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

**PERIOD: December 30, 2024 – January 3, 2025** 

Date of Report: January 7, 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.

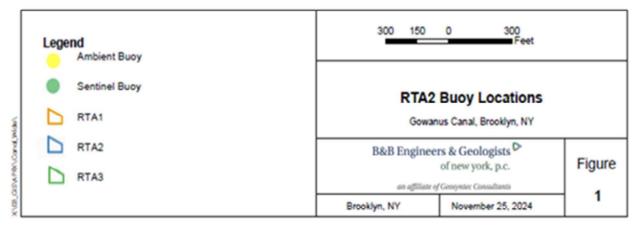
### 1.2 Summary of Monitoring Adjustments during Construction

- 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 December 30, 2024, three buoys equipped with multi-parameter water quality sondes were deployed as described in Section 1.2.

Due to the federal holiday, readings were not made on January 1<sup>st</sup>, 2025.

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	12/30/2024	12/31/2024	1/1/2025	1/2/2025	12/3/2025
Wind Direction (from)	ENE	WSW	W	NNW	NNE
Wind Speed (mph)	5.8	6.6	4.0	6.2	7.0
Temperature (°F)	48.7	51.9	47.1	41.1	36.1
Humidity (%)	99.6	82.9	73.6	65.1	80.3
Barometric Pressure (inHg)	30.19	30.03	30.05	30.11	29.93
Precipitation (Inch)	0.288	0.4	0.2	0.0	0.0

Table 1 - Summary of Weather Conditions for reporting period.

### 1.5 Tidal Conditions

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, December 30, 2024	1:18 AM	-2.6	-1.12	L
Monday, December 30, 2024	7:23 AM	2.24	3.45	Н
Monday, December 30, 2024	2:11 PM	-3.04	-2.28	L
Monday, December 30, 2024	7:53 PM	1.06	1.98	Н
Tuesday, December 31, 2024	2:03 AM	-2.72	-2.24	L
Tuesday, December 31, 2024	8:01 AM	2.33	2.87	Н
Tuesday, December 31, 2024	2:54 PM	-3.19	-2.32	L
Tuesday, December 31, 2024	8:30 PM	1.16	2.43	Н
Wednesday, January 1, 2025	2:45 AM	-2.86	-1.59	L
Wednesday, January 1, 2025	8:39 AM	2.4	3.25	Н
Wednesday, January 1, 2025	3:33 PM	-3.3	-3	L
Wednesday, January 1, 2025	9:12 PM	1.23	1.17	Н
Thursday, January 2, 2025	3:28 AM	-2.92	-3.75	L
Thursday, January 2, 2025	9:23 AM	2.35	1.12	Н
Thursday, January 2, 2025	4:13 PM	-3.33	<b>-</b> 4.53	L
Thursday, January 2, 2025	9:59 PM	1.32	-0.06	Н
Friday, January 3, 2025	4:12 AM	-2.91	-4.18	L
Friday, January 3, 2025	10:12 AM	2.22	1.66	Н
Friday, January 3, 2025	4:54 PM	-3.3	<b>-</b> 3.79	L
Friday, January 3, 2025	10:51 PM	1.43	1.09	Н

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

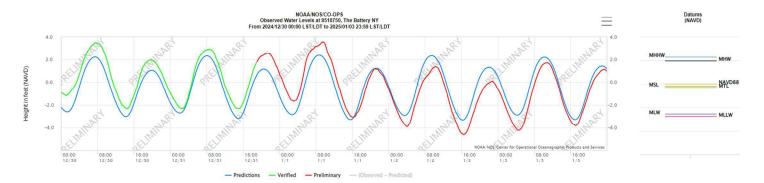


Figure 2 - Tidal Chart for reporting period.

### 2. REPORT OF EXCEEDANCES

An exceedance of the quantitative trigger and action criterion occurred at the 9<sup>th</sup> Street Bridge Sentinel Buoy on Thursday, January 2 from 16:30 to 17:30 due to extended backfilling operations

at 37 9<sup>th</sup> to deter further upland hardscape movement as well as potential resuspended sediment caused by proposals from passing tugs moving gravel barges and the AquaBlok barge. 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.

