

9.10 BOROUGH OF HAMBURG

This section presents the jurisdictional annex for the Borough of Hamburg. The annex includes a general overview of the Borough of Hamburg; an assessment of the Borough of Hamburg'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.

9.10.1 Hazard Mitigation Planning Team

The Borough of Hamburg 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 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 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 9.10-1. Hazard Mitigation Planning Team

Primary Poir Name / Title: Keith Sukennik Address: 16 Wallkill Avenue, Phone Number: (973) 670-01	e, Hamburg, NJ 07419 Address: 16 V		Alternate Point of Contact e: Michael Postorino, Public Safety/Police Director Wallkill Avenue, Hamburg, NJ 07419 ber: (973) 827-9230		
Email: oem@hamburgnj.org		Email: mposte	orino@hamburgpolice.org		
NFIP Floodplain Administrator Name / Title: John Ruschke, Borough Engineer Address: 412 Mt. Kemble Avenue, Suite G22 Morristown NJ 07960 Phone Number: (973) 827-9230 Email: John.ruschke@mottmac.com					
Name	Title		Method of Participation		
John Ruschke, PE & Samantha Anello, PE	Borough Engineer		NFIP, floodplain managers, contributed to the mitigation strategies, reviewed annex. John attended the kickoff meeting. Samantha attended the risk assessment meeting and mitigation strategy workshop.		
Keith Sukennikoff	OEM Coordinator		Primary point of contact; attended the kickoff meeting		
Michael Postorino	Public Safety/Police Directo	or	Alternate point of contact		

9.10.2 Jurisdiction Profile

The Borough of Hamburg is located in northern Sussex County. It is bordered to the north, east and west by the Township of Hardyston and to the south by the Borough of Franklin. The Borough covers an area of approximately 1.2 square miles. A tributary of the Wallkill River flows through the northern section of the Borough and along the Wallkill River forms the western border between the Borough and Township of Hardyston. Hamburg Creek is located in the southern end of the Borough. Hardistonville is an unincorporated area of the Borough.





According to the U.S. Census, the 2010 population for the Borough of Hamburg was 3,277. The estimated 2018 population was 3,152, a 3.8 percent decrease from the 2010 Census. Data from the 2018 U.S. Census American Community Survey indicate that 4.2 percent of the population is 5 years of age or younger and 15.4 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.

9.10.3 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 9.9-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development.

Type of Development	2	015	2	016	2	2017 2018		2019		
Number of I	Building	Permits f	or New (Constructi	on Issue	d Since th	e Previo	us HMP		
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single and Two-Family Units	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed- use, etc.)	0	0	0	0	0	0	0	0	0	0
Property or Development Name Re	Devel	ype of opment jor Develo	Stru	Units / ctures nd Infras	(ad and/o ano	ation dress or block 1 lot) from 201	Ha Zon	own zard ie(s)*	Stat	iption / cus of opment
Fairways at Wallkill	Reside	ntial	68			Block	Incider Area, Hazard Materia Incider Nuclea Incider Area,	Hazard Railway at Hazard lous al at Area, r at Hazard hate Soil, Slopes,	Ongoin	g
Known or Anti	cipated	Major Dev	velopme	nt and Inf	rastruct	ure in the	Next Fiv	ve (5) Year	rs	
			None	anticipate	d					

Table 9.10-2. Recent and Expected Future Development

* Only location-specific hazard zones or vulnerabilities identified. SFHA = Special Flood Hazard Area





9.10.4 Capability Assessment

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

- 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 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-today 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 with current mitigation integration are summarized below. The Borough of Hamburg identified specific integration activities that will be incorporated into municipal procedures; these actions 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 Hamburg and where hazard mitigation has been integrated.

				been integra codes/ordin	ts of the HMP ated into your ances/plans?	
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.	
Codes, Ordinances, & Requirements						
Building Code	Yes	State & Local	Yes	Yes	_	
 Adopted 9/3/2019 This code follows State Uniform Constr 	uction Code Act (N.	J.S. 52:27D-119 et seq	Yes – if			
This code follows State Uniform Constr Zoning Code	uction Code Act (N Yes	<u>J.S. 52:27D-119 et seq</u> Local	(Yes		
	105	Local	Planning Board	105		
 Comment: State permissive on local level. 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. The Zoning Department is responsible for this code in compliance with Chapter 215. 						
Subdivisions	Yes	Local	Yes – if municipality has a	Yes	-	

Table 9.10-3. Planning, Legal and Regulatory Capability





				Have aspects of the HM been integrated into yo codes/ordinances/plan	
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, i applicable
			Planning Board		
Comment:			Board		
 The governing body may by ordinance the filing of such plats with the county condition for the issuance of a permit, or two dwelling-unit buildings shall be of adjustment shall substitute for that or site plan pursuant to subsection 63. freeholders of any county having a coby said county planning board and fo and limited hereinafter in this section The LUB is responsible for this ordinal county for the subsection of the subsection of the subsection of the subsection of the section the subsection for the section the subsection for the subsection of the subsection o	recording officer and for any development, e exempt from such si of the planning board b. of this act . Dictate unty planning board s r the approval of thos unce in compliance wi	d approval of site plan. except that subdivision te plan review and app whenever the board of d by the Municipal Lan shall provide for the r se subdivisions affection ith Chapter 186.	s by resolution of a n or individual lot proval; provided th f adjustment has j nd Use Law. NJ Sa eview of all subdiv g county road or	the planning bod applications for hat the resolution urisdiction over tatute 40:27-6.2 visions of land w drainage facilith	ard as a detached ond n of the board a subdivision - the board oj ithin the coun
Stormwater Management	Yes	Local	Yes	Yes	-
Comment: See Title 7 of the NJ Administrative C The LUB is responsible for this ordina		ith Chapter 182.			
Post-Disaster Recovery	No	-	No	-	-
Comment:					
Real Estate Disclosure	Yes	State, Division of Consumer Affairs	Yes	Yes	
Comment: N.J.A.C. 13:45A-29.1 - Before signing (POS) approved by the New Jersey Real Estate C	ommission. The POS	provides information s	such as estimated	completion date.	s for
	ommission. The POS e type of title and own	provides information s nership interest being o	such as estimated offered, its proxim Yes – if	completion date.	s for
(POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th	ommission. The POS e type of title and own	provides information s nership interest being o	such as estimated offered, its proxim Yes – if municipality has a Planning	completion date.	s for
(POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management	commission. The POS e type of title and own nces in or around the No	provides information s nership interest being o subdivision. -	such as estimated offered, its proxim Yes – if municipality has a Planning Board	completion date: ity to hospitals, . -	s for schools, fire -
(POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management Comment:	ommission. The POS e type of title and own nces in or around the No See Zoning Ordinanc delineation of Growth	provides information s nership interest being a subdivision. - - e ; Also - Plan Endors a Areas and Environs;	such as estimated offered, its proxim Yes – if municipality has a Planning Board ement Process via Use of the endorse	completion date ity to hospitals, . - the State Devel ed plans in the in	s for schools, fire - opment &
(POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management Comment: • State Mandated on a municipal level. Redevelopment Plan provides for the o	ommission. The POS e type of title and own nces in or around the No See Zoning Ordinanc delineation of Growth	provides information s nership interest being a subdivision. - - e ; Also - Plan Endors a Areas and Environs;	such as estimated offered, its proxim Yes – if municipality has a Planning Board ement Process via Use of the endorsu- management strat Yes – if municipality has a Planning	completion date ity to hospitals, . - the State Devel ed plans in the in	s for schools, fire - opment &
(POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management Comment: • State Mandated on a municipal level. Redevelopment Plan provides for the of state environmental regulations ma Site Plan Review Comment:	ommission. The POS e type of title and own nces in or around the No See Zoning Ordinanc delineation of Growth kes the Plan Endorse Yes	provides information s hership interest being a subdivision. - e ; Also - Plan Endors a Areas and Environs; ment process a growth Local	such as estimated offered, its proxim Yes – if municipality has a Planning Board ement Process via Use of the endorse management strat Yes – if municipality has a Planning Board	completion date ity to hospitals, . - the State Devel ed plans in the in tegy. Yes	s for schools, fire - opment & nplementation -
 (POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management State Mandated on a municipal level. Redevelopment Plan provides for the of state environmental regulations ma Site Plan Review Comment: Dictated by the Municipal Land Use I review. NJ Statute 40:27-6.2: The boa of all subdivisions of land within the c county road or drainage facilities as s boards shall have a complete file of th shall file with the county planning boa date of this act and shall notify the cou which affects lands adjoining county proposed facilities or public lands sha county planning board at least 10 day the official notice of the public hearin, 	ommission. The POS e type of title and own nces in or around the No See Zoning Ordinanc delineation of Growth kes the Plan Endorse Yes wwwhich sets forth n ord of freeholders of a ounty by said county et forth and limited h e planning and zonin, and a copy of the plan- unty planning board county won on the county ma s prior to the public h g together with a copy	provides information s hership interest being of subdivision. - - e ; Also - Plan Endors a Areas and Environs; ment process a growth Local Local - - g ordinances of all mu ning board and fa ereinafter in this secti g ordinances of all mu ning and zoning ordina of the introduction of a lands, or lands lying y ster plan or official co tearing thereon by per- y of the proposed ordin	such as estimated offered, its proxim Yes – if municipality has a Planning Board ement Process via Use of the endorse management strat Yes – if municipality has a Planning Board for plans, etc., tim anty planning boa or the approval of on. 40:27-6.10 In nicipalities in the ances of the munic uny revision or am within 200 feet of ounty map. Such n sonal delivery or b	completion date. ity to hospitals, . ity to hospitals, . the State Devel- ed plans in the in tegy. Yes Yes verd shall provide those subdivision order that count ipality in effect tendment of such a municipal bon totice shall be gi	s for schools, fire - opment & nplementation - elopment s of the revie ns affecting nicipal clerk on the effectiv an ordinanco undary, or ven to the
 (POS) approved by the New Jersey Real Estate C improvements, fees for services and amenities, th and police, as well as any hazards, risks or nuisa Growth Management State Mandated on a municipal level. Redevelopment Plan provides for the of state environmental regulations ma Site Plan Review Comment: Dictated by the Municipal Land Use I review. NJ Statute 40:27-6.2: The boa of all subdivisions of land within the c county road or drainage facilities as s boards shall have a complete file of th shall file with the county planning boa date of this act and shall notify the con which affects lands adjoining county proposed facilities or public lands sha county planning board at least 10 day 	ommission. The POS e type of title and own nces in or around the No See Zoning Ordinanc delineation of Growth kes the Plan Endorse Yes wwwhich sets forth n ord of freeholders of a ounty by said county et forth and limited h e planning and zonin, and a copy of the plan- unty planning board county won on the county ma s prior to the public h g together with a copy	provides information s hership interest being of subdivision. - - e ; Also - Plan Endors a Areas and Environs; ment process a growth Local Local - - g ordinances of all mu ning board and fa ereinafter in this secti g ordinances of all mu ning and zoning ordina of the introduction of a lands, or lands lying y ster plan or official co tearing thereon by per- y of the proposed ordin	such as estimated offered, its proxim Yes – if municipality has a Planning Board ement Process via Use of the endorse management strat Yes – if municipality has a Planning Board for plans, etc., tim anty planning boa or the approval of on. 40:27-6.10 In nicipalities in the ances of the munic uny revision or am within 200 feet of ounty map. Such n sonal delivery or b	completion date. ity to hospitals, . ity to hospitals, . the State Devel- ed plans in the in tegy. Yes Yes verd shall provide those subdivision order that count ipality in effect tendment of such a municipal bon totice shall be gi	s for schools, fire - opment & nplementation - elopment s of the revie ns affecting nicipal clerk on the effectiv an ordinanco undary, or ven to the

