- 1. Welcome to the Jan 2023 FMAC Meeting
- 2. Meetings Info
 - a. 4th Tuesday of the month, 7 PM, Courthouse with Zoom for the Public
 - i. Members who cannot attend in person may Zoom in but cannot vote
- 3. Minutes Review & Comments for 2022
 - a. Feb edits Approved?
 - b. July edits Approved?
 - c. Oct edits Approved?
 - d. Nov edits Approved?
 - e. Dec 2022 actual meeting 1/3/2023 edits Approved?
- 4. Meetings Priorities Discussion
 - a. TG Watershed flood planning & stopping flooding asap in the VoM
 - b. AS low hanging fruit, things we can get done clean up rivers, leaves, sewers, floatables
 - c. DF USACE Project
 - d. SG development in the flood plain regulations, process
 - e. ER concentrate efforts on the areas that flood the worst
 - f. Patti T Dredging the Rivers & cleaning the debris
 - g. Bernie C Dam & Reservoir and funding
 - h. Leilani Emergency Preparedness
- 5. Member Roles & Priorities Discussion how can we be more effective? Subcommittees?
 - a. Timely communication to and from the VoM Admin. very important
 - i. Updates on the Watershed Plan -Draft, below monthly from VoM
 - ii. Timely & regular updates on the USACE Plan & Progress
 - iii. Timely, Regular and comprehensive Applications in the Floodplain
 - iv. Emergency Preparedness VoM has plans at the VoM Level; FMAC can work at the home/business level
 - v. LYR possible quarterly meetings of all VoM Committee Chairs
 - vi. Meeting Minutes ER to assist TG
 - b. TG & LYR planning to meet VM for discussion on these items.

Previous Business - Updates

- 6. BoT Work Session involvement with Harrison; FMAC sent Letter to BoT supporting working with Harrison
- 7. USACE Open Questions TG to find Q&A and circulate to FMAC
 - a. also discuss Process for info with VM
- 8. NY DEC Mamaroneck Sheldrake Watershed Study is starting;
 - a. TG to see if they can attend the 1/24/23 FMAC Meeting
- 9. The Holistic Watershed Plan (draft below) need updates monthly if possible
 - a. The Surface Flow Study for the Western Parts of the Village
 - b. Mamaroneck Reservoir & Dam
 - i. Feasibility Study expected completion Feb 2023 will need funding State, County?
 - c. Stream Gauges FMAC sent 'Guidelines Letter to Village Mgr. and cc BoT
 - d. Add these items to the Watershed Plan:
 - i. Waverly Ave Br., Crushed Culvert under Ralph Ave; Dredging; Aquifers; Plan for Communications
- **10.** Emergency Preparedness Fiscally, Environmentally & Culturally Responsibly!
 - a. FMAC believes we can help prepare residents and business owners & workers
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- 12. Flood Plain Regulations discussion;
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- 13. Temp Pumps for Columbus Park -TG believes pumps could reduce floodwaters 5-6 feet over 50 acres in 24 hours
 - a. Researching FEMA Grant for pumps?
- 14. Communication & Cooperation with Municipalities in our Watersheds

New Business

- 15. Emails to FMAC from the Community How does FMAC respond?
 - a. TG emails can be very time consuming receives 1 email with 30+cc's

i. Discussion – TG to respond to emails, sender only: TY, please attend our meeting and there will be some time at the end of FMAC meetings for a 3-minute question per resident

16. Community Comments at the FMAC Mtgs

a. time permitting, public comments on Flood topics allowed; time limit, 3 minutes per person

17. Questions from the Audience

- a. Allowed if Agenda has been completed
- b. limited to 3 minutes per person on Flood topics

18. Other



Open Diversion Culvert & Porous, Floodplain Parking

The open culvert has same the carrying capacity as the underground culvert, but grass, unlike cement, allows for permeability of the channel area. Open culvert will be easier and safer to maintain, especially in heavy flood conditions.

