

**BUREAU OF PUBLIC WORKS
REGULAR MEETING
555 Main Street, Hartford
May 31, 2023**

Present: Commissioners John Avedisian, Donald Currey, David Drake, Allen Hoffman, Gary Johnson, Byron Lester, Dominic Pane, Bhupen Patel, Alvin Taylor, James Woulfe and District Chairman William DiBella (11)

Remote

Attendance: Commissioners Andrew Adil, Richard Bush, Joan Gentile and Maureen Magnan (4)

Absent: Commissioners John Bazzano, John Gale, James Healy, Pasquale Salemi, David Steuber and Calixto Torres (6)

Also

Present: Commissioner Jean Holloway
Scott W. Jellison, Chief Executive Officer
Christopher Stone, District Counsel (Remote Attendance)
John S. Mirtle, District Clerk
Christopher Levesque, Chief Operating Officer
Kelly Shane, Chief Administrative Officer
Robert Barron, Chief Financial Officer
Jamie Harlow, Director of Human Resources (Remote Attendance)
Susan Negrelli, Director of Engineering
David Rutty, Director of Operations
Robert Schwarm, Director of Information Technology
Tom Tyler, Director of Facilities
Michael Curley, Manager of Technical Services
Jason Waterbury, Senior Project Manager
Craig Scott, Manager of Environmental Health & Safety
Carrie Blardo, Assistant to the Chief Executive Officer
Julie Price, Executive Assistant
Dave Baker, IT Consultant (Remote Attendance)
Joseph Szerejko, Independent Consumer Advocate (Remote Attendance)

CALL TO ORDER

The meeting was called to order by Chairman Hoffman at 4:21 PM

PUBLIC COMMENTS RELATIVE TO AGENDA ITEMS

No one from the public appeared to be heard.

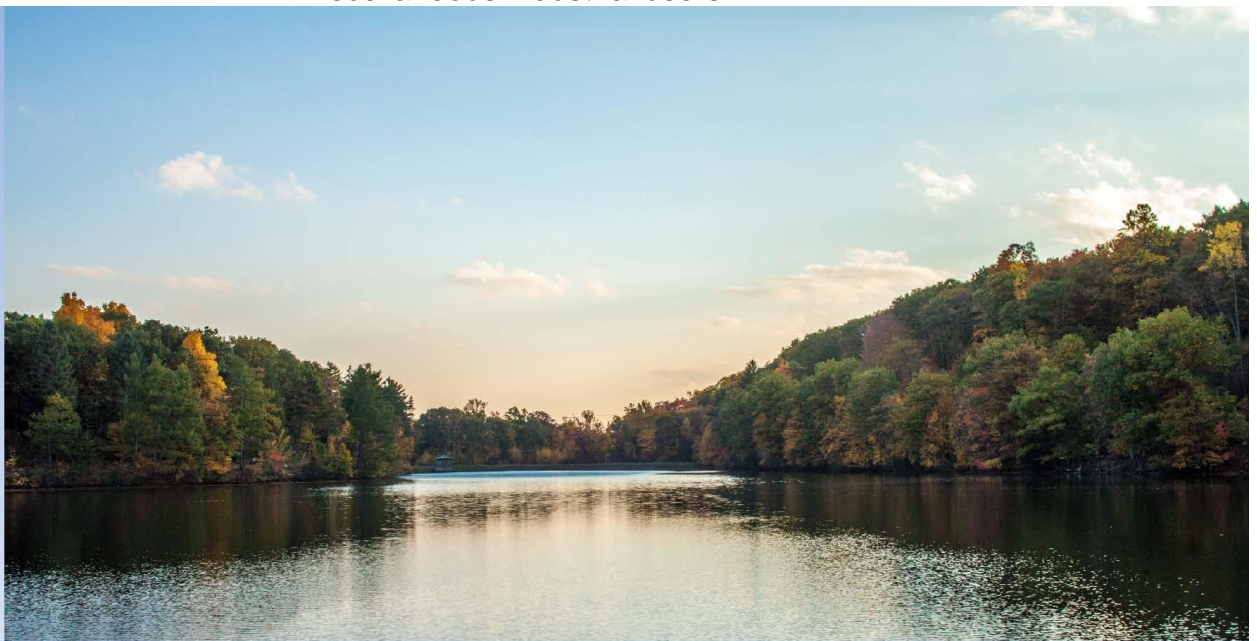
APPROVAL OF MEETING MINUTES

On motion made by Commissioner Currey and duly seconded, the meeting minutes of April 24, 2023 were approved.

Commissioner Pane entered the meeting at 4:37 PM.

OUTREACH TO SIGNIFICANT INDUSTRIAL USERS & MISCELLANEOUS INDUSTRIAL USERS

Chief Operating Officer Chris Levesque presented on outreach to significant industrial users & miscellaneous industrial users.



