

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

**PERIOD: April 5 to April 9, 2021**

**Date of Report: April 14, 2021**

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*Prepared by*

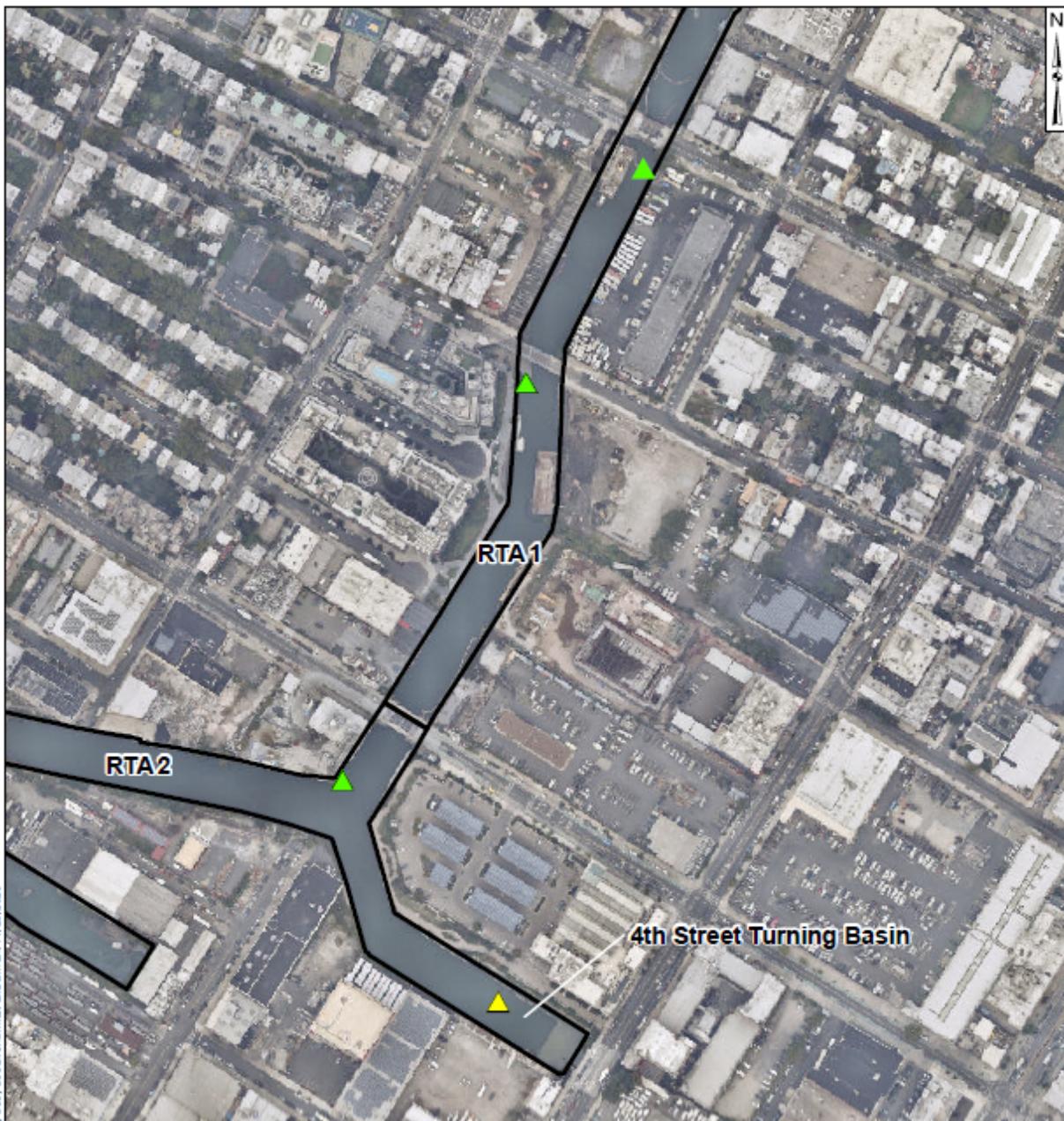
B&B Engineers & Geologists ▶  
of new york, p.c.

*an affiliate of Geosyntec Consultants*

1255 Roberts Blvd, Suite 200  
Kennesaw, GA 30144  
Project Number JR0289A

## **1. SCOPE OF MONITORING**

The following report summarizes water quality monitoring data collected during the week of April 5, 2021. In accordance with the Water Quality Monitoring Plan for In-waterway Construction Activities (WQMP) three turbidity buoys were deployed to monitor turbidity at the start of dredging between Carroll Street Bridge and 3<sup>rd</sup> Street Bridge. One turbidity buoy was deployed just south of the 3<sup>rd</sup> Street Bridge outside of the air curtain and traditional turbidity curtain. This buoy is referred to as the 3<sup>rd</sup> Street Sentinel Buoy. A second turbidity buoy was deployed just south of the 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. This turbidity buoy is referred to as the Ambient Buoy. Prior to dredging north of the Union Street Bridge, on January 22, 2021 a fourth turbidity buoy was deployed just south of the Union Street Bridge and is referred to as the Union Street Sentinel Buoy. A map indicating the approximate locations of the turbidity buoys is provided in **Figure 1**. 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. This report presents a summary of turbidity data collected from the ambient and sentinel buoys between 7 AM and 6 PM each day during the week of April 5. Daily turbidity data tables are provided in **Appendix A**. No handheld measurements were collected during this reporting period. Visual observations of turbidity and sheen are summarized in Section 4.



