

# Village of East Rockaway Annex

This document presents the Village of East Rockaway’s annex to the *Nassau County Multi-Jurisdictional Hazard Mitigation Plan*.

## Hazard Mitigation Plan Points of Contact

The individuals below have been identified as this jurisdiction’s points of contact for the hazard mitigation plan. These individuals are members of the Planning Committee that met regularly for the update of this plan and will continue to meet in the years ahead to implement it.

Primary Point of Contact	Alternate Point of Contact
Juan A. Garcia, P.E.,CFM., Village Engineer 376 Atlantic Avenue PO Box 189 East Rockaway, NY 11542 jgarcia@villageofeastrockaway.org 516-887-6310	Thomas Smith, Superintendent Of Buildings 376 Atlantic Avenue Po Box 189 East Rockaway, NY 11542 jgarcia@villageofeastrockaway.org 516-887-6310

## Profile

The Village of East Rockaway covers approximately 1.02 square miles<sup>1</sup> and has a total population of 9,814 according to the American Community Survey 5-year 2018 Estimates. Some of the demographics of the Village of East Rockaway are summarized in Table 1. This information supported the development of mitigation actions that account for the needs of the most vulnerable individuals in the community.

Table 1: Village of East Rockaway Demographic Information

Demographic		Demographic	
Below 5 Years Old	5.4%	Black or African American alone	3.0%
Above 65 Years Old	16.0%	American Indian and Alaska Native alone	0.0%
Individuals with Disabilities	5.5%	Asian alone	3.0%
Persons in Poverty	4.5%	Native Hawaiian and other Pacific Islander alone	0.0%
Renters	22.6%	Two or More Races	1.6%
Without a High School Diploma	460.0%	White alone, not Hispanic or Latino, percent	81.4%
Without Access to Broadband Internet	8.6%	Hispanic or Latino	11.9%

<sup>1</sup> This is inclusive of land area only.

Residential development has increased by five percent over the past years. The area has seen an increase in multi-family homes, condos, and apartments. In many instances extending properties are being repurposed to become residential property. The jurisdiction continues to maintain zoning and a planning team. By understanding these development trends and how they intersect with hazard-prone areas, this allows for current and future vulnerabilities to be planned for and avoided.

Refer to the **County Profile** section of this plan for additional information related to current and future conditions of the County’s vulnerable population and the natural environment. This information provides important context for understanding hazard mitigation planning.

## Hazard Vulnerability

This section summarizes how the natural hazards profiled in Section 4 of this plan impact the Village of East Rockaway. The jurisdiction identified coastal hazards, flooding, and wind as the natural hazards that most impact the community. Table 2 shows the sectors of the community that are most likely to be impacted by each hazard. The categories that were considered included the community, economy, health and social services, housing, infrastructure, natural and cultural resources, or no impact. No impact indicates that the jurisdiction did not identify a noticeable impact from the hazard over the past five years, even if the hazard occurs. This information was used to develop a relevant and effective mitigation strategy for the jurisdiction. Detailed hazard event histories, critical facility exposure, and additional vulnerability information can be found in each hazard profile in Section 4 of this plan.

The hazards that most impact the Village of East Rockaway include:  
**Coastal Hazards, Flooding, and Wind.**

*Table 2: Village of East Rockaway Hazard Impacts*

Hazard	Impact Categories
Coastal Hazards	Community, Housing, Infrastructure
Drought	Infrastructure
Extreme Temperatures	No Impact
Flooding	Community, Housing, Infrastructure
Ground Failure	Community, Infrastructure
Hurricane and Tropical Storms	Community, Housing, Infrastructure
Hail	Economy, Infrastructure
Lightning	Housing, Infrastructure
Severe Winter Weather	Community, Infrastructure
Tornados	No Impact
Wind	Community, Housing, Infrastructure

## Capability Assessment

This section summarizes the capabilities that the Village of East Rockaway has in place that can support hazard mitigation. These capabilities include plans, ordinances, staff, financial resources, and program participation. This Capability Assessment was used to help drive the identification and development of the projects presented in the Mitigation Strategy to make sure that they are appropriate in scope and achievable to implement.

