

## 13. TOWNSHIP OF WEEHAWKEN

This jurisdictional annex to the Hudson County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Township of Weehawken with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Weehawken, describes who participated in the planning process, assesses Weehawken's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

# 13.1 Hazard Mitigation Planning Team

**Primary Point of Contact** 

The Township of Weehawken identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Township departments. The Office of Emergency Management represented the community on the Hudson County HMP Planning Partnership and Steering Committee, and supported the local planning process by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 13-1 summarizes Township officials who participated in the development of the annex and in what capacity. Additional documentation of the Township's planning activities through Planning Partnership meetings is included in Volume I.

#### Table 13-1. Hazard Mitigation Planning Team

**Alternate Point of Contact** 

Name/Title: Jeffrey Fulcher, Deputy Director, Weehawken DPS Address: 400 Park Avenue, Weehawken, NJ 07086 Phone Number: 201-319-6046 Email: jfulcher@police.weehawkennj.gov	Name/Title: Giovanni D. Ahmed, Township Manager Address: 400 Park Avenue, Weehawken, NJ 07086 Phone Number: 201-319-6005 Email: gahmad@tow-nj.net			
National Flood Insurance Program Floodplain Administrator				
Name/Title: Frank Tattoli, Construction Code Official Address: 400 Park Avenue, Weehawken, NJ 07086 Phone Number: 201-319-6010 Email: franktattoli@tow-nj.net				
Additional Contributors				
Name/Title: Gio Ahmed, Business Administrator/Deputy Office of Emergency Management Coordinator Method of Participation: Participated in the planning process.				
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Name/Title: Jeff Fulcher, Weehawken Police/Deputy Office of Emergency Management Coordinator Method of Participation: Participated in the planning process.

Name/Title: Jeff Welz, Weehawken Police/ Office of Emergency Management Coordinator

Method of Participation: Participated in the planning process.



## 13.2 Community Profile

### 13.2.1 Brief History

Weehawken was formed as a township by an Act of the New Jersey Legislature on March 15, 1859, from portions of Hoboken and North Bergen. Weehawken, perched atop the Palisades along the Hudson River, has a rich history rooted in Lenape heritage, colonial settlement, and Revolutionary War activity. Known as the site of the famous 1804 duel between Alexander Hamilton and Aaron Burr, Weehawken later became a 19th-century transportation hub and summer retreat for New York's elite, blending natural beauty with historical significance (Insider NJ 2019).

#### 13.2.2 Location

The Township of Weehawken is located in eastern Hudson County along the Hudson River. It shares its borders with West New York to the north, Hudson River to the east, City of Hoboken to the south and Union City to the west.

#### 13.2.3 Governing Body Format

The Township is governed by a Council made up of five members. This governing body will be responsible for the adoption and implementation of this plan.

### 13.2.4 Population and Social Vulnerability

According to the U.S. Census, the 2020 population for Weehawken was 17,197, a 31.2 percent increase from the 2010 Census.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2020 U.S. Census indicates that 6.0 percent of the population is 5 years of age or younger, 11.9 percent is 65 years of age or older, 7.3 percent is non-English speaking, 7.3 percent is below the poverty threshold, and 6.2 percent is considered disabled.

#### 13.2.4.1 ALICE IN HUDSON COUNTY

ALICE is an acronym for Asset Limited, Income Constrained, Employed – households that earn more than the Federal Poverty Level, but less than the basic cost of living for the County. While conditions have improved for some households, many continue to struggle, especially as wages fail to keep pace with the rising cost of household essentials (housing, child care, food, transportation, health care, and a basic smartphone plan). Households below the ALICE Threshold – ALICE households plus those in poverty – can't afford the essentials.

According to 2021 Point-in-Time-Data from ALICE, 24 percent of the 292,000 households in Hudson County are ALICE households (compared to the state average of 26 percent). The median household income in Hudson is \$80,329, and





the County sees a labor force participation rate of 69 percent. Hudson County faces low household income compared to the state average of \$89,296 and while the County does carry a 3 percent higher labor participation rate compared to state numbers, 15 percent of Hudson households live in poverty.

### 13.3 Jurisdictional Capability Assessment and Integration

Weehawken performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- · Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Weehawken to identify opportunities for integrating mitigation concepts into ongoing Township procedures.

### 13.3.1 Planning and Regulatory Capability and Integration

Table 13-2 summarizes the planning and regulatory tools that are available to Weehawken.

Table 13-2. Planning and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency		
CODES, ORDINANCES, & REGULATIONS						
Building Code	Yes	Chapter 9	State and Local	Clerk and Zoning Board		
How has or will this be integrated with the HMP and how does this reduce risk?  State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14.						
Zoning/Land Use Code	Yes	Chapter 23	Local	Clerk and Zoning Board		
How has or will this be integrated with the HMP and how does this reduce risk?  Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan.						





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency		
Subdivision Code	Yes	Chapter 22	Local	Zoning Board		
How has or will this be integrated with the HMP and how does this reduce risk?  This integration ensures that future development is guided by hazard risk reduction principles, such as avoiding flood-prone areas incorporating resilient infrastructure standards, and promoting sustainable land use. By embedding mitigation considerations into the subdivision code, the Township can reduce vulnerability to natural hazards, support safer growth, and enhance long-term community resilience.						
Site Plan Code	Yes	Chapter 9	Local and County	Zoning Board		
How has or will this be integrated with the HMP and how does this reduce risk? This integration ensures that proposed developments are evaluated not only for zoning and design compliance but also for their exposure to natural hazards such as flooding, severe weather, and wildfire. By aligning site planning requirements with the HMP, the Township can promote resilient design practices, require hazard mitigation features (e.g., stormwater controls, elevation standards), and reduce long-term risk to people, property, and infrastructure.						
Stormwater Management Code	No	-	-	-		
How has or will this be integrated wit	h the HMP and	how does this reduce risk?				
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-		
How has or will this be integrated with the HMP and how does this reduce risk?						



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)  Authority (local, coun state, feder		
Real Estate Disclosure Requirements	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property

How has or will this be integrated with the HMP and how does this reduce risk?

For leases, the law amends the New Jersey Truth-in-Renting Act, N.J.S.A. 46:8-43 et seq., to require every landlord to notify in writing each of the landlord's tenants, prior to lease signing or renewal, whether the property is located in the Federal Emergency Management Agency (FEMA) Special Flood Hazard Area ("100-year floodplain") or Moderate Risk Flood Hazard Area ("500-year floodplain") and if the landlord has actual knowledge that the rental premises or any portion of the parking areas of the real property containing the rental premises has been subjected to flooding. The law does not apply to (1) landlords who lease commercial space or residential dwellings for less than one month, (2) residential dwellings in a premises containing not more than two units, (3) owner-occupied premises containing not more than three units, or (4) hotels, motels, or other guest houses serving transient or seasonal guests for a period of less than 120 days.