**District Bureau of Public Works
May 31, 2023**

Agenda Item 4: Outreach to Significant & Miscellaneous Industrial Users

Purpose of Discussion

- Report of Outreach to Significant Industrial Users (SIU) and Miscellaneous Industrial Users (MIU) to obtain Discharge Water Quality Reports and registration
- What are SIUs and MIUs and what permits apply to them
- What pollutants can SIUs and MIUs discharge and effects on District infrastructure and process
- Cost Recovery Rate Structure – Future Proposal based on flow and concentration following outreach

CT DEEP Industrial User General Permits and Individual Permits

- CT DEEP has developed a series of General Permits related to industrial wastewater discharges to Publicly Owned Treatment Works (POTW). Historically CT DEEP has permitted and enforced compliance of all Industrial Users for discharges to Sanitary Sewers.
- Permits for Industrial User Discharges
 - Significant Industrial User (SIU) Discharge General Permit (Discharge >25,000 gpd)
 - Significant Industrial User Individual Permit (Discharged pollutants not consistent with General Permit)
 - Miscellaneous Industrial User (MIU) General Permit (Discharge <25,000 gpd)
 - *Food Service Establishment/ Fats, Oils & Grease (FOG) Discharge Permits
- The District has been maintaining a list of current SIU and MIU dischargers and is looking to complete the list with unregistered dischargers to complete our inventory.
- The District currently charges a one-time Administrative Review fee for the application for each permit and applies a \$150/yr for inspections of the facility.

Example MIU GP Customers

Group I – Process Water Dischargers

- Commercial laundry wastewater
- Contact cooling and heating wastewater
- Cutting and grinding wastewater
- Food processing wastewater (including breweries and distilleries)
- Non-destruct testing rinsewater
- Printing and photographic processing wastewater
- Reverse osmosis reject water
- Tumbling or cleaning of parts wastewater
- Water treatment wastewater

Group II – Non-Process Water Dischargers

- Air compressor condensate & blowdown
- Boiler blowdown wastewater
- Building maintenance wastewater
- Fire suppression system testing wastewater
- Hydrostatic pressure testing wastewater
- Non-contact cooling water
- Potable water system maintenance or sampling wastewaters
- Swimming pool wastewater
- Vehicle maintenance wastewater

Pollutants for Wastewater

- Biochemical Oxygen Demand (BOD)
- Total Suspended Solids (TSS)
- Oil and Grease
- Chemical Oxygen Demand (COD)
- Total Kjeldahl Nitrogen (TKN)
- Ammonia
- Flow (Limits to imported or created discharges)

Pollutants Limits

Pollutants	MDC Limits (mg/L)	DEEP MIU Limits (mg/L)	DEEP SIU Limits - Process/NP (mg/L)
pH	5.5 - 10.0	5.5 - 11.5	5.5 - 11.5
BOD	300 mg/L Strength Charge	600 mg/L or 100.0 lbs/day	600 mg/L or 100.0 lbs/day
COD	700 mg/L Strength Charge	1200 mg/L	1200 mg/L or 200.0 lbs/day
TSS	600mg/L 300 mg/L Strength Charge	600 mg/L or 100.0 lbs/day	600 mg/L or 100.0 lbs/day
TKN	Total Nitrogen 8 lb/day	40mg/L or 8 lbs/day	40mg/L or 8 lbs/day
Nitrate-nitrit		40mg/L or 8 lbs/day	40mg/L or 8 lbs/day
O&G*	100 mg/L	100 mg/L	100 mg/L

Wastewater Discharge Program

Objective: Identify dischargers with compatible pollutants that are above domestic background concentrations and determine the operational and maintenance impact and subsequent costs to the District’s collection system and treatment systems.

Costs to recover:

- **Sewer Line and Sewer Pump Station Maintenance and Rehabilitation**
 - Case Study: The District receives an elevated level of BOD from a customer, although the customer pretreats the discharge prior to entering the Districts collection system the levels far exceed the domestic background concentrations. While in the collection system the discharge enters a pump station with a concrete wet well. The high concentration of BOD has degraded the concrete walls, piping and valves that has required substantial maintenance and future rehabilitation of the pump station. The District currently recovers cost for this discharge.
- **Water Pollution Control Facility Surcharges and Limits**
 - Case Study: The District receives high levels of ammonia (form of Nitrogen) from a customer, this customer has reported the discharge through the SIU GP process and has received approval from the CT DEEP and the District to discharge. The District WPC department manages Nitrogen Discharges and annually addresses performance through the CT DEEP Nitrogen Discharge Credit program. In this case the Nitrogen concentration far exceeds the domestic background concentrations and has contributed to increased processing as well as costs for Nitrogen credits (HWPCF: 2015 = \$1,033,000, 10 yr avg. = \$525,000). The District currently does not recover cost for this discharge.

Wastewater Discharge Program – Cost Recovery

The District has defined fees for the following:

- Wastewater Surcharge (excessive strength waste) for BOD, COD and TSS applied to SIUs only currently
- Permit Fees
- Inspection Fees

Fees to be developed and presented to BPW in Fall 2023

- Sampling and Monitoring Fees
- Industrial or Commercial Wastewater Rates
 - Based on Facility type
 - Based on Wastewater flow and pollutant concentration (block rates)

Questions?

