

Rye Brook Flood Mitigation Meeting

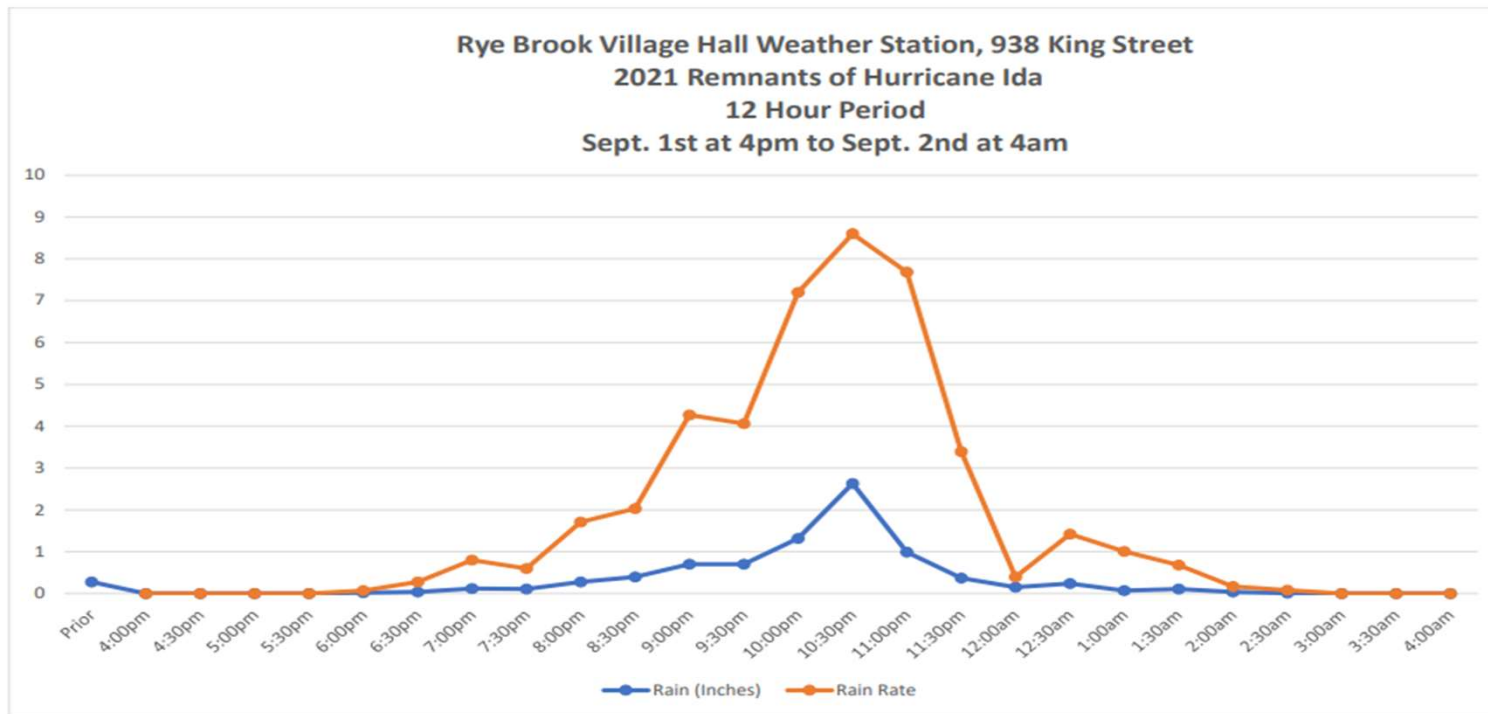
The Past, Present, & Future of Flood Mitigation

An Overview for Brook Lane & Wyman Street Residents

Flood Mitigation Meeting Agenda

1. Brief Review of Hurricane Ida in Rye Brook
2. Past, Present & Future Flood Mitigation
3. Q&A

Hurricane Ida- 2021



100 year storm = 1 in 100 chance of occurring in a given year (1.0% chance)
500 year storm = 1 in 500 chance of occurring in a given year (0.2% chance)

Storm Information

8.58" total rain for storm
6.34" rain in 2.5 hr. period
4.94" rain in 1.5 hr. period
3.95" rain in 1.0 hr. period
2.63" rain in 30 min. period

