### GOWANUS CANAL SUPERFUND SITE RTA2 REMEDIAL CONSTRUCTION Water Quality Monitoring Weekly Data Summary

PERIOD: March 17, 2025 – March 21, 2025

Date of Report: March 25, 2025

## **Report Contents**

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Prepared by

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#### 1. SCOPE OF MONITORING

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

In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) issued March 27, 2024, buoys equipped with multi-parameter water quality sondes, were deployed to monitor turbidity related to RTA2 construction activities. Buoys were deployed in the Fourth Street Turning Basin (TB4) to monitor background turbidity unaffected by in-water construction activities and at the North Carroll Street Bridge, which is referred to as the ambient buoy. A sentinel buoy was deployed north of 3<sup>rd</sup> Street Bridge (3SB), along the west bulkhead. These buoys (Figure 1) are in use to monitor the RTA2 pre-construction activities.

All readings from buoys were transmitted via telemetry at 15-minute intervals. The instrument used to collect turbidity 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 +/-0.5 NTU.

#### 1.2 <u>Summary of Monitoring Adjustments during Construction</u>

- August 9, 2024, after the conclusion of RTA1 WQMP, two additional buoys were added to the RTA2 WQMP, for a total of three sentinel buoys. The ambient buoy was moved to approximately ten meters north of Carroll Street Bridge, on the west side of the canal (ambient). A sentinel buoy was placed approximately twenty meters north of 3<sup>rd</sup> Street Bridge on the west side (3SB). A sentinel buoy was placed in Fourth Street Turning Basin (TB4). The 9<sup>th</sup> Street Bridge sentinel buoy (9SB) was not moved.
- To reduce instrument downtime, the 9th Street Bridge sentinel buoy (9SB) was relocated to the northeast side of the 9th Street Bridge on August 19, 2024. After two days of data collection, elevated turbidity readings were observed both during and outside of work hours. Consequently, on August 21, 2024, the buoy was moved again, this time to the northeast corner of the Hamilton Street Bridge.
- Turbidity readings at the Hamilton Street Bridge location exceeded 100 NTU both during and outside working hours. However, these readings were not representative of the actual turbidity within the RTA2 work area. Due to commercial traffic, a safe location for the sonde and buoy could not be found south of the 9th Street Bridge. Consequently, the sonde and buoy were relocated to the west side, 5 meters north of the 9th Street Bridge on Tuesday, August 27, 2024, at 08:15.
- Turbidity readings at 9SB were noted to be erratic and exceed 100 NTU both during and outside working hours. The buoy was moved approximately 20 meters north of 9<sup>th</sup> Street Bridge on Monday, September 9, 2024.

- On September 16, 2024, the 9SB was deselected from construction monitoring, as there are no construction activities in the main canal or in the vicinity of 9<sup>th</sup> Street Bridge. The buoy will remain in the water to collect background data as it is believed this area has naturally high NTU readings. A spot check zero calibration was performed on the buoy on Wednesday, September 18, 2024 to confirm the sensors were reading properly during this background monitoring period.
- On November 7, 2024, the ambient sonde and buoy was moved to the center of Carroll Street Bridge in an effort to reduce instrument downtime due to poor cell signal. This area was found to have a 100% cellular signal.
- On November 18, 2024, the sentinel buoy in TB4 was deselected from construction monitoring due to instrument errors. The buoy will remain out of service until maintenance and field observations can be made.
- On November 25, 2024, the 9SB sonde and buoy were placed back into the water quality monitoring program.
- On December 18, 2024, the 9SB sonde and buoy were relocated south of 9<sup>th</sup> Street Bridge along the eastern bulkhead, to avoid construction vessel traffic and shallow waters which had been resulting in false elevated readings, particularly during low tide events.
- On February 12, 2025, after observing a pause in data transmission, the ambient sonde and buoy were moved in an attempt to get a better signal in the area. It was moved to approximately 150 feet north of Carroll Street Bridge, to the center of the canal. On February 14, 2025, with data transmission issues not resolving, the ambient sonde and buoy were moved to approximately 200 feet south of Union Street Bridge, in the center of the canal where stronger signal strength has been observed. A test upload was performed; however data did not upload. Further troubleshooting will be required.
- On February 18, 2025, the ambient sonde buoy was removed from service due to consistent instrumentation and telemetry issues. The buoy will remain out of service until repairs are made.
- On February 25, 2025, the Ambient sonde and buoy was reinstated and positioned 200 feet south of the Union Street Bridge. Elevated readings were recorded, prompting a calibration check to verify the turbidity sensor's functionality. The sensor was confirmed to be operating normally.
- On February 25, 2025, the 9SB sonde was taken out of service due to instrumentation and telemetry failure. No data was recorded from 13:45 onward. The sonde will remain out of service until repairs are completed.
- On March 17, 2025, a rental sonde unit was deployed at the sentinel buoy in TB4 while repairs to the original sonde are ongoing.



