

**DELAWARE ESTUARY**  
**BUCKS, PHILADELPHIA, AND DELAWARE COUNTIES**

**WATER CONTACT SPORTS USE ASSESSMENT REPORT**

**Segment: Mainstem**  
**Stream Code: 00002**  
**Drainage List: G**

**DELAWARE RIVER BASIN COMMISSION**  
**AND**  
**ASSESSMENT SECTION**  
**WATER QUALITY DIVISION**  
**BUREAU OF CLEAN WATER**  
**PADEPARTMENT OF ENVIRONMENTAL PROTECTION**

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## **INTRODUCTION**

The Delaware River Basin Commission (DRBC) collected physiochemical and bacteriological data for the purpose of assessing the Water Contact Sports (WC) use of the Delaware Estuary (Estuary) in Bucks, Philadelphia, and Delaware Counties, in tidal Water Quality Zones (hereafter referred to as Zones) 2, 3, and 4. Data were collected at a total of 135 sites, over 6 sampling events with each site being sampled during each sampling event, over the period spanning from June 25, 2024 through July 22, 2024. Of the 135 sites, 89 were supported by funding from the Pennsylvania Department of Environmental Protection (PADEP) and 46 were supported by funding from the New Jersey Department of Environmental Protection (NJDEP). PADEP sites were monitored for Fecal Indicator Bacteria (FIB) including *Escherichia coli* (*E. Coli.*), *Enterococcus*, and Fecal Coliform, as well as analysis of host organism using Quantitative polymerase chain reaction (qPCR). NJDEP sites were monitored for FIB, but not qPCR.

Zones (including tidal portions of tributaries) are delineated by river miles (RM). Zone 2 is that part of the Delaware Estuary extending from the head of tidewater at Trenton, New Jersey, RM 133.4 (Trenton-Morrisville Toll Bridge) to RM 108.4 below the mouth of Pennypack Creek. Zone 3 is that part of the Delaware Estuary extending from RM 108.4 to RM 95.0 below the mouth of Big Timber Creek. Zone 4 is that part of the Delaware Estuary extending from RM 95.0 to RM 78.8, the Pennsylvania-Delaware boundary line. Zone 2 is currently designated Warm Water Fishes (WWF), Migratory Fishes (MF). Zone 3 is currently designated WWF (Maintenance Only); MF (Passage Only); Delete WC. Zone 4 is currently designated WWF (Maintenance Only); MF (Passage Only); Navigation; Delete WC, Potable Water Supply, Livestock Water Supply, and Irrigation.

Where the WC Use has been deleted, Pennsylvania defers to DRBC's WQS regulations. In these circumstances, Estuary waters are subject to Recreation Use criteria for fecal coliform and *Enterococcus* as a maximum geometric average per 100 mL in DRBC Administrative Manual Part III, Water Quality Regulations, 18 CFR Part 410, Article 3 (DRBC 2022). DRBC Recreation Use criteria further split Zone 4 into Upper Zone 4 and Lower Zone 4 (Table 1). DRBC regulations include a definition of "recreation", which states that recreation includes all water contact sports. Water contact sports, or primary contact recreation, include activities where the body can be fully immersed and there is a potential to swallow water, such as swimming, water skiing, diving and surfing. However, water contact sports also include secondary contact activities such as boating, fishing, and kayaking. In contrast to the primary contact recreation criteria, DRBC's secondary contact recreation criteria only apply to these activities where the probably of significant contact or water ingestion is minimal.

**Table 1.** Pennsylvania’s WC criteria (swimming season) along with DRBC’s Delaware Recreation Uses and criteria.

Zone	Pennsylvania’s Use	Pennsylvania’s <i>E. coli</i> Criterion (CFU/100mL)	DRBC’s Use	DRBC’s Fecal Coliform Criterion (CFU/100mL)	DRBC’s Enterococcus Criterion (CFU/100mL)	Estuary Mile
1	Water Contact Sports	126	Recreation	200	33	330.7 – 133.4
2	Water Contact Sports	126	Recreation	200	33	133.4 – 108.4
3	N/A	N/A	Recreation-Secondary Contact	770	88	108.4 – 95.0
Upper 4	N/A	N/A	Recreation-Secondary Contact	770	88	95.0 – 81.8
Lower 4	Water Contact Sports	126	Recreation	200	33	81.8 – 78.8

**GENERAL WATERBODY DESCRIPTION**

Pennsylvania’s tidal portion of the Delaware Estuary drainage originates in the head of tidewater starting at Morrisville, PA and Trenton, NJ and generally flows southwest to the PA-DE boundary line. The entire Delaware Estuary basin area covers 10,400 square miles of waters with land cover consisting of 60% forest, 20% agriculture, and 20% developed (Dewitz 2023). Numerous point-source discharges exist, along with several industrial stormwater and waste discharges. Pennsylvania’s tidal portion of the Delaware Estuary is located within United States Geological Survey (USGS) 12-digit Hydrologic Unit Codes (HUC12) 020402020607, 020402020507, 020402020405, 020402020403, 020402020305, 020402010407, and 020402010404.

The Estuary was previously assessed in 2012 with spatially limited data. Results of the previous assessment indicated that Zones 2, 3, and 4 were supporting.

**WATER QUALITY**

Sampling design and data collection were implemented consistent with PADEP’s *Water Quality Monitoring Protocols for Surface Waters* (Lookenbill and Arnold 2023). The data collection was completed in support of the existing assessment. Station locations were established to be representative of conditions found in the Delaware Estuary and to characterize water quality influences and/or land cover changes, pursuant to PADEP’s *Sampling Design and Planning* (Lookenbill et al. 2023) and *General Assessment Considerations* (Shull and Pulket 2023) and selected in consultation with PADEP and NJDEP (Figures 1 – 5, Appendix A). Stations were also established to maintain consistency with DRBC’s assessment methods. All locations monitored as part of this effort were used to make an assessment for the estuary regardless of whether they were collected in a tidal tributary.

This is because it is difficult to determine if the water quality was primarily the main estuary channel water or tributary water depending on tidal fluctuations; however, collected data will facilitate understanding of how different water quality is near the mouths of tidal tributaries compared to the main estuary channel.

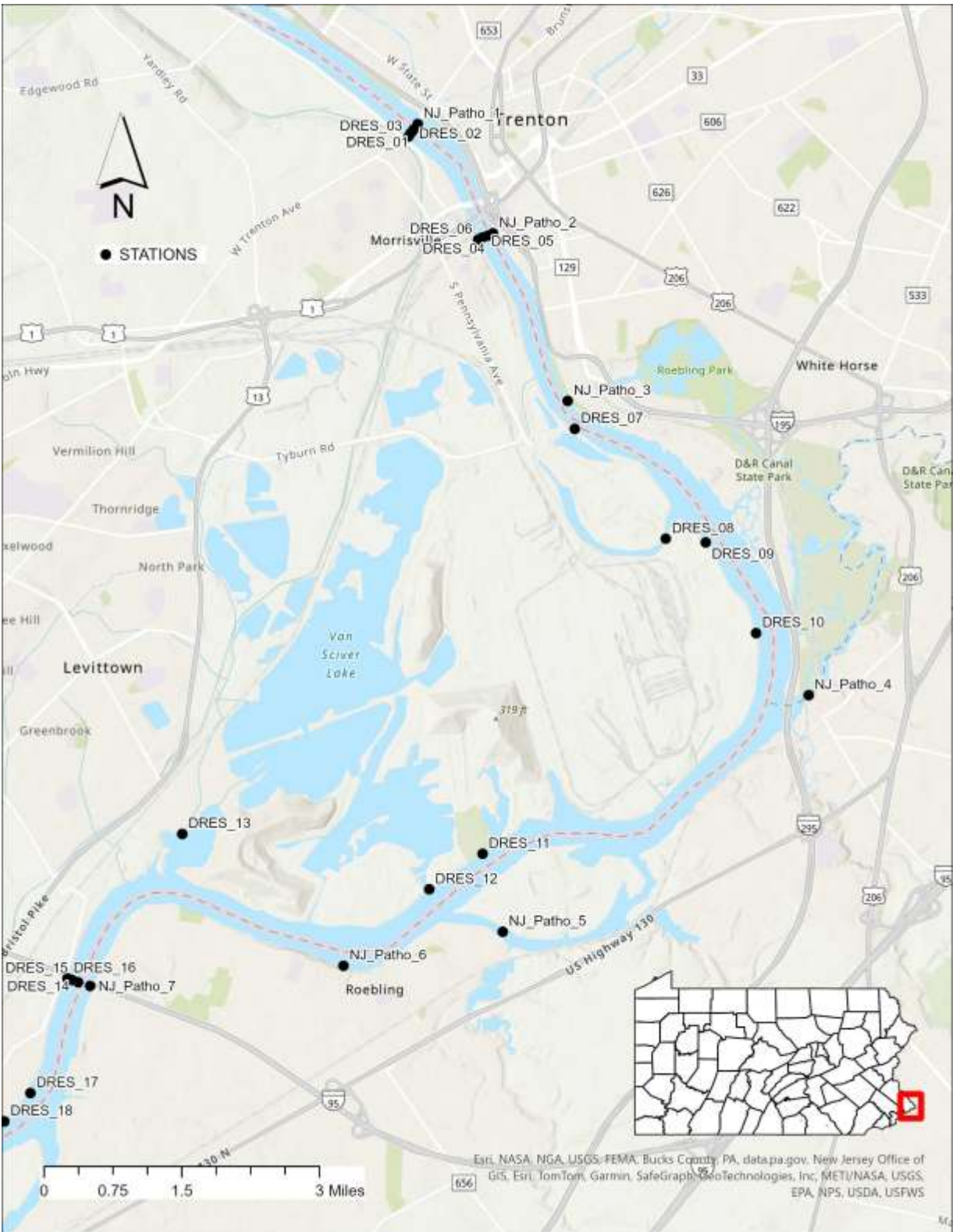


Figure 1. Delaware Estuary Station Locations – Upper Zone 2.