Lowering of parking and park area by 3½ ft. (~100,000 sq. ft. per VoM GIS map 4-1-5B1) and replacement of asphalt with porous pavers and vegetation allows for the holding of an additional 350,000 cubic ft/2,6 mm gallons of floodwater which will recharge groundwater, and avoiding neighboring homes.

Lowering and reconfiguration of parking allows for revitalization of riverfront parkland and neighborhood access.

	The Mamaroneck Hol	istic Watershed														
	Flood Control Plan - D	raft Outline - for														
	Discussion Only - Upd	lated														
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		River Cleanups													
		Dredging													
		Communication Plan - Update?													
		CERTS?	sand bag	?											
		Other?	program meet with	?											
			Flood victims												
4	b	Emer Preparedness -													
		Home & Business Items - FMAC to Assist													
		FMAC Approach													
		sand bag program													
		funding													
		Other?													
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		Temp pumps at the Confluence													
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		Modern Floodgates & Controls													
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		Mgmt.													
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6		Mam Reservoir	Determine Options and Cost	?											
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VoM FMAC - Minutes - Feb 15, 2022 - DRAFT

Attendance:

Anthony Gelber, Chairperson; Peggy Jackson Founding Member; Andrew Spatz, Steven Glener, Elsa Puerto Rubin, Dana Gallagher, Dan Natchez, Member of BOT

Minutes:

Meeting came to order at 7 pm through Zoom remote access.

Old Business

- 1. Welcome to the FMAC Feb, 2022 Meeting and Happy Valentine's Day +1
- 2. Meeting Dates for 2022 posted on VoM Website; next Mtg. March 22, 2022, 7 PM
- 3. Updates
 - a. USACE
 - i. The VOM is in the process of arranging a meeting to be held between the ACE/VOM/FMAC in the middle of March. We are awaiting more info and a specific date
 - ii. FMAC has been asking for this meeting for months. It is critical to begin the dialogue with ACE to identify the Project Scope, Process and Schedule, and then communicate this info to residents and business owners.
 - iii. Gelber to reach out and determine status of meeting.
- 4. Capital Projects
 - a. Road to Nowhere, RTN
 - i. Mayor Murphy, Mayor Richard Dionisio, Harrison, Tony Gelber, Peg Jackson and several of the Harrison Flood Committee met on the Road to Nowhere
 - ii. Previous plans to trim the road back were located by the VM's office and forwarded to the TOH. We are awaiting an update.
 - iii. Trustee Natchez trying to get BoT approval for River gauges
 - iv. Next Steps: VoM to send plans to Harrison
- 5. USDA NRCS Paula Bagley USDA
 - a. Post Ida River Cleanup Program Updates
 - i. Next Steps: FMAC, Gelber, send PowerPoint to Barberio and Sarnoff
 - b. Flood Plain Easement Info
 - i. Next Steps: Further discussion needed
- 6. County Involvement Updates Catherine Parker's office
 - a. Catherine Parker & John Filiberti attended, Thank you both!
 - b. FMAC & Parker discussed:
 - i. LISWIC and how it could be a tool for progress between Municipalities
 - ii. Westchester Co. has completed SW Reconnaissance Plans for several Watersheds, available at:
 - 1. https://planning.westchestergov.com/stormwater-management-law
 - iii. Possibly changings Regs so the concept of not discharging more SW becomes discharging lessSW
 - iv. River gauges should be a Watershed Project so upstream flows can be communicated in a timely manner to downstream Muni's and residents
 - v. Monies available Requesting Capital \$, starts with submitting the correct documentation Engineering Plans and Cost estimates
- 7. Watershed Flood Planning
 - a. Communications

