

9.2 VILLAGE OF SOUTH BLOOMING GROVE

This section presents the jurisdictional annex for the Village of South Blooming Grove.

9.2.1 Hazard Mitigation Plan Point of Contact

Hazard Mitigation Plan Points of Contact	
Primary Point of Contact	Alternate Point of Contact
Name: Robert Jerolman, Mayor Address: 811 Route 208 Monroe, New York 10950 Phone Number: 845-782-0945 2605 Fax Number: 845-782-2601 E-mail Address: mayor@villageofsouthbloominggrove.com	Name: John Hickey, Deputy Mayor Address: 811 Route 208 Monroe, New York 10950 Phone Number: 845-782-2605 Fax Number: 845-782-2601 E-mail Address: trusteehickey@villageofsouthbloominggrove.com

9.2.2 Profile

Population

The population of the Village of South Blooming Grove is estimated to be 3,234, based on information gathered during the 2010 U.S. Census.

Location

The Village of South Blooming grove is physically located in central Orange County. The Village is bordered by the Town of Blooming Grove to the north and west, the Town of Monroe and the Village of Kiryas Joel to the south, and the Town of Woodbury to the east.

Brief History

The Village of South Blooming Grove has a relatively short history being incorporated July 14, 2006. In 2009 the Village formally adopted a zoning code and planning board.

Governing Body Format

The Village of South Blooming Grove governing body consists of a Mayor, and four trustees. The Village holds meetings every second and fourth Monday of the month. The Village also has personnel of a clerk, treasurer, attorney, and engineer.

Growth/Development Trends

The Village of South Blooming Grove did not note any major residential or commercial development, or major infrastructure development planned for the next 5 years in the municipality.

9.2.3 NATURAL HAZARD EVENT HISTORY SINCE 2008

The Planning Area has a history of 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 planning area. The table below presents a summary of events that have occurred from 2008 to the present to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2008, refer to Volume I, Section 5.0 of this plan. All event damage before the Village’s incorporation was identified by the Town of Blooming Grove. Information regarding specific damages is included if available based on reference material or local sources.

Natural Hazard Event History				
Event Type	Date(s) of Event	FEMA Declaration	Orange County Designated?	Approximate Damage Assessment
Blizzard and Heavy Snow	February 24-27, 2010	N/A	N/A	Blizzard and heavy snows made all roads in the Village impassable. The amount of snow caused the roof at Village Hall to collapse, and damage to several private residences.
Severe Storms and Flooding (Nor’Easter)	March 13-31, 2010	DR-1899	Yes	Heavy rain caused flooding which damaged to five private properties, local bridges, roads, culverts, and the sewer pump station.
Wind Storm	May 09, 2010	N/A	N/A	Strong winds caused downed tree limbs and utility lines. Approximately 20 homes were damaged, and the water system booster pump at Midlevel was damaged from the electrical surge.
TSTM/Wind	June 24, 2010	N/A	N/A	No damages were reported/ available.
Lightning	July 19, 2010	N/A	N/A	No damages were reported/ available.
Lightning	July 21, 2010	N/A	N/A	No damages were reported/ available.
Flood	March 7, 2011	N/A	N/A	No damages were reported/ available.
Tornado	July 29, 2011	N/A	N/A	In Lower Hudson Valley, there was at least one super cell, which produced a tornado in Orange County. The NWS confirmed an EF-1 tornado that ran from the Towns of Goshen to Blooming Grove, on Friday July 29th. The tornado touched down in the Town of Goshen, before finally lifting near Prospect Road in the Town of Blooming Grove. All along its path, trees converged into a well-defined narrow path. Total property damage from this event was approximately \$50,000.
Hurricane Irene	August 26-September 5, 2011	DR-4020	Yes	Heavy rain caused flooding which damaged to eight private properties, multiple local bridges, roads, culverts, village recreational facilities, dams, and Village Hall Roof. Approximate cost to the Village was over \$1 million.
Remnants of Tropical Storm Lee	September 7-11, 2011	DR-4031	Yes	Remnants of Tropical Storm Lee produced heavy rains and caused flash flooding and river flooding across parts of central New York State and northeast Pennsylvania.

