GNHWPCA
Protecting the Environment
Greater New Haven Water Pollution Control Authority
260 East Street New Haven, CT 06511
203.466.5280 p 203 772.1564 f www.gnhwpca.com

June 30, 2020

Mr. George V. Hicks, P.E,
Department of Energy and Environmental Protection
Planning & Standards Division
Bureau of Water Protection and Land Reuse
79 Elm Street
Hartford, CT 06106-5127

Subject: GNHWPCA Annual Progress Report
Consent Order WC5509

Dear Mr. Hicks:

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, 2019 and the date of this letter.

Attachment "C" is a listing of emails and letters between DEEP, EPA and the Authority from July 1, 2019 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.

Attachment "D" includes calibrated flow monitoring results obtained from all Permitted CSO outfalls between May 2019 and April 2020. 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
Bruce J. Kirkland, P.E., Senior Engineer

w/ Attachments

ATTACHMENT "A"

GNHWPCA

CSO LTCP

ANNUAL STATUS REPORT

FY 2020

2020 ANNUAL REPORT
ATTACHMENT "A"

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY
CSO LONG TERM CONTROL PLAN ANNUAL STATUS REPORT
June 30, 2020

1997 EXISTING CONDITIONS MODEL						
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 001	1	1	East Shore WPAF	New Haven Harbor	Active	No model data
CSO 002	2	2	E.T.G. Boulevard @ Lamberton Street	West River	Active	1.5
CSO 003	3	3	E.T.G.Boulevard @ Orange Avenue	West River	Active	0.7
CSO 004	4	4	E.T.G. Boulevard @ Legion Avenue	West River	Active	1.0
CSO 005	5	5	E.T.G. Boulevard @ Derby Avenue	West River	Active	2.4
CSO 005 (A)		6	University Place		Active	Discharges to CSO 005 outfall
CSO 005 (B)		7	Elm / University Place		Active	Discharges to CSO 005 outfall
CSO 006	6	8	Whalley Avenue @ Fitch Street	West River	Active	2.3
CSO 007	7	9	Munson Street @ Canal Street	Mill River	Closed	0.0
CSO 008	8	10	Munson Street @ Orchard Street	Beaver Ponds	Active	0.0
CSO 009	9	11	Grand Avenue @ James Street	Mill River	Active	0.5
CSO 010	10	12	East Street @ I-91	Mill River	Active	0.3
CSO 010 (A)		13	East Street @ I-91	Mill River	Active	Discharges to CSO 011 outfall
CSO 011	11	14	Humphrey Street @ I-91	Mill River	Active	6.2
CSO 012	12	15	Mitchell Drive east of Nicoll Street	Mill River	Active	1.0
CSO 013	13	16	Everitt Street @ East Rock Road	Mill River	Active	0.1
CSO 013 (A)		17	East Rock Road @ Everitt Street		Active	Discharges to CSO 013 outfall
CSO 014		18	Trumbull Street @ Orange Street	Mill River	Active	Discharges to CSO 011 outfall
CSO 015	14	19	James Street Siphon	Quinnipiac River	Active	1.5
CSO 016	15	20	Poplar Street @ River Street	Quinnipiac River	Active	1.4
CSO 017	16	21	Grand Avenue @ Front Street	Quinnipiac River	Closed	0.0
CSO 018	17	22	Lombard Street @ North Front Street	Quinnipiac River	Active	0.0
CSO 019	18	23	Pine Street @ North Front Street	Quinnipiac River	Active	0.4
CSO 020	19	24	Quinnipiac Avenue @ Clifton Street	Quinnipiac River	Active	0.1
CSO 021	20	25	East Street Pump Station	New Haven Harbor	Active	1.4
CSO 021 (A)		26	Chapel / Hamilton	New Haven Harbor	Active	Discharges to CSO 021 outfall
CSO 022	21	27	Allen Place	New Haven Harbor	Active	No model data
CSO 023	22	28	Chestnut Street @ Water Street	New Haven Harbor	Closed	0.0
CSO 024	23	29	Boulevard Pump Station	New Haven Harbor	Active	3.2
CSO 025	24	30	Union Pump Station	New Haven Harbor	Active	1.4
CSO 025 (A)		31	Elm / University Place	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 025 (B)		32	Grove / Whitney	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 026	25	33	Humphrey Pump Station	Mill River	Active	Discharges to CSO 011 outfall
CSO 027		34	East / Ives	Mill River	Active	0.4
CSO 028	26	35	Mitchell Pump Station	Mill River	Active	Discharges to CSO 012 outfall
CSO 029		36	Barnes Pump Station	Quinnipiac River	Active	No model data
CSO 030	27	37	Quinnipiac Pump Station	Quinnipiac River	Active	No model data
CSO 031		38	South Frontage / Davenport	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 032		39	Port Sea / Liberty	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 033		40	Carlisle / Liberty	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 034		41	George / Temple	New Haven Harbor	Active	Discharges to CSO 025 outfall
CSO 035	28	42	Woodward Pump Station	New Haven Harbor	Active	No model data
(not assigned)	29	43	Greene Street	New Haven Harbor	Active	0.3
N/A	30	44	Middletown / Front	Quinnipiac River	Closed	0.0
N/A	31	45	State / James	Mill River	Closed	0.0
CSO VOLUME (MG)						26.0
CSO VOLUME REDUCTION (%)						0.0
NUMBER OF ACTIVE CSO REGULATORS					40	
NUMBER OF INACTIVE / CLOSED CSO REGULATORS					5	
NUMBER OF ACTIVE CSO OUTFALLS					26	
NUMBER OF INACTIVE / CLOSED CSO OUFALLS					5	

CALIBRATED 2016 CONDITIONS MODEL			
CSO LTCP CAPITAL IMPROVEMENTS 1997-2016	2016 CSO REGULATOR STATUS	CALIBRATED 2016 CONDITONS MODEL 2-YEAR DESIGN STORM CSO VOLUME (MG)	REDUCTION 1997-2016 CSO VOLUME (MG)
	Active	No model data	
Truman Tank	Closed	0.0	1.5
Truman Tank	Active	0.9	-0.2
	Active	1.9	-0.9
	Active	1.2	1.2
	Closed		
	Closed		
	Active	2.3	0.0
	Closed	0.0	0.0
	Closed	0.0	0.0
	Active	0.4	0.1
Sewer Separation	Closed	0.0	0.3
	Active	Discharges to CSO 011 outfall	Discharges to CSO 011 outfall
Sewer Separation	Active	2.6	3.6
Sewer Separation	Active	0.2	0.8
Sewer Separation	Closed	0.0	0.1
	Closed		
	Closed		
	Active	0.7	0.8
	Active	1.5	-0.1
	Closed	0.0	0.0
Sewer Separation	Closed	0.0	0.0
Sewer Separation	Closed	0.0	0.4
	Active	0.1	0.0
Sewer Separation	Active	1.5	-0.1
Sewer Separation	Closed		0.0
Sewer Separation	Closed		
	Closed	0.0	0.0
Truman Tank	Active	0.0	3.2
Sewer Separation	Active	1.0	0.4
Sewer Separation	Closed		
Sewer Separation	Closed		
Sewer Separation	Active	Discharges to CSO 011 outfall	Discharges to CSO 011 outfall
	Closed	0.0	0.4
	Active	Discharges to CSO 012 outfall	Discharges to CSO 012 outfall
Pump Station Upgrade	Closed		
Pump Station Upgrade	Closed		
Sewer Separation	Closed		
Sewer Separation	Closed		
Sewer Separation	Closed		
Sewer Separation	Active	Discharges to CSO 025 outfall	Discharges to CSO 025 outfall
	Closed		
	Closed	0.0	0.3
	Closed	0.0	0.0
	Closed	0.0	0.0
		14.3	11.7
		45%	
	18		
	27		
	14		
	17		

2020 STATUS			
NPDES PERMIT CSO REFERENCE NO.	NPDES PERMIT CSO REF. NO.	CSO LTCP AND REGULATOR IMPROVEMENTS 2013-2020	2020 CSO REGULATOR STATUS
CSO 001	CSO 001	Wet Weather Improvements	Active
CSO 002			Closed
CSO 003	CSO 003	CSO Regulator Improvements completed in 2020 - weir raised 16 inches	Active
CSO 004	CSO 004	Weir raised 8 inches in 2014, CSO Regulator Improvements completed in 2020 - weir raised 24 inches	Active
CSO 005	CSO 005	Weir raised 1.45 feet in 2014	Active
CSO 005 (A)			Closed
CSO 005 (B)			Closed
CSO 006	CSO 006	CSO Regulator Improvements completed in 2020 - weir raised 42 inches	Active
CSO 007			Closed
CSO 008		Closed in 2014	Closed
CSO 009	CSO 009	Weir raised 8 inches in 2015, I&I Project complete	Active
CSO 010		Closed in 2014	Closed
CSO 010 (A)	R 010 (A)	Closed in 2020	Closed
CSO 011	CSO 011	Sewer Separation Design Complete	Active
CSO 012	CSO 012	Closed in 2018	Closed
CSO 013		Closed in 2014	Closed
CSO 013 (A)			Closed
CSO 014		Closed in 2014	Closed
CSO 015	CSO 015	I&I Project complete	Active
CSO 016	CSO 016	Replaced duckbill in 2018	Active
CSO 017			Closed
CSO 018			Closed
CSO 019	CSO 019	Closed in 2015	Closed
CSO 020	CSO 020	Closed in 2019	Closed
CSO 021	CSO 021	Sewer Separation Design Complete; Duckbill 2013	Active
CSO 021 (A)			Closed
CSO 022			Closed
CSO 023			Closed
CSO 024	CSO 024	Weir raised 1.5 feet in 2017	Active
CSO 025	CSO 025	Weir raised 9.15 feet in 2019	Active
CSO 025 (A)			Closed
CSO 025 (B)			Closed
CSO 026	R 026	Closed in 2019	Closed
CSO 027			Closed
CSO 028	R 028	Closed in 2018	Closed
CSO 029			Closed
CSO 030			Closed
CSO 031		Closed in 2013	Closed
CSO 032		Closed in 2014	Closed
CSO 033			Closed
CSO 034	R 034	Closed in 2019	Closed
CSO 035			Closed
(not assigned)		Closed in 2014	Closed
N/A			Closed
N/A			Closed
			12
			33
			12
			19

