

**VILLAGE OF TARRYTOWN
BOARD OF TRUSTEES
WORK SESSION 6:00 P.M.
WEDNESDAY, DECEMBER 16, 2015
Tarrytown Village Hall
One Depot Plaza, Tarrytown, New York**

Board of Trustees Concerns

Open Session

1. Office Building and Mixed Use Districts Zoning Review
2. Soccer Field Access
3. Skate Shack
4. Glenville Fire Protection District
5. SWAT Intermunicipal Agreement
6. Input Recreation Advisory Council re RFP for Exercise and Fitness Rooms
7. Fence Replacement – Gracemere Park
8. Lease – Elizabeth Mascia Child Care Center
9. Parking Tickets
10. Westchester County Hazard Mitigation Plan

Executive Session

- 1A. Tarrytown Municipal Housing Authority Board
- 2A. Eastview Pump Station Deed
- 3A. Consultancy
- 4A. Tax Certioraris
- 5A. Sale of Village Owned Property
- 6A. Appraisal

VILLAGE OF TARRYTOWN

INTERNAL MEMORANDUM

To: Mayor Fixell and the Board of Trustees

From: Michael Blau, Village Administrator

Date: November 16, 2015

Subject: Skate Shack

Attached herewith please find a memorandum from John Hill, Chair of the Tarrytown Lakes Parks and Recreation Advisory Council, regarding the replacement of the skate shack (lower level building.) The Advisory Council met with the Tarrytown Lakes Committee and they jointly developed a concept that they wanted to share with the Board of Trustees to replace the skate shack. Please note that once the gas service to the upper building is addressed (gas service to the lower building is provided through the upper building) the upper building will be demolished. I will place this mater on an upcoming work session for discussion purposes.

To: Michael Blau
Village Administrator

From: John Hill, Chairman
Tarrytown Recreation Advisory Council

Re: Tarrytown Lakes Revitalization Plan

Recently the Tarrytown Recreation Advisory Council met with members of the Tarrytown Lakes Committee to review the Lakes Committee's proposed plans for revitalizing the smaller lake, which is just used for winter skating. The Recreation Advisory Council found their ideas to be both exciting and ambitious.

The Tarrytown Lakes have long been a welcome community recreation area. There are pictures, approximately, 100 years old showing people enjoying skating on the Lakes. □ Today the Lakes are used on a very daily basis all year long. People from all over the county and beyond use the lake area for walking, biking, kayaking (summer weekends) and fishing (Village license required).

We believe the use of the lakes will only increase in the future. An example of this is the future addition of the old Marymount College soccer field and the expanded trail network adjacent to the field. The Tarrytown Lakes have the potential to be true gem for Tarrytown. □

One particular project suggested by the Lakes Committee is the removal of both of the wooden skate shacks from the small lake where ice skating takes place during the winter. It is no secret that the skate shacks, even with some basic repairs in recent years, are still poor conditions. We believe everyone would agree that both shacks are not worth further rehabilitation efforts and should be

removed. □ The smaller skate shack used by the recreation staff adjacent to the parking lot should be demolished and not replaced.

It has been suggested that a one two-story structure be erected where the lower skate shack is located. The two-story structure would be accessible directly from the parking lot. Either floor could have multiple uses. For example the upper level could serve as an observation room for Recreation staff and the few non-skaters in attendance. The lower floor would still serve as a warming area for skaters, but could be also have a snack bar/coffee. This new building will be the gathering place for the whole area. It will also add to the park amenities. □

The Lakes Committee suggested the new building must be "green" have bathrooms, a snack bar, glass wall facing the lake, expanded deck area with chairs and umbrella, facilities to accommodate skaters and a fire pit. These suggestions for the new skate shack building go beyond just the occasional usage for winter skating. The new building now can be used as a year round facility and not just during the winter skating season.

We see is the potential for an expanded usage of the lakes and a more enjoyable experience at the lakes than what we have grown accustomed to during the different weather seasons at the lakes. This new building at the lakes would enhance the revitalization of the lake and establish the building as the corner stone of the Tarrytown Lakes and another jewel of the Village of Tarrytown..
□

The Tarrytown Recreation Advisory fully supports the Lakes Committee in their efforts and ideas for the revitalization of the smaller lake.



AGREEMENT PURSUANT TO TOWN
LAW §§ 176, 184 AND GENERAL
MUNICIPAL LAW ART. 5-G
- BETWEEN -
THE TOWN OF GREENBURGH
- AND -
THE VILLAGE OF TARRYTOWN
TO PROVIDE FIRE PROTECTION SERVICES
TO THE GLENVILLE FIRE PROTECTION DISTRICT

THIS AGREEMENT is made this 5th day of November 2015, by and between the **Town of Greenburgh** (Town), a municipal corporation organized and existing under the laws of the State of New York, located at 177 Hillside Avenue, Greenburgh, New York, acting on behalf of the Glenville Fire Protection District of the Town, and the **Village of Tarrytown** (Village), a municipal corporation organized and existing under the laws of the State of New York, located at One Depot Plaza, Tarrytown, New York 10591;

WITNESSETH:

WHEREAS, the Town Board of the Town of Greenburgh (Town) has established certain fire protection districts in the Town, including the Glenville Fire Protection District (GFPD), to protect residents' property and personal safety from damage or injury by fire; and

WHEREAS, the Village, through its fire department, has provided residents of the Glenville Fire Protection District exemplary fire safety services; and

WHEREAS, it is in the mutual interests of both the Town and the Village to continue furnishing fire protection to residents of the fire protection district; and

WHEREAS, a public hearing was held at Greenburgh Town Hall on August 19, 2015, after notice, for the purpose of considering whether the parties should enter a contract to continue providing residents of the fire protection district fire protection services; and

WHEREAS, at such hearing the Town Board adopted a resolution, copy attached, authorizing the Town Supervisor to enter into a contract with the Village and the Tarrytown Fire Department to provide fire safety services to residents of the fire protection district;

NOW, THEREFORE, BE IT AGREED by and between the Town, its successors and assigns, and the Village, its successors and assigns, for the consideration named herein as follows:

1 SCOPE of SERVICES

1.1. The Town does hereby engage the Village to provide fire protection services to residents of the Glenville Fire Protection District upon the following terms and conditions:

1.1.1. The Village and the Tarrytown Fire Department (Department) hereby agree to maintain and furnish suitable personnel and equipment to render adequate fire protection within the boundaries of the Glenville Fire Protection District.

1.1.2. When notified by alarm, telephone, or any other manner of a fire within the fire district members of the Fire Department, through the Tarrytown Fire Department, agree to respond without delay and diligently extinguish any fire within the district preventing injury and property damage to the greatest extent practicable.

2. CONSIDERATION

2.1. In consideration of providing the services outlined in ¶1, above, for the year January 1, 2015, through December 31, 2015, the Town agrees to pay the Village the sum of Two hundred Ninety Three Thousand One Hundred Eighty Eight Dollars and No Cents (\$293,188.00), which represents GFPD's percent of the assessment roll of the Village of Tarrytown and the Glenville Fire Protection District as they relate to the sum of the latest filed assessment rolls prepared for these areas in 2014 and applied to the 2014-2015 Village Fire Protection Budget for services rendered during calendar year 2015.

2.2. The Town and the Village agree to use the Chart of Accounts – Fire Protection Districts as set forth on Schedule A, attached, for determining applicable expenses.

2.3. In accordance with General Municipal Law §209-d, the Village agrees to pay to the Fire Department up to thirty-five percent (35%) of the amount paid by the Town to the Village for fire protection services.

2.4. The Town agrees to use its best efforts to make annual payment to the Village pursuant to this Agreement within 30 days from the date of the executed Agreement.

3. TERM

- 3.1 This agreement shall be for a period of one (1) year, commencing January 1, 2015, and terminating on December 31, 2015.

4. INSURANCE

- 4.1 The Village agrees to maintain insurance as required under this paragraph.

4.1.1. Workers' Compensation Insurance. The Village shall take out and maintain during the term of this contract Workers' Compensation Insurance for all employees assigned to the work or perform services hereunder.

4.1.2. General Liability and Property Damage Insurance. The Village shall take out and maintain during the term of this contract general liability and property damage insurance in an amount sufficient to protect from claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from operations under this contract. The amounts of such insurance shall be as follows:

4.1.2.1. General Liability Insurance in an amount not less than \$1,000,000 for injuries, including wrongful death, to any one person and subject to the same limit for each person, in an amount not less than \$3,000,000 for any occurrence.

4.1.2.2. Property Damage Insurance in an amount not less than \$1,000,000 for damage on account of all occurrences.

- 4.2. The Village agrees to furnish proof of compliance with the above insurance requirements to the Town and further agrees to name the Town as an additional insured in said policies.

- 4.3. Any claim for damage or injury for services performed under this Agreement to residents of the fire protection district shall be reported to the offices of the Town Attorney and Comptroller as soon as possible and not later than twenty-four hours from the time of such accident or claim. A detailed written report must be submitted to the Town as soon thereafter as possible and not later than three (3) days after the date of such accident.

5. INDEMNIFICATION and SAVE HARMLESS

- 5.1. The Village and the Fire Department hereby agree to indemnify and hold the Town, its officials, officers, agents, employees, and volunteers performing authorized tasks on behalf of the Town, harmless from and against all liability, including all expenses, reasonable attorney's fees, losses and claims, demands, payments, suits, actions, recoveries and judgements of any nature and description whatsoever resulting from any claim or claims

arising out of this contract, or the procedures leading thereto, for any act or omission of the Fire Department, its agents or employees representatives, or sub-contractors, during or in furtherance of the performance to this Agreement.

6. REQUIRED PROVISIONS of LAW

- 6.1 This Agreement shall be governed by the laws of New York State. Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to have been inserted herein. If any such provision is not inserted through mistake or otherwise, then upon the application of either party, this contract shall be physically amended forthwith to make such insertion.

7. PERMITS and REGULATIONS

- 7.1. The Village and the Fire Department agree to secure and pay for all licenses and permits necessary to perform and render the services set forth above.

8. STATEMENT of NONDISCRIMINATION

- 8.1 The Fire Department shall prominently post, on the site where services hereunder are to be provided, a statement regarding non-discrimination, which statement shall be similar in form to the following:

In compliance with Section 504 of the Rehabilitation Act of 1975 and title VI of the 1964 Civil Rights Act and New York State Executive Orders, no persons will be denied service or access to service based upon race, marital status, sexual orientation or handicapping condition.

9. NO ASSIGNMENT

- 9.1 In accordance with the provisions of Section 109 of the General Municipal Law, the Village and the Fire Department are hereby prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of any right, title or interest in this Agreement, or the power to execute this Agreement, to any other person or corporation without the prior written consent of the Town.

10 REPRESENTATIONS of the VILLAGE and the FIRE DEPARTMENT

10.1 The Village and the Fire Department make the following representations:

10.1.1. The Fire Department is qualified to perform the fire protection services outlined herein.

10.1.2. The Fire Department agrees to participate in the New York State Fire Incident Reporting System and further agrees to forward one copy of each and every report made regarding any fire occurring within the fire protection district to the Town Fire Marshal.

10.1.3. The Fire Department agrees to ensure that all members performing fire protection services are adequately trained and qualified to perform the tasks assigned as determined by completion of a National, New York State or equivalent fire training program and receive any annual or periodic refresher training that may be required.

10.1.4. The Village and the Fire Department agree to assume liability for any and all loss or damage caused by or to its fire apparatus sustained in answering any call.

10.1.5. The Village and the Fire Department agree to assume responsibility for the payment of all claims for injury or death of all persons, including fire personnel, occurring in connection with services rendered under this agreement.

10.1.6. The Fire Department agrees to respond to any fire involving a structure, regardless of whether it is commercial or residential, occupied or unoccupied, with the appropriate firefighting apparatus.

10.1.7. The Fire Department is fully familiar with all federal, state, and local laws, ordinances and regulations which may in any way affect the services to be provided.

