

10.2.26 City of Newburgh

This section presents the jurisdictional annex for the City of Newburgh.

10.2.26.1 Contacts

Primary and secondary contacts regarding this plan are identified as follows:

- Terry Ahlers – Acting Fire Chief
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Newburgh, NY 12550
(845) 562-1212

- William Horton – Assistant Fire Chief
22 Grand Street
Newburgh, NY 12550
(845) 562-1212

- Jason C. Morris, P.E. – City Engineer
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(845) 569-7300

- Judy Kennedy – Mayor
83 Broadway, City Hall
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10.2.26.2 Municipal Profile

Population

According to the U.S. Census, the 2010 population for the City of Newburgh was twenty-eight thousand, eight hundred sixty-six (28,866), with a population density of seven thousand, five hundred eighty-eight (7,588) persons per square mile. The population has increased by a 2% from the 2000 census to twenty-eight thousand, two hundred sixty (28,260).

Location

The City of Newburgh is located on the Hudson River, sixty (60) miles north of New York City. The city lies near the intersection of Interstate 84 (running west to Pennsylvania and east to Connecticut) and the New York State Thruway (I-87), which runs from New York City north to Albany. The City of Newburgh is surrounded by the Town of Newburgh to the north and west, the Town of New Windsor to the south, and the Hudson River to the east.

Brief History

The City of Newburgh was originally a part of the Town of Newburgh. The Town of Newburgh is one of the oldest Towns in New York State. Before English settlement, the Waoranek tribe had settled the area, part of the Lenape tribe of the Algonquin nation. In 1609, Henry Hudson, an Englishman sailing under contract to the Dutch government, was the first European to explore the river as far north as Newburgh. Hudson's ship, the Half Moon, came up the river to Newburgh.

By 1750, mills were operating along the creeks feeding the growth of ship, home and commercial building. Farms were productive, and there were two (2) docks on the Hudson.

The Precinct of Newburgh was established in 1763, by a law passed by the General Assembly of New York State. In March of 1788, the Precinct of Newburgh was organized as the Town of Newburgh. The Village of Newburgh was incorporated out of the Town in May of 1800, becoming the City of Newburgh in 1865. The remaining forty-five (45) square miles of the precinct comprises the Town of Newburgh of today.

As the 20th century dawned, Newburgh was thriving with over one hundred (100) manufacturing plants. The industries were predominantly machine shops, shipbuilding yards, cloth manufactories, clothing design and production factories, brickyards, plaster works and shipping concerns. During World War I shipyards and other manufacturing plants were vastly expanded. Ships were built in Newburgh were given names reflecting the surrounding area, such as the S.S. Walden and the S.S. Firthcliff. Newburgh was a major center for retail shopping for the entire Hudson Valley up through World War II.

Governing Body

The City of Newburgh operates under the Council-Manager form of municipal government. The City Council of Trustees is comprised of the Mayor and six (6) council members. The City Manager is the administrative head of the City government and manages the day-to-day affairs of the City.

Future Growth

After decades of declining population, the City of Newburgh began experiencing population growth in the early nineties. While the growth has been modest, the City has recognized the need to appropriately plan for this change. The City also recognized the opportunity presented by this growth trend to revitalize parts of the City that have long been neglected. Accordingly, in the mid-2000's, the City began updating its Planning Documents.

In 2008, the City adopted Plan-It Newburgh, the City's sustainable Master Plan, followed in 2011 by the adoption of the Future Land Use Plan, which described and mapped the City's desired land use goals. In 2012, the City adopted a report by the Pace Land Use Law Center on streamlining the Land Use review and approval process.

10.2.26.3 Hazard Vulnerabilities and Ranking

Risk Ranking

The following hazards have been identified by the City of Newburgh. Vulnerability was assessed due to frequency and potential extent for damages.

Hazard Event	Vulnerability
Drought	Moderate
Earthquake	Low
Flood	High
Hurricane	Moderate
Ice Jam	Low
Ice Storm	Moderate
Severe Thunderstorm	High
Tornado	Low
Wildfire	Low
Winter Storm	High
Extreme Temperatures	Moderate

Critical Facilities

A list of community Critical Facilities was generated to aid in mitigation planning. The table below summarizes the number of these facilities within the City which may be impacted by any of the previously noted hazards.

This information was used to identify potential needed improvements to existing Critical Facilities. Critical facilities were identified by the City as meeting this definition: “Any structure(s) and/or infrastructure within a community whose incapacity or destruction would:

- Have a debilitating impact on the defense or economic security of that community.
- Significantly hinder a community’s ability to recover following a disaster.”

Discretion was left up to the participating jurisdiction to select these facilities.

Transportation Network	Water Supply Systems (wells)	Government Services	Emergency Services	Educational / Shelter and Evacuation Facilities	Telecommunications
4	2	4	3	1	4

Additionally, the City has provided a table that has over one hundred and ninety (190) critical infrastructure and key resources to be addressed; see Table 10.2.26n for more information.

The City of Newburgh has eight (8) critical facilities within the 500-year floodplain or the high hazard Landslide Rating¹ area. One (1) of these facilities is located in both. Below is a table that identifies the structures and hazard issues.

Critical Infrastructure	500-Yr Flood	Landslide Rating	Associated Mitigation Action
Crystal Lake Dam	Y	N	N/A
Decarlo Dam	Y	Y	N/A
Harrison Dam	Y	N	N/A
Holden Dam	Y	N	N/A
McDole Mill Pond Dam	Y	N	N/A
Muchattoes Lake Dam	Y	N	N/A
Delano-Hitch Park	N	Y	N/A
Downing Park	N	Y	N/A

While it is assumed that most municipal water systems facilities are not located within the floodplain, the City will explore hardening/relocation opportunities for those that are located within the floodplain should such actions become necessary due to the incidence of flooding impacts.

By necessity, critical wastewater facilities are located within the 500-year floodplain due to discharge requirements and gravity-fed systems optimization. While relocation is neither desired nor feasible, the City of Newburgh will seek to harden these facilities where feasibly and fiscally possible. The City provided an extensive listing of such facilities in Table 10.2.26n.

Priority Hazard Events

The following sections detail the priority hazard events identified by the jurisdiction. Additional information about each hazard including frequency, history, and severity within Orange County is included within Section 5.0 of the main body of the Hazard Mitigation Plan (Volume I).

The probability of climate-related hazard events is generally expected to increase in the future within the City of Newburgh. This anticipated increase results from the expected increase in weather volatility associated with climate change. Hudson River communities will also experience increased threat of flooding due to sea level rise. Upstream tributaries such as the Quassaick Creek and Bushfield Creek will also experience increased flooding occurrences.

¹ Areas with a landslide rating in of greater than 37 are considered hazardous. The data was derived from HAZUS software analysis.

Past occurrences of hazard events are indicated in their respective profiles below. Some hazards may not have locally available documentation of past occurrence, but are nonetheless profiled in this annex to instill future mitigation planning consideration.