- i. FMAC sent info paragraph to Robert Ingenito for inclusion in the VoM Newsletter
 - Updates: FMAC sending info paragraphs to Ingenito for inclusion in the VoM e newsletter
- 8. Low Hanging Fruit Memo discussion re next steps
 - a. Discussion:
 - i. River and Storm System Maintenance
 - 1. Do we have, and where are the written schedules for:
 - a. Regular River maintenance and cleanouts
 - b. Standard storm syst maintenance
 - c. Pre-storm storm sewer cleanout by Priority area
 - b. Add'l Equipment what do we need
 - i. Glener mentioned that Army Surplus vehicles and equipment available at very good prices
 - ii. Discuss with Fire Chief?
- 9. Minutes Dec 2021 Approved

New Business

- 10. Other
 - a. Floatables problem for the VoM
 - i. In Ida, 2 floatables, 40 foot-ish container stuck at Plaza St Br and blue storage shed stuck at bridges
 - ii. Regulations prohibit floatables
 - iii. Glener to view VoM and take pics of Floatables for discussion next meeting
 - b. Emergency Parking locations during Floods
 - i. Elsa to look into
 - c. Regulations Members to review existing regs.

VoM FMAC – Minutes – July 12, 2022 - Draft

- A. Present Andrew Spatz, Steven Glener, Dana Gallagher, Tony Gelber, Trustee Natchez; Excused Peggy Jackson, Elsa Rubin
- B. Meeting Dates for 2022 posted on VoM Website
- C. Minutes for 5/24/22 Approved

Updates

- D. Emergency Preparedness Fiscally, Environmentally & Culturally Responsibly!
 - a. Meeting to be held at ST Vito's Community Room to update community members
- 19. Waverly Ave Br. being renovated by the Town of Mamaroneck and funded not by USACE
- **20. USACE Plan Tweaks** Discussion & should we generate a 'Motion' for the BoT
 - a. Tweaks to include: Grassy Open Channel vs Closed Tunnel, Reconstruction of RR Br. & Halstead Br, Review of solutions for Harbor Heights & House raising
 - b. Discussion to include Mamaroneck Reservoir & Dam no not included in the ACE Plan. Tweak has to be in the original Plan
 - c. Motion to BoT in support of requesting Tweaks for ACE passed 4 ayes and Chair
 - d. Further discussion, RR Br and Halstead too big for tweaks
- **21. New Motion** to overturn 1^{st} Motion 4 no's and 1 aye 1^{st} Motion remains
 - a. FMAC to send Motion to BoT supporting asking USACE for Tweaking the Plan to include Tweaks above.

22. Meeting Ended.

VoM FMAC - Minutes - Oct 25, 2022

- 1. Present Peg Jackson, Steven Glener, David Finch, Tony Gelber, Dan Natchez
- 2. USACE Meeting at the BoT Meeting Oct 11 2022 Recap
 - a. 4 Questions including Tweaks
 - b. Previous Questions
 - i. FMAC
 - ii. Public

3. Updates

- a. Meetings new NY State Regs for meetings?
- b. The Surface Flow Study for the Western Parts of the Village
 - i. Village has hired an Engineer will discuss process for the Study
 - ii. Charrette with Residents being considered
- c. Mamaroneck Reservoir & Dam Was the letter sent to request County Funding?
 - i. VOM FMAC sent a Letter to the VoM BoT asking that the VoM send a Letter to the CE, Latimer requesting funding for the study to determine if the Mamaroneck Dam & Reservoir could be enhanced as a part of the Mamaroneck Flood Control System

4. Stream Gauges

- a. Discussion needed re intent and scope of work
- 5. **Emergency Preparedness** Fiscally, Environmentally & Culturally Responsibly!
 - a. Updates/Next Steps
 - b. Comments on the VoM Mtg at Mamaroneck Ave School?
 - c. Other

6. Applications Review in the Floodplain

- a. TG spoke with Village Mgr. re Process
 - i. All Applications in the Flood plain to be sent to FMAC. FMAC to review and send 1 response to Village X
 - ii. X to circulate to all other Land Use Committees
- b. Updates Steven Glener

7. Flood Plain Regulations

- a. Town of Mamaroneck reviewing Model 'No Flooding Regs'
- b. other

8. Temp Pumps for Columbus Park

- a. Possible FEMA Grant for study, pumps?
- b. Next Steps?

