



9.17 BOROUGH OF LINCOLN PARK

This section presents the jurisdictional annex for the Borough of Lincoln Park. The annex includes a general overview of the Borough of Lincoln Park; an assessment of the Borough of Lincoln Park’s risk, vulnerability, and mitigation capabilities; and a prioritized action plan to implement prior to a disaster to reduce future losses and achieve greater resilience to natural hazards.

9.17.1 Hazard Mitigation Planning Team

The following individuals are the Borough of Lincoln Park’s identified HMP update primary and alternate points of contact and NFIP Floodplain Administrator.

Table 9.17-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name / Title: Perry T. Mayers, Administrator Address: 34 Chapel Hill Rd, Lincoln Park, NJ 07035 Phone Number: 973-270-2021 Email: pmayers@bolp.com	Name / Title: Sal Marino, Construction Official Address: 34 Chapel Hill Rd, Lincoln Park, NJ 07035 Phone Number: 973-270-2026 Email: salm@bolp.org
NFIP Floodplain Administrator	
Name / Title: Sal Marino, Construction Official Address: 34 Chapel Hill Rd, Lincoln Park, NJ 07035 Phone Number: 973-270-2026 Email: salm@bolp.org	

9.17.2 Jurisdiction Profile

The Borough of Lincoln Park is located in the extreme southeast portion of Morris County. The Borough is bordered to the north by the Township of Pequannock, to the east by the Township of Wayne, to the south by the Borough of Fairfield, and to the northwest by the Borough of Kinnelon. The total land area of the Borough is 6.7 square miles. Waterbodies in the Borough include the Passaic River, Pompton River, Beaver Dam Brook, East Ditch and West Ditch. The Borough of Lincoln Park is governed by a Mayor and seven borough council members; 3 at-large and 4 ward. The Mayor is elected to a 4-year term. The at-large council members and ward council members are elected to 4-year terms. The Mayor votes only in the event of a tie.

According to the U.S. Census, the Borough has a total area of 6.91 square miles, of which 6.38 square miles is land and 0.53 square miles is water.

According to the U.S. Census, the 2010 population for the Borough of Lincoln Park was 10,521. The estimated 2017 population was 10,464, a 0.5 percent decrease from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 5.2 percent of the population is 5 years of age or younger and 18.2 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.

9.17.3 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. Table 9.17-2 summarizes recent and expected future development trends, including major





residential/commercial development and major infrastructure development. Figures 9.17-1 and 9.17-1 at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development.

Table 9.17-2. Recent and Expected Future Development

Type of Development	2014	2015	2016	2017	2018
Number of Building Permits for New Construction Issued Since the Previous HMP					
Single Family	3	1	0	2	3
Multi-Family	0	0	0	0	1
Other (commercial, mixed-use, etc.)	2	2	1	0	1
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					
None Identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
Meridia Lincoln Park (Upper Main)	Residential	176 Rental Units	Block 3.05-Lots 305 & 305.05	None	Final Stages of Planning - Developers Agreement Signed
Meridia Transit Village	Residential over Retail	45 Rental Units over a ground floor restaurant	Block 139 Lot 19, 20, 21	Currently sits in 100 Year Flood Plain. Preliminary Maps do not-LOMR pending	Final Stages of Planning - Developers Agreement Signed
Dovetail Commons	Senior Residential Rental Units	24 Units total (2 Buildings)	Block 9 Lot 24.01	Partially sits in 100 Year Flood Plain. DEP permits have been obtained.	Final Stages of Planning - Developers Agreement Signed

* Only location-specific hazard zones or vulnerabilities identified.

9.17.4 Capability Assessment

The Borough of Lincoln Park 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 legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and





each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas that mitigation is currently integrated are summarized in this section. The Borough of Lincoln Park identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy.

PLANNING, LEGAL AND REGULATORY CAPABILITY

The table below summarizes the legal and regulatory tools that are available to the Borough of Lincoln Park and where hazard mitigation has been integrated.

Table 9.17-3. Planning, Legal and Regulatory Capability

	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
Codes, Ordinances, & Requirements					
Building Code	Yes	Local	Yes	-	-
<i>Comment: State mandated on local level under NJAC 5:23-3.14. International Building Code – New Jersey Edition, 2018, NJAC 5:24-3.14 Adopted 9/3/2019. Uniform Construction Codes, Chapter 213 of the municipal code. Administered by the Division of Building and Zoning.</i>					
Zoning Code	Yes	Local	Yes	-	-
<i>Comment: Per State of NJ Municipal Land Use Law (MLUL) L. 1975, s. 2, eff Aug 1, 1976, 40-55D-62: 49. Power to zone, requires all jurisdictions to have current zoning and other land development ordinances after the planning board has adopted the land use element and master plan. Planning and Zoning Ordinance, Chapter 28 of the municipal code. Administered by the Planning Board. The Planning and Zoning Ordinance was adopted to establish a pattern for the use of land and buildings based on the Master Plan and to encourage municipal action to guide the appropriate development of land in a manner which will promote the public health, safety, morals, and general welfare of the people. The ordinance is intended to regulate the use of land within zoning districts, secure safety from fire flood, panic, and other natural man-made disasters; provide adequate light air, and open space; limit and restrict buildings and structures to specified districts and regulate buildings and structures according to their type and nature and extent of their use and regulate the nature and extent of the use of land for trade, industry, residence, open space or other purposes; regulate the bulk, height, number of stories, and size of buildings and other structures; avoid a conflict with the development and general welfare of neighboring municipalities, the County and the State; establish appropriate population densities and concentrations contributing to the wellbeing of persons, neighborhoods, communities and regions and the preservation of the environment; provide sufficient space for agricultural, residential, recreational, commercial, and industrial uses and open space; encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging the location of such facilities and routes which result in congestion or blight; promote a desirable visual environment; promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper land use. The ordinance includes articles on planning and zoning, the Planning Board, the Zoning Board of Adjustment, development review procedures, flood damage prevention, stormwater management, soil removal, and development of steep slope.</i>					
Subdivisions	Yes	Local	Yes	-	-
<i>Comment: Land Development Review, Chapter 17 of the municipal code. Administered by the Planning Board.</i>					
Stormwater Management	Yes	Local	Yes	-	-
<i>Comment: Title 7 of the NJ Administrative Code (N.J.A.C. 7:8); Chapter 28 of the municipal code. Administered by the Planning Board. The ordinance establishes minimum stormwater management requirements and controls for major developments and promotes the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas.</i>					
Post-Disaster Recovery	No	-	-	-	-
<i>Comment:</i>					
Real Estate Disclosure	Yes	State – Division of Consumer Affairs	Yes	Yes	-
<i>Comment: N.J.A.C. 13:45A-29.1; 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 proximity to hospitals, schools, fire and police, as well as any hazards, risks or nuisances in or around the subdivision.</i>					
Growth Management	No	-	Yes	-	-
<i>Comment: State mandated at local level;</i>					
Shoreline Development	No		Yes	Yes/No	Yes/No





