# EXECUTIVE SUMMARY OF TOWN MEETINGS ON WATERWAY FLOODING

## TOWN OF WESTPORT PROJECT No. 2022-14

## **August 2023**



#### TOWN OF WESTPORT BOARD OF SELECTWOMEN

JENNIFER S. TOOKER, FIRST SELECTWOMAN

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# Town Meetings on Waterway Flooding (Meetings Held in 2022-2023)

# **Executive Summary**

Report on Findings and Priorities

#### Introduction

In the spring of 2022, Westport's First Selectwoman Jennifer S. Tooker commissioned a series of seven Town meetings to address the subject of watercourse flooding throughout Town. The purpose of these meetings was to facilitate an open forum and dialogue with residents and Town Officials to identify and discuss flooding issues in their neighborhoods. Seven meetings were conducted, with each meeting specifically addressing the issues germane to one or sometimes two watercourse watersheds.

Selectwoman Tooker assembled a Committee of Town Officials representing the various departments generally involved with flooding. Present were members from the Department of Public Works, members of the Conservation Department, and the Planning & Zoning Department. Also present was a Geographic Information System technician who displayed maps and visual images of the various areas being discussed.

During the meetings, residents were encouraged to speak about current flooding issues and problems they are aware of as well as potential future issues they were concerned about. The Committee alternately listened, took notes, and occasionally weighed in on the residents' concerns.

The bulk of each meeting was focused on the Committee listening carefully to and recording the residents' concerns.

The Committee collected the residents' concerns, and this data was entered into a spreadsheet for review.

## **Meeting Format and Schedule**

Each of the seven meetings were held in the Town Hall Auditorium, and ran for about 1-1/2 to 2 hours long. Attendance ranged from 10 to 30 residents at each meeting as well as the Committee.

Each meeting began with an opening presentation from the Department of Public Works describing in some detail the watershed or watersheds to be discussed. The presentation included an overview map of the Town and the specific watershed, as well as a detailed depiction of flood zones and stream crossings within each watershed. Pictures of stream crossings, that is, bridges or culverts along the stream, were shown.

FEMA flood zones and other Town flood studies were depicted on maps, showing the extent of the predicted flood zone areas. The committee commented as necessary regarding the flooding issues along a specific watercourse.

Once the presentation was complete, the meeting was opened up to Public Comment. The Committee recorded residents' comments and complaints regarding flooding in their respective neighborhoods, and around Town in general.

The dates of the meetings and watersheds addressed are as follows:

Date	Watershed
11/10/2022	Indian River
11/17/2022	Silver Brook & Willow Brook
12/01/2022	Muddy Brook
12/15/2022	Pussy Willow Brook
01/12/2023	Sasco Creek & New Creek
01/19/2023	Dead Man's Brook
01/26/2023	Stony Brook & Poplar Plains Brook

#### Methodology for Review of the Collected Data

Once all seven meetings had been concluded, the Committee compiled all the collected data into a spreadsheet.

The data was sorted by watercourse and analyzed to determine criteria stated by residents by which potential flooding mitigation projects might be prioritized.

A summary of the recorded data is included in Appendix B.

The database includes comments from about 40 residents who attended the meetings, with a few Committee comments.

#### **Summarized Conclusions**

The meetings were well attended by residents. The meetings included an at times lively interaction between residents, who live in flood prone neighborhoods, and Westport Land Use Staff, including Department of Public Works, Conservation, and Planning & Zoning.

This included a general sense that a continued effort between residents and Westport Staff to help residents navigate potential solutions to living in a flood prone area would be greatly welcome. Staff at the Town are more than glad to meet with residents to discuss flooding and possible mitigation solutions.

From the Town's perspective, this also included managing residents' expectations. There are certainly measures that can be taken to mitigate flooding, but there are similarly things that are not possible to remedy. In short, it is an education of knowing precisely

where you live within a watershed and building and reinforcing your dwelling in the most appropriate manner.

One item of interest was that within a given watershed on a meeting night, there seemed to be areas of focus that brought out several residents to voice their common comments. That had the effect of highlighting certain sub-areas along a stream that amplified the Committee's years of knowledge and experience of repeated flooding within the Town.