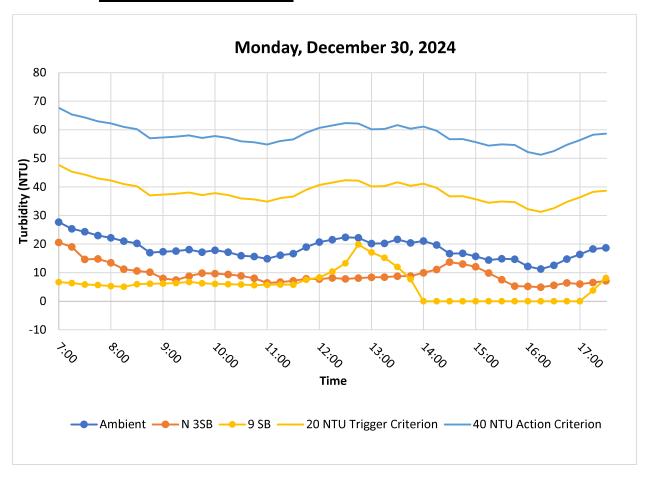
An exceedance to the trigger and action criterion occurred at the end of construction activities at 9SB on Thursday, January 2 as a result of extensive backfilling operations at 37 9<sup>th</sup>. Visual inspections at 17:30 did not confirm the exceedance. Visual inspections were also performed the

following morning and did not show signs of exceedances. Turbidity readings at the 9SB at the beginning of construction activities on Friday, January 3 had also stabilized and were no longer showing signs of an exceedance for no further action was required.

### 3. TURBIDITY BUOY DATA

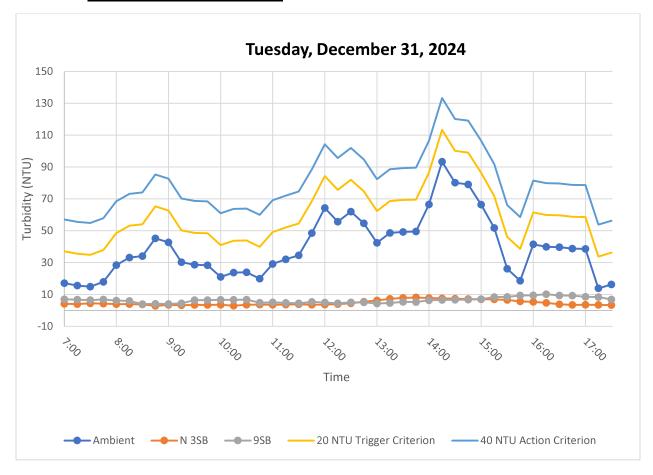
Throughout the reporting period, readings at the Ambient, 3SB, and 9SB sondes remained relatively stable. No data was recorded on Wednesday, January 1<sup>st</sup>, 2025, due to no work being performed on account of the holiday.

### 3.1 Monday, December 30, 2024



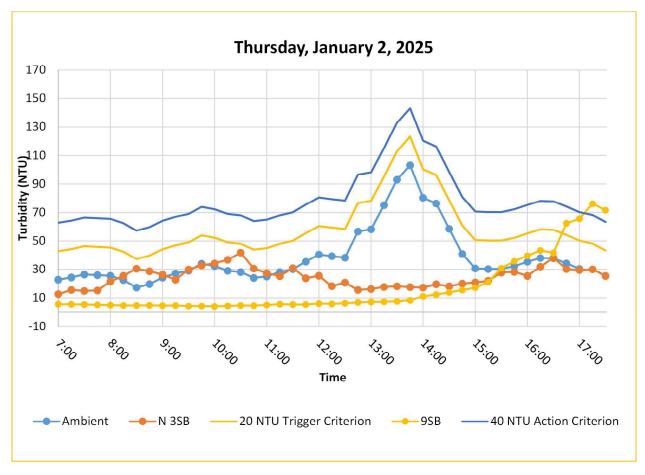
**Figure 3.** Hourly rolling average turbidity readings from 07:00 to 17:30.

### 3.2 Tuesday, December 31, 2024



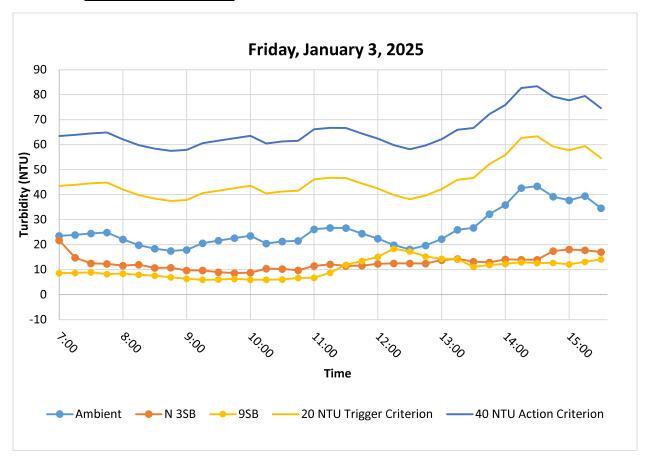
**Figure 4.** Hourly rolling average turbidity readings from 07:00 to 17:30.