	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<i>Comment: NJ Coastal Area Facility Review Act (N.J.S.A. 13:19) or CAFRA regulates almost all development along the coast for activities including construction, relocation, and enlargement of buildings or structures, and excavation, grading, shore protection structures, and site preparation. This law is implemented through NJ's Coastal Zone Management Rules N.J.A.C. 7:7E-1 et seq.</i>					
Site Plan Review	Yes	Local	No	-	-
<i>Comment: Land Development Review, Chapter 17 of the municipal code. Administered by Planning Board.</i>					
Environmental Protection	No	Local	Yes	-	-
<i>Comment: The rules that are utilized by the NJDEP and other environmental agencies are codified at Title 7 of the NJ Municipal Administrative Code.</i>					
Flood Damage Prevention	Yes	Local	Yes	No	-
<i>Comment: Land Development Review, Flood Damage Prevention. Chapter 17, Article 10 of the municipal code.</i>					
Wellhead Protection	No	-	-	-	-
<i>Comment:</i>					
Emergency Management	Yes	Local	-	-	-
<i>Comment: Fire Department, Chapter 39 of the municipal code. Police Department, Chapter 99 of the municipal code. Intermunicipal Services Agreement, Chapter 55 of the municipal code. The ordinance establishes a reciprocal agreement with each and every municipality within the County of Morris and the contiguous counties of Passaic and Essex for intermunicipal police, fire, and first aid assistance at time of any and all emergencies.</i>					
Climate Change	No	-	-	-	-
<i>Comment:</i>					
Disaster Recovery Ordinance	No	-	-	-	-
<i>Comment:</i>					
Disaster Reconstruction Ordinance	No	-	-	-	-
<i>Comment:</i>					
Other	Yes	-	-	-	-
<i>Comment: Hazardous Materials, Chapter 286 of the municipal code. The ordinance provides for the reimbursement and the replacement of expended resources and non-reusable equipment maintained or procured by the municipality/Fire Department and used in the case of a release or threatened release of any hazardous materials. Trees and Shrubs, Chapter 434 of the municipal code. The ordinance provides for the protection of trees and removal of trees, particularly dangerous trees which are determined to be dangerous to public health, safety, or welfare. Water Emergencies, Chapter 465 of the municipal code. Allows for taking measures for the conservation of water for domestic and sanitary purposes and fire protection.</i>					
Planning Documents					
Comprehensive / Master Plan	Yes	Local	Yes	No	-
<i>Comment: The Borough Master Plan was adopted on October 18, 2012.</i>					
Capital Improvement Plan	Yes	Local	Allowed	No	-
<i>Comment: Per NJSA 40:55D-29 the governing body is authorized to direct the planning board to prepare a CIP with at least a six year planning horizon.</i>					
Disaster Debris Management Plan	No	-	No	-	-
<i>Comment:</i>					
Floodplain or Watershed Plan	No	-	No	-	-
<i>Comment:</i>					
Stormwater Management Plan	Yes	Local and State	Yes	Yes	No
<i>Comment: Per NJDEP Storm Water Management Rule (N.J.A.C. 7:8, et seq.). The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999. The Department issued final stormwater rules on February 2, 2004 and four (4) NJPDES general permits authorizing stormwater discharges from Tier A and Tier B</i>					





	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<i>municipalities, as well as public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s). Stormwater Ordinance 10-14; 11-14. Administered by the DPW.</i>					
Stormwater Pollution Prevention Plan	Yes	Local	Yes	Yes	-
<i>Comment: As per stormwater program requirements.</i>					
Urban Water Management Plan	No	-	No	-	-
<i>Comment:</i>					
Habitat Conservation Plan	No	-	No	-	-
<i>Comment:</i>					
Economic Development Plan	No	-	No	-	-
<i>Comment:</i>					
Shoreline Management Plan	No	-	No	-	-
<i>Comment:</i>					
Community Wildfire Protection Plan	No	-	No	-	-
<i>Comment:</i>					
Community Forest Management Plan	No	-	No	-	-
<i>Comment:</i>					
Transportation Plan	No	-	No	-	-
<i>Comment:</i>					
Agriculture Plan	No	-	No	-	-
<i>Comment:</i>					
Climate Action Plan	No	-	No	-	-
<i>Comment:</i>					
Tourism Plan	No	-	No	-	-
<i>Comment:</i>					
Business Development Plan	No	-	No	-	-
<i>Comment:</i>					
Other	No	-	No	-	-
<i>Comment:</i>					
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes	No	No
<i>Comment: Per the NJ Civilian Defense and Disaster Control Act (App.A:9_43.2) Counties and municipalities must have written Emergency Operations Plans to be reviewed every 2 years. Emergency Response Plan is reviewed on this schedule.</i>					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	-
<i>Comment:</i>					
Post-Disaster Recovery Plan	Yes	Local	No	No	No



	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	State Mandated / Allowed	Has the HMP been integrated in the last 5 years? If yes- how?	
				If yes- how? Describe in comments	If no - can it be a mitigation action? If yes, add Mitigation Action #.
<i>Comment: Updated 10/9/14. Administered by OEM.</i>					
Continuity of Operations Plan	Yes	Local	No	-	-
<i>Comment:</i>					
Public Health Plan	Yes	Local	No	-	-
<i>Comment: Public Health Plan</i>					
Other	No	-	-	-	-
<i>Comment:</i>					

Table 9.17-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes, Building Department
Does your jurisdiction have the ability to track permits by hazard area?	Yes, through GIS
Does your jurisdiction have a buildable lands inventory? -If yes, please describe briefly. -If no, please quantitatively describe the level of buildout in the jurisdiction.	The Borough is built out with the exception of a few parcels that could be subdivided.

ADMINISTRATIVE AND TECHNICAL CAPABILITY

- **Planning Board:** The purpose of the Planning Board is to establish a pattern for the use of the land and buildings on the Master Plan and to encourage municipal action to guide the appropriate development of land in a manner that will promote the public health, safety, morals and general welfare of the people. The Planning Board consists of nine regular members and two alternate members consisting of certain classes and serving for specific terms. All are appointed by the Mayor except the Class II position which is appointed by the governing body. Alternate members serve two-year terms.
- **Zoning Board of Adjustment:** The Zoning Board of Adjustment was established to promote health, safety, morals and general welfare, prevent overcrowding of land and buildings, avoid undue concentration of population, provide adequate light and air with reasonable consideration to the characters of the zone and its peculiar suitability for particular uses, and with the objective of conserving the value of property and encouraging the most appropriate use of land throughout the borough. The Zoning Board consists of 7 regular members and 2 alternate members. They are appointed by the Governing Body in staggering terms.
- **Building Department:** The Building Department is responsible for issuing all required permits and performing inspections. The primary responsibility of the Building Department is to maintain the state mandated system for processing permits, performing inspections, to track and pursue code violation and unsafe structures.
- **Emergency Management:** The Lincoln Park Office of Emergency Management, together with the Lincoln Park Police Department, Lincoln Park Fire Department, and Lincoln Park Emergency Medical Services, and





county, state and federal agencies work to provide for the safety and well-being of everyone in the community.

