



**GREATER NEW HAVEN**  
Water Pollution Control Authority

**CONSENT ORDER WC5509**  
**Annual Progress Report**  
July 1, 2021 – June 30, 2022





## Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511  
203.466.5280 p 203 772.1564 f www.gnhwpc.com

June 30, 2022

Mr. Syed Bokhari  
Sanitary Engineer 2, Municipal Wastewater Program  
Department of Energy and Environmental Protection  
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106-5127

Subject: GNHWPCA Annual Progress Report  
Consent Order WC5509

Dear Mr. Bokhari:

Per Section B6 of the Consent Order WC5509, the Authority has assembled this letter and informational attachments to fulfill the requirement of an annual "progress report" which describes the actions the Authority has taken to comply with the Consent Order.

Please find the following attachments as summary of our progress:

**Attachment "A"** is an updated version of the CSO LTCP Table, the general format of this table was approved by DEEP on 9/14/11. We have updated the Table based on the results contained in the 2016 CSO LTCP Update Report as well as changes made to the combined sewer system during the previous year. This report was approved by DEEP on May 14, 2018.

**Attachment "B"** is a listing of Approval / Denial letters the Authority has received from the DEEP between July 1, 2021 and the date of this letter.

**Attachment "C"** is a listing of emails and letters between DEEP, EPA and the Authority from July 1, 2021 to the time of this letter. The emails are limited to those which include a transmission of documents or critical information relevant to the consent order and/or moving projects to construction through the CWF program. Please note that Attachments "C" is not intended to be comprehensive listings of all correspondence between GNHWPCA and DEEP. Rather they are those communications that contain material and substantive information on the relative subjects.

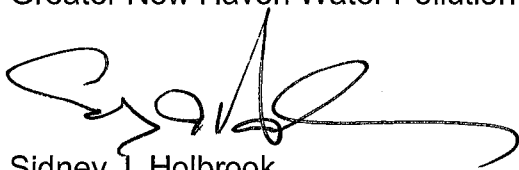
Mr. Syed Bokhari  
June 30, 2022  
Page 2 of 2

**Attachment "D"** includes calibrated flow monitoring results obtained from all Permitted CSO outfalls between May 2021 and April 2022. A current CSO Map has also been included as part of this attachment.

I have personally examined and am familiar with the information submitted in these documents and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachment may be punishable as a criminal offense.

Sincerely,

Greater New Haven Water Pollution Control Authority



Sidney J. Holbrook  
Executive Director

cc: Gabe Varca, Director of Finance and Administration  
Gary Zrelak, Director of Operations  
Thomas V. Sgroi, P.E., Director of Engineering  
Ricardo Ceballos, P.E., Engineer

w/ Attachments

# **ATTACHMENT “A”**

**GNHWPCA**

**CSO LTCP**

**ANNUAL STATUS REPORT**

**FY 2022**

2022 ANNUAL REPORT  
ATTACHMENT "A"

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
CSO LONG TERM CONTROL PLAN ANNUAL STATUS REPORT  
May 5, 2022

1997 EXISTING CONDITIONS MODEL							CALIBRATED 2016 CONDITIONS MODEL				2022 STATUS				LONG TERM CONTROL PLAN GOAL			
NPDES PERMIT CSO REFERENCE NO.	NO. OF CSO OUTFALLS	NO. OF CSO REGULATOR LOCATIONS	CSO REGULATOR LOCATION	CSO RECEIVING WATER	1997 CSO REGULATOR STATUS	1997 EXISTING CONDITIONS MODEL 2-YEAR DESIGN STORM CSO VOLUME (MG)	CSO LTCP CAPITAL IMPROVEMENTS 1997-2016	2016 CSO REGULATOR STATUS	CALIBRATED 2016 CONDITIONS MODEL 2-YEAR DESIGN STORM CSO VOLUME (MG)	REDUCTION 1997-2016 CSO VOLUME (MG)	NPDES PERMIT CSO REFERENCE NO.	NPDES PERMIT CSO REF. NO.	CSO LTCP AND REGULATOR IMPROVEMENTS 2013-2022	2022 CSO REGULATOR STATUS	PROPOSED CAPITAL IMPROVEMENTS	CSO LTCP FINAL CSO STATUS	CSO LTCP FUTURE CONDITIONS MODEL 2-YEAR DESIGN STORM CSO VOLUME (MG)	
CSO 001	1	1	East Shore WPAF	New Haven Harbor	Active	No model data					CSO 001	CSO 001	Wet Weather Improvements - Phase 1	Active	Wet Weather Improvements - Phase 2	Active w/ Treatment	No model data	
CSO 002	2	2	E.T.G. Boulevard @ Lamberton Street	West River	Active	1.5	Truman Tank	Closed	0.0	1.5	CSO 002			Closed		Closed	0.00	
CSO 003	3	3	E.T.G. Boulevard @ Orange Avenue	West River	Active	0.7	Truman Tank	Active	0.9	-0.2	CSO 003	CSO 003	CSO Regulator Improvements completed in 2020 - weir raised 16 inches	Active	CSO Storage Tank	Inactive	0.00	
CSO 004	4	4	E.T.G. Boulevard @ Legion Avenue	West River	Active	1.0		Active	1.9	-0.9	CSO 004	CSO 004	Weir raised 8 inches in 2014, CSO Regulator Improvements completed in 2020 - weir raised 24 inches	Active	CSO Storage Tank	Inactive	0.00	
CSO 005	5	5	E.T.G. Boulevard @ Derby Avenue	West River	Active	2.4		Active	1.2	1.2	CSO 005	CSO 005	Weir raised 1.45 feet in 2014	Active	CSO Storage Tank	Inactive	0.00	
CSO 005 (A)		6	University Place		Active	Discharges to CSO 005 outfall		Closed			CSO 005 (A)			Closed		Closed	0.00	
CSO 005 (B)		7	Elm / University Place		Active	Discharges to CSO 005 outfall		Closed			CSO 005 (B)			Closed		Closed	0.00	
CSO 006	6	8	Whalley Avenue @ Fitch Street	West River	Active	2.3		Active	2.3	0.0	CSO 006	CSO 006	CSO Regulator Improvements completed in 2020 - weir raised 42 inches	Active	CSO Storage Tank	Inactive	0.00	
CSO 007	7	9	Munson Street @ Canal Street	Mill River	Closed	0.0		Closed	0.0	0.0	CSO 007			Closed		Closed	0.00	
CSO 008	8	10	Munson Street @ Orchard Street	Beaver Ponds	Active	0.0		Closed	0.0	0.0	CSO 008		Closed in 2014	Closed		Closed	0.00	
CSO 009	9	11	Grand Avenue @ James Street	Mill River	Active	0.5		Active	0.4	0.1	CSO 009	CSO 009	Weir raised 8 inches in 2015 and an additional 6 inches in 2022	Active	Sewer Separation & CSO Storage Tank	Inactive	0.00	
CSO 010	10	12	East Street @ I-91	Mill River	Active	0.3	Sewer Separation	Closed	0.0	0.3	CSO 010		Closed in 2014	Closed		Closed	0.00	
CSO 010 (A)	11	13	East Street @ I-91	Mill River	Active	Discharges to CSO 011 outfall		Active	Discharges to CSO 011 outfall	Discharges to CSO 011 outfall	CSO 010 (A)	R 010 (A)	Closed in 2020	Closed		Closed	0.00	
CSO 011		14	Humphrey Street @ I-91	Mill River	Active	6.2	Sewer Separation	Active	2.6	3.6	CSO 011	CSO 011	Sewer Separation Design Complete	Active	CSO Storage Tank	Inactive	0.00	
CSO 012	12	15	Mitchell Drive east of Nicoll Street	Mill River	Active	1.0	Sewer Separation	Active	0.2	0.8	CSO 012	CSO 012	Closed in 2018	Closed		Closed	0.00	
CSO 013	13	16	Everitt Street @ East Rock Road	Mill River	Active	0.1	Sewer Separation	Closed	0.0	0.1	CSO 013		Closed in 2014	Closed		Closed	0.00	
CSO 013 (A)		17	East Rock Road @ Everitt Street		Active	Discharges to CSO 013 outfall		Closed			CSO 013 (A)			Closed		Closed	0.00	
CSO 014		18	Trumbull Street @ Orange Street	Mill River	Active	Discharges to CSO 011 outfall		Closed			CSO 014		Closed in 2014	Closed		Closed	0.00	
CSO 015	14	19	James Street Siphon	Quinnipiac River	Active	1.5		Active	0.7	0.8	CSO 015	CSO 015	Replaced duckbill in 2021, raised weir 18 inches in 2022	Active	Sewer Separation & CSO Storage Tank	Inactive	0.00	
CSO 016	15	20	Poplar Street @ River Street	Quinnipiac River	Active	1.4		Active	1.5	-0.1	CSO 016	CSO 016	Replaced duckbill in 2018, raised weir 6 inches in 2022	Active	Sewer Separation & CSO Storage Tank	Inactive	0.00	
CSO 017	16	21	Grand Avenue @ Front Street	Quinnipiac River	Closed	0.0		Closed	0.0	0.0	CSO 017			Closed		Closed	0.00	
CSO 018	17	22	Lombard Street @ North Front Street	Quinnipiac River	Active	0.0	Sewer Separation	Closed	0.0	0.0	CSO 018			Closed		Closed	0.00	
CSO 019	18	23	Pine Street @ North Front Street	Quinnipiac River	Active	0.4	Sewer Separation	Closed	0.0	0.4	CSO 019	CSO 019	Closed in 2015	Closed		Closed	0.00	
CSO 020	19	24	Quinnipiac Avenue @ Clifton Street	Quinnipiac River	Active	0.1	Sewer Separation	Active	0.1	0.0	CSO 020	CSO 020	Closed in 2019	Closed		Closed	0.00	
CSO 021	20	25	East Street Pump Station	New Haven Harbor	Active	1.4	Sewer Separation	Active	1.5	-0.1	CSO 021	CSO 021	Major Pump Station Design Underway; Replaced duckbill in 2013	Active	Major Pump Station Upgrade	Inactive	0.00	
CSO 021 (A)		26	Chapel / Hamilton	New Haven Harbor	Active	Discharges to CSO 021 outfall		Closed		0.0	CSO 021 (A)			Closed		Closed	0.00	
CSO 022	21	27	Allen Place	New Haven Harbor	Active	No model data					CSO 022			Closed		Closed	0.00	
CSO 023	22	28	Chestnut Street @ Water Street	New Haven Harbor	Closed	0.0			0.0	0.0	CSO 023			Closed		Closed	0.00	
CSO 024	23	29	Boulevard Pump Station	New Haven Harbor	Active	3.2	Truman Tank	Active	0.0	3.2	CSO 024	CSO 024	Weir raised 1.5 feet in 2017; Replaced duckbills in 2021	Active	Major Pump Station Upgrade & CSO Storage Tank	Inactive	0.00	
CSO 025		30	Union Pump Station	New Haven Harbor	Active	1.4	Sewer Separation	Active	1.0	0.4	CSO 025	CSO 025	Weir raised 9.15 feet in 2019	Active	Major Pump Station Upgrade	Inactive	0.00	
CSO 025 (A)		31	Elm / University Place	New Haven Harbor	Active	Discharges to CSO 025 outfall					CSO 025 (A)			Closed		Closed	0.00	
CSO 025 (B)		32	Grove / Whitney	New Haven Harbor	Active	Discharges to CSO 025 outfall					CSO 025 (B)			Closed		Closed	0.00	
CSO 026	25	33	Humphrey Pump Station	Mill River	Active	Discharges to CSO 011 outfall		Active	Discharges to CSO 011 outfall	Discharges to CSO 011 outfall	CSO 026	R 026	Closed in 2019	Closed		Closed	0.00	
CSO 027		34	East / Ives	Mill River	Active	0.4					CSO 027			Closed		Closed	0.00	
CSO 028		35	Mitchell Pump Station	Mill River	Active	Discharges to CSO 012 outfall		Active	Discharges to CSO 012 outfall	Discharges to CSO 012 outfall	CSO 028	R 028	Closed in 2018	Closed		Closed	0.00	
CSO 029	26	36	Barnes Pump Station	Quinnipiac River	Active	No model data					CSO 029			Closed		Closed	0.00	
CSO 030	27	37	Quinnipiac Pump Station	Quinnipiac River	Active	No model data					CSO 030			Closed		Closed	0.00	
CSO 031		38	South Frontage / Davenport	New Haven Harbor	Active	Discharges to CSO 025 outfall					CSO 031		Closed in 2013	Closed		Closed	0.00	
CSO 032		39	Port Sea / Liberty	New Haven Harbor	Active	Discharges to CSO 025 outfall					CSO 032		Closed in 2014	Closed		Closed	0.00	
CSO 033		40	Carlisle / Liberty	New Haven Harbor	Active	Discharges to CSO 025 outfall					CSO 033			Closed		Closed	0.00	
CSO 034	28	41	George / Temple	New Haven Harbor	Active	Discharges to CSO 025 outfall			Discharges to CSO 025 outfall	Discharges to CSO 025 outfall	CSO 034	R 034	Closed in 2019	Closed		Closed	0.00	
CSO 035		42	Woodward Pump Station	New Haven Harbor	Active	No model data					CSO 035			Closed		Closed	0.00	
(not assigned)		29	43	Greene Street	New Haven Harbor	Active	0.3			0.0	0.3	(not assigned)		Closed in 2014	Closed		Closed	0.00
N/A		30	44	Middletown / Front	Quinnipiac River	Closed	0.0			0.0	0.0	N/A			Closed		Closed	0.00
N/A	31	45	State / James	Mill River	Closed	0.0			0.0	0.0	N/A			Closed		Closed	0.00	
CSO VOLUME (MG)						26.0			14.3	11.7								
CSO VOLUME REDUCTION (%)						0.0			45%									
NUMBER OF ACTIVE CSO REGULATORS					40						12							
NUMBER OF INACTIVE / CLOSED CSO REGULATORS					5						18							
NUMBER OF ACTIVE CSO OUTFALLS					26						27							
NUMBER OF INACTIVE / CLOSED CSO OUTFALLS					5						14							
											17							

LEGEND/NOTES	
■	DENOTES CSO OUTFALL CURRENTLY INACTIVE/CLOSED
CSO VOLUME ESTIMATES WERE OBTAINED FROM THE 2016 CSO LTCP UPDATE REPORT	

DEFINITIONS	
ACTIVE	ACTIVE CSO DURING A 2-YEAR STORM FREQUENCY
INACTIVE	INACTIVE CSO DURING STORM FREQUENCIES BELOW 2-YEARS
CLOSED	CLOSED - BULKHEADED CSO - CLOSED FOR ALL STORMS

**ATTACHMENT “B”**

**DEEP LETTER  
CORRESPONDENCE**

**FY 2022**



**FY 2022 DEEP LETTER CORRESPONDENCE**

APPROVAL DATE	LETTER TYPE	CWF #	PROJECT	Amount	TO	FROM
06/24/22	Approval	CWF 2019-04 / CWF727D	Jacobs Eng Agreement Amendment	\$ 39,598.00	Sid Holbrook	Nisha Patel
06/03/22	Approval	727D / 2019-04	Sole Source Approval Neuros Air Compressor		Sid Holbrook	Nisha Patel
05/18/22	Approval	2012-04	Approval Plans and Specs for Yale Campus/Trumbull St Area Separation Project		Sid Holbrook	Nisha Patel
05/19/22	Approval	2012-05	Approval Plans and Specs for Orchard Street Area Separation Project		Sid Holbrook	Nisha Patel
05/11/22	Approval	2012-05 & 2012-06	Engineering Amendment Approval for Yale Campus and Orchard Street Separation Project		Sid Holbrook	Nisha Patel
04/18/22	Approval	Permit DS-201810973	De Minimis Change Farm Brook Flood Control Site		Mario Ricozzi	Graham Stevens
02/04/22	Direction		Clean Water Fund Bidding regarding Build America Buy America		Mario Ricozzi	Syed Bokhari
12/03/21	Approval	727D / 2019-04	Approval to bid specification approval for preselection of Air Compressor		Sid Holbrook	Graham Stevens
09/27/21	Approval	2021-03	CSO LTCP Scope Final Approval	\$498,557	Sid Holbrook	Jennifer Perry
09/24/21	Approval	2019-01	Mill River SSES Phase 2b Scope Approval	\$595,000	Sid Holbrook	Jennifer Perry
08/24/21	Info	2016-06	NDDB Update No Conflict		Julie Bjorkman	Karen Zyko
07/27/21	Notice	2016-06	Dam Safety Permit Expire		Mario Ricozzi	
07/26/21	Approval	727D / 2019-04	Approval to Proceed with Pre-Selection Bid Documents		Sid Holbrook	Jennifer Perry
07/23/21	Memo	SSO	File Memo regarding reporting			Jennifer Perry

**ATTACHMENT "C"**

**DEEP / GNHWPCA  
LETTER & EMAIL  
CORRESPONDENCE**

**FY 2022**





FY 2022 GNHWPCA LETTER & E-MAIL CORRESPONDENCE/TRANSMITTALS					
DATE	DOCUMENT TYPE	Ref/CWF #	PROJECT	TO	FROM
05/26/22	Letter		Application for Clean Water Funds - Yale Campus Trumbull St Area Phase 2 & Orchard St Area Separation Projects	Kimberly Masson (Treas.)	Sid Holbrook
05/26/22	Letter		Application for Clean Water Funds - Yale Campus Trumbull St Area Phase 2 & Orchard St Area Separation Projects	Patricia Reilly	Sid Holbrook
05/26/22	email & letter	CWF 727D	Request for Formal Approval Task Order Amendment Process Air Compressor Improvements	Catharine Chu	Sid Holbrook
05/17/22	email & letter		Draft Scope for Construction Phase Services Yale Campus Trumbull St Area Ph 2 & Orchard St Area Separations	Christopher Falk	Mario Ricozzi
05/13/22	email		Revised Pages Yale Campus Trumbull St Area Ph 2 & Orchard St Area Separations	Christopher Falk	Mario Ricozzi
05/13/22	email		Confirmation that no other formal testimony required for Priority List	Syed Bokhari	Tom Sgroi
05/13/22	email		Confirm Testimony regarding priority list omission	Syed Bokhari	Tom Sgroi
05/03/22	email	CWF 727D	Transmit 30% Value Engineering Report for East St Pump Sta Capacity Improvements	Syed Bokhari	Mario Ricozzi
05/02/22	email		Request for Formal Approval Task Order Amendment Design of Sewer Separation Projects	Christopher Falk	Mario Ricozzi
04/29/22	email & letter	CSO	Regulators 009,015,016	Syed Bokhari	Tom Sgroi
03/15/22	letter	CWF 2019-04 / CWF727D	Request to Preselect Process Air Compressor Vendor	Graham Stevens	Sid Holbrook
03/09/22	email		Environmental Impact Evaluation LTCP	G.Hicks/Syed Bokhari	Tom Sgroi
02/23/22	email		Brandford Preserve Sewer Easement	Nisha Patel	Tom Sgroi
01/04/22	email	CWF 2019-04 / CWF727D	Follow-up Process Air Compressor Improvement Draft Design Amendment	Catharine Chu	Mario Ricozzi
01/18/22	email	CWF 727D	Transmit Process Air Compressor Pre-Selection Addendum 1	Catharine Chu	Mario Ricozzi
12/27/21	email	CWF 2019-05	Authorization to Bid Request Orchard Street Area Sewer Separation Project	Christopher Falk	Mario Ricozzi
12/17/22	email	CWF 727D	Process Air Compressor Preliminary Design Report Volumes 1 & 2	Catharine Chu	Mario Ricozzi
12/14/22	email	CWF 727D	East St Pump Sta. Capacity Improvements Pump Options Summary & Selection Report	Syed Bokhari	Mario Ricozzi
12/10/22	email		GNHWPCA FY 22-23 CWF Priority List Submittal	Syed Bokhari	Tom Sgroi
11/26/21	email	CWF 2019-04 / CWF727D	Process Air Compressor Improvement Draft Design Amendment	Catharine Chu	Mario Ricozzi
11/15/21	Letter	CWF 2012-04	Plan Set - Yale Campus / Trubull St Area Sewer Separation Phase 2 Review Set	Christopher Falk	Mario Ricozzi
10/29/21	email		GIS Layer Info	Nisha Patel	Tom Sgroi
10/22/21	email	CWF 727D	Request for Authorization to Bid Process Air Compressor Pre-Selection	Catharine Chu	Mario Ricozzi
09/01/21	email	CWF 739PG	Mill River SSES Phase 2b Request for Task Order Approval	Catharine Chu	Mario Ricozzi
07/14/21	email	All projects	Review Status related to LTCP Schedule	George Hicks	Tom Sgroi
07/14/21	email	All projects	Review Status related to LTCP Schedule	Nisha Patel	Tom Sgroi
06/30/21	email		2020-2021 Annual Progress Report	Jennifer Perry/George Hicks	Tom Sgroi

