



9.11 TOWNSHIP OF MANTUA

This section presents the jurisdictional annex for the Township of Mantua and includes resources and information to assist public and private sectors with reducing losses from future hazard events. This annex is not intended as guidance for actions to take during a disaster. Rather, this annex provides actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex includes a general overview of the municipality and who in the Township participated in the planning process, an assessment of the Township of Mantua’s risk and vulnerability, the different capabilities used in the Township, and an action plan that will be implemented to achieve a more resilient community.

9.11.1 Hazard Mitigation Planning Team

The Township of Mantua followed the planning process described in Section 2 (Planning Process) in Volume I of this plan update and developed the annex over the course of several months with input from many Township departments as summarized in the table below. The primary and alternate points of contact represented the community on the Planning Partnership and supported the local planning process requirements 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.

The coronavirus pandemic resulted in a strain on local resources that limited some participation, but every effort was made to connect with staff and stakeholders and gain diverse input. Due to safety precautions, all meetings were held virtually.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity, including the Township of Mantua’s hazard mitigation plan primary and alternate points of contact. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.11-1. Hazard Mitigation Planning Team

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Name/Title: Lt. Brian Grady, Lieutenant/OEM Coordinator Address: 405 Main Street Mantua, NJ 08051 Phone Number: 856-468-1920 x1530 Email: BLGrady@MantuaTownship.com | Name/Title: Jennica Bileci, Township Administrator Address: 405 Main Street Mantua, NJ 08051 Phone Number: 856-468-1500 x120 Email: jbileci@mantuatownship.com |
| NFIP Floodplain Administrator | |
| Name/Title: Jim Gallagher, Construction Code Official Address: 405 Main Street Mantua, NJ 08051 Phone Number: 856-468-1500 x128 Email: jgallagher@mantuatownship.com | |



| Name | Title | Method of Participation |
|-----------------|----------------------------|---|
| Lt. Brian Grady | Lieutenant/OEM Coordinator | Provided information on past events, provided information on NFIP floodplain administration, provided status update on previous actions |
| Jennica Bileci | Township Administrator | Provided information on capabilities |
| Jon Bryson | Township Engineer | Provided status update on previous actions |
| Susan Baldwin | Construction Clerk | Provided permit information |

9.11.2 Municipal Profile

Mantua Township was formed as a township by an act of the New Jersey Legislature on February 23, 1853, from portions of Greenwich Township. The first town meeting was then held on March 9th, 1853 where Joseph Norris, John Haines, and Elijah Chew were appointed to the position of "Overseer of the Poor and Constables"

According to the United States Census Bureau, the township had a total area of 16.09 square miles, including 16.01 square miles of land and 0.09 square miles of water. Unincorporated communities, localities and place names located partially or completely within the township include Richwood, Barnsboro, Boodys Mills, Centre City, Eastlack Corner, Jessups, Manunkachunk, Sewell and West Landing. Tall Pines State Preserve is a 111-acre nature preserve that opened in November 2015 as Gloucester County's first state park and is located along the border of Deptford Township and Mantua Township.

The municipality is governed under the township form of municipal government. The Township Committee is comprised of five members, who are elected directly by the voters at-large in partisan elections. At an annual reorganization meeting, the Township Committee selects one of its members to serve as Mayor and another as Deputy Mayor.

According to the U.S. Census, the 2010 population for the Township of Mantua was 15,217. The estimated 2019 population was 14,941, a 1.8 percent decrease from the 2010 Census. Data from the 2019 U.S. Census American Community Survey indicate that 4.8 percent of the population is 5 years of age or younger and 15.5 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.11.3 Jurisdictional Capability Assessment and Integration

The Township of Mantua performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:



- An assessment of planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community's adaptive capacity to withstand hazard events.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. Annex development included reviewing planning and policy documents and surveying each jurisdiction to obtain a better understanding of their progress in plan integration and how risk reduction is supported. Areas with current mitigation integration are summarized in this jurisdictional Capability Assessment (Section 9.11.3). The updated mitigation strategy includes opportunities the Township of Mantua identified for integration of mitigation concepts to be incorporated into municipal procedures.

9.11.3.1 Planning, Legal, and Regulatory Capability

Section 5 (Capability Assessment) provides an overview of the planning, legal, and regulatory capabilities. The table below summarizes the regulatory tools that are available to the Township of Mantua, what is present in the jurisdiction, and code citation and date.

Table 9.11-2. Planning, Legal, and Regulatory Capability

| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|---|--|
| Codes, Ordinances, & Regulations | | | | | |
| Building Code | Yes | Yes | Chapter 142, 1977 | State and Local | Construction |
| <i>How does this reduce risk?</i> | | | | | |
| <i>There is hereby established in the Township of Mantua a State Uniform Construction Code enforcing agency, to be known as the "Township of Mantua Uniform Construction Code Enforcement Agency," consisting of a Construction Official, Building Subcode Official, Plumbing Subcode Official, Electrical Subcode Official, Fire Protection Subcode Official and such other subcode officials for such additional subcodes as the Commissioner of the Department of Community Affairs, State of New Jersey, shall hereafter adopt as part of the State Uniform Construction Code. The Construction Official shall be the chief administrator of the enforcing agency. The Building Subcode Official Inspector shall be the vice chief. These officials will have the authority to determine building construction that is deemed safe/ unsafe to people and the environment and provide a regulatory framework to reduce vulnerability to potential catastrophic hazards.</i> | | | | | |
| Zoning/Land Use Code | Yes | Yes, if the jurisdiction has a planning board | Article 3 Zoning District | Local | Town Planning |
| <i>How does this reduce risk?</i> | | | | | |
| <i>The boundaries of these zoning districts are established on a map entitled "Zoning Map of the Township of Mantua," dated May 2006, which accompanies and is hereby made a part of this chapter. Additionally, the map entitled "Critical Areas" is hereby made part of this chapter and shall be deemed conclusive for the purpose of administering the land use control measures of this chapter; provided, however, that the Planning Board or Zoning Board of Adjustment, as the case may be, may consider other sources of information presented by an applicant to more definitively define the location and extent of the critical areas on any lot or tract at the time of subdivision and/or site plan review.</i> | | | | | |
| Subdivision Ordinance | Yes | Yes, if the jurisdiction has a planning board | Chapter 230 | Local | Joint Land Use Board |
| <i>How does this reduce risk?</i> | | | | | |



| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|---|--|
| <p><i>A prospective purchaser, prospective mortgagee or any other person interested in any land in the Township which has been part of a subdivision in effect as of July 14, 1973, may apply, in writing, to the Administrative Officer for the issuance of a certificate certifying whether or not such subdivision has been duly approved by the Planning Board and in compliance with regulations with regulations to mitigate future hazards and risk.</i></p> | | | | | |
| Stormwater Management Ordinance | Yes | Yes | Chapter 344 – Stormwater Control; adopted 12/13/2006 Chapter 346 – Stormwater Management | Local | Public Works |
| <p><i>How does this reduce risk?</i> <i>The purpose of this article is to prohibit the feeding of unconfined wildlife in any public park or on any other property owned or operated by the Township of Mantua, so as to protect public health, safety, and welfare, and to prescribe penalties for failure to comply.</i></p> | | | | | |
| Post-Disaster Recovery/ Reconstruction Ordinance | No | No | - | - | - |
| Real Estate Disclosure | Yes | Yes | N.J.A.C. 13:45A-29.1 | State | State Division of Consumer Affairs |
| <p><i>How does this reduce risk?</i> <i>Before signing a contract of sale, all purchasers must receive a New Jersey Public Offering Statement (POS) approved by the New Jersey Real Estate Commission. The POS provides information such as estimated completion dates for improvements, fees for services and amenities, the type of title and ownership interest being offered, its proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.</i></p> | | | | | |
| Growth Management | Yes | Yes, if the jurisdiction has a planning board | Chapter 230, Land Development | Local | Joint Land Use Board |
| <p><i>How does this reduce risk?</i> <i>This chapter is adopted pursuant to N.J.S.A. 40:55D-1 et seq. in order to promote and protect the public health, safety, morals, and general welfare and in the furtherance of the following related and more specific objectives:</i></p> <ul style="list-style-type: none"> <i>A. To secure safety from fire, flood, panic, and other natural and man-made disasters.</i> <i>B. To provide adequate light, air, and open space.</i> <i>C. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county, and the state as a whole.</i> <i>D. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment.</i> <i>E. To encourage an appropriate and efficient expenditure of public funds by the coordination of public development with land use policies.</i> <i>F. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational and commercial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens.</i> <i>G. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which would result in congestion or blight.</i> <i>H. To promote a desirable visual environment through creative development techniques and good civic design and arrangements.</i> <i>I. To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land.</i> <i>J. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial and recreational development to the particular site.</i> <i>K. To encourage senior citizen community housing construction.</i> <i>L. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land.</i> <i>M. To promote the conservation of energy through the use of planning practices designed to reduce energy consumption and to provide for maximum utilization of renewable energy sources.</i> | | | | | |
| Site Plan Ordinance | Yes | Yes, if the jurisdiction has a planning board | Chapter 230-82 1983 | Local and County | Land Use Board |
| <p><i>How does this reduce risk?</i> <i>This chapter is adopted pursuant to N.J.S.A. 40:55D-1 et seq. in order to promote and protect the public health, safety, morals and general welfare and in the furtherance of the following related and more specific objectives:</i></p> | | | | | |



| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|--|---------------------------------|---|---|---|--|
| <p>A. To secure safety from fire, flood, panic and other natural and man-made disasters.</p> <p>B. To provide adequate light, air and open space.</p> <p>C. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the state as a whole.</p> <p>D. To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment.</p> <p>E. To encourage an appropriate and efficient expenditure of public funds by the coordination of public development with land use policies.</p> <p>F. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational and commercial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens.</p> <p>G. To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which would result in congestion or blight.</p> <p>H. To promote a desirable visual environment through creative development techniques and good civic design and arrangements.</p> <p>I. To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land.</p> <p>J. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial and recreational development to the particular site.</p> <p>K. To encourage senior citizen community housing construction.</p> <p>L. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land.</p> <p>M. To promote the conservation of energy through the use of planning practices designed to reduce energy consumption and to provide for maximum utilization of renewable energy sources.</p> | | | | | |
| Environmental Protection Ordinance | No | Yes, depends on type of environmental areas | - | - | - |
| Flood Damage Prevention Ordinance | Yes | Yes | Chapter 188 – Flood Damage Prevention; amended 8/1/2016 | Federal, State, County and Local | Construction Official |
| <p>How does this reduce risk?</p> <p>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:</p> <p>A. Protect human life and health;</p> <p>B. Minimize expenditure of public money for costly flood control projects;</p> <p>C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;</p> <p>D. Minimize prolonged business interruptions;</p> <p>E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard;</p> <p>F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;</p> <p>G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and</p> <p>H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.</p> | | | | | |
| Wellhead Protection | No | No | - | - | - |
| Emergency Management Ordinance | No | No | - | - | - |
| Climate Change Ordinance | No | No | - | - | - |
| Disaster Recovery Ordinance | No | No | - | - | - |
| Disaster Reconstruction Ordinance | No | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|---------------------------------------|---|---|--|
| Other | None | - | - | - | - |
| Codes, Ordinances, & Regulations Connection to Mitigation and Safe Growth | | | | | |
| <ul style="list-style-type: none"> Prior to, zoning changes, or development permitting, does the jurisdiction review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use? Not often Does the zoning ordinance discourage development or redevelopment within natural areas including wetlands, floodways, and floodplains? Yes. Does it contain natural overlay zones that set conditions? No Does the ordinance require developers to take additional actions to mitigate natural hazard risk? No Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use? No Do the ordinances prohibit development within, of filling of, wetlands, floodways, and floodplains? Yes Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? No Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas? No Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources? Yes Do the regulations allow density transfers where hazard areas exist? No When updating ordinances, is hazard mitigation considered? No | | | | | |
| Planning Documents | | | | | |
| Master Plan | Yes | Yes – County Yes/No - municipality | Master Plan (2006) and Reexamination Plans (2011 and 2012) | Local | Town Planning |
| <i>How does this reduce risk? The goals of this plan include to: Protect communities from natural hazards and promote smart development. Ensure public health and safety to reduce any avoidable hazard related issues. And to promote a sustainable future for all residents of Gloucester County.</i> | | | | | |
| Capital Improvement Plan | Yes | Allowed | Yearly | Local | Governing Body |
| <i>How does this reduce risk? Requires the departments to plan ahead of every year and strategically invest in equipment and capital to increase resilience.</i> | | | | | |
| Disaster Debris Management Plan | No | No | - | - | - |
| Floodplain Management or Watershed Plan | No | No | - | - | - |
| Stormwater Management Plan | Yes | Yes | Watershed Based Municipal Stormwater Management Plan 02/2006 | Local | |
| <i>How does this reduce risk? The intent and overall goal of the plan is to reduce flood damage including damage to life and property. Additionally, the plan looks to minimize stormwater runoff from new development as well as erosion that results from high runoff and groundwater recharge. The plan also seeks to protect public health and welfare of all residents through planning, engineering, operation, and maintenance of stormwater systems.</i> | | | | | |
| Stormwater Pollution Prevention Plan | Yes | Yes | Stormwater Pollution Prevention Plan Mantua Township (SPPP) 04/2021 | | |
| <i>How does this reduce risk? Preparation of an SPPP helps permittees in identifying potential sources of pollution and in establishing best management practices to minimize and/or eliminate the exposure of these pollutant sources. The plan identifies SPPP Team Members, Public Education and Outreach, Storm Drain Inlets. Training, and other state-required forms.</i> | | | | | |
| Urban Water Management Plan | No | No | - | - | - |
| Habitat Conservation Plan | No | No | - | - | - |
| Economic Development Plan | No | No | - | - | - |
| Shoreline Management Plan | No | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|-----------------------------|---|---|--|
| Community Wildfire Protection Plan | No | No | - | - | - |
| Community Forest Management Plan | No | No | - | - | - |
| Transportation Plan | No | No | - | - | - |
| Agriculture Plan | No | No | - | - | - |
| Climate Action/ Resiliency Plan | No | No | - | - | - |
| Tourism Plan | No | No | - | - | - |
| Business/ Downtown Development Plan | No | No | - | - | - |
| Other | No | No | - | - | - |
| Planning Connection to Mitigation and Safe Growth | | | | | |
| <ul style="list-style-type: none"> When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals. Annually, the jurisdiction will review mitigation actions when allocating funding. Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards? No Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? No Do budgets provide funding for hazard mitigation projects identified in the County HMP? No Does the future land use map clearly identify natural hazard areas? Yes, in planning documents Do the land use policies discourage development or redevelopment with natural hazard areas? No Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas? No Does the transportation plan limit access to hazard areas? N/A Is transportation policy used to guide growth to safe locations N/A Are transportation systems designed to function under disaster conditions (e.g., evacuation)? No Are environmental systems that protect development from hazards identified and mapped? No Do environmental policies maintain and restore protective ecosystems? Yes Do environmental policies provide incentives to development that is located outside protective ecosystems? No | | | | | |
| Response/Recovery Planning | | | | | |
| Emergency Operations Plan | Yes | Yes | Base Plan 2013 | Local | OEM |
| <p><i>How does this reduce risk?</i></p> <p><i>The Emergency Management Plan protects our community by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters.</i></p> | | | | | |
| Strategic Recovery Planning Report | No | No | - | - | - |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | No | - | - | - |
| Post-Disaster Recovery Plan | No | No | - | - | - |
| Continuity of Operations Plan | Yes | No | - | - | - |
| Public Health Plan | No | No | - | - | - |



| | Jurisdiction has this? (Yes/No) | Required by State? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Individual / Department / Agency Responsible |
|---|---------------------------------|-----------------------------|---|---|--|
| Other | No | - | - | - | - |
| Response/Recovery Planning Connection to Mitigation and Safe Growth | | | | | |
| <ul style="list-style-type: none"> Does your EOP cover short-term response and long-term recovery to address communications, evacuation, and housing necessary for identified hazards? Yes | | | | | |

9.11.3.2 Development and Permitting Capability

The table below summarizes the capabilities of the Township of Mantua to oversee and track development.

Table 9.11-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment |
|---|--------|--|
| Do you issue development permits? - If yes, what department is responsible? - If no, what is your process for development? | Yes | Zoning |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? - If yes, describe. - If no, quantitatively describe the level of buildout in the jurisdiction. | Yes | The Township has a site inventory of available land created by Economic Development Coordinator. |

9.11.3.3 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Mantua and their current responsibilities which contribute to hazard mitigation.