- **Engineering Department:** The Engineering Department provides technically sound professional engineering guidance on the implementation of policies and programs, directed at improving the quality of life for all members of the borough community.
- **Fire Department:** The Lincoln Park Fire Department proudly protects approximately 10,500 people living in an area of 7 square miles. The department operates out of two stations that protect a primarily residential area. The department is a public department whose members are on a volunteer status.
- **Health Department:** The mission of the Health Department is to prevent, promote and protect. The Health Department works to prevent disease, promote healthy living and protect the public from health hazards. The Lincoln Park Health Department offers the services of a licensed health officer, public health nurse, registered environmental health specialist, certified health education specialist and registrar of vital statistics. In addition, animal control services are offered through a shared services agreement.
- **Planning and Development Department:** The Planning and Development Department offers professional planning assistance and guidance to the various municipal agencies, so as to provide for the future viability - fiscally, physically, economically and functionally - of the borough, while assisting applicants through the administrative process.
- **Public Works:** The mission of the Public Works Department is to maintain and improve Lincoln Park's facilities through cost effective management and asset prioritization. We strive to provide responsive and quality public service through efficient procedures and positive inter-organizational communications. The Department includes the Division of Roads, Division of Water and Sewer, and the Division of Recycling.
- **Flood Information Page:** The Borough of Lincoln Park hosts a Flood Information page on the municipal website. It includes various educational information including links to flood gauge sites, elevation certificates, and flood maps.
- **Flood Acquisition Plan:** The Borough participates in the County's Flood Mitigation Program (FMP) and has an approved Flood Acquisition Plan (FLAP). The Morris County FMP is the first dedicated, county-level flood acquisition program in the State of New Jersey. The FMP allows Morris County to assist municipalities in moving people out of harm's way, lowering municipal costs due to intense flooding episodes, and create natural flood capture and storage areas which protect the remaining homes and businesses. The FMP is funded by the Morris County Open Space tax and provides grant monies for municipalities to purchase flood-prone residential properties.
- **Sustainable Jersey:** The Borough of Lincoln Park is a silver certified community in the Sustainable Jersey program. Sustainable Jersey actions related to hazard mitigation include the following:
 - *Emergency Communications Planning:* The Borough of Lincoln Park has put an emphasis on improving emergency communication capabilities. Continuing to recognize that any one method such as email, cable television, cell phones, landline, social media (Facebook and Twitter), digital sign boards, municipal web page, etc., of providing residents with notifications could fail or otherwise not reach the intended resident or business, the Borough's comprehensive and redundant emergency communications plan is constantly reviewed to maintain and enhance Lincoln Park's Emergency Communications Plan. Specifically because of the frequency of flooding in Lincoln Park, the Borough has also created a prominent web page to advise residents on how to properly prepare and stay connected. Buttons for Flood Information and the various other communication options are prominently displayed on the Home Page of the Borough's website (www.lincolnpark.org). Once signed up, residents will receive local emergency notifications directly from the Lincoln Park Police Department through the R.A.V.E. System and/or the Everbridge System which is countywide and administered by the Morris County OEM. Residents



can also sign up for less urgent notifications, such as road closures or boil water advisories), through our Notify Me application. Notifications were recently sent out through both the RAVE and Notify Me application during a NJ Natural Gas main replacement project and prior to the repaving of Rt. 202, the main East/West thoroughfare in LP to test the reliability of the two systems.

- o *Tree Protection Ordinance:* Chapter 202 of the Lincoln Park municipal code addresses Trees and Shrubs and includes sections on both the protection and removal of trees. Section 202-3. Protection of Trees includes seven specific protection mandates, such as prohibiting substances injurious to plant growth and the operation of machinery that may damage or destroy a tree, and mandating the placement of guards around trees when undertaking construction. Section 202-4. Removal of Trees mandates that a plan for tree removal must be submitted to Borough agencies when seeking building permits or subdivision approval; that no live tree exceeding three inches in diameter shall be destroyed except as listed in three exceptions. Section 202-2. Permits Required for Certain Activities protects trees along streets, highways, public places, park or land owned by the Borough from activities such as pruning, spraying, removing guards, excavating without a permit.
- o *Tree Hazard Inventory:* In 2016, with the help of John Linson (New Jersey Shade Tree), the Borough of Lincoln Park created a windshield survey. The survey consists of various tree hazards and special attention areas. In addition, the Borough proactively worked with JCP&L to have hazardous trees on/over wires trimmed or removed. In year 2018, the Borough spent \$48,473 in outside costs for contractors to remove trees as well as stump removals. As a municipality, the Borough spent roughly 104 hours (estimated at about two hours each week) which averaged at about \$6,555.50 in municipal salaries. We also sent members for the required CEU training (right tree right place & ACRT bucket truck training) which cost \$825 annually.

The table below summarizes potential staff and personnel resources available to the Borough of Lincoln Park.

Table 9.17-5. Administrative and Technical Capabilities

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board, Director of Development
Mitigation Planning Committee	Yes	OEM, Planning
Environmental Board / Commission	No	-
Open Space Board / Committee	No	-
Economic Development Commission / Committee	Yes	Administration
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Reverse 911, social media blasts, Rave
Maintenance program to reduce risk	Yes	Stream clearing as necessary
Mutual aid agreements	Yes	Fire/First Aid/Police
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Engineer
Staff with training in benefit/cost analysis	No	-
Staff with training in green infrastructure	Yes	Staff trained in green stormwater infrastructure techniques



Staff/Personnel Resource	Available?	Department/Agency/Position
Staff with education/knowledge/training in low impact development	Yes	Planning Board, Engineer
Surveyor	Yes	Engineer
Stormwater engineer	Yes	Engineer
Personnel skilled or trained in GIS applications	Yes	Engineer
Local or state water quality professional	Yes	-
Scientist familiar with natural hazards in local area	Yes	Engineer
Emergency manager	Yes	OEM/Police
Grant writers	No	-
Resilience Officer	No	-
Watershed planner	Yes	Engineer/Floodplain Administrator
Environmental specialist	Yes	Engineer/Floodplain Administrator
Other	Yes	Engineer: trained in damage assessments

FISCAL CAPABILITY

The table below summarizes financial resources available to the Borough of Lincoln Park.

