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

PERIOD: April 8, 2024 – April 12, 2024

Date of Report: April 15, 2024

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#### 1. SCOPE OF MONITORING

#### 1.1 <u>Initial Buoy Locations</u>

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 3<sup>rd</sup> Street Bridge outside of the air curtain and traditional turbidity curtain and was referred to as the 3<sup>rd</sup> 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 initially 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 <u>Summary of Monitoring Adjustments during Construction</u>

- 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 3<sup>rd</sup> 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 north of the Union Street Bridge to monitor dissolved oxygen (DO) in RTA1.
- On Tuesday, September 19, 2023, the fourth monitoring buoy (originally deployed north of the Union Street Bridge to monitor DO) was moved to just south of the Carroll Street Bridge due to ongoing in-waterway construction activities within 100 feet. In addition to dissolved oxygen, this served as an additional sentinel buoy and was referred to as the South Carroll Street Bridge Sentinel Buoy.
- On Thursday, November 2, 2023, the monitoring buoy deployed just south of the Third Street Bridge was removed from the canal to conduct maintenance and necessary repairs.
- On Monday, November 13, 2023, the monitoring buoy most recently deployed south of the Carroll Street Bridge was moved to just south of the Union Street Bridge due to ongoing in-waterway construction activities within 100 feet. In addition to dissolved oxygen, this served as an additional sentinel buoy and was referred to as the South Union Street Bridge Sentinel Buoy.
- On Tuesday, December 19, 2023, the monitoring buoy most recently deployed south of the Union Street Bridge was moved back to just south of the Carroll Street Bridge (referred to as the South Carroll Street Bridge Sentinel Buoy) due to ongoing in-waterway construction activities within 100 feet of Union Street Bridge.

- On Monday, February 12, 2024, the monitoring buoy most recently deployed south of the Carroll Street Bridge was moved to just south of the Third Street Bridge (referred to as the South Third Street Bridge Sentinel Buoy) due to ongoing in-waterway construction activities progressing south of the Carroll Street Bridge and into the south pool.
- On Wednesday, March 27, 2024, the monitoring buoy deployed south of the Third Street Bridge was moved to just north of the Third Street Bridge (referred to as the North Third Street Bridge Sentinel Buoy) due to ongoing in-waterway construction activities on the south side of the Third Street Bridge.

#### 1.3 <u>Current Reporting Period Scope of Monitoring</u>

For the week of April 8, 2024, 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 North Third Street Bridge Sentinel Buoy located just north of the Third Street Bridge. Additionally, DO measurements were recorded by the turbidity buoys.

All readings from buoys were transmitted via telemetry at 15-minute intervals. The instrument used to collect turbidity and DO from the buoys is an In-Situ VuLink (telemetry) and AquaTroll500 (sonde), equipped with optical sensors capable of reading turbidity levels with an accuracy of  $\pm$ -0.5 NTU and DO levels with an accuracy of  $\pm$ -0.1 mg/L.

Visual observations of turbidity and sheen are summarized in Section 5.



#### 2. **REPORT OF EXCEEDANCES**

No exceedances due to remedial construction-related activities to the quantitative trigger or action criteria were observed during the reporting period.

- **Trigger criterion** Any of the following:
  - The rolling average of the relevant sentinel buoy turbidity measurements over a onehour 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 inwaterway 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 <u>Response to Criteria Exceedances</u>

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 exceedances of the trigger and action level criteria is provided in Section 4.2 of the WQMP. No exceedances due to remedial construction-related activities to the quantitative trigger or action criteria were observed during the reporting period.

#### 3. TURBIDITY BUOY DATA

The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from April 8 – April 12, 2024. No exceedances due to remedial construction-related activities to the quantitative trigger or action criteria were observed during the reporting period.

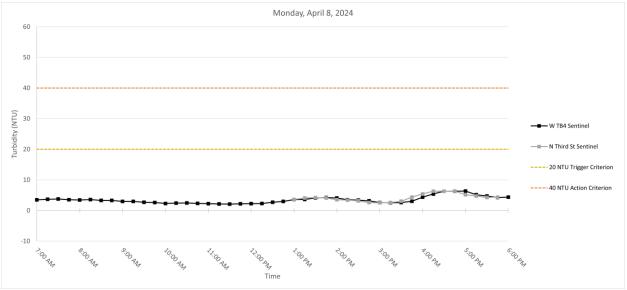
Table 1 below provides a summary of the turbidity data for the reporting period.

