	01/30/21	x		x								x
Snow Response Synopsis Lessons Learned	02/03/21	x		x								x
FEMA Youth Preparedness Council	02/03/21							x				x
Snow Storm Cost Estimate	02/04/21	x										
EMC EIN & DUN Number for filing papers	02/11/21			x								x
Snow Response Cost estimate	02/21/21	x		x								x
Executive Order Capacity Limits for events	02/23/21	x		x								
Executive Order for Wedding Receptions & Utility Shutoffs	03/05/21	x		x								
K-12 School Reopening Guidance	04/01/21	x		x								
Multijurisdictional Hazard Plan	05/25/21	x		x								x
Attend County Meeting	07/15/21											
Contact Anna Foley regarding plan	07/15/21											
Receive comments from Ann Foley	07/16/21											
Discuss Plan inhouse	09/20/21											x

## Governing Body Format

The city's governing body is comprised of a mayor and a four-member City Council. The mayor is directly elected to a four-year term of office and the city council members are elected at-large in partisan elections to serve three-year terms in office on a staggered basis with either one or two seats up for vote as part of the November general election in a three-year cycle.

## Land Use and Development Trends

An evaluation of growth and development trends was undertaken by each participating jurisdiction as part of the development of the initial plan in 2010, and the last update in 2016. As part of this second plan update, City of Estell Manor reviewed and updated its prior feedback to reflect current conditions as of mid-2021. The City of Estell Manor reported no major planned development in their jurisdiction.



### Atlantic County Multi-Jurisdictional Hazard Mitigation Plan Update *Worksheet #3 – Growth and Development Trends Update*

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Performing an assessment of Growth and Development Trends is one step of a FEMA-approved hazard mitigation plan update. This look into the future is important because development in hazard areas could put more assets at risk and, in turn, could work to increase potential disaster-related damages at a time when the mitigation plan's purpose is to reduce the potential for damages emanating from natural disasters. Growth/development trends are based on the construction of new buildings, demolition of old buildings, or the planning, zoning or subdivision of new areas for development. A stagnant or decreasing population alone is not reason for stating that no development has occurred, unless backed up by a lack of development.

An evaluation of growth/development trends was undertaken by each participating jurisdiction as part of the development of the 2016 plan. Your municipality's prior response from 2016 is included on the next page in Part 1. Please review your community's prior feedback and identify any changes that have occurred since that time so the most current information can be reflected in this 2021 plan update. In addition, please provide responses for Part 2.

Information for the 2016 plan was provided to us by: Wayne Caregnato, Zoning Officer, Floodplain Administrator

|

Your Name: [ Wayne Caregnato ]

Title: [ Zoning Officer ]

Community: [ City of Estell Manor ]

Email and Phone: [ [zoning@estellmanor.org](mailto:zoning@estellmanor.org) (609) 476-2692 x104 ]

Part 1 – Please update your response from 2016 to reflect current conditions in the community.

Community	<p><b>1. Land Uses and Development Trends in Hazard Areas as Reported in the 2016 Plan.</b> Please describe development trends occurring within your jurisdiction, such as the predominant types of development occurring, location, expected intensity, and pace by land use. While details are preferred, it is ok if your feedback is qualitative and quite general, such as "high-occupancy, high-density residential development is occurring near the waterfront".</p>	<p><b>1a. Please update your response to reflect conditions in 2021</b></p>	<p><b>Regulations/Codes/Ordinances To Protect New Development From Natural Hazards as Reported in the 2016 Plan.</b> Does your jurisdiction enforce regulations/ordinances/codes to protect new development from the effects of natural hazards? (Some examples might be floodplain management ordinances enforcing FEMA's NFIP for new development or substantial improvements in the floodplain; steep slope ordinances for community's which may have landslide hazards; earthquake resistant design criteria and/or high wind design criteria; or buffer zones in wildfire hazard areas.) If so, please describe.</p>	<p><b>2a. Please update your response to reflect conditions in 2021</b></p>
<p>Estell Manor, City of</p>	<p>A) Single Family Residential Development is occurring in presently undeveloped woodlands. 1) Low density all Pinelands Approvals and CAFRA approvals needed. A) Entire community Pinelands or CAFRA.</p>	<p>A) Single Family Residential Development is occurring in undeveloped woodlands. 1) Low density all Pinelands &amp; CAFRA approvals are verified. Some redevelopment of old abandoned property as property values rise.</p>	<p>We enforce all Pinelands and CAFRA regulations &amp; recommendations. All FEMA information is reviewed. We enforce Wetlands buffer and setbacks.</p>	<p>We enforce all Pinelands and CAFRA regulations &amp; recommendations. FEMA information is reviewed. We enforce Wetlands buffer and setbacks.</p>