### 3.3 Thursday, January 2, 2025



**Figure 5.** Hourly rolling average turbidity readings from 07:00 to 17:30.

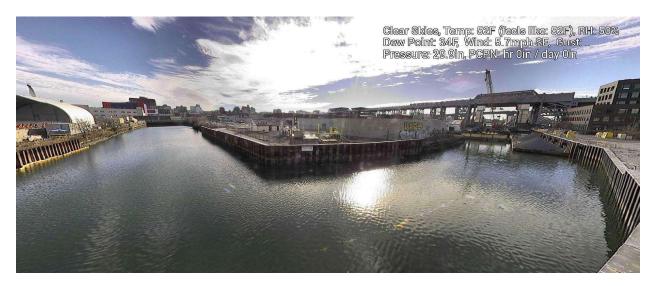
### 3.4 <u>Friday, January 3, 2025</u>



**Figure 6.** 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. Sheen was observed from Huntington Street on Thursday, January 2<sup>nd</sup> likely produced by rusting portions of the existing bulkhead on the Huntington Street end.



**Figure 7 – December 31, 2024.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge during in-waterway construction activities.



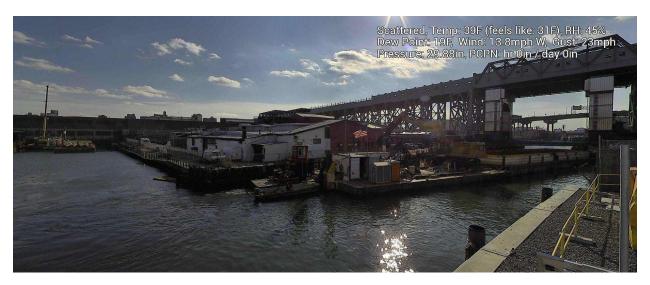
**Figure 8 – January 1, 2025.** General Conditions in Canal south of 3<sup>rd</sup> Street Bridge during inwaterway construction activities.



**Figure 9 – January 2, 2025.** Sheen observations at Huntington Street unrelated to in-waterway construction activities.



**Figure 10 – January 2, 2025.** Bulkhead conditions at Huntington Street resulting in sheen observations.



**Figure 11– January 3, 2025.** General Conditions in Canal north of 9<sup>th</sup> Street Bridge during inwaterway construction activities.