Comment: Chapter 215-20 of the Hamburg Code regulates development in critical areas. According to the code, all open water, streams, ponds, detention basins, wetlands as defined on the Army Corps of Engineers' wetlands survey and floodplains shall be excluded from the land area used by an applicant for development in the calculation of permitted densities for construction.





				Have aspects of the HMP been integrated into your codes/ordinances/plans?		
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.	
Flood Damage Prevention	Yes	Federal, State & Local	Yes	Yes	-	
Comment: • The NJ State Law Flood Area Control federal acts to support minimization of floodplain ordinances of each municipathe NFIP requires a floodplain ordinar effective June 20, 2016. • The Construction Official is responsible	flood losses. They d ality must be reviewe ace. Regulations for le for this ordinance	o not require local ad d for compliance with the Flood Control Ha	option but as enfo these regulations. zards Act were ad apter 215-20.	rced by the NJD In addition, pa	EP, the rticipation in	
Wellhead Protection	No		No	-	-	
Comment:				1		
Emergency Management	Yes	State and Local	No	No	-	
Comment: Chapter 20 Fire Department Chapter 44 Police Department						
Climate Change	No	-	No	-	-	
Comment:						
Disaster Recovery Ordinance	No	-	No	-	-	
Comment:						
Disaster Reconstruction Ordinance	No		No	-	-	
Comment:						
Other: Municipal Separate Storm Sewer System (MS4)	Yes	Local	No	Yes	-	
Comment: The DPW is responsible for this ordina	ance in compliance w	ith Chapter 182.				
Planning Documents			1			
Comprehensive / Master Plan	Yes	Local	Yes	Yes	-	
 2018 Revised NJ Statute 40:27-2; the of the county. The master plan of a county show the county planning board's reco- among other things, the general locati developments, parkways, playgrounds, the general location and extent of fores water supply, sanitary and drainage for important to the development of the cou- municipalities within the county in any advise the board of chosen freeholders expenditures. Per State of NJ Municipal components of a municipal Master Pla Further, all zoning ordinances must be The LUB is responsible for this plan. T 	y, with the accompany mmendations for the ion, character, and ex- forests, reservation, sts, agricultural area acilities, or the protec- unty. The county plan matters whatsoever with respect to the fa al Land Use Law (MI n and requires that e consistent with the l	ying maps, plats, char development of the te stent of streets or road s, parks, airports, and s, and open-developm ction of urban develop uning board shall enco which may concern th prmulation of develop LUL) L. 1975, s. 2, eff ach municipality prep Master Plan or will no	ts, and descriptive rritory covered by s, viaducts, bridge other public ways sent areas for purp ment, and such or purage the co-oper e integrity of the c nent programs an Aug 1, 1976 40:52 are a master plan t be benefitted from	e and explanator p the plan, and n es, waterway and , grounds, place poses of conserve ther features as ration of the loca ounty master pla d budgets for ca 5D-28 provides 1 and update it ev m a presumptior	y matter, shall aay include, d waterfront s and spaces; ation, food and may be al m and to upital he required ery 6 years. o f validity.	
2006.	NT-		N -			
Capital Improvement Plan Comment:	No	-	No	-	-	
	No	_	No	-	2020- Hamburg-	
Disaster Debris Management Plan	110				•	
Disaster Debris Management Plan Comment:					006	



	enforces (Federal, State Do you have Regional,			Have aspects of the HMP been integrated into your codes/ordinances/plans?		
		(Federal, State,	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.	
Comment:						
Stormwater Management Plan	Yes	Local	Yes	Yes	-	
 The Stormwater Management rules (N.J. the required components of regional and design and performance standards for minclude groundwater recharge, runoff q consideration, the use of nonstructural simpervious surfaces, minimizing the use requirements for groundwater recharge of major development to be located with without prior authorization from the De This plan was adopted on April 20,2005 The MC is responsible for this plan in c 	d municipal stormw new (proposed) deve uantity controls, an stormwater manage e of stormwater pipe e, stormwater runoff nin or to discharge r epartment under the 5.	ater management plan lopment. The design a d runoff quality contro ment techniques inclua s, preserving natural a quantity control, storn unoff from the major a Flood Hazard Area C	s and establish th nd performance s ls. The rules empl ling minimizing du lrainage features, nwater runoff qua levelopment into c	e stormwater ma tandards for new hasize, as a prim isturbance, minin etc. The rules at lity control, and a 300-foot ripari	nagement development ary mizing so set forth the prohibition	
Stormwater Pollution Prevention Plan	No	<i>plet</i> 182.	No	-		
associated with existing stormwater run as required under the Federal Clean W operate small municipal separate storm municipalities, certain public complexes or maintain highways. The permit prog nonpoint source pollutant loads from th ordinance (litter events)	ater Act. These NJP s sewer systems, kno s such as universitie ram establishes the s sese sources. The Sta	DES rules govern the wn as MS4s. Under th s and hospitals, and S. Statewide Basic Requi ttewide Basic Requirer	issuance of permit is program, permi tate, interstate and rements that must	ts to entities that its must be secur l federal agencie be implemented	own or ed by es that operate to reduce	
 ordinances (litter control, pet waste, wi management plan and implementing ord basin cleaning); implementing solids an education component. Hamburg is a Tier B community and a solution 	dinance(s); requirin ad floatables control	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin	of a municipal s s street sweeping	tormwater g and catch	
management plan and implementing ord basin cleaning); implementing solids an education component.	dinance(s); requirin ad floatables control	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin	of a municipal s s street sweeping	tormwater g and catch	
 management plan and implementing ord basin cleaning); implementing solids an education component. Hamburg is a Tier B community and a solution 	dinance(s); requirin ad floatables control Stormwater Pollutio	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required.	of a municipal s s street sweeping	tormwater g and catch	
 management plan and implementing ord basin cleaning); implementing solids an education component. Hamburg is a Tier B community and a S Urban Water Management Plan 	dinance(s); requirin ad floatables control Stormwater Pollutio	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required.	of a municipal s s street sweeping	tormwater g and catch	
 management plan and implementing ord basin cleaning); implementing solids an education component. Hamburg is a Tier B community and a S Urban Water Management Plan Comment: 	dinance(s); requirin ad floatables control Stormwater Pollutio No	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required. No	of a municipal s s street sweeping	tormwater g and catch	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan	dinance(s); requirin ad floatables control Stormwater Pollutio No	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required. No	of a municipal s s street sweeping	tormwater g and catch	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment:	dinance(s); requirin ad floatables control Stormwater Pollutio No No	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required. No No	of a municipal s s street sweeping	tormwater g and catch	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan	dinance(s); requirin ad floatables control Stormwater Pollutio No No	g certain maintenance ; locating discharge p	activities (such a. oints and stencilin ot required. No No	of a municipal s s street sweeping	tormwater g and catch	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment:	dinance(s); requirin ad floatables control Stormwater Pollutio No No No U.J.S.A. 13:19) or C4 enlargement of buil	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, grad	of a municipal s s street sweeping g catch basins; - - - along the coast f ding, shore prote	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning): implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This la	dinance(s); requirin ad floatables control Stormwater Pollutio No No No U.J.S.A. 13:19) or C4 enlargement of buil	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, grad	of a municipal s s street sweeping g catch basins; - - - along the coast f ding, shore prote	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This la Community Wildfire Protection Plan	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or C/ enlargement of build aw is implemented ti	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development a d excavation, grad one management f	of a municipal s s street sweeping g catch basins; - - - along the coast f ding, shore prote	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning): implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This la Comment:	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or C/ enlargement of build aw is implemented ti	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development a d excavation, grad one management f	of a municipal s s street sweeping g catch basins; - - - along the coast f ding, shore prote	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This la	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or Ca enlargement of buil aw is implemented to No	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, gration No	of a municipal s s street sweeping ag catch basins; - - - - along the coast f ding, shore prote Rules N.J.A.C. 7 -	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This le Community Wildfire Protection Plan Comment: Comment:	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or Ca enlargement of buil aw is implemented to No	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, gration No	of a municipal s s street sweeping ag catch basins; - - - - along the coast f ding, shore prote Rules N.J.A.C. 7 -	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This lo Comment: Comment: • Community Wildfire Protection Plan Comment:	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or Ca enlargement of built aw is implemented to No No	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, grad one management i No	of a municipal s s street sweeping ag catch basins; - - - - along the coast f ding, shore prote Rules N.J.A.C. 7 -	and catch and a public - - - - - - - - - - - - - - - - - - -	
management plan and implementing ord basin cleaning); implementing solids an education component. • Hamburg is a Tier B community and a S Urban Water Management Plan Comment: Habitat Conservation Plan Comment: Economic Development Plan Comment: Shoreline Management Plan Comment: • NJ Coastal Area Facility Review Act (N including construction, relocation, and structures, and site preparation. This le Community Wildfire Protection Plan Comment: Comment: Comment: Community Forest Management Plan Comment: Transportation Plan	dinance(s); requirin ad floatables control Stormwater Pollutio No No No I.J.S.A. 13:19) or Ca enlargement of built aw is implemented to No No	g certain maintenance ; locating discharge p n Prevention Plan is n - - - - AFRA regulates almos dings or structures, an	activities (such a. oints and stencilin ot required. No No Yes – if located in a coastal zone t all development of d excavation, grad one management i No	of a municipal s s street sweeping ag catch basins; - - - - along the coast f ding, shore prote Rules N.J.A.C. 7 -	and catch and a public - - - - - - - - - - - - - - - - - - -	