**ATTACHMENT “D”**

**ANNUAL CSO FLOW  
MONITORING DATA**

**JUNE 2022**

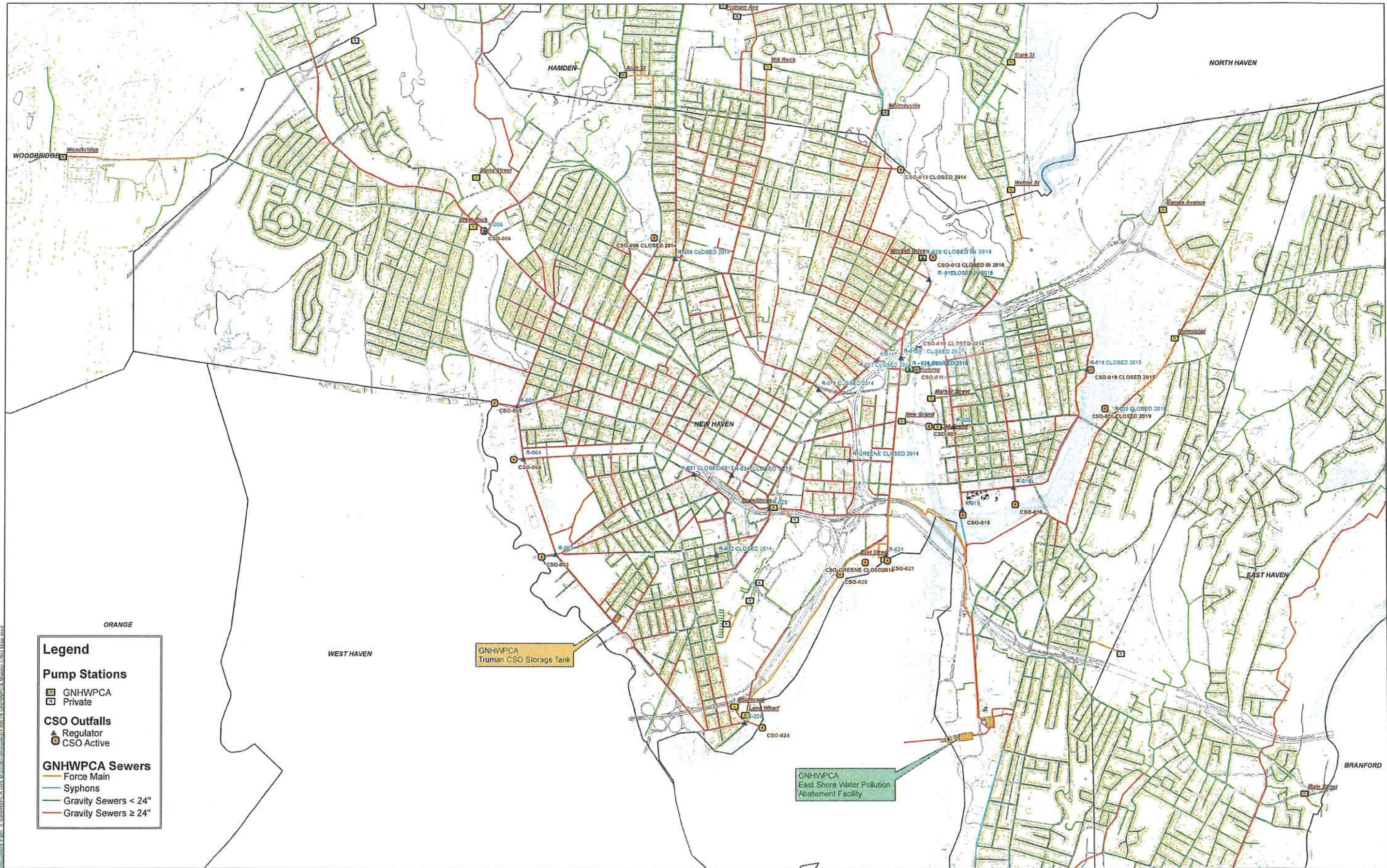
**ATTACHMENT "D"**

**JUNE 2022  
ANNUAL CSO FLOW MONITORING PROGRAM DATA**

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# **UPDATED SEWER MAP**



**Legend**

**Pump Stations**

- GNHWPCA
- Private

**CSO Outfalls**

- Regulator
- CSO Active

**GNHWPCA Sewers**

- Force Main
- Syphons
- Gravity Sewers < 24"
- Gravity Sewers ≥ 24"

**GNHWPCA  
COMBINED SEWER OVERFLOW (CSO) AND REGULATOR (R) LOCATIONS  
AND STATUS**



1 inch = 1,250 feet    4/30/2019

**REGULATOR & CSO  
DESIGNATIONS & STATUS**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
REGULATOR AND CSO DESIGNATIONS AND STATUS**

4/26/2022

(1) NPDES CSO #	(1) NPDES REGULATOR LOCATION	(1) NPDES CSO RECEIVING WATER	(1) NPDES CSO STATUS	(2) CSO #	(2) CSO STATUS	(2) REG #	(2) REG STATUS
#003	E.T. Grasso Boulevard @ Orange Av	West River	Active	#003	Active	#003	Weir raised 16 inches in 2020
#004	E.T. Grasso Boulevard @ Legion Av	West River	Active	#004	Active	#004	Weir raised 24 inches in 2020
#005	E.T. Grasso Boulevard @ Derby Av	West River	Active	#005	Active	#005	Weir raised 1.45 feet in 2014
#005 (A)	University Place	West River	Active	None	Closed prior to 2008	None	Closed prior to 2008
#005 (B)	Elm/University Place	West River	Active	None	Closed prior to 2008	None	Closed prior to 2008
#006	Whalley Av @ Fitch Street	West River	Active	#006	Active	#006	Weir raised 42 inches in 2020
#008	Munson St @ Orchard St	Mill River	Active	#008	Closed in 2014	#008	Closed in 2014
#009	Grande Av @ James St	Mill River	Active	#009	Active	#009	Weir raised 8 inches in 2015 and an additional 6 inches in 2022
#010	East St @ I-91 (2 Weirs/2 Regulators)	Mill River	Active	#010	Closed in 2014	#010	Closed in 2014
#010 (A)	East St @ I-91 (2 Weirs/2 Regulators)	Mill River	Active	#011	Active	#010 (A)	Closed in 2020
#011	Humphrey St @ I-91	Mill River	Active	#011	Active	#011	Active
#012	Mitchell Dr east of Nicoll St	Mill River	Active	#012	Closed in 2018	#012	Closed in 2018
#013	Everitt St @ East Rock Rd	Mill River	Active	#013	Closed in 2014	#013	Closed in 2014
#013 (A)	East Rock Rd @ Everitt St	Mill River	Active	None	Closed prior to 2008	None	Closed prior to 2008
#014	Trumbull St @ Orange St	Mill River	Active	#011	Active	#014	Closed in 2014
#015	James St Siphon	Quinnipiac River	Active	#015	Active	#015	Weir raised 18 inches in 2022
#016	Poplar St @ River St	Quinnipiac River	Active	#016	Active	#016	Weir repaired in 2014 and raised 6 inches in 2022
#019	Pine St @ North Front St	Quinnipiac River	Active	#019	Closed in 2015	#019	Closed in 2015
#020	Quinnipiac Av @ Clifton St	Quinnipiac River	Active	#020	Closed in 2019	#020	Closed in 2019
#021	East St Pump Station	New Haven Harbor	Active	#021	Active	#021	Active
#021 (A)	Chapel/Hamilton	New Haven Harbor	Active	None	Closed prior to 2008	None	Closed prior to 2008
#024	Boulevard Pump Station (Sea St)	New Haven Harbor	Active	#024	Active	#024	Weir raised 1.5 feet in 2017
#025	Union Pump Station (Union & State St)	New Haven Harbor	Active	#025	Active	#025	Weir raised 9.15 feet in 2019
#025 (A)	Elm/University Place	New Haven Harbor	Active	None	Closed prior to 2008	None	Closed prior to 2008
#025 (B)	Grove/Whitney	New Haven Harbor	Active	None	Closed prior to 2008	None	Closed prior to 2008
#026	Humphrey Pump Station	Mill River	Active	#011	Active	#026	Closed in 2019
#027	East/Ives	Mill River	Active	None	Closed prior to 2008	None	Closed prior to 2008
#028	Mitchell Pump Station	Mill River	Active	#012	Closed in 2018	#028	Closed in 2018
#031	S. Frontage/Davenport	New Haven Harbor	Active	None	Closed in 2013	None	Closed in 2013
#032	Port Sea/Liberty	New Haven Harbor	Active	#025	Active	#032	Closed in 2014
#033	Carlisle/Liberty	New Haven Harbor	Active	None	Closed prior to 2008	None	Closed prior to 2008
#034	George/Temple	New Haven Harbor	Active	#025	Active	#034	Closed in 2019
	Greene St	New Haven Harbor	Active	Greene	Closed in 2014	Greene	Closed in 2014
	Middletown/Front	Quinnipiac River	Active	None	Closed prior to 2008	None	Closed prior to 2008
				<b>11</b>	<b>ACTIVE CSOs</b>	<b>11</b>	<b>ACTIVE REGULATORS</b>
<b>(1) NPDES Permit # CT 0100366 dated February 9, 2016</b>							
<b>(2) Ongoing CSO Flow Monitoring Program initiated in June 2012</b>							

# **METER LOCATION SUMMARY**



**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
CSO FLOW MONITORING PROGRAM  
METER LOCATION SUMMARY  
APRIL 26, 2022**

**ALL ELEVATIONS REFER TO NAVD88 DATUM**

**METERS OF-003 SEWER AND OF-003 REGULATOR**

- Meter OF-003 Sewer was installed in the 72 inch wide by 67 inch high Boulevard Trunk Sewer downstream of Regulator 003 in June 2012 at an invert elevation of 1.34 feet. The new overflow depth in the sewer is 67 inches when the new overflow weir is set at the maximum overflow elevation of 6.51 feet.
- Meter OF-003 Overflow was installed in the 54 inch overflow pipe in June 2012 at an invert elevation of 1.70 feet. This meter was removed in August 2019 during construction of the new regulator as a part of project CWF 2016 -03. The new Meter OF-003 Regulator was installed in the new Regulator 003 structure in January 2020 to measure depth on the sewer side of the new overflow weir (and potentially depth and velocity on the drain side of the new overflow weir in the future). Regulator weir height is 66 inches.
- The old regulator consisted of a 5 foot long transverse weir in the 72 inch wide by 67 inch high Boulevard Trunk Sewer at elevation 5.15 feet. The old regulator weir was removed to an elevation of 3.95 feet to accommodate peak CSO design flows. The new structure was constructed over the 54 inch CSO Outfall 003 and consists of three concrete weirs at the approximate elevation of the old weir (5.18 feet) equipped with guide rails to add up to four 4 inch stop logs each. The new overflow weir has a total length of 12 feet three inches (13.92 feet per CSL) and a maximum overflow elevation of 6.51 feet. The bottom of the roof slab is at elevation 7.26 feet leaving a 9 inch clear opening over the stop logs.
- CSO start and stop times are based on depths on the sewer side of the overflow weir greater than the overflow weir elevation of 66 inches as measured at the new Meter OF-003 Regulator.
- CSO volumes are calculated using the Weir Formula for depths over the weir of up to 9 inches and the Orifice Equation for depths over the weir greater than 9 inches.
- Check the SCADA data to confirm that the Boulevard Pump Station is pumping at maximum flow of 27 to 33 MGD and that the Truman CSO Storage Tank was in service during any CSO events.

**METERS OF-004 SEWER AND OF-004 REGULATOR**

- Meter OF-004 Sewer was installed in the 72 inch wide by 64 inch high Boulevard Trunk Sewer downstream of Regulator 004 in June 2012 at an invert elevation of 3.00 feet. The new overflow depth in the sewer is 73 inches when the new overflow weir is set at the maximum overflow elevation of 8.71 feet.

- Meter OF-004 Overflow was installed in the 5 foot wide by 3 foot high box culvert overflow in June 2012 at an invert elevation of 3.01 feet. This meter was removed in August 2019 during construction of the new regulator as a part of project CWF 2016 -03. The new Meter OF-004 Regulator was installed in the new Regulator 004 structure in January 2020 to measure depth on the sewer side of the new overflow weir (and potentially depth and velocity on the drain side of the new overflow weir in the future). Regulator weir height is 101 inches.
- The old regulator consisted of three weirs; each two feet wide at an elevation of 5.92 feet. The weirs were raised 8 inches in July 2014 to elevation 6.59 feet. The old regulator weir was removed to an elevation of 5.92 feet to accommodate peak CSO design flows. The new regulator structure was constructed over the 5 foot wide by 3 foot high box culvert CSO 004 Outfall and consists of a concrete weir at the approximate elevation of the old weir (6.71 feet) equipped with guide rails to add up to four 6 inch stop logs. The new overflow weir has a total length of 4 feet (between elevations 6.71 feet and 8.71 feet). Above the maximum overflow elevation of 8.71 feet the total weir length is 8.88 feet. The bottom of the roof slab is at elevation 11.21 feet leaving a 30 inch clear opening over the stop logs.
- CSO start and stop times are based on depths on the sewer side of the overflow weir greater than the overflow weir elevation of 101 inches as measured at the new Meter OF-004 Regulator.
- CSO volumes are calculated using the Weir Formula for depths over the weir of up to 30 inches and the Orifice Equation for depths over the weir greater than 30 inches.
- Check the SCADA data to confirm that the Boulevard Pump Station is pumping at maximum flow of 27 to 33 MGD and that the Truman CSO Storage Tank was in service during any CSO events.

#### **METERS OF-005 SEWER AND OF-005 OVERFLOW**

- Meter OF-005 Sewer was installed in the 60 inch wide by 57 inch high Boulevard Trunk Sewer at Regulator 005 in June 2012 at an elevation of 3.85 feet. Overflow depth is 82 inches.
- Meter OF-005 Overflow was installed in the 48 inch overflow pipe in June 2012 at an invert elevation of 7.35 feet (downstream of the 36 inch drain connection).
- Meter OF-005 Overflow was reinstalled in the 48 inch overflow pipe in November 2013 at an invert elevation of 7.35 feet (upstream of the 36 inch drain connection).
- A new brick overflow weir was constructed in the 48 inch overflow pipe upstream of Meter OF-005 Overflow in July 2014 at an elevation of 10.25 feet.
- CSO start and stop times are based on a depth greater than 82 inches at Meter OF-005 Sewer and positive velocities at Meter OF-005 Overflow.
- CSO volumes are calculated based on depths and velocities at Meter OF-005 Overflow, the hydraulic elements chart and the Continuity Equation.
- Check the SCADA data to confirm that the Boulevard Pump Station is pumping at maximum flow of 27 to 33 MGD and that the Truman CSO Storage Tank was in service during any CSO events.

**METERS OF-006 SEWER AND OF-006 REGULATOR**

- Meter OF-006 Sewer was installed in the 36 inch sewer upstream of the 60 inch wide by 57 inch high Boulevard Trunk Sewer and the two overflow pipes in June 2012 at an invert elevation of 7.20 feet. The new overflow depth in the sewer is 72 inches when the new overflow weir is set at the maximum overflow elevation of 13.02 feet.
- Meters OF-006 Overflows AA and BB were installed in the twin 24 inch overflow pipes in July 2012 at an invert elevation of 9.49 feet, which is equal to the overflow elevation. These meters were removed in August 2019 during construction of the new regulator as a part of project CWF 2016 -03. The new Meter OF-006 Regulator was installed in the new Regulator 006 structure in January 2020 to measure depth on the sewer side of the new overflow weir (and potentially depth and velocity on the drain side of the new overflow weir in the future). Regulator weir height is 42 inches.
- The new Regulator 006 structure was constructed downstream of the two 24 inch overflow pipes and consists of a concrete weir at the approximate elevation of the old weir (9.52 feet) equipped with guide rails to add up to seven 6 inch stop logs. The new overflow weir has a total length of 4 feet (between elevations 9.52 feet and 13.02 feet). Above the maximum overflow elevation of 13.02 feet the total weir length is 5.96 feet. The bottom of the roof slab is at elevation 14.52 feet leaving an 18 inch clear opening over the stop logs.
- CSO start and stop times are based on depths on the sewer side of the overflow weir greater than the overflow weir elevation of 42 inches as measured at the new Meter OF-006 Regulator.
- CSO volumes are calculated using the Weir Formula for depths over the weir of up to 18 inches and the Orifice Equation for depths over the weir greater than 18 inches.
- Check the SCADA data to confirm that the Boulevard Pump Station is pumping at maximum flow of 27 to 33 MGD and that the Truman CSO Storage Tank was in service during any CSO events.

**METERS OF-009 SEWER AND OF-009 OVERFLOW**

- Meter OF-009 Overflow was installed in the 30 inch wide by 45 inch high overflow pipe in October 2012 at an invert elevation of 2.65 feet.
- The regulator consists of a 5.5 foot long weir at an elevation of 4.65 feet. The weir was rebuilt in January 2013. The overflow was raised 8 inches to elevation 5.32 feet in June 2015. The overflow weir was raised an additional 6 inches to elevation 5.82 feet in April 2022. Regulator weir height is now 38 inches.
- Meter OF-009 Sewer was installed in the 35 inch wide by 52 inch high James Street sewer one manhole upstream of Regulator 009 in July 2015 at an invert elevation of 2.81 feet. The overflow depth is 30 inches.
- CSO start and stop times are based on a depth greater than 30 inches at Meter OF-009 Sewer and positive velocities at Meter OF-009 Overflow.
- CSO volumes are calculated based on depths and velocities at Meter OF-009 Overflow, the hydraulic elements chart and the Continuity Equation.

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- There is significant tidal influence at Meter OF-009 Overflow. A new check valve was installed in CSO Outfall 009 in July 2020.
- Check the meter data at Meter OF-015 DS to confirm that the James Street siphon is operating at maximum flow of 24 MGD during any CSO events.

#### **METER OF-010 SEWER**

- Meter OF-010 Sewer was installed in the 54 inch East Street sewer at Regulator 010A in September 2012 at an invert elevation of 7.42 feet. The overflow depth to CSO Outfall 011 was 62 inches.
- The regulator was a 114 inch wide weir at elevation 12.62 feet.
- Regulator 010A was closed in March 2020.
- Meter OF-010 Sewer was left in place to measure flows in the East Street sewer upstream of the East Street Pump Station.

#### **METERS OF-011-631 AND OF-011-819**

- Four meters were installed in December 2012 to estimate CSOs at Regulator 011.
- Meter OF-011-997 was installed in the 30 inch sewer on State Street upstream of Regulator 011. This meter was removed in September 2013. Metered flows were very consistent and relatively small.
- Meter OF-011-609 was installed in the 25 inch wide by 37 inch high sewer on Humphrey Street upstream of Regulator 011. This meter was removed in September 2013. Metered flows were very consistent and relatively small.
- Meter OF-011-631 was installed in the 66 inch sewer on State Street upstream of Regulator 011.
- Meter OF-011-819 was installed in the 42 inch discharge pipe in Humphrey Street downstream of Regulator 011. The capacity of the 42 inch sewer is approximately 18 to 20 MGD.
- CSO start and stop times at Regulator 011 are estimated by subtracting the flows from the downstream meter (Meter OF-011-819) from the one upstream meter (Meter OF-011-631). Anytime the resultant flow is greater than zero a CSO is occurring.
- CSO volumes from Regulator 011 are estimated using the resultant flows as calculated above.

#### **HUMPHREY STREET PUMP STATION**

- Regulator 026 was a 10 inch overflow pipe from the Humphrey Street Pump Station wetwell to CSO Outfall 011.
- CSO Regulator 026 was closed in September 2019 as a part of the Humphrey Street Pump Station upgrade project.

#### **CSO REGULATOR 012 AND CSO OUTFALL 012**

- Meters OF-012 Overflows A and B were installed in the twin 18 inch overflow pipes in October 2012 at an invert elevation of 13.05 feet. These meters were removed in September 2014.
- New 6 inch high weirs were installed in each 18 inch overflow pipes in May 2013 at an elevation of 13.65 feet.
- Meter OF-012 Sewer was installed in the 36 inch wide by 55 inch high sewer in Mitchell Drive, three manholes downstream of Regulator 012, at an invert elevation of 9.89 feet. The overflow depth was 36 inches.
- CSO Regulator 012 and CSO Outfall 012 were closed in October 2018 as a part of project CWF 2016-02.

#### **MITCHELL DRIVE PUMP STATION**

- Regulator 028 was a 15 inch overflow pipe from the Mitchell Drive Pump Station wetwell to CSO Outfall 012.
- CSO Regulator 028 was closed in October 2018 as a part of the Mitchell Drive Pump Station upgrade project.

#### **METERS OF-015 US AND OF-015 DS**

- Meter OF-015 US was installed in the 45 inch James Street sewer upstream of Regulator 015 in October 2012 at an invert elevation of -1.21 feet.
- Meter OF-015 DS was installed in the 48 inch sewer to the James Street siphon inlet works building downstream of Regulator 015 in October 2012 at an invert elevation of -2.15 feet.
- The James Street siphon was designed with a capacity of 24 MGD.
- The regulator consists of a 7 foot long concrete weir at elevation 1.22 feet. The overflow elevation was raised 18 inches to elevation 2.72 feet by installing two sets of three 6 inch stop logs in April 2022. The overflow depth is now 58.5 inches.
- CSO start and stop times are based on depths greater than 58.5 inches at Meter OF-015 DS.
- CSO volumes are calculated by subtracting the Meter 015 DS flows from the Meter 015 US flows.
- A new check valve was installed in the chamber just upstream of CSO Outfall 015 in July 2020 to replace the defective duckbill.
- Check the meter data at Meter OF-015 DS to confirm that the James Street siphon is operating at maximum flow of 24 MGD during any CSO events.

#### **METERS OF-016 SEWER AND OF-016 OVERFLOW DS**

- Meter OF-016 Overflow was installed in the 48 inch wide by 60 inch high overflow pipe in Poplar Street in August 2012 at an invert elevation of -0.43 feet. A redundant depth and velocity meter (Meter OF-016 Overflow DS) was installed in the overflow pipe one manhole downstream from Meter OF-016 Overflow in October 2019 at an invert elevation of -0.57 feet. The data from S:\PROJECTS\CONSENT ORDER REPORTING\2-ANNUAL PROGRESS REPORTS - DUE JUNE 30\2022\Working Documents\220426 Meter Location Summary.docx

Meter OF-016 Overflow DS confirmed that the depth and velocity measurements at Meter OF-016 Overflow were being influenced by local hydraulic conditions. Meter OF-016 Overflow was removed in January 2020.