Table 9.11-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|---|
| Administrative Capability | | |
| Planning Board | Yes | Land Use Board |
| Zoning Board of Adjustments | Yes | Land Use Board |
| Planning Department | No | Department of Zoning, Land Use & Code Enforcement. The purpose of Zoning is to ensure that any proposed use, construction, or alteration is allowed in the zone and will be located within the required setbacks from the property lines as required by the Mantua Township Code. This code regulates the setbacks and permitting process for principal structures, additions, decks, gazebos, pools, hot tubs, sheds, basketball courts, patios, fencing, and all other accessory uses and structures. The code protects the integrity of the entire Township. |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | The Environmental Commission has four Volunteer members |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | The mission of the Mantua Township Economic Development Department is to create positive partnerships in the spirit of progress by seeking out and addressing the economic development needs of our community through outreach, creativity, perseverance, partnerships and cooperation. |
| Public Works/Highway Department | Yes | The Department of Public Works' mission is to provide the highest level of service to the residents of Mantua while maintaining the community's infrastructure in the most cost-effective manner possible. We provide essential services in the areas storm sewer maintenance, trash, recycling and yard waste collection, streets, buildings, grounds, and vehicle maintenance. The department continually strive to improve their services by incorporating new technology, employee involvement, improved customer service, and new ideas to effectively maintain our service-oriented department. |
| Construction/Building/Code Enforcement Department | Yes | The Mantua Township Construction Department is responsible for ensuring that all construction work in the Township complies with the requirements of the New Jersey Uniform Construction Code. The Department consists of clerical staff and licensed inspectors to perform the duties of the office. |
| Emergency Management/Public Safety Department | Yes | The department's mission is to provide the highest quality police services to the public in order to enhance community safety, protect life, property, and the Constitutional rights of all. In doing this, they will strengthen our relationship with the community, promote a partnership of mutual respect, and enhance the quality of life for their community. |
| Warning Systems / Services (mass notification system, outdoor warning signals) | Yes | Message and sign boards |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | DPW |
| Mutual aid agreements | Yes | DPW/ Fire |
| 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 | - |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | DPW |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | DPW/ Code Enforcement |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|---|
| Planners or engineers with an understanding of natural hazards | No | - |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | No | - |
| Scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | OEM |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |
| <i>How do your administrative/technical capabilities contribute to risk reduction in your community?</i> Staff and OEM plan and are trained to support hazard mitigation. | | |

9.11.3.4 Fiscal Capability

The table below summarizes financial resources available to the Township of Mantua.

Table 9.11-5. Fiscal Capabilities

| Financial Resources | Are these accessible or eligible to use for mitigation? (Yes/No) If yes, please describe. If no, can this be used to support in the future? |
|--|---|
| Community development Block Grants (CDBG, CDBG-DR) | Yes |
| Capital improvements 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 | No |
| Stormwater utility fee | No |
| Incur debt through general obligation bonds | No |
| Incur debt through special tax bonds | No |
| Incur debt through private activity bonds | No |
| Withhold public expenditures in hazard-prone areas | No |
| Other federal or state funding programs | Yes |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | No |
| Fiscal Connection to Mitigation and Safe Growth | |
| <i>How do your fiscal capabilities contribute to risk reduction in your community?</i> | |



| Financial Resources | Are these accessible or eligible to use for mitigation? (Yes/No) If yes, please describe. If no, can this be used to support in the future? |
|---|---|
| <ul style="list-style-type: none"> When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals. Annually, the jurisdiction will review mitigation actions when allocating funding. | |
| Do budgets limit expenditures on projects that would encourage development in areas vulnerable to natural hazards? No | |
| Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards? No | |
| Do budgets provide funding for hazard mitigation projects identified in the County HMP? No | |

9.11.3.5 Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Township of Mantua.

Table 9.11-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comments (available staff, responsibilities, etc.) |
|--|------------------------|---|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | Clerk |
| Hazard mitigation information available on your website | No | - |
| Social media for hazard mitigation education and outreach | No | - |
| Citizen boards or commissions that address issues related to hazard mitigation | No | - |
| Other programs already in place that could be used to communicate hazard-related information | No | - |
| Warning systems for hazard events | Yes | Various sirens and warning systems |
| Natural disaster/safety programs in place for schools | No | - |
| Other | No | - |
| <i>Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? If yes, please describe. No</i> | | |

9.11.3.6 Community Classifications

The table below summarizes classifications for community programs available to the Township of Mantua.



Table 9.11-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---|----------------------------|-----------------------------------|------------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| Sustainable Jersey | No | - | - |
| StormReady Certification | No | - | - |
| Firewise Communities classification | No | - | - |

Note:

N/A Not applicable

NP Not participating

- Unavailable

9.11.3.7 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 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.11-8. Adaptive Capacity

| Hazard | Adaptive Capacity - Strong/Moderate/Weak* |
|--------------------------------------|---|
| Coastal Erosion/Sea Level Rise | Moderate |
| Dam Failure/Levee Failure | Moderate |
| Disease Outbreak/Pandemic | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperatures | Moderate |
| Flood | Moderate |
| Geological Hazards | Moderate |
| High Wind | Moderate |
| Invasive Species/Harmful Algal Bloom | Moderate |
| Severe Summer Weather | Moderate |
| Severe Winter Weather | Strong |
| Wildfire | Moderate |

*Strong = Capacity exists and is in use, Moderate = Capacity may exist; but is not used or could use some improvement, Weak = Capacity does not exist or could use substantial improvement.



9.11.4 National Flood Insurance Program (NFIP) Compliance

The table below provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP.

Table 9.11-9. NFIP Summary

| NFIP Topic | Comments |
|---|--|
| Flood Vulnerability Summary | |
| <ul style="list-style-type: none"> # NFIP Policies: 21 # RL properties: 6 # SRL properties: 0 #RL/SRL mitigated: 0 | <ul style="list-style-type: none"> Total premium in force: \$12,066.00 # claims filed: 25 Total loss payments: \$342,121.85 |
| Describe areas prone to flooding in your jurisdiction. | Some low-lying areas are floodprone after heavy rain |
| 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, and if so, how many are interested in (elevation or acquisition)? | No |
| How do you make Substantial Damage determinations? <ul style="list-style-type: none"> How many were declared for recent flood events in your jurisdiction? | Code Enforcement Officer makes determination through guidelines set by municipal law |
| Detail any RiskMAP projects currently underway in your jurisdiction. | No |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why. | Yes |
| NFIP Administration | |
| What local department is responsible for floodplain management? | Code Enforcement |
| Are any staff certified floodplain managers (CFMs) or is a consultant retained? | No |
| Provide an explanation of who in your municipality provides NFIP administration services (permit review, GIS, education/outreach, inspections, engineering capability). | Code Enforcement and OEM as well as other departments supplement services as needed by residents. |
| What specific training or support does your floodplain management staff need to support its floodplain management program? | None |



| NFIP Topic | Comments |
|---|---|
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Unsure |
| Do you have access to resources to determine possible future flooding conditions from climate change? | Yes |
| NFIP Compliance | |
| List any outstanding NFIP compliance violations. | None |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | July 20, 1994 |
| <ul style="list-style-type: none"> What is the local law number or municipal code of your flood damage prevention ordinance? What is the date that your flood damage prevention ordinance was last amended? | <ul style="list-style-type: none"> Chapter 188 August 1, 2016 |
| Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways? | Meets |
| Are there other local ordinances, plans, or programs (site plan review, consideration of flood risk reduction when granting height variances) that support floodplain management and meeting the NFIP requirements? | No |
| <ul style="list-style-type: none"> Does your jurisdiction participate in CRS? If yes, is your jurisdiction interested in improving its CRS Classification? If no, is your jurisdiction interested in joining the CRS program? | <ul style="list-style-type: none"> No Not interested |
| Additional Information | |
| If you have repetitive loss properties in your community, what residential streets/neighborhoods are most flood prone and likely to incur flood damage? | Described in mitigation actions below |
| Does your municipality's flood damage prevention ordinance follow the NJDEP model ordinance language (https://www.nj.gov/dep/floodcontrol/modelord.htm) including the state mandated one-foot freeboard requirement? | No, to be addressed through action -004 |

Source: FEMA September 16, 2019; NJDEP - 2021

Notes:

RL—Repetitive Loss; SRL—Severe Repetitive Loss; NA—Not applicable



9.11.5 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 understanding a jurisdiction’s overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.11-10. Recent and Expected Future Development

| Type of Development | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | |
|--|---------------------|-------------------------|----------|--|-----------|------------------------------|-----------|-------------------------------------|-----------|-------------|-----------|-------------|
| Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ outside regulatory floodplain) | | | | | | | | | | | | |
| | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA | Total | Within SFHA |
| Single Family | 38 | 32 | 32 | 0 | 44 | | 63 | | 57 | | 22 | 0 |
| Multi-Family | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (commercial, mixed-use, etc.) | 2 | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 |
| Total Permits Issued | 30 | 0 | 0 | 0 | 44 | 0 | 66 | 0 | 59 | 0 | 22 | 0 |
| Property or Development Name | Type of Development | # of Units / Structures | | Location (address and/or block and lot) | | Known Hazard Zone(s)* | | Description / Status of Development | | | | |
| Recent Major Development and Infrastructure from 2015 to Present | | | | | | | | | | | | |
| White Oak Apartments | Residential | 50 | | 407 White Oak Lane, Sewell, NJ 08080 | | None | | Completed | | | | |
| Auto Zone | Commercial | 1 | | 222 Bridgeton Pike, Mantua, NJ 08051 | | Carbonate Rock, Soil Class D | | Completed | | | | |
| Cloud 10 Car Wash | Commercial | 1 | | 510 Woodbury Glassboro Road Sewell, NJ 08080 | | None identified | | Completed | | | | |
| Dollar General | Commercial | 1 | | 271 Lambs Road Sewell, NJ 08080 | | None identified | | Completed | | | | |
| Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years | | | | | | | | | | | | |
| Unknown | Mixed Use | 5 | | Lambs Road | | None identified | | Approved | | | | |

SFHA Special Flood Hazard Area (1% annual chance flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.11.6 Jurisdictional Risk Assessment

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Section 4.1 (Identification of Hazards of Concern), Section



4.2 (Methodology and Tools), and Section 4.4 (Hazard Ranking) provide a detailed summary for the Township of Mantua's risk assessment results, and data used to determine the hazard ranking are discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction. 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 were only generated for those hazards that can be clearly identified using mapping techniques and technologies and for which the Township of Mantua has significant exposure. The maps also show the location of potential new development, where available.

