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

**PERIOD: January 13, 2025 – January 17, 2025** 

Date of Report: January 21, 2025

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#### 1. SCOPE OF MONITORING

## 1.1 **Buoy Locations**

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.

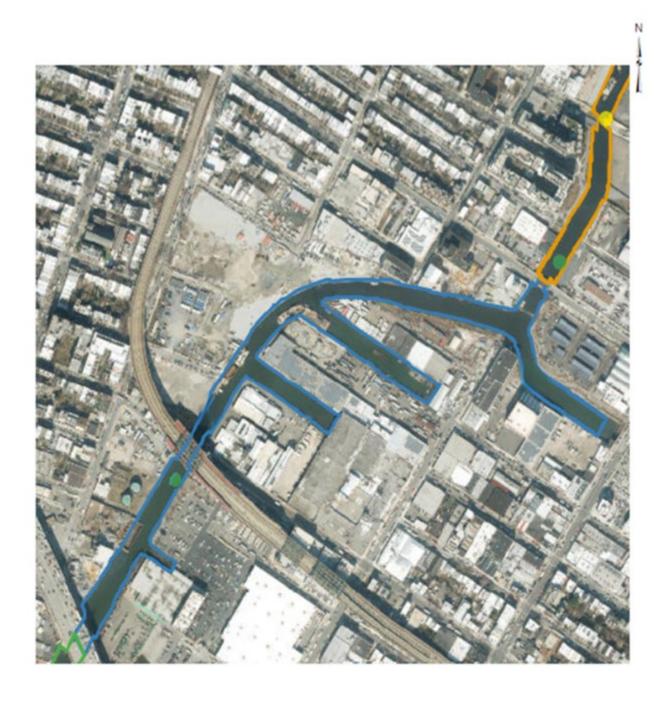
All readings from buoys were transmitted via telemetry at 15-minute intervals. The instrument used to collect turbidity from the buoys is an In-Situ VuLink (telemetry) and AquaTroll500 (sonde), equipped with optical sensors capable of reading turbidity levels with an accuracy of +/-0.5 NTU.

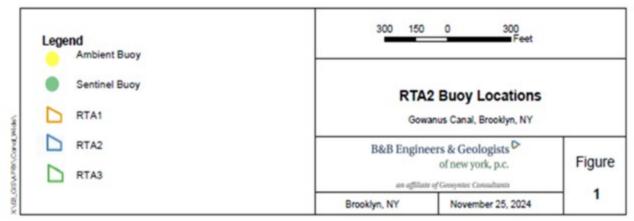
#### 1.2 Summary of Monitoring Adjustments during Construction

- 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.





# 1.3 Current Reporting Period Scope of Monitoring

During the week of January 13<sup>th</sup>, 2025, 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 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.

# 1.4 <u>Meteorological Conditions</u>

The weather conditions onsite were as follows:

Meteorological Parameters	1/13/2024	1/14/2024	1/15/2025	1/16/2025	1/17/2025
Wind Direction (from)	WSW	WNW	WNW	WSW	WSW
Wind Speed (mph)	7.3	10.3	8.3	8.1	6.4
Temperature (°F)	36.9	30.1	27.0	26.6	33.1
Humidity (%)	61.8	47.8	51.1	65.5	69.4
Barometric Pressure (inHg)	29.85	29.91	30.03	29.87	29.95
Precipitation (Inch)	0	0	0	0	0

Table 1 - Summary of Weather Conditions for reporting period.

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

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

Date	Time (LST/LDT)	Predicted (ft)	Preliminary (ft)	High/Low
Monday, January 13, 2025	Mon	1:16 AM	-3.15	-2.13
Monday, January 13, 2025	Mon	7:27 AM	2.43	3.41
Monday, January 13, 2025	Mon	2:07 PM	-3.48	-2.57
Monday, January 13, 2025	Mon	7:58 PM	1.53	2.13
Tuesday, January 14, 2025	Tue	2:06 AM	-3.15	-2.85
Tuesday, January 14, 2025	Tue	8:13 AM	2.38	2.54
Tuesday, January 14, 2025	Tue	2:53 PM	-3.52	-3.29
Tuesday, January 14, 2025	Tue	8:46 PM	1.54	1.29
Wednesday, January 15, 2025	Wed	2:53 AM	-3.1	-3.72
Wednesday, January 15, 2025	Wed	8:58 AM	2.24	1.86
Wednesday, January 15, 2025	Wed	3:36 PM	-3.46	-3.35
Wednesday, January 15, 2025	Wed	9:33 PM	1.5	1.69
Thursday, January 16, 2025	Thu	3:36 AM	-2.98	-2.53
Thursday, January 16, 2025	Thu	9:43 AM	2.03	2.91
Thursday, January 16, 2025	Thu	4:16 PM	-3.31	-2.52
Thursday, January 16, 2025	Thu	10:20 PM	1.43	2.07
Friday, January 17, 2025	Fri	4:18 AM	-2.79	-2.34
Friday, January 17, 2025	Fri	10:27 AM	1.76	2.52
Friday, January 17, 2025	Fri	4:54 PM	-3.09	-2.42
Friday, January 17, 2025	Fri	11:07 PM	1.36	2.02