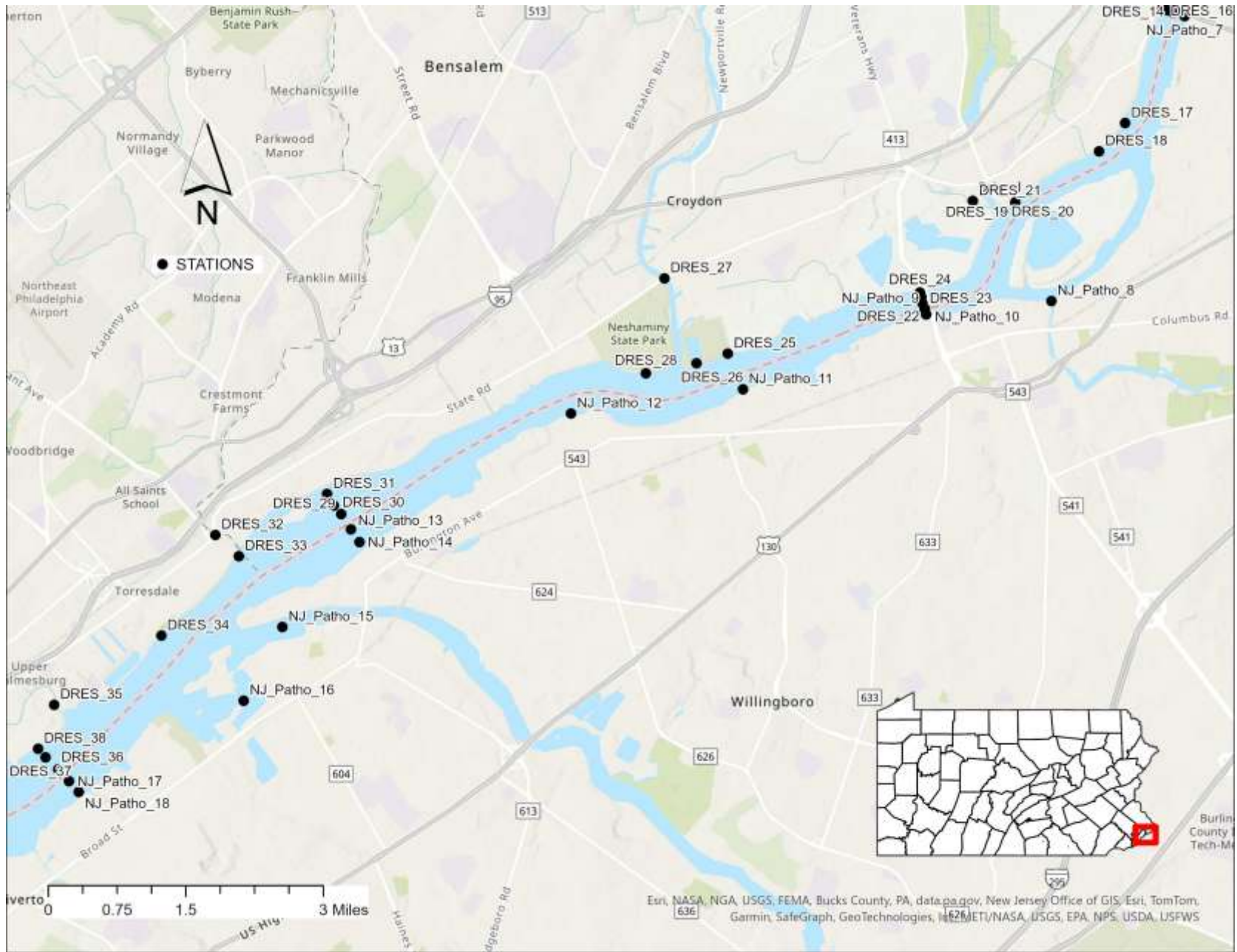


Figure 2. Delaware Estuary Station Locations – Lower Zone 2.

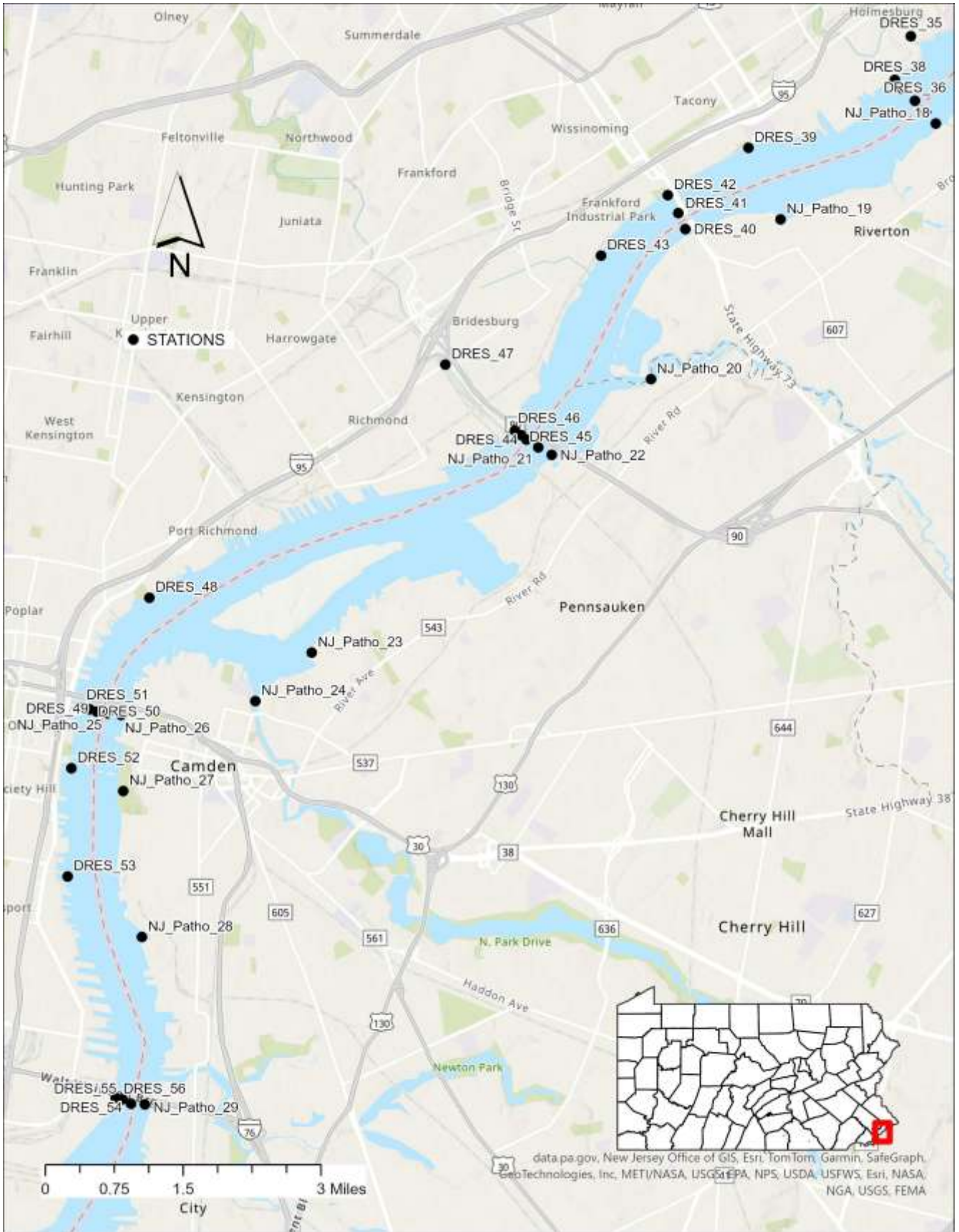
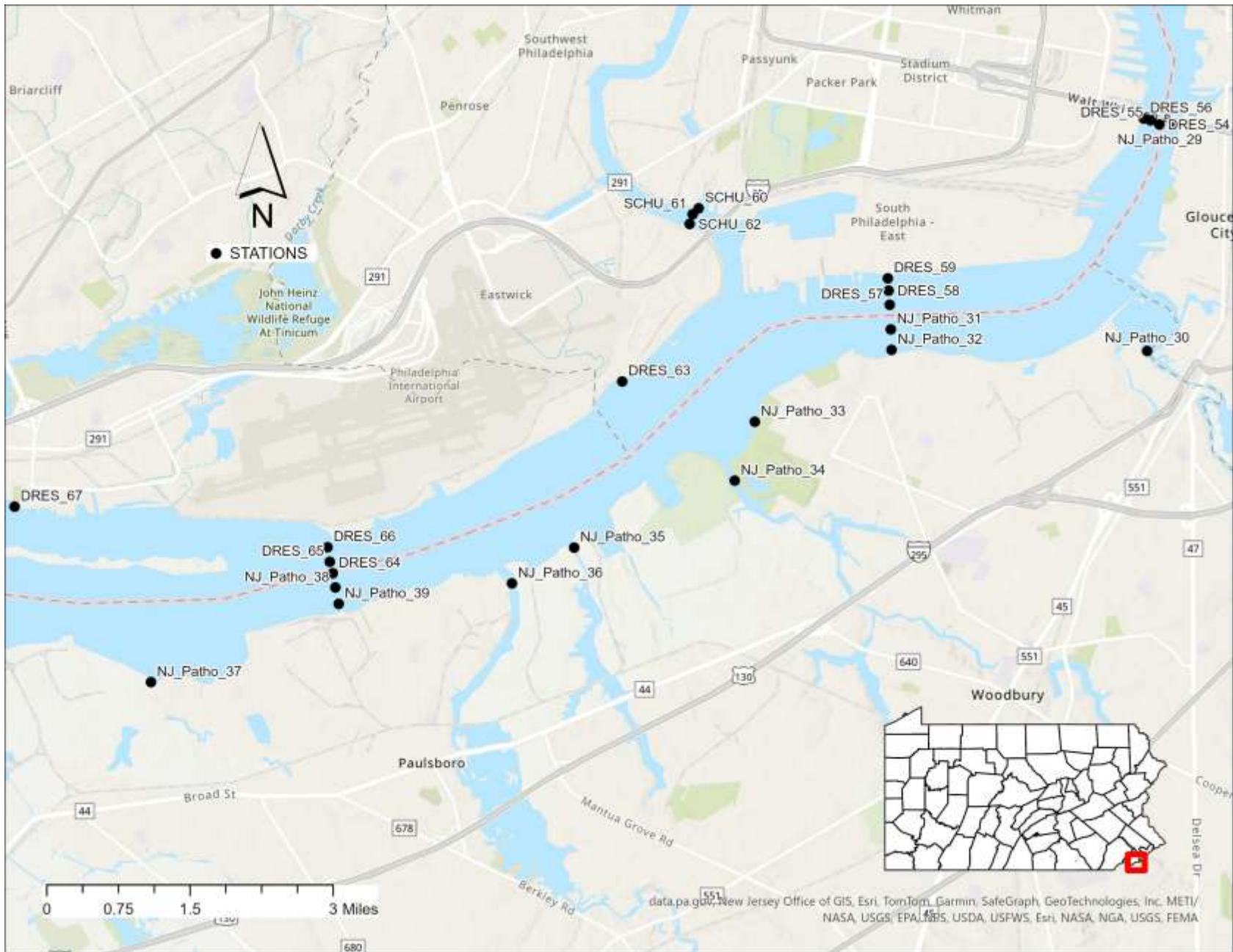