DRAFT



Figure 9.11-1. Township of Mantua Hazard Area Extent and Location Map 1

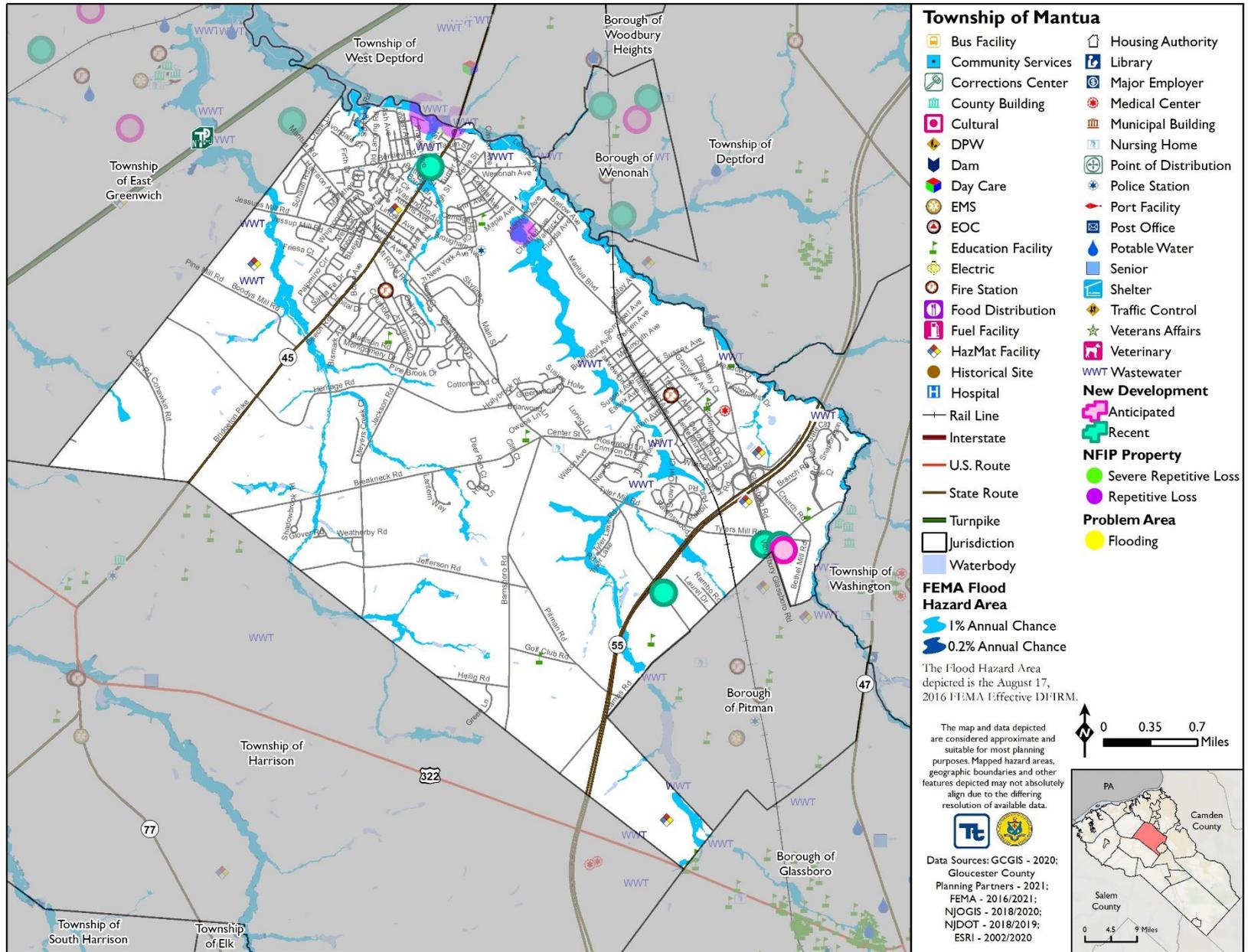




Figure 9.11-2. Township of Mantua Hazard Area Extent and Location Map 2

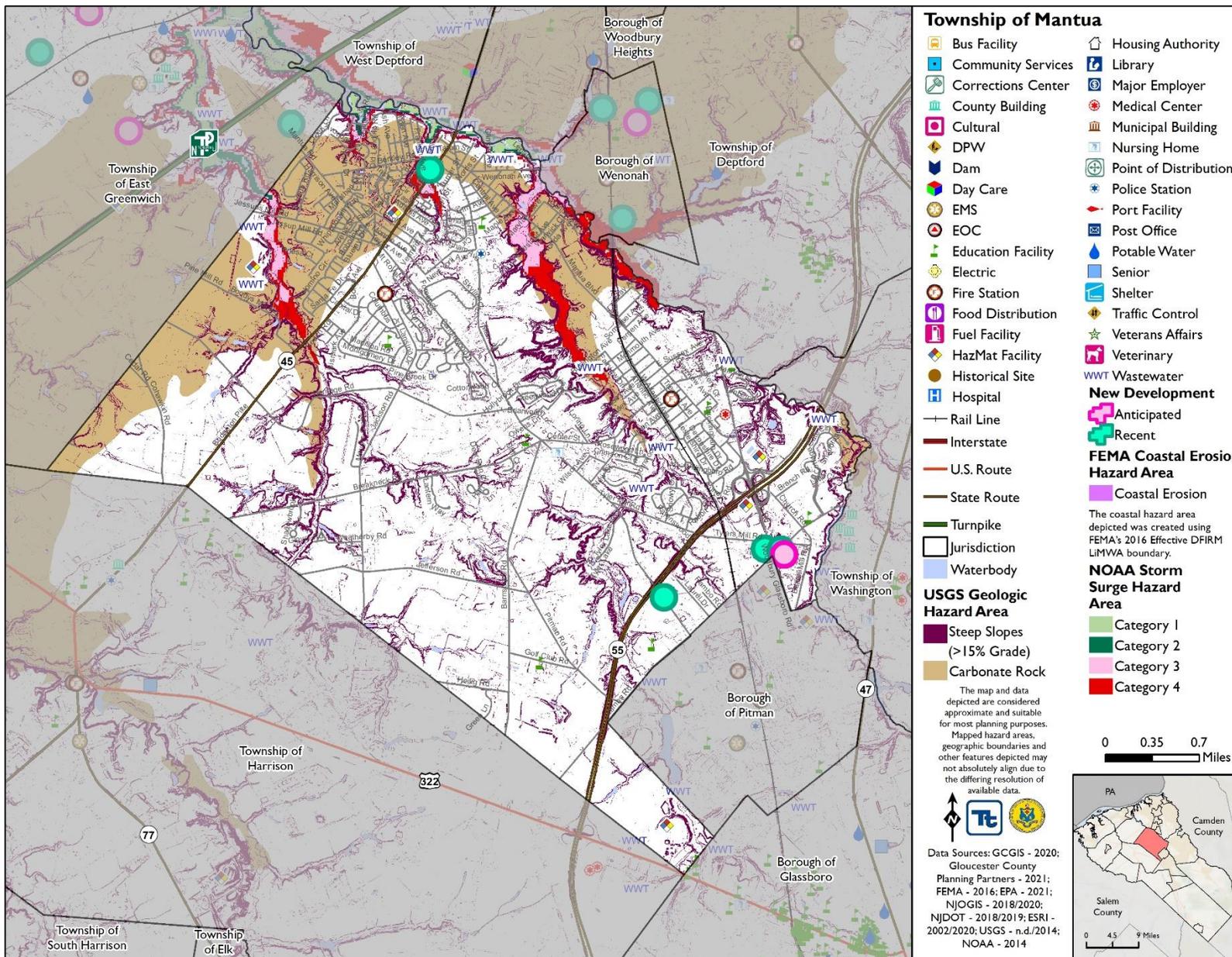




Figure 9.11-3. Township of Mantua Hazard Area Extent and Location Map 3

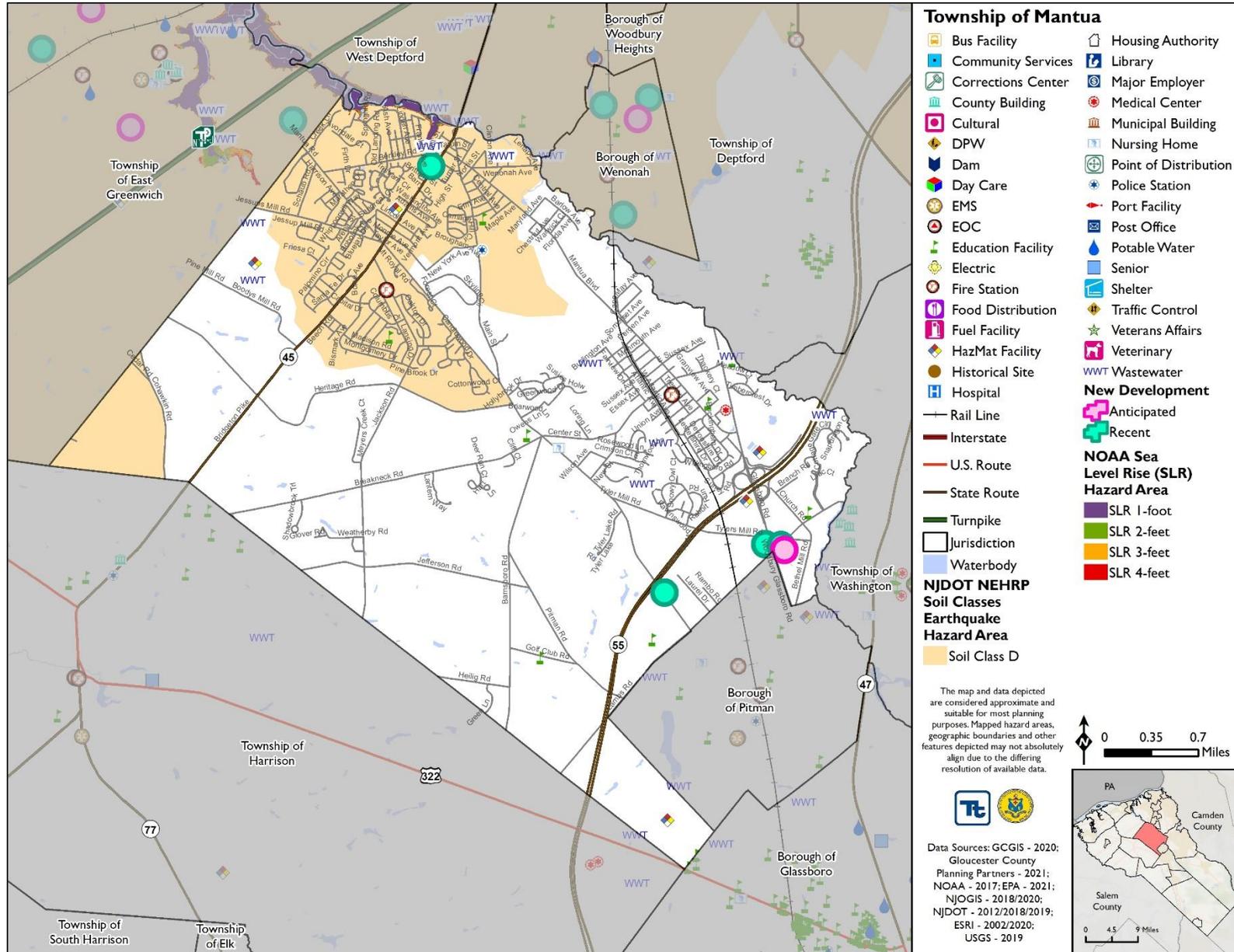
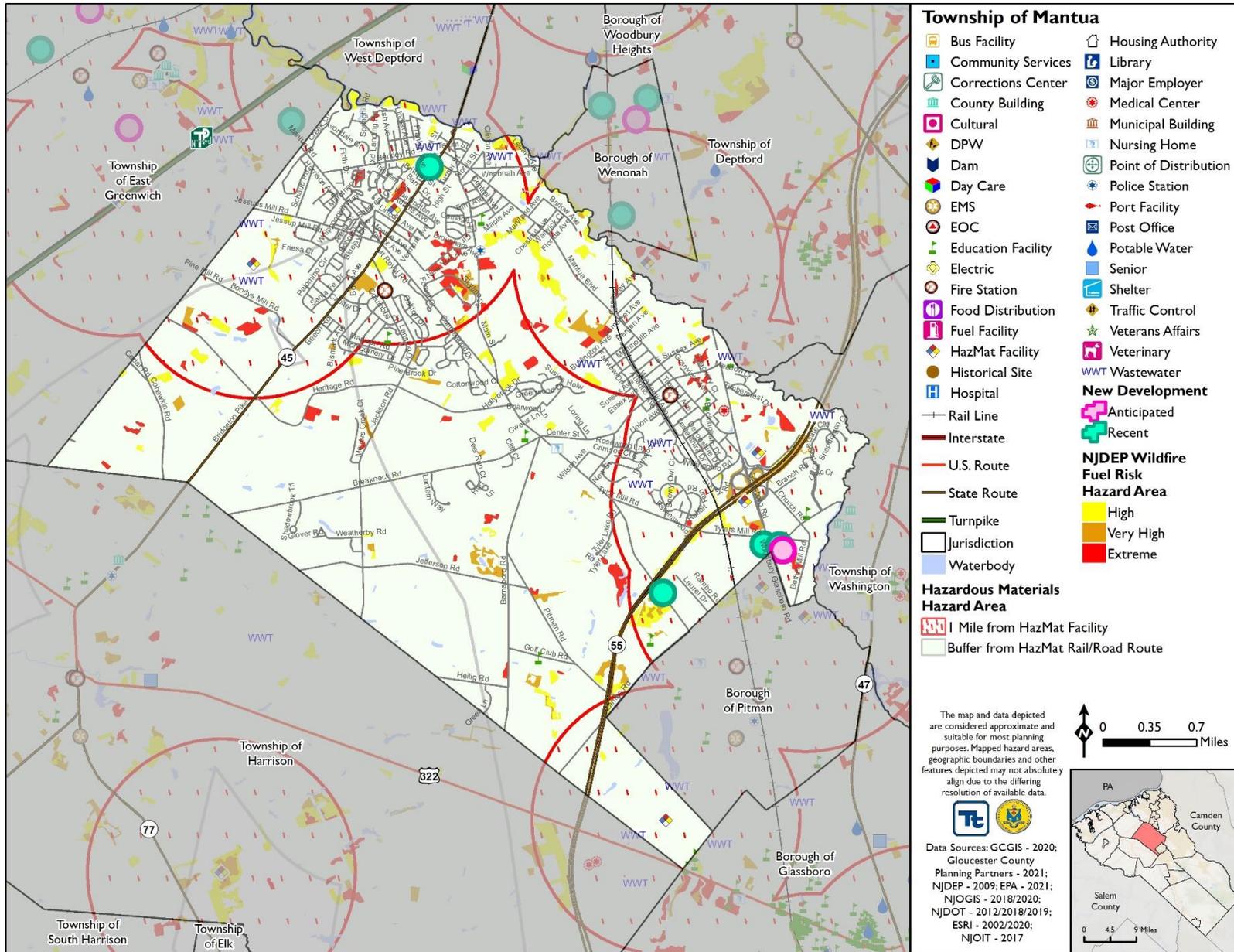




Figure 9.11-4. Township of Mantua Hazard Area Extent and Location Map 4





9.11.6.1 Hazard Event History

Gloucester County has a history of natural hazard events as detailed in Section 4 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities.

The Township of Mantua’s history of federal declarations (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Gloucester County. The table below provides details regarding municipal-specific loss and damages the Township experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources.

