

Village of Malverne Annex

This document presents the Village of Malverne’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
Keith Corbett, Mayor Village of Malverne 99 Church Street, Malverne, NY 11565 kcorbett@malvernevillage.org	Anthony Marino, Director Office of Emergency Management 99 Church Street Malverne, NY 11565 lihueguy@optonline.net 516-376-9304

Profile

The Village of Malverne covers approximately 1.06 square miles¹ and has a total population of 8,485 according to the American Community Survey 5-Year 2018 Estimates. Some of the demographics of the Village of Malverne 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 Malverne Demographic Information

Demographic		Demographic	
Below 5 Years Old	6.1%	Black or African American alone	7.0%
Above 65 Years Old	21.9%	American Indian and Alaska Native alone	0.1%
Individuals with Disabilities	5.5%	Asian alone	3.9%
Persons in Poverty	2.7%	Native Hawaiian and other Pacific Islander alone	0.0%
Renters	3.2%	Two or More Races	4.8%
Without a High School Diploma	4.6%	White alone, not Hispanic or Latino, percent	76.4%
Without Access to Broadband Internet	10.3%	Hispanic or Latino	7.4%

¹ This is inclusive of land area only.

Much of the development in Malverne in the past five years has been new residential construction, expansion of existing park areas, and new small businesses, which encompasses the broader spectrum of development. The jurisdiction maintains its zoning maps and 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 Malverne. The jurisdiction identified Extreme Temperatures, Flooding, Lightning, Severe Winter Weather, and Wind as the 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 Malverne include:
Extreme Temperatures, Flooding, Lightning, Severe Winter Weather, and Wind.

Table 2: Village of Malverne Hazard Impacts

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

Capability Assessment

This section summarizes the capabilities that the Village of Malverne 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 Malverne. The Village of Malverne maintains several key administrative and technical capabilities to support mitigation, including building codes, community development plans, emergency response plans, post disaster recovery plans, site plan review requirements, small area development plans, stormwater management plans, subdivision ordinances, and zoning ordinances. 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 Malverne Existing Legal and Regulatory Capabilities

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

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

Administrative and Technical Capability Assessment

Table 4 lists the assessment of existing administrative and technical tools for the Village of Malverne. The Village of Malverne's primary administrative and technical capabilities include an emergency manager, a building and infrastructure engineer, and a construction practices personnel. The Village can bolster their capabilities in this category by identifying individuals with expertise in land use and natural hazards (specifically related to flooding).

Table 4: Village of Malverne Existing Staff / Personnel Resource

Staff / Personnel Resource	Yes / No	Details
Emergency Manager(s)	Yes	Director, Deputy Director, members
Engineer(s) trained in construction practices related to buildings/infrastructure	Yes	George Lappin, Lou Santoro
Engineer(s) with an understanding of natural and/or human caused hazards	No	
Engineer(s) with knowledge of land development and land management practices	No	
Grant Writers	No	
Personnel skilled or trained in Geographic Information Systems	No	
Personnel trained in construction practices related to buildings/infrastructure	Yes	George Lappin, Lou Santoro
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 Malverne. Funding is often the biggest barrier when implementing mitigation programs. The Village is primarily able to fund mitigation programs by incurring debt through general obligation bonds and CDBG programs. Village of Malverne should consider explore additional fiscal capabilities in order to gain access to additional funding for mitigation.

Table 5: Village of Malverne Existing Fiscal Capabilities

Resources	Yes / No	Additional Details
Ability to incur debt through general obligation bonds	Yes	
Ability to incur debt through private activity bonds	No	
Ability to incur dept 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)	Yes	
Impact fees for home buyers and/or developers	No	
State mitigation grant programs	No	

Community Classification Assessment

Table 6 lists the assessment of existing community classifications for the Village of Malverne. Exploring gaining one or more community classifications will guide the Village's mitigation programs and support capacity building.

