

FLOODING ABATEMENT IN HARBOR VIEW

A Recap of the January 25, 2012 Meeting at the Harbor View Clubhouse

On January 25th, there was an interesting and informative presentation on the history of flooding in Harbor View, what we know about the causes, the action plan now being pursued and the help we'll need to achieve success to mitigate casual flooding in the future.

BACKGROUND



Several maps were shown at the presentation that provided a context for the current relationship of Harbor View to the “mainland.” About 120 years ago, Harbor View was literally an island with marshes and tidal waters separating Harbor View from the mainland, only connected at low tide by higher ground

where the road is now. During the mid-1800s Mr. Keyser, of NYC’s Tammany Hall gang, had purchased what is now Manresa Island, built a residence and graded the higher ground for access. This “road” was still low enough that during flooding conditions, the waters rose over the road so that there was a continuous expanse of water between Keyser Island and Harbor View. The marshes were also continuous north and south of this low access road.

As many people in Harbor View have heard, the primary access between Harbor View and the mainland once Harbor View became populated 100 years ago, was a bridge connecting Neptune Avenue in Harbor View with Neptune Avenue in Harbor Shores. A heavy truck, weighted down with stones from the construction of the power plant in the 1950s, caused part of the bridge to collapse. For various reasons, Harbor View took a payout from the power plant instead of repairing the bridge, tore down the bridge, and built up the Manresa/Keyser Island access road several feet higher



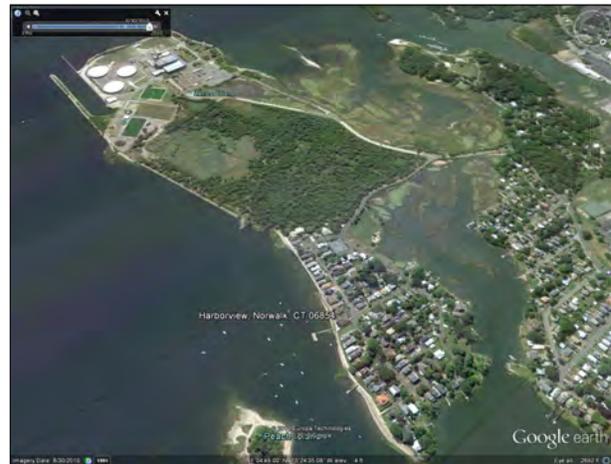
that we use now. The road is now approximately 9 feet above sea level (MSL).

The practical effect of this improved road was to establish a barrier that essentially cuts off the flow of water between the marshes. The only flow-through between the north and south marshes is through a 36-inch culvert located at the western end of Longshore Avenue.



Where millions of gallons of water once flowed freely, tidal flow is now restricted to the capacity of a 36-inch pipe. Most of the time, this does not appear to be a problem.

But the maps also show that during a northeasterly storm, the wind blows directly through the gap where the bridge once stood, then through the marshes towards Village Creek. When the access road was low, the water was able to sweep relatively unobstructed from Norwalk Harbor through the marshes to Long Island Sound. Except in an exceptionally fierce storm, the road barrier now prevents adequate flow-through and the water gets trapped and floods all the low-lying areas, including Harbor View.



An ongoing environmental consequence is that south of the road between the power plant and Village Creek, the marsh is filling in with silt and invasive plants.

PRESENT EFFORTS TO DEAL WITH FLOODING

The residents most affected by casual flooding live on Channel Avenue and near the playground since these are the lowest areas in Harbor View. During bigger storms, all of Harbor View's streets and yards will flood. All experienced residents know that salt water will ruin cars, and many cars have been lost to flooding over the years.

Many homes have also experienced damage from flooding. As a consequence, a lot of homes prone to flooding have been raised to prevent storm waters from flooding first floor levels. A few have been razed and rebuilt when flooding rendered them uninhabitable. Having asked residents for input, President Jerry Crowley estimates that property repairs due to flooding might even reach \$3 million. FEMA adjusters are quite familiar with Harbor View!

Acknowledging the need to be more pro-active in trying to prevent flooding, Harbor View hired Malcolm Pirnie Consultants in 2008 to conduct a hydraulic engineering study to pinpoint the causes of flooding and to provide guidelines on how to mitigate casual flooding. The resulting study provided topographic maps relative to tidal elevations illustrating the low points of Harbor View. The most actionable recommendation was to block floodwaters by constructing walls. However, despite pointed challenges from Harbor View residents, Malcolm Pirnie refused to identify the culvert as too small and thus a significant contributing factor to flooding. Harbor View does not agree with the conclusion relative to the culvert, though it agrees with the likely effectiveness of walls.