**Table 2** - NOAA Preliminary observations and predictions.

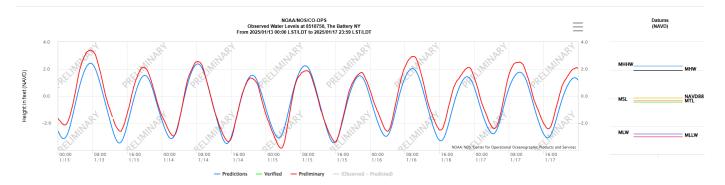


Figure 2 - Tidal Chart for reporting period.

## 2. REPORT OF EXCEEDANCES

An exceedance of the quantitative trigger criterion occurred at the 9<sup>th</sup> Street Bridge Sentinel Buoy (9SB) on Tuesday, January 14 from 16:00 to 17:30. An exceedance of the quantitative trigger and action criterion occurred at 9SB on Wednesday, January 15 between the hours of 13:30 to 14:30. These exceedances were determined to be unrelated to in-water construction activities as described below in Response to Criteria Exceedances. The 3<sup>rd</sup> Street Sentinel Buoy reported an exceedance of the quantitative trigger and action criterion between the hours of 7:30 to 11:30 on Monday,

January 13<sup>th</sup>. This was also determined to be unrelated to in-water construction activities as described below in Response to Criteria Exceedances. No other readings exceeded the trigger or action criterion during the monitoring period.

Turbidity and floatables were observed throughout the reporting period unrelated to construction activities.

## • **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 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 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 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 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.

Exceedances reported above at 9SB were investigated with no visual observation of sheen or turbidity plume in the vicinity. The investigations determined the exceedances were unrelated to in-waterway construction activities, but rather attributed toward low tide conditions. The sensor

was likely fowled because of interaction with the mudline. Readings stabilized with the rising tide and no further action was required. The exceedance reported above at 3SB on January 13<sup>th</sup> was investigated and determined to be unrelated to in-waterway construction activities. The increased turbidity was likely a result from potential CSO discharges or other discharge near the headwall in the early morning of that day (see Figure 11 in Summary of Visual Observations), which was then seen drifting down toward 3<sup>rd</sup> Street Bridge with the outgoing tide.

#### 3. TURBIDITY BUOY DATA

Throughout the reporting period, readings at the Ambient, 3SB, and 9SB sondes remained relatively stable. Exceedances shown below are unrelated to in-waterway construction activities as discussed above. The 9SB buoy faced telemetry issues at its location, resulting in no data being transmitted on the dates of January 16<sup>th</sup> and January 17<sup>th</sup>.

## 3.1 **Monday, January 13, 2024**

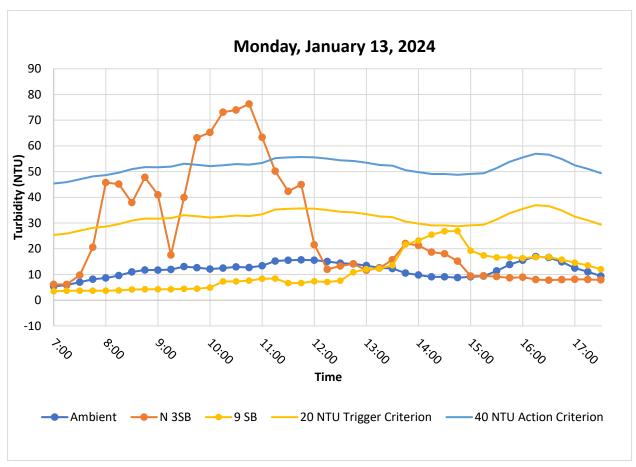
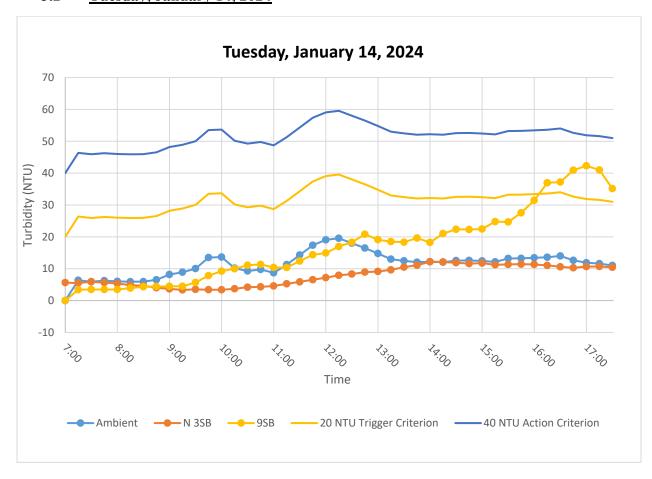


