

9.17: City of Margate City – Jurisdictional Annex

Summary of Hazards and Actions

Summary of Hazard Ranking and Actions, City of Margate City			
Hazard	Hazard Ranking	# of Related Actions	Action #s
Atmospheric Hazards			
Extreme Temperatures	M	3	A8, A9, D1
Hail	L	3	A8, A9, D1
Extreme Wind	M	3	A8, A9, D1
Hurricane & Tropical Storm	H	4	A8, A9, D1, D3
Lightning	L	3	A8, A9, D1
Nor'easter	H	3	A8, A9, D1
Tornado	L	3	A8, A9, D1
Winter Storm	M	3	A8, A9, D1
Hydrologic Hazards			
Coastal Erosion	H	3	A8, A9, D1
Sea Level Rise	H	5	A3, A8, A9, D1, F3
Dam Failure	N/A		
Levee Failure	N/A		
Drought	L	2	A8, A9
Flood	H	36	A1, A2, A4, A5, A6, A7, A8, A9, A10, B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, C1, C2, D1, D2, D3, E1, E2, E3, F1, F2, F3
Tsunami	L	3	A8, A9, D1
Storm Surge	H	3	A8, A9, D1
Wave Action	M	3	A8, A9, D1
Geologic Hazards			
Earthquake	L	2	A8, A9
Other Natural Hazards			
Wildfire	L	5	A8, A9, D1, E4, E5

Mitigation Strategy for Risk Reduction

Overview of Municipal Mitigation Strategy, City of Margate City				
Project Number	Project Description	Hazard(s) Addressed	Priority	Goals
A-1	Targeted Open Space Acquisition including wetlands parcels owned by private parties. (New)	Flood	L	3
A-2	Strengthen Floodplain Management Ordinance: Critical facilities standards, higher Freeboard (New)	Flood	M	4
A-3	Future Conditions Standards for New Developments: adjust bulkhead ordinance to increase heights in vulnerable areas, freeboard, and other regulations to account for climate change. (New)	Sea level rise	M	4
A-4	(From Capital Plan) Emergency Generator Installation- Bayshore Pump Station, Gladstone Water Tower Stormwater Pump Replacement (New)	Flood	M	3
A-5	Check Valve Inspections/Replace (New)	Flood	M	3
A-6	Draft a Capital Improvement Plan (New)	Flood	M	4
A-7	Complete a Repetitive Loss Area Analysis and Green Infrastructure /Natural Resources Plan (New)	Flood	M	3
A-8	Update land use and Margate Master Plan. (New)	All	M	4
A-9	(From Capital Plan) Locate the EOC and Communications Center on the 2nd floor of 9001 Winchester Avenue including dispatching, 911, etc. (New)	All	M	4
A-10	(From Capital Plan) Secure additional GIS capabilities to add layers of information to evaluation flooding issues. (New)	Flood	M	2
B-1	(From Capital Plan) Home Elevations- continue to apply for FEMA reimbursement grants and develop gap financing to support homeowners who have received grants (New)	Flood	H	3
B-2	Close bulkhead gaps - Elevate bulkheads at various locations (New)	Flood	H	3
B-3	Support floodproofing for commercial buildings in business districts (New)	Flood	M	3
B-4	Amherst Avenue - Construct a new stormwater pump station with includes a concrete wet well, three submersible pumps, electric to the pumps, connection of existing piping, and installation of check valves. (New)	Flood	H	3
B-5	Complete study to evaluate all Bay and Beach elevations and make recommendations for floodproofing (Action 3 in 2016 Plan) (New)	Flood	M	3
B-6	Address flooding in Margate Business District (New)	Flood	M	3
B-7	Replace bulkheads at beach end of Jefferson and Frontenac Avenue (Action 1 in 2016 Plan)	Flood	M	3
B-8	Replace bulkheads at Brunswick and Beach (Action 2a in 2016 Plan)	Flood	M	3
B-9	(From Capital Plan) Improve School Fields to address flooding (New)	Flood	M	3
B-10	(From Capital Plan) Decatur Playground Improvements (New)	Flood	M	3
B-11	(From Capital Plan) Shelter Island Reclamation (New)	Flood	M	3
B-12	(From Capital Plan) Back Bay Dredging – secure City-wide permit and complete phase 1 of the dredging project. (New)	Flood	M	3