				Have aspects of the HMF been integrated into you codes/ordinances/plans	
	Do you have this? (Yes/No)	Authority that enforces (Federal, State, Regional, County, Local)	Is this State Mandated?	If yes- how? Describe in comments.	If no - add Mitigation Action #, if applicable.
Climate Action Plan	No	-	No	-	-
Comment:				-	
Tourism Plan	No	-	No	-	-
Comment:					
Business Development Plan	No	-	No	-	-
Comment:					
Other: Open Space Plan	Yes	Local	No	No	-
Comment: This plan was adopted on June 24, 200. The MC is responsible for this plan in c		pter 215.			
Response/Recovery Planning					
Comprehensive Emergency Management Plan (CEMP) / Emergency Operations Plan (EOP)	Yes	Local	Yes	Yes	-
 Each county and municipality in the Stancessary to implement the plan. Each a Emergency Planning Guidelines have b subsequent scheduled review of the Stance This plan was adopted in 2010, updated Threat & Hazard Identification & Risk 	Emergency Operation een adopted by the life te Emergency Opera l in March 2019, and is responsible for the	ons Plan shall be adopt State Office of Emerger tions Plan. L.1989, c.2 d approved by the New	ted no later than o ncy Management 22, s.19. • Jersey State Poli	one year after the and shall be eva	e State
Assessment (THIRA)	No	-	No	-	-
Comment:					
Post-Disaster Recovery Plan	No	-	No	-	-
Comment:				-	
Continuity of Operations Plan	No	-	No	-	-
Comment:					
Public Health Plan	Yes	County	Yes	-	-
<i>Comment:</i> There is a public health plan within the Department.	Emergency Operation	ons Plan and is subjec	t to the jurisdiction	on of the Sussex	County Health
Other	No	-	No	-	-
Comment:					

Table 9.10-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes, Construction Department
Does your jurisdiction have the ability to track permits by hazard area?	Yes, the Borough has access to the County GIS system
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.	No





ADMINISTRATIVE AND TECHNICAL CAPABILITY

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

Staff/Personnel Resource	Available?	Department/Agency/Position
Administrative Capability	invaliable.	Department/Hgeney/Fosition
Planning Board	Yes	Lane Use Board
Mitigation Planning Committee	No	_
Environmental Board / Commission	No	· ·
Open Space Board / Committee	Yes	Land Use Board, Recreation Commission
Economic Development Commission / Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	No	·
Maintenance program to reduce risk	No	-
Mutual aid agreements	Yes	Mayor and Council
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Mayor and Council
Engineers or professionals trained in building or infrastructure construction practices	Yes	Mayor and Council
Planners or engineers with an understanding of natural hazards	Yes	Mayor and Council
Staff with training in benefit/cost analysis	Yes	Engineer
Staff with training in green infrastructure	Yes	Engineer
Staff with education/knowledge/training in low impact development	Yes	Engineer
Surveyor	Yes	Mayor and Council
Stormwater engineer	Yes	Engineer
Personnel skilled or trained in GIS applications	Yes	Mayor and Council
Local or state water quality professional	Yes	John Perry-
Scientist familiar with natural hazards in local area	Yes	Mayor and Council
Emergency manager	Yes	Mayor and Council
Watershed planner	No	-
Environmental specialist	Yes	Engineer
Grant writers	Yes	Jeff Stevens
Resilience Officer	No	-
Other: NFIP Floodplain Administrator	Yes	Construction Official, Engineer

Table 9.10-5. Administrative and Technical Capabilities

FISCAL CAPABILITY

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

Table 9.10-6. Fiscal Capabilities

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes





Financial Resource	Accessible or Eligible to Use?
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	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	Yes

EDUCATION AND OUTREACH CAPABILITY

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

Table 9.10-7. Education and Outreach Capabilities

Criterion	Response
Do you have a public information officer or communications office?	No
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.	No
Do you use social media for hazard mitigation education and outreach? -If yes, briefly describe.	No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? -If yes, briefly describe.	No
Do you have any other programs already in place that could be used to communicate hazard-related information? If yes, briefly describe.	No

COMMUNITY CLASSIFICATIONS

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

Table 9.10-8. Community Classifications

Program	Participating?	Classification	Date Classified
Community Rating System	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	Hardyston Building Department	Hardyston Building Department
Public Protection (Fire ISO Protection Class)	Yes	Hardyston Building Department	Hardyston Building Department
Storm Ready Certification	No	-	-
Firewise Community Classification	No	-	-
Sustainable Jersey	No	-	-

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.

Hazard	Adaptive Capacity (Capabilities) - Strong/Moderate/Weak		
Dam Failure	Weak		
Disease Outbreak	Weak		
Drought	Moderate		
Earthquake	Weak		
Flood	Moderate		
Geologic	Moderate		
Hazardous Materials	Moderate		
Hurricane and Tropical Storm	Moderate		
Invasive Species	Moderate		
Nor'Easter	Moderate		
Severe Weather	Moderate		
Severe Winter Weather	Moderate		
Wildfire	Moderate		

Table 9.10-9. Adaptive Capacity

Notes:

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; 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 0 10-10	National	Flood	Incura	nco Program	Compliance
Table 9.10-10.	Nationa		i msui ai	nce i i ogi am	compliance

Criterion	Response
What local department is responsible for floodplain management?	Engineering
Who is your floodplain administrator? (name, department/position)	John Ruschke, PE, CFM – Borough Engineer; Samantha Anello, PE, CFM - Engineering
Are any certified floodplain managers on staff in your jurisdiction?	Yes - John Ruschke, PE, CFM – Borough Engineer; Samantha Anello, PE, CFM - Engineering
What is the date that your flood damage prevention ordinance was last amended?	August 2011
Does your floodplain management program meet or exceed minimum requirements? -If exceeds, in what ways?	The program meets minimum requirements.
When was the most recent Community Assistance Visit or Community Assistance Contact?	December 7, 1994
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? -If so, state what they are.	No
Are any RiskMAP projects currently underway in your jurisdiction?	No





Criterion	Response
If so, state what they are.	
Do your flood hazard maps adequately address the flood risk within your jurisdiction? -If no, state why.	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? - If so, what type of assistance/training is needed?	The FPA would consider attending continuing education and/or certification training on floodplain management if offered.
Does your jurisdiction participate in the Community Rating System (CRS)? -If yes, is your jurisdiction interested in improving its CRS Classification? -If no, is your jurisdiction interested in joining the CRS program?	No
How many flood insurance policies are in force in your jurisdiction?* -What is the insurance in force? -What is the premium in force?	4 policies
How many total loss claims have been filed in your jurisdiction?* -How many claims are still open or were closed without payment? -What were the total payments for losses?	0 claims or payments
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?	Not currently
According to FEMA statistics as of October 13, 2020	

Reference: FEMA 2020

OPPORTUNITIES FOR FUTURE INTEGRATION

• **Disaster Debris Management Plan:** The Borough will develop a Disaster Debris Management Plan (2020-Hamburg-006).

9.10.5 Hazard Event History Specific to the Jurisdiction

Sussex 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 4.3 (Hazards of Concern) and includes a chronology of events that affected Sussex County and its jurisdictions. The Borough of Hamburg's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Sussex County. Table 9.9-11 provides details regarding municipal-specific loss and damages the jurisdiction experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Date(s) of Event	Event Type (disaster declaration if applicable)	Sussex County Designated?	Summary of Event	Summary of Local Damages and Losses
January 22, 2016 - January 24, 2016	DR-4264: Severe Winter Weather and Snowstorm	Yes	A major nor'easter, produced record snowfall and blizzard conditions in parts of New Jersey on January 23 rd and 24th.	Although the County was impacted, the Borough did not report damages.
January 20, 2020 and continuing	EM-3451, DR- 4488: COVID- 19 Pandemic	Yes	The coronavirus pandemic resulted in the need for shutdowns and social distancing and mask requirements.	The Borough was subject to closures and social distance and masking mandates.

