



## 10. TOWNSHIP OF GREEN

This jurisdictional annex to the Sussex County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Township of Green 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 Green, describes who participated in the planning process, assesses Green's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

### 10.1 HAZARD MITIGATION PLANNING TEAM

The Township of Green 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 Municipal Clerk/Administrator represented the community on the Sussex County HMP Planning Partnership 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 10-1 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 10-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Mark Zschack, Municipal Clerk/Administrator Address: 150 Kennedy Road, Tranquility, NJ 07879 Phone Number: (908) 852-9333 X18 Email: clerkadmin@greentwp.com	Name/Title: Margaret "Peg" Phillips, Mayor Address: 150 Kennedy Road, Tranquility, NJ 07879 Phone Number: (908) 853-9333 Email: pphillips@greentwp.com
<b>National Flood Insurance Program Floodplain Administrator</b>	
Name/Title: Craig Bollmann, Zoning Official Address: 150 Kennedy Road, Tranquility, NJ 07879 Phone Number: (908) 852-9333 X17 Email: zoning@greentwp.com	
<b>Additional Contributors</b>	
Name/Title: Mark Zschack, Municipal Clerk/Administrator Method of Participation: Provided key information to the development of the jurisdictional annex. Reviewed and approved final draft of annex signed signature page	
Name/Title: Margaret "Peg" Phillips, Mayor Method of Participation: Provided key information to the development of the jurisdictional annex.	
Name/Title: Craig Bollmann, Zoning Official Method of Participation: Provided key information to the development of the jurisdictional annex.	
Name/Title: Cory Stoner, Township Engineer Method of Participation: Provided key information to the development of the jurisdictional annex. Reviewed and approved final draft of annex signed signature page	
Name/Title: Jessica Caldwell, Principal Planner Method of Participation: Provided key information to the development of the jurisdictional annex. Reviewed and approved final draft of annex signed signature page	



Primary Point of Contact	Alternate Point of Contact
Name/Title: Jason Miller, Superintendent of Public Works Method of Participation: Provided key information to the development of the jurisdictional annex.	
Name/Title: Chris Lopanik, OEM Coordinator Method of Participation: Provided key information to the development of the jurisdictional annex. Reviewed and approved final draft of annex signed signature page	
Name/Title: Patty DeClesis, Deputy Municipal Clerk Method of Participation: Provided key information to the development of the jurisdictional annex.	

## 10.2 COMMUNITY PROFILE

Green Township is located in southwestern Sussex County and is bordered to the north by Fredon and Andover Townships, to the south and west by Warren County and to the east by Byram Township. The following unincorporated communities are located within the Township: Huntsburg, Greendell, Tranquility, and Huntsville. The Pequest River, Bear Brook, and Trout Brook are named streams that flow through the Township. Lake Tranquility, Buckmire Pond, and Turtle Pond are the larger named lakes located in the Township.

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 2021 American Community Survey 5-Year Population Estimates indicates that 1.9-percent of the population is 5 years of age or younger, 2.9-percent is 65 years of age or older, 2.5-percent is non-English speaking, 2-percent is below the poverty threshold, and 3-percent is considered disabled.

The Steering Committee also identified households that are above the Federal Poverty Level, but earn less than the basic cost of living as socially vulnerable. For the Township of Green, 14-percent of households earn less than the basic cost of living and are considered socially vulnerable.

Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

## 10.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Green 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 Green to identify opportunities for integrating mitigation concepts into ongoing Township procedures.

### 10.3.1 Planning and Regulatory Capability and Integration

Table 10-2 summarizes the planning and regulatory tools that are available to Green.

Table 10-2. 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
<b>CODES, ORDINANCES, &amp; REGULATIONS</b>				
<b>Building Code</b>	Yes	International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14 Adopted 9/3/2019; State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)	State & Local	Zoning Official
How has or will this be integrated with the HMP and how does this reduce risk? <i>The building code provides guidance on how to design, build, and operate buildings. Modern building codes lead to major reductions in property losses from natural disasters.</i>				
<b>Zoning/Land Use Code</b>	Yes	State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49; Chapter 30, Article XII	Local	Zoning Official
How has or will this be integrated with the HMP and how does this reduce risk? <i>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.</i>				
<b>Subdivision Code</b>	Yes	P.L.1975, c.291 (C.40:55D-47): 40:55D-37; Chapter 30, Article IX	Local	Zoning Official
How has or will this be integrated with the HMP and how does this reduce risk? <i>The governing body may by ordinance require approval of subdivision plats by resolution of the planning board as a condition for the filing of such plats with the county recording officer and approval of site plans by resolution of the planning board as a condition for the issuance of a permit for any development, except that subdivision or individual lot applications for detached one or two dwelling-unit buildings shall be exempt from such site plan review and approval; provided that the resolution of the board of adjustment shall substitute for that of the planning board whenever the board of adjustment has jurisdiction over a subdivision or site plan pursuant to subsection 63b. of this act . Dictated by the Municipal Land Use Law. NJ Statute 40:27-6.2 - the board of commissioners of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions affecting county road or drainage facilities as set forth and limited hereinafter in this section.</i>				
<b>Site Plan Code</b>	Yes	Municipal Land Use Law, NJ Statute 40:27-6.2; Chapter 30, Article IX	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? <i>The board of commissioners of any county having a county planning board shall provide for the review of all subdivisions of land within the county by said county planning board and for the approval of those subdivisions</i>				



	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
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*affecting county road or drainage facilities as set forth and limited hereinafter in this section. 40:27-6.10 In order that county planning boards shall have a complete file of the planning and zoning ordinances of all municipalities in the county, each municipal clerk shall file with the county planning board a copy of the planning and zoning ordinances of the municipality in effect on the effective date of this act and shall notify the county planning board of the introduction of any revision or amendment of such an ordinance which affects lands adjoining county roads or other county lands, or lands lying within 200 feet of a municipal boundary, or proposed facilities or public lands shown on the county master plan or official county map. Such notice shall be given to the county planning board at least 10 days prior to the public hearing thereon by personal delivery or by certified mail of a copy of the official notice of the public hearing together with a copy of the proposed ordinance.*

<b>Stormwater Management Code</b>	Yes	Title 7 of the NJ Administrative Code, N.J.A.C. 7:8; N.J.A.C. 5:21 – Section 30-17.1A.	Local & County	Township Committee
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How has or will this be integrated with the HMP and how does this reduce risk?

The purpose of the Stormwater Management Code for the State of New Jersey is to minimize pollution caused by stormwater and restore, enhance, and maintain the integrity of waters throughout the State.

<b>Post-Disaster Recovery/ Reconstruction Code</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Real Estate Disclosure Requirements</b>	Yes	Senate Bill 3110; P. L. 2023, c. 93, July 3, 2023	State	Sellers and Landlords of commercial or residential property
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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:*



	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
<ul style="list-style-type: none"> <li>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?</li> <li>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.</li> <li>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.</li> <li>Is there flood insurance on the property? A standard homeowner's insurance policy typically does not cover flood damage.</li> <li>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.</li> <li>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?</li> <li>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?</li> </ul>				

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

<b>Growth Management</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Environmental Protection Ordinance(s)</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Flood Damage Prevention Ordinance</b>	Yes	NJ State Law Flood Area Control Act (N.J.S.A. 58:16A-52); National Flood Control Act of 1968 (NFIP); Chapter 25, adopted in 2007 and amended effective 6/20/2016.	State, Federal and Local	Zoning Official
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p><i>It is the purpose of this chapter, to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to Protect human life and health; Minimize expenditure of public money for costly flood control projects; Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; Minimize prolonged business interruptions; Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard; Help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas; Ensure that potential buyers are notified that property is in an area of special flood hazard; and Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.</i></p>				
<b>Wellhead Protection</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Emergency Management Ordinance</b>	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
<b>Climate Change Ordinance</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Other: Special Purpose Ordinance (i.e., sensitive areas, steep slope)</b>	Yes	Soil and Soil Removal Chapter 26	County & Local	Township Committee and Engineering Department
How has or will this be integrated with the HMP and how does this reduce risk?				
<i>Purpose to control soil erosion and sediment damages and related environmental damage by requiring adequate provisions for surface water retention and drainage and for the protection of exposed soil surfaces in order to promote the safety, public health, convenience and general welfare of the community.</i>				
<b>PLANNING DOCUMENTS</b>				
<b>General/Comprehensive Plan</b>	Yes	2018 Revised NJ Statute 40:27-2; State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976 40:55D-28; Master Plan Reexamination Report, Green Township, September 2008.	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk?				
<i>The county planning board shall make and adopt a master plan for the physical development of the county. The master plan of a county, with the accompanying maps, plats, charts, and descriptive and explanatory matter, shall show the county planning board's recommendations for the development of the territory covered by the plan, and may include, among other things, the general location, character, and extent of streets or roads, viaducts, bridges, waterway and waterfront developments, parkways, playgrounds, forests, reservations, parks, airports, and other public ways, grounds, places and spaces; the general location and extent of forests, agricultural areas, and open-development areas for purposes of conservation, food and water supply, sanitary and drainage facilities, or the protection of urban development, and such other features as may be important to the development of the county. The county planning board shall encourage the co-operation of the local municipalities within the county in any matters whatsoever which may concern the integrity of the county master plan and to advise the board of chosen commissioners with respect to the formulation of development programs and budgets for capital expenditures. Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976 40:55D-28 provides the required components of a municipal Master Plan and requires that each municipality prepare a master plan and update it every 6 years. Further, all zoning ordinances must be consistent with the Master Plan or will not be benefitted from a presumption of validity.</i>				
<b>Capital Improvement Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Disaster Debris Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Floodplain Management or Watershed Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Stormwater Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
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	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
<b>Stormwater Pollution Prevention Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Open Space Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Urban Water Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Habitat Conservation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Economic Development Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Shoreline Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Community Wildfire Protection Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Community Forest Management Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Transportation Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Agriculture Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Climate Action/ Resilience/Sustainability Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Tourism Plan</b>	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
<b>Business/ Downtown Development Plan</b>	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
<b>Other</b>	No	-	-	-

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

#### RESPONSE/RECOVERY PLANNING

<b>Emergency Operations Plan</b>	Yes	Township of Green EOP, 2023	Local	OEM
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How has or will this be integrated with the HMP and how does this reduce risk?