## National Flood Insurance Program Summary

City of Estell Manor has participated in FEMA's National Flood Insurance program (NFIP) since 1978.

National Flood Insurance Program Data City of Estell Manor	
Total number of policies <sup>1</sup>	3
Insurance in force <sup>2</sup>	\$728,000
Total number of losses during NFIP participation	3
Total claims paid during NFIP participation	\$28,870
Non-Mitigated Repetitive Loss Properties	0
Non-Mitigated Severe Repetitive Loss Properties	0

Estell Manor does not participate in the NFIP's Community Rating System (CRS).

Estell Manor provided the following NFIP Administrator Input in 2021, for inclusion in the 2022 Plan.

<sup>1</sup> Policies in Force from www.fema.gov NFIP Insurance Report, data current as of 06/03/21.

<sup>2</sup> Insurance in Force from www.fema.gov NFIP Insurance Report, data current as of 06/03/21

Name: [ WayneCaregnato ] Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator

Community: [ City of Estell Manor ] Email and Phone: [ zoning@estellmanor.org (609) 476-2692 x104 ]



### Atlantic County Multi-Jurisdictional Hazard Mitigation Plan Update - *Worksheet #2 - NFIP*

*Note: Data showing in the form at this time was provided for the 2016 plan by: Wayne Caregnato. This form should be updated by your floodplain administrator.*

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP <sup>1</sup>	Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person is a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
[ Oct, 2014 ]	[ 11/3/78 ]	[ Zoning Officer, Flood Plain Administrator ]		[ ] Yes [ X ] No	[ ] Yes [ X ] No	[ X ] Yes [ ] No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
[ Flood Plain evaluations are certified as a pre-approval to construction permits ]							
Describe barriers to running an effective NFIP program in the community (if applicable):							
[ None ]							
When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?*	Is a CAV or CAC scheduled or needed?	Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how.	Is training of staff regarding NFIP issues planned?	Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)?	Does your community participate in the CRS? If so, state your Class.	Does your community intend to continue its participation in the CRS program?	If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle?
[ ]	[ ] Yes [ X ] No	[ X ] Yes [ ] No	[ X ] Yes [ ] No	[ ] Yes [ X ] No **	[ ] Yes* [ X ] No * Class [ ]	[ ] Yes [ X ] No	[ ] Yes [ X ] No
*Describe any outstanding compliance issues (i.e., current violations):							
[ ** Regarding question above** With certified flood plan, the state required to enforce ]							

Name: [ WayneCaregnato ] Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator

Representing: [ City of Estell Manor ] Email and Phone zoning@estellmanor.org (609) 476-2692 x104



**Provide an explanation of your local floodplain permitting process:**

[We issue flood plan certificates as a preapproval to development permits

Does your community intend to continue floodplain identification and mapping services including any local requests for map updates?	Does your community intend to initiate/continue the buyouts of repetitive loss properties?	Does your community intend to commit staff or resources to improve local mapping or code administration in the future?	Does your community intend to provide local outreach to promote the sale of flood insurance?	Does your community intend to participate in RiskMAP meetings and planning initiatives?	Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.?	Does your community intend to continue to implement home improvement programs designed to minimize basement flooding?	Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events?	Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does your community intend to adopt the new FEMA Advisory Base Flood Elevations?	As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan?		As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update?		Have there been any changes to your community's local floodplain management program since the last version of the plan?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