9. Communication & Cooperation with Municipalities in our Watersheds

- a. Harrison Updates
 - i. Rd to Nowhere believe there has been a negative response from Harrison on Rd to Nowhere Removal
 - 1. Engineer Amodeo proposing a Plan for 3 Dams approx. 10 years ago

10. The Holistic Watershed Plan (HWP) - Parallel Paths to a Drier Mamaroneck

- a. Overview MANY PROJECTS
 - i. 'Grassy Channel' in lieu of Closed Culvert 'Tweak' for the USACE Project?
 - ii. Possible Mam Dam & Reservoir Modernization
 - iii. The Flats Surface Flow Study

11. Other.

VoM FMAC - Minutes - 11/22/2022 - Draft

- 1. Nov 22, 2022 FMAC Meeting in person at the Courthouse
- 2. Present Peg Jackson, Andrew Spatz, Dave Finch, Steven Glener, Elsa Rubin, by phone, Tony Gelber
- 3. Discussion Development
 - a. in Harrison
 - i. West St Development are they following floodplain regs?
 - ii. TG attended a previous Harrison Planning observation Harrison is asking questions re floodplain regs
 - b. Open Space near Toyota City what is happening with this space?
- 4. Discussion Floodplain Regs Insurance
 - a. If landlord has insurance does/can it protect tenants?
 - b. Can Tenants get insurance?
 - c. How can FMAC assist?
- 5. Discussion Dredging
 - a. Can FMAC get the scope of work; What is the status of the project and permits?
- 6. Updates
 - a. Applications Review in the Floodplain Steven Glener following up on Applications
 - i. Does not believe FMAC is getting all Applications?
- 7. Thank you, Peg Jackson, for your service.
- 8. The FMAC Dec 2022 Meeting will be Jan 3, 2023

VoM FMAC - Minutes - 1/03/2023 - Draft

- 1. Welcome to the Dec/Jan 2023 FMAC Meeting Meeting held in the Courtroom
- 2. Present: Andrew Spatz, Dave Finch, Steven Glener, Elsa Rubin, Bernard Camarda, Patti Trifiletti, Tony Gelber, Trustee Leilani Yizar-Reid
- 3. Thank you to previous Trustee Dan Natchez and former FMAC Chair Peg Jackson for their service to the VoM.
- 4. Welcome & welcome to 2023:
 - a. new Members Bernard Camarda, Patti Trifiletti
 - b. Andrew Spatz, Dave Finch, Steven Glener, Elsa Rubin,
 - c. Trustee liaison Leilani Yizar-Reid
- 5. Meetings Info
 - a. 4th Tuesday of the month, 7 PM, Courthouse
 - b. Thoughts? FMAC Members expressed desire for more transparency
 - i. TG to det Options In Person, Zoom etc.
- 6. Meetings Priorities Discussion
 - a. TG Watershed flood planning & stopping flooding asap in the VoM
 - b. AS low hanging fruit, things we can get done clean up rivers, leaves, sewers, floatables
 - c. DF USACE Project
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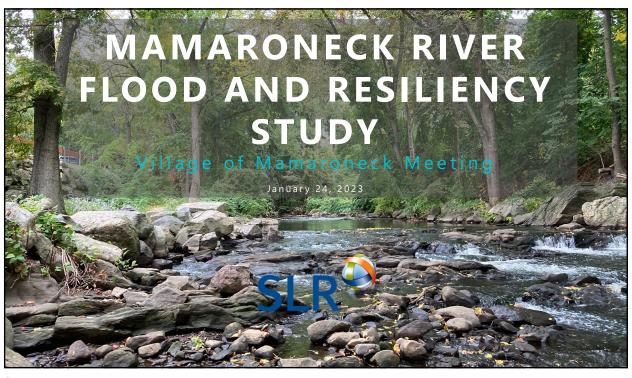
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 - v. LYR possible quarterly meetings of all VoM Committee Chairs
 - vi. Meeting Minutes ER to assist TG
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- 10. NY DEC Mamaroneck Sheldrake Watershed Study is starting;
 - a. TG to see if they can attend the 1/24/23 FMAC Meeting
- 11. The Watershed Plan (draft below) -need updates monthly if possible
 - a. The Surface Flow Study for the Western Parts of the Village No Updates
 - b. Mamaroneck Reservoir & Dam no updates
 - i. Feasibility Study expected completion Feb 2023 will need funding State, County?
 - c. Stream Gauges FMAC sent 'Guidelines Letter to Village Mgr. and cc BoT no updates
- 12. **Emergency Preparedness** Fiscally, Environmentally & Culturally Responsibly!
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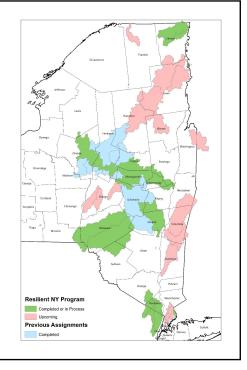
Agenda

