INTEGRATED SENTINEL MONITORING REPORT 2018

ENVIRONMENTAL PROTECTION

Bill de Blasio
Mayor

Vincent Sapienza, P. E.
Commissioner

June 30, 2019

Vincent Sapienza, P.E.
Commissioner

Pam Elardo, P.E.
Deputy Commissioner

Bureau of Wastewater Treatment
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Corona, NY 11368

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Mr. Robert Elburn, P.E.,
Regional Water Engineer New
York State Department of
Environmental Conservation
Division of Water - Region II
47-40 21st Street – 4th Fl
Long Island City, NY 11101-5407

Re: 2018 Integrated Sentinel Monitoring Report

Dear Mr. Elburn:

Pursuant to the State Pollutant Discharge Elimination System permit and in accordance with the section for Untreated Discharges, and the Municipal Separate Storm Sewer System permit section for Illicit Discharge Detection and Elimination, attached is the Department of Environmental Protection's Integrated Sentinel Monitoring report for 2018.

Sincerely,

Pamela Elardo, P.E.
Deputy Commissioner

JV/jb

cc: Eckels, LaGrotta, Volgende, Katehis, Lipton, Tam, Villacis, Alex, File
BWSO: Georgelis, Hammerman, Fragias, McColgan, Delaney, Safari
BEDC: Mahoney, Garin
BEPA: Balci, Fofanah

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INTRODUCTION

The Shoreline Survey Program-Cycle II conducted by the Bureau of Wastewater Treatment's Compliance Monitoring Section (CMS) between 1998 and 2018 has resulted in the identification of 4,406 outfalls including 427 Combined Sewer Overflows (CSO), 375 storm outfalls and other outfalls such as highway drains and non-city owned drains. A total of 416 contaminated discharges representing a flow of 4.41 MGD were identified. Since then, 407 of these contaminated discharges have been abated, representing a flow of 4.38 MGD, of which 266 discharging pipes are city-owned and the remainder, 150, falls under the jurisdiction of NYSDEC. Currently NYCDEP has seven (7) contaminated discharge pipes under abatement investigation, or 0.03 MGD, whereas 2 sewer pipes under the jurisdiction of NYSDEC remain to be abated or 0.004 MGD. Therefore, the benefit has been a 99.3 % abatement rate of contaminated dry weather discharges.

As an enhancement and modification of the two-year cycle of surveying the City's coastal waters under the Shoreline Survey Program, a **"SENTINEL MONITORING PROGRAM"** was designed, in cooperation with NYSDEC, to monitor specific sampling areas for fecal coliform (a raw sewage indicator) in water bodies throughout New York City. NYCDEP currently performs sentinel monitoring at eighty ambient monitoring stations in accordance with the current SPDES permit Storm-water Management Program. When a survey of the shoreline is performed, all shoreline survey protocols described in the Untreated Discharges Section of the SPDES permit are followed.

The goal of the **Sentinel Monitoring Program** is the periodic monitoring and sampling of ambient stations throughout New York City's harbor. Quarterly fecal coliform sampling is conducted at eighty stations. Sampling is performed after a dry antecedent period of forty eight hours and during various tidal cycles and seasons to ensure statistical integrity. The sampling results are compared to an established baseline. If sampling results are above the baseline trigger limits, NYCDEP aggressively pursues field investigations and surveillance of the adjacent shoreline of such sentinel stations to determine the source and cause of the contamination. Immediate actions are implemented to abate any found illegal discharges

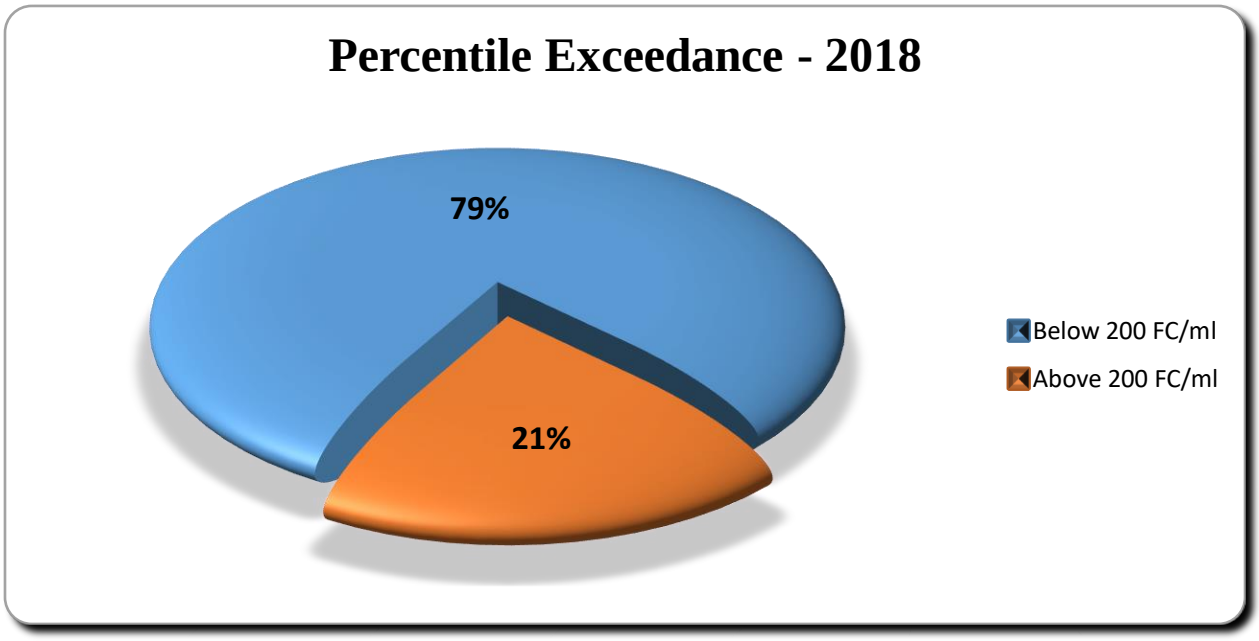
OPERATIONAL PLAN

For 2018, an interim baseline of 200 fecal/100 mL, based on NYSDEC water quality standards, was assigned to all of the 80 sentinel stations. A mini-shoreline investigation was conducted for any exceedance of this baseline. In addition, Entrococci samples were collected from all 80 sentinel stations in each of the quarters. However, DEP will continue to use fecal coliform as the trigger for the mini-shoreline survey as required by the SPDES Permit and MS4 Permit Part IV. D. 5.

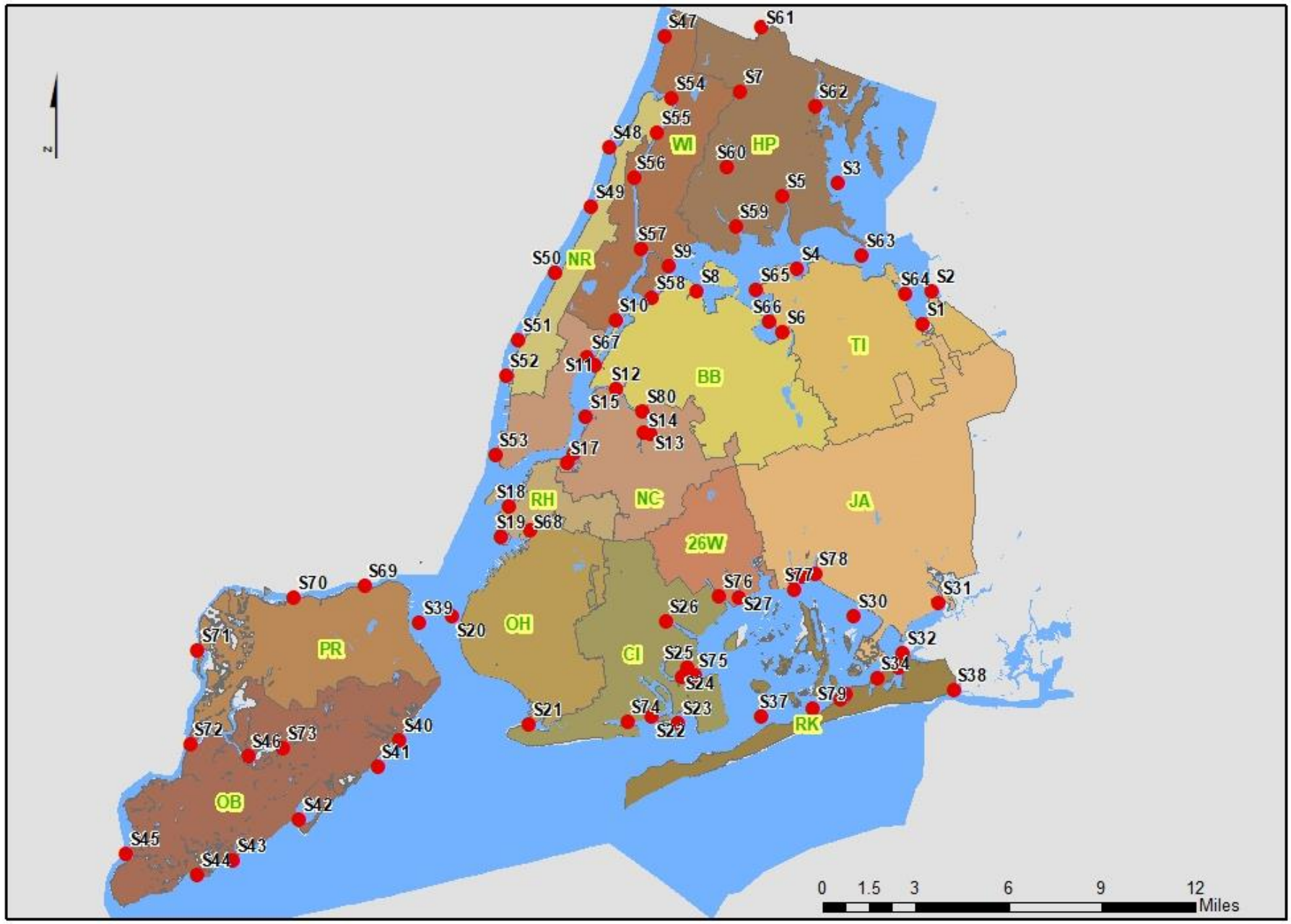
Each site is identified by a station number. Its location in the water is pinpointed using latitude and longitude coordinates from a Global Positioning System Navigator. Details of the **Sentinel Monitoring Program,** such as coordinate system, site map, analytical result, and baseline are described through the following tables, graphs and maps.