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Natural Hazard Event History				
Event Type	Date(s) of Event	FEMA Declaration	Orange County Designated?	Approximate Damage Assessment
				As of April 4, 2013, more than \$55M in individual assistance and \$126M in public assistance grants had been awarded by FEMA to affected counties in the State of New York. Specific damages for Orange county were not available at this time.
High Wind and Heavy Snow	October 29, 2011	N/A	N/A	Heavy snow and high wind caused massive amounts of debris and power outages. Village roads were impassable.
Hurricane Sandy	October 27 – November 8, 2012	DR-4085	Yes	Heavy rain caused flooding which damaged to private property, local bridges, roads, culverts, and the Village water system pumps. This event caused at least one reported injury.

Note:

DR = Major Disaster Declaration
 EF = Enhanced Fujita Scale (tornado)
 EM = Emergency Declaration
 N/A = Not applicable
 TSTM = Thunderstorm

9.2.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of the Village of South Blooming Grove.

Table 9.2-1 Natural Hazard Risk/Vulnerability Risk Ranking

Natural Hazard Risk/Vulnerability Risk Ranking				
Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c, d}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Flood	1% Annual Chance:\$27,663,000 0.2% Annual Chance:\$33,540,000	Frequent	18	Medium
Severe Storm	100-Year MRP:\$306,255 500-Year MRP:\$1,923,304 Annualized Loss:\$19,362	Frequent	18	Medium
Severe Winter Storm	1% of GBS:\$2,847,530 5% of GBS:\$14,237,650	Frequent	39	High
Earthquake	Not available	Rare	6	Low
Drought	Not available	Occasional	12	Medium
Extreme Temperature	Not available	Occasional	12	Medium
Wildfire	Not available	Occasional	16	Medium

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. High = Total hazard priority risk ranking score of 22 and above
Medium = Total hazard priority risk ranking of 12-22
Low = Total hazard risk ranking below 12
- c. The valuation of general building stock and loss estimates was based on custom inventory for the Town of Blooming Grove Planning Area.
- d. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.

9.2.5 CAPABILITY ASSESSMENT

This section describes the following capabilities of the local jurisdiction:

- Legal and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community resiliency
- Community political capability
- Community classification.

Officials from the Village of South Blooming Grove indicated that the municipality has limited fiscal capabilities, moderate planning and regulatory capabilities, and high administrative and technical capabilities, community political capability, and community resiliency capability; and a very willing political capability to enact policies or programs to reduce hazard vulnerabilities in the community.

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Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of South Blooming Grove.

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
1) Building Code	Y	Jeanne Oversen, Building Inspector	
2) Zoning Ordinance	Y	Sarah Ramos, Zoning Board of Alleals Chairwoman	2/9/09
3) Subdivision Ordinance	Y	Robert Geneslaw, Village Planner	6/23/08
4) NFIP Flood Damage Prevention Ordinance	Y	James Farr, P.E., Village Engineer	6/23/08
4a) Cumulative Substantial Damages			
4b) Freeboard			
5) Growth Management			
6) Floodplain Management / Basin Plan	Y	James Farr, P.E., Village Engineer	
7) Stormwater Management Plan/Ordinance	Y	Water & Sewer Dept.	
8) Comprehensive Plan / Master Plan/ General Plan		Julius Sas, Planning Board Chairman	Under Development
9) Capital Improvements Plan			Under Development
10) Site Plan Review Requirements	Y	James Farr, P.E., Village Engineer	
11) Open Space Plan			
12) Stream Corridor Management Plan			Under Development
13) Watershed Management or Protection Plan			Under Development
14) Economic Development Plan			Under Development
15) Comprehensive Emergency Management Plan	Y	Jim Farr, Village Engineer	
16) Emergency Response Plan	Y	Doug Mitchell, Emergency Management	
17) Post-Disaster Recovery Plan	Y	Doug Mitchell, Emergency	Under Development

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Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
		Management	
18) Post-Disaster Recovery Ordinance	Y	Doug Mitchell, Emergency Management	Under Development
19) Real Estate Disclosure Requirement	Y	Doug Mitchell, Emergency Management	Under Development
20) Other (Special Purpose Ordinances such as critical or sensitive areas)	N		

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of South Blooming Grove.