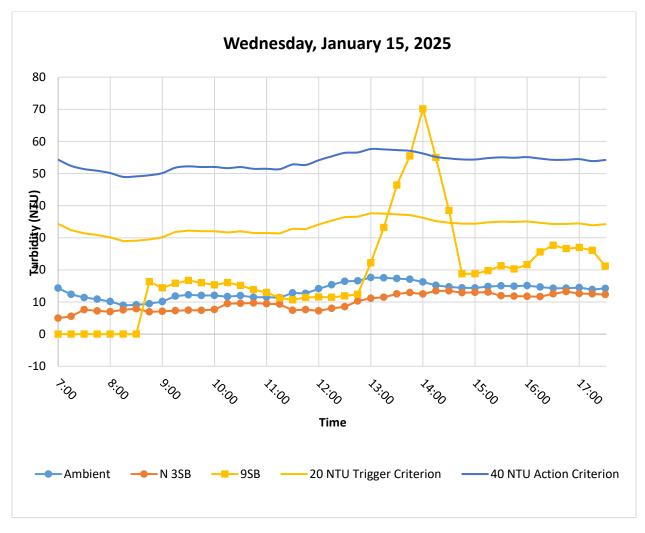
Figure 3. Hourly rolling average turbidity readings from 07:00 to 17:30.

# 3.2 <u>Tuesday, January 14, 2024</u>



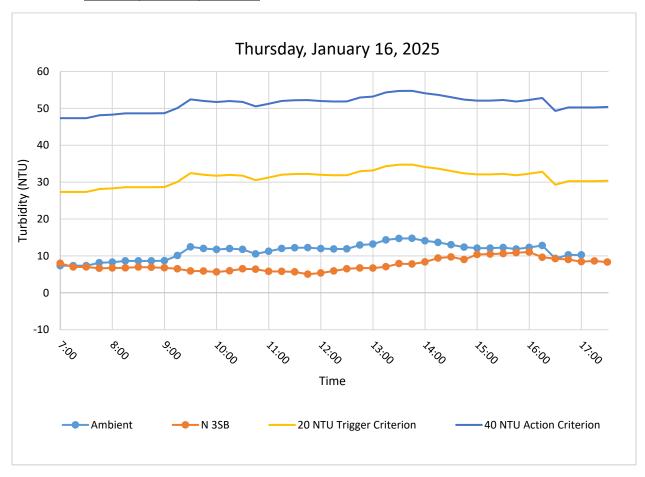
**Figure 4.** Hourly rolling average turbidity readings from 07:00 to 17:30. The exceedance of the trigger criterion by the 9SB buoy can be attributed to interactions with the mudline.

# 3.3 Wednesday, January 15, 2025



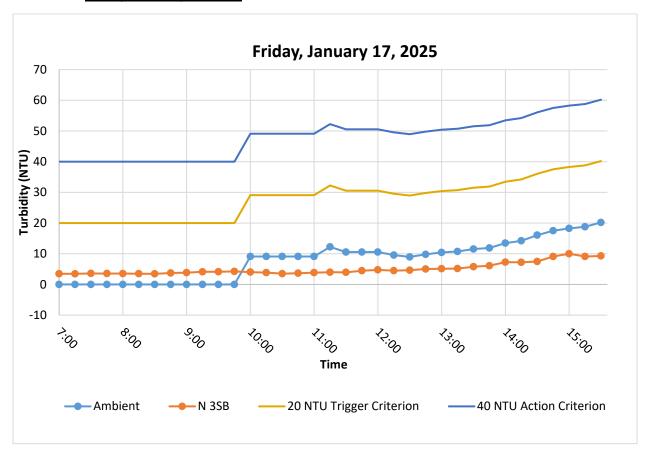
**Figure 5**. Hourly rolling average turbidity readings from 07:00 to 17:30. The exceedance reported by the 9SB buoy between the hours of 13:30 and 14:30 can be attributed to interactions with the mudline.