\* If you answered "yes", that there have been changes to your local program since the last version of the plan, please describe:

[We have adopted a flood plain administrator

**Provide a description of your community assistance and monitoring activities:**

[We are involved with the latest risk maps including mitigation of hazards

NFIP participating communities are required to update/revise their floodplain management ordinance to ensure that it complies with the latest FEMA regulations. Will your community continue to commit to this program requirement?	NFIP participating communities are also required to update/revise their floodplain management ordinance to be consistent with the latest FIRMs. Will your community continue to commit to this program requirement?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Note: All NFIP participating communities should encourage local residents to purchase and maintain flood insurance.

### Critical Facilities in Delineated Hazard Areas

Note that all assets and facilities in the City of Estell Manor are considered to be at risk from County-wide hazards: Hurricane/Tropical Storm, Nor' easter, Extreme Wind, Tornado, Winter Weather, Lightning, Extreme Temperatures and Earthquake.

Facility Name	Location	Facility Type	Flood, A Zone	Flood, V Zone (Wave)	Category 1-4 Storm Surge	Coastal Erosion	Sea Level Rise, 1 Ft	Sea Level Rise, 3 Ft	Dam Failure	Low to Moderate Wildfire	High to Extreme Wildfire
<b>City of Estell Manor</b>											
Estell Manor - Station 12-5	Cape May Avenue	Fire Station	0	0	0	0	0	0	0	0	0
City Hall	148 Cumberland Ave	Public Works	1	0	0	0	0	0	0	1	0
Estell Manor School	128 cape may Avenue	School	0	0	0	0	0	0	0	0	0
<b>Total</b>			<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

## Summary of Estimated Potential Losses from Hazards

Estimated annual losses provided in this section are based on best available data, and the methodologies applied result in an approximation of risk. Loss estimates should be used to understand relative risk from hazards.

Uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from approximations and simplifications that are necessary for a comprehensive analysis (i.e., incomplete inventories, demographics or economic parameters).

It is important to note that this table reflects estimates of average annual damages. For any hazard, individual event damages could be substantially (orders of magnitude) higher.

Only hazards for which annual losses were quantified and presented in Section 3C are included in this table.

Summary of Estimated Potential Losses From Hazards		
City of Estell Manor		
Quantified Hazard	Annualized Loss	Annual Loss Ratio
Extreme Wind	\$38,000	0.033%
Hurricane and Tropical Storm	\$110,000	0.040%
Lightning	\$300	0.000%
Tornado	\$100	0.000%
Drought*	\$115,000	5.000%
Winter Storm	\$1,000	0.001%
Coastal Erosion	\$0	0.000%
Flooding (Riverine)	\$1,000	0.000%
Storm Surge (Coastal Flooding)	\$77,000	0.030%
Earthquake	\$4,000	0.002%

\*Derived from crop values

## Outreach to the Public and Other Stakeholders

The City of Estell Manor did not submit a record of Outreach to the public and other stakeholders.

## Capability Assessment

This section describes the following capabilities of City of Estell Manor :

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community resiliency
- Community political capability

As part of the 2022 Plan update, each participating jurisdiction reevaluated the capabilities they had provided for the 2016 Plan, and sent updates to the consultant for incorporation into this plan section. City of Estell Manor has reviewed its responses from the 2016 Plan and has updated its prior feedback to reflect present-day conditions.

Legal and Regulatory Capability	
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this?
Building Code	Y
Zoning Ordinance	Y
Subdivision Ordinance	Y
Special Purposes Ordinance	N
Growth Management Ordinance	N
Site Plan Review Requirements	Y
Comprehensive Plan	Y
Capital Improvements Plan	N
Economic Development Plan	N
Emergency Response Plan	Y
Post-Disaster Recovery Plan	N
Post-Disaster Recovery Ordinance	N
Real Estate Disclosure Ordinance	N
Evacuation Plan	Y