The model notice is to contain the heading "Flood Risk" and questions for the landlord to answer regarding the landlord's actual knowledge of past flooding of the property. The questions regarding the property being in a FEMA Special or Moderate Risk Flood Hazard Area shall not contain the option for "unknown." To determine how the questions are to be answered, FEMA's current flood insurance rate maps for the leased premises area must be consulted. The landlord will be required to answer whether the rental premises or any portions of the parking areas of the real property containing the rental premises ever experienced any flood damage, water seepage, or pooled water due to a natural flood event and, if so, the number of times that has occurred.

The notice to residential tenants must also indicate that flood insurance may be available to renters through FEMA's National Flood Insurance Program to cover their personal property and contents in the event of a flood and that standard renter's insurance does not typically cover flood damage.

For sales, the law also amends the New Jersey Consumer Fraud Act, N.J.S.A. 56:8-1 et seq., to require sellers of real property to disclose, on the property condition disclosure statement, whether the property is located in the FEMA Special or Moderate Risk Flood Hazard Area and any actual knowledge of the seller concerning flood risks of the property to the purchaser before the purchaser becomes obligated under any contract for the purchase of the property.

The disclosure statement must contain the heading "Flood Risk" and ask the seller the following questions:

- Is any or all of the property in the Special Flood Hazard Area ("100-year floodplain") or a Moderate Risk Flood Hazard Area ("500-year floodplain") according to FEMA's current flood insurance rate maps?
- Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? Properties in
  the Special Flood Hazard Area with mortgages from federally regulated or insured lenders are required to obtain and maintain flood
  insurance.
- Have you ever received assistance from, or are you aware of any previous owners receiving assistance from FEMA, the U.S. Small
  Business Administration, or any other federal disaster flood assistance for flood damage on the property? For properties that have
  received flood disaster assistance, the requirement to obtain flood insurance passes down to all future owners.
- Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.
- Is there a FEMA elevation certificate available for the property? If so, it must be shared with the buyer. An elevation certificate is a
  FEMA form, completed by a licensed surveyor or engineer, that provides critical information about the flood risk of the property and
  is used by flood insurance providers to determine the appropriate insurance rating for the property.
- Have you ever filed a claim for flood damage to the property with any insurance provider? If the claim was approved, what was the amount received?
- Has the property experienced any flood damage, water seepage, or pooled water due to a natural flood event, such as heavy rainfall
  coastal storm surge, tidal inundation, or river overflow? If so, how many times?

Not all provisions of this law have become effective at the time of the writing of this plan.

Growth Management	No	-	-	-	
How has or will this be integrated with the HMP and how does this reduce risk?					



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency				
Environmental Protection Ordinance(s)	No	-	-	-				
How has or will this be integrated with	How has or will this be integrated with the HMP and how does this reduce risk?							
Flood Damage Prevention Ordinance	Yes	Chapter 20	Federal, State, County and Local	Building Department				
How has or will this be integrated wit management regulations are aligned ordinance with the HMP, the Townshi properties, and improve eligibility for Rating System (CRS).	with current ha ip can strengthe	zard data, best practices, and clima en development standards in flood	ate projections. By -prone areas, redu	coordinating the uce repetitive loss				
Wellhead Protection	No	-	-	-				
How has or will this be integrated wit	h the HMP and	how does this reduce risk?						
Emergency Management Ordinance	No	-	-	-				
How has or will this be integrated wit	h the HMP and	how does this reduce risk?		•				
Climate Change Ordinance	No	-	-	-				
How has or will this be integrated wit	h the HMP and	how does this reduce risk?						
Other: Shoreline Development	Yes	N.J.S.A. 13:19	State	State				
Included as a mitigation action (2020-W CAFRA regulates almost all developmen	How has or will this be integrated with the HMP and how does this reduce risk? Included as a mitigation action (2020-Weehawken-005) in the previous HMP. NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone							
PLANNING DOCUMENTS								
General/Comprehensive/Master Plan	Yes	Master Plan RE-Evaluation, 2003.	Local	Township Manager and the Planning Department				
The 1991 Re-Examination report analyze	How has or will this be integrated with the HMP and how does this reduce risk?  The 1991 Re-Examination report analyzed the 1976 Master Plan. A Land Use Plan was incorporated as an element in 1998 and identifies zoning specific to the waterfront and the steep slope areas of the Palisades.							
Capital Improvement Plan	No	-	-	-				
How has or will this be integrated with	h the HMP and	how does this reduce risk?						
Disaster Debris Management Plan	No	-	-	-				
How has or will this be integrated with the HMP and how does this reduce risk?								
Floodplain Management or Watershed Plan	No			-				
How has or will this be integrated wit	h the HMP and	how does this reduce risk?						
Stormwater Management Plan	No	-	-	-				
How has or will this be integrated wit	h the HMP and	how does this reduce risk?						
Open Space Plan	No	-	-	-				
How has or will this be integrated with the HMP and how does this reduce risk?								



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency			
Urban Water Management Plan	No	-	-	-			
How has or will this be integrated with the HMP and how does this reduce risk?							
Habitat Conservation Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and l	now does this reduce risk?					
Economic Development Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and l	now does this reduce risk?					
Community Wildfire Protection Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and I	now does this reduce risk?					
Community Forest Management Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and l	now does this reduce risk?					
Transportation Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and I	now does this reduce risk?		•			
Agriculture Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and I	now does this reduce risk?	·				
Climate Action/ Resilience/Sustainability Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and l	now does this reduce risk?		•			
Tourism Plan	No	-	-	-			
How has or will this be integrated with the HMP and how does this reduce risk?							
Business/ Downtown Development Plan	No	-	-	-			
How has or will this be integrated wit	h the HMP and I	now does this reduce risk?		•			
Other	-	-	-	-			
How has or will this be integrated wit	h the HMP and I	now does this reduce risk?					
RESPONSE/RECOVERY PLANNING							
Emergency Operations Plan	Yes	-	Local	Office of Emergency Management			
How has or will this be integrated with the HMP and how does this reduce risk?  Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years.							
Continuity of Operations Plan	No	-	-	-			
How has or will this be integrated with the HMP and how does this reduce risk?							
Substantial Damage Response Plan	No	-	-	-			
How has or will this be integrated with the HMP and how does this reduce risk?							