Administrative and Technical Capability		
Staff / Personnel Resources	Available ?	Department / Agency / Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Consultant Engineer: McGoey,Hauser&Edsall Engineering; Jim Farr P.E.
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Consultant Engineer: McGoey,Hauser&Edsall Engineering; Jim Farr P.E.
3) Planners or engineers with an understanding of natural hazards	N	
4) NFIP Floodplain Administrator	Y	Consultant Engineer: McGoey,Hauser&Edsall Engineering; Jim Farr P.E.
5) Surveyor(s)	N	
6) Personnel skilled or trained in GIS applications	N	
7) Scientist familiar with natural hazards	N	
8) Emergency Manager	Y	Doug Mitchell, Emergency Management
9) Grant Writer(s)	N	
10) Staff with expertise or training in benefit/cost analysis	N	

Fiscal Capability

The table below summarizes financial resources available to the Village of South Blooming Grove.

Fiscal Capability	
Financial Resources	Accessible or Eligible to use
1) Community Development Block Grants (CDBG)	N
2) Capital Improvements Project Funding	Y, Village Board
3) Authority to levy taxes for specific purposes	N
4) User fees for water, sewer, gas or electric service	Y, Village Board
5) Impact fees for homebuyers or developers of new development/homes	N
6) Incur debt through general obligation bonds	Y, Village Board
7) Incur debt through special tax bonds	Y, Village Board
8) Incur debt through private activity bonds	N
9) Withhold public expenditures in hazard-prone areas	N
10) State mitigation grant programs	Y, Village Board
11) Other	N

Community Classifications

The table below summarizes classifications for community program available to the Village of South Blooming Grove.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS)	NP	
Building Code Effectiveness Grading Schedule (BCEGS)	-	
Public Protection	-	
Storm Ready	NP	
Firewise	NP	

Notes:

- = Unavailable
- N/A = Not applicable
- NP = Not participating.

The classifications listed above relate to the Village of South Blooming Grove’s ability to provide effective services to lessen its vulnerability to the natural 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 CRS class applies to flood insurance, while the 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 5 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/>

9.2.6 MITIGATION STRATEGY

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

Past Mitigation Actions/Status

Description	Mitigation Initiative Status
Install protective barrier at sewer pump station	Completed
Old Town Road Culvert Replacement	Completed
Merriewold Lane south Culvert Crossing	Completed 2010
Satterly Creek reclamation	Completed 2010 and 2011

Hazard Vulnerabilities Identified

The Village has identified the following vulnerable areas:

- Satterly Creek Basin and surrounding areas
- Merriewold Lake dam spillway
- Peddler Hill Dam and Road
- Stonegate Drive stream crossing and culvert
- Culverts at Merriewold Lane North and Lakeshore drive

It is estimated that in the Village of South Blooming Grove, 109 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). Please note the methodology used underestimates the population at risk to flooding by as much as half because it does not take into consideration physical access into the area where the property is located such as the ability to travel into the area either on foot or by vehicle. In addition, when there are multiple structures on a parcel they will not be included in this estimate (such as multiple mobile homes on a parcel). Refer to the Flood Profile for further details.

Of the total parcels within the municipality, an estimated 46 (4.8%) are located within the 1% annual chance flood area. An estimated \$19,980,000 (4.4%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 25 NFIP policies in the community and there are 16 policies located within the 1% annual chance flood area. FEMA has identified 0 Repetitive Loss (RL) properties including 0 Severe Repetitive Loss (SRL) properties in the municipality.

HAZUS-MH estimates that for a 1% annual chance flood, \$17,063,000 (3.8%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 322 households may be displaced, 223 people may seek short-term sheltering, and an estimated 2,823 tons of debris could be generated.

Further information regarding the summary of the community’s participation in the NFIP is provided in the table below.



