

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

**PERIOD: April 19 to April 23, 2021**

**Date of Report: April 28, 2021**

**Report Contents**

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*Prepared by*

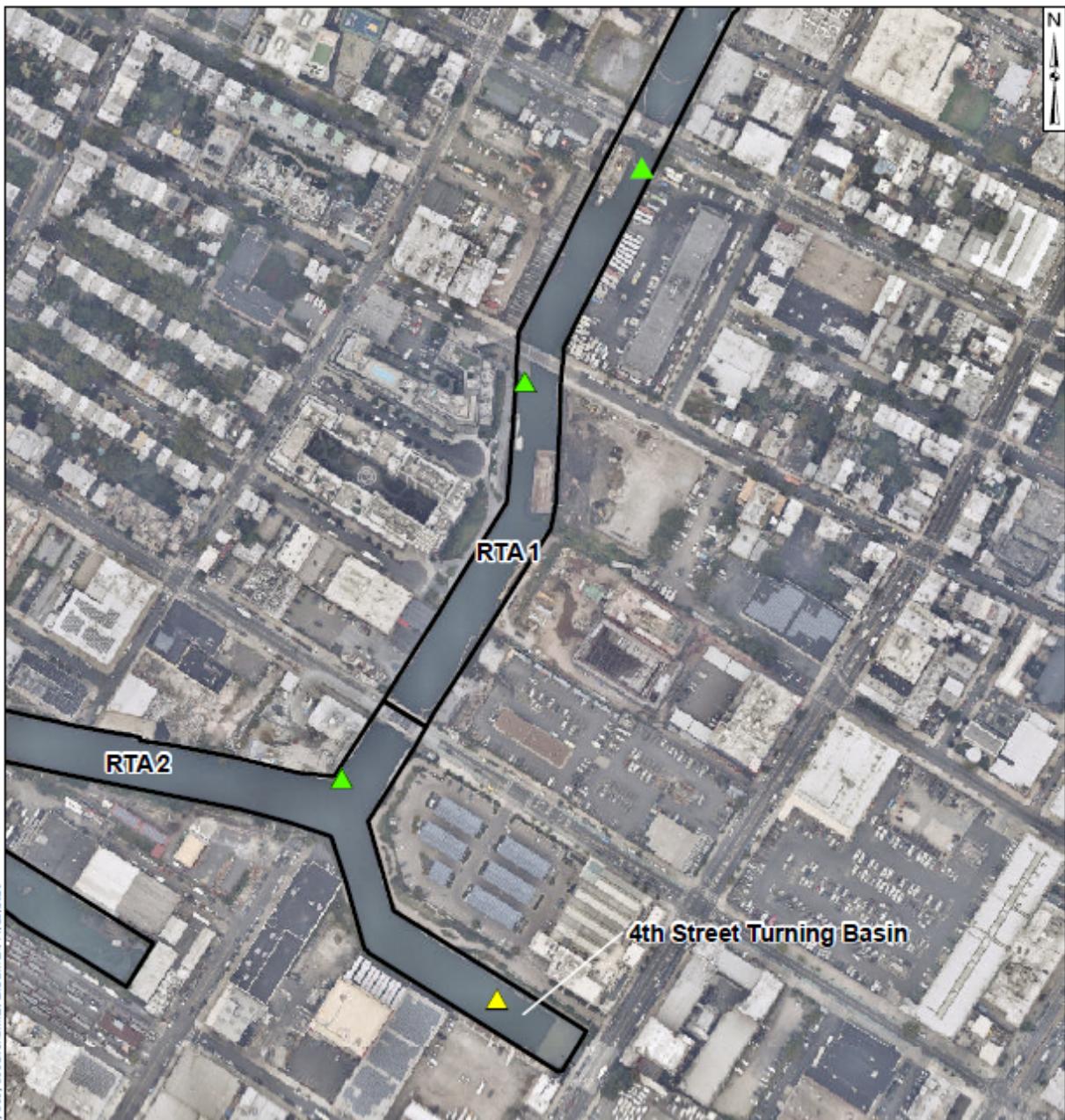
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Project Number JR0289A

## **1. SCOPE OF MONITORING**

The following report summarizes water quality monitoring data collected during the week of April 19, 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. The Union Street Sentinel Buoy was taken out of service and the remaining three buoys were re-calibrated on April 22<sup>nd</sup>, 2021. 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 12. On April 22, 2021 the Union Street Sentinel Buoy was taken out of service as the in-waterway work transitioned to installation of the cutoff wall at the First Street Turning Basin between the Carroll Street and Third Street Bridges. Routine servicing of the remaining turbidity buoys also occurred on April 22, 2021 which included a routine re-calibration of the turbidity sensors. 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 or the numerical trigger criterion were observed during the reporting period.

- **Trigger criterion** – Any of the following:
  - The rolling average of the relevant sentinel buoy turbidity measurements over a one-hour period exceeds the rolling average of the ambient buoy turbidity measurements by 20 NTU excluding any eliminated outlier measurements and in-waterway construction activities cannot be immediately excluded as the source following consultation with EPA; or
  - 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. No exceedances to the trigger or action level criteria were observed during this reporting period.