Legend	300 150	0 300 Feet	
Sentinel Buoy	RTA2	Buoy Locations	
gg 🗅 RTA1		us Canal, Brooklyn, NY	
RTA2	B&B Enginee	rs & Geologists <a>&gt;</a> of new york, p.c.	Figure
RTA3	an affiliate of Geosyntec Consultants		1
EO/:X	Brooklyn, NY	March 17, 2025	1

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

During the week of March 17, 2025, a maximum of three buoys equipped with multi-parameter water quality sondes were deployed as described in Section 1.2.

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 AquaTrol1500 (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 4.

#### 1.4 <u>Meteorological Conditions</u>

Meteorological Parameters	3/17/2025	3/18/2025	3/19/2025	3/20/2025	3/21/2025
Wind Direction (from)	NW	NNW	SE	ESE	NW
Wind Speed (mph)	6.3	6.9	4.9	6.5	8.9
Temperature (°F)	50.7	46.7	49.3	44.6	45.3
Humidity (%)	85.2	45.7	53.7	99.4	50.7
Barometric Pressure (inHg)	29.75	29.95	29.96	29.66	29.59
Precipitation (Inch)	0.94	0.01	0.0	0.01	1.29

The weather conditions onsite were as follows:

Table 1 - Summary of Weather Conditions for reporting period.

#### 1.5 <u>Tidal Conditions</u>

Date	Time (LST/LDT)	Predicted (ft)	Preliminary (ft)	High/Low
Monday, March 17, 2025	5:04 AM	-2.75	-2.09	L
Monday, March 17, 2025	10:58 AM	1.36	1.94	Н
Monday, March 17, 2025	5:08 PM	-2.6	-2.2	L
Monday, March 17, 2025	11:16 PM	1.81	1.82	Н
Tuesday, March 18, 2025	5:37 AM	-2.55	-2.18	L
Tuesday, March 18, 2025	11:34 AM	1.1	1.64	Н
Tuesday, March 18, 2025	5:33 PM	-2.35	-1.38	L
Tuesday, March 18, 2025	11:48 PM	1.65	2.62	Н
Wednesday, March 19, 2025	6:11 AM	-2.3	-1.51	L
Wednesday, March 19, 2025	12:13 PM	0.87	1.68	Н
Wednesday, March 19, 2025	5:57 PM	-2.11	-1.25	L
Thursday, March 20, 2025	12:24 AM	1.5	2.65	Н
Thursday, March 20, 2025	6:50 AM	-2.06	-1.01	L
Thursday, March 20, 2025	12:57 PM	0.68	1.88	Н
Thursday, March 20, 2025	6:27 PM	-1.88	-0.62	L
Friday, March 21, 2025	1:06 AM	1.38	2.5	Н
Friday, March 21, 2025	7:47 AM	-1.85	-1.66	L
Friday, March 21, 2025	1:47 PM	0.55	0.76	Н
Friday, March 21, 2025	7:13 PM	-1.67	-1.41	L

Tidal data from the Battery (National Oceanic and Atmospheric Administration [NOAA] Station 8518750) was reviewed and is summarized as follows:

Table 2 - NOAA Preliminary observations and predictions.

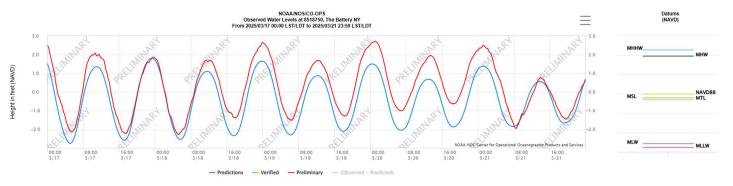


Figure 2 - Tidal Chart for reporting period.

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

No exceedances to the trigger and action levels occurred during the monitoring period. The TB4 sonde experienced elevated readings on Wednesday, March 19<sup>th</sup>, 2025 between the work period of 17:15 to 17:30. These readings coincided with low tide conditions and were unrelated to

in-water construction activities in RTA2. Additionally, the readings were not sustained for over a one-hour 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 RTA2 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 RTA2, 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.

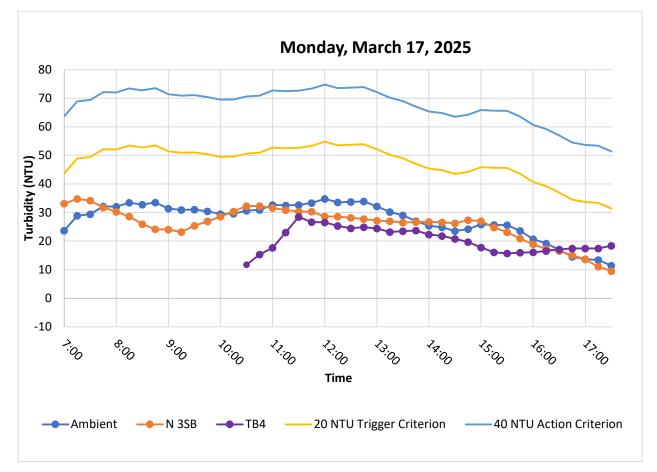
#### 2.1 <u>Response to Criteria Exceedances</u>

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 exceedance and evaluate Best 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.