Figure 3. Delaware Estuary Station Locations – Upper Zone 3.



**Figure 4.** Delaware Estuary Station Locations – Lower Zone 3 and Upper Zone 4.

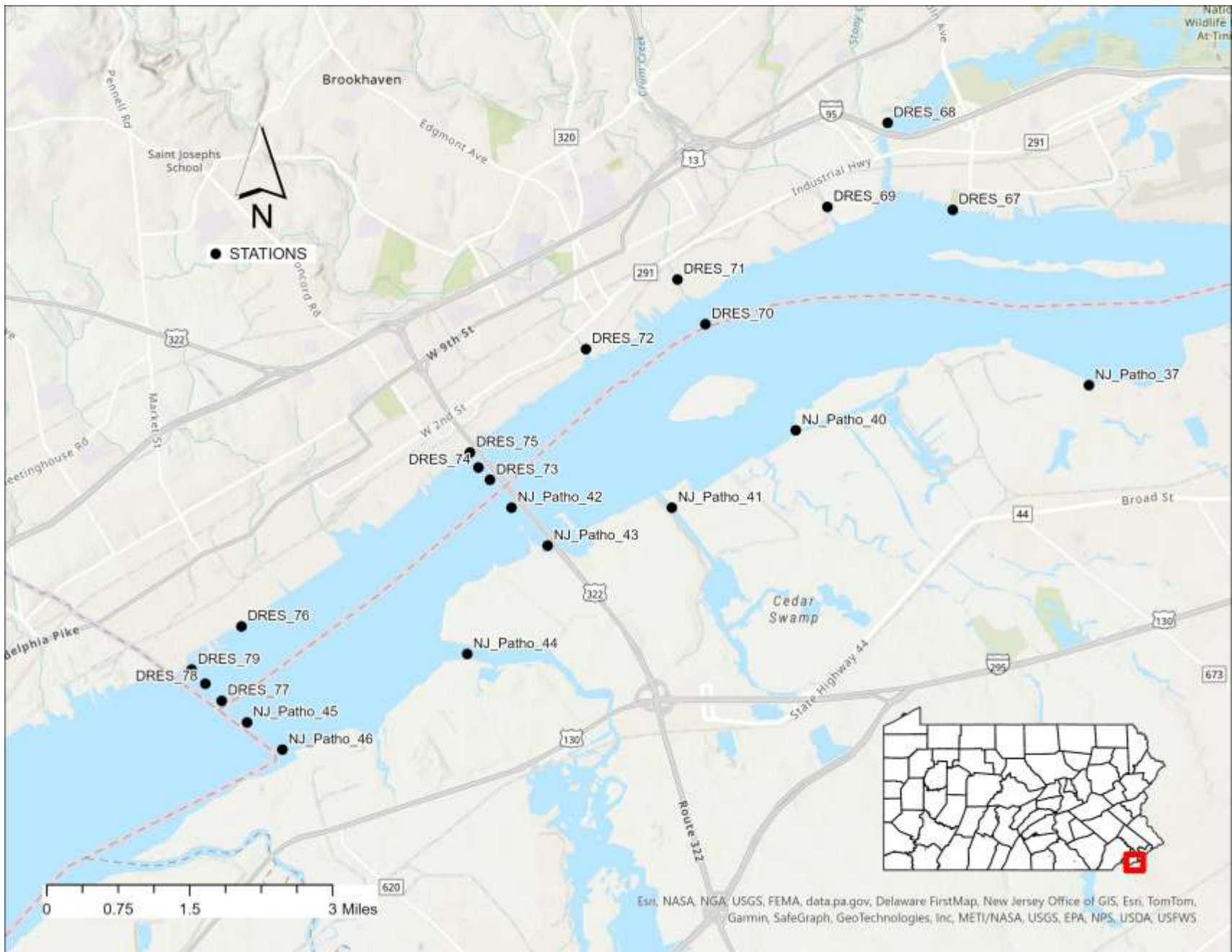


Figure 5. Delaware Estuary Station Locations – Lower Zone 4.

Bacteriological samples were collected at all stations during each sampling event over the course of 30 days using the PADEP *Bacteriological Data Collection Protocol* (Miller 2023). Data were assessed using DEP's Bacteriological Assessment Method for Water Contact Sports (Miller and Whiteash 2021). Edited data, such as values reported as '>X' or '<X', were set to the value of 'X' for this report and to make assessments. Because analytical methods used here reported *most probable number* (MPN) per 100 mL, binning of analytical values resulting in many samples with the same MPN number is common and expected. Where the DRBC's primary contact criteria and DEP's Water Contact Sports (WC) use criteria for the recreating season (May 1 – Sept 30) are applicable, a single 30-day geometric mean for *E. Coli.*, Enterococcus, and Fecal Coliform, was calculated at each station to make assessment decisions and to identify any potential problem areas. DRBC's primary contact criteria protect for all water contact sports and include maximum geometric averages for Fecal Coliform and Enterococcus. DEP's WC use criteria protect similar recreational activities as DRBC's primary contact criteria during the primary recreating season (May 1 – Sept 30) and include a 30-day geometric mean for *E. coli.* Where the DRBC's secondary contact criteria and DEP's WC use criteria for the non-recreating season (Oct 1 – April 30) are applicable, a single 30-day geometric mean for Enterococcus and Fecal Coliform, was calculated at each station to make assessment decisions and to identify any potential problem areas (Table 2). DRBC's secondary contact criteria include maximum geometric averages for Fecal Coliform and Enterococcus. DEP's WC use criteria for the non-recreating season (Oct 1 – April 30) provide similar protections as DRBC's secondary contact criteria and include a 30-day geometric mean for Fecal Coliform.

Geometric mean results show that all bacteria criteria are generally meeting in the upper portion of the Delaware Estuary. Conditions then begin to degrade through the middle portion of the Delaware Estuary with Enterococcus being the first bacteria indicator to consistently show impaired conditions. Through the lower portion of Zone 2 and upper portion of Zone 3, all bacteria indicators consistently show impairment, even with the application of secondary contact criteria starting in Zone 3. Conditions then improve within Zone 3 through Zone 4. It is important to note that, in many cases, bacteria concentrations were significantly different in the tidal tributaries when compared to the main estuary channel, even when tides were accounted for in the sampling effort (Appendix C). Although including tidal tributary data did not affect the overall assessment decisions, these results suggest that data collected in the tidal tributaries should be used to assess the tidal tributaries and not the main estuary channel in future assessment reports.

**Table 2.** Geometric Means at Each Station. Values in Bold Red Exceeded the Criterion.

CRITERIA	RIVER MILE	STATION	<i>E. coli</i>	Enterococcus	Fecal Coliform
			Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)
Primary	134.2	DRES_01	10	11	26
Primary	134.2	DRES_02	9	15	36
Primary	134.2	DRES_03	14	32	37
Primary	134.2	NJ_Patho_1	10	<b>40</b>	24
Primary	133.2	DRES_06	37	11	92
Primary	133.1	DRES_04	13	8	37
Primary	133.1	DRES_05	20	10	43
Primary	133.1	NJ_Patho_2	27	9	92
Primary	131.6	NJ_Patho_3	62	11	135
Primary	131.4	DRES_07	28	12	194
Primary	130.2	DRES_08	54	10	124
Primary	129.9	DRES_09	18	5	114
Primary	128.9	DRES_10	24	6	56
Primary	128.4	NJ_Patho_4	107	<b>120</b>	<b>219</b>
Primary	125.4	DRES_11	15	5	36
Primary	125.3	NJ_Patho_5	28	19	158
Primary	124.9	DRES_12	18	4	56
Primary	123.9	NJ_Patho_6	14	3	24
Primary	122.4	DRES_13	31	9	68
Primary	121.2	DRES_14	16	9	26
Primary	121.2	DRES_15	27	7	29
Primary	121.2	DRES_16	24	13	31
Primary	121.2	NJ_Patho_7	25	11	40
Primary	120.1	DRES_17	39	10	63
Primary	119.8	DRES_18	26	5	33
Primary	119	DRES_19	20	5	38
Primary	118.9	DRES_20	33	9	79
Primary	118.8	DRES_21	<b>241</b>	<b>508</b>	<b>263</b>
Primary	118.6	NJ_Patho_8	111	<b>34</b>	186
Primary	117.8	NJ_Patho_10	42	7	62
Primary	117.7	DRES_22	28	5	44
Primary	117.7	DRES_23	26	8	41
Primary	117.7	DRES_24	30	5	51
Primary	117.7	NJ_Patho_9	23	6	49
Primary	116.1	DRES_25	36	<b>54</b>	61
Primary	116.1	NJ_Patho_11	45	<b>43</b>	65
Primary	115.8	DRES_26	61	<b>100</b>	116
Primary	115.7	DRES_27	90	<b>86</b>	140
Primary	115.3	DRES_28	124	<b>152</b>	192