\Beverly\Gowanus-PRM03\_Geovm\Canal\_wide\Turbidity Buoy Locations.mxd 1/28/2020

**Legend**

- ▲ Ambient Buoy
- ▲ Sentinel Buoy
- RTA Boundary

300 150 0 300  
Feet

**Turbidity Buoy Locations**

Gowanus Canal, Brooklyn, NY

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Kennesaw, GA

February 2021

**Figure**

**1**

## **2. REPORT OF EXCEEDANCES**

No exceedances of the numerical action criterion were observed during the reporting period. Exceedances of the numerical trigger criterion were observed on April 5<sup>th</sup> at the 3<sup>rd</sup> Street Sentinel Buoy from 11:15 AM to 1:15 PM and at the Carroll Street Sentinel Buoy from 11:00 AM to 1:10 PM. Exceedances of the numerical trigger criterion were observed on April 6<sup>th</sup> at the Carroll Street Sentinel Buoy from 2:00 PM to 2:30 PM. Exceedances of the numerical trigger criterion were observed at the Carroll Street Sentinel Buoy on April 7<sup>th</sup> from 11:30 AM to 11:45 AM and again from 2:45 PM to 3:45 PM. Exceedances of the numerical trigger criterion were observed on April 8<sup>th</sup> at the Carroll Street Sentinel Buoy at 1:30 PM and at 3:15 PM. No exceedances were observed on April 9<sup>th</sup>.

- **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
  - 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 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 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. Exceedances to the numerical trigger criterion were a result of sediment resuspension from project-related vessel traffic.

### 3. TURBIDITY BUOY DATA

The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from April 5 to April 9, 2021. No exceedances of the action level criteria occurred during this reporting period. Exceedances to the trigger level numerical criterion occurred on April 5, 6, 7, and 8 at the Carroll St Sentinel Buoy and on April 5 at the 3<sup>rd</sup> St Sentinel Buoy.

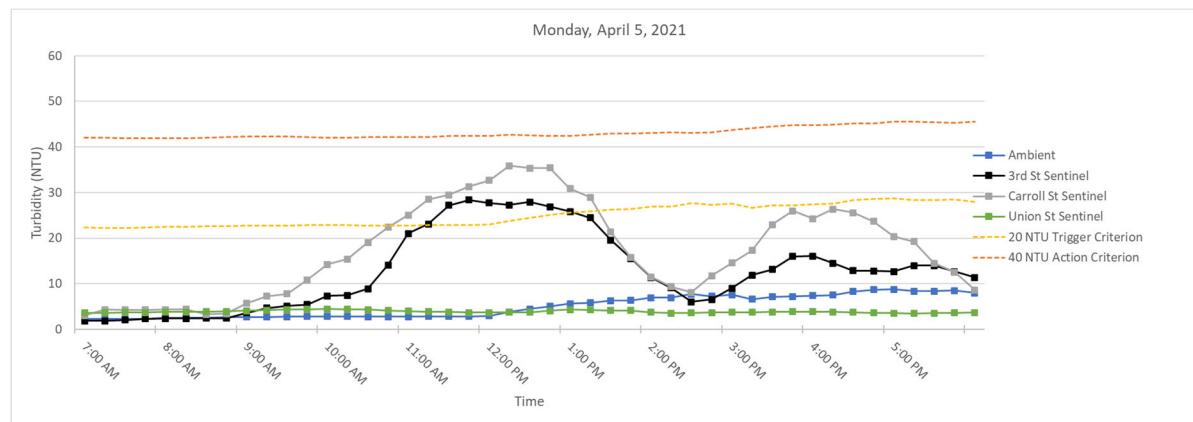
Section 2.1 contains further information on these exceedances. **Table 1** below provides a summary of the turbidity data for the reporting period.

**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

Date	Average Rolling Average Difference (NTU)			Maximum Rolling Average Difference (NTU)		
	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
Monday April 5, 2021	7.74	12.37	-1.12	25.55	32.05	1.59
Tuesday April 6, 2021	5.80	7.67	-0.78	15.55	21.52	1.02
Wednesday April 7, 2021	6.88	9.88	-1.61	18.21	23.69	1.45
Thursday April 8, 2021	4.47	7.35	0.00	13.58	20.84	1.49
Friday April 9, 2021	1.91	2.87	0.35	9.95	11.95	2.52

#### 3.1 Monday, April 5, 2021

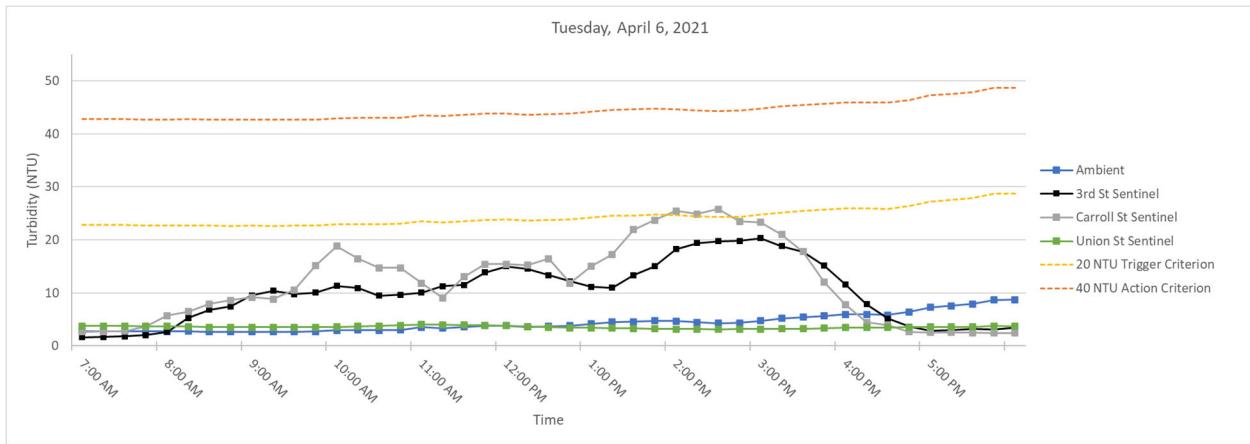
**Figure 2.** Hourly rolling average turbidity readings on Monday, April 5, 2021 from 7 AM to 6 PM.



