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

PERIOD: October 17 – October 21, 2022

Date of Report: October 25, 2022

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1. SCOPE OF MONITORING

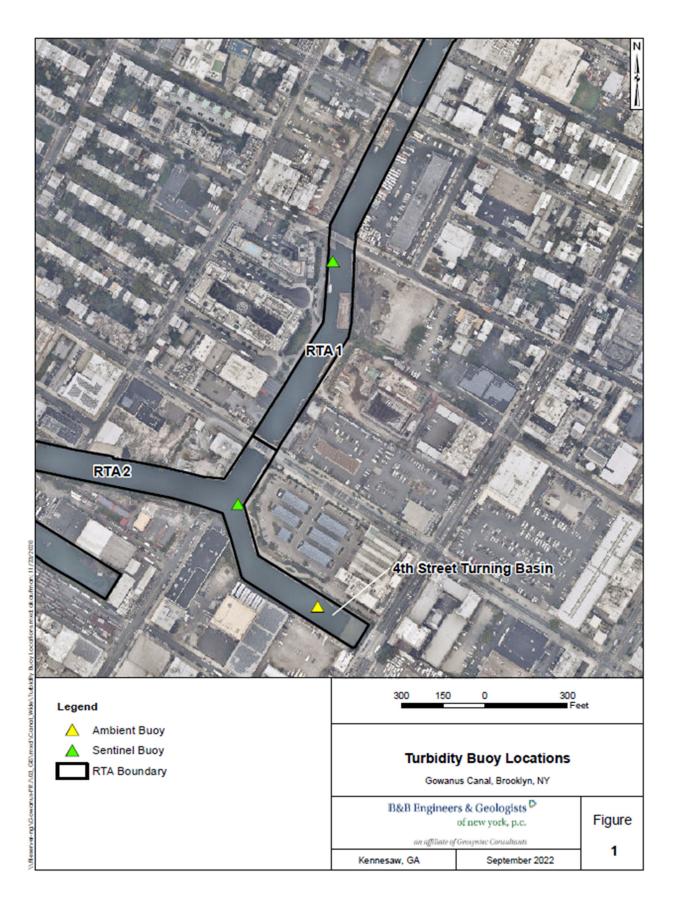
1.1 Current Buoy Locations

The following report summarizes water quality monitoring data collected during the week of October 17, 2022. In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) two 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 is 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 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 3rd Street Bridge in preparation for the resumption of ISS operations. On December 8, 2021, a third sentinel buoy was deployed just south of the Carroll Street Bridge.
- On April 21, 2022, the buoy deployed at the Carroll Street Bridge was relocated to the Union Street Bridge. On July 14, 2022, the Union Street Sentinel Buoy was removed from the canal for servicing before being re-deployed on July 21, 2022 and then moved back to the Carroll Street Bridge location on September 22, 2022.



2. REPORT OF EXCEEDANCES

No exceedances to 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 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 October 17 – October 21, 2022. No exceedances of the numerical trigger or action level criteria were met during the reporting period. Maintenance activities were completed at the 3rd Street Sentinel Buoy and monitoring capabilities restored at 3:30 PM on Tuesday, October 18, 2022.

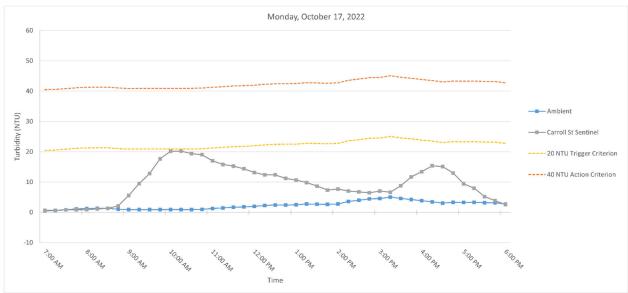
Table 1 below provides a summary of the turbidity data for the reporting period.