*The Emergency Operations Plan defines the scope of preparedness and emergency management activities necessary in the Township. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.*

<b>Continuity of Operations Plan</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Substantial Damage Response Plan</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Threat and Hazard Identification and Risk Assessment</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Post-Disaster Recovery Plan</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Public Health Plan</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

<b>Other</b>	No	-	-	-
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How has or will this be integrated with the HMP and how does this reduce risk?

### 10.3.2 Development and Permitting Capability

Table 10-3 summarizes the capabilities of Green to oversee and track development.





Table 10-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none"> <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	Floodplain development permits
Do you have a buildable land inventory? <ul style="list-style-type: none"> <li>If you have a buildable land inventory, please describe</li> </ul>	No	-
Describe the level of buildout in your jurisdiction.	N/A	There are limited areas for development within the Township.

### 10.3.3 Administrative and Technical Capability

Table 10-4 summarizes potential staff and personnel resources available to Green and their current responsibilities that contribute to hazard mitigation.

Table 10-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
<b>ADMINISTRATIVE CAPABILITY</b>		
Planning Board	Yes	The Planning Board consists of nine members with up to four alternates. The Planning Board shall exercise its powers in accordance with the MLUL regarding the Township Master; subdivision and site plan review; any official map adopted by the Township Council; the Zoning Ordinance, including conditional uses; any capital improvements programs; variances and certain building permits in conjunction with subdivision, site plan and conditional use approval pursuant to the Board's ancillary powers. The Planning Board has the same powers, extent, and is subject to the same restrictions, as a zoning board of adjustment.
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	The Environmental Advisory Committee provides advice and recommendations to the Planning Board on environmental impacts of land use in the municipality in an effort to ensure that planning reflects consideration of natural resources and quality of life.



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Open Space Board/Committee	Yes	The Open Space Committee is comprised of one member of the Township Committee and four citizens of the Township. There may not be more than two alternate members. The Open Space Committee prepares a report recommending which parcels of land should be acquired in fee and/or those parcels of land from which the Township should acquire development rights only; submits to the Township Committee a prioritized list of properties which it recommends that the Township acquire and/or properties from which it recommends that development rights should be acquired; and holds public meetings, which public meetings shall be held in accordance with the Open Public Meetings Act.
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	<p>The Road Department is responsible for all the roads that are owned by the Township of Green. During the year, the Road Department conducts routine maintenance on the roads, storm drains, and municipally owned buildings.</p> <p>From spring to fall, streets throughout the Township are swept. In the winter, the Department is always busy with removal of snow and ice from the roadways. The Department trims brush in the Township right of ways, mows Township owned property, and provides maintenance of Township owned buildings.</p>
Construction/Building/Code Enforcement Department	No	The Construction Department is through shared services with Independence Township, Warren County.
Emergency Management/Public Safety Department	Yes	The Emergency Services Department includes the Fire Department, Rescue Squad, and Emergency Management.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Township works to identify and remove trees on municipal property that could affect electric power.
Mutual aid agreements	Yes	Fire, First Aid
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-
<b>TECHNICAL/STAFFING CAPABILITY</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Township Engineer/Township Planner
Engineers or professionals trained in building or infrastructure construction practices	Yes	Township Engineer
Planners or engineers with an understanding of natural hazards	Yes	Township Engineer/Township Planner



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Staff with expertise or training in benefit/cost analysis	Yes	Township Engineer
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Township Engineer
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	No	-
Surveyors	Yes	Township Engineer
Emergency manager	Yes	Office of Emergency Management
Grant writers	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	Yes	Stormwater Engineer – Township Engineer

### 10.3.4 Fiscal Capability

Table 10-5 summarizes financial resources available to Green.

Table 10-5. 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	No
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

### 10.3.5 Education and Outreach Capability

Table 10-6 summarizes the education and outreach resources available to Green.



Table 10-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Township Committee
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	Yes	Facebook, X, NextDoor
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Smart911
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No	-
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	Notification system, social media, public website, newsletter

### 10.3.6 Community Classifications

Table 10-7 summarizes classifications for community programs available to Green.

Table 10-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	05/5Y	July 2014
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New Jersey Sustainable Jersey Community	Yes	None	Registered 12/16/2016
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

### 10.3.7 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 10-8 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 10-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Dam Failure	Moderate
Disease Outbreak	Moderate
Drought	Moderate
Earthquake	Moderate
Flood	Moderate
Geological Hazards	Moderate
Hazardous Materials	Moderate
Hurricane	Moderate
Infestation	Moderate
Nor'easter	Moderate
Severe Weather	Moderate
Severe Winter Weather	Moderate
Wildfire	Moderate

## 10.4 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 10-1 is responsible for maintaining this information.

### 10.4.1 NFIP Statistics

Table 10-9 summarizes the NFIP policy and claim statistics for Green.

Table 10-9. Green NFIP Summary of Policy and Claim Statistics

# Policies	5
# Claims (Losses)	3
Total Loss Payments	\$21,582.77
# Repetitive Loss Properties (NFIP definition)	0
# Repetitive Loss Properties (FMA definition)	0
# Severe Repetitive Loss Properties	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 Region II 2024*

## 10.4.2 Flood Vulnerability Summary

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

Table 10-10. NFIP Summary

NFIP Topic	Comments
<b>Flood Vulnerability Summary</b>	
Describe areas prone to flooding in your jurisdiction.	Flooding in the Township occurs within the SFHA.
Do you maintain a list of properties that have been damaged by flooding?	No
Do you maintain a list of property owners interested in flood mitigation?	No
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Unknown
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No
How do you make Substantial Damage determinations?	Unknown
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	Unknown
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes
<b>NFIP Compliance</b>	
What local department is responsible for floodplain management?	Municipal Engineer
Are any certified floodplain managers on staff in your jurisdiction?	No
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes, online FEMA, State, and regional resources.
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?	Township would consider attending continuing education and certification training on floodplain management.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, engineering capability





NFIP Topic	Comments
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	If the value of the proposed development would increase the structure's value by at least 50 percent.
What are the barriers to running an effective NFIP program in the community, if any?	Staff and funding
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)?	February 16, 1994
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 25, Flood Damage Prevention
What is the date that your flood damage prevention ordinance was last amended?	June 2016
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	The program meets minimum requirements.
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?	The Planning Board considers efforts to reduce flood risk when reviewing variances such as height restrictions. The Township has subdivision and site plan ordinances.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

## 10.5 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 10-11 through Table 10-13.

Table 10-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
<b>2019</b>				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0
<b>2020</b>				
Total Permits	1	0	1	2
Permits within SFHA	0	0	0	0
<b>2021</b>				
Total Permits	0	0	2	2
Permits within SFHA	0	0	0	0
<b>2022</b>				
Total Permits	1	0	0	1



	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA	0	0	0	0
<b>2023</b>				
Total Permits	1	0	1	2
Permits within SFHA	0	0	0	0

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

Table 10-12. Recent Major Development and Infrastructure from 2019 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
Cedar Peak	Commercial	1	120 Airport Road	No	Warehouse/Under Construction

\* Only location-specific hazard zones or vulnerabilities identified.

Table 10-13. 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)	Known Hazard Zones*	Description / Status of Development
There are no known or anticipated major development or infrastructure in the next five years.					

## 10.6 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 Green's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

### 10.6.1 Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Township are shown in Figure 10-1 through Figure 10-3. 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 Green has significant exposure. The maps show the location of potential new development, where available.