Table 6: Village of Malverne Community Classifications

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

National Flood Insurance Program Summary

This section provides a summary of the floodplain management capabilities for Village of Malverne and how the jurisdiction is meeting the requirements of the National Flood Insurance Program (NFIP).

The southwest area of the Village is the most flood-prone. The Village does not currently have a designated floodplain manager. Currently, the Village administers the NFIP through building permit and site plan review. The Village noted that training was a current barrier to running a successful NFIP program. The flood maps for this jurisdiction accurately portray the current flood risk. There are currently no RiskMAP projects ongoing in this jurisdiction.

No properties in the jurisdiction have been substantially damaged as a result of recent flood events. The Village of Malverne is in good standing with the NFIP. Based on documentation received from NYSDEC, a compliance audit in the form of a Community Assistance Visit was conducted in the Village on 06/15/2010. There are no NFIP compliance violations that need to be addressed in this jurisdiction.

The Village repaves roads to control storm flow. The Flood Damage Prevention Ordinance was last amended 08/05/2009 and can be referenced in Chapter 313, Village Code, L.L. No. 2-2009.

Mitigation Strategy

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

Previous Mitigation Actions

Action	A permanent generator will be installed at the OEM facility. It will have sufficient capacity to allow the OEM to provide continuous service to the community’s needs during a power outage.	The purpose of this project is to completely rebuild the entire paved surface area of the Department of Public Works Facility. The project will include engineering design, removal of the existing pavement, installation of a new storm water management system including new drywells and drainage structures, re-grading of the subsurface to obtain proper water runoff and the repaving of the entire 32,000 square foot area. The completed project will mitigate the problems of storm water flooding, ponding and dangerous ice formation in this busy and critical facility. It will protect workers and volunteers from injuries and provide for improved services and response times to the residents, especially during storm events and emergencies.
Risk Category	Power failure from extreme weather events and emergencies	Flooding and extreme weather events
Project Status	Completed	75% Complete
Project Status Description		75% complete, continuation has been delayed by the Covid-19.
Carried Forward to 2020 Plan	No	No
Required Changes	No	No

Proposed Mitigation Actions

Project Number	VME_1	VME_2	VME_3
Project Name	Tree Maintenance Program	Flood Reduction	Snow Removal Program
Goal being met	3, 5	1, 2, 3	4, 5
Hazards to be mitigated	Straight-line wind, Hurricane	Flooding	Snow
Priority Ranking	High	High	Medium
Description of the Problem	Downed limbs and trees have been a regular problem in the Village of Malverne during high wind events. The Village is a member of the Tree City USA program. Due to the constant loss of trees, the Village is committed to restocking trees in the area on a regular basis. At the same time larger, older trees in the community present hazards to roads, residents and facilities during high wind and rain situations several times a year. Super Storm Sandy and Tropical Storm Isaias caused several downed trees and limbs which caused many power lines to go down and damage to properties. Catching issues before trees and branches are downed in high wind events through a program that tracks trees and maintains them to reduce risk to lives and properties would be very helpful for the Village.	Five sites in the Village of Malverne experience localized flooding caused by a lack of or undersized storm infrastructure. The affected areas are near the intersection of Kenilworth St. and Nottingham Rd.; Eimer Ave. and Alnwick Rd.; Cornwell Ave and N. King St.; and Sydney Ave. and Burton St.	Heavy snow on the ground in the Village of Malverne can prevent the residents from traveling safely to work, school and critical medical appointments.
Description of the Solution	The Village of Malverne will develop a tree maintenance program that includes the to assessment of trees on a regular basis and suggest mitigation measures to limit future damage caused by high wind that brings down limbs and trees.	Increased underground storage and percolation of stormwater runoff through subgrade storage and percolation	The Village of Malverne will establish a program through which DPW workers, contingency staff and volunteers could be made available for snow removal following major snow events. This program would include teaching any identified additional personnel how to handle Village trucks and snow removal procedures and protocols.
Critical Facility	No	No	No
EHP Issues	No	Unknown	No
Estimated Timeline	1 Year	5 Years	1 Year