10.1.8. The Fire Department is fully licensed by all governing regulatory agencies.

10.1.9. The Village and the Fire Department agree to give the Town a minimum of ninety (90) days notice prior to any capital equipment purchase for fire protection services and costing in excess of \$100,000 and to solicit and weigh the opinion of Town officials prior to taking any vote or making any decision to undertake a capital purchase involving fire protection services. The failure to solicit and consider the Town's opinion regarding such a capital purchase costing \$100,000, or more, prior to any vote or decision, shall result in the capital expense being excluded from the Village's costs and expenses (Schedule A) for purposes of calculating the Town's contribution.

10.2 The Village agrees to obtain the written consent of the Fire Department to the terms and conditions set forth herein.

11. NOTICES

- 11.1 Any and all notices, communications, payments and demands required under this Agreement shall be in writing, addressed as follows, or to such other address as may hereafter be designated, in writing, by either party hereto:

11.1.1. To the Town: Town of Greenburgh
177 Hillside Avenue
Greenburgh, NY 10607
Attn: Bart Talamini, Comptroller

11.1.2. w/ copy to: John Lucido, Fire Marshal
177 Hillside Avenue
Greenburgh, NY 10607
Elmsford, NY 10523

11.1.3. To the Village: Mayor, Village of Tarrytown
One Depot Plaza
Tarrytown, NY 10591

Village Administrator, Village of Tarrytown
One Depot Plaza
Tarrytown, NY 10591

11.1.4. To the Fire Department: Tarrytown Volunteer Fire Department
50 Main Street
Tarrytown, NY 10591

12. WAIVER and MODIFICATION

- 12.1. No waiver of any breach or of any condition of this Agreement shall be binding unless executed in writing and signed by the party waiving such breach. No such waiver shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such or any other breach unless the waiver shall include the same.
- 12.2. This Agreement constitutes the complete understanding of the parties. No other understandings or agreements, oral or written, are valid and no modification of any provisions of the Agreement shall be valid unless in writing and signed by both parties in accordance with the provisions of Town Law §184.

13. ETHICAL DISCLOSURE

- 13.1. The Village and the Fire Department acknowledge the necessity for the highest ethical standards in all public contracts and accordingly agree to abide by the provisions of the Code of Ethics, Chapter 570 of the Code of the Town of Greenburgh, attached. Nothing herein shall, however, be interpreted or construed to require employees of the Village or members of the Fire Department to file a financial disclosure statement.

14. AUDIT and INSPECTION

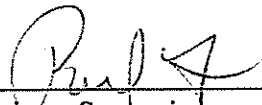
- 14.1. The Village and the Fire Department agree to permit the Town, or any of its authorized representatives, to visit and inspect the program, project or services operated pursuant to this Agreement and permit an audit and/or inspection of all books, records, and accounts relating thereto.
- 14.2. If requested by the Town, the Village will provide the Town with the contract year(s)' annual New York State Office of Fire Protection Call Report broken down by Glenville vs. non-Glenville Protection District calls.

15. DISPUTES

- 15.1. It is mutually agreed by and between the parties hereto, that in any dispute between the Town and the Village the disputed matter shall be settled in the first instance, by mediation in Westchester County, or if that fails, in the Supreme Court of the State of New York, Westchester County.

IN WITNESS WHEREOF, the parties hereto have each agreed to the terms and conditions as set forth herein.

TOWN OF GREENBURGH

By: 
Paul J. Feiner, Supervisor

S E A L

VILLAGE OF TARRYTOWN

By: _____
Michael Blau, Village Administrator

S E A L

In accordance with General Municipal Law §209-d, Tarrytown Fire Department consents to this Agreement, to all the terms and conditions expressed herein and to the payment to be made to the Fire Department by the Village.

TARRYTOWN FIRE DEPARTMENT

By: _____
Terence Murphy, Chief

CERTIFICATE OF AUTHORITY / FIRE DEPARTMENT

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

On the ____ day of _____, in the year 2015, before me, the undersigned, a Notary Public in and for said State, personally appeared TERENCE MURPHY, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.

Notary Public, Westchester County

MUNICIPAL ACKNOWLEDGMENT / GREENBURGH

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

On the 5th day of November, in the year 2015, before me, the undersigned, a Notary Public in and for said State, personally appeared PAUL J. FEINER, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual or the person upon behalf of which the individual acted, executed the instrument.



Notary Public, Westchester County

MARGARET PIETROWICZ
NOTARY PUBLIC, STATE OF NEW YORK
NO. 01PI4999480
QUALIFIED IN WESTCHESTER COUNTY
COMMISSION EXPIRES JULY 27, 2018

MUNICIPAL ACKNOWLEDGMENT / TARRYTOWN

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

On the _____ day of _____, in the year 2015, before me, the undersigned, a Notary
Public in and for said State, personally appeared Michael Blau, personally known to me or proved
to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the
within instrument and acknowledged to me that he executed the same in his capacity, and that by his
signature on the instrument, the individual or the person upon behalf of which the individual acted,
executed the instrument.

Notary Public, Westchester County



POLICE DEPARTMENT

TOWN OF GREENBURGH

188 TARRYTOWN ROAD, WHITE PLAINS, N.Y. 10607

TELEPHONE: (914) 989-1700

FAX. NO. (914) 682-5342

<http://www.police.greenburgh.com>

2015 NOV 20 AM 10:17

RECEIVED
TARRYTOWN
POLICE DEPT.



CHRIS T. McNERNEY
CHIEF OF POLICE

November 13, 2015

Chief Scott Brown
Tarrytown Police Department
One Depot Plaza
Tarrytown, NY 10591

Dear Chief Brown:

Enclosed please find a copy of the updated SWAT Intermunicipal Agreement (IMA). I have incorporated the changes we discussed, specifically, increasing the limit per individual officer in 2017. Please review and advise if you have any questions.

Please have the appropriate municipal officer sign and notarize the Acknowledgement and the Certificate of Authority. Once the paperwork is completed, please return all to me for processing. A fully executed original will be forwarded to you for your files.

If you have any questions, please do not hesitate to contact me at 914-989-1740.

Sincerely,

Chris T. McNerney
Chief of Police

Enc.



AGREEMENT PURSUANT TO GENERAL MUNICIPAL LAW ARTICLE 5-G, SECTION 119-O BETWEEN THE TOWN OF GREENBURGH AND THE VILLAGES OF ARDSLEY, DOBBS FERRY, ELMSFORD, HASTINGS-ON-HUDSON, IRVINGTON AND TARRYTOWN TO FORM A TOWNWIDE SPECIAL WEAPONS AND TACTICS UNIT.

This AGREEMENT (the "Agreement") is made this _____ day of _____ 2015, by and between the Village of Ardsley ("Ardsley"), a municipal corporation organized and existing under the laws of the State of New York, located at 507 Ashford Avenue, Ardsley, New York, 10502 ("Ardsley"), the Village of Dobbs Ferry ("Dobbs Ferry"), a municipal corporation organized and existing under the laws of the State of New York, located at 112 Main Street, Dobbs Ferry, New York 10522 ("Dobbs Ferry"), the Village of Elmsford ("Elmsford"), a municipal corporation organized and existing under the laws of the State of New York, located at 15 South Stone Avenue, Elmsford, New York 10523 ("Elmsford"), the Village of Hastings-on-Hudson ("Hastings"), a municipal corporation organized and existing under the laws of the State of New York, located at 7 Maple Avenue, Hastings-on-Hudson, New York 10706, the Village of Irvington ("Irvington"), a municipal corporation organized and existing under the laws of the State of New York, located at 55 Main Street, Irvington, New York 10533, the Village of Tarrytown ("Tarrytown"), a municipal corporation organized and existing under the laws of the State of New York, located at 21 Wildey Street, Tarrytown, New York 10591 and the Town of Greenburgh ("Greenburgh"), a municipal corporation organized and existing under the laws of the State of New York, located at 177 Hillside Avenue, White Plains, New York 10607.

WHEREAS, Section 119-O of the General Municipal Law permits municipal corporations to enter into agreements for the performance amongst themselves or one for the other of their respective functions, powers and duties on a cooperative or contract basis or for the provision of a joint service; and

WHEREAS, for the purposes of this agreement, the term hereinafter referred to as the Special Weapons and Tactics Unit ("SWAT"), shall mean a unit consisting of police officers from the respective jurisdictions of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington, Tarrytown and Greenburgh, duly formed to effectuate a joint service committed to quickly respond to situations involving barricaded suspects, potentially armed and dangerous suspects and/or to execute high risk arrest and search warrants as well as respond to other situations where the specialized weapons and equipment and advanced tactical training of SWAT Team members would provide an advantage over the weapons, equipment and training that are normally employed by uniformed police officers, thereby potentially reducing the risk of injury to residents and police officers while helping to ensure an overall favorable outcome of the event; and

WHEREAS, the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington, Tarrytown and the Town of Greenburgh (collectively, the "Municipalities") are members of SWAT; and

WHEREAS, SWAT, as a joint service, is charged with extra-territorial jurisdiction to make arrests and execute warrants within the respective jurisdictions of the Municipalities as necessary for the undertaking of this Agreement; and

WHEREAS, SWAT will be headquartered out of the Greenburgh Police Department; and

WHEREAS, the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and Tarrytown and the Town of Greenburgh require that the Municipalities participating in SWAT provide indemnification, representation, warranties and covenants and other matters described in the Agreement for the benefit of the Municipalities;

NOW THEREFORE, BE IT AGREED by and between Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington, Tarrytown and the Town of Greenburgh, and their successors and assigns, for the consideration named herein as follows:

ARTICLE ONE
Purpose of the Agreement

A. The purpose of this Agreement is to:

1. Maintain a joint Special Weapons and Tactics Team by the Village of Ardsley Police Department, the Village of Dobbs Ferry Police Department, the Village of Elmsford Police Department, the Village of Hastings-on-Hudson Police Department, the Village of Irvington Police Department, the Village of Tarrytown Police Department and the Town of Greenburgh Police Department (hereinafter referred to as "SWAT Team") that will be available to any participating entity in the event of an emergency in accordance with the provisions of this Agreement;
2. Formalize rules and regulations providing for a single team commander, a single set of standard operational procedures, training records maintenance, and the fiscal responsibilities of each agency;
3. Eliminate the need to follow the formal procedure set forth in GML §209-m to request assistance from the other party in the form of personnel and or equipment; and
4. Provide for more efficient utilization of law enforcement resources and services through commitment of police officers from the participating municipalities, in accordance with their capabilities, that would benefit public safety and the safety of police personnel.

ARTICLE TWO
Approval, Duration and Termination

- A. This Agreement shall not be effective until approved by a majority vote, as required by Section 119-O of the General Municipal Law, of the governing body of each Municipality.
- B. The initial term of this Agreement shall be five years, which term shall commence upon the execution of this Agreement by the last signing party. Upon expiration the terms herein shall continue, however, until all legislative bodies have held their respective organizational meetings. At such meetings, this agreement shall be considered for renewal, and if approved by each legislative body, such renewal shall be made effective November 1, 2020.
- C. A Municipality may terminate any rights and obligations under this Agreement at any time by giving thirty days (30) written notice to each of the parties to the Agreement as provided herein.

ARTICLE THREE
Consideration

- A. In exchange for the commitment of police officer(s) by Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and Tarrytown to SWAT, Greenburgh agrees to provide the facilities and the resources of its Police Department to arrange for and provide training; maintain appropriate records of the training completed by each member; secure and distribute equipment and supplies, and otherwise administer SWAT.
- B. Municipalities will be reimbursed from funds appropriated annually by the Town of Greenburgh in its Town Entire Budget under the A.3123 Department. Such reimbursement shall be for overtime expended by the Municipality in connection with training of their members in weapons, equipment and tactics as approved by Greenburgh and directed by the SWAT Team commander. Such reimbursement shall include the overtime hourly rate, the Social Security/Medicare match, Workers'

Compensation and New York State Retirement. The amount available for reimbursement to the Municipality shall be calculated by multiplying the number of SWAT officers assigned to the team during the respective year, times \$5,000.00. For example, a Municipality with two (2) officers assigned to the SWAT Team shall have a total of \$10,000.00 available for reimbursement. Commencing in 2017, reimbursement will increase to \$6000.00 per officer. No reimbursement shall be made for hours involved in actual SWAT operations. Expenses for actual SWAT operations shall be borne by the individual Municipality. Greenburgh shall also be responsible for purchasing all necessary equipment, uniforms, weapons, ammunition, and other required supplies from expense lines set up for this purpose under the A.3123 Department. Any and all other expenses associated with a Municipality's participation in SWAT not specifically mentioned in this Agreement shall be borne by the individual Municipality.

