GOWANUS CANAL SUPERFUND SITE
RTA1 REMEDIAL CONSTRUCTION
Water Quality Monitoring Weekly Data Summary

PERIOD: July 31 – August 4, 2023

Date of Report: August 8, 2023

Report Contents

- Scope of Monitoring
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1. SCOPE OF MONITORING

1.1 Initial Buoy Locations

In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) three turbidity buoys were deployed to monitor turbidity related to dredging activities. One turbidity buoy was deployed just south of the 3rd Street Bridge outside of the air curtain and traditional turbidity curtain and was referred to as the 3rd Street Sentinel Buoy. A second turbidity buoy was deployed just south of Carroll St Bridge to monitor dredging activities north of Carroll Street Bridge and was referred to as the Carroll Street Sentinel Buoy. The third turbidity buoy was deployed in the Fourth Street Turning Basin (TB4) in order to monitor background turbidity unaffected by in-water construction activities and was referred to as the Ambient Buoy.

Each turbidity buoy was equipped with a YSI EXO3 water quality meter with optical turbidity sensor. The buoys were field calibrated and programmed such that readings were collected every 15 minutes. After each measurement, the turbidity data were transmitted to a File Transfer Portal (FTP) site via telemetry.

1.2 Summary of Monitoring Adjustments during Construction

- On January 22, 2021, prior to dredging north of the Union Street Bridge, a fourth turbidity buoy was deployed just south of the Union Street Bridge and was referred to as the Union Street Sentinel Buoy. This fourth turbidity buoy was removed prior to the start of pipe pile installation.

- On Wednesday, September 22, 2021, the Carroll Street Sentinel Buoy was relocated to the west side of the canal where Degraw Street intersects the canal to monitor cofferdam removal activities conducted in the vicinity of the Flushing Tunnel. This buoy was renamed the Degraw Street Sentinel Buoy during cofferdam removal activities.

- On October 14, 2021, the Degraw Street Sentinel Buoy was removed from the canal for servicing. On October 20, 2021, the Degraw Street Sentinel Buoy was redeployed to its position south of the Carroll Street Bridge and was renamed to the Carroll Street Sentinel Buoy.

- On November 15, 2021, the Carroll Street Sentinel Buoy was moved to the Union Street Bridge and renamed the Union Street Sentinel Buoy. On December 3, 2021, the Union Street Buoy was removed from the canal for servicing and re-deployed at 3rd Street Bridge in preparation for the resumption of ISS operations. On December 8, 2021, a sentinel buoy was re-deployed just south of the Carroll Street Bridge.

- Since December 8, 2021, the sentinel buoy deployed at the northern-most portion of the canal has alternated positioning between the Union Street Bridge and Carroll Street Bridge locations based on the in-canal construction activities being conducted at any given time.

- On January 9, 2023, the Carroll Street Sentinel Buoy was moved to the Third Street Bridge location and renamed the Third Street Sentinel Buoy. Additionally, the former Third Street Sentinel Buoy was removed from the canal for servicing.

- On February 6, 2023, the newly serviced Third Street Sentinel Buoy was reinstalled at Third Street Bridge, and the former Carroll Street Sentinel Buoy was reinstalled at Carroll Street Bridge.

- The Ambient Buoy was removed from service on Friday, February 17, 2023, due to a faulty communications system. Following investigation into the cause of the fault and the appropriate repairs made, the Ambient Buoy was returned to service on Thursday, April 13, 2023. Due to similar issues, the Ambient Buoy was removed from service again on Monday, April 24, 2023, before being redeployed on Friday, May 12, 2023, and again removed from service on Monday, May 15, 2023, before being redeployed on Monday, June 12, 2023.

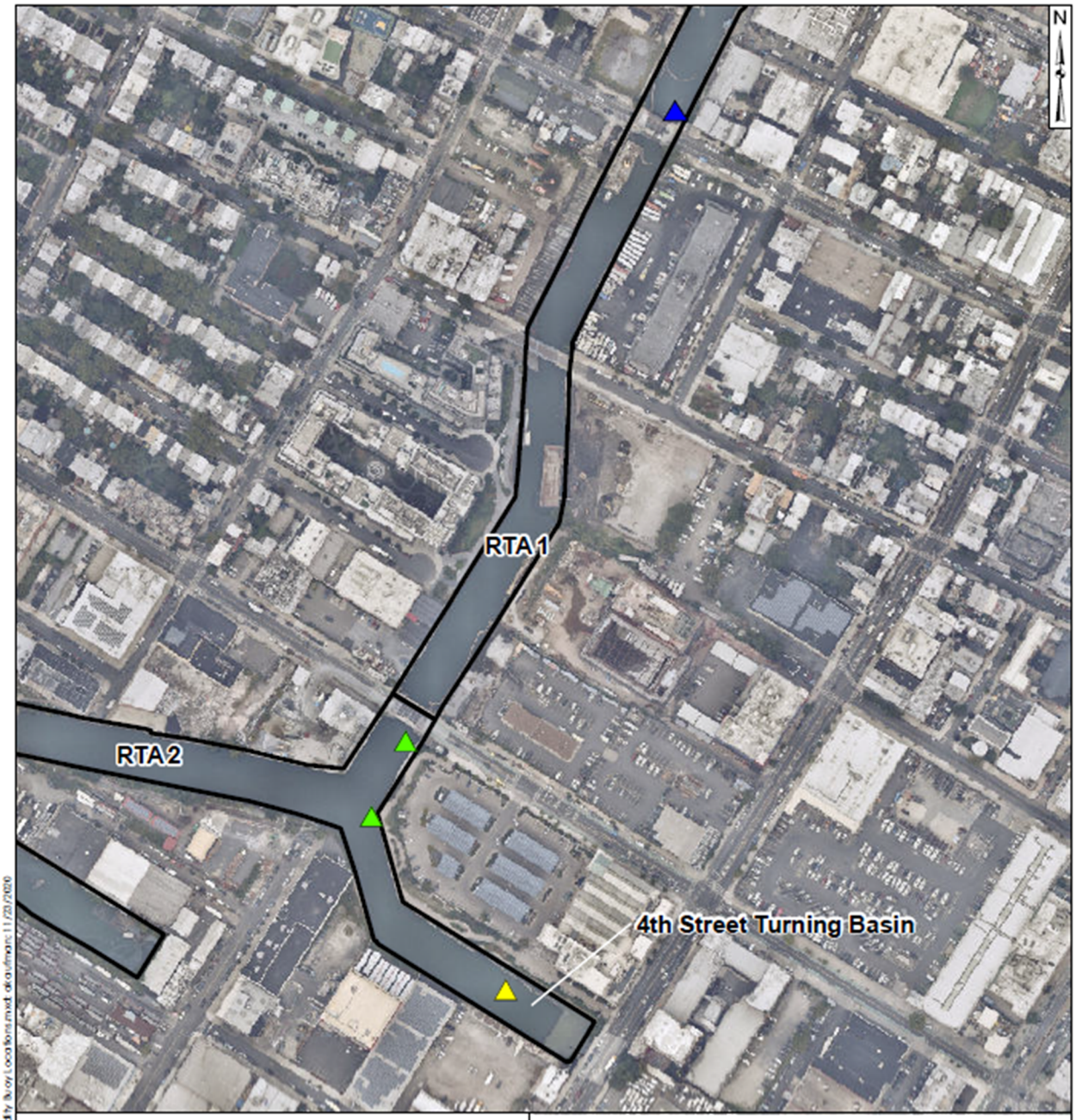
- On Thursday April 13, 2023, the Carroll Street Sentinel Buoy was assessed to be within 100ft of in-canal construction activities being conducted at Carroll Street Bridge, and consequently was repositioned to the North Third Street Sentinel Buoy location.

