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

PERIOD: December 27 – December 30, 2022

Date of Report: January 3, 2023

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#### 1. SCOPE OF MONITORING

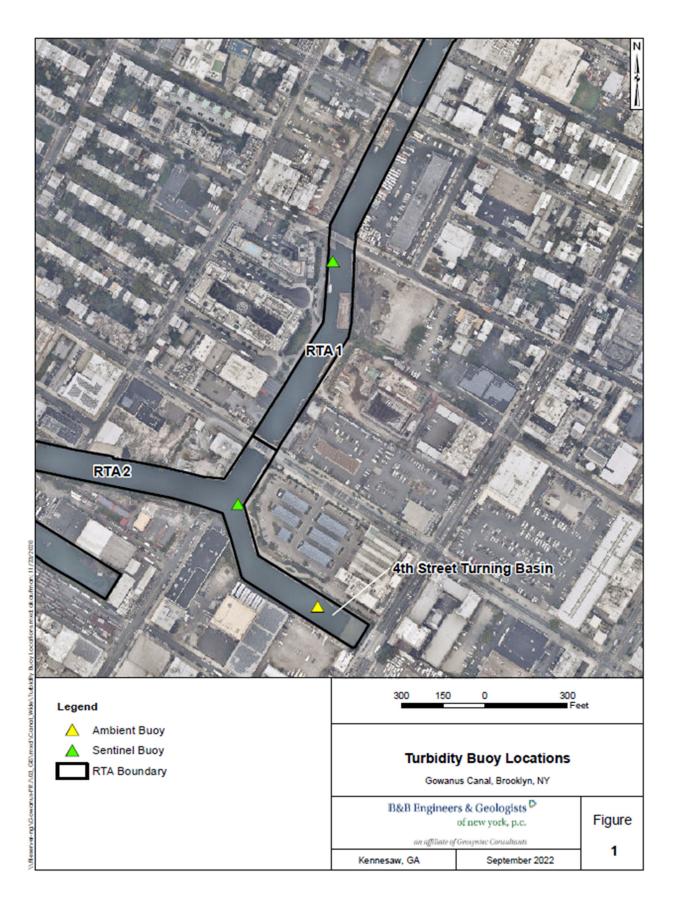
#### 1.1 Current Buoy Locations

The following report summarizes water quality monitoring data collected during the week of December 27, 2022. No construction activities occurred on December 26, 2022 due to the union holiday. 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 is 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 is referred to as the Carroll Street Sentinel Buoy. The third turbidity buoy was deployed in the Fourth Street Turning Basin in order to monitor background turbidity unaffected by in-water construction activities and is 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. No handheld measurements were collected during this reporting period. Visual observations of turbidity and sheen are summarized in Section 4.

#### 1.2 Previous Buoy Locations

- 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.



#### 2. REPORT OF EXCEEDANCES

No exceedances 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 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
- o 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 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 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 December 27 – December 30, 2022. No exceedances to the quantitative trigger or action criteria were observed during the reporting period. On Tuesday, December 27 from 4:00 PM to 4:15 PM, turbidity at the Carroll Street Sentinel Buoy exceeded ambient turbidity by greater than 20 NTU. However, this increase in turbidity was a result of momentary resuspension of sediment from prop wash from a passing tugboat within 100 feet of the sentinel buoy. Due to the proximity of the construction activity to the sentinel buoy and in accordance with the WQMP, this increase in turbidity did not meet the requirements for an exceedance to the trigger criterion.

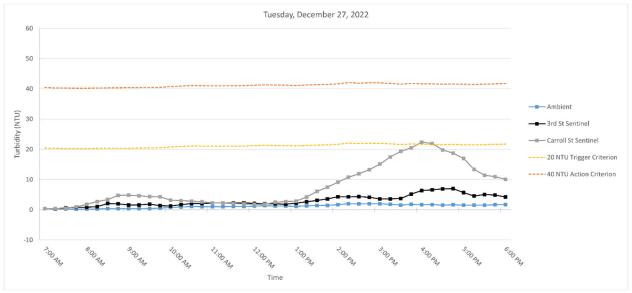
**Table 1** below provides a summary of the turbidity data for the reporting period.