Project Number	VME_1	VME_2	VME_3
Lead Agency	Village of Malverne	Department of Public Works	Village of Malverne
Estimated Costs	\$15,000 - \$25,000	\$1,500,000	To be determined
Estimated Benefits	Property, building, infrastructure, and vehicle damage, as well as life safety.	Flooding relief for homeowners, reduction of hazardous conditions for traffic and pedestrians.	Safe roads for emergency and residential vehicles.
Potential Funding Sources	Municipal budget, HMA Grants, NYS Grant	Village of Malverne, Capital improvement funds, Community improvement funds	Village Funding

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: Incorporated Village of Malverne

NYS DHSES Action Worksheet			
Project Name:	Flood Reduction		
Project Number:	VME_2		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Five sites in the Village of Malverne experience localized flooding caused by a lack of or undersized storm infrastructure. The affected areas are near the intersection of Kenilworth St. and Nottingham Rd.; Eimer Ave. and Alnwick Rd.; Cornwell Ave and N. King St.; and Sydney Ave. and Burton St.		
Action or Project Intended for Implementation			
Description of the Solution:	Increased underground storage and percolation of stormwater runoff through subgrade storage and percolation.		
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:	100-Year storm	Estimated Benefits (losses avoided):	Flooding relief for homeowners, reduction of hazardous conditions for traffic and pedestrians.
Useful Life:	50 Years		
Estimated Cost:	\$1,500,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	5 years
Estimated Time Required for Project Implementation:	5 Years	Potential Funding Sources:	Village of Malverne, Capital improvement funds, Community improvement funds
Responsible Organization:	Village of Malverne Building Department	Local Planning Mechanisms to be Used in Implementation, if any:	Village designated/hired Engineering firm
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	Add new storm sewer lines at various locations	,\$5,000,000	Not cost effective
	Leave it as it is.	\$0	Continued damage to private and public facilities, possible future sinkholes
	Relocate homes	Expensive	Not desirable by the community
Progress Report (for plan maintenance)			
Date of Status Report:	July 2020		
Report of Progress:	Not started		
Update Evaluation of the Problem and/or Solution:			

Instructions

(Name of Jurisdiction) _____

NYS DHSES Action Worksheet			
Project Name:	Each action must have a unique project number referenced here and in the Action Tables.		
Project Number:	Each action must have a unique project name referenced here and in the Action Tables.		
Risk / Vulnerability			
Hazard of Concern:	Identify the hazard being addressed with this action.		
Description of the Problem:	Provide a detailed narrative of the problem. Describe the natural hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.		
Action or Project Intended for Implementation			
Description of the Solution:	Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input 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:	Identify the level of protection the proposed project will provide. Ex. 100-year (1%) flood.	Estimated Benefits (losses avoided):	Identify the benefits that implementation of this project will provide. If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.
Useful Life:	Identify the number of years the project will provide protection against the hazard.		
Estimated Cost:	Identify all estimated costs associated with implementation.		
Plan for Implementation			
Prioritization:	Identify the priority based on the prioritization method agreed upon.	Desired Timeframe for Implementation:	Identify the desired start time for this project. Ex. Within 6 months.
Estimated Time Required for Project Implementation:	Provided the estimated time required to complete the project from start to end.	Potential Funding Sources:	Multiple sources of potential funding should be listed when appropriate.
Responsible Organization:	Identify the name of a department or agency responsible for implementation, not the jurisdiction.	Local Planning Mechanisms to be Used in Implementation, if any:	Consider the use of local planning mechanisms that will be used to implement this project.
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Alternative 1 Brief Description		Include a description of pros/cons of Alternative 1.
	Alternative 2 Brief Description		Include a description of pros/cons of Alternative 2.
Progress Report (for plan maintenance)			
Date of Status Report:	This section should be completed during plan maintenance/evaluation.		
Report of Progress:	Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.		
Update Evaluation of the Problem and/or Solution:	Provide an updated description of the problem and solution, and what has happened since initial consideration/development.		