CRITERIA	RIVER MILE	STATION	<i>E. coli</i>	Enterococcus	Fecal Coliform
			Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)
Primary	114.7	NJ_Patho_12	65	<b>70</b>	181
Primary	112.6	NJ_Patho_14	56	<b>72</b>	118
Primary	112.5	DRES_29	74	<b>85</b>	166
Primary	112.5	DRES_30	94	<b>95</b>	156
Primary	112.5	DRES_31	84	<b>60</b>	<b>205</b>
Primary	112.5	NJ_Patho_13	47	<b>84</b>	130
Primary	111.7	NJ_Patho_15	<b>135</b>	<b>276</b>	<b>442</b>
Primary	111.6	DRES_33	<b>277</b>	<b>186</b>	<b>529</b>
Primary	111.5	DRES_32	<b>409</b>	<b>609</b>	<b>554</b>
Primary	111.1	NJ_Patho_16	<b>169</b>	<b>229</b>	<b>390</b>
Primary	110.7	DRES_34	<b>574</b>	<b>231</b>	<b>779</b>
Primary	109.6	DRES_35	<b>761</b>	<b>1523</b>	<b>1016</b>
Primary	109.4	NJ_Patho_17	<b>227</b>	<b>118</b>	<b>543</b>
Primary	109.4	NJ_Patho_18	89	<b>137</b>	<b>351</b>
Primary	109.3	DRES_36	<b>428</b>	<b>209</b>	<b>401</b>
Primary	109.3	DRES_37	<b>1025</b>	<b>321</b>	<b>1053</b>
Primary	109.3	DRES_38	<b>1376</b>	<b>380</b>	<b>1600</b>
Secondary	108	NJ_Patho_19	N/A	<b>253</b>	273
Secondary	107.8	DRES_39	N/A	<b>521</b>	<b>1459</b>
Secondary	107.1	DRES_40	N/A	<b>158</b>	410
Secondary	107.1	DRES_41	N/A	<b>232</b>	<b>1217</b>
Secondary	107.1	DRES_42	N/A	<b>389</b>	<b>1600</b>
Secondary	106.4	DRES_43	N/A	<b>507</b>	<b>1600</b>
Secondary	105.7	NJ_Patho_20	N/A	<b>351</b>	<b>879</b>
Secondary	104.8	NJ_Patho_22	N/A	18	628
Secondary	104.7	DRES_44	N/A	84	<b>1335</b>
Secondary	104.7	NJ_Patho_21	N/A	34	<b>1091</b>
Secondary	104.6	DRES_45	N/A	<b>101</b>	<b>1600</b>
Secondary	104.6	DRES_46	N/A	52	<b>1600</b>
Secondary	104.4	DRES_47	N/A	<b>529</b>	<b>1459</b>
Secondary	102.3	NJ_Patho_23	N/A	21	663
Secondary	101.7	NJ_Patho_24	N/A	69	<b>926</b>
Secondary	101	DRES_48	N/A	45	<b>1016</b>
Secondary	100	NJ_Patho_25	N/A	16	449
Secondary	100	NJ_Patho_26	N/A	30	<b>945</b>
Secondary	99.9	DRES_49	N/A	9	421
Secondary	99.9	DRES_50	N/A	9	414
Secondary	99.9	DRES_51	N/A	34	543
Secondary	99.4	DRES_52	N/A	11	628

CRITERIA	RIVER MILE	STATION	<i>E. coli</i>	Enterococcus	Fecal Coliform
			Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)
Secondary	99.3	NJ_Patho_27	N/A	13	<b>980</b>
Secondary	98.6	DRES_53	N/A	12	682
Secondary	97.8	NJ_Patho_28	N/A	20	<b>862</b>
Secondary	96.8	NJ_Patho_29	N/A	5	216
Secondary	96.7	DRES_54	N/A	8	460
Secondary	96.7	DRES_55	N/A	6	252
Secondary	96.7	DRES_56	N/A	12	296
Secondary	95.2	NJ_Patho_30	N/A	11	263
Secondary	93.7	DRES_57	N/A	2	103
Secondary	93.7	DRES_58	N/A	2	108
Secondary	93.7	NJ_Patho_31	N/A	3	113
Secondary	93.7	NJ_Patho_32	N/A	9	244
Secondary	93.6	DRES_59	N/A	3	108
Secondary	92.5	SCHU_60	N/A	6	640
Secondary	92.5	SCHU_61	N/A	3	418
Secondary	92.4	SCHU_62	N/A	4	230
Secondary	92.3	NJ_Patho_33	N/A	7	67
Secondary	91.9	NJ_Patho_34	N/A	52	186
Secondary	91.4	DRES_63	N/A	6	100
Secondary	90.5	NJ_Patho_35	N/A	12	67
Secondary	89.9	NJ_Patho_36	N/A	21	104
Secondary	88.6	DRES_64	N/A	5	71
Secondary	88.6	DRES_65	N/A	8	32
Secondary	88.6	DRES_66	N/A	8	97
Secondary	88.6	NJ_Patho_38	N/A	2	24
Secondary	88.6	NJ_Patho_39	N/A	12	47
Secondary	87.1	NJ_Patho_37	N/A	2	30
Secondary	86	DRES_67	N/A	16	165
Secondary	85.5	DRES_68	N/A	<b>291</b>	527
Secondary	85.1	DRES_69	N/A	<b>343</b>	602
Secondary	84.8	NJ_Patho_40	N/A	14	86
Secondary	84.1	DRES_70	N/A	4	38
Secondary	84	DRES_71	N/A	<b>533</b>	<b>845</b>
Secondary	83.1	DRES_72	N/A	<b>439</b>	745
Secondary	83.1	NJ_Patho_41	N/A	51	276
Secondary	82	NJ_Patho_43	N/A	10	88
Secondary	81.8	DRES_73	N/A	4	30
Secondary	81.8	NJ_Patho_42	N/A	5	38
Primary	81.7	DRES_74	22	6	37
Primary	81.7	DRES_75	62	11	142
Primary	81	NJ_Patho_44	34	43	75

CRITERIA	RIVER MILE	STATION	<i>E. coli</i>	Enterococcus	Fecal Coliform
			Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)	Geometric Mean (MPN/100mL)
Primary	79.2	DRES_76	70	18	85
Primary	79.1	NJ_Patho_46	30	7	65
Primary	78.9	NJ_Patho_45	18	4	24
Primary	78.8	DRES_77	7	6	11
Primary	78.7	DRES_78	19	4	29
Primary	78.6	DRES_79	41	17	92

Bacteriological microbial source tracking (MST) quantitative polymerase chain reaction (qPCR) samples were collected at all PADEP stations during each sampling event over the course of 30 days using the PADEP *Bacteriological Data Collection Protocol* (Miller 2023). Although qPCR samples were collected at all PADEP stations, the PADEP *Bacteriological Source Method* (Miller et al. 2023) was only applied where PADEP stations showed impairment to understand potential sources. Within the upstream portion of the impaired sites, human and swine hosts were co-dominant based on order of magnitude analysis. Moving downstream, the human host became more dominant than the swine (Table 3).

**Table 3.** Sample Results for Impaired Stations. The qPCR dominant hosts (based on order of magnitude) are highlighted in gray for each sample.

STATION	DATE	<i>E. coli</i>	Enterococcus	Fecal Coliform	Human	Swine	Dog	Bovine	Avian
DRES_21	6/27/2024	649	1733	540	23932	56154	1735	100	100
DRES_21	7/2/2024	16	104	49	21815	634	814	100	100
DRES_21	7/9/2024	276	1300	280	100	100	100	100	100
DRES_21	7/10/2024	517	308	350	4410	740	100	100	100
DRES_21	7/16/2024	86	98	79	1709	100	100	100	100
DRES_21	7/18/2024	1553	2420	1600	1384	7358	100	100	100
DRES_25	6/25/2024	31	48	240	7979	5587	613	100	100
DRES_25	6/27/2024	52	76	49	100	20796	3422	100	100
DRES_25	7/2/2024	23	249	33	3077	2271	1181	100	100
DRES_25	7/9/2024	31	43	23	2360	100	100	100	100
DRES_25	7/16/2024	29	13	33	100	100	100	100	100
DRES_25	7/18/2024	63	50	170	2430	1783	100	100	100
DRES_26	6/25/2024	45	36	79	100	100	1716	100	100
DRES_26	6/27/2024	921	1120	1600	18868	55131	3529	100	100
DRES_26	7/2/2024	23	157	63	100	626	100	100	100
DRES_26	7/9/2024	32	86	70	100	100	100	100	100
DRES_26	7/16/2024	30	23	33	986	100	100	100	100
DRES_26	7/18/2024	56	81	130	100	100	100	100	100
DRES_27	6/25/2024	152	44	350	100	23891	2126	100	100
DRES_27	6/27/2024	79	52	49	27104	83289	2786	100	100
DRES_27	7/2/2024	33	238	33	100	6105	1291	100	100

