

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

PERIOD: August 14 – August 18, 2023

Date of Report: August 22, 2023

Report Contents

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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.

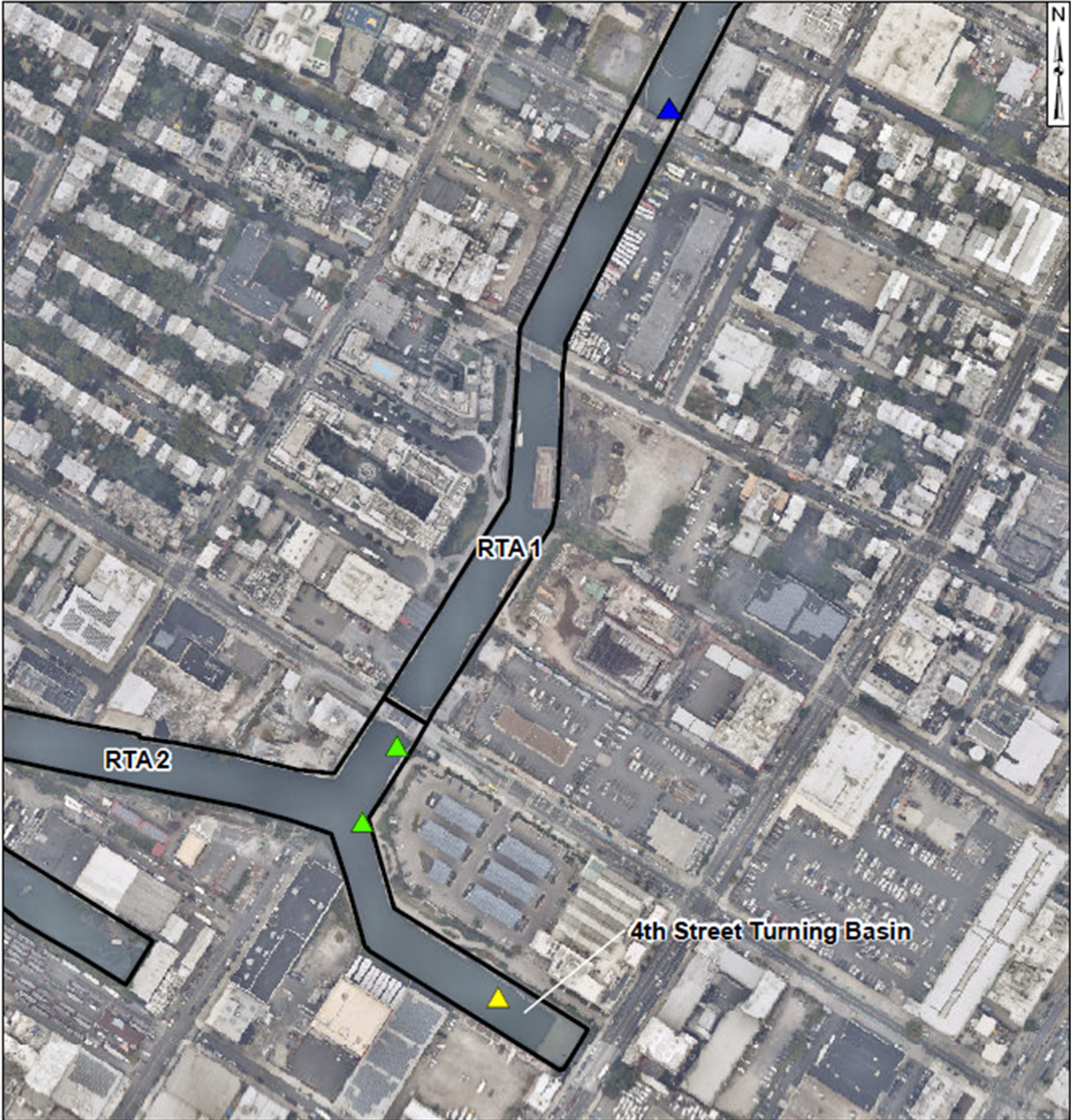
1.2 Summary of Monitoring Adjustments during Construction

- 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

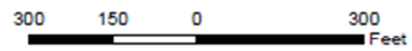
For the week of August 14, 2023, three turbidity buoys were deployed consisting of the Ambient Turbidity Buoy located in the eastern end of TB4, the West TB4 Sentinel Buoy located just outside of any sediment and floatables controls at the southern end of RTA1, and the South Third Street Sentinel Buoy 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. The instrument used to collect DO from the new monitoring buoy 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.



\\bbsrvr\eng\Gowanus\RTA\GIS\mxd\Canal\Water\Subsidiary\Buoy Locations.mxd, aka\lfrman\11/29/2020

Legend

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



**Water Quality Monitoring
Buoy Locations**

Gowanus Canal, Brooklyn, NY

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Figure

1

Brooklyn, NY

July 2023

2. REPORT OF EXCEEDANCES

An exceedance of the quantitative action criterion on Monday, August 14, 2023 from 11:30 AM to 2:00 PM and an exceedance of the quantitative trigger criterion on Thursday, August 17, 2023 occurred at the West TB4 Sentinel Buoy.

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.

An exceedance of the quantitative action criterion occurred on Monday, August 14, 2023 from 11:30 AM to 2:00 PM at the West TB4 Sentinel Buoy due to hydraulic capping activities occurring in the southern pool of RTA1 between the Carroll Street Bridge and 3rd Street Bridge. The turbidity curtain was deployed during this time period. Temporarily suspended capping material was able

to transport past the turbidity curtain between the curtain and the bulkhead wall. An exceedance of the quantitative trigger criterion occurred on Thursday, August 17, 2023 due to hydraulic capping activities occurring in the southern pool of RTA1. The air curtain was deployed during this time period. Temporarily suspended capping material was able to transport past the air curtain between the curtain and the bulkhead wall.

3. TURBIDITY BUOY DATA

The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from August 14 – August 18, 2023.

An exceedance of the quantitative action criterion on Monday, August 14, 2023 from 11:30 AM to 2:00 PM and an exceedance of the quantitative trigger criterion on Thursday, August 17, 2023 occurred at the West TB4 Sentinel Buoy. Elevated turbidity readings detected by the South 3rd Street Bridge were attributed to hydraulic capping activities occurring within 100 feet of the sentinel buoy. Due to the proximity of the construction activities to the sentinel buoy, these readings were excluded from the trigger and action level criteria in accordance with the WQMP. Heavy rain on Friday, August 18, 2023 resulted in high turbidity readings at all monitoring locations.

