



9.17 BOROUGH OF OGDENSBURG

This section presents the jurisdictional annex for the Borough of Ogdensburg.

9.17.1 HAZARD MITIGATION PLAN POINT OF CONTACT

The following individuals have been identified as the hazard mitigation plan’s primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Steven Ciasullo, Mayor 14 Highland Avenue, Ogdensburg, NJ 07439 Email: sciasullo@hotmail.com	Phyllis Drouin, RMC 14 Highland Avenue, Ogdensburg, NJ 07439 Email: pdrouin@embarqmail.com

9.17.2 MUNICIPAL PROFILE

The Borough of Ogdensburg is located in eastern Sussex County. It bordered to the north by Franklin Borough, to the east by Sparta Township and Hardyston Township, and to the south and west by Sparta Township. The Borough has a total area of approximately 2.3 square miles. South Ogdensburg is an unincorporated community located within the Borough. According to the U.S. Census, the 2010 population for the Borough of Ogdensburg was 2,410. The Wallkill River and its tributaries flow through the Borough. Heaters Pond is large pond that is located along the Borough's eastern border.

Growth/Development Trends

The Borough of Ogdensburg did not note any recent residential/commercial development since 2010 or any major residential or commercial development, or major infrastructure development planned for the next five years in the municipality.

9.17.3 NATURAL HAZARD EVENT HISTORY SPECIFIC TO THE MUNICIPALITY

Sussex County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities. For the purpose of this plan update, events that have occurred in the county from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.17-1. Hazard Event History

Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
August 26 – September 5, 2011	Hurricane Irene	DR-4021	Yes	Flooding and power outages; road closures throughout Borough; downed trees and power lines; large amount of debris from downed trees and flooding; clogging of Saw Mill Brook – debris from peoples yards caused the clogging. Shelter was open for residents.
September 28 – October 6, 2011	Remnants of Tropical Storm Lee	DR-4039	Yes	Flooding and power outages; road closures throughout Borough; downed trees and power lines; large amount of debris from downed trees and flooding



Date(s) of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 29, 2011	Severe Storm	DR-4048	Yes	Road closures, downed power lines and trees, snow removal, long term power outages, shelters open to residents
October 26 – November 8, 2012	Hurricane Sandy	DR-4086	Yes	Road closures, some street flooding, downed power lines and trees, power outages

9.17.4 HAZARD VULNERABILITIES AND RANKING

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The risk ranking methodology is presented in Section 5.3. However, each municipality had the opportunity to adjust the final ranking based on municipal feedback. The following summarizes the hazard vulnerabilities and their ranking in the Borough of Ogdensburg. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Borough of Ogdensburg.

Table 9.17-2. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Dam Failure	Damage estimate not available	Occasional	24	Medium
Drought	Damage estimate not available	Frequent	30	Medium
Earthquake	100-Year GBS: \$0 500-Year GBS: \$195,496 2,500-Year GBS: \$3,104,875	Occasional	28	Medium
Flood	1% Annual Chance: \$6,482,101	Frequent	18	Medium
Geologic	GBS Exposed to Carbonate Rock Areas: \$302,371,341	Frequent	54	Medium*
Hurricane	100-year MRP: \$83,270 500-year MRP: \$495,557 Annualized: \$4,680	Frequent	48	High
Nor'Easter	Damage estimate not available	Frequent	48	High
Severe Weather	100-Year MRP: \$83,270 500-year MRP: \$495,557 Annualized: \$4,680	Frequent	48	High
Severe Winter Weather	1% GBS: \$2,504,644 5% GBS: \$12,523,219	Frequent	51	High
Wildfire	Estimated Value in the Extreme, Very High, and High Hazard Areas: \$8,743,647	Frequent	24	Medium
Hazardous Materials	Damage estimate not available	Frequent	36	High

Notes:





- * The hazard ranking was changed for this hazard based on input from the municipality, population exposed, and/or event history.
- GBS = General building stock; MRP = Mean return period.
- a. The general building stock valuation is based on the custom inventory generated for the municipality and based on improved value.
- b. High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 15-30+
Low = Total hazard risk ranking below 15
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the estimated value of contents. Loss estimates for the flood and earthquake hazards represent both structure and contents. Potential flood loss estimates were generated using Hazus-MH 3.0 and the 2011 FEMA DFIRM for the 1-percent annual chance event. For the geologic and wildfire hazards, the improved value and estimated contents of buildings located within the identified hazard zones is provided.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Borough of Ogdensburg.