#### **3. TURBIDITY BUOY DATA**

Increased turbidity readings were recorded on Monday, March 17, and Friday, March 21, 2025 for the Ambient, 3SB and TB4 sondes. These were a result of heavy rainfall in the early morning hours of Monday, March 17, and in the evening of Thursday, March 20. Outfall and CSO releases were observed during both rain events. An elevated reading was recorded by the TB4 sonde buoy on Thursday, March 20 at 17:15 as a result of low tide conditions as discussed in section 2.

No exceedances to the trigger and action levels occurred during the monitoring period.



3.1 <u>Monday, March 17, 2025</u>

**Figure 3.** Hourly rolling average turbidity readings from 07:00 to 17:30. The TB4 sonde was deployed at 10:30 AM.

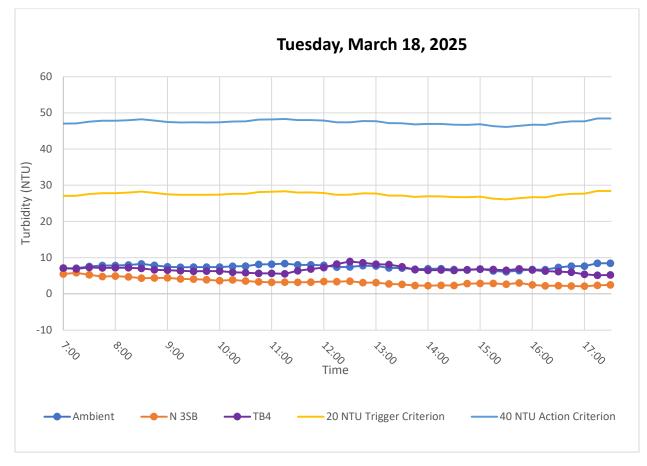
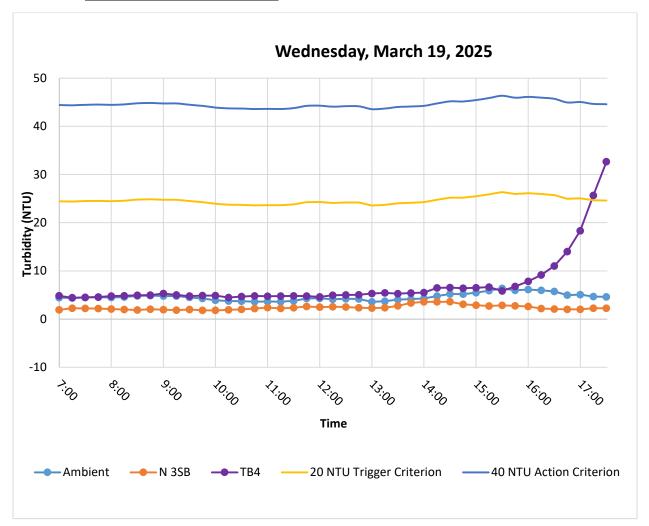


Figure 4. Hourly rolling average turbidity readings from 07:00 to 17:30.



**Figure 5**. Hourly rolling average turbidity readings from 07:00 to 17:30. An elevated reading was recorded by the TB4 sonde after 17:15 unrelated to in-water construction activities.

#### 3.3 <u>Wednesday, March 19, 2025</u>

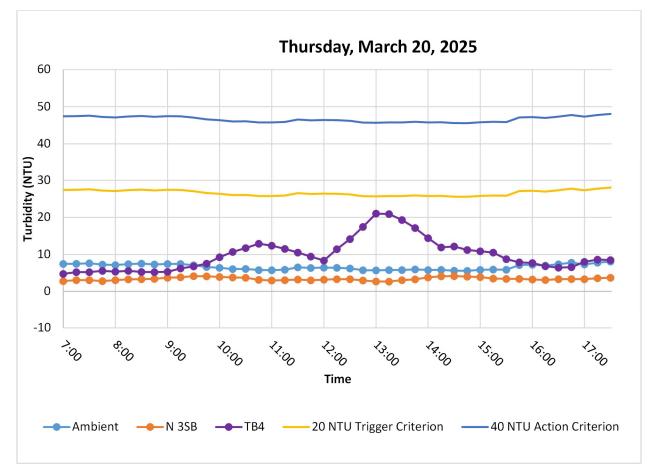


Figure 6. Hourly rolling average turbidity readings from 07:00 to 17:30

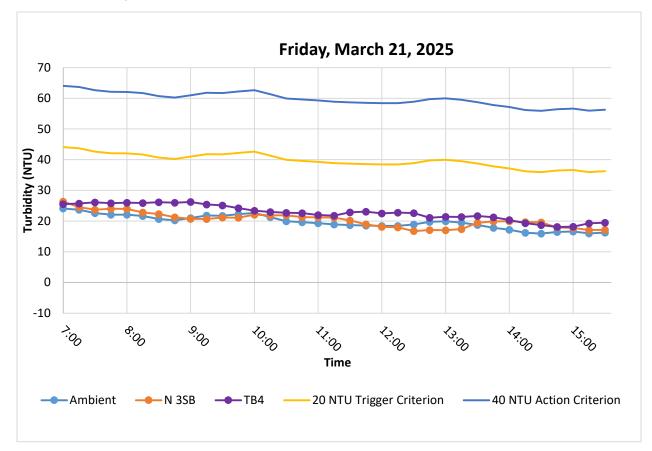


Figure 7. Hourly rolling average turbidity readings from 07:00 to 15:30.