  Data from the Third Street Sentinel Buoy was not reported from Thursday June 1, 2023 to June 2, 2023 due to a power failure and/or faulty communications system preventing transmission of readings. The Third Street Sentinel Buoy was returned to service with data collection resuming on June 5, 2023.

- On Wednesday, July 26, 2023, a fourth monitoring buoy was deployed just south of the Union Street Bridge to monitor dissolved oxygen (DO) in RTA1.

1.3 Current Reporting Period Scope of Monitoring

For the week of July 31, 2023, three turbidity buoys were deployed consisting of the Ambient Turbidity Buoy located in the eastern end of TB4, the West TB4 Sentinel Buoy located just outside of any sediment and floatables controls at the southern end of RTA1, and the South Third Street Sentinel Buoy located just south of the Third Street Bridge. In addition, a fourth monitoring buoy was deployed just south of the Union Street Bridge to monitor DO in RTA1, with readings being transmitted via telemetry at 15-minute intervals. Handheld DO measurements were also collected from the Bond Street Promenade during this reporting period. The instrument used to collect DO from the new monitoring buoy and the handheld unit is an In-Situ AquaTroll500 equipped with an optical Rugged Dissolved Oxygen (RDO) Sensor capable of reading DO levels with an accuracy of +/-0.1 mg/L. Visual observations of turbidity and sheen are summarized in Section 4.



Legend

- Ambient Buoy
- Sentinel Buoy
- DO Buoy
- RTA Boundary

300 150 0 300 Feet

Water Quality Monitoring

Buoy Locations

Gowanus Canal, Brooklyn, NY

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Figure 1

Brooklyn, NY | July 2023

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2. REPORT OF EXCEEDANCES

No exceedances to the quantitative action criteria were observed during the reporting period due to remedial construction-related activities. Exceedances of the quantitative trigger criterion occurred at the South Third Street Sentinel Buoy on Wednesday, August 2 from 3:45 PM to 4:45 PM and on Friday, August 4 from 2:15 PM to 4:30 PM. An exceedance of the quantitative trigger criterion occurred at the West TB4 Sentinel Buoy on Friday, August 4 from 2:45 PM to 4:30 PM. Exceedances were due to the transport of suspended cap material with the outgoing tide.

- **Trigger criterion** – Any of the following:
    - The rolling average of the relevant sentinel buoy turbidity measurements over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 20 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
    - Either an oil sheen or a turbidity plume is visually observed at the relevant sentinel buoy and in-waterway construction activities are readily identified as the source.
- **Action criterion** – Any of the following:
    - The rolling average of the turbidity measurements of the sentinel buoy outside of RTA1 over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 40 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
    - Either an oil sheen or a turbidity plume is visually observed outside of RTA1 and any deployed engineering controls and in-waterway construction activities are readily identified as the source.

An outlier is defined as a reading that is outside the range of 50 to 200 percent of the average of the three previous readings. In addition, to be considered an outlier, the subsequent reading must return to a range of 75 to 133 percent of the average of the three readings preceding the outlier.

2.1 Response to Criteria Exceedances

The trigger level criterion serves to provide early notification to the contractor of construction activities that may lead to an exceedance of the action level criterion. In the event of an exceedance to the trigger criterion, the contractor will not be stopped, and the contractor will be directed to investigate the source of the exceedance and evaluate Best Management Practices (BMPs). In the event of an exceedance to the action level criterion, in-waterway construction activities may be slowed or temporarily suspended as necessary while the contractor investigates the source of the exceedance and appropriate mitigation and corrective measures are determined. A more detailed description of responses to exceedances of the trigger and action level criteria is provided in Section 4.2 of the WQMP.

No exceedances to the quantitative action criteria were observed during the reporting period due to remedial construction-related activities. Exceedances of the quantitative trigger criterion occurred at the South Third Street Sentinel Buoy on Wednesday, August 2 from 3:45 PM to 4:45 PM and on Friday, August 4 from 2:15 PM to 4:30 PM. An exceedance of the trigger criterion occurred at the West TB4 Sentinel Buoy on Friday, August 4 from 2:45 PM to 4:30 PM. Exceedances to the quantitative trigger criterion were due to the transport of suspended capping material with the outgoing tide. Due to the time delay in transport of the suspended capping material from the point of placement to the southern boundary of RTA1, capping activities were completed for the day once the exceedances were detected by the downstream monitors. To mitigate the transport of temporarily suspended capping material south of RTA1, it is recommended that the Contractor deploy the turbidity curtain at the southern boundary of RTA1 when placing capping material south of the Carroll Street Bridge during and prior to ebbing tides.

3. TURBIDITY BUOY DATA

The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from July 31 – August 4, 2023.

No exceedances to the quantitative action criteria were observed during the reporting period due to remedial construction-related activities. Exceedances of the quantitative trigger criterion occurred at the South Third Street Sentinel Buoy on Wednesday, August 2 from 3:45 PM to 4:45 PM and on Friday, August 4 from 2:15 PM to 4:30 PM. An exceedance of the quantitative trigger criterion occurred at the West TB4 Sentinel Buoy on Friday, August 4 from 2:45 PM to 4:30 PM.