<b>Administrative and Technical Capability</b>	
<b>Regulatory Tools (Codes, Ordinances, Plans)</b>	<b>Do you have this?</b>
Planner(s) with knowledge of land development and management practices	N
Engineer(s) with knowledge of land development and management practices	Y
Planner(s) or engineer(s) with knowledge of land development and management practices	Y
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y
Planner(s) or engineer(s) with an understanding of natural and/or human caused hazards	Y
Floodplain manager	N
Surveyors	Y
Staff with education or expertise to assess the community's vulnerability to hazards	N
Personnel skilled in GIS and/or HAZUS	N
Scientists familiar with the hazards of the community	N
Emergency Manager	Y
Code Enforcement Official	Y
Public Works or Highway Superintendent	Y
Emergency Management Coordinator	Y

<b>Fiscal Capability</b>	
<b>Financial Resources</b>	<b>Accessible or Eligible to use</b>
Community Development Block Grants (CDBG)	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for Specific Purposes	N
Fees for Water, Sewer, Gas, or Electric Service	N
Impact Fees for Homebuyers or Developers for New Developments/Homes	N
Incur Debt through General Obligation Funds	N
Incur Debt through Special Tax and Revenue Bonds	N
Incur Debt through Private Activity Bonds	N
Withhold Spending in Hazard-Prone Areas	N
Other (i.e., coastal, sustainability, or climate change initiatives; or Brownfield funds)	N

Would you classify your community's <u>legal and regulatory</u> capability to implement hazard mitigation strategies as high, moderate, or low?	Would you classify your community's overall <u>technical</u> capability to implement hazard mitigation strategies as high, moderate, or low?	Would you classify your community's overall <u>fiscal</u> capability to implement hazard mitigation strategies as high, moderate, or low?	Would you classify your community's overall <u>administrative</u> capability to implement hazard mitigation strategies as high, moderate, or low?	Would you classify your political leadership's willingness to enact policies and programs that reduce hazard vulnerabilities in your community as high, moderate, or low - <u>even</u> if met with opposition? (i.e., guiding development away from identified hazard areas)?
moderate	moderate	low	moderate	moderate
Discuss ways of bridging identified gaps in your local capabilities to ensure that they are in-line with your mitigation actions and goals.				
<p><u>Specifically</u> regarding the city of Estell Manor ability to implement Hazard Mitigation</p> <p>From the perspective of our fiscal capability. The city is a community with very limited ability</p> <p>To take in revenue. We rely on residential properties limited to develop rateables</p> <p>Properties our 54 SQ miles is 65% state owned and we receive limited grant monies</p> <p>From this we also are host to the county (Atlantic). This is a significant constraint from</p> <p>Our fiscal ability to dedicate toward Hazard Mitigation impacts areas above identified</p> <p>Above as moderate as well as many other areas of concern identified throughout</p> <p>All areas of the work sheets regarding Hazard Mitigation</p>				

## Plan Integration

It is the intention of City of Estell Manor to incorporate mitigation planning as an integral component of daily municipal operations. The balance of this subsection describes local accomplishments over the last planning cycle (2016-2021), and targeted activities for the next planning cycle (2022-2027), as reported by the city's CPG member and shared with the consultant for incorporation here.

Demonstration of Progress over the Last Planning Cycle (2016-2021) – City of Estell Manor undertook the following plan integration mechanisms over the last planning cycle:

*We have held training for staff to develop safe work skills and learn how to operating Snow Plow and salt equipment.*

Targeted Plan Integration Activities for the Next Planning Cycle (2022-2027) – City of Estell Manor plans to implement the following plan integration mechanisms into local government operations from this point forward through the next planning cycle:

*We plan to revise our SOP for preparing for snow events. We will revise our SOP for responding to down trees.*

## **Mitigation Strategy**

This subsection sets forth the mitigation strategy for City of Estell Manor. It describes, in the following order:

- Progress on 2016 Plan Actions
- Hazard Mitigation Accomplishments
- Proposed 2022 Plan Mitigation Actions
- Action Worksheets

### **Progress on 2016 Plan Actions**

The following table was completed by the City of Estell Manor JAT Committee Members. It summarizes the progress that was made on the local hazard mitigation initiatives that were set forth in the last version of the plan in 2016.