# Monday, Dec 30, 2024

Date	Time	•	Turbidity (NTU)		Rolling A	Rolling Average Turbidity (NTU)	(NTU)	Difference (NTU)	e (NTU)
		Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
12/30/2024	7:00:00	23.64611816	16.50346375	5.441473007	23.65	16.50	5.44	-7.14	-18.20
12/30/2024	7:15:00	23.23138618	10.78350067	3.065219164	23.44	13.64	4.25	-9.80	-19.19
12/30/2024	7:30:00	27.78749657	12.76310062	6.400213242	24.89	13.35	4.97	-11.54	-19.92
12/30/2024	7:45:00	16.54831886	17.81292152	6.192273617	22.80	14.47	5.27	-8.34	-17.53
12/30/2024	8:00:00	19.89281845	9.515054703	5.185948849	22.22	13.48	5.26	-8.75	-16.96
12/30/2024	8:15:00	17.59596825	5.273396015	4.353128433	21.01	11.23	5.04	-9.78	-15.97
12/30/2024	8:30:00	19.23475456	7.723928452	7.775409698	20.21	10.62	5.98	-9.59	-14.23
12/30/2024	8:45:00	11.7904892	10.52293396	7.033734798	17.01	10.17	6.11	-6.84	-10.90
12/30/2024	9:00:00	17.97055435	6.829366207	6.679701328	17.30	7.97	6.21	-9.32	-11.09
12/30/2024	9:15:00	21.26405525	6.69578886	5.788717747	17.57	7.41	6.33	-10.16	-11.25
12/30/2024	9:30:00	20.01780891	11.89519215	6.445031643	18.06	8.73	6.74	-9.32	-11.31
12/30/2024	9:45:00	14.73145771	13.2264204	5.379525661	17.15	9.83	6.27	-7.32	-10.89
12/30/2024	10:00:00	15.12759113	9.699884415	6.173210144	17.82	6.67	60.9	-8.15	-11.73
12/30/2024	10:15:00	14.58840847	5.253682613	5.940347195	17.15	9.35	5.95	-7.79	-11.20
12/30/2024	10:30:00	15.28151798	4.332023144	5.247159481	15.95	8.88	5.84	-7.07	-10.11
12/30/2024	10:45:00	18.36745834	7.691741467	5.46404314	15.62	8.04	5.64	-7.58	86.6-
12/30/2024	11:00:00	10.89067459	5.039680958	5.957960129	14.85	6.40	5.76	-8.45	60.6-
12/30/2024	11:15:00	21.24793434	11.17914867	6.606200695	16.08	6.70	5.84	-9.38	-10.23
12/30/2024	11:30:00	17.45342827	7.324186325	5.666058064	16.65	7.11	5.79	-9.53	-10.86
12/30/2024	11:45:00	26.8878994	7.934440136	13.92086887	18.97	7.83	7.52	-11.14	-11.45
12/30/2024	12:00:00	26.95353508	7.370240688	9.527046204	20.69	7.77	8.34	-12.92	-12.35
12/30/2024	12:15:00	15.08113861	6.832758427	16.05345917	21.52	8.13	10.35	-13.40	-11.17
12/30/2024	12:30:00	25.46256065	9.528324127	21.17685509	22.37	7.80	13.27	-14.57	-9.10
12/30/2024	12:45:00	16.57337952	8.662926674		22.19	8.07	15.17	-14.13	-7.02
12/30/2024	13:00:00	16.86056519	9.392834663	0	20.19	8.36	11.69	-11.83	-8.50
12/30/2024	13:15:00	27.3333683	7.567603588	0	20.26	8.40	9.31	-11.87	-10.95
12/30/2024	13:30:00	21.88030815	8.734994888	0	21.62	8.78	5.29	-12.84	-16.33
12/30/2024	13:45:00	19.37345123	9.670098305	-	20.40	8.81	0.00	-11.60	-20.40
12/30/2024	14:00:00	20.06039619	14.15904903		21.10	9:30	0.00	-11.20	-21.10
12/30/2024	14:15:00	9.601910591	15.45468903	-	19.65	11.12	0.00	-8.53	-19.65
12/30/2024	14:30:00	12.44933414	20.30182838	-	16.67	13.66	0.00	-3.01	-16.67
12/30/2024	14:45:00	22.31019402	5.354122162		16.76	12.99		-3.77	-
12/30/2024	15:00:00	13.99315643	5.04501915		15.68	12.06	-	-3.62	-
12/30/2024	15:15:00	13.82182312	3.210388899		14.44	9.87		-4.56	
12/30/2024	15:30:00	11.8167181	3.726634026		14.88	7.53		-7.35	-
12/30/2024	15:45:00	11.41232777	_		14.67	4.33		-10.34	
12/30/2024	16:00:00	9.926850319	4.637084961		12.19	4.15		-8.04	
12/30/2024	16:15:00	9.362987518	3.793121576		11.27	3.84		-7.43	
12/30/2024	16:30:00	20.24937439	6.542070866		12.55	4.67		-7.88	-
12/30/2024	16:45:00	22.82194519	8.015152931		14.75	5.75		-9.01	-
12/30/2024	17:00:00	19.38928413	6.938951969		16.35	5.99	-	-10.36	-
12/30/2024	17:15:00	19.55132484	7.239915371		18.27	6.51	-	-11.77	-
12/30/2024	17:30:00	11.26580143	6.790590286	-	18.66	7.11	1	-11.55	1