Overview of Municipal Mitigation Strategy, City of Margate City

Project Number	Project Description	Hazard(s) Addressed	Priority	Goals
B-13	(From Capital Plan) Develop Plan for replacing bulkheads on private properties (New)	Flood	M	3
B-14	(From Capital Plan) Dry Flood Proof City Hall heater room (New)	Flood	M	3
B-15	(From Capital Plan) Public Works Property/Police Property Land Use Feasibility Study	Flood	M	4
B-16	(From Capital Plan) Implement Minnie Creek Drainage Recommendations (New)	Flood	M	3
C-1	Establish a solar installation program including reintroducing solar at 9001 Winchester Avenue, Municipal Building (New)	Flood	M	2
C-2	Establish a LED streetlight program including automated flashing flood zone signs during flood events. (New)	Flood	M	2
D-1	Install City-Wide Warning System/Implement IPAWS notifications using cell towers	All	M	2
D-2	(From Capital Plan) Install remotely actuated Road Flood Barrier Warning System	Flood	M	2
D-3	Elevate Evacuation Routes (New)	Hurricane/ Tropical storm	M	2
E-1	Install flood wall at City dock (2519-2601 Bayshore Ave) (New)	Flood	H	3
E-2	Road Elevations/Berm Transformation- identify and construct streets that can also function as berms or floodwalls (New)	Flood	L	3
E-3	Install and maintain inlet grates and debris collectors. Identify debris hotspots (New)	Flood	M	3
E-4	Fire Station #2, Phase 2 garage space (New)	Wildfire	L	3
E-5	Fire Hydrant Adapters (New)	Wildfire	L	2
F-1	Require real estate disclosure of flood hazard (New)	Flood	M	2
F-2	Elevation Certificates mapping (New)	Flood	M	2
F-3	Integrated flood hazard/sea level rise mapping for Margate (New)	Flood/Sea Level Rise	L	2

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

Contact Information

City of Margate City'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: Chuck LaBarre Title: Emergency Management Coordinator Department: Emergency Management Address: 9001 Winchester Avenue, Margate, NJ 08402 Phone Number: 609-335-6048 E-mail Address: oem.labarre@margate-nj.com			Name: Jim Rutala Title: Department: Rutala Associates Address: 717 River Drive, Linwood, NJ 08221 Phone Number: 609-743-0354 E-mail Address: jmrutala@comcast.net			
Jurisdictional Assessment Team Members						
JIM GALANTINO CERTIFIED FLOODPLAIN MANAGER MARGATE galantino_jim@margate-nj.com (609)822-1974						
*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	Mike Becker	mayorbecker@margate-nj.com	609-822-0424	07/29/21	EMAIL	YES
Administrator	Richard Deaney	deaney_richard@margate-nj.com	609-822-0424 ext106	07/29/21	EMAIL	YES
Clerk	Johanna Casey	casey_johanna@margate-nj.com	609-822-2605 ext133	07/29/21	EMAIL	YES
Engineer	Ed Dennis	edward.dennis@rve.com	609-645-7110	07/29/21	EMAIL	YES
Attorney	Scott Abbott	jsa@jsabbottlaw.com	609-823-4495	07/29/21	EMAIL	YES
Building Code Official	Jim Galantino	galantino_jim@margate-nj.com	609-822-1974 ext141	07/29/21	EMAIL	YES
Emergency Manager	Chuck LaBarre	oem.labarre@margate-nj.com	609-335-6048	07/29/21	EMAIL	YES
Fiscal/Budget Officer	Lisa McLaughlin	lmclaughlin@margate-nj.com	609-822-4088 ext122	07/29/21	EMAIL	YES
Floodplain Manager	Jim Galantino	galantino_jim@margate-nj.com	609-822-1974 ext141	07/29/21	EMAIL	YES
Planner	Roger McLarnon	mclarnon_roger@margate-nj.com	609-822-5438	07/29/21	EMAIL	YES
Public Works Director	Frank Ricciotti	fricciotti@margate-nj.com	609-822-5038 ext121	07/29/21	EMAIL	YES
Police Chief/Deputy OEM	Matt Hankinson	hankinson_matt@margate-nj.com	609-823-0055	07/29/21	EMAIL	YES
Fire Chief/Deputy OEM	Daniel Adams	adams_dan@margate-nj.com	609-822-6712	07/29/21	EMAIL	YES