LONG TERM CONTROL PLAN GOAL		
PROPOSED CAPITAL IMPROVEMENTS	CSO LTCP FINAL CSO STATUS	CSO LTCP FUTURE CONDITIONS MODEL 2-YEAR DESIGN STORM CSO VOLUME (MG)
Wet Weather Improvements	Active w/ Treatment	No model data
	Closed	0.00
CSO Storage Tank	Inactive	0.00
CSO Storage Tank	Inactive	0.00
CSO Storage Tank	Inactive	0.00
	Closed	0.00
	Closed	0.00
CSO Storage Tank	Inactive	0.00
	Closed	0.00
	Closed	0.00
Sewer Separation	Inactive	0.00
	Closed	0.00
	Closed	0.00
CSO Storage Tank	Inactive	0.00
Sewer Separation & CSO Storage Tank	Inactive	0.00
Sewer Separation & CSO Storage Tank	Inactive	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
Major Pump Station Upgrade	Inactive	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
Major Pump Station Upgrade & CSO Storage Tank	Inactive	0.00
Major Pump Station Upgrade	Inactive	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
	Closed	0.00
		0.00
		100%
	0	
	45	
	0	
	31	

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 2020

GNHWPCA
Protecting the Environment

2020 ANNUAL REPORT
ATTACHMENT "B"

FY 2020 DEEP LETTER CORRESPONDENCE

APPROVAL DATE	LETTER TYPE	CWF #	PROJECT	Amount	TO	FROM
08/06/19	Change Order #2 Approval	711-DC	2016-07 CSO Reduction Utilizing Green Infrastructure	-$200,280.15	Sid Holbrook	Denise Ruzicka, PE
08/06/19	Agreement Approval	727 D	Design of Process Air Compressor System for Low Level Nitrogen Removal	$687,605	Sid Holbrook	Denise Ruzicka, PE
10/11/19	Report Approval	TBD	Orchard Street Sewer Separation		Sid Holbrook	Brian P. Thompson
10/25/19	Agreement Approval	TBD	2016-06 I/I Phase 3 Design Middle Thorpe Drive & Paradise Ave Hamden & Areas 5,9,13 East Haven	$19,804	Sid Holbrook	Jennifer Perry, PE
··/08/19	Agreement Approval	727 D	Design of Process Air Compressor System for Low Level Nitrogen Removal	$687,605	Sid Holbrook	Jennifer Perry, PE
11/08/19	Agreement Approval	TBD	2016-06 I/I Phase 3 Design Middle Thorpe Drive & Paradise Ave Hamden & Areas 5,9,13 East Haven	$19,804	Sid Holbrook	Jennifer Perry, PE
11/22/19	Change Order #2 Approval	711-DC	2016-03 West River CSO Improvement Project	$78,843.80	Sid Holbrook	Jennifer Perry, PE
02/03/20	95% Design Comments	TBD	2016-06 I/I Phase 3 Design Middle Thorpe Drive & Paradise Ave Hamden & Areas 5,9,13 East Haven		Mario Ricozzi	Steve Muollo

ATTACHMENT "C"

DEEP / GNHWPCA

LETTER & EMAIL

CORRESPONDENCE

FY 2020

GNHWPCA
Protecting the Environment

2020 ANNUAL REPORT
ATTACHMENT "C"

FY 2020 GNHWPCA LETTER & E-MAIL CORRESPONDENCE/TRANSMITTALS					
DATE	DOCUMENT TYPE	Ref/CWF #	PROJECT	TO	FROM
07/10/19	Email	TBD	CWF-2018-01D East St PS and Process Air Application	George Hicks	Tom Sgroi
08/07/19	Email	N/A	Regulator and CSO Outfall 020 Closure	George Hicks / Denise Ruzicka	Tom Sgroi
08/12/19	Email (1)	N/A	CSO Outfall 27 Investigation (2:05pm)	George Hicks	Tom Sgroi
08/12/19	Email (2)	N/A	CSO Outfall 27 Investigation (4:25pm)	George Hicks	Tom Sgroi
08/15/19	Email	N/A	CSO Outfall 27 Investigation Closeout	George Hicks	Tom Sgroi
09/11/19	Email	Consent Order	Draft Consent Order Modification	George Hicks	Tom Sgroi
09/12/19	Email	N/A	Regulator and CSO Outfall 026 Closure	George Hicks / Denise Ruzicka	Tom Sgroi
09/20/19	Email		PD Report - Orchard St Sewer Separation Project	George Hicks/ Steve Muollo	Tom Sgroi
09/20/19	Email	N/A	CWF Status Report	George Hicks/ Steve Muollo	Tom Sgroi
10/08/19	Email	Consent Order	Added language to draft Consent Order Mod	George Hicks	Bruce Kirkland
11/13/19	Email	Priority List	FY20-21 Priority List	George Hicks	Tom Sgroi
01/15/20	Email	N/A	CSO Regulator Modifications	George Hicks / Jennifer Perry	Tom Sgroi
01/16/20	Email	N/A	Various Project Status	George Hicks	Tom Sgroi
01/17/20	Email	Consent Order	Executed Copy of Consent Order Modification 2	George Hicks	Tom Sgroi
03/13/20	Email	N/A	CSO Regulator 10A Closure	George Hicks / Jennifer Perry	Tom Sgroi

ATTACHMENT "D"

ANNUAL CSO FLOW MONITORING DATA

JUNE 2020

ATTACHMENT "D"

JUNE 2020
ANNUAL CSO FLOW MONITORING PROGRAM DATA

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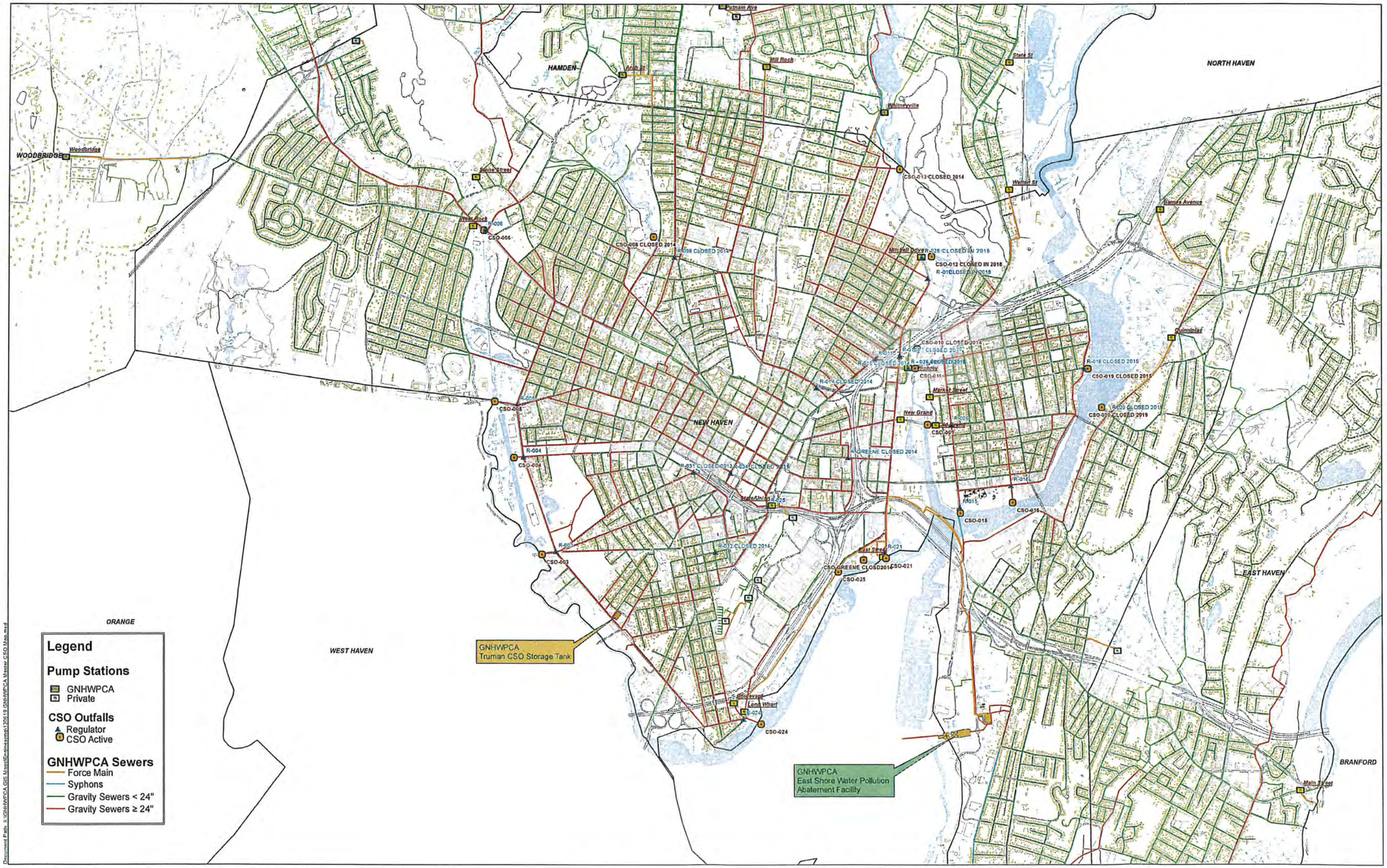
UPDATED SEWER MAP



Document Path: X:\GNHWPCA GIS Mapsl\Engineering\120619 GNHWPCA Master CSO Main.mxd

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Disclaimer:

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

N

1 inch = 1,250 feet

6/30/2019

REGULATOR & CSO DESIGNATIONS & STATUS

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY							
REGULATOR AND CSO DESIGNATIONS AND STATUS							
6/30/2020							
(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
#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	Active
#016	Poplar St @ River St	Quinnipiac River	Active	#016	Active	#016	Weir repaired in 2014
#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
				11	**ACTIVE CSOs**	**11**	**ACTIVE REGULATORS**
(1) NPDES Permit # CT 0100366 dated February 9, 2016							
(2) Ongoing CSO Flow Monitoring Program initiated in June 2012							

METER LOCATION

SUMMARY

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY
CSO FLOW MONITORING PROGRAM
METER LOCATION SUMMARY
JUNE 30, 2020

UPDATED 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).
- 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 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 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).
- 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 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 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 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). 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 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 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.
- 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.
- There is significant tidal influence at Meter OF-009 Overflow. A new check valve is scheduled to be installed in CSO Outfall 009 in 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.