Date Time		l urbidity (NIO)			(Automotive Parisher Marian	()		(2)
	Ambient	N3SB	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
12/31/24 7:00:00	16.06	2.04	5.27	16.06	2.04	5.27	-14.02	-10.79
12/31/24 7:15:00	12.07	3.91		14.06	2.97	5.27	-11.09	62'8-
12/31/24 7:30:00	13.07	-	2.79	13.73	2.97	4.03	-10.76	02'6-
12/31/24 7:45:00	32.20	2.78	5.68	18.35	2.91	4.58	-15.44	-13.77
12/31/24 8:00:00	69.03	3.76	2.47	28.49	3.12	4.05	-25.36	-24.44
12/31/24 8:15:00	39.53	2.18	4.56	33.18	3.16	3.87	-30.02	-29.31
12/31/24 8:30:00	16.46	2.49	4.39	34.06	2.80	3.98	-31.26	-30.08
12/31/24 8:45:00	80.69	2.97	3.80	45.26	2.84	4.18	-42.43	-41.08
12/31/24 9:00:00	19.37	-	5.22	42.70	2.85	4.09	-39.85	-38.61
12/31/24 9:15:00	6.78	2.68	4.39	30.24	2.58	4.47	-27.66	-25.77
12/31/24 9:30:00	31.62	3.37	-	28.66	2.88	4.45	-25.78	-24.21
12/31/24 9:45:00	15.05	2.59	4.18	28.38	2.90	4.40	-25.47	-23.98
12/31/24 10:00:00	32.15	3.29	4.67	20.99	2.98	4.61	-18.01	-16.38
12/31/24 10:15:00	32.81	2.78	5.19	23.68	2.94	4.61	-20.74	-19.07
12/31/24 10:30:00	7.85	1	4.81	23.90	3.01	4.71	-20.89	-19.18
12/31/24 10:45:00	11.77	3.77	5.18	19.93	3.11	4.81	-16.82	-15.12
12/31/24 11:00:00	61.11	2.10	5.32	29.14	2.98	5.04	-26.16	-24.10
12/31/24 11:15:00	46.70	3.78	3.11	32.05	3.11	4.72	-28.94	-27.32
12/31/24 11:30:00	45.53	3.90	3.77	34.59	3.39	4.44	-31.21	-30.15
12/31/24 11:45:00	77.57	4.11	1	48.54	3.53	4.35	-45.01	-44.19
12/31/24 12:00:00	90.40	4.07	3.15	64.26	3.59	3.84	-60.67	-60.42
12/31/24 12:15:00	17.92	3.76	3.01	55.62	3.92	3.26	-51.70	-52.36
12/31/24 12:30:00	78.44	6.17	6.32	61.97	4.40	4.06	-57.57	16.73-
12/31/24 12:45:00	9.16	9.20	3.77	54.70	5.46	4.06	-49.24	-50.63
12/31/24 13:00:00	16.07	8.12	5.59	42.40	6.26	4.37	-36.13	-38.03
12/31/24 13:15:00	1	00.6	4.29	30.40	7.25	4.60	-23.15	-25.80
12/31/24 13:30:00	21.38	6.79	6.82	31.26	7.85	5.36	-23.41	-25.90
12/31/24 13:45:00	79.84	7.44	5.78	31.61	8.11	5.25	-23.50	-26.36
12/31/24 14:00:00	93.79	7.54	9.49	52.77	7.78	6.40	-44.99	-46.38
12/31/24 14:15:00	-	6.95	6.43	65.00	7.54	6.56	-57.46	-58.44
12/31/24 14:30:00	55.39	7.97	4.73	62.60	7.34	6.65	-55.26	-55.95
12/31/24 14:45:00	16.14	5.75	7.22	61.29	7.13	6.73	-54.16	-54.56
12/31/24 15:00:00	16.55	6.41	7.25	45.47	6.93	7.02	-38.54	-38.44
12/31/24 15:15:00	20.51	7.50	-	27.15	6.92	6.41	-20.23	-20.74
12/31/24 15:30:00	22.12	4.90	7.36	26.14	6.51	6.64	-19.64	-19.50
12/31/24 15:45:00	17.63	3.61	9:00	18.59	5.63	7.71	-12.96	-10.89
12/31/24 16:00:00	-	4.11	7.92	19.20	5.31	7.88	-13.90	-11.32
12/31/24 16:15:00	8.72	3.82	10.69	17.25	4.79	8.74	-12.46	-8.50
	19.37	2.64	11.92	16.96	3.82	9.38	-13.15	-7.58
12/31/24 16:45:00	17.64	3.17	96.98	15.84	3.47	9.30	-12.37	-6.54
	16.86	3.79	5.24	15.65	3.51	8.55	-12.14	-7.10
12/31/24 17:15:00	89.9	3.65	7.18	13.85	3.41	8.40	-10.44	57 5-
00.00.71								0