Flood

Flooding in the City is a result from snow melt, heavy rains or other weather conditions. By identifying areas that are prone to flooding it is possible to restrict development to open space uses, including passive recreation and agricultural uses, which don't obstruct water flow and are tolerant of flooding. The Federal Emergency Management Agency (FEMA) has identified potential flood hazard areas in the City of Newburgh, which are shown on FEMA maps.

Historical Occurrence:

The Table below summarizes the FEMA Presidential Disaster (DR) or Emergency (EM) Declarations for flood events in Orange County, which encompasses the City of Newburgh. Many of these federal disasters were the remnants of severe storms or tropical or extra tropical disturbances (hurricanes, tropical storms, Nor'Easters) either passing over or located within proximity to the State. Further information about flooding events which impacted Orange County is provided in Section 5.0 of this plan.

Declaration Number	Type of Event	Date	Cost of Losses (approximate)	Source (s)
DR-45	Hurricane & Flood (Hurricane Connie and Diane)	August 1955	Flooding throughout the Town and City of Newburgh that caused evacuations. Flooding caused damage to residential and commercial properties, road closures, and power outages.	FEMA, Orange County HMP
DR-311	Severe Storms and Flood (Tropical Storm Doria)	August 1971	This storm caused seven deaths and \$147.6 M in damage throughout its path (1971 USD, \$735 M 2006 USD). New York State experienced approximately \$7.4 M in total eligible damages. Orange County experienced approximately \$29 K in property and crop damages. Estimated damages for the Town and City of Newburgh are unknown.	FEMA, Orange County HMP
DR-702	Coastal Storms and Flood	April 1984	Flooding occurred across southeastern New York State, and a federal disaster designation was declared on April 17. Flooding caused road closures in the Town and City of Newburgh Planning Area. Orange County experienced approximately \$11.9M in total eligible damages.	FEMA, Orange County HMP
DR-1095	Severe Storm and Flooding	January 1996	Severe storms and flooding across the region from January 19-30th led to road damage across Orange County. Orange County was among many counties in New York State that became eligible for Individual and Public Assistance under Federal Disaster Declaration DR-1095. Storm-induced damages to County roads at 32 locations resulted in approximately \$330,000 in damages. Estimated storm damages to Town and City of Newburgh are unknown.	FEMA, NOAA-NCDC, Orange County HMP

Table 10.2.26d: Presidential Disaster Declarations for Flooding and Related Events in Orange County				
Declaration Number	Type of Event	Date	Cost of Losses (approximate)	Source (s)
DR-1296	Remnants of Hurricane Floyd Flooding	September 1999	Heavy rain caused flooding which damaged private properties, local bridges, roads, and culverts	NOAA-NCDC, Orange County HMP
DR-1564	Severe Storms and Flooding	August-September 2004	The remnants of a tropical system combined with thunderstorms moved over Western Orange County, where hourly rainfall estimates in the three to five inches was observed at times. Houses were damaged, roads were destroyed, and buildings collapsed throughout Western Orange County. A federal disaster declaration was made on October 1. Damage estimates were \$2.2 M in public and \$1.8 M in private property. As of April 2013, \$2.8 M in FEMA Individual Assistance and \$14 M in Public Assistance Grants were approved and obligated throughout New York State. Estimated storm damages to Town and City of Newburgh are unknown.	FEMA, Orange County HMP
DR-1565	Remnants of Hurricane Ivan and Flooding	September 2004	Remnants of Hurricane Ivan dropped up to 5" of rainfall in some areas of Orange County. This amount of rainfall caused flash flooding of roadways and highways across the region. The total damages within New York State were approximately \$15.10 M. Specific damages totals for the Town and City of Newburgh are unknown.	NOAA-NCDC, Orange County HMP
DR-1589	Severe Storms and Flooding	April 2005	Heavy rain caused widespread urban flooding throughout Orange County. Most small streams and rivers overflowed their banks. In addition, high wind gusts from 46 to 57 mph, associated with heavier showers, downed trees.	FEMA, NOAA-NCDC, Orange County HMP
DR-4031	Remnants of Tropical Storm Lee and Flooding	September 2011	The remnants of Tropical Storm Lee impacted the county two weeks after Hurricane Irene made landfall. Combined damages for Hurricane Irene and Tropical Storm Lee exceeded \$ 55 million for Orange County. Specific damages for the Town and City of Newburgh were not available for this storm event.	NOAA-NCDC, FEMA,
DR-4085	Remnants of Hurricane Sandy and Flooding	October 2012	Much of the worst impacts during this storm were felt along the eastern portion of the County, and downstate. In Town and City of Newburgh, there were widespread power outages and downed trees. The water and wastewater plants were inaccessible due to road closures.	NOAA-NCDC, FEMA, Planning Area Input

The table below indicates that approximately 22% of the land in the City is within high flood risk areas (Zones A, AE, AH, AO) and approximately 1% of the land in the City is mapped as moderate flood risk areas (X500) (FEMA Flooding Mapping, 2016).

Table 10.2.26e: Summary of Land Areas Within the City of Newburgh in Flood Hazard Areas (Source: FEMA DFIRM Data, 2016)						
Municipality	Total Land Area (Acres)	High Flood Risk (Acres)	Moderate Flood Risk (Acres)	Low Flood Risk (Acres)	Land in High Flood Risk %	Land in Moderate Flood Risk %
		A, AE, AH, AO	X500	X	A, AE, AH, AO	X500
City of Newburgh	3,034	661	41	2,302	22%	1%

Below is a table that illustrates the value of property in the City of Newburgh that is located within the 500-year floodplain and is categorized by land use type. This table was derived from FEMA floodplain mapping and parcel data from the Orange County Property Assessor.

Table 10.2.26f: Structures in the City of Newburgh Vulnerable to 500-year Flood Events and Their Estimated Values		
Type of Structure	# Structures in Hazard Area	Value of Structures (in millions)
Residential	11	\$63.1
Commercial	40	\$47.6
Industrial	15	\$15.1
Agricultural	0	\$0
Religious/Non-profit	0	\$0
Government	0	\$0
Education	0	\$0
Utilities	3	\$0
Dams	6	Unknown
Parks	0	\$0
Total	75	\$126M

Extreme Temperatures

Both extreme heat and cold can be detrimental to human health and property. Associated risks include sunstroke and hypothermia as well as brownouts and flooding caused by the ice dams created by extreme cold.

A 2010 report by the NYS Office of Emergency Management ranked Orange County as among the counties with the smallest percentages of vulnerable populations, with 10% aged sixty-five (65) and above and 7% younger than age five (5).

Historical Occurrence:

In the past ten (10) years, the following extreme heat and cold events were reported to NOAA's Storm Events Database in Orange County.