Figure 10-1. Green Flood and Sinkhole Hazard Area Extent and Location Map

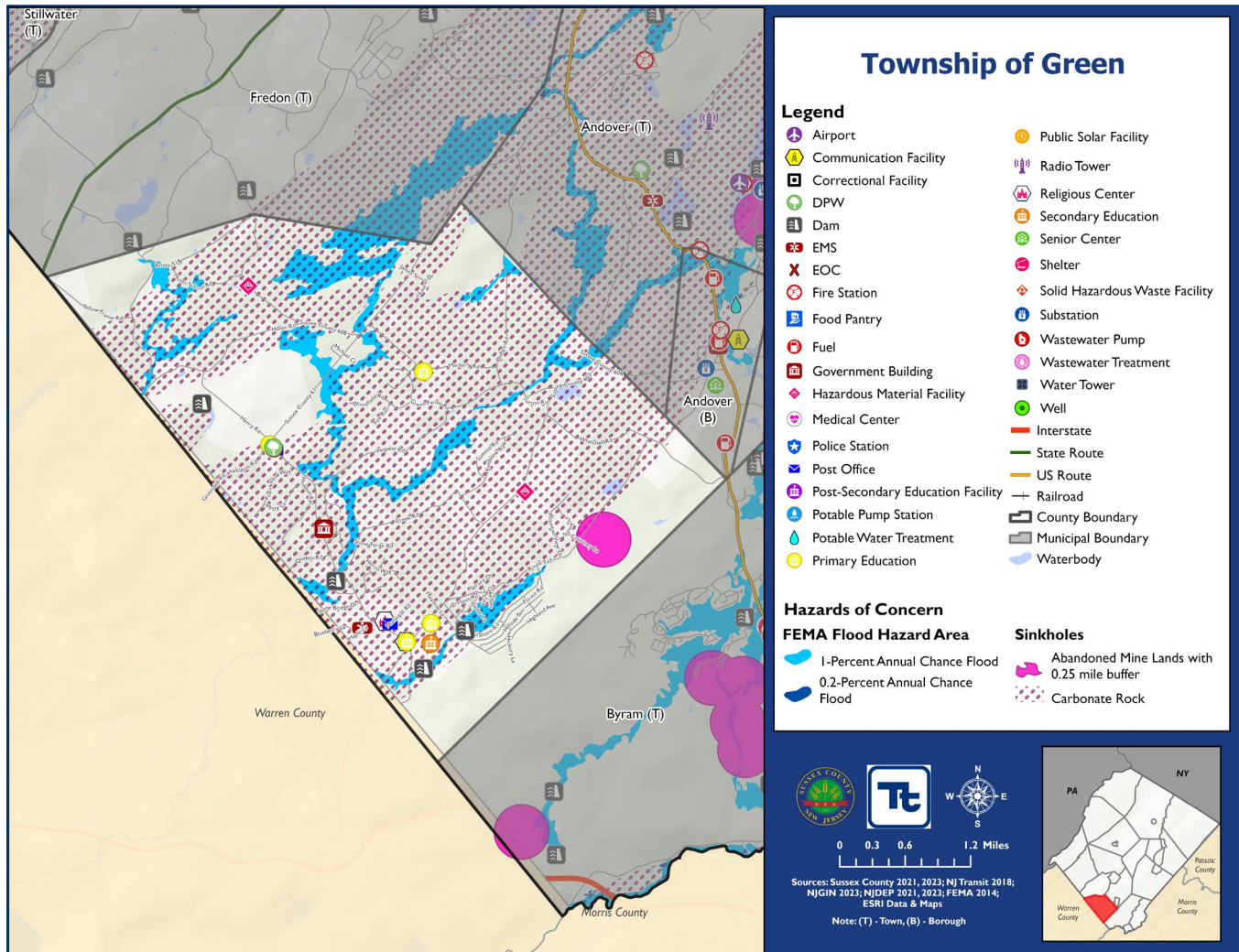


Figure 10-2. Green Hazardous Materials and Wildfire Hazard Area Extent and Location Map

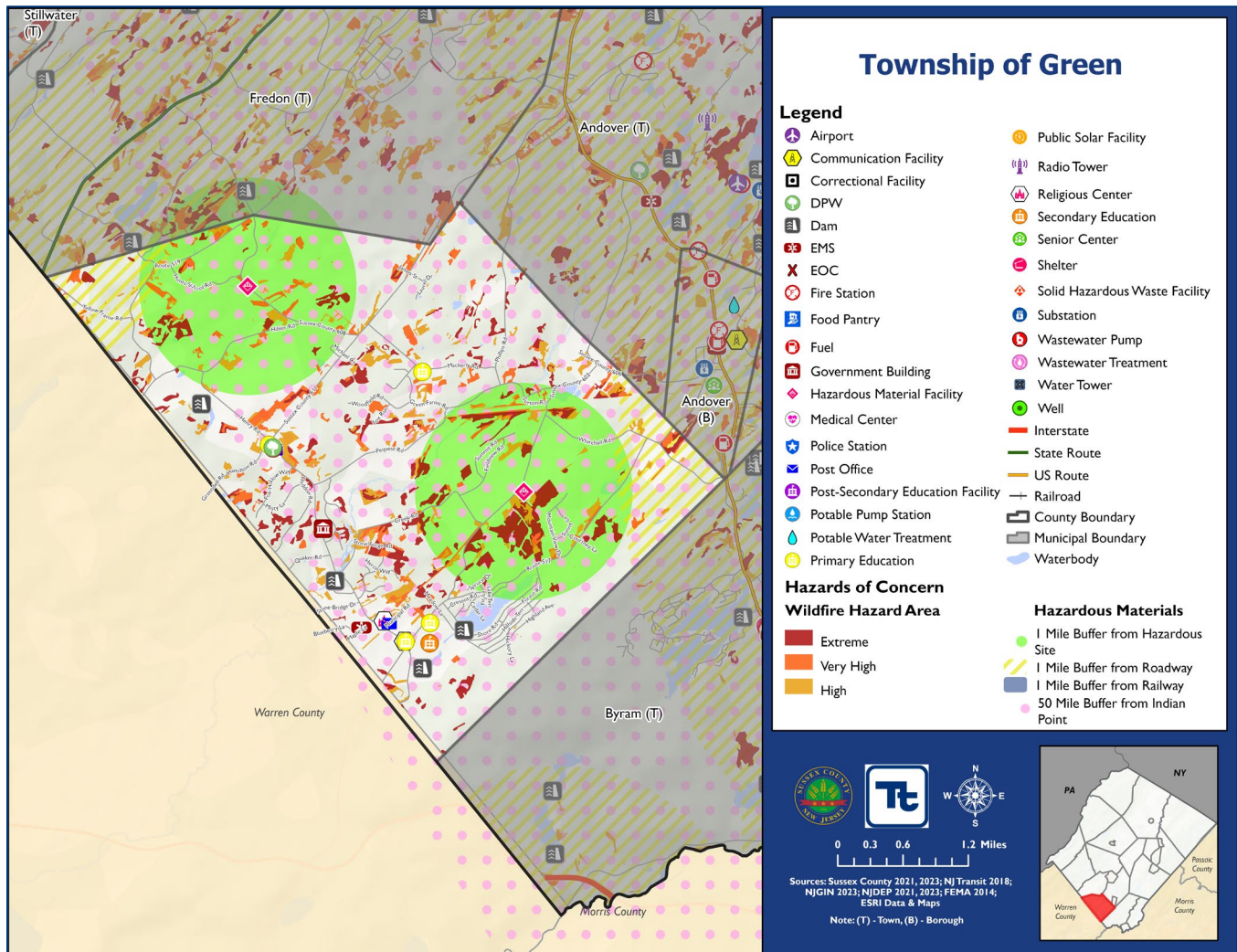
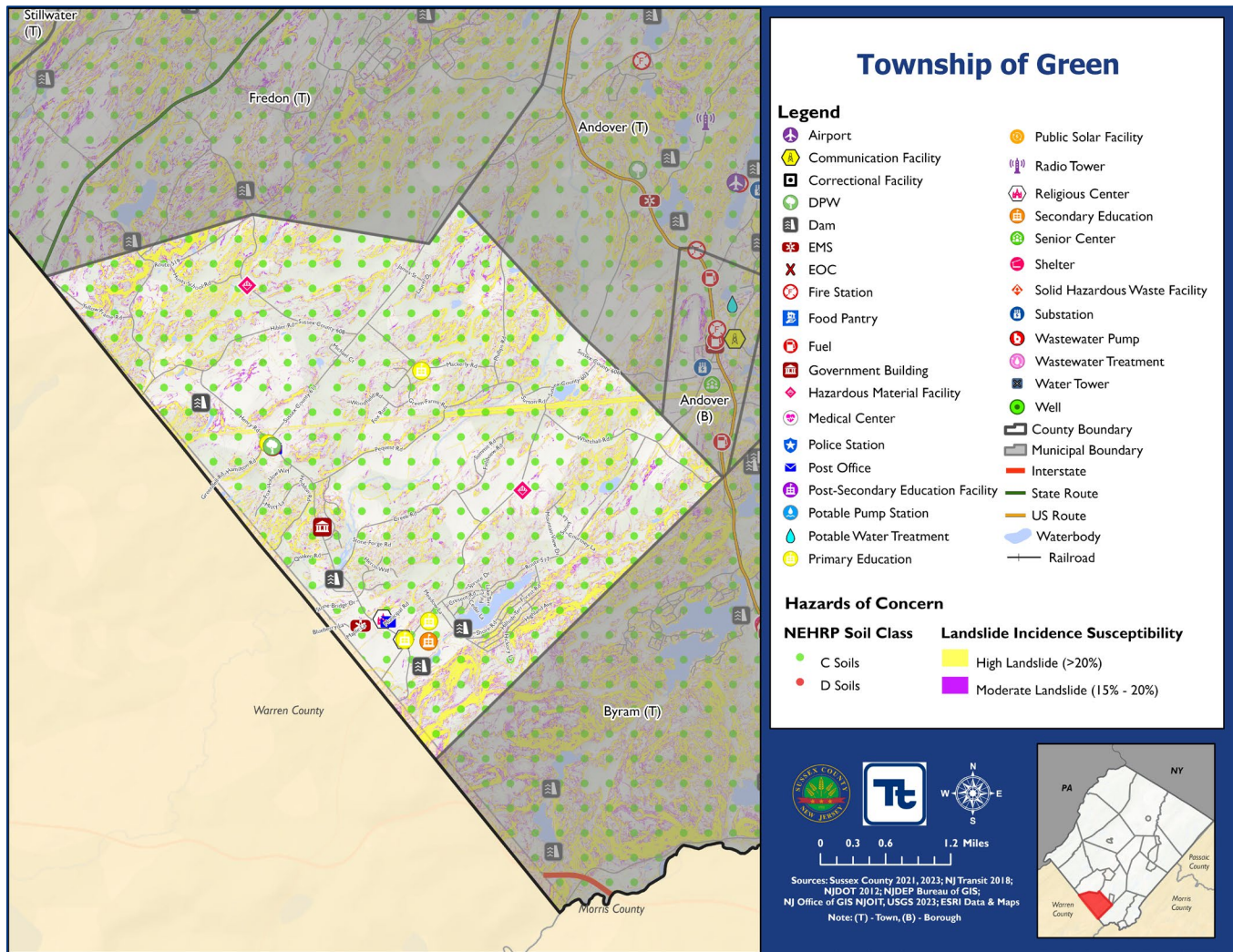