**Note:** On April 5, 2021 one spike in turbidity at the 3<sup>rd</sup> Street Sentinel Buoy of 38.91 NTU at 11:00 AM and one spike in turbidity at the Carroll Street Sentinel Buoy of 146.34 NTU at 10:45 AM were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

### **3.2 Tuesday, April 6, 2021**

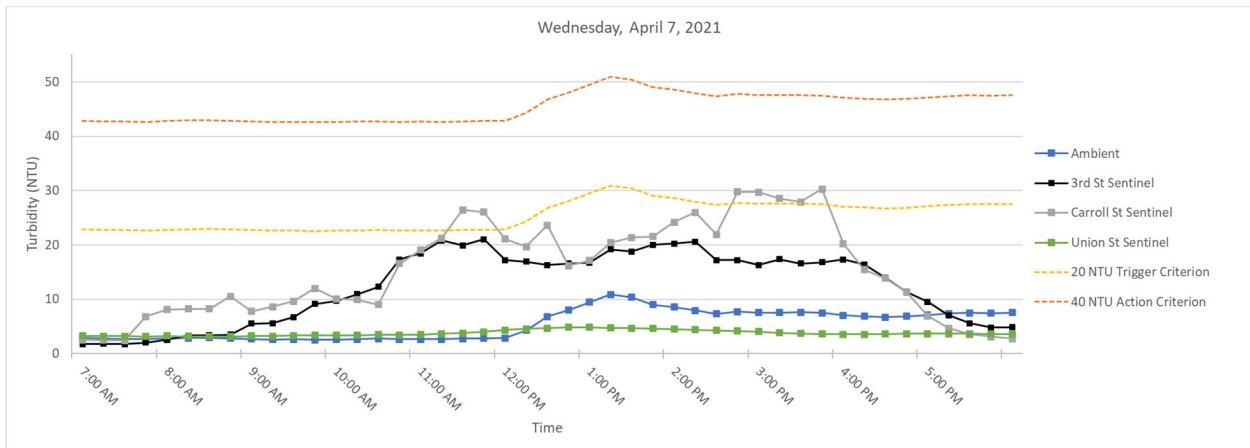
**Figure 3.** Hourly rolling average turbidity readings on Tuesday, April 6, 2021 from 7 AM to 6 PM.



**Note:** On April 6, 2021 one spike in turbidity at the 3<sup>rd</sup> Street Sentinel Buoy of 33.33 NTU at 10:00 AM and three spikes in turbidity at the Carroll Street Sentinel Buoy of 19.45 NTU at 8:15 AM and 29.93 NTU at 9:00 AM, and 30.97 NTU at 11:45 AM, respectively, were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

### **3.3 Wednesday, April 7, 2021**

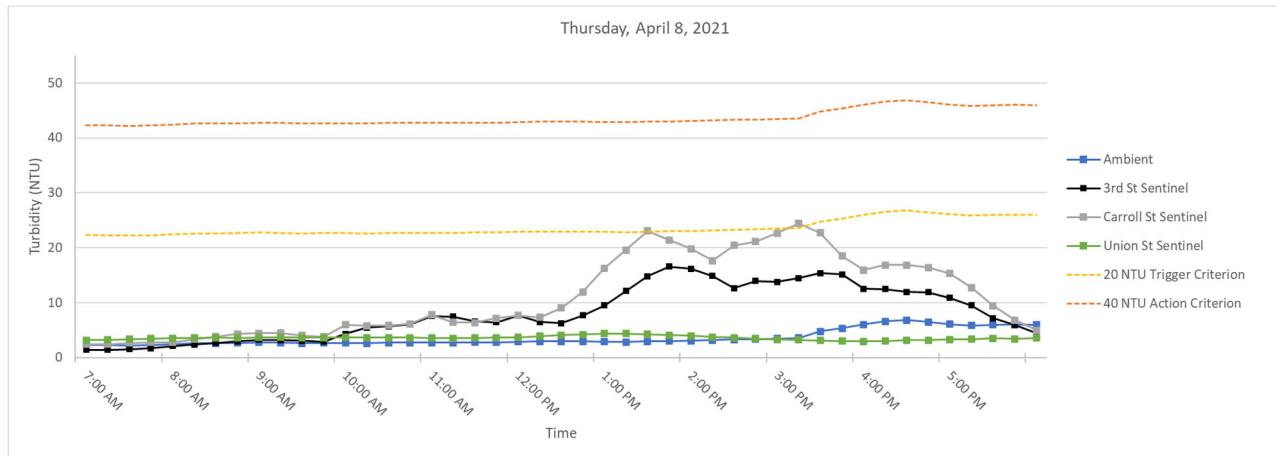
**Figure 4.** Hourly rolling average turbidity readings on Wednesday, April 7, 2021 from 7 AM to 6 PM.



**Note:** On March 31, 2021 two spikes in turbidity at the 3<sup>rd</sup> Street Sentinel Buoy of 40.29 NTU at 12:00 PM and 38.65 NTU at 3:00 PM, respectively, and one spike in turbidity at the Carroll Street Sentinel Buoy of 57.34 at 12:00 PM were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

### **3.4 Thursday, April 8, 2021**

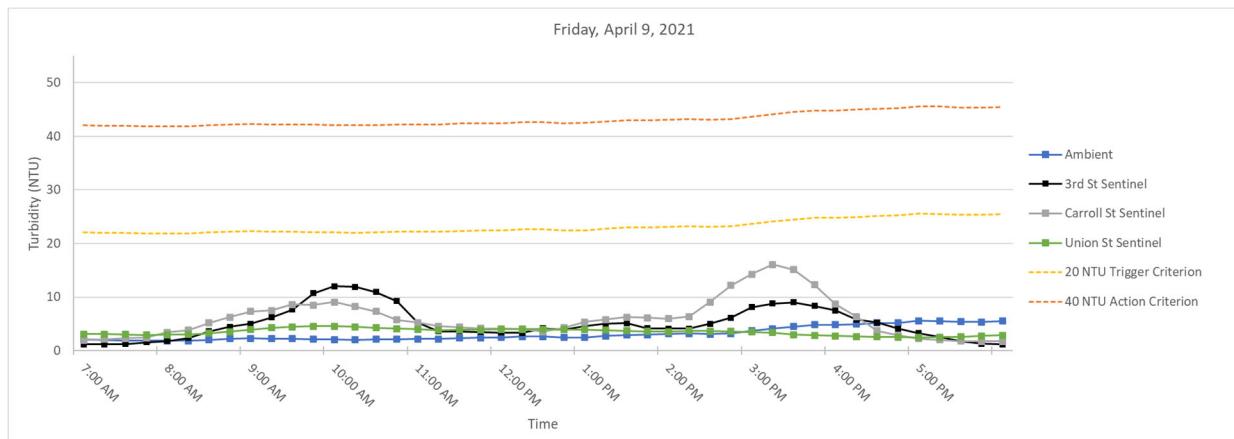
**Figure 5.** Hourly rolling average turbidity readings on Thursday, April 8, 2021 from 7 AM to 6 PM.