- July 2011 – Heat between 95 and 105 degrees, along with heat indices in excess of 105 degrees occurred for a couple of days. The heat index was as high as 115 degrees at Stewart Field Airport (KSWF) in Newburgh at 1 p.m. and 2 p.m. on July 22. One (1) death in Orange County was attributed.
- July 2012 – Excessive Heat- The heat index reached or exceeded 107 degrees at Newburgh airport (Stewart Field).
- July 2013 – Excessive Heat- The combination of high heat and humidity resulted in heat index values between 105 and 110 degrees for a few hours during the afternoon at Montgomery Airport and at Newburgh International Airport.
- September 2013 – Excessive Heat- At Stewart International Airport in Newburgh, the heat index reached 105 degrees at 2 p.m. At nearby Poughkeepsie Airport, the heat index also reached 105 degrees. This occurred at 3 p.m.
- February 2015 – Cold/Wind Chill- Wind chills fell to 26 degrees below zero (0) at 6 a.m. at both Orange County Airport and Stewart International Airport.

Severe Thunderstorm

For a description of this hazard, please see section 5.2.

Historical Occurrence:

In the past ten (10) years there is no record of any severe thunderstorms that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

Hurricane

For a description of this hazard, please see section 5.3.

Historical Occurrence:

In the past ten (10) years there is no record of any hurricanes that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document. It is of note that hurricane threats could potential increase due to climate change trends.

Drought

For a description of this hazard, please see section 5.5.

Historical Occurrence:

In the past ten (10) years there is no record of any droughts that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

Earthquake

For a description of this hazard, please see section 5.7.

Historical Occurrence:

In the past ten (10) years there is no record of any earthquakes that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

Winter Storm (Severe)

For a description of this hazard, please see section 5.8.

Historical Occurrences:

In the past ten (10) years there is no record of any winter storms that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

Ice Storm

The NWS uses the term “ice storm” to describe occasions when damaging accumulations of ice are expected during freezing rain situations. Significant accumulations of ice pull down trees and utility lines resulting in the loss of power and communications. Such accumulations of ice pose a risk to walking and driving. Damage from such events could include structural damage, utility failures, and tree damage as a result of excessive weight.

Historical Occurrence:

According to NOAA’s Storm Events Database, one (1) ice storm events have been recorded for Orange County in the past ten years, but no specific information is available for the City of Newburgh.

- December 11, 2008: Major automobile accident on the Newburgh-Beacon Bridge in Orange County with eight injuries. There were also scattered reports of trees and power lines down with the American Red Cross opening a shelter in Central Valley the following day.

Wildfire

Wildfires can be caused by natural hazards (lightning) but are much more often manmade, either accidental in cause or arson. These most often occur during the summer, associated with the drier conditions which allow vegetation and brush to readily burn.

Though no historical occurrences have affected the City, these events are most likely to occur in tracts of undeveloped land. The New York State Hazard Mitigation Plan (2014) summarized the risk according to favorable locations in the following table.

Table 10.2.26g: Exposure To Wildfire Risk Assessment

Urban/Wildlife Interface (feet)	Wildfire Risk Area- No Improved Properties (acres)	Wildfire Risk Area- With Improved Properties (acres)	Total Area (acres)	Total Area within Wildfire Risk Zones (%)	Total Value of Improvements in Municipal Areas	Improved Value within Wildfire Risk Zones	Improved Value within Wildfire Risk Zones (%)
11,341	19	41	641	9%	\$189,184,799	\$2,998,437	2%

Ice Jam

For a description of this hazard, please see section 5.10.

Historical Occurrences:

In the past ten (10) years there is no record of any ice jams that have explicitly impacted the City of Newburgh. However, there have been a number of recorded occurrences within Orange County. The information can be found in the main body of the document.

10.2.26.4 Capability Assessment

Planning and Regulatory Capability

Table 10.2.26h: Planning and Regulatory Tools

Tool/Program (Code, Ordinance, Plan)	Status: Do you have this? (Y/N)	Authority (Local, County, State, Federal)	Code Citation and Comments (Code Chapter, Date of Adoption, Name of Plan, Explanation of Authority, etc.)
Building Code	Y	County, State, Federal	NYS Building Codes 2010 Edition
Zoning Ordinance	Y	Local	
Subdivision Ordinance	Y	Local	
NFIP Flood Damage Protection Ordinance	Y	Federal, State, Local	
NFIP - Cumulative Substantial Damages	Y	Federal, Local	
Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas)	Y	Federal, State, Local	
Growth Management	Y	Local	
Floodplain Management/Basin Plan	Y	Federal, State, Local	
Stormwater Management Plan/Ordinance	N	N/A	
Comprehensive Plan/Master Plan	Y	Local	

Table 10.2.26h: Planning and Regulatory Tools			
Tool/Program (Code, Ordinance, Plan)	Status: Do you have this? (Y/N)	Authority (Local, County, State, Federal)	Code Citation and Comments (Code Chapter, Date of Adoption, Name of Plan, Explanation of Authority, etc.)
Capital Improvements Plan	Y	Local	
Site Plan Review Requirements	Y	Local	
Economic Development Plan	Y	Local	
Emergency Response Plan	Y	Local	2004
Post Disaster Recovery Plan	Y	Local	
Post Disaster Recovery Ordinance	N	N/A	

Administrative and Technical

The table below summarizes potential staff and personnel resources available to the City.

Table 10.2.26i: Administrative and Technical Capabilities		
Available Staff/ Personnel Resources	(Y or N)	Department/Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	City Engineer, City Planner, City Planning Board, ZBA
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	City Engineer, City Building Inspector, City Fire Chief
Planners or engineers with an understanding of natural hazards	Y	City Engineer, City Fire Chief, DPW Superintendent
NFIP Floodplain Administrator	Y	City Engineer
Surveyor(s)	Y	City Engineer
Personnel skilled or trained in "GIS" applications	Y	City Engineer, City Planner
Scientist familiar with natural hazards in the County.	Y	City Consultant, as needed
Emergency Manager	Y	City Fire Chief
Grant Writer(s)	Y	Various department head
Staff with expertise or training in benefit/cost analysis	Y	City Engineer
Professionals trained in conducting damage assessments	Y	City Engineer, DPW Superintendent, City Fire Chief

Fiscal

Table 10.2.26j: Fiscal Opportunities For The City of Newburgh		
Financial Resources	Accessible or Eligible to Use (Yes, No, Don't Know)	Comments
Community Development Block Grants	Y	Approved Entitlement Community
Capital Improvements Project funding	Y	Various projects
Authority to levy taxes for specific purposes	Y	Various projects
Fees for water, sewer, gas, or electric service	Y	Water, sewer, parking, boat launch
Impact fees for homebuyers or new developments/homes	Y	Various projects
Incur debt through general obligation bonds	Y	Various project
Federal/State Funding	Y	Various projects

NFIP: Administrator, Vulnerability, Resources, Compliance

According to FEMA Flood Mapping, the City of Newburgh has two hundred six (206) parcels located in 100 and 500 year floodplains. These include entire and or partial parcels. As of January 31, 2018, the City has thirty-four (34) current National Flood Insurance Program policies; the insurance In-Force (whole \$) is \$11,729,800. The written premium In-Force for the Town is 58,894. According to Table 8.2c, there are two (2) repetitive flood loss residential properties located within the City of Newburgh – neither of which qualify as severe repetitive flood loss properties.