### 3. TURBIDITY BUOY DATA

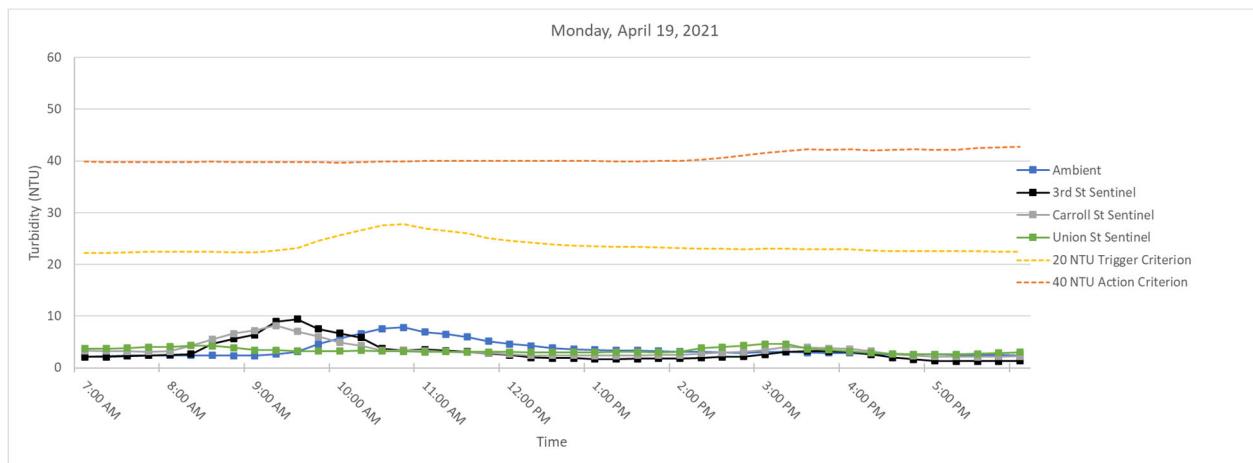
The following section provides turbidity data for the sentinel and ambient turbidity buoys from 7 AM to 6 PM from April 19 to April 23, 2021. No exceedances of the action or trigger level criteria occurred during this reporting period. No turbidity data was collected on April 22<sup>nd</sup> between 11:00 AM and 4:00 PM during routine servicing of the turbidity buoys as described in Section 1. **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 19, 2021	-0.69	-0.29	-0.29	6.33	5.55	1.54
Tuesday April 20, 2021	-0.20	0.57	0.58	3.20	3.61	1.03
Wednesday April 21, 2021	-0.55	0.35	0.55	1.19	2.78	1.72
Thursday April 22, 2021	-0.29	1.31	1.42	0.73	4.01	1.74
Friday April 23, 2021	2.06	3.48	--	6.64	5.99	--

#### 3.1 Monday, April 19, 2021

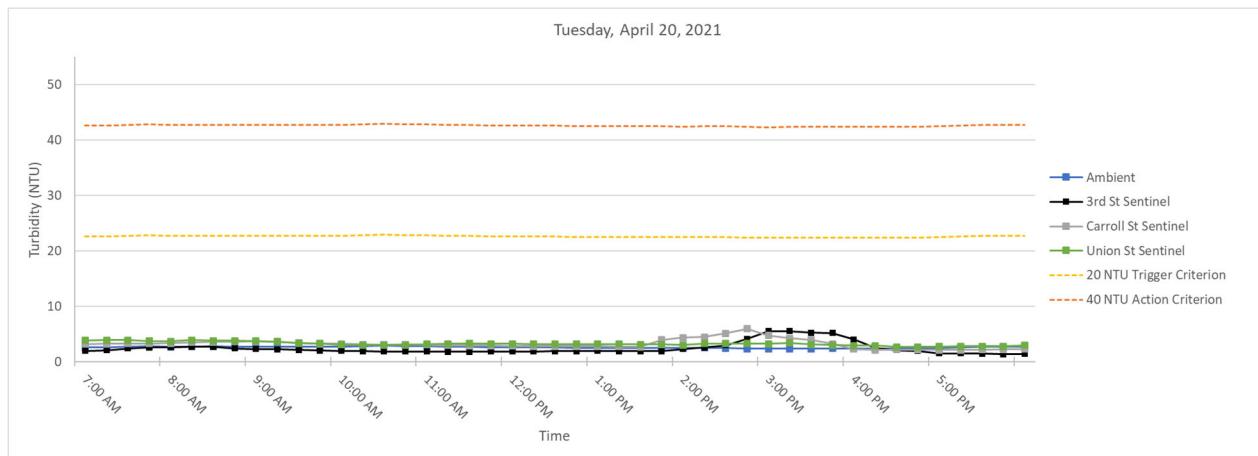
**Figure 2.** Hourly rolling average turbidity readings on Monday, April 19, 2021 from 7 AM to 6 PM.



**Note:** On April 19, 2021 two spikes in turbidity at the Union Street Sentinel Buoy of 11.76 NTU at 8:00 AM and 11.57 NTU at 2:30 PM respectively were eliminated as outliers in accordance with the outlier analysis defined in Section 2 and the WQMP.