**Note:** On April 8, 2021 one spike in turbidity at the Ambient Sentinel Buoy of 7.44 NTU at 2:30 PM, and two spikes in turbidity at the Carroll Street Sentinel Buoy of 7.37 NTU at 7:45 AM and 23.84 NTU at 11:45 AM, respectively, were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

### **3.5 Friday, April 9, 2021**

**Figure 6.** Hourly rolling average turbidity readings on Friday, April 9, 2021 from 7 AM to 6 PM.



**Note:** On April 9, 2021 one spike in turbidity at the Carroll Street Sentinel Buoy of 22.96 NTU at 9:45 AM, and one spike in turbidity at the 3rd Street Sentinel Buoy of 2.42 NTU at 6:00 PM were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

## **SUMMARY OF VISUAL OBSERVATIONS**

Some sheen was observed during dredging between 3<sup>rd</sup> Street and Carroll Street. Absorbent booms were deployed to contain this sheen. No sheen was observed migrating beyond the engineering controls deployed at the 3<sup>rd</sup> Street Bridge.

## **APPENDIX A**

### **Turbidity Data Tables**

## Monday, April 5, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)			Difference (NTU)			
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	2.39	2.07	2.84	3.9	2.32	1.83	3.03	3.60	-0.49	0.70	1.28
7:15:00	2.21	1.85	9.54	3.72	2.27	1.85	4.32	3.64	-0.43	2.05	1.37
7:30:00	2.37	3.11	2.93	3.78	2.23	2.09	4.29	3.74	-0.14	2.06	1.51
7:45:00	2.69	2.67	3.13	3.64	2.33	2.30	4.28	3.71	-0.04	1.94	1.38
8:00:00	2.83	2.13	3.12	3.96	2.50	2.37	4.31	3.80	-0.13	1.81	1.30
8:15:00	2.47	2.13	3.21	4.02	2.51	2.38	4.39	3.82	-0.14	1.87	1.31
8:30:00	2.61	2.32	4.17	4.02	2.59	2.47	3.31	3.88	-0.12	0.72	1.29
8:45:00	2.48	2.98	3.37	4.16	2.62	2.45	3.40	3.96	-0.17	0.78	1.34
9:00:00	3.08	8.66	14.56	4.38	2.69	3.64	5.69	4.11	0.95	2.99	1.41
9:15:00	2.97	7.09	11.21	4.31	2.72	4.64	7.30	4.18	1.91	4.58	1.46
9:30:00	2.84	4.45	5.77	4.67	2.80	5.10	7.82	4.31	2.30	5.02	1.51
9:45:00	2.83	4.13	19.41	4.45	2.84	5.46	10.86	4.39	2.62	8.02	1.55
10:00:00	2.61	12.47	13.58	4.48	2.87	7.36	12.91	4.46	4.49	10.04	1.59
10:15:00	2.92	9.3	20.46	4.13	2.83	7.49	14.09	4.41	4.65	11.25	1.57
10:30:00	2.69	14.03	29.44	3.94	2.78	8.88	17.73	4.33	6.10	14.95	1.56
10:45:00	2.98	30.52	146.34	3.64	2.81	14.09	45.85	4.13	11.28	43.04	1.32
11:00:00	2.76	38.91	38.54	3.87	2.79	21.05	49.67	4.01	18.25	46.88	1.22
11:15:00	2.98	22.67	34.19	3.87	2.87	23.09	53.79	3.89	20.22	50.93	1.02
11:30:00	2.7	29.94	24.33	3.65	2.82	27.21	54.57	3.79	24.39	51.75	0.97
11:45:00	2.7	19.81	36.78	3.56	2.82	28.37	56.04	3.72	25.55	53.21	0.89
12:00:00	3.6	27.44	38.05	3.64	2.95	27.75	34.38	3.72	24.81	31.43	0.77
12:15:00	7.26	36.47	46.16	4.12	3.85	27.27	35.90	3.77	23.42	32.05	-0.08
12:30:00	6	25.97	31.49	3.64	4.45	27.93	35.36	3.72	23.47	30.91	-0.73
12:45:00	5.76	24.82	24.71	5.53	5.06	26.90	35.44	4.10	21.84	30.37	-0.97
13:00:00	5.47	14.66	13.81	4.7	5.62	25.87	30.84	4.33	20.25	25.23	-1.29
13:15:00	4.7	20.35	28.66	3.47	5.84	24.45	28.97	4.29	18.62	23.13	-1.55
13:30:00	9.57	12.19	8.19	3.49	6.30	19.60	21.37	4.17	13.30	15.07	-2.13
13:45:00	6.38	5.63	3.26	3.46	6.38	15.53	15.73	4.13	9.15	9.35	-2.25
14:00:00	8.5	4.17	3.48	3.63	6.92	11.40	11.48	3.75	4.48	4.56	-3.17
14:15:00	5.56	3.3	3.35	3.81	6.94	9.13	9.39	3.57	2.19	2.45	-3.37
14:30:00	8.51	4.75	22.19	3.6	7.70	6.01	8.09	3.60	-1.70	0.39	-4.11
14:45:00	7.56	14.97	26.68	3.84	7.30	6.56	11.79	3.67	-0.74	4.49	-3.63
15:00:00	7.89	17.93	17.22	3.76	7.60	9.02	14.58	3.73	1.42	6.98	-3.88
15:15:00	3.72	18.39	17.04	3.72	6.65	11.87	17.30	3.75	5.22	10.65	-2.90
15:30:00	8.19	9.68	31.93	4.11	7.17	13.14	23.01	3.81	5.97	15.84	-3.37
15:45:00	8.81	18.92	37	4.06	7.23	15.98	25.97	3.90	8.74	18.74	-3.34
16:00:00	8.36	15.49	18.26	3.65	7.39	16.08	24.29	3.86	8.69	16.90	-3.53
16:15:00	8.66	9.91	27.68	3.6	7.55	14.48	26.38	3.83	6.93	18.83	-3.72
16:30:00	7.59	10.39	13.13	3.26	8.32	12.88	25.60	3.74	4.56	17.28	-4.59
16:45:00	9.96	9.3	22.28	3.65	8.68	12.80	23.67	3.64	4.13	14.99	-5.03
17:00:00	9.38	18.27	20.44	3.58	8.79	12.67	20.36	3.55	3.88	11.57	-5.24
17:15:00	6.47	22.13	12.91	3.49	8.41	14.00	19.29	3.52	5.59	10.88	-4.90
17:30:00	8.61	9.9	3.67	3.78	8.40	14.00	14.49	3.55	5.60	6.08	-4.85
17:45:00	8.15	3.97	3.61	3.53	8.51	12.71	12.58	3.61	4.20	4.07	-4.91
18:00:00	7.39	2.48	2.51	4.05	8.00	11.35	8.63	3.69	3.35	0.63	-4.31