- Background & Overview
 - Resilient NY Program
 - Project implementation example
- Mamaroneck River Flood Study
 - Focus watercourses & watershed
 - Flood history
 - Project phases
- Village of Mamaroneck engagement/data gathering



Resilient NY Program

- Initiative of NYSDEC, contracted through OGS
- Conduct flood studies and develop flood and ice-jam hazard mitigation alternatives that help guide implementation of mitigation projects
- Statewide focus on 48 floodprone streams and rivers in 29 counties
- Make New York State more resilient to future flooding and climate change
- SLR focusing on eastern portion of state
- Full list of focus watersheds and completed studies at: https://www.dec.ny.gov/lands/121102.html



3

Example of Project Implementation

Steele Creek, Village of Ilion, Herkimer County

- Residential property buyouts
- Road removals
- Dam removal
- · Widening and lowering of channel bed
- Channel restoration
- Floodplain creation
- · Bridge replacement





Top Right: Remington Arms Dam, Ilion, NY, before construction, 2019 **Bottom Right:** Remington Arms Dam, Ilion, NY, during construction, 2020

Example of Project Implementation

Steele Creek, Village of Ilion, Herkimer County

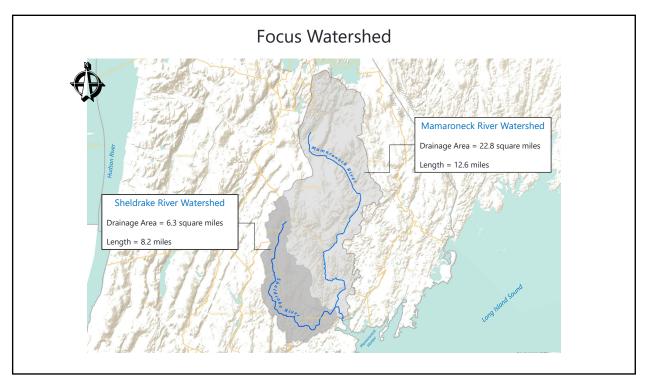
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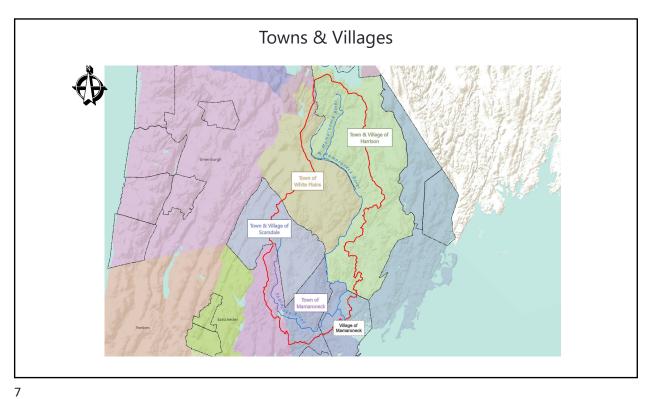