### Legal and Regulatory Capability Assessment

Table 3 lists the assessment of existing legal and regulatory tools for the Village of East Rockaway. The Village of East Rockaway maintains several key administrative and technical capabilities to support mitigation, including building codes, capital improvement plans, flood plain management plans, post disaster recovery ordinances, post disaster recovery plans, resilience plans, site plan review requirements, and stormwater management plans. These capabilities are critical to consider as tools in developing and implementing mitigation strategies. To further enhance their mitigation capabilities, the Village can consider the capabilities in the table below that the Village currently does not have. These additional capabilities would either support creating a legal framework or strategy for implementing a diversity of mitigation actions.

*Table 3: Village of East Rockaway Existing Legal and Regulatory Capabilities*

Regulatory Tool	Yes / No	Citation (if applicable)
Access and Functional Needs Plan	No	
Building Code	Yes	
Capital Improvement Plan	Yes	
Climate Action Plan	No	
Community Development Plan	No	
Comprehensive Plan / Master Plan	No	
Economic Development Plan(s)	No	
Emergency Response Plan(s)	No	
Floodplain Management Plan(s)	Yes	
Growth Management Plan(s)	No	
NFIP Flood Damage Prevention Ordinance(s)	No	
Open Space Plan(s)	No	
Post Disaster Recovery Ordinance(s)	Yes	
Post Disaster Recovery Plan(s)	Yes	
Real Estate Disclosure Requirements	No	
Resilience Plan(s)	Yes	
Site Plan Review Requirement(s)	Yes	
Small Area Development Plan(s)	No	

Regulatory Tool	Yes / No	Citation (if applicable)
Special Purpose Ordinance(s)	No	
Stormwater Management Plan(s)	Yes	
Subdivision Ordinance(s)	No	
Transportation Plan(s)	No	
Zoning Ordinance(s)	No	

## Administrative and Technical Capability Assessment

Table 4 lists the assessment of existing administrative and technical tools for the Village of East Rockaway. Increasing capacity and expertise in mitigation related administrative and technical capabilities of the Village will support mitigation planning and implementation.

*Table 4: Village of East Rockaway Existing Staff / Personnel Resource*

Staff / Personnel Resource	Yes / No	Details
Emergency Manager(s)	Yes	
Engineer(s) trained in construction practices related to buildings/infrastructure	Yes	
Engineer(s) with an understanding of natural and/or human caused hazards	Yes	
Engineer(s) with knowledge of land development and land management practices	Yes	
Grant Writers	Yes	
Personnel skilled or trained in Geographic Information Systems	Yes	
Personnel trained in construction practices related to buildings/infrastructure	No	
Planner(s) with an understanding of natural hazards	No	
Planner(s) with knowledge of land development and land management practices	No	
Scientist(s) familiar with natural hazards	No	
Surveyors	No	

## Fiscal Capability Assessment

Table 5 lists the assessment of existing fiscal tools for the Village of East Rockaway. Funding is often the biggest barrier when implementing mitigation programs. The Village is primarily able to fund mitigation programs by state mitigation grant programs. Village of East Rockaway should consider exploring additional fiscal capabilities in order to gain access to additional funding for mitigation.

Table 5: Village of East Rockaway Existing Fiscal Capabilities

Resources	Yes / No	Additional Details
Ability to incur debt through general obligation bonds	No	
Ability to incur debt through private activity bonds	No	
Ability to incur debt through special tax bonds	No	
Authority to levy taxes for specific purposes	No	
Authority to utilize user fees for utility services	No	
Authority to withhold public expenditures in hazard prone areas	No	
Capital improvements project funding	No	
Community Development Block Grants (CDBG)	No	
Impact fees for home buyers and/or developers	No	
State mitigation grant programs	Yes	

## Community Classification Assessment

Table 6 lists the assessment of existing community classifications for the Village of East Rockaway. Participation in the CRS and Climate Smart Communities program demonstrates increased capabilities of the Village related to mitigation. Exploring gaining additional community classifications will guide the Village's mitigation programs and support capacity building.

Table 6: Village of East Rockaway Community Classifications

Classification	Yes/No (or Status)
Building Code Effectiveness Grading Schedule (BCEGS)	No
Public Protection Classification Program	No
Community Rating System (CRS)	Yes
Other Classifications	Climate Smart Community

## National Flood Insurance Program Summary

Approximately 30% of the municipal area is in flood-prone areas. This section provides a summary of the floodplain management capabilities for Village of East Rockaway and how the jurisdiction is meeting the requirements of the National Flood Insurance Program (NFIP).