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 1n October 2012 at an invert elevation of -2.15 feet. The overflow depth is 40.5 inches.
- 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.
- CSO start and stop times are based on depths greater than 40.5 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 is scheduled to be installed in the chamber just upstream of CSO Outfall 015 in 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. The data from 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.
- 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 28.5 inches.

- The regulator consists of a 3.8 foot long brick weir at an elevation of 2.35 feet.
- CSO start and stop times are based on depths greater than 28.5 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 Quinnipiac 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.
- 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.
- 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 depths above the overflow weir 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 -2.22 feet. The overflow depth is 83 inches.
- 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 99 inches.
- 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.
- CSO start and stop times are based on depths above the overflow weir 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 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. The bottom of the roof slab is at elevation 16.66 feet leaving a 27 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 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 - 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 2019 – APRIL 2020

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - MAY 2019 THROUGH APRIL 2020					
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**	**RAINFALL (IN)**	**METER MONTHS**
CSO 006	REG 006	5	1.275	30.56	6
CSO 005	REG 005	10	0.757	51.39	12
CSO 004	REG 004	10	1.592	30.56	7
CSO 003	REG 003	9	1.760	30.56	7
CSO 024	REG 024	7	3.951	51.39	12
CSO 009	REG 009	16	1.229	51.39	12
CSO 016	REG 016	37	16.680	51.39	12
CSO 015	REG 015	38	4.517	55.23	12
CSO 011	REG 011	11	4.282	51.39	12
CSO 025	REG 025	0	0.000	51.39	12
CSO 021	REG 021	18	13.904	51.39	12
TOTAL		**161**	**49.947**		

METER DATA

APRIL 2020

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - APRIL 2020			
MONTHLY RAINFALL SUMMARY			
5.48 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
11 rain events (10 rain events in a typical month)			
Three 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	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	0.089
CSO 016	REG 016	5	0.954
CSO 015	REG 015	5	0.282
CSO 011	REG 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.002
TOTAL		**14**	**1.327**

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 CSO EVENTS BASED ON RAINFALL[1]	TYPICAL YEAR CSO VOLUME (MG) BASED ON RAINFALL[2]	TYPICAL YEAR CSO EVENTS BASED ON MONTHS[3]	TYPICAL YEAR CSO VOLUME (MG) BASED ON MONTHS[4]
CSO 006	REG 006	0	0.000	0	0.000
CSO 005	REG 005	5	0.047	6	0.051
CSO 004	REG 004	5	0.107	6	0.117
CSO 003	REG 003	5	0.456	6	0.498
CSO 024	REG 024	3	0.593	3	0.648
CSO 009	REG 009	16	0.918	18	1.002
CSO 016	REG 016	33	9.301	36	10.155
CSO 015	REG 015	33	2.797	36	3.054
CSO 011	REGS 010A, 011	3	0.165	3	0.180
CSO 025	REG 025	0	0.000	0	0.000
CSO 021	REG 021	11	5.432	12	5.931
TOTAL		**115**	**19.816**	**126**	**21.636**

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall x CSO Events since the STCP improvements / Rainfall since the STCP improvements

(2) Estimated Typical Year CSO Volume Based on Rainfall Methodology = Typical Year Rainfall x CSO Volume since the STCP improvements / Rainfall since the STCP improvements

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 months x CSO Events since the STCP improvements / Meter Months since the STCP improvements

(4) Estimated Typical Year CSO Volume Based on Monthly Methodology = 12 months x CSO Volume since the STCP improvements / Meter Months since the STCP improvements

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Orange Ave. @ Int. of Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: April **YEAR:** 2020
Average Low Temp: 40
Average High Temp: 55
Measured Rainfall: 5.48
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

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 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: April **YEAR:** 2020
Average Low Temp: 40
Average High Temp: 55
Measured Rainfall: 5.48
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

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 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

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:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month	4/9/2020	13:20	15:00	1.67	1.104	0.077
5	4/13/2020	3:15	17:40	14.42	1.52	3 month	4/13/2020	12:10	12:25	0.25	0.123	0.001
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month	4/21/2020	16:00	16:15	0.25	1.028	0.011
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

TOTAL MONTH FLOW VOLUME = 0.089

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: April YEAR: 2020
Average Low Temp: 40
Average High Temp: 55
Measured Rainfall: 5.48
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

TOTAL MONTH FLOW VOLUME = 0.000

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**	4/8/2020	5:05	5:45	0.67	1.640	0.046
4	4/9/2020	9:35	15:25	5.83	0.83	3 month	4/9/2020	12:25	15:45	3.33	0.353	0.049
5	4/13/2020	3:15	17:40	14.42	1.52	3 month	4/13/2020	7:15	16:50	9.58	5.470	0.090
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month	4/21/2020	16:00	17:20	1.33	0.105	0.006
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**	5/1/2020	0:05	1:20	1.25	1.741	0.091

TOTAL MONTH FLOW VOLUME = 0.282

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:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**	4/8/2020	5:00	5:45	0.75	2.470	0.077
4	4/9/2020	9:35	15:25	5.83	0.83	3 month	4/9/2020	12:15	15:45	3.50	1.116	0.163
5	4/13/2020	3:15	17:40	14.42	1.52	3 month	4/13/2020	7:10	17:00	9.83	1.157	0.474
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month	4/21/2020	15:55	16:55	1.00	2.690	0.112
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**	5/1/2020	0:00	1:20	1.33	2.301	0.128

TOTAL MONTH FLOW VOLUME = 0.954

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month	4/13/2020	12:50	13:05	0.25	0.148	0.002
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

TOTAL MONTH FLOW VOLUME = 0.002

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	April	YEAR:	2020
Average Low Temp:	40		
Average High Temp:	55		
Measured Rainfall:	5.48		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

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: April **YEAR:** 2020
Average Low Temp: 40
Average High Temp: 55
Measured Rainfall: 5.48
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	4/3/2020	0:30	12:25	11.92	0.09	**						
2	4/6/2020	4:25	4:30	0.08	0.01	**						
3	4/8/2020	2:00	5:10	3.17	0.33	**						
4	4/9/2020	9:35	15:25	5.83	0.83	3 month						
5	4/13/2020	3:15	17:40	14.42	1.52	3 month						
6	4/17/2020-4/18/2020	21:20	12:20	15.00	0.45	**						
7	4/21/2020	13:35	20:10	6.58	0.50	3 month						
8	4/24/2020	0:55	14:30	13.58	0.49	**						
9	4/26/2020	13:10	20:30	7.33	0.10	**						
10	4/30/2020	3:50	11:35	7.75	0.62	**						
11	4/30/2020-5/1/2020	22:30	13:50	15.33	0.54	**						

TOTAL MONTH FLOW VOLUME = 0.000

METER DATA

MARCH 2020

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - MARCH 2020			
MONTHLY RAINFALL SUMMARY			
4.21 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
11 rain events (10 rain events in a typical month)			
One 3 month and one 1 month storms. All other storms less than 1 month return frequency.			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
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	1	0.109
CSO 024	REG 024	1	0.216
CSO 009	REG 009	1	0.079
CSO 016	REG 016	4	1.094
CSO 015	REG 015	4	0.470
CSO 011	REGS 010A, 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	1.201
TOTAL		**12**	**3.169**

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 CSO EVENTS BASED ON RAINFALL[1]	TYPICAL YEAR CSO VOLUME (MG) BASED ON RAINFALL[2]	TYPICAL YEAR CSO EVENTS BASED ON MONTHS[3]	TYPICAL YEAR CSO VOLUME (MG) BASED ON MONTHS[4]
CSO 006	REG 006	0	0.000	0	0.000
CSO 005	REG 005	9	0.074	8	0.068
CSO 004	REG 004	9	0.169	8	0.156
CSO 003	REG 003	9	0.718	8	0.664
CSO 024	REG 024	4	0.934	4	0.864
CSO 009	REG 009	13	1.060	12	0.980
CSO 016	REG 016	30	10.516	28	9.724
CSO 015	REG 015	30	3.184	28	2.944
CSO 011	REGS 010A, 011	4	0.260	4	0.240
CSO 025	REG 025	0	0.000	0	0.000
CSO 021	REG 021	13	8.544	12	7.900
TOTAL		**121**	**25.458**	**112**	**23.540**

(1) Estimated Typical Year CSO Events Based on Rainfall Methodology = Typical Year Rainfall x CSO Events since the STCP improvements / Rainfall since the STCP improvements

(2) Estimated Typical Year CSO Volume Based on Rainfall Methodology = Typical Year Rainfall x CSO Volume since the STCP improvements / Rainfall since the STCP improvements

(3) Estimated Typical Year CSO Events Based on Monthly Methodology = 12 months x CSO Events since the STCP improvements / Meter Months since the STCP improvements

(4) Estimated Typical Year CSO Volume Based on Monthly Methodology = 12 months x CSO Volume since the STCP improvements / Meter Months since the STCP improvements

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Orange Ave. @ Int. of Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0.00

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	18:50	21:45	2.92	0.893	0.109
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.109

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 #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

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 yrds East of Ella T. Grasso Blvd.
LOCATION: 005
NPDES Permit Outfall #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 82"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	March	YEAR:	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

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 #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	18:25	19:15	0.83	2.286	0.079
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.079

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	March	YEAR:	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

10A Outfall closed on or about March 1

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	March	YEAR:	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**	3/13/2020	9:00	9:35	0.58	3.345	0.081
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month	3/19/2020	7:45	8:15	0.50	2.771	0.058
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	18:00	21:30	3.50	1.772	0.258
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**	3/29/2020	5:35	12:10	6.58	3.629	0.073
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.470

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:	March	YEAR:	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**	3/13/2020	8:55	9:35	0.67	3.498	0.097
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month	3/19/2020	7:40	8:15	0.58	5.677	0.138
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	17:55	21:35	3.67	4.439	0.678
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**	3/29/2020	5:25	12:10	6.75	0.644	0.181
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 1.094

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	March	**YEAR:**	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	18:55	21:50	2.92	9.880	1.201
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 1.201

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	March	**YEAR:**	2020
Average Low Temp:	36		
Average High Temp:	52		
Measured Rainfall:	4.21		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	3/3/2020	0:15	2:45	2.50	0.03	**						
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month	3/23/2020	20:25	21:50	1.42	3.652	0.216
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.216