	Average Rolling Ave	rage Difference (NTU)	Maximum Rolling Average Difference (NTU)			
Date	Date W TB4 - Ambient N Third St - Ambient		W TB4 - Ambient	N Third St - Ambient		
Monday, April 8, 2024	-32.06	-24.49	-23.87	8.48		
Tuesday, April 9, 2024	-15.14	42.00	8.23	125.45		
Wednesday, April 10, 2024	-0.81	1.35	3.57	5.82		
Thursday, April1, 2024	-1.73	-0.62	0.24	3.18		
Friday, April 12, 2024	-1.73	-4.10	0.24	-0.03		

**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 <u>Monday, April 8, 2024</u>

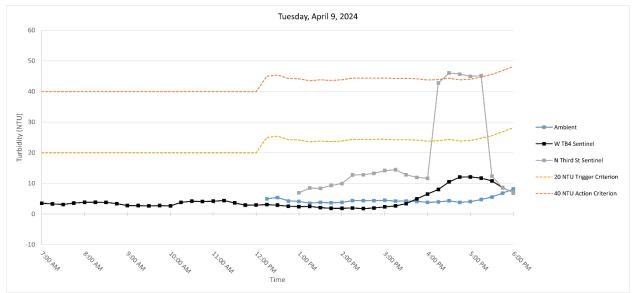
**Figure 3.** Hourly rolling average turbidity readings on Monday, March 25, 2024, from 7 AM to 6 PM.



**Note:** No exceedances were observed. Outlier turbidity readings above 40 NTU were detected at the North Third Street buoy. Ambient Buoy turbidity readings were artificially high as a result of a buildup of deposits of fine-grained sediments in and around the turbidity sensors. Ambient Buoy readings were discarded for all of Monday April 8<sup>th</sup> due to erroneously high readings.

#### 3.2 <u>Tuesday, April 9, 2024</u>

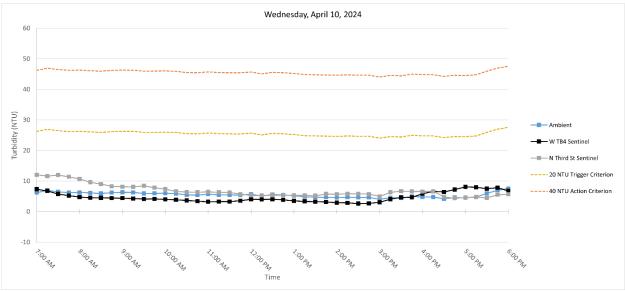
**Figure 3.** Hourly rolling average turbidity readings on Tuesday, March 26, 2024, from 7 AM to 6 PM.



**Note:** At the North Third Street Sentinel Buoy and the Ambient Buoy, turbidity readings were elevated and deemed to be erroneous before 1:00pm. Following being cleaned, the readings from each Buoy returned to expected levels. Elevated turbidity readings were detected at the North Third Street Buoy from 4:00pm to 5:50pm due to the suspension of sediments by a construction vessel passing within 100ft.

#### 3.3 <u>Wednesday, April 10, 2024</u>

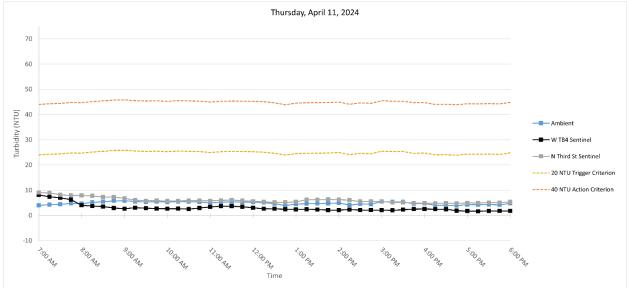
**Figure 4.** Hourly rolling average turbidity readings on Wednesday, March 27, 2024, from 7 AM to 6 PM.



Note: No exceedances were observed. No outlier turbidity readings above 20 NTU were detected at any of the buoys.

#### 3.4 <u>Thursday, April 11, 2024</u>

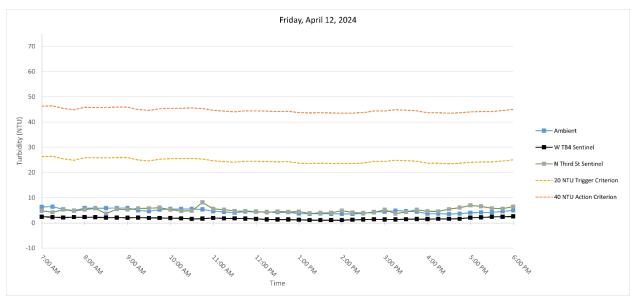
**Figure 5.** Hourly rolling average turbidity readings on Thursday, March 28, 2024, from 7 AM to 6 PM.