Table 9.17-3. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Flood Boundary (3)
Borough of Ogdensburg	8	8	\$53,266	1	0	0

Source: FEMA, 2014

- Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of November 31, 2014 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 11/31/2014.
- Note (2) Total building and content losses from the claims file provided by FEMA Region 2.
- Note (3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.
- Note (4) FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

Critical Facilities

There are no critical facilities located in the FEMA 1% or 0.2% annual chance flood boundary.

Other Vulnerabilities Identified by Municipality

The Borough identified the following vulnerable areas in the community:

- Corner of Cork Hill and Passaic Streets – this area of the Borough tends to flood during periods of heavy rain.
- Glen Brook Road and Thomas Place – this area floods during periods of heavy rain
- Center Street in the lower end floods during periods of heavy rain
- Predmore Road – floods during periods of heavy rain
- Brooks Flat Rad – floods during periods of heavy rain
- All from the Wallkill River and Sawmill Brook

9.17.5 CAPABILITY ASSESSMENT

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Education/Outreach and Community classification





- Self-Assessment of Capability
- National Flood Insurance Program
- Community Rating System
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Borough of Ogdensburg.

Table 9.17-4. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes	Local	Borough Council	December 2008
Capital Improvements Plan	No			
Floodplain Management / Basin Plan	Yes	Local	Borough Council	Borough has identified flood areas mapped
Stormwater Management Plan	Yes	Local	Borough Council	Stormwater Management Plan, November 2007
Open Space Plan	Yes	Local	Borough Council	Master Plan
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency Management Plan	No			
Emergency Response Plan	Yes	Local	Borough Council	Emergency Operations Plan, November 2011
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	Yes	Local	Borough Council	Strategic Growth Plan, February 2005
Other Plans:				
Regulatory Capability				
Building Code	Yes	State & Local	Borough	State Uniform Construction Code Act (N.J.S.A. 52:27D-119 et seq.)
Zoning Ordinance	Yes	Local	Borough	Land Development
Subdivision Ordinance	Yes	Local	Borough	Land Development
NFIP Flood Damage Prevention Ordinance	Yes	Local	Engineer	
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	No			
Growth Management Ordinances	No			



Table 9.17-4. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Site Plan Review Requirements	No			
Stormwater Management Ordinance	Yes	Local	DPW	Chapter 502 – Drainage, September 15, 2006
Municipal Separate Storm Sewer System (MS4)	No			
Natural Hazard Ordinance	Yes	Local	Engineer	Flood Damage Prevention
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State	Division of Consumer Affairs	N.J.A.C. 13:45A-29.1
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	No			

Administrative and Technical Capability

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

Table 9.17-5. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Land Use Board
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance Programs to Reduce Risk	Yes	
Mutual Aid Agreements	Yes	
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Borough Engineer
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	No	
Planners or engineers with an understanding of natural hazards	Yes	Borough Engineer
NFIP Floodplain Administrator	Yes	Borough Engineer
Surveyor(s)	Yes	Contracted
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Borough Engineer
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	



Table 9.17-5. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Grant Writer(s)	Yes	Borough Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Borough Engineer
Professionals trained in conducting damage assessments	Yes	Borough Engineer

Fiscal Capability

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

Table 9.17-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact Fees for homebuyers or developers of new development/ homes	Yes
Stormwater Utility Fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	No

Education/Outreach and Community Classifications

The table below summarizes education/outreach programs the community participates in and the classifications for community program available to the Borough of Ogdensburg.

Table 9.17-7. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	NP	NP
Building Code Effectiveness Grading Schedule (BCEGS)	TBD		
Public Protection (ISO Fire Protection Classes 1 to 10)	TBD		
Storm Ready	No	NP	NP
Firewise	No	NP	NP
Disaster/Safety Programs in/for Schools	Yes		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	Yes		



Table 9.17-7. Education/Outreach and Community Classifications

Program	Do you have/participate in this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public-Private Partnerships	TBD		

NP = Not participating.