Table 9.11-11. Hazard Event History

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|----------------------------|---|--------------------|---|--|
| February 15, 2015 | Cold/Wind Chill | No | The center of an arctic air mass brought some of the lowest wind chills and temperatures of the winter season to New Jersey. Wind chill factors were recorded as low as 22 degrees below zero, with actual temperatures reaching - 2°F. | Minor effect on the Township. |
| June 23, 2015 | Severe Storm (DR-4231-NJ) | Yes | In Gloucester County, the Red Cross opened two comfort stations. Wind damage was most severe between Greenwich Township and Mantua Township. Lightning struck a refinery in Paulsboro, causing a loss of power and off-gas. In Wenonah, wind damage knocked down several massive oak trees. In Mantua, the microburst knocked down an estimated 2,800 trees and 100 poles. The Township’s Fire Department building was severely damaged. Wind also knocked down power poles in East Greenwich along Kings Highway. Roads throughout East Greenwich were impassable. Damage was estimated at \$10 million. | Severe effect on the Township for weeks after the event. Fire Department roof was lost, extensive debris removal and multiple road closures for days. Financial impact was at least \$283,000 on the Township. |
| January 22 – 24, 2016 | Severe Winter Storm and Snowstorm (DR-4264-NJ) | Yes | Snow totals in Gloucester County included 21 inches in Deptford, 20.9 inches in Pitman, 17.5 inches in Turnersville, 14.5 inches in Williamstown, and one foot in Mullica Hill. | Township was hit hard with snow and had a financial impact of at least \$50,008 on the Township for debris removal. |
| March 6, 2018 | Winter Storm | No | Gloucester County was hit with isolated heavy snow, with totals ranging from five inches in Pitman to 6.5 inches in West Deptford. | A little more than average snowstorm with plowing operations in effect. |
| January 20, 2020 – Present | Covid-19 Pandemic (EM-3451-NJ) (DR-4488-NJ) | Yes | Between March 1, 2020 and March 15, 2021, Gloucester County reported 21,065 confirmed cases of COVID-19, and 530 total fatalities. | Township closed its doors and forced employees to work from home where appropriate. Financial |



| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Municipal Summary of Damages and Losses |
|----------------|---|--------------------|------------------|---|
| | | | | impact was at least \$16,000 on the Township. |

9.11.6.2 Hazard Ranking and Vulnerabilities

The hazard profiles in Section 4.1 (Identification of Hazards of Concern) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the Township of Mantua’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 4 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each participating jurisdiction can have differing degrees of risk exposure and vulnerability compared with Gloucester County as a whole. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Township of Mantua. The Township of Mantua reviewed the county hazard risk/vulnerability risk ranking table, including municipal-specific results, to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Township indicated the following:

- Hazmat is not a significant threat to the community and will be re ranked from high to medium.
- Severe storms are not a significant threat give historical events and will be re ranked from high to medium.
- Severe winter storms have relatively good response in terms of service and will be re ranked from medium to low.
- Utility failure has not occurred in the municipality for a long time and will be re ranked from medium to low.

Table 9.11-12. Hazard Ranking Input

| Dam/ Levee | Disease Outbreak | Drought | Earthquake | Extreme Temp | Flood | Geologic |
|------------|------------------|---------|------------|--------------|-------|----------|
| Low | Low | Medium | Low | Medium | Low | Low |



| | | | | | | | |
|---------|-----------|----------|-------------|--------------|---------------------|----------|-----------------|
| Haz Mat | Hurricane | Invasive | Nor' Easter | Severe Storm | Severe Winter Storm | Wildfire | Utility Failure |
| Medium | Low | Low | Medium | Medium | Low | Low | Low |

Note: The scale is based on the hazard rankings established in Section 4.4 (Hazard Ranking) and modified as appropriate during review by the jurisdiction.

Critical Facilities

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazus estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.11-13. Potential Flood Losses to Critical Facilities

| Name | Type | Lifeline? | Exposure | | Comment |
|--|------|-----------|----------|------------|---------|
| | | | 1% Event | 0.2% Event | |
| No critical facilities in the floodplain | | | | | |

Source: Gloucester County Planning Partners - 2021; HIFLD - 2020; EPA - 2021; FEMA 2016

9.11.6.3 Identified Issues

After review of the Township of Mantua’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the Township of Mantua has identified the following vulnerabilities within their community:

- The Senior Citizen Center (Listed as critical facility) does not have adequate backup power. It is not only critical for this facility to have continued operations as a medical facility, but also because it is considered an emergency shelter in times of need. It is important therefore that this facility has a permanent generator, including times when flooding and other natural disasters are occurring.
- Glassboro Road Continues to flood and continues to cause major road / traffic related issues as well as flood loss. This project is ongoing, and the municipality is trying to determine best feasible intervention needed to reduce flooding along this road.
- Route 45 within the Township has repetitive flooding. This causes hazardous driving conditions as well as property loss. This road, however, is owned by the state and is not under the jurisdiction of the municipality.
- The municipality’s flood damage prevention ordinance is outdated and requires revisions and updating.
- The GCUA Buckingham Metering Station # 23 is located within the 100-year floodplain and is subject to flooding.
- Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has 2 repetitive loss properties, but other properties may be impacted by flooding as well.



- The water and sewer lines in the Mantua city center area are outdated.
- The municipality does not have a disaster debris management plan.

Specific areas of concern based on resident response to the citizen survey include:

- None

9.11.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

9.11.7.1 Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2016 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and are discussed in the 'Capability Assessment' presented previously in this annex.

DRAFT



Table 9.11-14. Status of Previous Mitigation Actions

| 2017 Action Number and Action Description | | Responsible Party | Status (In Progress, No Progress, Ongoing Capability, or Completed) | Include in the 2022 HMP? Check if Yes | Enter 2022 HMP Action # |
|---|--|---|--|--|----------------------------|
| MJ-1 | Alleviate flooding at Glassboro Road to include retention system at stream crossing bridge. | Municipal OEM, Mantua Township DPW, Gloucester County DPW | No Progress | Yes | 001 |
| MJ-2 | Alleviate flooding on Route 45. | Municipal OEM, NJDOT | In Progress – NJDOT contracted McCormick Taylor Engineers to study the issue. | Yes | 002 |
| MJ-3 | Upgrade storm drainage pipes at Atlantic Avenue and Livingstone Road. | Municipal OEM, Gloucester County DPW | No Progress | No | - |
| M-01 | Identify and pursue outreach and education opportunities | Municipal OEM | In progress | No | - |
| M-02 | Prioritize critical facilities and complete site and facility surveys to identify vulnerabilities and potential mitigation measures. | Municipal OEM and Facility Managers | In progress | No | - |
| M-03 | Prioritize recurrent drainage problem areas and initiate data collection to track unreimbursed damages and related response and recovery expenses. | Municipal OEM and Municipal Working Group | In progress – Data collection is available in the County dispatch software, ProPhoenix | No | - |
| M-04 | Conduct Regular Municipal Working Group Meetings | Municipal OEM and Municipal Working Group | Complete | No | - |
| M-05 | Install backup emergency power generator at Fire Station (CF-4). | Municipal OEM and Public Works Department | Completed by fire department with the costs to them. | No | - |
| M-06 | Install permanent backup emergency power generator at Public Works Facility (CF-6). | Municipal OEM and Public Works Department | Completed by HMG from Hurricane Sandy | No | - |
| M-07 | Install backup emergency power generator at Senior Center (CF-16). | Municipal OEM and Public Works Department | No Progress | Yes | 003 |
| M-08 | Upgrade water / sewer system in Mantua Township city center area. | Municipal OEM and Public Works Department | In Progress – Currently sent to engineer to study replacement of all water and sewer lines as well as fire hydrants. | Yes | 008 |
| M-09 | Engineering study to determine appropriate flood mitigation action for houses located on Hickory Avenue next to Mantua Creek. | Municipal OEM and Public Works Department | No Progress | No | - |
| M-10 | Address identified Repetitive Flood Loss Properties. | Floodplain Administrator | No Progress | No | - |



9.11.7.2 Additional Mitigation Efforts

In addition to the mitigation initiatives completed in Table 9.11-14, the Township of Mantua identified the following mitigation efforts completed over the last five years:

- Have worked on various stormwater related issues across the township.

9.11.7.3 Proposed Hazard Mitigation Initiatives for the HMP Update

The Township of Mantua participated in a mitigation action workshop in May 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

The table below indicates the range of proposed mitigation action categories.

Table 9.11-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|---------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam/ Levee | X | X | | | X | | | | X | |
| Disease Outbreak | X | X | | | X | | | | X | |
| Drought | X | X | | | X | | | | X | |
| Earthquake | X | X | | | X | | | | X | |
| Ext Temp | X | X | | | X | | | | X | |
| Flood | X | X | | X | X | X | X | | X | |
| Geologic | X | X | | | X | | | | X | |
| Hazmat | X | X | | | X | | | | X | |
| Hurricane | X | X | | | X | | | | X | |
| Invasive | X | X | | | X | | | | X | |
| Nor'Easter | X | X | | | X | | | | X | |
| Severe Storm | X | X | | | X | | | | X | |
| Severe Winter Storm | X | X | | | X | | | | X | |
| Wildfire | X | X | | | X | | | | X | |
| Utility Failure | X | X | | | X | | | | X | |

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

The table below (Table 9.11-16) summarizes the comprehensive range of specific mitigation initiatives the Township of Mantua would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives 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 municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.