ARTICLE FOUR

Control of Personnel and Equipment

- A. The Incident Commander of the agency responsible for the geographic jurisdiction in which an incident occurs shall be in command of the operation(s) under which the SWAT Team is requested. The SWAT Team Commander shall report to the Incident Commander. SWAT Team members will be under the supervisory control and direction of the SWAT Team structure during incidents and training events. Specifically, during incidents occurring within the Town of Greenburgh, the Incident Commander shall be a member of the Town of Greenburgh Police Department. During incidents occurring within the Village of Ardsley, the Incident Commander shall be a member of the Village of Ardsley Police Department. During incidents occurring within the Village of Dobbs Ferry, the Incident Commander shall be a member of the Village of Dobbs Ferry Police Department. During incidents occurring within the Village of Hastings on Hudson, the Incident Commander shall be a member of the Village of Hastings-on- Hudson Police Department. During incidents occurring within the Village of Irvington, the Incident Commander shall be a member of the Village of Irvington Police Department. During incidents occurring within the Village of Tarrytown the Incident Commander shall be a member of the Village of Tarrytown Police Department. During incidents occurring in the Village of Elmsford the Incident Commander shall be a member of the Village of Elmsford Police Department.
- B. In exchange for the commitment of police officer(s) by the villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and Tarrytown to the SWAT Team, The Town of Greenburgh agrees to provide the facilities and the resources of its police department to arrange for and provide training; maintain appropriate records of the training completed by each member; prepare, submit and maintain all annual budgetary responsibilities; secure and distribute equipment and supplies, and otherwise administer SWAT which includes selecting and providing the Team Commander.
- C. Each party agrees that the selection of the SWAT Team Leaders and members will be made by the SWAT Team Commander.
- D. It is understood that while operating either in training or at a SWAT incident under the command of the SWAT Team Commander or his designee, all team members shall adhere to the SWAT Team Standard Operating Procedures.
- E. Each Municipality agrees to seek and maintain compliance with the provisions of the SWAT Team Certification Program promulgated by the State of New York Municipal Police Training Council (MPTC).

ARTICLE FIVE
Privileges and Immunities

- A. To the extent permitted by law, all the powers, duties, rights, privileges and immunities from liability which surround the activities of the SWAT team when performing its functions within the public agency's territorial limits shall apply to the activities of the SWAT team, team members, other police officers or employees, or agency while furnishing tactical assistance outside its territorial limits under the terms of this Agreement.
- B. Specifically, pursuant to sections §119-n(c) and § 119-o GML, law enforcement officers assisting another local government outside their normal geographical area of employment shall have all powers and authority of law enforcement officers in such other jurisdiction as provided by law, including the power of arrest.

ARTICLE SIX
Line of Duty Death or Injury

The effect of the death, injury or disability of any officer who is killed, injured or disabled outside the territorial limits of either participating entity while in the performance of this agreement, shall be the same as if they were killed, injured or were to become disabled while that officer was functioning within its own territorial limits, and such injury or death shall be considered to be in the line of duty.

ARTICLE SEVEN
Insurance

- A. With regard to any activities on property owned or maintained by the respective Municipalities, the Municipalities agree to secure and maintain throughout the term of this Agreement, general liability, property damage and automobile liability insurance sufficient to protect the Municipalities for personal injury, including accidental death, as well as claims for property damage which may arise out of the activities of the SWAT Unit under this Agreement. The amounts of such insurance shall not be less than \$1,000,000 per occurrence.
- B. The respective Municipalities agree to name each other as additional insured parties on all relevant policies and uses. The Municipalities agree to furnish copies of their respective insurance policies with the above insurance requirements to each other, as designated herein, within five (5) business days of the date of execution of this Agreement. The parties agree to report to each other any accident or claim arising out of SWAT Unit activities as soon as possible and not later than three (3) business days from the time of such accident or claim. The parties agree to make available to each other all employees who are witnesses or who are knowledgeable about any accident or claim.

ARTICLE EIGHT
Indemnification and Save Harmless

- A. The **Town of Greenburgh** covenants and agrees at its sole cost to indemnify and hold harmless the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts,

damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Town of Greenburgh, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Town of Greenburgh as provided herein, and the Town of Greenburgh shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- B. The **Village of Ardsley** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Ardsley, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Dobbs Ferry, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Ardsley as provided herein, and the Village of Ardsley shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- C. The **Village of Dobbs Ferry** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Ardsley, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Dobbs Ferry, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Ardsley, Elmsford, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is

asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Dobbs Ferry as provided herein, and the Village of Dobbs Ferry shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- D. The **Village of Elmsford** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Ardsley, Dobbs Ferry, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Elmsford, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Ardsley, Dobbs Ferry, Hastings-on-Hudson, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Elmsford as provided herein, and the Village of Elmsford shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- E. The **Village of Hastings-on-Hudson** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Ardsley, Dobbs Ferry, Elmsford, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Hastings-on-Hudson, its officers, agents employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Ardsley, Dobbs Ferry, Elmsford, Irvington and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Hastings as provided herein, and the Village of Hastings-on-Hudson shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- F. The **Village of Irvington** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson and/or

Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Irvington, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson and/or Tarrytown, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Irvington as provided herein, and the Village of Irvington shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.

- G. The **Village of Tarrytown** covenants and agrees at its sole cost to indemnify and hold harmless the Town of Greenburgh, the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson and/or Irvington, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, harmless from and against all liability, including expenses, attorneys' fees, losses and claims, demands, payments, suits, administrative or judicial actions or proceedings, obligations, debts, damages, costs of assessing damages or losses, litigation costs, recoveries and judgments of any nature and description whatsoever resulting from any claim or claims arising out of any act or omission by the Village of Tarrytown, its officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing arising out of their activities undertaken within the scope of this Agreement.

In the event of any action or proceeding commenced against the Town of Greenburgh and/or the Villages of Ardsley, Dobbs Ferry, Elmsford, Hastings-on-Hudson and/or Irvington, their officers, agents, employees, volunteers, successors and assigns of any and all of the foregoing, which is asserted to be within the indemnification coverage of this Article, the respective Municipality/Municipalities shall give prompt written notice thereof to the Village of Tarrytown as provided herein, and the Village of Tarrytown shall defend same by attorneys and other professionals approved by the respective Municipality/Municipalities-which approval shall not be unreasonably withheld.

- H. The Municipalities agree to cooperate with each other as reasonably required for the defense of any such action.
- I. The Municipalities acknowledge and agree that the provisions of this section are intended to survive termination of this agreement.

ARTICLE NINE

Authority for Execution

The respective representatives of each Municipality, who executed this Agreement on the behalf of their respective Municipal Corporations, are duly authorized and empowered to execute this Agreement.

ARTICLE TEN
Notices

Any and all notices, communications, payments and demands required under this Agreement shall be made in writing, addressed as follows, or to such other addresses as may be hereafter designated, in writing, by each party hereto:

To Ardsley:

Village Manager Village of Ardsley
507 Ashford Avenue
Ardsley, New York 10502

To Dobbs Ferry:

Village Administrator Village of Dobbs Ferry
112 Main Street
Dobbs Ferry, New York 10522

To Elmsford:

Village Administrator Village of Elmsford
15 South Stone Avenue
Elmsford, New York 10523

To Greenburgh:

Town Supervisor Town of Greenburgh
177 Hillside Avenue
White Plains, NY 10607

To Hastings:

Village Manager Village of Hastings-on-Hudson
7 Maple Avenue
Hastings-on-Hudson, New York 10706

To Irvington:

Village Administrator Village of Irvington
85 Main Street
Irvington, New York 10533

To Tarrytown:

Village Administrator Village of Tarrytown
One Depot Plaza
Tarrytown, New York 10591

ARTICLE ELEVEN
Waiver

No waiver or any breach or of any condition of this Agreement will be binding unless executed in writing and signed by the party waiving such breach. No such waive shall in any way affect any other term or condition of this Agreement or constitute a cause or excuse for a repetition of such any or other breach unless the waiver shall include the same.

ARTICLE TWELVE
Entire Understanding

This Agreement contains the entire understanding of the parties who hereby acknowledge that there has been, and are no representations, warranties, covenants or understandings other than those expressly set forth herein.

ARTICLE THIRTEEN
Modification

Neither this Agreement, nor any provision hereof, shall be amended or modified, or deemed amended or modified, except by an agreement in writing duly subscribed and acknowledged by all parties to this Agreement with the same formality as this Agreement.

ARTICLE FOURTEEN
Binding Effect

This Agreement shall be binding upon and inure to the benefit of the parties, their heirs, successors and assigns.

ARTICLE FIFTEEN
Legal Interpretation

All matters affecting the interpretation of this Agreement and the rights of the parties hereto shall be governed by the laws of the State of New York.

ARTICLE SIXTEEN
Counterparts

This Agreement may be executed in one or more counterparts by some or all of the parties hereto, each of which counterparts shall be an original and all of which together shall constitute a single agreement. The failure of any party hereto to execute this Agreement, or any counterpart hereof, shall not relieve the other signatories from their obligations hereunder.

IN WITNESS THEREOF, the parties have agreed to the terms and conditions set forth and executed this Agreement, the date and year above written.

VILLAGE OF TARRYTOWN

INTERNAL MEMORANDUM

To: Mayor Fixell and the Board of Trustees

From: Michael Blau, Village Administrator

Date: December 4, 2015

Subject: Fence Replacement Gracemere Park

Please be advised that the Board of Trustees in the Capital Budget approved for FY 15-16 appropriated \$22,500 for the replacement of the 6 ft. high chain link fence around the pond in Gracemere Park. Pursuant to the Village's Procurement Policy, three prices were obtained for the replacement in kind for the 6 ft. high chain link fence. A resident of Glenwolde reached out to Joe Arduino and noted that it was her desire to have the chain link fence replaced with a decorative fence similar to the fence at the water pump station on Neperan Road as opposed to a chain link fence. Based thereon, three proposals were received for the replacement of the 6 ft. high chain link fence in kind and a 6 ft. high aluminum fence. The spreadsheet included provides the cost proposals for the fence replacement. I have also included an E-Mail from Nancy Pellegrini, the resident of Glenwolde who is requesting the decorative fence. Should the Board agree to install the decorative fence as opposed to the chain link fence, there will be an additional cost of \$6,780 above the amount appropriated in the capital budget.

FENCE REPLACEMENT - GRACEMERE PARK CAPITAL BUDGET APPROPRIATION = \$22,500		
Vendor	Proposal for 6' Chain Link	Proposal for 6' Decorative Aluminum
Precision Built Fences	\$22,500.00	\$29,280.00
Yaboo Fence Company	\$34,074.00	\$44,195.00
Carjen Fence Co. Inc.	\$21,431.25	\$63,301.50

Mike Blau

From: nancy pellegrini <ncpell@optonline.net>
Sent: Monday, November 30, 2015 11:03 AM
To: Mike Blau
Cc: Joe Arduino
Subject: Capital Improvement project along the north sidee of Gracemere Park

To: Tarrytown Board Members

As a resident of Glenwolde Park, I have represented the concerns of my neighbors and requested that the capital improvement project be undertaken and completed.

For twenty six years, I have had the pleasure of living in this beautiful historic neighborhood on the south end of Tarrytown. Recently, Glenwolde was listed on the National Registry of historic neighborhoods. Within the past five years we installed two signposts to recognize the entrances to our neighborhood, which was built in 1927, and is in close proximity to Lyndhurst. It is because of this historic value we would like a black aluminum fence to be installed rather than a chain link fence which appears to be used mainly for commercial applications.