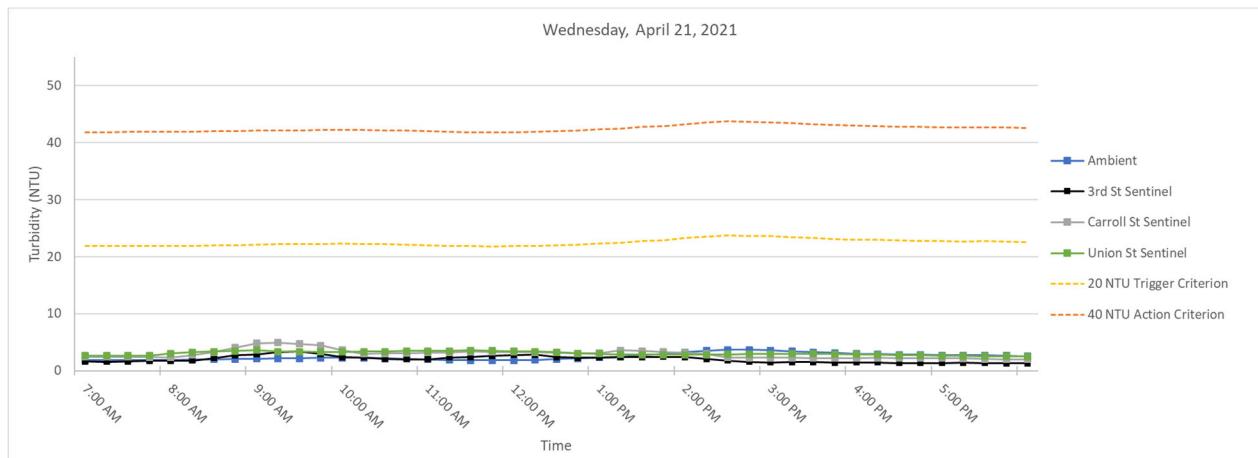
### **3.2 Tuesday, April 20, 2021**

**Figure 3.** Hourly rolling average turbidity readings on Tuesday, April 20, 2021 from 7 AM to 6 PM.



### **3.3 Wednesday, April 21, 2021**

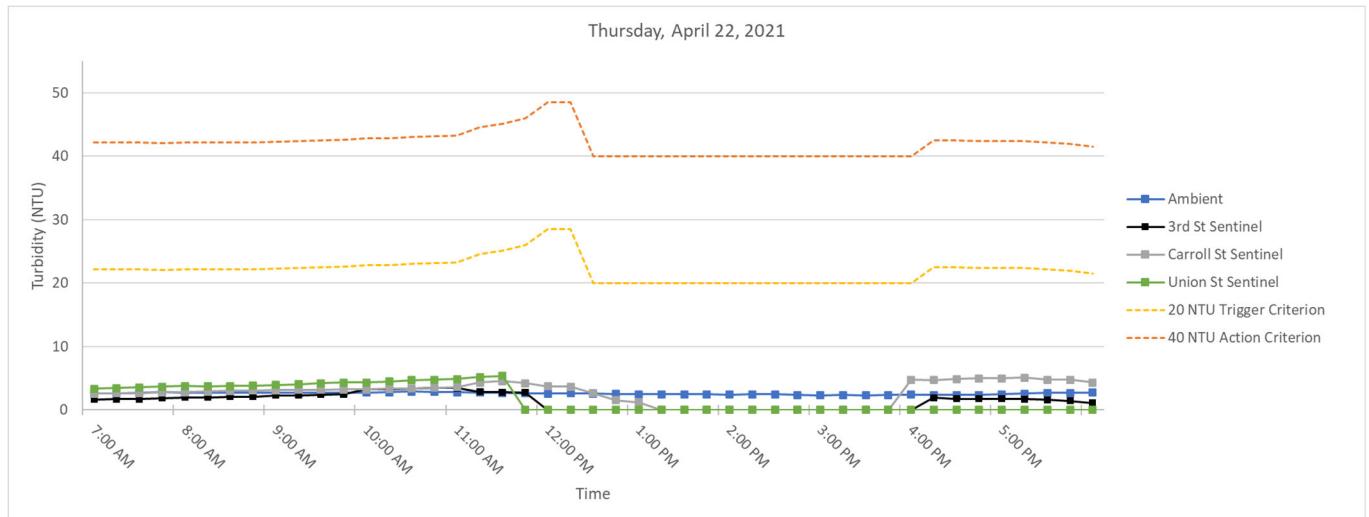
**Figure 4.** Hourly rolling average turbidity readings on Wednesday, April 21, 2021 from 7 AM to 6 PM.



**Note:** On April 14, 2021 one spike at the Carroll Street Sentinel buoy of 13.02 NTU at 11:15 AM was removed as an outlier in accordance with the outlier analysis defined in Section 2 and the WQMP.

### **3.4 Thursday, April 22, 2021**

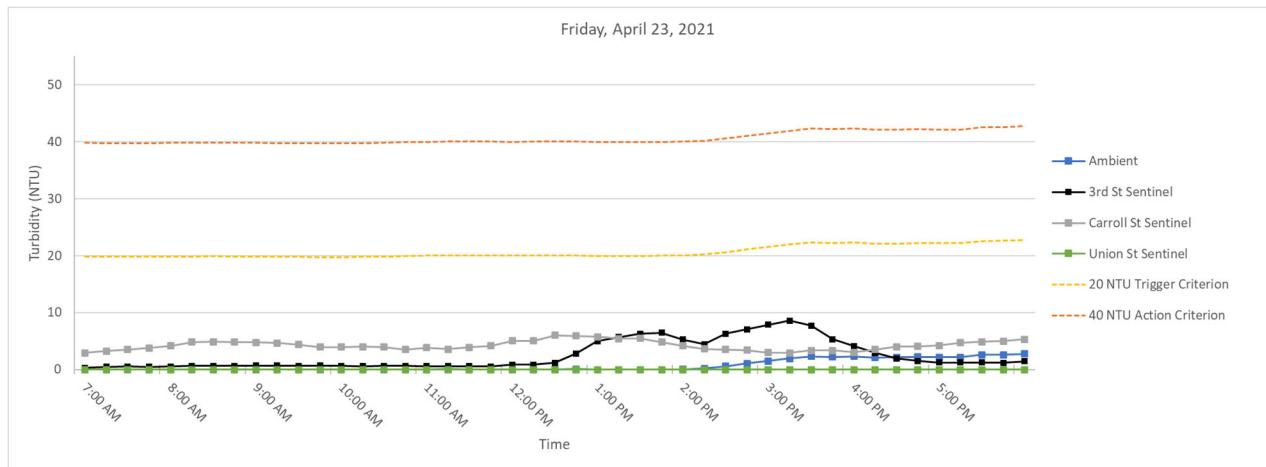
**Figure 5.** Hourly rolling average turbidity readings on Thursday, April 22, 2021 from 7 AM to 6 PM.