- The regulator consists of a 3.8 foot long brick weir at an elevation of 2.35 feet. The overflow weir was raised 6 inches to elevation 2.85 feet in April 2022. Regulator weir height is now 41 inches.
- Meter OF-016 Sewer was installed in the 54 inch sewer two manholes downstream of Regulator 016 in River Street in July 2017 at an invert elevation of -0.03 feet. The overflow depth is now 34.5 inches.
- CSO start and stop times are based on depths greater than 34.5 inches at Meter OF-016 Sewer and positive velocities at Meter OF-016 Overflow DS.
- CSO volumes are calculated based on depths and velocities at Meter OF-016 Overflow DS, the hydraulic elements chart and the Continuity Equation.
- A new check valve was installed in the chamber just upstream of CSO Outfall 016 in 2018 to replace the defective duckbill.
- Check the meter data at Meter OF-015 DS to confirm that the James Street siphon is operating at maximum flow of 24 MGD during any CSO events.

#### **CSO REGULATOR 020 AND CSO OUTFALL 020**

- Meter OF-020 Overflow (depth sensor) was installed in the 15 inch overflow pipe in Clifton Street at Regulator 020 in March 2013 at an invert elevation of 12.90 feet.
- Meter OF-020 Sewer was installed in the 24 inch sewer in Quinpiac Avenue at Regulator 020 in March 2013 at an invert elevation of 10.45 feet. The overflow depth was 30 inches.
- The regulator was a 15 inch pipe.
- CSO Regulator 020 and CSO Outfall 020 were closed in July 2019 as a part of project CWF 2016-02.

#### **METERS OF-021 AND E ST PS SEWER**

- Meter E St PS Sewer was installed in the 62 inch wide by 67 inch high East Street sewer upstream of Regulator 021 in September 2012 at an invert elevation of -0.95 feet. The overflow elevation is 90 inches. To convert the Level (in) measurements to NAVD88 divide by 12 to convert to feet and add -0.95 feet.
- Meter OF-021 was installed in Regulator 021 at the East Street Pump Station in November 2012 at an invert elevation of -2.21 feet. The meter records the depths on the sewer side over the overflow weir. To convert the Weir Level (in) measurements to NAVD88 divide by 12 to convert to feet and add 5.29 feet.
- The regulator is twin 84 inch wide steel plate weirs at elevation 5.29 feet.
- There is a duckbill on the overflow pipe in a chamber just upstream of CSO Outfall 021 that was installed in 2015.

- CSO start and stop times are based on a depth above the overflow weir elevation of 32.5 inches at Regulator 021 as measured by Meter OF-021.
- CSO volumes are calculated based on depths over the twin 84 inch weirs at Regulator 021 using the Weir Formula.
- Check the SCADA data to confirm that the East Street Pump Station is pumping at maximum flow of 40 to 45 MGD during any CSO events.
- Check the SCADA data to confirm that the Union Pump Station is pumping at maximum flow of 20 to 22 MGD during any CSO events.

#### **METERS OF-024 US, OF-024 DS AND OF-024 WEIR WALL**

- Meter OF-024 US was installed in the 84 inch wide by 69 inch high Boulevard Trunk Sewer upstream of Regulator 024 in July 2012 at an invert elevation of -2.06 feet. The overflow depth is 85 inches. To convert the Level (in) measurements to NAVD88 divide by 12 to convert to feet and add -2.06 feet.
- Meter OF-024 DS was installed in the 48 inch sewer to the Boulevard Pump Station downstream of Regulator 024 in July 2012 at an invert elevation of -3.19 feet. The overflow depth is 88 inches. To convert the Level (in) measurements to NAVD88 divide by 12 to convert to feet and add -3.19 feet.
- The regulator consists of three weirs each 4.5 feet wide at an elevation of 2.99 feet. The weir elevation was raised 18 inches to elevation 4.49 feet in July 2017.
- Meter OF-024 Weir Wall was installed in Regulator 024 in October 2012 to measure the depth on the sewer side of the weir at Regulator 024. Regulator weir height is 41.5 inches. To convert the Level - Weir (in) measurements to NAVD88 divide by 12 to convert to feet and add 4.49 feet.
- CSO start and stop times are based on depths above the overflow weir elevation of 12 inches as measured at Meter 024 Weir Wall.
- CSO volumes are calculated by subtracting the Meter OF-024 DS flows from the Meter OF-024 US flows.
- A new influent gate was installed at the Boulevard Pump Station in March 2019 to prevent the level in the wetwell from reaching the walkways. When wetwell levels exceed 180 inches the gate starts to close to maintain wetwell levels at 180 inches.
- Check the SCADA data to confirm that the Boulevard Pump Station is pumping at maximum flow of 27 to 33 MGD and that the Truman CSO Storage Tank was in service during any CSO events.

#### **METERS OF-025 STATE, OF-025 FRONTAGE, OF-025 COLUMBUS AND OF-025 REGULATOR**

- Meter OF-025 State was installed in the 48 inch wide by 60 inch high sewer on State Street upstream of Regulator 025 in September 2013 at an invert of 3.87 feet. The rim elevation is 15.35 feet. The distance from the rim to the invert is 138 inches.

- Meter OF-025 Frontage was installed in the 30 inch sewer on North Frontage Road upstream of Regulator 025 in September 2013 at an invert of 1.95 feet. The rim elevation is 16.45 feet. The distance from the rim to the invert is 174 inches.
- Meter OF-025 Columbus was installed in the 30 inch sewer on Columbus Avenue upstream of Regulator 025 in November 2013 at an invert of -1.78 feet. The rim elevation is 9.95 feet. The distance from the rim to the invert is 141 inches.
- Meter OF-025 Weir was installed in Regulator 025 in November 2013. This meter was removed in December 2018 during construction of the new regulator as a part of project CWF 2016-05. The new Meter OF-025 Regulator was installed in the new Regulator 025 structure in July 2019 to measure depths on the sewer side and the storm side of the new overflow weir.
- The old regulator was a 45 inch long overflow weir made up of stainless steel plates at an overflow elevation of 5.35 feet. The old regulator weir was removed. The new regulator structure was constructed above the old regulator structure and consists of a concrete weir at 11.91 feet equipped with guide rails to add up to five 6 inch stop logs. The new overflow weir has a total length of 9 feet and a maximum overflow elevation of 14.41 feet. Regulator weir height is 48 inches. The bottom of the roof slab is at elevation 16.66 feet leaving a 27 inch clear opening over the stop logs. To convert the Level – Sewer Side (in) measurements to NAVD88 divide by 12 to convert to feet and add 10.41 feet.
- CSO start and stop times are based on depths on the sewer side of the overflow weir greater than the overflow weir elevation of 48 inches as measured at the new Meter OF-025 Regulator.
- CSO volumes are calculated using the Weir Formula for depths over the weir of up to 27 inches and the Orifice Equation for depths over the weir greater than 27 inches.
- Check the SCADA data to confirm that the Union Pump Station is pumping at maximum flow of 20 to 22 MGD during any CSO events.
- Check the SCADA data to confirm that the East Street Pump Station is pumping at maximum flow of 40 to 45 MGD during any CSO events.

#### **METER REGULATOR 034 – GEORGE**

- Meter Regulator 034 - George was installed in the 36 inch wide by 48 inch high sewer on George Street upstream of Regulator 034 in September 2013 at an invert of 11.89 feet. The rim elevation is 20.45 feet. The distance from the rim to the invert is 103 inches. Meter Regulator 034-George was left in place to measure flows in the George Street Sewer upstream of Regulator 025 and the Union Pump Station.
- Meter Regulator 034 - Temple was installed in the 25 inch wide by 37 inch high sewer on Temple Street upstream of Regulator 034 in September 2013 at an invert of 12.52 feet. The rim elevation is 20.95 feet. The distance from the rim to the invert is 102 inches. Meter Regulator 034 – Temple was removed in October 2019.
- Meter Regulator 034 - Weir was installed in Regulator 034 in November 2013. Sensors were metering the depths on each side of the overflow weir. Meter Regulator 034 - Weir was removed in January 2019.



- The overflow weir consisted of wood stop logs, 6.6 feet long, at an overflow elevation of 11.65 feet. The overflow elevation was raised two feet by adding stop logs to elevation 13.65 feet in August 2014.
- CSO Regulator 034 was closed in January 2019 as a part of project CWF 2016-05.

#### **METER GNH1**

- Meter GNH1 was installed in the 72 inch wide by 64 inch high Boulevard Trunk Sewer downstream of the Truman Tank Diversion Chamber in June 2012 at an invert elevation of 0.25 feet. The overflow depth is 36 inches.
- The regulator is a 10 foot long bending weir at elevation 3.28 feet.
- The SCADA system measures depths in each cell of the 5 MG tank.
- Truman Tank activation start and stop times are based on a depth greater than 36 inches at Meter GNH1 and SCADA depths in the Truman Tank.
- CSO storage volumes are calculated based on SCADA depths in the Truman Tank. Each foot of depth in each cell equates to 122,500 gallons.

**METER DATA**

**SUMMARY**

**MAY 2021 - APRIL 2022**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY						
CSO FLOW MONITORING PROGRAM						
METER DATA SUMMARY - MAY 2021 THROUGH APRIL 2022						
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>	<u>RAINFALL (IN)</u>	<u>METER MONTHS</u>	
CSO 006	REG 006	2	1.762	46.79	12	
CSO 005	REG 005	3	2.737	46.79	12	
CSO 004	REG 004	8	5.889	46.79	12	
CSO 003	REG 003	6	4.491	46.79	12	
CSO 024	REG 024	4	2.068	46.79	12	
CSO 009	REG 009	15	2.124	46.79	12	
CSO 016	REG 016	28	8.354	46.79	12	
CSO 015	REG 015	29	4.646	46.79	12	
CSO 011	REG 011	9	2.679	46.79	12	
CSO 025	REG 025	0	0.000	46.79	12	
CSO 021	REG 021	13	9.059	46.79	12	
<b>TOTAL</b>		<b>117</b>	<b>43.809</b>			

# **METER DATA**

**APRIL 2022**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - APRIL 2022			
<b>MONTHLY RAINFALL SUMMARY</b>			
3.69 inches of rain (3.44 inches of rain in a typical month)			
No snow			
14 rain events (10 rain events in a typical month)			
One 1 month storm. All other storms less than 1 month return frequency.			
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	1	0.032
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	2	0.130
CSO 016	REG 016	2	0.707
CSO 015	REG 015	2	0.442
CSO 011	REG 011	2	0.119
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.783
<b>TOTAL</b>		<b>10</b>	<b>2.213</b>

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 NPDES Permit Outfall #: 003  
 MONTH: April YEAR: 2022  
 Average Low Temp: 40  
 Average High Temp: 58  
 Measured Rainfall: 3.69  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	4/1/2022	0:30	6:35	6.08	0.16	**					
2	4/1/2022	14:30	16:10	1.67	0.05	**					
3	4/3/2022	12:40	15:10	2.50	0.16	**					
4	4/6/2022	0:50	13:45	12.92	0.46	**					
5	4/7/2022	14:45	21:20	6.58	0.33	**					
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63	**					
7	4/9/2022	4:55	6:20	1.42	0.05	**					
8	4/9/2022	10:55	12:10	1.25	0.09	**					
9	4/12/2022	9:30	11:15	1.75	0.07	**					
10	4/14/2022	18:55	21:15	2.33	0.23	**					
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22	**					
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19	1 month					
13	4/26/2022	11:05	20:30	9.42	0.04	**					
14	4/27/2022	0:15	0:20	0.08	0.01	**					

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 004

NPDES Permit Outfall #:

MONTH: April YEAR: 2022

Average Low Temp:

40

Average High Temp:

58

Measured Rainfall:

3.69

Measured Snowfall:

0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	4/1/2022	0:30	6:35	6.08	0.16 **							
2	4/1/2022	14:30	16:10	1.67	0.05 **							
3	4/3/2022	12:40	15:10	2.50	0.16 **							
4	4/6/2022	0:50	13:45	12.92	0.46 **							
5	4/7/2022	14:45	21:20	6.58	0.33 **							
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63 **							
7	4/9/2022	4:55	6:20	1.42	0.05 **							
8	4/9/2022	10:55	12:10	1.25	0.09 **							
9	4/12/2022	9:30	11:15	1.75	0.07 **							
10	4/14/2022	18:55	21:15	2.33	0.23 **							
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22 **							
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19 1 month	4/19/2022	2:40	3:35	0.92	0.827	0.032	
13	4/26/2022	11:05	20:30	9.42	0.04 **							
14	4/27/2022	0:15	0:20	0.08	0.01 **							

TOTAL MONTH FLOW VOLUME = 0.032

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Derby Ave. 20 yds East of Ella T. Grasso Blvd.

**LOCATION:** 005

**NPDES Permit Outfall #:**

**MONTH:** April YEAR: 2022

**Average Low Temp:** 40

**Average High Temp:** 58

**Measured Rainfall:** 3.69

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/1/2022	0:30	6:35	6:08	0.16	**						
2	4/1/2022	14:30	16:10	1:67	0.05	**						
3	4/3/2022	12:40	15:10	2:50	0.16	**						
4	4/6/2022	0:50	13:45	12:92	0.46	**						
5	4/7/2022	14:45	21:20	6:58	0.33	**						
6	4/7/2022-4/8/2022	22:45	5:35	6:83	0.63	**						
7	4/9/2022	4:55	6:20	1:42	0.05	**						
8	4/9/2022	10:55	12:10	1:25	0.09	**						
9	4/12/2022	9:30	11:15	1:75	0.07	**						
10	4/14/2022	18:55	21:15	2:33	0.23	**						
11	4/16/2022-4/17/2022	21:40	0:30	2:83	0.22	**						
12	4/18/2022-4/19/2022	23:45	7:00	7:25	1.19	1 month						
13	4/26/2022	11:05	20:30	9:42	0.04	**						
14	4/27/2022	0:15	0:20	0:08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 NPDES Permit Outfall #: April YEAR: 2022  
 MONTH: 40  
 Average Low Temp: 58  
 Average High Temp: 3.69  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	4/1/2022	0:30	6:35	6.08	0.16	**					
2	4/1/2022	14:30	16:10	1.67	0.05	**					
3	4/3/2022	12:40	15:10	2.50	0.16	**					
4	4/6/2022	0:50	13:45	12.92	0.46	**					
5	4/7/2022	14:45	21:20	6.58	0.33	**					
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63	**					
7	4/9/2022	4:55	6:20	1.42	0.05	**					
8	4/9/2022	10:55	12:10	1.25	0.09	**					
9	4/12/2022	9:30	11:15	1.75	0.07	**					
10	4/14/2022	18:55	21:15	2.33	0.23	**					
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22	**					
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19	1 month					
13	4/26/2022	11:05	20:30	9.42	0.04	**					
14	4/27/2022	0:15	0:20	0.08	0.01	**					

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Grand Avenue & James Street

**LOCATION:** 009

**NPDES Permit Outfall #:**

April YEAR: 2022

**MONTH:** 40

**Average Low Temp:** 58

**Average High Temp:** 3.69

**Measured Rainfall:** 0

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)			
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)	
1	4/1/2022	0:30	6:35	6.08	0.16	**							
2	4/1/2022	14:30	16:10	1.67	0.05	**							
3	4/3/2022	12:40	15:10	2.50	0.16	**							
4	4/6/2022	0:50	13:45	12.92	0.46	**							
5	4/7/2022	14:45	21:20	6.58	0.33	**							
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63	**							
7	4/9/2022	4:55	6:20	1.42	0.05	**		4/8/2022	2:15	2:40	0.42	1.508	0.026
8	4/9/2022	10:55	12:10	1.25	0.09	**							
9	4/12/2022	9:30	11:15	1.75	0.07	**							
10	4/14/2022	18:55	21:15	2.33	0.23	**							
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22	**							
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19	1 month		4/19/2022	1:25	3:40	2.25	1.112	0.104
13	4/26/2022	11:05	20:30	9.42	0.04	**							
14	4/27/2022	0:15	0:20	0.08	0.01	**							

TOTAL MONTH FLOW VOLUME = 0.130

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011

NPDES Permit Outfall #:

MONTH: April YEAR: 2022

Average Low Temp: 40

Average High Temp: 58

Measured Rainfall: 3.69

Measured Snowfall: 0

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/1/2022	0:30	6:35	6.08	0.16	**						
2	4/1/2022	14:30	16:10	1.67	0.05	**						
3	4/3/2022	12:40	15:10	2.50	0.16	**						
4	4/6/2022	0:50	13:45	12.92	0.46	**						
5	4/7/2022	14:45	21:20	6.58	0.33	**						
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63	**	4/8/2022	2:15	2:50	0.58	1.461	0.036
7	4/9/2022	4:55	6:20	1.42	0.05	**						
8	4/9/2022	10:55	12:10	1.25	0.09	**						
9	4/12/2022	9:30	11:15	1.75	0.07	**						
10	4/14/2022	18:55	21:15	2.33	0.23	**						
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22	**						
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19	1 month	4/19/2022	1:35	3:25	1.83	1.085	0.083
13	4/26/2022	11:05	20:30	9.42	0.04	**						
14	4/27/2022	0:15	0:20	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.119

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 NPDES Permit Outfall #: 015  
 MONTH: April YEAR: 2022  
 Average Low Temp: 40  
 Average High Temp: 58  
 Measured Rainfall: 3.69  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT			CSO EVENT			OUTFALL Q. volume (MG)	OUTFALL Qavg (MGD)	DURATION (hours)
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY			
1	4/1/2022	0:30	6:35	6:08	0.16	**			
2	4/1/2022	14:30	16:10	1:67	0.05	**			
3	4/3/2022	12:40	15:10	2:50	0.16	**			
4	4/6/2022	0:50	13:45	12:92	0.46	**			
5	4/7/2022	14:45	21:20	6:58	0.33	**			
6	4/7/2022-4/8/2022	22:45	5:35	6:83	0.63	**	4/7/2022-4/8/2022	23:45	3:30
7	4/9/2022	4:55	6:20	1:42	0.05	**			
8	4/9/2022	10:55	12:10	1:25	0.09	**			
9	4/12/2022	9:30	11:15	1:75	0.07	**			
10	4/14/2022	18:55	21:15	2:33	0.23	**			
11	4/16/2022-4/17/2022	21:40	0:30	2:83	0.22	**			
12	4/18/2022-4/19/2022	23:45	7:00	7:25	1.19	1 month	4/19/2022	1:05	4:45
13	4/26/2022	11:05	20:30	9:42	0.04	**			
14	4/27/2022	0:15	0:20	0:08	0.01	**			

TOTAL MONTH FLOW VOLUME = 0.442

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar 016  
 NPDES Permit Outfall #: 016  
 MONTH: April YEAR: 2022  
 Average Low Temp: 40  
 Average High Temp: 58  
 Measured Rainfall: 3.69  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	4/1/2022	0:30	6:35	6.08	0.16 **						
2	4/1/2022	14:30	16:10	1.67	0.05 **						
3	4/3/2022	12:40	15:10	2.50	0.16 **						
4	4/6/2022	0:50	13:45	12.92	0.46 **						
5	4/7/2022	14:45	21:20	6.58	0.33 **						
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63 **						
7	4/9/2022	4:55	6:20	1.42	0.05 **			2:05	2:55	0.83	0.206
8	4/9/2022	10:55	12:10	1.25	0.09 **						
9	4/12/2022	9:30	11:15	1.75	0.07 **						
10	4/14/2022	18:55	21:15	2.33	0.23 **						
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22 **						
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19 1 month			1:05	3:55	2.83	0.501
13	4/26/2022	11:05	20:30	9.42	0.04 **						
14	4/27/2022	0:15	0:20	0.08	0.01 **						

TOTAL MONTH FLOW VOLUME = 0.707

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG 638 Long Wharf Drive

LOCATION: 021

NPDES Permit Outfall #:

MONTH: April YEAR: 2022

Average Low Temp: 40

Average High Temp: 58

Measured Rainfall: 3.69

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	4/1/2022	0:30	6:35	6.08	0.16 **						
2	4/1/2022	14:30	16:10	1.67	0.05 **						
3	4/3/2022	12:40	15:10	2.50	0.16 **						
4	4/6/2022	0:50	13:45	12.92	0.46 **						
5	4/7/2022	14:45	21:20	6.58	0.33 **						
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63 **						
7	4/9/2022	4:55	6:20	1.42	0.05 **						
8	4/9/2022	10:55	12:10	1.25	0.09 **						
9	4/12/2022	9:30	11:15	1.75	0.07 **						
10	4/14/2022	18:55	21:15	2.33	0.23 **						
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22 **						
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19 1 month	4/19/2022	1:55	4:35	2.67	7.044	0.783
13	4/26/2022	11:05	20:30	9.42	0.04 **						
14	4/27/2022	0:15	0:20	0.08	0.01 **						

TOTAL MONTH FLOW VOLUME = 0.783

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Sea Street @ South Water Street  
 024

NPDES Permit Outfall #: 2022  
 MONTH: April YEAR: 2022  
 Average Low Temp: 40  
 Average High Temp: 58  
 Measured Rainfall: 3.69  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT				
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/1/2022	0:30	6:35	6.08	0.16	**						
2	4/1/2022	14:30	16:10	1.67	0.05	**						
3	4/3/2022	12:40	15:10	2.50	0.16	**						
4	4/6/2022	0:50	13:45	12.92	0.46	**						
5	4/7/2022	14:45	21:20	6.58	0.33	**						
6	4/7/2022-4/8/2022	22:45	5:35	6.83	0.63	**						
7	4/9/2022	4:55	6:20	1.42	0.05	**						
8	4/9/2022	10:55	12:10	1.25	0.09	**						
9	4/12/2022	9:30	11:15	1.75	0.07	**						
10	4/14/2022	18:55	21:15	2.33	0.23	**						
11	4/16/2022-4/17/2022	21:40	0:30	2.83	0.22	**						
12	4/18/2022-4/19/2022	23:45	7:00	7.25	1.19	1 month						
13	4/26/2022	11:05	20:30	9.42	0.04	**						
14	4/27/2022	0:15	0:20	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Intersection of State & N. Front Street  
**LOCATION:** 025  
**NPDES Permit Outfall #:** April YEAR: 2022  
**MONTH:** 40  
**Average Low Temp:** 58  
**Average High Temp:** 3.69  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	4/1/2022	0:30	6:35	6:08	0.16	**					
2	4/1/2022	14:30	16:10	1:67	0.05	**					
3	4/3/2022	12:40	15:10	2:50	0.16	**					
4	4/6/2022	0:50	13:45	12:92	0.46	**					
5	4/7/2022	14:45	21:20	6:58	0.33	**					
6	4/7/2022-4/8/2022	22:45	5:35	6:83	0.63	**					
7	4/9/2022	4:55	6:20	1:42	0.05	**					
8	4/9/2022	10:55	12:10	1:25	0.09	**					
9	4/12/2022	9:30	11:15	1:75	0.07	**					
10	4/14/2022	18:55	21:15	2:33	0.23	**					
11	4/16/2022-4/17/2022	21:40	0:30	2:83	0.22	**					
12	4/18/2022-4/19/2022	23:45	7:00	7:25	1.19	1 month					
13	4/26/2022	11:05	20:30	9:42	0.04	**					
14	4/27/2022	0:15	0:20	0:08	0.01	**					