The City Engineer serves as the Floodplain Administrator. The City has been maintaining NFIP participation by performing the duties and actions that were listed in the local laws that their municipal boards adopted. (Local Law #5 of 2007) The City Floodplain Administrator has been provided an NFIP best practices guidance package and will be using it to improve local participation in NFIP standards going forward. This package of documents was provided by NYSDHSES and can be found in Appendix F - NFIP Floodplain Administrator Guidance Package.

Table 10.2.26k: National Flood Insurance Program (NFIP) Summary (Source: FEMA Policy Statistics NY)						
Jurisdiction	# Policies	# Claims (Losses)	Total Loss Payments	Closed Losses	Open Losses	CWOP Losses
City of Newburgh	34	35	\$514,836	26	0	9

Hazard Mitigation: Existing and Planning Mechanisms

Emergency Communications, Routes, and Shelters:

Orange County and the City of Newburgh utilize the CodeRED system for emergency notifications. The City follows emergency route rules set by Orange County. The City has one (1) designated emergency shelter: South William Street Armory (321 S. Williams St., Newburgh, NY 12550). More information on this site can be found in Attachment III.

Comprehensive Plan:

The City of Newburgh's Comprehensive Plan – "Plan-It Newburgh" – was adopted in December 2008. The plan discusses existing conditions, comprehensive plans vision and goals, implementations, as well as potential zoning map changes. The plan also lists the provision of emergency services and emergency housing as high priorities for the City.

Comprehensive Emergency Management Plan:

On June 16, 2008, the Newburgh City Council adopted the Comprehensive Emergency Management Plan, providing all-hazards management guidance for City actions before, during and after an emergency.

The development of this plan included an analysis of potential hazards that could affect the city and an assessment of the capabilities existing in the city to deal with potential hazards.

City departments' and agencies' emergency management responsibilities are outlined in this plan. Assignments are made within the framework of the present City capability and existing organizational responsibilities. The City Manager is designated to coordinate all emergency management activities of the City of Newburgh. The City intends to use the Incident Command System (ICS) to respond to emergencies. ICS is a management tool for the command, control, and coordination of resources and personnel in an emergency. Specific emergency management guidance for situations requiring special knowledge, technical expertise, and resources may be addressed in separate annexes attached to the plan. Examples of this type of situation are emergencies resulting from hazardous chemical releases, dam failures, or power outages.

The plan provides general all-hazards management guidance, using existing organizations, to allow the City to meet its responsibilities before, during and after an emergency.

Planning Mechanisms:

While this annex has provided a summary and description of existing plans, policies, and regulatory mechanisms that support hazard mitigation, the 2018 Orange County Hazard Mitigation Plan Update is intended to allow for the integration of its recommendations and data into local plans. Listed below are several planning and policy mechanisms that lend themselves to the integration of materials and objectives from this hazard mitigation plan. Columns to the right indicate whether the municipality has utilized hazard mitigation planning elements in the past (as in the aftermath of a previous local hazard mitigation plan) and whether they intend to be utilized in the future (which most, if not all, do).

Table 10.2.26l: Incorporation of Hazard Mitigation Planning into Existing and Future Planning Mechanisms		
Planning Mechanism	Has been Utilized	May be Utilized
Capital Improvement Budget: Hazard Mitigation Actions to be considered during the development of annual capital improvement plans. Compliance with Hazard Mitigation goals and objectives as well as the hazard vulnerability of site will be a consideration during the evaluation of infrastructure and facilities projects.		X
Operating Budget: Hazard Mitigation Actions to be considered within day-to-day operating budgets as funding permits.		X
Building & Zoning Ordinances: Review of the hazard mitigation plan and hazard analyses are part of the evaluation of land use, zoning, and development review ordinances and permitted processes.		X
Comprehensive Land Use Plan: Elements such as hazard vulnerability and hazard area extents will be considered during the development of future land use maps and other elements of comprehensive planning.		X
Human Resource Manual: Employee job descriptions may contain elements related to hazard mitigation planning and associated recommendations.		X
Grant Applications: Support for funding requests in the form of data, maps, and priority recommendations will be drawn from the hazard mitigation plan.		X
Fire Plan: Fire Plans for the municipality and local fire departments can utilize data and mapping in the hazard mitigation plan.		X
Local School Service Projects: Municipal officials and staff can explore the possibility of collaboration with local school districts to provide avenues for student community service projects as well as educational opportunities.		X
Economic Development: Local chambers of commerce and other economic development agencies can utilize the hazard mitigation plan to better inform new/expanding businesses in finding a location.		X

Summary

The City will utilize this Hazard Mitigation Plan to inform the Comprehensive Plan and update its Comprehensive Emergency Management Plan by advancing a list of potential mitigation actions, including but not limited to improvements to infrastructure, emergency response, and public awareness.

10.2.26.5 Mitigation Strategy and Prioritization

Past, Completed, and Ongoing Initiatives

The City has not provided any information in regards to past, complete and ongoing initiatives.

Proposed Initiatives

Table 10.2.26m: Mitigation Actions/Projects Identified			
Action	Description	Involved Agency(ies)	Funding Source(s)
CN-1	Lake Drive Culvert Replacement	City of Newburgh Engineering Department	Transportation Improvement Program – 20% Match, Bridge NY, FEMA (HMGP, HMA)
CN-2	Install backup generators	City of Newburgh Engineering and Fire Dept.	Local BAN, FEMA (HMGP, HMA)
CN-3	Walsh Road Bridge Rehabilitation	City of Newburgh Engineering	Transportation Improvement Program – 20% Match, Bridge NY, FEMA (HMGP, HMA)
CN-4	Washington Lake Dam reconstruction	City of Newburgh Engineering and Water Departments	Local BAN FEMA (HMGP, HMA)
CN-5	City-wide Emergency Communications system	City of Newburgh Fire Department	Municipal Budget, County Budget, FEMA (HMGP, HMA)
CN-6	Develop an Emergency Operations Center	City of Newburgh IT and Fire Department	Municipal Budget, FEMA (HMGP, HMA)
CN-7	Silver Stream Dam repairs	City of Newburgh Engineering and Water Dept.	Local BAN, FEMA (HMGP, HMA)
CN-8	Mill Street Bridge Rehabilitation	City of Newburgh Engineering Dept.	Local BAN, , Bridge NY, FEMA (HMGP, HMA)
CN-9	Purchase ground penetrating radar	City of Newburgh Engineering Department	Municipal Budget, FEMA (HMGP, HMA)
CN-10	NIMS Training	City of Newburgh Fire Department	Municipal Budget, FEMA (HMGP, HMA)
CN-11	Local Emergency Planning Committee training	City of Newburgh Fire Department	Municipal Budget, FEMA (HMGP, HMA)
CN-12	City WWTP flood protection redesign	City of Newburgh Engineering & Fire Dept.	Municipal Budget (alone), FEMA (HMGP, HMA), CWSRF, WQIP
CN-13	Secondary access to police building	City of Newburgh Engineering Dept.	NYSDHSES, NYS Police Grants
CN-14	Phase 1 Sewer Separation project	City of Newburgh Engineering & Water Dept.	Municipal Budget (unable to fund)
CN-15	Update floodplain maps	City of Newburgh Engineering & Fire Dept.	Municipal Budget
CN-16	Emergency auxiliary water supply pumping station	City of Newburgh Engineering & Water Dept.	NYSEFC DWSRF, NYSEFC WIIA
CN-17	Newburgh watershed protection plan	City of Newburgh Engineering & Water Dept.	NYSDEC, Hudson River Estuary Program

STAPLEE forms were completed for each of these aforementioned actions. A table with these evaluations can be found in Attachment II of this jurisdictional annex.