#### 4. SUMMARY OF VISUAL OBSERVATIONS

Throughout the majority of the reporting period, sheens in the RTA2 areas ranged from minimal to moderate. Outfall and CSO discharges were observed during and immediately after rain events. An increase in debris and floatables were observed as a result of these discharges.



**Figure 8 – March 17, 2025.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge near TB6 during in-waterway construction activities.



**Figure 9 – March 18, 2025.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge near TB6 during in-waterway construction activities.



**Figure 10 – March 20, 2025.** General Conditions in Canal south of 3<sup>rd</sup> Street Bridge near TB4 during in-waterway construction activities.

## **APPENDIX A Turbidity Data Tables**

Date	Time	Turbi	dity (NTU)		Rollin	ng Average Turl	Difference (NTU)	
		Ambient	N3SB	TB4	Ambient	N3SB	TB4	N3SB - Ambient
3/17/2025	7:00:00	23.66	33.12		23.66	33.12		9.46
3/17/2025	7:15:00	34.11	36.48		28.88	34.80		5.92
3/17/2025	7:30:00	30.46	32.92		29.41	34.17		4.76
3/17/2025	7:45:00	40.35	24.51	3.09	32.15	31.76	3.09	-0.39
3/17/2025	8:00:00	31.59	24.21	3.21	32.03	30.25	3.15	-1.79
3/17/2025	8:15:00	30.66	25.12	3.20	33.44	28.65	3.17	-4.79
3/17/2025	8:30:00	30.77	22.86	1.82	32.77	25.92	2.83	-6.84
3/17/2025	8:45:00	34.14	24.14	1.46	33.50	24.17	2.56	-9.34
3/17/2025	9:00:00	29.76	23.76	1.44	31.38	24.02	2.23	-7.37
3/17/2025	9:15:00	29.14	20.17	1.46	30.89	23.21	1.88	-7.68
3/17/2025	9:30:00	31.39	35.95		31.04	25.38	1.55	-5.66
3/17/2025	9:45:00	27.67	30.48		30.42	26.90	1.46	-3.52
3/17/2025	10:00:00	29.43	32.53	0.83	29.48	28.58	1.24	-0.90
3/17/2025	10:15:00	30.10	32.77	0.87	29.55	30.38	1.05	0.84
3/17/2025	10:30:00	34.47	29.55	33.37	30.61	32.26	11.69	1.65
3/17/2025	10:45:00	32.78	35.87	26.10	30.89	32.24	15.29	1.35
3/17/2025	11:00:00	36.62	27.27	27.08	32.68	31.60	17.65	-1.08
3/17/2025	11:15:00	28.48	28.94	27.78	32.49	30.88	23.04	-1.61
3/17/2025	11:30:00	30.78	30.04	27.98	32.63	30.33	28.46	-2.29
3/17/2025	11:45:00	38.03	29.26	24.23	33.34	30.28	26.63	-3.06
3/17/2025	12:00:00	40.07	27.55	25.79	34.80	28.61	26.57	-6.18
3/17/2025	12:15:00	30.39	26.96	20.92	33.55	28.55	25.34	-5.00
3/17/2025	12:30:00	29.22	26.94	23.43	33.70	28.15	24.47	-5.55
3/17/2025	12:45:00	31.58	27.93	29.86	33.86	27.73	24.85	-6.13
3/17/2025	13:00:00	29.37	26.49	22.05	32.13	27.17	24.41	-4.95
3/17/2025	13:15:00	30.26	26.37	19.69	30.16	26.94	23.19	-3.23
3/17/2025	13:30:00	24.61	24.86	22.39	29.01	26.52	23.48	-2.49
3/17/2025	13:45:00	19.21	27.54	24.42	27.01	26.64	23.68	-0.37
3/17/2025	14:00:00	23.32	28.40	22.95	25.35	26.73	22.30	1.38
3/17/2025	14:15:00	26.58	25.47	19.41	24.80	26.53	21.77	1.73
3/17/2025	14:30:00	23.85	24.90	14.75	23.51	26.23	20.78	2.72
3/17/2025	14:45:00	28.10	30.40	16.87	24.21	27.34	19.68	3.13
3/17/2025	15:00:00	27.36	25.87	14.82	25.84	27.01	17.76	1.16
3/17/2025	15:15:00	22.40	17.16	14.66	25.66	24.76	16.10	-0.90
3/17/2025	15:30:00	26.30	17.00	17.33	25.60	23.06	15.69	-2.54
3/17/2025	15:45:00	13.69	14.18	16.24	23.57	20.92	15.98	-2.65
3/17/2025	16:00:00	13.59	20.09	17.26	20.67	18.86	16.06	-1.81
3/17/2025	16:15:00	19.92	17.48	17.28	19.18	17.18	16.55	-2.00
3/17/2025	16:30:00	11.21	13.89	17.22	16.94	16.53	17.06	-0.41
3/17/2025	16:45:00	14.07	9.42	19.11	14.50	15.01	17.42	0.52
3/17/2025	17:00:00	9.49	7.05	16.16	13.66	13.59	17.40	-0.07
3/17/2025	17:15:00	12.23	7.47	17.43	13.38	11.06	17.44	-2.32
3/17/2025	17:30:00	10.03	9.55	21.93	11.41	9.48	18.37	-1.93