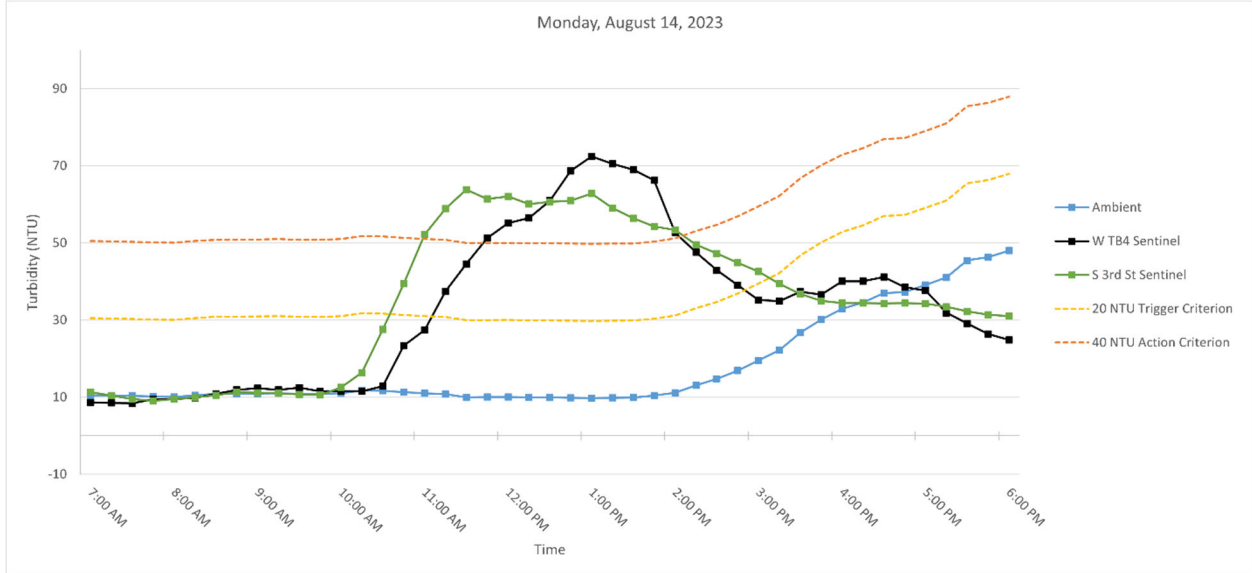
Table 1 below provides a summary of the turbidity data for the reporting period.

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, August 14, 2023	15.35	17.15	62.70	53.85
Tuesday, August 15, 2023	5.44	16.56	35.75	51.80
Wednesday, August 16, 2023	5.94	9.73	16.71	17.02
Thursday, August 17, 2023	13.55	14.05	34.68	41.14
Friday, August 18, 2023	9.61	12.85	36.25	33.30

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, August 14, 2023

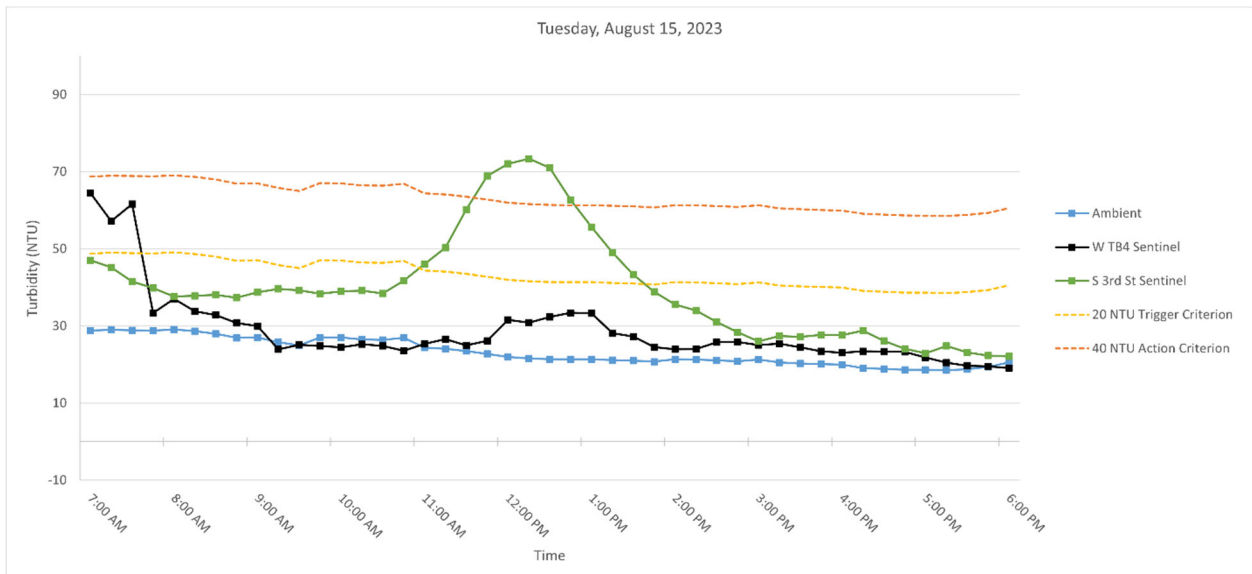
Figure 3. Hourly rolling average turbidity readings on Monday, August 14, 2023, from 7 AM to 6 PM.



Note: Turbidity readings at the South 3rd Street Sentinel Buoy were excluded from the trigger and action level criteria due to proximity to hydraulic capping activities in accordance with the WQMP.

3.2 Tuesday, August 15, 2023

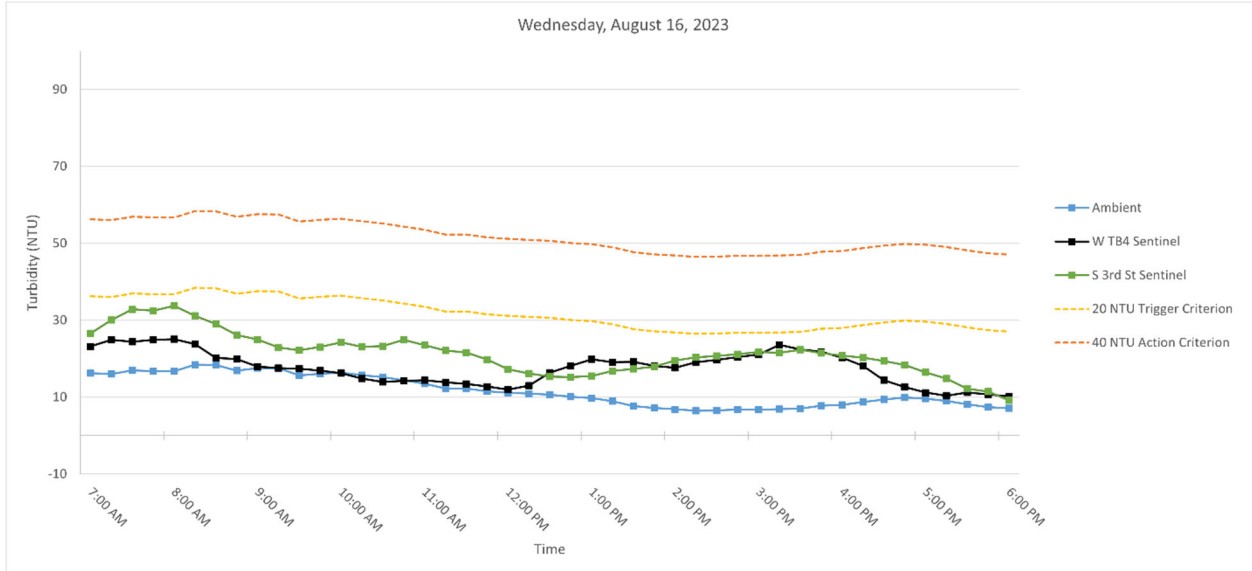
Figure 3. Hourly rolling average turbidity readings on Tuesday, August 15, 2023, from 7 AM to 6 PM.



Note: Turbidity readings at the South 3rd Street Sentinel Buoy were excluded from the trigger and action level criteria due to proximity to hydraulic capping activities in accordance with the WQMP.