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery, and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The Community Rating System (CRS) class applies to flood insurance while the Building Code Effectiveness Grading Schedule (BCEGS) and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within five road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of the Borough of Ogdensburg’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.17-8. Self-Assessment of Capability

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and Regulatory Capability		X	
Administrative and Technical Capability		X	
Fiscal Capability	X – lack of funding		
Community Political Capability		X	
Community Resiliency Capability		X	
Capability to Integrate Mitigation into Municipal Processes and Activities.		X	





National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Eugene Buczynski, P.E., Engineer

Flood Vulnerability Summary

The Township maintains lists/inventories of properties that have been damaged by floods. The FPA is not aware of any structures that were damaged during Irene, Lee, Sandy or other recent events and substantial damage estimates were not made for these events. The FPA is unaware of any properties interested in mitigation at the time of the HMP update.

Resources

Eugene Buczynski is the appointed floodplain administrator for the Borough. Christopher Ross, DPW Supervisor, the emergency management coordinator and the construction code official provides assistance to the FPA when needed. NFIP administration services provided to the Borough include: inspections when requested, assistance with damage assessments, and record keeping. Education and/or outreach is not provided to the community. The FPA did not indicate any barriers to running an effective floodplain management program and stated that he feels adequately supported and trained to fulfill his role as the municipal floodplain administrator. The FPA would consider attending continuing education and/or certification training on floodplain management if it were offered and if authorized by the Borough's governing body. The FPA indicated that the Borough's Emergency Management Coordinator and DPW Supervisor would possibly attend the training as well.

Compliance History

The Borough is in good standing with the NFIP; however, it is unknown as to when the most recent compliance audit was conducted.

Regulatory

The Township's flood damage prevention ordinance exceeds the minimum set by FEMA and the State and the Township has other ordinances and program that support floodplain management. Additionally, during site plan review, the Land Use Board considers floodplain regulations in the review of applications.

Community Rating System

The Borough of Ogdensburg does not participate in the Community Rating System (CRS) program.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

Land Use Planning: The Borough has a Land Use Board which reviews all applications for development and

Environmental Resource Inventory 2011: This document provides a comprehensive inventory of the environmental sensitive lands and associated hazards.





Highlands: Ogdensburg Borough is located in the New Jersey Highlands Region and is part of the Highlands Area. As such, the Borough is one of 88 municipalities protected by and subject to the provisions of the Highlands Water Protection and Planning Act that protects, enhances and restores Highland’s natural resources. The Highlands Act requires that future land use in the Highlands Region be guided by the Regional Master Plan’s Land Use Capability Map (LUCM) Series which includes tools to identify and protect the natural, scenic and other resources of the region. In supporting and complying with the Highlands Act, the Borough enacted amendments and updates to local zoning and development ordinances that ensure the protection of important resources and areas. The Highland Act creates three primary zones: a Protection Zone, a Conservation Zone and an Existing community Zone. Protection Zones are areas with the highest quality resources with extreme limitations on allowable development while Conservation Zones have significant agricultural lands and associated woodlands and environmental features with allowable development consisting primarily of agricultural uses. Existing Community Zones consist of areas of concentrated development with limited environmental constraints. These zones are overlaid with existing local zoning maps to identify and address issues of public interest including watershed management, open space preservation, historic preservation, flood protection among others.

Regulatory and Enforcement (Ordinances)

The Borough has multiple chapters pertaining to the mitigation of hazards. These ordinances include the Flood Damage Prevention Chapter, Stormwater Control Chapter, and an Environmental Impact Statement requirement and an Environmentally Sensitive Areas section included in the Land Use Chapter. The Borough also has a chapter specific to the hazards associated with environmentally sensitive areas.

Flood Damage Prevention

The purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the alternate use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Chapter 502: Stormwater Management

The purposed of the Stormwater Control chapter is to implement best management practices for stormwater management designed to promote the public health, safety and general welfare the citizens.

Highlands: In addition, the Highlands Water Protection and Planning Act provides additional regulatory control over development within the Borough. While Major Highlands Development projects, as defined by the Highlands Act, still require local approvals, they must first receive a Highlands Resource Applicability Determination and be evaluated for consistency with the provisions of the Highlands Act. Major Highlands Development projects include a variety of projects such as any non-residential development, any residential development that disturbs one or more acres of land, any development that disturbs ¼ acres of more of forest



among others. This process identifies any potential Highlands Resources on the site and if found requires adherence to relevant development standards and restrictions.