	Average Rolling Ave	rage Difference (NTU)	Maximum Rolling Average Difference (NTU)			
Date	Date 3rd St - Ambient Carroll St - Ambient		3rd St - Ambient	Carroll St - Ambient		
Monday, October 17, 2022	N/A	7.22	N/A	19.33		
Tuesday, October 18, 2022	4.25	2.97	4.42	12.67		
Wednesday, October 19, 2022	4.89	2.57	10.26	9.73		
Thursday, October 20, 2022	5.27	3.55	7.62	8.29		
Friday, October 21, 2022	5.93	5.78	8.29	12.91		

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, October 17, 2022**

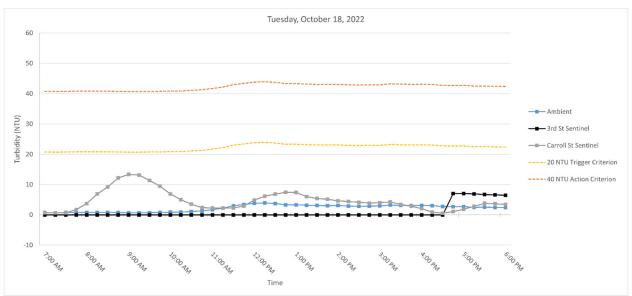
Figure 3. Hourly rolling average turbidity readings on Monday, October 17, 2022, from 7 AM to 6 PM.



Note: A turbidity reading from the Carroll Street Sentinel Buoy of 32.77 NTU at 4:00 PM was removed as an outlier in accordance with the water quality monitoring plan. The 3rd Street Sentinel Buoy was out of service.

3.2 **Tuesday, October 18, 2022**

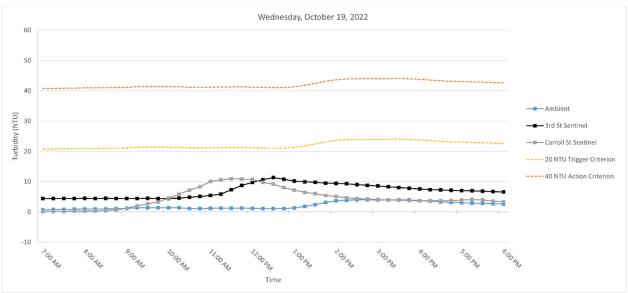
Figure 3. Hourly rolling average turbidity readings on Tuesday, October 18, 2022, from 7 AM to 6 PM.



Note: No outlier turbidity readings above 20 NTU were detected. Maintenance activities were completed at the 3rd Street Sentinel Buoy and monitoring capabilities restored at 3:30 PM

3.3 Wednesday, October 19, 2022

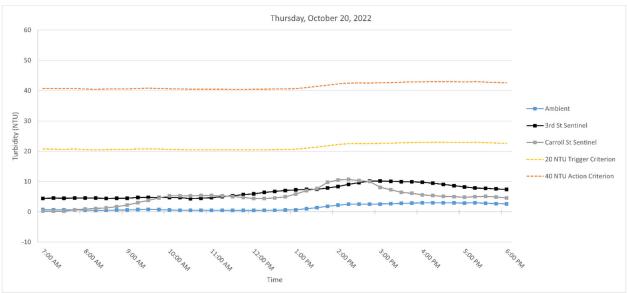
Figure 4. Hourly rolling average turbidity readings on Wednesday, October 19, 2022, from 7 AM to 6 PM.



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

3.4 **Thursday, October 20, 2022**

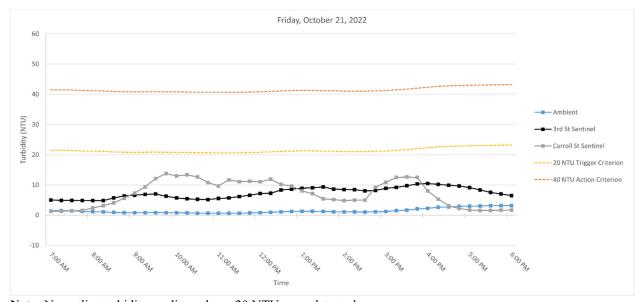
Figure 5. Hourly rolling average turbidity readings on Thursday, October 20, 2022, from 7 AM to 6 PM.