Date Time		Turbidity (NTU)			Rolling	Average Turbidi	ty (NTU)	Difference (NTU)		
Bute		Ambient	N3SB	TB4	Ambient	N3SB	TB4	N3SB - Ambient	TB4 - Ambient	
3/18/25	7:00:00	7.03	5.49	7.09	7.03	5.49	7.09	-1.54	0.06	
3/18/25	7:15:00	7.11	6.14	6.66	7.07	5.82	6.87	-1.25	-0.20	
3/18/25	7:30:00	8.55	4.11	8.07	7.56	5.25	7.27	-2.32	-0.29	
3/18/25	7:45:00	8.53	3.36	6.87	7.80	4.77	7.17	-3.03	-0.63	
3/18/25	8:00:00	7.81	5.35	7.36	7.80	4.89	7.21	-2.92	-0.59	
3/18/25	8:15:00	7.80	4.39	7.09	7.96	4.67	7.21	-3.29	-0.75	
3/18/25	8:30:00	8.53	4.38	5.65	8.24	4.32	7.01	-3.93	-1.23	
3/18/25	8:45:00	6.71	4.30	6.19	7.87	4.35	6.63	-3.52	-1.24	
3/18/25	9:00:00	6.55	3.56	6.35	7.48	4.39	6.53	-3.09	-0.95	
3/18/25	9:15:00	7.17	3.97	6.59	7.35	4.12	6.37	-3.23	-0.98	
3/18/25	9:30:00	7.86	4.09	6.33	7.36	4.06	6.22	-3.31	-1.14	
3/18/25	9:45:00	8.50	3.53	5.84	7.36	3.89	6.26	-3.47	-1.10	
3/18/25	10:00:00	6.88	2.98	6.28	7.39	3.63	6.28	-3.76	-1.11	
3/18/25	10:15:00	7.61	4.56	4.68	7.60	3.83	5.94	-3.78	-1.66	
3/18/25	10:30:00	7.30	2.46	5.95	7.63	3.52	5.82	-4.11	-1.81	
3/18/25	10:45:00	10.31	2.92	5.54	8.12	3.29	5.66	-4.83	-2.46	
3/18/25	11:00:00	8.85	2.92	5.81	8.19	3.17	5.65	-5.02	-2.54	
3/18/25	11:15:00	7.56	3.35	5.66	8.33	3.24	5.53	-5.08	-2.80	
3/18/25	11:30:00	5.96	4.23	8.81	8.00	3.18	6.35	-4.82	-1.64	
3/18/25	11:45:00	7.35	2.59	8.43	8.01	3.20	6.85	-4.80	-1.16	
3/18/25	12:00:00	9.57	3.95	7.63	7.86	3.41	7.27	-4.45	-0.59	
3/18/25	12:15:00	6.44	2.68	10.53	7.38	3.36	8.21	-4.02	0.83	
3/18/25	12:30:00	7.69	4.04	9.29	7.40	3.50	8.94	-3.90	1.53	
3/18/25	12:45:00	7.71	2.13	6.95	7.75	3.08	8.57	-4.68	0.81	
3/18/25	13:00:00	7.05	2.60	6.55	7.69	3.08	8.19	-4.61	0.50	
3/18/25	13:15:00	6.81	2.21	7.20	7.14	2.73	8.10	-4.41	0.97	
3/18/25	13:30:00	6.33	1.93	7.31	7.12	2.58	7.46	-4.54	0.34	
3/18/25	13:45:00	6.11	2.61	5.37	6.80	2.30	6.68	-4.51	-0.13	
3/18/25	14:00:00	8.47	1.87	5.98	6.95	2.25	6.48	-4.71	-0.47	
3/18/25	14:15:00	6.90	2.99	7.11	6.93	2.32	6.59	-4.60	-0.33	
3/18/25	14:30:00	5.79	2.10	6.44	6.72	2.30	6.44	-4.42	-0.28	
3/18/25	14:45:00	6.10	4.55	8.00	6.68	2.83	6.58	-3.85	-0.10	
3/18/25	15:00:00	6.89	2.83	6.39	6.83	2.87	6.78	-3.96	-0.05	
3/18/25	15:15:00	5.88	1.78	5.63	6.31	2.85	6.71	-3.46	0.40	
3/18/25	15:30:00	5.84	1.91	6.05	6.10	2.64	6.50	-3.46	0.40	
3/18/25	15:45:00	7.35	3.82	8.32	6.41	2.98	6.88	-3.43	0.47	
3/18/25	16:00:00	7.55	1.92	6.48	6.70	2.45	6.58	-4.25	-0.13	
3/18/25	16:15:00		1.53	4.84	6.66	2.19	6.27	-4.46	-0.39	
3/18/25	16:30:00	8.45	1.99	5.09	7.30	2.23	6.16	-5.07	-1.14	
3/18/25	16:45:00	7.21	1.62	5.05	7.64	2.18	5.96	-5.47	-1.68	
3/18/25	17:00:00	7.40	3.50	5.51	7.65	2.11	5.40	-5.54	-2.26	
3/18/25	17:15:00	10.75	2.97	5.11	8.45	2.32	5.12	-6.13	-3.33	
3/18/25	17:30:00		2.34		8.45	2.48	5.19	-5.97	-3.26	