SURVEY STATISTICS

Fecal Coliform Baseline FC/100 ml	Number of Stations	Percentage (%) of Stations
1 – 200	63	79
> 200	17	21



New York Harbor Sentinel Monitoring Stations



Sampling Stations

Station ID	Location	Latitude	Longitude
S1	Alley Creek & Northern Boulevard (Northside)	40° 46' 07"	73° 45' 26"
S2	Entrance to Udall's Cove at Village Park	40° 47' 01"	73° 45' 06"
S3	Eastchester Bay & Lafayette Avenue	40° 50' 05"	73° 48' 21"
S4	Entrance to Powell's Cove	40° 47' 40"	73° 50' 01"
S5	Westchester Creek north of Unionport Bridge	40° 49' 43"	73° 50' 35"
S6	Entrance to Flushing River w/o Whitestone Expressway	40° 45' 54"	73° 50' 34"
S7	Bronx River South of East Gun Hill Road	40° 52' 38"	73° 52' 10"
S8	Entrance to Steinway Creek	40° 47' 01"	73° 53' 44"
S9	Entrance to Bronx Kills n/o Randall's Island Park	40° 47' 44"	73° 54' 46"
S10	Hallets Cove and 30th Drive	40° 46' 14"	73° 56' 44"
S11	East Channel & Entrance to 45th Avenue Canal	40° 44' 59"	73° 57' 29"
S12	Entrance to Dutch Kills South of LIRR Bridge	40° 44' 17"	73° 56' 44"
S13	Newtown Creek n/o Grand Avenue Bridge	40° 43' 02"	73° 55' 26"
S14	Entrance to English Kills at Scott street	40° 43' 04"	73° 55' 41"
S15	Entrance to Bushwick Inlet	40° 43' 32"	73° 57' 50"
S16	Entrance to Wallabout Channel	40° 42' 30"	73° 58' 16"
S17	Entrance to Brooklyn Navy Yard	40° 42' 14"	73° 58' 32"
S18	Entrance to Atlantic Basin	40° 40' 59"	73° 00' 41"
S19	Entrance to Erie Basin at Dwight Street	40° 40' 09"	73° 00' 56"
S20	Upper New York Bay & 79th street	40° 37' 56"	73° 02' 44"
S21	Entrance to Coney Island Creek at Kaiser Playground	40° 34' 53"	73° 59' 56"
S22	Shell Bank Creek & Lois Avenue	40° 35' 07"	73° 55' 24"
S23	Gerritsen Inlet at Dead Horse Bay	40° 34' 57"	73° 54' 26"
S24	Mill Basin & Indiana Place	40° 36' 14"	73° 54' 19"
S25	Entrance to East Mill Basin at Basset Street	40° 36' 30"	73° 54' 07"
S26	Paerdegat Basin & Avenue K Marina	40° 37' 48"	73° 54' 54"
S27	Entrance to Hendrix Creek southeast of Belt Parkway	40° 38' 26"	73° 52' 12"

Sampling Stations

Station ID	Location	Latitude	Longitude
S28	Entrance to Shellbank Basin at 165th Avenue	40° 38' 59"	73° 50' 13"
S29	Entrance to Hawtree Basin at 164th Avenue	40° 39' 02"	73° 49' 52"
S30	Grassy Bay at South Runway 7-JFK Airport	40° 37' 55"	73° 47' 59"
S31	Entrance to Thurston Basin	40° 38' 18"	73° 44' 52"
S32	Entrance to Mott Basin at Breeze Place	40° 36' 53"	73° 46' 11"
S33	Entrance to Norton Basin at Dunbar Street	40° 36' 29"	73° 46' 21"
S34	Entrance to Sommerville Basin	40° 36' 11"	73° 47' 08"
S35	Entrance to Vernam Basin at Alameda Avenue	40° 35' 44"	73° 48' 18"
S36	Entrance to Barbadoes Basin at Beach 83rd Street	40° 35' 35"	73° 48' 29"
S37	Beach Channel and Beach 131st Street	40° 35' 08"	73° 51' 23"
S38	Bannister Creek & Atlantic Beach Bridge Approach	40° 35' 50"	73° 44' 19"
S39	Upper NY Bay &Navy Homeport (at Union Street)	40° 37' 46"	74° 03' 56"
S40	Lower NY Bay n/o Sand Lane (South Beach)	40° 34' 28"	74° 04' 40"
S41	Lower NY Bay s/o New Dorp Lane (Gateway Park)	40° 33' 42"	74° 05' 28"
S42	Entrance to Great Kills Harbor at Cleveland Avenue	40° 32' 13"	74° 08' 22"
S43	Raritan Bay n/o Huguenot Avenue	40° 31' 01"	74° 10' 48"
S44	Prince's Bay& entrance to Lemon Creek	40° 30' 40"	74° 12' 05"
S45	Arthur Kill & Entrance to Mill Creek	40° 31' 16"	74° 14' 43"
S46	Richmond Creek and Richmond Avenue (Eastside)	40° 33' 59"	74° 10' 12"
S47	Hudson River & W.233rd Street	40° 54' 11"	73° 54' 56"
S48	Hudson River Under George Washington Bridge	40° 51' 04"	73° 56' 58"
S49	Hudson River & W.135th Street	40° 49' 25"	73° 57' 38"
S50	Hudson River & W. 86th Street	40° 47' 34"	73° 58' 59"
S51	Hudson River & W. 38th Street	40° 45' 41"	73° 00' 19"
S52	Hudson River & W. 14th Street	40° 44' 41"	73° 00' 46"
S53	Hudson River & South Cove (The Battery)	40° 42' 26"	73° 01' 10"
S54	Harlem River Under Broadway Bridge	40° 52' 25"	73° 54' 40"

Sampling Stations

Station ID	Location	Latitude	Longitude
S55	Harlem River & Sherman Creek	40° 51' 29"	73° 55' 11"
S56	Harlem River & W. 170th Street	40° 50' 13"	73° 56' 02"
S57	Harlem River n/o Willis Avenue Bridge	40° 48' 13"	73° 55' 49"
S58	East River & 24th Avenue	40° 46' 51"	73° 55' 23"
S59	Bronx River & Randall Avenue	40° 48' 51"	73° 52' 18"
S60	Bronx River & E. 180th Street	40° 50' 32"	73° 52' 37"
S61	Bronx River & E. 241st Street	40° 54' 26"	73° 51' 20"
S62	Hutchinson River & Ash Loop	40° 52' 14"	73° 49' 22"
S63	East River Under The Throggs Neck Bridge	40° 48' 01"	73° 47' 39"
S64	Little Neck Bay & 26th Avenue	40° 46' 56"	73° 46' 03"
S65	East River & 18th Avenue	40° 47' 04"	73° 51' 33"
S66	Flushing Bay & 31st Avenue	40° 46' 10"	73° 51' 04"
S67	East River & E. 51 Street	40° 45' 12"	73° 57' 46"
S68	Gowanus Bay e/o Hamilton Avenue Bridge	40° 40' 20"	73° 59' 53"
S69	Kill Van Kull & Tysen Street	40° 38' 47"	74° 05' 58"
S70	Kill Van Kull w/o Bayonne Bridge	40° 38' 27"	74° 08' 34"
S71	Arthur Kill e/o Prall's Island	40° 36' 59"	74° 12' 06"
S72	Arthur Kill & Fresh Kills	40° 34' 20"	74° 12' 23"
S73	Lower NY Bay e/o Crooke's Point (Gateway Park)	40° 31' 20"	74° 08' 01"
S74	Sheepshead Bay & Nostrand Avenue	40° 34' 58"	73° 56' 19"
S75	Mill Basin e/o Belt Parkway	40° 36' 17"	73° 53' 50"
S76	Fresh Creek Basin & Avenue N	40° 38' 29"	73° 52' 56"
S77	Grassy Bay Under Cross Bay Boulevard Bridge	40° 38' 40"	73° 50' 10"
S78	Bergen Basin & 163rd Avenue	40° 39' 07"	73° 49' 24"
S79	Broad Channel e/o Giant Bar Marsh	40° 35' 21"	73° 49' 30"
S80	Newtown Creek Under Kosciusko Bridge	40° 43' 40"	73° 55' 45"