We are a residential community, and think an aluminum fence would be more in keeping with the charm of the neighborhood. Most of the residents have lived here for many years and feel that our tax dollars should be used to enhance the integrity of the neighborhood rather than detract from it.

Your consideration of this request is greatly appreciated.

Sincerely,

Nancy Pellegrini
4 Glenwolde Park
Tarrytown

SECTION 2. PLAN ADOPTION

2.1 Overview

This section contains information regarding adoption of the 2015 Westchester County Multi-Jurisdictional Hazard Mitigation Plan by Westchester County and each participating jurisdiction.

2.1.1 Plan Adoption by Local Governing Bodies

Adoption by the local governing bodies demonstrates the commitment of Westchester County and each participating jurisdiction to fulfill the mitigation goals [and objectives] and mitigation strategies outlined in the Plan. Adoption legitimizes the Plan and authorizes responsible agencies to execute their responsibilities.

The County and all participating jurisdictions will proceed with formal adoption proceedings when FEMA provides conditional approval of this plan. Following adoption or formal action on the plan, the jurisdiction must submit a copy of the resolution or other legal instrument showing formal adoption (acceptance) of the plan to NYS DHSES. This will then be submitted to FEMA with the resolution in Appendix A of this Plan. The jurisdictions understand that FEMA will transmit acknowledgement of verification of formal plan adoption and the official approval of the plan to the mitigation plan coordinator.

The resolution issued to support adoption of the plan is included as Appendix A, Resolution of Plan Adoption.

In addition to being required by DMA 2000, adoption of the plan is necessary because:

- It lends authority to the plan to serve as a guiding document for all local and state government officials;
- It gives legal status to the plan in the event it is challenged in court;
- It certifies the program and grant administrators that the plan's recommendations have been properly considered and approved by the governing authority and jurisdictions' citizens; and
- It helps to ensure the continuity of mitigation programs and policies over time because elected officials, staff, and other community decision-makers can refer to the official document when making decisions about the community's future.

Source: FEMA. 2003. "How to Series"-*Bringing the Plan to Life* (FEMA 386-4).

RESOLUTION NO. XXXX-XX

A RESOLUTION OF THE Governing Body OF THE Jurisdiction Name AUTHORIZING THE ADOPTION OF THE 2015 WESTCHESTER COUNTY, NY HAZARD MITIGATION PLAN UPDATE

WHEREAS, all jurisdictions within Westchester County have exposure to natural hazards that increase the risk to life, property, environment, and the County and local economy; and

WHEREAS; pro-active mitigation of known hazards before a disaster event can reduce or eliminate long-term risk to life and property; and

WHEREAS, The Disaster Mitigation Act of 2000 (Public Law 106-390) established new requirements for pre and post disaster hazard mitigation programs; and

WHEREAS; a coalition of Westchester County municipalities with like planning objectives has been formed to pool resources and create consistent mitigation strategies within Westchester County; and

WHEREAS, the coalition has completed a planning process that engages the public, assesses the risk and vulnerability to the impacts of natural hazards, develops a mitigation strategy consistent with a set of uniform goals and objectives, and creates a plan for implementing, evaluating and revising this strategy;

NOW, THEREFORE, BE IT RESOLVED that the [jurisdiction name]:

- 1) Adopts in its entirety, the 2015 Westchester County Hazard Mitigation Plan (the "Plan") as the jurisdiction's Natural Hazard Mitigation Plan, and resolves to execute the actions identified in the Plan that pertain to this jurisdiction.
- 2) Will use the adopted and approved portions of the Plan to guide pre- and post-disaster mitigation of the hazards identified.
- 3) Will coordinate the strategies identified in the Plan with other planning programs and mechanisms under its jurisdictional authority.
- 4) Will continue its support of the Mitigation Planning Committee as described within the Plan.
- 5) Will help to promote and support the mitigation successes of all participants in this Plan.
- 6) Will incorporate mitigation planning as an integral component of government and partner operations.
- 7) Will provide an update of the Plan in conjunction with the County no less than every five years.

PASSED AND ADOPTED on this Xst, Xnd, Xrd, Xth day of MONTH, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Mayor, City/Town/Village of _____

Clerk, City/Town/Village of _____

Friday, October 14, 2015

WESTCHESTER COUNTY

Resources for Implementing Your Approved Plan

Local Mitigation Planning Handbook. It is the official guide for local governments to develop, update and implement local mitigation plans. While federal requirements have not changed, the Handbook provides revised and expanded guidance, offering practical approaches, tools, worksheets and local mitigation planning examples for how communities can engage in effective planning to reduce long-term risk from natural hazards and disasters. <http://www.fema.gov/library/viewRecord.do?id=7209>

Using Cost Benefit Review in Mitigation Planning (FEMA 386-5). This How-To #5 is available online at <http://www.fema.gov/media-library/assets/documents/10210>

Mitigation Ideas: A Resource for Reducing Risk from Natural Hazards provides a resource that communities can use to identify and evaluate a range of potential mitigation actions for reducing risk to natural hazards and disasters. <https://www.fema.gov/media-library/assets/documents/30627>

FEMA's Hazard Mitigation Assistance (HMA) Grant Programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages including the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA). For disasters declared after February 27, 2015, HMGP funding may be used to fund additional mitigation planning-related activities including updating or enhancing HMP elements or integrating HMP risk assessments or mitigation strategies into other planning efforts. Please note that states are ultimately responsible for prioritizing how HMGP funding will be spent. <https://www.fema.gov/media-library/assets/documents/103279>

Hazard Mitigation Planning Resources: A variety of resources on the hazard mitigation planning process, including developing and implementing local mitigation plans and mitigation grant programs. <http://www.fema.gov/hazard-mitigation-planning-resources#7>

Hazard Mitigation: Integrating Best Practices into Planning: This resource, prepared by the American Planning Association (APA), seeks to close the gap that often exists between hazard mitigation planning and other local planning and regulatory land-use processes. It introduces hazard mitigation as a vital area of practice for planners; provides guidance on how to integrate hazard mitigation strategies into comprehensive, area, and functional plans; and shows where hazard mitigation can fit into zoning and subdivision codes. Best practices and practical applications are provided. <https://www.fema.gov/media-library/assets/documents/19261>



Other FEMA Resources

NFIP Community Ratings System: The National Flood Insurance Program (NFIP) Community Rating System (CRS) is a voluntary program for recognizing and encouraging community floodplain management activities exceeding the minimum NFIP standards. Any community in full compliance with the minimum NFIP floodplain management requirements may apply to join the CRS. The CRS uses a Class rating system to determine flood insurance premium reductions for residents. Each CRS Class improvement produces a 5% discount on flood insurance premiums for properties in the SFHA. It should be noted that NYS requirements exceed NFIP minimums for some activities. For a summary of New York State's Uniform Minimum Credit, see <http://crsresources.org/200-2/#>. The current CRS Coordinator's Manual is here: <http://crsresources.org/>

Reducing Damage from Localized Flooding: A Guide for Communities: This guide is intended to help local offices in cities, towns, villages, and counties in the United States understand what they can do to reduce the damage, disruption, and public and private costs that result from the shallow, localized flooding that occurs within their jurisdictions. This is flooding that all too often escapes the attention received by larger floods or those that are clearly mapped and subject to floodplain development regulations. June 2005.
<https://www.fema.gov/media-library/assets/documents/1012>

Engineering With Nature: Alternative Techniques to Riprap Bank Stabilization : While land erosion, stream migration and even flooding are natural processes, they can cause havoc when occurring near human populations. This has led to the creation of a number of measures to control or eliminate such hazards. Unfortunately, while many of these techniques – such as riprap or hard armoring – solve the immediate problem, they are not always the safest or most environmentally conscious choice for the long-term. This FEMA Region X report documents case studies where alternatives to riprap have been employed.

Planning for Post-Disaster Recovery: Next Generation: This resource is designed to help communities improve their resiliency and provides how-to guidance for communities to start their mitigation planning and disaster-recovery planning processes. The new report was produced by the American Planning Association (APA) through a cooperative agreement from FEMA, and is a follow-up edition to the popular Planning for Post-Disaster Recovery and Reconstruction (FEMA 421) report originally published in 1998.
<https://www.fema.gov/media-library/assets/documents/103445>

Subdivision Design in Flood Hazard Areas (PAS 473): Economic, political, and market pressures make some development on floodplains inevitable. But appropriate subdivision designs can minimize risks of flood damage-or eliminate them entirely. This report explores the full range of planning techniques to minimize possible problems in a flood-hazard area. Cluster development, coast-to-road lots, and elevated buildings are all suggested as techniques that will minimize flood damage. Detailed diagrams illustrate the natural functions of a floodplain and describe the tools used to preserve these functions and protect properties from flooding. 1997. Update currently underway. \$15. https://www.planning.org/store/product/?ProductCode=BOOK_P473



Westchester County-specific Resources

Flood Risk Tools for New York Communities: Besides the regulatory tools FEMA develops, the Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) reports, FEMA, in partnership with local and state partners, also provides communities with other GIS tools they can use to better understand and plan for flood risk. For Westchester County's coastal communities, a Flood Risk Report, Flood Risk Map, and Flood Risk Database can be found here:

https://data.fema.gov/NationalDisasters/Hurricane%20Sandy/RiskMAP/Public/Draft_Non_Regulatory_Flood_Risk_Products/Westchester/

Westchester County Stormwater Reconnaissance Plans: Westchester County enacted a Stormwater Management Law in 2011 requiring the county to assess current conditions and identify cost-effective projects to address flooding and flood damage. Since 2012 a Stormwater Advisory Board has met regularly to advise the county on flood-related matters, including the development of "reconnaissance plans" for each of the county's major watersheds or drainage basins. (1) Saw Mill River-Pocantico River Watershed (December 2012); (2) Bronx River Watershed (April 2013); (3) Coastal Long Island Sound Watershed (August 2013); (4) Peekskill-Haverstraw Bay Watershed (March 2014); and (5) Croton River and Inland Long Island Sound Watersheds (July 2014). <http://planning.westchestergov.com/environment/flooding>

Flooding and Land Use Planning: A Guidance Document for Municipal Officials and Planners: This manual was created for elected officials, planning and zoning board members, planners and development professionals to improve land use decisions with respect to flooding and flood damage. The manual covers: (1) flooding causes and the relationship to development; (2) regulations for government agencies associated with flood control and flood hazard mitigation; (3) comprehensive and watershed planning; (4) stormwater management; (5) successful floodplain management tools; (6) local ordinances; (7) site plan review tools; and (8) stormwater management design. The manual also includes an extensive appendix with a glossary and references, including a summary of Federal and State programs that support the items addressed. June 2010. See "View the manual" link under County Efforts: <http://planning.westchestergov.com/environment/flooding>

Historic Flood Map Information: Communities can receive Community Rating System credits for maintaining earlier editions of flood insurance rating maps (FIRMs) and Flood Boundary and Floodway Maps and making these maps readily available. Copies of old FIRMs and studies are available from the FEMA Map Service Center: <https://msc.fema.gov/portal/advanceSearch#searchresultsanchor>

Floodplain Management Training: Please note that NYSDEC will be providing Floodplain Management Training in all NYS counties. Please check website for schedule: <http://www.dec.ny.gov/lands/101275.html>



WESTCHESTER COUNTY RESILIENCE MEETING

Other Planning and Implementation Resources

New York State Stormwater Management Design Manual: Green infrastructure consists of a variety of site design techniques and structural practices used for managing stormwater. On a larger scale, it can include preserving and restoring natural landscape features (such as forests, floodplains and wetlands), and reducing impervious surfaces. On a smaller scale, it can include green roofs, pervious pavement, rain gardens, vegetated swales, planters and stream buffers. These smaller tools are also referred to as Low Impact Development or LID. Please see: <http://www.dec.ny.gov/lands/58930.html> and Chapter 5 in NYSDEC Stormwater Management Design Manual: <http://www.dec.ny.gov/chemical/29072.html>