### Table 5

## Thursday, Jan 2, 2025

Date         Inne         Ambient           1/2/2025         7:00:00         34.91521835           1/2/2025         7:15:00         32.3333592           1/2/2025         7:30:00         19.54952049           1/2/2025         7:30:00         19.54952049           1/2/2025         7:45:00         21.94441795           1/2/2025         8:00:00         18.81547546           1/2/2025         8:30:00         6.269519806           1/2/2025         8:30:00         6.269519806           1/2/2025         8:45:00         31.7144928           1/2/2025         8:45:00         32.81179428           1/2/2025         9:45:00         30.8355999           1/2/2025         9:45:00         32.83438815           1/2/2025         10:00:00         27.34603119           1/2/2025         10:00:00         27.35527458           1/2/2025         10:00:00         27.36507217           1/2/2025         10:00:00         27.36507217           1/2/2025         11:30:00         38.7655229           1/2/2025         11:45:00         38.7358648           1/2/2025         12:30:00         37.4660319           1/2/2025         12:30:00         3	ent N3SB 21835 7.321973324 85922 25.83830261 52049 19.83638382							
7:00:00 7:15:00 7:15:00 8:00:00 8:00:00 8:15:00 8:15:00 8:15:00 9:15:00 9:15:00 10:00:00 11:30:00 11:45:00 12:45:00 12:45:00 13:45:00 13:45:00 14:45:00	HH	TB4	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
7:15:00 7:30:00 7:30:00 8:00:00 8:00:00 8:30:00 8:30:00 9:00:00 9:15:00 9:45:00 10:45:00 11:45:00 11:45:00 13:45:00 14:45:00		7.321973324	6.947540283	34.92	7.32	6.95	-27.59	-27.97
7:30:00 7:45:00 8:00:00 8:00:00 8:30:00 8:30:00 9:00:00 9:15:00 9:45:00 10:45:00 11:45:00		25.83830261	4.732679367	33.63	16.58	5.84	-17.05	-27.79
7.45:00 8:00:00 8:00:00 8:30:00 8:30:00 9:00:00 9:15:00 9:45:00 10:45:00 11:45:00 12:45:00 13:45:00 14:40:00 14:45:00 14:45:00 14:45:00 14:45:00 14:45:00 14:45:00 14:45:00 14:45:00 14:45:00		19.83638382	4.538216114	28.94	17.67	5.41	-11.27	-23.53
8:00:00 8:15:00 8:30:00 8:30:00 9:00:00 9:15:00 9:45:00 10:30:00 11:30:00 11:45:00 12:45:00 13:45:00 14:10:00 14:30:00 14:30:00 14:30:00		17.92699051	5.016012192	27.19	17.73	5.31	-9.46	-21.88
8:15:00 8:30:00 8:30:00 9:00:00 9:15:00 9:45:00 10:30:00 11:30:00 11:45:00 12:45:00 13:45:00 13:45:00 14:30:00 14:30:00 14:30:00 14:30:00	17546 37.15338516	37.15338516	3.955807686	25.52	21.62	5.04	-3.90	-20.48
8:30:00 8:45:00 9:00:00 9:15:00 9:45:00 10:00:00 10:45:00 11:30:00 11:45:00 12:45:00 13:45:00 13:45:00 14:30:00 14:30:00 14:30:00 14:30:00 14:30:00 14:30:00	14693 26.68480301	26.68480301	5.981199265	22.53	25.49	4.84	2.96	-17.69
8.45:00 9:00:00 9:15:00 9:30:00 9:45:00 10:00:00 10:45:00 11:30:00 11:45:00 12:45:00 13:45:00 13:45:00 14:10:00 14:15:00 14:15:00 14:15:00 14:15:00 14:15:00	19806 50.72095871	50.72095871	4.968865395	17.31	30.46	4.89	13.15	-12.42
9:00:00 9:15:00 9:30:00 9:45:00 10:00:00 10:15:00 10:45:00 11:30:00 11:45:00 12:45:00 12:45:00 13:45:00 13:45:00 14:10:00 14:15:00 14:15:00 14:15:00		10.87629223	4.633034706	19.75	28.67	4.91	8.93	-14.84
9:15:00 9:30:00 9:45:00 10:00:00 10:15:00 10:45:00 11:30:00 11:45:00 12:45:00 12:45:00 13:45:00 13:45:00 14:00:00 14:15:00 14:30:00 14:30:00	5.859287262	5.859287262	4.231167793	24.25	26.26	4.75	2.01	-19.49
9:30:00 9:45:00 10:00:00 10:15:00 10:30:00 10:45:00 11:30:00 11:45:00 12:45:00 13:45:00 13:45:00 14:30:00 14:30:00 14:30:00	79428 20.09645653	20.09645653	4.172251225	27.05	22.85	4.80	-4.20	-22.25
9:45:00 10:00:00 10:15:00 10:30:00 10:45:00 11:15:00 11:15:00 11:45:00 12:45:00 13:45:00 13:45:00 14:00:00 14:15:00 14:30:00 14:45:00	53245 62.11800385	62.11800385	4.121654034	29.09	29.93	4.43	0.85	-24.66