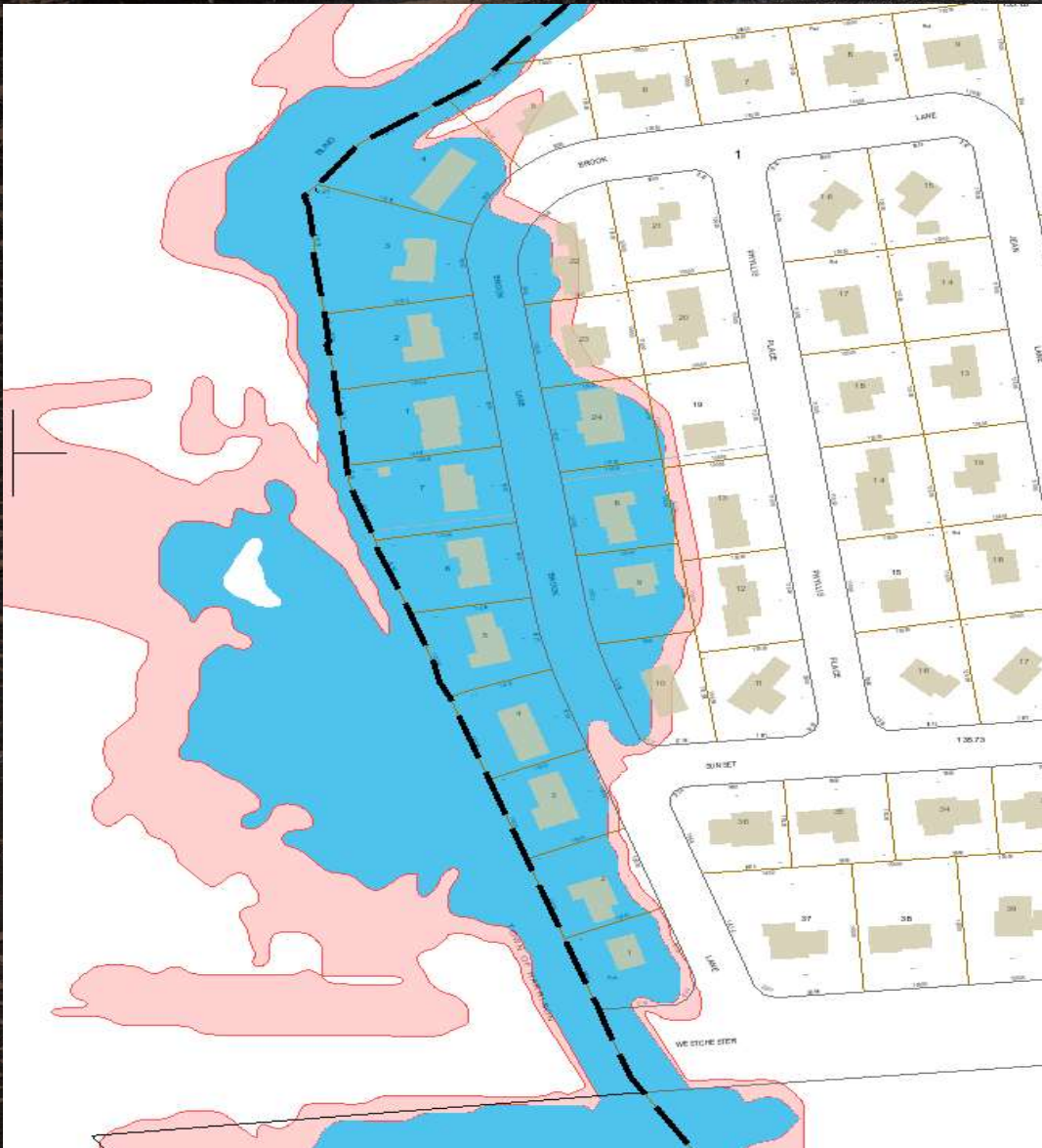
Hurricane Ida - 2021

FEMA FLOOD MAP OF BROOK LANE AREA

Blue – 100 YEAR STORM

Pink – 500 YEAR STORM

Storm Water: Almost all storm water in Rye Brook flows into basins and into the Blind Brook. If you release more water downstream, it will cause more flooding downstream. It is often better to look for water storage (detention) opportunities.



Past Efforts: 2002 - 2020

2002: DRE Stormwater Analysis - East Branch Blind Brook

Projects implemented:

- 1) 2005 King St. Fields Underground detention system (est. \$500,000)
- 2) 2007 King Street Improvements and Loch Lane Bypass (est. \$350,000)
- 3) Philips Pond near Beechwood Circle (est. \$101,000)
- 4) 2009 New Detention Basin between Edgewood Avenue and Bluebird Hollow. (est. \$833,000)

Past Efforts: 2002 - 2020

2008 Chas Sells Engineering Study

(Bowman Avenue Upper & Lower Ponds, Avon Cir., & Brook Ln.)