# 3.4 **Thursday, January 16, 2025**



**Figure 6.** Hourly rolling average turbidity readings from 07:00 to 17:30. Due to telemetry issues, 9SB did not report any data for Thursday, January 16<sup>th</sup>

# 3.5 **Friday, January 17, 2025**



**Figure 7.** Hourly rolling average turbidity readings from 07:00 to 15:30. Due to telemetry issues, 9SB did not report any data for Friday, January 17<sup>th</sup>

## 4. SUMMARY OF VISUAL OBSERVATIONS

Throughout the majority of the reporting period, sheens in the RTA2 areas ranged from minimal to moderate. Overnight rainy conditions resulted in discharges being observed at the headwall in RTA1 at 6am on January 13<sup>th</sup> (Figure 11).

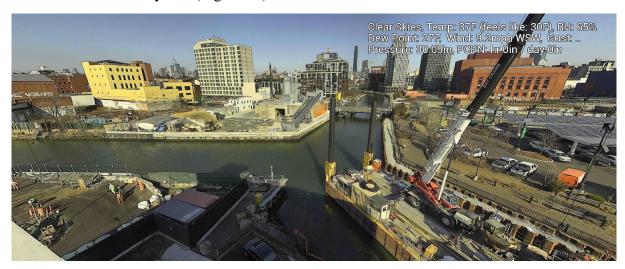


Figure 8 – January 17, 2025. General Conditions in Canal north of 9<sup>th</sup> Street Bridge during inwaterway construction activities.



**Figure 9 – January 14, 2025.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge near TB6 during in-waterway construction activities.



**Figure 10 – January 16, 2025.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge near TB6 during in-waterway construction activities.

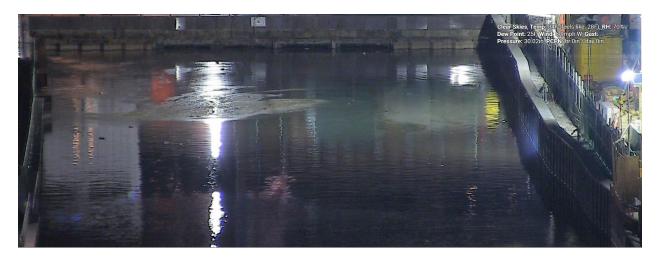


Figure 11 -January 13, 2025. After rain overnight, CSO discharges were noted at the headwall.

# APPENDIX A Turbidity Data Tables

Date	Time		Turbidity (NTU)	Rolling A	verage Turbidit	y (NTU)	Differenc	e (NTU)	
		Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
1/13/2025	7:00:00	5.37	6.13	3.47	5.37	6.13	3.47	0.77	-1.90
1/13/2025	7:15:00	6.41		3.85	5.89	6.13	3.66	0.25	-2.23
1/13/2025	7:30:00	9.25	13.33	3.75	7.01	9.73	3.69	2.72	-3.32
1/13/2025	7:45:00	11.53	42.28		8.14	20.58	3.69	12.44	-4.45
1/13/2025	8:00:00	10.65	121.27		8.64	45.75	3.69	37.11	-4.95
1/13/2025	8:15:00	10.09	3.65		9.58	45.13	3.80	35.55	-5.79
1/13/2025	8:30:00	13.31	9.19	4.57	10.96	37.95	4.16	26.98	-6.81
1/13/2025	8:45:00	13.12	62.45	3.91	11.74	47.77	4.24	36.03	-7.50
1/13/2025	9:00:00	11.31	8.29		11.70	40.97	4.24	29.28	-7.46
1/13/2025	9:15:00	11.84	4.35		11.93	17.59	4.24	5.65	-7.69