	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency		
Threat and Hazard Identification and Risk Assessment	No	-	-	-		
How has or will this be integrated wit	How has or will this be integrated with the HMP and how does this reduce risk?					
Post-Disaster Recovery Plan	No	-	-	-		
How has or will this be integrated with the HMP and how does this reduce risk?						
Public Health Plan	No	-	-	-		
How has or will this be integrated with the HMP and how does this reduce risk?						
Other	-	-	-	-		
How has or will this be integrated with the HMP and how does this reduce risk?						

# 13.3.2 Development and Permitting Capability

 $\label{thm:continuous} \textbf{Table 13-3 summarizes the capabilities of Weehawken to oversee and track development.}$ 

Table 13-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits?		
<ul> <li>If you issue development permits, what department is responsible?</li> <li>If you do not issue development permits, what is your process for tracking new development?</li> </ul>	Yes	The Building Department is responsible for issuing development permits.
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Township has a GIS system.
Do you have a buildable land inventory?  If you have a buildable land inventory, please describe	No	-
Describe the level of buildout in your jurisdiction.	N/A	

# 13.3.3 Administrative and Technical Capability

Table 13-4 summarizes potential staff and personnel resources available to Weehawken and their current responsibilities that contribute to hazard mitigation.

Table 13-4. Administrative and Technical Capabilities

Resources	Available?	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	Planning



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Zoning Board of Adjustment	Yes	Zoning Board
Planning Department		Planning Department for the Township
Mitigation Planning Committee	Yes	Unofficially, Administration
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Open Space Trust Fund Committee  Weehawken's Department of Parks is responsible for the upkeep of the town's parks, ballfields, and playgrounds.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works is responsible for:      Keeping town's streets, parks, and playgrounds clean     Clearing leaves and branches from sidewalks and streets     Sanitation/trach pick up     Removing snow and keeping roads clear Maintaining township buildings and grounds
Construction/Building/Code Enforcement Department	Yes	The Building Department is made up of the Construction Code Office, the Health Department, the Housing Inspection Office, as well as the fire, plumbing and electrical inspectors. This department also oversees the Park Avenue Partnership, which is dedicated to the revitalization of Park Avenue and the historic Water Tower.
Emergency Management/Public Safety Department	Yes	The Department of Public Safety is comprised of the Police Department, Fire Department, and First Aid Squad.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Stormwater, tree trimming near power lines in addition to PSEG doing their own trimming
Mutual aid agreements	Yes	May not be official but verbal agreements in place.
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	Yes	Human Resource
Other	Yes	The Weehawken Health Department has the responsibility to protect and promote the public health. It has the authority to adopt rules necessary for that purpose.
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	Yes	Town Planner consultant Jill Hartmann Town Engineers Maser Consulting
Engineers or professionals trained in building or infrastructure construction practices	Yes	Town Engineers, Maser Consulting
Planners or engineers with an understanding of natural hazards	Yes	Town Engineers, Maser Consulting
Staff with expertise or training in benefit/cost analysis	Yes	CFO, Lisa Toscano
Professionals trained in conducting damage assessments	Yes	Engineering Department and Building Department



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Township Manager
Staff that work with socially vulnerable populations or underserved communities	Yes	Township coordinates with homeless shelters in the a partnership.
Environmental scientists familiar with natural hazards	No	-
Surveyors	Yes	Town Engineers, Maser Consulting
Emergency manager	Yes	Jeff Welz, Public Safety Director
Grant writers	Yes	Consultants as needed
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	-	-

# 13.3.4 Fiscal Capability

Table 13-5 summarizes financial resources available to Weehawken.

Table 13-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

# 13.3.5 Education and Outreach Capability

Table 13-6 summarizes the education and outreach resources available to Weehawken.



Table 13-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Township manager
Personnel skilled or trained in website development	Yes	Township manager
Hazard mitigation information available on your website	Yes	
Social media for hazard mitigation education and outreach	Yes	Currently use fliers, Facebook, Twitter, website, newsletters, mailings encourage signup for Swiftreach, includes reverse 911, email, text, etc.
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Currently use Facebook, Twitter, website, Swiftreach, includes reverse 911, email, text, etc.
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	Yes	Weehawken's Housing Authority provides 167 units of affordable senior citizens' housing, and manages 350 units of Section 8 subsidized housing for town residents. The Authority also runs one of the Town's two Senior Nutrition Centers as well as the Family Self Sufficient Program.  Weehawken Township and the Recreation Department continue to provide a wide variety of free and low cost recreational programs to residents ages four and up.  Weehawken provides a host of services for its Senior Citizens. Including nutrition, transportation, social activities, and a "Keep In Touch" program which communicates with the homebound and the ill.
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	Facebook, Twitter, Reverse 911 call system, mailings

# 13.3.6 Community Classifications

 $\label{thm:community} \textbf{Table 13-7 summarizes classifications for community programs available to Weehawken.}$ 

Table 13-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3	9/21/2015
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
National Weather Service StormReady Certification	No	-	=





Program	Participating? (Yes/No)	Classification	Date Classified
Firewise Communities classification	No	-	-
Sustainable Jersey	Yes	None	3/9/2011
Other: Organizations with mitigation focus (advocacy group, non-government)	N/A	-	-

N/A = Not applicable

— = Unavailable

### 13.3.7 Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 13-8 summarizes the adaptive capacity for each identified hazard of concern and the Township's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

Table 13-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak	
Dam and Levee Failure	Moderate	
Drought	Moderate	
Extreme Temperatures	Moderate	
Flood	Strong	
Geological Hazards	Moderate	
Severe Weather	Moderate	
Severe Winter Weather	Moderate	
Wildfire	Moderate	

# 13.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 13-1 is responsible for maintaining this information.

### 13.4.1 NFIP Statistics

Table 13-9 summarizes the NFIP policy and claim statistics for Weehawken.



Table 13-9. Weehawken NFIP Summary of Policy and Claim Statistics

# Policies	633	
# Claims (Losses)	110	
Total Loss Payments	\$7,537,473.53	
# Repetitive Loss Properties (NFIP definition)	4	
# Repetitive Loss Properties (FMA definition)	0	
# Severe Repetitive Loss Properties (NFIP definition)	0	
# Severe Repetitive Loss Properties (FMA definition)	0	

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA 2024

# 13.4.2 Flood Vulnerability Summary

Table 13-10 provides a summary of the NFIP program in Weehawken.