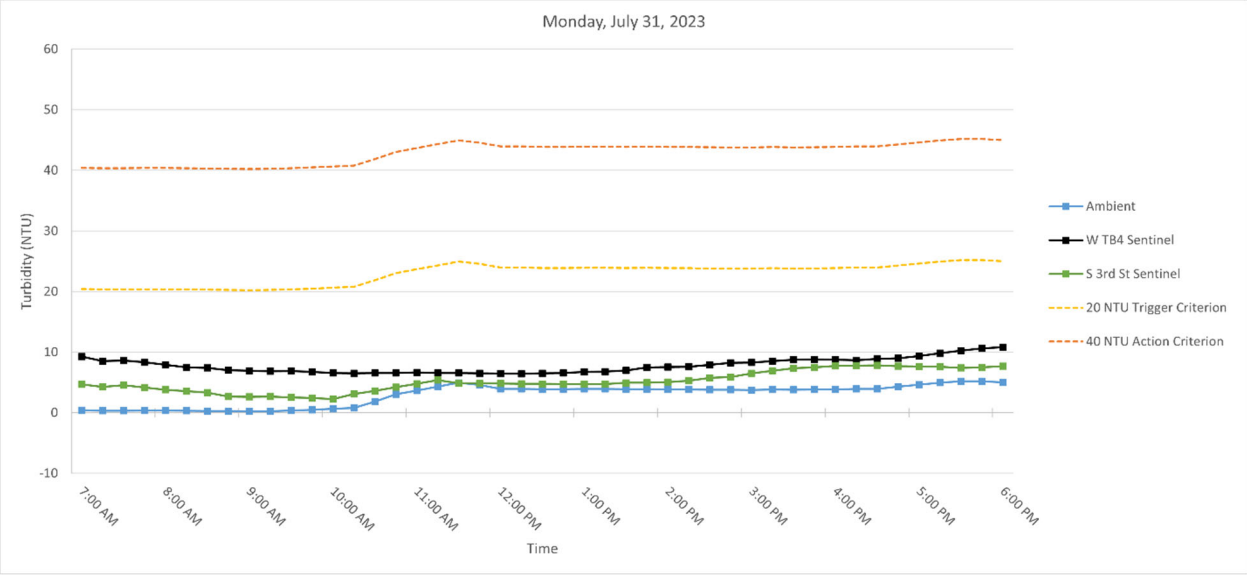
Table 1 below provides a summary of the turbidity data for the reporting period.

Date	Average Rolling Average Difference (NTU)		Maximum Rolling Average Difference (NTU)	
	W TB4 - Ambient	S 3rd St - Ambient	W TB4 - Ambient	S 3rd St - Ambient
Monday, July 24, 2023	4.87	2.24	8.86	4.26
Tuesday, August 1, 2023	6.95	6.38	11.55	14.56
Wednesday, August 2, 2023	6.63	8.98	17.31	22.51
Thursday, August 3, 2023	6.43	5.95	17.37	17.40
Friday, August 4, 2023	9.54	9.82	24.29	31.20

Table 1. Daily average and maximum differences between the rolling average turbidity readings from RTA1 sentinel buoys and the ambient buoy between 7 AM and 6 PM.

3.1 Monday, July 31, 2023

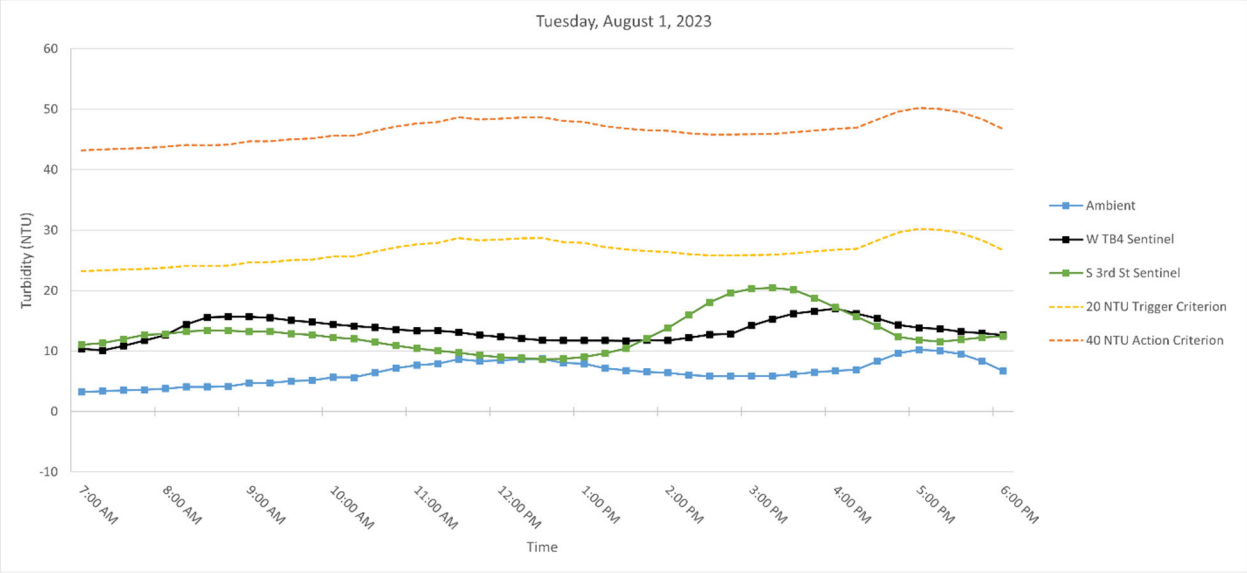
Figure 3. Hourly rolling average turbidity readings on Monday, July 31, 2023, from 7 AM to 6 PM.



Note: No outlier turbidity readings above 20 NTU were detected.

3.2 Tuesday, August 1, 2023

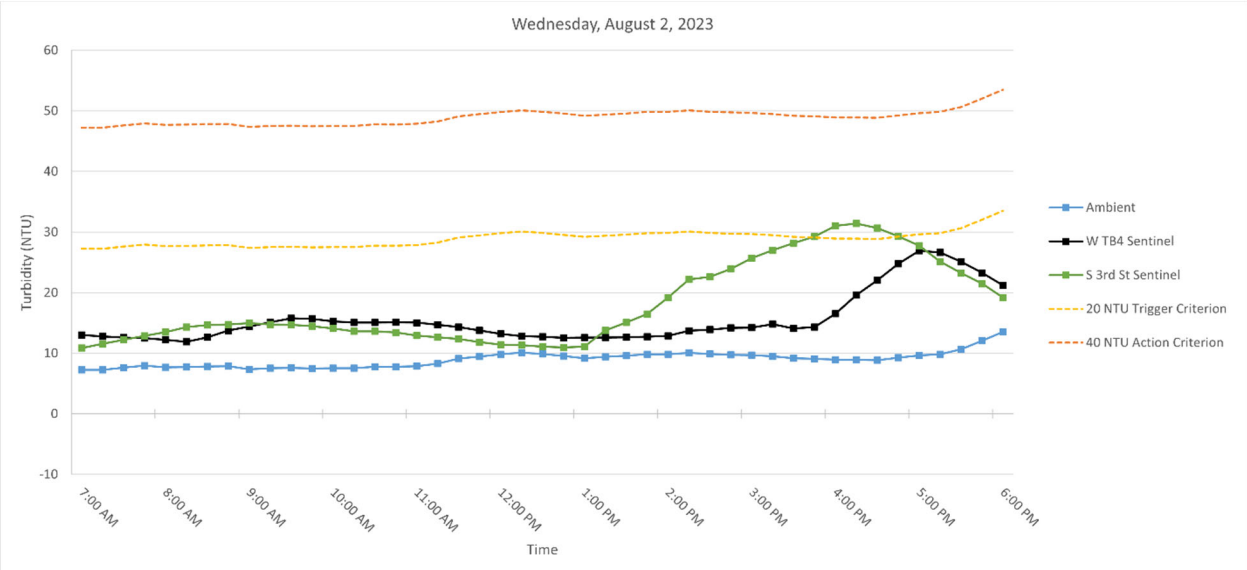
Figure 3. Hourly rolling average turbidity readings on Tuesday, August 1, 2023, from 7 AM to 6 PM.