SHORELINE MONITORING PROGRAM

2018 ANALYTICAL RESULTS

Station ID	Samp1	Samp2	Samp3	Samp4	Samp5	Samp6	Samp7	Samp8	Samp9	Samp10	95% UCL
S1	84	32	84	20	218	2	207	2	62	72	102
S2	199	56	132	4	168	6	18	2	74	40	84
S3	4	8	4	4	72	2	2	2	18	6	11
S4	320	160	20	24	1,099	6	18	6	205	24	148
S5	89	40	28	36	360	52	80	113	104	3,800	267
S6	32,000	400	2,800	25,000	62,000	3,500	8,100	3,200	9,200	10,100	18,128
S7	892	310	400	400	240	580	233	240	300	289	462
S8	28	28	12	20	220	128	10	2	196	98	86
S9	17	44	48	4	92	16	14	20	84	40	49
S10	88	174	24	28	24	12	116	18	62	10	66
S11	66	236	4	8	4	10	104	10	40	54	56
S12	580	5,400	60	16	28	42	1,190	22	330	470	556
S13	1,150	27,000	132	84	5,100	18	19,700	70	220	3,000	3,387
S14	148,000	101,000	380	16	182	420	13,400	212	17,100	8,700	14,673
S15	61	192	40	12	8	10	2	81	200	40	75
S16	217	92	4	4	230	12	16	22	94	60	85
S17	50	100	24	8	8	8	2	38	24	42	38
S18	25	96	40	4	8	2	110	68	172	28	68
S19	33	60	4	4	20	10	2	24	24	36	28
S20	44	18	4	28	16	14	28	93	110	30	48
S21	12	390	560	72	10	8,100	2,100	1,218	10	882	1,016
S22	4	22	4	12	12	4	11,400	2	720	6	118
S23	28	12	4	88	4	40	2	2	22	3	22
S24	8	8	4	4	8	2	10	2	32	10	11
S25	4	32	4	4	20	4	4	2	40	8	14
S26	216	24	188	4	490	44	8	6	560	92	167
S27	120	4	4	4	124	24	10	8	270	34	56

Fecal result = FC / 100ml

UCL – Under Confidence Limit

SHORELINE MONITORING PROGRAM

2018 ANALYTICAL RESULTS

Station ID	Samp1	Samp2	Samp3	Samp4	Samp5	Samp6	Samp7	Samp8	Samp9	Samp10	95% UCL
S28	28	56	4	4	20	8	8	2	86	500	50
S29	4	32	12	4	88	2	26	2	34	540	49
S30	58	8	4	4	8	10	2	2	8	74	18
S31	198	104	44	4	4	52	76	20	20	18	65
S32	16	4	4	4	410	2	2	2	8	4	17
S33	20	12	4	4	36	20	36	2	84	10	27
S34	16	8	4	4	2,400	2	12	2	16	32	46
S35	28	16	4	12	4	12	2	4	8	34	15
S36	144	148	4	4	92	12	2	6	20	176	61
S37	16	16	8	4	4	2	6	4	6	10	9
S38	84	8	4	8	16	2	2	10	2	230	26
S39	104	10	16	24	48	16	2	10	54	224	56
S40	44	10	8	4	4	4	2	6	92	22	20
S41	16	4	8	4	12	4	10	2	10	14	11
S42	280	4	4	4	8	2	2	8	10	2	16
S43	56	4	20	4	4	4	2	2	36	6	14
S44	8	8	16	4	4	2	2	2	76	10	13
S45	20	4	4	44	60	4	2	124	1,318	16	73
S46	330	52	24	108	260	12	132	4	600	8	163
S47	8	64	230	168	4	4	34	8	18	132	71
S48	50	10	204	219	8	10	24	10	10	174	73
S49	28	96	144	152	24	44	44	2	16	84	86
S50	1,800	8	144	76	16	30	60	106	86	144	187
S51	96	8	140	60	28	93	258	128	8	92	120
S52	22	12	20	116	64	16	24	6	260	96	71
S53	8	8	44	64	32	2	18	6	74	16	34
S54	144	48	196	128	300	18	44	28	8	216	143

Fecal result = FC / 100ml

UCL – Under Confidence Limit

SHORELINE MONITORING PROGRAM

2018 ANALYTICAL RESULTS

Station ID	Samp1	Samp2	Samp3	Samp4	Samp5	Samp6	Samp7	Samp8	Samp9	Samp10	95% UCL
S55	224	96	240	199	520	8	26	36	18	66	169
S56	80	84	128	200	530	14	28	18	12	62	126
S57	22	100	152	155	68	14	12	18	6	40	70
S58	6	80	136	56	120	60	16	22	98	22	80
S59	8	168	310	80	400	30	14	42	2,300	560	338
S60	600	132	124	216	169	74	550	16	260	845	383
S61	4,100	2,000	580	2,400	1,500	3,400	580	1,045	1,036	1,154	2,211
S62	68	124,000	47,000	224	72	2	5,100	228	15,200	17,700	10,366
S63	53	24	8	4	420	2	28	2	40	22	46
S64	28	20	164	4	183	100	112	2	28	64	91
S65	500	200	52	30	6,636	36	6	6	330	188	370
S66	4,900	360	108	550	1,018	160	26	86	3,500	440	1,046
S67	100	100	60	26	20	40	88	28	50	52	70
S68	370	245	60	24	218	2	4	75	330	52	172
S69	30	20	8	4	112	14	8	26	93	92	48
S70	8	8	20	4	132	4	24	320	320	109	89
S71	12	28	20	4	286	12	10	20	530	118	85
S72	1,099	50	24	72	187	14	4	50	133	164	167
S73	16	4	4	4	4	2	2	8	30	14	10
S74	16	570	937	12	4	96	212	58	214	172	250
S75	8	30	4	4	40	2	4	2	14	34	17
S76	9,727	64	48	116	84	6	14	4	148	60	238
S77	19	40	4	4	24	2	4	2	290	340	48
S78	340	3,100	4	28	4	2	62	4	4	12,100	276
S79	20	48	4	4	4	8	4	6	6	16	14
S80	1,000	86,000	88	310	500	30	4,800	88	2,900	330	2,768

Fecal result = FC / 100ml

UCL – Under Confidence Limit

1st QUARTER

JANUARY 1 - MARCH 31, 2018

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

1st QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
1	03/06/18	S 1	***207**	10	200
2	03/06/18	S 2	18	6	200
3	03/06/18	S 3	2	2	200
4	03/06/18	S 4	18	2	200
5	03/06/18	S 5	80	6	200
6	03/12/18	S 6	***8,100**	***13,000**	200
7	02/27/18	S 7	***233**	66	200
8	03/12/18	S 8	10	28	200
9	03/12/18	S 9	14	14	200
10	03/05/18	S 10	116	34	200
11	03/05/18	S 11	104	28	200
12	03/05/18	S 12	***1,190**	112	200
13	03/05/18	S 13	***19,700**	***470**	200
14	03/05/18	S 14	***13,400**	***223**	200
15	03/16/18	S 15	2	12	200
16	03/16/18	S 16	16	12	200
17	03/16/18	S 17	2	10	200
18	03/16/18	S 18	110	4	200
19	03/16/18	S 19	2	2	200
20	03/01/18	S 20	28	8	200
21	03/01/18	S 21	***2,100**	***480**	200
22	03/01/18	S 22	***11,400**	94	200
23	03/01/18	S 23	2	2	200
24	03/01/18	S 24	10	2	200
25	03/01/18	S 25	4	2	200
26	02/28/18	S 26	8	2	200
27	02/28/18	S 27	10	8	200
28	02/28/18	S 28	8	10	200
29	02/28/18	S 29	26	44	200
30	02/28/18	S 30	2	2	200
31	02/01/18	S 31	76	10	200
32	02/01/18	S 32	2	2	200
33	02/01/18	S 33	36	28	200
34	02/01/18	S 34	12	2	200
35	02/01/18	S 35	2	2	200
36	02/01/18	S 36	2	2	200
37	02/01/18	S 37	6	2	200
38	03/05/18	S 38	2	6	200
39	03/19/18	S 39	2	2	200
40	03/19/18	S 40	2	2	200