Table 13-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Hackensack Plank Road, Hudson Place
Do you maintain a list of properties that have been damaged by flooding?	Yes
Do you maintain a list of property owners interested in flood mitigation?	Yes
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Contracted support
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	None
How many properties have been mitigated (elevation or acquisition) in your jurisdiction?  If there are mitigation properties, how were the projects funded?	None at this time.

Commented [MK1]: TOWNSHIP: Worksheet C was not returned to the Tetra Tech team, this section contains general language with assumptions for the Township. Please review each green highlight carefully and update as you go through to remove inaccurate/incorrect information. Otherwise, this will be returned as is to NJOEM and FEMA for review.



NFIP Topic	Comments
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Construction Code Official
Are any certified floodplain managers on staff in your jurisdiction?	Frank Tattoli
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes, training for OEM staff to become certified floodplain managers.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	The building department department does not have capacity nor resources to provide a full-depth of NFIP administration services, these types of services would need to be contracted with an engineering firm.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Unknown.
What are the barriers to running an effective NFIP program in the community, if any?	Certified CFM and training for staff, building capacity for staff to run an effective program for the community.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?  If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	Unknown.
What is the local law number or municipal code of your flood damage prevention ordinance?	The Ordinance was adopted in 2006 with Appendix updates from the state and FEMA on flood zone and base flood elevation levels to be adjusted
What is the date that your flood damage prevention ordinance was last amended?	2018
Does your floodplain management program meet or exceed minimum requirements?  If exceeds, in what ways?	Meets
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	No
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Community is interested in joining CRS.

# 13.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and





expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 13-11 through Table 13-13.

Table 13-11. Number of Building Permits for New Construction Issued Since the Previous HMF

rubic 15 11	. Number of Building Permits for New Construction issued Since the Previous Hivip						
		New Construction Permits Issued					
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total			
2019							
Total Permits	0	0	0	0			
Permits within SFHA	0	0	0	0			
2020							
Total Permits	0	0	0	0			
Permits within SFHA	0	0	0	0			
2021							
Total Permits	0	0	0	0			
Permits within SFHA	0	0	0	0			
2022							
Total Permits	0	0	0	0			
Permits within SFHA	0	0	0	0			
2023							
Total Permits	0	0	0	0			
Permits within SFHA	0	0	0	0			

SFHA = Special Flood Hazard Area (1% flood event)

Table 13-12. Recent Major Development and Infrastructure from 2017 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development	
None Identified						

 $<sup>{\</sup>it *Only location-specific hazard zones or vulnerabilities identified.}$ 

**Commented [MK2]:** TOWNSHIP: Worksheet D was not returned to the Tetra Tech team, this section contains general language with assumptions for the Township. Please review each green highlight carefully and update as you go through to remove inaccurate/incorrect information. Otherwise, this will be returned as is to NJOEM and FEMA for review.



#### Table 13-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)		Description / Status of Development	
None Identified						

# 13.6 Jurisdictional Risk Assessment

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Weehawken's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

#### 13.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 13-1 through Figure 13-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Weehawken has significant exposure. The maps show the location of potential new development, where available.



West NewYork (T) Union City (C) New York Weehawken (T) 0.15 0.3 Senior Care Affordable Housing Heliport Alternative Education Hospital Shelter Coastal Erosion Fire Risk # Bridge i Library NJGWS Landslide Susceptibility Extreme Subway Station Bus Facility Very High (1) TV Transmitter Class A - Strongly Cemented Rock Communication Facility High Medical Center Urgent Care Moderate Correctional Facility Class B - Weakly Cemented Rock Military Base Wastewater Pump Low County Building Municipal Hall NEHRP Soil Class Wastewater Treatment O DPW ♦ Oil Facility Water Tower D Dam Pharmacy E County Boundary (A) Daycare Police Station Municipality Boundary EI3 EMS Post Office Interstate X EOC Post-Secondary Education — State Route Electric Power 2024 — US Route dson County 2 NJGIN 2024 USGS 2015 NJDEP 2015 NJGWS 2016 NJFFS 2009 Primary Education Electric Substation - County Route Public Health Department Ferry Local Route Fire Station Radio Tower - Passenger Rail Grocery Store Rail Station

Figure 13-1. Weehawken Hazard Area Extent and Location Map 1

Secondary Education

Hazardous Materials

Waterbody

TETRA TE



Figure 13-2. Weehawken Hazard Area Extent and Location Map 2

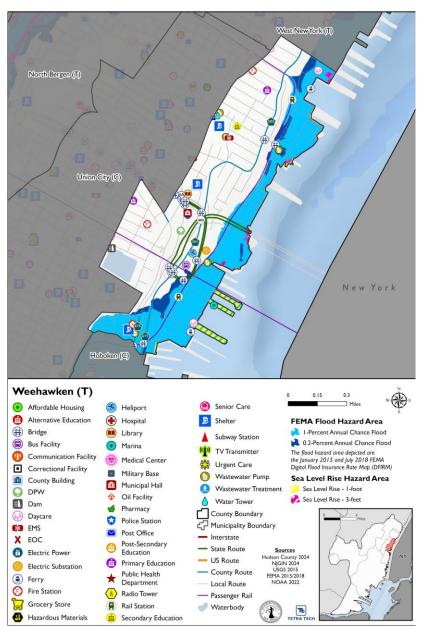
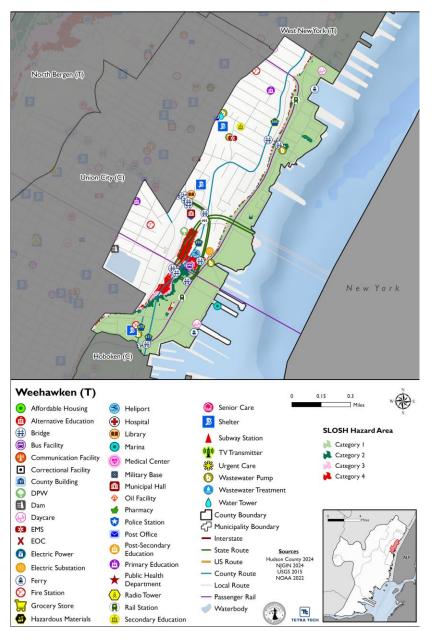




Figure 13-3. Weehawken Hazard Area Extent and Location Map 3





## 13.6.2 Hazard Event History

The history of natural and non-natural hazard events in Weehawken is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 13-14 provides details on loss and damage in Weehawken during hazard events since the last hazard mitigation plan update.