The City of Margate City 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
MARGATE JAT KICK-OFF MEETING NVITATION SENT	07/12/21	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MARGATE JAT ATTENDANCE AT MEETING	07/18/21	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
MARGATE JAT ATTENDANCE AT MEETING -DRAFT	07/29/21	N	N	N	N	Y	Y	Y	Y	Y	Y	Y
MARGATE JAT ATTENDANCE AT MEETING -FINAL DRAFT	08/04/21	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y

Governing Body Format

The governing body is comprised of three commissioners, who are elected at-large to four-year terms of office on a non-partisan basis as part of the May municipal election. Each commissioner is assigned a department to oversee and administer. The Mayor is then selected from among the three elected Commissioners by a vote between them and assigned to the office by resolution.

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 Margate City reviewed and updated its prior feedback to reflect current conditions as of mid-2021. The City of Margate City reported no major planned development in their jurisdiction.



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

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: Jim Galantino, Certified Floodplain Administrator

□

Your Name: [Roger McLarnon, PE, PP, CME, CFM]

Title: [Planner, Zoning Officer]

Community: [Margate]

Email and Phone: [McLarnon Roger@margate-nj.com, 609-822-5438]

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

Community	<p>1. Land Uses and Development Trends in Hazard Areas as Reported in the 2016 Plan. 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>1a. Please update your response to reflect conditions in 2021</p>	<p>Regulations/Codes/Ordinances To Protect New Development From Natural Hazards as Reported in the 2016 Plan. 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>2a. Please update your response to reflect conditions in 2021</p>
<p>Margate City, City of</p>	<p>Currently and for the coming 2 to 3 years, we expect a very light volume of construction, mostly of single-family homes, and most of them seasonal occupancy, throughout the City, with no particular area of Margate having more activity than any other. We do not expect any significant net gain in occupied units. Multi-family development in the area from Washington to Coolidge Avenue, very active up to about 2006 has dwindled down to nearly zero in the past 6-12 months. There are no commercial developments whatever anticipated at this time. Roger Rubin, PP (1512), Land Use Administration Zoning Officer, City of Margate, NJ 609-822-5438</p> <p>Around 2011 Margate began to see a large increase in new home construction. Also, after 2012 Superstorm Sandy we have begun a substantial amount of construction of new homes and home elevations. In 2014 we had over 64 demolitions.</p>	<p>Since 2016, each year has seen a continual rise in issuance of zoning and construction permits. The increased activity has been across the island with a higher number perhaps near the Bayfront areas mainly single family construction along with a smaller number of multi-family construction activity. There is some mixed use development proposed for 2021. Trends for single family homes are to maximize building coverage and lot coverage. Roger McLarnon, PE, PP, CFM, CME, CPWM. Land Use administrator, Zoning Offer, Planner, City of Margate, NJ 08402 609-822-5438.</p>	<p>Yes. We have bulkhead height Ordinances. We have a new Ordinance requiring bayfront and canal front properties to submit to site plan review for all new development, for approval of the City Engineer, Building Inspector, and Land Use Administrator. FFF is 11ft AMSL throughout Margate. We require 35% of all SF land when developed to be open and permeable; 45% of multi-family development.</p> <p>We currently require all new and substantial improved properties to elevated to the 1988 datum and also meet the 2013 preliminary flood maps. We enforce a 3-foot freeboard to all construction.</p>	<p>Yes, the zoning office also confirms Base Flood Requirements and have changed the zoning to permit parking and storage to be below buildings which permits a freeboard up to 5'-7' or more. All freeboard for residential use is 3 foot to the lowest horizontal structure and an additional 1 foot for floor so in essence a 4 foot freeboard as a minimum. All waterfront properties are required to discharge roof runoff directly into the bay to reduce loading on City stormwater system and enforces new bulkhead elevations. Permeable areas have been enforced as well. New homes have clearly outpaced home elevations however some still occur mainly through grants.</p>

National Flood Insurance Program Summary

City of Margate City has participated in FEMA's National Flood Insurance program (NFIP) since 1971.