1/13/2025	9:30:00	15.71	115.35	4.69	13.06	39.93	4.39	26.87	-8.67
1/13/2025	9:45:00	11.20	125.32	4.76	12.64	63.15	4.45	50.52	-8.18
1/13/2025	10:00:00	10.47	72.88	5.22	12.11	65.24	4.89	53.13	-7.22
1/13/2025	10:15:00	13.09	47.64	14.46	12.46	73.11	7.28	60.65	-5.18
1/13/2025	10:30:00	14.23	8.52	7.32	12.94	73.94	7.29	61.00	-5.65
1/13/2025	10:45:00	14.48	127.16	6.28	12.70	76.30	7.61	63.61	-5.09
1/13/2025	11:00:00	14.61	60.54	8.54	13.38	63.35	8.36	49.97	-5.01
1/13/2025	11:15:00	19.71	6.95	5.48	15.22	50.16	8.41	34.94	-6.81
1/13/2025	11:30:00	14.61	8.53	5.50	15.53	42.34	6.62	26.81	-8.90
1/13/2025	11:45:00	14.93	21.60	7.53	15.67	44.96	6.67	29.29	-9.00
1/13/2025	12:00:00	13.91	10.15	9.72	15.55	21.56	7.35	6.00	-8.20
1/13/2025	12:15:00	12.09	12.81		15.05	12.01	7.06	-3.04	-7.99
1/13/2025	12:30:00	16.35			14.38	13.28	7.58	-1.10	-6.80
1/13/2025	12:45:00	13.38	11.97	15.38	14.13	14.13	10.88	0.00	-3.26
1/13/2025	13:00:00	11.57		11.05	13.46	11.64	12.05	-1.82	-1.41
1/13/2025	13:15:00	9.52	12.64	10.55	12.58	12.47	12.33	-0.11	-0.25
1/13/2025	13:30:00	10.63	22.51	17.23	12.29	15.71	13.55	3.42	1.26
1/13/2025	13:45:00	7.64	40.92	54.07	10.55	22.01	21.66	11.46	11.11
1/13/2025	14:00:00	9.56	9.09	23.14	9.78	21.29	23.21	11.51	13.43
1/13/2025	14:15:00	8.00	8.30	22.31	9.07	18.69	25.46	9.62	16.39
1/13/2025	14:30:00	9.56	9.45	17.23	9.08	18.05	26.80	8.98	17.72
1/13/2025	14:45:00	9.05	8.20	17.68	8.76	15.19	26.89	6.43	18.12
1/13/2025	15:00:00	9.27	11.95	15.90	9.09	9.40	19.25	0.31	10.16
1/13/2025	15:15:00	10.89	9.44	13.82	9.35	9.47	17.39	0.12	8.03
1/13/2025	15:30:00	18.12	6.75	18.54	11.38	9.16	16.64	-2.22	5.26
1/13/2025	15:45:00	21.87	6.96	17.52	13.84	8.66	16.69	-5.18	2.85
1/13/2025	16:00:00	17.37	9.53	15.93	15.51	8.93	16.34	-6.58	0.84
1/13/2025	16:15:00	16.46	7.49	18.06	16.94	8.04	16.78	-8.91	-0.17
1/13/2025	16:30:00	9.16	8.21	13.88	16.60	7.79	16.79	-8.81	0.19
1/13/2025	16:45:00	9.61	7.80	13.43	14.89	8.00	15.76	-6.89	0.87
1/13/2025	17:00:00	9.78	7.47	11.50	12.47	8.10	14.56	-4.37	2.09
1/13/2025	17:15:00	10.23	9.31	10.69	11.05	8.06	13.51	-2.99	2.47
1/13/2025	17:30:00	8.06	6.69	10.55	9.37	7.90	12.01	-1.47	2.64