** Fecal Coliform Exceedance*

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

1st QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
41	03/19/18	S 41	10	2	200
42	03/19/18	S 42	2	2	200
43	03/19/18	S 43	2	2	200
44	03/19/18	S 44	2	2	200
45	03/19/18	S 45	2	2	200
46	03/05/18	S 46	132	85	200
47	03/16/18	S 47	34	6	200
48	03/16/18	S 48	24	8	200
49	03/16/18	S 49	44	26	200
50	03/16/18	S 50	60	10	200
51	03/16/18	S 51	***258**	20	200
52	03/16/18	S 52	24	16	200
53	03/16/18	S 53	18	4	200
54	03/12/18	S 54	44	4	200
55	03/12/18	S 55	26	10	200
56	03/12/18	S 56	28	10	200
57	03/12/18	S 57	12	12	200
58	03/12/18	S 58	16	16	200
59	03/06/18	S 59	14	2	200
60	02/27/18	S 60	***550**	34	200
61	02/27/18	S 61	***580**	52	200
62	02/27/18	S 62	***5,100**	***900**	200
63	03/06/18	S 63	28	2	200
64	03/06/18	S 64	112	2	200
65	03/12/18	S 65	6	32	200
66	03/12/18	S 66	26	78	200
67	03/05/18	S 67	88	36	200
68	03/19/18	S 68	4	12	200
69	03/19/18	S 69	8	2	200
70	03/19/18	S 70	24	8	200
71	03/19/18	S 71	10	2	200
72	03/19/18	S 72	4	10	200
73	03/19/18	S 73	2	2	200
74	03/01/18	S 74	***212**	44	200
75	03/01/18	S 75	4	2	200
76	02/28/18	S 76	14	2	200
77	02/28/18	S 77	4	2	200
78	02/28/18	S 78	62	16	200
79	02/01/18	S 79	4	10	200
80	03/05/18	S 80	***4,800**	***250**	200

** Fecal Coliform Exceedance*

WEATHER REPORT

The first quarter monitoring and sampling of ambient sampling stations began on January 01 and ended on March 31, 2018. During this quarter, all eighty stations were sampled, and a total of 6.25 inches of precipitation was recorded falling.

MINI-SHORELINE SURVEY RESULTS

S-1: ALLEY CREEK & NORTHERN BOULEVARD

A mini-shoreline survey was conducted in beginning of March. Entrance to the Alley Creek and the surrounding area were surveyed, but no discharge was observed.

S-6: ENTRANCE TO FLUSHING RIVER, W/O WHITESTONE EXPWY

A mini-shoreline survey was performed in mid-March. The survey included the Flushing River shorelines, between Roosevelt Avenue and 31st Road. No discharge was observed.

S-7: BRONX RIVER, SOUTH OF EAST GUN HILL ROAD

A mini-shoreline survey was conducted in beginning of March. The survey targeted all the outfalls on both east and west sides of the Bronx River, starting north of East Gun Hill Road and proceeded northward to the Westchester County border. Two (2) outfalls with highly elevated fecal coli form levels, originating from Westchester County were identified to be the source of exceedance at the sentinel stations. The Compliance Monitoring Section (CMS) has notified the NYSDEC of this ongoing problem.

S-12: ENTRANCE TO DUTCH KILLS SOUTH OF LIRR BRIDGE

A mini-shoreline survey was conducted in the beginning of March. The entire shoreline, both west and east sides of the entire Dutch Kills was surveyed. No discharge was observed.

S-13: NEWTOWN CREEK NORTH OF GRAND AVENUE

A mini-shoreline survey was performed by the beginning of March. The area inspected included the shoreline between Grand Avenue and 58th Street. No discharge was observed.

S-14: ENTRANCE TO ENGLISH KILLS AT SCOTT STREET

A mini-shoreline survey was conducted by the beginning of March. The survey began at the entrance to English Kills at Scott Street, proceeded southward to Rewe Street. No discharge was observed.

S-21: ENTRANCE TO CONEY ISLAND CREEK AT KAISER PLAYGROUND

A mini-shoreline survey was conducted by the beginning of March. The investigation started at West 32nd Street, proceeded eastward to West 20th Street, covering the shoreline and the surrounding area. No discharge was observed.

S-51: HUDSON RIVER & W. 38TH STREET
A mini-shoreline survey was performed in mid-March. The investigation included the shoreline of the Hudson River, beginning at W.34th Street and proceeded northward to W.48th Street. No discharge was observed.

S-60: BRONX RIVER & EAST 180TH STREET
A mini-shoreline survey was performed by the beginning of March. The survey covered the shoreline of the Bronx River, starting from East 180th Street and proceeded northward covering the Bronx Zoo and surrounding area. No discharge was observed.

S-61: BRONX RIVER & E. 241ST STREET
A mini-shoreline survey was performed by the beginning of March. The investigation covered the shoreline of the Bronx River north of E. 243rd Street. No discharge was observed.

S-62: HUTCHINSON RIVER & ASH LOOP
A mini-shoreline survey was performed by the beginning of March. The investigation included the area along the Hutchinson River near Coop City in the Bronx. No discharge was observed.

S-74: SHEEPSHEAD BAY & NOSTRAND AVENUE
A mini-shoreline survey was conducted by the beginning of March. The survey started at Brigham Street, proceeded west, and ended at Kensington Street. No discharge was observed.

S-80: NEWTOWN CREEK UNDER KOSCIUSKO BRIDGE
A mini-shoreline survey was conducted by the beginning of March. The survey began from Meeker Avenue and Newtown Creek, and proceeded south going under the Kosciusko Bridge to Anthony Street. No discharge was observed.

DRY WEATHER DISCHARGE

BB-008, 108th STREET & 37th AVENUE
The investigation to identify the source of the dry weather discharge at the outfall is ongoing. This is a tidally impacted outfall. The Bureau of Environmental Design and Construction (BEDC) has begun a project for modifying weirs in the regulators that discharge to BB-008, to optimize CSO capture. The CMS personnel will continue investigating the area to identify any other illegal connections to storm sewers tributary to the BB-008 outfall. Please refer to Item Number 3687.

NCQ-077, MASPETH CREEK

As part of an ongoing investigation to determine the source(s) of contamination to the Maspeth Creek from the outfall NCQ-077, CMS personnel dye tested the establishments, Way Fong LLC, President East Company, and GD Citrus Inc. All three establishments were confirmed to be illegally discharging sanitary waste to Maspeth Creek through a storm sewer. As a result, a Commissioner's Order was issued to each of the establishments. All three cases are still open. Please refer to item Number 5484.

Address	Date of Investigation	Date Closed	Comments
57-29 99th Street	06/30/2017		Under BWSO review
16 Galasso Place	07/31/2017		Under BWSO review
3 Galasso Place	07/06/2017		Under BWSO review

CI-664, W. 15th STREET & CONEY ISLAND CREEK

The investigation to determine source(s) of contaminated dry-weather discharge from CI-664 is still ongoing. Since the New York City Department of Design and Construction is currently constructing new storm sewers in the area, the investigation is impeded, but CMS personnel will continue investigating the area for any other illegal connections. Please refer to Item Number 3621.

HP-010 & BRONX RIVER

The investigation to abate the source(s) of contaminated dry-weather discharge from HP-010 is still ongoing. CMS has referred the case to the Bureau of Water and Sewer Operations (BWSO) to remove the sources of illegal discharge from the sanitary sewer to the storm sewer. Please refer to Item Number 3374.

TI-024 / 61st AVENUE/ALLEY POND

As part of an ongoing investigation to identify any improper storm sewer connections tributary to the outfall TI-024, CMS personnel dye tested two hundred and thirty-one (231) establishments. The following two hundred and nineteen (219) were found to be properly connected to the sanitary sewer:

240-29 67th Ave	240-39 67th Ave	240-57 67th Ave	240-53 67th Ave
240-55 67th Ave	240-41 67th Ave	240-67 67th Ave	240-78 67th Ave
240-70 67th Ave	240-30 67th Ave	240-11 67th Ave	240-18 67th Ave
240-16 67th Ave	240-64 67th Ave	239-45 66th Ave	239-41 66th Ave
239-29 66th Ave	239-31 66th Ave	239-51 66th Ave	239-38 66th Ave
239-25 66th Ave	240-31 67th Ave	240-36 67th Ave	240-35 67th Ave
240-59 67th Ave	240-63 67th Ave	240-83 67th Ave	240-75 67th Ave
240-4 7 67th Ave	240-60 67th Ave	240-73 67th Ave	240-19 67th Ave
240-15 67th Ave	240-01 67th Ave	240-06 671h Ave	240-66 67th Ave
239-35 66th Ave	239-33 66th Ave	240-25 67th Ave	239-53 66th Ave
239-32 661h Ave	239-36 66th Ave	240-33 67th Ave	240-28 67th Ave