SEWER CUSTOMER SERVICE CHARGE

Chief Operating Officer Chris Levesque gave a presentation regarding the sewer customer service charge for sewer only customers.



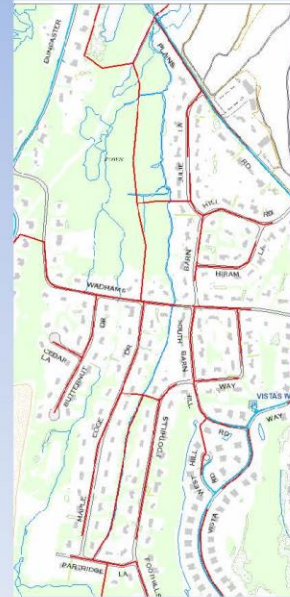
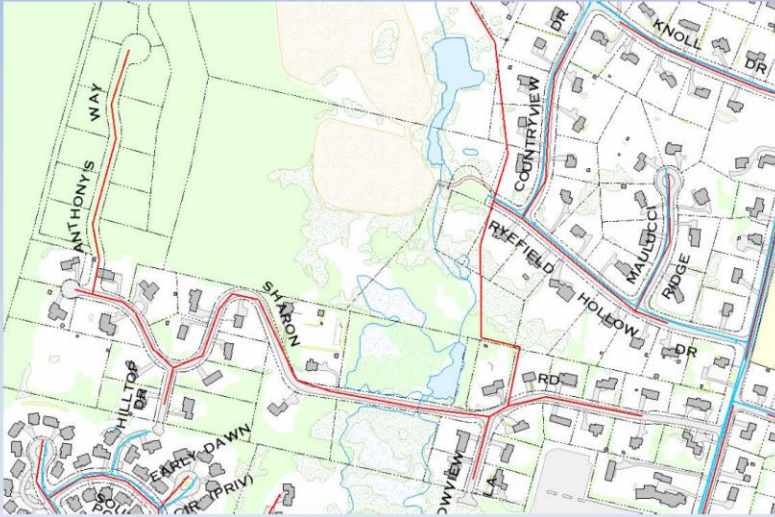
**District Bureau of Public Works
May 31, 2023**

Agenda Item 5: Sewer Customer Service Charge (Sewer Only Customers)

Purpose of Discussion

- Report of Outreach to Sewer Only Customers.
- Example of Sewer Only Customers
- Next Steps in Outreach
- Billing of Customer Service Charge following inventory in January 2024

Example of Sewer Only Customers



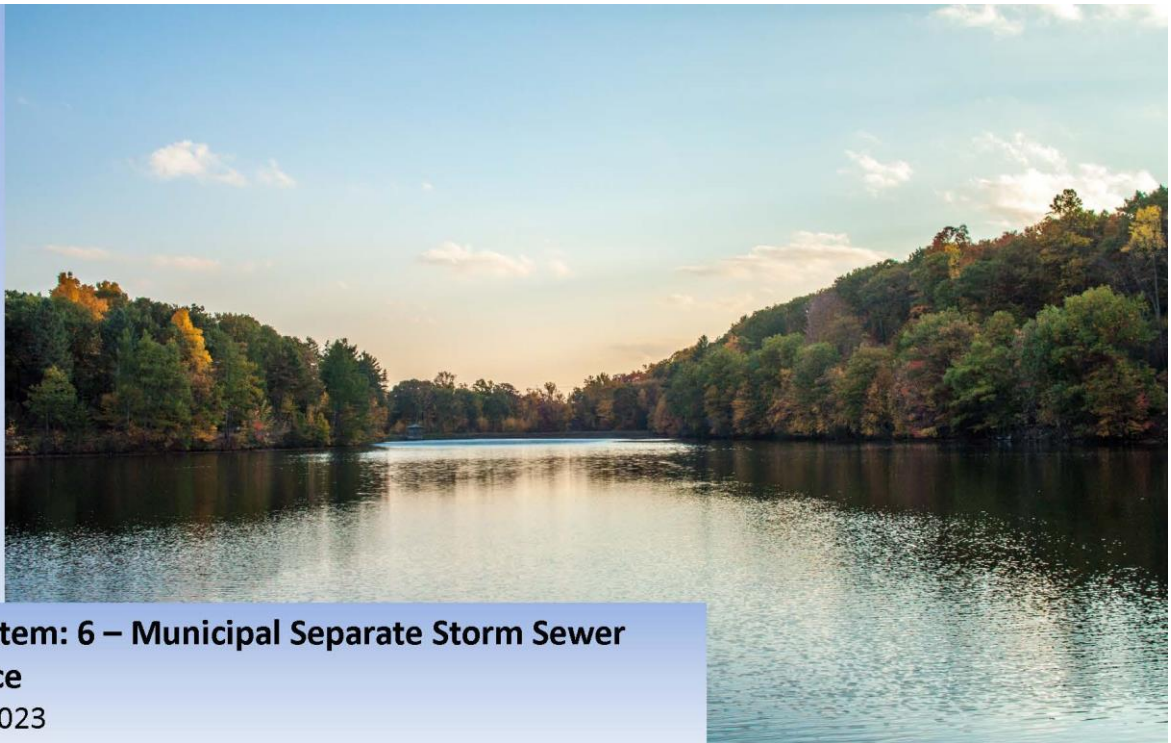
Next Steps

- Perform Inventory of Properties and Property Owners with Sewer Service Only
- Create Customer Information in SAP CIS and begin creating data for future billing
- Communicate with customers following completion of inventory in each town about the District and services provided as a sewer customer. Provide information of future billing and payment options.