Figure 10-3. Green Landslide and NEHRP Soils Hazard Area Extent and Location Map





## 10.6.2 Hazard Event History

The history of natural and non-natural hazard events in Green is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 10-14 provides details on loss and damage in Green during hazard events since the last hazard mitigation plan update.

Table 10-14. Hazard Event History in Green

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Green
August 4, 2020	Tropical Storm Isaias (DR-4574-NJ)	Yes	Tropical Storm Isaias brought high winds and heavy rain to Sussex County; there were numerous reports of downed trees and power lines. Observations from surrounding areas suggest sustained tropical storm force winds likely occurred.	No damages or losses recorded for the Township.
January 31-February 2, 2021	Severe Winter Storm and Snowstorm (FEMA-DR-4597)	Yes	Heavy precipitation developed producing areas of extreme snowfall rates of 2 to 4 inches per hour in northern New Jersey. Numerous reports of 24 to 32 inches were received from across the County.	No damages or losses recorded for the Township.
September 1-3, 2021	Remnants of Hurricane Ida (FEMA-DR-4614)	Yes	The remnants of Hurricane Ida produced heavy rainfall and flash floods. Widespread flash flooding occurred in Sussex County with numerous road closures.	No damages or losses recorded for the Township.
January 20, 2020 – May 11, 2023	Covid-19 Pandemic (EM-3451-NJ, DR-4488-NJ)	Yes	Sussex County accounted for 37,642 positive cases of COVID-19 in the State of New Jersey, and 425 of the reported deaths. A total of 277,542 vaccinations were delivered in the County to both residents and non-residents.	The Township followed and enforced masking and social distancing mandates.

EM = Emergency Declaration (FEMA)

FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

## 10.6.3 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 Green .

### 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. Green 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:

- The Township agrees with the following hazard rankings developed during the hazard ranking review.

Table 10-15 shows Green's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 10-15. Hazard Ranking

Hazard	Rank
Dam Failure	Medium
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Flood	Low
Geological Hazards	Medium
Hazardous Materials	Medium
Hurricane	Medium
Infestation	Low
Nor'easter	High
Severe Weather	High
Severe Winter Weather	High
Wildfire	Low

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

## Critical Facilities

Table 10-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 10-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Annual Chance Event	0.2% Annual Chance Event		
Tranquility Church Dam	Dam	Yes	Yes	2025-GreenTwp-10	-
Tranquility Mill Dam	Dam	Yes	Yes	2025-GreenTwp-10	-

Source: Sussex County 2021, 2023; NJGIN 2023



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

- Lake Tranquility Dam

### 10.6.4 Identified Issues

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

- Lake Tranquility properties are inundated with ground water. Ground water seepage can impact basement and ground-level storage areas and living conditions. Flooded roadways around Lake Tranquility can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.
- Water systems are limited in Green Township therefore the need for a water source to combat fires is paramount. The Township has a lack of stand pipes at draft stations for emergency equipment which could result in the inability to combat and extinguish fires.
- The Township lacks a Disaster Debris Management Plan to address post disaster cleanup. Without a plan in place, there are no identified resources in place to properly address debris and do not have identified locations for debris storage.
- Hunts School Road has an undersized drainage pipe that contributes to flooding. Flooded roadways can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.
- Backup power sources are necessary to maintain critical services for critical facilities. The Tranquility Post Office (28 Kennedy Road) and the Greendell Post Office (243 Kennedy Road) lack backup power to maintain operations in the event of an emergency. High winds associated with hurricanes, nor'easters, severe weather, and severe winter weather are known to cause power outages, which would impact the continuity of operations at both critical facilities.
- No mapping exists of the drainage system in Green Township to help identify and solve problem areas. Information on drainage systems can be used to optimize stormwater management efforts and monitor potential overflows during floods and severe storm events. Not having this information readily available presents an obstacle to comprehensive stormwater management.
- A recent audit of New Jersey's model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. The Township's Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement.
- 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.
- The Township does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Township in identifying and prioritizing properties to mitigate.
- The Tranquility Church Dam and Tranquility Mill Dam, both critical infrastructures, are located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Lake Tranquility Dam, within its jurisdiction. These structures have the potential to impact persons and structures within inundation areas.



- The Township does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.
- The Township does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations. The Township has struggled with identifying where socially vulnerable populations are located at within the jurisdiction. Identifying and educating these populations can increase resiliency in the Township and potentially reduce the number of emergency calls during hazardous events.
- Lake Tranquility Dam is a Class I High Hazard Dam that is located on Lake Tranquility. The dam is owned by the Township. Failure of the dam could result in inundation of densely populated areas, critical facilities and community lifelines, and several local roadways including Scenic Drive, Shore Road, Meadow Lane, Pondview Circle, and Mallard Drive. Although the dam was last inspected in 2022 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.

## 10.7 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.

### 10.7.1 Past Mitigation Action Status

Table 10-17 indicates progress on the Township's mitigation strategy identified in the 2021 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.

### 10.7.2 Additional Mitigation Efforts

Green did not identify any additional mitigation efforts completed since the last HMP.



Table 10-17. 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 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2021-Green-001	Whitehall Road Roadway Elevation	Flood, Severe Weather	Engineer, DPW	<p><b>Problem:</b> Road flooding on Whitehall Road near Washers Pond restricts normal travel and greatly effects emergency access. During Hurricane Irene the road surface was covered for months by six feet of water. In high rain years the roadway is partially flooded also creating a driving hazard.</p> <p><b>Solution:</b> A four hundred- and fifty-foot (450') section of the road will need to be reconstructed. The area of flooding will need to be raised approximately eighteen inches (18") to mitigate the semi-annual flooding. The slope along Washers Pond will require grading and a guide rail needs to be replaced.</p>	1. Completed 2. This project has been completed.	1. Discontinue 2. Not applicable 3. The project was completed
2021-Green-002	Lake Tranquility Drainage Study	Flood	Engineer	<p><b>Problem:</b> Lake Tranquility properties are inundated with water runoff and ground water.</p> <p><b>Solution:</b> The Township will conduct drainage study of the entire lake community and determine if actions can be taken to address groundwater flooding in Lake Tranquility. Once actions are identified, the Township will carry out the cost-effective options. A potential action would be to implement a storm water runoff management system for 350 homes in Lake Tranquility area as funding and private cooperation permit. Drainage easements need to be</p>	1. No Progress 2. Due to financial constraints no progress has been made on this project.	1. Include in update 2. Not applicable 3. Not applicable



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 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				created allowing the Township the authorization to access and maintain.		
2021-Green-003	Stand Pipes at Draft Sites	Wildfire, Hazardous Materials	Administrator , OEM Coordinator	<p><b>Problem:</b> Water systems are limited in Green Township therefore the need for a water source to combat fires is paramount. The Township has a lack of stand pipes at draft stations for emergency equipment.</p> <p><b>Solution:</b> Additional areas for the installation of a stand pipe or draft stations will be researched and determined. Once the locations are established funding and or easements will need to be secured.</p>	1. No Progress 2. Due to financial constraints no progress has been made on this project.	1. Include in update 2. Not applicable 3. Not applicable
2021-Green-004	Portable Water Pumps	Flood	Fire Chief, Administrator	<p><b>Problem:</b> Basements of homes in the Township flood during periods of heavy rain and the residents do not have pumps to remove the water.</p> <p><b>Solution:</b> Purchase/replace portable water pumps (12) to ensure those who experience flooding in conjunction with loss of power are adequately protected from loss of structure and/or mold issues.</p>	1. Completed 2. Discussions between OEM, Administrator, and Fire Chief it was determined that 12 pumps was an overly ambitious goal for a municipality of less than 4000 people. Taking in consideration our vehicle fleet and manpower it was determined that the 5 pumps in our inventory will be sufficient to meet the needs of the Township. Two of these pumps were recently acquired for Green Twp OEM	1. Discontinue 2. Not applicable 3. Project has been completed
2021-Green-005	Pequest River	Flood, Severe Weather	Township Engineer	<p><b>Problem:</b> The Pequest River experiences streambank erosion.</p> <p><b>Solution:</b> Identify areas of the Pequest River where erosion and undermining of the river bank are occurring. Work with the Township Engineer and private land</p>	1. Discontinue 2. No longer an initiative of the Township	1. Discontinue 2. Not applicable 3. No longer an initiative of the Township