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

3.5 **Friday, October 21, 2022**

Figure 6. Hourly rolling average turbidity readings on Friday, October 21, 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 3rd Street Bridge. Absorbent booms were also deployed south of dredging activities to contain sheens north of the Carroll Street Bridge.

APPENDIX A Turbidity Data Tables

Monday, October 17, 2022

Time	Turbidity (NTU)			Ro	olling Average Turbidity (N	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	0.57		0.41	0.48		0.66		0.18
7:15:00	0.69		0.47	0.56		0.63		0.07
7:30:00	1.88		1.94	0.82		0.83		0.01
7:45:00	1.83		0.73	1.10		0.83		-0.27
8:00:00	1.34		0.78	1.26		0.87		-0.40
8:15:00	0.68		1.71	1.28		1.13		-0.16
8:30:00	0.78		1.29	1.30		1.29		-0.01
8:45:00	0.53		5.98	1.03		2.10		1.07
9:00:00	1		17.86	0.87		5.52		4.66
9:15:00	1.46		20.42	0.89		9.45		8.56
9:30:00	0.72		18.36	0.90		12.78		11.88
9:45:00	0.76		25.63	0.89		17.65		16.76
10:00:00	0.6		18.27	0.91		20.11		19.20
10:15:00	0.92		18.45	0.89		20.23		19.33
10:30:00	1.48		16.12	0.90		19.37		18.47
10:45:00	1.18		16.51	0.99		19.00		18.01
11:00:00	2.17		15.89	1.27		17.05		15.78
11:15:00			12.01	1.44		15.80		14.36
11:30:00	1.93		15.64	1.69		15.23		13.54
11:45:00	1.85		11.71	1.78		14.35		12.57
12:00:00	1.88		10.48	1.96		13.15		11.19
12:15:00	3.39		11.97	2.26		12.36		10.10
12:30:00	3		11.89	2.41		12.34		9.93
12:45:00	2.12		9.95	2.45		11.20		8.75
13:00:00	2.06		8.82	2.49		10.62		8.13
13:15:00	3.26		6.57	2.77		9.84		7.07
13:30:00	2.97		6.13	2.68		8.67		5.99
13:45:00			5.33	2.60		7.36		4.76
14:00:00	2.7		11.42	2.75		7.65		4.91
14:15:00	5.45		5.62	3.60		7.01		3.42
14:30:00	4.8		5.13	3.98		6.73		2.75
14:45:00	4.75		4.69	4.43		6.44		2.01
15:00:00	4.98		8.11	4.54		6.99		2.46
15:15:00	5.35		9.66	5.07		6.64		1.58
15:30:00	2.93		16.37	4.56		8.79		4.23
15:45:00	3.13		19.59	4.23		11.68		7.46
16:00:00	2.74	**	••	3.83		13.43		9.61
16:15:00	3.23		15.79	3.48		15.35	-	11.88
16:30:00	3.07		8.6	3.02		15.09	-	12.07
16:45:00	4.39		7.96	3.31		12.99		9.67
17:00:00	2.86		5.23	3.26		9.40	-	6.14
17:15:00	2.97		2.19	3.30		7.95	-	4.65
17:30:00	2.63		1.95	3.18		5.19	-	2.00
17:45:00	2.98		1.74	3.17		3.81		0.65
18:00:00	2.19		1.51	2.73		2.52		-0.20