TOTAL MONTH  
FLOW VOLUME = 0.000



# **METER DATA**

**MARCH 2022**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - MARCH 2022**

**MONTHLY RAINFALL SUMMARY**

2.55 inches of rain (3.44 inches of rain in a typical month)

No snow

17 rain events (10 rain events in a typical month)

One 1 month storm. All other storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	0	0.000
CSO 016	REG 016	2	0.219
CSO 015	REG 015	2	0.226
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	0	0.000
<b>TOTAL</b>		<b>4</b>	<b>0.445</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.863	2		2	0.887
CSO 005	REG 005	2	1.368	2		2	1.405
CSO 004	REG 004	4	2.926	5		5	3.004
CSO 003	REG 003	4	2.253	5		5	2.314
CSO 024	REG 024	2	1.426	3		3	1.465
CSO 009	REG 009	15	1.452	16		16	1.491
CSO 016	REG 016	28	6.117	29		29	6.280
CSO 015	REG 015	30	4.429	31		31	4.547
CSO 011	REG 011	6	1.395	6		6	1.433
CSO 025	REG 025	0	0.000	0		0	0.000
CSO 021	REG 021	13	7.649	13		13	7.853
<b>TOTAL</b>		<b>106</b>	<b>29.879</b>	<b>109</b>		<b>109</b>	<b>30.676</b>

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 MONTH: March YEAR: 2022  
 NPDES Permit Outfall #: 31  
 Average Low Temp: 48  
 Average High Temp: 2.55  
 Measured Rainfall: 0.00  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		
1	3/1/2022	19:55	20:25	0.50	0.02	**					
2	3/2/2022	4:25	4:30	0.08	0.01	**					
3	3/3/2022	2:40	4:35	1.92	0.05	**					
4	3/6/2022	10:20	12:00	1.67	0.20	**					
5	3/7/2022	21:55	22:00	0.08	0.01	**					
6	3/9/2022	10:00	19:00	9.00	0.36	**					
7	3/12/2022	2:20	4:25	2.08	0.03	**					
8	3/12/2022	8:55	12:30	3.58	0.40	**					
9	3/17/2022	13:45	14:00	0.25	0.03	**					
10	3/19/2022	7:15	7:20	0.08	0.01	**					
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**					
12	3/24/2022	0:05	11:30	11.42	0.53	**					
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month					
14	3/26/2022	16:10	17:20	1.17	0.07	**					
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**					
16	3/28/2022	10:50	10:55	0.08	0.01	**					
17	3/31/2022	6:00	7:50	1.83	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Ella T. Grasso Blvd. - 23 yards North of Legion Ave.  
 NPDES Permit Outfall #: 004  
 MONTH: March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	3/1/2022	19:55	20:25	0.50	0.02	**					
2	3/2/2022	4:25	4:30	0.08	0.01	**					
3	3/3/2022	2:40	4:35	1.92	0.05	**					
4	3/6/2022	10:20	12:00	1.67	0.20	**					
5	3/7/2022	21:55	22:00	0.08	0.01	**					
6	3/9/2022	10:00	19:00	9.00	0.36	**					
7	3/12/2022	2:20	4:25	2.08	0.03	**					
8	3/12/2022	8:55	12:30	3.58	0.40	**					
9	3/17/2022	13:45	14:00	0.25	0.03	**					
10	3/19/2022	7:15	7:20	0.08	0.01	**					
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**					
12	3/24/2022	0:05	11:30	11.42	0.53	**					
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month					
14	3/26/2022	16:10	17:20	1.17	0.07	**					
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**					
16	3/28/2022	10:50	10:55	0.08	0.01	**					
17	3/31/2022	6:00	7:50	1.83	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
 LOCATION: 005

NPDES Permit Outfall #:

MONTH: March YEAR: 2022

Average Low Temp: 31

Average High Temp: 48

Measured Rainfall: 2.55

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	3/1/2022	19:55	20:25	0:50	0.02	**						
2	3/2/2022	4:25	4:30	0:08	0.01	**						
3	3/3/2022	2:40	4:35	1:92	0.05	**						
4	3/6/2022	10:20	12:00	1:67	0.20	**						
5	3/7/2022	21:55	22:00	0:08	0.01	**						
6	3/9/2022	10:00	19:00	9:00	0.36	**						
7	3/12/2022	2:20	4:25	2:08	0.03	**						
8	3/12/2022	8:55	12:30	3:58	0.40	**						
9	3/17/2022	13:45	14:00	0:25	0.03	**						
10	3/19/2022	7:15	7:20	0:08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2:92	0.10	**						
12	3/24/2022	0:05	11:30	11:42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4:92	0.56	1 month						
14	3/26/2022	16:10	17:20	1:17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2:17	0.14	**						
16	3/28/2022	10:50	10:55	0:08	0.01	**						
17	3/31/2022	6:00	7:50	1:83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 NPDES Permit Outfall #: 006  
 MONTH: March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	3/1/2022	19:55	20:25	0.50	0.02	**					
2	3/2/2022	4:30	4:35	0.08	0.01	**					
3	3/3/2022	2:40	4:35	1.92	0.05	**					
4	3/6/2022	10:20	12:00	1.67	0.20	**					
5	3/7/2022	21:55	22:00	0.08	0.01	**					
6	3/9/2022	10:00	19:00	9.00	0.36	**					
7	3/12/2022	2:20	4:25	2.08	0.03	**					
8	3/12/2022	8:55	12:30	3.58	0.40	**					
9	3/17/2022	13:45	14:00	0.25	0.03	**					
10	3/19/2022	7:15	7:20	0.08	0.01	**					
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**					
12	3/24/2022	0:05	11:30	11.42	0.53	**					
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month					
14	3/26/2022	16:10	17:20	1.17	0.07	**					
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**					
16	3/28/2022	10:50	10:55	0.08	0.01	**					
17	3/31/2022	6:00	7:50	1.83	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Grand Avenue & James Street

**LOCATION:** 009

**NPDES Permit Outfall #:**

**MONTH:** March YEAR: 2022

**Average Low Temp:** 31

**Average High Temp:** 48

**Measured Rainfall:** 2.55

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	3/1/2022	19:55	20:25	0.50	0.02	**						
2	3/2/2022	4:25	4:30	0.08	0.01	**						
3	3/3/2022	2:40	4:35	1.92	0.05	**						
4	3/6/2022	10:20	12:00	1.67	0.20	**						
5	3/7/2022	21:55	22:00	0.08	0.01	**						
6	3/9/2022	10:00	19:00	9.00	0.36	**						
7	3/12/2022	2:20	4:25	2.08	0.03	**						
8	3/12/2022	8:55	12:30	3.58	0.40	**						
9	3/17/2022	13:45	14:00	0.25	0.08	**						
10	3/19/2022	7:15	7:20	0.08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**						
12	3/24/2022	0:05	11:30	11.42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month						
14	3/26/2022	16:10	17:20	1.17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**						
16	3/28/2022	10:50	10:55	0.08	0.01	**						
17	3/31/2022	6:00	7:50	1.83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 30"



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG 011  
 LOCATION: March YEAR: 2022  
 NPDES Permit Outfall #: 31  
 MONTH: 48  
 Average Low Temp: 2.55  
 Average High Temp: 0  
 Measured Rainfall:  
 Measured Snowfall:

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/1/2022	19:55	20:25	0.50	0.02	**						
2	3/2/2022	4:25	4:30	0.08	0.01	**						
3	3/3/2022	2:40	4:35	1.92	0.05	**						
4	3/6/2022	10:20	12:00	1.67	0.20	**						
5	3/7/2022	21:55	22:00	0.08	0.01	**						
6	3/9/2022	10:00	19:00	9.00	0.36	**						
7	3/12/2022	2:20	4:25	2.08	0.03	**						
8	3/12/2022	8:55	12:30	3.58	0.40	**						
9	3/17/2022	13:45	14:00	0.25	0.03	**						
10	3/19/2022	7:15	7:20	0.08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**						
12	3/24/2022	0:05	11:30	11.42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month						
14	3/26/2022	16:10	17:20	1.17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**						
16	3/28/2022	10:50	10:55	0.08	0.01	**						
17	3/31/2022	6:00	7:50	1.83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 NPDES Permit Outfall #: 015  
 MONTH: March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/1/2022	19:55	20:25	0.50	0.02	**						
2	3/2/2022	4:25	4:30	0.08	0.01	**						
3	3/3/2022	2:40	4:35	1.92	0.05	**						
4	3/6/2022	10:20	12:00	1.67	0.20	**						
5	3/7/2022	21:55	22:00	0.08	0.01	**						
6	3/9/2022	10:00	19:00	9.00	0.36	**						
7	3/12/2022	2:20	4:25	2.08	0.03	**						
8	3/12/2022	8:55	12:30	3.58	0.40	**	3/12/2022	10:25	11:05	0.67	3.12	0.087
9	3/17/2022	13:45	14:00	0.25	0.03	**						
10	3/19/2022	7:15	7:20	0.08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**						
12	3/24/2022	0:05	11:30	11.42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month	3/24/2022-3/25/2022	23:55	1:45	1.83	1.73	0.132
14	3/26/2022	16:10	17:20	1.17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**						
16	3/28/2022	10:50	10:55	0.08	0.01	**						
17	3/31/2022	6:00	7:50	1.83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.219

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar 016  
 NPDES Permit Outfall #: 016  
 MONTH: March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START		STOP	DURATION (hours)
1	3/1/2022	19:55	20:25	0.50	0.02	**					
2	3/2/2022	4:25	4:30	0.08	0.01	**					
3	3/3/2022	2:40	4:35	1.92	0.05	**					
4	3/6/2022	10:20	12:00	1.67	0.20	**					
5	3/7/2022	21:55	22:00	0.08	0.01	**					
6	3/9/2022	10:00	19:00	9.00	0.36	**					
7	3/12/2022	2:20	4:25	2.08	0.03	**					
8	3/12/2022	8:55	12:30	3.58	0.40	**	3/12/2022	10:25	11:05	0.67	1.98
9	3/17/2022	13:45	14:00	0.25	0.03	**					
10	3/19/2022	7:15	7:20	0.08	0.01	**					
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**					
12	3/24/2022	0:05	11:30	11.42	0.53	**					
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month	3/24/2022-3/25/2022	23:55	1:40	1.75	2.35
14	3/26/2022	16:10	17:20	1.17	0.07	**					
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**					
16	3/28/2022	10:50	10:55	0.08	0.01	**					
17	3/31/2022	6:00	7:50	1.83	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.226

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 638 Long Wharf Drive  
 021

NPDES Permit Outfall #: March YEAR: 2022

MONTH: 31

Average Low Temp: 48

Average High Temp: 2.55

Measured Rainfall: 0

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg (MGD)	OUTFALL Q <sub>1</sub> volume (MG)
1	3/1/2022	19:55	20:25	0.50	0.02	**						
2	3/2/2022	4:25	4:30	0.08	0.01	**						
3	3/3/2022	2:40	4:35	1.92	0.05	**						
4	3/6/2022	10:20	12:00	1.67	0.20	**						
5	3/7/2022	21:55	22:00	0.08	0.01	**						
6	3/9/2022	10:00	19:00	9.00	0.36	**						
7	3/12/2022	2:20	4:25	2.08	0.03	**						
8	3/12/2022	8:55	12:30	3.58	0.40	**						
9	3/17/2022	13:45	14:00	0.75	0.03	**						
10	3/19/2022	7:15	7:20	0.08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**						
12	3/24/2022	0:05	11:30	11.42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month						
14	3/26/2022	16:10	17:20	1.17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**						
16	3/28/2022	10:50	10:55	0.08	0.01	**						
17	3/31/2022	6:00	7:50	1.83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 LOCATION: Sea Street @ South Water Street  
 024

**MONTH:** March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/1/2022	19:55	20:25	0.50	0.02	**						
2	3/2/2022	4:25	4:30	0.08	0.01	**						
3	3/3/2022	2:40	4:35	1.92	0.05	**						
4	3/6/2022	10:20	12:00	1.67	0.20	**						
5	3/7/2022	21:55	22:00	0.08	0.01	**						
6	3/9/2022	10:00	19:00	9.00	0.36	**						
7	3/12/2022	2:20	4:25	2.08	0.03	**						
8	3/12/2022	8:55	12:30	3.58	0.40	**						
9	3/17/2022	13:45	14:00	0.25	0.03	**						
10	3/19/2022	7:15	7:20	0.08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2.92	0.10	**						
12	3/24/2022	0:05	11:30	11.42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4.92	0.56	1 month						
14	3/26/2022	16:10	17:20	1.17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2.17	0.14	**						
16	3/28/2022	10:50	10:55	0.08	0.01	**						
17	3/31/2022	6:00	7:50	1.83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Intersection of State & N. Front Street  
 NPDES Permit Outfall #: 025  
 MONTH: March YEAR: 2022  
 Average Low Temp: 31  
 Average High Temp: 48  
 Measured Rainfall: 2.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/1/2022	19:55	20:25	0:50	0.02	**						
2	3/2/2022	4:25	4:30	0:08	0.01	**						
3	3/3/2022	2:40	4:35	1:92	0.05	**						
4	3/6/2022	10:20	12:00	1:67	0.20	**						
5	3/7/2022	21:55	22:00	0:08	0.01	**						
6	3/9/2022	10:00	19:00	9:00	0.36	**						
7	3/12/2022	2:20	4:25	2:08	0.03	**						
8	3/12/2022	8:55	12:30	3:58	0.40	**						
9	3/17/2022	13:45	14:00	0:25	0.03	**						
10	3/19/2022	7:15	7:20	0:08	0.01	**						
11	3/19/2022-3/20/2022	21:40	0:35	2:92	0.10	**						
12	3/24/2022	0:05	11:30	11:42	0.53	**						
13	3/24/2022-3/25/2022	22:30	3:25	4:92	0.56	1 month						
14	3/26/2022	16:10	17:20	1:17	0.07	**						
15	3/26/2022-3/27/2022	22:25	0:35	2:17	0.14	**						
16	3/28/2022	10:50	10:55	0:08	0.01	**						
17	3/31/2022	6:00	7:50	1:83	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

# **METER DATA**

**FEBRUARY 2022**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - FEBRUARY 2022			
<u>MONTHLY RAINFALL SUMMARY</u>			
4.07 inches of rain (3.44 inches of rain in a typical month)			
4.4 inches of snow			
10 rain events (10 rain events in a typical month)			
One 1 month storm. All other storms less than 1 month return frequency.			
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	1	0.063
CSO 003	REG 003	1	0.006
CSO 024	REG 024	1	0.075
CSO 009	REG 009	1	0.012
CSO 016	REG 016	2	0.460
CSO 015	REG 015	2	0.037
CSO 011	REG 011	1	0.030
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.206
<b>TOTAL</b>		<b>10</b>	<b>0.889</b>



GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY

CSO FLOW MONITORING PROGRAM

METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.847	2	0.887		
CSO 005	REG 005	2	1.342	2	1.405		
CSO 004	REG 004	4	2.870	5	3.004		
CSO 003	REG 003	5	2.262	5	2.368		
CSO 024	REG 024	3	1.502	3	1.573		
CSO 009	REG 009	15	1.462	16	1.530		
CSO 016	REG 016	28	6.417	30	6.718		
CSO 015	REG 015	30	4.460	32	4.669		
CSO 011	REG 011	6	1.369	6	1.433		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	13	8.075	14	8.453		
<b>TOTAL</b>		<b>107</b>	<b>30.606</b>	<b>113</b>	<b>32.038</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Orange Ave. @ Int. of Ella T. Grasso Blvd.  
**NPDES Permit Outfall #:** 003  
**MONTH:** February YEAR: 2022  
**Average Low Temp:** 25  
**Average High Temp:** 41  
**Measured Rainfall:** 4.07  
**Measured Snowfall:** 4.40

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					TOTAL MONTH FLOW VOLUME =
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**	2/22/2022					
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month		20:55	21:15	0.33	0.45	0.006
9	2/25/2022	12:30	18:50	6.33	0.45	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

**Note:** Overflow occurs when interceptor level reaches 67"

TOTAL MONTH FLOW VOLUME = 0.006

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Ella T. Grasso Blvd. - 23 yards North of Legion Ave.  
**NPDES Permit Outfall #:** 004  
**MONTH:** February YEAR: 2022  
**Average Low Temp:** 25  
**Average High Temp:** 41  
**Measured Rainfall:** 4.07  
**Measured Snowfall:** 4.4

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month	2/22/2022	20:55	21:25	0.50	3.04	0.063
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.063

Note: Overflow occurs when Interceptor level reaches 75"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
 LOCATION: 005

NPDES Permit Outfall #:

MONTH: February YEAR: 2022

Average Low Temp: 25

Average High Temp: 41

Measured Rainfall: 4.07

Measured Snowfall: 4.4

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month						
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 MONTH: February YEAR: 2022  
 NPDES Permit Outfall #: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month						
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 Grand Avenue & James Street  
 LOCATION: 009  
 NPDES Permit Outfall #: February YEAR: 2022  
 MONTH: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**					
2	2/4/2022	2:22	19:35	17.22	0.87	**					
3	2/7/2022	11:00	20:10	9.17	0.15	**					
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**					
5	2/13/2022	12:15	12:55	0.67	0.05	**					
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**					
7	2/18/2022	7:00	7:25	0.42	0.05	**					
8	2/22/2022	16:00	22:00	6.00	0.81	1 month	2/22/2022	21:00	21:20	0.33	0.83
9	2/25/2022	12:30	18:50	6.33	0.46	**					
10	2/26/2022	9:05	13:45	4.67	0.32	**					
<b>TOTAL MONTH</b>										<b>FLOW VOLUME =</b>	

Note: Overflow occurs when interceptor level reaches 30"

0.012

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: February YEAR: 2022  
 MONTH: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18:00	0.45	**						
2	2/4/2022	2:22	19:35	17:22	0.87	**						
3	2/7/2022	11:00	20:10	9:17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6:58	0.30	**						
5	2/13/2022	12:15	12:55	0:67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4:58	0.61	**						
7	2/18/2022	7:00	7:25	0:42	0.05	**						
8	2/22/2022	16:00	22:00	6:00	0.81	1 month	2/22/2022	21:05	21:25	0.33	2.18	0.030
9	2/25/2022	12:30	18:50	6:33	0.46	**						
10	2/26/2022	9:05	13:45	4:67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.030

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 015  
 NPDES Permit Outfall #: February YEAR: 2022  
 MONTH: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45 **							
2	2/4/2022	2:22	19:35	17.22	0.87 **		2/4/2022	6:10	6:55	0.75	0.50	0.016
3	2/7/2022	11:00	20:10	9.17	0.15 **							
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30 **							
5	2/13/2022	12:15	12:55	0.67	0.05 **							
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61 **							
7	2/18/2022	7:00	7:25	0.42	0.05 **							
8	2/22/2022	16:00	22:00	6.00	0.81 1 month		2/22/2022	18:40	21:45	3.08	0.17	0.021
9	2/25/2022	12:30	18:50	6.33	0.46 **							
10	2/26/2022	9:05	13:45	4.67	0.32 **							

TOTAL MONTH FLOW VOLUME = 0.037

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar 016  
 NPDES Permit Outfall #: February YEAR: 2022  
 MONTH: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**	2/4/2022	6:10	7:15	1.08	1.82	0.082
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month	2/22/2022	18:40	21:50	3.17	2.86	0.378
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.460

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 638 Long Wharf Drive  
 NPDES Permit Outfall #: 021  
 MONTH: February YEAR: 2022  
 Average Low Temp: 25  
 Average High Temp: 41  
 Measured Rainfall: 4.07  
 Measured Snowfall: 4.4

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month	2/22/2022	19:55	22:05	2.17	2.28	0.206
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.206

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Sea Street @ South Water Street  
 024  
**MONTH:** February YEAR: 2022  
**NPDES Permit Outfall #:** 25  
**Average Low Temp:** 41  
**Average High Temp:** 4.07  
**Measured Rainfall:** 4.4  
**Measured Snowfall:**

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Cavg (MGD)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month	2/22/2022	20:55	21:55	1.00	1.79	0.075
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.075

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Intersection of State & N. Front Street  
 025  
 NPDES Permit Outfall #: February YEAR: 2022  
 MONTH: 25  
 Average Low Temp: 41  
 Average High Temp: 4.07  
 Measured Rainfall: 4.4  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT				OUTFALL	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg (MGD)	OUTFALL volume (MG)
1	2/3/2022-2/4/2022	7:05	1:05	18.00	0.45	**						
2	2/4/2022	2:22	19:35	17.22	0.87	**						
3	2/7/2022	11:00	20:10	9.17	0.15	**						
4	2/7/2022-2/8/2022	22:05	4:40	6.58	0.30	**						
5	2/13/2022	12:15	12:55	0.67	0.05	**						
6	2/17/2022-2/18/2022	22:40	3:15	4.58	0.61	**						
7	2/18/2022	7:00	7:25	0.42	0.05	**						
8	2/22/2022	16:00	22:00	6.00	0.81	1 month						
9	2/25/2022	12:30	18:50	6.33	0.46	**						
10	2/26/2022	9:05	13:45	4.67	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.000

# **METER DATA**

**JANUARY 2022**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - JANUARY 2022**

**MONTHLY RAINFALL SUMMARY**

2.66 inches of rain (3.44 inches of rain in a typical month)

18.6 inches of snow

14 rain events (10 rain events in a typical month)

One 1 month storm. All other storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	1	0.002
CSO 004	REG 004	1	0.026
CSO 003	REG 003	1	0.018
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.061
CSO 016	REG 016	1	0.711
CSO 015	REG 015	1	0.268
CSO 011	REG 011	1	0.122
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.320
<b>TOTAL</b>		<b>8</b>	<b>1.528</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(3)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.852	2	0.887		
CSO 005	REG 005	2	1.351	3	1.405		
CSO 004	REG 004	4	2.867	5	2.982		
CSO 003	REG 003	5	2.301	5	2.394		
CSO 024	REG 024	2	1.476	3	1.535		
CSO 009	REG 009	15	1.511	16	1.572		
CSO 016	REG 016	28	6.663	30	6.931		
CSO 015	REG 015	30	4.551	32	4.733		
CSO 011	REG 011	5	1.363	6	1.418		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	13	8.247	14	8.578		
<b>TOTAL</b>		<b>108</b>	<b>31.183</b>	<b>112</b>	<b>32.433</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years  
 (2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years  
 (3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years  
 (4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 NPDES Permit Outfall #: 2022  
 MONTH: January YEAR: 2022  
 Average Low Temp: 22  
 Average High Temp: 37  
 Measured Rainfall: 2.66  
 Measured Snowfall: 18.60

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)	
1	1/1/2022	7:45	8:35	0.83	0.02	**							
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**							
3	1/5/2022	7:00	18:15	11.25	0.25	**							
4	1/7/2022	14:00	16:25	2.42	0.11	**							
5	1/8/2022	11:30	15:40	4.17	0.08	**							
6	1/9/2022	8:35	10:05	1.50	0.07	**							
7	1/9/2022	15:30	20:50	5.33	0.15	**							
8	1/10/2022	1:55	2:00	0.08	0.01	**							
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	5:40	6:30	0.83	0.53	0.018	
10	1/17/2022	19:00	19:05	0.08	0.01	**							
11	1/20/2022	4:25	12:30	8.08	0.23	**							
12	1/25/2022	2:20	2:25	0.08	0.01	**							
13	1/30/2022	14:00	14:30	0.50	0.04	**							
14	1/31/2022	12:15	15:40	3.42	0.15	**							

TOTAL MONTH FLOW VOLUME = 0.018

Note: Overflow occurs when Interceptor level reaches 67"



**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.  
 LOCATION: 004  
 NPDES Permit Outfall #: 004  
 MONTH: January YEAR: 2022  
 Average Low Temp: 22  
 Average High Temp: 37  
 Measured Rainfall: 2.66  
 Measured Snowfall: 18.6

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	5:50	6:25	0.58	1.08	0.026
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.026

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Derby Ave. 20 yds East of Ella T. Grasso Blvd.