“STAPLEE” refers to the following lenses of evaluation: social, technological, administrative, political, legal, economic, and environmental.

Future Needs

Table 10.2.26n below lists all critical infrastructure and key resources for the City of Newburgh. As time passes and this infrastructure wears, the facilities and resources in this list will provide expectations of future hazard mitigation needs.

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Hazmat Manufacturing/ Storage/Use	Sunoco	Fuel Station	115	Lake Street	
Hazmat Manufacturing/ Storage/Use	Sunoco	Fuel Station	510	Broadway	
Hazmat Manufacturing/ Storage/Use	Mobil Mart	Fuel Station	310	Broadway	
Hazmat Manufacturing/ Storage/Use	Shell	Fuel Station	405	Broadway	
Hazmat Manufacturing/ Storage/Use	Urethane Technology Company	Hazmat	59	Temple Avenue	
Hazmat Manufacturing/ Storage/Use	Arctic Glacier	Hazmat	225	Lake Street	
Hazmat Manufacturing/ Storage/Use	Verizon	Hazmat	220	Liberty Street	
Hazmat Manufacturing/ Storage/Use	Propane Mixing Station	Hazmat		Renwick & Water Street	
High Occupant Habitation	Bourne Apartments	Highrise Building	150-154	Smith Street	
High Occupant Habitation	UTC High Rise	Highrise Building	207	Lake Drive	
High Occupant Habitation	Hudson Pointe Apartments	Highrise Building	90	Grand Street	
High Occupant Habitation	Burton Towers	Highrise Building	36	Cerone Place	
High Occupant Habitation	Cerone Place	Highrise Building	35	Cerone Place	
Special Occupant Habitation (PNP Facility)	Gidney Avenue Magnet School	Educational Facility	300	Gidney Avenue	
Special Occupant Habitation (PNP Facility)	Newburgh Free Academy - Main Campus	Educational Facility	201	Fullerton Avenue	
Special Occupant Habitation (PNP Facility)	Newburgh Free Academy - North Campus	Educational Facility	301	Robinson Avenue	
Special Occupant Habitation (PNP Facility)	South Middle School	Educational Facility	33-63	Monument Street	
Special Occupant Habitation (PNP Facility)	Pre-K Center	Educational Facility	191	Washington Street	
Special Occupant Habitation (PNP Facility)	Horizons-on-the-Hudson Magnet School	Educational Facility	137	Montgomery Street	
Special Occupant Habitation (PNP Facility)	Bishop Dunn Memorial School	Educational Facility	50	Gidney Avenue	
Special Occupant Habitation (PNP Facility)	Nora Cronin Presentation Academy	Educational Facility	120	South Street	
Special Occupant Habitation (PNP Facility)	San Miguel Academy of Newburgh	Educational Facility		Renwick Street	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Special Occupant Habitation (PNP Facility)	Mount Saint Mary College (MSMC)	Educational Facility	330	Powell Avenue	
Special Occupant Habitation (PNP Facility)	SUNY Orange Community College	Educational Facility	1	Washington Center	
Special Occupant Habitation (PNP Facility)	St. Luke's Cornwall Hospital - Newburgh Campus	Medical Facility	70	Dubois Street	
Public Assemblage	Delano Hitch Stadium/Recreation Park/Aquatic Center	Assembly/ Stadium		Washington Street	
Religious Assemblage	Amazing Grace Apostolic Faith Church	Assembly	361	Broadway	
Religious Assemblage	Ame Zion Church	Assembly	109	Washington Terrace	
Religious Assemblage	Best temple Church of God in Christ	Assembly	11	South Street	
Religious Assemblage	Calvary Full Gospel Bible Church	Assembly	142	South Street Apt 5220	
Religious Assemblage	Calvary Full Gospel Church	Assembly	359	1st Street	
Religious Assemblage	Calvary Presbyterian Church	Assembly	120	South Street	
Religious Assemblage	Centro Catolico Hispano	Assembly	157	Liberty Street	
Religious Assemblage	Church of God	Assembly	60	Dubois Street	
Religious Assemblage	Church of God	Assembly	4	Oak Street	
Religious Assemblage	Church of God by Faith	Assembly	29	Bridge Street	
Religious Assemblage	Church of God of Prophecy	Assembly	173	Broadway	
Religious Assemblage	Church of the Good Shepherd	Assembly	271	Broadway	
Religious Assemblage	Church of the Living God	Assembly	61	William Street	
Religious Assemblage	Ebenezer Baptist Church	Assembly	76	1st Street	
Religious Assemblage	First Assembly of God International	Assembly	25	William Street	
Religious Assemblage	First Baptist Church	Assembly	481	South Street	
Religious Assemblage	First Born Church of the Living God House of Joy	Assembly	109	Liberty Street	
Religious Assemblage	First United Methodist Church	Assembly	241	Liberty Street	
Religious Assemblage	Gods Deliverance Center Incorporated	Assembly	189	W Parmenter Street	
Religious Assemblage	Grace Tabernacle	Assembly	78	South William Street	
Religious Assemblage	Grace United Methodist Church	Assembly	468	Broadway	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Religious Assemblage	Holy Deliverance Apostolic Temple	Assembly	37	Chambers Street	
Religious Assemblage	Holy temple Incorporated U H C	Assembly	179	South Street	
Religious Assemblage	House of God Hebrew Pentecostal Church	Assembly	149	South William Street	
Religious Assemblage	House of Prayer	Assembly	60	South Johnston Street	
Religious Assemblage	House of Refuge	Assembly	131	Broadway	
Religious Assemblage	Hudson Valley Christian Church	Assembly	100	Grand Street	
Religious Assemblage	Kingdom Hall of Jehovas Witness	Assembly	408	Carpenter Ave Apt 13	
Religious Assemblage	Life Restoration Church	Assembly	136	1st Street	
Religious Assemblage	Living in Jesus Ministry Incorporated	Assembly	119	South Street	
Religious Assemblage	Milford United Methodist Church	Assembly	206	Ann Street	
Religious Assemblage	Mt Calvary F B H Church	Assembly	167	Grand Street	
Religious Assemblage	New Beginners Church of Christ	Assembly	60	Johnston Street	
Religious Assemblage	New Hope BAPTIST Church	Assembly	20	Mill Street	
Religious Assemblage	New Jerusalem Deliverance Temple	Assembly	376	Washington Street	
Religious Assemblage	Newburgh Tabernacle Sdn Church	Assembly	251	Grand Street	
Religious Assemblage	Rhema Christian Worship Center	Assembly	49	Lander Street	
Religious Assemblage	Sacred Heart Church	Assembly	25	South Robinson Avenue	
Religious Assemblage	Saint Patrick's Church	Assembly	55	Grand Street	
Religious Assemblage	Seventh Day Adventist Church	Assembly	497	Gidney Avenue	
Religious Assemblage	Soul Saving Station	Assembly	120	North Miller Street	
Religious Assemblage	St Francis of Assisi Religious Education Ofc	Assembly	145	Benkard Avenue	