	Average Rolling Ave	rage Difference (NTU)	Maximum Rolling Average Difference (NTU)			
Date	3rd St - Ambient Carroll St - Ambient		3rd St - Ambient	Carroll St - Ambient		
Monday, December 26, 2022	N/A	N/A	N/A	N/A		
Tuesday, December 27, 2022	1.84	6.53	5.40	20.74		
Wednesday, December 28, 2022	0.47	3.06	2.42	4.29		
Thursday, December 29, 2022	0.62	2.84	3.93	6.81		
Friday, December 30, 2022	2.58	7.33	14.42	16.80		

**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** Tuesday, December 27, 2022

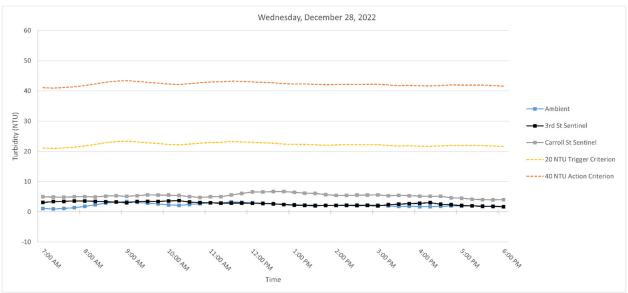
**Figure 3.** Hourly rolling average turbidity readings on Tuesday, December 27, 2022, from 7 AM to 6 PM.



**Note:** From 4:00 PM to 4:15 PM, turbidity at the Carroll Street Sentinel Buoy exceeded ambient turbidity by greater than 20 NTU. However, this increase in turbidity was a result of momentary resuspension of sediment from prop wash from a passing tugboat within 100 feet of the sentinel buoy. Due to the proximity of the construction activity to the sentinel buoy and in accordance with the WQMP, this increase in turbidity did not meet the requirements for an exceedance to the trigger criterion.

#### 3.2 Wednesday, December 28, 2022

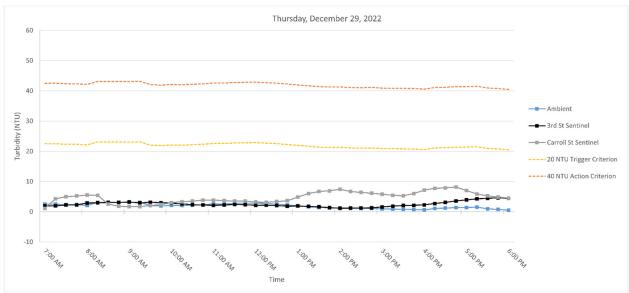
**Figure 4.** Hourly rolling average turbidity readings on Wednesday, December 28, 2022, from 7 AM to 6 PM.



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

#### 3.3 Thursday, December 29, 2022

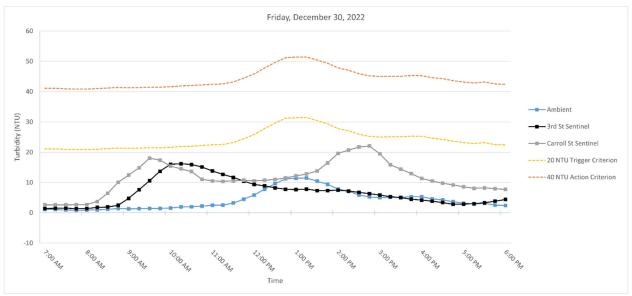
**Figure 5.** Hourly rolling average turbidity readings on Thursday, December 29, 2022, from 7 AM to 6 PM.



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

#### 3.4 **Friday, December 30, 2022**

**Figure 6.** Hourly rolling average turbidity readings on Friday, December 30, 2022, from 7 AM to 6 PM.



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

#### **SUMMARY OF VISUAL OBSERVATIONS**

Sheen was observed above background conditions during work operations. These sheens were contained within RTA1 by the air curtain deployed south of the 3<sup>rd</sup> Street Bridge. Absorbent booms were periodically deployed to the extent practicable south of the dredging area to contain sheens to within the immediate work zone.