The Village's Engineer, and Certified Floodplain Manager, is responsible for floodplain management. Additional training will support the future growth of the floodplain management program. The Village administers the NFIP through education and outreach, building permit and site plan review, and inspections. One barrier to running a successful NFIP program in the Village of East Rockaway is the lack of open area to meet NFIP minimum standards. The flood maps for this jurisdiction accurately portray the current flood risk. There are currently no RiskMAP projects ongoing in this jurisdiction.

After flood events, substantial damage determinations are made by obtaining an estimated cost of damaged, performed by a licensed professional. The Village reported that 5 properties were substantially damaged as a result of recent flood events. The Village of East Rockaway is in good standing with the NFIP. Based on documentation received from NYSDEC, the Village had its last Community Assistance Contact on 02/15/2013 and its last Community Assistance Visit on 07/20/2018. There are no NFIP compliance violations that need to be addressed in this jurisdiction.

Some properties in the Village have been elevated with the assistance of the New York State mitigation program. The Flood Damage Prevention Ordinance was last amended 12/10/2018 and can be referenced in L.L. No. 2-2018.

## Mitigation Strategy

The following section provides an overview of the mitigation strategy for Village of East Rockaway. It provides an overview of the jurisdiction's previous mitigation actions, proposed actions, and the NYS mitigation worksheets.

### Previous Mitigation Actions

<b>Action</b>	Permanent generators installed at four vulnerable East Rockaway school facilities.	Lawson Avenue Drainage Project	DPW and Recreation Hardening	First Avenue
<b>Risk Category</b>	Frequent power outages due to extreme weather	Rainstorm Event	Flood Event	Flood Event
<b>Project Status</b>	In progress	In progress	In progress	Not started
<b>Project Status Description</b>	Completed 50% of the installation	completed 100% design	completed 100% design	Conceptual design completed
<b>Carried Forward to 2020 Plan</b>	Y	Y	Y	Y
<b>Required Changes</b>	None	None	None	None

## Proposed Mitigation Actions

Project Number	VER_1	VER_2	VER_3	VER_4	VER_5
Project Name	Department of Public Works and Recreation Hardening	Fire Department Flooding Action Plan	First Avenue Check valves	Generator Installation at Four East Rockaway Schools	Lawson Ave Drainage Project
Goal being met	3	2, 3	3	2, 3	3
Hazards to be mitigated	Local flooding during rain and tidal events	Flooding	Local Flooding during rain and tidal events	Frequent power outages due to extreme weather	Local flooding during rain and tidal events
Description of the Problem	Superstorm Sandy flooded the Department of Public Works (DPW) office area and Recreation building.	Three Fire Department facilities in the Village are located in the 100 year floodplain and may sustain damage in the event of a flood (East Rockaway Fire Department Protector Hook Ladder and Hose Company 1, East Rockaway Fire Department Vigilant Engine Company 1, and East Rockaway Fire Department Incorporated). The Village owns the fire apparatuses and equipment housed in the Fire Department-owned facilities.	Roadway floods during super moon tide and rain events due the lack of a backflow prevention valve in the outfall pipe.	There are frequent power outages at four facilities.	Drainage project to increase drainage capacity at this location.
Description of the Solution	Construct a flood wall at the DPW office area and Recreation building to mitigate future flooding of these buildings.	Coordinate an action plan with the Fire Department to protect the critical equipment and fire apparatuses from flooding. This plan may include an option to move the fire apparatuses to alternative locations outside the flood zone once a flood warning has been issued.	Construct a chamber (manhole) to house check valve to prevent black flow.	Install permanent generators. 50% of this project is complete.	Increase diameter of all the drainage system to convey larger amount of runoff.
Critical Facility	Yes	Yes	No	Yes	No
EHP Issues	Y	N	Y	N	Y
Estimated Timeline	2016-2022	2021-2026	2021-2026	2021-2026	2016-2022
Lead Agency	Village of East Rockaway	Village of East Rockaway	Village of East Rockaway	East Rockaway School District	Village of East Rockaway
Estimated Costs	\$350000	\$10000	\$50000	\$160000	\$3500000
Estimated Benefits	450000	Avoid the loss of multiple fire apparatuses due to flooding	50000	No loss of power	\$1,000,000 each occurrence
Potential Funding Sources	GOSR	Municipal budget	Municipal budget	FEMA HMGP, Municipal budget	GOSR



## Mitigation Action Worksheets

The following pages contain mitigation action worksheets that provide additional detail some of the jurisdiction's proposed mitigation actions.