**Note:** On April 22, 2021 no spikes in turbidity were observed above 10 NTU. No turbidity data was collected during servicing of the turbidity meters.

### **3.5 Friday, April 23, 2021**

**Figure 6.** Hourly rolling average turbidity readings on Friday, April 23, 2021 from 7 AM to 6 PM.



**Note:** On April 23, 2021 no spikes in turbidity were observed above 10 NTU.

## **SUMMARY OF VISUAL OBSERVATIONS**

No sheen above background conditions was observed during this reporting period.

## **APPENDIX A**

### **Turbidity Data Tables**

## Monday, April 19, 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	2.25	2.05	3.22	3.48	2.20	2.10	3.28	3.69	-0.10	1.08	1.50
7:15:00	2.47	2.17	3.11	3.47	2.27	2.11	3.24	3.69	-0.16	0.98	1.43
7:30:00	2.61	2.93	2.97	4.6	2.36	2.27	3.17	3.83	-0.09	0.81	1.47
7:45:00	2.38	3.05	3.1	4.81	2.41	2.44	3.14	4.03	0.02	0.73	1.62
8:00:00	2.24	2.31	3.51	--	2.39	2.50	3.18	4.09	0.11	0.79	1.70
8:15:00	2.45	2.85	9.01	4.3	2.43	2.66	4.34	4.30	0.23	1.91	1.87
8:30:00	2.28	12.32	8.85	3.31	2.39	4.69	5.49	4.26	2.30	3.10	1.86
8:45:00	2.29	7.62	8.58	3.16	2.33	5.63	6.61	3.90	3.30	4.28	1.57
9:00:00	2.63	6.74	6.16	2.84	2.38	6.37	7.22	3.40	3.99	4.84	1.02
9:15:00	3.48	15.23	8.29	3.44	2.63	8.95	8.18	3.41	6.33	5.55	0.78
9:30:00	4.83	5.09	3.45	3.32	3.10	9.40	7.07	3.21	6.30	3.96	0.11
9:45:00	9.82	3.02	3.64	3.38	4.61	7.54	6.02	3.23	2.93	1.41	-1.38
10:00:00	7.55	3.35	3.04	3.27	5.66	6.69	4.92	3.25	1.02	-0.75	-2.41
10:15:00	7.6	2.68	3.01	3.27	6.66	5.87	4.29	3.34	-0.78	-2.37	-3.32
10:30:00	8.1	4.43	3.78	2.84	7.58	3.71	3.38	3.22	-3.87	-4.20	-4.36
10:45:00	6.12	3.21	3.23	3.03	7.84	3.34	3.34	3.16	-4.50	-4.50	-4.68
11:00:00	5.39	3.92	3.34	3.04	6.95	3.52	3.28	3.09	-3.43	-3.67	-3.86
11:15:00	5.42	2.28	2.3	3.31	6.53	3.30	3.13	3.10	-3.22	-3.39	-3.43
11:30:00	4.72	1.81	2.48	3.02	5.95	3.13	3.03	3.05	-2.82	-2.92	-2.90
11:45:00	3.92	2.65	2.67	2.98	5.11	2.77	2.80	3.08	-2.34	-2.31	-2.04
12:00:00	3.63	1.67	2.37	2.83	4.62	2.47	2.63	3.04	-2.15	-1.98	-1.58
12:15:00	3.51	1.62	2.32	3	4.24	2.01	2.43	3.03	-2.23	-1.81	-1.21
12:30:00	3.33	1.64	2.33	3.1	3.82	1.88	2.43	2.99	-1.94	-1.39	-0.84
12:45:00	3.59	1.66	2.33	3.11	3.60	1.85	2.40	3.00	-1.75	-1.19	-0.59
13:00:00	3.28	1.84	2.44	3	3.47	1.69	2.36	3.01	-1.78	-1.11	-0.46
13:15:00	3.17	1.59	2.44	3.05	3.38	1.67	2.37	3.05	-1.71	-1.00	-0.32
13:30:00	3.37	1.94	2.48	3.01	3.35	1.73	2.40	3.05	-1.61	-0.94	-0.29
13:45:00	2.84	1.92	2.65	2.79	3.25	1.79	2.47	2.99	-1.46	-0.78	-0.26
14:00:00	2.93	1.68	2.21	3.36	3.12	1.79	2.44	3.04	-1.32	-0.67	-0.08
14:15:00	3.01	2.5	4.13	6.89	3.06	1.93	2.78	3.82	-1.14	-0.28	0.76
14:30:00	2.9	2.62	3.38	--	3.01	2.13	2.97	4.01	-0.88	-0.04	1.00
14:45:00	2.8	2.1	2.97	4.14	2.90	2.16	3.07	4.30	-0.73	0.17	1.40
15:00:00	3.72	4.14	4.29	4.04	3.07	2.61	3.40	4.61	-0.46	0.32	1.54
15:15:00	2.99	4.29	5.39	3.29	3.08	3.13	4.03	4.59	0.05	0.95	1.51
15:30:00	2.46	2.97	3.63	3.25	2.97	3.22	3.93	3.68	0.25	0.96	0.71
15:45:00	2.49	2.53	2.66	2.76	2.89	3.21	3.79	3.50	0.31	0.90	0.60
16:00:00	2.68	1.6	2.24	2.72	2.87	3.11	3.64	3.21	0.24	0.77	0.34
16:15:00	2.57	1.62	2.36	2.5	2.64	2.60	3.26	2.90	-0.04	0.62	0.27
16:30:00	2.66	1.18	2.28	2.45	2.57	1.98	2.63	2.74	-0.59	0.06	0.16
16:45:00	2.45	1.18	2.09	2.51	2.57	1.62	2.33	2.59	-0.95	-0.24	0.02
17:00:00	2.56	1.26	2	2.64	2.58	1.37	2.19	2.56	-1.22	-0.39	-0.02
17:15:00	2.5	1.3	2.09	2.87	2.55	1.31	2.16	2.59	-1.24	-0.38	0.05
17:30:00	2.45	1.4	2.25	3.13	2.52	1.26	2.14	2.72	-1.26	-0.38	0.20
17:45:00	2.28	1.36	2.3	3.17	2.45	1.30	2.15	2.86	-1.15	-0.30	0.42
18:00:00	2.27	1.46	2.43	3.33	2.41	1.36	2.21	3.03	-1.06	-0.20	0.62