STATION	DATE	<i>E. coli</i>	Enterococcus	Fecal Coliform	Human	Swine	Dog	Bovine	Avian
DRES_27	7/9/2024	291	260	350	100	100	100	100	100
DRES_27	7/16/2024	60	32	110	100	100	100	100	100
DRES_27	7/18/2024	79	88	350	8186	6039	100	100	100
DRES_28	6/25/2024	770	272	920	100	39197	1121	100	100
DRES_28	6/27/2024	461	770	920	22984	71832	6963	100	100
DRES_28	7/2/2024	34	236	49	100	2609	788	100	100
DRES_28	7/9/2024	249	387	350	100	100	100	100	100
DRES_28	7/16/2024	26	16	70	100	100	100	100	100
DRES_28	7/18/2024	47	40	49	1903	100	100	100	100
DRES_29	6/25/2024	46	28	70	100	100	100	100	100
DRES_29	6/27/2024	72	115	920	39136	33475	3513	100	100
DRES_29	7/2/2024	179	517	350	10157	1333	100	100	100
DRES_29	7/9/2024	15	35	11	2357	100	100	100	100
DRES_29	7/16/2024	142	20	240	100	100	100	100	100
DRES_29	7/18/2024	127	326	350	8345	8529	100	100	100
DRES_30	6/25/2024	53	29	33	100	9213	850	100	100
DRES_30	6/27/2024	96	135	170	19787	37519	3225	100	100
DRES_30	7/2/2024	219	249	350	7438	4197	100	100	100
DRES_30	7/9/2024	21	54	79	3060	100	100	100	100
DRES_30	7/16/2024	91	28	170	1982	100	100	100	100
DRES_30	7/18/2024	326	517	540	2865	5354	100	100	100
DRES_31	6/25/2024	54	15	350	100	3583	910	100	100
DRES_31	6/27/2024	84	93	220	152339	45535	100	100	100
DRES_31	7/2/2024	86	206	170	7592	2700	501	100	100
DRES_31	7/9/2024	27	78	46	4214	2196	100	100	100
DRES_31	7/16/2024	148	12	350	5689	100	100	100	100
DRES_31	7/18/2024	219	172	350	100	5903	100	100	100
DRES_32	6/27/2024	2420	2420	1600	1588448	588250	83220	100	9882
DRES_32	7/2/2024	58	173	350	4240	9210	781	100	100
DRES_32	7/9/2024	488	816	350	100	100	100	100	100
DRES_32	7/10/2024	285	980	540	100	1005	100	100	100
DRES_32	7/16/2024	99	63	170	957	100	100	100	100
DRES_32	7/18/2024	2420	2420	1600	50198	36107	789	100	1661
DRES_33	6/25/2024	326	45	1600	9692	100	100	100	100
DRES_33	6/27/2024	613	649	920	249385	100545	100	100	100
DRES_33	7/2/2024	387	461	540	7357	927	100	100	100
DRES_33	7/9/2024	23	78	49	100	100	100	100	100
DRES_33	7/16/2024	276	38	350	6435	100	100	100	100
DRES_33	7/18/2024	921	1046	1600	11113	16554	100	100	100
DRES_34	6/25/2024	1986	84	1600	39097	100	473	100	663
DRES_34	6/27/2024	1986	2420	1600	2635761	289217	32901	100	100
DRES_34	7/2/2024	727	457	920	6495	8943	881	100	100
DRES_34	7/9/2024	56	115	110	100	341	100	100	100
DRES_34	7/16/2024	365	29	1600	2981	100	100	100	100
DRES_34	7/18/2024	613	488	540	8642	53445	100	100	100
DRES_35	6/25/2024	214	1300	920	101506	28896	100	100	100

STATION	DATE	<i>E. coli</i>	Enterococcus	Fecal Coliform	Human	Swine	Dog	Bovine	Avian
DRES_35	6/27/2024	2420	2420	1600	2296702	1016121	148665	100	11447
DRES_35	7/2/2024	411	436	1600	40638	24554	2004	100	100
DRES_35	7/9/2024	687	1553	540	53929	3848	100	100	100
DRES_35	7/16/2024	548	2420	540	1054	100	100	100	100
DRES_35	7/18/2024	2420	2420	1600	44129	100	100	100	596
DRES_36	6/25/2024	260	28	920	5178	23679	1875	100	100
DRES_36	6/27/2024	2420	517	1600	1354183	382311	27588	100	100
DRES_36	7/2/2024	727	579	220	49340	8041	933	100	100
DRES_36	7/9/2024	28	261	23	100	100	100	100	100
DRES_36	7/16/2024	1986	130	1600	29739	100	100	100	100
DRES_36	7/18/2024	240	291	350	5359	9095	100	100	100
DRES_37	6/25/2024	1046	53	1600	23417	18989	594	100	100
DRES_37	6/27/2024	2420	2420	1600	2424006	100	44376	100	100
DRES_37	7/2/2024	1046	328	1600	56018	21228	100	100	100
DRES_37	7/9/2024	222	144	130	100	353	100	100	100
DRES_37	7/16/2024	2420	328	1600	40586	1701	100	100	100
DRES_37	7/18/2024	816	548	1600	17182	10105	100	100	100
DRES_38	6/25/2024	1203	98	1600	38885	100	100	100	100
DRES_38	6/27/2024	2420	2420	1600	2310221	100	34985	100	100
DRES_38	7/2/2024	1553	361	1600	45797	20292	1340	100	100
DRES_38	7/9/2024	980	387	1600	5227	426	100	100	100
DRES_38	7/16/2024	1986	99	1600	9935	893	100	100	100
DRES_38	7/18/2024	770	921	1600	12399	11392	100	100	100
DRES_39	6/25/2024	2420	139	1600	81125	55975	1275	100	842
DRES_39	6/27/2024	2420	2420	1600	2290832	282460	18552	100	100
DRES_39	7/2/2024	2420	435	1600	74996	13135	1047	100	100
DRES_39	7/9/2024	2420	238	920	7831	100	100	100	100
DRES_39	7/16/2024	2420	548	1600	6053	718	100	100	100
DRES_39	7/18/2024	2420	1046	1600	59473	100	100	100	100
DRES_40	6/25/2024	727	82	350	19901	100	100	100	100
DRES_40	6/27/2024	345	816	920	153964	45591	7886	100	100
DRES_40	7/2/2024	178	184	540	20352	5296	830	100	100
DRES_40	7/9/2024	86	260	49	3447	100	100	100	100
DRES_40	7/16/2024	328	64	350	806	100	100	100	100
DRES_40	7/18/2024	173	75	1600	9798	433	100	100	100
DRES_41	6/25/2024	1733	50	1600	32822	8066	324	100	100
DRES_41	6/27/2024	2420	1120	1600	1785814	100	41110	100	100
DRES_41	7/2/2024	816	816	1600	32018	5637	2260	100	100
DRES_41	7/9/2024	816	345	540	9325	100	100	100	100
DRES_41	7/16/2024	921	49	920	6608	439	100	100	100
DRES_41	7/18/2024	579	201	1600	7932	9911	100	100	100
DRES_42	6/25/2024	2420	154	1600	70872	29547	100	100	100
DRES_42	6/27/2024	2420	1986	1600	3136359	100	37523	100	100
DRES_42	7/2/2024	2420	435	1600	224728	8740	1713	100	100
DRES_42	7/9/2024	1414	214	1600	6435	100	100	100	100
DRES_42	7/16/2024	1986	109	1600	7942	592	100	100	100

STATION	DATE	<i>E. coli</i>	Enterococcus	Fecal Coliform	Human	Swine	Dog	Bovine	Avian
DRES_42	7/18/2024	2420	1120	1600	114200	32768	100	100	100
DRES_43	6/25/2024	2420	178	1600	177568	64765	949	100	100
DRES_43	6/27/2024	2420	2420	1600	3693843	641754	13922	100	100
DRES_43	7/2/2024	2420	240	1600	71491	10809	100	100	100
DRES_43	7/9/2024	2420	727	1600	11731	100	100	100	100
DRES_43	7/16/2024	2420	173	1600	2048	100	100	100	100
DRES_43	7/18/2024	2420	1300	1600	179355	8107	100	100	100
DRES_44	6/26/2024	1733	34	1600	460202	50169	9273	100	100
DRES_44	7/1/2024	1733	548	1600	174134	54836	15175	100	100
DRES_44	7/8/2024	866	75	1600	11760	100	100	100	100
DRES_44	7/15/2024	387	6	540	54949	100	100	100	100
DRES_44	7/17/2024	1120	66	1600	91664	17092	1881	100	100
DRES_44	7/22/2024	1733	649	1600	231513	27862	388	100	100
DRES_45	6/26/2024	2420	491	1600	592447	45144	7425	100	100
DRES_45	7/1/2024	2420	1553	1600	184184	20846	100	100	100
DRES_45	7/8/2024	2420	28	1600	29164	2800	100	100	100
DRES_45	7/15/2024	1120	12	1600	133097	4240	1345	100	100
DRES_45	7/17/2024	2420	5	1600	91929	100	2873	100	100
DRES_45	7/22/2024	2420	816	1600	308699	100	100	100	100
DRES_46	6/26/2024	1986	239	1600	609182	100	18494	100	100
DRES_46	7/1/2024	2420	1120	1600	193831	25556	5640	100	100
DRES_46	7/8/2024	2420	13	1600	50841	2350	100	100	100
DRES_46	7/15/2024	1046	11	1600	230563	23315	100	100	100
DRES_46	7/17/2024	1733	1	1600	171275	100	100	100	100
DRES_46	7/22/2024	1733	517	1600	805665	100	1058	100	100
DRES_47	6/25/2024	2420	2420	1600	858264	100	6229	100	100
DRES_47	6/27/2024	2420	2420	1600	7.14E+08	10754447	2341121	100	9092
DRES_47	7/2/2024	770	79	1600	150352	8364	5735	100	100
DRES_47	7/9/2024	1986	1203	1600	100	2862	100	100	100
DRES_47	7/16/2024	1414	28	920	19947	100	100	100	100
DRES_47	7/18/2024	2420	1414	1600	350771	31138	100	100	100
DRES_48	6/26/2024	548	17	1600	456942	100	13795	100	100
DRES_48	7/1/2024	1300	2420	1600	198570	12655	100	100	100
DRES_48	7/8/2024	687	21	540	5531	1064	100	100	100
DRES_48	7/15/2024	276	11	540	110183	5285	100	100	100
DRES_48	7/17/2024	816	10	1600	53870	100	100	100	100
DRES_48	7/22/2024	435	93	920	865685	100	100	100	100
DRES_67	6/26/2024	44	4	33	11225	3979	100	100	100
DRES_67	7/1/2024	1553	2420	1600	195996	17839	1536	100	100
DRES_67	7/8/2024	49	31	130	11522	1794	100	100	100
DRES_67	7/15/2024	71	1	130	1272	767	100	100	100
DRES_67	7/17/2024	248	17	240	2553	1216	100	100	100
DRES_67	7/22/2024	35	3	94	110205	1455	100	100	100
DRES_68	6/25/2024	205	411	1600	65522	22819	3405	100	100
DRES_68	6/27/2024	1553	2420	1600	115179	154921	13574	100	100
DRES_68	7/2/2024	121	104	540	48380	8470	878	100	100