## Nassau County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Inc. Village of East Rockaway

NYS DHSES Action Worksheet			
Project Name:	Lawson Ave Drainage Project		
Project Number:	Leave Blank		
Risk / Vulnerability			
Hazard of Concern:	Local flooding during rain and tidal events		
Description of the Problem:	Drainage project to increase drainage capacity at this location.		
Action or Project Intended for Implementation			
Description of the Solution:	Increase diameter of all the drainage system to convey larger amount of runoff.		
Is this project related to a Critical Facility?		Yes	No <input checked="" type="checkbox"/>
<small>(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)</small>			
Level of Protection:	25-year storm	Estimated Benefits (losses avoided):	\$1,000,000 each occurrence
Useful Life:	50 years		
Estimated Cost:	\$3,500,000		
Plan for Implementation			
Prioritization:	Leave Blank	Desired Timeframe for Implementation:	2016-2022
Estimated Time Required for Project Implementation:	2016-2022	Potential Funding Sources:	GOSR
Responsible Organization:	Village of East Rockaway	Local Planning Mechanisms to be Used in Implementation, if any:	Village of East Rockaway Engineering
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Raise the roadway	\$20,000,000	Cost Prohibitive
	Increase the capacity to protect against a 50-year storm	\$10,000,000	Cost Prohibitive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

## Nassau County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Inc. Village of East Rockaway

NYS DHSES Action Worksheet			
Project Name:	First Avenue Check valves		
Project Number:	Leave Blank		
Risk / Vulnerability			
Hazard of Concern:	Local Flooding during rain and tidal events		
Description of the Problem:	Roadway floods during super moon tide and rain events due the lack of a backflow prevention valve in the outfall pipe.		
Action or Project Intended for Implementation			
Description of the Solution:	Construct a chamber (manhole) to house check valve to prevent black flow.		
Is this project related to a Critical Facility?		Yes	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 year storm	Estimated Benefits (losses avoided):	\$50,000
Useful Life:	50 years		
Estimated Cost:	\$50,000		
Plan for Implementation			
Prioritization:	Leave Blank	Desired Timeframe for Implementation:	2021-2026
Estimated Time Required for Project Implementation:	Five years	Potential Funding Sources:	Local Funding
Responsible Organization:	Village of East Rockaway	Local Planning Mechanisms to be Used in Implementation, if any:	Village of East Rockaway Engineering
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Construct a new drainage system	\$6,000,000	Cost Prohibitive
	Elevate the roadway	\$2,000,000	Cost Prohibitive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

## Nassau County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Inc. Village of East Rockaway

NYS DHSES Action Worksheet			
Project Name:	Department of Public Works and Recreation Hardening		
Project Number:	Leave Blank		
Risk / Vulnerability			
Hazard of Concern:	Local flooding during rain and tidal events		
Description of the Problem:	Superstorm Sandy flooded the Department of Public Works (DPW) office area and Recreation building.		
Action or Project Intended for Implementation			
Description of the Solution:	Construct a flood wall at the DPW office area and Recreation building to mitigate future flooding of these buildings.		
Is this project related to a Critical Facility?	Yes	<input checked="" type="checkbox"/>	No
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	500 year storm	Estimated Benefits (losses avoided):	\$450,000
Useful Life:	50 years		
Estimated Cost:	\$350,000		
Plan for Implementation			
Prioritization:	Leave Blank	Desired Timeframe for Implementation:	2016-2022
Estimated Time Required for Project Implementation:	2016-2022	Potential Funding Sources:	GOSR
Responsible Organization:	Village of East Rockaway	Local Planning Mechanisms to be Used in Implementation, if any:	Village of East Rockaway Engineering
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Elevate building	\$2,000,000	Cost Prohibitive
	Construct a second floor, abandoned first floor	\$700,000	Cost Prohibitive
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			