National Flood Insurance Program Data City of Margate City	
Total number of policies ¹	5,023
Insurance in force ²	\$1,266,620,700
Total number of losses during NFIP participation	3,163
Total claims paid during NFIP participation	\$76,347,228
Non-Mitigated Repetitive Loss Properties	71
Non-Mitigated Severe Repetitive Loss Properties	46

Margate also participates in the NFIP's Community Rating System (CRS). Margate entered the CRS in 1992, and is presently a Class 5 community receiving a 25% premium discount for policyholders in the Special Flood Hazard Area (SFHA) and a 10% premium discount for policyholders outside of the SFHA.

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

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

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

Name: JIM GALANTINO Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator

Community: MARGATE Email and Phone: galantino_jim@margate-nj.com (609) 822-1974



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: Jim Galantino. This form should be updated by your floodplain administrator.

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	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?	
08/28/2018	06/19/1971	Certified Floodplain Manager		<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	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
<input checked="" type="checkbox"/> Review all permits and building application's prior to construction before ground breaking. To process is to determine if the construction is being built in a floodway or in the floodplain area							
Describe barriers to running an effective NFIP program in the community (if applicable):							
<input checked="" type="checkbox"/> Grants to allow for possible homes to elevated or mitigated							
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?
2020	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No We have a 1 foot freeboard and currently require all construction to be built to 1988 datum	<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 * Class <u>5</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
*Describe any outstanding compliance issues (i.e., current violations):							
[

Name: JIM GALANTINO Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator

Community: MARGATE Email and Phone: galantino_jim@margate-nj.com (609) 822-1974



Provide an explanation of your local floodplain permitting process:								
[We review and process all applications before issuing any permits. This process determines if a property is to be elevated or demolished]								
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 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	<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
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 are currently enforcing the Preliminary flood maps of 2018 And we use 1988 datum.]								
Provide a description of your community assistance and monitoring activities:								
[We have FEMA pamphlets in our library and we also have information available on our websites and at our counter to assist anyone who has a question about flood insurance or risks]								
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				

Critical Facilities in Delineated Hazard Areas

Note that all assets and facilities in the City of Margate City 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
City of Margate City											
Margate City Fire Dept Headquarters	Washington and Ventnor Avenues	Fire Station	1	0	1	0	0	0	0	0	0
Margate City Fire Dept. Station #2	405 Brunswick Drive	Fire Station	1	0	1	0	0	0	0	0	0
Margate City PD	111 N Decatur Ave	Police Station	1	0	1	0	0	0	0	0	0
City Hall	1 S Washington Ave	Public Works	1	0	1	0	0	1	0	0	0
Eugene A. Tighe Middle School	7804 Amherst Avenue	School	1	0	1	0	0	0	0	0	0
William H. Ross Int. School	8103 Winchester Ave	School	1	0	1	0	0	0	0	0	0
Water Tower	100 N. Benson Ave	Water Supply Facility	1	0	1	0	0	1	0	1	0
Water Tower	Amherst Ave/N. Gladstone Ave	Water Supply Facility	1	0	1	0	0	0	0	1	0
Well 10	Benson Ave/Monmouth Ave	Water Supply Facility	1	0	1	0	0	1	0	1	0
Well 5	400 N Gladstone Avenue	Water Supply Facility	1	0	1	0	0	0	0	0	0
Well 7	200 N Decateur Avenue	Water Supply Facility	1	0	1	0	0	0	0	0	0
Well 8	Amherst Ave/N. Gladstone Ave	Water Supply Facility	1	0	1	0	0	0	0	1	0
Total			12	0	12	0	0	3	0	4	0

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 Margate City		
Quantified Hazard	Annualized Loss	Annual Loss Ratio
Extreme Wind	\$518,000	0.033%
Hurricane and Tropical Storm	\$1,256,000	0.060%
Lightning	\$4,500	0.000%
Tornado	\$1,300	0.000%
Drought*	\$0	0.000%
Winter Storm	\$14,100	0.001%
Coastal Erosion	\$0	0.000%
Flooding (Riverine)	\$0	0.000%
Storm Surge (Coastal Flooding)	\$38,957,000	1.910%
Earthquake	\$14,000	0.001%