Operational and Administration

The Borough has established a Joint Land Use Board that is responsible for the review of development applications. The Borough has a Zoning officer as well as a planning and zoning board secretary.

Funding

Operating Budget: The Borough's operating budget contains minimal provisions for expected repairs like snow removal and infrastructure repair after a storm or natural disaster.

Grants: The Borough has received funding from the NJDOT, Sustainable Jersey, The Garden State Preservation Trust Fund, and Clean Communities grant programs for the completion of mitigation and emergency response related projects including roadway and drainage improvements.

Education and Outreach

The Borough's website's home page posts information regarding upcoming community events and important municipal decisions. The Borough identified a new mitigation action to enhance their public outreach and education program on hazard mitigation and preparedness. Refer to Table 9.17-11 for further information.

9.17.6 MITIGATION STRATEGY AND PRIORITIZATION

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

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2011 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.17-9. Past Mitigation Initiative Status

Initiative Number	2011 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2016 HMP? or Discontinue)	Describe Next Step 1. If including action in the 2015 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Ogdensburg Borough 1	Acquisition / elevation of one repetitive loss property located on Richardsville Road	OEM Coordinator	No Progress	Due to lack of funding, this project has not been completed.	Include in 2016 HMP	This action will be included in the plan update.
Ogdensburg Borough 2	Retrofit roof to meet current snow load standards for Ogdensburg Elementary School located at 100 Main Street	School Administration	No Progress	The Borough does not have jurisdiction over the elementary school building.	Discontinue	The Borough does not have jurisdiction over the elementary school building; therefore, this action will not be included in the plan update.
Ogdensburg Borough 3	Backup generator for Ogdensburg Elementary School located at 100 Main Street. Facility utilized as a shelter.	School Administration	No Progress	The Borough does not have jurisdiction over the elementary school building.	Discontinue	The Borough does not have jurisdiction over the elementary school building; therefore, this action will not be included in the plan update.
Ogdensburg Borough 4	Dredge Heaters Pond to increase holding capacity.	DPW Supervisor	No Progress	Due to lack of funding, this project has not been completed.	Include in 2016 HMP	Dredge Heaters Pond and armor dam.
Ogdensburg Borough 5	Backup generator for Ogdensburg Fire Department located on Main Street. Facility utilized as a shelter.	Station Commander	No Progress	Due to lack of funding, this project has not been completed.	Include in 2016 HMP	
Ogdensburg Borough 6	Implement Fire Wise Program throughout the Borough.	OEM Coordinator	No Progress		Discontinue	Not a concern to the Borough at this time.
Ogdensburg Borough 7	Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.	Borough Engineer	No Progress	Due to lack of funding, this project has not been completed.	Include in 2016 HMP	Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.
Ogdensburg Borough 8	Armoring and bank stabilization on Heaters	Borough Engineer	In Progress	Began engineering study; but need funding to complete project	Include in 2016 HMP	Dredge Heaters Pond and armor dam.



<u>Initiative Number</u>	<u>2011 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2016 HMP? or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2015 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
	Pond Dam located at Edison Road.					
Ogdensburg Borough 9	Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	OEM Coordinator, in coordination with SCDEM	In Progress		Include in 2016 HMP	Continue to enhance and develop the Borough's public outreach and education programs for hazard mitigation and preparedness.



Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Borough has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2011 HMP:

- Culvert cleaning and replacement; catch basin maintenance; tree trimming program
- Generator at Borough Hall

Proposed Hazard Mitigation Initiatives for the Plan Update

Sussex County held a mitigation action workshop in April 2015 and provided the municipalities with 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). In May 2015, a second workshop was led by FEMA Region 2 and NJOEM and the results to the risk assessment were provided to further assist with the identification of mitigation actions. In October 2015, the Borough attended an annex support meeting to complete with the identification of mitigation actions for the community.