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: March **YEAR:** 2020
Average Low Temp: 36
Average High Temp: 52
Measured Rainfall: 4.21
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	3/3/2020	0:15	2:45	2.50	0.03							
2	3/3/2002-3/4/2020	16:20	0:00	7.67	0.26	**						
3	3/6/2020	21:00	22:20	1.33	0.02	**						
4	3/12/2020-3/13/2020	21:50	3:55	6.08	0.30	**						
5	3/13/2020	8:05	11:55	3.83	0.37	**						
6	3/17/2020	3:50	10:00	6.17	0.11	**						
7	3/19/2020	2:05	8:50	6.75	0.79	1 month						
8	3/20/2020	20:05	20:10	0.08	0.01	**						
9	3/23/2020	11:20	21:25	10.08	1.49	3 month						
10	3/28/2020-3/29/2020	15:40	12:20	20.67	0.77	**						
11	3/29/2020	18:40	20:10	1.50	0.06	**						

TOTAL MONTH FLOW VOLUME = 0.000

METER DATA

FEBRUARY 2020

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - FEBRUARY 2020			
MONTHLY RAINFALL SUMMARY			
3.52 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
10 rain events (10 rain events in a typical month)			
One 3 month and one 1 month storms. All other storms less than 1 month return frequency.			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REG 006	0	0.000
CSO 005	REG 005	1	0.001
CSO 004	REG 004	1	0.019
CSO 003	REG 003	1	0.057
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.096
CSO 016	REG 016	2	0.886
CSO 015	REG 015	2	0.165
CSO 011	REGS 010A, 011	0	0.000
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.456
TOTAL		**9**	**1.680**

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 CSO EVENTS BASED ON RAINFALL[1]	TYPICAL YEAR CSO VOLUME (MG) BASED ON RAINFALL[2]	TYPICAL YEAR CSO EVENTS BASED ON MONTHS[3]	TYPICAL YEAR CSO VOLUME (MG) BASED ON MONTHS[4]
CSO 006	REG 006	15	4.574	21	6.319
CSO 005	REG 005	9	0.682	11	0.879
CSO 004	REG 004	18	3.767	23	4.930
CSO 003	REG 003	16	3.117	21	4.079
CSO 024	REG 024	5	2.751	7	3.545
CSO 009	REG 009	13	1.194	17	1.539
CSO 016	REG 016	25	11.178	32	14.404
CSO 015	REG 015	26	3.563	33	4.591
CSO 011	REGS 010A, 011	10	4.804	14	6.190
CSO 025	REG 025	6	1.922	7	2.442
CSO 021	REG 021	12	8.736	16	11.257
TOTAL		**156**	**46.286**	**202**	**60.175**

(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	3:05	3:30	0.42	3.294	0.057

TOTAL MONTH FLOW VOLUME = 0.057

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 #:
MONTH: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	3:10	3:35	0.42	1.098	0.019

TOTAL MONTH FLOW VOLUME = 0.019

Note: Overflow occurs when Interceptor level reaches 73"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	February	YEAR:	2020
Average Low Temp:	35		
Average High Temp:	51		
Measured Rainfall:	3.52		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	3:20	3:30	0.17	0.085	0.001

TOTAL MONTH FLOW VOLUME = 0.001

Note: Overflow occurs when Interceptor level reaches 82"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave, 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	February	YEAR:	2020
Average Low Temp:	35		
Average High Temp:	51		
Measured Rainfall:	3.52		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

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: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	3/27/2020	2:45	3:45	1.00	2.294	0.096

TOTAL MONTH FLOW VOLUME = 0.096

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	February	YEAR:	2020
Average Low Temp:	35		
Average High Temp:	51		
Measured Rainfall:	3.52		
Measured Snowfall:	0		

	RAINFALL EVENT						CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: February YEAR: 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

TOTAL MONTH
FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	February	YEAR:	2020
Average Low Temp:	35		
Average High Temp:	51		
Measured Rainfall:	3.52		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month	2/13/2020	4:30	4:55	0.42	1.026	0.018
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	2:05	4:30	2.42	1.464	0.147

TOTAL MONTH FLOW VOLUME = 0.165

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:	February	**YEAR:**	2020
Average Low Temp:	35		
Average High Temp:	51		
Measured Rainfall:	3.52		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month	2/13/2020	4:00	5:00	1.00	5.768	0.240
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	2:00	4:35	2.58	5.998	0.646

TOTAL MONTH FLOW VOLUME = 0.886

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG 638 Long Wharf Drive
LOCATION: 021
NPDES Permit Outfall #:
MONTH: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month	2/27/2020	2:55	4:50	1.92	5.706	0.456

TOTAL MONTH FLOW VOLUME = 0.456

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Sea Street @ South Water Street
LOCATION: 024
NPDES Permit Outfall #:
MONTH: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

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: February **YEAR:** 2020
Average Low Temp: 35
Average High Temp: 51
Measured Rainfall: 3.52
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	2/5/2020	0:15	2:05	1.83	0.06	**						
2	2/6/2020	1:05	18:30	17.42	0.27	**						
3	2/7/2020	0:40	16:40	16.00	0.28	**						
4	2/10/2020	5:55	8:25	2.50	0.10	**						
5	2/10/2020-2/11/2020	13:25	14:50	25.42	0.53	**						
6	2/12/2020-2/13/2020	23:15	6:30	7.25	0.72	1 month						
7	2/13/2020	10:30	14:55	4.42	0.13	**						
8	2/18/2020	15:00	17:10	2.17	0.06	**						
9	2/25/2020-2/26/2020	18:25	6:15	11.83	0.26	**						
10	2/27/2020	0:15	6:40	6.42	1.11	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

METER DATA

JANUARY 2020

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - JANUARY 2020			
MONTHLY RAINFALL SUMMARY			
1.81 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
9 rain events (10 rain events in a typical month)			
One 3 month storm. All other storms less than 1 month return frequency.			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REG 006	0	0.000
CSO 005	REG 005	1	0.016
CSO 004	REG 004	1	0.020
CSO 003	REG 003	0	0.000
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.070
CSO 016	REG 016	1	0.451
CSO 015	REG 015	1	0.101
CSO 011	REGS 010A, 011	1	0.060
CSO 025	REG 025	0	0.000
CSO 021	REG 021	1	0.318
TOTAL		**7**	**1.036**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REG 006	16	4.670	23	6.621
CSO 005	REG 005	8	0.669	11	0.880
CSO 004	REG 004	18	3.772	25	5.067
CSO 003	REG 003	17	3.309	23	4.444
CSO 024	REG 024	5	2.694	7	3.545
CSO 009	REG 009	13	1.161	18	1.527
CSO 016	REG 016	24	10.665	32	14.033
CSO 015	REG 015	25	3.712	34	4.884
CSO 011	REGS 010A, 011	11	4.882	15	6.423
CSO 025	REG 025	6	1.880	7	2.442
CSO 021	REG 021	13	8.449	17	11.116
TOTAL		**158**	**45.861**	**211**	**60.981**
(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month						
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

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 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:15	18:40	0.42	1.161	0.020
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.020

Note: Overflow occurs when Interceptor level reaches 73"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	January	**YEAR:**	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:15	18:35	0.33	1.134	0.016
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.016

Note: Overflow occurs when Interceptor level reaches 82"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave..30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	January	YEAR:	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month						
9	1/31/2020-2/1/2020	22:45	0:40	1.92	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: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:15	18:45	0.50	3.381	0.070
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.070

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	January	YEAR:	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month						
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:25	18:40	0.25	5.772	0.060
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.060

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:25	18:40	0.25	5.772	0.060
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.060

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	January	YEAR:	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	17:35	19:55	2.33	1.041	0.101
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.101

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:	January	**YEAR:**	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	17:50	19:10	1.33	8.115	0.451
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.451

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	January	YEAR:	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month	1/25/2020	18:35	20:05	1.50	5.085	0.318
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME =	0.318

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	January	**YEAR:**	2020
Average Low Temp:	30.03		
Average High Temp:	43.77		
Measured Rainfall:	1.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month						
9	1/31/2020-2/1/2020	22:45	0:40	1.92	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 Intersection of State & N. Front Street
LOCATION: 025
NPDES Permit Outfall #:
MONTH: January **YEAR:** 2020
Average Low Temp: 30.03
Average High Temp: 43.77
Measured Rainfall: 1.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	1/3/2020-1/4/2020	5:10	12:55	31.75	0.30	**						
2	1/5/2020	0:20	6:10	5.83	0.03	**						
3	1/7/2020-1/8/2020	21:15	0:00	2.75	0.06	**						
4	1/12/2020	2:30	5:00	2.50	0.05	**						
5	1/14/2020	17:30	17:45	0.25	0.02	**						
6	1/16/2020	2:05	5:40	3.58	0.05	**						
7	1/18/2020-1/19/2020	23:20	9:25	10.08	0.39	**						
8	1/25/2020	10:30	19:40	9.17	0.89	3 month						
9	1/31/2020-2/1/2020	22:45	0:40	1.92	0.02	**						

TOTAL MONTH FLOW VOLUME = 0.000

METER DATA

DECEMBER 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - DECEMBER 2019			
MONTHLY RAINFALL SUMMARY			
7.57 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
11 rain events (10 rain events in a typical month)			
One 2 year and two 1 month storms. All other storms less than 1 month return frequency.			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	1	0.012
CSO 004	REG 004	NO DATA	NO DATA
CSO 003	REG 003	NO DATA	NO DATA
CSO 024	REG 024	1	0.871
CSO 009	REG 009	1	0.257
CSO 016	REG 016	4	2.339
CSO 015	REG 015	3	0.515
CSO 011	REGS 010A, 011	1	0.489
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	3	2.211
TOTAL		**14**	**6.694**

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 CSO EVENTS BASED ON RAINFALL[1]	TYPICAL YEAR CSO VOLUME (MG) BASED ON RAINFALL[2]	TYPICAL YEAR CSO EVENTS BASED ON MONTHS[3]	TYPICAL YEAR CSO VOLUME (MG) BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	4.670	23	6.621
CSO 005	REG 005	8	0.663	11	0.872
CSO 004	REG 004	19	3.766	25	5.059
CSO 003	REG 003	18	3.321	24	4.461
CSO 024	REG 024	5	2.694	7	3.545
CSO 009	REG 009	13	1.134	17	1.492
CSO 016	REG 016	24	10.497	32	13.811
CSO 015	REG 015	25	3.726	34	4.902
CSO 011	REGS 010A, 011, 026	11	4.859	15	6.393
CSO 025	REGS 025, 034	6	1.880	7	2.442
CSO 021	REG 021	13	8.700	17	11.447
TOTAL		**159**	**45.909**	**211**	**61.044**