City of Estell Manor continues to improve city services and modernize with the times. EMC has Ordinances and plans to ensure slow controlled growth and protection of citizens as well as forest and water resources.

PROGRESS ON 2016 HAZARD MITIGATION PLAN INITIATIVES												
2016 Plan Initiative Number	Mitigation Initiative Description	2016 Plan Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
1	Install Dry Hydrants	High	Wildfire	Estell Manor Fire Department			X		Previous estimates to install revealed funding is the obstacle. Additionally NJDEP required permits to build in wetlands which adds to the already high cost of construction.	x		This project continues to be relevant. One of the lakes identified as a drafting source is owned by the NJDEP, Fish and Wildlife. Their ownership mandates communication and securing permits to build drafting structure in wetlands. Our ability to raise revenue is very limited. Projects such as this place a strain on the communities budget.
2	Drainage improvements - storm drains throughout the city	Medium	Flooding	Engineer			X		Estell Manor City Hall, Elementary School and Soccer Field at Corner of Cumberland and Cape May Avenues were built using NJDEP approved plans and Stormwater Best Management Practices.	x		Cape Atlantic Soil Conservation District approved structures installed @ City Soccer fields. No flooding because stormwater best management practices and annual maintenance of recharge basins.
3	Hold public education	High	All	Council			X		Estell Manor has updated its entire web site. The website identifies all major city departments, Meeting dates, calendar of events, Mayor and Council and list means to contact city officials.	x		Emergency Management tips are listed to educate the public on how to prepare and react to an emergency. Stormwater Management guidance which follow NJDEP Best Management Practices are listed.
4	Enforce state building codes - code enforcement	Medium	All	Code enforcement			X		Administrative legislation is posted on website Ordinances section. Hazard mitigation is addressed in Emergency Management, Fire Dept Construction Code, Stormwater Mgt, Numbering of Property, Property (Abandoned) Solid Waste Mgt	x		Zoning and Code officials are required to complete course on NJ Municipal Land Use Law and take continuing education (CU) units to maintain competencies.
5	Enforce state building codes - code enforcement	Medium	All	Code enforcement			X		Duplicate		x	This appears to be a duplicate with #4

PROGRESS ON 2016 HAZARD MITIGATION PLAN INITIATIVES												
2016 Plan Initiative Number	Mitigation Initiative Description	2016 Plan Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
6	Incorporate hazard mitigation concepts into the master plan	Medium	All	Planning			X		The Master Plan addresses controlled growth & protection of the aquifer. Flood Hazard Zones only permit docks, piers and boat launches provided no significant adverse impacts. Commercial/Public docks must meet all state & federal regulations.	x		Reducing man made impact in flood hazard areas reduces potential for future damage and protects sensitive flood prone areas. Only low impact development [docks] are permitted in flood zones.
7	Web site update - social media	High	All	Clerk			X		EMC hosts its own webpage listing all government offices, services, regulations. EMC has social media through The Citizens Group of Estell Manor, Better Together- Citizens Group of Estell Manor.	x		Estell Manor's webpage is maintained by the city. Numerous public and private groups communicate important events and information through Facebook. Stormwater Public Outreach is displayed at City Hall.
8	Conduct workshops on hazards and hazard mitigation	Low	All	Planning Board			X		Hazard mitigation is addressed in Municipal Land Use Law. Primary means to protect against hazards is regulation and enforcement of regulations concerning: flood plains, haz waste, septic systems.	x		Construction and zoning officials must complete MLUL training and continuing education credits to maintain competencies. Zoning officer provides subject matter expert guidance to Zoning Board.
9	Add into master plan - information on hazards and hazard mitigation	Medium	All	Planning Board			X		Hazard mitigation is addressed in the Master Plan and city Ordinances. Zoning Officer is subject matter expert to apply regulations to ensure hazards are mitigated.	x		Zoning Officer and Zoning Engineer provide expert guidance to Planning Board on implementation of Master Plan and analyzes hazard mitigation as part of all Zoning Variances.