Tuesday, October 18, 2022

Time	Turbidity (NTU)			Ro	lling Average Turbidity (N	Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	0.7		0.66	0.73		0.68		-0.05
7:15:00	0.5		0.59	0.67		0.67		0.00
7:30:00	1.17		0.75	0.74		0.66		-0.08
7:45:00	1.08		6.2	0.82		1.74		0.92
8:00:00	0.68		10.59	0.83		3.76		2.93
8:15:00	0.58		16.14	0.80		6.85		6.05
8:30:00	0.62		12.24	0.83		9.18		8.36
8:45:00	••		15.75	0.74		12.18		11.44
9:00:00	0.8		11.98	0.67		13.34		12.67
9:15:00	0.66		9.57	0.67		13.14		12.47
9:30:00	0.79		7.24	0.72		11.36		10.64
9:45:00	0.87		2.77	0.78		9.46		8.68
10:00:00	1.26		2.81	0.88		6.87		6.00
10:15:00	0.79		2.69	0.87		5.02		4.14
10:30:00	1.79		1.93	1.10		3.49		2.39
10:45:00	1.62		1.62	1.27		2.36		1.10
11:00:00	3.07		2.05	1.71		2.22		0.51
11:15:00	3.68		2.71	2.19		2.20		0.01
11:30:00	4.66		3.04	2.96		2.27		-0.69
11:45:00	3.93		5.07	3.39		2.90		-0.49
12:00:00	3.8		11.35	3.83		4.84		1.02
12:15:00	3.48		8.41	3.91		6.12		2.21
12:30:00	2.86		6.31	3.75		6.84		3.09
12:45:00	2.44		6.01	3.30		7.43		4.13
13:00:00	3.98		4.94	3.31		7.40		4.09
13:15:00	3.04		4.53	3.16		6.04		2.88
13:30:00	3.05		5.09	3.07	-	5.38		2.30
13:45:00	2.73		5.19	3.05		5.15		2.10
14:00:00	2.55		3.41	3.07		4.63		1.56
14:15:00	3.17		3.81	2.91		4.41		1.50
14:30:00	2.63		3.21	2.83		4.14		1.32
14:45:00	3.48		3.8	2.91		3.88		0.97
15:00:00	2.81		5.95	2.93		4.04		1.11
15:15:00	4.04		4.39	3.23		4.23		1.01
15:30:00	2.74			3.14		4.34		1.20
15:45:00	2.21	7.31		3.06	7.31	4.71	4.25	1.66
16:00:00	3.74	6.99		3.11	7.15	5.17	4.04	2.06
16:15:00	2.45	7.57		3.04	7.29	4.39	4.25	1.35
16:30:00	2.61	6.56	2.68	2.75	7.11	2.68	4.36	-0.07
16:45:00	2.41	6.86	2.75	2.68	7.06	2.72	4.37	0.03
17:00:00	2.41	6.99	3.87	2.72	6.99	3.10	4.27	0.38
17:15:00	2.58	6.58	4.77	2.49	6.91	3.52	4.42	1.03
17:30:00	2.54	6.35	4.92	2.51	6.67	3.80	4.16	1.29
17:45:00	2.22	6.21	2	2.43	6.60	3.66	4.17	1.23
18:00:00	2.05	6.22	1.62	2.36	6.47	3.44	4.11	1.08