(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: December **YEAR:** 2019
Average Low Temp: 16
Average High Temp: 26
Measured Rainfall: 7.57
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/1/2019	18:00	23:10	5.17	0.63	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 003 IMPROVEMENTS PROJECT - CWF 2016-03					
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year						
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.		
LOCATION:	004		
NPDES Permit Outfall #:			
MONTH:	December	**YEAR:**	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 004					
2	12/2/2019	3:05	18:35	15.50	0.05	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year						
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24:42	2.96	2 year	12/14/2019	2:15	4:00	1.75	0.166	0.012
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.012

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	December	**YEAR:**	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 006 IMPROVEMENTS PROJECT - CWF 2016-03					
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year						
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Grand Avenue & James Street		
LOCATION:	009		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	1:10	7:20	6.17	1.001	0.257
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.257

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year						
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: December **YEAR:** 2019
Average Low Temp: 16
Average High Temp: 26
Measured Rainfall: 7.57
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	2:00	8:05	6.08	1.901	0.489
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.489

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: December YEAR: 2019
Average Low Temp: 16
Average High Temp: 26
Measured Rainfall: 7.57
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	2:00	8:05	6.08	1.901	0.489
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.489

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month	12/9/2019	19:35	21:45	2.17	1.112	0.100
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	0:25	8:05	7.67	5.625	0.391
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month	12/30/2019	6:20	6:55	0.58	0.981	0.024
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.515

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 DS		
NPDES Permit Outfall #:			
MONTH:	December	**YEAR:**	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**	12/1/2019	19:35	20:10	0.58	2.198	0.053
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month	12/9/2019	19:30	21:25	1.92	3.046	0.243
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	0:15	8:05	7.83	5.972	1.949
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month	12/30/2019	6:10	6:55	0.75	3.012	0.094
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 2.339

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**	12/1/2019	19:45	21:15	1.50	4.928	0.308
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month	12/9/2019	20:25	21:50	1.42	4.578	0.270
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	1:15	8:00	6.75	5.806	1.633
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 2.211

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	December	YEAR:	2019
Average Low Temp:	16		
Average High Temp:	26		
Measured Rainfall:	7.57		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year	12/14/2019	2:30	8:05	5.58	9.740	0.871
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.871

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: December **YEAR:** 2019
Average Low Temp: 16
Average High Temp: 26
Measured Rainfall: 7.57
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	12/1/2019	18:00	23:10	5.17	0.63	**						
2	12/2/2019	3:05	18:35	15.50	0.05	**						
3	12/3/2019	9:10	9:55	0.75	0.04	**						
4	12/9/2019-12/10/2019	3:10	0:40	21.50	1.52	1 month						
5	12/10/2019-12/11/2019	13:05	3:55	14.83	0.34	**						
6	12/11/2019	11:30	12:10	0.67	0.10	**						
7	12/13/2019-12/14/2019	15:40	16:05	24.42	2.96	2 year						
8	12/17/2019-12/18/2019	13:00	0:15	11.25	0.04	**						
9	12/18/2019	8:40	12:40	4.00	0.48	**						
10	12/29/2019-12/30/2019	18:05	22:05	28.00	1.31	1 month						
11	12/31/2019	20:50	20:55	0.08	0.10	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

NOVEMBER 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - NOVEMBER 2019			
MONTHLY RAINFALL SUMMARY			
1.46 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
8 rain events (10 rain events in a typical month)			
All storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	0	0.000
CSO 004	REG 004	NO DATA	NO DATA
CSO 003	REG 003	NO DATA	NO DATA
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	0	0.000
CSO 011	REGS 010A, 011	0	0.000
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	0	0.000
TOTAL		**0**	**0.000**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	4.599	22	6.273
CSO 005	REG 005	8	0.698	10	0.866
CSO 004	REG 004	19	3.709	25	4.807
CSO 003	REG 003	18	3.272	23	4.240
CSO 024	REG 024	5	2.506	7	3.109
CSO 009	REG 009	13	1.099	17	1.364
CSO 016	REG 016	24	10.191	30	12.642
CSO 015	REG 015	26	3.744	32	4.645
CSO 011	REGS 010A, 011, 026	11	4.957	14	6.149
CSO 025	REGS 025, 034	6	2.001	7	2.442
CSO 021	REG 021	12	8.336	16	10.341
TOTAL		**160**	**45.112**	**202**	**56.875**

(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: November **YEAR:** 2019
Average Low Temp: 31
Average High Temp: 40
Measured Rainfall: 1.46
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 003					
2	11/7/2019	18:05	21:45	3.67	0.09	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: November **YEAR:** 2019
Average Low Temp: 31
Average High Temp: 40
Measured Rainfall: 1.46
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 004					
2	11/7/2019	18:05	21:45	3.67	0.09	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	November	**YEAR:**	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	November	YEAR:	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 006					
2	11/7/2019	18:05	21:45	3.67	0.09	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Grand Avenue & James Street
LOCATION: 009
NPDES Permit Outfall #:
MONTH: November **YEAR:** 2019
Average Low Temp: 31
Average High Temp: 40
Measured Rainfall: 1.46
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street
LOCATION:	010A
NPDES Permit Outfall #:	
MONTH:	November YEAR: 2019
Average Low Temp:	31
Average High Temp:	40
Measured Rainfall:	1.46
Measured Snowfall:	0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62".

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: November YEAR: 2019
Average Low Temp: 31
Average High Temp: 40
Measured Rainfall: 1.46
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011

NPDES Permit Outfall #:

MONTH: November **YEAR:** 2019

Average Low Temp: 31

Average High Temp: 40

Measured Rainfall: 1.46

Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	November	YEAR:	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

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:	November	**YEAR:**	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	November	**YEAR:**	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	November	YEAR:	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

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:	November	YEAR:	2019
Average Low Temp:	31		
Average High Temp:	40		
Measured Rainfall:	1.46		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	11/1/2019	2:10	4:20	2.17	0.10	**						
2	11/7/2019	18:05	21:45	3.67	0.09	**						
3	11/12/2019	8:20	10:45	2.42	0.05	**						
4	11/19/2019	0:45	7:15	6.50	0.35	**						
5	11/20/2019	13:35	13:40	0.08	0.01	**						
6	11/22/2019	12:45	14:10	1.42	0.12	**						
7	11/23/2019-11/24/2019	23:05	18:35	19.50	0.71	**						
8	11/27/2019	17:40	18:00	0.33	0.03	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

OCTOBER 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - OCTOBER 2019			
MONTHLY RAINFALL SUMMARY			
7.33 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
13 rain events (10 rain events in a typical month)			
Two 2 year storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	2	0.267
CSO 004	REG 004	NO DATA	NO DATA
CSO 003	REG 003	NO DATA	NO DATA
CSO 024	REG 024	2	0.587
CSO 009	REG 009	2	0.176
CSO 016	REG 016	2	4.439
CSO 015	REG 015	2	0.809
CSO 011	REGS 010A, 011	2	2.160
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	2	3.275
TOTAL		**14**	**11.713**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	4.491	21	5.959
CSO 005	REG 005	8	0.693	10	0.866
CSO 004	REG 004	19	3.622	23	4.578
CSO 003	REG 003	18	3.195	22	4.038
CSO 024	REG 024	5	2.489	7	3.109
CSO 009	REG 009	13	1.092	17	1.364
CSO 016	REG 016	24	10.123	30	12.642
CSO 015	REG 015	26	3.833	33	4.787
CSO 011	REGS 010A, 011, 026	11	4.923	14	6.149
CSO 025	REGS 025, 034	6	1.986	7	2.442
CSO 021	REG 021	12	8.280	16	10.341
TOTAL		**158**	**44.728**	**200**	**56.273**
(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp:
Average High Temp:
Measured Rainfall: 7.33
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 003					
2	10/2/2019	18:40	18:50	0.17	0.02	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year						
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year						
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 004 IMPROVEMENTS PROJECT - CWF 2016-03					
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year						
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year						
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Derby Ave. 20 yrds East of Ella T. Grasso Blvd.
LOCATION: 005
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019	20:40	23:15	0.74	1.492	0.161
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:20	14:45	0.74	1.800	0.106
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.267

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Whalley Ave. 30 yrds from Fitch Street
LOCATION: 006
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 006					
2	10/2/2019	18:40	18:50	0.17	0.02	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year						
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year						
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Grand Avenue & James Street
LOCATION: 009
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019	22:10	22:50	0.67	2.881	0.080
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:05	15:15	2.17	1.061	0.096
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.176

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	October	YEAR:	2019
Average Low Temp:	0		
Average High Temp:	0		
Measured Rainfall:	7.33		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019	22:15	23:20	1.08	5.196	0.235
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	14:10	15:05	0.92	1.562	0.060
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.295

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: October YEAR: 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019-10/17/2019	21:00	0:05	3.08	9.151	1.176
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:45	16:00	2.25	7.354	0.689
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 1.865

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: October YEAR: 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019-10/17/2019	21:00	0:05	3.08	14.347	1.411
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:45	16:00	2.25	8.916	0.749
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 2.160

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG 15 James Street
LOCATION: 015
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019-10/17/2019	19:05	2:40	7.58	2.603	0.660
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	11:45	16:15	4.50	0.796	0.149
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.809

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: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019	18:50	23:25	4.58	12.363	2.361
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	11:45	16:25	4.67	10.685	2.078
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 4.439

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	October	YEAR:	2019
Average Low Temp:	0		
Average High Temp:	0		
Measured Rainfall:	7.33		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019-10/17/2019	19:25	0:40	5.25	10.734	2.348
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:40	16:40	3.00	7.414	0.927
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 3.275

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Sea Street @ South Water Street
LOCATION: 024
NPDES Permit Outfall #:
MONTH: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year	10/16/2019	21:25	23:10	1.75	1.917	0.087
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year	10/27/2019	13:55	17:05	3.17	3.788	0.500
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.587