## **Hazard Mitigation Accomplishments (2016-2021)**

The State of New Jersey 2019 HMP (Section 3, Page 3-30) requires identification of mitigation activities as an essential element of a local plan review. Information on the status of long-range mitigation strategies shall be contained in the original plan. Self-funded mitigation initiatives as well as past FEMA funded projects should be documented. The City of Estell Manor did not report any mitigation actions completed since the last plan update.

## Proposed 2022 Plan Mitigation Actions

The process for selection and prioritization of mitigation actions is described in greater detail in Section 6 of the main text. The outcomes of that overall process are summarized here.

This plan proposes the actions determined to be the most appropriate for the resources and capabilities of City of Estell Manor based on the experience of local officials, with input from the public and other stakeholders. Potential actions were reviewed relative to potential financial as well as administrative and legal costs and the degree to which they would be endorsed by the public. Potential actions were reviewed during the meetings relative to their potential benefit of effectiveness in saving lives, protecting the natural environment, and reducing disruption and damage. Actions selected by each jurisdiction include activities to protect existing and future structures and infrastructure and enhance community resilience.

Part of enhancing community resilience involves adapting to a changing climate. This plan's risk assessment includes information on climate change as part of the hazard vulnerability analysis and contain strategies/projects to address increased vulnerability that may result from climate change. By developing mitigating strategies and/or projects for hazards that are exacerbated by climate change, jurisdictions will better protect residents, avoid, or reduce damage to property and public infrastructure, and reduce personal hardship. Previous sections of this plan have presented information on how climate change may affect jurisdictional vulnerability or increased frequency of occurrence and/or severity in exposure to the identified hazards. Climate change is addressed by mitigating the various hazards that it exacerbates. City of Estell Manor has proposed a range of hazard mitigation initiatives to address their highest hazards including those hazards that are exacerbated by a changing climate.

Action priorities were determined by a qualitative prioritization process. A higher priority was assigned to projects where: the life/safety risk of taking no action was deemed to be unacceptably high; the project addresses one of the community's highest hazards and/or key risks; benefits were projected to equal or exceed project costs; critical facilities or key local assets were being protected; funding and staff resources were deemed to be sufficient and/or accessible for project implementation; the project is technically feasible and the community determined their legal authority to implement the action; negative environmental and/or social impacts were not identified during the assessment, or were very minimal; and/or where there was overall support for the project from the local community (government officials, public, and stakeholders).

Detailed Action Worksheets for each action item in the strategy are presented in the following pages.