Nassau County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction: Incorporated Village of Malverne

NYS DHSES Action Worksheet			
Project Name:	Tree Maintenance Program		
Project Number:	VME_1		
Risk / Vulnerability			
Hazard of Concern:	Straight-line wind, hurricane		
Description of the Problem:	Downed limbs and trees have been a regular problem in the Village of Malverne during high wind events. The Village is a member of the Tree City USA program. Due to the constant loss of trees, the Village is committed to restocking trees in the area on a regular basis. At the same time larger, older trees in the community present hazards to roads, residents and facilities during high wind and rain situations several times a year. Super Storm Sandy and Tropical Storm Isaias caused several downed trees and limbs which caused many power lines to go down and damage to properties. Catching issues before trees and branches are downed in high wind events through a program that tracks trees and maintains them to reduce risk to lives and properties would be very helpful for the Village.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village of Malverne will develop a tree maintenance program that includes the to assessment of trees on a regular basis and suggest mitigation measures to limit future damage caused by high wind that brings down limbs and trees.		
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:	Protects against property loss and damage power lines during severe storm events which take place multiple times throughout the year	Estimated Benefits (losses avoided):	Property, building, infrastructure, and vehicle damage, as well as life safety.
Useful Life:	10 Years		
Estimated Cost:	\$15,000 - \$25,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2021
Estimated Time Required for Project Implementation:	1 Year	Potential Funding Sources:	Municipal budget, HMA Grants, NYS Grant
Responsible Organization:	Department of Public Works	Local Planning Mechanisms to be Used in Implementation, if any:	
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	Wait until they fall / die; remove downed branches and trees as needed.	\$5,000 annually	Not stable option for all storm events
	Remove sick or dangerous specimens	\$25,000	This may be feasible and able to be done over a period of a few years
	No Action	\$0	Challenge remains with removing and managing downed trees.
Progress Report (for plan maintenance)			

Instructions

(Name of Jurisdiction) _____

NYS DHSES Action Worksheet			
Project Name:	Each action must have a unique project number referenced here and in the Action Tables.		
Project Number:	Each action must have a unique project name referenced here and in the Action Tables.		
Risk / Vulnerability			
Hazard of Concern:	Identify the hazard being addressed with this action.		
Description of the Problem:	Provide a detailed narrative of the problem. Describe the natural hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.		
Action or Project Intended for Implementation			
Description of the Solution:	Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input 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:	Identify the level of protection the proposed project will provide. Ex. 100-year (1%) flood.	Estimated Benefits (losses avoided):	Identify the benefits that implementation of this project will provide. If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.
Useful Life:	Identify the number of years the project will provide protection against the hazard.		
Estimated Cost:	Identify all estimated costs associated with implementation.		
Plan for Implementation			
Prioritization:	Identify the priority based on the prioritization method agreed upon.	Desired Timeframe for Implementation:	Identify the desired start time for this project. Ex. Within 6 months.
Estimated Time Required for Project Implementation:	Provided the estimated time required to complete the project from start to end.	Potential Funding Sources:	Multiple sources of potential funding should be listed when appropriate.
Responsible Organization:	Identify the name of a department or agency responsible for implementation, not the jurisdiction.	Local Planning Mechanisms to be Used in Implementation, if any:	Consider the use of local planning mechanisms that will be used to implement this project.
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Alternative 1 Brief Description		Include a description of pros/cons of Alternative 1.
	Alternative 2 Brief Description		Include a description of pros/cons of Alternative 2.
Progress Report (for plan maintenance)			
Date of Status Report:	This section should be completed during plan maintenance/evaluation.		
Report of Progress:	Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.		
Update Evaluation of the Problem and/or Solution:	Provide an updated description of the problem and solution, and what has happened since initial consideration/development.		