Table 9.10-11. Hazard Event History





Date(s) of Event	Event Type (disaster declaration if applicable)	Sussex County Designated?	Summary of Event	Summary of Local Damages and Losses
2020	Rainstorm	No	Large storm event resulted in significant wash out at the Limekiln road culvert in 2020. Resulted	The Borough incurred costs for DPW overtime to clean-up

Source: FEMA 2020, NOAA NCEI 2020

9.10.6 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. Refer to Section 4.2 (Methodology and Tools) and Section 4.4 (Hazard Ranking) for a detailed summary for the Borough of Hamburg risk assessment results and data used to determine the hazard ranking discussed later in this section.

HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps were generated for the Borough of Hamburg 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 Hamburg has significant exposure.

REPETITIVE FLOOD LOSSES

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

- Number of repetitive loss (RL) properties: 0
- Number of severe repetitive loss (SRL) properties: 0
- Number of RL/SRL properties that have been mitigated: 0

Source: FEMA 2019

CRITICAL FACILITIES AND LIFELINES

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

Table 9.10-12. Critical Facilities and Lifelines Flood Exposure

		Exposure	
Name	Туре	1% Event	0.2% Event
Wheatsworth Mill #1 Dam	Dam	Х	Х
Wheatsworth Mill #2 Dam	Dam	Х	Х

Source: Sussex County Planning Partnership 2020

IDENTIFIED ISSUES AND PROBLEM AREAS

The jurisdiction has identified the following vulnerabilities within their community:

• The Borough has noted that dams in Hamburg need to be brought into compliance with NJDEP requirements. Currently, there are no Emergency Action Plans in place.





- The Borough has reported the need to install a backup generator at the Hamburg Elementary School and to install portable generators to deploy on an as-needed basis.
- Limekiln Road has been identified as having undersized culverts that result in periodic road flooding.
- North Governor Haines Street has been identified as being a drainage problem area.
- The Borough has identified inflow/infiltration issues with Hamburg's water/sewer system and proposes monitoring and remedies to manage the issue.

HAZARD RANKING

This section summarizes the jurisdiction's primary hazards of concern based on identified problems, impacts and the results of the risk assessment as presented in Section 4 (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 development of mitigation actions, targeting those hazards with the highest level of concern.

As discussed in Section 4.4 (Hazard Ranking), each plan participant may have differing degrees of risk exposure and vulnerability compared to Sussex County as a whole. Therefore, the Borough of Hamburg ranked each hazard's degree of risk as it pertains to their community factoring in their capabilities to withstand impacts and rebound after the event. The table below summarizes the hazard rankings of potential hazards for the Borough of Hamburg has reviewed the Sussex County hazard ranking table and has provided input to 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 of Hamburg indicated the following reasons why hazard rankings have changed since the 2016 HMP:

In 2016, the Dam Failure ranking was listed as high. In the initial 2020 risk assessment, the hazard was
ranked low. The Borough requested that the ranking should be changed to high to reflect the lack of
evidence for existing dams' compliance and the lack of an Emergency Action Plan.

Dam Failure	Disease Outbrea	ak Drought	Earthqu	ake	Flood		Geologic
High	Medium	Medium	Low	ow Medium		Medium	Low
Hazardous Materials	Hurricane and Tropical Storm	Invasive Species	Nor'Easter		rere ther	Severe Winter Weather	Wildfire
Medium	High	Medium	High	Hi	gh	High	Low

Table 9.10-13. Borough of Hamburg Hazard Ranking

9.10.7 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 2016 HMP. Actions that are carried forward as part of this plan update are included in Table 9.9-15 and Table 9.9-16 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.





2016 Action Number Action Description			Status (In Progress, No	Include in the 2021 HMP Update?		
		Responsible Party	Progress, Ongoing Capability, or Completed)	Check if Yes	Enter 2021 HMP Action #	
Hamburg- 1 (old #1)	Backup generator for shelter at Hamburg Elementary School located on Linwood Avenue.	OEM Coordinator	No Progress	x	2021- Hamburg-001	
Hamburg- 2 (old #2)	Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.	School Administrator, Municipal Engineer	In-Progress, 50% complete	х	2021- Hamburg-002	
Hamburg- 3 (revised old #4)	Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the Borough website and social media.	OEM Coordinator, in coordination with SCDEM	No Progress	Х	2021- Hamburg-003	
Hamburg- 4 (new)	Multi-purpose emergency vehicle to support highways	Borough OEM	No Progress	X	2021- Hamburg-004	
Hamburg- 5 (new)	Purchase Bobcat Skid-Steer to use during debris cleanup operations and post-hazard events.	Borough DPW	No Progress	X	2021- Hamburg-005	
Hamburg- 6 (new)	Create and maintain a plan for adequate road and debris clearing capabilities within the Borough.	Borough DPW	No Progress	Х	2021- Hamburg-006	
Hamburg- 7 (new)	Purchase portable generator for critical facilities	Municipal Engineer, OEM Coordinator	No Progress	X	2021- Hamburg-007	
Hamburg- 8 (new)	Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.	Planning	No Progress	Х	2021- Hamburg-008	
Hamburg- 9 (new)	During the Borough's rezoning procedures or update of the zoning ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.	Borough Administration	No Progress	X	2021- Hamburg-009	
Hamburg- 10 (new)	Prepare and enforce a fire plan for the Borough and recognize the existence of wildfire	OEM Coordinator	No Progress	х	2021- Hamburg-010	





			Status (In Progress, No		the 2021 HMP pdate?
2016	Action Number Action Description	Responsible Party	Progress, Ongoing Capability, or Completed)	Check if Yes	Enter 2021 HMP Action #
	hazards and identify risk areas based on a vulnerability assessment.				
Hamburg- 11 (new)	The Borough will work with local school districts and assist with community service projects regarding hazards and mitigation.	OEM Coordinator	No Progress	Х	2021- Hamburg-011
Hamburg- 12 (new)	Catch Basin & General Stormwater Facility Maintenance: The continual maintenance of catch basins and stormwater facilities is critical especially before and after large storm events	Borough DPW and Engineer	On Going Capability	Х	2021- Hamburg-012
Hamburg- 13 (new)	Sanitary Sewer Reinforcement: Perform a study to determine where sanitary sewer reinforcement is needed due to most imminent threats of failure or cracking.	Borough Engineer	No Progress	Х	2021- Hamburg-013
Hamburg- 14 (new)	Tree Removal and Maintenance in the Vicinity of Power Lines: Tree removal and maintenance in the vicinity of power lines will help minimize power outages during Severe Weather events.	Borough DPW	Ongoing	X	2021- Hamburg-014

PROPOSED HAZARD MITIGATION INITIATIVES FOR THE PLAN UPDATE

The Borough of Hamburg participated in a risk assessment workshop in October 2020 in which detailed information was provided about assets exposed and vulnerable to the identified hazards of concern. The Borough of Hamburg participated in a mitigation action workshop in November 2020 and was provided a Mitigation Toolbox that included a mitigation catalog developed specifically for Sussex County and its hazards of concerns; challenges and opportunities identified during the capability and risk assessments; mitigation funding sources, 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 9.9-15 summarizes the comprehensive-range of specific mitigation initiatives the Borough of Hamburg would like to pursue in the future to reduce the effects of hazards. 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 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 actions as *High*, *Medium*, or *Low*. The table below summarizes the evaluation of each mitigation initiative, listed by action number.

Table 9.9-16 provides a summary of the prioritization of all proposed mitigation initiatives for this HMP update.





Table 9.10-15. Proposed Hazard Mitigation Initiatives	Table 9.10-15.	Proposed	Hazard	Mitigation	Initiatives
---	----------------	----------	--------	-------------------	-------------

Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
2021- Hamburg- 001	Generator Installation	 Problem: The Hamburg Elementary School does not have a backup generator to power the facility during a power outage. Because the facility is used as a shelter for the municipality, it is critical to install a generator to power the facility to be used during hazard events. Solution: Install 3 phase backup generator for shelter at Hamburg Elementary School located on Linwood Avenue. The Borough Engineer and the school maintenance crew shall work together to purchase and install the generator. 	New	Flood, Severe Weather, Severe Winter Weather	1, 2, 3, 5, 6	OEM Coordinator	HMGP, Municipal Budget	Continued Operation	150k	1 year	Medium	SIP	PP, PR, ES
2021- Hamburg- 002	Roof Upgrade	Problem: The roof of the Hamburg Elementary	Existing	Severe Winter Weather	1, 2, 5	School Administrator, Municipal Engineer	Municipal Budget, School Budget	Structural Mitigation	Medium	1 year	Medium	SIP	PR, ES







Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
	School cannot handle the snow load that accumulates during severe snowstorms. Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood											
Multi-Hazard Public Awareness Program	Problem: There is a lack of knowledge around hazard mitigation in the region and residents are underprepared for potential natural hazard events Solution: Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on	New	All Hazards	1, 2, 3, 4, 5, 6	OEM Coordinator, in coordination with SCDEM	Municipal Budget	Preparedne ss and Increase Public Knowledge	Low	5 years	Medium	EAP	PR, PI
	Initiative Name Multi-Hazard Public Awareness	Initiative Namethe Problem and SolutionNameSchool cannot handle the snow load that accumulates during severe snowstorms.Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.Problem: There is a lack of knowledge around hazard mitigation in the region and residents are underprepared for potential natural hazard eventsMulti-Hazard Public Awareness ProgramSolution: Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on	Mitigation Initiative NameDescription of the Problem and SolutionExistin g Assets?School cannot handle the snow load that accumulates during severe snowstorms.School cannot handle the snow load that accumulates during severe snowstorms.Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.Problem: There is a lack of knowledge around hazard mitigation in the region and residents are underprepared for potential natural hazard eventsNew	Mitigation Initiative NameDescription of the Problem and SolutionExistin g Assets?Hazard(s) to be MitigatedSchool cannot handle the snow load that accumulates during severe snowstorms.School cannot handle the snow load that accumulates during severe snowstorms.Image: Comparison of the second standards on Hamburg Elementary School located on Linwood Avenue.Image: Comparison of the second the second of the second Multi-Hazard Public Awareness ProgramImage: Comparison of the second of th	Mitigation Initiative NameDescription of the Problem and SolutionExistin g Assets?Hazard(s) to be MitigatedGoals MetSchool cannot handle the snow load that accumulates during severe snowstorms.School cannot handle the snow load that accumulates during severe snowstorms.Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.NewAll Hazards1, 2, 3, 4, 5, 6Multi-Hazard Public Awareness ProgramSolution: Develop, implement, and facilitate a multi-hazard public awareness program. Provide information onNewAll Hazards1, 2, 3, 4, 5, 6	Mitigation Initiative Name Description of the Problem and Solution Existin g Assets? Hazard(s) to be Mitigated Lead and Goals School cannot handle the snow load that accumulates during severe snowstorms. School cannot handle the snow load that accumulates during severe snowstorms. Image: Constant of the problem met current snow load standards on Hamburg Elementary School located on Linwood Avenue. Image: Constant of the problem mitigation in the region and residents are underprepared for potential natural hazard events New All Hazards 1, 2, 3, 4, 5, 6 OEM Coordinator, in coordinator, in coordinator, in coordinator, in coordinator, in provide information on	Mitigation Initiative Name Description of the Problem Existin g Assets? Hazard(s) to be Mitigated Lead and Goals Potential Punding School cannot handle the snow load that accumulates during severe snowstorms. School cannot handle the snow load that accumulates Assets? Mitigated Met Agencies Fourity Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue. New All Hazards 1, 2, 3, 4, 5, 6 OEM Coordinator, in coordination with SCDEM Municipal Budget Multi-Hazard Public Awareness Program Solution: Develop, implement, and facilitate a multi-hazard public awareness program. Provide information on New All Hazards 1, 2, 5, 6 OEM Coordinator, in 5, 6 Municipal Budget	Mitigation Initiative Name Description of the Problem and Solution Existin Assets? Hazard(s) to be Mitigated Lead and Goals Potential Support Met Estimated Benefits School cannot handle the snow load that accumulates during severe snowsforms. School cannot handle the snow load that accumulates Assets? Met January School Solution Estimated Benefits Solution Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue. New All Hazards 1, 2, 5, 6 OEM Coordination, in coordination with SCDEM Municipal Budget Preparedne ss and Increase Public Knowledge Multi-Hazard Public Awareness Program Solution: meet current sa lack of knowledge New All Hazards 1, 2, 5, 6 OEM coordination, in coordination with SCDEM Municipal Budget Preparedne ss and Increase Public Knowledge Multi-Hazard public awareness program. Provide information on Solution: solution New All Hazards 1, 2, 5, 6 OEM coordination, in solution Preparedne ss and Increase Public Knowledge	Mitigation Initiative Name Description of the Problem and Solution Existin Assets? Hazard(s) to be witigated Gals Met Lead and Support Agencies Potential Funding Sources Estimated Enenfits School cannot handle the snow load that accumulates during severe snowstorms. Assets? Mitigated Met Agencies Sources Estimated Estimated Solution: Retrofit roof to meet current snow load standards on Hamburg Elementary School tocated on Linwood Avenue. New All Hazards 1, 2, 5, 6 OEM Coordinator, in coordinator, in coordination with SCDEM Municipal Budget Preparedne ss and Increase Public Knowledge Multi-Hazard Public Awareness Program. Provide information on Solution: Develop, information on New All Hazards 1, 2, 5, 6 OEM Coordinator, in coordinator, in coordinator, in coordination Municipal Budget Preparedne ss and Increase Public Knowledge Low	Mitigation Initiative Name Description of the Problem and Solution Existin Assets? Hazard(s) to be Mitigated Gask Mitigated Lad and Magencies Potential Support Estimated Potential Sources Estimated Penefits Estimated Estimated School cannot handle the soow load that accumulates during sovere snowstorms. seets? Mitigated Met Aut Support Suppor Support Support	Mitigation Initiative Name Description of the Problem and Solution Existin g Assets? Hazard(s) witigated Lead and Roads Potunting Support Estimated Benefits Estimated Cost Timeline Priority School cannoh handfe the snow load tha accumulates during severe. School cannoh handfe the snow load that accumulates New All Hazards I. 2. 3. 4. 5. 6 OEM handfe the snow handfe the snow load that accumulates New School cannoh handfe the snow handfe the snow handf	Nume Outcom Decision Imported Decision Imported Decision Imported Decision School cannot handle the snow load that accumulates during severe snowstorms. Solution: Retrofit roof to met current snow load standards on Hamburg Elementary School located on Linwood Avenue. New All Hazards 1.2. 3.4. 5.6 OEM Municipal Budget Preparedme ss and novinde Low 5 years Medium EAP Multi-Hazard Program Problem: There region and residents are underperared for potential awareness program. Provide New All Hazards 1.2. 3.4. 5.6 OEM Municipal Budget Preparedme ss and novith SCDEM Low 5 years Medium EAP Multi-Hazard Problic awareness program. Provide Solution: Develop, implement, and facilitate a multi-hazard public Solution: Awareness S





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution website and social media.	New or Existin g 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
2021- Hamburg- 004	Purchase Emergency vehicle	Problem: The municipality does not have an emergency vehicle to support highway and issues related to road closures and issues related to severe weather. Additional vehicles will increase capacity and overall response. Solution: The Municipality shall purchase a multi-purpose emergency vehicle to support highways.	New	All Hazards	3, 5, 6	Borough OEM	Municipal Budget, HMGP,	Increased Capacity	Low	5 year	Medium	SIP	PP, ES
2021- Hamburg- 005	Purchase Bobcat Skid- Steer	Problem: The municipality struggles to keep up with debris cleanup operation immediately after storm events. This could cause significant issues around subsequent flooding due to clogging of roadways and waterbodies.	New	Severe Weather, Flood	1, 2, 4, 5	Borough DPW	Municipal Budget, HMGP, New Jersey Departmen t of Transportat ion – Local Aid Program	Increased capability	Medium	1 year	Medium	SIP	PR, PP



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
		Solution: Purchase Bobcat Skid-Steer to use during debris cleanup operations and post-hazard events.											
2021- Hamburg- 006	Develop Disaster Debris Management Plan	Problem: The municipality has not developed a comprehensive strategy to address debris clearing during and after a hazard event. Solution: Create and maintain a plan for adequate road and debris clearing capabilities within the Borough.	New	All Hazards	1, 2, 4, 5	Borough DPW	Municipal Budget	Streamline d Response	Low	1 year	High	LPR	ES
2021- Hamburg- 007	Portable Generator	Problem: Not all critical facilities have backup power. Solution: Purchase portable generators for critical facilities that can be used to power the bare essentials during a hazard event	New	Hurricane, Nor'Easter, Severe Weather, Severe Winter Weather	1, 2, 3, 5	Municipal Engineer, OEM Coordinator	HMGP	Continued Operation	Low	l year	Medium	LPR	PR
2021- Hamburg- 008	HMP Implementation	Problem: The municipality has previously not been successful	Existing	All	1, 2, 3, 4, 5, 6, 7	Planning	Municipal Budget	Enhanced Planning	Low	5 years	High	LPR	PR



edt. TERS													
Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
		in implementing hazard mitigation actions within the municipality. Solution: Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.											
2021- Hamburg- 009	Hazard Area Identification and Plan Implementation	Problem: The municipality has previously not been successful in identifying potential hazard areas within the municipality. Solution: During the Borough's	Existing	All	1, 2, 3, 4, 5, 6, 7	Borough Administration	Municipal Budget as Needed	Hazard Mitigation	Low	5 years and longer	High	LPR	PR



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
		rezoning procedures or update of the zoning ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.											
2021- Hamburg- 010		Problem: The municipality has previously not been successful in implementing the municipal fire plan proposed actions.			1, 2,	OEM Coordinator							
	Fire Plan Implementation	Solution: Prepare and enforce a fire plan for the Borough and recognize the existence of wildfire hazards and identify risk areas based on a vulnerability assessment.	Existing	All	1, 2, 3, 4, 5, 6, 7		Municipal Budget as Needed	All	Low	5 years and longer	High	LPR	PR
2021- Hamburg- 011	Local School Districts HMP Implementation	Problem: The municipality has previously not been able to successfully implement hazard mitigation actions in coordination	Existing	All	1, 2, 3, 4, 5, 6, 7	OEM Coordinator	Municipal Budget as Needed	HMP Integration	Low	5 years	Medium	LPR	PR



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution with the local school districts.	New or Existin g 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
		Solution: The Borough will work with local school districts and assist with community service projects regarding hazards and mitigation.											
2021- Hamburg- 012	Stansontar	Problem: The municipality has previously had trouble around stormwater infrastructure maintenance capabilities Solution: The municipality would like to increase maintenance capabilities of catch basins and					HMGP, BRIC Municipal Budget as needed; New Jersey						
	Stormwater Maintenance Program	stormwater facilities is critical especially before and after large storm events. The municipality can do this by developing a program that can be coordinated with other municipalities to facilitate the maintained of	New	Flood, Severe Weathers	1, 2, 3, 5	Borough DPW and Engineer	Water Bank; Environme ntal Infrastructu re Financing Program	Increased organized capacity	Low	5 years	High	LPR	PR