<b>Action Worksheet</b>	
<b>Your plan name</b>	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
<b>Your community name</b>	<i>City of Estell Manor</i>
<b>Community action number</b>	<i>Estell Manor 1</i>
<b>Assessing the Risk</b>	
<b>Hazard(s) addressed</b>	<i>Wild land Fire and Structural fire</i>
<b>Risk finding</b>	<i>Protect life and property</i>
<b>Describing the Action</b>	
<b>Action category</b>	<i>Implementing the Action</i>
<b>Action type</b>	<i>Fire Prevention</i>
<b>Action description</b>	<i>Install Dry Hydrants</i>
<b>Existing, future &amp;/or NA</b>	<i>Existing and Future</i>
<b>Evaluating the Action</b>	
<b>Losses avoided (i.e., benefits)</b>	<i>\$267,544 Average home value in Estell Manor</i>
<b>Cost estimate</b>	<i>\$10,000</i>
<b>Cost effectiveness (i.e., benefit/cost)</b>	<i>could pay for the cost in a one time use and also used for fire fighting training purpose</i>
<b>Technical</b>	<i>Able to draft a unlimited water supply to our community for fire fighting purpose</i>
<b>Political</b>	<i>May help CRS reduce our fire insurance rates</i>
<b>Legal</b>	<i>Must get permit from NJDEP [and perhaps Pinelands Commission] to install it on state property</i>
<b>Environmental</b>	<i>DEP approval</i>
<b>Social</b>	<i>Does not effect any social issues</i>
<b>Administrative capability</b>	<i>Local fire department input</i>
<b>Local champion</b>	<i>Estell Manor Fire Department</i>
<b>Other community objectives</b>	<i>Supports the city emergency operation plan</i>
<b>Implementing the Action</b>	
<b>Priority</b>	<i>High</i>
<b>Local planning mechanism</b>	<i>Codes, plans</i>
<b>Responsible party</b>	<i>Estell Manor Fire Department</i>
<b>Potential funding sources</b>	<i>HMGP and Fire Department 25% match</i>
<b>Time line</b>	<i>18 months</i>
<b>Reporting on Progress</b>	
<b>Action progress status</b>	<i>working with the state for approval to reinstall broken dry hydrant on a state roadway bridge</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>2</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>Flooding</i>
Risk finding	<i>Reduce stormwater flooding</i>
<b>Describing the Action</b>	
Action category	<i>natural resource protection and structural project</i>
Action type	<i>drainage improvements</i>
Action description	<i>drainage improvements - storm drains throughout the city</i>
Existing, future &/or NA	<i>protects all development</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>effective at reducing damage</i>
Cost estimate	<i>not sure</i>
Cost effectiveness (i.e., benefit/cost)	<i>losses outweigh cost</i>
Technical	<i>feasible</i>
Political	<i>support</i>
Legal	<i>yes</i>
Environmental	<i>Beneficial to Environment</i>
Social	<i>Beneficial to Community</i>
Administrative capability	<i>not sure</i>
Local champion	<i>public and local government</i>
Other community objectives	<i>further others community objectives</i>
<b>Implementing the Action</b>	
Priority	<i>low</i>
Local planning mechanism	<i>codes and plans</i>
Responsible party	<i>engineer</i>
Potential funding sources	<i>grant</i>
Time line	<i>2025</i>
<b>Reporting on Progress</b>	
Action progress status	<i>ongoing</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>3</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>All</i>
Risk finding	
<b>Describing the Action</b>	
Action category	<i>Public awareness</i>
Action type	
Action description	<i>Public Outreach</i>
Existing, future &/or NA	<i>City Webpage, Facebook, Twitter</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	
Cost estimate	<i>minimal</i>
Cost effectiveness (i.e., benefit/cost)	<i>effective</i>
Technical	<i>implemented and ongoing</i>
Political	<i>public support</i>
Legal	<i>yes</i>
Environmental	<i>no environmental impacts</i>
Social	<i>no social impact</i>
Administrative capability	<i>out side help to administer</i>
Local champion	<i>council</i>
Other community objectives	
<b>Implementing the Action</b>	
Priority	<i>high</i>
Local planning mechanism	
Responsible party	<i>council</i>
Potential funding sources	
Time line	
<b>Reporting on Progress</b>	
Action progress status	<i>Completed, some updating needed</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>5</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>All</i>
Risk finding	<i>building codes</i>
<b>Describing the Action</b>	
Action category	<i>planning</i>
Action type	<i>building codes</i>
Action description	<i>state building codes - code enforcement</i>
Existing, future &/or NA	<i>protect development</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>protect development</i>
Cost estimate	<i>unknown</i>
Cost effectiveness (i.e., benefit/cost)	<i>effective</i>
Technical	<i>feasible</i>
Political	<i>supported</i>
Legal	<i>state building codes</i>
Environmental	<i>no impact</i>
Social	<i>NA</i>
Administrative capability	<i>capable</i>
Local champion	<i>Code enforcement</i>
Other community objectives	
<b>Implementing the Action</b>	
Priority	<i>medium</i>
Local planning mechanism	
Responsible party	<i>Code enforcement</i>
Potential funding sources	
Time line	
<b>Reporting on Progress</b>	
Action progress status	<i>ongoing</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>6</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>all</i>
Risk finding	<i>natural disaster</i>
<b>Describing the Action</b>	
Action category	<i>planning</i>
Action type	<i>incorporate in the master plan</i>
Action description	<i>hazard mitigation</i>
Existing, future &/or NA	<i>protect development</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>effective</i>
Cost estimate	<i>minimal</i>
Cost effectiveness (i.e., benefit/cost)	<i>save monies</i>
Technical	<i>feasible</i>
Political	<i>supportive</i>
Legal	<i>yes</i>
Environmental	<i>no impact</i>
Social	<i>no impact</i>
Administrative capability	<i>capable</i>
Local champion	<i>planning</i>
Other community objectives	
<b>Implementing the Action</b>	
Priority	<i>medium</i>
Local planning mechanism	<i>planning</i>
Responsible party	<i>planning</i>
Potential funding sources	<i>none</i>
Time line	<i>2024</i>
<b>Reporting on Progress</b>	
Action progress status	