Note: No exceedances were observed. No outlier turbidity readings above 20 NTU were detected at any of the buoys.

#### 3.5 Friday, April 12, 2024

**Figure 6.** Hourly rolling average turbidity readings on Friday, March 29, 2024, from 7 AM to 6 PM.



Note: No exceedances were observed. Outlier turbidity readings above 20 NTU were detected at the Ambient Buoy.

#### 4. DISSOLVED OXYGEN MONITORING DATA

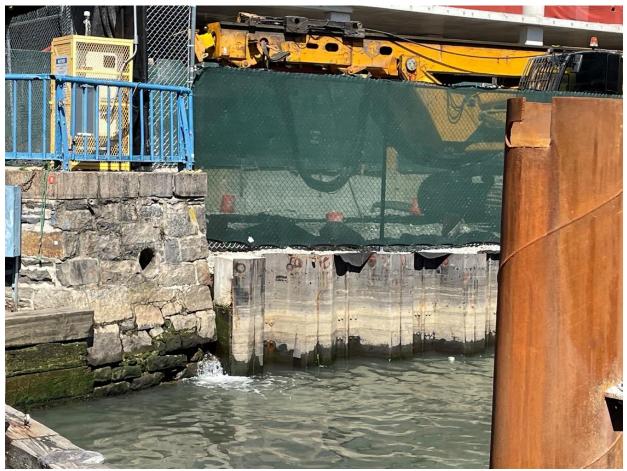
Dissolved oxygen measured at the monitoring buoys throughout the reporting period is provided in Appendix B and summarized below:

- Ambient
  - Average = 5.00 (+/-0.1) mg/L
  - Min = 1.97 (+/-0.1) mg/L on Wednesday April 10, 2024
  - Max = 9.62 (+/-0.1) mg/L on Sunday April 14, 2024
- West Turning Basin 4 (W TB4)
  - Average = 5.18 (+/-0.1) mg/L
  - Min = 0.46 (+/-0.1) mg/L on Wednesday April 10, 2024
  - Max = 10.53 (+/-0.1) mg/L on Sunday April 14, 2024
- North Third Street Bridge (N 3SB)
  - Average = 3.97 (+/-0.1) mg/L
  - $Min = \langle 0.1 mg/L at multiple times throughout the reporting period$
  - Max = 9.56 (+/-0.1) mg/L on Sunday April 14, 2024

#### 5. SUMMARY OF VISUAL OBSERVATIONS

Visual indications of elevated turbidity were periodically observed during the reporting period attributable to capping activities, typically due to temporarily suspended sediment from passing vessels. Turbid and sheen discharges were observed during the reporting period at multiple locations on the canal. Multiple discharges, of varying contents, were identified during the reporting period.

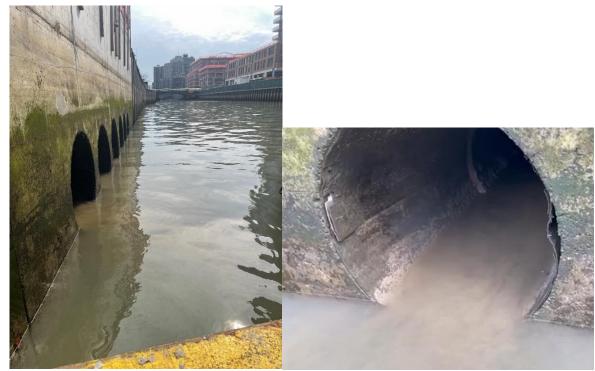
Photographs depicting conditions relevant to these events are shown below.



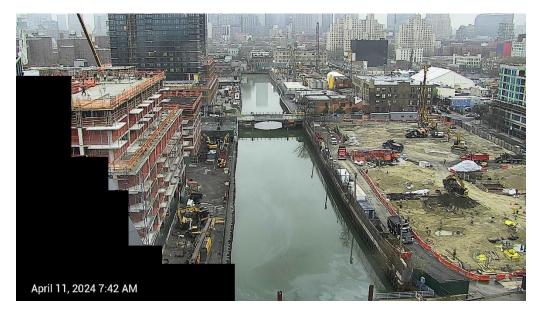
**Figure 7.** Discharge from the storm water outfall at the Bayside North construction site located between Union Street and Degraw Street on April 8, 2024 at approximately 11:25 AM.