Wednesday, October 19, 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	0.95	4.42	0.15	0.68	4.41	0.13	3.73	-0.55
7:15:00	0.84	4.39	0.1	0.72	4.40	0.09	3.68	-0.62
7:30:00	0.93	4.58	0.24	0.80	4.44	0.14	3.64	-0.66
7:45:00	1	4.44	0.47	0.87	4.43	0.21	3.56	-0.66
8:00:00	0.97	4.49	0.49	0.94	4.46	0.29	3.53	-0.65
8:15:00		4.39	0.25	0.94	4.46	0.31	3.52	-0.62
8:30:00	1.09	4.45	0.63	1.00	4.47	0.42	3.47	-0.58
8:45:00	1.1	4.5	1.42	1.04	4.45	0.65	3.41	-0.39
9:00:00	1.22	4.42	3.43	1.10	4.45	1.24	3.36	0.15
9:15:00	2.06	4.42	4.11	1.37	4.44	1.97	3.07	0.60
9:30:00	1.36	4.53	3.85	1.37	4.46	2.69	3.10	1.32
9:45:00	1.11	4.34	3.48	1.37	4.44	3.26	3.07	1.89
10:00:00	1.06	4.57	7.96	1.36	4.46	4.57	3.09	3.20
10:15:00	1.1	4.8	9.7	1.34	4.53	5.82	3.19	4.48
10:30:00	0.86	5.81	10.93	1.10	4.81	7.18	3.71	6.09
10:45:00	1.49	5.93	9.39	1.12	5.09	8.29	3.97	7.17
11:00:00	1.37	5.93	12.31	1.18	5.41	10.06	4.23	8.88
11:15:00	1.35	7.04	10.43	1.23	5.90	10.55	4.67	9.32
11:30:00	1.08	12.09	11.74	1.23	7.36	10.96	6.13	9.73
11:45:00	1.05	12.73	10.36	1.27	8.74	10.85	7.48	9.58
12:00:00	0.95	10.89	8.77	1.16	9.74	10.72	8.58	9.56
12:15:00	1.03	10.36	7.36	1.09	10.62	9.73	9.53	8.64
12:30:00	1.12	10.45	7.5	1.05	11.30	9.15	10.26	8.10
12:45:00	1.15	9.61	5.89	1.06	10.81	7.98	9.75	6.92
13:00:00	2.23	9.54	6.43	1.30	10.17	7.19	8.87	5.89
13:15:00	3.5	9.86	5.2	1.81	9.96	6.48	8.16	4.67
13:30:00	4.08	9.47	4.88	2.42	9.79	5.98	7.37	3.56
13:45:00	4.49	9.05	4.66	3.09	9.51	5.41	6.42	2.32
14:00:00	3.91	9.19	4.29	3.64	9.42	5.09	5.78	1.45
14:15:00	3.42	8.86	4.22	3.88	9.29	4.65	5.41	0.77
14:30:00	3.86	8.4	3.89	3.95	8.99	4.39	5.04	0.44
14:45:00	4.21	8.45	4.12	3.98	8.79	4.24	4.81	0.26
15:00:00	4.3	7.89	3.84	3.94	8.56	4.07	4.62	0.13
15:15:00	3.95	7.7	3.85	3.95	8.26	3.98	4.31	0.04
15:30:00	3.87	7.66	3.59	4.04	8.02	3.86	3.98	-0.18
15:45:00	3.31	7.44	3.37	3.93	7.83	3.75	3.90	-0.17
16:00:00	3.28	7.15		3.74	7.57	3.66	3.83	-0.08
16:15:00	3.27	6.8	4.11	3.54	7.35	3.73	3.81	0.19
16:30:00	2.86	7.13	3.73	3.32	7.24	3.70	3.92	0.38
16:45:00	2.91	7.05	3.61	3.13	7.11	3.71	3.99	0.58
17:00:00	2.96	6.98	4.27	3.06	7.02	3.93	3.97	0.87
17:15:00	2.53	6.77	4.54	2.91	6.95	4.05	4.04	1.15
17:30:00	2.87	6.25	3.41	2.83	6.84	3.91	4.01	1.09
17:45:00	2.2	6.31	1.89	2.69	6.67	3.54	3.98	0.85
18:00:00	2.39	6.58	2.48	2.59	6.58	3.32	3.99	0.73