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 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				owners in developing plans to stabilize these locations.		
2021-Green-006	All Hazards Outreach	All Hazards	OEM Coordinator, in coordination with SCDDEM	<p><b>Problem:</b> The Township lacks outreach to address hazards, emergency preparedness, and hazard mitigation.</p> <p><b>Solution:</b> Develop and conduct all - hazards public education and outreach program for hazard mitigation and preparedness. Utilize Township social media outlets to communicate with township residents.</p>	<p>1. Ongoing Capability</p> <p>2. Both Green Township and the Green Township OEM have developed public outreach capabilities through social media sites (Facebook/Twitter/NextDoor) and emergency notifications through Rave. Residents are urged to sign up through Smart911 to enroll in alerts. As information on public education and outreach programs becomes available it is disseminated via social media and the township website.</p>	<p>1. Discontinue</p> <p>2. Not applicable</p> <p>3. Ongoing capability/maintenance</p>
2021-Green-007	Disaster Debris Management Plan	All Hazards	OEM, Public Works	<p><b>Problem:</b> The Township lacks a Disaster Debris Management Plan.</p> <p><b>Solution:</b> The Township will develop and adopt a Disaster Debris Management Plan.</p>	<p>1. No progress</p> <p>2. Due to other Township prioritizes, there has been no progress on this action.</p>	<p>1. Include in update</p> <p>2. Not applicable</p> <p>3. Not applicable</p>
2021-Green-008	Hunts School Road	Flood, Severe Weather	Public Works	<p><b>Problem:</b> Hunts School Road has an undersized drainage pipe that contributes to flooding.</p> <p><b>Solution:</b> The Township will replace and upsize the drainage pipe.</p>	<p>1. No Progress</p> <p>2. Due to financial constraints no progress has been made on this project.</p>	<p>1. Include in update</p> <p>2. Not applicable</p> <p>3. Not applicable</p>
2021-Green-009	Post Office Backup Power	Hurricane, Nor'Easter, Severe Winter Weather,	OEM, Engineer, Administration	<p><b>Problem:</b> Backup power sources are necessary to maintain critical services for critical facilities. The Tranquility Post Office and the Greendell Post Office</p>	<p>1. No Progress</p> <p>2. Due to financial constraints no progress has been made on this project.</p>	<p>1. Include in update</p> <p>2. Not applicable</p> <p>3. Not applicable</p>





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 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
		Severe Weather		lack backup power. The Township owns both properties.  <b>Solution:</b> The Township will consider the installation of backup generators at each site. The Engineer will research what size generator is needed to power the facilities. The Township will then purchase and install the selected generator and necessary electrical components to supply backup power to the facilities.		
2021-Green-010	Drainage System Mapping	Flood, Severe Weather	Public Works	<b>Problem:</b> No mapping exists of the drainage system in Green Township to help identify and solve problem areas.  <b>Solution:</b> The Township will contract with an engineering firm to create detailed mapping of all drainage infrastructure.	1. No Progress 2. Due to financial constraints no progress has been made on this project.	1. Include in update 2. Not applicable 3. Not applicable
2021-Green-011	Flood Damage Prevention Ordinance Update	Flood	FPA, Administration	<b>Problem:</b> The Township's Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement.  <b>Solution:</b> The Township will update the Flood Damage Prevention Ordinance to include the freeboard requirement.	1. No progress 2. Due to other Township prioritizes, there has been no progress on this action.	1. Include in update 2. Not applicable 3. Not applicable



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

Green 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 Green 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 10-18 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 10-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 10-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam Failure	X	X		X	X		X		X	X
Disease Outbreak		X		X			X			X
Drought		X		X			X			X
Earthquake	X	X		X	X		X			X
Flood	X	X	X	X	X		X	X	X	X
Geological Hazards	X	X		X	X		X			X
Hazardous Materials	X	X		X	X		X		X	X
Hurricane	X	X	X	X	X		X	X	X	X
Infestation				X			X			
Nor'easter	X	X	X	X	X		X	X	X	X
Severe Weather	X	X	X	X	X		X	X	X	X
Severe Winter Weather	X	X		X	X		X			X
Wildfire	X	X		X	X		X			X

**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 10-19. Summary of Prioritization of Actions

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-GreenTwp-01	Lake Tranquility Drainage Study	1	1	1	1	1	0	1	1	1	1	1	1	0	0	11	High
2025-GreenTwp-02	Stand Pipes at Draft Sites	1	1	1	1	1	0	1	1	1	0	1	1	1	0	11	High
2025-GreenTwp-03	Disaster Debris Management Plan	0	1	1	1	1	1	1	0	1	1	1	1	0	1	11	High
2025-GreenTwp-04	Hunts School Road Drainage Improvements	1	1	1	1	1	0	1	1	1	0	1	1	0	0	10	Medium
2025-GreenTwp-05	Emergency Generators at Critical Facilities	1	1	1	1	1	0	0	1	1	1	0	1	1	0	10	Medium
2025-GreenTwp-06	Drainage System Mapping	0	1	1	1	1	1	1	0	1	1	1	1	1	1	12	High
2025-GreenTwp-07	Code Coordinated Ordinance	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-GreenTwp-08	Substantial Damage Management Plan	0	1	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-GreenTwp-09	Flood Mitigation Interest	1	1	1	1	1	1	1	1	1	0	1	1	1	1	13	High
2025-GreenTwp-10	Dam Owner Partnership	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High
2025-GreenTwp-11	Certified Floodplain Manager Training	1	1	1	1	1	1	0	1	1	1	1	1	0	1	12	High
2025-GreenTwp-12	Socially Vulnerable Populations Outreach	1	0	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2025-GreenTwp-13	Lake Tranquility Dam Rehab	1	1	1	1	0	0	1	1	1	0	1	1	1	1	11	High

Note: Volume I, Section 21 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).



## Action 2025-GreenTwp-01. Lake Tranquility Drainage Study

<b>Lead Agency:</b>	Engineering																
<b>Supporting Agencies:</b>	Public Works, Township Administration, NJDEP																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane																
<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation																
<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter																
<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Lake Tranquility properties are inundated with ground water. Ground water seepage can impact basement and ground-level storage areas and living conditions. Flooded roadways around Lake Tranquility can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.																
<b>Description of the Solution:</b>	The Township Engineer will conduct a drainage study of the entire lake community and determine if actions can be taken to address groundwater flooding in Lake Tranquility. Once actions are identified, the Township will carry out the cost-effective options, either through Public Works or a hired contractor. A potential action would be to implement a storm water runoff management system for 350 homes in Lake Tranquility area as funding and private cooperation permit. Drainage easements need to be created allowing the Township the authorization to access and maintain.																
<b>Estimated Cost:</b>	High																
<b>Potential Funding Sources:</b>	HMGP, BRIC, FMA, Township Budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2																
<b>Benefits:</b>	This action would reduce the flooding impacts felt by the Township surrounding Lake Tranquility.																
<b>Impact on Socially Vulnerable Populations:</b>	This action will assist socially vulnerable populations whose properties are impacted by flooding surrounding Lake Tranquility. Furthermore, this action will assist in keeping roadways clear of flood waters for the populations which may need to attend medical appointments or require medical attention from first responders.																
<b>Impact on Future Development:</b>	Future development in the impacted area will be less likely to be flooded.																
<b>Impact on Critical Facilities/Lifelines:</b>	This action would assist in the reduction of roadway flooding surrounding Lake Tranquility, permitting first responders to traverse the roadways safely.																
<b>Impact on Capabilities:</b>	Not applicable																
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Heavy rains can increase the likelihood of potential catastrophic flooding.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input checked="" type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input checked="" type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
<b>CRS Category</b>	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input checked="" type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input checked="" type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
<input type="checkbox"/> Preventative Measures (PR)	<input checked="" type="checkbox"/> Natural Resource Protection (NR)																
<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current problem continues</td></tr><tr><td>Raise banks of lake to increase storage capacity</td><td>Cost prohibitive</td></tr><tr><td>Expand lake</td><td>Cost prohibitive</td></tr></table>	Action	Evaluation	No action	Current problem continues	Raise banks of lake to increase storage capacity	Cost prohibitive	Expand lake	Cost prohibitive								
Action	Evaluation																
No action	Current problem continues																
Raise banks of lake to increase storage capacity	Cost prohibitive																
Expand lake	Cost prohibitive																