Top Right: Steele Creek, Ilion, NY, during construction, 2020 **Bottom Right:** Steele Creek, Ilion, NY, after construction, 2021

5





		Flood History
Date	Event Type	NOTES
September 1975	Hurricane Eloise	Hurricane Eloise caused extensive flooding within the Mamaroneck River watershed. It dropped 10.84 inches of rain over the Village of Mamaroneck from September 19th to September 27th and was considered a record flood in the area. Around \$19 million in damages occurred.
December 1992	Nor'easter	This Nor'easter dropped heavy rains and caused heavy flooding in Westchester County. It caused about \$1 to \$2 million in damages. 19 people died as a result of the storm.
September 1999	Hurricane Floyd	Remnants of Hurricane Floyd caused widespread flooding in Westchester County and much of southern New York. Rainfall rates were from 1 to 2 inches per hour for at least 3 consecutive hours. Total damages were estimated at \$14.6 million, with \$6.6 million worth of damage in Westchester County.
April 15-16, 2007	Nor'easter	This Nor'easter dropped 8.05 inches of rain on southern Westchester County within a 24-hour period. Widespread flooding ensued, and some people considered it the "worst flooding in half a century". The Village of Mamaroneck was seriously affected.
August 2011	Tropical Storm Irene	\$296 million in damages across New York State. Over 7 inches of rainfall fell on the Village of Mamaroneck and approximately 40 percent of the village was flooded. Between 400 and 500 homes in the Village of Mamaroneck's low-lying areas and coastal and river flood zones were affected by an evacuation order. A storm surge of 3 feet occurred off the Long Island Sound.
October 2012	Hurricane Sandy	Record coastal flooding in Lower New York. Hurricane Sandy produced high tides in the coastal areas. Around 60 percent of the community is without power, and seventy roads are closed due to downed trees and wires.
September 2021	Hurricane Ida	Significant flooding occurred in the Village of Mamaroneck and many residents were evacuated. An average of 6 inches of rain fell in Westchester County. Some neighborhoods reported as much as 14 feet of water. 3 people died as a result of this storm.

Flood History: Sheldrake River in Mamaroneck



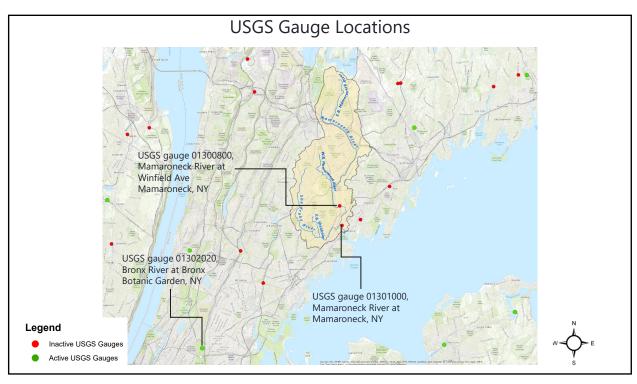


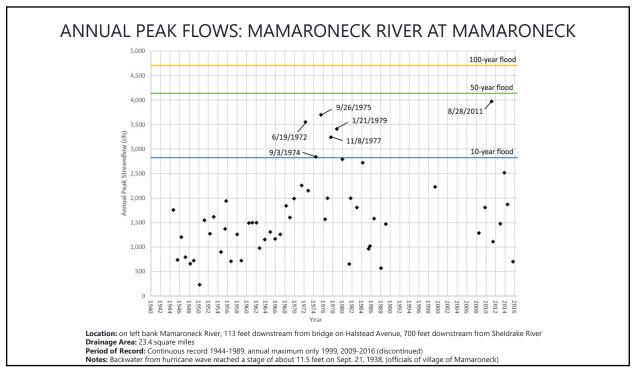
Fenimore Road & Waverly Ave during Hurricane Irene 08-28-2011