NYS Climate Smart Communities Climate Smart Resiliency Planning: A Planning Evaluation Tool: Designed specifically for New York State Communities, this NYSDEC-developed resource is a self-administered planning assessment tool designed to help local officials assess their communities' readiness and resilience in the face of changing weather patterns and rising sea levels. See the Climate Smart Resiliency link on the right under "Important Links" <http://www.dec.ny.gov/energy/82168.html>

Using Multi-Objective Management to Reduce Flood Losses in Your Watershed: This citizen's guidebook explains "multiobjective management" or "M-O-M" - a proven approach to reduce flood losses and simultaneously address other community concerns. Based on strong communication, it capitalizes on the technical and financial help that is already available from government agencies and private organizations. It succeeds because it coordinates flood loss reduction with other community needs and goals to develop a stronger, more comprehensive program. Developed by EPA and the Association of State Floodplain Managers; <http://floods.org/index.asp?menuID=726&firstlevelmenuID=188&siteID=1>

Post-Flood Emergency Stream Intervention: Originally developed by the Delaware County Soil and Water Conservation District and Delaware County Planning Department in cooperation with the New York City Department of Environmental Protection, this resource was later expanded for state-wide application by New York Department of Environmental Conservation. March 2014.
www.dec.ny.gov/docs/administration_pdf/streammnl.pdf

Stream Processes: A Guide to Living in Harmony with Streams: This was a collaborative project of the Chemung County Soil and Water Conservation District, Upper Susquehanna Coalition, and Southern Tier Central Regional Planning and Development Board. Additional input and assistance was provided by the Hydrologic and Habitat Modifications Workgroup of the NYS Nonpoint Source Coordinating Committee, the NYS Department of Environmental Conservation, the NYS Department of Transportation, the Bradford County (PA) Conservation District, and others. August 2006. <http://www.stcplanning.org/index.asp?pagelD=103>

Local Flood Proofing Programs: This document was prepared by French & Associates, Ltd., Park Forest, Illinois for the US Army Corps of Engineers National Nonstructural/Flood Proofing Committee. It is based on publications, research findings, site visits, and interviews with a number of communities and organizations. Included as a resource from the NFIP Community Ratings System program. February 2005. See link 360 Local Flood Proofing Programs: <http://crsresources.org/300-3/>



No Adverse Impact Floodplain Management: No Adverse Impact floodplain management takes place when the actions of one property owner are not allowed to adversely affect the rights of other property owners. The adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion and sedimentation, or other impacts the community considers important. A variety of resources available from the Association of State Floodplain Managers.
<http://www.floods.org/index.asp?menuID=460>

New York State Floodplain and Stormwater Managers Association: The NYSFSMA is the NYS chapter of the Association of State Floodplain Managers. Helpful information regarding floodplain management is available from their website: http://nyfloods.org/content.aspx?page_id=0&club_id=735785



9.42 Village of Tarrytown

This section presents the jurisdictional annex for the Village of Tarrytown.

9.42.1 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
Michael Blau, Village Administrator One Depot Plaza, Tarrytown, NY 10591 (914) 631-1885 mblau@tarrytowngov.com	Michael McGarvey, Village Engineer, NFIP FPA One Depot Plaza, Tarrytown, NY 10591 (914) 631-3668 mmcgarvey@tarrytowngov.com

9.42.2 Municipal Profile

This section provides a summary of the community.

Population

According to the U.S. Census, the 2010 population for the Village of Tarrytown was 11,277.

Location

The Village of Tarrytown is located in the central-western portion of Westchester County along the Hudson River. The Village is bordered by the Village of Sleepy Hollow to the north, the Village of Irvington to the south and the Town of Greenburgh to the east. The Hudson River establishes the Village's western boundary. The Village is approximately 5.7 square miles in area (3.7 square miles of land area) and 22 miles north of Manhattan in an area called the Tappan Zee.

Brief History

The Village was built in 1645 and was incorporated on December 9, 1870. After the Revolutionary War (for which Tarrytown received acclaim as the place of the capture of Major Andre) Tarrytown was mainly an agricultural community. In 1849, the New York Central Division came to Tarrytown and freight began to move by rail. Many wealthy and powerful families moved to the area including Washington Irving, General William Paulding, and Jay Gould. After the great depression there was a surge in home building and in the mid-1950s the New York State Thruway and Tappan Zee Bridge were completed and Tarrytown became the site for several large corporations. Tarrytowners are involved in their community with many volunteer communities including a volunteer fire department and ambulance corps. Metro-North railroad provides service to Manhattan – an easy 35 minute commute. Tarrytown welcomes many tourists to the community and is proud of its parks, waterfront, antique shops and many fine restaurants.

Governing Body Format

Board of Trustees (Mayor and six trustees).

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2005 and any known or anticipated major development that has been identified in the next five years within the municipality.



Table 9.42-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	Number of Units / Structures	Location (address and/or Parcel IDs)	Known Hazard Zones*	Description / Status
Recent Development					
Hudson Harbor	Residential	198	West Main Street	Flood (AE7)	Approved project; 52 units already constructed. Building Permit issued for another 52.
Legends at Wilson Park	Residential	14	Wilson Park Drive	None	Approved subdivision. Building Permit issued for one unit.
Jardim Estates East	Residential	12	Browning Lane	None	Subdivision presently before Planning Board
Jardim Estates West	Residential	8	Gracemere Road	None	Approved subdivision. 8 already constructed.
Tarry Grand Estates	Residential	8	Off of South Broadway	None	Application submitted to Planning Board
Kraft Foods Requa Property	Residential	22	Off of South Broadway	None	Development possibilities. Land currently vacant.
Belvedere	Residential	59	Off of South Broadway	None	Land presently used as one large parcel with mansion. Development possibilities on property.
Known or Anticipated Development					
Redevelopment at old Recreation Building – new Recreation facility with swimming pool	Recreational	N/A	River front area	Flood (storm surge)	In planning stages
Tear down and rebuilt of Boat Club facility (the only NFIP RL property in the Village)	Commercial, Recreational	1	236 Greene Street	Flood – however will be rebuilt to prevailing NFIP requirements	In planning stages

* Only location-specific hazard zones or vulnerabilities identified.

9.42.3 Natural Hazard Event History Specific to the Municipality

Westchester 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 2005 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 9.42-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
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Table 9.42-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 27- November 8, 2012	Hurricane Sandy	DR-4085	Yes	Incurring ~\$130K debris removal and emergency protective services (Public Assistance). Not a significant amount of structural damage. Mostly water was backing up from storm drain systems. Village Hall is 10' above the BFE; storm surge came to within 1' of the front door. Flooding at public housing complex run by the Tarrytown Municipal Housing Authority. Power outages in 65-7% of the Village for 4-5 days. Village Park and ballfield electrical system completely inundated.
February 8-9, 2013	Severe Winter Storm and Snowstorm	DR-4111	No	Village ran out of places to stage snow, and had to rely on a former manufacturing facility in Sleepy Hollow to stage snow.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

IA Individual Assistance

N/A Not applicable

PA Public Assistance

9.42.4 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 following summarizes the hazard vulnerabilities and their ranking in the Village of Tarrytown. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Natural Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the natural hazard risk/vulnerability rankings of potential hazards for Village of Tarrytown.

Table 9.42-3. Natural Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^a	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Earthquake	100-Year GBS: \$0 500-Year GBS: \$4,140,763 2,500-Year GBS: \$73,552,658	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	30	Medium
Flood	1% Annual Chance: \$34,103,592	Frequent	36	High
Severe Storm	100-Year MRP: \$3,391,587 500-year MRP: \$19,591,255 Annualized: \$210,188	Frequent	48	High
Winter Storm	1% GBS: \$10,066,919 5% GBS: \$50,334,594	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$0	Frequent	18	Medium

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)



- b. The valuation of general building stock and loss estimates was based on the custom inventory developed for Westchester County and probabilistic modeling results and exposure analysis as discussed in Section 5.
- c. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages.
- d. Frequent = Hazard event that is likely to occur within 25 years;
Occasional = Hazard event that is likely to occur within 100 years; and
Rare = Hazard event that is not likely to occur within 100 years
- e. The estimated potential losses for Severe Storm are from the HAZUS-MH probabilistic hurricane wind model results. See footnote c.
- GBS = General building stock
MRP = Mean return period
RCV = Replacement cost value

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the municipality.

Table 9.42-4. 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)
Village of Tarrytown	48	23	926,665	1	0	5

Source: FEMA Region 2, 2014

(1): Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 3/31/14. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents the number of claims closed by 3/31/14.

(2): Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2.

(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.

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1-percent annual chance flood events.

Table 9.42-5. Potential Flood Losses to Critical Facilities

Name	Municipality	Type	Exposure		Potential Loss From 1% Event		
			1% Event	0.2% Event	% Structure Damage	% Content Damage	Days to 100-Percent
Frank's Fuel Service Wharf.	Tarrytown (V)	Port		X	-	-	-
Hudson Harbor	Tarrytown (V)	Port	X	X	-	-	-
New York Waterways Dock.	Tarrytown (V)	Port	X	X	-	-	-
No Name Provided	Tarrytown (V)	Wastewater Pump	X	X	40.0	-	-
Tarrytown Boat Club	Tarrytown (V)	Marina	X	X	-	-	-
Tarrytown F.D.	Tarrytown (V)	Fire	X	X	5.4	6.2	480
Tarrytown Metro North Station	Tarrytown (V)	Rail	X	X	-	-	-
Washington Irvington Boat	Tarrytown (V)	Marina	X	X	-	-	-

Source: Westchester County, FEMA 2014



Note: Please note it is assumed that wells have electrical equipment and openings are three-feet above grade.

- (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.

Other Vulnerabilities Identified by Municipality

The following flood-prone areas have been identified by the Village of Tarrytown through the Westchester County Stormwater Reconnaissance Plan process (see Section 6 – Capability Assessment for a description of the program; see map at the end of this annex for location of these problem areas):

Map Area ID: TTN-1

Municipality: TARRYTOWN

General Location: NEPERAN AVENUE, EAST OF SUNNYSIDE AVENUE

Nearest Watercourse or Water Body: TRIBUTARY TO TARRYTOWN RESERVOIR

Associated Study/Report: NONE

Evaluation Score: Low

General Description of Flooding: A section of Neperan Avenue east of Sunnyside Avenue, just south of Tarrytown Reservoir, is impassable during storms dumping three inches or more of rain and most notably flooded during a storm in 2004 or 2005. A small watercourse, tributary to Tarrytown Reservoir and flowing from south to north, crosses underneath Neperan Avenue in this location. The respondent stated that the source of flooding is stormwater runoff from steep slopes and roads draining to the watercourse and overwhelming Neperan Avenue catch basins. Eighteen inches of standing and rushing water reportedly covers the road for approximately six hours.

The following additional vulnerabilities are identified by the municipality:

- Neperan Road water pump station (co-located with Sleepy Hollow and Briarcliff Manor's pump stations) – all running on generator during Sandy. As part of the Con-Ed hardening project, this was what the Village identified for them to focus on.
- The primary sheltering facility (not ARC-designated) in the Village is the Senior Center which is located west of the Metro North railroad tracks, within the Hudson River floodplain. During Sandy, the Village used the Community Opportunity Center (COC) on Wildey Street to support short term needs, however this facility lacks backup power.
- The Village lacks an adequate Emergency Operations Center (EOC).
- During Severe Winter Storms, as during the 2013/14 winter season, the Village lacks enough locations to stage snow. The Village was allowed to stage snow at the former General Motors plant in Sleepy Hollow, but this site is scheduled for re-development. This is also a problem for Sleepy Hollow.
- During power outages, the loss of traffic signals particularly along major roadways creates a significant public safety concern, and places a burden on police resources during a time when they are already taxed addressing other public safety concerns. This problem is common throughout the County.
- The Boat Club facility is the only identified NFIP Repetitive Loss facility in the Village, however this is scheduled to be demolished and rebuilt to prevailing NFIP requirements
- Lighting system at ball field got inundated during Sandy (brackish water).
- No landslide vulnerabilities identified in the community.