*Derived from crop values

Outreach to the Public and Other Stakeholders

As part of this 2022 Plan Update, City of Margate City undertook various activities to: (a) alert the public and other stakeholders to the fact that the HMP Planning Committee was working to develop the update; and (b) provide the public and other stakeholders with a forum to ask questions and submit comments and suggestions on the process. Outreach activities undertaken by City of Margate City included those listed below. No comments were recorded as a result of the outreach activities.

Outreach Activities			
Date of Activity	Type of Activity	Activity Details	Lead Department and/or Staff Title who Undertook Activity
7/12/21	Email/Notice on Flyer	Community event meeting flyer with ACMJHP notification was emailed and distributed to Margate City Business Associations entire membership	Margate OEM Chuck LaBarre, Coordinator
7/13/21	Post on City Website, City newsletter and all City Social media outlets	Community event meeting flyer with ACMJHP notification was posted on Margate City website	Margate OEM Chuck LaBarre, Coordinator Kelle Amodeo, City Commissioners office Taylor of Suasiao Communications
7/13/21	Email	Community event meeting flyer with ACMJHP notification was emailed and distributed to Margate City employees	Margate OEM Chuck LaBarre, Coordinator Kelle Amodeo, City Commissioners office
7/13/21	Flyer / Print	Community event meeting flyer with ACMJHP notification was printed and distributed to Margate City buildings, Municipal Admin Bldg, Senior Citizen Pavilion and City Commissioners Meeting room lobby	Margate OEM Chuck LaBarre, Coordinator Kelle Amodeo, City Commissioners office
7/22/21	Public Meeting	Public Community event meeting with explanation and public forum for ACMJHP	Margate OEM Chuck LaBarre, Coordinator Vince Jones, Atlantic County OEM

Capability Assessment

This section describes the following capabilities of City of Margate City :

- 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 Margate City 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	Y
Growth Management Ordinance	Y
Site Plan Review Requirements	Y
Comprehensive Plan	Y
Capital Improvements Plan	Y
Economic Development Plan	Y
Emergency Response Plan	Y
Post-Disaster Recovery Plan	Y
Post-Disaster Recovery Ordinance	N
Real Estate Disclosure Ordinance	Y
Evacuation Plan	Y

Administrative and Technical Capability	
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this?
Planner(s) with knowledge of land development and management practices	Y
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	Y
Surveyors	Y
Staff with education or expertise to assess the community's vulnerability to hazards	Y
Personnel skilled in GIS and/or HAZUS	Y
Scientists familiar with the hazards of the community	Y
Emergency Manager	Y
Code Enforcement Official	Y
Public Works or Highway Superintendent	Y
Emergency Management Coordinator	Y

Fiscal Capability	
Financial Resources	Accessible or Eligible to use
Community Development Block Grants (CDBG)	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for Specific Purposes	Y
Fees for Water, Sewer, Gas, or Electric Service	Y
Impact Fees for Homebuyers or Developers for New Developments/Homes	N
Incur Debt through General Obligation Funds	Y
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)	Y

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 - even if met with opposition? (i.e., guiding development away from identified hazard areas)?
H	H	H	H	H
<p>Discuss ways of bridging identified gaps in your local capabilities to ensure that they are in-line with your mitigation actions and goals.</p>				
<p>Leadership will act accordingly to prohibit negligent construction. Media such as websites, newspaper, tax bills, or water bill inserts. Community outreach lectures on flood warnings and proper flood construction methods.</p>				

Plan Integration

It is the intention of City of Margate City 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 Margate City undertook the following plan integration mechanisms over the last planning cycle:

Margate used funding thru grants and FEMA aid to completely rebuild Old City Hall, add flood vents to fire station 1. Rebuilt over 1000 feet of Amherst Ave bulkhead and renovated/replaced all storm water piping systems under Amherst Ave. Margate also received funding to elevate Repetitive Loss Properties 75% FEMA and 25% homeowner. Margate was awarded a grant to install 3 Emergency Alert Sirens in town to notify residents should a possible catastrophic event could take place and residents must evacuate town immediately.