Note: No outlier turbidity readings above 20 NTU were detected.

3.3 Wednesday, August 2, 2023

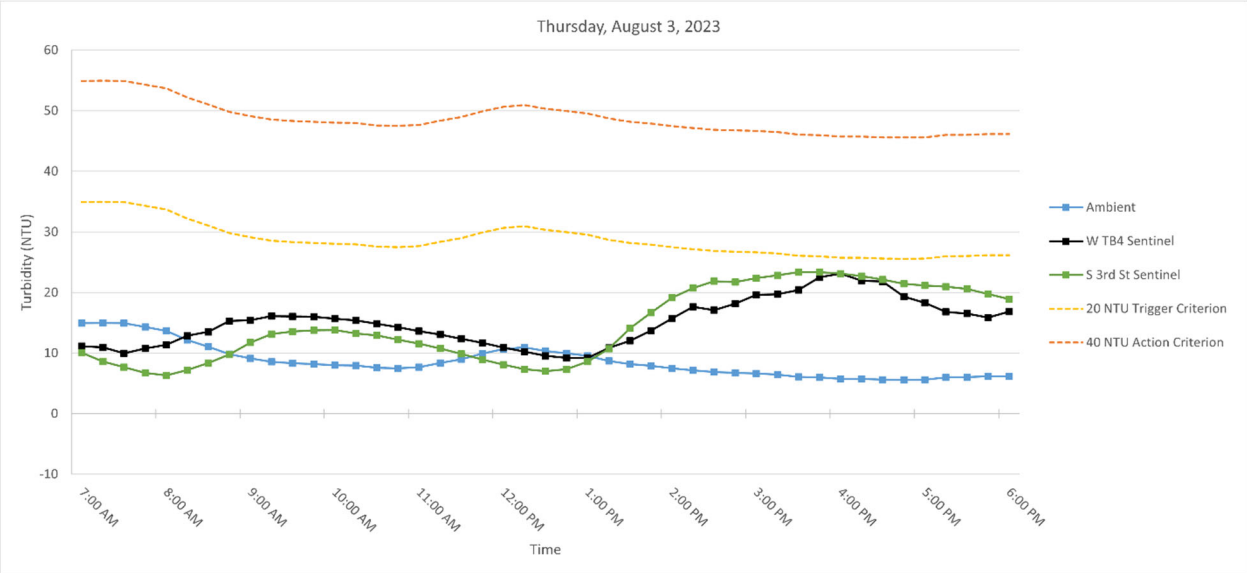
Figure 4. Hourly rolling average turbidity readings on Wednesday, August 2, 2023, from 7 AM to 6 PM.



Note: Exceedances of the quantitative trigger criterion occurred at the South Third Street Sentinel Buoy from 3:45 PM to 4:45 PM. No outlier turbidity readings above 20 NTU were detected.

3.4 Thursday, August 3, 2023

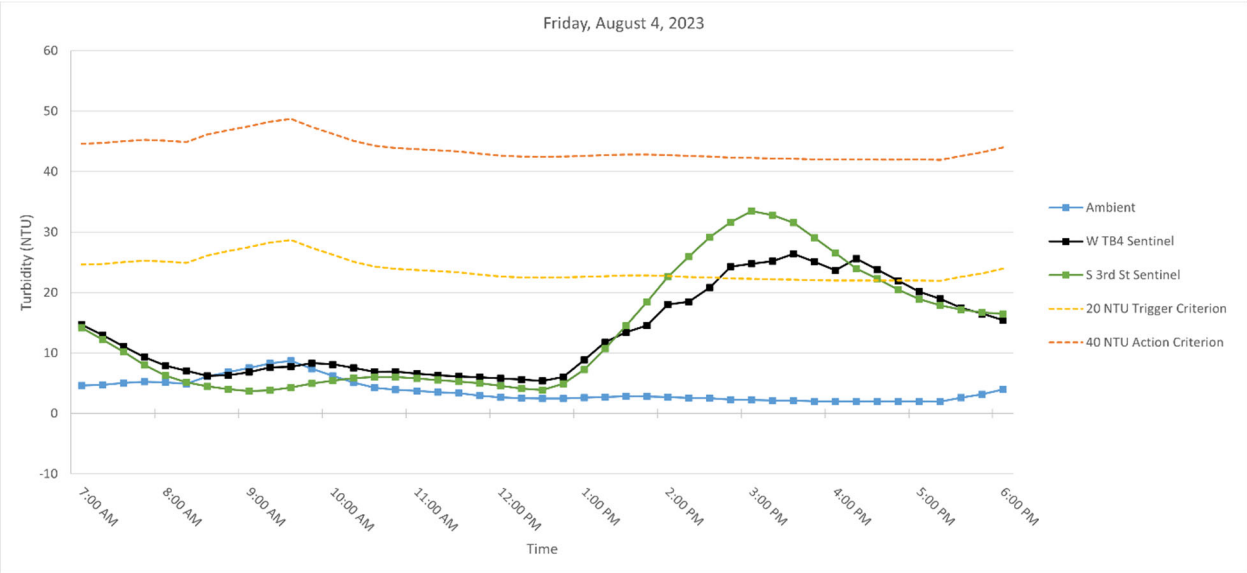
Figure 5. Hourly rolling average turbidity readings on Thursday, August 3, 2023, from 7 AM to 6 PM.



Note: No outlier turbidity readings above 20 NTU were detected.

3.5 Friday, August 4, 2023

Figure 6. Hourly rolling average turbidity readings on Friday, August 4, 2023, from 7 AM to 6 PM.