Table 9.17-10 summarizes the comprehensive-range of specific mitigation initiatives the Borough would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as 'High', 'Medium', or 'Low.' Table 9.17-11 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.17-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Ogdensburg-1 (old #4)	Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.	Existing	Dam Failure, Severe Weather	All	Engineering, Borough administration	High	Medium to High	HMGP with local cost share	Short Term / DOF	Medium	SIP	PP
Ogdensburg-2 (new)	Upgrade the emergency warning system in the Borough, including additional fire sirens.	Existing	All	All	Fire Department, OEM	High	Low	Local Budget	Short Term / DOF	High	SIP, EAP	PP, PI
Ogdensburg-3 (new)	Implement Reverse 911 system for the Borough	N/A	All	All	OEM, Township Administration	High	Low	Local Budget	Short Term / DOF	Medium	SIP, EAP	PP, PI
Ogdensburg-4 (new)	Implement a debris clearing program of the Walkkill River and Saw Mill Brook	Existing	Severe Weather; Severe Winter Weather	2, 5	Engineering and DPW, working with contractors and local utilities	Medium – High (reduced risk of utility outages; life safety)	Medium	Local Budget	Short	Medium	NSP	NR
Ogdensburg-5 (old #9)	Continue to enhance and develop the Borough's public outreach and education programs for hazard mitigation and preparedness.	N/A	All Hazards	All	Elected Official's Office	Medium	Low	Municipal Budget; HMA programs with local or county match	Short	High	EAP	PI
Ogdensburg-6 (revised old #3)	Ensure continuity of operations at critical facilities. At this time the following is identified: purchase and install backup generators at the following critical facilities: <ul style="list-style-type: none"> • First Aid Squad • Meadow Road pump station • Fire Department 	Existing	All	1, 2, 6	Engineering, OEM	Medium to High	Medium to High	HMGP with local cost share	Short Term / DOF	High	SIP	PP
Ogdensburg-7	Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.	Existing	Severe Weather, Flood, Severe Winter Weather	All	Engineering, Borough Administration	Medium	Medium to High	HMGP with local cost share	Short Term / DOF	Medium	SIP	PP





Table 9.17-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Ogdensburg-8 (revised old #1)	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect structures from future damage, with repetitive loss and severe repetitive loss properties as a priority when applicable. Phase 1: Identify appropriate candidates and determine most cost-effective mitigation option. Phase 2: Work with the property owners to implement selected action based on available funding and local match availability.											
	See above.	Existing	Flood, Severe Weather Wildfire, Severe Winter Weather	1, 2, 5	Engineering via NFIP FPA with NJOEM, FEMA support	High	High	HMGP and local budget (or property owner) for cost share	Ongoing (outreach and specific project identification); Long term DOF (specific project application and implementation)	High	SIP	PP

Notes:

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

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

- 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
- NJDEP New Jersey Department of Environmental Protection
- NJOEM New Jersey Office of Emergency Management
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program
- RFC Repetitive Flood Claims Grant Program (discontinued)
- SRL Severe Repetitive Loss Grant Program (discontinued)

Timeline:

- Short 1 to 5 years
- Long Term 5 years or greater
- OG On-going program
- DOF Depending on funding

Costs:

Where actual project costs have been reasonably estimated:

- Low < \$10,000
- Medium \$10,000 to \$100,000
- High > \$100,000

Where actual project costs cannot reasonably be established at this time:

- Low Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
- Medium Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

- Low= < \$10,000
- Medium \$10,000 to \$100,000
- High > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

- Low Long-term benefits of the project are difficult to quantify in the short term.
- Medium Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.





Costs:

High Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

High Project will have an immediate impact on the reduction of risk exposure to life and property.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.17-11. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
Ogdensburg-1 (old #4)	Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.	1	1	1	1	1	0	0	1	0	1	1	1	0	0	9	Medium
Ogdensburg-2 (new)	Upgrade the emergency warning system in the Borough, including additional fire sirens.	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	High
Ogdensburg-3 (new)	Implement Reverse 911 system for the Borough	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	Medium
Ogdensburg-4 (new)	Implement a debris clearing program of the Wallkill River and Saw Mill Brook	0	1	1	1	1	0	0	1	0	1	1	1	0	0	9	Medium
Ogdensburg-5 (old #9)	Continue to enhance and develop the Borough's public outreach and education programs for hazard mitigation and preparedness.	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	High
Ogdensburg-6 (revised old #3)	Purchase and install backup generators at the following critical facilities: <ul style="list-style-type: none"> • First Aid Squad • Meadow Road pump station • Fire Department 	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	High
Ogdensburg-7	Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.	0	1	1	1	1	0	0	1	0	1	1	1	0	0	9	Medium
Ogdensburg-8 (revised old #1)	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition / relocation to protect structures from future damage, with repetitive loss and severe repetitive loss	1	1	1	1	1	0	0	0	1	1	1	1	1	0	10	High



Table 9.17-11. Summary of Prioritization of Actions

Mitigation Action / Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	properties as a priority when applicable.																