STATION	DATE	<i>E. coli</i>	Enterococcus	Fecal Coliform	Human	Swine	Dog	Bovine	Avian
DRES_68	7/9/2024	365	1733	920	100	3075	100	100	100
DRES_68	7/16/2024	119	22	130	1974	100	100	100	100
DRES_68	7/18/2024	70	153	130	4290	1759	0	100	1172
DRES_69	6/27/2024	2420	2420	1600	47001	330555	35823	100	2284
DRES_69	7/2/2024	153	112	280	51995	7148	1739	100	100
DRES_69	7/9/2024	980	1203	1600	100	100	539	100	100
DRES_69	7/10/2024	816	517	350	100	5299	100	100	100
DRES_69	7/16/2024	205	62	350	5578	100	100	100	100
DRES_69	7/18/2024	130	155	540	5474	2800	100	100	100
DRES_71	6/27/2024	2420	2420	1600	2483845	800908	73972	100	14629
DRES_71	7/2/2024	260	248	920	51694	17487	1973	100	100
DRES_71	7/9/2024	1733	1986	1600	4712	100	100	100	100
DRES_71	7/10/2024	1203	727	280	14092	100	100	100	956
DRES_71	7/16/2024	687	76	540	100	100	100	100	100
DRES_71	7/18/2024	365	178	540	10280	8581	100	100	100
DRES_72	6/25/2024	1986	1203	350	185515	38669	30642	100	4495
DRES_72	6/27/2024	2420	2420	1600	29386436	2771313	351065	100	8382
DRES_72	7/2/2024	770	488	920	74981	20326	4153	100	100
DRES_72	7/9/2024	1553	1046	1600	8618	100	100	100	100
DRES_72	7/16/2024	102	36	130	3460	100	100	100	100
DRES_72	7/18/2024	308	134	1600	16227	4142	100	100	100

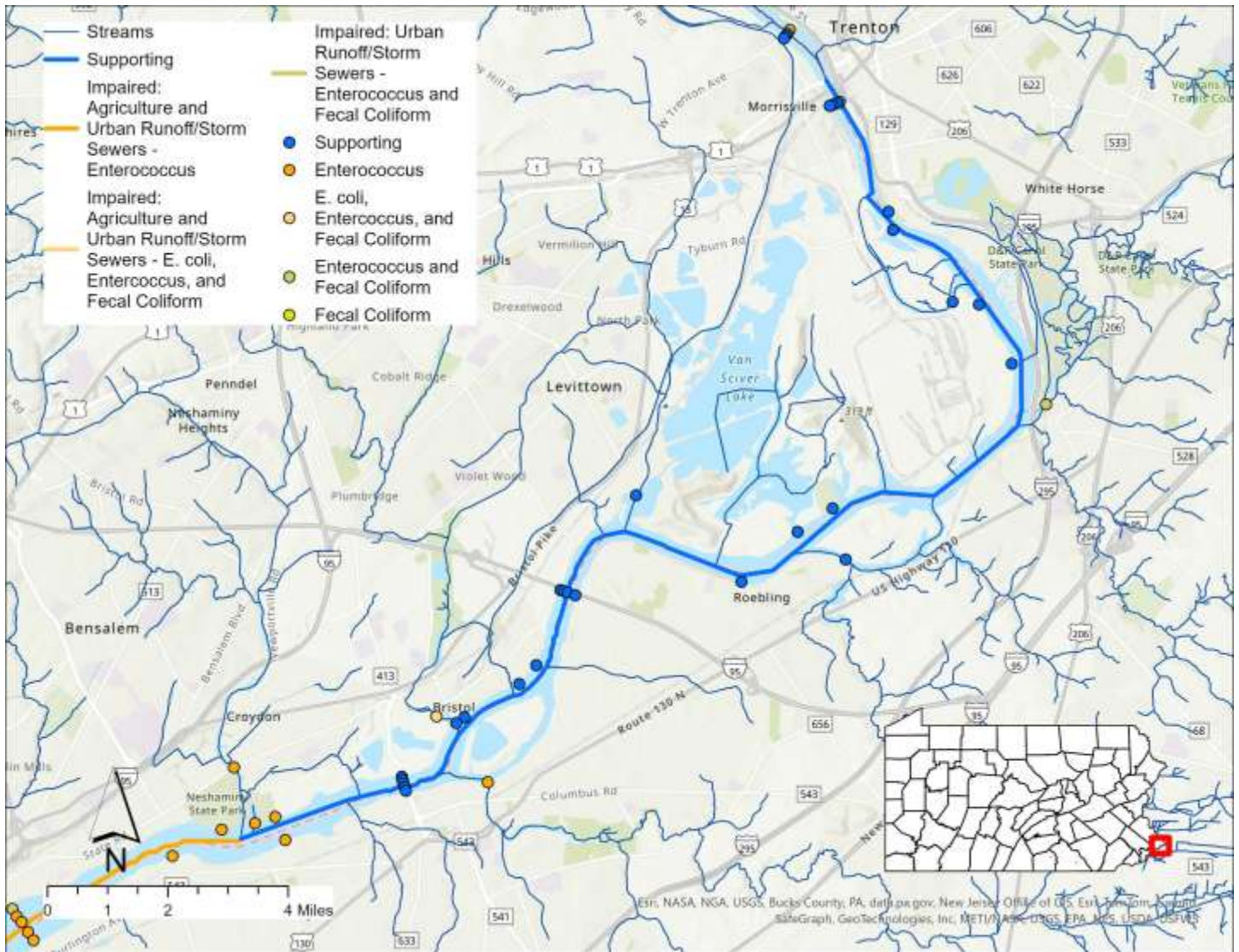
## **PROTECTED USE ASSESSMENT**

The assessment was implemented to make assessment delineations based on all collected data and analyses according to PADEP's *Water Quality Assessment Methodology for Surface Waters* (Shull and Whiteash 2023). Specifically, the PADEP *Bacteriological Assessment Method* (Miller and Whiteash 2021) was applied to the fecal indicator bacteriological samples. The PADEP *Bacteriological Source Method* (Miller et al. 2023) was applied to impaired stations. As a result of this assessment effort, a total of 14.3 estuary miles (25.5%) were impaired. Details of the assessments are described below.

### **Delaware Estuary – RM 133.4 (Trenton-Morrisville Toll Bridge) to Neshaminy Creek**

*E. coli*, Enterococcus, and Fecal Coliform data collected at stations DRES\_01 through DRES\_24 and NJ\_Patho\_01 through NJ\_Patho\_10 indicated that this reach of the Estuary was supporting (Figure 6).

- Including all stations within this reach, the overall *E. coli* geometric mean was 24 MPN/100mL, the overall Enterococcus geometric mean was 10 MPN/100mL, and the overall Fecal Coliform geometric mean was 55 MPN/100mL.
- Excursions of the 410 MPN/100mL portion of the *E. coli* criterion reached 1.5%, which was below 10% and not an exceedance.



**Figure 6.** Delaware Estuary Mainstem from RM 133.4 (Trenton-Morrisville Toll Bridge) to Neshaminy Creek Assessment Delineation.

### Delaware Estuary – Neshaminy Creek to Poquessing Creek

*E. coli*, Enterococcus, and Fecal Coliform data collected at stations DRES\_25 through DRES\_31 and NJ\_Patho\_11 through NJ\_Patho\_14 indicated that this reach of the Estuary was impaired (Figure 7).

- Including all stations within this reach, the overall *E. coli* geometric mean was 67 MPN/100mL, the overall Enterococcus geometric mean was 78 MPN/100mL, and the overall Fecal Coliform geometric mean was 130 MPN/100mL. Enterococcus was the only geometric mean exceeding criteria. Enterococcus exceedances along the shoreline of the estuary were also observed just upstream of this impairment delineation. More data should be collected in this area to determine if the impairment should be extended upstream of Neshaminy Creek.
- Excursions of the 410 MPN/100mL portion of the *E. coli* criterion reached 5.6%, which was below 10% and not an exceedance.
- Human and swine hosts were consistently co-dominant through this reach, indicating a mixture of both agricultural and urban sources. Dog host was also detected, but in a lower order of magnitude compared to the dominant hosts.

- Land cover in many of the upper portions of tributaries flowing into this section of the Delaware Estuary (particularly Neshaminy Creek) is influenced by agriculture (approximately 16% of land cover for the entire Neshaminy Creek watershed).
- Land cover in the remaining portions of tributaries flowing into this section of the Delaware Estuary is heavily influenced by development and impervious surfaces.