Note: Exceedances of the quantitative trigger criterion occurred at the South Third Street Sentinel Buoy from 2:15 PM to 4:30 PM and at the West TB4 Sentinel Buoy from 2:45 PM to 4:30 PM. No outlier turbidity readings above 20 NTU were detected.

4. DISSOLVED OXYGEN MONITORING DATA

On Wednesday, July 26, 2023, a fourth monitoring buoy was deployed just south of the Union Street Bridge to monitor DO in RTA1. The average dissolved oxygen measured at this monitoring buoy throughout the reporting period was <0.1 mg/L. The average dissolved oxygen measured using the handheld unit at the Bond Street Promenade was 0.60 (+/-0.1) mg/L on Friday August 4, 2023 at 12:15 PM.

SUMMARY OF VISUAL OBSERVATIONS

Visual indications of elevated turbidity were periodically observed during the reporting period attributable to capping activities. No sheens attributable to in-canal work operations were observed above background conditions. Turbid and sheen discharges were observed during the reporting period from storm water outfalls, including from the high-level storm sewer pipe adjacent to OH-005.

Throughout the reporting period, a dark coloration of the water was observed in RTA1 and RTA2 suggesting a decrease in dissolved oxygen levels in the canal attributable to the loading of organic materials during CSO discharge events and urban runoff. EPA has been notified of the observation.

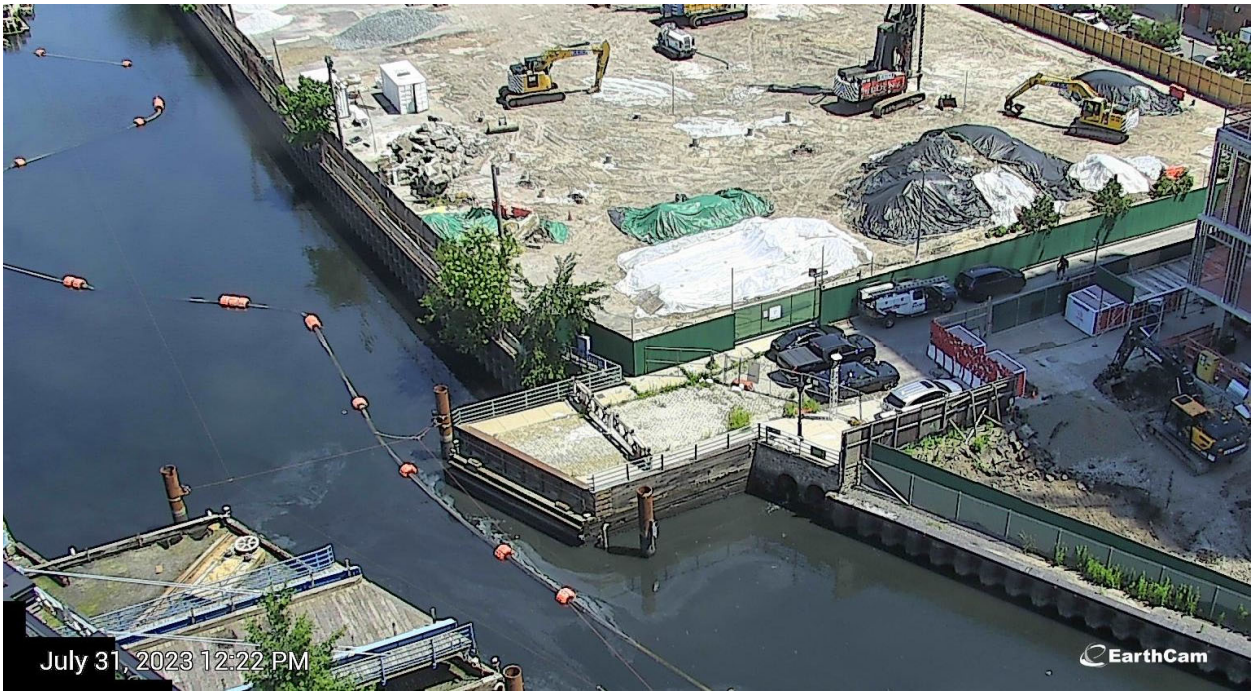


Figure 7. Sheen and turbid discharge from high level storm sewer pipe on July 31, 2023 at 12:15 PM.

APPENDIX A
Turbidity Data Tables

Monday, July 31, 2023

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)	
	Ambient	W TB4	S 3rd Street	Ambient	W TB4	S 3rd Street	W TB4 - Ambient	S 3rd St - Ambient
7:00:00	0.5	8.82	3.93	0.40	9.26	4.66	8.86	4.26
7:15:00	0.54	7.52	3.61	0.34	8.52	4.24	8.17	3.89
7:30:00	0.21	9.15	6.17	0.34	8.61	4.54	8.27	4.20
7:45:00	0.3	7.4	2.98	0.38	8.32	4.18	7.94	3.80
8:00:00	0.33	6.73	2.21	0.38	7.92	3.78	7.55	3.40
8:15:00	0.33	6.62	2.8	0.34	7.48	3.55	7.14	3.21
8:30:00	0.3	7.16	2.35	0.29	7.41	3.30	7.12	3.01
8:45:00	0.01	7.25	2.91	0.25	7.03	2.65	6.78	2.40
9:00:00	0.14	6.78	2.82	0.22	6.91	2.62	6.69	2.40
9:15:00	0.44	6.36	2.34	0.24	6.83	2.64	6.59	2.40
9:30:00	0.96	6.77	2.09	0.37	6.86	2.50	6.49	2.13
9:45:00	0.82	6.42	2.07	0.47	6.72	2.45	6.24	1.97
10:00:00	0.88	6.49	1.89	0.65	6.56	2.24	5.92	1.59
10:15:00	0.86	6.39	7.09	0.79	6.49	3.10	5.69	2.30
10:30:00	5.68	6.69	4.93	1.84	6.55	3.61	4.71	1.77
10:45:00	6.94	6.76	5.02	3.04	6.55	4.20	3.51	1.16
11:00:00	3.95	6.79	4.85	3.66	6.62	4.76	2.96	1.09
11:15:00	4.14	6.15	4.9	4.31	6.56	5.36	2.24	1.04
11:30:00	3.96	6.29	4.69	4.93	6.54	4.88	1.60	-0.06
11:45:00	3.89	6.59	4.74	4.58	6.52	4.84	1.94	0.26
12:00:00	3.8	6.56	4.84	3.95	6.48	4.80	2.53	0.86
12:15:00	3.95	6.52	4.76	3.95	6.42	4.79	2.47	0.84
12:30:00	3.69	6.54	4.71	3.86	6.50	4.75	2.64	0.89
12:45:00	3.98	6.58	4.61	3.86	6.56	4.73	2.70	0.87
13:00:00	4.12	7.53	4.78	3.91	6.75	4.74	2.84	0.83
13:15:00	3.81	6.7	4.72	3.91	6.77	4.72	2.86	0.81
13:30:00	3.78	7.43	5.85	3.88	6.96	4.93	3.08	1.06
13:45:00	3.78	9.11	4.84	3.89	7.47	4.96	3.58	1.07
14:00:00	3.78	6.8	5.03	3.85	7.51	5.04	3.66	1.19
14:15:00	4.12	7.82	5.94	3.85	7.57	5.28	3.72	1.42
14:30:00	3.53	8.4	7.16	3.80	7.91	5.76	4.11	1.97
14:45:00	3.65	8.96	6.4	3.77	8.22	5.87	4.45	2.10
15:00:00	3.72	9.35	8.08	3.76	8.27	6.52	4.51	2.76
15:15:00	4.26	7.95	7.01	3.86	8.50	6.92	4.64	3.06
15:30:00	3.76	9.12	8.14	3.78	8.76	7.36	4.97	3.57
15:45:00	3.7	8.63	7.71	3.82	8.80	7.47	4.98	3.65
16:00:00	3.81	8.63	7.61	3.85	8.74	7.71	4.89	3.86
16:15:00	4.22	8.91	8.4	3.95	8.65	7.77	4.70	3.82
16:30:00	4.25	9.23	7.28	3.95	8.90	7.83	4.96	3.88
16:45:00	5.44	9.58	7.3	4.28	9.00	7.66	4.71	3.38
17:00:00	5.38	10.53	7.45	4.62	9.38	7.61	4.76	2.99
17:15:00	5.42	10.98	7.41	4.94	9.85	7.57	4.90	2.63
17:30:00	5.4	10.85	7.61	5.18	10.23	7.41	5.06	2.23
17:45:00	4.34	11.09	7.54	5.20	10.61	7.46	5.41	2.27
18:00:00	4.48	10.49	8.31	5.00	10.79	7.66	5.78	2.66