## Tuesday, April 6, 2021

7:00:00	2.57	1.75	2.9	3.87	2.81	1.64	2.66	3.74	-1.17	-0.15	0.94
7:15:00	2.85	1.81	2.89	3.86	2.79	1.69	2.73	3.78	-1.10	-0.06	0.99
7:30:00	2.84	2.08	2.84	3.74	2.80	1.80	2.80	3.79	-1.00	0.00	0.99
7:45:00	2.68	2.71	6.83	3.69	2.71	2.02	3.63	3.74	-0.70	0.91	1.02
8:00:00	2.61	5.16	13.3	3.49	2.71	2.70	5.75	3.73	-0.01	3.04	1.02
8:15:00	2.85	14.68	--	3.49	2.77	5.29	6.47	3.65	2.52	3.70	0.89
8:30:00	2.42	9.51	8.65	3.33	2.68	6.83	7.91	3.55	4.15	5.23	0.87
8:45:00	2.77	5.19	5.58	3.73	2.67	7.45	8.59	3.55	4.78	5.92	0.88
9:00:00	2.71	13.3	--	3.55	2.67	9.57	9.18	3.52	6.90	6.50	0.85
9:15:00	2.57	9.36	12.28	3.56	2.66	10.41	8.84	3.53	7.74	6.17	0.87
9:30:00	2.87	11.45	15.9	3.49	2.67	9.76	10.60	3.53	7.09	7.93	0.86
9:45:00	2.8	11.13	26.9	3.39	2.74	10.09	15.17	3.54	7.34	12.42	0.80
10:00:00	3.79	--	20.25	3.97	2.95	11.31	18.83	3.59	8.36	15.88	0.64
10:15:00	3	11.66	6.9	4.1	3.01	10.90	16.45	3.70	7.89	13.44	0.70
10:30:00	2.44	3.76	3.58	3.85	2.98	9.50	14.71	3.76	6.52	11.73	0.78
10:45:00	3.17	11.98	15.93	4.05	3.04	9.63	14.71	3.87	6.59	11.67	0.83
11:00:00	5.18	12.84	12.62	4.19	3.52	10.06	11.86	4.03	6.54	8.34	0.52
11:15:00	2.93	16.16	6.42	3.96	3.34	11.28	9.09	4.03	7.94	5.75	0.69
11:30:00	4.2	12.88	26.64	3.78	3.58	11.52	13.04	3.97	7.94	9.45	0.38
11:45:00	3.57	15.35	--	3.5	3.81	13.84	15.40	3.90	10.03	11.59	0.09
12:00:00	3.3	17.82	16.07	3.6	3.84	15.01	15.44	3.81	11.17	11.60	-0.03
12:15:00	4.09	10.52	11.91	3.44	3.62	14.55	15.26	3.66	10.93	11.64	0.04
12:30:00	3.52	10.19	11.3	3.41	3.74	13.35	16.48	3.55	9.62	12.74	-0.19
12:45:00	4.72	7.19	8.14	3.29	3.84	12.21	11.86	3.45	8.37	8.02	-0.39
13:00:00	5.3	10.06	27.62	3.52	4.19	11.16	15.01	3.45	6.97	10.82	-0.73
13:15:00	5.05	17.07	27.51	3.28	4.54	11.01	17.30	3.39	6.47	12.76	-1.15
13:30:00	4.42	22.13	35.05	2.94	4.60	13.33	21.92	3.29	8.73	17.32	-1.31
13:45:00	4.27	18.61	20.24	3.18	4.75	15.01	23.71	3.24	10.26	18.96	-1.51
14:00:00	4.35	23.33	16.89	3.19	4.68	18.24	25.46	3.22	13.56	20.78	-1.46
14:15:00	4.27	15.92	24.65	3.25	4.47	19.41	24.87	3.17	14.94	20.40	-1.30
14:30:00	4.12	18.77	32.18	3.06	4.29	19.75	25.80	3.12	15.47	21.52	-1.16
14:45:00	4.8	22.38	23.59	3.17	4.36	19.80	23.51	3.17	15.44	19.15	-1.19
15:00:00	6.27	21.16	19.41	3.23	4.76	20.31	23.34	3.18	15.55	18.58	-1.58
15:15:00	6.55	16.05	5.19	3.58	5.20	18.86	21.00	3.26	13.65	15.80	-1.94
15:30:00	5.54	10.4	8.7	3.33	5.46	17.75	17.81	3.27	12.30	12.36	-2.18
15:45:00	5.3	5.83	3.29	3.64	5.69	15.16	12.04	3.39	9.47	6.34	-2.30
16:00:00	6.12	4.67	2.33	3.53	5.96	11.62	7.78	3.46	5.67	1.83	-2.49
16:15:00	6.36	2.45	2.67	3.3	5.97	7.88	4.44	3.48	1.91	-1.54	-2.50
16:30:00	6.02	2.46	2.82	3.54	5.87	5.16	3.96	3.47	-0.71	-1.91	-2.40
16:45:00	8.32	2.9	2.4	3.66	6.42	3.66	2.70	3.53	-2.76	-3.72	-2.89
17:00:00	9.53	1.9	2.56	3.89	7.27	2.88	2.56	3.58	-4.39	-4.71	-3.69
17:15:00	7.64	5.39	2.42	3.64	7.57	3.02	2.57	3.61	-4.55	-5.00	-3.97
17:30:00	8.01	3.54	2.39	3.39	7.90	3.24	2.52	3.62	-4.67	-5.39	-4.28
17:45:00	9.91	1.75	2.34	4.14	8.68	3.10	2.42	3.74	-5.59	-6.26	-4.94
18:00:00	8.45	4.58	2.42	3.46	8.71	3.43	2.43	3.70	-5.28	-6.28	-5.00