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: October **YEAR:** 2019
Average Low Temp: 0
Average High Temp: 0
Measured Rainfall: 7.33
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	10/1/2019	8:50	9:05	0.25	0.04	**						
2	10/2/2019	18:40	18:50	0.17	0.02	**						
3	10/3/2019-10/4/2019	6:30	4:15	21.75	0.29	**						
4	10/7/2019	23:20	23:55	0.58	0.03	**						
5	10/9/2019	8:05	17:30	9.42	0.55	**						
6	10/10/2019-10/11/2019	21:20	0:05	2.75	0.17	**						
7	10/16/2019-10/17/2019	17:10	1:10	8.00	2.56	2 year						
8	10/20/2019-10/21/2019	17:05	1:00	7.92	0.20	**						
9	10/22/2019-10/23/2019	21:05	4:25	7.33	0.33	**						
10	10/27/2019	7:45	17:45	10.00	2.41	2 year						
11	10/29/2019-10/30/2019	13:45	0:10	10.42	0.13	**						
12	10/30/2019	2:05	21:00	18.92	0.16	**						
13	10/31/2019	0:10	13:25	13.25	0.44	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

SEPTEMBER 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - SEPTEMBER 2019			
MONTHLY RAINFALL SUMMARY			
1.88 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
10 rain events (10 rain events in a typical month)			
One 2 year and one 3 month storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	0	0.000
CSO 004	REG 004	NO DATA	NO DATA
CSO 003	REG 003	NO DATA	NO DATA
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.006
CSO 016	REG 016	3	0.381
CSO 015	REG 015	4	0.208
CSO 011	REGS 010A, 011	0	0.000
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	2	0.696
TOTAL		**10**	**1.291**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	5.163	21	6.959
CSO 005	REG 005	8	0.629	10	0.776
CSO 004	REG 004	18	3.996	23	5.142
CSO 003	REG 003	17	3.148	22	4.051
CSO 024	REG 024	5	2.954	7	3.645
CSO 009	REG 009	13	1.227	17	1.513
CSO 016	REG 016	24	9.287	30	11.456
CSO 015	REG 015	27	4.069	34	5.020
CSO 011	REGS 010A, 011, 026	11	4.853	14	5.987
CSO 025	REGS 025, 034	7	2.634	8	3.196
CSO 021	REG 021	13	8.815	16	10.874
TOTAL		**160**	**46.774**	**201**	**58.616**
(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: September **YEAR:** 2019
Average Low Temp: 60
Average High Temp: 76
Measured Rainfall: 1.88
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/2/2019	16:45	17:05	0.33	0.06	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 003					
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: September **YEAR:** 2019
Average Low Temp: 60
Average High Temp: 76
Measured Rainfall: 1.88
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/2/2019	16:45	17:05	0.33	0.06	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 004					
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Derby Ave. 20 yrds East of Ella T. Grasso Blvd.
LOCATION: 005
NPDES Permit Outfall #:
MONTH: September YEAR: 2019
Average Low Temp: 60
Average High Temp: 76
Measured Rainfall: 1.88
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	September	**YEAR:**	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 006					
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Grand Avenue & James Street		
LOCATION:	009		
NPDES Permit Outfall #:			
MONTH:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month	9/26/2019	16:30	16:50	0.33	0.421	0.006

TOTAL MONTH FLOW VOLUME = 0.006

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: September **YEAR:** 2019
Average Low Temp: 60
Average High Temp: 76
Measured Rainfall: 1.88
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: September **YEAR:** 2019
Average Low Temp: 60
Average High Temp: 76
Measured Rainfall: 1.88
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**	9/2/2019-9/3/2019	23:55	0:15	0.33	0.526	0.007
3	9/4/2019	19:10	19:35	0.42	0.86	2 year	9/4/2019	19:30	20:15	0.75	2.857	0.089
4	9/6/2019	16:05	17:45	1.67	0.20	**	9/6/2019	16:45	17:45	1.00	1.834	0.076
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month	9/26/2019	16:35	17:20	0.75	1.145	0.036

TOTAL MONTH FLOW VOLUME = 0.208

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:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year	9/4/2019	19:30	20:20	0.83	4.970	0.173
4	9/6/2019	16:05	17:45	1.67	0.20	**	9/6/2019	16:45	17:00	0.25	5.338	0.056
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month	9/26/2019	16:30	17:30	1.00	3.653	0.152

TOTAL MONTH FLOW VOLUME = 0.381

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year	9/4/2019	19:55	21:00	1.08	5.437	0.245
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month	9/26/2019	16:55	18:00	1.08	9.990	0.451

TOTAL MONTH FLOW VOLUME = 0.696

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	September	YEAR:	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

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:	September	**YEAR:**	2019
Average Low Temp:	60		
Average High Temp:	76		
Measured Rainfall:	1.88		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	9/2/2019	16:45	17:05	0.33	0.06	**						
2	9/2/2019-9/3/2019	23:30	2:20	2.83	0.24	**						
3	9/4/2019	19:10	19:35	0.42	0.86	2 year						
4	9/6/2019	16:05	17:45	1.67	0.20	**						
5	9/7/2019	4:10	4:30	0.33	0.02	**						
6	9/12/2019	7:50	7:55	0.08	0.01	**						
7	9/14/2019-9/15/2019	21:15	0:05	2.83	0.07	**						
8	9/16/2019	6:35	7:10	0.58	0.02	**						
9	9/24/2019	0:30	0:35	0.08	0.01	**						
10	9/26/2019	16:10	17:10	1.00	0.39	3 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

AUGUST 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - AUGUST 2019			
MONTHLY RAINFALL SUMMARY			
2.73 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
11 rain events (10 rain events in a typical month)			
one 6 month, two 3 month, and two 1 month storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	2	0.167
CSO 004	REG 004	NO DATA	NO DATA
CSO 003	REG 003	NO DATA	NO DATA
CSO 024	REG 024	0	0.000
CSO 009	REG 009	1	0.028
CSO 016	REG 016	5	0.415
CSO 015	REG 015	5	0.275
CSO 011	REGS 010A, 011	2	0.313
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	2	0.653
TOTAL		**17**	**1.851**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR CSO EVENTS	TYPICAL YEAR CSO VOLUME (MG)	TYPICAL YEAR CSO EVENTS	TYPICAL YEAR CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	15	4.936	20	6.643
CSO 005	REG 005	8	0.629	10	0.776
CSO 004	REG 004	17	3.821	22	4.918
CSO 003	REG 003	17	3.023	22	3.892
CSO 024	REG 024	5	2.954	7	3.645
CSO 009	REG 009	13	1.224	16	1.510
CSO 016	REG 016	23	9.132	29	11.266
CSO 015	REG 015	26	4.019	32	4.958
CSO 011	REGS 010A, 011, 026	11	4.853	14	5.987
CSO 025	REGS 025, 034	7	2.634	8	3.196
CSO 021	REG 021	12	8.549	15	10.546
TOTAL		**156**	**45.775**	**195**	**57.334**
(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: August **YEAR:** 2019
Average Low Temp: 70
Average High Temp: 80
Measured Rainfall: 2.73
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 003					
2	8/7/2019	20:05	23:20	3.25	0.49	1 month	IMPROVEMENTS PROJECT - CWF 2016-03					
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.		
LOCATION:	004		
NPDES Permit Outfall #:			
MONTH:	August	**YEAR:**	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	8/4/2019	0:20	0:25	0.08	0.01	**	METER REMOVED ON 8/2/19 FOR CONSTRUCTION OF REGULATOR 004					
2	8/7/2019	20:05	23:20	3.25	0.49	1 month	IMPROVEMENTS PROJECT - CWF 2016-03					
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	August	**YEAR:**	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month	8/13/2019	9:40	10:15	0.58	2.493	0.061
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:25	17:55	0.50	5.103	0.106
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.167

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Whalley Ave. 30 yrds from Fitch Street
LOCATION: 006
NPDES Permit Outfall #:
MONTH: August **YEAR:** 2019
Average Low Temp: 70
Average High Temp: 80
Measured Rainfall: 2.73
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**	METER REMOVED ON 7/2/19 FOR CONSTRUCTION OF REGULATOR 006 IMPROVEMENTS PROJECT - CWF 2016-03					
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Grand Avenue & James Street		
LOCATION:	009		
NPDES Permit Outfall #:			
MONTH:	August	YEAR:	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:25	17:50	0.42	1.632	0.028
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.028

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	August	YEAR:	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: August YEAR: 2019
Average Low Temp: 70
Average High Temp: 80
Measured Rainfall: 2.73
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month	8/13/2019	9:55	10:30	0.58	4.591	0.112
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:30	18:20	0.83	5.798	0.201
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.313

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011

NPDES Permit Outfall #:

MONTH: August **YEAR:** 2019

Average Low Temp: 70

Average High Temp: 80

Measured Rainfall: 2.73

Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month	8/13/2019	9:55	10:30	0.58	4.591	0.112
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:30	18:20	0.83	5.798	0.201
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.313

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	August	**YEAR:**	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month	8/7/2019	20:40	21:05	0.42	1.140	0.020
3	8/13/2019	7:30	9:55	2.42	0.45	3 month	8/13/2019	8:30	10:55	2.42	2.157	0.078
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month	8/18/2019	0:10	1:00	0.83	0.640	0.022
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:25	18:35	1.17	2.821	0.137
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month	8/28/2019	16:45	17:35	0.83	0.506	0.018
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.275

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:	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month	8/7/2019	20:40	21:00	0.33	0.143	0.002
3	8/13/2019	7:30	9:55	2.42	0.45	3 month	8/13/2019	8:40	10:25	1.75	1.629	0.119
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month	8/18/2019	0:10	0:40	0.50	4.619	0.096
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:30	18:25	0.92	5.030	0.192
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month	8/28/2019	16:45	17:45	1.00	0.142	0.006
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.415

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	August	YEAR:	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month	8/18/2019	0:30	1:40	1.17	6.082	0.296
6	8/19/2019	17:05	17:45	0.67	0.46	6 month	8/19/2019	17:40	18:40	1.00	8.573	0.357
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.653