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>7</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>all</i>
Risk finding	<i>public awareness</i>
<b>Describing the Action</b>	
Action category	<i>public education</i>
Action type	<i>social media</i>
Action description	<i>county website update</i>
Existing, future &/or NA	<i>awareness</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>effective</i>
Cost estimate	<i>minimal</i>
Cost effectiveness (i.e., benefit/cost)	<i>yes</i>
Technical	<i>feasible</i>
Political	<i>support</i>
Legal	<i>yes</i>
Environmental	<i>NA</i>
Social	<i>NA</i>
Administrative capability	<i>capable</i>
Local champion	<i>ACOEM</i>
Other community objectives	
<b>Implementing the Action</b>	
Priority	<i>high</i>
Local planning mechanism	<i>codes</i>
Responsible party	<i>clerk</i>
Potential funding sources	<i>none</i>
Time line	<i>started</i>
<b>Reporting on Progress</b>	
Action progress status	<i>carried forward</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>8</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>all</i>
Risk finding	<i>natural hazards</i>
<b>Describing the Action</b>	
Action category	<i>planning</i>
Action type	<i>workshops</i>
Action description	<i>Conduct workshops on hazards and hazard mitigation</i>
Existing, future &/or NA	<i>protect</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>effective</i>
Cost estimate	<i>minimal</i>
Cost effectiveness (i.e., benefit/cost)	<i>yes</i>
Technical	<i>feasible</i>
Political	<i>support</i>
Legal	<i>yes</i>
Environmental	<i>NA</i>
Social	<i>NA</i>
Administrative capability	<i>capable</i>
Local champion	<i>planning board</i>
Other community objectives	<i>open space</i>
<b>Implementing the Action</b>	
Priority	<i>low</i>
Local planning mechanism	<i>plans</i>
Responsible party	<i>planning board</i>
Potential funding sources	
Time line	<i>ongoing</i>
<b>Reporting on Progress</b>	
Action progress status	<i>ongoing</i>

<b>Action Worksheet</b>	
Your plan name	<i>Atlantic County Multi-jurisdictional Hazard Mitigation Plan</i>
Your community name	<i>Estell Manor</i>
Community action number	<i>9</i>
<b>Assessing the Risk</b>	
Hazard(s) addressed	<i>All</i>
Risk finding	<i>Hazard mitigation</i>
<b>Describing the Action</b>	
Action category	<i>planning</i>
Action type	<i>hazards</i>
Action description	<i>add into master plan - information on hazards and hazard mitigation</i>
Existing, future &/or NA	<i>protect development</i>
<b>Evaluating the Action</b>	
Losses avoided (i.e., benefits)	<i>effective</i>
Cost estimate	<i>minimal</i>
Cost effectiveness (i.e., benefit/cost)	<i>yes</i>
Technical	<i>feasible</i>
Political	<i>support</i>
Legal	<i>yes</i>
Environmental	<i>NA</i>
Social	<i>NA</i>
Administrative capability	<i>engineer</i>
Local champion	<i>planning board</i>
Other community objectives	<i>environmental quality</i>
<b>Implementing the Action</b>	
Priority	<i>high</i>
Local planning mechanism	<i>plans</i>
Responsible party	<i>planning board</i>
Potential funding sources	<i>grant</i>
Time line	<i>2024</i>
<b>Reporting on Progress</b>	
Action progress status	<i>started</i>