3.3 Wednesday, August 16, 2023

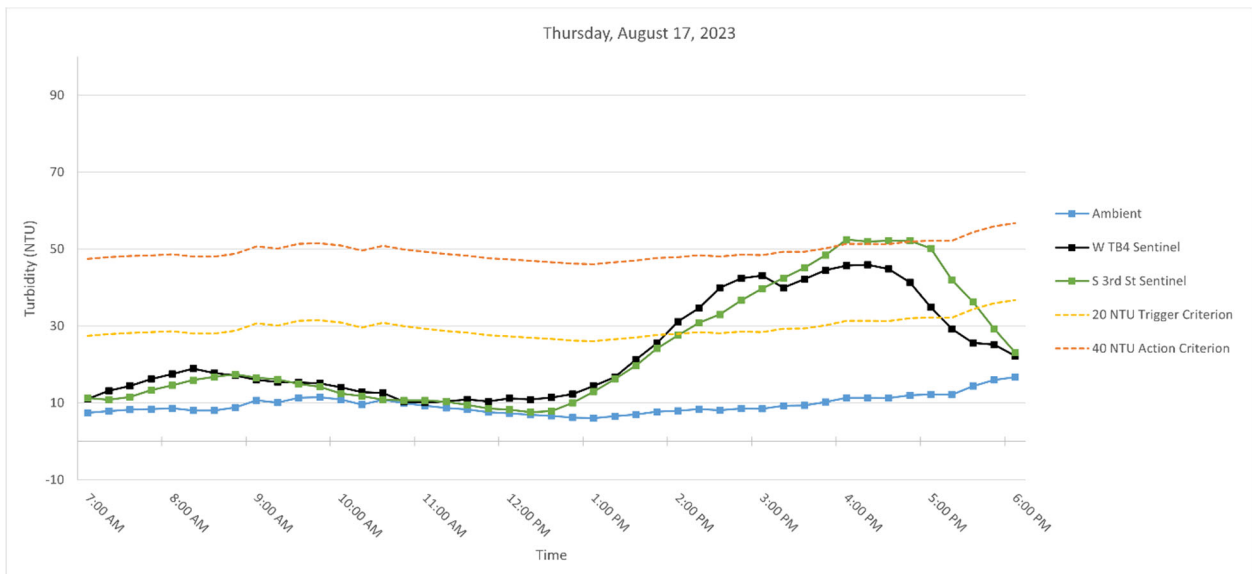
Figure 4. Hourly rolling average turbidity readings on Wednesday, August 16, 2023, from 7 AM to 6 PM.



Note: Outlier turbidity readings above 20 NTU were detected at the West TB4 Sentinel Buoy and the Ambient Buoy.

3.4 Thursday, August 17, 2023

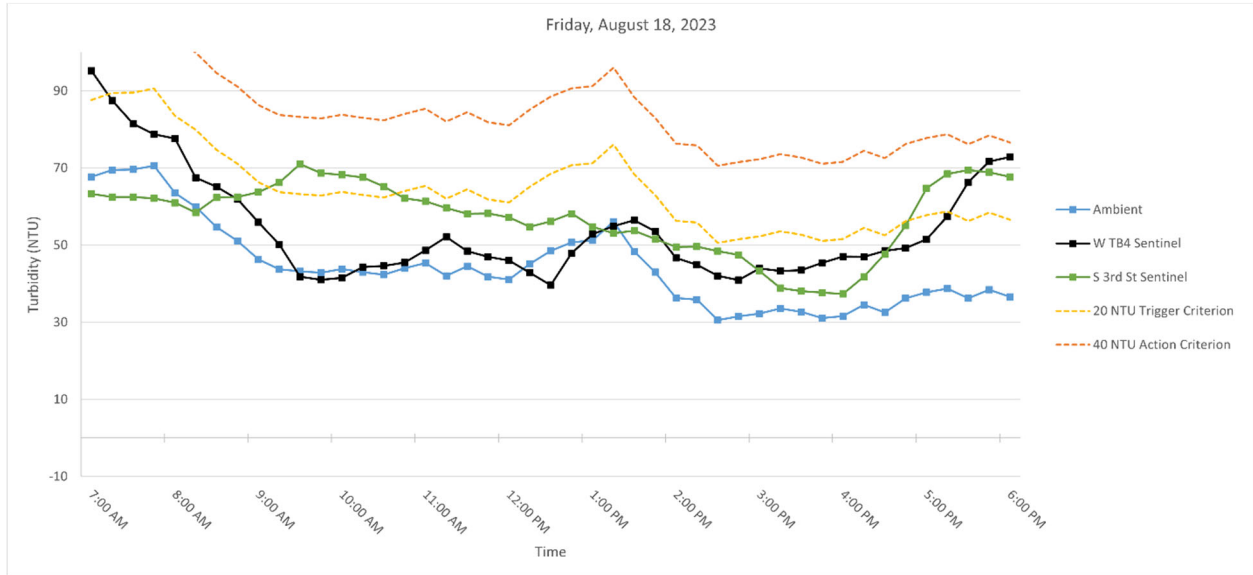
Figure 5. Hourly rolling average turbidity readings on Thursday, August 17, 2023, from 7 AM to 6 PM.



Note: Turbidity readings at the South 3rd Street Sentinel Buoy were excluded from the trigger and action level criteria due to proximity to hydraulic capping activities in accordance with the WQMP.

3.5 Friday, August 18, 2023

Figure 6. Hourly rolling average turbidity readings on Friday, August 18, 2023, from 7 AM to 6 PM.



Note: High turbidity readings were recorded at all buoys due to heavy rain events. An outlier turbidity reading above 20 NTU was detected at the Ambient Buoy.

4. DISSOLVED OXYGEN MONITORING DATA

Dissolved oxygen measured at the monitoring buoys throughout the reporting period is summarized below:

- Ambient
 - Average = 0.26 (+/-0.1) mg/L
 - Min = < 0.1 mg/L at multiple times throughout the reporting period
 - Max = 4.21 (+/-0.1) mg/L on Friday August 18, 2023

- West Turning Basin 4 (W TB4)
 - Average = 0.34 (+/-0.1) mg/L
 - Min = < 0.1 mg/L at multiple times throughout the reporting period
 - Max = 4.74 (+/-0.1) mg/L on Friday August 18, 2023

- South Third Street Bridge (S 3SB)
 - Average = 0.22 (+/-0.1) mg/L
 - Min = < 0.1 mg/L at multiple times throughout the reporting period
 - Max = 4.34 (+/-0.1) mg/L on Friday August 18, 2023

- North Union Street Bridge (N USB)
 - Average = 0.28 (+/-0.1) mg/L
 - Min = < 0.1 mg/L at multiple times throughout the reporting period
 - Max = 6.84 (+/-0.1) mg/L on Thursday August 18, 2023

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.

Elevated turbidity and occasional sheens were observed throughout the reporting period, being attributed to CSOs contributing high volumes of outflow into the canal during intense and sustained heavy rain events (as opposed to any work-related activities). Turbid discharges were observed during the reporting period from storm water outfalls, including from the high-level storm sewer pipe adjacent to OH-005.

On Friday, August 18, 2023, a dark debris was observed migrating south to north up the Canal, likely due to heavy rain events in the area.