Questions?

MUNICIPAL SEPARATE STORM SEWER ORDINANCE

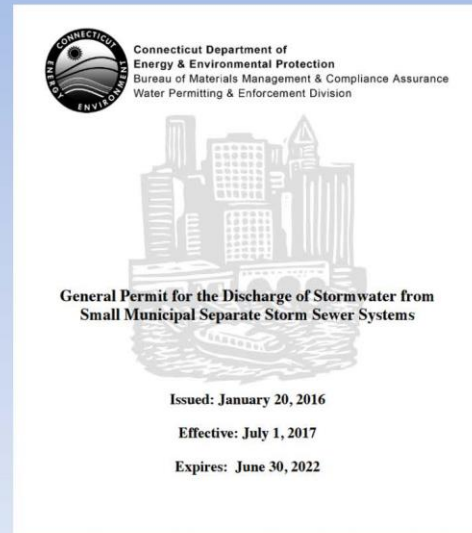
Chief Operating Officer Chris Levesque gave a presentation on the municipal separate storm sewer ordinance.



Agenda Item: 6 – Municipal Separate Storm Sewer Ordinance
May 31, 2023

2017 MS4 Permit Requirements for MDC Member Towns

- All CT municipalities within an "[urbanized area](#)" are required to comply with the MS4 General Permit to discharge stormwater into CT's water bodies. The basic requirements of the permit are to:
 - 1) Submit a **Stormwater Management Plan** identifying 6 minimum control measures that a municipality will undertake to prevent and/or treat polluted runoff;
 - 2) Submit **Annual Reports** to DEEP indicating the progress with implementing that plan; and
 - 3) **Monitor the quality** of water bodies.



Purpose of MS4

– Mission Statement from CT DEEP Website:

This general permit requires each municipality to take steps to keep the stormwater entering its storm sewer systems clean before that stormwater enters water bodies. One important element of this permit is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday living activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.

MS4 BMPs

- BMP 4-4: Construction Site Runoff Control - Conduct Site Inspections:
 - The COH is responsible for the inspection and enforcement of construction site runoff control.
- BMP 6-2a: Minimize the discharge of pollutants to MS4 from parks and open space management:
 - The COH is responsible for the maintenance of its properties, parks, or other facilities that it owns or operates so as to minimize the discharge of pollutants to its storm system.
- BMP 6-9: Develop / Implement Street Sweeping Program:
 - The COH is responsible for developing a SOP for street sweeping and meeting its annual goal of all residential streets of twice/year.
- BMP 6-10: Develop / Implement catch basin cleaning program:
 - The MDC cleans approximately one-third to one-half of the catch basins (CB) in Hartford per year and incurs the associated costs for the disposal of the material at the Manchester landfill.

COH BMP Compliance:

- BMP 4-4: Construction Site Runoff Control - Conduct Site Inspections



Photos taken from Westbrook Village Development (7/9/21 & 7/20/21)

COH BMP Compliance:

- BMP 6-2a: Minimize the discharge of pollutants to MS4 from parks and open space management:



Photos taken from Bushnell Park along Gold Street (7/29/21)

COH BMP Compliance:

- BMP 6-9: Develop / Implement Street Sweeping Program:



Photos taken from Blue Hills Neighborhood (July 2020)

COH BMP Compliance:

– BMP 6-9: Develop / Implement Street Sweeping Program:



Photos taken from Albany Avenue (10/7/21)

Impacts to MDC

- Financial:
 - COH owes MDC for CB Debris Disposal:
 - \$385,000 (approx.) dating back to 2015
 - Additional Cleanings of CB's:
 - 763 Basins = \$101,000 in 2020
 - Additional Cleaning of Combined Sewers (CS):
 - Columbus Blvd Siphon = \$1,069,400 in last 7 years
- Regulatory:
 - Debris in CS system leads to increased CSO volumes/events
- MDC Installation of CB Grates (2022)



HWPCF NPDES PERMIT

– Per Hartford WPCF NPDES Permit, MDC creating a new sewer ordinance which will:

- Prohibit the construction of new combined sewers
- Prohibit the connection of new inflow sources to the existing combined sewer system, or to separated sewers in Hartford upstream of the combined sewer system.
- Require compliance with the City of Hartford’s Planning and Zoning regulations with regards to stormwater management.
 - This includes, but isn’t limited to, a zero-net increase in stormwater discharge (peak flow rates) from newly developed parcels in 2, 10, 25, and 100-year storms.