## Action 2025-GreenTwp-02. Stand Pipes at Draft Sites

<b>Lead Agency:</b>	Fire Department		
<b>Supporting Agencies:</b>	Township Administration, Emergency Management, Engineering		
<b>Hazard(s) of Concern:</b>	<div><input type="checkbox"/> Dam Failure</div> <div><input type="checkbox"/> Disease Outbreak</div> <div><input type="checkbox"/> Drought</div> <div><input type="checkbox"/> Earthquake</div> <div><input type="checkbox"/> Flood</div> <div><input type="checkbox"/> Geological Hazards</div> <div><input checked="" type="checkbox"/> Hazardous Materials</div> <div><input type="checkbox"/> Hurricane</div> <div><input type="checkbox"/> Infestation</div> <div><input type="checkbox"/> Nor'easter</div> <div><input type="checkbox"/> Severe Weather</div> <div><input type="checkbox"/> Severe Winter Weather</div> <div><input checked="" type="checkbox"/> Wildfire</div>		
<b>Description of the Problem:</b>	Water systems are limited in Green Township therefore the need for a water source to combat fires is paramount. The Township has a lack of stand pipes at draft stations for emergency equipment which could result in the inability to combat and extinguish fires.		
<b>Description of the Solution:</b>	Additional areas for the installation of a stand pipe or draft stations will be researched and determined. Once the locations are established funding and or easements will need to be secured.		
<b>Estimated Cost:</b>	Medium		
<b>Potential Funding Sources:</b>	HMGP, BRIC, Township Budget		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	1, 2		
<b>Benefits:</b>	This action will benefit the entire Township by providing additional locations for first responders to draw water from to battle fires, whether it be from wildfires or a hazard material release.		
<b>Impact on Socially Vulnerable Populations:</b>	This action will permit first responders to expand their ability to support responses to location near or where socially vulnerable populations live. Additional stand pipes will allow first responders to extinguish fires which may impact these populations.		
<b>Impact on Future Development:</b>	This action will support emergency operations, in particular the extinguishing of fires, in the vicinity of future development.		
<b>Impact on Critical Facilities/Lifelines:</b>	This action will permit the safety and security lifeline to effectively respond to wildfires and/or fires caused by hazardous material releases. It will also expand the water system lifeline by providing additional locations for stand pipes.		
<b>Impact on Capabilities:</b>	This action will expand the response and recovery capabilities of the Township.		
<b>Climate Change Considerations:</b>	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the likelihood of wildfires.		
<b>Mitigation Category</b>	<div><input type="checkbox"/> Local Plans and Regulations (LPR)</div> <div><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP)</div> <div><input type="checkbox"/> Education and Awareness Programs (EAP)</div>		
<b>CRS Category</b>	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input type="checkbox"/> Property Protection (PP)</div> <div><input type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR)</div> <div><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</div> <div><input checked="" type="checkbox"/> Emergency Services (ES)</div>		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No Action	Current problem remains	
	Purchase tanker truck for water	Slow emergency service response times.	
	Develop contract with neighboring towns for fire response	Too slow of response times, towns may be unable	





## Action 2025-GreenTwp-03. Disaster Debris Management Plan

<b>Lead Agency:</b>	Emergency Management																
<b>Supporting Agencies:</b>	Public Works, Township Administration																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input checked="" type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input checked="" type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input checked="" type="checkbox"/> Geological Hazards</td><td><input checked="" type="checkbox"/> Wildfire</td></tr><tr><td><input checked="" type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input checked="" type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Severe Winter Weather	<input checked="" type="checkbox"/> Geological Hazards	<input checked="" type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Hazardous Materials	
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<input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Severe Winter Weather																
<input checked="" type="checkbox"/> Geological Hazards	<input checked="" type="checkbox"/> Wildfire																
<input checked="" type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	The Township currently does not have an adopted debris management plan. Without a plan in place, there are no identified resources in place to properly address debris and do not have identified locations for debris storage.																
<b>Description of the Solution:</b>	The municipality will develop a disaster debris management plan. This plan will establish procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The plan will identify responsibilities for execution of the plan. The plan will align with permitted temporary collection areas.																
<b>Estimated Cost:</b>	Staff time																
<b>Potential Funding Sources:</b>	Municipal budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	5																
<b>Benefits:</b>	The action will result in increased quicker and more efficient cleanup after disaster events.																
<b>Impact on Socially Vulnerable Populations:</b>	Not Applicable																
<b>Impact on Future Development:</b>	Not Applicable																
<b>Impact on Critical Facilities/Lifelines:</b>	Not Applicable																
<b>Impact on Capabilities:</b>	The action will result in increased post disaster capabilities.																
<b>Climate Change Considerations:</b>	Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the capabilities to respond to these events.																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<table><tr><td><input checked="" type="checkbox"/> High</td><td><input type="checkbox"/> Medium</td><td><input type="checkbox"/> Low</td></tr></table>			<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low											
<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low															
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem remains</td></tr><tr><td>Rely on federal cleanup</td><td>These services may or may not be available</td></tr><tr><td>Rely on state cleanup</td><td>These services may or may not be available</td></tr></table>			Action	Evaluation	No Action	Current problem remains	Rely on federal cleanup	These services may or may not be available	Rely on state cleanup	These services may or may not be available						
Action	Evaluation																
No Action	Current problem remains																
Rely on federal cleanup	These services may or may not be available																
Rely on state cleanup	These services may or may not be available																



## Action 2025-GreenTwp-04. Hunts School Road Drainage Improvements

<b>Lead Agency:</b>	Engineering																
<b>Supporting Agencies:</b>	Public Works																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane																
<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation																
<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter																
<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Hunts School Road has an undersized drainage pipe that contributes to flooding. Flooded roadways can impact evacuation routes, prevent emergency responders from reaching a location, and impede on necessary medical appointments or needs for vulnerable populations.																
<b>Description of the Solution:</b>	The Township Engineer will complete an engineering survey of drainage systems on Hunts School Road that are below capacity and contribute to flooding to determine strategies which would provide relief from floods. The Township Public Works will complete the necessary work.																
<b>Estimated Cost:</b>	Medium																
<b>Potential Funding Sources:</b>	HMGP, BRIC, Township Budget																
<b>Implementation Timeline:</b>	3 years																
<b>Goals Met:</b>	1, 2																
<b>Benefits:</b>	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.																
<b>Impact on Socially Vulnerable Populations:</b>	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.																
<b>Impact on Future Development:</b>	Future development in the impacted area will be less likely to be flooded.																
<b>Impact on Critical Facilities/Lifelines:</b>	Transportation routes are more likely to remain open, which allows evacuation routes to remain intact. Furthermore, Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.																
<b>Impact on Capabilities:</b>	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.																
<b>Climate Change Considerations:</b>	Climate change is likely to result in more frequent and severe rainfall events. This action upsizes drainage systems to meet changing stormwater needs as the result of climate change.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>CRS Category</b>	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input checked="" type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
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<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem remains</td></tr><tr><td>Remove roadway</td><td>Roadway cannot be removed</td></tr><tr><td>Raingardens</td><td>Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.</td></tr></table>	Action	Evaluation	No Action	Current problem remains	Remove roadway	Roadway cannot be removed	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.								
Action	Evaluation																
No Action	Current problem remains																
Remove roadway	Roadway cannot be removed																
Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.																



## Action 2025-GreenTwp-05. Emergency Generators at Critical Facilities

<b>Lead Agency:</b>	Engineering		
<b>Supporting Agencies:</b>	Post Office, Emergency Management, Township Administration		
<b>Hazard(s) of Concern:</b>	<input checked="" type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials	<input checked="" type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire	
<b>Description of the Problem:</b>	Backup power sources are necessary to maintain critical services for critical facilities. The Tranquility Post Office (28 Kennedy Road) and the Greendell Post Office (243 Kennedy Road) lack backup power to maintain operations in the event of an emergency. High winds associated with hurricanes, nor'easters, severe weather, and severe winter weather are known to cause power outages, which would impact the continuity of operations at both critical facilities.		
<b>Description of the Solution:</b>	The Township's Engineer will assess the needs of the buildings to determine the capacity required for the generator. Following this determination, the generator and all necessary components and accessories will be installed at both the Tranquility Post Office (28 Kennedy Road) and the Greendell Post Office (243 Kennedy Road). The employees at post office will be responsible will perform, or hire a contractor to perform, the needed maintenance for these generators.		
<b>Estimated Cost:</b>	Medium		
<b>Potential Funding Sources:</b>	HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Annual Budget		
<b>Implementation Timeline:</b>	Within 5 years		
<b>Goals Met:</b>	1, 2, 5, 6, 7		
<b>Benefits:</b>	This action ensures continued operation of a critical facility and its essential functions during a power outage.		
<b>Impact on Socially Vulnerable Populations:</b>	Protection of this critical facility will ensure socially vulnerable populations receive necessary items through mail carriers, including medications.		
<b>Impact on Future Development:</b>	This action results in protection of a critical facility that could support future development.		
<b>Impact on Critical Facilities/Lifelines:</b>	This action ensures continued operation of a critical facility and its essential functions during a power outage.		
<b>Impact on Capabilities:</b>	This action ensures continuity of operations to maintain capabilities.		
<b>Climate Change Considerations:</b>	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.		
<b>Mitigation Category</b>	<input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)	
<b>CRS Category</b>	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)	
<b>Priority</b>	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	
	No Action	Current problem remains	
	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.	