**Figure 8.** High number of floating solids were observed on Monday April 8, 2024, near the north headwall of the canal.



**Figure 9.** Turbid discharge observed at the Degraw Street east outfall on Wednesday April 10, 2024, at approximately 3:15 PM.



**Figure 14.** Sheen pictured south of the Union Street Bridge at 4:02 PM on Wednesday, April 10, 2024.



**Figure. 15** Visual indication of elevated turbidity as a result of temporarily suspended sediments from passing vessels at approximately 4:00 PM, April 10, 2024

# **APPENDIX A Turbidity Data Tables**

## Monday, April 8, 2024

Time	Turbidity (NTU)			R	olling Average Turbidity	Difference (NTU)		
	Ambient	W TB4	N Third Street	Ambient	W TB4	N Third Street	W TB4 - Ambient	N 3SB - Ambient
7:00:00	32.55	3.57	-	27.81	3.49		-24.33	
7:15:00	24.08	3.98		28.36	3.65		-24.71	
7:30:00	17.60	3.73		28.32	3.75		-24.57	
7:45:00	24.31	3.72	-	27.42	3.54		-23.87	
8:00:00	43.30	2.25		28.37	3.45		-24.92	
8:15:00	36.92	4.17		29.24	3.57		-25.67	
8:30:00	42.38	2.63		32.90	3.30		-29.61	
8:45:00	19.99	3.75		33.38	3.30		-30.08	
9:00:00	24.19	2.00		33.36	2.96		-30.40	
9:15:00	19.12	2.27		28.52	2.96		-25.56	
9:30:00	37.29	2.74		28.59	2.68		-25.92	
9:45:00	43.29	2.20		28.78	2.59		-26.18	
10:00:00	37.73			32.32	2.30		-30.02	
10:15:00	44.01	2.53		36.29	2.44		-33.85	
10:30:00	25.20	2.32		37.50	2.45		-35.06	
10:45:00	28.52	2.29		35.75	2.34		-33.41	
11:00:00	22.67	1.86		31.63	2.25		-29.38	
11:15:00	38.30	1.72		31.74	2.14		-29.60	
11:30:00	46.74	2.18		32.29	2.07		-30.21	
11:45:00	45.48	2.89		36.34	2.19		-34.16	
12:00:00	27.80	2.39		36.20	2.21		-33.99	
12:15:00	20.06	2.22		35.68	2.28		-33.40	
12:30:00	25.15	3.87		33.05	2.71		-30.34	
12:45:00	41.69	3.38		32.04	2.95		-29.09	
13:00:00	36.33	5.95	6.42	30.21	3.56	6.42	-26.64	-23.79
13:15:00	46.55	2.58		33.96	3.60	6.42	-30.36	-27.54
13:30:00	30.21	4.71	5.43	35.99	4.10	5.92	-31.89	-30.06
13:45:00	26.61	4.59	5.60	36.28	4.24	5.82	-32.04	-30.46
14:00:00	20.61	2.59	4.64	32.06	4.08	5.52	-27.98	-26.54
14:15:00	37.32	3.07	5.61	32.26	3.51	5.32	-28.75	-26.94
14:30:00	43.29	2.05	6.72	31.61	3.40	5.60	-28.21	-26.01
14:45:00	36.39	3.41	5.84	32.84	3.14	5.68	-29.70	-27.16
15:00:00	34.53	1.88	7.00	34.43	2.60	5.96	-31.83	-28.46
15:15:00	21.15	2.14	8.33	34.53	2.51	6.70	-32.03	-27.84
15:30:00	28.00	3.47	8.87	32.67	2.59	7.35	-30.08	-25.32
15:45:00	57.49	4.28	6.27	35.51	3.04	7.26	-32.47	-28.25
16:00:00	52.38	10.03	59.79	38.71	4.36	18.05	-34.35	-20.66
16:15:00	53.39	7.08	108.92	42.48	5.40	38.44	-37.08	-4.04
16:30:00	27.07	6.64		43.66	6.30	45.96	-37.36	2.30
16:45:00	27.36	3.51	10.45	43.54	6.31	46.36	-37.23	2.82
17:00:00	26.99	4.38	4.54	37.44	6.33	45.92	-31.11	8.48
17:15:00	125.71	4.22	4.45	52.11	5.17	32.09	-46.94	-20.02
17:30:00	58.89	4.87		53.21	4.72	6.48	-48.48	-46.73
17:45:00	52.97	4.41	4.21	58.39	4.28	5.91	-54.11	-52.48
18:00:00	36.63	3.88	5.65	60.24	4.35	4.71	-55.89	-55.53