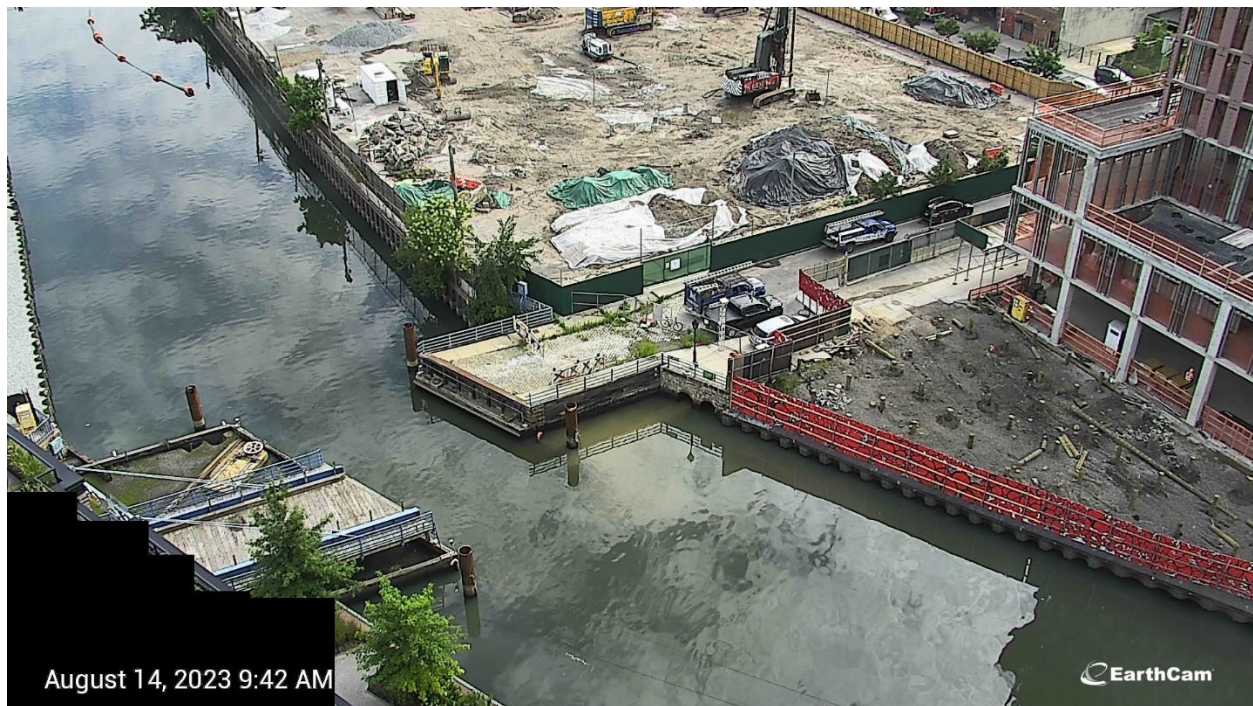


Figure 7. Turbid discharge from high level storm sewer pipe on August 14, 2023 at 9:45 AM.

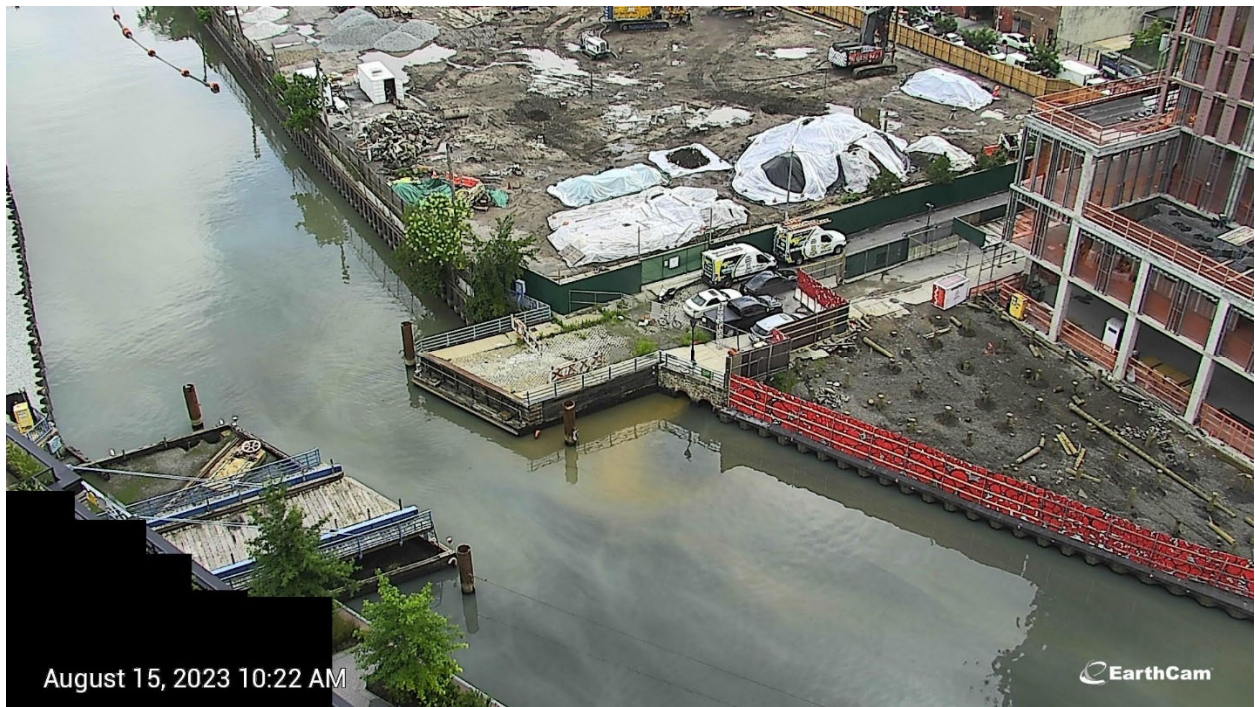


Figure 8. Turbid discharge from high level storm sewer pipe on August 15, 2023 at 10:15 AM.

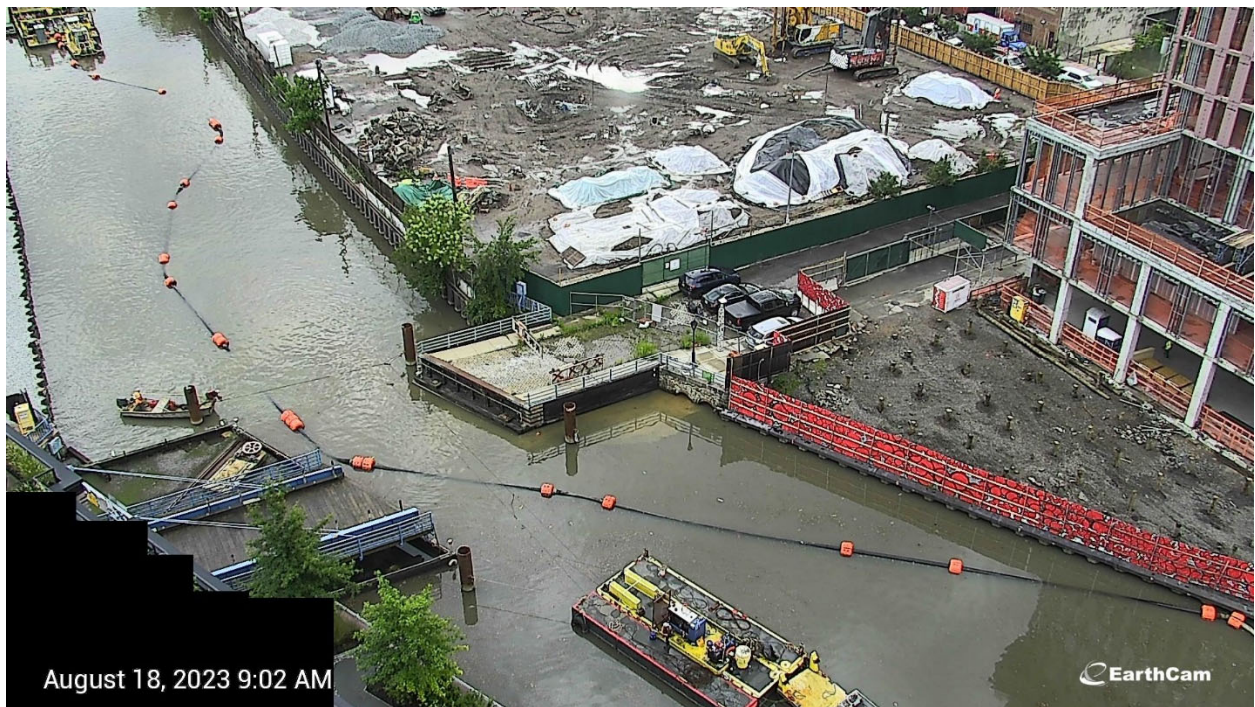


Figure 9. Turbid discharge from high level storm sewer pipe on August 18, 2023 at 9:00 AM.