These areas included, for example:

- **Indian River.** From Saugatuck Avenue to Hogan Trail.
- **Muddy Brook.** From Green's Farms Road to Post Road East and near Long Lots School.
- **Pussy Willow Brook.** From Green's Farms Road to just north of Valley Road.
- **New Creek.** From Green's Farms Road to Arrow Head Road.
- **Sasco Creek.** The area from Westway Road and Tomahawk Lane to Green's Farms Road, and the area at the cul-de-sac of Grist Mill Lane.
- **Dead Man's Brook.** From Jesup Road to Compo Road North.

This is not to say that flooding does not occur elsewhere along these streams. What it does say is that groups of residents came out to speak not just about their singular property, but about their neighborhood as a whole with regards to flooding.

Most of these areas are already on the Committee's radar, so to speak, and are also called out in the Department of Public Works' list of possible priorities (included in Appendix A).

Another item of concern that was discussed with the cleaning and clearing of brooks and streams. Many residents voiced such questions about how to go about this, and clear streams of unwanted trees, branches, debris, invasive species, and accumulated roadway sand (from snow removal).

This led to several lively discussions whereby the Department of Public Works and the Conservation Director indicated their willingness to work with residents in specific areas to develop a plan to work together to improve stream flow. It would need to be on a case-by-case basis, and residents would need to meet with and get approval from Town staff to develop such a plan and schedule, but the Town indicated its willingness to engage in this.

As can be seen from the comments in Appendix B, many residents asked about such stream clearing activities, and how to best go about implementing it.

Another item that was discussed at this meeting was the availability and opportunity of State and/or Federal grant money for flooding projects. Both the Department of Public Works and the Conservation Director assured the residents that they will continue to look for and apply for applicable State or Federal grant funding to remediate flooding should such items become available.

Lastly, many of the questions and comments that were raised at the meetings that are listed in Appendix B were answered at the meeting. Most of those answers tend to fall within three main recommendations, the same three recommendations that FEMA makes to property owners regarding how to address flood risks on their property.

The first is to raise or lift your dwelling's finished floor to be above the Base Flood Elevation. This is colloquially known as a FEMA lift. The owner would raise their dwelling above the flood zone, and the area below the finished floor would be only for parking of vehicles, dwelling access, or storage. It would not be a basement or living space.

The second of those recommendations is to armor the existing dwelling with known flood proofing materials in order to make those portions of the dwelling that experience flooding capable of enduring a flooding event. There are FEMA publications that detail such materials.

The third is what is known as retreat. It means moving the dwelling to a place outside of the flood hazard zone, or moving to another site. Needless to say, this is not the most popular strategy, as most people have much invested in their dwelling, both financially and personally. But it is listed as a FEMA option.

To briefly summarize, the series of meetings was an excellent start of a dialogue regarding flooding within Westport. It is a dialogue that hopefully will continue to broaden, and from which useful paths of flooding mitigation solutions will be possible.

Please refer to both of the Appendices. Appendix A includes the Department of Public Work's preliminary Potential Projects List, and Appendix B includes the paraphrased listing of residents' comments and questions from the meetings.

#### APPENDICES & DATA

Appendix A: Department of Public Works

Potential Projects List - Flooding Projects/ Stream Cleaning/Update FEMA Mapping

Appendix B: Summary of Questions, Comment, and Concerns from Meetings

- Indian River
- Muddy Brook
- Pussy Willow Brook
- New Creek & Sasco Creek
- Dead Man's Brook

(Note there were no comments for Silver Brook, Willow Brook, Stony Brook, Poplar Plains Brook)

# **TOWN MEETINGS ON WATERWAY FLOODING**

# **APPENDIX A:**

DEPARTMENT OF PUBLIC WORKS
POTENTIAL PROJECTS LIST (2022)

#### Department of Public Works - Potential Projects List [2022]

## **Flooding Projects**

#### Muddy Brook Group

- Hillandale Road at Muddy Brook
- Green's Farms Road at Muddy Brook
- Parking Lot at 1076 Post Road East at Muddy Brook