Religious Assemblage	St George's Episcopal Church	Assembly	105	Grand Street	
Religious Assemblage	St Martin de Porres Society of Black Ministry	Assembly	185	Liberty Street	
Religious Assemblage	St Mary's Church	Assembly	180	South Street	
Religious Assemblage	St Nicholas Greek Orthodox Church	Assembly	19	Fullerton Avenue	
Religious Assemblage	Temple Baptist	Assembly	7	William Street	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Religious Assemblage	The Living Word Center	Assembly	102	South Plank Road	
Religious Assemblage	The Salvation Army	Assembly	234	Van Ness Street	
Religious Assemblage	Valley Bible Baptist Church	Assembly	10	Carter Street # A	
Community Lifeline	Natural Gas Blow-off Locations	Utilities			
Community Lifeline	Electric	Utilities			
Community Lifeline	Water Department	Utilities	493	Little Britain Road	
Community Lifeline	Wastewater Plant	Sewage Treatment Facility	2	Renwick Street	
Community Lifeline	Washington Lake	Water Storage Reservoir	207	Little Britain Road	
Public Safety Facility	Fire Department Headquarters	Fire Department	22	Grand Street	
Public Safety Facility	Engine 3	Fire Department	492	Broadway	
Public Safety Facility	Police Headquarters	Police Department	55	Broadway	
Public Building	Newburgh Post Office	Post Offices	217	Liberty Street	
Public Building	West Newburgh Post Office	Post Offices	467	Broadway	
Public Building	Congressman Sean Patrick Maloney District Office	Government Building	123	Grand Street	
Public Building	Orange County District 4 Office of Curlie Dillard	County Government Building	350	North Water Street	
Public Building	City Court	Local Government Building	300	Broadway	
Public Building	City Hall	Local Government Building	83	Broadway	
Public Building	1841 Courthouse (Building/ Code Enforcement, Historian, Congressman Maloney District Office)	Local Government Building	123	Grand Street	
Public Building	Newburgh Film Office	Local Government Building	250	Lake Street	
Public Building	Recreation Department	Local Government Building	401	Washington Street	
Public Building	Newburgh Free Library	Local Government Building	124	Grand Street	
Public Building	Department of Public Works (Location of Municipal Fuel Pumps)	Local Government Building	88	Pierces Road	
Transportation Network	South Street	Evacuation Route		South Street	
Transportation Network	Robinson/South Robinson Ave (State Route 9W)	Evacuation Route/State Highway		Robinson/S Robinson Ave	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Transportation Network	Lake Street Bridge (Over Quassaick Creek)	Transportation Network		Lake Street	
Transportation Network	South Robinson/9W Bridge (over Railroad)	Transportation Network	250	South Robinson Avenue	
Transportation Network	Mill Street Bridge (over railroad)	Transportation Network	242	Mill Street	
Transportation Network	Gidney Avenue Bridge (over Interstate 84)	Transportation Network	564	Gidney Avenue	
Transportation Network	Broadway (17K)	Transportation Network		Broadway	
Transportation Network	Lake Street (State Route 32)	Transportation Network		Lake Street	
Transportation Network	Railroad Bridge at Pier Loun	Railroad Transit System	10	Park Place	
Transportation Network	Railroad (Runs Parallel to the River and Water St.)	Railroad Transit System			
Transportation Network	Newburgh-Beacon Ferry	River Transportation System		Front Street	
Retail Occupancy (High Transit Habitation)	A&P Coat Apron & Linen Supply Inc.	Business	115	Dickson Street	
Public Building	NYS DOT Transportation Maintenance	State Building	112	Dickson Street	
	Independent Living, Inc.		5	Washington Terrace	
Special Occupant Habitation (PNP Facility)	West End Veterinary Office	Medical Facility	41	Fullerton Avenue	
Special Occupant Habitation (PNP Facility)	Greater Hudson Family Health	Medical Facility	147	Lake Street	
	Graphic Technology, Inc.	Business	211	Dupont Avenue	
Special Occupant Habitation (PNP Facility)	St. Luke's Liberty Dialysis	Medical Facility	4	Corwin Court	
Public Assemblage	Ritz Theater	Assembly Building	107	Broadway	
High Occupant Habitation	The Cornerstone Residence Housing	Highrise Building	111	Broadway	
Manufacturing Facility	LaBella Strings	Business	256	Broadway	
Special Occupant Habitation (PNP Facility)	High Pointe Senior Apartments	Senior Citizen Centers	223	West Street	
Retail Occupancy (High Transit Habitation)	The Granite Factory	Business	27	Renwick Street	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Retail Occupancy (High Transit Habitation)	NJ Mattress Factory	Business	102	South William Street	
Retail Occupancy (High Transit Habitation)	Haight Fire Equipment	Business	199	Little Britain Road	
Hazmat Manufacturing/ Storage/Use	Culligan	Bulk Storage Facility	131	Little Britain Road	
Warehouse Occupancy	Herr Foods Inc.	Food Distribution Center	280	Little Britain Road	
	Key Bank	Banking and Finance	78	Broadway	
	Citizens Bank	Banking and Finance	456	Broadway	
	Bank of America	Banking and Finance	385	Broadway	
	TD Bank	Banking and Finance	800	Broadway	
	Hudson Heritage Federal Credit Union	Banking and Finance	2	Corwin Court	
Transportation Network	Water Street	Evacuation Route			
Community Lifeline	Dam (Walsh Rd)	Water Storage Reservoir			
Community Lifeline	Dam (South Robinson)	Water Storage Reservoir			
Community Lifeline	Dam (William St)	Water Storage Reservoir			
Community Lifeline	Water Tank (Ellis Ave)	Water Storage Reservoir			
Community Lifeline	Water Tank (Marne Ave)	Water Storage Reservoir			
Community Lifeline	Brady Water Tank	Water Storage Reservoir			
Sewer					
Community Lifeline	Crescent Avenue Pump Station	Lift Station	40	Plank Road	Across the street
Community Lifeline	Mullens Apartment Pump Station	Lift Station	40	Walsh Road	
Community Lifeline	Front Street Pump Station	Lift Station	40	Front Street	
Community Lifeline	Lake Drive Pump Station	Lift Station	129	Lake Drive	
Community Lifeline	Rowing Club Pump Station	Lift Station		River Street	
Community Lifeline	S. William Street Temporary Pump Station	Lift Station	3	River Street	Intersection of River Street and extension of S. William Street.
Community Lifeline	Scobie Drive Pump Station	Lift Station	98	Scobie Drive	
Community Lifeline	Laborer's Local 17 Pump Station	Lift Station	301-307	Little Britain Road	