10:00:00 10:15:00 10:30:00 10:45:00 11:00:00 11:15:00 11:45:00 12:45:00 13:45:00 14:30:00 14:30:00 14:30:00		64.84119415	4.699213982	34.00	24.74	4.37	-9.26	-29.63
10:15:00 10:30:00 10:45:00 11:00:00 11:15:00 11:45:00 12:45:00 13:45:00 14:100:00 14:15:00 14:30:00	18.4268074	18.4268074	3.823842764	32.32	26.63	4.21	-5.70	-28.11
10:30:00 10:45:00 11:00:00 11:15:00 11:30:00 11:45:00 12:45:00 13:45:00 14:00:00 14:15:00 14:30:00	27458 18.63780975	18.63780975	5.784828663	29.03	29.82	4.52	0.79	-24.51
10:45:00 11:00:00 11:15:00 11:30:00 11:45:00 12:30:00 12:45:00 13:45:00 13:45:00 14:00:00 14:15:00 14:30:00		45.24448013	5.719600201	28.03	36.11	4.83	8.07	-23.20
11:00:00 11:15:00 11:30:00 11:45:00 12:00:00 12:45:00 13:45:00 13:45:00 14:00:00 14:15:00 14:30:00	5.385420322	5.385420322	3.701175451	24.04	21.92	4.75	-2.12	-19.30
11:15:00 11:30:00 11:45:00 12:00:00 12:15:00 12:45:00 13:00:00 13:15:00 13:45:00 14:00:00 14:15:00 14:30:00		48.53122711	6.831876278	25.02	21.92	5.17	-3.09	-19.84
11:30:00 11:45:00 12:00:00 12:15:00 12:45:00 13:30:00 13:45:00 14:10:00 14:15:00 14:30:00	8.795459747	8.795459747	6.5750103	28.09	19.52	5.72	-8.57	-22.37
11:45:00 12:00:00 12:15:00 12:30:00 12:45:00 13:15:00 13:30:00 13:45:00 14:15:00 14:30:00	25229	46.35488129	4.902998924	30.15	19.81	5.55	-10.34	-24.60
12:00:00 12:15:00 12:30:00 12:45:00 13:15:00 13:30:00 13:45:00 14:00:00 14:30:00	9.819710732	9.819710732	5.850047588	35.52	8.00	5.57	-27.52	-29.95
12:15:00 12:30:00 12:45:00 13:00:00 13:15:00 13:45:00 14:15:00 14:30:00	38748 13.75929451	-	6.896461964	40.56	10.79	6.21	-29.77	-34.35
12:30:00 12:45:00 13:00:00 13:15:00 13:45:00 14:15:00 14:30:00	13.12267017	13.12267017	5.586549759	39.37	11.37	5.96	-27.99	-33.41
12:45:00 13:00:00 13:15:00 13:30:00 14:00:00 14:15:00 14:30:00	78195 20.80736351	20.80736351	8.926332474	38.35	14.38	6.43	-23.98	-31.92
13:00:00 13:15:00 13:30:00 14:00:00 14:30:00		20.65503883	7.450973511	56.67	15.63	6.94	-41.03	-49.72
13:15:00 13:30:00 13:45:00 14:00:00 14:30:00	12.88991261	12.88991261	7.582475185	58.24	16.25	7.29	-41.99	-50.95
13:30:00 13:45:00 14:15:00 14:30:00	57101 21.12449646	21.12449646	7.392496109	75.25	17.72	7.39	-57.53	-67.86
13:45:00 14:00:00 14:15:00 14:30:00	59901 15.78234863	15.78234863	7.725691319	93.08	18.25	7.82	-74.83	-85.26
14:00:00 14:15:00 14:30:00	35303 18.01066399	1	11.99653149	103.23	17.69	8.43	-85.54	-94.80
14:15:00		18.53274155	20.98501968	80.34	17.27	11.14	-63.08	-69.21
14:30:00		24.67831421	13.66412449	76.31	19.63	12.35	-56.69	-63.96
14.45.00	77075 14.06966114	14.06966114	15.22205639	58.61	18.21	13.92	-40.39	-44.69
14:45:00		25.53884888	15.63905239	41.00	20.17	15.50	-20.83	-25.50
1/2/2025 15:00:00 32.85496521		21.95815086	21.0471096	30.69	20.96	17.31	-9.73	-13.38
15:15:00	16253 23.79558945	23.79558945	40.22031403	30.26	22.01	21.16	-8.25	-9.10
1/2/2025 15:30:00 42.47054672		53.29388428	61.45083618	30.28	21.34	30.72	-8.94	0.44
1/2/2025 15:45:00 41.81419373	19373 16.6158886	16.6158886	40.9280014	32.25	21.98	35.86	-10.27	3.61
1/2/2025   16:00:00   46.49124908	24908 11.13848495	11.13848495	34.58489609	35.38	18.38	39.62	-17.00	4.27
1/2/2025 16:15:00 46.60480499	30499 54.760746	54.760746	40.33584976	38.13	26.58	43.50	-11.55	5.38
1/2/2025 16:30:00 11.59238338	38338	-	31.49077797	37.79	27.51	41.76	-10.29	3.96
1/2/2025   16:45:00   24.5626297		13.1192379	165.4034882	34.21	23.91	62.55	-10.30	28.34
17:00:00		13.25951481	56.52799988	30.31	23.07	65.67	-7.25	35.35
17:15:00 35	7178 13.40991497	13.40991497	87.61112976	28.21	23.64	76.27	-4.57	48.06
1/2/2025 17:30:00 22.94	22.94618034	31.9790802	16.96810341	23.48	13.26	71.60	-10.22	48.12