Considering all the evidence described above, the following sources and causes were included:

- Source Agriculture, cause Enterococcus
- Source Urban Runoff/Storm Sewers, cause Enterococcus

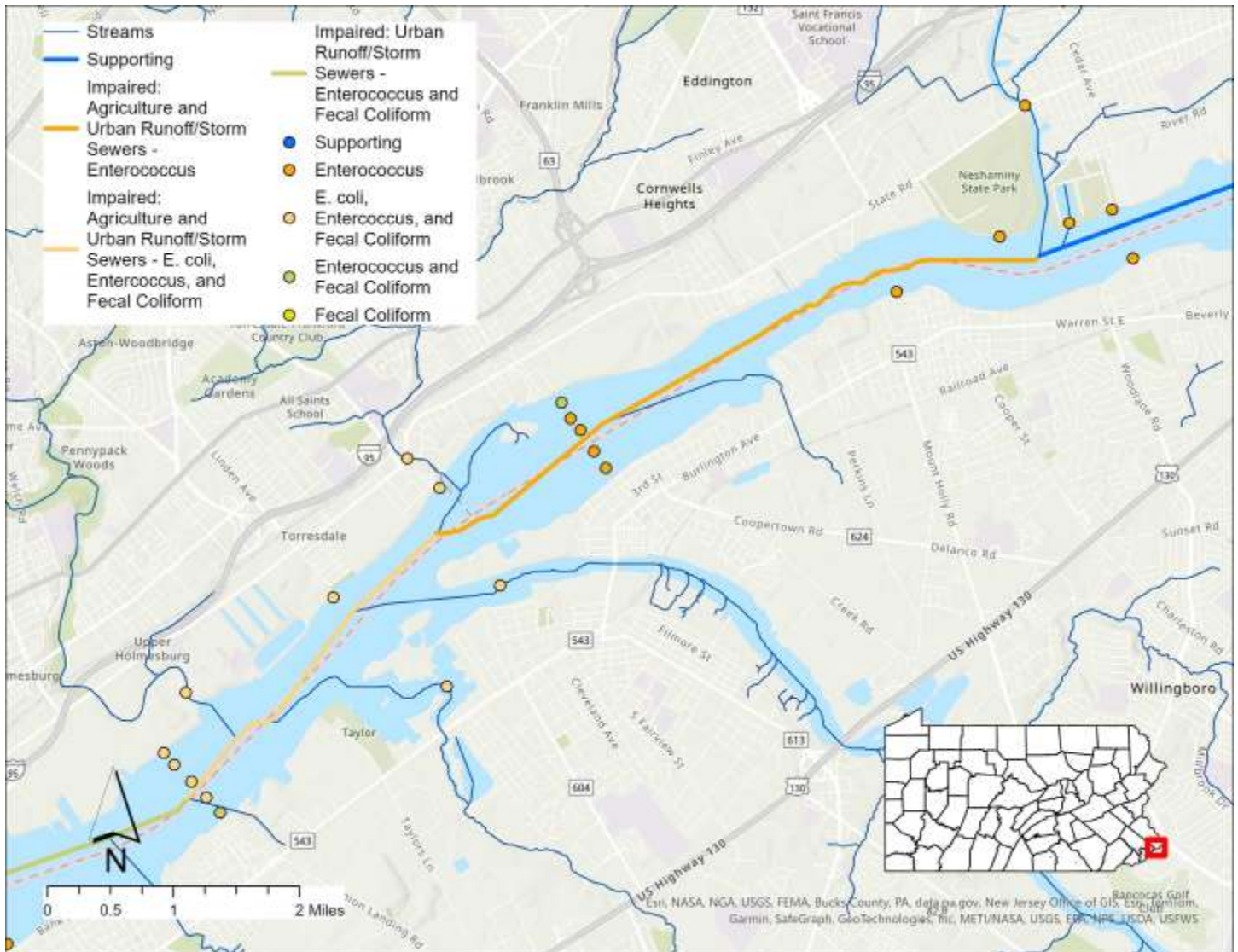
#### **Delaware Estuary – Poquessing Creek to RM 108.4 Below the Mouth of Pennypack Creek**

*E. coli*, Enterococcus, and Fecal Coliform data collected at stations DRES\_32 through DRES\_38 and NJ\_Patho\_15 through NJ\_Patho\_18 indicated that this reach of the Estuary was impaired (Figure 7).

- Including all stations within this reach, the overall *E. coli* geometric mean was 361 MPN/100mL, the overall Enterococcus geometric mean was 286 MPN/100mL, and the overall Fecal Coliform geometric mean was 619 MPN/100mL.
- Excursions of the 410 MPN/100mL portion of the *E. coli* criterion reached 47%, which was above 10% and an exceedance.
- Human and swine hosts were consistently co-dominant through this reach, indicating a mixture of both agricultural and urban sources. Dog host was detected in a lower order of magnitude compared to the dominant hosts.
- Land cover in many of the upper portions of larger tributaries flowing into this section of the Delaware Estuary (particularly Neshaminy Creek) is influenced by agriculture (approximately 16% of land cover for the entire Neshaminy Creek watershed).
- Land cover in the remaining portions of tributaries flowing into this section of the Delaware Estuary is heavily influenced by development and impervious surfaces.

Considering all the evidence described above, the following sources and causes were included:

- Source Agriculture, causes *E. coli*, Enterococcus, and Fecal Coliform
- Source Urban Runoff/Storm Sewers, causes *E. coli*, Enterococcus, and Fecal Coliform



**Figure 7.** Delaware Estuary Mainstem from Neshaminy Creek to RM 108.4 Below the Mouth of Pennypack Creek Assessment Delineations.

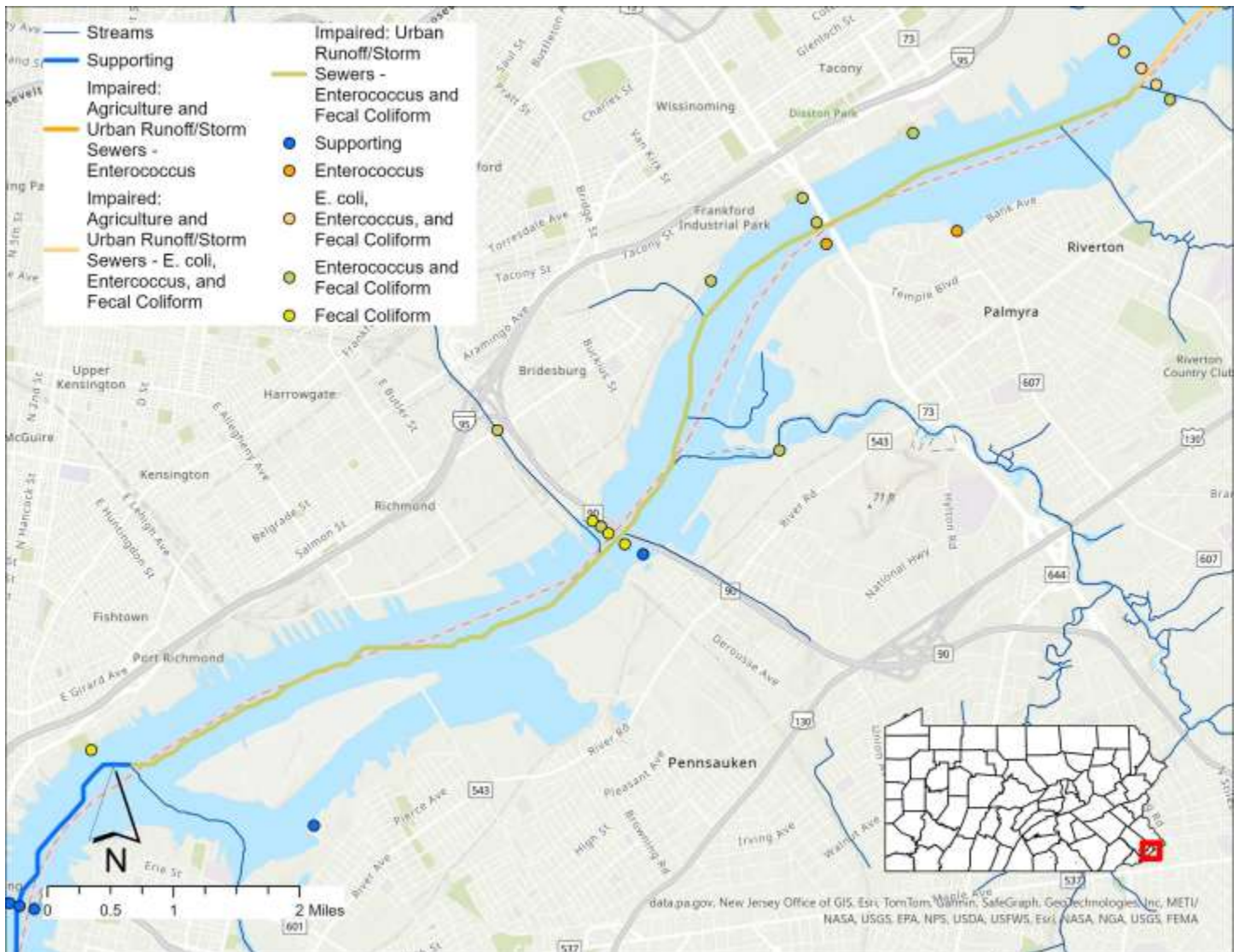
**Delaware Estuary – RM 108.4 Below the Mouth of Pennypack Creek to Cooper River (NJ)**

Enterococcus, and Fecal Coliform data collected at stations DRES\_39 through DRES\_48 and NJ\_Patho\_19 through NJ\_Patho\_24 indicated that this reach Estuary was impaired (Figure 8).

- Including all stations within this reach, the overall Enterococcus geometric mean was 124 MPN/100mL and the overall Fecal Coliform geometric mean was 997 MPN/100mL.
- Although the *E. coli* criteria do not apply in this section of the Estuary, the geometric mean for all stations in this reach was 865 MPN/100mL.
- Human host was consistently dominant through this reach, indicating urban sources.
- Land cover in the tributaries flowing into this section of the Delaware Estuary is heavily influenced by development and impervious surfaces.

Considering all the evidence described above, the following sources and causes were included:

- Source Urban Runoff/Storm Sewers, causes Enterococcus, and Fecal Coliform



**Figure 8.** Delaware Estuary Mainstem from RM 108.4 Below the Mouth of Pennypack Creek to Cooper River (NJ) Assessment Delineations.