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution local stormwater infrastructure.	New or Existin g 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
2021- Hamburg- 013	Reinforcements	Problem: The Sewer Sanitary Facility has been having issues around building cracking which has led to the threat of potential disrupted operation of the critical service. Solution: Sanitary Sewer Reinforcement: Perform a study to determine where sanitary sewer reinforcement is needed due to most imminent threats of failure or cracking.	New	Flood, Severe Weather	1, 2, 3, 5	Borough Engineer	HMGP, Municipal Budget	Fix Structure disrepairs	Low	2 years	Medium	SIP	SP
2021- Hamburg- 014	Tree Maintenance	Problem: In previous years, the municipality has experienced accidents around tree falling and disrupting the utility lines, subsequently causing power outages. The Borough is now on the power company's tree trimming program which	New	Hurricane, Nor'Easter, Severe Weather, Severe Winter Weather	1, 2, 3, 4, 5	Borough DPW	HMGP, Municipal Budget	Better Tree Maintenanc e	High	2 years	Medium	LPR SP,	PP, NR





AT TERM													
Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
		is implemented every three years. Solution: Tree Removal and Maintenance in the Vicinity of Power Lines: Tree removal and maintenance in the vicinity of power lines will help minimize power outages during Severe Weather events. The municipality work with the County to develop strategy to conduct tree maintenance.											
2021- Hamburg- 015	Hamburg Borough Building Code Update	Problem: Building Codes need to be periodically reviewed for updates to keep up with changing regulations and reduce hazard risks Solution: Perform periodical building code reviews and	Existing	All Hazards	1	Construction Code Official	N/A – Staff Time	Low	Low	Ongoing	High	LPR	PR/ PP
	Evaluation of Bridges and	make updates as required Problem: Aged Infrastructure	Existing	Flood/Sever e Weather	1	Borough Administration	Borough	High	High	Short	High	LPR	PR





eth IER.													
Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
2021- Hamburg- 016	Other River Structures	Solution: A comprehensive master plan should be developed for appropriate sizing of the bridge openings and setting road elevations to provide maximum benefits as the bridges are eventually replaced over time.				, Township Engineer							
2021- Hamburg- 017	Hazard Warning System	Problem: Hazard warning systems need to be developed. Solution: The hazard warning system resources available to the Township should be reviewed and utilized.	Existing	All Hazards	1, 2, 3, 4	Borough Administration Township Engineer	Borough	High	Low	Short	High	EAP	PI
2021- Hamburg- 018	Stream Cleaning & Maintenance	Problem: The required removal of built-up debris and sediment/silt buildup within streams and rivers. Bridge openings must be maintained. Solution: Removal of debris,	Existing	Flood, Severe Weather, Severe Winter Weather	1, 3	Borough Administration , Township Engineer	Borough; Capital Improveme nts	High	Low	Short — Annual Basis	High	NSP	PR, PP, NR, SP



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution sediment, and	New or Existin g 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
		sediment, and silt from the channel as well as bridge openings by volunteer groups and outside contractors when needed.											
2021- Hamburg-	GIS Mapping of Catch Basin & General	Problem : The location of all catch basins and stormwater facilities, both private and public, need to be identified, mapped, and located for planning and maintenance	Existing	Flood, Severe Weather	1	Borough Administration , Township Engineer DPW Supervisor	Borough, PDM	High	Low	Short	High	NSP , SIP	PR, PP
019	Stormwater Facilities	Solution: Create a GIS mapping system of catch basins, stormwater facilities, basins, culverts, and other drainage features and structures											
2021- Hamburg- 020	Dam project	Problem: No evidence of existing dams being in compliance with Dam Safety Requirements; No Emergency Action Plan for Dam failure. Solution: The Borough will	Existing	Dam Failure	7	Administration , Dam owners	Borough budget	Dams brought into compliance with NJDEP Dam Safety Requireme nts	Staff time	1 year	High	EAP	PI





Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution work with dam owners to gain copies of Emergency Action Plans or instruct them to develop Plan in	New or Existin g 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
2021- Hamburg- 021	North Governor Haines Street Drainage	conjunction with NJDEP. Problem: North Governor Haines Street experiences drainage issues. Solution: The Borough will conduct a feasibility study for North Governor Haines Street drainage issues. If cost-effective measures are identified, the Borough will pursue grant funding and implement the selected actions.	Existing	Flood, Severe Weather	2	Engineer, DPW	HMGP, BRIC, municipal budget	Reduction in flood risk	\$200,000	Within 5 years	High	SIP	SP
2021- amburg- 022	Limekiln Road Drainage Improvement Project	Problem: Existing Culvert does not have adequate capacity. Results in flooding on roadway and near Pump Station Solution: Culvert and drainage	Existing	Flood, Severe Weather	2	Engineering	HMGP, BRIC, Municipal Budget	Reduction in Flood Risk	\$500,000	Within 5 years	High	SIP	SP



Initiative Number	Mitigation Initiative Name	Description of the Problem and Solution	New or Existin g 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
		channel improvements are required to pass required capacity.											

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:

 BRIC
 Building Resilient Infrastructure and Communities

 FMA
 Flood Mitigation Assistance Grant Program

 HMGP
 Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

<u>Cost:</u> 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.





							-										
Initiative Number	Mitigation Initiative Name	Life Safety	Property Protection	Cost Effectiveness	Fechnical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
2021- Hamburg- 001	Backup generator for shelter at Hamburg Elementary School located on Linwood Avenue.	0	0	1	0	0	0	0	0	1	1	1	1	1	1	7	Medium
2021- Hamburg- 002	Retrofit roof to meet current snow load standards on Hamburg Elementary School located on Linwood Avenue.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	7	Medium
2021- Hamburg- 003	Develop, implement, and facilitate a multi- hazard public awareness program. Provide information on all types of hazards, preparedness and mitigation measures via the Borough website and social media.	0	0	1	1	0	0	0	0	0	1	1	1	1	0	6	Medium
2021- Hamburg- 004	Multi-purpose emergency vehicle to support highways	1	0	1	0	0	0	1	0	0	1	1	1	1	1	8	Medium
2021- Hamburg- 005	Purchase Bobcat Skid-Steer to use during debris cleanup operations and post- hazard events.	1	0	1	0	0	0	1	0	0	1	1	1	1	1	8	Medium
2021- Hamburg- 006	Create and maintain a plan for adequate road and debris clearing capabilities within the Borough.	1	1	1	1	0	0	0	0	0	1	1	1	1	1	9	High

Table 9.10-16. Summary of Evaluation and Action Priorities



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	Total	High / Medium / Low
2021- Hamburg- 007	Purchase portable generator for critical facilities	0	0	1	0	0	0	0	0	1	1	1	1	1	1	7	Medium
2021- Hamburg- 008	Utilize the Hazard Mitigation Plan (HMP) when updating the Comprehensive Master Plan; consider including hazard identification, hazard zones risk assessment information, and hazard mitigation goals as identified in the HMP. Further, the findings and recommendation of the HMP will be considered during any future site plan review processes.	1	1	1	1	-	0	0	0	0	1	1	1	1	1	10	High
2021- Hamburg- 009	During the Borough's rezoning procedures or update of the zoning ordinance, the Borough will recognize hazard areas as limits on changes to zoning within the municipality.	1	1	1	1	1	0	0	0	0	1	1	1	1	1	10	High
2021- Hamburg- 010	Prepare and enforce a fire plan for the Borough and recognize the existence of wildfire hazards and identify	1	1	1	1	1	0	0	0	0	1	1	1	1	1	10	High



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	Total	High / Medium / Low
	risk areas based on a vulnerability assessment.																
2021- Hamburg- 011	The Borough will work with local school districts and assist with community service projects regarding hazards and mitigation.	0	0	1	1	0	0	0	0	0	1	1	1	1	0	6	Medium
2021- Hamburg- 012	Catch Basin & General Stormwater Facility Maintenance: The continual maintenance of catch basins and stormwater facilities is critical especially before and after large storm events	0	1	1	0	0	0	0		-	1	1	1	1	1	9	High
2021- Hamburg- 013	Sanitary Sewer Reinforcement: Perform a study to determine where sanitary sewer reinforcement is needed due to most imminent threats of failure or cracking.	0	1	1	1	0	0	0	0	0	1	0	1	1	1	7	Medium
2021- Hamburg- 014	Tree Removal and Maintenance in the Vicinity of Power Lines: Tree removal and maintenance in the vicinity of power lines will help minimize power	0	1	1	0	0	0	0	1	1	1	0	1	1	1	8	Medium



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	Total	High / Medium / Low
	outages during Severe Weather events.																
2021- Hamburg- 015	Hamburg Borough Building Code Update	0	1	1	1	0	1	0	0	0	1	1	1	1	0	8	Medium
2021- Hamburg- 016	Evaluation of Bridges and Other River Structures	1	1	1	1	0	0	0	1	0	1	1	1	0	1	9	High
2021- Hamburg- 017	Hazard Warning System	1	0	1	0	0	1	1	0	1	1	1	0	1	1	9	High
2021- Hamburg- 018	Stream Cleaning & Maintenance	0	1	1	0	0	0	0	1	1	1	1	1	1	1	9	High
2021- Hamburg- 019	GIS Mapping of Catch Basin & General Stormwater Facilities	0	0	1	1	0	0	0	1	1	1	1	1	1	1	9	High
2021- Hamburg- 020	Dam project	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2021- Hamburg- 021	North Governor Haines Street Drainage	0	1	0	1	1	1	0	1	0	1	1	0	1	1	9	High
2021- Hamburg- 022	Limekiln Road Drainage Improvement Project	1	1	0	1	1	1	0	1	0	1	1	0	1	1	10	High

Notes: Section 6 (Mitigation Strategy) 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.