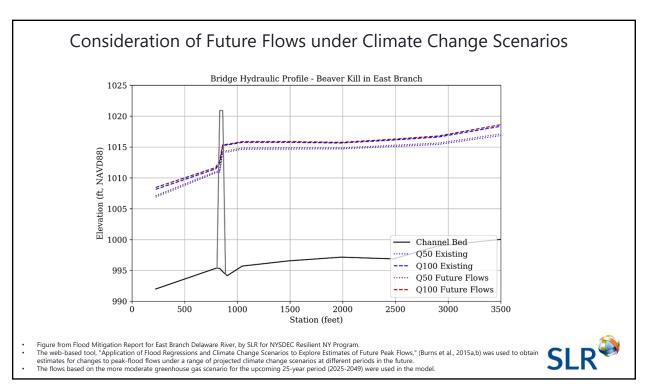
Fenimore Road & Waverly Ave on 10-13-2022

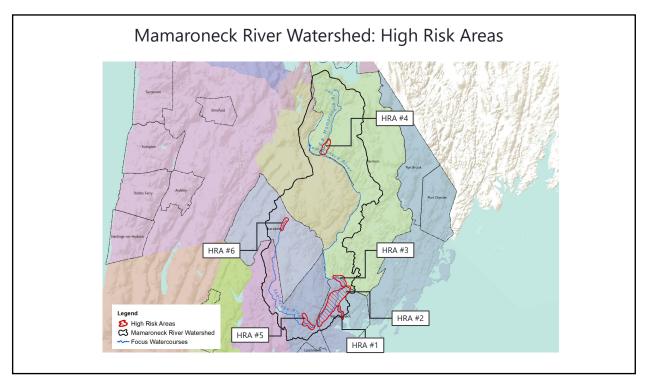


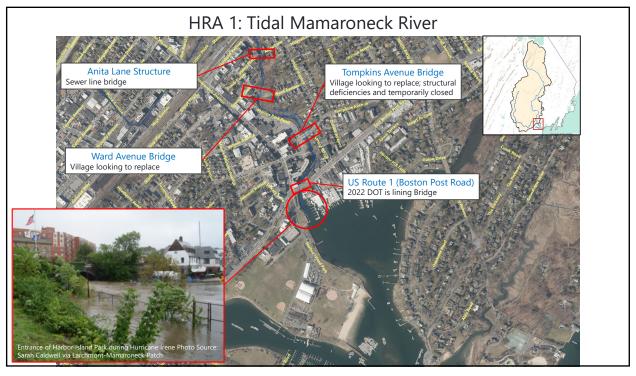
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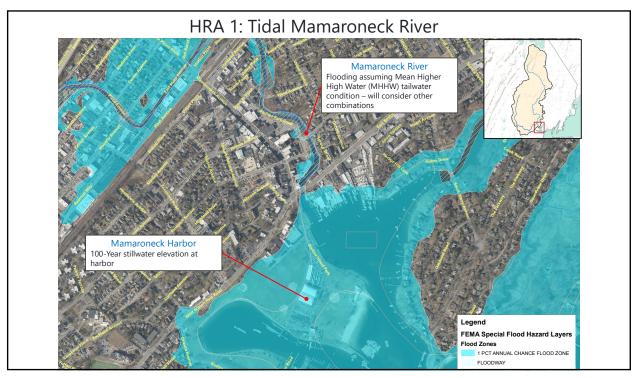