Control Measures and Responsibility within Hartford and Timeline

Control Measures

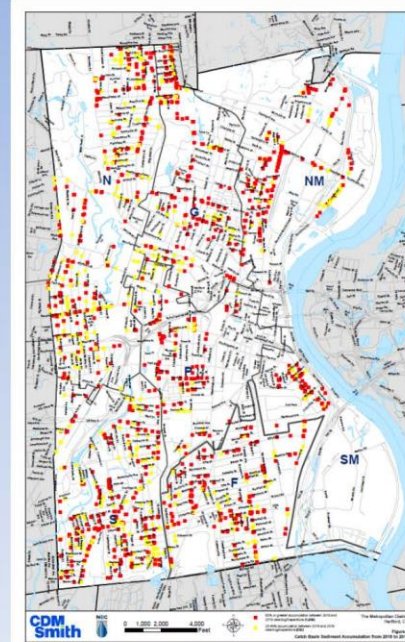
1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention/ Good Housekeeping for Municipal Operations
7. Monitoring Requirements

MS4 Tasks for 2004 Permittees

Legend		Permit	Implementation	Year 1	Year 2	Year 3	Year 4	Year 5
MS4 #	MS4 Name	MS4 #	MS4 Name	MS4 #	MS4 Name	MS4 #	MS4 Name	MS4 #
1	Public Education and Outreach	1	Public Education and Outreach	1	Public Education and Outreach	1	Public Education and Outreach	1
2	Public Participation and Involvement	2	Public Participation and Involvement	2	Public Participation and Involvement	2	Public Participation and Involvement	2
3	Illicit Discharge Detection and Elimination	3	Illicit Discharge Detection and Elimination	3	Illicit Discharge Detection and Elimination	3	Illicit Discharge Detection and Elimination	3
4	Construction Site Runoff Control	4	Construction Site Runoff Control	4	Construction Site Runoff Control	4	Construction Site Runoff Control	4
5	Post Construction Stormwater Management in New Development and Redevelopment	5	Post Construction Stormwater Management in New Development and Redevelopment	5	Post Construction Stormwater Management in New Development and Redevelopment	5	Post Construction Stormwater Management in New Development and Redevelopment	5
6	Pollution Prevention/ Good Housekeeping for Municipal Operations	6	Pollution Prevention/ Good Housekeeping for Municipal Operations	6	Pollution Prevention/ Good Housekeeping for Municipal Operations	6	Pollution Prevention/ Good Housekeeping for Municipal Operations	6
7	Monitoring Requirements	7	Monitoring Requirements	7	Monitoring Requirements	7	Monitoring Requirements	7

Major Control Measure Contribution from MDC

BMP#	Description	Activity
3-2	Develop list and maps of all MS4 stormwater outfalls in urbanized and priority areas	MDC provided a list and map of all MDC Outfalls and known COH Outfalls on XX-XX-XX
3-3	Develop a program for citizen reporting of illicit discharges	MDC utilized existing notification system and process through MDC's Command Center
6-3	Implement coordination with interconnected MS4s	MDC provided a list and map of storm sewer and known and unknown ownership to the COH for review on XX-XX-XX
6-10	Develop / Implement catch basin cleaning program	Completed in 2016 prior to start of MS4. Prior to cleaning of catch basins, the Maintainer records depth of debris in Sump. Results of catch basins with % full is reported to the COH for adjustment to street cleaning program
7-1	Screen all outfalls that discharge to impaired waters: beginning screening	MDC has completed the required 43 outfalls in 2018/19/20. Analysis results were provided to COH for annual reports.



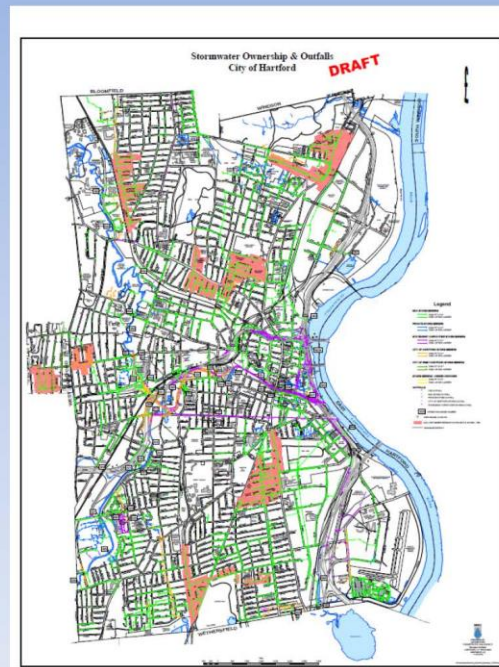
Communication with Hartford and CT DEEP

City of Hartford

- MDC has submitted all required data to the City prior to the City's required annual submittal of their MS4 plan to CT DEEP
- MDC has completed a DRAFT MOU on provided the MOU to the City on August 6, 2018
- MDC has provided the City in 2020 with a Draft Map of all stormwater pipes and determined ownership

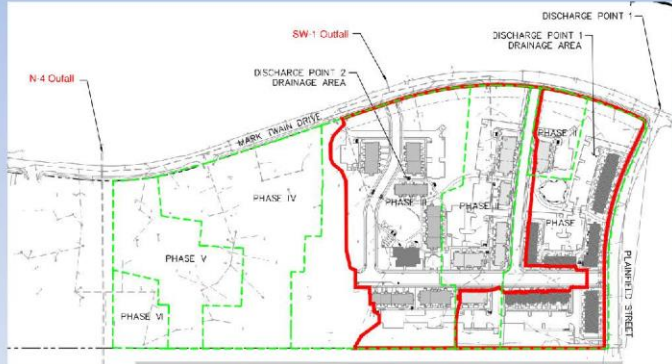
CT DEEP

- MDC has provided letters in 2017/18/19 to CT DEEP requesting support to address the deficiencies identified in the City's MS4 Plan and DEEP's direction regarding intermunicipal coordination.