As discussed in Section 6 (Mitigation Strategy), 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.11-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

DRAFT



Table 9.11-16. Proposed Hazard Mitigation Initiatives and Associated Priority

| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Timeline | Priority | Mitigation Category | CRS Category |
|------------------------------|---------------------------------|---|-------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|------------------------------|----------|---------------------|--------------|
| 2022 Township of Mantua -001 | Glassboro Road Flood Mitigation | <p>Problem: Glassboro Road Continues to flood and cause major road / traffic related issues as well as flood loss. This project is ongoing, and the municipality is trying to determine best feasible intervention needed to reduce flooding along this road.</p> <p>Solution: The township would like to alleviate flooding along Glassboro Road by creating a retention basin system at stream crossing bridge. The system would not only prevent overflow of e stream and stormwater infrastructure but will also allow for natural filtration to reduce the amount of contaminated runoff that enters the water system. The DPW shall work with some of the landowners to coordinate the construction of the retention basin. The design is already underway and the next stage is to construct the new basin. The DPW shall then secure funding through HMGP and or BRIC and then determine subcontractor work. The project would then be maintained by the DPW once construction is complete.</p> | New | Flood | 1,2,6 | 3 years | DPW | HMGP/BRIC | Flood Mitigation | 500,000 | 2 years once funding secured | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Timeline | Priority | Mitigation Category | CRS Category |
|------------------------------|---|---|-------------------------|---------------------------|------------|--------------------|---------------------------|---------------------------|--------------------|-----------------|---|----------|---------------------|--------------|
| 2022 Township of Mantua -002 | Route 45 Flood Mitigation | <p>Problem: Route 45 within the Township has repetitive flooding. This causes hazardous driving conditions as well as property loss. This road, however, is owned by the state and is not under the jurisdiction of the municipality.</p> <p>Solution: The township shall work the NJDOT to alleviate flooding along road. Mantua would not be the stakeholder in this project and thus would not qualify for funding. However, the town is willing to work closely and coordinate construction costs if needed to alleviate flooding. The DPW will reach out to the state to determine funding as well as methods to alleviate flooding of road.</p> | Existing | Flood | 1, 2, 5, 6 | 3 years | NJDOT, Mantua DPW | State Funding | High | Unsure | 1 year once state commits | High | EAP | PI |
| 2022 Township of Mantua -003 | Senior Center Backup Power Installation | <p>Problem: The Senior Citizen Center (listed as a critical facility) does not have adequate backup power. It is critical for this facility to operate continuously as it is a medical facility and is also considered an emergency shelter in times of need. Therefore, it is important that this facility has a permanent generator to be used when flooding and other natural disasters are occurring.</p> <p>It is not only critical for this facility to have continued operations as a</p> | New | All | 1, 2, 6 | 2 years | Facility manager and DPW | Municipal Budget and HMGP | High | 100,000-500,000 | 6 months once energy needs are determined and fully planned and funding secured | High | SIP | SP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Timeline | Priority | Mitigation Category | CRS Category |
|------------------------------|----------------------------|--|-------------------------|---------------------------|-----------|--------------------|---|---------------------------|--------------------|-----------------|-----------------------------------|----------|---------------------|--------------|
| | | <p>medical facility, but also because it is considered an emergency shelter in times of need. It is important therefore that this facility has a permanent generator, including times when flooding and other natural disasters are occurring.</p> <p>Solution: The DPW shall work with the facility manager of the senior Citizen center to determine the adequate backup power needed to power the entire facility. The generator will be permanent and will require site assessment to determine the best location that the new asset will be placed. The DPW shall coordinate these efforts with the facility manager and help secure adequate funding to purchase and install the generator.</p> | | | | | | | | | | | | |
| 2022 Township of Mantua -004 | FDPO Update | <p>Problem: The municipality's flood damage prevention ordinance is outdated and requires revisions and updating.</p> <p>Solution: The Township Board and Administration as well as the NFIP Administrator shall work together to update their FDPO once contacted by the state. The state shall work with municipality to provide updated guidance and model ordinance as needed.</p> | Existing | Flood | All | 1-5 years | State of NJ and Township Administration | Municipal Budget | Compliance | 0-100 dollars | 6 months once contacted by state. | High | LP R | PR |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Timeline | Priority | Mitigation Category | CRS Category |
|-------------------------------|--|--|-------------------------|---------------------------|------------|--------------------|------------------------------------|---------------------------|--------------------|-----------------|-----------------------------|----------|---------------------|--------------|
| 2022 Township of Mantua -005 | Disaster Debris Management Plan | Problem: The municipality does not have a disaster debris management plan. Solution: The municipality would need to develop a disaster debris management plan to facilitate the cleanup process post disaster. This plan can be developed by the municipality and does not require external assistance, however, coordination with neighboring municipalities and stakeholders might be necessary. | New | All | All | 2 years | Various Departments and Town Board | Municipal Budget | High | Low | 1 year once funding secured | High | LP R | PR |
| 2022- Township of Mantua -006 | GCUA Buckingham Metering Station # 23 Flood Mitigation | Problem: The GCUA Buckingham Metering Station # 23 is located within the 100-year floodplain and is subject to flooding. Solution: The township shall conduct outreach to the property owner to determine potential mitigation actions to reduce potential damage that can be caused by flooding. The Town NFIP administrator shall reach out to the facility owner to reduce the facility's risk to damage. If the facility requires retrofitting of some nature and thus funding, the facility owner shall work with the township to apply for funding. | Existing | Flood | 2, 4, 5 | 2 years | GCUA, Township Administration | Municipal budget, FMA | Moderate | Low | 1 year once funding secured | High | EAP | PI |
| 2022- Township of Mantua -007 | Rep Loss Outreach | Problem: Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid | Existing | Flood | 1, 2, 3, 5 | 5 years | Township Administration | Municipal Budget | FMA, HMGP | Low | 5 years | High | SIP | PP |



| Project Number | Mitigation Initiative Name | Description of Problem and Solution | New or Existing Assets? | Hazard(s) to be Mitigated | Goals Met | Estimated Timeline | Lead and Support Agencies | Potential Funding Sources | Estimated Benefits | Estimated Costs | Timeline | Priority | Mitigation Category | CRS Category |
|-----------------------------|------------------------------|--|-------------------------|---------------------------|-----------|--------------------|---------------------------|---------------------------|--------------------|-----------------|----------|----------|---------------------|--------------|
| | | NFIP claims. The Town has 2 repetitive loss properties, but other properties can be impacted by flooding as well. Solution: Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas). | | | | | | | | | | | | |
| 2022-Township of Mantua-008 | Water and Sewer Line Upgrade | Problem: The water and sewer lines in the Mantua city center area are outdated. Solution: Upgrade water / sewer system in Mantua Township city center area. Municipal OEM and Public Works Department sent to engineer to study replacement of all water and sewer lines as well as fire hydrants. | Existing | Flood | 1, 2, 4 | 3 years | OEM, DPW, Engineering | HMGP/BRI C | Flood Mitigation | High | Long | High | SIP | SP |

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

Potential FEMA HMA Funding Sources:

Timeline:



| | |
|------|--|
| CAV | Community Assistance Visit |
| CRS | Community Rating System |
| DPW | Department of Public Works |
| EHP | Environmental Planning and Historic Preservation |
| FEMA | Federal Emergency Management Agency |
| FPA | Floodplain Administrator |
| HMA | Hazard Mitigation Assistance |
| N/A | Not applicable |
| NFIP | National Flood Insurance Program |
| OEM | Office of Emergency Management |

| | |
|------|---|
| FMA | Flood Mitigation Assistance Grant Program |
| HMGP | Hazard Mitigation Grant Program |
| BRIC | Building Resilient Infrastructure and Communities Program |

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *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 manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also 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.*

CRS Category:

- *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 also 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 9.11-17. Summary Evaluation and Action Priority

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|-----------------------------|--|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2022 Township of Mantua-001 | Glassboro Road Flood Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | -1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2022 Township of Mantua-002 | Route 45 Flood Mitigation | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 9 | High |
| 2022 Township of Mantua-003 | Senior Center Backup Power Installation | 1 | 1 | 1 | 1 | 1 | 1 | -1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | High |
| 2022 Township of Mantua-004 | FDPO Update | 1 | 1 | 1 | 1 | 1 | -1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2022 Township of Mantua-005 | Disaster Debris Management Plan | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2022-Township of Montua-006 | GCUA Buckingham Metering Station # 23 Flood Mitigation | 1 | 1 | 1 | 1 | 1 | 1 | -1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2022-Township of Mantua-007 | Rep Loss Outreach | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 9 | High |
| 2022-Tpwnship of Mantua-008 | Water and Sewer Line Upgrade | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |

Note: Section 6 (Mitigation Strategy), which conveys guidance on prioritizing mitigation actions.

Low (0-4), Medium (5-8), High (9-14).

This action has been identified as being of highest importance to the municipality and an action that the municipality would like to complete as soon as funding is received.



9.11.8 Action Worksheets

The following action worksheets have been developed by the Township of Mantua to aid in the submittal of grant applications to support the funding of high priority proposed actions. The State of New Jersey requires at least two projects be developed with action worksheets.