Tuesday, August 1, 2023

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)	
	Ambient	W TB4	S 3rd Street	Ambient	W TB4	S 3rd Street	W TB4 - Ambient	S 3rd St - Ambient
7:00:00	3.23	7.89	11.73	3.21	10.36	11.04	7.15	7.83
7:15:00	3.8	9.82	12.16	3.36	10.13	11.31	6.76	7.95
7:30:00	3.8	14.64	13.49	3.49	10.86	11.96	7.38	8.47
7:45:00	3.53	15.04	13.48	3.58	11.73	12.67	8.16	9.09
8:00:00	4.58	15.72	13.15	3.79	12.62	12.80	8.83	9.01
8:15:00	4.71	16.71	13.98	4.08	14.39	13.25	10.30	9.17
8:30:00	3.62	15.89	12.97	4.05	15.60	13.41	11.55	9.37
8:45:00	4.36	14.99	13.34	4.16	15.67	13.38	11.51	9.22
9:00:00	6.12	15.06	12.55	4.68	15.67	13.20	11.00	8.52
9:15:00	--	14.72	13.26	4.70	15.47	13.22	10.77	8.52
9:30:00	6	14.73	12.22	5.03	15.08	12.87	10.05	7.84
9:45:00	4.13	14.37	12.09	5.15	14.77	12.69	9.62	7.54
10:00:00	6.36	13.08	11.23	5.65	14.39	12.27	8.74	6.62
10:15:00	6.04	13.82	11.31	5.63	14.14	12.02	8.51	6.39
10:30:00	9.58	13.57	10.48	6.42	13.91	11.47	7.49	5.04
10:45:00	9.56	12.98	9.44	7.13	13.56	10.91	6.43	3.78
11:00:00	6.82	13.21	9.78	7.67	13.33	10.45	5.66	2.78
11:15:00	7.41	13.27	9.2	7.88	13.37	10.04	5.49	2.16
11:30:00	9.98	12.4	9.72	8.67	13.09	9.72	4.42	1.05
11:45:00	7.82	11.33	8.35	8.32	12.64	9.30	4.32	0.98
12:00:00	10.23	11.58	7.85	8.45	12.36	8.98	3.91	0.53
12:15:00	7.83	11.7	9.02	8.65	12.06	8.83	3.40	0.17
12:30:00	7.59	11.98	8.25	8.69	11.80	8.64	3.11	-0.05
12:45:00	6.78	12.19	9.98	8.05	11.76	8.69	3.71	0.64
13:00:00	6.97	11.16	9.97	7.88	11.72	9.01	3.84	1.13
13:15:00	6.71	11.7	10.92	7.18	11.75	9.63	4.57	2.45
13:30:00	5.96	11.42	13.1	6.80	11.69	10.44	4.89	3.64
13:45:00	6.26	12.56	16.5	6.54	11.81	12.09	5.27	5.56
14:00:00	6.16	11.83	18.53	6.41	11.73	13.80	5.32	7.39
14:15:00	5.03	13.65	20.83	6.02	12.23	15.98	6.21	9.95
14:30:00	5.71	14.19	21.43	5.82	12.73	18.08	6.91	12.25
14:45:00	6.04	11.89	20.77	5.84	12.82	19.61	6.98	13.77
15:00:00	6.46	19.51	20.06	5.88	14.21	20.32	8.33	14.44
15:15:00	6.28	17.22	19.22	5.90	15.29	20.46	9.39	14.56
15:30:00	6.39	18.05	19.13	6.18	16.17	20.12	10.00	13.95
15:45:00	7.31	16.27	14.57	6.50	16.59	18.75	10.09	12.25
16:00:00	7.32	14.09	13.2	6.75	17.03	17.24	10.28	10.48
16:15:00	7.35	15.23	12.28	6.93	16.17	15.68	9.24	8.75
16:30:00	13.18	13.25	11.35	8.31	15.38	14.11	7.07	5.80
16:45:00	12.91	12.85	10.42	9.61	14.34	12.36	4.72	2.75
17:00:00	10.48	13.76	11.91	10.25	13.84	11.83	3.59	1.58
17:15:00	6.21	13.23	11.71	10.03	13.66	11.53	3.64	1.51
17:30:00	4.59	12.77	14.13	9.47	13.17	11.90	3.70	2.43
17:45:00	7.49	12.1	13.02	8.34	12.94	12.24	4.61	3.90
18:00:00	4.7	11.4	11.54	6.69	12.65	12.46	5.96	5.77