## Wednesday, April 7, 2021

7:00:00	2.21	1.45	2.41	3.46	2.87	1.73	2.55	3.28	-1.14	-0.32	0.41
7:15:00	2.67	2.13	2.27	3.13	2.76	1.79	2.50	3.24	-0.97	-0.26	0.48
7:30:00	2.85	1.59	2.36	3.21	2.72	1.74	2.42	3.21	-0.97	-0.30	0.49
7:45:00	2.91	3.22	24.53	3.02	2.63	2.02	6.83	3.14	-0.62	4.20	0.51
8:00:00	3.18	4.27	9.07	3.49	2.76	2.53	8.13	3.26	-0.23	5.36	0.50
8:15:00	2.81	5.42	2.93	3.03	2.88	3.33	8.23	3.18	0.44	5.35	0.29
8:30:00	2.86	2.4	2.31	3	2.92	3.38	8.24	3.15	0.46	5.32	0.23
8:45:00	2.42	2.26	13.93	3.33	2.84	3.51	10.55	3.17	0.68	7.72	0.34
9:00:00	2.37	13.34	10.65	3.63	2.73	5.54	7.78	3.30	2.81	5.05	0.57
9:15:00	2.53	4.48	13.41	3.15	2.60	5.58	8.65	3.23	2.98	6.05	0.63
9:30:00	2.98	11.07	8.02	3.44	2.63	6.71	9.66	3.31	4.08	7.03	0.68
9:45:00	2.49	14.55	13.96	3.41	2.56	9.14	11.99	3.39	6.58	9.44	0.83
10:00:00	2.61	4.94	4.55	3.38	2.60	9.68	10.12	3.40	7.08	7.52	0.81
10:15:00	2.77	19.56	9.67	3.51	2.68	10.92	9.92	3.38	8.24	7.25	0.70
10:30:00	2.95	11.34	8.83	3.66	2.76	12.29	9.01	3.48	9.53	6.25	0.72
10:45:00	2.36	36.2	45.78	3.33	2.64	17.32	16.56	3.46	14.68	13.92	0.82
11:00:00	2.61	20.1	26.52	3.69	2.66	18.43	19.07	3.51	15.77	16.41	0.85
11:15:00	2.5	16.88	15.62	4.06	2.64	20.82	21.28	3.65	18.18	18.65	1.01
11:30:00	3.39	15.02	35.49	4.24	2.76	19.91	26.45	3.80	17.15	23.69	1.03
11:45:00	3.14	16.87	6.8	4.75	2.80	21.01	26.04	4.01	18.21	23.24	1.21
12:00:00	2.74	--	--	4.9	2.88	17.22	21.11	4.33	14.34	18.23	1.45
12:15:00	9.63	18.97	20.77	4.84	4.28	16.94	19.67	4.56	12.66	15.39	0.28
12:30:00	15.18	14.3	31.53	4.75	6.82	16.29	23.65	4.70	9.47	16.83	-2.12
12:45:00	9.36	16.15	5.55	4.99	8.01	16.57	16.16	4.85	8.56	8.15	-3.16
13:00:00	10.49	17.65	10.69	4.81	9.48	16.77	17.14	4.86	7.29	7.66	-4.62
13:15:00	9.88	28.88	33.44	4.34	10.91	19.19	20.40	4.75	8.28	9.49	-6.16
13:30:00	7.05	16.81	25.53	4.41	10.39	18.76	21.35	4.66	8.37	10.96	-5.73
13:45:00	8.28	20.6	32.56	4.49	9.01	20.02	21.55	4.61	11.01	12.54	-4.40
14:00:00	7.18	17.18	18.63	4.51	8.58	20.22	24.17	4.51	11.65	15.59	-4.06
14:15:00	7.24	19.41	19.9	4.25	7.93	20.58	26.01	4.40	12.65	18.09	-3.53
14:30:00	6.94	11.93	13.13	3.88	7.34	17.19	21.95	4.31	9.85	14.61	-3.03
14:45:00	9.1	16.74	64.59	3.88	7.75	17.17	29.76	4.20	9.42	22.01	-3.55
15:00:00	7.38	--	32.28	3.67	7.57	16.32	29.71	4.04	8.75	22.14	-3.53
15:15:00	7.21	21.33	12.79	3.64	7.57	17.35	28.54	3.86	9.78	20.96	-3.71
15:30:00	7.36	16.23	16.7	3.44	7.60	16.56	27.90	3.70	8.96	20.30	-3.90
15:45:00	6.36	12.83	25.08	3.54	7.48	16.78	30.29	3.63	9.30	22.81	-3.85
16:00:00	6.96	18.95	14.34	3.58	7.05	17.34	20.24	3.57	10.28	13.18	-3.48
16:15:00	6.49	12.69	8.34	3.65	6.88	16.41	15.45	3.57	9.53	8.57	-3.31
16:30:00	6.53	9.18	4.81	3.83	6.74	13.98	13.85	3.61	7.24	7.11	-3.13
16:45:00	7.98	3.41	4.09	3.67	6.86	11.41	11.33	3.65	4.55	4.47	-3.21
17:00:00	7.67	3.49	3.2	3.69	7.13	9.54	6.96	3.68	2.42	-0.17	-3.44
17:15:00	8.18	6.36	2.84	3.63	7.37	7.03	4.66	3.69	-0.34	-2.71	-3.68
17:30:00	7.21	5.36	2.82	3.4	7.51	5.56	3.55	3.64	-1.95	-3.96	-3.87
17:45:00	6.13	5.33	2.55	3.8	7.43	4.79	3.10	3.64	-2.64	-4.33	-3.80
18:00:00	8.51	3.61	2.54	3.56	7.54	4.83	2.79	3.62	-2.71	-4.75	-3.92