## Tuesday, April 20, 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	2.6	2.26	3.34	3.26	2.57	1.97	3.16	3.84	-0.61	0.59	1.27
7:15:00	2.53	2.13	3.32	3.99	2.60	2.05	3.22	3.87	-0.55	0.62	1.27
7:30:00	2.94	3.47	3.33	3.96	2.66	2.37	3.27	3.87	-0.29	0.61	1.21
7:45:00	2.59	2.68	3.1	3.45	2.78	2.53	3.28	3.73	-0.25	0.49	0.95
8:00:00	2.7	2.4	3.68	3.73	2.67	2.59	3.35	3.68	-0.08	0.68	1.01
8:15:00	2.71	2.53	4.07	4.42	2.69	2.64	3.50	3.91	-0.05	0.81	1.22
8:30:00	2.81	2.29	3.71	3.32	2.75	2.67	3.58	3.78	-0.08	0.83	1.03
8:45:00	2.88	2.13	3.43	3.87	2.74	2.41	3.60	3.76	-0.33	0.86	1.02
9:00:00	2.57	2.13	3.57	3.29	2.73	2.30	3.69	3.73	-0.44	0.96	0.99
9:15:00	2.56	1.98	3.19	3.12	2.71	2.21	3.59	3.60	-0.49	0.89	0.90
9:30:00	2.75	1.88	2.97	3.14	2.71	2.08	3.37	3.35	-0.63	0.66	0.63
9:45:00	2.73	1.96	3.07	2.91	2.70	2.02	3.25	3.27	-0.68	0.55	0.57
10:00:00	3.12	1.86	3.26	2.92	2.75	1.96	3.21	3.08	-0.78	0.47	0.33
10:15:00	2.8	1.77	3.09	2.89	2.79	1.89	3.12	3.00	-0.90	0.32	0.20
10:30:00	2.98	1.8	2.94	3.09	2.88	1.85	3.07	2.99	-1.02	0.19	0.11
10:45:00	2.47	1.85	3.1	3.31	2.82	1.85	3.09	3.02	-0.97	0.27	0.20
11:00:00	2.61	1.76	2.87	3.51	2.80	1.81	3.05	3.14	-0.99	0.26	0.35
11:15:00	2.8	1.77	2.65	3.25	2.73	1.79	2.93	3.21	-0.94	0.20	0.48
11:30:00	2.64	1.79	2.82	3.31	2.70	1.79	2.88	3.29	-0.91	0.18	0.59
11:45:00	2.5	1.85	2.91	2.86	2.60	1.80	2.87	3.25	-0.80	0.27	0.64
12:00:00	2.36	1.86	2.9	3.17	2.58	1.81	2.83	3.22	-0.78	0.25	0.64
12:15:00	2.74	1.91	2.67	3.35	2.61	1.84	2.79	3.19	-0.77	0.18	0.58
12:30:00	2.51	2.09	2.7	3.13	2.55	1.90	2.80	3.16	-0.65	0.25	0.61
12:45:00	2.49	1.81	2.64	3.39	2.52	1.90	2.76	3.18	-0.62	0.24	0.66
13:00:00	2.21	2	2.9	2.87	2.46	1.93	2.76	3.18	-0.53	0.30	0.72
13:15:00	2.32	1.65	2.62	3.05	2.45	1.89	2.71	3.16	-0.56	0.25	0.70
13:30:00	2.9	1.82	2.34	3.08	2.49	1.87	2.64	3.10	-0.61	0.15	0.62
13:45:00	2.47	2.02	9.1	3.11	2.48	1.86	3.92	3.10	-0.62	1.44	0.62
14:00:00	2.2	4	4.6	2.99	2.42	2.30	4.31	3.02	-0.12	1.89	0.60
14:15:00	2.48	3.16	3.63	4.08	2.47	2.53	4.46	3.26	0.06	1.98	0.79
14:30:00	2.21	3.81	5.76	3.19	2.45	2.96	5.09	3.29	0.51	2.63	0.84
14:45:00	2.4	7.44	6.7	3.01	2.35	4.09	5.96	3.28	1.73	3.61	0.92
15:00:00	2.25	9.14	2.91	2.88	2.31	5.51	4.72	3.23	3.20	2.41	0.92
15:15:00	2.35	3.86	2.19	3.7	2.34	5.48	4.24	3.37	3.14	1.90	1.03
15:30:00	2.38	1.89	2.14	2.68	2.32	5.23	3.94	3.09	2.91	1.62	0.77
15:45:00	2.51	3.5	2.2	2.63	2.38	5.17	3.23	2.98	2.79	0.85	0.60
16:00:00	2.58	1.49	2.04	2.66	2.41	3.98	2.30	2.91	1.56	-0.12	0.50
16:15:00	2.03	1.49	2.04	2.86	2.37	2.45	2.12	2.91	0.08	-0.25	0.54
16:30:00	2.39	1.83	2.27	2.56	2.38	2.04	2.14	2.68	-0.34	-0.24	0.30
16:45:00	2.21	1.33	2.18	2.63	2.34	1.93	2.15	2.67	-0.42	-0.20	0.32
17:00:00	3.14	1.42	2.08	2.81	2.47	1.51	2.12	2.70	-0.96	-0.35	0.23
17:15:00	2.98	1.33	2.06	2.92	2.55	1.48	2.13	2.76	-1.07	-0.42	0.21
17:30:00	2.58	1.32	2.31	2.97	2.66	1.45	2.18	2.78	-1.21	-0.48	0.12
17:45:00	2.45	1.38	2.41	2.64	2.67	1.36	2.21	2.79	-1.32	-0.46	0.12
18:00:00	2.43	1.51	2.45	3.36	2.72	1.39	2.26	2.94	-1.32	-0.45	0.22