Wednesday, August 2, 2023

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)	
	Ambient	W TB4	S 3rd Street	Ambient	W TB4	S 3rd Street	W TB4 - Ambient	S 3rd St - Ambient
7:00:00	7.24	13.3	10.52	7.23	13.00	10.85	5.77	3.62
7:15:00	7.35	11.64	13.97	7.25	12.77	11.54	5.52	4.29
7:30:00	7.29	11.38	14.33	7.61	12.59	12.22	4.98	4.61
7:45:00	9.87	12.51	13.84	7.93	12.50	12.84	4.57	4.91
8:00:00	6.64	12.17	14.75	7.68	12.20	13.48	4.52	5.80
8:15:00	7.48	11.68	14.65	7.73	11.88	14.31	4.15	6.58
8:30:00	7.83	15.46	15.55	7.82	12.64	14.62	4.82	6.80
8:45:00	7.47	16.84	14.88	7.86	13.73	14.73	5.87	6.88
9:00:00	7.37	15.94	14.92	7.36	14.42	14.95	7.06	7.59
9:15:00	7.47	15.72	13.7	7.52	15.13	14.74	7.60	7.22
9:30:00	7.72	14.93	14.41	7.57	15.78	14.69	8.21	7.12
9:45:00	7.33	14.85	14.28	7.47	15.66	14.44	8.18	6.97
10:00:00	7.65	14.9	13.17	7.51	15.27	14.10	7.76	6.59
10:15:00	7.46	14.83	12.6	7.53	15.05	13.63	7.52	6.11
10:30:00	8.7	15.72	13.7	7.77	15.05	13.63	7.27	5.86
10:45:00	7.57	15.22	13.49	7.74	15.10	13.45	7.36	5.71
11:00:00	7.94	14.54	11.54	7.86	15.04	12.90	7.18	5.04
11:15:00	9.69	13.06	11.8	8.27	14.67	12.63	6.40	4.35
11:30:00	11.59	12.95	11.2	9.10	14.30	12.35	5.20	3.25
11:45:00	10.49	12.93	11.13	9.46	13.74	11.83	4.28	2.38
12:00:00	9.32	12.42	11.44	9.81	13.18	11.42	3.37	1.62
12:15:00	9.43	12.79	11.13	10.10	12.83	11.34	2.73	1.24
12:30:00	8.51	12.61	10.57	9.87	12.74	11.09	2.87	1.23
12:45:00	9.99	12.01	10.43	9.55	12.55	10.94	3.00	1.39
13:00:00	8.66	13.09	11.85	9.18	12.58	11.08	3.40	1.90
13:15:00	10.34	12.5	24.71	9.39	12.60	13.74	3.21	4.35
13:30:00	10.37	13.01	17.75	9.57	12.64	15.06	3.07	5.49
13:45:00	9.78	13.06	17.52	9.83	12.73	16.45	2.91	6.62
14:00:00	10.07	12.75	24.03	9.84	12.88	19.17	3.04	9.33
14:15:00	9.83	17.12	26.83	10.08	13.69	22.17	3.61	12.09
14:30:00	9.3	13.48	26.82	9.87	13.88	22.59	4.01	12.72
14:45:00	9.69	14.55	24.36	9.73	14.19	23.91	4.46	14.18
15:00:00	9.52	13.3	26.47	9.68	14.24	25.70	4.56	16.02
15:15:00	9.07	15.56	30.65	9.48	14.80	27.03	5.32	17.54
15:30:00	8.35	13.48	32.67	9.19	14.07	28.19	4.89	19.01
15:45:00	8.82	14.73	32.14	9.09	14.32	29.26	5.23	20.17
16:00:00	8.86	25.52	33.21	8.92	16.52	31.03	7.59	22.10
16:15:00	9.49	28.7	28.47	8.92	19.60	31.43	10.68	22.51
16:30:00	8.72	27.88	26.87	8.85	22.06	30.67	13.21	21.82
16:45:00	10.33	27.06	25.71	9.24	24.78	29.28	15.53	20.04
17:00:00	10.68	25.47	24.53	9.62	26.93	27.76	17.31	18.14
17:15:00	9.93	24.03	20.02	9.83	26.63	25.12	16.80	15.29
17:30:00	13.57	20.95	18.86	10.65	25.08	23.20	14.43	12.55
17:45:00	15.77	18.86	18.16	12.06	23.27	21.46	11.22	9.40
18:00:00	17.64	16.59	14.42	13.52	21.18	19.20	7.66	5.68

Thursday, August 3, 2023

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)	
	Ambient	W TB4	S 3rd Street	Ambient	W TB4	S 3rd Street	W TB4 - Ambient	S 3rd St - Ambient
7:00:00	16.84	8.24	7.73	14.90	11.11	10.06	-3.79	-4.84
7:15:00	14.38	12.66	6.12	14.95	10.95	8.61	-4.00	-6.34
7:30:00	14.68	7.5	6.1	14.93	9.95	7.66	-4.98	-7.27
7:45:00	11.41	15.46	5.07	14.32	10.77	6.75	-3.56	-7.58
8:00:00	11.08	13.01	6.4	13.68	11.37	6.28	-2.30	-7.39
8:15:00	9.35	15.75	12.32	12.18	12.88	7.20	0.70	-4.98
8:30:00	8.71	15.74	11.98	11.05	13.49	8.37	2.45	-2.67
8:45:00	8.46	16.43	13.04	9.80	15.28	9.76	5.48	-0.04
9:00:00	7.99	16.35	14.92	9.12	15.46	11.73	6.34	2.61
9:15:00	8.15	16.21	13.46	8.53	16.10	13.14	7.56	4.61
9:30:00	8.25	15.55	14.37	8.31	16.06	13.55	7.74	5.24
9:45:00	7.95	15.56	13.01	8.16	16.02	13.76	7.86	5.60
10:00:00	7.71	14.63	13.3	8.01	15.66	13.81	7.65	5.80
10:15:00	7.74	15.03	11.99	7.96	15.40	13.23	7.44	5.27
10:30:00	6.25	13.36	11.86	7.58	14.83	12.91	7.25	5.33
10:45:00	7.8	12.65	10.81	7.49	14.25	12.19	6.76	4.70
11:00:00	8.71	12.31	9.88	7.64	13.60	11.57	5.95	3.93
11:15:00	11.37	11.87	9.17	8.37	13.04	10.74	4.67	2.37
11:30:00	10.63	11.6	7.65	8.95	12.36	9.87	3.41	0.92
11:45:00	10.98	10.05	7.23	9.90	11.70	8.95	1.80	-0.95
12:00:00	11.62	8.69	6.46	10.66	10.90	8.08	0.24	-2.58
12:15:00	10.05	9	6.16	10.93	10.24	7.33	-0.69	-3.60
12:30:00	8.42	8.36	7.54	10.34	9.54	7.01	-0.80	-3.33
12:45:00	8.63	10.02	9.17	9.94	9.22	7.31	-0.72	-2.63
13:00:00	8.85	9.91	13.58	9.51	9.20	8.58	-0.32	-0.93
13:15:00	7.6	17.05	17.02	8.71	10.87	10.69	2.16	1.98
13:30:00	7.4	14.67	23.08	8.18	12.00	14.08	3.82	5.90
13:45:00	6.89	16.79	20.33	7.87	13.69	16.64	5.81	8.76
14:00:00	6.68	20.21	21.64	7.48	15.73	19.13	8.24	11.65
14:15:00	7.16	19.39	21.47	7.15	17.62	20.71	10.48	13.56
14:30:00	6.25	14.21	22.72	6.88	17.05	21.85	10.18	14.97
14:45:00	6.72	20.2	22.3	6.74	18.16	21.69	11.42	14.95
15:00:00	6.43	23.95	23.75	6.65	19.59	22.38	12.94	15.73
15:15:00	5.73	20.81	23.85	6.46	19.71	22.82	13.25	16.36
15:30:00	5.23	22.83	24.19	6.07	20.40	23.36	14.33	17.29
15:45:00	5.72	24.64	22.66	5.97	22.49	23.35	16.52	17.38
16:00:00	5.53	23.25	21.17	5.73	23.10	23.12	17.37	17.40
16:15:00	6.44	18.25	21.5	5.73	21.96	22.67	16.23	16.94
16:30:00	5.02	20.04	21.14	5.59	21.80	22.13	16.21	16.54
16:45:00	5.16	10.41	20.65	5.57	19.32	21.42	13.74	15.85
17:00:00	5.77	19.5	21.22	5.58	18.29	21.14	12.71	15.55
17:15:00	7.56	15.88	20.32	5.99	16.82	20.97	10.83	14.98
17:30:00	6.49	16.66	19.53	6.00	16.50	20.57	10.50	14.57
17:45:00	5.84	16.79	16.95	6.16	15.85	19.73	9.68	13.57
18:00:00	5.11	15.43	16.39	6.15	16.85	18.88	10.70	12.73