## Thursday, April 8, 2021

Time	Turbidity (NTU)				Rolling Average Turbidity (NTU)				Difference (NTU)		
	Ambient	3rd Street	Carroll Street	Union Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient
7:00:00	2.16	1.31	2.44	3.41	2.32	1.37	2.42	3.19	-0.95	0.11	0.87
7:15:00	2.24	1.58	2.57	3.49	2.26	1.40	2.45	3.24	-0.85	0.19	0.98
7:30:00	2.67	1.92	3.34	3.68	2.22	1.51	2.67	3.33	-0.70	0.45	1.11
7:45:00	2.3	2.19--		3.56	2.26	1.67	2.78	3.45	-0.59	0.52	1.19
8:00:00	2.63	3.29	2.64	3.41	2.40	2.06	2.75	3.51	-0.34	0.35	1.11
8:15:00	3.1	2.75	4.75	3.81	2.59	2.35	3.33	3.59	-0.24	0.74	1.00
8:30:00	2.28	3.03	4.39	3.67	2.60	2.64	3.78	3.63	0.04	1.18	1.03
8:45:00	3.01	3.48	5.4	3.41	2.66	2.95	4.30	3.57	0.28	1.63	0.91
9:00:00	2.93	3.68	4.93	4.06	2.79	3.25	4.42	3.67	0.46	1.63	0.88
9:15:00	2.33	2.96	3	3.53	2.73	3.18	4.49	3.70	0.45	1.76	0.97
9:30:00	2.37	2.06	2.34	3.47	2.58	3.04	4.01	3.63	0.46	1.43	1.04
9:45:00	2.64	2.23	3.35	3.6	2.66	2.88	3.80	3.61	0.23	1.15	0.96
10:00:00	2.85	10.5	16.06	3.87	2.62	4.29	5.94	3.71	1.66	3.31	1.08
10:15:00	2.67	9.46	4.28	3.58	2.57	5.44	5.81	3.61	2.87	3.23	1.04
10:30:00	2.9	4.25	3.16	3.49	2.69	5.70	5.84	3.60	3.01	3.15	0.92
10:45:00	2.51	3.79	3.86	3.62	2.71	6.05	6.14	3.63	3.33	3.43	0.92
11:00:00	2.56	9.77	11.65	3.28	2.70	7.55	7.80	3.57	4.86	5.10	0.87
11:15:00	2.84	9.95	9.12	3.67	2.70	7.44	6.41	3.53	4.75	3.72	0.83
11:30:00	2.96	5.03	4.04	3.79	2.75	6.56	6.37	3.57	3.80	3.61	0.82
11:45:00	3.08	3.54--		3.64	2.79	6.42	7.17	3.60	3.63	4.38	0.81
12:00:00	2.94	9.64	5.78	4.01	2.88	7.59	7.65	3.68	4.71	4.77	0.80
12:15:00	2.84	4.25	10.44	4.31	2.93	6.48	7.35	3.88	3.55	4.41	0.95
12:30:00	2.87	8.82	15.78	4.65	2.94	6.26	9.01	4.08	3.32	6.07	1.14
12:45:00	3	12.12	15.84	4.22	2.95	7.67	11.96	4.17	4.73	9.01	1.22
13:00:00	2.74	12.68	33.51	4.53	2.88	9.50	16.27	4.34	6.62	13.39	1.47
13:15:00	2.79	22.8	22.27	3.97	2.85	12.13	19.57	4.34	9.29	16.72	1.49
13:30:00	3.3	17.41	27.76	3.9	2.94	14.77	23.03	4.25	11.83	20.09	1.31
13:45:00	3.18	17.89	7.73	3.79	3.00	16.58	21.42	4.08	13.58	18.42	1.08
14:00:00	3.33	9.94	7.7	3.56	3.07	16.14	19.79	3.95	13.08	16.73	0.88
14:15:00	3.27	6.28	22.82	3.43	3.17	14.86	17.66	3.73	11.69	14.48	0.56
14:30:00	--	11.53	36.18	3.47	3.27	12.61	20.44	3.63	9.34	17.17	0.36
14:45:00	3.5	24.15	31.11	3.07	3.32	13.96	21.11	3.46	10.64	17.79	0.14
15:00:00	3.67	17.05	15.56	2.94	3.44	13.79	22.67	3.29	10.35	19.23	-0.15
15:15:00	3.79	13.15	16.31	3.26	3.56	14.43	24.40	3.23	10.87	20.84	-0.32
15:30:00	8.08	10.92	14.29	2.89	4.76	15.36	22.69	3.13	10.60	17.93	-1.63
15:45:00	7.59	10.45	15.31	2.8	5.33	15.14	18.52	2.99	9.82	13.19	-2.33
16:00:00	6.87	11.1	18.11	2.92	6.00	12.53	15.92	2.96	6.53	9.92	-3.04
16:15:00	6.64	16.53	20.27	3.01	6.59	12.43	16.86	2.98	5.84	10.26	-3.62
16:30:00	4.97	10.61	16.36	4.27	6.83	11.92	16.87	3.18	5.09	10.04	-3.65
16:45:00	6.39	10.66	11.78	2.95	6.49	11.87	16.37	3.19	5.38	9.87	-3.30
17:00:00	5.43	5.47	9.85	3.32	6.06	10.87	15.27	3.29	4.81	9.21	-2.77
17:15:00	5.8	4.3	5.3	3.27	5.85	9.51	12.71	3.36	3.67	6.87	-2.48
17:30:00	7.18	4.61	3.89	3.75	5.95	7.13	9.44	3.51	1.18	3.48	-2.44
17:45:00	5.2	4.4	3.31	3.74	6.00	5.89	6.83	3.41	-0.11	0.83	-2.59
18:00:00	6.1	3.72	2.65	3.73	5.94	4.50	5.00	3.56	-1.44	-0.94	-2.38