## Wednesday, April 21, 2021

Time	Turbidity (NTU)			Rolling Average Turbidity (NTU)			Difference (NTU)				
	Ambient	3rd Street	Carroll Street	Ambient	3rd Street	Carroll Street	Union Street	3rd St - Ambient	Carroll St - Ambient	Union St - Ambient	
7:00:00	1.98	1.63	2.3	2.42	1.83	1.58	2.44	2.62	-0.25	0.61	0.79
7:15:00	1.65	1.55	2.29	2.79	1.82	1.56	2.40	2.62	-0.27	0.58	0.80
7:30:00	1.97	1.87	--	2.64	1.86	1.61	2.41	2.61	-0.25	0.56	0.76
7:45:00	1.76	2.09	2.4	2.54	1.87	1.71	2.37	2.62	-0.16	0.50	0.76
8:00:00	1.93	1.48	2.28	4.83	1.86	1.72	2.32	3.04	-0.13	0.46	1.19
8:15:00	2.24	1.88	3.94	3.37	1.91	1.77	2.73	3.23	-0.14	0.82	1.32
8:30:00	2.01	3.69	4.33	3.23	1.98	2.20	3.24	3.32	0.22	1.26	1.34
8:45:00	2.14	4.33	7.28	3.39	2.02	2.69	4.05	3.47	0.68	2.03	1.46
9:00:00	2.14	--	6.23	3.39	2.09	2.85	4.81	3.64	0.75	2.72	1.55
9:15:00	2.32	3.3	2.96	3.29	2.17	3.30	4.95	3.33	1.13	2.78	1.16
9:30:00	2.17	2.05	2.82	3.31	2.16	3.34	4.72	3.32	1.19	2.57	1.17
9:45:00	2.4	2.03	2.9	3.14	2.23	2.93	4.44	3.30	0.69	2.20	1.07
10:00:00	2.3	2.03	3.11	3.38	2.27	2.35	3.60	3.30	0.09	1.34	1.04
10:15:00	2.04	2.02	3.05	3.53	2.25	2.29	2.97	3.33	0.04	0.72	1.08
10:30:00	1.84	2	3.21	3.46	2.15	2.03	3.02	3.36	-0.12	0.87	1.21
10:45:00	1.92	1.93	3.13	3.66	2.10	2.00	3.08	3.43	-0.10	0.98	1.33
11:00:00	1.79	1.93	3.37	3.38	1.98	1.98	3.17	3.48	0.00	1.20	1.50
11:15:00	1.78	3.57	--	3.37	1.87	2.29	3.19	3.48	0.42	1.32	1.61
11:30:00	1.85	--	3.66	3.91	1.84	2.36	3.34	3.56	0.52	1.51	1.72
11:45:00	1.73	2.91	3.05	3.16	1.81	2.59	3.30	3.50	0.77	1.49	1.68
12:00:00	1.99	2.51	3.11	3.28	1.83	2.73	3.30	3.42	0.90	1.47	1.59
12:15:00	1.91	2.14	3.13	2.97	1.85	2.78	3.24	3.34	0.93	1.39	1.49
12:30:00	2.62	1.82	2.84	2.99	2.02	2.35	3.16	3.26	0.33	1.14	1.24
12:45:00	2.42	1.89	2.98	2.83	2.13	2.25	3.02	3.05	0.12	0.89	0.91
13:00:00	2.65	3.08	3.39	2.79	2.32	2.29	3.09	2.97	-0.03	0.77	0.65
13:15:00	2.52	2.79	5.42	2.61	2.42	2.34	3.55	2.84	-0.08	1.13	0.41
13:30:00	3.44	2.38	2.56	2.85	2.73	2.39	3.44	2.81	-0.34	0.71	0.08
13:45:00	3.43	2.04	2.23	2.87	2.89	2.44	3.32	2.79	-0.46	0.42	-0.10
14:00:00	4.17	1.55	2.26	2.78	3.24	2.37	3.17	2.78	-0.87	-0.07	-0.46
14:15:00	3.86	1.36	2.31	2.87	3.48	2.02	2.96	2.80	-1.46	-0.53	-0.69
14:30:00	3.59	1.63	2.24	3.05	3.70	1.79	2.32	2.88	-1.91	-1.38	-0.81
14:45:00	3.29	1.3	2.19	2.91	3.67	1.58	2.25	2.90	-2.09	-1.42	-0.77
15:00:00	2.99	1.39	2.2	3.01	3.58	1.45	2.24	2.92	-2.13	-1.34	-0.66
15:15:00	3.33	1.71	2.28	3.08	3.41	1.48	2.24	2.98	-1.93	-1.17	-0.43
15:30:00	3.05	1.35	2.14	2.75	3.25	1.48	2.21	2.96	-1.77	-1.04	-0.29
15:45:00	2.88	1.28	2.09	2.84	3.11	1.41	2.18	2.92	-1.70	-0.93	-0.19
16:00:00	2.66	1.35	2.34	2.71	2.98	1.42	2.21	2.88	-1.57	-0.77	-0.10
16:15:00	2.75	1.41	2.31	2.51	2.93	1.42	2.23	2.78	-1.51	-0.70	-0.16
16:30:00	2.76	1.37	2.17	2.57	2.82	1.35	2.21	2.68	-1.47	-0.61	-0.14
16:45:00	2.84	1.25	2.14	2.75	2.78	1.33	2.21	2.68	-1.45	-0.57	-0.10
17:00:00	2.57	1.39	2.13	2.4	2.72	1.35	2.22	2.59	-1.36	-0.50	-0.13
17:15:00	2.54	1.46	2.01	2.62	2.69	1.38	2.15	2.57	-1.32	-0.54	-0.12
17:30:00	2.85	1.12	1.84	2.33	2.71	1.32	2.06	2.53	-1.39	-0.65	-0.18
17:45:00	2.52	1.18	1.86	2.52	2.66	1.28	2.00	2.52	-1.38	-0.67	-0.14
18:00:00	2.16	1.38	1.96	2.53	2.53	1.31	1.96	2.48	-1.22	-0.57	-0.05
6:00:00	2.06	1.49	2.53	3.16	2.43	1.33	2.04	2.63	-1.10	-0.39	0.21