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

Margate will diligently enforce our Flood Damage Prevention Ordinance, increase our enforcement of our Substantial Improvement on existing structures. Margate will also increase awareness of potential flood areas and build new construction to higher freeboard requirements. Revisit zoning to include environmentally friendly projects and possible solar farms and windmill energy.

Mitigation Strategy

This subsection sets forth the mitigation strategy for City of Margate City. 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 Margate City 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 Margate City local priorities have changed due to funding source requirements being met, possibly extending projects into the capital plan. The COVID pandemic has forced The City to reallocate funding to dealing with the pandemic, status of employees working remotely and handling other covid related employees and business dealings have changed.

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	Rebuild bulkheads at Beach end of Jefferson and Frontenac avenues	Medium	Flooding	Margate Public Works			x		Funding source not identified.	x		
2	Rebuild bulkheads at Beach end of Frontenac avenues	Medium	Flooding	Margate Public Works			x		Funding source not identified.	x		duplicate with the row above
2a	Rebuild bulkhead at Brunswick Ave and Beach	Medium	Flooding	Margate Public Works	x		x		Funded in capital	x		
3	Study to evaluate all Bay and Beach elevations and make recommendations for floodproofing	Medium	Flooding	City Engineer	x						x	
4	Cooperative venture with Ventnor to reduce street flooding	Medium	Flooding	City Engineer	x				On-going. Initial scope and project completed however, drainage system needs to be updated.		x	
5	Mitigate street flooding at Amherst between Clarendon and Essex Avenues	Medium	Flooding	City Engineer	x						x	
6	Updating land use and Margate Master Plan to reduce flooding risks throughout Margate	Medium	All	City Engineer	x						x	

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 following table summarizes past mitigation accomplishments in City of Margate City since the last version of the plan was adopted in 2016.

Past Mitigation Accomplishments				
Project	Status		Funding Source	Relationship to Plan
	Approved/Active Year	Completed Year		
Amherst Avenue Bulkhead, Longport Border to near Monroe Avenue	2018	Lamberti's Restaurant 2018	Private Funding	Not in the 2016 Plan, Immediate Action needed.
Amherst Avenue Bulkhead, near Washington Avenue to Adams Avenue	2018	Captain Andy's Redevelopment, 2018	Private Funding	Not in the 2016 Plan, Immediate Action needed.
Amherst Avenue Bulkhead, near Jefferson Avenue to Adams Avenue	2018	Barbary Coast Marina Redevelopment, 2018	Private Funding	Not in the 2016 Plan, Immediate Action needed.
Amherst Avenue Bulkhead, near Monroe Avenue to near Jefferson	2020	Amherst Avenue Bulkhead- 2020	Private Funding	Not in the 2016 Plan, Immediate Action needed.
Elevation Certificates Mapping	City of Margate – Construction Department	2021-2022 Collect and digitize existing elevation certificates on file 2022 - Post elevation certificates on a map on the city website	City Funds	Not in the 2016 Plan. Flood hazard mapping

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 Margate City 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. The City of Margate City 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 information for each action item in the strategy are presented in the following pages. The City of Margate chose to present its actions in a different format to that recommended by the consultant.

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
Preventative Activities						
A-1	Low	4	Targeted Open Space Acquisition including wetlands parcels owned by private parties.	City of Margate NJDEP-Blue Acres FEMA	2020-2025: Identify and secure funding sources and clusters of potential properties	NA/NJDEP, Blue Acres FEMA, City Capital Funds, County Open Space funds.
A-2	Medium	2, 4	Strengthen Floodplain Management Ordinance: Critical facilities standards, higher freeboard	City of Margate	2021-2022: Identify feasible changes and protection benchmarks	\$10,000/City Funds
A-3	Medium	2, 4	Future Conditions Standards for New Developments: adjust bulkhead ordinance to increase heights in vulnerable areas, freeboard, and other regulations to account for climate change.	City of Margate	2023: Identify and adopt future conditions standards based on tracked emissions scenarios and standards used for Army Corps/DEP Projects	\$5,000/City Funds
A-4	Medium	4	(From Capital Plan) Emergency Generator Installation-Bayshore Pump Station, Gladstone Water Tower Stormwater Pump Replacement	City of Margate, FEMA, NJOEM, NJET	2020-2025: Identify and secure funding sources for generators. Prioritize critical generators and those at lowest elevations	\$200,000 per generator/FEMA Pre-Disaster Mitigation, City Funds, NJEIT
A-5	Medium	4	Check Valve Inspections/Replace	City of Margate	Ongoing	\$30,000 Each/City Funds; NJEIT
A-6	Medium	2, 4	Draft a Capital Improvement Plan	City of Margate	2020- Begin reserve for comprehensive, flood-informed capital improvement plan	\$20,000/City Funds; NJEIT; NJDEP; FEMA; Army Corps