Table 13-14. Hazard Event History in Weehawken

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Weehawken
February 25, 2019	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour. Damages from these strong, damaging winds totaled over \$50,000 across the County.	Damaged power lines and tree branches, minor damages at municipal level.
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM- 3451-NJ, DR-4488-NJ)	Yes	As of March 4, 2023, Hudson County accounts for 219,191 positive cases of COVID-19 in the State of New Jersey, and 2,671 of the reported deaths. A total of 1,565,233 vaccinations have been delivered in the County to both residents and non-residents.	No physical damages reported at municipal level.
February 7, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 53 miles per hour. Damages from these strong, damaging winds totaled over \$50,000 across the County.	Damaged power lines and tree branches, minor damages at municipal level.
April 13, 2020	Strong Wind, High Wind	No	Widespread damaging wind gusts occurred as storms moved through Hudson County. Wind gusts reached an estimated 58 miles per hour. Damages from these strong, damaging winds totaled over \$50,000 across the County.	Damaged power lines and tree branches, minor damages at municipal level.
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	The remnants of Hurricane Ida produced heavy rainfall, flash floods, widespread wind damage, and power outages. There were multiple disruptions to mass transit and road closures due to downed power lines and trees were noted, with numerous water systems having to move to alternate power. One person was injured in Hudson County because of this event.	Localized flooding reported at several streets within Jersey City; flooded roadways and homes, fallen tree branches, power lines.



Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Weehawken
September 1-3, 2021	Remnants of Hurricane Ida (EM-3573-NJ, DR-4614-NJ)	Yes	Extremely heavy rainfall associated with the remnants of Hurricane Ida overspread northeast New Jersey during the evening of September 1 and continued through the early morning hours of September 2. Rainfall totals ranged from 5-8+ inches across much of the region, with much of that rain falling in just a few hours. This resulted in widespread flash flooding leading to numerous road closures and water rescues in addition to extensive river flooding. One fatality and seven injuries occurred in Hudson County as a result of this storm.	Widespread flooding reported at several streets within Jersey City; flooded roadways and homes, fallen tree branches, power lines.
January 28-29, 2022	Winter Storm	No	A Nor'easter brought snow and gusty winds. Wind gusts of 40 mph were reported. Snow and blowing snow impacted Hudson County, with snow totals amounting to 8.5 inches in Hudson County.	Power outages reported

EM = Emergency Declaration (FEMA)
FEMA = Federal Emergency Management Agency
DR = Major Disaster Declaration (FEMA)
N/A = Not applicable

### 13.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Weehawken .

#### 13.6.3.1 HAZARD RANKING

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Weehawken reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Township indicated the following:

None identified



Table 13-15 shows Weehawken's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 13-15. Hazard Ranking

Hazard	Rank
Dam and Levee Failure	Low
Drought	Medium
Extreme Temperatures	Low
Flood	High
Geological Hazards	Low
Severe Weather	High
Severe Winter Weather	Medium
Wildfire	Low

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

### 13.6.3.2 CRITICAL FACILITIES

Table 13-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 13-16. Critical Facilities Flood Vulnerability

		Vulnei	rability
Name	Туре	1% Annual Chance Event	0.2% Annual Chance Event
Bright Horizons at Lincoln Harbor	Daycare	X	Х
HBLR & Port Imperial Blv	Bridge	X	Х
HUDS-BERG LR&HARBOR BLVD	Bridge	X	Х
Lincoln Harbor	Marina	Х	Х
Lincoln Harbor Ferry Terminal	Ferry	X	X
Lincoln Harbor Station	Rail Station	Х	Х
NORTH HUDSON REGIONAL FIRE AND RESCUE ENGINE 3	Fire Station	X	X
North Hudson Sewerage - transfers Hob	Wastewater Pump	Х	Х
North Hudson Sewerage Authority	Wastewater Pump	X	X
Port Imperial Ferry Terminal	Ferry	Х	Х
Port Imperial Station	Rail Station	Х	Х
Sowing Seed School	Daycare	Х	Х
ST. LAWRENCE PARISH CENTER	Shelter	X	Х
Bridge – NJ-495 – 3 Miles West of Lincoln Tunnel	Bridge	-	Х

Source: Hudson County; HIFLD; NJGIN



In addition to critical facilities that are exposed to flooding, the following high hazard dams are located in Weehawken:

Hackensack Res. #2 Dam

#### 13.6.4 Identified Issues

After review of Weehawken's hazard event history, hazard rankings, hazard location, and current capabilities, Weehawken identified the following vulnerabilities within the community:

- Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by
  issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs
  of damaged buildings. After any disaster event, they must:
  - Determine where the damage occurred within the community and if the damaged structures are in an SFHΔ
  - Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect
    against liability and promote equitable administration.
  - Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's predamage value.
  - Require permits for floodplain development.

The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.

- There are 2 repetitive loss properties in the Southwest part of the Township in the Shades area of town.
- The firehouse is in the 1% regulatory floodplain. During Sandy the equipment had to be relocated to
  provide continuity of services It is not determined if there is back up power, but this is a lifeline facility.
   Potentially this could be isolated from flooded roadways. This facility also houses rescue equipment.
- Hartz Industries and Mak-Cali own most of the shoreline, and 5 to 10 year master plans are submitted before development for approval, but the Town does not have shoreline planning.
- Many critical facilities within the Township are not municipally owned and are therefore outside the direct
  control of local authorities. These facilities are often unaware of their exposure to natural hazards, making
  them more vulnerable to damage during disasters and potentially disrupting essential services to the
  community.
- Numerous critical facilities within the Township are located in the 100-year floodplain and are not under Township ownership. As a result, these facilities may lack adequate flood protection and awareness of their risk, increasing the potential for service disruptions and damage during flood events.
- The Township lacks a stand-alone stormwater ordinance, which limits its ability to effectively manage runoff, reduce localized flooding, and enforce best practices in new development.
- The Daniel Webster School lacks backup power.