# **APPENDIX A Turbidity Data Tables**

## Tuesday, December 27, 2022

Time	Turbidity (NTU)			Ro	olling Average Turbidity (I	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	0.13	0.21	0.28	0.42	0.34	0.37	-0.07	-0.05
7:15:00	0.14	0.26	0.51	0.29	0.29	0.32	0.01	0.03
7:30:00		2.55	0.74	0.23	0.67	0.44	0.44	0.21
7:45:00	0.18		2.99	0.19	0.81	0.96	0.62	0.78
8:00:00	0.41	0.35	4.36	0.22	0.84	1.78	0.63	1.56
8:15:00	0.37	0.98	5.04	0.28	1.04	2.73	0.76	2.45
8:30:00	0.48	4.3	3.62	0.36	2.05	3.35	1.69	2.99
8:45:00	0.35	2.16	7.89	0.36	1.95	4.78	1.59	4.42
9:00:00	0.26	0.16	3.24	0.37	1.59	4.83	1.22	4.46
9:15:00	0.46	0.37	3.26	0.38	1.59	4.61	1.21	4.23
9:30:00	0.61	2.42	3.62	0.43	1.88	4.33	1.45	3.89
9:45:00	0.74	1.55	3.53	0.48	1.33	4.31	0.85	3.82
10:00:00	1.81	1.88	2.17	0.78	1.28	3.16	0.50	2.39
10:15:00		2.26	2.28	0.91	1.70	2.97	0.79	2.07
10:30:00	1.2	2.05	2.72	1.09	2.03	2.86	0.94	1.77
10:45:00	0.4	2.61	2.42	1.04	2.07	2.62	1.03	1.59
11:00:00	0.6	2.37	1.86	1.00	2.23	2.29	1.23	1.29
11:15:00	1.86	2.21	1.89	1.02	2.30	2.23	1.29	1.22
11:30:00	1.28	1.93	1.61	1.07	2.23	2.10	1.17	1.03
11:45:00	1.17	2.26	1.81	1.06	2.28	1.92	1.21	0.86
12:00:00	1.13	1.6	1.72	1.21	2.07	1.78	0.87	0.57
12:15:00	1.32	1.89	1.86	1.35	1.98	1.78	0.63	0.43
12:30:00	1.26	2.04	5.3	1.23	1.94	2.46	0.71	1.23
12:45:00		1.34	2.9	1.22	1.83	2.72	0.61	1.50
13:00:00	0.69	4.03	2.39	1.10	2.18	2.83	1.08	1.73
13:15:00	1.87	3.81	8.58	1.29	2.62	4.21	1.34	2.92
13:30:00	1.71	4.28	11.12	1.38	3.10	6.06	1.72	4.68
13:45:00	1.59	4.48	12.31	1.47	3.59	7.46	2.12	6.00
14:00:00	2.5	4.85	11.1	1.67	4.29	9.10	2.62	7.43
14:15:00	2.43	4.04	10.73	2.02	4.29	10.77	2.27	8.75
14:30:00	1.29	4.12	14.14	1.90	4.35	11.88	2.45	9.98
14:45:00	2.15	3.12	18.11	1.99	4.12	13.28	2.13	11.29
15:00:00	1.47	1.82	21.52	1.97	3.59	15.12	1.62	13.15
15:15:00	1.68	4.84	22.88	1.80	3.59	17.48	1.78	15.67
15:30:00	1.16	4.83	19.87	1.55	3.75	19.30	2.20	17.75
15:45:00	2.29	11.33	20	1.75	5.19	20.48	3.44	18.73
16:00:00	1.61	9.07	27.63	1.64	6.38	22.38	4.74	20.74
16:15:00	1.55	2.85	19.16	1.66	6.58	21.91	4.93	20.25
16:30:00	1.08	6.6	12.42	1.54	6.94	19.82	5.40	18.28
16:45:00	1.6	4.93	14.37	1.63	6.96	18.72	5.33	17.09
17:00:00	1.78	4.83	11.17	1.52	5.66	16.95	4.13	15.43
17:15:00	1.33	3.54	9.6	1.47	4.55	13.34	3.08	11.88
17:30:00	1.92	5.34	9.43	1.54	5.05	11.40	3.51	9.86
17:45:00	1.59	5.75	10.08	1.64	4.88	10.93	3.23	9.29
18:00:00	1.99	1.65	9.99	1.72	4.22	10.05	2.50	8.33