**Thursday, April 22, 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	2.08	1.78	2.67	3.9	2.14	1.63	2.56	3.34	-0.51	0.43	1.20
7:15:00	2.12	1.82	2.69	3.69	2.15	1.69	2.62	3.44	-0.46	0.47	1.30
7:30:00	--	--	--	--	2.17	1.72	2.62	3.55	-0.45	0.45	1.38
7:45:00	2.06	2.09	2.93	3.7	2.10	1.84	2.76	3.65	-0.27	0.66	1.54
8:00:00	2.22	2.1	2.88	3.8	2.12	1.95	2.79	3.77	-0.17	0.67	1.65
8:15:00	2.29	1.95	3.18	3.74	2.17	1.99	2.92	3.73	-0.18	0.75	1.56
8:30:00	2.08	2.2	3.13	3.75	2.16	2.09	3.03	3.75	-0.08	0.87	1.59
8:45:00	2.33	2.07	3.19	4.13	2.20	2.08	3.06	3.82	-0.11	0.87	1.63
9:00:00	2.63	3.11	3.12	4.27	2.31	2.29	3.10	3.94	-0.02	0.79	1.63
9:15:00	2.49	2.2	3.19	4.38	2.36	2.31	3.16	4.05	-0.06	0.80	1.69
9:30:00	2.7	2.48	3.28	4.39	2.45	2.41	3.18	4.18	-0.03	0.74	1.74
9:45:00	2.79	--	3.26	4.39	2.59	2.47	3.21	4.31	-0.12	0.62	1.72
10:00:00	3.34	5.22	3.41	4.26	2.79	3.25	3.25	4.34	0.46	0.46	1.55
10:15:00	2.94	2.98	3.49	4.99	2.85	3.22	3.33	4.48	0.37	0.47	1.63
10:30:00	3.39	2.8	3.53	5.36	3.03	3.37	3.39	4.68	0.34	0.36	1.65
10:45:00	3.52	2.74	3.72	--	3.20	3.44	3.48	4.75	0.24	0.29	1.55
11:00:00	--	--	3.8	--	3.30	3.44	3.59	4.87	0.14	0.29	1.57
11:15:00	8.45	--	6.94	--	4.58	2.84	4.30	5.18	-1.74	-0.28	0.60
11:30:00	--	--	4.68	--	5.12	2.77	4.53	5.36	-2.35	-0.59	0.24
11:45:00	--	--	1.93	--	5.99	2.74	4.21	--	-3.25	-1.77	--
12:00:00	--	--	1.19	--	8.45	--	3.71	--	--	-4.74	--
12:15:00	--	--	--	--	8.45	--	3.69	--	--	-4.77	--
12:30:00	--	--	--	--	--	--	2.60	--	--	--	--
12:45:00	--	--	--	--	--	--	1.56	--	--	--	--
13:00:00	--	--	--	--	--	--	1.19	--	--	--	--
13:15:00	--	--	--	--	--	--	--	--	--	--	--
13:30:00	--	--	--	--	--	--	--	--	--	--	--
13:45:00	--	--	--	--	--	--	--	--	--	--	--
14:00:00	--	--	--	--	--	--	--	--	--	--	--
14:15:00	--	--	--	--	--	--	--	--	--	--	--
14:30:00	--	--	--	--	--	--	--	--	--	--	--
14:45:00	--	--	--	--	--	--	--	--	--	--	--
15:00:00	--	--	--	--	--	--	--	--	--	--	--
15:15:00	--	--	--	--	--	--	--	--	--	--	--
15:30:00	--	--	--	--	--	--	--	--	--	--	--
15:45:00	--	--	--	--	--	--	--	--	--	--	--
16:00:00	--	--	4.76	--	--	--	4.76	--	--	--	--
16:15:00	2.54	1.91	4.69	--	2.54	1.91	4.73	--	-0.63	2.19	--
16:30:00	2.47	1.55	5.23	--	2.51	1.73	4.89	--	-0.78	2.39	--
16:45:00	2.26	1.77	5.13	--	2.42	1.74	4.95	--	-0.68	2.53	--
17:00:00	2.12	1.79	5.08	--	2.35	1.76	4.98	--	-0.59	2.63	--
17:15:00	2.27	1.48	5.16	--	2.33	1.70	5.06	--	-0.63	2.73	--
17:30:00	1.77	1.35	3.31	--	2.18	1.59	4.78	--	-0.59	2.60	--
17:45:00	1.41	0.84	5.18	--	1.97	1.45	4.77	--	-0.52	2.81	--
18:00:00	-0.02	0.08	2.82	--	1.51	1.11	4.31	--	-0.40	2.80	--