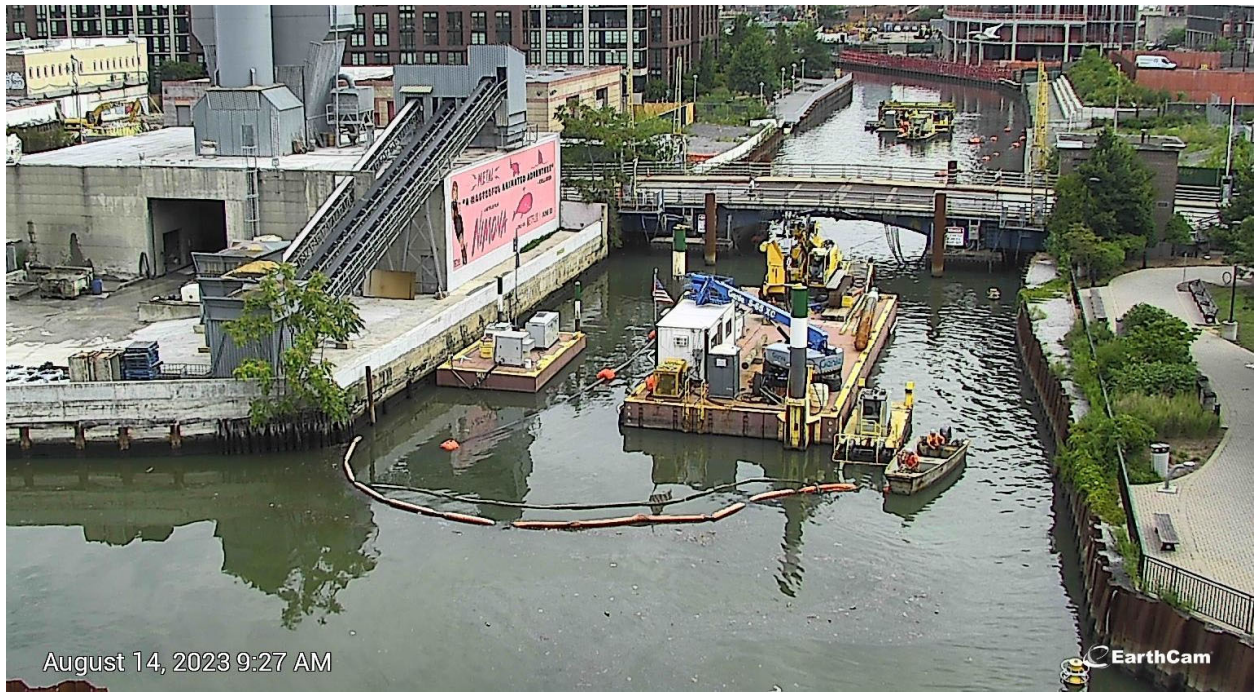


Figure 10. Deployment of turbidity curtain on August 14, 2023 at 9:30 AM.

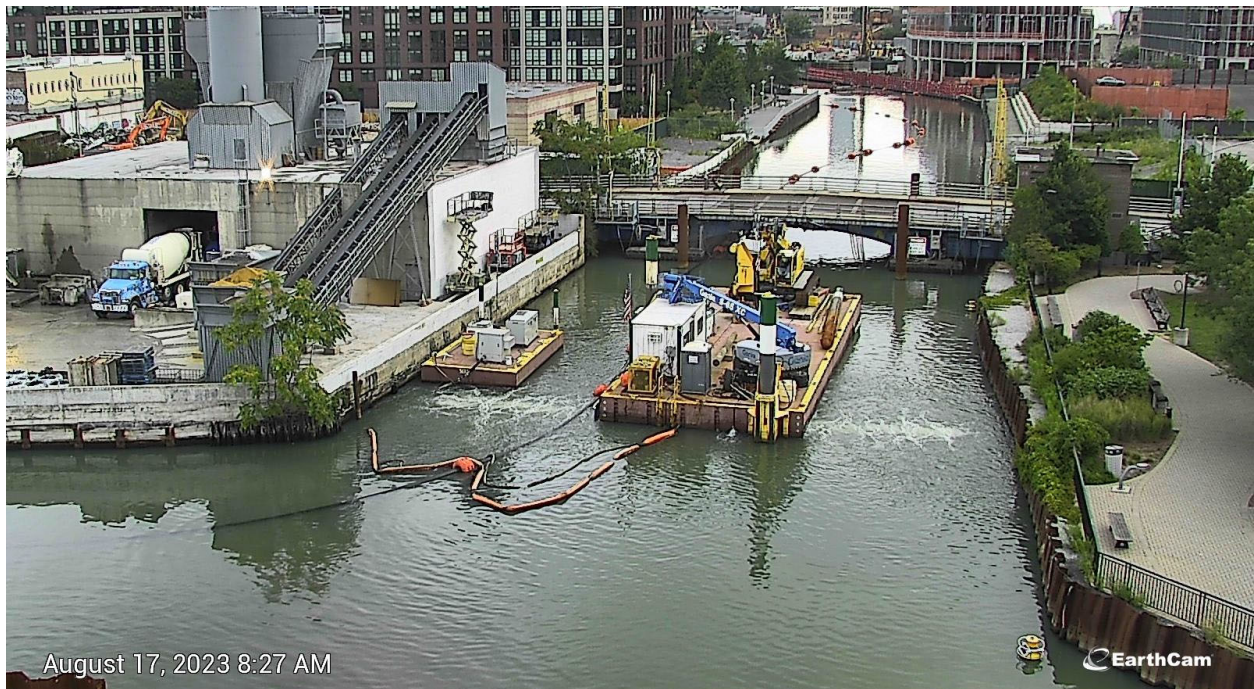


Figure 11. Operation of the air curtain on August 17, 2023 at 8:30 AM.