240-37 67th Ave
240-34 67th Ave
240-61 67th Ave
240-72 67th Ave
240-52 67thAve
240-76 671h Ave
240-81 67th Ave
240-17 67th Ave
240-42 671h Ave
240-21 67th Ave
240-12 671h Ave
240-07 67th Ave
240-49 67th Ave
239-43 66th Ave
239-42 66th Ave
239-55 66th Ave
239-44 66th Ave
239-27 66th Ave
240-05 671h Ave
240-45 67th Ave
240-43 67th Ave
240-27 67th Ave
240-51 67th Ave
240-69 67th Ave
240-65 67th Ave
240-79 67th Ave
240-48 67th Ave
240-58 67th Ave
240-40 67th Ave
240-20 67th Ave
240-22 67th Ave
240-46 67th Ave
239-47 66th Ave
240-03 67th Ave
239-39 66th Ave
239-37 66th Ave
239-49 66th Ave
239-40 66th Ave
239-19 66th Ave
239-54 66th Ave
240-12 66th Ave
239-50 66th Ave
239-46 66th Ave
240-28 66th Ave
239-30 66th Ave
239-56 661h Ave
240-02 66th Ave
240-14 66th Ave
240-71 6th Ave
240-16 661h Ave
240-20 66th Ave
240-07 66th Ave
240-17 66th Ave
240-04 661h Ave
240-06 661h Ave
239-48 65th Ave
239-52 65th Ave
239-54 651h Ave
239-29 65th Ave
239-35 65th Ave
239-33 65th Ave
239-37 651h Ave
240-33 65th Ave
239-49 65th Ave
240-37 66th Ave
239-47 65th Ave
239-51 65th Ave
239-40 65th Ave
239-53 65th Ave
239-57 65th Ave
239-30 65th Ave
239-50 65th Ave
239-59 65th Ave
239-20 651h Ave
239-19 65th Ave
239-22 651h Ave
239-21 65th Ave
239-26 651h Ave
239-27 65th Ave
239-46 65th Ave
239-25 65th Ave
239-31 651h Ave
239-28 65th Ave
239-45 65th Ave
239-39 65th Ave
239-36 65th Ave
239-61 65th Ave
240-15 65th Ave
240-03 65th Ave
240-01 651h Ave
239-44 65th Ave
239-41 65th Ave
239-32 65th Ave
239-23 651h Ave
240-02 65th Ave
240-12 651h Ave
240-18 65th Ave
240-28 651h Ave
239-43 65th Ave
240-54 67th Ave
239-17 65th Ave
239-34 651h Ave
240-04 67th Ave
240-08 67th Ave
239-15 65th Ave
240-17 651h Ave
240-09 65th Ave
240-16 65th Ave
240-23 65th Ave
240-30 651h Ave
240-09 67th Ave
239-42 65th Ave
239-55 65th Ave
240-10 671h Ave
240-14 67th Ave
240-38 65th Ave
240-21 65th Ave
240-25 651h Ave
240-27 65th Ave
240-11 65th Ave
240-03 66th Ave
240-05 66th Ave
240-34 66th Ave
240-36 66th Ave
240-19 66th Ave
240-09 66th Ave
239-52 66th Ave
239-24 65th Ave
240-46 65th Ave
240-52 651h Ave
240-56 65th Ave
240-58 65th Ave
240-15 66th Ave
240-18 661h Ave
240-21 66th Ave
240-33 66th Ave
240-46 66th Ave
240-32 661h Ave
240-45 66th Ave
240-53 66th Ave
240-38 66th Ave
240-41 66th Ave
240-10 66th Ave
240-08 66th Ave
240-30 66th Ave
240-52 66th Ave
240-24 66th Ave
240-54 66th Ave
240-56 66th Ave
239-24 661h Ave
239-26 66th Ave
240-37 65th Ave
240-35 65th Ave
240-31 65th Ave
240-32 65th Ave
240-39 65th Ave
240-22 65th Ave
240-24 651h Ave
240-29 65th Ave
240-06 651h Ave
240-05 65th Ave
240-48 651h Ave
240-50 65th Ave
240-40 65th Ave
240-27 66th Ave
240-40 66th Ave
240-47 661h Ave
240-42 65th Ave
240-44 65th Ave
259-07 57th Ave
259-15 57th Ave
57-03 Little Neck Pkwy
259-11 57th Ave
259-19 57th Ave
259-03 57th Ave

The remaining twelve (12) establishments as follows, were found to have improper connection to the storm sewer, and were issued Commissioner's Orders:

Address	Date of Investigation	Date Closed	Comments
240-81 67th Ave	02/11/2009	03/10/2009	
240-21 67th Ave	02/27/2009	05/12/2009	
239-33 66th Ave	07/02/2009	11/20/2009	
240-25 67th Ave	07/13/2009	10/22/2009	
239-49 66th Ave	07/06/2009	09/18/2009	
239-40 66th Ave	09/25/2009	12/03/2009	
239-38 66th Ave	07/02/2009	11/20/2009	
239-32 66th Ave	09/25/2009	12/22/2009	
239-39 65th Ave	05/20/2010	09/08/2010	
240-09 67th Ave	09/13/2010	11/18/2010	
240-10 67th Ave	05/10/2012	11/12/2014	
259-07 57th Ave	04/11/2014	08/07/2014	

As a result, all homeowners complied with the orders. CMS will continue to investigate the area to identify any other illegal connections to the storm sewer tributary to TI-024. Please refer to item number 4558.

2nd QUARTER

APRIL 1 - JUNE 30, 2018

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
1	05/09/18	S 1	2	2	200
2	05/09/18	S 2	2	2	200
3	05/09/18	S 3	2	2	200
4	05/09/18	S 4	6	2	200
5	06/15/18	S 5	113	20	200
6	05/09/18	S 6	***3,200**	228	200
7	04/09/18	S 7	***240**	62	200
8	05/09/18	S 8	2	2	200
9	06/15/18	S 9	20	4	200
10	04/24/18	S 10	18	4	200
11	04/24/18	S 11	10	2	200
12	04/24/18	S 12	22	2	200
13	04/24/18	S 13	70	4	200
14	04/24/18	S 14	***212**	38	200
15	05/08/18	S 15	81	2	200
16	05/08/18	S 16	22	14	200
17	05/08/18	S 17	38	6	200
18	05/08/18	S 18	68	2	200
19	05/08/18	S 19	24	2	200
20	05/08/18	S 20	93	2	200
21	05/08/18	S 21	***1,218**	46	200
22	05/08/18	S 22	2	2	200
23	05/03/18	S 23	2	2	200
24	05/03/18	S 24	2	2	200
25	05/03/18	S 25	2	2	200
26	05/03/18	S 26	6	2	200
27	05/03/18	S 27	8	2	200
28	05/03/18	S 28	2	2	200
29	05/03/18	S 29	2	2	200
30	04/23/18	S 30	2	2	200
31	04/23/18	S 31	20	10	200
32	04/23/18	S 32	2	2	200
33	04/23/18	S 33	2	2	200
34	04/23/18	S 34	2	2	200
35	04/23/18	S 35	4	2	200
36	04/23/18	S 36	6	2	200
37	04/23/18	S 37	4	2	200
38	04/09/18	S 38	10	2	200
39	06/14/18	S 39	10	2	200
40	06/14/18	S 40	6	2	200

** Fecal Coliform Exceedance*

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

2nd QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
41	06/14/18	S 41	2	2	200
42	06/14/18	S 42	8	2	200
43	06/14/18	S 43	2	2	200
44	06/14/18	S 44	2	2	200
45	06/14/18	S 45	124	2	200
46	04/09/18	S 46	4	4	200
47	06/18/18	S 47	8	2	200
48	06/18/18	S 48	10	8	200
49	06/18/18	S 49	2	10	200
50	06/18/18	S 50	106	2	200
51	06/18/18	S 51	128	2	200
52	06/18/18	S 52	6	2	200
53	06/18/18	S 53	6	2	200
54	06/15/18	S 54	28	2	200
55	06/15/18	S 55	36	6	200
56	06/15/18	S 56	18	12	200
57	06/15/18	S 57	18	2	200
58	04/24/18	S 58	22	4	200
59	06/15/18	S 59	42	2	200
60	04/09/18	S 60	16	6	200
61	04/09/18	S 61	***1,045**	***210**	200
62	04/09/18	S 62	***228**	119	200
63	05/09/18	S 63	2	2	200
64	05/09/18	S 64	2	2	200
65	05/09/18	S 65	6	4	200
66	05/09/18	S 66	86	2	200
67	04/24/18	S 67	28	2	200
68	05/08/18	S 68	75	4	200
69	06/14/18	S 69	26	4	200
70	06/14/18	S 70	***320**	2	200
71	06/14/18	S 71	20	2	200
72	06/14/18	S 72	50	2	200
73	06/14/18	S 73	8	2	200
74	05/08/18	S 74	58	2	200
75	05/03/18	S 75	2	2	200
76	05/03/18	S 76	4	2	200
77	05/03/18	S 77	2	2	200
78	04/23/18	S 78	4	2	200
79	04/23/18	S 79	6	2	200
80	04/24/18	S 80	88	4	200

** Fecal Coliform Exceedance*

WEATHER REPORT

The second quarter monitoring and sampling of ambient sampling stations began on April 01 and ended on June 30, 2018. During this quarter, all eighty stations were sampled, and a total of 7.03 inches of precipitation was recorded falling.

MINI-SHORELINE SURVEY RESULTS

S-6: ENTRANCE TO FLUSHING RIVER, W/O WHITESTONE EXPWY

A mini-shoreline survey was performed by the beginning of May. The investigation included the shoreline of the Flushing River between Roosevelt Avenue and 31st Road. No discharge was observed.