LOCATION: 005

NPDES Permit Outfall #:

MONTH: January YEAR: 2022

Average Low Temp: 22

Average High Temp: 37

Measured Rainfall: 2.66

Measured Snowfall: 18.6

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT						
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	6:00	6:25	0.42	0.09	0.002
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.002

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 NPDES Permit Outfall #: January YEAR: 2022  
 MONTH: 22  
 Average Low Temp: 37  
 Average High Temp: 2.66  
 Measured Rainfall: 18.6  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month						
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 009  
 NPDES Permit Outfall #: January YEAR: 2022  
 MONTH: 22  
 Average Low Temp: 37  
 Average High Temp: 2.66  
 Measured Rainfall: 18.6  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT				
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	5:25	6:10	0.75	1.96	0.061
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.061

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011

NPDES Permit Outfall #:

MONTH: January YEAR: 2022

Average Low Temp: 22

Average High Temp: 37

Measured Rainfall: 2.66

Measured Snowfall: 18.6

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	5:35	6:50	1.25	2.35	0.122
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.122

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 15 James Street  
 015

**LOCATION:**

**NPDES Permit Outfall #:**

**MONTH:** January YEAR: 2022

**Average Low Temp:** 22

**Average High Temp:** 37

**Measured Rainfall:** 2.66

**Measured Snowfall:** 18.6

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02**							
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41**							
3	1/5/2022	7:00	18:15	11.25	0.25**							
4	1/7/2022	14:00	16:25	2.42	0.11**							
5	1/8/2022	11:30	15:40	4.17	0.08**							
6	1/9/2022	8:35	10:05	1.50	0.07**							
7	1/9/2022	15:30	20:50	5.33	0.15**							
8	1/10/2022	1:55	2:00	0.08	0.01**							
9	1/17/2022	2:05	9:20	7.25	1.12 1 month	1/17/2022	4:40	7:25	2.75	2.34	0.268	
10	1/17/2022	19:00	19:05	0.08	0.01**							
11	1/20/2022	4:25	12:30	8.08	0.23**							
12	1/25/2022	2:20	2:25	0.08	0.01**							
13	1/30/2022	14:00	14:30	0.50	0.04**							
14	1/31/2022	12:15	15:40	3.42	0.15**							

TOTAL MONTH FLOW VOLUME = 0.268

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Int. River & Poplar  
**LOCATION:** 016

**NPDES Permit Outfall #:**

January YEAR: 2022

**MONTH:**

22

**Average Low Temp:**

37

**Average High Temp:**

2.66

**Measured Rainfall:**

18.6

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Q avg (MGD)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	4:35	6:45	2.17	7.87	0.711
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.711

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** 638 Long Wharf Drive  
021

**LOCATION:** 638 Long Wharf Drive  
**NPDES Permit Outfall #:** 021  
**MONTH:** January YEAR: 2022  
**Average Low Temp:** 22  
**Average High Temp:** 37  
**Measured Rainfall:** 2.66  
**Measured Snowfall:** 18.6

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Avg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month	1/17/2022	5:45	7:30	1.75	4.38	0.320
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.320



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Sea Street @ South Water Street  
 024

NPDES Permit Outfall #: 2022  
 MONTH: January YEAR: 2022  
 Average Low Temp: 22  
 Average High Temp: 37  
 Measured Rainfall: 2.66  
 Measured Snowfall: 18.6

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month						
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Intersection of State & N. Front Street  
**LOCATION:** 025  
**NPDES Permit Outfall #:**  
**MONTH:** January YEAR: 2022  
 Average Low Temp: 22  
 Average High Temp: 37  
 Measured Rainfall: 2.66  
 Measured Snowfall: 18.6

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/1/2022	7:45	8:35	0.83	0.02	**						
2	1/1/2022-1/2/2022	18:30	6:25	11.92	0.41	**						
3	1/5/2022	7:00	18:15	11.25	0.25	**						
4	1/7/2022	14:00	16:25	2.42	0.11	**						
5	1/8/2022	11:30	15:40	4.17	0.08	**						
6	1/9/2022	8:35	10:05	1.50	0.07	**						
7	1/9/2022	15:30	20:50	5.33	0.15	**						
8	1/10/2022	1:55	2:00	0.08	0.01	**						
9	1/17/2022	2:05	9:20	7.25	1.12	1 month						
10	1/17/2022	19:00	19:05	0.08	0.01	**						
11	1/20/2022	4:25	12:30	8.08	0.23	**						
12	1/25/2022	2:20	2:25	0.08	0.01	**						
13	1/30/2022	14:00	14:30	0.50	0.04	**						
14	1/31/2022	12:15	15:40	3.42	0.15	**						

TOTAL MONTH FLOW VOLUME = 0.000

# **METER DATA**

**DECEMBER 2021**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - DECEMBER 2021**

**MONTHLY RAINFALL SUMMARY**

1.77 inches of rain (3.44 inches of rain in a typical month)

No snow

20 rain events (10 rain events in a typical month)

All storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	0	0.000
CSO 016	REG 016	0	0.000
CSO 015	REG 015	1	0.025
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	0	0.000
<b>TOTAL</b>		<b>1</b>	<b>0.025</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	
CSO 006	REG 006	1	0.861	2		0.887	
CSO 005	REG 005	2	1.371	3		1.412	
CSO 004	REG 004	4	2.893	5		2.979	
CSO 003	REG 003	4	2.315	5		2.385	
CSO 024	REG 024	2	1.491	3		1.535	
CSO 009	REG 009	16	1.531	16		1.577	
CSO 016	REG 016	29	6.604	30		6.801	
CSO 015	REG 015	31	4.515	32		4.650	
CSO 011	REG 011	5	1.346	6		1.387	
CSO 025	REG 025	0	0.000	0		0.000	
CSO 021	REG 021	13	8.329	14		8.577	
<b>TOTAL</b>		<b>108</b>	<b>31.255</b>	<b>112</b>		<b>32.187</b>	

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 NPDES Permit Outfall #: 2021  
 MONTH: December YEAR: 2021  
 Average Low Temp: 35.74  
 Average High Temp: 47.61  
 Measured Rainfall: 1.77  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		
1	12/2/2021	2:15	3:20	1.08	0.02	**					
2	12/2/2021	22:00	22:15	0.25	0.02	**					
3	12/6/2021	3:15	6:00	2.75	0.33	**					
4	12/6/2021	20:15	21:35	1.33	0.04	**					
5	12/8/2021	14:00	14:05	0.08	0.01	**					
6	12/9/2021	9:05	10:00	0.92	0.10	**					
7	12/11/2021	5:25	11:25	6.00	0.12	**					
8	12/11/2021	21:55	23:15	1.33	0.13	**					
9	12/15/2021	20:20	22:20	2.00	0.04	**					
10	12/16/2021	1:10	8:45	7.58	0.02	**					
11	12/18/2021	11:25	22:45	11.33	0.10	**					
12	12/19/2021	1:20	5:55	4.58	0.08	**					
13	12/22/2021	3:35	9:20	5.75	0.22	**					
14	12/24/2021	12:20	12:25	0.08	0.01	**					
15	12/25/2021	6:50	14:05	7.25	0.26	**					
16	12/26/2021	0:30	0:35	0.08	0.01	**					
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**					
18	12/29/2021	1:10	1:15	0.08	0.01	**					
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**					
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
**LOCATION:** 004  
**NPDES Permit Outfall #:** December 2021  
**MONTH:** 35.74  
**Average Low Temp:** 47.61  
**Average High Temp:** 1.77  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	12/2/2021	2:15	3:20	1.08	0.02	**					
2	12/2/2021	22:00	22:15	0.25	0.02	**					
3	12/6/2021	3:15	6:00	2.75	0.33	**					
4	12/6/2021	20:15	21:35	1.33	0.04	**					
5	12/8/2021	14:00	14:05	0.08	0.01	**					
6	12/9/2021	9:05	10:00	0.92	0.10	**					
7	12/11/2021	5:25	11:25	6.00	0.12	**					
8	12/11/2021	21:55	23:15	1.33	0.13	**					
9	12/15/2021	20:20	22:20	2.00	0.04	**					
10	12/16/2021	1:10	8:45	7.58	0.02	**					
11	12/18/2021	11:25	22:45	11.33	0.10	**					
12	12/19/2021	1:20	5:55	4.58	0.08	**					
13	12/22/2021	3:35	9:20	5.75	0.22	**					
14	12/24/2021	12:20	12:25	0.08	0.01	**					
15	12/25/2021	6:50	14:05	7.25	0.26	**					
16	12/26/2021	0:30	0:35	0.08	0.01	**					
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**					
18	12/29/2021	1:10	1:15	0.08	0.01	**					
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**					
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**					
<b>TOTAL MONTH</b>											

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Derby Ave. 20 yds East of Ella T. Grasso Blvd.

**LOCATION:** 005

**NPDES Permit Outfall #:**

December YEAR: 2021

**MONTH:**

35.74

**Average Low Temp:**

47.61

**Average High Temp:**

1.77

**Measured Rainfall:**

0

**Measured Snowfall:**

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	OUTFALL Qavg (MGD)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	12/2/2021	2:15	3:20	1:08	0.02	**						
2	12/2/2021	22:00	22:15	0:25	0.02	**						
3	12/6/2021	3:15	6:00	2:75	0.33	**						
4	12/6/2021	20:15	21:35	1:33	0.04	**						
5	12/8/2021	14:00	14:05	0:08	0.01	**						
6	12/9/2021	9:05	10:00	0:92	0.10	**						
7	12/11/2021	5:25	11:25	6:00	0.12	**						
8	12/11/2021	21:55	23:15	1:33	0.13	**						
9	12/15/2021	20:20	22:20	2:00	0.04	**						
10	12/16/2021	1:10	8:45	7:58	0.02	**						
11	12/18/2021	11:25	22:45	11:33	0.10	**						
12	12/19/2021	1:20	5:55	4:58	0.08	**						
13	12/22/2021	3:35	9:20	5:75	0.22	**						
14	12/24/2021	12:20	12:25	0:08	0.01	**						
15	12/25/2021	6:50	14:05	7:25	0.26	**						
16	12/26/2021	0:30	0:35	0:08	0.01	**						
17	12/27/2021-12/28/2021	22:30	6:40	8:17	0.15	**						
18	12/29/2021	1:10	1:15	0:08	0.01	**						
19	12/29/2021-12/30/2021	20:00	9:45	13:75	0.07	**						
20	12/30/2021-12/31/2021	22:10	1:20	3:17	0.03	**						
<b>TOTAL MONTH</b>												





**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 009

NPDES Permit Outfall #: 2021  
 MONTH: December YEAR: 2021  
 Average Low Temp: 35.74  
 Average High Temp: 47.61  
 Measured Rainfall: 1.77  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		
1	12/2/2021	2:15	3:20	1.08	0.02	**					
2	12/2/2021	22:00	22:15	0.25	0.02	**					
3	12/6/2021	3:15	6:00	2.75	0.33	**					
4	12/6/2021	20:15	21:35	1.33	0.04	**					
5	12/8/2021	14:00	14:05	0.08	0.01	**					
6	12/9/2021	9:05	10:00	0.92	0.10	**					
7	12/11/2021	5:25	11:25	6.00	0.12	**					
8	12/11/2021	21:55	23:15	1.33	0.13	**					
9	12/15/2021	20:20	22:20	2.00	0.04	**					
10	12/16/2021	1:10	8:45	7.58	0.02	**					
11	12/18/2021	11:25	22:45	11.33	0.10	**					
12	12/19/2021	1:20	5:55	4.58	0.08	**					
13	12/22/2021	3:35	9:20	5.75	0.22	**					
14	12/24/2021	12:20	12:25	0.08	0.01	**					
15	12/25/2021	6:50	14:05	7.25	0.26	**					
16	12/26/2021	0:30	0:35	0.08	0.01	**					
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**					
18	12/29/2021	1:10	1:15	0.08	0.01	**					
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**					
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**					
<b>TOTAL MONTH</b>											

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

**LOCATION:** 011

**NPDES Permit Outfall #:**

December 2021

**MONTH:**

35.74

**Average Low Temp:**

47.61

**Average High Temp:**

1.77

**Measured Rainfall:**

0

**Measured Snowfall:**

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/2/2021	2:15	3:20	1.08	0.02	**						
2	12/2/2021	22:00	22:15	0.25	0.02	**						
3	12/6/2021	3:15	6:00	2.75	0.33	**						
4	12/6/2021	20:15	21:35	1.33	0.04	**						
5	12/8/2021	14:00	14:05	0.08	0.01	**						
6	12/9/2021	9:05	10:00	0.92	0.10	**						
7	12/11/2021	5:25	11:25	6.00	0.12	**						
8	12/11/2021	21:55	23:15	1.33	0.13	**						
9	12/15/2021	20:20	22:20	2.00	0.04	**						
10	12/16/2021	1:10	8:45	7.58	0.02	**						
11	12/18/2021	11:25	22:45	11.33	0.10	**						
12	12/19/2021	1:20	5:55	4.58	0.08	**						
13	12/22/2021	3:35	9:20	5.75	0.22	**						
14	12/24/2021	12:20	12:25	0.08	0.01	**						
15	12/25/2021	6:50	14:05	7.25	0.26	**						
16	12/26/2021	0:30	0:35	0.08	0.01	**						
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**						
18	12/29/2021	1:10	1:15	0.08	0.01	**						
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**						
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**						
											TOTAL MONTH	

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** 15 James Street  
**LOCATION:** 015  
**NPDES Permit Outfall #:**  
**MONTH:** December YEAR: 2021  
**Average Low Temp:** 35.74  
**Average High Temp:** 47.61  
**Measured Rainfall:** 1.77  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	12/2/2021	2:15	3:20	1.08	0.02	**						
2	12/2/2021	22:00	22:15	0.25	0.02	**						
3	12/6/2021	3:15	6:00	2.75	0.33	**						
4	12/6/2021	20:15	21:35	1.33	0.04	**						
5	12/8/2021	14:00	14:05	0.08	0.01	**						
6	12/9/2021	9:05	10:00	0.92	0.10	**						
7	12/11/2021	5:25	11:25	6.00	0.12	**						
8	12/11/2021	21:55	23:15	1.33	0.13	**						
9	12/15/2021	20:20	22:20	2.00	0.04	**						
10	12/16/2021	1:10	8:45	7.58	0.02	**						
11	12/18/2021	11:25	22:45	11.33	0.10	**						
12	12/19/2021	1:20	5:55	4.58	0.08	**						
13	12/22/2021	3:35	9:20	5.75	0.22	**						
14	12/24/2021	12:20	12:25	0.08	0.01	**						
15	12/25/2021	6:50	14:05	7.25	0.26	**						
16	12/26/2021	0:30	0:35	0.08	0.01	**						
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**						
18	12/29/2021	1:10	1:15	0.08	0.01	**						
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**						
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.025

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Int. River & Poplar

LOCATION: 016

NPDES Permit Outfall #:

MONTH: December YEAR: 2021

Average Low Temp: 35.74

Average High Temp: 47.61

Measured Rainfall: 1.77

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/2/2021	2:15	3:20	1:08	0.02	**						
2	12/2/2021	22:00	22:15	0:25	0.02	**						
3	12/6/2021	3:15	6:00	2:75	0.33	**						
4	12/6/2021	20:15	21:35	1:33	0.04	**						
5	12/8/2021	14:00	14:05	0:08	0.01	**						
6	12/9/2021	9:05	10:00	0:92	0.10	**						
7	12/11/2021	5:25	11:25	6:00	0.12	**						
8	12/11/2021	21:55	23:15	1:33	0.13	**						
9	12/15/2021	20:20	22:20	2:00	0.04	**						
10	12/16/2021	1:10	8:45	7:58	0.02	**						
11	12/18/2021	11:25	22:45	11:33	0.10	**						
12	12/19/2021	1:20	5:55	4:58	0.08	**						
13	12/22/2021	3:35	9:20	5:75	0.22	**						
14	12/24/2021	12:20	12:25	0:08	0.01	**						
15	12/25/2021	6:50	14:05	7:25	0.26	**						
16	12/26/2021	0:30	0:35	0:08	0.01	**						
17	12/27/2021-12/28/2021	22:30	6:40	8:17	0.15	**						
18	12/29/2021	1:10	1:15	0:08	0.01	**						
19	12/29/2021-12/30/2021	20:00	9:45	13:75	0.07	**						
20	12/30/2021-12/31/2021	22:10	1:20	3:17	0.03	**						

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 638 Long Wharf Drive  
 021

**LOCATION:**

December 2021

35.74

47.61

1.77

0

0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	12/2/2021	2:15	3:20	1:08	0.02	**					
2	12/2/2021	22:00	22:15	0:25	0.02	**					
3	12/6/2021	3:15	6:00	2:75	0.33	**					
4	12/6/2021	20:15	21:35	1:33	0.04	**					
5	12/8/2021	14:00	14:05	0:08	0.01	**					
6	12/9/2021	9:05	10:00	0:92	0.10	**					
7	12/11/2021	5:25	11:25	6:00	0.12	**					
8	12/11/2021	21:55	23:15	1:33	0.13	**					
9	12/15/2021	20:20	22:20	2:00	0.04	**					
10	12/16/2021	1:10	8:45	7:58	0.02	**					
11	12/18/2021	11:25	22:45	11:33	0.10	**					
12	12/19/2021	1:20	5:55	4:58	0.08	**					
13	12/22/2021	3:35	9:20	5:75	0.22	**					
14	12/24/2021	12:20	12:25	0:08	0.01	**					
15	12/25/2021	6:50	14:05	7:25	0.26	**					
16	12/26/2021	0:30	0:35	0:08	0.01	**					
17	12/27/2021-12/28/2021	22:30	6:40	8:17	0.15	**					
18	12/29/2021	1:10	1:15	0:08	0.01	**					
19	12/29/2021-12/30/2021	20:00	9:45	13:75	0.07	**					
20	12/30/2021-12/31/2021	22:10	1:20	3:17	0.03	**					

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 LOCATION: Sea Street @ South Water Street  
 024

**NPDES Permit Outfall #:**  
**MONTH:** December YEAR: 2021  
**Average Low Temp:** 35.74  
**Average High Temp:** 47.61  
**Measured Rainfall:** 1.77  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q.volum (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	12/2/2021	2:15	3:20	1.08	0.02	**					
2	12/2/2021	22:00	22:15	0.25	0.02	**					
3	12/6/2021	3:15	6:00	2.75	0.33	**					
4	12/6/2021	20:15	21:35	1.33	0.04	**					
5	12/8/2021	14:00	14:05	0.08	0.01	**					
6	12/9/2021	9:05	10:00	0.92	0.10	**					
7	12/11/2021	5:25	11:25	6.00	0.12	**					
8	12/11/2021	21:55	23:15	1.33	0.13	**					
9	12/15/2021	20:20	22:20	2.00	0.04	**					
10	12/16/2021	1:10	8:45	7.58	0.02	**					
11	12/18/2021	11:25	22:45	11.33	0.10	**					
12	12/19/2021	1:20	5:55	4.58	0.08	**					
13	12/22/2021	3:35	9:20	5.75	0.22	**					
14	12/24/2021	12:20	12:25	0.08	0.01	**					
15	12/25/2021	6:50	14:05	7.25	0.26	**					
16	12/26/2021	0:30	0:35	0.08	0.01	**					
17	12/27/2021-12/28/2021	22:30	6:40	8.17	0.15	**					
18	12/29/2021	1:10	1:15	0.08	0.01	**					
19	12/29/2021-12/30/2021	20:00	9:45	13.75	0.07	**					
20	12/30/2021-12/31/2021	22:10	1:20	3.17	0.03	**					