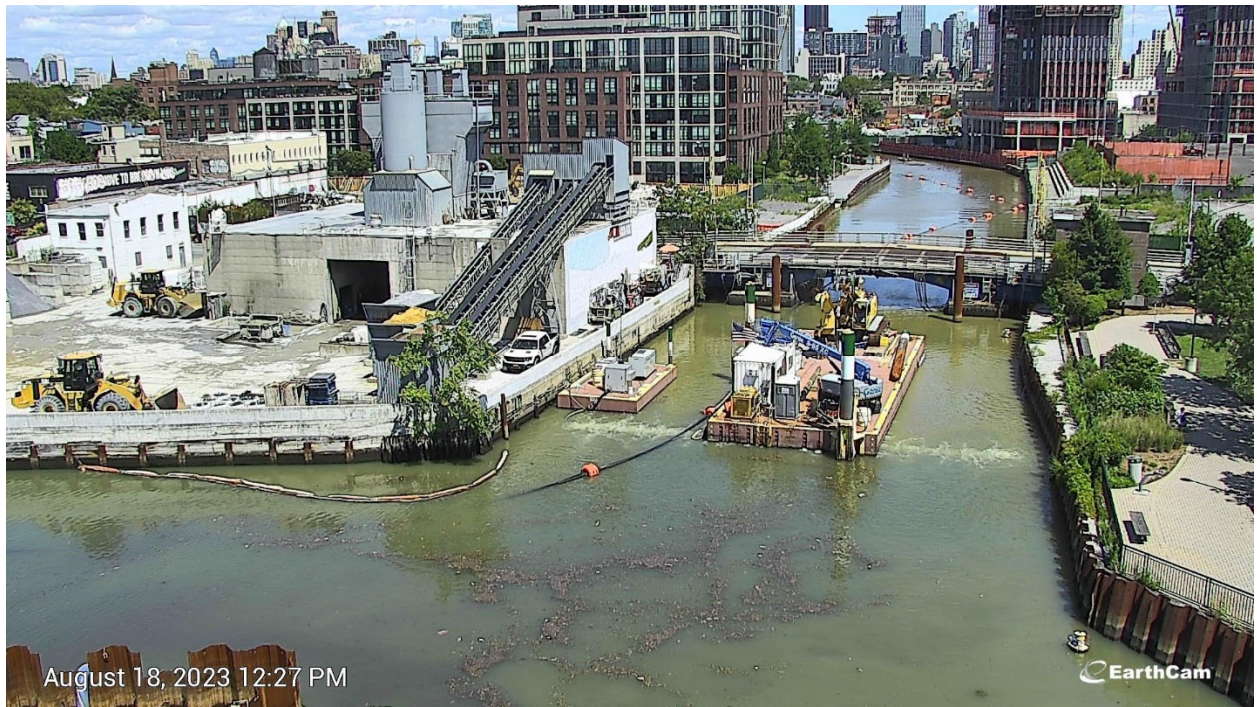


Figure 12. Dark debris migrating south to north up the Canal on August 18, 2023 at 12:30 PM.

APPENDIX A
Turbidity Data Tables

Monday, August 14, 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	10.19	9.80	8.87	10.50	8.68	11.32	-1.81	0.83
7:15:00	10.24	11.05	8.30	10.43	8.50	10.40	-1.93	-0.03
7:30:00	10.04	7.17	7.92	10.31	8.40	9.51	-1.91	-0.80
7:45:00	9.79	9.77	10.12	10.17	9.42	8.99	-0.74	-1.17
8:00:00	9.90	9.96	12.59	10.03	9.55	9.56	-0.48	-0.47
8:15:00	12.43	11.35	10.90	10.48	9.86	9.97	-0.62	-0.51
8:30:00	11.99	16.07	10.91	10.83	10.86	10.49	0.03	-0.34
8:45:00	10.05	12.24	11.90	10.83	11.88	11.29	1.05	0.45
9:00:00	10.17	12.06	9.60	10.91	12.34	11.18	1.43	0.27
9:15:00	10.39	7.81	11.66	11.01	11.91	10.99	0.90	-0.01
9:30:00	11.59	14.34	9.42	10.84	12.50	10.70	1.67	-0.14
9:45:00	11.92	11.19	10.19	10.82	11.53	10.55	0.70	-0.27
10:00:00	10.96	12.71	21.84	11.01	11.62	12.54	0.61	1.53
10:15:00	13.95	--	28.91	11.76	11.51	16.40	-0.25	4.64
10:30:00	10.02	13.22	67.51	11.69	12.86	27.57	1.17	15.88
10:45:00	9.81	56.33	68.65	11.33	23.36	39.42	12.03	28.09
11:00:00	10.36	--	73.94	11.02	27.42	52.17	16.40	41.15
11:15:00	9.70	43.00	55.48	10.77	37.52	58.90	26.75	48.13
11:30:00	9.99	65.65	53.57	9.98	44.55	63.83	34.57	53.85
11:45:00	10.23	39.86	55.42	10.02	51.21	61.41	41.19	51.39
12:00:00	9.86	72.02	72.00	10.02	55.13	62.08	45.11	52.05
12:15:00	9.95	61.65	63.81	9.94	56.44	60.06	46.49	50.11
12:30:00	9.67	65.53	58.42	9.94	60.94	60.64	51.01	50.71
12:45:00	9.48	104.49	55.03	9.84	68.71	60.94	58.87	51.10
13:00:00	9.78	58.54	64.80	9.75	72.45	62.81	62.70	53.06
13:15:00	10.25	62.49	53.25	9.83	70.54	59.06	60.71	49.23
13:30:00	10.19	53.88	50.35	9.88	68.98	56.37	59.11	46.49
13:45:00	12.22	51.96	48.05	10.39	66.27	54.30	55.88	43.91
14:00:00	13.37	36.83	50.51	11.16	52.74	53.39	41.57	42.23
14:15:00	19.42	32.69	45.47	13.09	47.57	49.53	34.48	36.43
14:30:00	18.39	39.38	42.14	14.72	42.95	47.30	28.23	32.58
14:45:00	21.13	34.26	38.12	16.91	39.02	44.86	22.12	27.95
15:00:00	25.21	33.00	36.43	19.50	35.23	42.53	15.73	23.03
15:15:00	26.95	35.18	34.84	22.22	34.90	39.40	12.68	17.18
15:30:00	42.16	44.75	32.38	26.77	37.31	36.78	10.55	10.01
15:45:00	35.21	36.00	33.23	30.13	36.64	35.00	6.51	4.87
16:00:00	34.94	51.49	35.19	32.89	40.08	34.42	7.19	1.52
16:15:00	33.57	33.00	36.29	34.57	40.08	34.39	5.51	-0.18
16:30:00	38.85	40.47	34.56	36.95	41.14	34.33	4.19	-2.62
16:45:00	43.65	31.50	32.76	37.25	38.49	34.41	1.25	-2.84
17:00:00	44.43	31.88	32.49	39.09	37.67	34.26	-1.42	-4.83
17:15:00	44.77	22.46	31.22	41.06	31.86	33.46	-9.19	-7.59
17:30:00	55.65	19.27	30.10	45.47	29.12	32.23	-16.36	-13.24
17:45:00	43.09	26.78	30.49	46.32	26.38	31.41	-19.94	-14.91
18:00:00	51.93	23.83	30.78	47.98	24.84	31.02	-23.13	-16.96