A



,

Hazard	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
Dam Failure	Х	Х	Х		Х			Х
Disease Outbreak	Х	Х	Х		Х			Х
Drought	Х	Х	Х		Х			Х
Earthquake	Х	Х	Х		Х			Х
Flood	Х	Х	Х	Х	Х	Х		Х
Geologic	Х	Х	Х		Х			Х
Hazardous Materials	Х	Х	Х		X			Х
Hurricane and Tropical Storm	Х	Х	Х		Х			Х
Invasive Species	Х	Х	Х		Х			х
Nor'Easter	Х	Х	Х		X			Х
Severe Weather	Х	Х	Х	Х	Х	Х		Х
Severe Winter Weather	Х	Х	Х	X	X			Х
Wildfire	Х	Х	Х		Х			Х

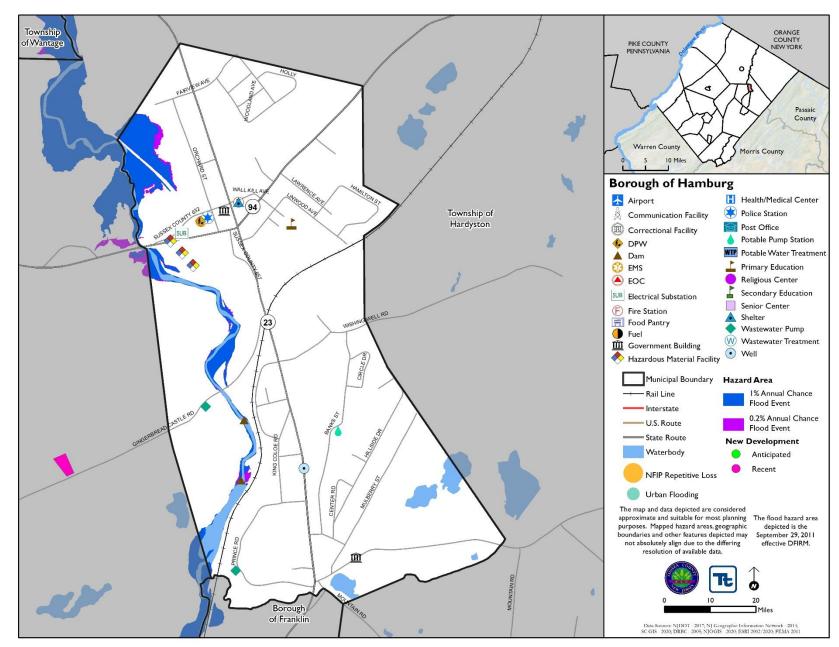
Table 9.10-17	. Analysis of Mitigation	Actions by Hazard and	Category
---------------	--------------------------	-----------------------	----------

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

high ranked hazard

ORANGE medium ranked hazard

YELLOW low ranked hazard





Ŧŧ

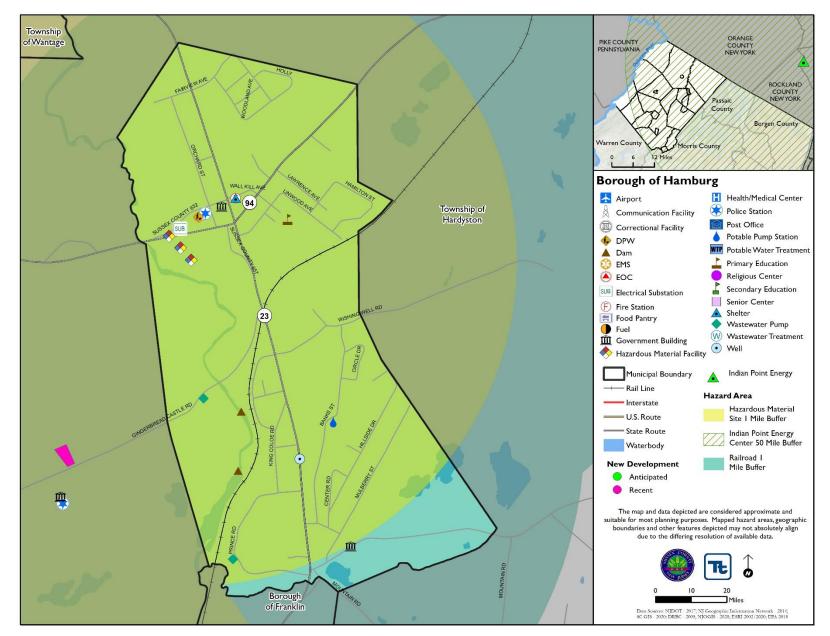


Figure 9.10-2. Borough of Hamburg Hazard Area Extent and Location Map 2

Ŧŧ



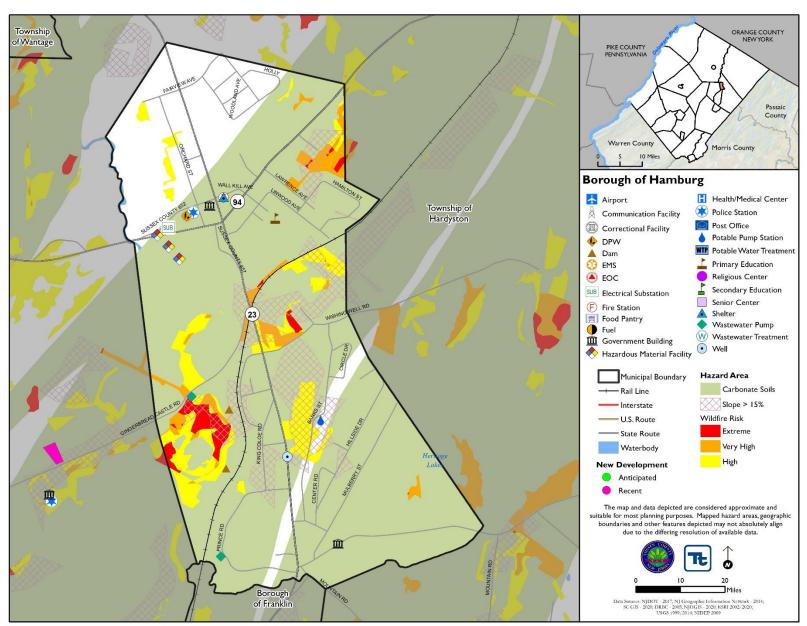


Figure 9.10-3 Borough of Hamburg Hazard Area Extent and Location Map 3



	Action	Workshee	et	
Project Name:	Generator Installation			
Project Number:	2020-Hamburg-001			
	Risk / V	ulnerabili	ty	
Hazard(s) of Concern:	Flood, Severe Weather, Se	vere Winter	r Weather	
Description of the Problem:	The Hamburg Elementary School does not have a backup generator to power the facility during a power outage. Because the facility is used as a shelter for the municipality, it is critical to install a generator to power the facility to be used during hazard events.			
	Action or Project Inte	ended for I	mplementation	
Description of the Solution: Install 3 phase backup generator for shelter at Hamburg Elementary School located on Linwood Avenue. The Borough Engineer and the school maintenance crew shall work together to purchase and install the generator.				
Is this project related to a (Lifeline?	Critical Facility or Yes		No 🗌	
Level of Protection:	500-year storm		ted Benefits avoided):	Continued Operation
Useful Life:	20 years	Goals N	Met:	1, 2, 3, 5, 6
Estimated Cost:	100k	Mitigat	tion Action Type:	Structural and Infrastructure Project
	Plan for I	nplementa		
Prioritization:	Medium		d Timeframe for nentation:	1 year once funding received
Estimated Time Required for Project Implementation:	1 year	Potent Source	ial Funding s:	НМСР
Responsible Organization:	OEM Coordinator	Mecha	Planning nisms to be Used lementation if any:	Hazard Mitigation
	Three Alternatives Cons	idered (in	cluding No Action)	
	Action	E	stimated Cost	Evaluation
Alternatives:	No Action		\$0	Current problem continues
	Install Solar Generator Installation		High Medium	Weather Dependent Best alternative
	Progress Report (for plan m		Dest alternative
Date of Status Report:	Trogress Report	ioi pian m		
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	Generator Installation		
Project Number:	2020-Hamburg-001		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	0	This project protects life and property	
Property Protection	0	This project protects life and property	
Cost-Effectiveness	1		
Technical	0	Additional technical resources are needed	
Political	0	There are no known political complications	
Legal	0	There are no known legal complications	
Fiscal	0	Additional funding is needed	
Environmental	0	No adverse environmental impacts	
Social	1		
Administrative	1		
Multi-Hazard	1		
Timeline	1		
Agency Champion	1		
Other Community Objectives	1		
Total	7		
Priority (High/Med/Low)	Medium		