Friday, August 1, 2023

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)	
	Ambient	W TB4	S 3rd Street	Ambient	W TB4	S 3rd Street	W TB4 - Ambient	S 3rd St - Ambient
7:00:00	4.48	9.81	8.91	4.62	14.70	14.19	10.07	9.57
7:15:00	4.6	8.99	6.55	4.73	12.95	12.19	8.23	7.46
7:30:00	5.83	8.06	6.53	5.04	11.07	10.19	6.03	5.15
7:45:00	5.93	7.22	5.38	5.25	9.31	8.01	4.06	2.76
8:00:00	4.77	5.41	3.88	5.12	7.90	6.25	2.78	1.13
8:15:00	3.37	5.54	3.39	4.90	7.04	5.15	2.14	0.25
8:30:00	10.74	4.94	3.34	6.13	6.23	4.50	0.11	-1.62
8:45:00	9.43	8.52	4.2	6.85	6.33	4.04	-0.52	-2.81
9:00:00	9.28	9.62	3.61	7.52	6.81	3.68	-0.71	-3.83
9:15:00	8.56	9.44	4.58	8.28	7.61	3.82	-0.66	-4.45
9:30:00	5.51	6.15	5.64	8.70	7.73	4.27	-0.97	-4.43
9:45:00	4.09	7.78	6.84	7.37	8.30	4.97	0.93	-2.40
10:00:00	3.75	7.58	6.39	6.24	8.11	5.41	1.88	-0.83
10:15:00	3.56	6.68	5.78	5.09	7.53	5.85	2.43	0.75
10:30:00	4.45	6.28	5.58	4.27	6.89	6.05	2.62	1.77
10:45:00	3.71	6.3	5.58	3.91	6.92	6.03	3.01	2.12
11:00:00	3.2	6.18	5.65	3.73	6.60	5.80	2.87	2.06
11:15:00	2.7	6.01	4.99	3.52	6.29	5.52	2.77	1.99
11:30:00	2.76	5.9	4.51	3.36	6.13	5.26	2.77	1.90
11:45:00	2.41	5.62	4.24	2.96	6.00	4.99	3.05	2.04
12:00:00	2.18	5.36	3.59	2.65	5.81	4.60	3.16	1.95
12:15:00	2.51	5.06	3.31	2.51	5.59	4.13	3.08	1.62
12:30:00	2.42	4.96	3.81	2.46	5.38	3.89	2.92	1.44
12:45:00	2.91	9.16	9.5	2.49	6.03	4.89	3.55	2.40
13:00:00	2.98	19.6	15.97	2.60	8.83	7.24	6.23	4.64
13:15:00	2.74	20.05	20.92	2.71	11.77	10.70	9.05	7.99
13:30:00	3.08	13.43	22.33	2.83	13.44	14.51	10.61	11.68
13:45:00	2.36	10.57	23.52	2.81	14.56	18.45	11.75	15.63
14:00:00	2.44	26.32	30.36	2.72	17.99	22.62	15.27	19.90
14:15:00	2.24	22.01	32.46	2.57	18.48	25.92	15.90	23.35
14:30:00	2.39	31.8	37.19	2.50	20.83	29.17	18.32	26.67
14:45:00	2.08	30.79	34.7	2.30	24.30	31.65	22.00	29.34
15:00:00	2.15	12.76	32.58	2.26	24.74	33.46	22.48	31.20
15:15:00	1.96	28.51	27.13	2.16	25.17	32.81	23.01	30.65
15:30:00	2.04	28.21	26.18	2.12	26.41	31.56	24.29	29.43
15:45:00	1.89	25.09	24.63	2.02	25.07	29.04	23.05	27.02
16:00:00	2	23.73	22.06	2.01	23.66	26.52	21.65	24.51
16:15:00	2.15	22.49	19.71	2.01	25.61	23.94	23.60	21.93
16:30:00	1.92	19.38	18.71	2.00	23.78	22.26	21.78	20.26
16:45:00	1.97	18.96	17.22	1.99	21.93	20.47	19.94	18.48
17:00:00	2.04	15.95	16.9	2.02	20.10	18.92	18.09	16.90
17:15:00	1.7	17.9	16.79	1.96	18.94	17.87	16.98	15.91
17:30:00	5.34	15.08	16.13	2.59	17.45	17.15	14.86	14.56
17:45:00	4.87	14.58	16.53	3.18	16.49	16.71	13.31	13.53
18:00:00	5.93	13.73	15.97	3.98	15.45	16.46	11.47	12.49