		Tu	bidity (NTU)		Rollin	Difference (NTU)		
Date	Time	Ambient	N3SB	TB4	Ambient	N3SB	тв4	N3SB - Ambient
3/19/2025	6:00:00							
3/19/2025	6:15:00							
3/19/2025	6:30:00							
3/19/2025	6:45:00	4.22						
3/19/2025	7:00:00	4.67	1.91	4.83	4.45	1.91	4.83	-2.53
3/19/2025	7:15:00	4.26	2.61	4.02	4.38	2.26	4.43	-2.12
3/19/2025	7:30:00	4.77	2.10	4.63	4.48	2.21	4.49	-2.27
3/19/2025	7:45:00	4.73	2.15	4.81	4.53	2.19	4.57	-2.34
3/19/2025	8:00:00	3.94	1.66	5.56	4.48	2.09	4.77	-2.39
3/19/2025	8:15:00	5.18	1.38	5.17	4.58	1.98	4.84	-2.60
3/19/2025	8:30:00	5.33	2.16	4.50	4.79	1.89	4.93	-2.90
3/19/2025	8:45:00	5.11	2.96	4.81	4.86	2.06	4.97	-2.80
3/19/2025	9:00:00	4.27	1.57	6.42	4.77	1.95	5.29	-2.82
3/19/2025	9:15:00	3.94	1.16	4.06	4.77	1.85	4.99	-2.92
3/19/2025	9:30:00	3.85	2.11	4.07	4.50	1.99	4.77	-2.51
3/19/2025	9:45:00	4.11	1.32	5.05	4.26	1.82	4.88	-2.43
3/19/2025	10:00:00	3.42	2.85	4.70	3.92	1.80	4.86	-2.12
3/19/2025	10:15:00	3.39	2.18	4.55	3.74	1.92	4.48	-1.82
3/19/2025	10:30:00	3.79	1.54	4.92	3.74	2.00	4.66	-1.72
3/19/2025	10:45:00	3.31	2.97	4.89	3.61	2.00	4.82	-1.43
3/19/2025	11:00:00	4.33	2.30	4.57	3.65	2.37	4.72	-1.43
3/19/2025	11:15:00	3.29	2.30	4.91	3.62	2.23	4.72	-1.28
3/19/2025	11:30:00	4.23	2.13	4.91	3.79	2.23	4.77	-1.40
3/19/2025	11:45:00	6.14	2.74	4.72	4.26	2.61	4.80	-1.45
3/19/2025	11:43:00	3.55	2.88	4.75	4.20	2.46	4.77	-1.84
3/19/2025	12:00:00	3.30	2.68	6.25	4.31	2.40	4.00	-1.84
	12:13:00	3.30	1.98	5.24	4.10	2.54	5.00	-1.69
3/19/2025 3/19/2025	12:30:00	4.19	1.98	4.91	4.19	2.31	5.00	-1.84
3/19/2025	12:45:00	3.16	2.50	6.01	3.59	2.34	5.29	-1.84
3/19/2025	13:15:00	4.13	2.50	4.72	3.59	2.27	5.29	-1.32
3/19/2025	13:30:00	5.00	4.60	5.54	4.04	2.30	5.28	-1.34
3/19/2025	13:45:00	4.14	5.03	5.80	4.04	3.36	5.39	-0.77
3/19/2025	13:43:00	4.14	2.95	5.44	4.12	3.56	5.50	-0.71
3/19/2025	14:00:00	4.93	2.95	10.77	4.27	3.56	6.45	-0.71
3/19/2025	14:15:00	6.34	2.50	5.08	5.20	3.56	6.45	-1.19
3/19/2025	14:30:00	4.91	2.95	5.08 4.97	5.20	3.01	6.52	-1.59
3/19/2025		-	3.94	6.30	5.18	2.87	6.41	
	15:00:00	5.62						-2.61
3/19/2025	15:15:00	6.97 8.00	2.16	5.96 6.83	5.88 6.37	2.71 2.83	6.62	-3.17 -3.54
3/19/2025 3/19/2025	15:30:00 15:45:00	8.00 4.26	3.08	6.83 9.71	5.95	2.83	5.83 6.75	-3.54
3/19/2025	16:00:00	5.74	1.40	10.28	6.12	2.62	7.82	-3.50
3/19/2025	16:15:00	4.88	1.76	12.94	5.97	2.19	9.14	-3.78
3/19/2025	16:30:00	5.73	1.65	15.34	5.72	2.08	11.02	-3.64
3/19/2025	16:45:00	4.21	2.70	21.70	4.97	2.01	13.99	-2.96
3/19/2025	17:00:00	4.76	2.50	31.31	5.06	2.00	18.31	-3.06
3/19/2025	17:15:00	3.79	2.59	46.99	4.67	2.24	25.66	-2.43
3/19/2025	17:30:00	4.58	1.88	47.91	4.61	2.26	32.65	-2.35