9.42.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- 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 municipality.

Table 9.42-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y	State and Local		NYS Building Code Ch. 97 Building Construction, Adopted 5-6-1991
Zoning Ordinance	Y	Local		Ch. 305 Zoning, Adopted 8-17-1987, Amended 12-1-2008
Subdivision Ordinance	Y	Local		Ch. 263 Subdivision of Land, Adopted 2-5-1962
NFIP Flood Damage Protection Ordinance	Y	Federal, State, Local		Ch. 169 Flood Damage Prevention, Adopted 4-20-1987, Rev. 6-18-2007
NFIP - Freeboard	Y	State, Local		Ch. 169 State mandated BFE+2 for single and two- family residential construction, BFE+1 for all other construction types
NFIP - Cumulative Substantial Damages	N	Local		
Growth Management	Y			
Floodplain Management / Basin Plan	Y	Local		Chapter 169 - Flood Damage Prevention
Stormwater Management Plan/Ordinance	Y	Local		Ch. 305 Zoning, Article XII Stormwater Management and Erosion and Sediment Control, Adopted 8-17-1987, Amended 12-1-2008
Comprehensive Plan / Master Plan	Y	Local		Village of Tarrytown Comprehensive Master Plan, 2007
Capital Improvements Plan	Y	Local		5-Year Plan
Site Plan Review Requirements	Y	Local		Chapter 305 -- Zoning
Habitat Conservation Plan				
Economic Development Plan	N			
Emergency Response Plan	Y	Local		Updated in 2011 along with HMP
Post Disaster Recovery Plan	Y	Local		
Post Disaster Recovery Ordinance	Y	Local		
Real Estate Disclosure req.	Y	State		NYS mandate
Other (e.g. steep slope ordinance, local waterfront	Y	Local		Ch. 147 Environmental Quality Review



Table 9.42-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
revitalization plan)				
Waterfront Management or Protection Plan	Y	Local		Chapter 300 – Waterfront Consistency Review
Shoreline Management Plan				

(1) NYS Subdivision laws provide a general framework, but allow room for local ordinances and interpretation.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Tarrytown.

Table 9.42-7. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Village Engineer; Planning is conducted by hired consultants
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Village Engineer and Assistant Village Engineer
Planners or engineers with an understanding of natural hazards	Y	Village Engineer and Assistant Village Engineer
NFIP Floodplain Administrator	Y	Village Engineer (per Ch. 169-10 of Village Code) Currently Michael McGarvey, Village Engineer
Surveyor(s)	N	
Personnel skilled or trained in "GIS" applications	Y	Assistant Village Engineer
Scientist familiar with natural hazards in the County.	N	
Emergency Manager	Y	Michael Blau, Village Administrator
Grant Writer(s)	Y	Michael Blau, Village Administrator
Staff with expertise or training in benefit/cost analysis	Y	Michael Blau, Village Administrator
Professionals trained in conducting damage assessments	N	

Fiscal Capability

The table below summarizes financial resources available to the Village of Tarrytown.

Table 9.42-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes (water and sewer)
Impact Fees for homebuyers or developers of new development/homes	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes
Mitigation grant programs	Yes
Other	



Community Classifications

The table below summarizes classifications for community program available to the Village of Tarrytown.

Table 9.42-9. Community Classifications

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

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

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 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 1000 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/>

National Flood Insurance Program

The following section provides details on the National Flood Insurance Program (NFIP) as implemented within the municipality:

NFIP Floodplain Administrator:

Michael McGarvey, P.E., Village Engineer

Flood Vulnerability Summary

Tarrytown adopted Local Law "Flood Damage and Prevention" in 1987 to minimize damage from flooding for new construction and the renovation of existing buildings. The Local Law as last updated in 2009 to include revised base flood elevations in special flood zones.

Resources

Local Law Chapter 169 Flood Damage Prevention and NFIP/FIRM 360933



Compliance History

All new construction located within the one A or Ae flood zones have been constructed at an elevation of 2 feet above BFE.

Regulatory

Compliance with Local Law Chapter 169 and Title 19 NYCRR is required prior to the issuance of any permits.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

It is the intention of this municipality to incorporate hazard mitigation planning and natural hazard risk reduction as an integral component of ongoing municipal operations. The following identifies relevant planning mechanisms and programs that have been/will be incorporated into municipal procedures, which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation “capabilities”:

Regulatory and Enforcement

The Village constantly reviews their regulatory and enforcement programs, and adopts higher regulatory standards as warranted. As an example: Stormwater Regulations – Town requires all projects to design for the 25 or 100-year storm event for stormwater retention (location dependent).

Operational and Administration

Working relationship with Consolidated Edison (Con-Ed) is vastly improved (municipal liaison program), and Con-Ed has upgraded and implemented programs to address tree management and the hardening of their infrastructure. The Village continues to maintain a tree-trimming program to complement Con-Ed’s tree management programs.

Fiscal

The Village has a 5-year Capital Budget program that includes funding for mitigation projects.

Education and Outreach

The Village has a robust public education and outreach program, including a Village website, Reverse 911 and Email blast system, and regular newsletters to residents, used to support community hazard awareness, preparedness, and private property hazard mitigation. The Village intends to promote greater subscription to the Email blast system. Work with web developer to improve the Village website to increase traffic and utility

9.42.6 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 current 2011 Plan. 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 9.42-10. Past Mitigation Initiative Status

Description	Status	Review Comments
VT-1: Install a backup generator at the Riverside Hose fire house	100% complete.	
VT-2: The Tarrytown Seniors (Senior Facility) is located in the FEMA DFIRM 500-year flood boundary. To mitigate flooding, the Village is eliminating impervious surfaces to increase drainage around the senior center restoring the parkland and connecting an emergency generator.	100% complete. Restored park, removed as much impervious surfaces as possible, and installed a generator.	
VT-3: Work with the Village of Irvington to increase stormwater capacity in the Sunnyside Lane area (bordering both the Village of Tarrytown and Irvington) to mitigate flooding. Includes an NFIP Repetitive Loss property.	Minimal progress. Village submitted this project under Sandy HMGP.	Carry project forward in updated strategy, continuing to work with the Village of Irvington to secure funding and implement the project.
VT-4: Increase stormwater capacity along Neperan Road adjacent to Tarrytown Lakes (Skate Shack) to mitigate flooding. The current culvert is insufficient in size and overflows causing road closures and property damage.	100% complete.	Add an initiative addressing long term maintenance of Upper Tarrytown Lake to preserve detention capacity.
VT-5: Perform drainage improvements along Benedict Avenue to decrease flooding in the Loh park area. Raise and reconstruct two bridges that connect Loh Avenue and Leroy Avenue to eliminate the damming effect that takes place allowing water to flow freely.	25% complete. Project is out to bid.	Carry project forward
VT-6: Retrofit structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.	Ongoing	Specifically identified is the Boat Club facility at 236 Greene Street (only RL in Village). This initiative to be combined with VT-7 below.
VT-7: Purchase, or relocate structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority.	Ongoing	See above.
VT-8: 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.	100% complete.	
VT-9: Begin the process to adopt higher	100% complete and	This initiative represents an ongoing process in



Table 9.42-10. Past Mitigation Initiative Status

Description	Status	Review Comments
regulatory standards to manage flood risk (i.e. increased freeboard, cumulative substantial damage/improvements).	continuous.	the Village to build regulatory capabilities, and is identified in the "Integration" of this annex. Stormwater Regulations – Town requires all projects to design for the 25 or 100-year storm event for stormwater retention (location dependent).
VT-10: Conduct and facilitate community and public education and outreach for Village residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction:	50% complete. MS4 program involves extensive outreach. Village website Reverse 911 Email blast system	Promote greater subscription to the Email blast system. Work with web developer to improve the Village website to increase traffic and utility.
VT-11: Determine if a Community Assistance Visit (CAV) or Community Assistance Contact (CAC) is needed, and schedule if needed.	Complete	Village is in full compliance with the NFIP.
VT-12: Have designated NFIP Floodplain Administrator (FPA) become a Certified Floodplain Manager through the ASFPM, and consider relevant continuing education training such as FEMA Benefit-Cost Analysis.	In progress	A modified version of this initiative is being carried forward, specifically identifying those county led initiatives that the Town will support and/or participate in. CEU credits are typically needed for Building Inspector and P.E. license.
VT-13: Begin the process to apply to participate in the Community Rating System (CRS) to further manage flood risk and reduce flood insurance premiums for NFIP policyholders. This shall start with the submission to FEMA-DHS of a Letter of Intent to join CRS, followed by the completion and submission of an application to the program once the community's current compliance with the NFIP is established.	No progress.	A modified version of this initiative is being carried forward, specifically identifying those county led initiatives that the Town will support and/or participate in, which may include informational CRS seminars.
VT-14: Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	100% complete.	
VT-15: Complete the ongoing updates of the Comprehensive Emergency Management Plans for Greenburgh and the six participating municipalities The Village Police department currently conducts an annual review of its emergency operational plans. This year, the review is being done in conjunction with the department's plans for achieving accreditation.	100% complete.	
VT-16: Create/enhance/ maintain mutual aid agreements with neighboring communities for continuity of operations (e.g., the Village Police Department maintains mutual aid agreements with the Villages of Sleepy Hollow and Irvington. Additional agreements are in place with the Town of Greenburgh for SWAT, Drug & Alcohol Task Force and emergency radio operations).	100% complete.	

Table 9.42-10. Past Mitigation Initiative Status

Description	Status	Review Comments
VT-17: Identify and develop agreements with entities that can provide support with FEMA/SOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/SOEM paperwork compilation, submissions, record-keeping	No Progress. This initiative would need to be led by the County.	A modified version of this initiative is being carried forward, specifically identifying those county led initiatives that the Town will support and/or participate in.
VT-18: Work with regional agencies (i.e. County and SOEM) 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).	Ongoing with respect to professional continuing education of building code official. Full implementation of this initiative would need to be led by the County of NYS DHSES.	A modified version of this initiative is being carried forward, specifically identifying those county (of State) led initiatives that the Town will support and/or participate in.
VT-19: Continue to implement the tree-trimming program and work with Con-Ed to continue and maintain trees in the Village.	Ongoing.	This initiative is being removed from the updated mitigation strategy as it refers to activities that are an ongoing and normal part of municipal operations (Integration Action).
VT-20: 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 efforts.	Ongoing. This is a County or State led initiative.	A modified version of this initiative is being carried forward, specifically identifying those county (of State) led initiatives that the Town will support and/or participate in.

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Village of Tarrytown has identified the following as mitigation projects/activities that have been completed, are planned, or on-going within the municipality:

- Benedict Avenue – got an \$877K county flooding grant. Had to redesigned project several times. They call it the Loh Park flood mitigation project. County flooding program. This is primarily to help prevent flooding of the County owned sewage pump station.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Tarrytown identified mitigation initiatives they would like to pursue in the future. 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. Table 9.42-11 identifies the municipality's updated local mitigation strategy.