S-7: BRONX RIVER, SOUTH OF EAST GUN HILL ROAD

A mini-shoreline survey was conducted by the beginning of April. The survey targeted all the outfalls on both east and west side of the Bronx River, starting north of the East Gun Hill Road, and proceeded northward to the Westchester County border. Two (2) outfalls with highly elevated fecal coli form levels, originating from Westchester County were identified to be the source of exceedance at the sentinel stations. The Compliance Monitoring Section has notified the NYSDEC of this ongoing problem.

S-14: ENTRANCE TO ENGLISH KILLS AT SCOTT STREET

A mini-shoreline survey was conducted at the end of April. The survey began at the entrance to English Kills at Scott Street, southward to Rewe Street. No discharge was observed.

S-21: ENTRANCE TO CONEY ISLAND CREEK AT KAISER PLAYGROUND

A mini-shoreline survey was conducted by the beginning of May. The investigation included the shoreline of Coney Island Creek starting from West 32nd Street and proceeded east to West 20th Street. No discharge was observed.

S-61: BRONX RIVER & E. 241ST STREET

A mini-shoreline survey was performed by the beginning of April. The investigation covered the shoreline of the Bronx River northward to E. 243rd Street. No discharge was observed.

S-62: HUTCHINSON RIVER & ASH LOOP

A mini-shoreline survey was performed by the beginning of April. The investigation included the area along the Hutchinson River near Coop City in the Bronx. No discharge was observed.

S-70: KILL VAN KULL W/O BAYONNE BRIDGE

A mini-shoreline survey was performed in mid-June. The investigation covered the shoreline of Kill Van Kull from Simonson Avenue to Nicholas Avenue. No discharge was observed.

DRY WEATHER DISCHARGES

465 VANDERVOORT AVENUE BROOKLYN

CMS personnel conducted a joint investigation with NYS DEC and NYPD personnel at the establishment, SHK Truck Repair, located at 465 Vandervoort Avenue Brooklyn. There was evidence of discharging engine-oil and fluid to the street pavement and catch basin. A Commissioner's Order prohibiting any discharge to the catch basin was issued. The case was transferred to NYS DEC.

3rd QUARTER

JULY 1 - SEPTEMBER 30, 2018

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

3rd QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Baseline
1	09/04/18	S 1	62	2	200
2	09/04/18	S 2	74	2	200
3	09/04/18	S 3	18	2	200
4	07/31/18	S 4	***205**	2	200
5	09/04/18	S 5	104	2	200
6	07/31/18	S 6	***9,200**	10	200
7	07/09/18	S 7	***300**	197	200
8	07/31/18	S 8	196	4	200
9	07/31/18	S 9	84	4	200
10	07/10/18	S 10	62	2	200
11	07/10/18	S 11	40	10	200
12	07/10/18	S 12	***330**	2	200
13	07/10/18	S 13	***220**	20	200
14	07/10/18	S 14	***17,100**	48	200
15	08/30/18	S 15	200	4	200
16	08/30/18	S 16	94	2	200
17	08/30/18	S 17	24	2	200
18	08/30/18	S 18	172	2	200
19	08/30/18	S 19	24	2	200
20	08/30/18	S 20	110	2	200
21	09/17/18	S 21	10	2	200
22	09/17/18	S 22	***720**	2	200
23	09/17/18	S 23	22	2	200
24	09/17/18	S 24	32	2	200
25	09/17/18	S 25	40	2	200
26	09/17/18	S 26	***560**	2	200
27	07/05/18	S 27	***270**	2	200
28	07/05/18	S 28	86	4	200
29	07/05/18	S 29	34	2	200
30	07/05/18	S 30	8	2	200
31	07/05/18	S 31	20	2	200
32	09/06/18	S 32	8	2	200
33	09/06/18	S 33	84	2	200
34	09/06/18	S 34	16	2	200
35	09/06/18	S 35	8	2	200
36	09/06/18	S 36	20	2	200
37	09/06/18	S 37	6	2	200
38	07/30/18	S 38	2	100	200
39	08/30/18	S 39	54	2	200
40	09/24/18	S 40	92	6	200

** Fecal Coliform Exceedance*

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

3rd QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
41	09/24/18	S 41	10	4	200
42	09/21/18	S 42	10	2	200
43	09/21/18	S 43	36	2	200
44	09/21/18	S 44	76	2	200
45	09/21/18	S 45	***1,318**	8	200
46	07/30/18	S 46	***600**	196	200
47	08/28/18	S 47	18	2	200
48	08/28/18	S 48	10	2	200
49	08/28/18	S 49	16	4	200
50	08/28/18	S 50	86	2	200
51	08/28/18	S 51	8	2	200
52	09/24/18	S 52	***260**	2	200
53	09/24/18	S 53	74	2	200
54	08/28/18	S 54	8	2	200
55	08/28/18	S 55	18	2	200
56	08/28/18	S 56	12	4	200
57	08/28/18	S 57	6	4	200
58	07/31/18	S 58	98	6	200
59	07/31/18	S 59	***2,300**	2	200
60	07/09/18	S 60	***260**	40	200
61	07/09/18	S 61	***1,036**	196	200
62	07/09/18	S 62	***15,200**	4	200
63	09/04/18	S 63	40	2	200
64	09/04/18	S 64	28	2	200
65	07/31/18	S 65	***330**	8	200
66	07/31/18	S 66	***3,500**	2	200
67	07/10/18	S 67	50	2	200
68	08/30/18	S 68	***330**	4	200
69	09/21/18	S 69	93	8	200
70	09/21/18	S 70	***320**	6	200
71	09/21/18	S 71	***530**	2	200
72	09/21/18	S 72	133	20	200
73	09/21/18	S 73	30	2	200
74	09/17/18	S 74	***214**	2	200
75	09/17/18	S 75	14	2	200
76	07/05/18	S 76	148	2	200
77	07/05/18	S 77	***290**	4	200
78	07/05/18	S 78	4	2	200
79	09/06/18	S 79	6	2	200
80	07/10/18	S 80	***2,900**	192	200

** Fecal Coliform Exceedance*

WEATHER REPORT

The third quarter monitoring and sampling of ambient sampling stations began on July 01 and ended on September 30, 2018. During this quarter, all eighty stations were sampled, and a total of 8.33 inches of precipitation was recorded falling.

MINI-SHORELINE SURVEY RESULTS

S-4: ENTRANCE TO POWELL'S COVE

A mini-shoreline survey was performed by the beginning of August. The inspection covered the entire Powell's Cove. No discharge was observed.

S-6: ENTRANCE TO FLUSHING RIVER, W/O WHITESTONE EXPWY

A mini-shoreline survey was performed by the beginning of August. The investigation included the shoreline of the Flushing River between Roosevelt Avenue and 31st Road. No discharge was observed.

S-7: BRONX RIVER, SOUTH OF EAST GUN HILL ROAD

A mini-shoreline survey was conducted in mid-July. The survey targeted all the outfalls on both east and west sides of the Bronx River, starting north of East Gun Hill Road and proceeded northward to the Westchester County border. Two (2) outfalls with highly elevated fecal coli form levels, originating from Westchester County were identified to be the source of exceedance at the sentinel stations. CMS has notified the NYSDEC of this ongoing problem.

S-12: ENTRANCE TO DUTCH KILLS SOUTH OF LIRR BRIDGE

A mini-shoreline survey was conducted in mid-July. The inspection was performed on both West and East sides of the entire Dutch Kills shoreline. No discharge was observed.

S-13: NEWTOWN CREEK NORTH OF GRAND AVENUE

A mini-shoreline survey was performed in mid-July. The area inspected included the shoreline between Grand Avenue and 58th Street. No discharge was observed.

S-14: ENTRANCE TO ENGLISH KILLS AT SCOTT STREET

A mini-shoreline survey was conducted in mid-July. The survey began at the entrance to English Kills at Scott Street, southward to Rewe Street. No discharge was observed.

S-22: SHELL BANK CREEK & LOIS AVENUE

A mini-shoreline survey was conducted by the end of September. The survey covered the entire Shell Bank Creek and adjacent area. No discharge was observed.

S-26: PAERDEGAT BASIN & AVENUE K

A mini-shoreline survey was conducted in mid-September and included all of Paerdegat Basin. No discharge was observed.

S-27: ENTRANCE TO HENDRIX CREEK, SOUTHEAST OF BELT PKWY

A mini-shoreline survey was conducted in mid-July. The area surveyed started from the entrance to the Hendrix Creek, and proceeding northward to the Belt Parkway. No discharge was observed.

S-45: ARTHUR KILL & ENTRANCE TO MILL CREEK

A mini survey was conducted by the end of September. The area inspected included the shoreline Richmond Valley Road south to Nassau Place. No discharge was observed.

S-46: RICHMOND CREEK & RICHMOND AVENUE

A mini-shoreline survey was conducted by the beginning of August. The investigation covered all of Richmond Creek. No discharge was observed.

S-52: HUDSON RIVER & WEST 14TH STREET

A mini-shoreline survey was performed by the end of September. The investigation included the shoreline of the Hudson River starting at W.14th Street northward to W. 21st street. No discharge was observed.