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Community Lifeline	South Interceptor				
Community Lifeline	North Interceptor				
Community Lifeline	Central Interceptor - Broadway to S. William Street				
Community Lifeline	Regulator No. 1				
Community Lifeline	Regulator No. 2				
Community Lifeline	Regulator No. 3		25	Renwick Street	Middle of Renwick Street, west of S. Colden Street
Community Lifeline	Regulator No. 4		38	Edward Street	Southern edge of S. William Street, east of Edward Street
Community Lifeline	Regulator No. 5		76	First Street	Southern edge of First Street, west of Montgomery Street
Community Lifeline	Regulator No. 6		110	Grand Street	Middle of Second Street east of Grand Street
Community Lifeline	Regulator No. 7		69	South Street	Middle of east bound lane of South Street, west of Water Street
Community Lifeline	Regulator No. 8		215	Water Street	Middle of the continuation of Colden Street, west of Water Street
Community Lifeline	Regulator No. 9		2	Broad Street	Middle of Broad Street, west of N. Water Street
Community Lifeline	Regulator No. 10		2	Nicoll Street	Southern edge of Nicoll Street
Community Lifeline	Regulator No. 11		10	Park Place	In the grassed median
Community Lifeline	Headworks Influent Line				

Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Community Lifeline	Diversion Manhole A		94	S Water Street	Northern edge of Washington Street, east of Colden Street
Community Lifeline	Diversion Manhole B		2	Colden Street	Eastern edge of site, across from old Train Station
Community Lifeline	Diversion Manhole C		124	Grand Street	Middle of Grand Street at Third Street
Community Lifeline	Diversion Manhole D		182	Water Street	In the turf area towards South Street
Community Lifeline	Diversion Manhole E		390	N. Montgomery Street	Middle of the N. Montgomery Street
Community Lifeline	Diversion Manhole F		38	Edward Street	Middle of S. William Street east of Edward Street
Community Lifeline	Diversion Manhole G		34	Montgomery Street	Southern edge of 2nd Street east of Montgomery St.
Water					
Community Lifeline	Carter Street Pump Station		2	Carter Street	
Community Lifeline	Marne Avenue Pump Station		283	Carpenter Avenue	
Community Lifeline	High Service Transmission Main				
Community Lifeline	Low Service Transmission Main				
Community Lifeline	Raw Water Transmission Main - Brown's Pond				
Community Lifeline	Raw Water Transmission Main - Washington Lake				
Community Lifeline	West Trunkline - Little Britain Road to South Interceptor				
Community Lifeline	Silver Stream Diversion Gate		799	NY-300	
Community Lifeline	Patton Brook Diversion Gate		1030	NY-300	

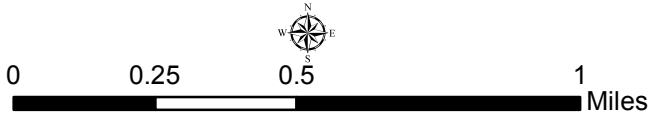
Table 10.2.26n: City of Newburgh Critical Infrastructure and Key Resources					
Category	Facility Name	CIKR Type	Street #	Street Name	Notes
Other					
Public Assemblage	Armory Unity Center		312	S. William Street	
	Repeater Location - Downing Park		123	Carpenter Avenue	
	Repeater Location - St. Luke's Hospital		70	Dubois Street	
Transportation Network	Railroad Bridge - Fifth Street				
Transportation Network	Railroad Bridge - Fourth Street				
Transportation Network	Railroad Bridge - Third Street				
Transportation Network	Railroad Bridge - Second Street				
Transportation Network	Railroad Bridge - Carpenter Street				
Transportation Network	Railroad Bridge - First Street				
Transportation Network	Railroad Bridge - Renwick Street				
Transportation Network	Railroad Bridge - Quassaick Creek				
Transportation Network	Railroad Crossing - Washington Street				
Transportation Network	Bridge - River Road at Quassaick Creek				
Transportation Network	Boat Launch				

10.2.26.6 Hazard Area Extent and Location

A map demonstrating the location of certain hazard areas is attached as Attachment I.

Attachment I

**Hazard Area Extent and Location Map -
City of Newburgh**



Path: C:\GIS\Projects\HMP\Orange County\Orange County Hazard Profiles.mxd

Attachment II

STAPLEE Mitigation Action Cost/Benefit Analysis - City of Newburgh

STAPLEE Criteria Consideration Tables
Mitigation Action Prioritization and Comparison

Jurisdiction: City of Newburgh

Action ID	Action	S	T	A	P	L	E	E	Can action be easily implemented?	Does action achieve multiple plan objectives?	Can action be quickly implemented?	Level of action benefits	Level of action overall costs	Priority ranking
		+ = benefit (favorable), - = cost (unfavorable), 0 = neutral or N/A											Levels = high, medium, or low	
CN-1	Lake Drive Culvert Replacement: Closure is eminent, replacement will keep road connections for emergency personnel and residents.	+	+	-	+	+	-	+	-	+	-	High	High (\$1.99 mill.)	High (Priority 3)
CN-2	Install backup emergency power sources for City Hall and two city owned buildings used as emergency shelters.	+	+	+	+	+	+	0	+	+	0	High	Medium (\$300,000)	High (Priority 5)
CN-3	Walsh Rd Bridge Rehabilitation: Rehabilitate / Replace failing portions of the bridge to keep road connection open for emergency personnel and residents	+	+	-	+	+	-	+	-	+	-	High	High (\$1.948 mill.)	High (Priority 6)
CN-4	Washington Lake Dam: spillway design and reconstruction, address wet area below dam, and installation of a low level drain to prevent inundation of surrounding structures in the event of failure	+	+	-	+	+	-	+	-	+	-	High	High (\$2.04 mill.)	High (Priority 7)
CN-5	Emergency Communication: Participate in a community wide emergency communications network to notify citizens of time critical information.	+	+	+	+	+	+	0	0	+	0	High	Medium	High (Priority 8)
CN-6	Emergency Operations Center: Plan and develop a functional Emergency Operations Center to manage and limit loss related to the cascading events from unplanned incidents.	+	+	+	+	+	0	0	0	+	+	High	Low (\$12,000-\$15,000)	High (Priority 9)
CN-7	Silver Stream Dam: headwall and spillway repairs to prevent inundation of surrounding structures in the event of failure, loss of backup drinking water source, and potential effects to NYCDEP aqueduct.	+	+	-	+	+	-	+	-	+	-	High	Medium (\$350,000)	High (Priority 10)
CN-8	Mill Street Bridge Rehabilitation: Bridge is currently closed; assessment, design, and repair of two failing footings will reopen road connections for emergency personnel and residents.	+	+	-	+	+	-	+	-	+	-	High	Medium (\$200,000)	High (Priority 11)

STAPLEE Criteria Consideration Tables
Mitigation Action Prioritization and Comparison