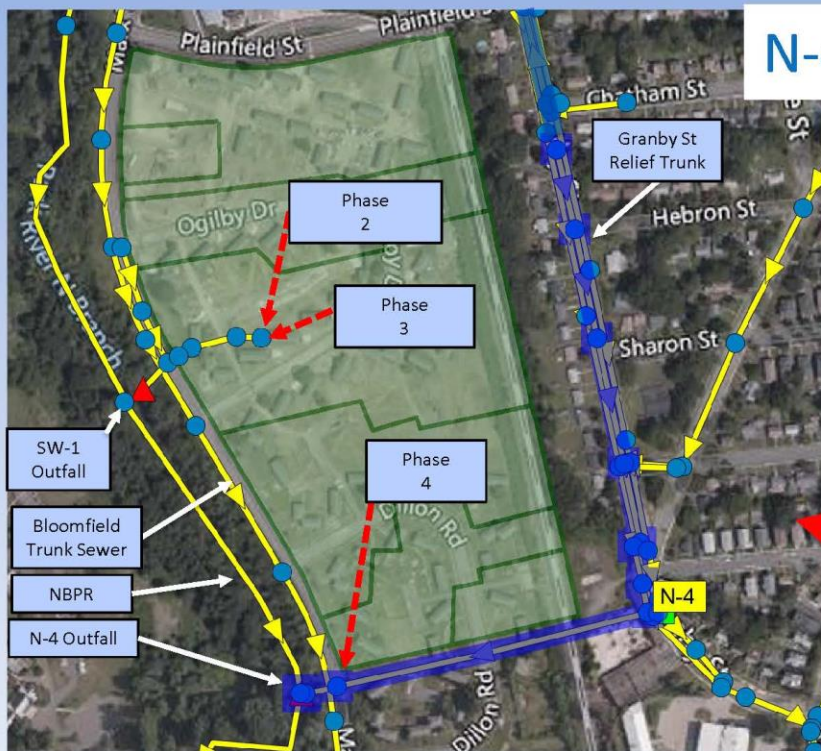


Westbrook Village Development - Simulations

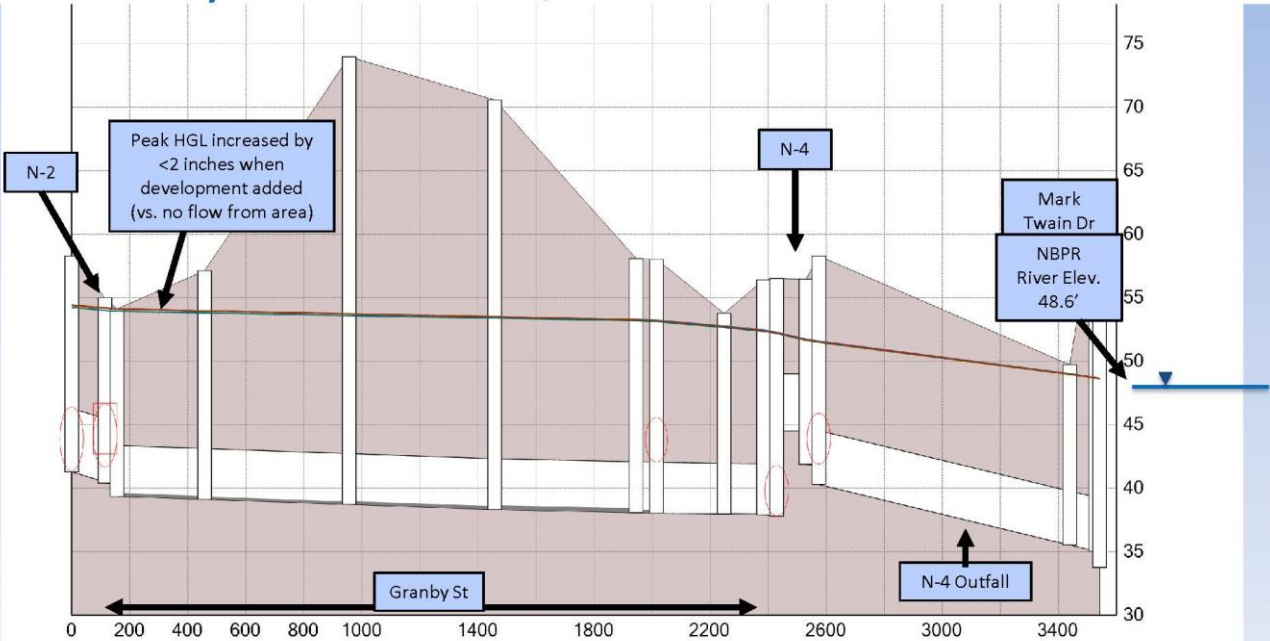
- The District received a request from the developer for Westbrook Village (Mark Twain Dr, Hartford) for new storm water infrastructure and connection to the District's Combined Sewer Overflow Outfall Pipe.
- The District evaluated the effect the connection and proposed development would have on the proposed development as well as current areas with known system surcharges and street flooding upstream of the development. We also evaluated the flow in the pipe related to the North Branch Park River elevations and identified that the River currently restricts the flow during a 10-yr event and will require future dredging.
- Simulated 10-yr CSO storm & river elevated to 10-yr flood (~Elev 49.0)