# Tuesday, Jan 14, 2025

Date	Time		Turbidity	(NTU)	Roll	ling Average Tur	bidity (NTU)	Difference (NTU)		
		Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient	
1/14/25	7:00:00		5.64			5.64				
1/14/25	7:15:00	6.37	5.35	3.43	6.37	5.50	3.43	-0.87	-2.94	
1/14/25	7:30:00	5.49	6.76	3.55	5.93	5.92	3.49	-0.01	-2.44	
1/14/25	7:45:00	6.91	4.83		6.25	5.65	3.49	-0.61	-2.77	
1/14/25	8:00:00	5.31	4.18		6.02	5.35	3.49	-0.66	-2.53	
1/14/25	8:15:00	5.52	3.17	4.79	5.92	4.86	3.92	-1.06	-2.00	
1/14/25	8:30:00	6.59	4.23	4.69	5.96	4.64	4.34	-1.33	-1.62	
1/14/25	8:45:00	8.32	3.71	3.78	6.53	4.02	4.42	-2.50	-2.11	
1/14/25	9:00:00	15.19	3.08	4.76	8.19	3.67	4.50	-4.51	-3.68	
1/14/25	9:15:00		2.59	4.47	8.90	3.36	4.49	-5.55	-4.41	
1/14/25	9:30:00		4.02	10.71	10.03	3.53	5.68	-6.51	-4.35	
1/14/25	9:45:00	17.01	3.64	15.43	13.51	3.41	7.83	-10.10	-5.68	
1/14/25	10:00:00	8.80	3.65	10.84	13.67	3.40	9.24	-10.27	-4.43	
1/14/25	10:15:00	4.75	4.63	8.56	10.19	3.71	10.00	-6.48	-0.19	
1/14/25	10:30:00	6.57	5.05	10.02	9.28	4.20	11.11	-5.08	1.83	
1/14/25	10:45:00	11.77	4.63	11.85	9.78	4.32	11.34	-5.46	1.56	
1/14/25	11:00:00	11.66	5.01	10.74	8.71	4.59	10.40	-4.11	1.69	
1/14/25	11:15:00	21.72	7.00	10.69	11.29	5.27	10.37	-6.03	-0.92	
1/14/25	11:30:00	19.82	7.74	18.77	14.31	5.89	12.41	-8.42	-1.90	
1/14/25	11:45:00	21.89	8.36	19.89	17.37	6.55	14.39	-10.83	-2.99	
1/14/25	12:00:00	20.24	7.91	14.59	19.07	7.20	14.93	-11.86	-4.13	
1/14/25	12:15:00	14.12	8.70	20.98	19.56	7.94	16.98	-11.62	-2.58	
1/14/25	12:30:00	14.03	8.97	17.32	18.02	8.33	18.31	-9.69	0.29	
1/14/25	12:45:00	12.20	10.74	31.32	16.50	8.93	20.82	-7.56	4.32	
1/14/25	13:00:00	13.35	9.35	11.43	14.79	9.13	19.13	-5.66	4.34	
1/14/25	13:15:00	11.32	10.50	11.43	13.00	9.65	18.50	-3.35	5.49	
1/14/25	13:30:00	11.47	12.92	20.18	12.47	10.50	18.34	-1.98	5.86	
1/14/25	13:45:00	11.93	11.99	23.80	12.05	11.10	19.63	-0.95	7.58	
1/14/25	14:00:00	12.95	16.22	24.48	12.20	12.20	18.27	-0.01	6.06	
1/14/25	14:15:00	12.62	9.01	25.31	12.06	12.13	21.04	0.07	8.98	
1/14/25	14:30:00	13.78	9.25	18.10	12.55	11.88	22.37	-0.68	9.82	
1/14/25	14:45:00	11.71	11.57	19.80	12.60	11.61	22.30	-0.99	9.70	
1/14/25	15:00:00	11.16	12.82	24.63	12.44	11.77	22.46	-0.67	10.02	
1/14/25	15:15:00	11.48	13.57	36.10	12.15	11.24	24.79	-0.91	12.64	
1/14/25	15:30:00	18.00	9.57	24.75	13.23	11.36	24.68	-1.87	11.45	
1/14/25	15:45:00	13.97	9.60	32.48	13.27	11.43	27.55	-1.84	14.29	
1/14/25	16:00:00	12.55	11.18	39.40	13.43	11.35	31.47	-2.08	18.04	
1/14/25	16:15:00	12.02	11.36	52.17	13.61	11.06	36.98	-2.55	23.37	
1/14/25	16:30:00	13.54	11.29		14.02	10.60	37.20	-3.42	23.18	
1/14/25	16:45:00	11.07	8.08	39.61	12.63	10.30	40.91	-2.33	28.28	
1/14/25	17:00:00	10.24	11.44	38.02	11.89	10.67	42.30	-1.22	30.41	
1/14/25	17:15:00	11.14	11.43	34.16	11.60	10.72	40.99	-0.88	29.38	
1/14/25	17:30:00	9.06	9.96	28.82	11.01	10.44	35.15	-0.57	24.14	