# 13.7 Mitigation Strategy and Prioritization

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

#### 13.7.1 Past Mitigation Action Status

Table 13-17 indicates progress on the Township's mitigation strategy identified in the 2020 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

## 13.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed in Table 13-17, Weehawken identified the following mitigation efforts completed since the last HMP:

None Identified

Since the adoption of the County's first HMP, Weehawken has made significant mitigation progress in the following areas:

None Identified



Table 13-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 001		Flood	Town Manager	Problem: There are 2 repetitive loss properties in the Southwest part of the Township in the Shades area of town.  Solution: Elevate the properties. (Provide outreach to owners to determine if there is interest in a property elevation. Based on the feedback, if there is an interest submit application for funding). However, must determine if this property will be mitigated by the water diversion project. This project consists of a wall to prevent flooding to deflect the water in at risk areas.		1. Include 2. No Change 3. N/A

**Commented [MK3]:** TOWNSHIP: Worksheet E was not returned to the Tetra Tech team, this section contains general language with assumptions for the Township. Please review each green highlight carefully and update as you go through to remove inaccurate/incorrect information. Otherwise, this will be returned as is to NJOEM and FEMA for review.

13-25





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 002	Regional Firehouse Mitigation Project	Flood, Wildfire	North Hudson Regional Fire and Rescue with support from the Township.	Problem: The firehouse is in the 1% regulatory floodplain. During Sandy the equipment had to be relocated to provide continuity of services It is not determined if there is back up power, but this is a lifeline facility. Potentially this could be isolated from flooded roadways. This facility also houses rescue equipment.  Solution: Since this is in a critical location, floodproof the facility to prevent ingress of flood waters and inundation of utilities.	1.In progress 2.Project is in progress but remains in conceptual design and planning due to limited capabilities and capacity as well as experiencing difficulty in finding funding for this project.	1. Include 2. No Change 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 003	Natural gas generator and automatic transfer switch for EMS and shelter building	All hazards	Office of Emergency Management, Managers Office	Problem: The EMS and shelter building lacks a generator and transfer switch.  Solution: Purchase and install natural gas generator and automatic transfer switch for EMS and shelter building at 201 Highwood Ave and Webster School (shelter).	expected to be completed May 2025. High school generator project is complete.	Discontinue     N/A     Project Complete
2020- Weehawken- 004	Develop stormwater ordinance	Flood, Severe storm	Administration	Problem: The Township lacks a stand alone stormwater ordinance.  Solution: The Township will develop and adopt a stormwater ordinance.	is working with Code Ordinances to evaluate how to best update the flood ordinances for Weehawken.	1. Include 2. No Change 3. N/A



Project Number	Project Name	Hazard(s) Addressed		Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Weehawken- 005	mitigation into shoreline development approval		Administration	i i	1.In progress 2.Hartz Industries continues to work on mitigation actions, Mak-Cali is no longer working on this mitigation action. Project is still in development.	1. Include 2. No Change 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 006	Conduct outreach to hazard prone critical facility operators	All hazards	OEM	Problem: Numerous critical facilities are not owned by the Township and are prone to hazard damages.  Solution: The Township will conduct outreach to operators of critical facilities to educate them on their hazard exposure and possible mitigation actions.	outreach for critical facilities owners.	1. Include 2. No Change 3. N/A
2020- Weehawken- 007		All hazards	Office of Emergency Management, Managers Office	Problem: The Daniel Webster School lacks backup power.  Solution: Purchase and install a backup generator at the Daniel Webster School.	In Progress     Project has been delayed due to limited capacity and capability such as funding to complete project, scope is still being determine to determine load.	1. Include 2. No Change 3. N/A



Project Number	Project Name	t		Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 008	Update Police Building	Coastal Storm, Severe Weather, Severe Winter Weather	Police Department	Problem: The Police Building is outdated and prone to damage in storm events. Continued degradation of the facility could threaten continuity of operations.	Complete     The Township has found a feasible facility to relocate Police Department infrastructure away from hazard risk.	Discontinue     N/A     Project Complete
				Solution: The Township will design a replacement structure and replace the existing Police Building with an updated and hazard resistant structure.		



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020- Weehawken- 009	Critical facilities outreach	Flood	Floodplain Administrator	Problem: Numerous critical facilities are located in the 100-year floodplain. These facilities are not Township owned.  Solution: The FPA will conduct outreach to facility managers to discuss flood exposure, current flood protections, and potential mitigation actions.		1. Include 2. No Change 3. N/A



#### 13.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Weehawken participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 "Selecting Appropriate Mitigation Measures for Floodprone Structures" (March 2007)
- FEMA "Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards" (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Weehawken would like to pursue in the future to reduce the effects of hazards. The actions are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in Township priorities.

Table 13-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 13-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 13-18. Analysis of Mitigation Actions by Hazard and Category

	Actions That Address the Hazard, by Action Category													
		FE	MA		CRS									
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES				
Dam and Levee Failure	х	Х			х		Х			Х				
Drought	Х	Х			Х		Х			Х				
Extreme Temperatures	Х	Х			Х		Х			Х				
Flood	Х	Х			Х	Х	Х			Х				
Geological Hazards	Х	Х			Х		Х			Х				
Severe Weather	Х	Х			Х	Х	Х			Х				
Severe Winter Weather	Х	Х			Х		Х			Х				
Wildfire	Х	Х			Х	Х	х			Х				

Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

Natural Systems Protection (NSP)—These are actions that minimize damage and losses and preserve or restore the functions of natural systems

Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 13-19. Summary of Prioritization of Actions

		Score	s for E			teria											
Project Number	Project Name	Life Safety	Property Protection	Cost- Effectiveness	Political	Legal	Fiscal	Environment al	Social Vulnerability	Administrativ e	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	High / Medium / Low
2025- Weehaw ken-001	Substantial Damage Management Plan	0	1		1	1	1	0	1			1	1	1			High
2025- Weehaw ken-002	Repetitive Loss Properties	1	1	1	0	1	0	1	1	1	1	1	1	1	0	11	High
2025- Weehaw ken-003	Regional Firehouse Mitigation Project	1	1	1	1	1	0	0	0	1	1	1	1	1	1	11	High
2025- Weehaw ken-004	Hazard Mitigation into Shoreline Development	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2025- Weehaw ken-005	Critical Facilities Education and Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2025- Weehaw ken-006	FPA Education and Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2025- Weehaw ken-007	Stormwater Ordinance	0	1	1	1	1	1	1	0	1	1	1	1	0	1	11	High
2025- Weehaw ken-008	Daniel Webster School Generator	1	1	1	1	1	0	0	1	1	1	1	1	1	1	12	High

Note: Volume I, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).