## Wednesday, December 28, 2022

Time	Turbidity (NTU)			Ro	olling Average Turbidity (I	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	1.04	4.16	4.98	1.09	3.10	4.96	2.00	3.87
7:15:00	0.7	3.99	4.56	0.93	3.35	4.89	2.42	3.97
7:30:00	2.14	3.34	5.21	1.13	3.47	4.87	2.34	3.74
7:45:00	2.26	3.46	5.61	1.36	3.61	4.96	2.25	3.60
8:00:00	2.73	2.93	4.68	1.77	3.58	5.01	1.80	3.23
8:15:00	3.84	3.48	4.49	2.33	3.44	4.91	1.11	2.58
8:30:00	3.41	3.48	6.07	2.88	3.34	5.21	0.46	2.34
8:45:00	3.9	2.77	5.58	3.23	3.22	5.29	0.00	2.06
9:00:00	3.07	2.36	4.77	3.39	3.00	5.12	-0.39	1.73
9:15:00	1.46	5.01	5.64	3.14	3.42	5.31	0.28	2.17
9:30:00	2.38	3.55	5.97	2.84	3.43	5.61	0.59	2.76
9:45:00	2.18	3.25	5.59	2.60	3.39	5.51	0.79	2.91
10:00:00		3.71	5.54	2.27	3.58	5.50	1.30	3.23
10:15:00	2.51	2.88	4.2	2.13	3.68	5.39	1.55	3.26
10:30:00	2.64	2.79	3.98	2.43	3.24	5.06	0.81	2.63
10:45:00	3.4	2.62	4.52	2.68	3.05	4.77	0.37	2.08
11:00:00	3.35	2.88	6.47	2.98	2.98	4.94	0.00	1.97
11:15:00	3.08	3.07	5.86	3.00	2.85	5.01	-0.15	2.01
11:30:00	3.76	3.09	6.89	3.25	2.89	5.54	-0.36	2.30
11:45:00	2.11	2.81	6.61	3.14	2.89	6.07	-0.25	2.93
12:00:00	2.47	2.43	6.98	2.95	2.86	6.56	-0.10	3.61
12:15:00	2.73	2.4	6.39	2.83	2.76	6.55	-0.07	3.72
12:30:00	2.46	2.25	6.55	2.71	2.60	6.68	-0.11	3.98
12:45:00	2.26	2.12	6.97	2.41	2.40	6.70	0.00	4.29
13:00:00	1.67	1.81	5.44	2.32	2.20	6.47	-0.12	4.15
13:15:00	2.36	1.8	5.39	2.30	2.08	6.15	-0.22	3.85
13:30:00	2.22	2.13	6.03	2.19	2.02	6.08	-0.17	3.88
13:45:00	1.8	2.86	4.57	2.06	2.14	5.68	0.08	3.62
14:00:00	2.58	1.99	5.65	2.13	2.12	5.42	-0.01	3.29
14:15:00	2.15	1.71	5.39	2.22	2.10	5.41	-0.12	3.18
14:30:00		1.52	5.91	2.19	2.04	5.51	-0.15	3.32
14:45:00	2.39	2.47	6.11	2.23	2.11	5.53	-0.12	3.30
15:00:00	1.81	2.04	4.94	2.23	1.95	5.60	-0.29	3.37
15:15:00	1.52	4.02	4.35	1.97	2.35	5.34	0.38	3.37
15:30:00	1.37	2.44	6.08	1.77	2.50	5.48	0.73	3.71
15:45:00	2.1	2.66	5.22	1.84	2.73	5.34	0.89	3.50
16:00:00	1.74	1	5.24	1.71	2.79	5.17	1.08	3.46
16:15:00	1.59	3.02	4.88	1.66	3.04	5.15	1.37	3.49
16:30:00	2.23	1.7	4.22	1.81	2.46	5.13	0.65	3.32
16:45:00	2.17	1.92	3.61	1.97	2.33	4.63	0.36	2.67
17:00:00	1.89	1.5	4.6	1.92	2.04	4.51	0.11	2.59
17:15:00	1.87	1.99	3.54	1.95	2.03	4.17	0.08	2.22
17:30:00	1.42	1.84	4.13	1.92	1.79	4.02	-0.13	2.10
17:45:00	1.36	1.95	3.75	1.74	1.84	3.93	0.10	2.18
18:00:00	1.57	1.08	3.96	1.62	1.67	4.00	0.05	2.37