# Wednesday, Jan 15, 2025

			Turbidity (	(NTU)	Roll	ing Average Turbid	Difference (NTU)		
Date	Time	Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
1/15/2025	7:00:00	14.90	4.98		14.31	4.98		-9.33	
1/15/2025	7:15:00	8.51	6.10		12.37	5.54		-6.84	
1/15/2025	7:30:00	8.40	11.79		11.38	7.62		-3.76	
1/15/2025	7:45:00	8.78	5.99		10.86	7.21		-3.65	
1/15/2025	8:00:00	10.13	6.02		10.14	6.98		-3.17	
1/15/2025	8:15:00		7.78		8.96	7.54		-1.42	
1/15/2025	8:30:00		7.89		9.10	7.89		-1.21	
1/15/2025	8:45:00		6.96	16.31	9.46	6.93	16.31	-2.53	6.85
1/15/2025	9:00:00		6.82	12.47	10.13	7.09	14.39	-3.04	4.26
1/15/2025	9:15:00	11.82	6.94	18.69	11.82	7.28	15.82	-4.54	4.00
1/15/2025	9:30:00	12.63	8.63	19.29	12.22	7.45	16.69	-4.78	4.46
1/15/2025	9:45:00	11.62	7.61	13.18	12.02	7.39	15.99	-4.63	3.96
1/15/2025	10:00:00	12.11	8.21	12.97	12.04	7.64	15.32	-4.40	3.28
1/15/2025	10:15:00	10.16	16.05		11.67	9.49	16.03	-2.18	4.37
1/15/2025	10:30:00	13.47	7.39		12.00	9.58	15.15	-2.42	3.15
1/15/2025	10:45:00	10.01	9.11	15.39	11.47	9.67	13.85	-1.80	2.37
1/15/2025	11:00:00	11.65	6.49	10.49	11.48	9.45	12.95	-2.03	1.47
1/15/2025	11:15:00	11.46	7.57	7.95	11.35	9.32	11.28	-2.03	-0.07
1/15/2025	11:30:00	17.45	6.52	8.95	12.81	7.41	10.70	-5.39	-2.11
1/15/2025	11:45:00	12.77	8.39	14.27	12.67	7.61	11.41	-5.05	-1.26
1/15/2025	12:00:00	17.34		16.09	14.13	7.24	11.55	-6.89	-2.58
1/15/2025	12:15:00	17.71	9.52	10.04	15.35	8.00	11.46	-7.35	-3.89
1/15/2025	12:30:00	16.91	9.70	10.01	16.44	8.53	11.87	-7.91	-4.56
1/15/2025	12:45:00	18.10	13.57	11.59	16.57	10.29	12.40	-6.27	-4.17
1/15/2025	13:00:00	18.07	11.82	63.37	17.63	11.15	22.22	-6.48	4.60
1/15/2025	13:15:00	16.77	12.70	70.85	17.51	11.46	33.17	-6.05	15.66
1/15/2025	13:30:00	16.60	14.86 11.67	76.15	17.29 17.06	12.53 12.92	46.40	-4.76 -4.14	29.11
1/15/2025	13:45:00	15.78 13.97	11.67		16.24	12.92	55.49 70.13	+	38.43 53.89
1/15/2025 1/15/2025	14:00:00 14:15:00	13.97	16.69	17.89	15.18	12.49	70.13 54.96	-3.75 -1.71	39.79
1/15/2025	14:15:00	14.39	12.73	21.45	14.70	13.46	38.49	-1.71	23.79
1/15/2025	14:45:00	15.05	12.73	17.03	14.70	13.47	18.79	-1.23	4.40
1/15/2025	15:00:00	15.63	12.01	17.03	14.39	12.90	18.79	-1.49	4.40
1/15/2025	15:15:00	16.16	11.76	22.66	14.80	13.06	19.75	-1.75	4.95
1/15/2025	15:30:00	13.91	11.76	23.93	15.03	11.93	21.26	-3.10	6.24
1/15/2025	15:45:00	13.81	12.21	17.47	14.91	11.83	20.27	-3.10	5.36
1/15/2025	16:00:00	16.02	11.55	22.48	15.11	11.73	21.63	-3.37	6.53
1/15/2025	16:15:00	13.36	11.71	41.43	14.65	11.66	25.59	-2.99	10.94
1/15/2025	16:30:00	14.21	16.17	32.91	14.26	12.54	27.64	-1.72	13.38
1/15/2025	16:45:00	14.06	14.60	18.87	14.29	13.25	26.63	-1.05	12.34
1/15/2025	17:00:00	14.74	9.10	19.13	14.48	12.62	26.96	-1.85	12.48
1/15/2025	17:15:00	12.97	11.09	18.07	13.87	12.53	26.08	-1.34	12.21
1/15/2025	17:30:00	15.13	10.60	16.79	14.22	12.31	21.15	-1.91	6.93