Tuesday, August 15, 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	29.48	38.75	40.84	28.77	64.52	47.07	35.75	18.30
7:15:00	29.55	28.83	40.45	28.99	57.17	45.23	28.18	16.23
7:30:00	29.48	--	46.44	28.89	61.60	41.52	32.72	12.63
7:45:00	25.87	25.37	30.36	28.80	33.34	39.84	4.54	11.03
8:00:00	30.99	55.33	30.10	29.08	37.07	37.64	7.99	8.56
8:15:00	27.35	25.59	41.72	28.65	33.78	37.81	5.13	9.17
8:30:00	26.21	25.13	41.86	27.98	32.85	38.10	4.87	10.11
8:45:00	24.19	22.50	42.69	26.92	30.78	37.35	3.86	10.42
9:00:00	26.34	21.34	37.25	27.02	29.98	38.72	2.96	11.71
9:15:00	25.00	25.11	34.39	25.82	23.93	39.58	-1.89	13.76
9:30:00	23.05	31.54	40.13	24.96	25.12	39.26	0.16	14.30
9:45:00	36.56	23.79	37.20	27.03	24.86	38.33	-2.17	11.30
10:00:00	24.04	20.44	45.87	27.00	24.44	38.97	-2.55	11.97
10:15:00	23.77	25.53	38.23	26.48	25.28	39.16	-1.20	12.68
10:30:00	24.61	22.72	30.78	26.41	24.80	38.44	-1.60	12.04
10:45:00	25.68	25.36	56.72	26.93	23.57	41.76	-3.36	14.83
11:00:00	23.87	32.80	58.37	24.39	25.37	45.99	0.98	21.60
11:15:00	22.58	--	67.40	24.10	26.60	50.30	2.50	26.20
11:30:00	20.86	19.15	87.65	23.52	25.01	60.18	1.49	36.66
11:45:00	20.89	27.36	74.17	22.77	26.17	68.86	3.39	46.09
12:00:00	21.75	46.94	72.60	21.99	31.56	72.04	9.57	50.05
12:15:00	21.94	30.06	65.19	21.60	30.88	73.40	9.28	51.80
12:30:00	21.56	38.29	55.56	21.40	32.36	71.03	10.96	49.63
12:45:00	20.57	24.34	45.96	21.34	33.40	62.69	12.06	41.35
13:00:00	20.89	26.73	38.89	21.34	33.27	55.64	11.93	34.29
13:15:00	20.92	21.40	39.67	21.18	28.16	49.05	6.99	27.88
13:30:00	21.03	25.42	36.39	20.99	27.24	43.29	6.24	22.30
13:45:00	20.31	24.71	33.53	20.74	24.52	38.89	3.78	18.14
14:00:00	23.61	21.55	29.43	21.35	23.96	35.58	2.61	14.23
14:15:00	20.56	26.87	30.91	21.28	23.99	33.99	2.71	12.70
14:30:00	19.81	30.48	24.91	21.06	25.81	31.04	4.74	9.97
14:45:00	20.12	25.80	23.16	20.88	25.88	28.39	5.00	7.51
15:00:00	22.55	20.44	21.74	21.33	25.03	26.03	3.70	4.70
15:15:00	19.60	23.50	36.13	20.53	25.42	27.37	4.89	6.84
15:30:00	19.32	22.06	30.09	20.28	24.46	27.21	4.18	6.93
15:45:00	18.90	25.34	27.22	20.09	23.43	27.67	3.33	7.57
16:00:00	19.40	23.85	23.03	19.95	23.04	27.64	3.09	7.69
16:15:00	18.18	22.50	27.37	19.08	23.45	28.77	4.37	9.69
16:30:00	18.68	22.89	22.97	18.89	23.33	26.14	4.43	7.24
16:45:00	18.18	21.67	20.02	18.67	23.25	24.12	4.58	5.46
17:00:00	18.69	18.07	21.20	18.63	21.80	22.92	3.17	4.29
17:15:00	18.83	17.47	32.64	18.51	20.52	24.84	2.01	6.33
17:30:00	19.56	18.33	18.69	18.79	19.69	23.10	0.90	4.31
17:45:00	21.49	22.25	19.05	19.35	19.56	22.32	0.21	2.97
18:00:00	24.17	19.23	19.08	20.55	19.07	22.13	-1.48	1.58

Wednesday, August 16, 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	15.85	21.35	35.49	16.23	23.17	26.59	6.94	10.35
7:15:00	15.49	33.95	35.21	15.99	24.89	30.06	8.90	14.07
7:30:00	21.72	18.75	34.71	16.93	24.37	32.81	7.43	15.88
7:45:00	15.78	31.50	28.84	16.75	24.90	32.48	8.15	15.73
8:00:00	14.74	19.79	34.41	16.72	25.07	33.73	8.35	17.02
8:15:00	24.29	14.91	22.76	18.40	23.78	31.19	5.38	12.78
8:30:00	15.08	16.03	24.37	18.32	20.20	29.02	1.88	10.70
8:45:00	14.67	17.31	20.29	16.91	19.91	26.14	3.00	9.22
9:00:00	19.03	21.48	22.88	17.56	17.91	24.94	0.34	7.38
9:15:00	14.47	18.12	24.31	17.51	17.57	22.92	0.06	5.41
9:30:00	14.90	14.21	19.16	15.63	17.43	22.20	1.80	6.57
9:45:00	17.41	13.16	28.49	16.10	16.86	23.03	0.76	6.93
10:00:00	16.07	14.24	26.51	16.38	16.24	24.27	-0.13	7.89
10:15:00	--	14.23	16.91	15.71	14.79	23.08	-0.92	7.36
10:30:00	12.24	13.94	25.17	15.15	13.95	23.25	-1.20	8.09
10:45:00	11.66	15.72	27.55	14.34	14.26	24.93	-0.09	10.58
11:00:00	14.17	13.93	21.43	13.53	14.41	23.51	0.88	9.98
11:15:00	11.06	11.47	19.58	12.28	13.86	22.13	1.58	9.85
11:30:00	--	12.17	14.29	12.28	13.44	21.61	1.16	9.33
11:45:00	9.28	10.34	15.95	11.54	12.73	19.76	1.18	8.22
12:00:00	10.16	--	14.91	11.17	11.98	17.23	0.81	6.07
12:15:00	13.04	17.87	15.86	10.89	12.96	16.12	2.08	5.23
12:30:00	10.05	25.13	15.59	10.63	16.38	15.32	5.75	4.69
12:45:00	7.87	19.22	13.67	10.08	18.14	15.20	8.06	5.12
13:00:00	7.76	16.96	17.55	9.78	19.80	15.52	10.02	5.74
13:15:00	6.04	16.40	21.18	8.95	19.12	16.77	10.16	7.82
13:30:00	6.83	18.27	18.53	7.71	19.20	17.30	11.49	9.59
13:45:00	7.19	19.74	18.71	7.14	18.12	17.93	10.98	10.79
14:00:00	6.37	16.76	21.84	6.84	17.63	19.56	10.79	12.72
14:15:00	5.71	24.15	21.53	6.43	19.06	20.36	12.64	13.93
14:30:00	6.44	19.38	23.01	6.51	19.66	20.72	13.15	14.21
14:45:00	8.15	21.96	20.64	6.77	20.40	21.14	13.63	14.37
15:00:00	6.91	23.11	21.49	6.71	21.07	21.70	14.36	14.99
15:15:00	7.04	29.17	20.92	6.85	23.55	21.52	16.71	14.67
15:30:00	6.42	18.19	25.44	6.99	22.36	22.30	15.37	15.31
15:45:00	10.36	16.59	18.77	7.78	21.80	21.45	14.03	13.68
16:00:00	9.21	14.34	17.18	7.99	20.28	20.76	12.29	12.77
16:15:00	10.71	12.51	18.88	8.75	18.16	20.24	9.41	11.49
16:30:00	10.26	10.14	16.57	9.39	14.36	19.37	4.96	9.98
16:45:00	8.80	9.56	20.36	9.87	12.63	18.35	2.76	8.48
17:00:00	9.06	9.35	9.21	9.61	11.18	16.44	1.57	6.83
17:15:00	6.26	10.23	9.16	9.02	10.36	14.84	1.34	5.82
17:30:00	6.43	16.65	5.44	8.16	11.18	12.15	3.02	3.99
17:45:00	6.35	7.81	12.85	7.38	10.72	11.41	3.34	4.03
18:00:00	7.25	6.98	--	7.07	10.20	9.17	3.13	2.10