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
A-7	Medium	2, 4, 5, 6	Complete a Repetitive Loss Area Analysis and Green Infrastructure/Natural Resources Plan	City of Margate FEMA	2021- Develop scope of work and draft FEMA grant application 2022 - Develop planning documents 2023- Begin implementation of recommendations	\$25,000/City Funds; FEMA Grants
A-8	Medium	1,4,6	(From 2017 HMP) Update land use and Margate Master Plan.	City of Margate, Margate Planning Board	2023	\$1,000,000
A-9	Medium	1	(From Capital Plan) Locate the EOC and Communications Center on the 2 nd floor of 9001 Winchester Avenue including dispatching, 911, etc.	City of Margate	2024	City funds
A-10	Medium	1	(From Capital Plan) Secure additional GIS capabilities to add layers of information to evaluation flooding issues.	City of Margate	2024	City funds
Property Protection						
B-1	High	1, 6	(From Capital Plan) Home Elevations- continue to apply for FEMA reimbursement grants and develop gap financing to support homeowners who have received grants	Private property owners (lead); FEMA, NJOEM, NJDCA	2021: Develop framework for gap financing	\$200,000 per structure/ FEMA, NJDCA, property owner
B-2	High	1, 6	Close bulkhead gaps Elevate bulkheads at various locations	City (Lead); Waterfront property owners (lead); NJDEP (Permitting)	Ongoing	\$1,000 per linear foot/ City capital funds; FEMA grants; Private owner contributions; Army

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
						Corps appropriations (if tied to Back Bay Study); NJDEP Shore Protection Fund; Army Corps
B-3	Medium	1, 6	Support floodproofing for commercial buildings in business districts	Private property owners	2021-2022 Begin developing guidance for commercial floodproofing to retain business uses	City funds (standards/guidance) Private funds (construction); CDBG-DR
B-4	High	1,4	Amherst Avenue - Construct a new stormwater pump station with includes a concrete wet well, three submersible pumps, electric to the pumps, connection of existing piping, and installation of check valves.	City of Margate, FEMA, County of Atlantic, NJDEP, NJET	2022 – Design 2023-2024 - Construction	\$1,880,400
B-5	Medium	1,4	(From 2017 HMP) Complete study to evaluate all Bay and Beach elevations and make recommendations for floodproofing	City of Margate, USACE, NJDEP, NJET	2023	\$180,000
B-6	Medium	1,4	(From 2017 HMP) Address flooding in Margate Business District	City of Margate, City of Ventnor, County of Atlantic, FEMA, NJET	2023	\$3,000,000
B-7	Medium	1,4	(From 2017 HMP) Replace bulkheads at beach end of Jefferson and Frontenac Avenue	City of Margate	2024	\$120,000