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 actions as 'High', 'Medium', or 'Low.' Table 9.42-12 below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.42-11. 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
Tarrytown -1 (LOI #1261)	Central Avenue Culvert Replacement	Existing	Flood, Severe Storm, Transportation	G-1, G-2	Village Engineer	High - Reduced flooding in downtown business district affecting structures and infrastructure High	High - >1MM	Grant funding (HMGP applied), Village budget for local match	Long-term DOF; Sandy HMGP application	Medium	SIP	PP
Tarrytown -2 (LOI #1274 (Former VT-3)	Sunnyside Lane Stormwater Capacity Expansion- White Tail Road Drainage	Existing	Flood, Severe Storm, Transportation	G-1, G-2	Village of Irvington, Town of Greenburgh with support from the Village of Tarrytown's Engineer	[Closure of East and West Sunnyside and Broadway (Route 9); Washington Irving property floods (on the National Register of Historic Places); potential residential property damage]	High	Grant funding (HMGP applied), Village budget for local match	Long-term DOF; Sandy HMGP application	Medium	SIP	PP
Tarrytown -3 (LOI #1264 (Former VT-4)	Neperan Road Culvert Flooding Mitigation Project	Existing	Flood, Severe Storm, Transportation	G-1, G-2	Village Engineer	High - Road washout and closures for 2-3 days along this high-traffic area (back-way around Parkways); Police car flooded and lost.	High - ~\$150K	Grant funding (HMGP applied), Village budget for local match	Short DOF; Sandy HMGP application	Medium	SIP	PP
Continue to implement drainage improvements along Benedict Avenue to decrease flooding in the Loh park area. Raise and reconstruct two bridges that connect Loh Avenue and Leroy Avenue to eliminate the damming effect that takes place allowing water to flow freely. Project is out to bid, est. 25% complete.												
Tarrytown -4 (Former VT-5)	See above.	Existing	Flooding, Severe Storm, Transportation	G-1, G-2	Village Engineer and consultant	High - Floods Westchester County Pump Station; Road closures along Route 9; Property damage to private residences along Route 9	High (> \$1.6 Million)	Westchester County Grant (\$800,000) and Village	In progress; out to bid.	Medium	SIP	PP
Tarrytown -5 (Former VT-6/7)	Promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL - currently) and Severe Repetitive Loss (SRL - none currently), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be: funding, benefits versus cost, and willing participation of property owners. Specifically identified are properties in the following locations: Greene Street	Existing	Flooding, Severe Storm	G-1, G-2	Village NFIP FPA; support from NYS	High - Reduced or eliminated risk to property damage from	High	FEMA or other mitigation	Long-term DOF	High	SIP, EAP	PP, PI

Table 9.42-11. 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
Tarrytown -6 (Former VT-10)	Continue to expand and enhance community and public education and outreach for Village residents and businesses to further promote and effect natural hazard risk reduction. Specifically, the Village will promote greater subscription to the Email blast system. Work with web developer to improve the Village website to increase traffic and utility.				DHSES and FEMA	floodings		grant funding, NFIP flood insurance and ICC; property owner for local match.				
Tarrytown -7 (Former VT-12, 13, 17, 18, 20)	See above. Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1)	N/A	All Hazards	G-3, G-5	Village	High	High	TBD	Short Term / DOF	Medium	EAP	PI
Tarrytown -8	Continue to work with the NYSDOT generator program to install portable generators with hook-ups at critical traffic light locations. Specifically identified in the Village are the following intersections: <ul style="list-style-type: none"> Route 9 and 119 Route 9 and the entrance to the Thruway Route 119 and the Thruway Broadway and Main Broadway and Benedict 		All Hazards	All Objectives	Westchester County, as supported by relevant local department leads,	High (comprehensive improvements mitigation and risk-reduction capabilities)	Low-Medium (locally)	Local (staff resources)	Short	High	LPR, EAP	PR, PI
Tarrytown -9	See above. Retrofit Community Opportunity Center (COC) on Wildey Street as and ARC-designated shelter, which will need to	N/A	Severe Storm; Severe Winter Storm	G-1, G-5	NYSDOT (owner of traffic signals)	Reduced emergency protective services; potential life-safety	Medium	TBD – ask Greenburgh how they did it	Short	Medium	SIP	PP
		Existing	All Hazards	G-1, G-2	Westchester Community Opportunity Program	Improved sheltering capacity	High	TBD – grants from other levels of government. Funding from not-for-	Short	Medium	SIP	PP

Table 9.42-11. 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
	include backup power.							profits				
Tarrytown -10	Secure funding to construct an EOC within Village Hall, and implement once funding is secured.	Existing	All Hazards	G-1, G-2	Village of Tarrytown, Westchester County	Improved emergency management capabilities	Medium	Available Federal and State emergency management and homeland security funding sources (e.g. EMPG)	Short	Medium	SIP, EM*	PP
Tarrytown -11	Village Park and Ball field Lighting – raise up controllers. Upgrade underground electrical system. Already elevated controllers as part of Sandy PA. NYS DHSES is looking at this area.											
	See above.	Existing	Flood	2	Village of Tarrytown	Maintain reliability of the system	Medium	Available state and federal grants	Short	Medium	SIP	PP
Tarrytown -12	Investigate the possibility of acquiring a snowmelter.	N/A	Severe Winter Storm	1, 5	Village of Tarrytown; Other Villages in Town of Greenburgh	Improved snow removal capabilities; especially during emergency situations	Medium	Available state and federal grants, contributions among Villages	Short	Medium	EM*	PI
Tarrytown -13	Loh Park Flood Mitigation Project: Install new 1,100 linear feet of drainage piping and catch basins from pond at Prospect & Benedict Avenues to Loh Ave. & Benedict Ave. storm water sewer system. Phase 2: install new storm drain systems, increase drainage channel capacity west of Grove St., enclose about 100 linear feet of open channels at Loh Ave. and Leroy Ave. and construct new storm drain system. Phase 3: construct new pond with associated outlet structure in upper drainage area #3, provide stream restoration, sediment removal and provide outfall protection on all six existing outfalls into main drainage channel.											
	See above.	Existing	Flood, Severe Storm, Severe Winter Storm		County Planning, Stormwater Management, Village	High	High	Village of BPL26	Short	High	SIP	PP

Notes:

EM* = Emergency Management activity (non-mitigation)

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:

CAV Community Assistance Visit

CRS Community Rating System
DPW Department of Public Works

FEMA Federal Emergency Management Agency
 FPA Floodplain Administrator
 HMA Hazard Mitigation Assistance
 N/A Not applicable
 NFIP National Flood Insurance Program
 OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:
 FMA Flood Mitigation Assistance Grant Program

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 reappropriation 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.

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

HMGP Hazard Mitigation Grant Program
 PDM Pre-Disaster Mitigation Grant Program
 RFC Repetitive Flood Claims Grant Program (discontinued in 2015)
 SRL Severe Repetitive Loss Grant Program (discontinued in 2015)

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

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.



Table 9.42-12. 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
Tarrytown-1 (LOI #1261)	Central Avenue Culvert Replacement	1	1	1	0	0	0	0	1	0	1	1	-1	0	0	5	Medium
Tarrytown-2 LOI #1274 (Former VT-3)	Sunnyside Lane Stormwater Capacity Expansion- White Tail Road Drainage	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Medium
Tarrytown-3 (Former VT-4)	Neperan Road Culvert Flooding Mitigation Project	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Medium
Tarrytown-4 (Former VT-5)	Benedict Avenue drainage improvements	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Medium
Tarrytown-5 (Former VT-6/7)	Address flood vulnerable properties, including RL/SRL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Medium
Tarrytown-6 (Former VT-10)	Enhanced Public Education and Outreach	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Medium
Tarrytown-7 (Former VT-12, 13, 17, 18, 20)	Support county/state-led initiatives and activities to build mitigation capabilities	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	High
Tarrytown-8	Work with NYSDOT to install backup power at traffic lights	1	1	1	0	0	0	0	0	1	0	1	1	0	0	6	Medium
Tarrytown-9	Retrofit Community Opportunity Center (COC)	1	1	1	1	0	0	0	0	1	0	1	1	0	0	7	Medium
Tarrytown-10	Construct an EOC within Village Hall	1	1	1	1	0	0	0	0	1	0	1	1	0	0	7	Medium
Tarrytown-11	Village Park and Ball field Lighting flood mitigation	1	1	1	1	0	0	0	0	1	0	0	1	0	0	6	Medium
Tarrytown-12	Acquire snow melter	1	1	1	0	0	0	0	0	1	0	1	1	0	0	6	Medium
Tarrytown-13	Loh Park Flood Mitigation Project	1	1	1	1	0	0	1	1	0	0	1	1	0	0	8	High

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

9.42.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.42.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Tarrytown 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 Village of Tarrytown has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.42.9 Additional Comments

None at this time.

Figure 9.42-1. Village of Tarrytown Hazard Area Extent and Location Map

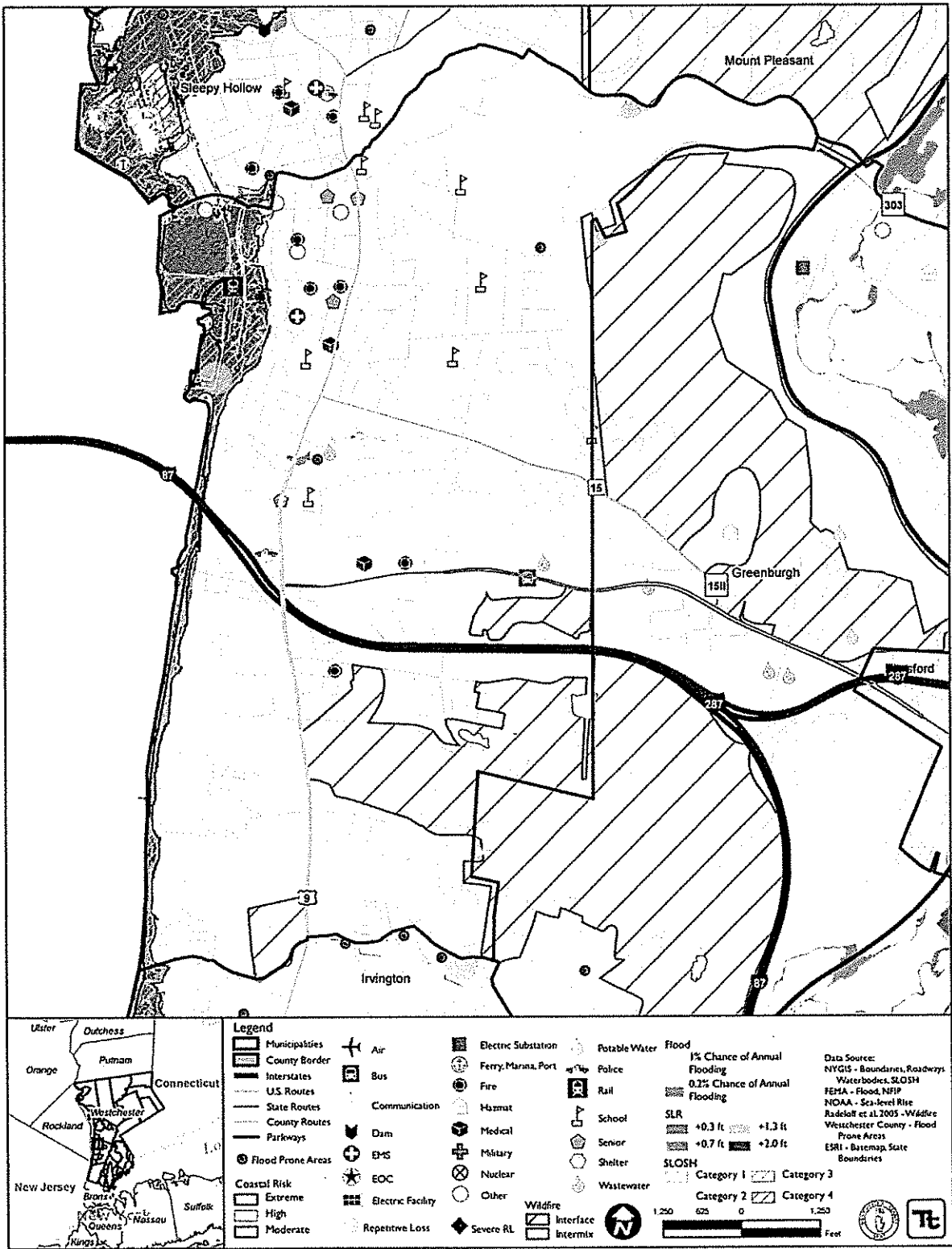
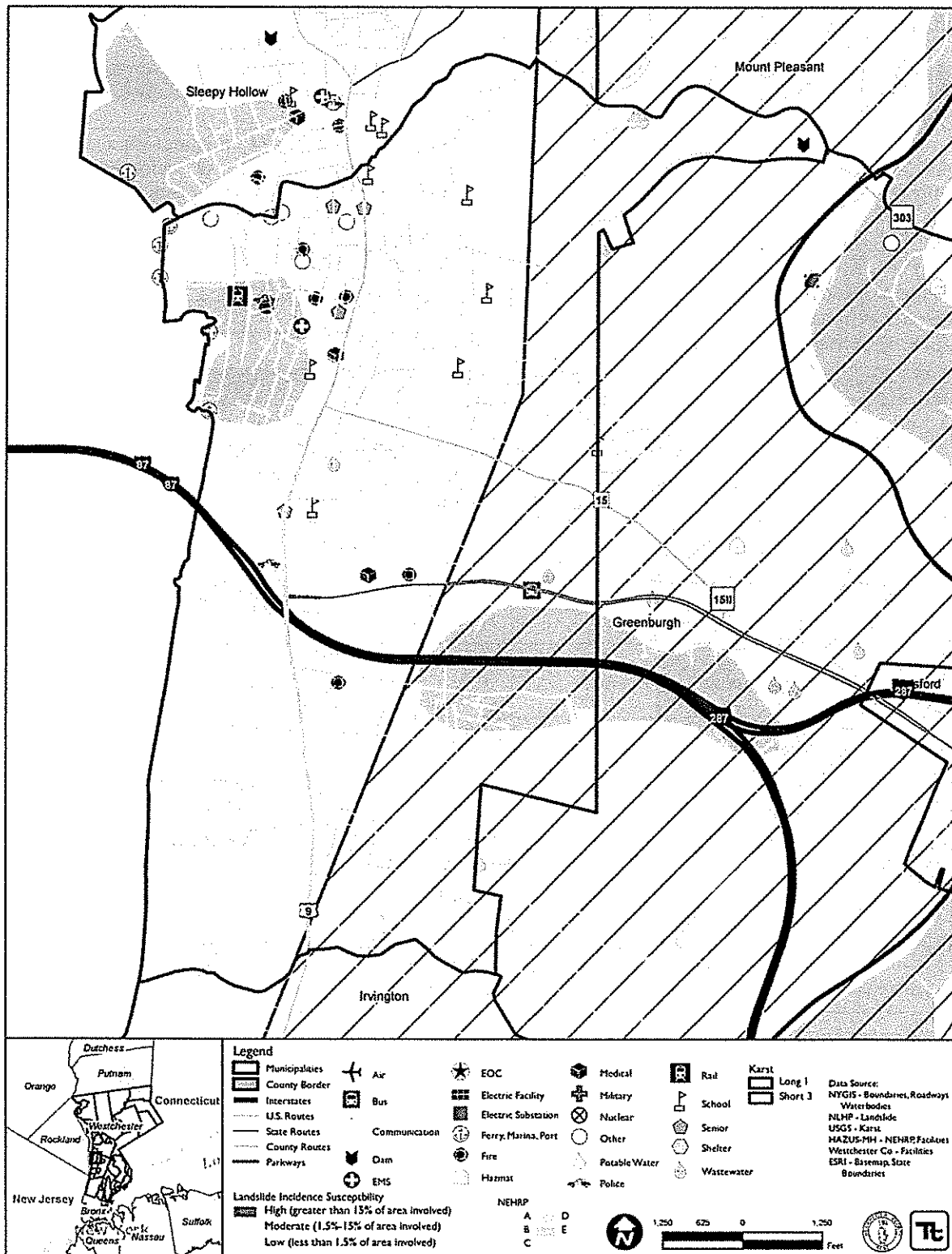