Long Term

Since then, Don Atwell, a Harbor View resident who lives in one of the areas most prone to flooding, has been engaged in a persistent effort to contact agencies and organizations that could corroborate our belief that the culvert is too small and that enlarging the opening would help deter flooding. Don has been in contact with:

- o EPA
- o DEP
- o NOAA
- o Army Corp of Engineers
- o Norwalk Land Trust, aided by Henry Huse, a Director of the Trust, who lives on the other side of the marsh in the solar-powered home.

Feedback from conversations Don's had is that there is basic agreement that the culvert is probably too small. These organizations recognize that the free flow of storm/tidal floodwaters is crucial to a healthy

wetlands environment and they have undertaken many remedial construction projects throughout the state of Connecticut.

The value of providing a free flow of tidal waters in Harbor View and adjacent low-lying areas is two-fold:

- o Environmental: to protect habitat and marshes
- o Health and safety: to prevent flooding that could subsequently prevent emergency vehicles from entering Harbor View if there were a life-threatening situation.

Before we can get any kind of commitment from these agencies, we need firm data demonstrating the disparity in water levels on the north and south sides of Longshore Avenue, particularly during storm events. As with many things in life, timing is everything! Last year, Harbor View residents became aware of a young man mucking about in the marshes. His name is Troy Hill, and he's a doctoral candidate at Yale studying to be an environmental scientist, with a focus on marshes. Troy was Harbor View's guest speaker on July 4th 2011 and has kept in touch with Harbor View. He has agreed to monitor the information from water-level data loggers that Harbor View will pay for, and in collaboration with Troy, install on rods imbedded in the marshes north and south of the culvert. These sophisticated data loggers, small cigar-tube containers filled with the necessary electronics, will collect flood height information automatically, without the need for residents to come down and monitor visually for a disparity in height between tidal waters. The DEP says it will accept Troy's data, which we hope will allow the DEP to make the modification of Longshore Avenue culvert a "priority."

Short Term

In addition to these long-term efforts, Harbor View is taking immediate steps to prevent flood waters from causing property damage, which you may have seen or heard about:

- o A temporary sandbag barrier has been constructed between the Channel Avenue wall and the berm created for a tree near the playground area. The purpose is to keep floodwaters from flowing across the playground at this low point and filling up Channel Avenue. If the sandbag barrier is proved to be effective, we'll investigate making it permanent.
- o More effective tidal valves are being installed, making drainage pipes water-tight both in areas that have not had valves previously, and as replacement valves. These are one-way valves that let water out, but not in. One caveat about the tidal valves is that they need to be kept clean of sand, seaweed, and any debris that could hold the valve open, but when they are clean they work well.

- o Harbor View will put in an application with the DEP Long Island Sound (LIS) to repair the Channel Avenue wall that runs from the playground to 25 Channel. The current, relatively low wall is very porous due to cracks in the mortar and consequently doesn't do an effective job at keeping rising flood waters from seeping through cracks or overflowing onto Channel Avenue. The wall will be repaired to an approximate 2-foot height with one-way valves installed to allow the exit of rain water without allowing seawater in.
- o Note: the water-level data loggers, tidal valves and Channel Avenue repairs will be funded from annual dues already collected and earmarked for long-range repairs and upgrades.

Another long-term goal that Harbor View intends to investigate is to make application with DEP LIS to continue the Channel Avenue wall down to Longshore Avenue by the baseball backstop.

NEXT STEPS

Harbor View has allies, not only Troy Hill, but also Chris Perone, our State Representative who obtained the grant for the 2008 study, and who is now committed to helping Harbor View once we have the necessary data to go to the state/federal agencies for action.

Attorney Ronald Kowalski, a Friend of Harbor View who has expertise in land use issues, has volunteered to advise us as necessary.

We need to engage the appropriate key people in Norwalk's administration to work with Harbor View on getting larger culvert pipes or other causeway modification on Longshore Avenue to allow greater flow-through between the two marshes.

We need the support of all Harbor View residents and homeowners to make this happen.

How can you help? Suggestions, offers of help, please contact Don Atwell at donatwell@hotmail.com or 203-299-0448.



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