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Table 9.2- 2 NFIP Summary

NFIP Summary								
Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 1% Boundary (3)	# Policies in 0.2% - Boundary (3)	# Policies Outside the 0.2% Flood Hazard (3)
Village of South Blooming Grove	25	3	\$31,484	0	0	16	17	8

Source: FEMA Region 2, 2013

Notes:

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of January 31, 2013. The community name was used to summarize these statistics. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. There were no repetitive loss properties identified for the Village of South Blooming Grove. The number of claims represents the number of claims closed by January 31, 2013 along with their total payments (structure and contents).
- (2) Total building and content losses from the claims file provided by FEMA Region 2. Only claims closed with payment are listed.
- (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. 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.
- (4) The number of policies in force for the Village of South Blooming Grove as provided by FEMA in January 31, 2013 is 25; however, according to the updated statistics for May 31, 2013 there are 89 policies in force. The difference noted for the Village of South Blooming Grove between January and May 2013 will be looked into further. These numbers differ greatly from what is reported in the County Plan (3 policies in force) for the Village of South Blooming Grove in September 2010).

Table 9.2- 3 Critical Facilities Located in the 1-Percent and 0.2-Percent Annual Chance Flood Boundaries and Estimated Potential Damage

Critical Facility Damage Estimate										
Name	Municipality	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
			1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾
South Blooming Grove SD 1	South Blooming Grove (V)	WW	X	X	30			33	-	-
South Blooming Grove Water	South Blooming Grove (V)	Potable	X	X	16	-	-	38	-	-

Source: HAZUS-MH 2.1

Note: NA = Not available; T = Town; V = Village

- = Not calculated by HAZUS-MH 2.1

X = Facility located within the DFIRM boundary.

(1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

(2) In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Please refer to the Hazard Profiles in Section 5 of this plan for additional vulnerability information relevant to this jurisdiction.



9.2.7 PROPOSED HAZARD MITIGATION INITIATIVES

Some of the identified mitigation initiatives in the table below 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.

Table 9.2- 4 Proposed Hazard Mitigation Initiatives

Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
Mitigation Type: Prevention											
SBG-1	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New and Existing	All Hazards	1-3 1-6 1-7	Municipality with support from Planning Partners, County Planning, NYSOEM, FEMA	High	Low – High (for 5 year update)	Municipal Budget, FEMA planning grants	On-going	H	PR
SBG-2	Adopt regulations for undergrounding utilities in new developments.	N/A	Severe Storm	1-1 1-3 1-8 3-1	Municipal Council	Medium	Low	Municipal Budget	Short	M	PR
SBG-3	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives SBG-8 and SBG-13 below.	N/A	Flood, Severe Storm	1-4 1-8 2-3 4-4	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NYSOEM, FEMA	Medium	Low-Medium	Municipal Budget	Ongoing	M	PR, PE
SBG-4	Implement, review, and enforce municipal policies	N/A	Severe Storm	3-1 4-4	Municipal Code Enforcement	Medium	Low	Municipal Budget	Short	M	PR



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Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	and programs to prevent trees from threatening lives and impacting power availability/interruption.			5-1							
SBG-5	Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations	N/A	All Hazards	3-6 5-1 5-2	Municipality with support from County, NYSOEM, FEMA and surrounding communities	Medium	Low	Municipal Budget	Short Term	M	PR, ES
SBG-6	Implement permit fee waivers for installation of backup power for private property.	N/A	Severe Storm	1-6 2-4	Municipal Council	Medium	Low	Municipal Budget	Short	M	PR
SBG-7	Obtain and archive elevation certificates	N/A	Flood, Severe Storm	1-4 1-6	NFIP Floodplain Administrator	Medium	Low	Municipal Budget	On-going	M	PR
SBG-8	Support ongoing updates of Comprehensive Emergency Management Plans, and implement Hazard Mitigation actions enumerated in the Village of South Blooming Grove Emergency Management Plan.	New and Existing	All Hazards	1-6	Municipality with support from County Emergency Management	Low	Low	Municipal Budget	On-going	M	PR
SBG-9	Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment and hazard mitigation. Projects include, but will not be limited to: - Install automatic level sensing devices on streams and lakes to provide for early warning of potential flooding - Develop a detailed inventory of critical facilities based upon FEMA's	N/A	All Hazards	1-3 1-4 1-5 2-8 3-4 5-2	Hazard Mitigation Plan Coordinator	Medium-High	Medium-High	FEMA Mitigation Grant Programs with local match	Long Term DOF	M	PR