## Friday, Jan 3, 2025

-		Turbidity (NTU)			Rolling Average Turbidity (NTU)	1 _ 1	Differen	Difference (NTU)
	띧	4	9SB	Ambient	N3SB	9SB	N3SB - Ambient	9SB - Ambient
11.99517918	11.99517	7918	7.557769299	30.85	12.00	7.56	-18.85	-23.29
14.90346527	14.903465	27	8.507778168	27.22	13.45	8.03	-13.77	-19.18
8.442501068	8.4425010	89	10.12870502	25.99	11.78	8.73	-14.21	-17.26
23.04375267 12.75277996 12.75277996	12.752779	96	7.811182499	25.26	12.02	8.50	-13.23	-16.76
9.411038399 9.791222572 9.7912225	9.791222	372	7.803724766	22.09	11.58	8.36	-10.51	-13.73
19.40379524   14.10020542   14.10020	14.10020	542	5.511891842	19.80	12.00	7.95	-7.80	-11.85
16.58744621 8.328767776 8.328767	8.32876	9///	6.51405859	18.40	10.68	7.55	-7.72	-10.85
19.0519619 8.894451141 8.894451	8.894451	141	6.80286026	17.50	10.77	68.9	-6.73	-10.61
24.78317451 7.099632263 7.099632	7.099632	263	4.999328136	17.85	9.64	6.33	-8.20	-11.52
23.02499962   10.05911064   10.059110	10.059110	)64	5.847782135	20.57	9.70	5.94	-10.87	-14.64
24.37726784   10.47799206   10.47799206	10.477992	90:	5.926850796	21.56	8.97	6.02	-12.59	-15.55
21.62169456   6.445531368   6.445531368	6.4455313	89	7.638551235	22.57	8.60	6.24	-13.98	-16.33
23.76591492   9.613171577   9.6131715	9.6131715	77	5.29781723	23.51	8.74	5.94	-14.78	-17.57
9.46363163 15.26324844 15.26324844	15.263248	44	5.149611473	20.45	10.37	5.97	-10.08	-14.48
26.93053436 9.456139565 9.456139	9.456139	565	6.056331635	21.23	10.25	6.01	-10.98	-15.22
25.90395927 7.9155159 7.9155159	7.915515	6	9.180953979	21.54	9.74	99:9	-11.80	-14.87
14.9714632 14.9714632	14.971463	2	7.930480957	21.52	11.44	6.72	-10.07	-14.79
26.77642059 12.83975601 12.83975601	12.839756	01	15.18065929	22.27	12.09	8.70	-10.18	-13.57
9.000609398 12.26486492 12.26486492	12.264864	192	21.07360458	22.15	11.49	11.88	-10.66	-10.27
15.88394451 9.993328094 9.993328	9.993328	094	13.85451031	19.39	11.60	13.44	-7.79	-5.95
11.28820038	11.2882(	3038	17.58572388	16.90	12.27	15.12	-4.63	-1.77
31.45248413 15.9258213 15.9258	15.9258	213	23.95744324	19.81	12.46	18.33	-7.35	-1.48
18.46201134   13.0915184   13.0915	13.0915	184	9.850910187	18.15	12.51	17.26	-5.63	-0.88
16.54773331 11.6544075 11.6544075	11.6544(	375	10.87133312	19.66	12.39	15.22	-7.27	-4.43
28.52780342 16.74325371 16.74325371	16.74325	371	9.3878088	22.19	13.74	14.33	-8.44	-7.85
34.62038803 13.98365784 13.98365784	13.98365	784	17.17554474	25.92	14.28	14.25	-11.64	-11.67
35.18298721   10.55914783   10.55914783	10.55914	783	8.07454586	26.67	13.21	11.07	-13.46	-15.60
46.15669632 11.35102558 11.35102	11.35102	558	13.76233292	32.21	12.86	11.85	-19.35	-20.35
34.70698166   17.83300591   17.83300591	17.83300	591	13.19922161	35.84	14.09	12.32	-21.74	-23.52
62.57770538 16.1421051 16.1421051	16.14210	)51	12.32420254	42.65	13.97	12.91	-28.68	-29.74
38.15716171 13.78516865 13.78516865	13.7851	9892	15.54195881	43.36	13.93	12.58	-29.42	-30.78
14.41107178 28.02388573 28.02388573	28.023	38573	8.528273582	39.20	17.43	12.67	-21.77	-26.53
38.78380966   14.55687714   14.55687714	14.5568	37714	11.03352737	37.73	18.07	12.13	-19.66	-25.60
43.22145462   16.27561951   16.2756	16.2756	1951	18.11268997	39.43	17.76	13.11	-21.67	-26.32
38.20068741   12.36975384   12.3697	12.36975384	5384	17.05988503	34.55	17.00	14.06	-17.55	-20.50