## Tuesday, April 9, 2024

	Turbidity (NTU)			Rolling Average Turbidity (I	NTU)	Difference (NTU)		
Ambient	W TB4	N Third Street	Ambient	W TB4	N Third Street	W TB4 - Ambient	N 3SB - Ambient	
26.51	2.79	36.43	35.64	3.54	35.23	-32.11	-0.41	
20.34	2.75	31.43	30.82	3.31	35.20	-27.51	4.39	
44.20	4.57	24.90	31.64	3.10	31.82	-28.54	0.18	
51.90	5.32	30.05	33.18	3.60	31.13	-29.58	-2.05	
49.01		104.70	38.39	3.86	45.50	-34.54	7.11	
37.73	2.75	135.02	40.64	3.85	65.22	-36.79	24.58	
25.23	2.56	136.07	41.62	3.80	86.15	-37.82	44.53	
26.92	2.96	151.60	38.16	3.39	111.49	-34.76	73.33	
55.30	2.68	144.67	38.84	2.74	134.41	-36.10	95.57	
45.63		160.94	38.16	2.74	145.66	-35.42	107.50	
52.60	2.36	105.99	41.13	2.64	139.86	-38.49	98.72	
32.23	2.99	161.88	42.53	2.75	145.02	-39.78	102.48	
32.20	2.57	171.03	43.59	2.65	148.91	-40.94	105.32	
26.35	7.27	176.26	37.80	3.80	155.22	-34.00	117.42	
53.83	5.61	163.65	39.44	4.16	155.76	-35.28	116.32	
59.11	2.11	158.13	40.74	4.11	166.19	-36.63	125.45	
50.81	3.40	48.77	44.46	4.19	143.57	-40.27	99.11	
2.20	3.64	182.07	38.46	4.40	145.77	-34.06	107.31	
9.17	3.48	163.11	35.02	3.65	143.14	-31.38	108.12	
3.68	1.88	0.00	24.99	2.90	110.41	-22.09	85.42	
6.46	2.29	5.19	14.46	2.94	79.83	-11.53	65.37	
3.45	4.16	8.72	4.99	3.09	71.82	-1.90	66.83	
4.27	2.59	6.84	5.41	2.88	36.77	-2.53	31.37	
3.62	1.79	6.54	4.30	2.54	5.46	-1.75	1.16	
2.94	1.39	7.29	4.15	2.44	6.92	-1.70	2.77	
3.48	2.44	13.00	3.55	2.47	8.48	-1.08	4.93	
4.80	2.28	8.20	3.82	2.10	8.38	-1.72	4.55	
3.42	1.34	11.45	3.65	1.85	9.30	-1.81	5.64	
4.45	1.84	9.75	3.82	1.86	9.94	-1.96	6.12	
5.79	1.92	21.27	4.39	1.96	12.73	-2.42	8.35	
3.37	1.56	13.38	4.36	1.79	12.81	-2.57	8.45	
4.88	3.12	10.72	4.38	1.96	13.31	-2.42	8.93	
3.72	3.31	15.65	4.44	2.35	14.15	-2.09	9.71	
3.45	3.34	11.23	4.24	2.65	14.45	-1.59	10.21	
5.90	5.57	12.97	4.26	3.38	12.79	-0.88	8.53	
2.71	9.55	9.30	4.13	4.98	11.97	0.85	7.84	
3.19	11.03	9.10	3.80	6.56	11.65	2.76	7.86	
4.41	10.65	171.11	3.93	8.03	42.74	4.10	38.81	
5.44	15.61	27.66	4.33	10.48	46.03	6.15	41.70	
3.33	13.39	11.22	3.82	12.05	45.68	8.23	41.86	
3.78	10.00	5.87	4.03	12.14	44.99	8.11	40.96	
6.76	8.86	9.86	4.74	11.70	45.15	6.96	40.40	
8.52	6.42	7.56	5.57	10.86	12.44	5.29	6.87	
11.74	4.10	7.94	6.83	8.55	8.49	1.73	1.67	
10.08	5.57	4.07	8.18	6.99	7.06	-1.18	-1.11	