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Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes.										
SBG-10	Incorporate ordinances and/or zoning restrictions to control and mitigate future development in hazard areas, specifically as identified in Section 9.2.10.	N/A	All Hazards	1-6 1-7 1-8 4-1 4-4	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short	M	PR
SBG-11	Develop programs/procedures to capture and archive loss data from events. Examples include: Record location and length of roadway closures; Develop a database of residential and commercial property damage, including permit history for such repairs; High water marks, perhaps painting phone poles with high water marks and or regulatory Base Flood Elevations (BFEs).	N/A	All Hazards	1-3 1-4 1-5 2-8	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short	M	PR
SBG-12	Promote the participation of Floodplain Administrators within the planning process and other activities.	N/A	Flood	1-6 1-7 1-8	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short	M	PR
SBG-13	Work with regional agencies (i.e. County and NYSOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers).	N/A	All Hazards	3-3 3-8	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget, FEMA HMA and HLS grant programs	Short-Long Term	M	PR



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Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
SBG-14	Identify and develop agreements with entities that can provide support with FEMA/NYSOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/NYSOEM paperwork compilation, submissions, record-keeping	N/A	All Hazards	2-7	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Long Term	L	PR, ES
Mitigation Type: Property Protection											
SBG-15	Purchase, relocate, or elevate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority. Phase 1: Identify appropriate candidates based on cost-effectiveness. Phase 2: Where determined to be a viable option, work with property owners toward implementation of the determined action based on available funding from FEMA and local match availability. Projects for immediate consideration include acquisition or elevation of the private residence in the Tappan Subdivision, the Town Maintenance Garage, and the Tappan Water Plant facilities. Also refer to TBG action #20.	Existing	Flood, Severe Storm	1-1 1-2	Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NYSOEM, FEMA	High	High	FEMA Mitigation Grants	Long Term DOF	H	PP



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Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
Mitigation Type: Public Education and Awareness											
SBG-16	Provide public education and outreach on proper installation and/or use of backup power	N/A	Severe Storm	2-2 2-4 2-5 3-3	Municipal Clerk	Medium	Low	Municipal Budget	Short	M	PE
SBG-17	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: - Conduct educational outreach to owners of important water resources facilities - Educate property owners in stream maintenance. - Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. - Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. - Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk	N/A	All Hazards	2-2 2-3 2-4 2-5	Municipality with support from Planning Partners, County Planning, NYSOEM, FEMA	Medium	Medium	Municipal Budget, HMA programs with local or county match	Short Term	M	PE



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Proposed Hazard Mitigation Initiatives											
Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	reduction measures. - Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding.										
SBG-18	Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program.	N/A	Severe Storm	2-1 2-2	Municipality with support from County, NYSOEM and FEMA	Medium	Low	Municipal Budget	Short Term, DOF	M	PE
Mitigation Type: Natural Resources Protection											
SBG-19	Stonegate Drive stream crossing and culvert	N/A	Flood	1-1 3-5 4-2	Municipality with support from County Planning, NYSOEM	High	Medium	Municipal Budget	Long Term OG DOF	H	NR
SBG-20	Increase size and capacity of culverts on Merriewold Lane North and Lakeshore drive continuation	N/A	Flood	1-1 3-5 4-2	Municipality with support from County Planning, NYSOEM	High	Medium	Municipal Budget	Long Term OG DOF	H	NR
SBG-21	Continue operation of Satterly Creek reclamation	Both	Flood	1-1 4-2	Municipality with support from County Planning, NYSDEC, NYSDEC	High	Medium	Municipal Budget, HMA programs with local or county match	Long Term DOF	H	NR
SBG-22	Pursue hydraulic analysis of Satterly Creek to address Stormwater issues and to identify solutions to reduce impact downstream. The results of this analysis will be used to in the development of future projects to mitigate flooding.	Both	Flood	1-1 4-3	Municipality with support from neighboring jurisdictions, NYSDEC	Medium	Medium	Municipal Budget	Short Term DOF	M	NR