## Action 2025-Weehawken-001. Substantial Damage Management Plan

Lead Agency:	Floodplain Administrator	
Supporting Agencies:	Borough OEM, Borough DPW	
Hazards of Concern:	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	Officials in NFIP-participating communities are responsible for regulating all development in SFHAs by issuing permits and enforcing local floodplain requirements, including Substantial Damage, for the repairs of damaged buildings. After any disaster event, they must:  • Determine where the damage occurred within the community and if the damaged structures are in an SFHA.  • Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.  • Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value.  • Require permits for floodplain development.  The municipality does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The municipality is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.	
Description of the Solution:	The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 Developing a Substantial Damage Management Plan (https://crsresources.org/files/500/developing subst damge mgmt plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.	
Estimated Cost:	Low	
Potential Funding Sources:	Municipal budget	
Implementation Timeline:	Within 5 years to develop the plan; ongoing to maintain and update the plan	
Goals Met:	3, 6	
Benefits:	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.	
Impact on Socially Vulnerable Populations:	Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations.	
Impact on Future Development:	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.	
Impact on Critical Facilities/Lifelines:	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.	
Impact on Capabilities:	This action improves disaster recovery capabilities.	
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.	
Mitigation Category	Local Plans and Regulations	



CRS Category	Emergency Services, Preventative Measure	Emergency Services, Preventative Measure	
Priority	High	High	
Alternatives	Action	Evaluation	
	No Action	-	
	Rely on state or federal resources following disaster events	Resources may not be available during major widespread events	
	Establish MOUs with outside agencies to conduct Substantial Damage Determinations	A plan outlining responsibilities is still necessary to prevent missing important requirements	



### Action 2025-Weehawken-002. Repetitive Loss Properties

Lead Agency:	Town Manager	
Supporting Agencies:	-	
Hazards of Concern:	Flood, Severe Weather	
Description of the Problem:	There are 2 repetitive loss properties in the Southwest part of the Township in the Shades area of town.	
Description of the Solution:	Elevate the properties. Provide outreach to owners to determine if there is interest in a property elevation. Based on the feedback, if there is an interest, submit an application for funding. However, must determine if this property will be mitigated by the water diversion project. This project consists of a wall to prevent flooding to deflect the water in at-risk areas.	
Estimated Cost:	Medium	
Potential Funding Sources:	FMA, HMGP, match from property own	ers
Implementation Timeline:	1-5 years	
Goals Met:	1,2,7	
Benefits:	Eliminates flood damage to homes and r	residents.
Impact on Socially Vulnerable Populations:	Removing homes from the floodplain immediately removes the risk to life and property. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.	
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.	
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.	
Impact on Capabilities:	Removing the risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed.	
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events.	
Mitigation Category	Structure and Infrastructure Project, Education and Awareness Program	
CRS Category	Property Protection, Public Information	
Priority	High	
Alternatives	Action	Evaluation
	No Action	-
	Levee around floodplain	Costly, not enough room
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.



## Action 2025-Weehawken-003.Regional Firehouse Mitigation Project

Lead Agency:	North Hudson Regional Fire and Rescue		
Supporting Agencies:	Township Fire Department		
Hazards of Concern:	Flood, Wildfire		
Description of the Problem:	The firehouse is in the 1% regulatory floodplain. During Sandy the equipment had to be relocated to provide continuity of services It is not determined if there is back up power, but this is a lifeline facility. Potentially this could be isolated from flooded roadways. This facility also houses rescue equipment.		
Description of the Solution:	Since this is in a critical location, floodproof the facility to prevent ingress of flood waters and inundation of utilities. The firehouse is in the 1% regulatory floodplain.		
Estimated Cost:	Medium		
Potential Funding Sources:	HMGP, Firefighter Assistance Grant Prog	gram	
Implementation Timeline:	1-5 years		
Goals Met:	1,2,7		
Benefits:	This serves several thousand people. It is also backup to other firehouses in the region.		
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on.		
Impact on Future Development:	The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area.		
Impact on Critical Facilities/Lifelines:	This action will protect the regional firehouse which is a critical facility, maintaining the critical services that it provides.		
Impact on Capabilities:	This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities.		
Climate Change Considerations:	This action addresses anticipated increases in flooding frequency and severity through protection to the 1-percent annual chance) flood level.		
Mitigation Category	Structure and Infrastructure Projects		
CRS Category	Emergency Services, Property Protection		
Priority	High		
Alternatives	Action	Evaluation	
	No Action	-	
	Relocate facility	Relocation is expensive and results in loss or delay of critical services in the immediate area	
	Establish plans to enter into MOU with neighboring critical facilities to provide service during flood events	Reduction in response times and delay of critical services in the immediate area.	



# Action 2025-Weehawken-004. Hazard Mitigation into Shoreline Development

Lead Agency:	Town Administration		
Supporting Agencies:	-		
Hazards of Concern:	Flood, Severe Weather, Severe Winter Weather		
Description of the Problem:	Hartz Industries and Mak-Cali own most of the shoreline, and 5 to 10 year master plans are submitted before development for approval, but the Town does not have shoreline planning.		
Description of the Solution:	Develop and implement procedures to include hazard mitigation into shoreline development approval		
Estimated Cost:	Low, Staff Time		
Potential Funding Sources:	Municipal Budget		
Implementation Timeline:	1-5 years		
Goals Met:	1,2,6,7		
Benefits:	Hazard mitigation incorporation in shoreline development.		
Impact on Socially Vulnerable Populations:	Including hazard mitigation in shoreline planning helps protect vulnerable communities from coastal hazards and promotes equitable resilience.		
Impact on Future Development:	This action ensures future shoreline development is safer, more sustainable, and better adapted to long-term risks.		
Impact on Critical Facilities/Lifelines:	It reduces the risk to nearby critical infrastructure by discouraging development in high-risk coastal areas.		
Impact on Capabilities:	The Town will enhance its planning and review capabilities to support resilient shoreline development.		
Climate Change Considerations:	This action supports climate adaptation by addressing sea level rise and increasing storm impacts in development decisions.		
Mitigation Category	Local Plans and Regulations		
CRS Category	Preventative Measure		
Priority	High		
Alternatives	Action	Evaluation	
	No Action	-	
	Rely on voluntary developer compliance	Not formal enforcement	
	Wait for State or Federal guidelines	Delays needed local action	