Date Time		٦	Furbidity (NTU)		Rolling	g Average Turbidi	ty (NTU)	Difference (NTU)		
	Time	Ambient	N3SB	TB4	Ambient	N3SB	TB4	N3SB - Ambient	TB4 - Ambient	
3/20/2025	7:00:00	7.43	2.78	4.73	7.43	2.78	4.73	-4.66	-2.71	
3/20/2025	7:15:00	7.52	3.26	5.67	7.47	3.02	5.20	-4.46	-2.28	
3/20/2025	7:30:00	7.82	3.10	5.28	7.59	3.05	5.23	-4.54	-2.36	
3/20/2025	7:45:00	6.15	2.00	6.62	7.23	2.78	5.58	-4.45	-1.66	
3/20/2025	8:00:00	6.62	4.09	4.44	7.11	3.05	5.35	-4.06	-1.76	
3/20/2025	8:15:00	8.71	3.80	5.69	7.36	3.25	5.54	-4.11	-1.82	
3/20/2025	8:30:00	8.25	3.46	4.31	7.51	3.29	5.27	-4.22	-2.24	
3/20/2025	8:45:00	6.73	3.59	4.99	7.29	3.39	5.21	-3.90	-2.08	
3/20/2025	9:00:00	6.89	3.53	7.06	7.44	3.69	5.30	-3.75	-2.14	
3/20/2025	9:15:00	6.50	4.72	9.05	7.42	3.82	6.22	-3.60	-1.20	
3/20/2025	9:30:00	7.05	5.33	8.47	7.09	4.13	6.78	-2.96	-0.31	
3/20/2025	9:45:00	5.77	3.22	7.91	6.59	4.08	7.50	-2.51	0.91	
3/20/2025	10:00:00	5.70	2.79	13.70	6.38	3.92	9.24	-2.47	2.85	
3/20/2025	10:15:00	5.18	2.88	14.15	6.04	3.79	10.65	-2.25	4.61	
3/20/2025	10:30:00	6.69	4.25	14.36	6.08	3.70	11.72	-2.38	5.64	
3/20/2025	10:45:00	5.55	2.57	14.31	5.78	3.14	12.88	-2.63	7.11	
3/20/2025	11:00:00	5.62	2.18	5.26	5.75	2.94	12.36	-2.81	6.61	
3/20/2025	11:15:00	6.35	3.25	9.47	5.88	3.03	11.51	-2.85	5.63	
3/20/2025	11:30:00	8.44	3.77	9.09	6.53	3.21	10.50	-3.33	3.97	
3/20/2025	11:45:00	5.69	3.21	8.96	6.33	3.00	9.42	-3.33	3.09	
3/20/2025	12:00:00	5.91	3.36	8.85	6.40	3.15	8.33	-3.25	1.93	
3/20/2025	12:15:00	5.55	2.87	20.60	6.39	3.29	11.39	-3.09	5.01	
3/20/2025	12:30:00	5.49	3.27	23.26	6.21	3.30	14.15	-2.92	7.94	
3/20/2025	12:45:00	5.98	2.04	25.54	5.72	2.95	17.44	-2.77	11.72	
3/20/2025	13:00:00	5.52	1.95	26.86	5.69	2.70	21.02	-2.99	15.33	
3/20/2025	13:15:00	6.22	3.20	8.31	5.75	2.67	20.91	-3.08	15.16	
3/20/2025	13:30:00	5.56	4.63	12.61	5.76	3.02	19.31	-2.74	13.56	
3/20/2025	13:45:00	6.50	4.48	12.32	5.96	3.26	17.13	-2.70	11.17	
3/20/2025	14:00:00	5.08	4.59	11.97	5.78	3.77	14.41	-2.01	8.64	
3/20/2025	14:15:00	5.76	3.61	14.23	5.83	4.10	11.89	-1.73	6.06	
3/20/2025	14:30:00	5.13	3.42	9.54	5.61	4.14	12.13	-1.46	6.53	
3/20/2025	14:45:00	5.39	3.89	7.89	5.57	4.00	11.19	-1.58	5.62	
3/20/2025	15:00:00	7.74	3.82	10.68	5.82	3.86	10.86	-1.96	5.04	
3/20/2025	15:15:00	5.58	2.55	10.08	5.92	3.46	10.48	-2.46	4.56	
3/20/2025	15:30:00	5.53	3.16	5.44	5.87	3.37	8.73	-2.51	2.85	
3/20/2025	15:45:00	11.26	3.44	5.12	7.10	3.37	7.84	-3.73	0.74	
3/20/2025	16:00:00	5.89	3.02	7.11	7.20	3.20	7.69	-4.00	0.49	
3/20/2025	16:15:00	6.62	3.30	6.40	6.97	3.09	6.83	-3.88	-0.14	
3/20/2025	16:30:00	7.31	3.66	8.04	7.32	3.32	6.42	-4.00	-0.90	
3/20/2025	16:45:00	7.68	3.37	6.15	7.75	3.36	6.56	-4.39	-1.19	
3/20/2025	17:00:00	9.05	3.04	12.25	7.31	3.28	7.99	-4.03	0.68	
3/20/2025	17:15:00	8.19	4.47	10.22	7.77	3.57	8.61	-4.20	0.84	
3/20/2025	17:30:00		3.80	5.73	8.06	3.67	8.48	-4.39	0.42	