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Sea Street @ South Water Street
LOCATION: 024
NPDES Permit Outfall #:
MONTH: August **YEAR:** 2019
Average Low Temp: 70
Average High Temp: 80
Measured Rainfall: 2.73
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	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 #:			
MONTH:	August	YEAR:	2019
Average Low Temp:	70		
Average High Temp:	80		
Measured Rainfall:	2.73		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	8/4/2019	0:20	0:25	0.08	0.01	**						
2	8/7/2019	20:05	23:20	3.25	0.49	1 month						
3	8/13/2019	7:30	9:55	2.42	0.45	3 month						
4	8/13/2019	12:15	14:50	2.58	0.02	**						
5	8/17/2019-8/18/2019	23:30	2:05	2.58	0.43	3 month						
6	8/19/2019	17:05	17:45	0.67	0.46	6 month						
7	8/21/2019	18:05	18:25	0.33	0.03	**						
8	8/22/2019	21:45	22:40	0.92	0.07	**						
9	8/23/2019	6:05	9:45	3.67	0.11	**						
10	8/28/2019	12:20	19:15	6.92	0.65	1 month						
11	8/29/2019	9:55	10:00	0.08	0.01	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

JULY 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - JULY 2019			
MONTHLY RAINFALL SUMMARY			
5.81 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
7 rain events (10 rain events in a typical month)			
One 10 year, one 6 month and one 3 month storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	NO DATA	NO DATA
CSO 005	REG 005	1	0.124
CSO 004	REG 004	1	0.210
CSO 003	REG 003	1	0.484
CSO 024	REG 024	1	1.333
CSO 009	REG 009	1	0.120
CSO 016	REG 016	3	2.660
CSO 015	REG 015	3	0.611
CSO 011	REGS 010A, 011, 026	1	0.519
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	1	1.130
CSO 020	REG 020	NO DATA	NO DATA
TOTAL		**13**	**7.191**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	15	5.034	20	6.526
CSO 005	REG 005	8	0.740	10	0.920
CSO 004	REG 004	18	3.992	23	4.960
CSO 003	REG 003	18	3.109	23	3.863
CSO 024	REG 024	6	2.984	7	3.708
CSO 009	REG 009	14	1.349	17	1.676
CSO 016	REG 016	22	9.249	27	11.492
CSO 015	REG 015	25	4.086	31	5.077
CSO 011	REGS 010A, 011, 026	11	4.944	14	6.143
CSO 025	REGS 025, 034	7	2.619	9	3.202
CSO 021	REG 021	12	8.522	15	10.588
CSO 020	REG 020	2	0.009	2	0.011
TOTAL		**155**	**46.628**	**193**	**58.152**
(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 Ella T. Grasso Blvd.
LOCATION:	003
NPDES Permit Outfall #:	
MONTH:	July **YEAR:** 2019
Average Low Temp:	69
Average High Temp:	87
Measured Rainfall:	5.81
Measured Snowfall:	0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:05	22:50	4.75	2.446	0.484
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.484

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: July **YEAR:** 2019
Average Low Temp: 69
Average High Temp: 87
Measured Rainfall: 5.81
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:10	21:30	3.33	1.513	0.210
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.210

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Derby Ave. 20 yrds East of Ella T. Grasso Blvd.		
LOCATION:	005		
NPDES Permit Outfall #:			
MONTH:	July	**YEAR:**	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:25	21:05	2.67	1.115	0.124
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.124

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	July	YEAR:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month	METER REMOVED ON 7/2/19 FOR CONSTRUCTION OF REGULATOR 006					
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**	IMPROVEMENTS PROJECT - CWF 2016-03					
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year						
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Grand Avenue & James Street		
LOCATION:	009		
NPDES Permit Outfall #:			
MONTH:	July	YEAR:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:00	20:55	2.92	0.991	0.120
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.120

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	July	YEAR:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year						
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: July YEAR: 2019
Average Low Temp: 69
Average High Temp: 87
Measured Rainfall: 5.81
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:05	21:45	3.67	3.394	0.519
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.519

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: July YEAR: 2019
Average Low Temp: 69
Average High Temp: 87
Measured Rainfall: 5.81
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:05	21:45	3.67	3.394	0.519
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.519

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	July	YEAR:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**	7/18/2019	12:20	13:30	1.17	0.503	0.024
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:00	21:50	3.83	3.518	0.552
6	7/23/2019	3:15	9:25	6.17	0.68	3 month	7/23/2019	5:30	6:30	1.00	0.841	0.035
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.611

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:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**	7/18/2019	12:20	12:55	0.58	3.568	0.087
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:00	21:35	3.58	15.083	2.252
6	7/23/2019	3:15	9:25	6.17	0.68	3 month	7/23/2019	5:30	6:25	0.92	8.391	0.321
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 2.660

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Clifton and Quinnipiac			
LOCATION:	020			
NPDES Permit Outfall #:				
MONTH:	July	**YEAR:**	2019	
Average Low Temp:	69			
Average High Temp:	87			
Measured Rainfall:	5.81			
Measured Snowfall:	0			

		RAINFALL EVENT					**CSO EVENT**					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month	**METER REMOVED ON 7/3/19 FOR CONSTRUCTION OF REGULATOR AND**					
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**	**CSO OUTFALL 020 CLOSURE PROJECT - CWF 2016-02**					
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year						
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**	**REGULATOR AND CSO OUTFALL 020 CLOSED ON 7/31/19**					
										TOTAL MONTH		
										FLOW VOLUME =		0.000

Note: Overflow occurs when Interceptor level reaches 31"

Meter not installed during 7/2019

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	July	**YEAR:**	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	18:25	22:15	3.83	7.077	1.130
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 1.130

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	July	YEAR:	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year	7/22/2019	19:35	22:35	3.00	10.663	1.333
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 1.333

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:	July	**YEAR:**	2019
Average Low Temp:	69		
Average High Temp:	87		
Measured Rainfall:	5.81		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	7/6/2019	16:25	22:55	6.50	1.17	6 month						
2	7/11/2019-7/12/2019	19:15	2:30	7.25	0.34	**						
3	7/17/2019-7/18/2019	15:10	0:15	9.08	0.27	**						
4	7/18/2019	11:00	20:35	9.58	0.61	**						
5	7/22/2019	17:35	22:05	4.50	2.60	10 year						
6	7/23/2019	3:15	9:25	6.17	0.68	3 month						
7	7/31/2019	17:45	19:15	1.50	0.14	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

JUNE 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - JUNE 2019			
MONTHLY RAINFALL SUMMARY			
3.25 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
15 rain events (10 rain events in a typical month)			
Two 3 month and one 1 month storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	2	0.179
CSO 005	REG 005	0	0.000
CSO 004	REG 004	3	0.032
CSO 003	REG 003	2	0.240
CSO 024	REG 024	0	0.000
CSO 009	REG 009	2	0.101
CSO 016	REG 016	4	0.324
CSO 015	REG 015	4	0.287
CSO 011	REGS 010A, 011, 026	1	0.081
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	1	0.653
CSO 020	REG 020	0	0.000
TOTAL		**19**	**1.897**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	5.229	20	6.257
CSO 005	REG 005	8	0.717	9	0.858
CSO 004	REG 004	19	4.074	23	4.874
CSO 003	REG 003	19	3.061	23	3.662
CSO 024	REG 024	6	2.577	7	3.084
CSO 009	REG 009	15	1.356	18	1.623
CSO 016	REG 016	21	8.493	26	10.162
CSO 015	REG 015	25	4.093	30	4.897
CSO 011	REGS 010A, 011, 026	11	4.918	13	5.884
CSO 025	REGS 025, 034	8	2.726	9	3.202
CSO 021	REG 021	12	8.537	15	10.213
CSO 020	REG 020	2	0.009	2	0.010
TOTAL		**159**	**45.781**	**190**	**54.712**
(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 Ella T. Grasso Blvd.
LOCATION: 003
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**	6/10/2019	18:15	19:05	0.83	1.338	0.046
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:15	17:00	2.75	1.689	0.194
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.240

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**	6/10/2019	18:15	18:50	0.58	0.184	0.004
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:20	16:20	2.00	0.319	0.027
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month	6/25/2019	12:35	12:50	0.25	0.133	0.001
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.032

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Derby Ave. 20 yrds East of Ella T. Grasso Blvd.
LOCATION: 005
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month						
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**	6/10/2019	18:10	18:50	0.67	0.733	0.018
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:35	16:40	2.08	1.850	0.161
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.179

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Grand Avenue & James Street
LOCATION: 009
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	15:35	16:05	0.58	4.217	0.088
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month	6/25/2019	12:25	12:35	0.58	1.870	0.013
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.101

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month						
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: June YEAR: 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	15:45	16:25	0.67	2.932	0.081
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.081

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG

LOCATION: 011
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	15:45	16:25	0.67	2.932	0.081
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.081

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**	6/10/2019	18:00	19:30	1.50	2.056	0.129
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:20	16:55	2.58	0.623	0.067
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month	6/25/2019	12:30	13:10	0.67	1.731	0.048
14	6/29/2019	20:05	20:30	0.42	0.34	3 month	6/29/2019	20:50	21:30	5.75	1.535	0.043
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.287

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:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**	6/10/2019	18:45	19:20	0.58	1.021	0.025
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:20	16:45	2.42	2.419	0.244
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month	6/25/2019	12:25	13:00	0.58	1.722	0.042
14	6/29/2019	20:05	20:30	0.42	0.34	3 month	6/29/2019	20:50	21:20	0.50	0.634	0.013
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.324

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Clifton and Quinnipiac		
LOCATION:	020		
NPDES Permit Outfall #:			
MONTH:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month						
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive		
LOCATION:	021		
NPDES Permit Outfall #:			
MONTH:	June	YEAR:	2019
Average Low Temp:	61		
Average High Temp:	78		
Measured Rainfall:	3.25		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month	6/18/2019	14:55	17:30	2.58	6.063	0.653
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.653

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Intersection of State & N. Front Street
LOCATION: 025
NPDES Permit Outfall #:
MONTH: June **YEAR:** 2019
Average Low Temp: 61
Average High Temp: 78
Measured Rainfall: 3.25
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	6/2/2019	23:00	23:35	0.58	0.03	**						
2	6/10/2019	15:50	21:35	5.75	0.38	**						
3	6/11/2019	0:15	8:00	7.75	0.15	**						
4	6/13/2019	9:25	13:05	3.67	0.30	**						
5	6/13/2019	23:15	23:45	0.50	0.03	**						
6	6/16/2019	2:35	5:40	3.08	0.06	**						
7	6/16/2019	14:45	21:05	6.33	0.04	**						
8	6/18/2019	2:10	20:45	18.58	1.14	3 month						
9	6/19/2019	18:15	18:20	0.08	0.01	**						
10	6/20/2019	2:15	5:05	2.83	0.09	**						
11	6/20/2019	14:00	14:25	0.42	0.05	**						
12	6/21/2019	8:00	11:35	3.58	0.07	**						
13	6/25/2019	8:50	14:10	5.33	0.52	1 month						
14	6/29/2019	20:05	20:30	0.42	0.34	3 month						
15	6/30/2019	11:45	11:55	0.17	0.04	**						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"