Time	Turbidity (NTU)			F	Rolling Average Turbidity	Difference (NTU)		
	Ambient	W TB4	N Third Street	Ambient	W TB4	N Third Street	W TB4 - Ambient	N 3SB - Ambient
7:00:00	7.82	5.75	11.50	6.22	7.33	12.04	1.10	5.82
7:15:00	6.68	4.34	11.42	6.94	6.79	11.61	-0.15	4.67
7:30:00	3.92	4.35	12.46	6.49	5.77	11.95	-0.72	5.46
7:45:00	5.04	4.54	9.94	6.21	5.23	11.41	-0.98	5.21
8:00:00	8.06	4.91	8.19	6.30	4.78	10.70	-1.53	4.40
8:15:00	6.85	4.51	5.97	6.11	4.53	9.60	-1.58	3.49
8:30:00	5.79	4.16	8.53	5.93	4.49	9.02	-1.44	3.09
8:45:00	5.37	4.11	8.78	6.22	4.45	8.28	-1.78	2.06
9:00:00	5.50	4.48	9.26	6.31	4.43	8.15	-1.88	1.83
9:15:00	7.95	4.05	7.97	6.29	4.26	8.10	-2.03	1.81
9:30:00	5.05	3.83	7.72	5.93	4.13	8.45	-1.80	2.52
9:45:00	6.08	4.32	5.55	5.99	4.16	7.85	-1.83	1.86
10:00:00	5.58	3.35	6.47	6.03	4.01	7.39	-2.03	1.36
10:15:00	4.98	3.79	5.24	5.93	3.87	6.59	-2.06	0.66
10:30:00	5.74	3.08	6.96	5.48	3.67	6.39	-1.81	0.90
10:45:00	4.86	2.62	7.62	5.45	3.43	6.37	-2.02	0.92
11:00:00	7.55	3.32	6.09	5.74	3.23	6.48	-2.51	0.74
11:15:00	4.41	3.67	5.73	5.51	3.29	6.33	-2.21	0.82
11:30:00	4.76	3.80	4.99	5.46	3.30	6.28	-2.17	0.81
11:45:00	5.57	4.39	4.29	5.43	3.56	5.74	-1.87	0.31
12:00:00	6.16	5.10	5.40	5.69	4.06	5.30	-1.63	-0.39
12:15:00	4.58	2.92	6.10	5.09	3.98	5.30	-1.12	0.21
12:30:00	6.90	3.88	5.81	5.59	4.02	5.32	-1.58	-0.27
12:45:00	4.08	2.93	5.01	5.46	3.85	5.32	-1.61	-0.13
13:00:00	4.40	2.84	4.32	5.22	3.53	5.33	-1.69	0.10
13:15:00	4.29	4.25	5.38	4.85	3.36	5.32	-1.49	0.47
13:30:00	4.11	2.36	5.52	4.76	3.25	5.21	-1.51	0.45
13:45:00	6.63	3.42	8.59	4.70	3.16	5.76	-1.55	1.06
14:00:00	3.74	1.72	4.73	4.64	2.92	5.71	-1.72	1.07
14:15:00	4.96	2.62	4.99	4.75	2.87	5.84	-1.87	1.09
14:30:00	3.83	2.93	5.31	4.66	2.61	5.83	-2.04	1.17
14:45:00	4.08	2.74	5.12	4.65	2.69	5.75	-1.96	1.10
15:00:00	3.71	5.25	4.66	4.06	3.05	4.96	-1.01	0.90
15:15:00	6.15	6.80	11.52	4.55	4.07	6.32	-0.48	1.77
15:30:00	4.37	5.73	6.93	4.43	4.69	6.71	0.26	2.28
15:45:00	6.59	2.90	4.90	4.98	4.68	6.63	-0.30	1.65
16:00:00	3.27	8.63	4.80	4.82	5.86	6.56	1.05	1.74
16:15:00	3.52	9.08	4.94	4.78	6.63	6.62	1.85	1.84
16:30:00	3.36	5.81	2.66	4.22	6.43	4.85	2.21	0.62
16:45:00	6.27	9.63	4.58	4.60	7.21	4.38	2.61	-0.22
17:00:00	6.27	7.41	6.23	4.54	8.11	4.64	3.57	0.11
17:15:00	4.47	7.89	5.45	4.78	7.96	4.77	3.19	-0.01
17:30:00	9.48	6.82	3.51	5.97	7.51	4.49	1.54	-1.48
17:45:00	8.45	7.33	7.93	6.99	7.82	5.54	0.83	-1.45
18:00:00	9.28	4.43	5.32	7.59	6.78	5.69	-0.81	-1.90