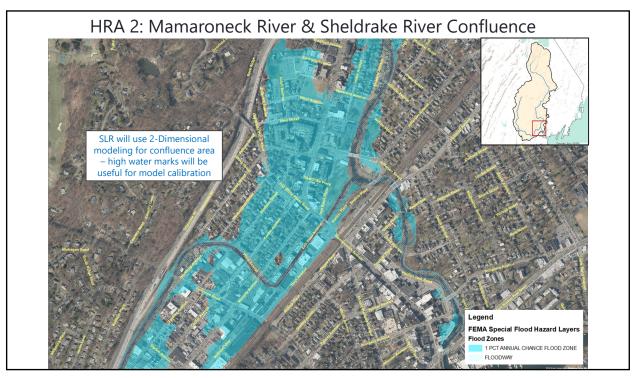


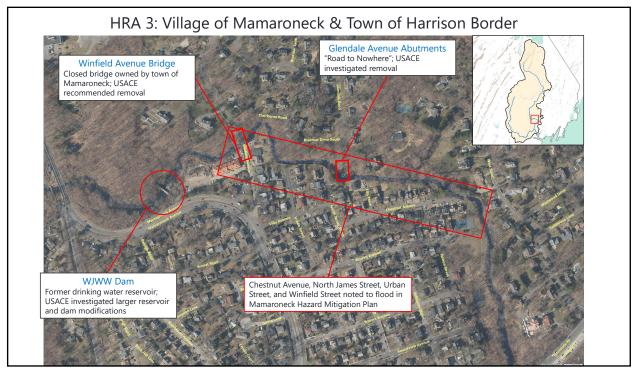


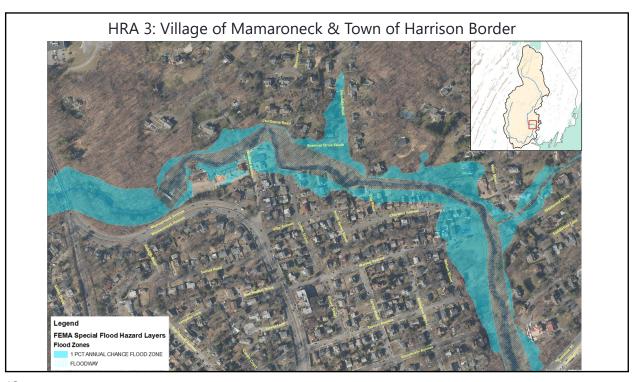












Approach

Data Collection

- •Input from experts and witnesses
- Input from watershed groups
- Existing reports, studies, publications
- Existing hydraulic models



Identification of High-Hazard Areas



Meeting with City representatives Utica, NY (M. Castellanos)



Gathering input from witnesses of flooding Hunter, NY (M. Castellanos)



Approach

Field Assessment and Investigations

- Geomorphic investigations
- Hydraulic modeling



Evaluation of Mitigation Strategies



Development of Flood Mitigation Alternatives & Reporting



Looking Downstream at Harbor Island Park, Mamaroneck (K. Parmelee)



Downstream of Halstead Ave Bridge, Mamaroneck (K. Parmelee)

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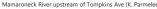
Examples of Flood Mitigation Strategies Bridges, River/ Individual Channel Dams, Floodplain **Planning** Watershed Building Alteration Treatments Culverts Management Repair of Eroding Banks Flood Code Removal Widening Enforcement proofing Operational Wetland Changes Protection Management Deepening Creation Limiting Modification Stormwater Impervious Cover Realignment Zoning Modifications Sediment Replacement Buy-Out Management

Data Gathering

- Reports and Studies:
 - FEMA Flood Insurance Study (2007)
 - FEMA Flood Insurance Rate Maps
 - Flood Risk Management Report (USACOE, 2017)
 - V of Mamaroneck Multi-Hazard Mitigation Plan (2012)
- Contacts:
 - Harbor & Coastal Zone Management Commission
 - Public Works/Highway Departments
 - Emergency Responders
 - Other key contacts with firsthand knowledge of flooding
- Observations:
 - Areas of flooding/flow paths/flooding depths
 - Bridges/culverts that overtopped or became clogged with ice or debris
 - Locations of critical facilities and anchor businesses
 - Photographs and Videos (drone)

Data Sharing by Email or Upload Link







Mamaroneck River upstream of Jefferson Ave Bridge (K. Parmelee)

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