N-4 Outfall Simulation

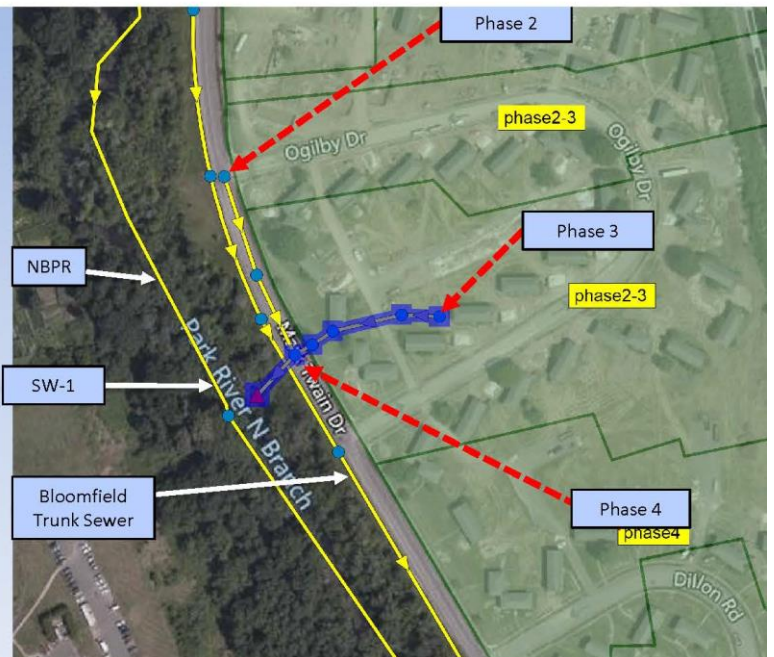


Granby Street Trunk/Relief Trunk & N-4 Outfall

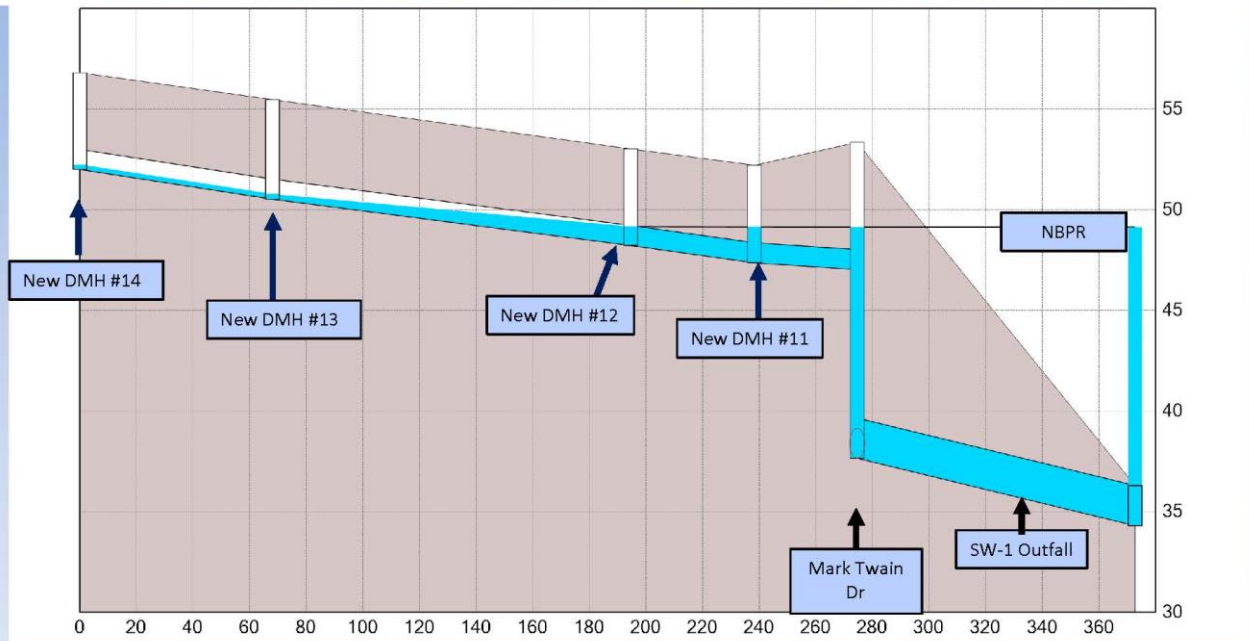


Phase 2 & 3 Simulation (with and without Phase 4 to SW-1)