## Wednesday, April 10, 2024

Time	Turbidity (NTU)			Ro	olling Average Turbidity	Difference (NTU)		
	Ambient	W TB4	N Third Street	Ambient	W TB4	N Third Street	W TB4 - Ambient	N 3SB - Ambient
7:00:00	3.43	4.94	7.84	3.99	8.12	9.02	4.14	5.04
7:15:00	4.67	3.88	8.54	4.29	7.41	8.91	3.12	4.62
7:30:00	3.97	4.90	6.20	4.42	6.97	8.15	2.55	3.73
7:45:00	5.13	4.20	7.84	4.77	6.27	7.91	1.50	3.14
8:00:00	6.29	2.17	9.08	4.70	4.02	7.90	-0.68	3.20
8:15:00	5.67	3.42	6.98	5.15	3.72	7.73	-1.43	2.58
8:30:00	6.12	2.74	6.14	5.44	3.49	7.25	-1.95	1.81
8:45:00	5.66	2.23	6.38	5.77	2.95	7.28	-2.82	1.51
9:00:00	5.31	2.66	5.14	5.81	2.64	6.74	-3.17	0.93
9:15:00	4.82	4.23	5.58	5.52	3.05	6.04	-2.46	0.53
9:30:00	4.77	2.49	5.73	5.34	2.87	5.79	-2.47	0.46
9:45:00	6.70	1.97	6.65	5.45	2.72	5.89	-2.73	0.44
10:00:00	4.56	1.94	5.23	5.23	2.66	5.67	-2.57	0.44
10:15:00	6.72	2.84	5.65	5.51	2.69	5.77	-2.82	0.26
10:30:00	4.34	3.35	6.01	5.42	2.52	5.85	-2.90	0.44
10:45:00	4.33	4.51	5.61	5.33	2.92	5.83	-2.41	0.50
11:00:00	5.02	4.19	6.46	4.99	3.37	5.79	-1.63	0.80
11:15:00	5.89	3.45	6.02	5.26	3.67	5.95	-1.59	0.69
11:30:00	7.15	2.69	6.49	5.34	3.64	6.12	-1.71	0.77
11:45:00	4.26	2.38	4.59	5.33	3.44	5.83	-1.88	0.51
12:00:00	3.88	2.37	4.58	5.24	3.02	5.63	-2.22	0.39
12:15:00	4.10	2.46	5.13	5.06	2.67	5.36	-2.39	0.31
12:30:00	3.66	3.20	4.99	4.61	2.62	5.16	-1.99	0.54
12:45:00	3.63	1.79	6.53	3.91	2.44	5.16	-1.47	1.26
13:00:00	7.24	2.08	5.72	4.50	2.38	5.39	-2.12	0.89
13:15:00		2.58	8.71	4.66	2.42	6.21	-2.24	1.56
13:30:00	4.30	1.95	5.10	4.71	2.32	6.21	-2.39	1.50
13:45:00	3.80	2.10	5.57	4.74	2.10	6.33	-2.64	1.59
14:00:00	4.51	1.79	6.19	4.96	2.10	6.26	-2.86	1.30
14:15:00	3.76	3.22	4.74	4.09	2.33	6.06	-1.76	1.97
14:30:00	6.67	1.51	5.91	4.61	2.11	5.50	-2.49	0.90
14:45:00	3.56	2.02		4.46	2.13	5.60	-2.33	1.15
15:00:00	8.85	1.94	5.28	5.47	2.09	5.53	-3.37	0.06
15:15:00	3.74	1.32	4.55	5.31	2.00	5.12	-3.31	-0.20
15:30:00	3.82	4.69	4.85	5.33	2.29	5.15	-3.03	-0.18
15:45:00	3.32	2.57	4.90	4.66	2.51	4.89	-2.15	0.24
16:00:00	3.96	2.16	4.57	4.74	2.53	4.83	-2.20	0.09
16:15:00	5.21	1.62	5.07	4.01	2.47	4.79	-1.54	0.78
16:30:00	3.92	1.15		4.05	2.44	4.85	-1.61	0.80
16:45:00	3.16	1.86	4.47	3.91	1.87	4.75	-2.04	0.84
17:00:00	5.14	1.88	5.72	4.28	1.73	4.96	-2.55	0.68
17:15:00	3.68	1.68	4.42	4.22	1.64	4.92	-2.59	0.70
17:30:00	5.87	2.17	5.73	4.35	1.75	5.09	-2.61	0.73
17:45:00	3.19	1.41	4.99	4.21	1.80	5.07	-2.41	0.86
18:00:00	6.18		5.83	4.81	1.78	5.34	-3.03	0.53