Jurisdiction: City of Newburgh

Action ID	Action	S	T	A	P	L	E	E	Can action be easily implemented?	Does action achieve multiple plan objectives?	Can action be quickly implemented?	Level of action benefits	Level of action overall costs	Priority ranking
		+ = benefit (favorable), - = cost (unfavorable), 0 = neutral or N/A											Levels = high, medium, or low	
CN-9	Ground Penetrating Radar: Purchase ground penetrating radar to quickly identify sinkholes caused by failed water and sewer lines.	+	+	0	+	+	0	+	+	+	+	Medium	Low (\$10,000)	High (Priority 9)
CN-10	NIMS Training: Continue training appropriate city personnel in the National Incident Management System. (NIMS)	+	+	0	+	+	+	+	+	+	+	Medium	Low (\$3,000)	High (Priority 10)
CN-11	Local Emergency Planning Committee: Continue training with, and support of the Local Emergency Planning Committee and coordinate continuing updates of the County Hazard Mitigation Plan.	+	+	0	+	+	+	+	+	+	+	Medium	Low (\$2,500)	High (Priority 11)
CN-12	Flood protection at City wastewater plant: Pursue funding to design and construct flood protection measures at the City Wastewater Plant on the Hudson River.	+	+	-	+	+	-	+	-	+	-	High	High (\$3 million)	Medium (Priority 1)
CN-13	Police Entrance: provide safe secondary access to the building. Existing overhead structure is failing.	+	+	0	+	+	0	0	0	0	0	Medium	Medium (\$100,000)	Medium (Priority 2)
CN-14	Sewer Separation Phase I: Engineer and complete separation of the storm and sanitary sewer systems to assist with limiting the overburden of the City sewer plant.	+	+	-	+	+	-	+	-	+	-	High	High (\$4 million)	Medium (Priority 3)
CN-15	Flood Plain Map Updates: Provide local level assistance in updating flood plain maps. Funds would be used to attend meetings held by NYDEC, FEMA and USGS.	+	+	0	+	+	+	+	+	+	+	Medium	Low (\$2,500)	Low
CN-16	Auxiliary Water Supply: Provide pumping station with line for fire suppression operations in the event of the loss of primary water supply through the construction of an auxiliary water supply system.	+	+	+	+	0	+	0	0	+	-	High	High (\$8.5 mill.)	High (Priority 4)

STAPLEE Criteria Consideration Tables
Mitigation Action Prioritization and Comparison

Jurisdiction:

City of Newburgh

Action ID	Action	S	T	A	P	L	E	E	Can action be easily implemented?	Does action achieve multiple plan objectives?	Can action be quickly implemented?	Level of action benefits	Level of action overall costs	Priority ranking
		+ = benefit (favorable), - = cost (unfavorable), 0 = neutral or N/A											Levels = high, medium, or low	
CN-17	Newburgh Watershed Protection Plan: Provide for the mapping, signage and oversight of the watershed system feeding into Washington Lake and Browns Pond Reservoirs.	+	+	0	+	+	0	+	+	+	+	Medium	Medium (\$350,000)	High (Priority 2)

Attachment III

**Hazard Mitigation Worksheets -
City of Newburgh**

Mitigation Actions and Strategy Detail Worksheet

Action Worksheet	
Name of Jurisdiction	City of Newburgh
Name of Hazard Mitigation Plan	Orange County Hazard Mitigation Plan
Potential Actions/Projects (not being implemented at this time)	
Action/Project Number	CNB 001
Name of Action/Project	Lake Drive Culvert Replacement
Summary of Evaluation: Benefits (losses avoided), estimated costs, and other factors considered	Closure is eminent, replacement will keep road connections for emergency personnel and residents. \$1.99 Million to replace failing culverts with a bridge structure, reconnecting the streambed.
Plan for Implementation	
Responsible Organization	City of Newburgh Engineering Department
Action/Project Priority	Tier 1 Priority 1
Potential Funding Sources	Transportation Improvement Program, 20 percent City match.
Other assisting organizations, entities, etc.	None
Local planning mechanisms to be used in project/action implementation, if any	Currently included for discussion/approval of the Capital Plan.
Progress Report	
Date of status report	
Report of progress	
Evaluation of effectiveness	

Mitigation Actions and Strategy Detail Worksheet

Action Worksheet	
Name of Jurisdiction	City of Newburgh
Name of Hazard Mitigation Plan	Orange County Hazard Mitigation Plan
Potential Actions/Projects (not being implemented at this time)	
Action/Project Number	CNB 003
Name of Action/Project	Flood Protection at City Wastewater Plant
Summary of Evaluation: Benefits (losses avoided), estimated costs, and other factors considered	Pursue funding to design and construct flood protection measures at the City Wastewater Plant on the Hudson River. The cost associated with protecting and raising the controls and tanks is estimated to be 3.00 million dollars.
Plan for Implementation	
Responsible Organization	City of Newburgh Engineering and Fire Departments.
Action/Project Priority	Tier 2
Potential Funding Sources	Municipal Budget (unable to fund)
Other assisting organizations, entities, etc.	None
Local planning mechanisms to be used in project/action implementation, if any	To be managed through the update of the Comprehensive Emergency Management Plan.
Progress Report	
Date of status report	
Report of progress	
Evaluation of effectiveness	

Orange County
Multi-Jurisdictional All Natural Hazard Mitigation Plan
Emergency Shelter Questionnaire

Name of Your Municipality:	<u>City of Newburgh</u>
Common Name of Your Emergency Shelter:	<u>South William Street Armory</u>
Street Address of Your Emergency Shelter:	<u>321 South William Street</u> <u>Newburgh, NY 12550</u>
Name of the Owner of Your Emergency Shelter:	<u>City of Newburgh</u>
Name of the Regular Occupant of Your Emergency Shelter:	<u>Newburgh Armory Unity center</u>

Name of Jurisdiction: _____

**RESOLUTION
TO AUTHORIZE THE ACCEPTANCE AND ADOPTION OF THE
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE FOR
ORANGE COUNTY, NEW YORK**

WHEREAS, the Orange County Department of Emergency Services, with the assistance from Barton & Loguidice, D.P.C., has gathered information and prepared the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York; and

WHEREAS, the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York has been prepared in accordance with the Disaster Mitigation Act of 2000 and Title 44 Code of Federal Regulations (CFR), Part 201; and

WHEREAS, Title 44 CFR, Chapter 1, Part 201.6(c)(5) requires each local government participating in the preparation of a Multi-Jurisdictional Mitigation Plan or Plan Update to accept and adopt such plan; and

WHEREAS, the City of Newburgh, has reviewed the 2016 Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, has found the document to be acceptable, and as a local unit of government, has afforded its citizens an opportunity to comment and provide input regarding the Plan Update and the actions included in the Plan;

WHEREAS, the City of Newburgh, will consider the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County during the implementation and updating of local planning mechanisms, and will incorporate the hazard assessment data, hazard vulnerabilities, and mitigation actions in these mechanisms, where applicable;

NOW THEREFORE, BE IT RESOLVED, that the City of Newburgh, as a participating jurisdiction, adopts the Multi-Jurisdictional Hazard Mitigation Plan Update for Orange County, New York, dated May 2016.

This resolution was thereupon declared duly adopted on _____.

(Mayor)

(Clerk)