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
B-8	Medium	1	(From 2017 HMP) Replace bulkheads at Brunswick and Beach	City of Margate	2024	\$60,000
B-9	Medium	1	(From Capital Plan) Improve School Fields to address flooding	City of Margate	2024	City Funds
B-10	Medium	1	(From Capital Plan) Decatur Playground Improvements	City of Margate	2025	City Funds
B-11	Medium	1,4	(From Capital Plan) Shelter Island Reclamation	City of Margate, NFWF	2024	City Funds
B-12	Medium	1,4	(From Capital Plan) Back Bay Dredging – secure City-wide permit and complete phase 1 of the dredging project.	City of Margate, USACE, NJDEP, NJDOT	2024	City Funds
B-13	Medium	1,4	(From Capital Plan) Develop Plan for replacing bulkheads on private properties	City of Margate, USACE, NJDEP,	Ongoing	Private Funds
B-14	Medium	1,4	(From Capital Plan) Dry Flood Proof City Hall heater room	City of Margate, USACE, NJDEP,	Ongoing	City Funds
B-15	Medium	1	(From Capital Plan) Public Works Property/Police Property Land Use Feasibility Study	City of Margate,	2024	\$50,000
B-16	Medium	1	(From Capital Plan) Implement Minnie Creek Drainage Recommendations	City of Margate, USACE, NJDEP,	2024	City Funds
Carbon Reduction						

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
C-1	Medium	1	Establish a solar installation program including reintroducing solar at 9001 Winchester Avenue, Municipal Building	City of Margate	2024	No cost to City, Power Purchase Agreement
C-2	Medium	1	Establish a LED streetlight program including automated flashing flood zone signs during flood events.	City of Margate	2025	\$1,000,000; NJBPU, Atlantic City Electric
Emergency Services						
D-1	Medium	1, 3	Install City-Wide Warning System/Implement IPAWS notifications using cell towers	Atlantic County OEM, Margate OEM/Police/Fire	2024- Implement system	\$40,000
D-2	Medium	1	(From Capital Plan) Install remotely actuated Road Flood Barrier Warning System	City of Margate	2022	City Funds
D-3	Medium	1, 3	Elevate Evacuation Routes	NJDOT City of Margate	2022-2025 Develop schedule and specifications for roadway	NJ Transportation Trust Fund; Capital funds;
Structural Protections						
E-1	High	1, 6	Install flood wall at City dock (2519-2601 Bayshore Ave)	City of Margate, NJDEP	2021 Draft design and permit for boat ramp floodgate 2022-2023 Install flood gate	\$200,000/City Funds; Hazard Mitigation Assistance
E-2	Low	1, 6	Road Elevations/Berm Transformation- identify and construct streets that can also function as berms or floodwalls	NJDOT City of Margate Atlantic County Private property Owners	2022 Develop inventory of roads that require elevation	NJ Transportation Trust Fund; Capital funds; FEMA

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
E-3	Medium	5	Install and maintain inlet grates and debris collectors. Identify debris hotspots	Margate Public Works	Ongoing	\$5,500 per year/City funds
E-4	Low	1	Fire Station #2, Phase 2 garage space	City of Margate	2025	City of Margate
E-5	Low		Fire Hydrant Adapters	City of Margate	2025	City of Margate
Public Information						
F-1	Medium	1, 2	Require real estate disclosure of flood hazard	City of Margate	2021-2022 Draft legislation for flood hazard disclosure	City Funds
F-2	Medium	1, 2	Elevation Certificates mapping	City of Margate – Construction Department	2021-2022 Collect and digitize existing elevation certificates on file 2022 - Post elevation certificates on a map on the city website	\$7,500/City Funds
F-3	Low	1, 2, 4	Integrated flood hazard/sea level rise mapping for Margate	City of Margate	2021-2025 Identify map host and data for	\$10,000/City Funds; FEMA; NJOEM

ID	Priority	Goals	Action Description	Lead Agency and Partners	Targeted Completion Date	Cost/Potential Funding Sources
			<p>Goals:</p> <ol style="list-style-type: none"> 1. Protect life, safety, property, and economy. 2. Work with local citizens and watershed management groups so that residents understand the flood hazard of the region based on best available data and science. 3. Increase resilience of infrastructure and critical facilities. 4. Account for flood risk in land use and planning. 5. Preserve, enhance, or restore the natural environment’s floodplain functions. 6. Encourage the development and implementation of long-term, cost-effective, and environmentally-sound mitigation projects. <p>Priorities:</p> <p>High: Critical need/imminent vulnerability- This designates projects that should be prioritized immediately due to the provision of essential protection services and immediate health/public safety.</p> <p>Medium: Contributing action to critical function; Addresses nuisance/quality of life issue.</p> <p>Low: Aspirational projects/prospective mitigation</p>			