## Friday, Mar 21, 2025

Date Time			Turbidity (NTU)		Rolling Average Turbidity (NTU)			
		Ambient	N3SB	TB4	Ambient	N3SB	TB4	
3/21/2025	7:00:00	24.10	26.37	25.52	24.10	26.37	25.52	
3/21/2025	7:15:00	23.29	22.74	25.93	23.69	24.55	25.72	
3/21/2025	7:30:00	20.47	21.97	26.87	22.62	23.69	26.10	
3/21/2025	7:45:00	20.52	25.04	25.10	22.09	24.03	25.85	
3/21/2025	8:00:00	21.99	23.57	26.53	22.07	23.94	25.99	
3/21/2025	8:15:00	22.12	20.70	25.09	21.68	22.80	25.90	
3/21/2025	8:30:00	18.37	20.04	27.04	20.69	22.26	26.13	
3/21/2025	8:45:00	18.22	16.98	26.20	20.24	21.27	25.99	
3/21/2025	9:00:00	24.26	22.35	26.26	20.99	20.73	26.22	
3/21/2025	9:15:00	26.05	23.21	22.61	21.80	20.66	25.44	
3/21/2025	9:30:00	21.73	23.16	23.37	21.73	21.15	25.10	
3/21/2025	9:45:00	20.86	19.82	22.55	22.23	21.11	24.20	
3/21/2025	10:00:00	20.23	21.97	22.22	22.63	22.10	23.40	
3/21/2025	10:15:00	17.72	21.09	24.04	21.32	21.85	22.96	
3/21/2025	10:30:00	19.21	23.26	21.44	19.95	21.86	22.72	
3/21/2025	10:45:00	20.06	20.42	22.78	19.62	21.31	22.60	
3/21/2025	11:00:00	19.24	19.35	19.31	19.29	21.22	21.96	
3/21/2025	11:15:00	18.18	21.57	21.22	18.88	21.14	21.76	
3/21/2025	11:30:00	16.81	16.35	29.63	18.70	20.19	22.87	
3/21/2025	11:45:00	18.42	16.97	22.48	18.54	18.93	23.08	
3/21/2025	12:00:00	19.49	16.35	19.94	18.43	18.12	22.52	
3/21/2025	12:15:00	19.32	18.47	20.62	18.44	17.94	22.78	
3/21/2025	12:30:00	20.35	15.61	20.30	18.88	16.75	22.59	
3/21/2025	12:45:00	21.16	18.00	22.21	19.75	17.08	21.11	
3/21/2025	13:00:00	19.49	16.74	23.85	19.96	17.04	21.38	
3/21/2025	13:15:00	17.12	18.07	19.77	19.49	17.38	21.35	
3/21/2025	13:30:00	15.59	28.70	22.16	18.74	19.42	21.66	
3/21/2025	13:45:00	15.65	18.02	18.34	17.80	19.91	21.27	
3/21/2025	14:00:00	17.97	18.21	17.75	17.16	19.95	20.37	
3/21/2025	14:15:00	14.67	15.41	18.61	16.20	19.68	19.32	
3/21/2025	14:30:00	15.88	17.60	16.63	15.95	19.58	18.70	
3/21/2025	14:45:00	18.13	20.26	19.25	16.46	17.90	18.12	
3/21/2025	15:00:00	16.46	17.32	18.64	16.62	17.76	18.18	
3/21/2025	15:15:00	14.69	14.79	23.21	15.97	17.08	19.27	
3/21/2025	15:30:00	16.17	15.61	19.52	16.27	17.12	19.45	