Figure 9.42-2. Village of Tarrytown Hazard Area Extent and Location Map



Name of Jurisdiction: Village of Tarrytown, Tarrytown
 Action Number: LOI #1261
 Action Name: Central Avenue Culvert Replacement

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Transportation
Specific problem being mitigated:	The Village of Tarrytown is seeking hazard mitigation funding to protect and enhance the reliability and resilience of transportation infrastructure in the downtown business district of Tarrytown by replacing the 100-year old Central Ave
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Village is proposing to replace the Central Avenue Culvert, from the eastern terminus of State Route 9/ Broadway to its western terminus at Cottage Place—a total of about 1,500 feet. The roadway will have to be excavated and a new engineered concrete
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Recent Damages: \$150,000
Estimated Cost	\$10,250,000
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village of Tarrytown, Michael Blau, Village Administrator
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Grant funding (HMGP applied), Village budget for local match
Timeline for Completion	Long-term DOF; Sandy HMGP application
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

LOI #1261

Action Name:

Central Avenue Culvert Replacement

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Protect the downtown business district of the Village
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Transportation
Timeline	-1	This project will take longer than a year to complete
Agency Champion	0	
Other Community Objectives	0	
Total	5	
Priority (High/Med/Low)	Medium	



Name of Jurisdiction:	Village of Tarrytown, Tarrytown
Action Number:	LOI #1274
Action Name:	Sunnyside Lane Stormwater Capacity Expansion- White Tail Road Drainage

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Severe Winter Storm
Specific problem being mitigated:	The Whitetail Road Drainage Project complements a larger envisioned mitigation project at VT-3 in The Greater Greenburgh Planning Area DMA 2000 Hazard Mitigation Plan-- "Work with the Village of Irvington to increase stormwater capacity
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Increase stormwater capacity at Sunnyside Lane and White Tail Road
	2. Do nothing – current problem continues
	3. No other feasible actions/projects identified
Action/Project Intended for Implementation	
Description of Selected Action/Project	The project complements a larger mitigation project that is listed on the Greater Greenburgh Planning Area DMA 2000 Hazard Mitigation Plan (June 2011, by Tetra Tech Hazard Mitigation Planners) as VT-3-- "Work with the Village of Irvington to increase stor
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Recent Damages: \$30,000
Estimated Cost	\$25,000
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village of Tarrytown, Michael Blau, Village Administrator
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Grant funding (HMGP applied), Village budget for local match
Timeline for Completion	Long-term DOF; Sandy HMGP application
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

LOI #1274

Action Name:

Sunnyside Lane Stormwater Capacity Expansion- White Tail Road
Drainage

Criteria	Numeric Rank [-1, 0, 1]	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	-1	This project will take longer than a year to complete
Agency Champion	0	
Other Community Objectives	0	
Total	5	
Priority (High/Med/Low)	Medium	



Name of Jurisdiction:	Village of Tarrytown, Tarrytown
Action Number:	LOI #1265
Action Name:	Neperan Road Culvert Flooding Mitigation Project

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Transportation
Specific problem being mitigated:	Neperan Road is a major roadway that links the Village of Tarrytown downtown business district with the Tarrytown Lakes area and eastern parkways (Saw Mill Parkway, Cross Westchester Expressway 287 and NYS Thruway/ Tappan Zee Bridge). A
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Greater Greenburgh Planning Area DMA 2000 Hazard Mitigation Plan identified the project as VT-4-- "Increase stormwater capacity along Neperan Road adjacent to Tarrytown Lakes (skate shack) to mitigate flooding. " The project will replace an 80-foot,
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Recent Damages: \$35,000
Estimated Cost	\$150,000
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village of Tarrytown, Michael Blau, Village Administrator
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Grant funding (HMGP applied), Village budget for local match
Timeline for Completion	Short DOF; Sandy HMGP application
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

LOI #1265

Action Name:

Neperan Road Culvert Flooding Mitigation Project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	Village will seek grant funding and use local budget for match
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Severe Winter Storm
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	6	
Priority (High/Med/Low)	Medium	

Name of Jurisdiction:	Village of Tarrytown
Action Number:	Tarrytown-4 (former VT-5)
Action Name:	Implement drainage improvements along Benedict Avenue

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm, Transportation
Specific problem being mitigated:	Flooding in the Loh park area of the Village
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Continue to implement drainage improvements along Benedict Avenue to decrease flooding in the Loh park area. Raise and reconstruct two bridges that connect Loh Avenue and Leroy Avenue to eliminate the damming effect that takes place allowing water to flow freely. Project is out to bid, est. 25% complete.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High - Floods Westchester County Pump Station; Road closures along Route 9; Property damage to private residences along Route 9
Estimated Cost	High (> \$1.6 Million)
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village Engineer and consultant
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Westchester County Grant (\$800,000) and Village
Timeline for Completion	In progress; out to bid.
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

Tarrytown-4 (former VT-5)

Action Name:

Implement drainage improvements along Benedict Avenue

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)	Medium	



Name of Jurisdiction: Village of Tarrytown
 Action Number: Tarrytown-8
 Action Name: NYSDOT Generator Program

Assessing the Risk	
Hazard(s) addressed:	Severe Storm; Severe Winter Storm
Specific problem being mitigated:	Loss of power to critical traffic lights in the Village.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Continue to work with the NYSDOT generator program to install portable generators with hook-ups at critical traffic light locations. Specifically identified in the Village are the following intersections:</p> <ul style="list-style-type: none"> • Route 9 and 119 • Route 9 and the entrance to the Thruway • Route 119 and the Thruway • Broadway and Main • Broadway and Benedict
Mitigation Action/Project Type	SIP
Goals Met	1, 5
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Reduced emergency protective services; potential life-safety
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	NYSDOT (owner of traffic signals)
Local Planning Mechanism	Transportation
Potential Funding Sources	TBD
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number: Tarrytown-8
 Action Name: NYSDOT Generator Program

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	0	
Multi-Hazard	1	Severe Storm; Severe Winter Storm
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	6	
Priority (High/Med/Low)	Medium	

Name of Jurisdiction:	Village of Tarrytown
Action Number:	Tarrytown-9
Action Name:	Retrofit Community Opportunity Center (COC) on Wildey Street

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	Loss of power to the community center that is also an ARC designated shelter
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Retrofit Community Opportunity Center (COC) on Wildey Street as and ARC-designated shelter, which will need to include backup power.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Improved sheltering capacity
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Westchester Community Opportunity Program
Local Planning Mechanism	Emergency Management
Potential Funding Sources	TBD – grants from other levels of government. Funding from not-for-profits
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

Tarrytown-9

Action Name:

Retrofit Community Opportunity Center (COC) on Wildey Street

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	Provide a shelter for those impacted by hazard events
Administrative	0	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (High/Med/Low)	Medium	

Name of Jurisdiction: Village of Tarrytown
 Action Number: Tarrytown-11
 Action Name: Village Park and Ball field Lighting

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Controllers of lighting system are damaged during flooding events
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Village Park and Ball field Lighting – raise up controllers. Upgrade underground electrical system. Already elevated controllers as part of Sandy PA. NYS DHSES is looking at this area.
Mitigation Action/Project Type	SIP
Goals Met	1, 2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Maintain reliability of the system
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village
Local Planning Mechanism	Emergency Management
Potential Funding Sources	State and Federal Grants
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

Tarrytown-11

Action Name:

Village Park and Ball field Lighting

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	0	
Multi-Hazard	0	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	6	
Priority (High/Med/Low)	Medium	



Name of Jurisdiction: Village of Tarrytown
Action Number: Tarrytown-13
Action Name: Loh Park Flood Mitigation Project

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Severe Winter Storm
Specific problem being mitigated:	This area of the Village tends to flood due to the need of a new drainage system
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Do nothing – current problem continues
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Install new 1,100 linear feet of drainage piping and catch basins from pond at Prospect & Benedict Avenues to Loh Ave. & Benedict Ave. storm water sewer system. Phase 2: install new stormdrain systems, increase drainage channel capacity west of Grove St., enclose about 100 linear feet of open channels at Loh Ave. and Leroy Ave. and construct new storm drain system. Phase 3: construct new pond with associated outlet structure in upper drainage area #3, provide stream restoration, sediment removal and provide outfall protection on all six existing outfalls into main drainage channel.
Mitigation Action/Project Type	SIP
Goals Met	1, 2, 4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	County Planning, Stormwater Management, Village
Local Planning Mechanism	Stormwater Management, Capital Improvement
Potential Funding Sources	Village of Tarrytown and BPL26
Timeline for Completion	Short Term
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (next page)



Action Number:

Tarrytown-13

Action Name:

Loh Park Flood Mitigation Project

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	
Environmental	1	
Social	0	
Administrative	0	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (High/Med/Low)	High	