S-59: BRONX RIVER & RANDALL AVENUE

A mini shoreline survey of the shoreline was conducted by the beginning of August. The area inspected started at the Bronx River and Randall Avenue and preceded north to the Bruckner Expressway. No discharge was observed.

S-60: BRONX RIVER & EAST 180TH STREET

A mini-shoreline survey was performed by the beginning of July. The survey covered the shoreline of the Bronx River starting from East 180th Street and proceeded northward covering the Bronx Zoo. No discharge was observed.

S-61: BRONX RIVER & E. 241ST STREET

A mini-shoreline survey was performed by the beginning of July. The investigation covered the shoreline of the Bronx River northward to E. 243rd Street. No discharge was observed.

S-62: HUTCHINSON RIVER & ASH LOOP

A mini-shoreline survey was performed by the beginning of July. The investigation included the area along the Hutchinson River near Coop City in the Bronx. No discharge was observed.

S-65: EAST RIVER & 18TH AVENUE

A mini-shoreline survey was performed by the beginning of August. The area inspected included the shoreline of Flushing Bay from 18th Avenue northward to 9th Avenue. No discharge was observed.

S-66: FLUSHING BAY & 31ST AVENUE

A mini-shoreline survey was performed by the beginning of August. Flushing Bay shoreline between 123rd Street and 28th Avenue was the targeted area for the survey. No discharge was observed.

S-68: GOWANUS BAY E/O HAMILTON AVENUE BRIDGE
A mini-shoreline survey was performed by the beginning of September. The survey covered the area between Columbia Street and 23rd Street. No discharge was observed.

S-70: KILL VAN KULL W/O BAYONNE BRIDGE
A mini-shoreline survey was performed by the end of September. The investigation covered the shoreline of Kill Van Kull from Simonson Avenue to Nicholas Avenue. No discharge was observed.

S-71: ARTHUR KILL E/O PRALL'S ISLAND
A mini-shoreline survey was performed by the end of September. The area inspected covered the shoreline of Arthur Kill near Meredith Avenue & Spencer Streets east of the Prall's Island. No discharge was observed.

S-74: SHEEPSHEAD BAY & NOSTRAND AVENUE
A mini-shoreline survey was conducted in mid-September. The area inspected of the bay started at Brigham Street and proceeded west unto Kensington Street. No discharge was observed.

S-77: GRASSY BAY UNDER CROSS BAY BOULEVARD BRIDGE
A mini-shoreline survey was performed by the beginning of July. The investigation covered the entire shoreline area of Grassy Bay. No discharge was observed.

S-80: NEWTOWN CREEK UNDER KOSCIUSKO BRIDGE
A mini-shoreline survey was conducted by the beginning of July. The survey began from Meeker Avenue and Newtown Creek, and proceeded south going under the Kosciusko Bridge to Anthony Street. No discharge was observed.

DRY WEATHER DISCHARGES

ROC-017
In response to a request from the DEP Management, CMS personnel conducted a dry-weather discharge investigation at the vicinity of Williams Court, Far Rockaway. The following six (6) houses had illegal connections to a storm sewer tributary to ROC – 017:

1. 1 Williams Ct., Far Rockaway, NY 11691
2. 2 Williams Ct., Far Rockaway, NY 11691
3. 3 Williams Ct., Far Rockaway, NY 11691
4. 6 Williams Ct., Far Rockaway, NY 11691
5. 8 Williams Ct., Far Rockaway, NY 11691
6. 10 Williams Ct., Far Rockaway, NY 11691

Commissioner's Orders were issued to the homeowners to reconnect to the sanitary sewer. The CMS personnel verified the prompt compliance of all the homeowners with the CO. The case was therefore closed. Please refer to Item Number 5521.

OH-021 & CONEY ISLAND CREEK

In response to a referral by a DEP contractor of high fecal count levels in a storm sewer tributary to Coney Island Creek, CMS started an investigation in the area and dye tested fifty-five (55) establishments. The following forty-nine (49) establishments of which were properly connected to the sanitary sewer:

1816 E 14th Street	1817 E 14th Street	1819 E 14th Street
1821 E 14th Street	1822 E 14th Street	1823 E 14th Street
1825 E 14th Street	1828 E 14th Street	1829 E 14th Street
1830 E 14th Street	1834 E 14th Street	1836 E 14th Street
1546 E 16th Street	1555 E 16th Street	1559 E 16th Street
1560 E 16th Street	1561 E 16th Street	1565 E 16th Street
1569 E 16th Street	1571 E 16th Street	1575 E 16th Street
1577 E 16th Street	1578 E 16th Street	1580 E 16th Street
1581 E 16th Street	1583 E 16th Street	1587 E 16th Street
1588 E 16th Street	1517 E 15th Street	1520 E 15th Street
1519 E 15th Street	1524 E 15th Street	1530 E 15th Street
1531 E 15th Street	1542 E 15th Street	1526 E 15th Street
1521 E 15th Street	1538 E 15th Street	1553 E 15th Street
1558 E 15th Street	1562 E 15th Street	1555 E 15th Street
1563 E 15th Street	1557 E 15th Street	1559 E 15th Street
1568 E 15th Street	1549 E 15th Street	1523 E 15th Street
1525 E 15th Street		

The remaining six (6) establishments, listed below, were improperly connected to a storm sewer tributary to OH-021:

Address	Date of Investigation	Date Closed	Comments
1572 E 16th St, Brooklyn, NY11229	10/25/2017	10/31/2017	
1562 E 16th St, Brooklyn, NY11229	10/26/2017	11/17/2017	
1586 E 16th St, Brooklyn, NY11229	10/27/2017	11/17/2017	
1570 E 16th St, Brooklyn, NY11229	11/20/2017	12/04/2017	
1551 E 16th St, Brooklyn, NY11229	01/02/2018	03/16/2018	
1820 E 14th St., Brooklyn, NY11229	10/27/2017	7/13/2018	

As a result, Commissioner's Orders (CO) were issued to all the homeowners. As of today, all of them have complied. CMS personnel will continue investigating the area to identify any other illegal connections to storm sewers tributary to the OH-021 outfall. Please refer to item Number 5326

OH-197

In response to a request from NYS-DEC regarding a possible dry weather discharge at the outfall, OH-197, CMS personnel conducted a joint investigation with NYS-DEC personnel in the vicinity and identified three (3) illicit connections to a storm sewer.

As a result, Commissioner's Orders were issued to the establishments located at 5726 1st Avenue, Brooklyn, NY 11220, and 58th St, Brooklyn, NY, 11220, to remove the illegal connections and submit the drainage system diagram of the building. These two establishments promptly complied with the CO, and the case was therefore closed as of July 18 2018.

The third establishment located at 140 58th St, Brooklyn, NY, 11220, is currently under legal review for further enforcement proceeding. This case is, therefore, still open.

OH-539

As part of ongoing investigation to abate illegal connections to storm sewers tributary to the outfall, OH-539, CMS personnel performed a joint sewer investigation with NYS DEC to verify whether the establishment, Paradise Plastics, located at 116 39th Street is still connected to the storm sewer. The establishment manager informed that the illegal connection was removed and a portable septic system that discharges to the next building's sewer system was installed to mitigate the issue. No dye was observed in the storm sewer. The case was closed as of October 04 2018.

4th QUARTER

OCTOBER 1 - DECEMBER 31, 2018

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

4th QUARTER

No	Sample Date	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
1	10/18/18	S 1	72	8	200
2	10/18/18	S 2	40	8	200
3	10/18/18	S 3	6	2	200
4	10/18/18	S 4	24	2	200
5	11/19/18	S 5	***3,800**	168	200
6	10/18/18	S 6	***10,100**	***580**	200
7	10/02/18	S 7	***289**	***1,510**	200
8	10/18/18	S 8	98	12	200
9	11/19/18	S 9	40	8	200
10	10/17/18	S 10	10	4	200
11	10/17/18	S 11	54	4	200
12	10/17/18	S 12	***470**	2	200
13	10/17/18	S 13	***3,000**	68	200
14	10/17/18	S 14	***8700**	84	200
15	11/19/18	S 15	40	4	200
16	12/06/18	S 16	60	6	200
17	12/06/18	S 17	42	6	200
18	12/11/18	S 18	28	2	200
19	12/11/18	S 19	36	20	200
20	12/11/18	S 20	30	8	200
21	12/11/18	S 21	***882**	156	200
22	12/11/18	S 22	6	84	200
23	12/11/18	S 23	3	6	200
24	11/01/18	S 24	10	2	200
25	11/01/18	S 25	8	4	200
26	11/01/18	S 26	92	6	200
27	11/01/18	S 27	34	4	200
28	11/01/18	S 28	***500**	2	200
29	11/01/18	S 29	***540**	2	200
30	11/01/18	S 30	74	2	200
31	10/01/18	S 31	18	2	200
32	10/01/18	S 32	4	2	200
33	10/01/18	S 33	10	2	200
34	10/01/18	S 34	32	2	200
35	10/01/18	S 35	34	2	200
36	10/01/18	S 36	176	2	200
37	10/01/18	S 37	10	2	200
38	11/29/18	S 38	***230**	2	200
39	12/05/18	S 39	***224**	46	200
40	12/05/18	S 40	22	12	200