Table 9.17-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes, limited areas
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	No
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	No
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Clean Water Act 319 Grants (Nonpoint Source Pollution)	No
Other	Open Space Acquisition Funding Programs

EDUCATION AND OUTREACH CAPABILITY

The table below summarizes the education and outreach resources available to the Borough of Lincoln Park.

Table 9.17-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	Borough Administrator and Recreation Departments
Do you have personnel skilled or trained in website development?	Yes
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes, the Borough has a Flood Information Page
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes: Facebook, twitter, website, email, monthly mayors' newsletter



Criterion	Response
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <ul style="list-style-type: none"> If yes, briefly describe. 	No
Do you have any other programs already in place that could be used to communicate hazard-related information? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes: Recreation Department
Do you have any established warning systems for hazard events? <ul style="list-style-type: none"> If yes, briefly describe. 	Yes: Reverse 911, social media blasts, Rave

COMMUNITY CLASSIFICATIONS

The table below summarizes the classifications for community programs available to the Borough of Lincoln Park.

Table 9.17-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	Yes	5	2016
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	-	-
Public Protection (Fire ISO Protection Class)	Yes	4	-
Storm Ready Certification	No	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	Yes	Silver	October 18, 2019

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 ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

Table 9.17-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low
Dam Failure	Medium
Disease Outbreak	Low
Drought	Medium
Earthquake	Medium
Extreme Temperature	Medium
Flood	Medium
Geologic	Medium
Harmful Algal Bloom	Low
Hazardous Substances	Medium
Infestation	Low
Severe Weather	High
Severe Winter Weather	High
Wildfire	Medium

Notes:





High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement;
 Low = Capacity does not exist or could use substantial improvement; Unsure = Not enough information is known to assign a rating.

NATIONAL FLOOD INSURANCE PROGRAM

This section provides specific information on the management and regulation of the regulatory floodplain.

Table 9.17-10. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Construction Department
Who is your floodplain administrator? (name, department/position)	Sal Marino
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date that your flood damage prevention ordinance was last amended?	2012
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? 	Exceed, Class 5 in CRS.
When was the most recent Community Assistance Visit or Community Assistance Contact?	March 20, 2017
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state what they are. 	No
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what they are. 	None
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If no, state why. 	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program?	Yes
<input type="checkbox"/> If so, what type of assistance/training is needed?	All training welcome
Does your jurisdiction participate in the Community Rating System (CRS)? <ul style="list-style-type: none"> If yes, is your jurisdiction interested in improving its CRS Classification? If no, is your jurisdiction interested in joining the CRS program? 	Yes, yes
How many flood insurance policies are in force in your jurisdiction?*	Flood insurance policies: 619
<ul style="list-style-type: none"> What is the insurance in force? What is the premium in force? 	Insurance in force: \$145,564,100 Premium in force: \$1,315,549
How many total loss claims have been filed in your jurisdiction?*	Total loss claims: 3,265
<ul style="list-style-type: none"> How many claims are still open or were closed without payment? What were the total payments for losses? 	Claims open or closed without payment: 32 Total payments for losses: \$62,787,068
Do you maintain a list of properties that have been damaged by flooding?	Yes
Do you maintain a list of property owners interested in flood mitigation?	Yes

*According to FEMA statistics as of 09/30/2018

9.17.5 Hazard Event History Specific to the Jurisdiction

Morris County has a history of 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 in Section 4.4 (Hazard Profiles) and includes a chronology of events that affected Morris County and its jurisdictions. The Borough of Lincoln Park’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Morris County. Table 9.17-11 provides details regarding municipal-specific loss and damages the Borough experienced during hazard events. Information provided in the table below is based on reference material or local sources.





Table 9.17-11. Hazard Event History

Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
January 21-24, 2016	Severe Winter Storm and Snowstorm (DR-4264)	Yes	<p>An impulse from the west coast traversed the midsection of the country, then developed into a low-pressure system as it tracked across the Gulf states before intensifying along the Carolina coast into a major nor'easter, producing record snowfall in parts of New Jersey on January 23rd. It then moved out to sea after passing by the mid-Atlantic coast early on January 24th. Wind gusts up to 60 MPH produced blizzard conditions as visibilities dropped to one-quarter mile or less in spots. Snow began during the evening hours on the 22nd, then continued, heavy at times through the 23rd before ending early on the 24th. Snowfall totals included 30.0 inches in Long Valley, 29.0 inches in Madison, 26.0 inches in Budd Lake, 25.3 inches in Green Pond, 22.5 inches in Butler, 21.0 inches in Chatham, and 18.0 inches in Marcella. At one point during the storm, up to 270,000 customers were without power.</p>	<p>The Borough incurred snow removal costs. Employee overtime: \$13,946.86. Equipment repairs: \$5,322.21. Equipment usage rates: \$24,106.02. Salt: \$5,974.61. Meal Tickets: \$96. Total reimbursement: \$49,445.70.</p>
March 6-7, 2018	Severe Winter Storm and Snowstorm (DR-4368)	Yes	<p>Precipitation gradually overspread the region during the overnight hours of March 6th to the 7th. 12 to 24 inches was observed across large parts of Morris County. The snow contained large amounts of liquid, making it heavy and wet. This resulted in downed trees, limbs, and wires, leading to numerous power outages across portions of New Jersey, especially where the heaviest snow was reported. Many customers were still without power from the previous storm when this storm struck. Governor Murphy estimated about 350,000 customers state-wide lost power as a result of this second storm.</p>	<p>Although the county was impacted, the Borough of Lincoln Park did not report damages.</p>



Date(s) of Event	Event Type (disaster declaration if applicable)	Morris County Designated?	Summary of Event	Summary of Local Damages and Losses
			Governor Phil Murphy declared a state of emergency which went into effect at 8 PM Tuesday March 6th.	

9.17.6 Jurisdiction-Specific Vulnerabilities and Hazard ranking

The hazard profiles in Section 4 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Table 9.17-12 summarizes the Borough of Lincoln Park risk assessment results and data used to determine the hazard ranking.

In an attempt to summarize the confidence level regarding the input utilized to populate the hazard ranking, a gradient of certainty was developed. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and increased understanding of the data utilized to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.