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Intersection of State & N. Front Street  
**LOCATION:** 02S  
**NPDES Permit Outfall #:** December YEAR: 2021  
**MONTH:** 35.74  
**Average Low Temp:** 47.61  
**Average High Temp:** 1.77  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	Qavg (MGD)	OUTFALL volume (MG)
1	12/2/2021	2:15	3:20	1:08	0.02	**						
2	12/2/2021	22:00	22:15	0:25	0.02	**						
3	12/6/2021	3:15	6:00	2:75	0.33	**						
4	12/6/2021	20:15	21:35	1:33	0.04	**						
5	12/8/2021	14:00	14:05	0:08	0.01	**						
6	12/9/2021	9:05	10:00	0:92	0.10	**						
7	12/11/2021	5:25	11:25	6:00	0.12	**						
8	12/11/2021	21:55	23:15	1:33	0.13	**						
9	12/15/2021	20:20	22:20	2:00	0.04	**						
10	12/16/2021	1:10	8:45	7:58	0.02	**						
11	12/18/2021	11:25	22:45	11:33	0.10	**						
12	12/19/2021	1:20	5:55	4:58	0.08	**						
13	12/22/2021	3:35	9:20	5:75	0.22	**						
14	12/24/2021	12:20	12:25	0:08	0.01	**						
15	12/25/2021	6:50	14:05	7:25	0.26	**						
16	12/26/2021	0:30	0:35	0:08	0.01	**						
17	12/27/2021-12/28/2021	22:30	6:40	8:17	0.15	**						
18	12/29/2021	1:10	1:15	0:08	0.01	**						
19	12/29/2021-12/30/2021	20:00	9:45	13:75	0.07	**						
20	12/30/2021-12/31/2021	22:10	1:20	3:17	0.03	**						

TOTAL MONTH



# **METER DATA**

**NOVEMBER 2021**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
 CSO FLOW MONITORING PROGRAM  
 METER DATA SUMMARY - NOVEMBER 2021

**MONTHLY RAINFALL SUMMARY**

1.26 inches of rain (3.44 inches of rain in a typical month)

No snow

8 rain events (10 rain events in a typical month)

All storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	0	0.000
CSO 016	REG 016	1	0.059
CSO 015	REG 015	1	0.110
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	3	0.291
<b>TOTAL</b>		<b>5</b>	<b>0.460</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.879	2	0.925		
CSO 005	REG 005	2	1.400	3	1.473		
CSO 004	REG 004	4	2.954	5	3.109		
CSO 003	REG 003	4	2.365	5	2.488		
CSO 024	REG 024	2	1.522	3	1.602		
CSO 009	REG 009	16	1.563	17	1.645		
CSO 016	REG 016	29	6.744	31	7.096		
CSO 015	REG 015	31	4.599	32	4.839		
CSO 011	REG 011	5	1.375	6	1.447		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	13	8.506	14	8.950		
<b>TOTAL</b>		<b>110</b>	<b>31.908</b>	<b>116</b>	<b>33.573</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 Orange Ave. @ Int. of Eila T. Grasso Blvd.  
 003  
 November YEAR: 2021  
 NPDES Permit Outfall #: 36.47  
 MONTH: 54.33  
 Average Low Temp: 1.26  
 Average High Temp: 0.00  
 Measured Rainfall:  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	11/12/2021	9:25	14:00	4.58	0.29	**					
2	11/13/2021	15:20	16:25	1.08	0.25	**					
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06	**					
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19	**					
5	11/21/2021	19:50	21:15	1.42	0.12	**					
6	11/22/2021	1:35	2:10	0.58	0.15	**					
7	11/22/2021	5:40	8:25	2.75	0.10	**					
8	11/26/2021	2:10	12:20	10.17	0.10	**					
<b>TOTAL MONTH</b>										<b>FLOW VOLUME =</b>	0.000

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 LOCATION: 004  
 NPDES Permit Outfall #: November YEAR: 2021  
 MONTH: 36.47  
 Average Low Temp: 54.33  
 Average High Temp: 1.26  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	11/12/2021	9:25	14:00	4.58	0.29	**					
2	11/13/2021	15:20	16:25	1.08	0.25	**					
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06	**					
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19	**					
5	11/21/2021	19:50	21:15	1.42	0.12	**					
6	11/22/2021	1:35	2:10	0.58	0.15	**					
7	11/22/2021	5:40	8:25	2.75	0.10	**					
8	11/26/2021	2:10	12:20	10.17	0.10	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
005

**LOCATION:**

NPDES Permit Outfall #:

MONTH:

Average Low Temp:

Average High Temp:

Measured Rainfall:

Measured Snowfall:

November YEAR: 2021

36.47

54.33

1.26

0

EVENT NO.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/12/2021	9:25	14:00	4:38	0.29	**						
2	11/13/2021	15:20	16:25	1:08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1:33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3:58	0.19	**						
5	11/21/2021	19:50	21:15	1:42	0.12	**						
6	11/22/2021	1:35	2:10	0:58	0.15	**						
7	11/22/2021	5:40	8:25	2:75	0.10	**						
8	11/26/2021	2:10	12:20	10:17	0.10	**						
											<b>TOTAL MONTH</b>	0.000
											<b>FLOW VOLUME =</b>	

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Whalley Ave. 30 yds from Fitch Street  
**LOCATION:** 006  
**NPDES Permit Outfall #:** November YEAR: 2021  
**MONTH:** 36.47  
**Average Low Temp:** 54.33  
**Average High Temp:** 1.26  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL FREQUENCY	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)		
1	11/12/2021	9:25	14:00	4.58	0.29**						
2	11/13/2021	15:20	16:25	1.08	0.25**						
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06**						
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19**						
5	11/21/2021	19:50	21:15	1.42	0.12**						
6	11/22/2021	1:35	2:10	0.58	0.15**						
7	11/22/2021	5:40	8:25	2.75	0.10**						
8	11/26/2021	2:10	12:20	10.17	0.10**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 009

NPDES Permit Outfall #:

MONTH: November YEAR: 2021

Average Low Temp:

36.47

Average High Temp:

54.33

Measured Rainfall:

1.26

Measured Snowfall:

0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q <sub>avg</sub> (MGD)	OUTFALL Q <sub>volume</sub> (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	11/12/2021	9:25	14:00	4:58	0.29	**						
2	11/13/2021	15:20	16:25	1:08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1:33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3:58	0.19	**						
5	11/21/2021	19:50	21:15	1:42	0.12	**						
6	11/22/2021	1:35	2:10	0:58	0.15	**						
7	11/22/2021	5:40	8:25	2:75	0.10	**						
8	11/26/2021	2:10	12:20	10:17	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 30"



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: November 2021  
 MONTH: November 36.47  
 Average Low Temp: 54.33  
 Average High Temp: 1.26  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	11/12/2021	9:25	14:00	4:58	0.29**						
2	11/13/2021	15:20	16:25	1:08	0.25**						
3	11/14/2021-11/15/2021	22:55	0:15	1:33	0.06**						
4	11/18/2021-11/19/2021	23:30	3:05	3:58	0.19**						
5	11/21/2021	19:50	21:15	1:42	0.12**						
6	11/22/2021	1:35	2:10	0:58	0.15**						
7	11/22/2021	5:40	8:25	2:75	0.10**						
8	11/26/2021	2:10	12:20	10:17	0.10**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 015  
 NPDES Permit Outfall #: November YEAR: 2021  
 MONTH: 36.47  
 Average Low Temp: 54.33  
 Average High Temp: 1.26  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	11/12/2021	9:25	14:00	4:58	0.29	**						
2	11/13/2021	15:20	16:25	1:08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1:33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3:58	0.19	**						
5	11/21/2021	19:50	21:15	1:42	0.12	**						
6	11/22/2021	1:35	2:10	0:58	0.15	**						
7	11/22/2021	5:40	8:25	2:75	0.10	**						
8	11/25/2021	2:10	12:20	10:17	0.10	**	11/13/2021	16:05	16:55	0.83	3.16	0.110

TOTAL MONTH FLOW VOLUME = 0.110

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Int. River & Poplar  
 LOCATION: 016

NPDES Permit Outfall #: November YEAR: 2021

MONTH: Average Low Temp: 36.47

Average High Temp: 54.33

Measured Rainfall: 1.26

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q <sub>avg</sub> (MGD)	OUTFALL Q <sub>volume</sub> (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	11/12/2021	9:25	14:00	4.58	0.29	**	11/13/2021	16:00	16:25	0.42	3.39	0.059
2	11/13/2021	15:20	16:25	1.08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19	**						
5	11/21/2021	19:50	21:15	1.42	0.12	**						
6	11/22/2021	1:35	2:10	0.58	0.15	**						
7	11/22/2021	5:40	8:25	2.75	0.10	**						
8	11/26/2021	2:10	12:20	10.17	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.059

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 638 Long Wharf Drive  
 021

**LOCATION:**

**NPDES Permit Outfall #:**

November YEAR: 2021

36.47

54.33

1.26

0

**Average Low Temp:**

**Average High Temp:**

**Measured Rainfall:**

**Measured Snowfall:**

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q.volum (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	11/12/2021	9:25	14:00	4.58	0.29	**	11/13/2021	16:30	17:30	1.00	2.67	0.111
2	11/13/2021	15:20	16:25	1.08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19	**						
5	11/21/2021	19:50	21:15	1.42	0.12	**	11/21/2021	21:50	22:10	0.33	0.40	0.006
6	11/22/2021	1:35	2:10	0.58	0.15	**	11/22/2021	2:10	3:10	1.00	4.18	0.174
7	11/22/2021	5:40	8:25	2.75	0.10	**						
8	11/26/2021	2:10	12:20	10.17	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.291

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Sea Street @ South Water Street  
 024  
 NPDES Permit Outfall #: 2021  
 MONTH: November YEAR: 2021  
 Average Low Temp: 36.47  
 Average High Temp: 54.33  
 Measured Rainfall: 1.26  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	11/12/2021	9:25	14:00	4:58	0.29	**					
2	11/13/2021	15:20	16:25	1:08	0.25	**					
3	11/14/2021-11/15/2021	22:55	0:15	1:33	0.06	**					
4	11/18/2021-11/19/2021	23:30	3:05	3:58	0.19	**					
5	11/21/2021	19:50	21:15	1:42	0.12	**					
6	11/22/2021	1:35	2:10	0:58	0.15	**					
7	11/22/2021	5:40	8:25	2:75	0.10	**					
8	11/26/2021	2:10	12:20	10:17	0.10	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Intersection of State & N. Front Street  
**NPDES Permit Outfall #:** 025  
**MONTH:** November YEAR: 2021  
**Average Low Temp:** 36.47  
**Average High Temp:** 54.33  
**Measured Rainfall:** 1.26  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	11/12/2021	9:25	14:00	4.58	0.29	**						
2	11/13/2021	15:20	16:25	1.08	0.25	**						
3	11/14/2021-11/15/2021	22:55	0:15	1.33	0.06	**						
4	11/18/2021-11/19/2021	23:30	3:05	3.58	0.19	**						
5	11/21/2021	19:50	21:15	1.42	0.12	**						
6	11/22/2021	1:35	2:10	0.58	0.15	**						
7	11/22/2021	5:40	8:25	2.75	0.10	**						
8	11/26/2021	2:10	12:20	10.17	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

# **METER DATA**

**OCTOBER 2021**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - OCTOBER 2021			
<u>MONTHLY RAINFALL SUMMARY</u>			
6.76 inches of rain (3.44 inches of rain in a typical month)			
No snow			
10 rain events (10 rain events in a typical month)			
One 2 to 5 year storm and one 6 month to 1 year storm. All other storms less than 1 month return frequency.			
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	1	0.460
CSO 003	REG 003	1	0.184
CSO 024	REG 024	1	0.501
CSO 009	REG 009	1	0.102
CSO 016	REG 016	2	0.639
CSO 015	REG 015	2	0.680
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	2	1.556
<b>TOTAL</b>		<b>10</b>	<b>4.122</b>



**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	2	0.893	2	0.967		
CSO 005	REG 005	3	1.422	3	1.540		
CSO 004	REG 004	5	3.000	5	3.250		
CSO 003	REG 003	5	2.401	5	2.601		
CSO 024	REG 024	3	1.546	3	1.675		
CSO 009	REG 009	16	1.587	17	1.720		
CSO 016	REG 016	29	6.818	32	7.387		
CSO 015	REG 015	31	4.614	33	4.999		
CSO 011	REG 011	6	1.396	6	1.513		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	12	8.490	13	9.198		
<b>TOTAL</b>		<b>109</b>	<b>32.167</b>	<b>118</b>	<b>34.849</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 NPDES Permit Outfall #: 2021  
 MONTH: October YEAR: 2021  
 Average Low Temp: 54  
 Average High Temp: 69  
 Measured Rainfall: 6.76  
 Measured Snowfall: 0.00

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year						
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**						
3	10/18/2021	13:35	14:10	0.58	0.07	**						
4	10/23/2021	21:45	23:25	1.67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**						
6	10/26/2021	1:30	3:45	2.25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year	10/26/2021	10:55	15:45	1.83	2.42	0.184
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**						
9	10/30/2021	10:35	17:30	6.92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.184

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 004  
 NPDES Permit Outfall #: 004  
 MONTH: October YEAR: 2021  
 Average Low Temp: 54  
 Average High Temp: 69  
 Measured Rainfall: 6.76  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	START	STOP	DURATION (hours)		OUTFALL Q avg (MGD)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year					
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**					
3	10/18/2021	13:35	14:10	0.58	0.07	**					
4	10/23/2021	21:45	23:25	1.67	0.02	**					
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**					
6	10/26/2021	1:30	3:45	2.25	0.45	**					
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year					
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**					
9	10/30/2021	10:35	17:30	6.92	0.31	**					
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**					
										TOTAL MONTH FLOW VOLUME =	0.460

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
 005  
 NPDES Permit Outfall #: October YEAR: 2021  
 MONTH: 54  
 Average Low Temp: 69  
 Average High Temp: 6.76  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year					
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**					
3	10/18/2021	13:35	14:10	0.58	0.07	**					
4	10/23/2021	21:45	23:25	1.67	0.02	**					
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**					
6	10/26/2021	1:30	3:45	2.25	0.45	**					
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year					
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**					
9	10/30/2021	10:35	17:30	6.92	0.31	**					
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 NPDES Permit Outfall #: 2021  
 MONTH: October YEAR: 2021  
 Average Low Temp: 54  
 Average High Temp: 69  
 Measured Rainfall: 6.76  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year						
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**						
3	10/18/2021	13:35	14:10	0.58	0.07	**						
4	10/23/2021	21:45	23:25	1.67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**						
6	10/26/2021	1:30	3:45	2.25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year						
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**						
9	10/30/2021	10:35	17:30	6.92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**						
<b>TOTAL MONTH</b>											<b>FLOW VOLUME =</b>	<b>0.000</b>

Note: Overflow occurs when interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

Grand Avenue & James Street  
009

**LOCATION:**

NPDES Permit Outfall #:

MONTH:

Average Low Temp:

Average High Temp:

Measured Rainfall:

Measured Snowfall:

October 2021

54

69

6.76

0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22:33	1.26	6 month to 1 year	10/4/2021	22:15	22:45	0.50	4.87	0.102
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**						
3	10/18/2021	13:35	14:10	0.58	0.07	**						
4	10/23/2021	21:45	23:25	1.67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**						
6	10/26/2021	1:30	3:45	2.25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year						
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**						
9	10/30/2021	10:35	17:30	6.92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**						
											TOTAL MONTH	0.102
											FLOW VOLUME =	

Note: Overflow occurs when Interceptor level reaches 30"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

**LOCATION:** 011  
**NPDES Permit Outfall #:**  
**MONTH:** October YEAR: 2021  
 Average Low Temp: 54  
 Average High Temp: 69  
 Measured Rainfall: 6.76  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year						
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**						
3	10/18/2021	13:35	14:10	0.58	0.07	**						
4	10/23/2021	21:45	23:25	1.67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**						
6	10/26/2021	1:30	3:45	2.25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year						
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**						
9	10/30/2021	10:35	17:30	6.92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 NPDES Permit Outfall #: 015  
 MONTH: October YEAR: 2021  
 Average Low Temp: 54  
 Average High Temp: 69  
 Measured Rainfall: 6.76  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Clave (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22:33	1.26	6 month to 1 year	10/4/2021	22:00	0:00	2.00	1.42	0.118
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32 **							
3	10/18/2021	13:35	14:10	0.58	0.07 **							
4	10/23/2021	21:45	23:25	1.67	0.02 **							
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35 **							
6	10/26/2021	1:30	3:45	2.25	0.45 **							
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03 2 to 5 year		10/26/2021	3:35	16:40	8.33	1.62	0.562
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63 **							
9	10/30/2021	10:35	17:30	6.92	0.31 **							
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32 **							

TOTAL MONTH FLOW VOLUME = 0.680

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar  
 016

NIPDES Permit: Outfall #: 2021

MONTH: October YEAR: 2021

Average Low Temp: 54

Average High Temp: 69

Measured Rainfall: 6.76

Measured Snowfall: 0

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22:33	1.26	6 month to 1 year	10/4/2021	22:00	22:40	0.67	3.04	0.084
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32 **							
3	10/18/2021	13:35	14:10	0.58	0.07 **							
4	10/23/2021	21:45	23:25	1.67	0.02 **							
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35 **							
6	10/26/2021	1:30	3:45	2.25	0.45 **							
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03 2 to 5 year		10/26/2021	8:50	12:05	3.25	4.10	0.555
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63 **							
9	10/30/2021	10:35	17:30	6.92	0.31 **							
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32 **							

TOTAL MONTH FLOW VOLUME = 0.639

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 638 Long Wharf Drive

LOCATION: 021

NPDES Permit Outfall #:

MONTH: October YEAR: 2021

Average Low Temp: 54

Average High Temp: 69

Measured Rainfall: 6.76

Measured Snowfall: 0

EVENT NO.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/4/2021	1:10	23:30	22.33	1.26	6 month to 1 year	10/4/2021	22:45	23:30	0.75	4.39	0.137
2	10/16/2021-10/17/2021	22:15	0:55	2.67	0.32	**						
3	10/18/2021	13:35	14:10	0.58	0.07	**						
4	10/23/2021	21:45	23:25	1.67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6.42	0.35	**						
6	10/26/2021	1:30	3:45	2.25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22.08	3.03	2 to 5 year	10/26/2021	9:50	16:40	6.83	4.99	1.419
8	10/29/2021-10/30/2021	23:35	8:05	8.50	0.63	**						
9	10/30/2021	10:35	17:30	6.92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6.25	0.32	**						
TOTAL MONTH											FLOW VOLUME =	1.556

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 LOCATION: Sea Street @ South Water Street  
 024

NPDES Permit Outfall #: 024

MONTH: October YEAR: 2021

Average Low Temp: 54

Average High Temp: 69

Measured Rainfall: 6.76

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Q avg (MGD)
1	10/14/2021	1:10	23:30	22:33	1.26	6 month to 1 year						
2	10/16/2021-10/17/2021	22:15	0:55	2:67	0.32	**						
3	10/18/2021	13:35	14:10	0:58	0.07	**						
4	10/23/2021	21:45	23:25	1:67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6:42	0.35	**						
6	10/26/2021	1:30	3:45	2:25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22:08	3.03	2 to 5 year						
8	10/29/2021-10/30/2021	23:35	8:05	8:50	0.63	**						
9	10/30/2021	10:35	17:30	6:92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6:25	0.32	**	10/26/2021	10:55	12:45	1:83	6.56	0.501

TOTAL MONTH FLOW VOLUME = 0.501

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

Intersection of State & N. Front Street  
025

**LOCATION:**

**NPDES Permit Outfall #:**

**MONTH:** October YEAR: 2021

**Average Low Temp:** 54

**Average High Temp:** 69

**Measured Rainfall:** 6.76

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q Avg volume (MG)	OUTFALL Q (MGD)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	10/4/2021	1:10	23:30	22:33	1.26	6 month to 1 year						
2	10/16/2021-10/17/2021	22:15	0:55	2:67	0.32	**						
3	10/18/2021	13:35	14:10	0:58	0.07	**						
4	10/23/2021	21:45	23:25	1:67	0.02	**						
5	10/24/2021-10/25/2021	23:55	6:20	6:42	0.35	**						
6	10/26/2021	1:30	3:45	2:25	0.45	**						
7	10/26/2021-10/27/2021	5:05	3:10	22:08	3.08	2 to 5 year						
8	10/29/2021-10/30/2021	23:35	8:05	8:50	0.63	**						
9	10/30/2021	10:35	17:30	6:92	0.31	**						
10	10/30/2021-10/31/2021	21:45	4:00	6:25	0.32	**						

TOTAL MONTH FLOW VOLUME = 0.000

**METER DATA**

**SEPTEMBER 2021**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - SEPTEMBER 2021			
<u>MONTHLY RAINFALL SUMMARY</u>			
7.55 inches of rain (3.44 inches of rain in a typical month)			
No snow			
10 rain events (10 rain events in a typical month)			
One 50 to 100 year, one 6 month to 1 year, and one 1 to 3 month storms. All other storms less than 1 month return frequency.			
CSO NUMBER	REGULATOR NUMBERS	CSO EVENTS	CSO VOLUME (MG)
CSO 006	REG 006	1	0.521
CSO 005	REG 005	1	0.974
CSO 004	REG 004	1	2.771
CSO 003	REG 003	1	2.474
CSO 024	REG 024	1	0.644
CSO 009	REG 009	2	0.450
CSO 016	REG 016	3	2.601
CSO 015	REG 015	3	0.841
CSO 011	REG 011	2	1.427
CSO 025	REG 025	0	0.000
CSO 021	REG 021	2	3.058
<b>TOTAL</b>		<b>17</b>	<b>15.761</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	2	0.973	2	1.013		
CSO 005	REG 005	3	1.550	3	1.614		
CSO 004	REG 004	4	3.017	5	3.142		
CSO 003	REG 003	4	2.516	5	2.620		
CSO 024	REG 024	2	1.410	2	1.468		
CSO 009	REG 009	17	1.674	18	1.743		
CSO 016	REG 016	31	7.080	32	7.373		
CSO 015	REG 015	32	4.655	34	4.848		
CSO 011	REG 011	6	1.522	6	1.585		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	12	8.399	13	8.747		
<b>TOTAL</b>		<b>114</b>	<b>32.796</b>	<b>118</b>	<b>34.153</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 NPDES Permit: 003  
 MONTH: September YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 77  
 Measured Rainfall: 7.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	9/1/2021	6:50	16:15	9.42	0.37 **							
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year	9/1/2021-9/2/2021	22:25	1:35	3.17	18.75	2.474	
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year							
10	9/28/2021	12:25	14:00	1.58	0.12 **							

TOTAL MONTH FLOW VOLUME = 2.474

Note: Overflow occurs when Interceptor level reaches 67"



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yds North of Legion Ave.