## Thursday, April 11, 2024

Friday, April 12, 2024

Time	Turbidity (NTU)			R	olling Average Turbidity	Difference (NTU)		
	Ambient	W TB4	N Third Street	Ambient	W TB4	N Third Street	W TB4 - Ambient	N 3SB - Ambient
7:00:00	7.16	2.40		6.32	2.44		-3.88	
7:15:00	4.25	2.13		6.42	2.27		-4.15	
7:30:00	3.97	2.51		5.42	2.11		-3.31	
7:45:00	5.10	2.27		4.88	2.29		-2.59	
8:00:00	8.92	2.19		5.88	2.30		-3.58	
8:15:00	6.86	2.10		5.82	2.24		-3.58	
8:30:00	4.25	1.47		5.82	2.11		-3.71	
8:45:00	4.55	2.42		5.94	2.09		-3.85	
9:00:00	5.00	1.90		5.92	2.02		-3.90	
9:15:00	4.29	2.59		4.99	2.10		-2.90	
9:30:00	5.06	1.58		4.63	1.99		-2.64	
9:45:00	7.36	1.36		5.25	1.97		-3.28	
10:00:00	5.71	2.07		5.49	1.90		-3.58	
10:15:00	4.98	1.39		5.48	1.80		-3.68	
10:30:00	4.67			5.56	1.60		-3.95	-
10:45:00	4.03	1.90		5.35	1.68		-3.67	
11:00:00	3.79	2.54		4.64	1.98		-2.66	
11:15:00	4.26	1.35		4.34	1.80		-2.55	
11:30:00	3.63	1.38		4.07	1.79		-2.28	
11:45:00	6.55	1.27		4.45	1.69		-2.76	
12:00:00	3.83	1.42		4.41	1.59		-2.82	
12:15:00	3.38			4.33	1.36		-2.98	
12:30:00	3.63	1.28		4.21	1.34		-2.87	
12:45:00	3.95	1.42		4.27	1.35		-2.92	
13:00:00	3.73	0.72		3.70	1.21		-2.49	
13:15:00	3.42	0.98		3.62	1.10		-2.52	
13:30:00	3.69			3.68	1.10		-2.58	-
13:45:00	3.27	1.32		3.61	1.11		-2.50	
14:00:00	3.63	1.40	5.28	3.55	1.10	5.28	-2.44	1.73
14:15:00	3.90	1.21	3.66	3.58	1.23	4.47	-2.36	0.88
14:30:00	4.18	1.40	4.35	3.73	1.33	4.43	-2.40	0.69
14:45:00	6.96	1.79	5.22	4.39	1.42	4.63	-2.96	0.24
15:00:00	3.40	1.02	4.59	4.41	1.36	4.62	-3.05	0.20
15:15:00	5.98		4.55	4.88	1.36	4.47	-3.53	-0.41
15:30:00	2.89	1.69	5.45	4.68	1.48	4.83	-3.20	0.15
15:45:00	2.99	1.54	6.06	4.44	1.51	5.17	-2.93	0.73
16:00:00	2.98	1.78	6.95	3.65	1.51	5.52	-2.14	1.87
16:15:00	3.50	1.43	6.57	3.67	1.61	5.92	-2.06	2.25
16:30:00	5.30		5.80	3.53	1.61	6.17	-1.92	2.63
16:45:00	3.59	1.87	5.64	3.67	1.66	6.20	-2.02	2.53
17:00:00	4.76	3.33	6.48	4.03	2.10	6.29	-1.93	2.26
17:15:00	3.73	2.07	6.67	4.18	2.17	6.23	-2.00	2.06
17:30:00	3.44	2.40	12.10	4.16	2.42	7.34	-1.75	3.18
17:45:00	7.33	2.46	6.24	4.57	2.42	7.43	-2.15	2.86
18:00:00	5.72	2.65	6.45	5.00	2.58	7.59	-2.42	2.59