Table 9.17-12. Summary of Risk Assessment Results

Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
Dam Failure	Partial or complete failure of a dam There are 0 dams in the Borough, according to NJDEP.	Population impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		The number of building impacted is dependent on the capacity of the dam, the extent of the dam failure inundation area and the severity of the failure.		Economic impacts include dam/building/infrastructure repairs; debris removal/disposal; utility impacts.		Low
Disease Outbreak	Disease Outbreaks which include: Mosquito-Borne Diseases, Tick-Borne Diseases, Campylobacteriosis, Influenza, Mumps, Ebola	Population impacted is dependent on the disease and severity of the outbreak; in some cases immuno-compromised persons are more vulnerable.		Structural impacts due to disease outbreak would be limited.		Economic losses can include County financial impacts to monitor/address outbreaks; lost wages or commercial interruptions; depends on the severity and type of disease outbreak. .		Low
Drought	Prolonged drought event - The County is serviced by water supplies who primarily get water from groundwater sources; some surface water sources.	Entire population exposed. Population on surface water supplies may be impacted first; water restrictions/contamination; increased wildfire risk.		Droughts are not expected to cause direct damage to buildings.		Losses include aesthetic, landscape/nursery/agricultural industry impacts.		Low
Earthquake	100, 500-, 2,500-Year Mean Return Period (MRP) Events evaluated NEHRP Soils D&E (soft soils that amplify ground shaking are present in the County)	NEHRP D&E:	6,010	NEHRP D&E:	2,055	100-year Loss:	\$64,469	High
		Liquefaction Class 4:	4,911	Liquefaction Class 4:	1,623	500-year Loss:	\$4,602,483	
2,500-year Loss:	\$69,401,268							
Extreme Temperature	Extreme temperature event (heat or cold)	Over 65 Population:	1,909	Physical impacts due to extreme temperatures would be limited.		Loss of business function is possible due to unexpected repairs (i.e. pipes bursting) or power failures.		Low



Hazard of Concern	Hazard/ Scenario Area Evaluated	Population		Buildings		Economy (Loss)		Certainty Factor
		Population Below Poverty Level:	356					
Flood	100- and 500-Year Mean Return Period Event	100-year	2,579	100-year	882	100-year Loss:	\$688,552,685	High
		500-year	3,287	500-year	1,128			
Geological	High Landslide Susceptibility Areas and Areas developed over carbonate rock	Class A:	101	Class A:	34	Class A:	11871322.27	Moderate
		Class B:	0	Class B:	0	Class B:	\$0	
		Carbonate Bedrock:	0	Carbonate Bedrock:	0	Carbonate Bedrock:	\$0	
Harmful Algal Bloom	Any body of water or area adjacent that is susceptible to harmful algal bloom.	Population in contact (e.g., swimming) or drinking water from surface water impacted can result in a range of health effects		General building stock impacts due to harmful algal bloom are not anticipated. Critical facilities (i.e., water treatment plants) could lead to plant closures.		Economic impacts range from recreational closure of impacted waterbodies; cost to sample/monitor/remediate.		Low
Hazardous Substance	Release of a hazardous substance from a fixed site.	Population impacted will depend on the type of material and scale of the incident. May include population within small radii of site.		The degree of damages to a building depends on the scale of the incident.		The degree of damages depends on the scale of the incident.		Low
Infestation	Infestation including: Insects [e.g. Gypsy Moth, Mosquitoes, Spotted Lanternfly, Emerald Ash Borer], White-Tailed Deer, Rodents	Population impacted will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Physical impacts will be limited to indirect impacts from invasive species which affect crops and vegetation.		Economic impact will depend on the type and severity of infestation and may cause an increased risk for disease outbreak.		Low
Severe Weather	Severe Weather Event	Entire population exposed; The degree of impact to the population depends on the scale of the incident.		Entire building stock is exposed; The degree of impact depends on the scale of the incident.		Annualized Loss:	\$41,395	High
						100 -Year Loss:	\$407,992	
						500-year Loss:	\$2,586,313	
Severe Winter Weather	Severe Winter Weather Event	All residents/commuters/visitors are exposed; socially-vulnerable populations may be at increased risk.		All buildings are exposed; the degree of impact depends on the scale of the incident.		The cost of snow and ice removal and repair of roads/infrastructure can impact operating budgets.		Low
Wildfire	Wildfire Fuel Hazard areas (High, Very High, Extreme)	Wildfire:	3	Wildfire:	2	Wildfire:	\$859,451	Moderate





REPETITIVE FLOOD LOSSES

The following summarizes the repetitive and severe repetitive flood losses in the Borough of Lincoln Park.

- Number of repetitive loss (RL) properties: 191
- Number of severe repetitive loss (SRL) properties: 173
- Number of RL/SRL properties that have been mitigated: 72

Source: FEMA BureauNet, 2019

Note: RL and SRL as of 04/26/2019; The number of SRL properties excludes RL properties and includes properties that have been verified only (SRL_Indicator = V).

CRITICAL FACILITIES

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain.

Table 9.17-13. Potential Flood Losses to Critical Facilities and Lifelines

Name	Type	Exposure		Status of Mitigation
		1% Event	0.2% Event	
Lincoln Park Hose Company 2*	Fire		x	
Lincoln Park Airport	Air	x	x	2020-Borough of Lincoln Park-005
Lincoln Park Station	Rail		x	
Two Bridges Sewerage Authority*	Wastewater	x	x	2020-Borough of Lincoln Park-004
Lincoln Park Borough DPW*	DPW	x	x	The DPW was mitigated post Irene. Electrical components and gas pumps were elevated to prevent flood damages.

*Identified lifeline

ADDITIONAL IDENTIFIED VULNERABILITIES

The jurisdiction has identified the following vulnerabilities within their community:

- Approximately 68-percent of the Borough of Lincoln Park is in the 100-year floodplain (FEMA Special Flood Hazard Area). This is largely due to the presence of two of the largest (by drainage area) rivers in northern New Jersey. The Passaic River helps shape the southern municipal border while the Pompton River shapes the eastern municipal boundary. The risk for flooding can vary within the same neighborhood and even property to property. When the Borough experiences a flooding event all residents are affected; roads and bridges are closed and power failures and outages may occur.
- When significant flooding events occur, there are major issues with ingress and egress. Southern exit (two bridges road), eastern (Route 202 near Wayne border). Only option to exit town is through Montville through 287.
- The Lincoln Park Airport is located in the 100-year floodplain.
- The Two Bridges Sewerage Authority is located in the hundred-year floodplain and is a lifeline facility.
- The DPW yard is located in the 100-year floodplain and is a lifeline facility.

HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Borough of Lincoln Park that illustrate the probable areas impacted within the municipality. 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 have been generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Borough of Lincoln Park has significant exposure. Refer to Figures 9.17-1 and 9.17-2.

HAZARD RANKING

This section includes 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 5 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; its potential impacts on people, property, and the economy; 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 4.3 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Morris County as a whole. Therefore, each jurisdiction ranked the degree of risk to each hazard as it pertains to their community factoring in their capabilities to withstand impacts and bounce back after the event. The table below summarizes the hazard rankings of potential natural hazards for the Borough of Lincoln Park. The Borough of Lincoln Park has reviewed the Morris County hazard ranking table, as well as its individual results, to reflect the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Borough indicated the following:

- The Borough changed the hazard ranking for disease outbreak from high to medium
- The Borough changed the hazard ranking of harmful algal bloom from low to medium.
- The Borough changed the hazard ranking of infestation from medium to high.
- The Borough changed the hazard ranking of severe weather from high to medium.
- The Borough changed the hazard ranking of severe winter storm from high to medium.