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



9.17.7 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

None at this time.

9.17.8 HAZARD AREA EXTENT AND LOCATION

Hazard area extent and location maps have been generated for the Borough of Ogdensburg 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 considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Borough of Ogdensburg has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.17.9 ADDITIONAL COMMENTS

None at this time.



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

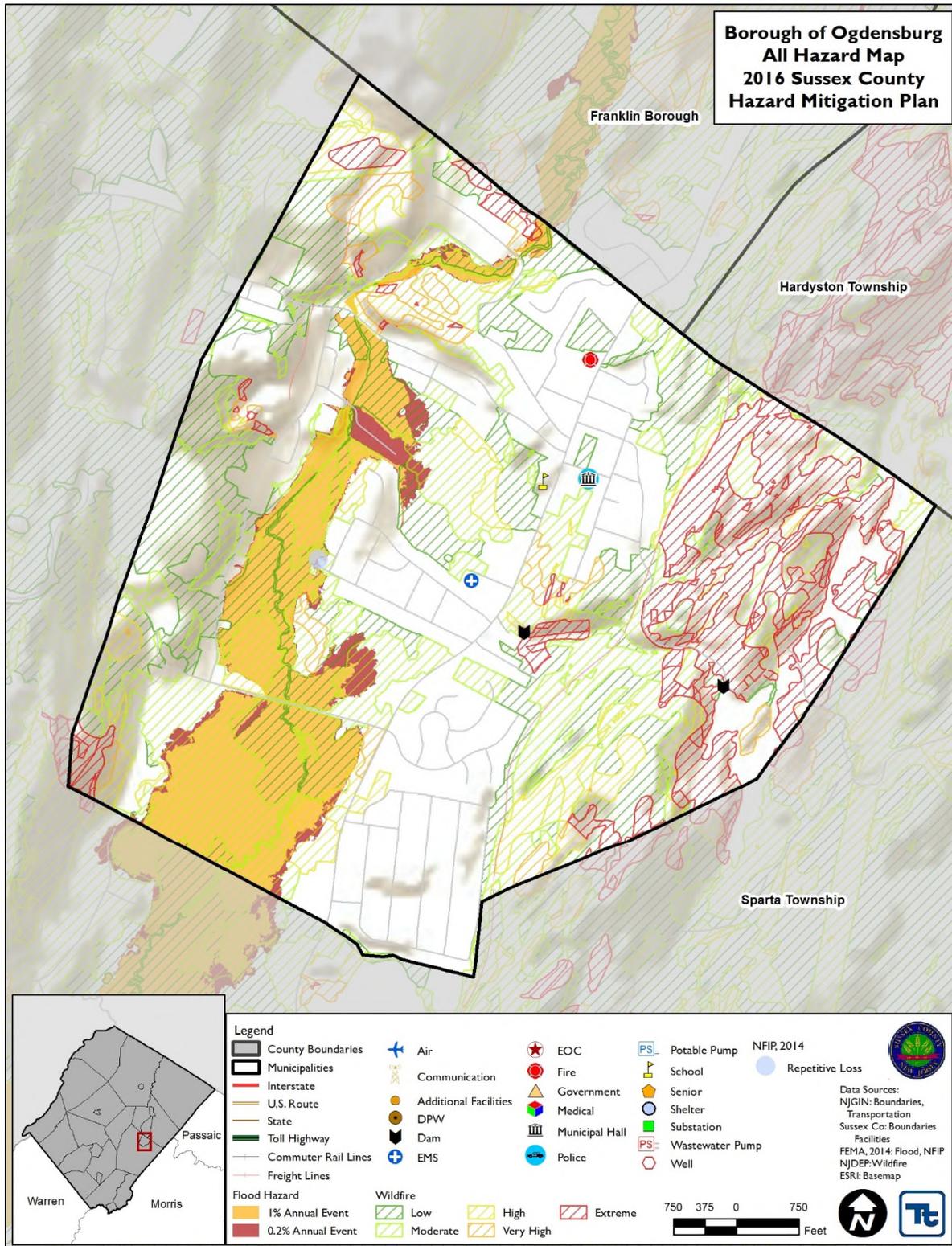
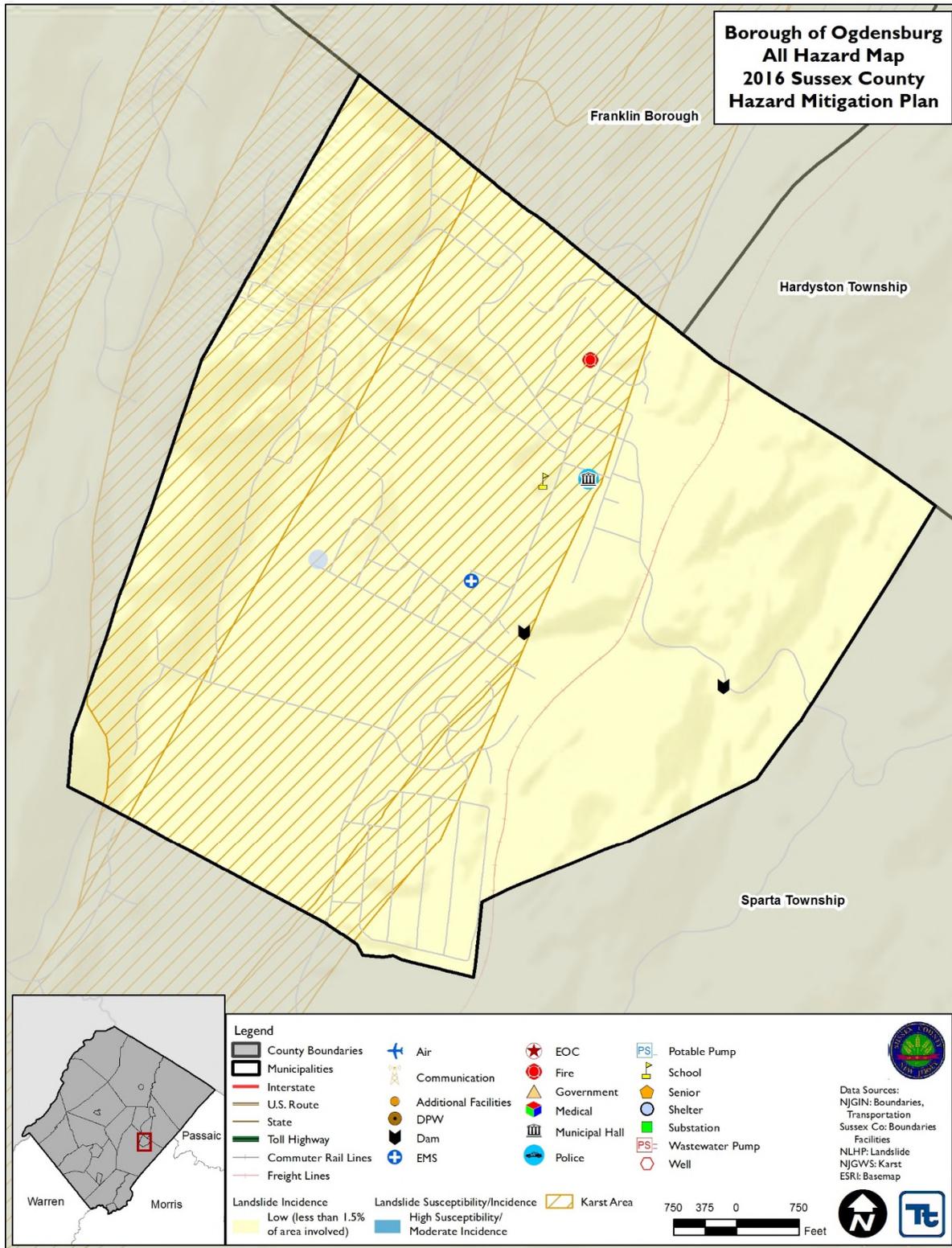




Figure 9.17-2. Borough of Ogdensburg Hazard Area Extent and Location Map 2





Action Number: Ogdensburg-1

Mitigation Action/Initiative: Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.