**Fecal Coliform Exceedance*

SHORELINE MONITORING PROGRAM

2018

FECAL COLIFORM (MF) SAMPLE RESULTS

4th QUARTER

No	Sample	Station ID	Fecal Coliform	Entrococci	2018 Fecal Coliform Baseline
41	12/05/18	S 41	14	10	200
42	12/05/18	S 42	2	4	200
43	12/05/18	S 43	6	14	200
44	12/05/18	S 44	10	2	200
45	12/05/18	S 45	16	40	200
46	11/29/18	S 46	8	***460**	200
47	12/06/18	S 47	132	34	200
48	12/06/18	S 48	174	18	200
49	12/06/18	S 49	84	24	200
50	12/06/18	S 50	144	20	200
51	12/06/18	S 51	92	40	200
52	12/06/18	S 52	96	16	200
53	12/06/18	S 53	16	10	200
54	11/19/18	S 54	***216**	36	200
55	11/19/18	S 55	66	22	200
56	11/19/18	S 56	62	18	200
57	11/19/18	S 57	40	8	200
58	10/17/18	S 58	22	18	200
59	11/19/18	S 59	***560**	104	200
60	10/02/18	S 60	***845**	189	200
61	10/02/18	S 61	***1,154**	***1,445**	200
62	10/02/18	S 62	***17,700**	***228**	200
63	10/18/18	S 63	22	2	200
64	10/18/18	S 64	64	16	200
65	10/18/18	S 65	188	2	200
66	10/18/18	S 66	***440**	8	200
67	10/17/18	S 67	52	4	200
68	12/11/18	S 68	52	26	200
69	12/05/18	S 69	92	52	200
70	12/05/18	S 70	109	89	200
71	12/05/18	S 71	118	54	200
72	12/05/18	S 72	164	104	200
73	12/05/18	S 73	14	34	200
74	12/11/18	S 74	172	84	200
75	11/01/18	S 75	34	2	200
76	11/01/18	S 76	60	2	200
77	11/01/18	S 77	***340**	2	200
78	11/01/18	S 78	***12,100**	8	200
79	10/01/18	S 79	16	2	200
80	10/17/18	S 80	***330**	58	200

** Fecal Coliform Exceedance*

WEATHER REPORT

The fourth quarter monitoring and sampling of ambient sampling stations began on October 01 and ended on December 31, 2016. During this quarter, all eighty stations were sampled, and a total of 12.49 inches of precipitation was recorded falling.

MINI-SHORELINE SURVEY RESULTS

S-5: WESTCHESTER CREEK, N/O UNIONPORT BRIDGE

A mini shoreline survey was conducted in mid-November. The survey included the shoreline of the Westchester Creek between Waterbury Ave and Lafayette Ave. No discharge was observed.

S-6: ENTRANCE TO FLUSHING RIVER, W/O WHITESTONE EXPWY

A mini-shoreline survey was performed in mid-October. The investigation included the shoreline of the Flushing River between Roosevelt Avenue and 31st Road. No discharge was observed.

S-7: BRONX RIVER, SOUTH OF EAST GUN HILL ROAD

A mini-shoreline survey was conducted by the beginning of October. The survey targeted all the outfalls on both east and west sides of the Bronx River, starting north of East Gun Hill Road and proceeded northward to the Westchester County border. Two (2) outfalls with highly elevated fecal coli form level, originating from Westchester County were identified to be the source of exceedance at the sentinel stations. CMS has notified the NYSDEC of this ongoing problem.

S-12: ENTRANCE TO DUTCH KILLS SOUTH OF LIRR BRIDGE

A mini-shoreline survey was conducted in mid-October. The entire shoreline of the survey was performed on both west and east shorelines of the entire Dutch Kills. No discharge was observed.

S-13: NEWTOWN CREEK NORTH OF GRAND AVENUE

A mini-shoreline survey was performed in mid-October. The area inspected included the shoreline between Grand Avenue and 58th Street. No discharge was observed.

S-14: ENTRANCE TO ENGLISH KILLS AT SCOTT STREET

A mini-shoreline survey was conducted in mid-October. The survey began at the entrance to English Kills at Scott Street, proceeded southward to Rewe Street. No discharge was observed.

S-21: ENTRANCE TO CONEY ISLAND CREEK AT KAISER PLAYGROUND

A mini-shoreline survey was conducted in mid-December. The investigation included the shoreline of Coney Island Creek starting from West 32nd Street and proceeding eastward to the West 20th Street. No discharge was observed.

S-28: ENTRANCE TO SHELL BANK BASIN AT 165TH AVENUE

A mini-shoreline survey was conducted by the beginning of November. The shoreline of the Shell Bank Basin between 157th Avenue and 165th Avenue was the targeted are for the investigation. No discharge was observed.

S-29: ENTRANCE TO HAWTREE BASIN AT 164TH AVENUE

A mini shoreline survey was conducted by the beginning of November. The survey included the shoreline of the Hawtree Basin between 160th Ave and 165th Ave. No discharge was observed.

S-38: BANNISTER CREEK & ATLANTIC BEACH BRIDGE APPROACH

A mini-shoreline survey was performed by the end of November. The area inspected covered the entire Bannister Creek. No discharge was observed.

S-39: UPPER NEW YORK BAY & NAVY HOMEPORT AT UNION STREET

A mini-shoreline survey was performed by the beginning of December. The targeted area was the shoreline of Upper New York Bay between Harrison Street and Prospect Street. No discharge was observed.

S-46: RICHMOND CREEK & RICHMOND AVENUE

A mini-shoreline survey was performed in mid-December. The survey covered all of the Richmond Creek. No discharge was observed.

S-54: HARLEM RIVER, UNDER BROADWAY BRIDGE

A mini-shoreline survey was performed in mid-November. The investigation started from Harlem River & Broadway Bridge and proceeded southward to West 215th Street. No discharge was observed.

S-59: BRONX RIVER & RANDALL AVENUE

A mini shoreline survey of the shoreline was conducted in mid-November. The area inspected started at the Bronx River and Randall Avenue and preceded north to the Bruckner Expressway. No discharge was observed.

S-60: BRONX RIVER & EAST 180TH STREET

A mini-shoreline survey was performed by the beginning of October. The survey covered the shoreline of the Bronx River starting from East 180th Street and proceeded northward covering the Bronx Zoo. No discharge was observed.

S-61: BRONX RIVER & E. 241ST STREET

A mini-shoreline survey was performed by the beginning of October. The investigation covered the shoreline of the Bronx River northward to E. 243rd Street. No discharge was observed.

S-62: HUTCHINSON RIVER & ASH LOOP

A mini-shoreline survey was performed by the beginning of October. The investigation included the area along the Hutchinson River near Coop City in the Bronx. No discharge was observed.

S-66: FLUSHING BAY & 31ST AVENUE

A mini-shoreline survey was performed in mid-October. Flushing Bay shoreline between 123rd Street and 28th Avenue was the targeted area for the survey. No discharge was observed.

S-77: GRASSY BAY UNDER CROSS BAY BOULEVARD BRIDGE

A mini-shoreline survey was performed by the beginning of November. The investigation covered the entire shoreline area of Grassy Bay. No discharge was observed.

S-78: BERGEN BASIN & 163RD AVENUE

A mini-shoreline survey was performed by the beginning of November. The area inspected included the shoreline of both sides of Bergen Basin between the entrance and 163rd Avenue. No discharge was observed.

S-80: NEWTOWN CREEK UNDER KOSCIUSKO BRIDGE

A mini-shoreline survey was conducted in mid-October. The survey began from Meeker Avenue and Newtown Creek, and proceeded south going under the Kosciusko Bridge to Anthony Street. No discharge was observed.

DRY WEATHER DISCHARGES

2430 FDR DRIVE, MANHATTAN

In response to a request from the NYS-DEC to investigate a possible dry-weather discharge to the East River from NY Skyport, located at 2430 FDR Drive, CMS Personnel conducted a dye test. Due to a broken pipe at Skyport Marina docking area, dye was observed in the East River. The case was therefore transferred to NYS DEC.

Unauthorized Non-Storm Water Discharges

DEP's Emergency Response Unit (ERU) tracks and responds to incidents of spills and illegal discharges to the NYC sewer system. These constitute unauthorized non-storm-water discharges under the New York City MS4 Permit. In accordance with an agreement between DEP and DEC, DEP will report citywide information on spills and illegal discharges to meet the requirement in MS4 Permit Part IV.D.5 through 2020, when DEP will submit the final MS4 map and can identify all spills and discharges located in the MS4.

The Table below includes ERU's complaint response tracking information for calendar year 2018, which includes the types and number of complaints received and responded to.

	Nature of Complaint		**Total for 2018**
1.	Oil		169
2.	Gasoline/Explosivity		139
3.	Chemicals		98
4.	Odors		27
5.	Wastewater/Concrete		614
6.	Discharge to Receiving Water		17
7.	Miscellaneous		39
		Sub Total	1103
8a.	Complaints received & referred to Others		99
8b.	Follow-up-Inspections		915
		Total	2117