Table 9.17-14. Borough of Lincoln Park Hazard Ranking Input

Dam Failure	Drought	Earthquake	Extreme Temperature	Flood	Geological Hazard
Medium	Medium	Medium	Medium	High	Medium

Harmful Algal Bloom	Severe Storm	Severe Winter Storm	Wildfire	Hazardous Substances	Disease Outbreak	Infestation
Medium	Medium	Medium	Medium	High	Medium	High

9.17.7 Mitigation Strategy and Prioritization

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

PAST MITIGATION INITIATIVE STATUS

The following table summarizes the jurisdiction’s progress on their mitigation strategy identified in the 2015 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 can also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.17-15. Status of Previous HMP Mitigation Actions

2015 Action Number Action Description	Responsible Party	Status (In Progress, No Progress, Ongoing Capability, or Completed)	Include in the 2020 HMP Update?	
			Check if Yes	Enter 2020 HMP Action #
BLP-1: Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable.	Borough OEM	In Progress	X	2020-Borough of Lincoln Park-001
BLP-2: Mitigate Pompton / Passaic River chokepoints via debris-clearing and/or dredging	Borough OEM	In Progress	X	2020-Borough of Lincoln Park-002
BLP-3: Elevate Two Bridges Road (major road and evacuation route); engineering study.	Borough OEM	No Progress	X	2020-Borough of Lincoln Park-003
BLP-4: TBSA Treatment Plant; flood mitigation/engineering study to determine appropriate flood mitigation actions.	Two Bridges Sewerage Authority	In Progress	X	2020-Borough of Lincoln Park-0004
BLP-5: Develop all hazards public education and outreach program for hazard mitigation and preparedness	Borough OEM	Complete		

In addition to the above progress, the Borough of Lincoln Park identified the following mitigation projects/activities that were completed but not identified in the 2015 HMP mitigation strategy:

- The Borough of Lincoln Park partnered with Pequannock to clear the East Ditch of debris, vegetation, and silt.

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Lincoln Park participated in a risk assessment workshop in November 2019 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Borough of Lincoln Park participated in a mitigation action workshop in March 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Morris County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; and 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). Section 6 (Mitigation Strategy) and Appendix F (Mitigation Strategy Supplement) provide a more complete description of the Mitigation Toolbox and its resources.

Table 9.17-16 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Lincoln Park would like to pursue in the future to reduce the effects of hazards. Some of these initiatives might be previous actions carried forward for this HMP update. Initiatives are dependent upon available funding (grants and local match availability) and can 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 criteria were used to evaluate each action, including an evaluation of the benefits and costs. For each new mitigation action, a numeric rank was assigned (-1, 0, or 1) for each of the 14 evaluation criteria. The results of this evaluation, in addition to input from the jurisdiction, were then used to prioritize the mitigation initiatives as 'High', 'Medium', or 'Low.' Table 9.17-17 summarizes the evaluation of each mitigation initiative and the resulting priority, listed by Action Number.



Table 9.17-16. Proposed Hazard Mitigation Initiatives and Action Priority

Initiative Number	Mitigation Initiative Name	Description of the Problem	Description of the Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
2020-Borough of Lincoln Park-001	Mitigate flood-prone properties, including RL/SRL properties	The Borough has repetitive loss properties.	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. The Borough will focus on acquisition as the primary mitigation action.	Existing	Flood, Severe Storm	1, 2, 5	Borough OEM, Public Works, Engineering	FEMA HMGP and FMA, local cost share by residents	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	\$6 Million	3 years	High	SIP	PP
2020-Borough of Lincoln Park-002	Mitigate Pompton / Passaic River chokepoints	Chokepoints along the Pompton/ Passaic River contribute to flooding.	Mitigate Pompton / Passaic River chokepoints via debris-clearing and/or dredging with an additional focus on the clearing of invasive plant species.	Existing	Flood, Infestation	1, 4	Borough OEM, Public Works in cooperation with neighboring jurisdictions	HMA Grants, Army Corp of Engineers	Reduction in flooding	\$125,000	Within 5 years	High	SIP, NSP	SP, NR
2020-Borough of Lincoln Park-003	Elevate Two Bridges Road	Two bridges Road is a major road and evacuation route which is prone to flooding.	Elevate Two Bridges Road (major road and evacuation route) and conduct engineering study as part of Phase 2 of neighboring bridge.	Existing	Flood, Hazardous Materials	1, 4	Borough OEM, Public Works	HMA Grants	Reduction in flood risk	\$150,000	Within 5 years	Medium	SIP	PP
2020-Borough	TBSA Treatment Plant	The Two Bridges Sewerage Authority	Undergo a flood mitigation/engineering study to	Existing	Flood	1, 2,	FPA, facility manager	Municipal budget,	Reduction in	TBD	Within	Medium	EAP	PI



Initiative Number	Mitigation Initiative Name	Description of the Problem	Description of the Solution	New or Existing Assets?	Hazard(s) to be Mitigated	Goals Met	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Cost	Timeline	Priority	Mitigation Category	CRS Category
of Lincoln Park-004		Treatment Plant is located in the 100-year floodplain. The facility is privately owned.	determine appropriate flood mitigation actions.					HMGP, FMA	flood risk		6 months			
2020-Borough of Lincoln Park-005	Lincoln Park Airport	The Lincoln Park Airport is located in the 100-year floodplain. The facility is privately owned.	Undergo a flood mitigation/engineering study to determine appropriate flood mitigation actions.	Existing	Flood	1, 2	FPA, facility manager	Municipal budget, HMGP, FMA	Reduction in flood risk	TBD	Within 6 months	Medium	EAP	PI

Notes:

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- 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

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

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 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. 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. 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. 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 9.17-17. Summary of Evaluation and Action Priority

Initiative Number	Mitigation Initiative 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
2020-Borough of Lincoln Park-001	Mitigate flood-prone properties, including RL/SRL properties	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2020-Borough of Lincoln Park-002	Mitigate Pompton / Passaic River chokepoints	0	1	1	0	1	0	0	1	0	1	0	0	1	0	6	Medium
2020-Borough of Lincoln Park-003	Elevate Two Bridges Road	1	1	0	1	1	1	0	1	0	1	0	0	1	0	8	Medium
2020-Borough of Lincoln Park-004	TBSA Treatment Plant	0	1	1	1	1	1	1	1	0	1	0	1	1	1	11	High
2020-Borough of Lincoln Park-005	Lincoln Park Airport	0	1	1	1	1	1	1	1	0	1	0	1	1	1	11	High

Notes: Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions.