## Action 2025-GreenTwp-06. Drainage System Mapping

<b>Lead Agency:</b>	Public Works																
<b>Supporting Agencies:</b>	Floodplain Administrator, Township Administration																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input checked="" type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input checked="" type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	No mapping exists of the drainage system in Green Township to help identify and solve problem areas. Information on drainage systems can be used to optimize stormwater management efforts and monitor potential overflows during floods and severe storm events. Not having this information readily available presents an obstacle to comprehensive stormwater management.																
<b>Description of the Solution:</b>	The Township will contract with an engineering firm to create detailed mapping of all drainage infrastructure.																
<b>Estimated Cost:</b>	Medium																
<b>Potential Funding Sources:</b>	BRIC, HMGP, Township Budget																
<b>Implementation Timeline:</b>	Within 3 years																
<b>Goals Met:</b>	1, 2																
<b>Benefits:</b>	Information on drainage systems can be used to optimize stormwater management efforts and monitor potential overflows during floods and severe storm events.																
<b>Impact on Socially Vulnerable Populations:</b>	The mapping of drainage systems can assist in locating where socially vulnerable populations are in relation to this infrastructure. Should the drainage infrastructure become damaged in any way near these populations, first responders can swiftly notify these populations and get them out of harms way.																
<b>Impact on Future Development:</b>	Mapping the drainage systems in the Township can assist in determining where future development will be supported by this infrastructure and reduce any potential impacts from hazards, such as flooding and heavy rains from severe storms.																
<b>Impact on Critical Facilities/Lifelines:</b>	Drainage and stormwater infrastructure will be properly identified and mapped, permitting officials to quickly locate and resolve any damages to the systems. Damages to stormwater infrastructure can cause flooded roadways, preventing first responders from reaching emergencies, restrict regular travel, and prevent individuals from reaching evacuation routes.																
<b>Impact on Capabilities:</b>	This action will enhance the Township's capabilities for stormwater management.																
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Heavy rain events can produce excessive waters which can inundate drainage systems, potentially damaging the infrastructure and causing flooding conditions.																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current problem remains</td></tr><tr><td>Request assistance from local colleges and universities in developing mapping</td><td>May not be financially feasible or sustainable</td></tr><tr><td>Create a physical map noting the location of these systems instead of a digitized version</td><td>The physical map may get lost or damaged more easily</td></tr></table>	Action	Evaluation	No action	Current problem remains	Request assistance from local colleges and universities in developing mapping	May not be financially feasible or sustainable	Create a physical map noting the location of these systems instead of a digitized version	The physical map may get lost or damaged more easily								
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No action	Current problem remains																
Request assistance from local colleges and universities in developing mapping	May not be financially feasible or sustainable																
Create a physical map noting the location of these systems instead of a digitized version	The physical map may get lost or damaged more easily																



## Action 2025-GreenTwp-07. Code Coordinated Ordinance

<b>Lead Agency:</b>	Floodplain Administrator																
<b>Supporting Agencies:</b>	Construction Official, Building Department, Township Administration, NFIP State Coordinator, FEMA Regional Office																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	<p>A recent audit of New Jersey's model ordinances by FEMA for conformance with NFIP, resulted in a review of existing local flood damage prevention ordinances. Based upon FEMA's review, specific language related to NFIP regulations was not consistent. Additionally, it was determined that better coordination was needed between the three sets of regulations that regulate development and construction in the floodplain. These regulations are the NFIP implemented by local floodplain administrators, the New Jersey Flood Hazard Area Control Act (FHACA) implemented at the State level by the NJDEP, and the Uniform Construction Code (UCC) implemented by the local Construction Official. NJDEP used this feedback to develop a model Code Coordinated Ordinance and continues to work with municipalities to update flood damage prevention ordinances to the Code Coordinated Ordinance. The Township's Flood Damage Prevention Ordinance lacks the state mandated freeboard requirement.</p>																
<b>Description of the Solution:</b>	<p>After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the municipality will update and adopt the Code Coordinated Ordinance.</p>																
<b>Estimated Cost:</b>	Staff time																
<b>Potential Funding Sources:</b>	Municipal budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 5,7																
<b>Benefits:</b>	<p>The updated ordinance will improve floodplain management, meet NFIP requirements, and increase resilience of new and substantially improved structures in the floodplain.</p>																
<b>Impact on Socially Vulnerable Populations:</b>	<p>The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to socially vulnerable populations exists.</p>																
<b>Impact on Future Development:</b>	<p>The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.</p>																
<b>Impact on Critical Facilities/Lifelines:</b>	<p>Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the same requirements as general building construction that are set forth in the ordinance.</p>																
<b>Impact on Capabilities:</b>	<p>This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.</p>																
<b>Climate Change Considerations:</b>	<p>The updated ordinance includes the State's higher standards that are in place to address heightened flood risk due to climate change such as those for floodway rise and mandatory freeboard have been incorporated in these new model ordinances.</p>																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr></table>	Action	Evaluation	No Action	Current problem exists												
Action	Evaluation																
No Action	Current problem exists																



	Modify existing flood damage prevention ordinance	Time intensive
	Leave NFIP	Residents lose flood insurance coverage

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## Action 2025-GreenTwp-08. Substantial Damage Management Plan

<b>Lead Agency:</b>	Floodplain Administrator		
<b>Supporting Agencies:</b>	Emergency Management, Building Department		
<b>Hazard(s) of Concern:</b>	<input checked="" type="checkbox"/> Dam Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials <input checked="" type="checkbox"/> Hurricane <input type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire		
<b>Description of the Problem:</b>	<p>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:</p> <ul style="list-style-type: none"> <li>Determine where the damage occurred within the community and if the damaged structures are in an SFHA.</li> <li>Determine what to use for "market value" and cost to repair; uniformly applying regulations will protect against liability and promote equitable administration.</li> <li>Determine if repairing plus improving the damaged structure equals or exceeds 50% of the structure's pre-damage value.</li> <li>Require permits for floodplain development.</li> </ul> <p>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.</p>		
<b>Description of the Solution:</b>	<p>The municipality will develop a Substantial Damage Management Plan, following the six step planning process in 2021 Developing a Substantial Damage Management Plan (<a href="https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf">https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf</a>). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p>		
<b>Estimated Cost:</b>	Low		
<b>Potential Funding Sources:</b>	Municipal budget		
<b>Implementation Timeline:</b>	Within 5 years to develop the plan; ongoing to maintain and update the plan		
<b>Goals Met:</b>	2, 5		
<b>Benefits:</b>	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.		
<b>Impact on Socially Vulnerable Populations:</b>	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.		
<b>Impact on Future Development:</b>	A Substantial Damage Management Plan would include all existing, current, and future development in the municipality.		
<b>Impact on Critical Facilities/Lifelines:</b>	A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality.		
<b>Impact on Capabilities:</b>	This action improves disaster recovery capabilities.		
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery.		
<b>Mitigation Category</b>	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
<b>CRS Category</b>	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)		
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>	





	No Action	Current problem remains
	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

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## Action 2025-GreenTwp-09. Flood Mitigation Interest

<b>Lead Agency:</b>	Floodplain Administrator																
<b>Supporting Agencies:</b>	Planning Board, Township Administration																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<b>Description of the Problem:</b>	The Township does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Maintaining these lists can assist the Township in identifying and prioritizing properties to mitigate.																
<b>Description of the Solution:</b>	The Floodplain Administration will develop a list for inventorying system, or properties damaged by flood events and property owners who are interested in flood mitigation measures, such as elevation or acquisition.																
<b>Estimated Cost:</b>	Staff time, Low																
<b>Potential Funding Sources:</b>	Township Budget																
<b>Implementation Timeline:</b>	Within 2 years																
<b>Goals Met:</b>	1, 2, 5																
<b>Benefits:</b>	Keeping a list of damaged properties and property owners interested in flood mitigation efforts may lead to the elimination of flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage.																
<b>Impact on Socially Vulnerable Populations:</b>	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Removing homes from the floodplain immediately removes the risk to life and property.																
<b>Impact on Future Development:</b>	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.																
<b>Impact on Critical Facilities/Lifelines:</b>	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.																
<b>Impact on Capabilities:</b>	This action will create a new Township capability, while enhancing its current NFIP capabilities.																
<b>Climate Change Considerations:</b>	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Areas experiencing flooding conditions may increase. 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.																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current problem remains</td></tr><tr><td>Only share opportunities when notified of grant funding</td><td>May not be enough time to garner interest or write application</td></tr><tr><td>Wait for information from the State on flood-damaged properties</td><td>May be a delay in notice</td></tr></table>	Action	Evaluation	No action	Current problem remains	Only share opportunities when notified of grant funding	May not be enough time to garner interest or write application	Wait for information from the State on flood-damaged properties	May be a delay in notice								
Action	Evaluation																
No action	Current problem remains																
Only share opportunities when notified of grant funding	May not be enough time to garner interest or write application																
Wait for information from the State on flood-damaged properties	May be a delay in notice																