# Thursday, Jan 16, 2025

			Turbidity (NTL	J)	Rolling	Average Turbidity	y (NTU)	Difference (NTU)		
Date	Time	Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient	
1/16/2025	7:00:00	7.34	7.99		7.34	7.99		0.65		
1/16/2025	7:15:00		6.00		7.34	7.00		-0.35		
1/16/2025	7:30:00		6.99		7.34	6.99		-0.35		
1/16/2025	7:45:00	8.93	5.65		8.14	6.66		-1.48		
1/16/2025	8:00:00	8.62	6.93		8.30	6.71		-1.59		
1/16/2025	8:15:00	8.38	8.27		8.64	6.77		-1.88		
1/16/2025	8:30:00		7.04		8.64	6.97		-1.67		
1/16/2025	8:45:00		6.66		8.64	6.91		-1.73		
1/16/2025	9:00:00	9.06	4.99		8.68	6.78		-1.91		
1/16/2025	9:15:00	12.85	5.54		10.09	6.50		-3.59		
1/16/2025	9:30:00	15.44	5.30		12.45	5.91		-6.54		
1/16/2025	9:45:00	10.69	6.94		12.01	5.89		-6.12		
1/16/2025	10:00:00	10.65	5.48		11.74	5.65		-6.09		
1/16/2025	10:15:00	10.27	6.56		11.98	5.96		-6.02		
1/16/2025	10:30:00		8.22		11.76	6.50		-5.26		
1/16/2025	10:45:00	12.84	4.71 4.03		10.54	6.38 5.80		-4.15 -5.45		
1/16/2025 1/16/2025	11:00:00 11:15:00	12.84	4.03 5.44		11.25 12.01	5.80		-5.45 -6.21		
1/16/2025	11:15:00	10.87	5.92		12.01	5.67		-6.21 -6.54		
1/16/2025	11:45:00	12.34	5.08		12.21	5.04		-0.54 -7.20		
1/16/2025	12:00:00	11.01	6.36		11.99	5.37		-6.63		
1/16/2025	12:15:00	12.22	6.81		11.87	5.92		-5.95		
1/16/2025	12:30:00	13.01	8.35		11.89	6.50		-5.39		
1/16/2025	12:45:00	16.14	6.97		12.94	6.71		-6.23		
1/16/2025	13:00:00	13.60	5.00		13.19	6.70		-6.50		
1/16/2025	13:15:00	16.69	8.14		14.33	7.05		-7.27		
1/16/2025	13:30:00	14.17	11.06		14.72	7.90		-6.82		
1/16/2025	13:45:00	13.17			14.75	7.79		-6.96		
1/16/2025	14:00:00	12.85	9.21		14.10	8.35		-5.74		
1/16/2025	14:15:00	11.44	9.24		13.66	9.41		-4.25		
1/16/2025	14:30:00	13.48	9.33		13.02	9.71		-3.31		
1/16/2025	14:45:00	10.98	8.26		12.39	9.01		-3.38		
1/16/2025	15:00:00	11.77	15.90		12.10	10.39		-1.72		
1/16/2025	15:15:00	12.82	9.73		12.10	10.49		-1.61		
1/16/2025	15:30:00		9.93		12.26	10.63		-1.63		
1/16/2025	15:45:00		10.48		11.86	10.86		-1.00		
1/16/2025	16:00:00		9.22		12.29	11.05		-1.24		
1/16/2025	16:15:00		8.78		12.82	9.63		-3.19		
1/16/2025	16:30:00	9.31	7.82		9.31	9.25		-0.06		
1/16/2025	16:45:00	11.22	8.79		10.26	9.02		-1.25		
1/16/2025	17:00:00		7.56		10.26	8.43		-1.83		
1/16/2025	17:15:00		10.19		10.26	8.63		-1.64		
1/16/2025	17:30:00	10.61	7.24		10.38	8.32		-2.06		

# Friday, Jan 17, 2025

Date	Date Time Turbidity (NTU)			Ro	lling Average Turb	Differen	Difference (NTU)		
Dute	1	Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
1/17/2025	7:00:00		3.48			3.48			
1/17/2025	7:15:00		3.44			3.46			
1/17/2025	7:30:00		3.81			3.57			
1/17/2025	7:45:00		3.50			3.56			
1/17/2025	8:00:00		3.50			3.54			
1/17/2025	8:15:00		3.28			3.51			
1/17/2025	8:30:00		3.14			3.45			
1/17/2025	8:45:00		5.19			3.72			
1/17/2025	9:00:00		4.08			3.84			
1/17/2025	9:15:00		4.87			4.11			
1/17/2025	9:30:00		3.32			4.12			
1/17/2025	9:45:00		3.78			4.25			
1/17/2025	10:00:00	9.10	4.06		9.10	4.02		-5.08	
1/17/2025	10:15:00		3.22		9.10	3.85		-5.25	
1/17/2025	10:30:00		3.22		9.10	3.52		-5.51	
1/17/2025	10:45:00		3.98		9.10	3.65		-5.34	
1/17/2025	11:00:00		4.72		9.10	3.84		-5.11	
1/17/2025	11:15:00	12.24	4.79		12.24	3.99		-8.06	
1/17/2025	11:30:00	8.87	3.03		10.55	3.95		-6.42	
1/17/2025	11:45:00		5.79		10.55	4.46		-6.09	
1/17/2025	12:00:00		5.46		10.55	4.76		-5.79	
1/17/2025	12:15:00	7.57	3.36		9.56	4.49		-5.07	
1/17/2025	12:30:00	10.46	5.51		8.96	4.63		-4.34	
1/17/2025	12:45:00	11.37	5.01		9.80	5.02		-4.78	
1/17/2025	13:00:00	12.31	6.24		10.43	5.11		-5.59	
1/17/2025	13:15:00	11.96	5.74		10.73	5.17		-5.83	
1/17/2025	13:30:00		6.36		11.52	5.77		-5.87	
1/17/2025	13:45:00		7.15		11.88	6.10		-5.82	
1/17/2025	14:00:00	16.12	10.83		13.46	7.26		-5.94	
1/17/2025	14:15:00	14.58	5.91		14.22	7.20		-7.02	
1/17/2025	14:30:00	17.49	7.15		16.06	7.48		-8.58	
1/17/2025	14:45:00	21.84	14.40		17.51	9.09		-8.42	
1/17/2025	15:00:00	21.26	11.73		18.26	10.01		-8.25	
1/17/2025	15:15:00		6.33		18.79	9.11		-9.68	
1/17/2025	15:30:00		6.80		20.20	9.28		-10.91	