#### Willow Brook Group

• Little Weston Road at Willow Brook

#### Pussy Willow Brook Group

- Guyer Road at Pussy Willow Brook
- Valley Road at Pussy Willow Brook
- Irongate Hill at Pussy Willow Brook
- Spicer Road at Pussy Willow Brook
- Crescent Road at Pussy Willow Brook

#### Dead Man's Brook Group

- [Bay St / Post Rd E / 199 Post Rd E / Myrtle Ave] at Dead Man's Brook
- Evergreen Avenue at Dead Man's Brook
- Cross Highway at Dead Man's Brook

#### **Stream Cleaning**

- Pussy Willow Brook
- Dead Man's Brook
- Muddy Brook

#### **Revising FEMA Mapping**

- Indian River
- Pussy Willow Brook
- New Creek
- Willow Brook
- West Branch of Saugatuck River: Newtown Turnpike & Hermit Lane area

# **TOWN MEETINGS ON WATERWAY FLOODING**

# **APPENDIX B:**

SUMMARY OF QUESTIONS, COMMENTS, & CONCERNS FROM MEETINGS

#### Summary of Questions, Comments, & Concerns from Meeting 1 [11/10/2022]

#### Watercourse: Indian River

What will the flooding impact be for the Hiawatha Lane Affordable Housing Development?

These meetings are a great idea.

The Town needs more funding for more staff.

The Town needs more of an effort from the DPW to get funding for drainage improvements.

Are the Town Flood Studies, that is, GZA (Eight Streams) and BL (Dead Man's Brook) on the Town's website?

The project on the CT Turnpike is going to impact the drainage in the area. The Town should urge the CT DOT to install an additional culvert. Has Westport DPW spoken with Norwalk DPW regarding flooding?

What is the possibility of using BRIC funding? Federal Infrastructure Act grants? Has Westport applied for grants?

The statement that this area has no other problems but for the CT Turnpike culvert is not true. The 2021 rainfall (7.5" in 24 hrs) caused Hogan Trail to overtop.

The Town needs to look at culverts north of the CT Turnpike.

Flooding conditions have worsened considerably in recent years. The replacement of the CT Turnpike culvert alone may not solve the problem.

Lived in area for 24 years, and flooding has definitely gotten worse.

The wetland around the pond at Indian River Green is rapidly filling with silt and vegetation. Is the Condo Association intending to dredge the pond? Are increasing tides a problem as well?

The owner has a permit to dredge the pond, but to date, has not dredged the pond.

The Committee made the following comments:

- The owner of the Hiawatha project is required to reach out to the CT DOT Department of Rails to ask about the maintenance of the culvert.
- To date, the DPW has not found funding for culverts.

#### Summary of Questions, Comments, & Concerns from Meeting 3 [12/01/2022]

### Watercourse: Muddy Brook

As a member of the Green's Farm Association, we need the dialogue with the Town and with all affected parties. Green's Farm Road bridge over Muddy Brook needs to be replaced. Hillandale Road bridge over Muddy Brook needs to be replaced.

I live downstream of the Hillandale Road bridge, and a new bridge will cause damage to my property. No new bridge, please.

I live upstream of the Hillandale Road bridge, and I have experienced extensive and repeated flooding for many years. The Hillandale Road bridge over Muddy Brook needs to be replaced.

The builder of my house ended the drainage pipe too soon, and thus created a wetland on property where there was none before. Can anything be done about this?

On my property, there is a lot of debris within a very narrow stream channel. There is lots of sediment, like on a beach, and it creates a very narrow channel. Can anything be done about this?

Flooding in this area creates big, big, issues.

If a stream were to be cleared of debris, would that "cleared" stream stay clean and cleared over time?

What are the weight loads that a replacement bridge is designed to accommodate? How heavy of a traffic load can a new bridge be expected to bear?

There are considerable flooding concerns on Muddy Brook in the area of Long Lots School. Are there any plans for redevelopment? Any redevelopment on lower soccer fields would be problematic to the houses near Muddy Brook due to the already wet nature of the surrounding soils.

#### Summary of Questions, Comments, & Concerns from Meeting 4 [12/15/2022]

#### **Watercourse: Pussy Willow Brook**

We have lived in our house for over 20 years. The stream floods very close to our house. There is a definite blockage; the stream is very overgrown. The vegetation acts as a fence or a dam to the stream, and flooding occurs. Can anything be done to alleviate this flooding situation due to the vegetation?