**Friday, April 23, 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	-0.18	0.15	2.74	--	-0.15	0.33	2.92	--	0.48	3.07	--
7:15:00	-0.35	0.71	4.39	--	-0.22	0.46	3.23	--	0.67	3.45	--
7:30:00	-0.08	0.64	4.43	--	-0.22	0.51	3.49	--	0.73	3.72	--
7:45:00	-0.21	0.43	4.57	--	-0.23	0.48	3.79	--	0.71	4.01	--
8:00:00	-0.04	0.6	4.64	--	-0.17	0.51	4.15	--	0.68	4.33	--
8:15:00	-0.2	0.83	6.05	--	-0.18	0.64	4.82	--	0.82	4.99	--
8:30:00	-0.08	0.65	4.58	--	-0.12	0.63	4.85	--	0.75	4.98	--
8:45:00	-0.36	0.59	4.41	--	-0.18	0.62	4.85	--	0.80	5.03	--
9:00:00	-0.29	0.75	4.18	--	-0.19	0.68	4.77	--	0.88	4.97	--
9:15:00	-0.15	0.54	4.22	--	-0.22	0.67	4.69	--	0.89	4.90	--
9:30:00	-0.21	0.54	4.46	--	-0.22	0.61	4.37	--	0.83	4.59	--
9:45:00	-0.37	1.03	2.61	--	-0.28	0.69	3.98	--	0.97	4.25	--
10:00:00	-0.37	0.45	4.29	--	-0.28	0.66	3.95	--	0.94	4.23	--
10:15:00	0	0.33	4.34	--	-0.22	0.58	3.98	--	0.80	4.20	--
10:30:00	0.19	0.71	4.03	--	-0.15	0.61	3.95	--	0.76	4.10	--
10:45:00	0.16	0.74	2.23	--	-0.08	0.65	3.50	--	0.73	3.58	--
11:00:00	0.01	0.72	4.24	--	0.00	0.59	3.83	--	0.59	3.83	--
11:15:00	0.02	0.44	2.9	--	0.08	0.59	3.55	--	0.51	3.47	--
11:30:00	-0.09	0.29	6.01	--	0.06	0.58	3.88	--	0.52	3.82	--
11:45:00	--	0.34	5.49	--	0.03	0.51	4.17	--	0.48	4.15	--
12:00:00	0.05	2.38	6.54	--	0.00	0.83	5.04	--	0.84	5.04	--
12:15:00	0.14	0.74	4.15	--	0.03	0.84	5.02	--	0.81	4.99	--
12:30:00	0.02	2.04	7.93	--	0.03	1.16	6.02	--	1.13	5.99	--
12:45:00	--	8.52	5.54	--	0.07	2.80	5.93	--	2.73	5.86	--
13:00:00	-0.31	11.34	4.73	--	-0.03	5.00	5.78	--	5.03	5.80	--
13:15:00	--	5.84	4.9	--	-0.05	5.70	5.45	--	5.75	5.50	--
13:30:00	0.12	3.7	4.3	--	-0.06	6.29	5.48	--	6.34	5.54	--
13:45:00	0.15	2.99	4.58	--	-0.01	6.48	4.81	--	6.49	4.82	--
14:00:00	0.25	2.52	2.36	--	0.05	5.28	4.17	--	5.23	4.12	--
14:15:00	0.28	7.31	2.03	--	0.20	4.47	3.63	--	4.27	3.43	--
14:30:00	2.2	14.85	4.22	--	0.60	6.27	3.50	--	5.67	2.90	--
14:45:00	2.48	7.61	3.97	--	1.07	7.06	3.43	--	5.98	2.36	--
15:00:00	2.35	7.01	2.24	--	1.51	7.86	2.96	--	6.35	1.45	--
15:15:00	2.44	6.16	2.11	--	1.95	8.59	2.91	--	6.64	0.96	--
15:30:00	2.09	2.97	4.34	--	2.31	7.72	3.38	--	5.41	1.06	--
15:45:00	1.65	2.72	4.02	--	2.20	5.29	3.34	--	3.09	1.13	--
16:00:00	3.03	1.74	2.35	--	2.31	4.12	3.01	--	1.81	0.70	--
16:15:00	1.23	0.96	4.82	--	2.09	2.91	3.53	--	0.82	1.44	--
16:30:00	2.71	1.45	4.52	--	2.14	1.97	4.01	--	-0.17	1.87	--
16:45:00	2.58	0.61	4.52	--	2.24	1.50	4.05	--	-0.74	1.81	--
17:00:00	1.3	1.37	4.88	--	2.17	1.23	4.22	--	-0.94	2.05	--
17:15:00	3.03	1.69	4.88	--	2.17	1.22	4.72	--	-0.95	2.55	--
17:30:00	3.23	0.98	5.47	--	2.57	1.22	4.85	--	-1.35	2.28	--
17:45:00	2.95	1.32	5.28	--	2.62	1.19	5.01	--	-1.42	2.39	--
18:00:00	3.16	1.82	6.04	--	2.73	1.44	5.31	--	-1.30	2.58	--