Friday, March 9, 2021

7:00:00	1.9	1.14	2.29	3.14	2.06	1.20	1.95	3.10	-0.86	-0.11	1.05	
7:15:00	1.73	1.22	2.57	2.92	2.00	1.19	2.12	3.07	-0.81	0.13	1.08	
7:30:00	1.75	1.57	2.52	2.82	1.93	1.25	2.28	3.01	-0.68	0.35	1.08	
7:45:00	1.92	2.8	2.82	2.74	1.85	1.57	2.44	2.94	-0.28	0.59	1.09	
8:00:00	2.03	2.28	7.09	3.16	1.87	1.80	3.46	2.96	-0.06	1.59	1.09	
8:15:00	1.97	3.98	4.28	3.62	1.88	2.37	3.86	3.05	0.49	1.98	1.17	
8:30:00	2.56	7.44	9.09	3.95	2.05	3.61	5.16	3.26	1.57	3.11	1.21	
8:45:00	2.68	5.7	8.04	4.23	2.23	4.44	6.26	3.54	2.21	4.03	1.31	
9:00:00	2.22	5.54	8.21	4.62	2.29	4.99	7.34	3.92	2.70	5.05	1.62	
9:15:00	1.8	8.34	7.96	4.85	2.25	6.20	7.52	4.25	3.95	5.27	2.01	
9:30:00	1.96	11.27	9.93	4.55	2.24	7.66	8.65	4.44	5.41	6.40	2.20	
9:45:00	2.09	22.73	--	4.56	2.15	10.72	8.54	4.56	8.57	6.39	2.41	
10:00:00	2.24	12.2	10.24	4.33	2.06	12.02	9.09	4.58	9.95	7.02	2.52	
10:15:00	2.08	4.88	4.76	4.06	2.03	11.88	8.22	4.47	9.85	6.19	2.44	
10:30:00	2.28	3.57	4.31	3.84	2.13	10.93	7.31	4.27	8.80	5.18	2.14	
10:45:00	2.09	2.9	3.64	3.7	2.16	9.26	5.74	4.10	7.10	3.58	1.94	
11:00:00	2.15	2.78	3.23	3.94	2.17	5.27	5.24	3.97	3.10	3.07	1.81	
11:15:00	2.5	4.01	6.97	3.72	2.22	3.63	4.58	3.85	1.41	2.36	1.63	
11:30:00	2.84	4.82	3.76	4.24	2.37	3.62	4.38	3.89	1.24	2.01	1.52	
11:45:00	2.44	3.04	3.23	3.77	2.40	3.51	4.17	3.87	1.11	1.76	1.47	
12:00:00	2.44	2.33	3.38	4.19	2.47	3.40	4.11	3.97	0.92	1.64	1.50	
12:15:00	3.12	2.47	3.01	3.97	2.67	3.33	4.07	3.98	0.67	1.40	1.31	
12:30:00	2.27	8.19	4.41	3.93	2.62	4.17	3.56	4.02	1.55	0.94	1.40	
12:45:00	2.1	3.74	7.5	3.78	2.47	3.95	4.31	3.93	1.48	1.83	1.45	
13:00:00	2.47	6.01	8.57	3.78	2.48	4.55	5.37	3.93	2.07	2.89	1.45	
13:15:00	3.83	4.62	5.48	3.55	2.76	5.01	5.79	3.80	2.25	3.04	1.04	
13:30:00	4.1	3.2	5.4	3.53	2.95	5.15	6.27	3.71	2.20	3.32	0.76	
13:45:00	2.4	3.26	3.8	3.46	2.98	4.17	6.15	3.62	1.19	3.17	0.64	
14:00:00	2.92	3.51	6.61	3.46	3.14	4.12	5.97	3.56	0.98	2.83	0.41	
14:15:00	2.89	5.96	10.61	4.61	3.23	4.11	6.38	3.72	0.88	3.15	0.49	
14:30:00	3.3	9.06	18.88	3.29	3.12	5.00	9.06	3.67	1.88	5.94	0.55	
14:45:00	4.64	8.98	21.08	3.1	3.23	6.15	12.20	3.58	2.92	8.97	0.35	
15:00:00	4.79	13.14	14.23	2.9	3.71	8.13	14.28	3.47	4.42	10.57	-0.24	
15:15:00	4.95	6.78	15.53	2.87	4.11	8.78	16.07	3.35	4.67	11.95	-0.76	
15:30:00	4.9	7.3	5.94	2.75	4.52	9.05	15.13	2.98	4.54	10.62	-1.53	
15:45:00	4.94	5.64	4.64	2.59	4.84	8.37	12.28	2.84	3.52	7.44	-2.00	
16:00:00	4.64	4.65	3.05	2.62	4.84	7.50	8.68	2.75	2.66	3.83	-2.10	
16:15:00	5.44	4.76	2.71	2.48	4.97	5.83	6.37	2.66	0.85	1.40	-2.31	
16:30:00	6	3.82	2.21	2.4	5.18	5.23	3.71	2.57	0.05	-1.47	-2.62	
16:45:00	5.03	1.59	1.65	2.46	5.21	4.09	2.85	2.51	-1.12	-2.36	-2.70	
17:00:00	6.77	1.37	1.68	2.49	5.58	3.24	2.26	2.49	-2.34	-3.32	-3.09	
17:15:00	4.41	1.09	1.93	2.73	5.53	2.53	2.04	2.51	-3.00	-3.49	-3.02	
17:30:00	4.8	1.12	1.62	2.99	5.40	1.80	1.82	2.61	-3.60	-3.58	-2.79	
17:45:00	5.78	1.16	1.75	2.99	5.36	1.27	1.73	2.73	-4.09	-3.63	-2.63	
18:00:00	5.84	--		1.75	3.23	5.52	1.19	1.75	2.89	-4.34	-3.77	-2.63