- Bowman Ave: Sluice gate. (No impact upstream).
- Avon Circle: Recommended hydraulic improvement project.
- **Brook Lane area**: After considering models that included expanding the bridge opening width by as much as 10 feet and raising the bridge height by 2 feet, there was “*minimal water surface elevation reductions*” and “*it was concluded that the existing bridge opening is basically adequate and the flooding in this area is connected with a wider floodplain rather than an undersized structure*” (p.38)

Past Efforts: 2002 - 2020

- 2013: Stormwater Reconnaissance Plan for LI Sound Watershed.
- 2014: Blind Brook Watershed Study (Parsons Brinkerhoff):
 - Recommended 2 lg. detention ponds on east side of SUNY Purchase and modeled water surface elevation reductions in four downstream locations as far as Rye City to at least the 100 year storm level. Est. Cost \$511,000.
- 2014: Rye City NY Rising Reconstruction Program:
 - This program reviewed Purchase College basins, expanding basins at the WC Airport, resizing the Bowman Ave ponds, and installing stream gauges for sluice gate.
 - Rye City, Rye Brook and state officials met with Purchase College representatives at the time – but SUNY Purchase did not want to encumber their property with this large project.
- 2015: Rye Brook annex of County-wide Hazard Mitigation Plan adopted.
- 2017: DASNY reviewed resizing the upper pond at Bowman Ave. & optimizing sluice gate settings following 2-3 years of stream gauge monitoring.

Past Efforts: 2002 - 2020

Avon Circle Flood Mitigation Project Summary:

2016-2020 Rye Brook, Rye Town & PCSD joint project.

\$7M+ Project identified to reduce flooding in Avon Circle by re-routing piping, opening culvert under Westchester Ave. & elevating a PCMS ballfield with underground detention.

Rye Brook received a grant from Westchester County for ½ of the \$85k study costs, and Rye Town received a CDBG grant for the other ½ of the study costs.

The study and costs were finalized in November 2020.



April 2007



Sept. 2021

Current Efforts: Sept. to Dec. 2021

- Rye Brook, Rye City, NYS Senator Mayer & NYS Assemblyman Otis continue to work together.
- Revisiting 2014 engineering study recommending 2 lg. basins at SUNY Purchase.
- Avon Circle Project (\$7.2M): Rye Brook applied for WC grant for \$3.5M approved by WC Stormwater Advisory Board, next goes to WC Planning Bd & then WCBOL. Rye Town worked with Rye Brook, Avon & PCSD to submit a Building Resistant Infrastructure & Communities (BRIC) grant for approx. \$3.5M balance.
- Harrison:
 - RB urging Harrison to enforce Office Park maintenance stream banks, debris & trees.
 - Proposed Developments: Rye Brook & its consultants have submitted comments on stormwater.
- Rye Brook and Rye City have met with NYSDEC about addt'l. flood studies.
 - Rye Brook has expressed particular interest in the NY Streams Study for this watershed focusing on the upstream storage options (i.e. Purchase College basins).

Current Efforts – Sept. to Dec. 2021

- Natural Resources Conservation Service (NRCS) Floodplain Easement Program (Purchasing Properties):
 - Rye Brook submitted a Letter of Interest to participate.
 - Meeting Already held with NRCS and NYSDEC. Site visit early January.
 - This program allows for the purchase of properties from interested homeowners (“appraisal value a day before the event”) that were damaged by flooding at least 1x in the last 12 months, or 2x in the past 10 years. No other reasonable solutions should exist to reduce the flooding hazards in these locations. A permanent easement is placed on the property which is restored to its natural state and is owned & maintained by Village.
- FEMA Community Rating System (CRS) (Flood Insurance Premium Discounts):
 - Only 3 Westchester municipalities currently participate.
 - Must exceed the minimum requirements of the National Flood Insurance Program (NFIP).
 - Private flood insurance premium rates are discounted typically 5-15%.
 - Typically 6 months to 2 years to be fully accepted into this program.
 - 226 properties have flood insurance policies in Rye Brook.
 - Village has met with FEMA CRS representatives and a Community Assistance Visit (CAV) is scheduled for January 2022. A community needs at least 500 points to enter the discount program, and the CAV is the first step toward getting approval to meet this goal.
- Rye Brook Adopted Annex to County-wide Hazard Mitigation Plan (HMP):

Future Priorities 2022 +

- Continue to work with NYS Senator Mayer and NYS Assemblyman Otis on all state and federal programs and funding sources.
- Work with Rye City & NYSDEC officials to prepare a NY Streams Study, focusing on upstream detention (6-8 mo). NYSDEC also initiating an Army Corps Study of watershed.
- Initiate the NRCS Floodplain Easement Program, which would result in purchasing interested properties and maintaining as an open floodplain easement. (2-3 years)
- Start process of being considered for the FEMA Community Rating System, which would provide flood insurance discounts for most of the 226 flood insurance policies in Rye Brook. (6 mo-2 yrs)
- Consider updating prior engineering studies of the Rich Manor Park area of the eastern branch of the Blind Brook using updated rain data and seeing if there are any additional capital projects to mitigate flooding. (1-2 years)

*Please Remember: The deadline to apply for FEMA assistance is now **Tuesday, Jan 4.***



Q & A