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Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
Mitigation Type: Structural Projects											
SBG-23	Peddler hill Road and dam	Existing	Flood	1-1 1-3	Municipality with support from County Planning, NYSDEC, NYSOEM	Medium	Medium	Municipal Budget	Short Term DOF	M	SP
SBG-24	Merriewold Lake dam Spillway continuation	Existing	Flood	4-2	Municipality with support from County Planning, NYSDEC, NYSOEM	Medium	Medium	Municipal Budget	Short Term DOF	M	SP
SBG-25	Redesign Merriewold Lake spillway	Existing	Flood	1-1 1-3	Municipality with support from County Planning, NYSDEC, NYSOEM	Medium	Medium	Municipal Budget	Short Term DOF	M	SP
Mitigation Type: Emergency Services											
SBG-26	Improve communication systems, including the following recommendations called for in the Village of South Blooming Grove Emergency Management Plan: - development of redundant utilities/communications systems - develop and implement hurricane/severe storm/tornado early warning system and evacuation plans - develop and implement a dam failure warning system and evacuation plans	N/A	All Hazards	2-2 2-6 3-4	Municipality with support from County, NYSOEM and FEMA	High	Medium	Municipal Budget	Short	H	ES
SBG-27	Obtain and install backup power sources at critical facilities.	Existing	All	1-1 3-3 3-5	Municipality with support from County, NYSOEM and FEMA	Medium	Medium	Municipal Budget	Short Term DOF	M	ES

Notes:



*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:

ARC	American Red Cross
BGPD	Blooming Grove Planning Department
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
HMA	Hazard Mitigation Assistance
HMP	Hazard Mitigation Proposal
N/A	Not applicable
NFIP	National Flood Insurance Program
NYSOEM	New York State Office of Emergency Management
NOAA	National Oceanic and Atmospheric Administration
USACE	U.S Army Corp of Engineers
USGS	U.S. Geological Survey

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.

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:

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.

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

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



SRL = Severe Repetitive Loss Grant Program

Timeline:

Short = 1 to 5 years

Long Term = 5 years or greater

OG = On-going program

DOF = Depending on funding

Notes (for Mitigation Type):

1. PR = Prevention: Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. PP = Property Protection: 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.
3. PE = Public Education and Awareness: 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.
4. NR = Natural Resource Protection: 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.
5. SP = Structural Projects: 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.
6. ES = Emergency Services: 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.

9.2.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number.

Table 9.2-5 Prioritization of Mitigation Initiatives

Prioritization of Mitigation Initiatives							
Initiative #	# of Objectives Met	Benefits	Costs	Do benefits equal or exceed costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
Mitigation Type: Prevention							
SBG-1	3	H	L	Y	N	Y	High
SBG-2	4	M	L	Y	N	Y	Medium
SBG-3	4	M	L	Y	N	Y	Medium
SBG-4	3	M	L	Y	N	Y	Medium
SBG-5	3	M	L	Y	N	Y	Medium
SBG-6	2	M	L	Y	N	N	Medium
SBG-7	2	M	L	Y	N	Y	Medium
SBG-8	1	M	M	Y	N	Y	Medium
SBG-9	6	M	M	Y	N	Y	Medium
SBG-10	5	M	M	Y	N	Y	Medium
SBG-11	4	M	M	Y	Y	Y	Medium
SBG-12	3	M	M	Y	N	Y	Medium
SBG-13	2	M	M	Y	Y	Y	Medium
SBG-14	1	M	M	Y	N	Y	Low
Mitigation Type: Property Protection							
SBG-15	2	H	H	Y	Y	-	High
Mitigation Type: Public Education and Awareness							
SBG-16	4	M	L	Y	Y	Y	Medium
SBG-17	4	M	M	Y	Y	Y	Medium
SBG-18	2	M	L	Y	N	Y	Medium
Mitigation Type: Natural Resources Protection							
SBG-19	3	H	M	Y	Y	-	High
SBG-20	3	H	M	Y	Y	-	High
SBG-21	2	H	M	Y	Y	Y	High
SBG-22	2	M	M	Y		-	Medium
Mitigation Type: Structural Projects							
SBG-23	2	M	M	Y	N	-	Medium
SBG-24	1	M	M	Y	N	-	Medium
SBG-25	2	M	M	Y	N	Y	Medium
Mitigation Type: Emergency Services							
SBG-26	2	H	M	Y	Y	-	High
SBG-27	3	M	M	Y	Y	N	Medium