## Thursday, December 29, 2022

Time	Turbidity (NTU)			Ro	olling Average Turbidity (	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	2.28	1.96	1.21	2.51	1.92	1.09	-0.59	-1.42
7:15:00	2.57	2.28	17.18	2.53	1.94	4.29	-0.59	1.76
7:30:00	2.01	2.89	4.42	2.34	2.22	4.93	-0.12	2.59
7:45:00	2.32	2.34	2.4	2.33	2.30	5.23	-0.03	2.90
8:00:00	1.37	4.88	2.35	2.11	2.87	5.51	0.76	3.40
8:15:00	7.26	2.19	0.92	3.11	2.92	5.45	-0.19	2.35
8:30:00	2.64	3.18		3.12	3.10	2.52	-0.02	-0.60
8:45:00	1.95	2.69	1.56	3.11	3.06	1.81	-0.05	-1.30
9:00:00	2.06	3.15	1.84	3.06	3.22	1.67	0.16	-1.39
9:15:00	1.76	3.48	2.59	3.13	2.94	1.73	-0.20	-1.41
9:30:00	1.89	3.05	2.26	2.06	3.11	2.06	1.05	0.00
9:45:00	1.79	2.57	3.66	1.89	2.99	2.38	1.10	0.49
10:00:00	2.88	1.97	4.52	2.08	2.84	2.97	0.77	0.90
10:15:00	1.92	1.87	3.63	2.05	2.59	3.33	0.54	1.28
10:30:00	2.39	2.21	3.4	2.17	2.33	3.49	0.16	1.32
10:45:00	2.5	2.61	4.13	2.30	2.25	3.87	-0.05	1.57
11:00:00	3.33	2.1	3.64	2.60	2.15	3.86	-0.45	1.26
11:15:00	2.75	2.33	3.45	2.58	2.22	3.65	-0.35	1.07
11:30:00	2.77	2.85	3.2	2.75	2.42	3.56	-0.33	0.82
11:45:00	2.83	1.7	2.96	2.84	2.32	3.48	-0.52	0.64
12:00:00	2.63	1.72	2.79	2.86	2.14	3.21	-0.72	0.35
12:15:00	2.41	2.28	3.15	2.68	2.18	3.11	-0.50	0.43
12:30:00	2.01	1.67	4.75	2.53	2.04	3.37	-0.49	0.84
12:45:00	1.34	1.89	4.46	2.24	1.85	3.62	-0.39	1.38
13:00:00	1.41		9.16	1.96	1.89	4.86	-0.07	2.90
13:15:00	1.27	1.27	8.63	1.69	1.78	6.03	0.09	4.34
13:30:00	0.94	1.69	6.49	1.39	1.63	6.70	0.24	5.30
13:45:00	1.44	0.48	5.95	1.28	1.33	6.94	0.05	5.66
14:00:00		1.21	6.92	1.27	1.16	7.43	-0.10	6.17
14:15:00	0.79	1.3	5.3	1.11	1.19	6.66	0.08	5.55
14:30:00	0.99	1.45	7.3	1.04	1.23	6.39	0.19	5.35
14:45:00	1.26	1.94	5.12	1.12	1.28	6.12	0.16	5.00
15:00:00	0.64	1.87	4.37	0.92	1.55	5.80	0.63	4.88
15:15:00	0.72	2.8	5.24	0.88	1.87	5.47	0.99	4.59
15:30:00	0.41	2.22	4.39	0.80	2.06	5.28	1.25	4.48
15:45:00	0.7	1.93	10.95	0.75	2.15	6.01	1.41	5.27
16:00:00	0.46	2.6	10.73	0.59	2.28	7.14	1.70	6.55
16:15:00	3.16	4.07	7.39	1.09	2.72	7.74	1.63	6.65
16:30:00	1.17	4.5	6.13	1.18	3.06	7.92	1.88	6.74
16:45:00	1.34	4.88	5.66	1.37	3.60	8.17	2.23	6.81
17:00:00	0.76	3.63	5.07	1.38	3.94	7.00	2.56	5.62
17:15:00	1.25	4.32	5.15	1.54	4.28	5.88	2.74	4.34
17:30:00	0.32	4.85	4.22	0.97	4.44	5.25	3.47	4.28
17:45:00	0.13	5.34	4.44	0.76	4.60	4.91	3.84	4.15
18:00:00	0.01	4	3.47	0.49	4.43	4.47	3.93	3.98