LOCATION: 004

NPDES Permit Outfall #:

MONTH: September YEAR: 2021

Average Low Temp: 63

Average High Temp: 77

Measured Rainfall: 7.55

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg Q volume (MGD)	OUTFALL Q volume (MG)
1	9/1/2021	6:50	16:15	9.42	0.37 **							
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year	9/1/2021-9/2/2021	22:20	3:05	4.75	14.00	2.771	
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year							
10	9/28/2021	12:25	14:00	1.58	0.12 **							

TOTAL MONTH FLOW VOLUME = 2.771

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Derby Ave. 20 yds East of Ella T. Grasso Blvd.

LOCATION: 005

NPDES Permit: Outfall #:

MONTH: September YEAR: 2021

Average Low Temp: 63

Average High Temp: 77

Measured Rainfall: 7.55

Measured Snowfall: 0

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q. volume (MG)
1	9/1/2021	6:50	16:15	9.42	0.37 **							
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year		9/1/2021-9/2/2021	22:30	1:30	3.00	7.79	0.974
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year							
10	9/28/2021	12:25	14:00	1.58	0.12 **							

TOTAL MONTH FLOW VOLUME = 0.974

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 NPDES Permit Outfall #: September YEAR: 2021  
 MONTH: 63  
 Average Low Temp: 77  
 Average High Temp: 7.55  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/1/2021	6:50	16:15	9:42	0.37 **		9/1/2021-9/2/2021	22:30	1:25	2.92	6.52	0.521
2	9/1/2021-9/2/2021	18:20	4:00	9:67	4.47 50 to 100 year							
3	9/5/2021	15:35	22:05	6:50	0.37 **							
4	9/9/2021	2:35	3:35	1:00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12:83	0.24 **							
6	9/16/2021	7:45	8:25	0:67	0.20 **							
7	9/17/2021	17:20	17:40	0:33	0.07 **							
8	9/22/2021	12:20	12:25	0:08	0.01 **							
9	9/24/2021	1:05	9:50	8:75	1.34 6 month to 1 year							
10	9/28/2021	12:25	14:00	1:58	0.12 **							

TOTAL MONTH FLOW VOLUME = 0.521

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 009  
 NPDES Permit Outfall #: 2021  
 MONTH: September  
 Average Low Temp: 63  
 Average High Temp: 77  
 Measured Rainfall: 7.55  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qave (MGD)	OUTFALL Q volume (MG)
1	9/1/2021	6:50	16:15	9.42	0.37 **							
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year		9/1/2021-9/2/2021	21:00	2:55	5.92	1.18	0.287
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year		9/24/2021	2:45	3:35	0.83	4.70	0.163
10	9/28/2021	12:25	14:00	1.58	0.12 **							
<b>TOTAL MONTH</b>											<b>FLOW VOLUME =</b>	<b>0.450</b>

Note: Overflow occurs when Interceptor level reaches 30"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

**LOCATION:** 011  
**NPDES Permit Outfall #:** September 2021  
**MONTH:** 63  
**Average Low Temp:** 77  
**Average High Temp:** 7.55  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)			
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)	
1	9/1/2021	6:50	16:15	9.42	0.37 **								
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year	9/1/2021-9/2/2021	22:40	2:35	3.92	8.06	1.316		
3	9/5/2021	15:35	22:05	6.50	0.37 **								
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month								
5	9/9/2021	7:55	20:45	12.83	0.24 **								
6	9/16/2021	7:45	8:25	0.67	0.20 **								
7	9/17/2021	17:20	17:40	0.33	0.07 **								
8	9/22/2021	12:20	12:25	0.08	0.01 **								
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year	9/24/2021	2:40	3:45	1.08	2.46	0.111		
10	9/28/2021	12:25	14:00	1.58	0.12 **								

TOTAL MONTH FLOW VOLUME = 1.427

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 15 James Street  
 015  
 NPDES Permit Outfall #:   
 MONTH: September YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 77  
 Measured Rainfall: 7.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q. avg (MGD)		
1	9/1/2021	6:50	16:15	9.42	0.37 **								
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year	9/1/2021-9/2/2021	20:30	4:05	7.58	1.86	0.588		
3	9/5/2021	15:35	22:05	6.50	0.37 **								
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month	9/9/2021	3:00	4:05	1.08	2.87	0.130		
5	9/9/2021	7:55	20:45	12.83	0.24 **								
6	9/16/2021	7:45	8:25	0.67	0.20 **								
7	9/17/2021	17:20	17:40	0.33	0.07 **								
8	9/22/2021	12:20	12:25	0.08	0.01 **								
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year	9/24/2021	2:40	9:45	2.92	1.00	0.123		
10	9/28/2021	12:25	14:00	1.58	0.12 **								
<b>TOTAL MONTH</b>											<b>FLOW VOLUME =</b>	<b>0.841</b>	

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar 016  
 NPDES Permit Outfall #: 016  
 MONTH: September YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 77  
 Measured Rainfall: 7.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	9/1/2021	6:50	16:15	9.42	0.37 **							
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47	50 to 100 year	9/1/2021-9/2/2021	20:45	3:35	6.83	7.24	2.061
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36	1 to 3 month	9/9/2021	3:00	3:55	0.92	1.05	0.040
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34	6 month to 1 year	9/24/2021	2:35	4:45	2.17	5.54	0.500
10	9/28/2021	12:25	14:00	1.58	0.12 **							

TOTAL MONTH FLOW VOLUME = 2.601

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 638 Long Wharf Drive  
 021

NPDES Permit Outfall #: September YEAR: 2021  
 MONTH: 63  
 Average Low Temp: 77  
 Average High Temp: 7.55  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT						CSO EVENT					
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)
1	9/1/2021	6:50	16:15	9.42	0.37	**						
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47	50 to 100 year	9/1/2021-9/2/2021	21:25	4:25	7.00	8.64	2.521
3	9/5/2021	15:35	22:05	6.50	0.37	**						
4	9/9/2021	2:35	3:35	1.00	0.36	1 to 3 month						
5	9/9/2021	7:55	20:45	12.83	0.24	**						
6	9/16/2021	7:45	8:25	0.67	0.20	**						
7	9/17/2021	17:20	17:40	0.33	0.07	**						
8	9/22/2021	12:20	12:25	0.08	0.01	**						
9	9/24/2021	1:05	9:50	8.75	1.34	6 month to 1 year	9/24/2021	3:00	4:40	1.67	7.73	0.537
10	9/28/2021	12:25	14:00	1.58	0.12	**						

TOTAL MONTH FLOW VOLUME = 3.058



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Sea Street @ South Water Street

024

NPDES Permit Outfall #:

September 2021

Average Low Temp:

63

Average High Temp:

77

Measured Rainfall:

7.55

Measured Snowfall:

0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Clave (MGD)	OUTFALL Q. volume (MG)
1	9/1/2021	6:50	16:15	9.42	0.37 **		9/1/2021-9/2/2021	22:30	0:20	1.83	8.43	0.644
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47 50 to 100 year							
3	9/5/2021	15:35	22:05	6.50	0.37 **							
4	9/9/2021	2:35	3:35	1.00	0.36 1 to 3 month							
5	9/9/2021	7:55	20:45	12.83	0.24 **							
6	9/16/2021	7:45	8:25	0.67	0.20 **							
7	9/17/2021	17:20	17:40	0.33	0.07 **							
8	9/22/2021	12:20	12:25	0.08	0.01 **							
9	9/24/2021	1:05	9:50	8.75	1.34 6 month to 1 year							
10	9/28/2021	12:25	14:00	1.58	0.12 **							
											TOTAL MONTH	0.644
											FLOW VOLUME =	

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Intersection of State & N. Front Street  
 025  
 NPDES Permit Outfall #: 2021  
 MONTH: September YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 77  
 Measured Rainfall: 7.55  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					OUTFALL Q volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	
1	9/1/2021	6:50	16:15	9.42	0.37	**						
2	9/1/2021-9/2/2021	18:20	4:00	9.67	4.47	50 to 100 year						
3	9/5/2021	15:35	22:05	6.50	0.37	**						
4	9/9/2021	2:35	3:35	1.00	0.36	1 to 3 month						
5	9/9/2021	7:55	20:45	12.83	0.24	**						
6	9/16/2021	7:45	8:25	0.67	0.20	**						
7	9/17/2021	17:20	17:40	0.33	0.07	**						
8	9/22/2021	12:20	12:25	0.08	0.01	**						
9	9/24/2021	1:05	9:50	8.75	1.34	6 month to 1 year						
10	9/28/2021	12:25	14:00	1.58	0.12	**						

TOTAL MONTH  
 FLOW VOLUME = 0.000

# **METER DATA**

**AUGUST 2021**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - AUGUST 2021**

**MONTHLY RAINFALL SUMMARY**

2.18 inches of rain (3.44 inches of rain in a typical month)

No snow

7 rain events (10 rain events in a typical month)

One 6 month and one 1 month storms. All other storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	3	0.110
CSO 016	REG 016	4	0.378
CSO 015	REG 015	4	0.524
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	0	0.000
<b>TOTAL</b>		<b>11</b>	<b>1.012</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS	CSO VOLUME (MG) BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS	CSO VOLUME (MG) BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.764		1	0.751	
CSO 005	REG 005	2	1.128		2	1.110	
CSO 004	REG 004	4	1.663		4	1.636	
CSO 003	REG 003	4	1.288		4	1.267	
CSO 024	REG 024	2	1.174		2	1.155	
CSO 009	REG 009	18	1.587		17	1.561	
CSO 016	REG 016	32	6.284		32	6.181	
CSO 015	REG 015	34	4.662		34	4.586	
CSO 011	REG 011	5	0.821		5	0.808	
CSO 025	REG 025	0	0.000		0	0.000	
CSO 021	REG 021	12	7.471		12	7.349	
<b>TOTAL</b>		<b>116</b>	<b>26.842</b>		<b>114</b>	<b>26.404</b>	

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 MONTH: August YEAR: 2021  
 NPDES Permit Outfall #: 70  
 Average Low Temp: 83  
 Average High Temp: 2.18  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03**							
2	8/8/2021	3:05	19:15	16.17	0.09**							
3	8/19/2021	3:30	6:40	3.17	0.37**							
4	8/22/2021	6:45	8:45	2.00	0.41 1 month							
5	8/22/2021	11:40	17:55	6.25	0.55**							
6	8/23/2021	7:35	12:35	5.00	0.53**							
7	8/23/2020	15:20	18:50	3.50	0.14**							
TOTAL MONTH											0.000	
FLOW VOLUME =											0.000	

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Ella T. Grasso Blvd. - 23 yds North of Legion Ave.

**LOCATION:** 004

**NPDES Permit Outfall #:**

August YEAR: 2021

**MONTH:** 70

Average Low Temp: 83

Average High Temp: 2.18

Measured Rainfall: 0

Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
**LOCATION:** 005

**NPDES Permit Outfall #:**

**MONTH:** August **YEAR:** 2021

**Average Low Temp:** 70

**Average High Temp:** 83

**Measured Rainfall:** 2.18

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**					
2	8/8/2021	3:05	19:15	16.17	0.09	**					
3	8/19/2021	3:30	6:40	3.17	0.37	**					
4	8/22/2021	6:45	8:45	2.00	0.41	1 month					
5	8/22/2021	11:40	17:55	6.25	0.55	**					
6	8/23/2021	7:35	12:35	5.00	0.53	**					
7	8/23/2020	15:20	18:50	3.50	0.14	**					
										<b>TOTAL MONTH</b>	0.000
										<b>FLOW VOLUME =</b>	0.000

**Note:** Overflow occurs when Interceptor level reaches 82"



**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Whalley Ave. 30 yds from Fitch Street  
**LOCATION:** 006  
**NPDES Permit Outfall #:**  
**MONTH:** August YEAR: 2021  
 70  
 83  
**Average Low Temp:** 2.18  
**Average High Temp:**  
**Measured Rainfall:** 0  
**Measured Snowfall:**

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Aveg Q (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 72"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 NPDES Permit Outfall #: 009

MONTH: August YEAR: 2021  
 Average Low Temp: 70  
 Average High Temp: 83  
 Measured Rainfall: 2.18  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)			
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)	
1	8/4/2021-8/5/2021	23:50	2:35	2:75	0.03 **								
2	8/8/2021	3:05	19:15	16.17	0.09 **								
3	8/19/2021	3:30	6:40	3.17	0.37 **			8/19/2021	5:20	5:30	0.17	0.47	0.003
4	8/22/2021	6:45	8:45	2.00	0.41 1 month			8/22/2021	8:20	8:35	0.25	1.69	0.018
5	8/22/2021	11:40	17:55	6.25	0.55 **								
6	8/23/2021	7:35	12:35	5.00	0.95 6 month			8/23/2021	11:10	11:40	0.50	3.67	0.089
7	8/23/2020	15:20	18:50	3.50	0.14 **								

TOTAL MONTH FLOW VOLUME = 0.110

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: August YEAR: 2021  
 MONTH: 70  
 Average Low Temp: 83  
 Average High Temp: 2.18  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** 15 James Street  
**LOCATION:** 015  
**NPDES Permit Outfall #:**  
**MONTH:** August YEAR: 2021  
 Average Low Temp: 70  
 Average High Temp: 83  
 Measured Rainfall: 2.18  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q Avg (MGD)	OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)	
1	8/4/2021-8/5/2021	23:50	2:35	2:75	0.03 **								
2	8/8/2021	3:05	19:15	16:17	0.09 **								
3	8/19/2021	3:30	6:40	3:17	0.37 **								
4	8/22/2021	6:45	8:45	2:00	0.41 1 month	8/19/2021	5:50	5:50	0.58	1.09	0.027		
5	8/22/2021	11:40	17:55	6:25	0.55 **	8/22/2021	8:20	9:05	0.75	1.34	0.042		
6	8/23/2021	7:35	12:35	5:00	0.95 6 month	8/22/2021	13:10	14:40	1.50	0.31	0.019		
7	8/23/2020	15:20	18:50	3:50	0.14 **	8/23/2021	11:05	13:40	2.58	2.69	0.290		

TOTAL MONTH FLOW VOLUME = 0.378

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Int. River & Poplar

**LOCATION:** 016

**NPDES Permit Outfall #:**

**MONTH:** August YEAR: 2021

**Average Low Temp:** 70

**Average High Temp:** 83

**Measured Rainfall:** 2.18

**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qave (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.95	6 month						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

**TOTAL MONTH FLOW VOLUME =** 0.524

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 638 Long Wharf Drive  
 021

**LOCATION:**  
**NPDES Permit Outfall #:**  
**MONTH:**  
 Average Low Temp:  
 Average High Temp:  
 Measured Rainfall:  
 Measured Snowfall:

August 2021  
 70  
 83  
 2.18  
 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**

Sea Street @ South Water Street  
024

**LOCATION:**

NPDES Permit Outfall #:

MONTH:

Average Low Temp:

Average High Temp:

Measured Rainfall:

Measured Snowfall:

August 2021  
70  
83  
2.18  
0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Clave (MGD)	OUTFALL Q volume (MG)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Intersection of State & N. Front Street  
 025  
 NPDES Permit Outfall #: 2021  
 MONTH: August YEAR: 2021  
 Average Low Temp: 70  
 Average High Temp: 83  
 Measured Rainfall: 2.18  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg volume (MGD)	OUTFALL volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP			DURATION (hours)
1	8/4/2021-8/5/2021	23:50	2:35	2.75	0.03	**						
2	8/8/2021	3:05	19:15	16.17	0.09	**						
3	8/19/2021	3:30	6:40	3.17	0.37	**						
4	8/22/2021	6:45	8:45	2.00	0.41	1 month						
5	8/22/2021	11:40	17:55	6.25	0.55	**						
6	8/23/2021	7:35	12:35	5.00	0.53	**						
7	8/23/2020	15:20	18:50	3.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000



# **METER DATA**

**JULY 2021**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - JULY 2021			
<u>MONTHLY RAINFALL SUMMARY</u>			
8.30 inches of rain (3.44 inches of rain in a typical month)			
No snow			
13 rain events (10 rain events in a typical month)			
One 25 year, one 2 year, one 6 month, and two 3 month storms. All other storms less than 1 month return frequency.			
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	1	1.241
CSO 005	REG 005	1	1.761
CSO 004	REG 004	3	2.537
CSO 003	REG 003	2	1.809
CSO 024	REG 024	1	0.848
CSO 009	REG 009	4	1.249
CSO 016	REG 016	6	1.888
CSO 015	REG 015	6	1.234
CSO 011	REG 011	3	0.981
CSO 025	REG 025	0	0.000
CSO 021	REG 021	3	2.845
<b>TOTAL</b>		<b>30</b>	<b>16.393</b>

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY

CSO FLOW MONITORING PROGRAM

METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 005	REG 006	1	0.789	1	0.791		
CSO 005	REG 005	3	1.166	3	1.168		
CSO 004	REG 004	4	1.719	4	1.722		
CSO 003	REG 003	4	1.330	4	1.333		
CSO 024	REG 024	2	1.213	2	1.216		
CSO 009	REG 009	16	1.570	16	1.573		
CSO 016	REG 016	31	6.255	31	6.268		
CSO 015	REG 015	33	4.487	33	4.496		
CSO 011	REG 011	6	0.848	6	0.850		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	13	7.720	13	7.736		
<b>TOTAL</b>		<b>113</b>	<b>27.098</b>	<b>113</b>	<b>27.154</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 003  
 MONTH: July YEAR: 2021  
 Average Low Temp: 68  
 Average High Temp: 81  
 Measured Rainfall: 8.30  
 Measured Snowfall: 0.00

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg Q volume (MGD)	OUTFALL Q volume (MG)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month						
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month						
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:00	17:20	0.33	3.48	0.048
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25 year	7/9/2021	7:05	10:45	3.67	12.01	1.761
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						

TOTAL MONTH FLOW VOLUME = 1.809

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 LOCATION: 004  
 NPDES Permit Outfall #: July YEAR: 2021  
 MONTH: 68  
 Average Low Temp: 81  
 Average High Temp: 8.30  
 Measured Rainfall: 0  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month	7/1/2021	22:40	23:00	0.33	2.77	0.039
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month						
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:00	17:30	0.50	8.35	0.174
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25 year	7/9/2021	7:05	11:20	4.25	13.12	2.324
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						

TOTAL MONTH FLOW VOLUME = 2.537

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG Derby Ave. 20 yds East of Ella T. Grasso Blvd.