Thursday, October 20, 2022

Time	Turbidity (NTU)			Ro	lling Average Turbidity (Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	3rd St - Ambient	Carroll St - Ambient
7:00:00	0.59	4.37	0.15	0.73	4.43	0.22	3.70	-0.51
7:15:00	0.53	4.95	0.17	0.68	4.51	0.21	3.83	-0.47
7:30:00	0.65	4.22	0.22	0.66	4.47	0.19	3.81	-0.47
7:45:00	0.97	4.54	2.7	0.71	4.50	0.69	3.80	-0.01
8:00:00	0	4.56	1.46	0.55	4.53	0.94	3.98	0.39
8:15:00	0	4.36	0.91	0.43	4.53	1.09	4.10	0.66
8:30:00	0.98	4.45	1.29	0.52	4.43	1.32	3.91	0.80
8:45:00	1	4.43	2.15	0.59	4.47	1.70	3.88	1.11
9:00:00	0.93	4.53	5.42	0.58	4.47	2.25	3.88	1.66
9:15:00	0.76	6.04	5.4	0.73	4.76	3.03	4.03	2.30
9:30:00	0.49	4.3	4.59	0.83	4.75	3.77	3.92	2.94
9:45:00	0.5	4.31	5.33	0.74	4.72	4.58	3.99	3.84
10:00:00	0.36	4.41	5.6	0.61	4.72	5.27	4.11	4.66
10:15:00	0.64	4.41	5.47	0.55	4.69	5.28	4.14	4.73
10:30:00	0.5	4.28	5.19	0.50	4.34	5.24	3.84	4.74
10:45:00	0.44	5.1	5.22	0.49	4.50	5.36	4.01	4.87
11:00:00	0.51	5.16	5.28	0.49	4.67	5.35	4.18	4.86
11:15:00	0.37	5.91		0.49	4.97	5.29	4.48	4.80
11:30:00	0.36	6.05	4.5	0.44	5.30	5.05	4.86	4.61
11:45:00	0.54	6.11	3.99	0.44	5.67	4.75	5.22	4.30
12:00:00	0.55	6.49	3.84	0.47	5.94	4.40	5.48	3.94
12:15:00	0.65	7.49	5.22	0.49	6.41	4.39	5.92	3.89
12:30:00	0.58	7.45	5.26	0.54	6.72	4.56	6.18	4.03
12:45:00	0.62	7.61	6.51	0.59	7.03	4.96	6.44	4.38
13:00:00	0.91	7.1	8.64	0.66	7.23	5.89	6.57	5.23
13:15:00	2.27	7.32	9.17	1.01	7.39	6.96	6.39	5.95
13:30:00	2.63	7.67	8.69	1.40	7.43	7.65	6.03	6.25
13:45:00	2.66	9.66	15.63	1.82	7.87	9.73	6.05	7.91
14:00:00	2.56	10.18	10.37	2.21	8.39	10.50	6.18	8.29
14:15:00	2.34	10.49	9.6	2.49	9.06	10.69	6.57	8.20
14:30:00	2.56	10.16	7.04	2.55	9.63	10.27	7.08	7.72
14:45:00	2.49	10.23	7.44	2.52	10.14	10.02	7.62	7.49
15:00:00	2.96	9.72	6.09	2.58	10.16	8.11	7.57	5.53
15:15:00	2.92	9.82	6.18	2.65	10.08	7.27	7.43	4.62
15:30:00	2.95	9.84	5.43	2.78	9.95	6.44	7.18	3.66
15:45:00	3.05	9.95	5.38	2.87	9.91	6.10	7.04	3.23
16:00:00	2.79	9.46	4.87	2.93	9.76	5.59	6.82	2.66
16:15:00	3.09	8.04	4.92	2.96	9.42	5.36	6.46	2.40
16:30:00	2.93	8.09	4.87	2.96	9.08	5.09	6.11	2.13
16:45:00	2.88	7.61	4.83	2.95	8.63	4.97	5.68	2.03
17:00:00	2.75	7.94	4.59	2.89	8.23	4.82	5.34	1.93
17:15:00	3.17	7.5	5.84	2.96	7.84	5.01	4.87	2.05
17:30:00	2.43	7.7	5.37	2.83	7.77	5.10	4.94	2.27
17:45:00	2.15	7.01	3.89	2.68	7.55	4.90	4.88	2.23
18:00:00	2.51	6.83	3.14	2.60	7.40	4.57	4.79	1.96