## Friday, December 30, 2022

Time	Turbidity (NTU)			Ro	olling Average Turbidity (	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	0.72	1.08	2.39	1.12	1.42	2.63	0.30	1.51
7:15:00	0.74		2.64	1.08	1.49	2.62	0.41	1.54
7:30:00	0.64	1.38	2.39	0.93	1.55	2.63	0.62	1.70
7:45:00	1	1.53	2.93	0.85	1.36	2.65	0.51	1.79
8:00:00	1.24	1.63	3.18	0.87	1.41	2.71	0.54	1.84
8:15:00	1.29	2.59	7.44	0.98	1.78	3.72	0.80	2.73
8:30:00	1.73	2.41	16.37	1.18	1.91	6.46	0.73	5.28
8:45:00	1.63	4.29	20.38	1.38	2.49	10.06	1.11	8.68
9:00:00	0.52	12.85	14.89	1.28	4.75	12.45	3.47	11.17
9:15:00	1.52	16.04	15	1.34	7.64	14.82	6.30	13.48
9:30:00	1.88	17.2	23.6	1.46	10.56	18.05	9.10	16.59
9:45:00	1.71	18.28	12.88	1.45	13.73	17.35	12.28	15.90
10:00:00	2.37	15.73	10.8	1.60	16.02	15.43	14.42	13.83
10:15:00	1.98	13.65	10.31	1.89	16.18	14.52	14.29	12.63
10:30:00	2.11	14.8	10.44	2.01	15.93	13.61	13.92	11.60
10:45:00	2.87	13.19	10.8	2.21	15.13	11.05	12.92	8.84
11:00:00	3.05	11.56	10.19	2.48	13.79	10.51	11.31	8.03
11:15:00	2.66	10.2	10.2	2.53	12.68	10.39	10.15	7.85
11:30:00	5.42	8.73	11.05	3.22	11.70	10.54	8.47	7.31
11:45:00	8.44	8.41	11.47	4.49	10.42	10.74	5.93	6.25
12:00:00	9.85	7.9	9.81	5.88	9.36	10.54	3.48	4.66
12:15:00	12.76	9.26	11.21	7.83	8.90	10.75	1.07	2.92
12:30:00	11.75	6.76	11.42	9.64	8.21	10.99	-1.43	1.35
12:45:00	13.25	6.44	13.77	11.21	7.75	11.54	-3.46	0.33
13:00:00	9.46	7.95	14.56	11.41	7.66	12.15	-3.75	0.74
13:15:00	10.05	8.67	13.24	11.45	7.82	12.84	-3.64	1.39
13:30:00	7.62	6.81	15.91	10.43	7.33	13.78	-3.10	3.35
13:45:00	6.56	6.9	24.92	9.39	7.35	16.48	-2.03	7.09
14:00:00	5.39	7.15	29.5	7.82	7.50	19.63	-0.32	11.81
14:15:00	5.8	6.53	19.89	7.08	7.21	20.69	0.13	13.61
14:30:00	4.19	6.26	18.3	5.91	6.73	21.70	0.82	15.79
14:45:00	4.2	4.68	17.52	5.23	6.30	22.03	1.08	16.80
15:00:00	5.47	4.54	12.16	5.01	5.83	19.47	0.82	14.46
15:15:00	5.77	4.65	11.43	5.09	5.33	15.86	0.25	10.77
15:30:00	5.83	4.87	12.55	5.09	5.00	14.39	-0.09	9.30
15:45:00	5.28	3.63	10.81	5.31	4.47	12.89	-0.84	7.58
16:00:00	3.94	3.22	9.69	5.26	4.18	11.33	-1.08	6.07
16:15:00	2.19	2.77	7.97	4.60	3.83	10.49	-0.77	5.89
16:30:00	4.04	2.22	7.96	4.26	3.34	9.80	-0.91	5.54
16:45:00	2.78	2.27	9.53	3.65	2.82	9.19	-0.82	5.55
17:00:00	2.9	3.87	7.54	3.17	2.87	8.54	-0.30	5.37
17:15:00	2.47	3.76	7.44	2.88	2.98	8.09	0.10	5.21
17:30:00	3.56	4.43	8.69	3.15	3.31	8.23	0.16	5.08
17:45:00	0.91	4.92	6.55	2.52	3.85	7.95	1.33	5.43
18:00:00	2.29	4.98	8.33	2.43	4.39	7.71	1.97	5.28