Thursday, August 17, 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	9.12	12.44	10.57	7.45	11.05	11.31	3.60	3.87
7:15:00	10.67	20.83	10.10	7.90	13.19	10.82	5.28	2.91
7:30:00	9.32	16.98	15.82	8.24	14.44	11.61	6.20	3.37
7:45:00	6.91	20.29	18.68	8.39	16.23	13.31	7.83	4.92
8:00:00	7.31	17.06	17.63	8.66	17.52	14.56	8.86	5.90
8:15:00	6.11	19.41	17.54	8.06	18.92	15.95	10.85	7.89
8:30:00	10.70	14.93	14.37	8.07	17.73	16.81	9.66	8.74
8:45:00	13.09	14.09	19.01	8.82	17.15	17.45	8.33	8.62
9:00:00	16.33	14.64	14.18	10.71	16.02	16.55	5.32	5.84
9:15:00	4.40	14.20	15.61	10.13	15.45	16.14	5.33	6.02
9:30:00	12.34	18.85	11.78	11.37	15.34	14.99	3.97	3.62
9:45:00	11.42	13.66	10.50	11.52	15.09	14.22	3.57	2.70
10:00:00	10.03	8.93	10.36	10.90	14.06	12.49	3.15	1.58
10:15:00	9.78	8.58	10.89	9.59	12.84	11.83	3.25	2.23
10:30:00	10.63	12.84	10.66	10.84	12.57	10.84	1.73	0.00
10:45:00	7.83	7.66	11.17	9.94	10.33	10.72	0.40	0.78
11:00:00	8.30	12.54	10.48	9.31	10.11	10.71	0.80	1.40
11:15:00	7.10	10.33	8.31	8.73	10.39	10.30	1.66	1.58
11:30:00	7.66	11.19	6.88	8.30	10.91	9.50	2.61	1.20
11:45:00	7.20	10.36	5.82	7.62	10.42	8.54	2.80	0.92
12:00:00	6.38	11.65	9.87	7.33	11.21	8.27	3.89	0.95
12:15:00	6.33	10.85	7.31	6.93	10.88	7.64	3.94	0.71
12:30:00	5.54	13.19	9.66	6.62	11.45	7.91	4.83	1.29
12:45:00	5.68	15.66	17.61	6.23	12.34	10.05	6.12	3.83
13:00:00	6.36	20.98	20.41	6.06	14.47	12.97	8.41	6.91
13:15:00	9.07	22.90	26.19	6.60	16.72	16.24	10.12	9.64
13:30:00	8.47	33.55	24.89	7.02	21.26	19.75	14.23	12.73
13:45:00	8.99	34.61	31.79	7.71	25.54	24.18	17.83	16.47
14:00:00	6.88	43.90	34.97	7.95	31.19	27.65	23.23	19.70
14:15:00	8.63	38.39	36.42	8.41	34.67	30.85	26.26	22.44
14:30:00	7.53	49.59	37.06	8.10	40.01	33.02	31.91	24.92
14:45:00	10.88	45.47	43.03	8.58	42.39	36.65	33.81	28.07
15:00:00	8.34	38.35	47.23	8.45	43.14	39.74	34.68	31.29
15:15:00	11.14	27.98	48.56	9.30	39.96	42.46	30.65	33.16
15:30:00	8.86	49.61	49.61	9.35	42.20	45.10	32.85	35.75
15:45:00	11.91	61.46	53.62	10.23	44.57	48.41	34.35	38.18
16:00:00	16.51	51.25	63.44	11.35	45.73	52.49	34.38	41.14
16:15:00	8.37	39.35	44.61	11.36	45.93	51.97	34.57	40.61
16:30:00	10.89	22.61	49.85	11.31	44.86	52.22	33.55	40.92
16:45:00	12.33	32.14	49.59	12.00	41.36	52.22	29.36	40.22
17:00:00	13.03	29.32	43.43	12.23	34.93	50.18	22.71	37.96
17:15:00	16.25	22.71	22.21	12.17	29.23	41.94	17.05	29.76
17:30:00	19.37	21.19	16.27	14.37	25.59	36.27	11.22	21.90
17:45:00	18.84	20.51	15.15	15.96	25.17	29.33	9.21	13.37
18:00:00	16.10	17.36	18.70	16.72	22.22	23.15	5.50	6.43

Friday, August 18, 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	55.35	132.99	65.17	67.69	95.20	63.28	27.52	-4.41
7:15:00	80.94	57.21	60.15	69.49	87.48	62.50	17.99	-6.99
7:30:00	59.77	58.21	63.22	69.60	81.45	62.50	11.85	-7.10
7:45:00	64.85	72.49	57.79	70.58	78.76	62.15	8.19	-8.42
8:00:00	56.81	67.43	58.60	63.54	77.67	60.99	14.12	-2.56
8:15:00	37.25	82.21	52.42	59.92	67.51	58.44	7.59	-1.49
8:30:00	--	45.35	79.76	54.67	65.14	62.36	10.47	7.69
8:45:00	45.41	42.17	63.73	51.08	61.93	62.46	10.85	11.38
9:00:00	45.84	42.56	64.21	46.33	55.94	63.74	9.62	17.42
9:15:00	46.44	38.24	71.10	43.74	50.11	66.24	6.37	22.51
9:30:00	35.29	40.90	76.42	43.24	41.85	71.04	-1.40	27.80
9:45:00	41.33	41.09	67.86	42.86	40.99	68.66	-1.87	25.80
10:00:00	50.13	44.97	61.76	43.80	41.55	68.27	-2.25	24.46
10:15:00	41.88	56.49	60.72	43.01	44.34	67.57	1.33	24.56
10:30:00	43.01	39.70	59.30	42.33	44.63	65.21	2.30	22.88
10:45:00	43.78	45.23	61.15	44.03	45.50	62.16	1.47	18.13
11:00:00	48.02	57.03	63.87	45.36	48.68	61.36	3.32	16.00
11:15:00	33.44	62.10	53.11	42.03	52.11	59.63	10.08	17.60
11:30:00	54.31	38.24	53.21	44.51	48.46	58.13	3.95	13.62
11:45:00	29.65	32.10	59.66	41.84	46.94	58.20	5.10	16.36
12:00:00	40.05	40.60	56.13	41.09	46.01	57.20	4.92	16.10
12:15:00	68.37	41.10	51.58	45.16	42.83	54.74	-2.34	9.57
12:30:00	50.13	45.99	60.36	48.50	39.61	56.19	-8.90	7.69
12:45:00	65.33	79.84	63.23	50.71	47.93	58.19	-2.78	7.49
13:00:00	32.37	56.81	42.38	51.25	52.87	54.74	1.62	3.49
13:15:00	64.18	50.76	47.86	56.08	54.90	53.08	-1.18	-2.99
13:30:00	29.97	48.98	54.92	48.39	56.48	53.75	8.08	5.35
13:45:00	23.21	31.49	49.82	43.01	53.58	51.64	10.57	8.63
14:00:00	31.87	45.21	52.81	36.32	46.65	49.56	10.33	13.24
14:15:00	30.08	48.11	42.74	35.86	44.91	49.63	9.05	13.77
14:30:00	37.83	36.40	42.00	30.59	42.04	48.46	11.44	17.87
14:45:00	34.53	43.47	50.14	31.51	40.93	47.50	9.43	16.00
15:00:00	27.08	46.52	28.92	32.28	43.94	43.32	11.66	11.04
15:15:00	38.40	42.15	30.70	33.58	43.33	38.90	9.75	5.32
15:30:00	25.62	49.01	38.72	32.69	43.51	38.10	10.82	5.41
15:45:00	29.72	45.85	40.16	31.07	45.40	37.73	14.33	6.66
16:00:00	37.28	51.64	48.06	31.62	47.03	37.31	15.42	5.70
16:15:00	41.53	46.28	51.60	34.51	46.98	41.85	12.48	7.34
16:30:00	28.61	49.67	60.00	32.55	48.49	47.71	15.94	15.16
16:45:00	44.05	52.97	75.60	36.24	49.28	55.08	13.04	18.84
17:00:00	37.49	57.02	88.70	37.79	51.52	64.79	13.72	27.00
17:15:00	41.90	81.32	66.28	38.72	57.45	68.44	18.74	29.72
17:30:00	28.97	90.74	56.97	36.20	66.35	69.51	30.14	33.30
17:45:00	39.71	76.32	56.77	38.42	71.68	68.87	33.25	30.44
18:00:00	35.09	59.01	69.84	36.63	72.88	67.71	36.25	31.08