	Action W	orksheet		
Project Name:	Purchase Bobcat Skid-Steer	Purchase Bobcat Skid-Steer		
Project Number:	2020-Hamburg-005			
	Risk / Vul	nerability		
Hazard(s) of Concern:	Flood, Severe Weather, Sever	e Winter Weather		
Description of the Problem:	The municipality struggles to keep up with debris cleanup operation immediately after storm events. This could cause significant issues around subsequent flooding due to clogging of roadways and waterbodies.			
	Action or Project Intend	led for Implementation		
Description of the Solution:				
Is this project related to a (Lifeline?	Critical Facility or Yes	No 🛛		
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Continued Operation	
Useful Life:	20 years	Goals Met:	1, 2, 4, 5	
Estimated Cost:	Medium	Mitigation Action Type:	Structural and Infrastructure Project	
	Plan for Imp			
Prioritization:	Medium	Desired Timeframe for Implementation:	1 year once funding received	
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, New Jersey Department of Transportation – Local Aid Program, Municipal Budget	
Responsible Organization:	Borough DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation	
	Three Alternatives Consid			
	Action	Estimated Cost	Evaluation	
	No Action	\$0	Current problem continues	
Alternatives:	Hire contractor to conduct any additional work	Low	Low cost but dependent on external aid which might not be fully reliable	
	Purchase Bobcat Skid Steer	Medium	Best alternative	
	Progress Report (for	r plan maintenance)		
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	Purchase Bobcat Skid-Steer		
Project Number:	2020-Hamburg-005		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	1		
Property Protection	0	This project protects property	
Cost-Effectiveness	1		
Technical	0	Additional technical resources are needed	
Political	0	There are no known political complications	
Legal	0	There are no known legal complications	
Fiscal	1		
Environmental	0	No adverse environmental impacts	
Social	0	There are no social effects	
Administrative	1		
Multi-Hazard	1		
Timeline	1		
Agency Champion	1		
Other Community Objectives	1		
Total	8		
Priority (High/Med/Low)	Medium		



	Action W	′orksheet		
Project Name:	Develop Debris Management	Plan		
Project Number:	2020-Hamburg-006			
	Risk / Vul	nerability		
Hazard(s) of Concern:	All Hazards			
Description of the Problem:	The municipality has not developed a comprehensive strategy to address debris clearing during and after a hazard event. As a result, the municipality is unable to respond to debris clearance is a concise and organized manner. While increased capacity would also be beneficial, better organization and coordination of existing resources can also be useful.			
		ded for Implementation		
Description of the Solution:Create and maintain a plan for adequate road and debris clearing capabilities within the Borough. Coordinate with the DPW and County to develop an inventory of existing sites that need constant debris clearance and for repetitive flooded sites that pose constant 				
Is this project related to a C Lifeline?	Critical Facility or Yes	□ No ⊠		
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Streamlined Operations	
Useful Life:	5 years	Goals Met:	1, 2,4, 5	
Estimated Cost:	Medium	Mitigation Action Type:	Local Plans and Regulations	
	Plan for Imp			
Prioritization:	High	Desired Timeframe for Implementation:	1 year once funding received	
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	Municipal Budget	
Responsible Organization:	Borough DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation	
	Three Alternatives Considered (including No Action)			
	Action No Action	Estimated Cost \$0	Evaluation Current problem continues	
Alternatives:	Increase current capacity	High	Would need additional equipment, staff, and larger facility	
	Debris management plan	Low	Best solution	
Data of Status D	Progress Report (fo	r plan maintenance)		
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	Develop Debris Management Plan		
Project Number:	2020-Hamburg-006		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	1		
Property Protection	1		
Cost-Effectiveness	1		
Technical	1		
Political	0	There might be some political complications	
Legal	0	There are potential legal complications	
Fiscal	0	Resource needs have not yet been identified	
Environmental	0	There are no adverse environmental impacts	
Social	0	There are no adverse social impacts	
Administrative	1		
Multi-Hazard	1	All Hazards	
Timeline	1		
Agency Champion	1		
Other Community Objectives	1		
Total	9		
Priority (High/Med/Low)	High		



	Action W	orksheet		
Project Name:	Stormwater Maintenance Pro	ogram		
Project Number:	2020-Hamburg-012			
	Risk / Vul	nerability		
Hazard(s) of Concern:	Severe Weather, Flood			
Description of the Problem:		The municipality has previously had trouble around stormwater infrastructure maintenance capabilities and would like to increase its overall capacity.		
	Action or Project Inten	ded for Implementation		
Description of the Solution:The municipality would like to increase maintenance capabilities of catch basins and stormwater facilities is critical especially before and after large storm events. The municipality can do this by developing a program that can be coordinated with other 				
Is this project related to a C Lifeline?	Critical Facility or Yes	□ No ⊠		
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Increased organized capacity	
Useful Life:	NA	Goals Met:	1, 2, 3, 5	
Estimated Cost:	Low	Mitigation Action Type:	Local Plans and Regulations	
	Plan for Imp	lementation		
Prioritization:	Medium	Desired Timeframe for Implementation:	1 year once funding received	
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, BRIC Municipal Budget as needed; New Jersey Water Bank; Environmental Infrastructure Financing Program	
Responsible Organization:	Borough DPW and Engineer	Local Planning Mechanisms to be Used	Hazard Mitigation	
	Three Alternatives Consid	in Implementation if any: ered (including No Action)		
	Action	Estimated Cost	Evaluation	
	No Action	\$0	Current problem continues	
Alternatives:	Hire contractor to conduct any additional work	Low	Low cost but dependent on external aid which might not be fully reliable	
	Purchase Bobcat Skid Steer	Medium	Best alternative	
Progress Report (for plan maintenance)				
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	Stormwater Maintenan	Stormwater Maintenance Program	
Project Number:	2020-Hamburg-012		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	1		
Property Protection	1		
Cost-Effectiveness	1		
Technical	0	Technical issues have not been identified	
Political	0	Political issues have not been identified	
Legal	0	No legal issues have been identified	
Fiscal	0	The exact cost has not yet been identified	
Environmental	1		
Social	1		
Administrative	1		
Multi-Hazard	1		
Timeline	1		
Agency Champion	1		
Other Community Objectives	1		
Total	10		
Priority (High/Med/Low)	High		



Action Worksheet				
Project Name:	Reinforcements			
Project Number:	2020-Hamburg-013			
		nerability		
Hazard(s) of Concern:	Severe Weather, Flood			
Description of the Problem:	led to the threat of potential	The Sewer Sanitary Facility has been having issues around building cracking which has led to the threat of potential disrupted operation of the critical service. The facility deals with municipal sewer and therefore needs to be in full operation at all times.		
	Action or Project Inten	ded for Implementation		
Description of the Solution:	Description of the The municipal DPW shall perform a study to determine where sanitary sewer reinforcement is needed due to most imminent threats of failure or cracking. The DPW			
Is this project related to a C Lifeline?	Critical Facility or Yes	No 🗌		
Level of Protection:	500-year storm	Estimated Benefits (losses avoided):	Fix Structure disrepairs	
Useful Life:	15 years	Goals Met:	1, 2, 3, 5	
Estimated Cost:	Low	Mitigation Action Type:	Structural and Infrastructure Projects	
	Plan for Imp	lementation		
Prioritization:	Medium	Desired Timeframe for Implementation:	1 year once funding received	
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	HMGP, Municipal Budget	
Responsible Organization:	Borough Engineer	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation	
	Three Alternatives Consid			
	Action	Estimated Cost	Evaluation	
Alternatives:	No Action	\$0	Current problem continues Existing facility needs to be	
	Construct a new facility	High	closed	
	Reinforcements Study Progress Report (fo	Low r plan maintananca)	Best solution	
	Progress Report (10	r plan maintenance)		
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	Reinforcements		
Project Number:	2020-Hamburg-013		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	0		
Property Protection	1		
Cost-Effectiveness	1		
Technical	0	Technical issues have not been identified	
Political	0	Political issues have not been identified	
Legal	0	No legal issues have been identified	
Fiscal	0	The exact cost has not yet been identified	
Environmental	0	No adverse environmental impact	
Social	1		
Administrative	0	No known administrative issues	
Multi-Hazard	1		
Timeline	1		
Agency Champion	1		
Other Community Objectives	1		
Total	7		
Priority (High/Med/Low)	Medium		



	Action	Worksheet		
Project Name:	North Governor Haines St	North Governor Haines Street Drainage		
Project Number:	2021-Hamburg-021	2021-Hamburg-021		
	Risk / V	ulnerability		
Hazard(s) of Concern:	Flood, Severe Weather			
Description of the Problem:	North Governor Haines St	eet experiences drainage issues.		
	Action or Project Int	ended for Implementation		
Description of the Solution:The Borough will conduct a feasibility study for North Governor Haines Street drainage issues. If cost-effective measures are identified, the Borough will pursue grant funding and implement the selected actions.				
Is this project related to a (Lifeline?	Critical Facility or Yes	No 🛛		
Level of Protection:	TBD by feasibility study	Estimated Benefits (losses avoided):	Reduction in flood risk	
Useful Life:	TBD by feasibility study	Goals Met:	2	
Estimated Cost:	TBD by feasibility study	Mitigation Action Type:	Local Plans and Regulations, Structure and Infrastructure Projects	
	Plan for In	nplementation		
Prioritization:	High	Desired Timeframe for Implementation:	Within 5 years	
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	HMGP, BRIC, municipal budget	
Responsible Organization:	Engineer, DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard mitigation planning, stormwater planning	
	Three Alternatives Cons	idered (including No Action)		
	Action	Estimated Cost	Evaluation	
Alternatives:	No Action Elevate roadways	\$0 \$500,000	Current problem continues Costly and may not solve problem	
	Relocate roadways	N/A	Not possible	
	Progress Report	for plan maintenance)		
Date of Status Report:				
Report of Progress:				
Update Evaluation of the Problem and/or Solution:				





Action Worksheet			
Project Name:	North Governor Haines Street Drainage		
Project Number:	2021-Hamburg-021		
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate	
Life Safety	0		
Property Protection	1	Reduction in flooding risk	
Cost-Effectiveness	0		
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 reduce flooding impacts.	
Administrative	1		
Multi-Hazard	1	Flood, Severe Weather	
Timeline	0		
Agency Champion	1	Engineer, DPW	
Other Community Objectives	1		
Total	9		
Priority (High/Med/Low)	High		