#### Action 2025-Weehawken-005. Critical Facilities Education and Outreach

Lead Agency:	Town OEM	
Supporting Agencies:	-	
Hazards of Concern:	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire	
Description of the Problem:	Many critical facilities within the Township are not municipally owned and are therefore outside the direct control of local authorities. These facilities are often unaware of their exposure to natural hazards, making them more vulnerable to damage during disasters and potentially disrupting essential services to the community.	
Description of the Solution:	The Township will conduct targeted outreach to operators of these critical facilities to educate them on their specific hazard exposures and inform them of practical mitigation actions. This proactive engagement will help reduce vulnerability, improve facility resilience, and strengthen overall community preparedness.	
Estimated Cost:	Staff Time	
Potential Funding Sources:	Municipal Budget	
Implementation Timeline:	1-5 years	
Goals Met:	1,2,3,5,6	
Benefits:	This action increases awareness among facility operators, promotes proactive risk reduction, and strengthens the resilience of essential services that the community depends on during and after disasters.	
Impact on Socially Vulnerable Populations:	By improving the resilience of critical facilities such as healthcare centers, shelters, and utilities, this action helps ensure that vulnerable populations maintain access to essential services during emergencies.	
Impact on Future Development:	While not directly influencing new development, this action fosters a culture of risk awareness and may encourage future facility upgrades or relocations to safer areas.	
Impact on Critical Facilities/Lifelines:	This action directly enhances the safety and operational continuity of critical facilities and lifelines by equipping operators with the knowledge to implement effective mitigation strategies.	
Impact on Capabilities:	The Township will strengthen its outreach, coordination, and risk communication capabilities, building stronger partnerships with private and non-municipal facility operators.	
Climate Change Considerations:	As climate-related hazards intensify, this action ensures that facility operators are informed about evolving risks such as increased flooding, extreme temperatures, or severe weather, and can adapt accordingly.	
Mitigation Category	Education and Awareness Program	
CRS Category	Public Information	
Priority	High	
Alternatives	Action	Evaluation
	No Action	-
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town



Use only a few methods for distribution

Using only a few methods of distribution may hinder socially vulnerable populations from receiving guidance



#### Action 2025-Weehawken-006. FPA Education and Outreach

Lead Agency:	Floodplain Administrator		
Supporting Agencies:	-		
Hazards of Concern:	Flood, Severe Weather		
Description of the Problem:	Numerous critical facilities within the Township are located in the 100-year floodplain and are not under Township ownership. As a result, these facilities may lack adequate flood protection and awareness of their risk, increasing the potential for service disruptions and damage during flood events.		
Description of the Solution:	The Floodplain Administrator (FPA) will conduct targeted outreach to facility managers to discuss their flood exposure, assess existing protections, and recommend appropriate mitigation actions. This initiative will help reduce flood risk, improve facility resilience, and support the continuity of essential services during emergencies.		
Estimated Cost:	Staff Time		
Potential Funding Sources:	Municipal Budget, HMGP, FMA		
Implementation Timeline:	1-5 years		
Goals Met:	1,2,3,5,6		
Benefits:	This action raises awareness among facility managers about their flood risk and encourages the implementation of protective measures, which can reduce damage, service disruptions, and recovery costs during flood events.		
Impact on Socially Vulnerable Populations:	By improving the resilience of critical facilities—such as healthcare, emergency shelters, and utilities—this action helps ensure that vulnerable populations retain access to essential services during and after flooding.		
Impact on Future Development:	While it does not directly regulate new development, this outreach may influence future decisions by facility managers to retrofit, relocate, or design facilities with flood resilience in mind.		
Impact on Critical Facilities/Lifelines:	This action directly supports the protection of critical facilities located in highrisk flood zones, helping to maintain continuity of operations and reduce the likelihood of cascading failures during disasters.		
Impact on Capabilities:	The FPA will enhance its ability to engage with non-Township entities, build partnerships, and provide technical guidance, strengthening the overall emergency management network.		
Climate Change Considerations:	As climate change increases the frequency and severity of flooding, this action ensures that facility managers are informed and prepared to adapt to evolving flood risks.		
Mitigation Category	Education and Awareness Program		
CRS Category	Public Information		
Priority	High		
Alternatives	Action	Evaluation	
	No Action	-	
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town	



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### Action 2025-Weehawken-007. Stormwater Ordinance

Lead Agency:	Administration		
Supporting Agencies:	-		
Hazards of Concern:	Flood, Severe Weather		
Description of the Problem:	The Township lacks a stand-alone stormwater ordinance, which limits its ability to effectively manage runoff, reduce localized flooding, and enforce best practices in new development.		
Description of the Solution:	The Township will develop and adopt a comprehensive stormwater ordinance to regulate runoff, improve drainage infrastructure, and enhance resilience to flooding and severe weather. The Township Administration is working with Code Ordinances to evaluate how to best update the flood ordinances for Weehawken, ensuring alignment with current best practices and future climate conditions.		
Estimated Cost:	Staff Time		
Potential Funding Sources:	Municipal Budget		
Implementation Timeline:	1-5 years		
Goals Met:	1,2,3		
Benefits:	Reduces flood risk and property damage		
Impact on Socially Vulnerable Populations:	Reduces flood risk in underserved neighborhoods and ensures equitable infrastructure planning.		
Impact on Future Development:	Ensures new development includes adequate stormwater controls and supports sustainable growth.		
Impact on Critical Facilities/Lifelines:	Reduces flood risk to roads, utilities, and emergency access routes.		
Impact on Capabilities:	Enhances regulatory and planning capabilities for stormwater and floodplain management.		
Climate Change Considerations:	By incorporating future rainfall projections and green infrastructure requirements into the ordinance to address more intense and frequent storm events.		
Mitigation Category	Local Plans and Regulations		
CRS Category	Public Information		
Priority	High		
Alternatives	Action	Evaluation	
	No Action	-	
	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town	
	Incorporate Stormwater Provisions into Existing Zoning Code	May lack the specificity and enforcement mechanisms	



#### Action 2025-Weehawken-008. Daniel Webster School Generator

Lead Agency:	OEM		
Supporting Agencies:	Manager's Office		
Hazards of Concern:	Dam and Levee Failure, Drought, Extreme Temperatures, Flood, Geological Hazards, Severe Weather, Severe Winter Weather, Wildfire		
Description of the Problem:	The Daniel Webster School lacks backup power.		
Description of the Solution:	Purchase and install a backup generator	at the Daniel Webster School.	
Estimated Cost:	Medium		
Potential Funding Sources:	FEMA HMGP, Municipal Budget		
Implementation Timeline:	1-5 years		
Goals Met:	1,2,6,7		
Benefits:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.		
Impact on Future Development:	This action results in protection of a critical facility that could support future development.		
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of a critical facility and its essential functions during a power outage.		
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.		
Climate Change Considerations:	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.		
Mitigation Category	Structure and Infrastructure Projects		
CRS Category	Emergency Services		
Priority	High		
Alternatives	Action	Evaluation	
	No Action	-	
	Microgrid	Costly and difficult to implement.	
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.	