Invasive species like Mile-a-Minute Vine are a big problem. The excessive vegetation clogs the already narrow stream. We need to solve the problems that are real and that we can solve. Clearing Mile-a-Minute will make this stream much cleaner and help to alleviate flooding.

We live in the area where the brook makes a curve. There is definitely a blockage in the stream, something wrong with the flow. Can we just clean out the stream? How do we proceed with cleaning? Whom do we permissions or permits from?

Flooding has definitely gotten worse over the years.

We have lived in our house for 45 years. Years ago, the residents wanted the Town to clean the brook. The Town wanted a concrete lined channel.

I have photographs. The river has no place to go. The sediment in the brook is from the Town sanding when it snows.

When we get a series of large rainfalls, the yard is a marsh.

Brook must be dredged and cleaned. It has been overgrown, it is clogged with vegetation and sand, and never flows fully anymore. It has water in it all year around. Culvert is too small, clogged with sand.

In the old days, the brook flowed freely; now it is stagnant. Something is blocking the brook. Something needs to be done. Even a small rainfall will noticeably raise the level of the brook.

We have lived in our house for 45 years. Four times the roadway flooded and overtopped. The brook is silted and needs inspection. I clean the culvert myself.

I think things are getting wetter. The culvert appears to be filled with silt and has never been cleaned.

Guyer Road Floods, and get close to overtopping. The pipe should be cleaned, not just the plunge pool. Flooding in the area is getting noticeably worse.

When the Town cleaned the stream, the brook level dropped as a result. The brook needs to be cleaned and kept clean.

Engineers want water to flow from Point A to Point B, quickly. Conservation likes the water to flow slowly. May Engineering and Conservation need to go out to lunch and come to a compromise.

My property is a success story - it is a working detention basin.

Large storms are one thing, flash floods are another.

Homeowner maintenance is the key.

#### Summary of Questions, Comments, & Concerns from Meeting 5 [01/12/2023]

#### Watercourse: New Creek; Sasco Creek

We have lived for 25 years in our house. A 4" rain storm will result in water in our garage. A 5" rain storm will result in water at the house. I realize that tides are also an issue here.

I understand that flooding is going to happen. What can be done to help floodproof my house?

Are there other options to flooding other than upsizing culverts? How does the Town deal with sites where improvements are made and increase impervious area?

Our house is not just in a flood zone, it is in a floodway. We are wondering what can be done to help alleviate flooding?

Can we plant trees to help with infiltration and prevent erosion?

When flooding happens, the creek takes a shortcut across our property. We have only ever had about 18" of water at our house.

Any help from Town would be appreciated.

We have lived in our house for about 10+ years. In that time, the yard has flooded once or twice per year. Sasco Creek goes around our house.

Are there options to keep the water out of the house? What can the Town do to help prepare for flooding?

We have lived in our house for 2.5 years. There is occasional ponding in the yard, with the saltwater killing the grass. Erosion is a constant issue. Once his yard floods, the flooding does not drain away with the outgoing tide. What can he do?

The Committee made the following comment:

• Planning& Zoning stated that approximately 3,000 properties within Town are located within a flood hazard zone.

#### Summary of Questions, Comments, & Concerns from Meeting 6 [01/19/2023]

#### Watercourse: Dead Man's Brook

We need to keep everyone in mind and expand our thinking. What will happen during a 100-year storm?

There are no small solutions, only big ones.

The only message the Town is giving in order to mitigate the effects of flooding is to harden our houses.

I would want to see the cost for each option proposed in the BL Flood Study with the corresponding benefit.

There has been no effort by the Town to organize, for politicians to know on doors. The Town should do the same to pull together residents.

Will a larger channel shrink the 100-year flood plain?

Will a reduction in land value downstream (i.e. the Town takes properties and reverts them to "natural conditions") increase land value upstream?

The solution has to be holistic. We need to expand our thinking, to think big. What can we as homeowners do? Hardening structures per FEMA requirements only goes so far.

What about the cost analysis of alternatives?