## Action 2025-GreenTwp-10. Dam Owner Partnership

<b>Lead Agency:</b>	Township OEM																
<b>Supporting Agencies:</b>	NJDEP, Dam Owners																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	The Tranquility Church Dam and Tranquility Mill Dam, both critical infrastructures, are located in the 1- and 0.2-percent flood hazard areas. The Township also has a high-hazard potential dam, the Lake Tranquility Dam, within its jurisdiction. These structures have the potential to impact persons and structures within inundation areas.																
<b>Description of the Solution:</b>	The Township will work with the owners of the dams to ensure inspections and safety procedures are up to date. EAPs will be collected by Township OEM and shared with the County OEM.																
<b>Estimated Cost:</b>	Low																
<b>Potential Funding Sources:</b>	Municipal budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 3, 5, 7																
<b>Benefits:</b>	This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.																
<b>Impact on Socially Vulnerable Populations:</b>	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.																
<b>Impact on Future Development:</b>	Future development near inundation areas will be more secure as safety procedures and inspections are regularly performed on the dams.																
<b>Impact on Critical Facilities/Lifelines:</b>	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam.																
<b>Impact on Capabilities:</b>	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.																
<b>Climate Change Considerations:</b>	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event. This action will increase the capabilities to respond to these events.																
<b>Mitigation Category</b>	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>CRS Category</b>	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
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<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)																
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Township will be unaware of any safety concerns for the dam or its condition</td></tr><tr><td>Utilize information from NJDEP</td><td>Owners may not be required to submit a safety plan to the State</td></tr><tr><td>Utilize information from the National Inventory of Dams</td><td>Not all dams are listed on the inventory</td></tr></table>	Action	Evaluation	No Action	Township will be unaware of any safety concerns for the dam or its condition	Utilize information from NJDEP	Owners may not be required to submit a safety plan to the State	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory								
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Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory																



## Action 2025-GreenTwp-11. Certified Floodplain Manager Training

<b>Lead Agency:</b>	Floodplain Administrator																
<b>Supporting Agencies:</b>	Engineering, Building Department, Township Administration																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation																
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<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather																
<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	The Township does not have any certified floodplain managers (CFM) on staff. Becoming a CFM increases the depth of understanding when dealing with FEMA floodplains. The certifications ensures those that bare it understand the regulatory requirements and procedures needed to make floodplain management work effectively and efficiently at the community level.																
<b>Description of the Solution:</b>	Provide training and/or certification for Township staff with NFIP regulations and floodplain management ordinances. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.																
<b>Estimated Cost:</b>	Low																
<b>Potential Funding Sources:</b>	Township Budget																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 3, 5																
<b>Benefits:</b>	This action will increase the NFIP capabilities of the Township and assure the Township's NFIP program has enough staff to accomplish its goals and reach NFIP compliance.																
<b>Impact on Socially Vulnerable Populations:</b>	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location.																
<b>Impact on Future Development:</b>	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.																
<b>Impact on Critical Facilities/Lifelines:</b>	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood.																
<b>Impact on Capabilities:</b>	This action will enhance the Township's current NFIP capabilities.																
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will educate staff on NFIP regulations to assist with the flood hazard.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input checked="" type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input checked="" type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>															
	No Action	Current problem remains															
	Hire outside contractors for floodplain administration	Costly															
	Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role															



## Action 2025-GreenTwp-12. Socially Vulnerable Populations Outreach

<b>Lead Agency:</b>	Emergency Management								
<b>Supporting Agencies:</b>	Township Administration, Sussex County								
<b>Hazard(s) of Concern:</b>	<div><div><input checked="" type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Geological Hazards <input checked="" type="checkbox"/> Hazardous Materials</div><div><input checked="" type="checkbox"/> Hurricane <input checked="" type="checkbox"/> Infestation <input checked="" type="checkbox"/> Nor'easter <input checked="" type="checkbox"/> Severe Weather <input checked="" type="checkbox"/> Severe Winter Weather <input checked="" type="checkbox"/> Wildfire</div></div>								
<b>Description of the Problem:</b>	The Township does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations. The Township has struggled with identifying where socially vulnerable populations are located at within the jurisdiction. Identifying and educating these populations can increase resiliency in the Township and potentially reduce the number of emergency calls during hazardous events.								
<b>Description of the Solution:</b>	Create outreach materials, or utilize those from Sussex County, on hazard risks for socially vulnerable populations. Methods of distribution may include Township events, the Township newsletters, social media, the Township website, and having the materials on display for the public at Township libraries and offices. Consider hiring staff to work directly with socially vulnerable populations. Work with Sussex County to identify and create a list of socially vulnerable populations utilizing Register Ready.								
<b>Estimated Cost:</b>	Low								
<b>Potential Funding Sources:</b>	Township Budget, HMGP								
<b>Implementation Timeline:</b>	Within 3 years								
<b>Goals Met:</b>	1, 2, 3, 7								
<b>Benefits:</b>	This action will ensure there is an individual working to identify and work with the socially vulnerable populations in the Township. Furthermore, this action will create opportunities to educate and inform populations on hazard risks.								
<b>Impact on Socially Vulnerable Populations:</b>	Socially vulnerable populations in the Township will become educated on hazards risks. The Township will identify an individual to identify and work with these populations to ensure the most up to date information is being shared.								
<b>Impact on Future Development:</b>	Not applicable								
<b>Impact on Critical Facilities/Lifelines:</b>	Educating populations on hazard risk and how to mitigate the risks can decrease the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.								
<b>Impact on Capabilities:</b>	This action would build upon the Township's already existing public education and outreach program. It would also assist the Township in identifying where socially vulnerable populations are located in the jurisdiction.								
<b>Climate Change Considerations:</b>	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from hazards and how climate change may exacerbate those risks.								
<b>Mitigation Category</b>	<div><div><input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)</div><div><input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP)</div></div>								
<b>CRS Category</b>	<div><div><input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI)</div><div><input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)</div></div>								
<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low						
<b>Alternatives:</b>	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No action</td><td>Current methods remain the only ones used</td></tr><tr><td>Rely on state or federal resources</td><td>Resources may be generalized and not specific to the risks in the Township</td></tr></table>	Action	Evaluation	No action	Current methods remain the only ones used	Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Township		
Action	Evaluation								
No action	Current methods remain the only ones used								
Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Township								





	Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance
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## Action 2025-GreenTwp-13. Lake Tranquility Dam Rehab

<b>Lead Agency:</b>	Municipal Engineer																
<b>Supporting Agencies:</b>	County Engineer, County OEM, NJDEP																
<b>Hazard(s) of Concern:</b>	<table><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Hurricane</td></tr><tr><td><input type="checkbox"/> Disease Outbreak</td><td><input type="checkbox"/> Infestation</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Nor'easter</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Severe Weather</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input type="checkbox"/> Severe Winter Weather</td></tr><tr><td><input type="checkbox"/> Geological Hazards</td><td><input type="checkbox"/> Wildfire</td></tr><tr><td><input type="checkbox"/> Hazardous Materials</td><td></td></tr></table>			<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Disease Outbreak	<input type="checkbox"/> Infestation	<input type="checkbox"/> Drought	<input type="checkbox"/> Nor'easter	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Severe Weather	<input type="checkbox"/> Flood	<input type="checkbox"/> Severe Winter Weather	<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Hazardous Materials	
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<input type="checkbox"/> Geological Hazards	<input type="checkbox"/> Wildfire																
<input type="checkbox"/> Hazardous Materials																	
<b>Description of the Problem:</b>	Lake Tranquility Dam is a Class I High Hazard Dam that is located on Lake Tranquility. The dam is owned by the Township. Failure of the dam could result in inundation of densely populated areas, critical facilities and community lifelines, and several local roadways including Scenic Drive, Shore Road, Meadow Lane, Pondview Circle, and Mallard Drive. Although the dam was last inspected in 2022 and found to be in satisfactory condition, the risk of dam failure warrants an engineering evaluation to determine if retrofits of the dam would result in safer conditions.																
<b>Description of the Solution:</b>	The Municipal Engineer will complete an engineering study of Lake Tranquility Dam. The Township will also request information and input from its Public Works/Highway department and the County regarding impacted roadways. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the Township will pursue funding support, permit approval from NJDEP, and implement the cost-effective measures.																
<b>Estimated Cost:</b>	High																
<b>Potential Funding Sources:</b>	FEMA BRIC, HHPD																
<b>Implementation Timeline:</b>	Within 5 years																
<b>Goals Met:</b>	1, 2, 8																
<b>Benefits:</b>	This action will improve the safety and security of those who live within the dam inundation areas of the dams and increase the resilience of responding agencies.																
<b>Impact on Socially Vulnerable Populations:</b>	The action will result in better preparedness within the Special Flood Hazard Area and inundation areas where significant risk to socially vulnerable populations exists.																
<b>Impact on Future Development:</b>	Future development located in or near the dam inundation area will be further protected from a dam failure event.																
<b>Impact on Critical Facilities/Lifelines:</b>	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam and strengthen the structural integrity of dam, as needed.																
<b>Impact on Capabilities:</b>	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.																
<b>Climate Change Considerations:</b>	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event due to projected increases in precipitation. This action will increase the capabilities to respond to these events.																
<b>Mitigation Category</b>	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<b>Priority</b>	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
<b>Alternatives:</b>	<b>Action</b>	<b>Evaluation</b>															
	No Action	Current problem continues															
	Decommission Dam	High cost, flood risk for nearby infrastructure increased, loss of Lake Tranquility as an environmental and recreational resource.															



	Elevate nearby structures	Very high cost and likely not feasible for commercial properties. Will not reduce potential for dam failure due to poor dam conditions
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