Notes: H = High; M = Medium; L = Low; Y = Yes; N = No; N/A = Not applicable; - = Unavailable



Explanation of Priorities

Explanations of priority classifications used to assess the mitigation initiatives described in this annex are presented below:

High Priority = A project that meets multiple objectives (i.e., multiple hazards), where potential benefits exceed the costs. High-priority projects have funding secured or are on-going projects that meet eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation (PDM) Grant Program. High-priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, where the potential benefits outweigh the costs. Funding for medium-priority projects has not been secured but these projects are eligible for grants under HMGP, PDM, or other grant programs. These projects can be completed in the short term, once funding is completed. Medium-priority projects will become high-priority projects once funding is secured.

Low Priority = A project that will mitigate the risk of a hazard, where the potential benefits do not exceed the costs or have benefits that are difficult to quantify. Funding for low-priority projects has not been secured and these projects are not eligible for HMGP or PDM grant funding. The timeline for completion is considered long term (1 to 10 years). Low-priority projects may be eligible other sources of grant funding from other programs. A low-priority project could become a high-priority project once funding is secured as long as it could be completed in the short term.

Was prioritization of initiatives based on the above definitions? Yes

Was prioritization of initiatives based on parameters other than those stated above? Not applicable

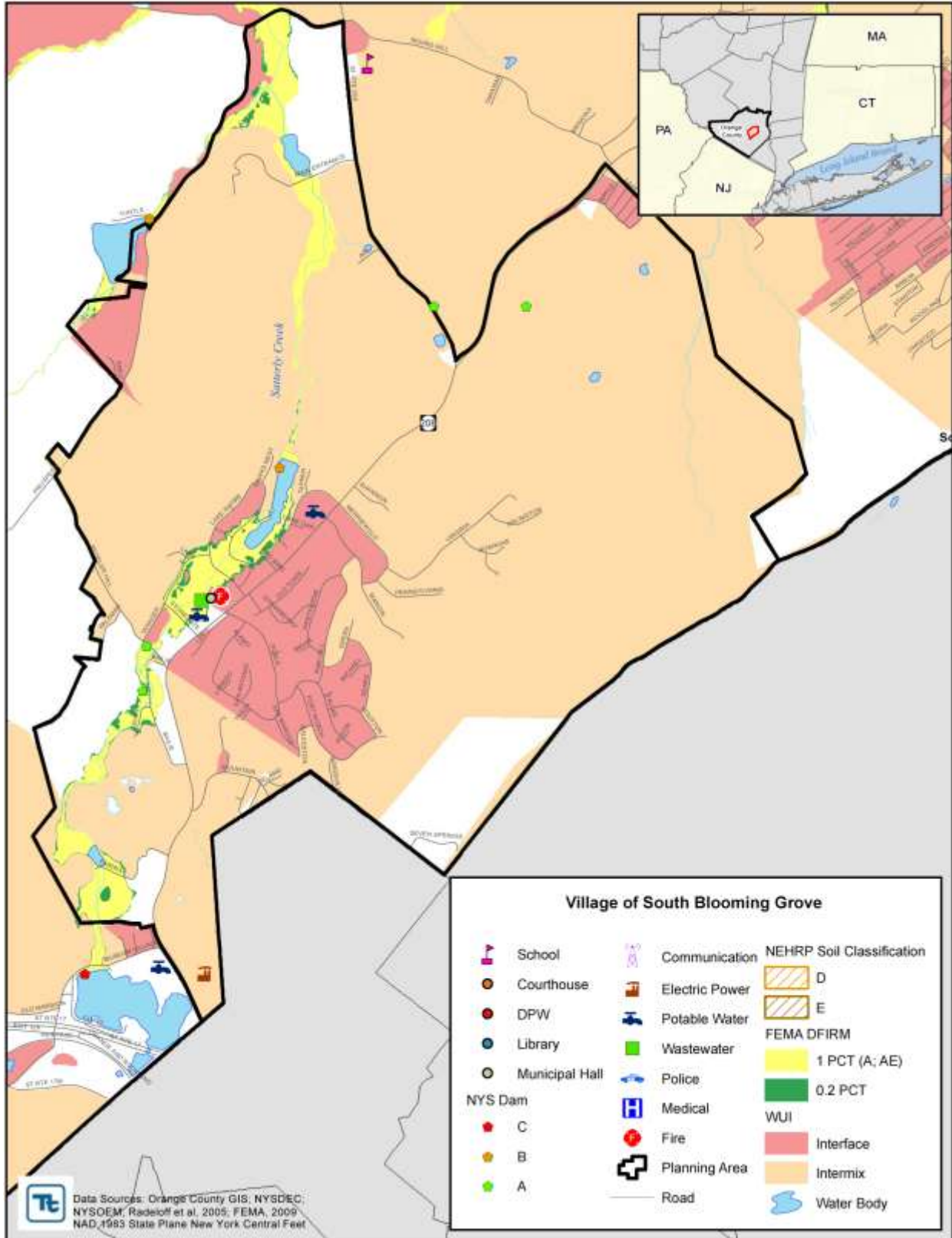
9.2.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The Village of South Blooming Grove has no additional risk vulnerabilities that need to be addressed at this time.