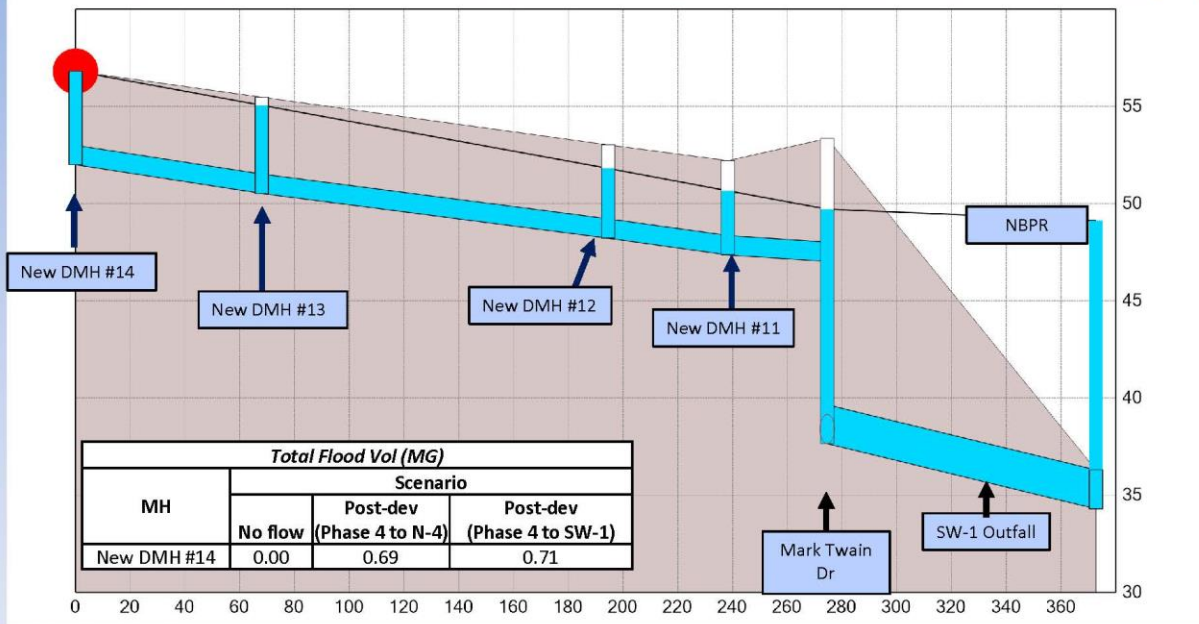
- Added the most downstream proposed storm drains in Phase 3 to model, highlighted in figure



SW-1 Outfall Profile – Peak HGL with no flow from area



SW-1 Outfall Profile – Peak HGL with flow added from Phase 2/3/4



Flood Control Oversight

Greater Hartford Flood Control Commission Rules and Regulations

- 1.A – For purposes of properly managing the flood plain district and flood control infrastructure in Hartford, and to comply with Article I, Section 28-Drainage channels and floodplains, and Article III, Division 21-FP Flood Plain District of the City of Hartford Zoning Regulations, or the most current ordinances adopted by the City of Hartford, all development activities the Flood Plain District shall require approval by the Greater Hartford Flood Commission (GHFC). Prior to the activity commencing the applicant shall apply for and shall in no way guarantee flooding cannot occur beyond the floodway or flood plain limits.
- 1.C – The Flood Plain District is delineated on the FEMA Flood Insurance Rate Maps (FIRM) on file in the Office of the Town Clerk of Hartford and with the Greater Hartford Flood Commission, and is subject to the jurisdiction of the GHFC’s Rules and Regulations as described herein. The Flood Plain District on the North and South Branches of the Park River is defined by the greater of the “Required Flood Storage Area below Elevation 51.92 NGVD as noted in a Formal Agreement between the Army Corps of Engineers and the City of Hartford”, and all other FEMA flood zone classifications designated on the FIRM Maps.
- Significant Flood Plain District activities include construction of new dwellings or commercial buildings.

OPPORTUNITY FOR GENERAL PUBLIC COMMENTS

No one from the public appeared to be heard.

COMMISSIONER REQUESTS FOR FUTURE AGENDA ITEMS

District Chairman DiBella let staff and the Bureau know that we will need to bring back the North Hartford flooding issue and DEEP consent order modification to BPW, Board of Finance, then the District Board, once we have a response from DEEP.

Commissioner Currey asked for clarification from Attorney Stone on the April 24, 2023 BPW minutes where S3c states “the District” and “a District” and whether those are both referring to Metropolitan District capital improvement projects.

ADJOURNMENT

The meeting was adjourned at 5:27 PM

ATTEST:

John S. Mirtle
District Clerk

Date of Approval