METER DATA

MAY 2019

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY			
CSO FLOW MONITORING PROGRAM			
METER DATA SUMMARY - MAY 2019			
MONTHLY RAINFALL SUMMARY			
6.72 inches of rain (3.44 inches of rain in a typical month)			
No snowfall			
15 rain events (10 rain events in a typical month)			
One ten year, one 1 year, one 6 month, and one 1 month storms, all other storms less than 1 month return frequency			
CSO NUMBER	**REGULATOR NUMBERS**	**CSO EVENTS**	**CSO VOLUME (MG)**
CSO 006	REGS 006 A, 006 B	3	1.096
CSO 005	REG 005	2	0.170
CSO 004	REG 004	4	1.331
CSO 003	REG 003	4	0.870
CSO 024	REG 024	2	0.944
CSO 009	REG 009	2	0.207
CSO 016	REG 016	4	2.737
CSO 015	REG 015	5	0.794
CSO 011	REGS 010A, 011, 026	3	0.660
CSO 025	REGS 025	0	0.000
CSO 021	REG 021	3	3.309
CSO 020	REG 020	0	0.000
TOTAL		**32**	**12.118**

GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY					
CSO FLOW MONITORING PROGRAM					
METER DATA SUMMARY - 2 YEAR ROLLING AVERAGE - TYPICAL YEAR ESTIMATES					
		TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR	TYPICAL YEAR
		CSO EVENTS	CSO VOLUME (MG)	CSO EVENTS	CSO VOLUME (MG)
CSO NUMBER	REGULATOR NUMBERS	BASED ON RAINFALL[1]	BASED ON RAINFALL[2]	BASED ON MONTHS[3]	BASED ON MONTHS[4]
CSO 006	REGS 006 A, 006 B	16	5.220	19	6.177
CSO 005	REG 005	8	0.725	9	0.858
CSO 004	REG 004	19	4.117	23	4.871
CSO 003	REG 003	19	3.000	23	3.549
CSO 024	REG 024	6	2.669	8	3.159
CSO 009	REG 009	15	1.335	18	1.579
CSO 016	REG 016	21	8.477	25	10.030
CSO 015	REG 015	25	4.184	30	4.950
CSO 011	REGS 010A, 011, 026	11	4.983	14	5.896
CSO 025	REGS 025, 034	8	2.759	9	3.202
CSO 021	REG 021	12	8.388	15	9.925
CSO 020	REG 020	2	0.010	2	0.010
TOTAL		**162**	**45.856**	**191**	**54.194**
(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 Ella T. Grasso Blvd.
LOCATION:	003
NPDES Permit Outfall #:	
MONTH:	May **YEAR:** 2019
Average Low Temp:	24
Average High Temp:	72
Measured Rainfall:	6.72
Measured Snowfall:	0.00

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month	5/12/2019	15:45	17:20	1.58	0.830	0.055
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019-5/29/2019	21:45	0:00	2.25	1.546	0.145
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:10	21:40	2.50	5.256	0.547
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:30	21:30	1.00	2.948	0.123

TOTAL MONTH FLOW VOLUME = 0.870

Note: Overflow occurs when Interceptor level reaches 46"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Ella T. Grasso Blvd. - 23 yrds North of Legion Ave.
LOCATION: 004
NPDES Permit Outfall #:
MONTH: May **YEAR:** 2019
Average Low Temp: 24
Average High Temp: 72
Measured Rainfall: 6.72
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month	5/12/2019	15:45	16:30	0.75	0.222	0.007
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**	5/20/2019	18:15	18:35	0.33	0.155	0.002
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:45	22:55	1.17	11.860	0.577
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:05	20:50	1.75	9.515	0.694
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:35	21:45	1.17	1.043	0.051

TOTAL MONTH FLOW VOLUME = 1.331

Note: Overflow occurs when Interceptor level reaches 43"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG Derby Ave. 20 yrds East of Ella T. Grasso Blvd.
LOCATION: 005
NPDES Permit Outfall #:
MONTH: May **YEAR:** 2019
Average Low Temp: 24
Average High Temp: 72
Measured Rainfall: 6.72
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:50	22:00	0.17	22.221	0.154
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:25	19:35	0.17	2.349	0.016
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						

TOTAL MONTH FLOW VOLUME = 0.170

Note: Overflow occurs when Interceptor level reaches 71"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Whalley Ave. 30 yrds from Fitch Street		
LOCATION:	006		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:45	23:15	1.50	5.332	0.323
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:10	20:40	1.50	8.605	0.519
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:35	21:40	1.08	5.864	0.254

TOTAL MONTH FLOW VOLUME = 1.096

Note: Overflow occurs when Interceptor level reaches 27"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Grand Avenue & James Street		
LOCATION:	009		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:45	22:25	0.67	4.103	0.114
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:00	19:50	0.83	2.679	0.093
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						

TOTAL MONTH FLOW VOLUME = 0.207

Note: Overflow occurs when Interceptor level reaches 30"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	547 East Street		
LOCATION:	010A		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year						
14	5/29/2019	17:20	20:15	2.92	0.96	1 year						
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						
										TOTAL MONTH		
										FLOW VOLUME =		0.000

Note: Overflow occurs when Interceptor level reaches 62"

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: May YEAR: 2019
Average Low Temp: 24
Average High Temp: 72
Measured Rainfall: 6.72
Measured Snowfall: 0

	RAINFALL EVENT						CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:50	22:50	1.00	6.539	0.272
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:20	20:35	1.25	5.776	0.301
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:45	21:20	0.58	3.583	0.087

TOTAL MONTH FLOW VOLUME = 0.660

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG
LOCATION: 011
NPDES Permit Outfall #:
MONTH: May **YEAR:** 2019
Average Low Temp: 24
Average High Temp: 72
Measured Rainfall: 6.72
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:50	22:50	1.00	6.588	0.272
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:20	20:35	1.25	5.776	0.301
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:45	21:20	0.58	3.583	0.087

TOTAL MONTH FLOW VOLUME = 0.660

Sum of 010A and 011

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	15 James Street		
LOCATION:	015		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month	5/12/2019	12:30	17:40	5.17	5.726	0.178
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**	5/20/2019	18:15	18:40	0.42	3.736	0.065
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:40	23:25	1.75	2.491	0.182
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:05	21:00	1.92	3.977	0.318
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:15	22:05	1.83	0.666	0.051

TOTAL MONTH FLOW VOLUME = 0.794

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:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month	5/12/2019	12:35	16:45	4.17	0.249	0.043
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:45	23:00	1.25	24.033	1.252
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:10	20:15	1.08	23.150	1.045
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	20:25	21:20	0.92	10.406	0.397
										TOTAL MONTH FLOW VOLUME =		2.737

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Clifton and Quinnipiac		
LOCATION:	020		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year						
14	5/29/2019	17:20	20:15	2.92	0.96	1 year						
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						

TOTAL MONTH FLOW VOLUME = 0.000

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	638 Long Wharf Drive
LOCATION:	021
NPDES Permit Outfall #:	
MONTH:	May YEAR: 2019
Average Low Temp:	24
Average High Temp:	72
Measured Rainfall:	6.72
Measured Snowfall:	0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019-5/29/2019	21:55	0:10	2.25	18.060	1.693
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:35	21:30	1.92	17.978	1.436
15	5/30/2019	19:05	23:20	4.25	0.61	6 month	5/30/2019	21:05	22:05	1.00	4.318	0.180

TOTAL MONTH FLOW VOLUME = 3.309

FLOW MONITORING REPORT SUMMARY TABLE

CSO EVENTS LOG	Sea Street @ South Water Street		
LOCATION:	024		
NPDES Permit Outfall #:			
MONTH:	May	YEAR:	2019
Average Low Temp:	24		
Average High Temp:	72		
Measured Rainfall:	6.72		
Measured Snowfall:	0		

		RAINFALL EVENT					CSO EVENT					
EVENT No.	**DATE**	**START**	**STOP**	**DURATION (hours)**	**TOTAL**	**FREQUENCY**	**DATE**	**START**	**STOP**	**DURATION (hours)**	**OUTFALL Qavg (MGD)**	**OUTFALL Q volume (MG)**
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year	5/28/2019	21:55	23:25	1.50	30.962	0.476
14	5/29/2019	17:20	20:15	2.92	0.96	1 year	5/29/2019	19:25	21:05	1.67	6.743	0.468
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						

TOTAL MONTH FLOW VOLUME = 0.944

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: May **YEAR:** 2019
Average Low Temp: 24
Average High Temp: 72
Measured Rainfall: 6.72
Measured Snowfall: 0

		RAINFALL EVENT					CSO EVENT					
EVENT No.	DATE	START	STOP	DURATION (hours)	TOTAL	FREQUENCY	DATE	START	STOP	DURATION (hours)	OUTFALL Qavg (MGD)	OUTFALL Q volume (MG)
1	5/1/2019-5/2/2019	22:35	0:15	1.67	0.20	**						
2	5/3/2019	13:55	14:45	0.83	0.06	**						
3	5/4/2019	2:00	3:15	1.25	0.07	**						
4	5/5/2019-5/6/2019	3:25	2:00	22.58	0.89	**						
5	5/11/2019	3:40	3:45	0.08	0.01	**						
6	5/12/2019	2:35	19:25	16.83	1.11	1 month						
7	5/13/2019	9:25	20:30	11.08	0.62	**						
8	5/16/2019	1:50	1:55	0.08	0.01	**						
9	5/17/2019	14:25	14:50	0.42	0.02	**						
10	5/20/2019	0:25	18:05	17.67	0.41	**						
11	5/23/2019	6:00	7:30	1.50	0.09	**						
12	5/26/2019	1:45	2:10	0.42	0.10	**						
13	5/28/2019	14:15	23:00	8.75	1.56	10 year						
14	5/29/2019	17:20	20:15	2.92	0.96	1 year						
15	5/30/2019	19:05	23:20	4.25	0.61	6 month						

TOTAL MONTH FLOW VOLUME = 0.000

Note: Overflow occurs when Interceptor level reaches 21"