9.2.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within the Village of South Blooming Grove is provided on the following page. This map is based on the best data available at the time of the preparation of this plan, and is 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 Village of South Blooming Grove has significant exposure. The planning area maps are provided in the hazard profiles within Section 5.4, Volume I of this plan.

SECTION 9.2: VILLAGE OF SOUTH BLOOMING GROVE



9.2.11 STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of the Village of South Blooming Grove to incorporate mitigation planning as an integral component of daily municipal operations. The following table contains a list of planning mechanisms that have been or will be incorporated into municipal procedures.

Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms		
Planning Mechanisms	Has Been Utilized	Will Be Utilized
Operating Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.		X
Capital Improvement Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives.		X
Human Resource Manual Employee job descriptions may contain hazard mitigation actions.		X
Building and Zoning Ordinances A variety of building and zoning regulations are used to restrict the uses of land and establish building specifications. Prior to land use, zoning changes, or development permitting, the municipality will review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use.	X	
Comprehensive Land Use Plan A land use plan is intended to identify land use issues and to make recommendations on how to address these issues. When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations.		X
Grant Applications Data and maps will be used as supporting documentation in grant applications.		X
Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority.		X
Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans.		X
Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The municipality will incorporate hazard-resistant construction standards into the design and location of projects.		X
Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects.		X
Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district.		X
Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding.		X
Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location.		X

9.2.12 NFIP ADMINISTRATOR INPUT

Insurance Summary

- As of 4/30/13, there are 88 policies in force, with a total coverage of \$9,838,600. The written premium per policy is \$34,979/yr.
- As of 4/30/13, and 10 claims have been paid totaling \$31,483.91.
- There are 5 Repetitive Loss Properties and 3 Severe Repetitive Loss Properties within the Village.

Staff Resources

James Farr, P.E., Village Engineer

Regulation

- The Village entered NFIP on August 3, 2009, which is also the date of the current/effective FIRM. The Village of South Blooming Grove is also shown on the Town of Blooming Grove FIRM panels 360608, dated 11/15/1985.

Compliance History

- The Village is in good standing with the NFIP, and has no outstanding compliance issues.

Community Rating System

- The Village of South Blooming Grove does not participate in CRS.

9.2.13 ADDITIONAL COMMENTS

There are no additional comments at this time.