Are there any reasonable wins to this flooding situation? What can the residents do?

What mitigation measures are available? What options to homeowners have? Answer: harden your structure, your home. What options are available to homeowners to fight flooding?

The residents of this area are frustrated by the many different "this will help" measures, but no outright solution.

Can we install bigger pipes? Clean out the existing pipes?

Is the Town working with WestCOG? I want a coordinated effort from the Town.

Can we get an Early Warning System, a Flood Warning System, similar to the Traffic Warning system (NIXLE)?

North Avenue has been eroded by Dead Man's Brook. We need direction from the Town, not be told "it's too big."

Is there computer modeling that indicates how best to protect the downtown area?

There needs to be stream dredging and frequent inspections and cleaning.

This all needs to be coordinated with WestCOG. There needs to be coordination with property owners.

I would want a Board to use data to prioritize options and solutions. I would want the Town to tell me what I can do. Can we have tax abatements for people living on streams?

I would like an explanation of pumping stations (the Town pumping flood waters into Long Island Sound).

What about a task force to address flooding and drainage issues in the Town?

We need direction; what can we do?

This is an alarming crisis. My property floods with only 1" to 2" of rainfall.

Can ARPA funds be used to mitigate flooding? Can we use Winslow Park for flood storage?

When will this report be completed? I would like to see a timeline. Will this report show what the public and the Town can do with the dollar amounts?

This is a crisis. We need an early warning system for flooding.

It this is a crisis, then what are we doing?

Can we summarize the 2018 GZA Flood Study?

Is there anything we can do? What makes Dead Man's Brook different? Can we have a workshop on flooding, an education effort?

What solutions did the BL Study propose?

We need to have Public Information Meetings to provide more information about what to do regarding flooding.

I do not want to see any hardscaped engineering solutions. No channel widening, no ponds, no bigger culverts or bigger bridges.

Perhaps the Town can purchase properties as they become available. They can then let them return to nature. Maybe install rain gardens.

Violet Lane residents have hardened their properties and are willing to show other how they did it.

It is too late to fix flooding. I have no expectations of solutions. Residents will need to harden their properties in order to floodproof them.

We have recently had a few 100-year storms/flood levels, and a 500-year one. Tides and sea level affect the flooding along the lower reach of Dead Man's Brook.

Can the Town help with new technologies for homeowners?

Dead Man's Brook flows very fast at my property, my house. The Myrtle Avenue drains back-up and flood the roadway.

You need to harden your property. There is no hope. Make your property resilient. Experiment with solutions. Will the Town help assist with this?

What about flap gates on drain pipes?

Has sea level rise been considered? If the channel were to be widened, would the Benefit Cost Analysis (BCA) pencil out?

For me and my family, we have given up on the idea of fixing flooding.

I clean the brook and the culverts near my property, from Bayberry Lane to the headwaters of Dead Man's Brook.

Can the Town divert water to the big wetland at Silent Grove North?

Can the Town have a Warning System for Floods (Code Red)?

Is there money in the Town's budget for a grant writer?

Flooding is getting worse. The residents acknowledge that flooding happens, and would ask for a better warning system.

I understand that we flood, especially with a large storm event. I would want a robust warning system in place, based on rainfall amount.

Maps are missing levels of flooding.

There are large amounts of silt in the streams, that is to say, stream storage has been filled with silt. Can these streams be cleaned and/or dredged to increase the amount of storage? There is a lot of silt in stream beds.

At what size storm does the flooding of Dead Man's Brook begin?

Where did the name "Dead Man's Brook" come from?

A good job was done under Leslie Lane, a pinch point, a steep area where flooding is 15' above the brook during large storm events.

Can we redesign culverts that appear to be undersized? Can we open the culverts at Leslie Lane? How does opening up and cleaning the stream work? Is there any permitting required from the Town?

Is there a program whereby streams get inspected?

The Committee made the following comment:

- Most of Dead Man's Brook is on private property. This causes logistical issues for Town, as the Town has no rights to enter onto private property.
- When a culvert is replaced, the Town generally cleans out 50 feet to 100 feet on either side.
- Resiliency was added to the Downtown Implementation Plan.