Friday, October 21, 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	1.09	4.74	1.45	1.42	4.98	1.29	3.57	-0.12
7:15:00	1.54	4.7	1.35	1.47	4.91	1.29	3.45	-0.18
7:30:00	1.41	5	1.83	1.42	4.91	1.40	3.49	-0.02
7:45:00	0.83	4.81	2.18	1.24	4.85	1.57	3.61	0.33
8:00:00	1	4.78	5.14	1.17	4.81	2.39	3.63	1.22
8:15:00	0.63	4.78	5.43	1.08	4.81	3.19	3.73	2.10
8:30:00	0.79	9.11	5.72	0.93	5.70	4.06	4.76	3.13
8:45:00	0.93	8.25	9.64	0.84	6.35	5.62	5.51	4.79
9:00:00	0.83	6.37	10.84	0.84	6.66	7.35	5.82	6.52
9:15:00	0.95	5.92	15.17	0.83	6.89	9.36	6.06	8.53
9:30:00	0.79	5.38	19.19	0.86	7.01	12.11	6.15	11.25
9:45:00	0.68	5.48	13.87	0.84	6.28	13.74	5.44	12.91
10:00:00	0.72	5.27	6.04	0.79	5.68	13.02	4.89	12.23
10:15:00	0.61	5.05	12.29	0.75	5.42	13.31	4.67	12.56
10:30:00	0.59	5	11.91	0.68	5.24	12.66	4.56	11.98
10:45:00	0.82	5.08	9.81	0.68	5.18	10.78	4.49	10.10
11:00:00	0.52	7.22	8.32	0.65	5.52	9.67	4.87	9.02
11:15:00	0.75	6.06	16.25	0.66	5.68	11.72	5.02	11.06
11:30:00	0.58	7.52	9.17	0.65	6.18	11.09	5.52	10.44
11:45:00	1.07	7.08	12.49	0.75	6.59	11.21	5.84	10.46
12:00:00	1.17	8.13	8.99	0.82	7.20	11.04	6.38	10.23
12:15:00	1.34	7.46	12.43	0.98	7.25	11.87	6.27	10.88
12:30:00	1.36	11.71	7.57	1.10	8.38	10.13	7.28	9.03
12:45:00	1.31	8.56	6.68	1.25	8.59	9.63	7.34	8.38
13:00:00	1.31	8.74	4.65	1.30	8.92	8.06	7.62	6.77
13:15:00	1.13	8.97	4.29	1.29	9.09	7.12	7.80	5.83
13:30:00	0.91	8.68	3.7	1.20	9.33	5.38	8.13	4.17
13:45:00	1.03	8.06	6.67	1.14	8.60	5.20	7.46	4.06
14:00:00	0.93	8.06	4.71	1.06	8.50	4.80	7.44	3.74
14:15:00	1.26	8.21	5.67	1.05	8.40	5.01	7.34	3.96
14:30:00	1.05	7.31	4.28	1.04	8.06	5.01	7.03	3.97
14:45:00	1.38	9.27	24.85	1.13	8.18	9.24	7.05	8.11
15:00:00	1.32	11.55	14.87	1.19	8.88	10.88	7.69	9.69
15:15:00	2.46	9.82	12.83	1.49	9.23	12.50	7.74	11.01
15:30:00	2.23	10.67	6.34	1.69	9.72	12.63	8.04	10.95
15:45:00	2.85	10.36	3.65	2.05	10.33	12.51	8.29	10.46
16:00:00	2.67	10.03	2.39	2.31	10.49	8.02	8.18	5.71
16:15:00	2.91	10.08	1.55	2.62	10.19	5.35	7.57	2.73
16:30:00	3.19	8.38	1.67	2.77	9.90	3.12	7.13	0.35
16:45:00	2.89	9.66	1.59	2.90	9.70	2.17	6.80	-0.73
17:00:00	3.28	7.56	1.5	2.99	9.14	1.74	6.15	-1.25
17:15:00	2.97	6.27	1.58	3.05	8.39	1.58	5.34	-1.47
17:30:00	3.27	5.83	1.6	3.12	7.54	1.59	4.42	-1.53
17:45:00	3.4	5.78	1.83	3.16	7.02	1.62	3.86	-1.54
18:00:00	3.06	7.14	2.09	3.20	6.52	1.72	3.32	-1.48