Table 9.17-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Dam Failure								
Disease Outbreak								
Drought								
Earthquake								
Extreme Temperature								
Flood		2020- Borough of Lincoln Park-001, 2020- Borough of Lincoln Park-003	2020- Borough of Lincoln Park-004, 2020- Borough of Lincoln Park-005	2020- Borough of Lincoln Park-002		2020- Borough of Lincoln Park-002		
Geologic								
Harmful Algal Bloom								
Hazardous Substances		2020- Borough of Lincoln Park-003						
Infestation				2020- Borough of Lincoln Park-002				
Severe Weather		2020- Borough of Lincoln Park-001						
Severe Winter Weather								
Wildfire								

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

RED = high ranked hazard

ORANGE = medium ranked hazard

YELLOW = low ranked hazard

9.17.8 Staff and Local Stakeholder Involvement in Annex Development

The Borough of Lincoln Park followed the planning process described in Section 2 (Planning Process). This annex was developed over the course of several months with input from many jurisdiction representatives. 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 following table summarizes who participated and in what capacity. 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 9.17-19. Contributors to the Annex

Entity	Title	Method of Participation
Perry T. Mayers	Administrator	Primary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Sal Marino	Construction Official	Attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Thomas Boorady	Borough Engineer	Attended plan participant meetings, provided impact data, contributed to the mitigation strategy



Figure 9.17-1. Borough of Lincoln Park Hazard Area Extent and Location Map

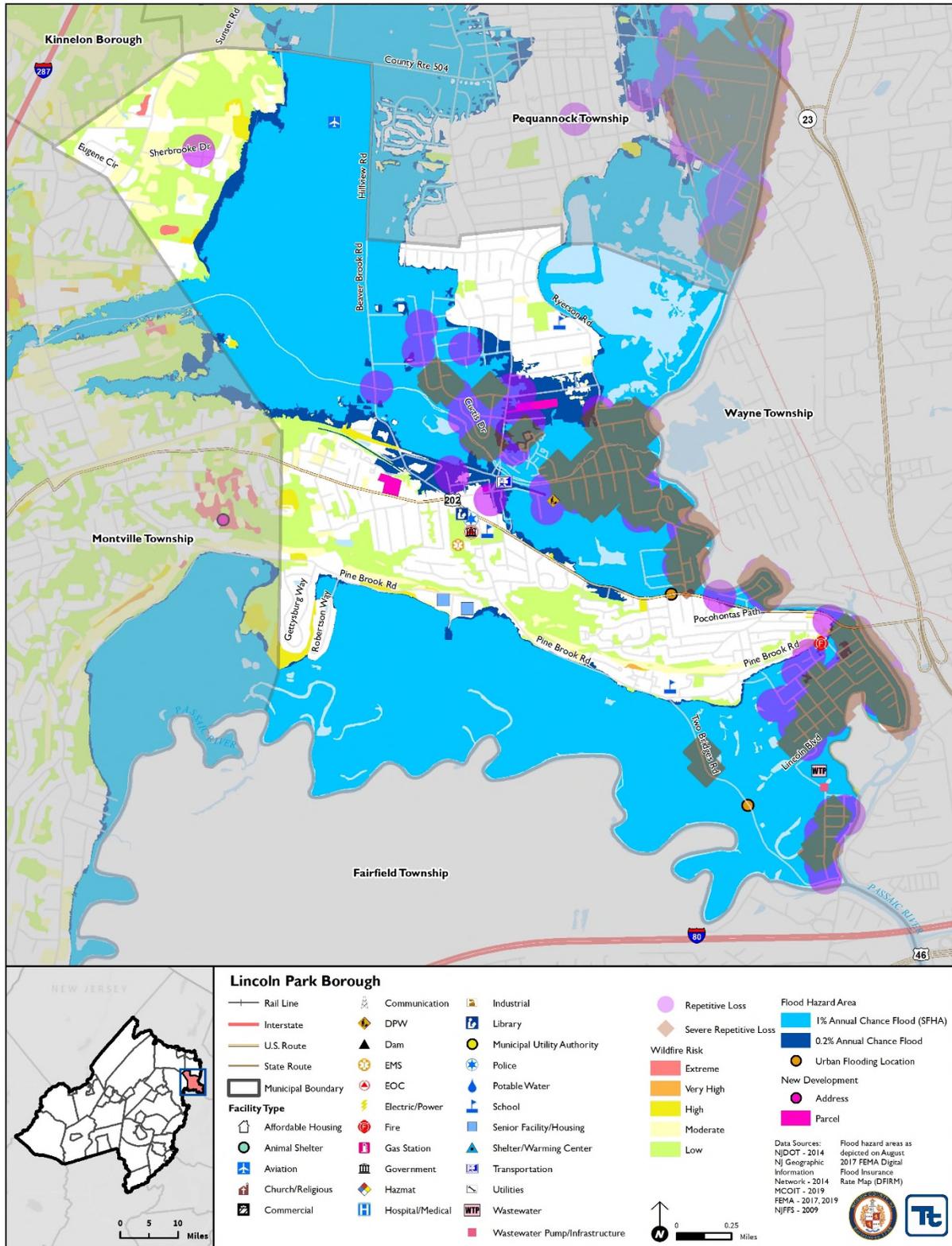
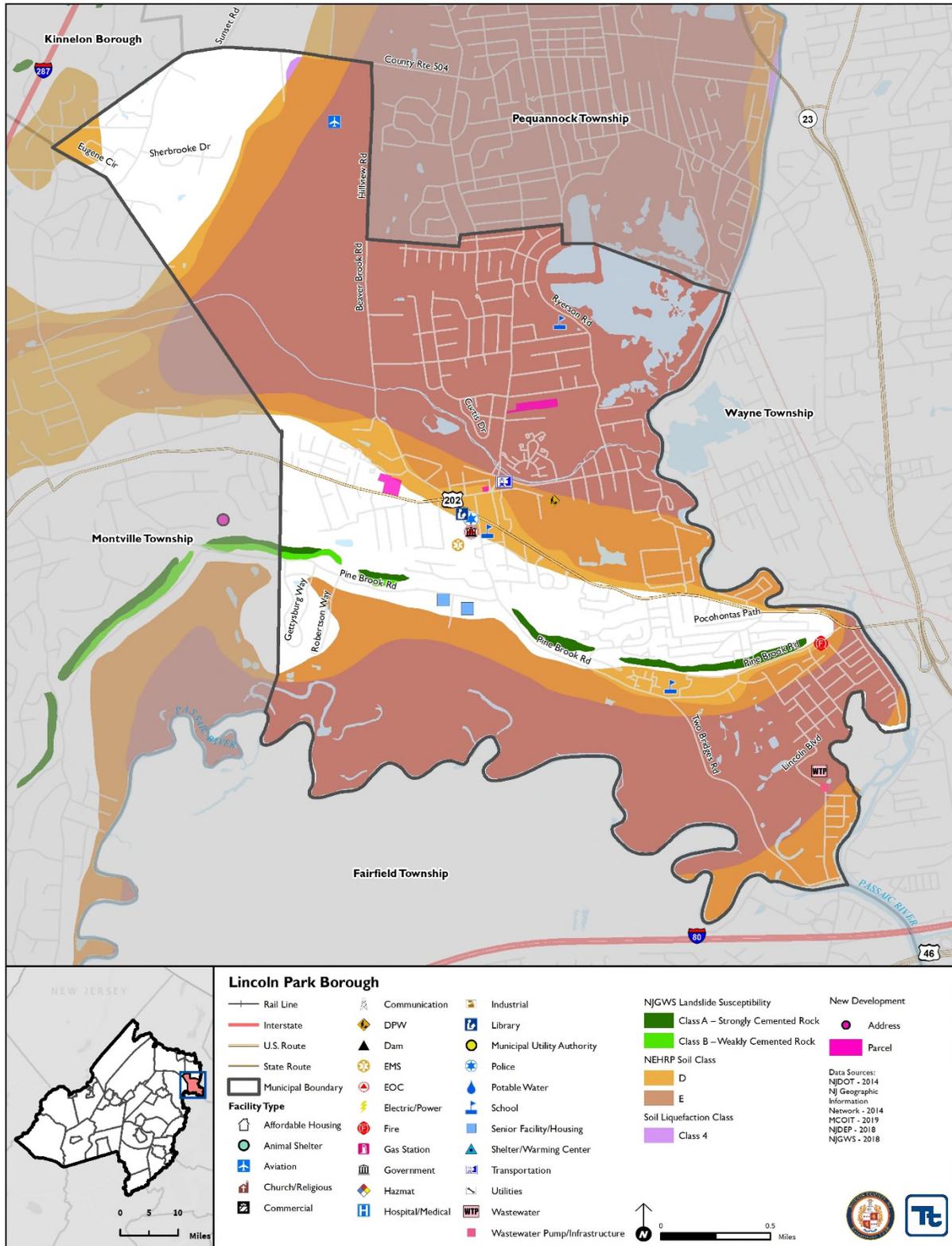