DRAFT



| Action Worksheet | | | |
|--|---|---|---------------------------------------|
| Project Name: | Glassboro Road Flood Mitigation | | |
| Project Number: | 2022 Township of Mantua-001 | | |
| Risk / Vulnerability | | | |
| Hazard(s) of Concern: | Flood | | |
| Description of the Problem: | Problem: Glassboro Road Continues to flood and continues to cause major road / traffic related issues as well as flood loss. This project is ongoing, and the municipality is trying to determine best feasible intervention needed to reduce flooding along this road. | | |
| Action or Project Intended for Implementation | | | |
| Description of the Solution: | Solution: The township would like to alleviate flooding along Glassboro Road by creating a retention basin system at stream crossing bridge. The system would not only relieve the stream and stormwater infrastructure from overflowing but will also allow for natural filtration to reduce contaminated runoff from entering the water system. The DPW shall work with some of the landowners to coordinate the construction of the retention basin. The design is already underway and the next stage is to construct the new basin. The DPW shall then secure funding through HMGP and or BRIC and then determine subcontractor work. The project would then be maintained by the DPW once construction is complete. | | |
| Is this project related to a Critical Facility? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Is this project related to a Critical Facility located within the 100-year floodplain? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| (If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| Level of Protection: | 500-year storm | Estimated Benefits (losses avoided): | Flooding Prevention |
| Useful Life: | 20 years | Goals Met: | 1,2 |
| Estimated Cost: | 500,000 | Mitigation Action Type: | Structural and Infrastructure Project |
| Plan for Implementation | | | |
| Prioritization: | High | Desired Timeframe for Implementation: | 2 years once funding secured |
| Estimated Time Required for Project Implementation: | 3 years | Potential Funding Sources: | HMGP/ BRIC |
| Responsible Organization: | DPW | Local Planning Mechanisms to be Used in Implementation if any: | Hazard Mitigation |
| Three Alternatives Considered (including No Action) | | | |
| Alternatives: | Action | Estimated Cost | Evaluation |
| | No Action | \$0 | Problem continues. |
| | Close Road | High | Infeasible |
| | Retention Basin | High | Feasible |
| Progress Report (for plan maintenance) | | | |
| Date of Status Report: | | | |
| Report of Progress: | | | |
| Update Evaluation of the Problem and/or Solution: | | | |



| Evaluation and Prioritization | | |
|--------------------------------|---------------------------------|---|
| Project Name: | Glassboro Road Flood Mitigation | |
| Project Number: | 2022 Township of Mantua-001 | |
| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
| Life Safety | 1 | This project protects life |
| Property Protection | 1 | This project protects property |
| Cost-Effectiveness | 1 | This project is most cost effective |
| Technical | 1 | There are no technical issues |
| Political | 1 | There are no political issues |
| Legal | 1 | There are no legal complications |
| Fiscal | -1 | Additional Funding is needed |
| Environmental | 1 | Has a positive impact on environment |
| Social | 1 | Has positive impact on society |
| Administrative | 1 | No administrative issues |
| Multi-Hazard | 0 | This addresses a single hazard |
| Timeline | 1 | The timeline is feasible |
| Agency Champion | 1 | The town DOW/ OEM |
| Other Community Objectives | 1 | Safety |
| Total | 11 | |
| Priority (High/Med/Low) | High | |



| Action Worksheet | | | |
|--|---|---|--|
| Project Name: | Senior Center Backup Power Installation | | |
| Project Number: | 2022 Township of Mantua-003 | | |
| Risk / Vulnerability | | | |
| Hazard(s) of Concern: | All | | |
| Description of the Problem: | Problem: The Senior Citizen Center (Listed as critical facility) does not have adequate backup power. It is not only critical for this facility to have continued operations as a medical facility, but also because it is considered an emergency shelter in times of need. It is important therefore that this facility has a permanent generator, including times when flooding and other natural disasters are occurring. | | |
| Action or Project Intended for Implementation | | | |
| Description of the Solution: | Solution: The DPW shall work with the facility manager of the senior Citizen center to determine the adequate backup power needed to power the entire facility. The generator will be permanent and will require site assessment to determine the best location that the new asset will be placed. The DPW shall coordinate these efforts with the facility manager and help secure adequate funding to purchase and install the generator. | | |
| Is this project related to a Critical Facility? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Is this project related to a Critical Facility located within the 100-year floodplain? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| (If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| Level of Protection: | 500-year storm | Estimated Benefits (losses avoided): | Continued Operation |
| Useful Life: | 20 years | Goals Met: | 1,2 |
| Estimated Cost: | 100-500,000 | Mitigation Action Type: | Structural and Infrastructure Project |
| Plan for Implementation | | | |
| Prioritization: | High | Desired Timeframe for Implementation: | 6 months once plans made and funding secured |
| Estimated Time Required for Project Implementation: | 2 years | Potential Funding Sources: | HMGP |
| Responsible Organization: | Town DPW and Facility Manager | Local Planning Mechanisms to be Used in Implementation if any: | Structural and Infrastructure Project |
| Three Alternatives Considered (including No Action) | | | |
| Alternatives: | Action | Estimated Cost | Evaluation |
| | No Action | \$0 | Problem continues. |
| | Install solar | High | Dependent on weather |
| | Install generator | High | Best long-term solution |
| Progress Report (for plan maintenance) | | | |
| Date of Status Report: | | | |
| Report of Progress: | | | |
| Update Evaluation of the Problem and/or Solution: | | | |



| Evaluation and Prioritization | | |
|--------------------------------|---|---|
| Project Name: | Senior Center Backup Power Installation | |
| Project Number: | 2022 Township of Mantua-003 | |
| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
| Life Safety | 1 | This project protects life |
| Property Protection | 1 | This project protects property |
| Cost-Effectiveness | 1 | This project is most cost effective |
| Technical | 1 | There are no technical issues |
| Political | 1 | There are no political issues |
| Legal | 1 | There are no legal complications |
| Fiscal | -1 | Additional Funding is needed |
| Environmental | 0 | Has no adverse impact |
| Social | 1 | Has positive impact on society |
| Administrative | 1 | No administrative issues |
| Multi-Hazard | 1 | This addresses multiple hazards |
| Timeline | 1 | The timeline is feasible |
| Agency Champion | 1 | The town DPW/Facility Manager |
| Other Community Objectives | 1 | Safety |
| Total | 11 | |
| Priority (High/Med/Low) | High | |



| Action Worksheet | | | |
|---|--|---|--|
| Project Name: | Rep Loss Outreach | | |
| Project Number: | 2022-Township of Mantua-007 | | |
| Risk / Vulnerability | | | |
| Hazard(s) of Concern: | Flood | | |
| Description of the Problem: | Frequent flooding events have resulted in damages to residential properties. These properties have been repetitively flooded as documented by paid NFIP claims. The Town has 2 repetitive loss properties, but other properties may be impacted by flooding as well. | | |
| Action or Project Intended for Implementation | | | |
| Description of the Solution: | Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas). | | |
| Is this project related to a Critical Facility or Lifeline? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Is this project related to a Critical Facility located within the 100-year floodplain? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Level of Protection: | 1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>) | Estimated Benefits (losses avoided): | Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage. |
| Useful Life: | Acquisition: Lifetime Elevation: 30 years (residential) | Goals Met: | 1, 3 |
| Estimated Cost: | \$3Million | Mitigation Action Type: | Structure and Infrastructure Project |
| Plan for Implementation | | | |
| Prioritization: | High | Desired Timeframe for Implementation: | 5 years |
| Estimated Time Required for Project Implementation: | 5 Years | Potential Funding Sources: | FEMA HMGP and FMA, local cost share by residents |
| Responsible Organization: | Township Administration supported by homeowners | Local Planning Mechanisms to be Used in Implementation if any: | Hazard Mitigation |
| Three Alternatives Considered (including No Action) | | | |
| Alternatives: | Action | Estimated Cost | Evaluation |
| | No Action | \$0 | Current problem continues |
| | Elevate homes | \$500,000 | When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads |
| | Elevate roads | \$500,000 | Elevated roadways would not protect the homes from flood damages |
| Progress Report (for plan maintenance) | | | |
| Date of Status Report: | | | |
| Report of Progress: | | | |
| Update Evaluation of the Problem and/or Solution: | | | |



| Action Worksheet | | |
|--------------------------------|-----------------------------|---|
| Project Name: | Rep Loss Outreach | |
| Project Number: | 2022-Township of Mantua-007 | |
| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
| Life Safety | 1 | Families moved out of high-risk flood areas. |
| Property Protection | 1 | Properties removed from high-risk flood areas. |
| Cost-Effectiveness | 1 | Cost-effective project |
| Technical | 1 | Technically feasible project |
| Political | 1 | |
| Legal | 1 | The Town has the legal authority to conduct the project. |
| Fiscal | 0 | Project will require grant funding. |
| Environmental | 1 | |
| Social | 0 | Project would remove families from the flood prone areas of the Town. |
| Administrative | 0 | |
| Multi-Hazard | 0 | Flood |
| Timeline | 0 | |
| Agency Champion | 1 | NFIP Floodplain Administrator, supported by homeowners |
| Other Community Objectives | 1 | |
| Total | 9 | |
| Priority (High/Med/Low) | High | |