Assessing the Risk	
Hazard(s) addressed:	Dam Failure, Severe Weather
Specific problem being mitigated:	Risk of dam failure
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.
	2. Do nothing – current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.
Action/Project Category	SIP
Goals/Objectives Met	All
Applies to existing and/or new development; or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	Medium to High
Priority	Medium
Plan for Implementation	
Responsible/Lead Agency/Department	Engineering, Borough Administration
Local Planning Mechanism	Emergency Operations, Capital Improvement
Potential Funding Sources	HMGP with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Ogdensburg-1

Mitigation Action/Initiative: Implement the engineering study conducted on Heaters Pond – armor the dam on the pond and stabilize the bank of Heaters Pond.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protect the residents that live near Heaters Pond
Property Protection	1	Prevent the dam from failing
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	0	
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Dam Failure, Severe Weather
Timeline	1	
Local Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	Medium	



Action Number: Ogdensburg-2

Mitigation Action/Initiative: Upgrade the emergency warning system in the Borough, including additional fire sirens.

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	Lack of warning systems in the Borough
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Upgrade the emergency warning system in the Borough, including additional fire sirens.
	2. Do nothing – current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Upgrade the emergency warning system in the Borough, including additional fire sirens.
Action/Project Category	SIP, EAP
Goals/Objectives Met	All
Applies to existing and/or new development; or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	Low
Priority	High
Plan for Implementation	
Responsible/Lead Agency/Department	Fire Department, OEM
Local Planning Mechanism	Emergency Operations, Capital Improvement
Potential Funding Sources	Local Budget
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Ogdensburg-2

Mitigation Action/Initiative: Upgrade the emergency warning system in the Borough, including additional fire sirens.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Alert residents in the event of an emergency
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Local Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



Action Number: Ogdensburg-6

Mitigation Action/Initiative: Purchase and install backup generators at the following critical facilities

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	Loss of power to critical facilities in the Borough prevent them from functioning properly in emergencies.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<ol style="list-style-type: none"> 1. Purchase and install backup generators at the following critical facilities 2. Use portable generators – not feasible during longer power outages 3. Do nothing – current problem continues
Action/Project Intended for Implementation	
Description of Selected Action/Project	Purchase and install backup generators at the following critical facilities: <ul style="list-style-type: none"> • First Aid Squad • Meadow Road pump station • Fire Department
Action/Project Category	SIP
Goals/Objectives Met	1, 2, 6
Applies to existing and/or new development; or not applicable	Existing
Benefits (losses avoided)	Medium to High
Estimated Cost	Medium to High
Priority	High
Plan for Implementation	
Responsible/Lead Agency/Department	Engineering, OEM
Local Planning Mechanism	Emergency Operations, Capital Improvement
Potential Funding Sources	HMGP with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Ogdensburg-6

Mitigation Action/Initiative: Purchase and install backup generators at the following critical facilities

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provide shelter and drinking water for residents
Property Protection	1	Allow facilities to operate during power outages
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	0	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All
Timeline	1	
Local Champion	1	
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	



Action Number: Ogdensburg-7

Mitigation Action/Initiative: Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Weather, Severe Winter Weather
Specific problem being mitigated:	Need vegetation in this area to protect the stream bank and stream
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.
	2. Do nothing – current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.
Action/Project Category	SIP
Goals/Objectives Met	All
Applies to existing and/or new development; or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Medium to High
Priority	Medium
Plan for Implementation	
Responsible/Lead Agency/Department	Engineering, Borough Administration
Local Planning Mechanism	Capital Improvement
Potential Funding Sources	HMGP with local cost share
Timeline for Completion	Short Term / DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:



Action Number: Ogdensburg-7

Mitigation Action/Initiative: Stream bank stabilization (vegetation addition) on Middle Sawmill Brook from RR tracks to Route 517.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Protect structures and railroad tracks from flood damage in this area
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	0	
Environmental	1	Stabilize slopes in this area
Social	0	
Administrative	1	
Multi-Hazard	1	Severe Weather, Flood, Severe Winter Weather
Timeline	1	
Local Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	Medium	