LOCATION: 005

NPDES Permit Outfall #:

MONTH: July YEAR: 2021

Average Low Temp: 68

Average High Temp: 81

Measured Rainfall: 8.30

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)		
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month							
2	7/2/2021	18:55	23:55	5.00	0.16	**							
3	7/3/2021	6:55	20:35	13.67	0.28	**							
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month							
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month							
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year							
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25year	7/9/2021	8:10	10:50	2.67	12.01	1.761	
8	7/12/2021	0:20	4:30	4.17	0.09	**							
9	7/18/2021	0:45	7:20	6.58	0.09	**							
10	7/25/2021	4:50	7:55	3.08	0.12	**							
11	7/27/2021	20:30	20:50	0.33	0.07	**							
12	7/28/2021	0:50	2:25	1.58	0.06	**							
13	7/29/2021	16:25	21:40	5.25	0.49	**							

TOTAL MONTH FLOW VOLUME = 1.761

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 006  
 NPDES Permit Outfall #: July YEAR: 2021  
 MONTH: 68  
 Average Low Temp: 81  
 Average High Temp: 8.30  
 Measured Rainfall: 0  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month						
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month						
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year						
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25 year	7/9/2021	7:55	10:50	2.92	10.64	1.241
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						
<b>TOTAL MONTH</b>											<b>FLOW VOLUME =</b>	<b>1.241</b>

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Grand Avenue & James Street  
 009

NPDES Permit Outfall #: July YEAR: 2021

MONTH: 68

Average Low Temp: 81

Average High Temp: 8.20

Measured Rainfall: 0

Measured Snowfall:

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month	7/1/2021	22:40	23:10	0.50	4.38	0.076
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month	7/8/2021	2:55	3:05	0.17	2.59	0.018
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:05	17:30	0.42	10.24	0.178
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25year	7/9/2021	8:15	11:05	2.83	8.27	0.977
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						

TOTAL MONTH FLOW VOLUME = 1.249

Note: Overflow occurs when interceptor level reaches 30"



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: July YEAR: 2021  
 MONTH: 68  
 Average Low Temp: 81  
 Average High Temp: 8.30  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg (MGD)	OUTFALL Q volume (MG)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month	7/1/2021	22:40	23:20	0.67	2.49	0.069
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month						
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:05	18:10	1.08	1.74	0.078
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25year	7/9/2021	8:10	12:00	3.83	5.22	0.834
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						

TOTAL MONTH FLOW VOLUME = 0.981

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** 15 James Street  
**LOCATION:** 015

**NPDES Permit Outfall #:**

July YEAR: 2021

**MONTH:** 68

Average Low Temp: 81

Average High Temp: 8.30

Measured Rainfall: 0

Measured Snowfall:

EVENT No.	RAINFALL EVENT				CSO EVENT				OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)		
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START			STOP	DURATION (hours)
1	7/1-2/2021	13:35	5:15	15:75	1.04	3 month	7/1/2021	22:40	23:45	1.08	2.41	0.109
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month	7/6/2021	19:00	19:20	0.33	0.96	0.013
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month	7/8/2021	2:50	3:35	0.75	3.19	0.100
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:00	22:25	1.92	3.28	0.257
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25year	7/9/2021	6:05	12:10	6.08	2.77	0.703
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**	7/29/2021	21:30	22:05		2.14	0.052

TOTAL MONTH FLOW VOLUME = 1.234

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Int. River & Poplar  
**LOCATION:** 016  
**NPDES Permit Outfall #:**  
**MONTH:** July YEAR: 2021  
**Average Low Temp:** 68  
**Average High Temp:** 81  
**Measured Rainfall:** 8.30  
**Measured Snowfall:** 0

EVENT No.	RAINFALL EVENT				CSO EVENT				OUTFALL Q.volumne (MG)			
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START		STOP	DURATION (hours)	OUTFALL Q.vgve (MGD)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month	7/1/2021	22:40	23:45	1.08	3.17	0.143
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month	7/6/2021	19:00	19:20	0.33	1.18	0.016
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month	7/8/2021	2:45	3:35	0.83	4.56	0.158
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:00	17:10	0.17	11.03	0.077
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25year	7/9/2021	6:00	12:15	6.25	5.61	1.461
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**	7/29/2021	21:25	22:10	0.75	1.05	0.033
<b>TOTAL MONTH</b>										<b>FLOW VOLUME =</b>	<b>1.888</b>	

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 638 Long Wharf Drive  
 NPDES Permit Outfall #: 021  
 MONTH: July YEAR: 2021  
 Average Low Temp: 68  
 Average High Temp: 81  
 Measured Rainfall: 8.30  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Cavg (MGD)	OUTFALL Q volume (MG)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month	7/1/2021-7/2/2021	23:00	0:05	1.08	4.47	0.202
2	7/2/2021	18:55	23:55	5.00	0.16	**						
3	7/3/2021	6:55	20:35	13.67	0.28	**						
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month						
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month						
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year	7/8/2021	17:20	18:45	1.42	4.99	0.294
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25 year	7/9/2021	6:40	13:15	6.58	8.57	2.349
8	7/12/2021	0:20	4:30	4.17	0.09	**						
9	7/18/2021	0:45	7:20	6.58	0.09	**						
10	7/25/2021	4:50	7:55	3.08	0.12	**						
11	7/27/2021	20:30	20:50	0.33	0.07	**						
12	7/28/2021	0:50	2:25	1.58	0.06	**						
13	7/29/2021	16:25	21:40	5.25	0.49	**						

TOTAL MONTH FLOW VOLUME = 2.845

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
 LOCATION: Sea Street @ South Water Street  
 024  
 MONTH: July YEAR: 2021  
 Average Low Temp: 68  
 Average High Temp: 81  
 Measured Rainfall: 8.30  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month					
2	7/2/2021	18:55	23:55	5.00	0.16	**					
3	7/3/2021	6:55	20:35	13.67	0.28	**					
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month					
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month					
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year					
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25 year	7/9/2021	7:10	11:20	4.17	4.89
8	7/12/2021	0:20	4:30	4.17	0.09	**					
9	7/18/2021	0:45	7:20	6.58	0.09	**					
10	7/25/2021	4:50	7:55	3.08	0.12	**					
11	7/27/2021	20:30	20:50	0.33	0.07	**					
12	7/28/2021	0:50	2:25	1.58	0.06	**					
13	7/29/2021	16:25	21:40	5.25	0.49	**					
<b>TOTAL MONTH</b>										<b>FLOW VOLUME =</b>	<b>0.848</b>

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Intersection of State & N. Front Street  
 025  
**MONTH:** July YEAR: 2021  
**NPDES Permit Outfall#:** 68  
**Average Low Temp:** 81  
**Average High Temp:** 8.30  
**Measured Rainfall:** 0  
**Measured Snowfall:** 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q Avg volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	7/1-2/2021	13:35	5:15	15.75	1.04	3 month					
2	7/2/2021	18:55	23:55	5.00	0.16	**					
3	7/3/2021	6:55	20:35	13.67	0.28	**					
4	7/6/2021	18:30	20:25	1.92	0.33	1 to 3 month					
5	7/8/2021	2:25	2:40	0.25	0.32	3 to 6 month					
6	7/8/2021	15:15	21:45	6.50	1.36	1 to 2 year					
7	7/9/2021	2:15	11:45	9.50	3.79	10 to 25/year					
8	7/12/2021	0:20	4:30	4.17	0.09	**					
9	7/18/2021	0:45	7:20	6.58	0.09	**					
10	7/25/2021	4:50	7:55	3.08	0.12	**					
11	7/27/2021	20:30	20:50	0.33	0.07	**					
12	7/28/2021	0:50	2:25	1.58	0.06	**					
13	7/29/2021	16:25	21:40	5.25	0.49	**					

TOTAL MONTH  
 FLOW VOLUME = 0.000

# **METER DATA**

**JUNE 2021**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - JUNE 2021			
<u>MONTHLY RAINFALL SUMMARY</u>			
1.16 inches of rain (3.44 inches of rain in a typical month)			
No snow			
9 rain events (10 rain events in a typical month)			
One 1 month storm. All other storms less than 1 month return frequency.			
<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	0	0.000
CSO 016	REG 016	2	0.020
CSO 015	REG 015	2	0.024
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	0	0.000
<b>TOTAL</b>		<b>4</b>	<b>0.044</b>



**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY**

**CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(3)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>
CSO 006	REG 006	1	0.008	1	0.007		
CSO 005	REG 005	2	0.064	2	0.059		
CSO 004	REG 004	3	0.137	3	0.127		
CSO 003	REG 003	4	0.218	3	0.201		
CSO 024	REG 024	1	0.777	1	0.718		
CSO 009	REG 009	16	0.896	15	0.828		
CSO 016	REG 016	31	6.069	29	5.606		
CSO 015	REG 015	33	3.978	31	3.675		
CSO 011	REG 011	4	0.263	4	0.243		
CSO 025	REG 025	0	0.000	0	0.000		
CSO 021	REG 021	12	6.787	11	6.269		
<b>TOTAL</b>		<b>108</b>	<b>19.199</b>	<b>99</b>	<b>17.734</b>		

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 NPDES Permit Outfall #: 003  
 MONTH: June YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 80  
 Measured Rainfall: 1.16  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	6/3/2021	10:50	22:45	11.92	0.06	**					
2	6/8/2021	17:50	21:30	3.67	0.09	**					
3	6/9/2021	19:50	20:25	0.58	0.08	**					
4	6/12/2021	9:00	9:30	0.50	0.03	**					
5	6/14/2021	7:45	13:20	5.58	0.46	1 month					
6	6/19/2021	19:50	21:50	2.00	0.07	**					
7	6/22/2021	13:30	19:35	6.08	0.34	**					
8	6/25/2021	8:25	8:30	0.08	0.01	**					
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 67"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 NPDES Permit Outfall #: 004  
 MONTH: June YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 80  
 Measured Rainfall: 1.16  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	6/3/2021	10:50	22:45	11.92	0.06	**					
2	6/8/2021	17:50	21:30	3.67	0.09	**					
3	6/9/2021	19:50	20:25	0.58	0.08	**					
4	6/12/2021	9:00	9:30	0.50	0.03	**					
5	6/14/2021	7:45	13:20	5.58	0.46	1 month					
6	6/19/2021	19:50	21:50	2.00	0.07	**					
7	6/22/2021	13:30	19:35	6.08	0.34	**					
8	6/25/2021	8:25	8:30	0.08	0.01	**					
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 73"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG** Derby Ave. 20 yds East of Ella T. Grasso Blvd.

**LOCATION:** 005

**NPDES Permit Outfall #:**

**MONTH:** June YEAR: 2021

**Average Low Temp:** 63

**Average High Temp:** 80

**Measured Rainfall:** 1.16

**Measured Snowfall:** 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	6/3/2021	10:50	22:45	11.92	0.06	**					
2	6/8/2021	17:50	21:30	3.67	0.09	**					
3	6/9/2021	19:50	20:25	0.58	0.08	**					
4	6/12/2021	9:00	9:30	0.50	0.03	**					
5	6/14/2021	7:45	13:20	5.58	0.46	1 month					
6	6/19/2021	19:50	21:50	2.00	0.07	**					
7	6/22/2021	13:30	19:35	6.08	0.34	**					
8	6/25/2021	8:25	8:30	0.08	0.01	**					
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 NPDES Permit Outfall #: 006  
 MONTH: June YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 80  
 Measured Rainfall: 1.16  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month						
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**						
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 72"

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Grand Avenue & James Street  
**NPDES Permit Outfall #:** 009  
**MONTH:** June YEAR: 2021  
**Average Low Temp:** 63  
**Average High Temp:** 80  
**Measured Rainfall:** 1.16  
**Measured Snowfall:** 0.00

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q avg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month						
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**						
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: June YEAR: 2021  
 MONTH: 63  
 Average Low Temp: 80  
 Average High Temp: 1.16  
 Measured Rainfall: 0.00  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month						
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**						
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG      15 James Street  
 LOCATION:            015  
 NPDES Permit Outfall #:      June      YEAR:      2021  
 MONTH:                              63  
 Average Low Temp:              80  
 Average High Temp:             1.16  
 Measured Rainfall:              0.00  
 Measured Snowfall:

EVENT No.	RAINFALL EVENT					CSO EVENT						
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06 **							
2	6/8/2021	17:50	21:30	3.67	0.09 **							
3	6/9/2021	19:50	20:25	0.58	0.08 **							
4	6/12/2021	9:00	9:30	0.50	0.03 **							
5	6/14/2021	7:45	13:20	5.58	0.46 1 month	6/14/2021	8:45	9:00	0.25	1.14	0.012	
6	6/19/2021	19:50	21:50	2.00	0.07 **							
7	6/22/2021	13:30	19:35	6.08	0.34 **	6/22/2021	15:55	16:15	0.33	0.86	0.012	
8	6/25/2021	8:25	8:30	0.08	0.01 **							
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02 **							

TOTAL MONTH FLOW VOLUME = 0.024

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"



FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG  
 LOCATION: Int. River & Poplar 016  
 NPDES Permit Outfall #: 016  
 MONTH: June YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 80  
 Measured Rainfall: 1.16  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)		
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)	OUTFALL Qavg (MGD)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month	6/14/2021	8:45	8:55	0.17	1.01	0.007
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**	6/22/2021	15:50	16:10	0.33	0.90	0.013
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.020

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: 638 Long Wharf Drive  
 021  
 NPDES Permit Outfall #:   
 MONTH: June YEAR: 2021  
 Average Low Temp: 63  
 Average High Temp: 80  
 Measured Rainfall: 1.16  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month						
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**						
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Sea Street @ South Water Street  
**NPDES Permit Outfall #:** 024  
**MONTH:** June YEAR: 2021  
**Average Low Temp:** 63  
**Average High Temp:** 80  
**Measured Rainfall:** 1.16  
**Measured Snowfall:** 0.00

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/3/2021	10:50	22:45	11.92	0.06	**						
2	6/8/2021	17:50	21:30	3.67	0.09	**						
3	6/9/2021	19:50	20:25	0.58	0.08	**						
4	6/12/2021	9:00	9:30	0.50	0.03	**						
5	6/14/2021	7:45	13:20	5.58	0.46	1 month						
6	6/19/2021	19:50	21:50	2.00	0.07	**						
7	6/22/2021	13:30	19:35	6.08	0.34	**						
8	6/25/2021	8:25	8:30	0.08	0.01	**						
9	6/30/2020-7/1/2021	23:45	0:50	1.08	0.02	**						
											<b>TOTAL MONTH FLOW VOLUME =</b>	0.000

**Note:** Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

**CSO EVENTS LOG**  
**LOCATION:** Intersection of State & N. Front Street  
 025  
**MONTH:** June YEAR: 2021  
 63  
 Average Low Temp: 80  
 Average High Temp: 1.16  
 Measured Rainfall: 0.00  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT					CSO EVENT					OUTFALL Q Qavg (MGD)	OUTFALL volume (MG)
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)			
1	6/3/2021	10:50	22:45	11:92	0.06	**							
2	6/8/2021	17:50	21:30	3:67	0.09	**							
3	6/9/2021	19:50	20:25	0:58	0.08	**							
4	6/12/2021	9:00	9:30	0:50	0.03	**							
5	6/14/2021	7:45	13:20	5:58	0.46	1 month							
6	6/19/2021	19:50	21:50	2:00	0.07	**							
7	6/22/2021	13:30	19:35	6:08	0.34	**							
8	6/25/2021	8:25	8:30	0:08	0.01	**							
9	6/30/2020-7/1/2021	23:45	0:50	1:08	0.02	**							

TOTAL MONTH  
 FLOW VOLUME = 0.000

# **METER DATA**

**MAY 2021**

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
CSO FLOW MONITORING PROGRAM  
METER DATA SUMMARY - MAY 2021**

**MONTHLY RAINFALL SUMMARY**

4.84 inches of rain (3.44 inches of rain in a typical month)

No snow

8 rain events (10 rain events in a typical month)

Two 3 month storms. All other storms less than 1 month return frequency.

<u>CSO NUMBER</u>	<u>REGULATOR NUMBERS</u>	<u>CSO EVENTS</u>	<u>CSO VOLUME (MG)</u>
CSO 006	REG 006	0	0.000
CSO 005	REG 005	0	0.000
CSO 004	REG 004	0	0.000
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.010
CSO 016	REG 016	3	0.239
CSO 015	REG 015	3	0.639
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	0	0.000
<b>TOTAL</b>		<b>7</b>	<b>0.888</b>

**GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
CSO FLOW MONITORING PROGRAM**

**METER DATA SUMMARY - STCP ROLLING AVERAGE - TYPICAL YEAR ESTIMATES**

CSO NUMBER	REGULATOR NUMBERS	TYPICAL YEAR		TYPICAL YEAR		TYPICAL YEAR	
		CSO EVENTS BASED ON RAINFALL <sup>(1)</sup>	CSO VOLUME (MG) BASED ON RAINFALL <sup>(2)</sup>	CSO EVENTS BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(3)</sup>	CSO VOLUME (MG) BASED ON MONTHS <sup>(4)</sup>	
CSO 006	REG 006	1	0.008	1	0.008	0.008	
CSO 005	REG 005	2	0.066	2	0.066	0.063	
CSO 004	REG 004	3	0.140	3	0.140	0.134	
CSO 003	REG 003	4	0.222	4	0.222	0.213	
CSO 024	REG 024	1	0.793	1	0.793	0.760	
CSO 009	REG 009	16	0.915	16	0.915	0.877	
CSO 016	REG 016	30	6.180	29	6.180	5.922	
CSO 015	REG 015	32	4.043	31	4.043	3.874	
CSO 011	REG 011	4	0.269	4	0.269	0.258	
CSO 025	REG 025	0	0.000	0	0.000	0.000	
CSO 021	REG 021	13	6.928	12	6.928	6.638	
<b>TOTAL</b>		<b>107</b>	<b>19.565</b>	<b>102</b>	<b>19.565</b>	<b>18.746</b>	

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Events in the last two years / Rainfall in the last two years

(2) Estimated Typical Year CSO Volume (MG) Based on Rainfall Methodology = Typical Year Rainfall (3.44 in x 12 = 41.28 in) x CSO Volume (MG) in the last two years / Rainfall in the last two years

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 x CSO Events in the last two years / Meter Months in the last two years

(4) Estimated Typical Year CSO Volume (MG) Based on Monthly Methodology = 12 x CSO Volume (MG) in the last two years / Meter Months in the last two years

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Orange Ave. @ Int. of Ella T. Grasso Blvd.  
 NPDES Permit Outfall #: 003  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0.00

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month					
2	5/5/2021	4:35	17:30	12.92	0.16	**					
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**					
4	5/26/2021	21:15	22:45	1.50	0.03	**					
5	5/27/2021	1:30	3:00	1.50	0.07	**					
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month					
7	5/29/2021	9:00	13:25	4.42	0.24	**					
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 67"



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 Location: Ella T. Grasso Blvd. - 23 yds North of Legion Ave.  
 NPDES Permit Outfall #: 004  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month						
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month						
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 73"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Derby Ave. 20 yds East of Ella T. Grasso Blvd.  
 LOCATION: 005  
 NPDES Permit Outfall #: May YEAR: 2021  
 MONTH: 60  
 Average Low Temp: 69  
 Average High Temp: 4.84  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT				
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month						
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month						
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Whalley Ave. 30 yds from Fitch Street  
 NPDES Permit Outfall #: 006  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q. volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month					
2	5/5/2021	4:35	17:30	12.92	0.16	**					
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**					
4	5/26/2021	21:15	22:45	1.50	0.03	**					
5	5/27/2021	1:30	3:00	1.50	0.07	**					
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month					
7	5/29/2021	9:00	13:25	4.42	0.24	**					
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**					

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 72"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Grand Avenue & James Street

LOCATION: 009

NPDES Permit Outfall #: 009

MONTH: May YEAR: 2021

Average Low Temp: 60

Average High Temp: 69

Measured Rainfall: 4.84

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q <sub>v</sub> volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month	5/4/2021	2:50	3:10	0.33	0.010
2	5/5/2021	4:35	17:30	12.92	0.16	**					
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**					
4	5/26/2021	21:15	22:45	1.50	0.03	**					
5	5/27/2021	1:30	3:00	1.50	0.07	**					
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month					
7	5/29/2021	9:00	13:25	4.42	0.24	**					
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**					
TOTAL MONTH											0.010
FLOW VOLUME =											0.010

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011  
 NPDES Permit Outfall #: May YEAR: 2021  
 MONTH: 60  
 Average Low Temp: 69  
 Average High Temp: 4.84  
 Measured Rainfall: 0  
 Measured Snowfall:

EVENT No.	DATE	RAINFALL EVENT						CSO EVENT				
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month						
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month						
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG 15 James Street  
 LOCATION: 015  
 NPDES Permit Outfall #: May YEAR: 2021  
 MONTH: 60  
 Average Low Temp: 69  
 Average High Temp: 4.84  
 Measured Rainfall: 0  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT				CSO EVENT				OUTFALL Q Avg (MGD)	OUTFALL Q volume (MG)		
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START			STOP	DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month	5/4/2021	2:10	4:00	1.83	4.31	0.329
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month	5/28/2021-5/29/2021	21:40	1:05	2.25	2.31	0.216
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**	5/30/2021	20:40	21:20	0.67	3.39	0.094

TOTAL MONTH FLOW VOLUME = 0.639

Expected capacity of siphon is between 24 and 30 MGD.  
 Weir Height 40.5"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Int. River & Poplar  
 LOCATION: 016  
 NPDES Permit Outfall #: May YEAR: 2021  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0

EVENT No.	RAINFALL EVENT				CSO EVENT							
	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month	5/4/2021	2:10	3:45	1.58	2.66	0.175
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month	5/28/2021	21:40	23:25	1.75	0.63	0.046
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**	5/30/2021	20:40	21:20	0.67	0.63	0.018

TOTAL MONTH FLOW VOLUME = 0.239

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG 638 Long Wharf Drive

LOCATION: 021

NPDES Permit Outfall #:

MONTH: May YEAR: 2021

Average Low Temp: 60

Average High Temp: 69

Measured Rainfall: 4.84

Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month					
2	5/5/2021	4:35	17:30	12.92	0.16	**					
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**					
4	5/26/2021	21:15	22:45	1.50	0.03	**					
5	5/27/2021	1:30	3:00	1.50	0.07	**					
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month					
7	5/29/2021	9:00	13:25	4.42	0.24	**					
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**					

TOTAL MONTH FLOW VOLUME = 0.000



**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Sea Street @ South Water Street  
 NPDES Permit Outfall #: 024  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT				OUTFALL Q <sub>v</sub> volume (MG)	
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP		DURATION (hours)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month					
2	5/5/2021	4:35	17:30	12.92	0.16	**					
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**					
4	5/26/2021	21:15	22:45	1.50	0.03	**					
5	5/27/2021	1:30	3:00	1.50	0.07	**					
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month					
7	5/29/2021	9:00	13:25	4.42	0.24	**					
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**					

TOTAL MONTH  
 FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 83" in US & 99" in DS

**FLOW MONITORING REPORT SUMMARY TABLE**

CSO EVENTS LOG  
 LOCATION: Intersection of State & N. Front Street  
 NPDES Permit Outfall #: 025  
 MONTH: May YEAR: 2021  
 Average Low Temp: 60  
 Average High Temp: 69  
 Measured Rainfall: 4.84  
 Measured Snowfall: 0

EVENT No.	DATE	RAINFALL EVENT				CSO EVENT						
		START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Q <sub>avg</sub> (MGD)	OUTFALL Q volume (MG)
1	5/3/2021-5/4/2021	20:50	5:20	8.50	1.24	3 month						
2	5/5/2021	4:35	17:30	12.92	0.16	**						
3	5/9/2021-5/10/2021	18:50	5:40	10.83	0.72	**						
4	5/26/2021	21:15	22:45	1.50	0.03	**						
5	5/27/2021	1:30	3:00	1.50	0.07	**						
6	5/28/2021-5/29/2021	17:50	4:55	11.08	1.32	3 month						
7	5/29/2021	9:00	13:25	4.42	0.24	**						
8	5/30/2021-5/31/2021	8:30	0:45	16.25	1.06	**						

TOTAL MONTH FLOW VOLUME = 0.000