Figure 9.17-2. Borough of Lincoln Park Hazard Area Extent and Location Map





Action Worksheet			
Project Name:	Mitigate flood-prone properties, including RL/SRL properties		
Project Number:	2020-Borough of Lincoln Park-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages in the following areas: . Aspen Lane, Bank Lane, Dubrow Street, Elm Street, Riveredge Road, DeHart Street, Ryerson Road, W. William Street, Linden Avenue, Harmon Street, Woodlawn Road, Walnut Street, Roosevelt Street, Oak Street, Poplar Street, Forrest Avenue, Midwood Road, President Street, Maple Street, Pequannock Avenue, Franklin Street, Lincoln Boulevard and Pequannock Avenue. These areas are residential, and these properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	Conduct outreach to 60 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 <u>floodprone</u> areas that experience frequent flooding (high risk areas). The Borough will place an emphasis on acquisition projects as elevated homes still result in the need for emergency response.		
Is this project related to a Critical Facility or Lifeline?	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, 2, 5
Estimated Cost:	\$6Million	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, 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	\$1,000,000	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	\$1,000,000	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:	Mitigate flood-prone properties, including RL/SRL properties	
Project Number:	2020-Borough of Lincoln Park-001	
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 Borough 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 floodprone areas of the Borough
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	

Action Worksheet

Project Name:	Mitigate Pompton / Passaic River chokepoints
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Project Number:	2020-Borough of Lincoln Park-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Chokepoints along the Pompton/ Passaic River contribute to flooding. This leads to flooding of roadways.		
Action or Project Intended for Implementation			
Description of the Solution:	Mitigate Pompton / Passaic River chokepoints via debris-clearing and/or dredging (see list in "Central Passaic River Flood Reduction Measures Technical Sub-Committee Report," June 24, 2008).		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	TBD by level of dredging	Estimated Benefits (losses avoided):	Reduction in flooding on Passaic River
Useful Life:	5 years	Goals Met:	1, 4
Estimated Cost:	\$125,000	Mitigation Action Type:	Structure and Infrastructure Project, Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMA Grants, Army Corp of Engineers
Responsible Organization:	Borough OEM, Public Works in cooperation with neighboring jurisdictions	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Close roadways when flooding is forecast	Staff time	Reduction in available staff during disaster events.
	Remove roadways	\$100,000	Roadways cannot be removed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet	
Project Name:	Mitigate Pompton / Passaic River chokepoints



Project Number:	2020-Borough of Lincoln Park-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Protects roadways from flooding
Cost-Effectiveness	1	
Technical	0	
Political	1	
Legal	0	Project requires permitting
Fiscal	0	Project requires funding support
Environmental	1	Restores Passaic River
Social	0	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	
Agency Champion	1	Borough OEM, Public Works in cooperation with neighboring jurisdictions
Other Community Objectives	0	
Total	6	
Priority (High/Med/Low)	Medium	

Action Worksheet	
Project Name:	Elevate Two Bridges Road
Project Number:	2020-Borough of Lincoln Park-003



Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	Two Bridges Road is a major road and evacuation route which is prone to flooding. The neighboring bridge is currently being replaced.		
Action or Project Intended for Implementation			
Description of the Solution:	Elevate Two Bridges Road (major road and evacuation route) and conduct engineering study as part of Phase 2 of the bridge replacement effort over the Passaic River and Pompton River.		
Is this project related to a Critical Facility or Lifeline?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of Protection:	Additional elevation	Estimated Benefits (losses avoided):	Reduction in flood risk
Useful Life:	50 years	Goals Met:	1, 4
Estimated Cost:	\$150,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	HMA Grants
Responsible Organization:	Borough OEM, Public Works	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Planning, Emergency Planning
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Close roadways when flooding is forecast	Staff time	Reduction in available staff during disaster events.
	Remove roadways	\$100,000	Roadways cannot be removed
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Action Worksheet	
Project Name:	Elevate Two Bridges Road



Project Number:	2020-Borough of Lincoln Park-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Evacuation route protected from flooding
Property Protection	1	Roadway protected from flooding
Cost-Effectiveness	0	
Technical	1	
Political	1	
Legal	1	The Borough has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	0	Protects evacuation route
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	
Agency Champion	1	Borough OEM, Public Works
Other Community Objectives	0	
Total	8	
Priority (High/Med/Low)	Medium	