**Delaware Estuary – Cooper River (NJ) to RM 81.8 (End of Secondary Criteria)**

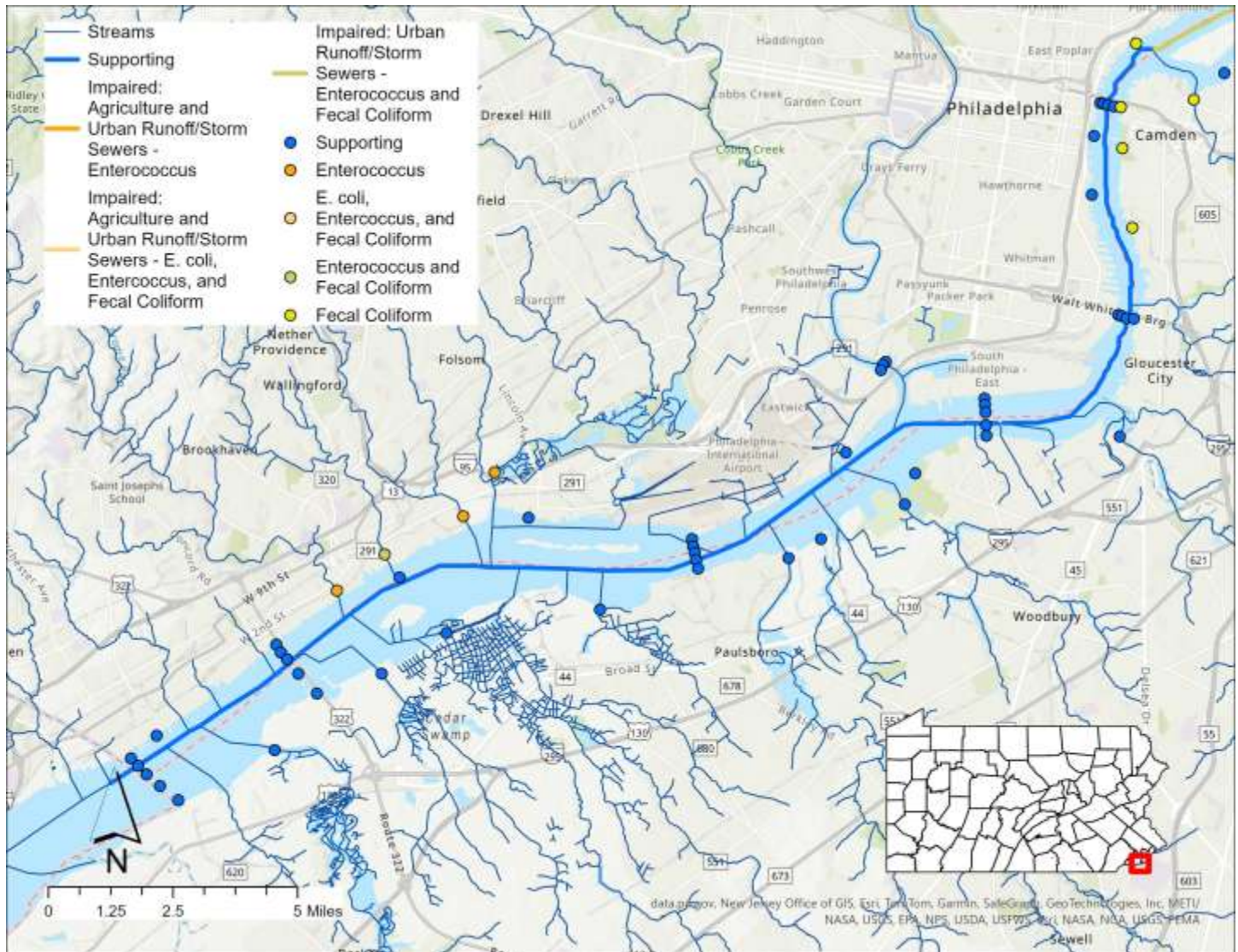
Enterococcus, and Fecal Coliform data collected at stations DRES\_49 through DRES\_73, SCHU\_60 through SCHU\_62, and NJ\_Patho\_25 through NJ\_Patho\_43 indicated that this reach of the Estuary was supporting (Figure 9).

- Including all stations within this reach, the overall Enterococcus geometric mean was 12 MPN/100mL and the overall Fecal Coliform geometric mean was 185 MPN/100mL.
- Although the *E. coli* criteria do not apply in this section of the Estuary, the geometric mean for all stations in this reach was 120 MPN/100mL.

**Delaware Estuary – RM 81.8 (End of Secondary Criteria) to RM 78.8 (Pennsylvania-Delaware Boundary Line)**

*E. coli*, Enterococcus, and Fecal Coliform data collected at stations DRES\_74 through DRES\_79 and NJ\_Patho\_44 through NJ\_Patho\_46 indicated that this reach of the Estuary was supporting (Figure 10).

- Including all stations within this reach, the overall *E. coli* geometric mean was 28, the overall Enterococcus geometric mean was 9, and the overall Fecal Coliform geometric mean was 48.
- Excursions of the 410 MPN/100mL portion of the *E. coli* criterion reached 7.5%, which was below 10% and not an exceedance.



**Figure 9.** Delaware Estuary Mainstem from Cooper River (NJ) to RM 78.8 (Pennsylvania-Delaware Boundary Line).

## **LITERATURE CITED**

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**APPENDIX A: STATION LOCATION TABLE**

**Table A1. Station Locations – Delaware Estuary**

<b>STATION</b>	<b>DESCRIPTION</b>
<b>NJ_Patho_1</b>	Delaware Estuary (26064986) Mercer County, NJ Lat: 40.219994 Long: -74.777527
<b>DRES_01</b>	Delaware Estuary (26064986) Bucks County, PA Lat: 40.219275 Long: -74.77821
<b>DRES_02</b>	Delaware Estuary (26064986) Bucks County, PA Lat: 40.218843 Long: -74.778646
<b>DRES_03</b>	Delaware Estuary (26064986) Bucks County, PA Lat: 40.218444 Long: -74.778994
<b>NJ_Patho_2</b>	Delaware Estuary (25486800) Mercer County, NJ Lat: 40.206848 Long: -74.765613
<b>DRES_04</b>	Delaware Estuary (25486800) Bucks County, PA Lat: 40.206565 Long: -74.766394
<b>DRES_05</b>	Delaware Estuary (25486800) Bucks County, PA Lat: 40.206315 Long: -74.767268
<b>DRES_06</b>	Delaware Estuary (25486800) Bucks County, PA Lat: 40.206082 Long: -74.767981
<b>NJ_Patho_3</b>	Delaware Estuary (25486802) Mercer County, NJ Lat: 40.186674 Long: -74.753876
<b>DRES_07</b>	Delaware Estuary (25486802) Bucks County, PA Lat: 40.183333 Long: -74.752778
<b>DRES_08</b>	Delaware Estuary (25486152) Bucks County, PA Lat: 40.170101 Long: -74.738445
<b>DRES_09</b>	Delaware Estuary (25486156) Bucks County, PA Lat: 40.169666 Long: -74.732127
<b>DRES_10</b>	Delaware Estuary (25486156) Bucks County, PA Lat: 40.158767 Long: -74.724229
<b>NJ_Patho_4</b>	Delaware Estuary (25486118) Mercer County, NJ Lat: 40.151302 Long: -74.715956
<b>DRES_13</b>	Delaware Estuary (25486822) Bucks County, PA Lat: 40.134611 Long: -74.814557
<b>DRES_11</b>	Delaware Estuary (25486816) Bucks County, PA Lat: 40.132205 Long: -74.767276
<b>DRES_12</b>	Delaware Estuary (25486816) Bucks County, PA Lat: 40.12794 Long: -74.775699

<b>STATION</b>	<b>DESCRIPTION</b>
<b>NJ_Patho_5</b>	Delaware Estuary (25475068) Burlington County, NJ Lat: 40.122846 Long: -74.764096
<b>NJ_Patho_6</b>	Delaware Estuary (25486988) Burlington County, NJ Lat: 40.118759 Long: -74.789187
<b>DRES_16</b>	Delaware Estuary (25475062) Bucks County, PA Lat: 40.117214 Long: -74.832646
<b>DRES_15</b>	Delaware Estuary (25475062) Bucks County, PA Lat: 40.117037 Long: -74.831936
<b>DRES_14</b>	Delaware Estuary (25475062) Bucks County, PA Lat: 40.116756 Long: -74.830991
<b>NJ_Patho_7</b>	Delaware Estuary (25475062) Burlington County, NJ Lat: 40.116305 Long: -74.829099
<b>DRES_17</b>	Delaware Estuary (25475062) Bucks County, PA Lat: 40.103418 Long: -74.838511
<b>DRES_18</b>	Delaware Estuary (25474984) Bucks County, PA Lat: 40.100021 Long: -74.842603
<b>DRES_21</b>	Delaware Estuary (25475030) Bucks County, PA Lat: 40.094019 Long: -74.862505
<b>DRES_19</b>	Delaware Estuary (25474986) Bucks County, PA Lat: 40.093864 Long: -74.855805
<b>DRES_20</b>	Delaware Estuary (25475030) Bucks County, PA Lat: 40.092799 Long: -74.857774
<b>DRES_27</b>	Delaware Estuary (25474428) Bucks County, PA Lat: 40.084692 Long: -74.911183
<b>DRES_24</b>	Delaware Estuary (25475032) Bucks County, PA Lat: 40.082971 Long: -74.870842
<b>DRES_23</b>	Delaware Estuary (25475032) Bucks County, PA Lat: 40.082438 Long: -74.870647
<b>NJ_Patho_8</b>	Delaware Estuary (25474990) Burlington County, NJ Lat: 40.081954 Long: -74.850113
<b>DRES_22</b>	Delaware Estuary (25475032) Bucks County, PA Lat: 40.081692 Long: -74.870452
<b>NJ_Patho_9</b>	Delaware Estuary (25475032) Burlington County, NJ Lat: 40.081012 Long: -74.870086
<b>NJ_Patho_10</b>	Delaware Estuary (25475032)

<b>STATION</b>	<b>DESCRIPTION</b>
	Burlington County, NJ Lat: 40.080334 Long: -74.86985
<b>DRES_25</b>	Delaware Estuary (25474466) Bucks County, PA Lat: 40.075593 Long: -74.901183
<b>DRES_26</b>	Delaware Estuary (25474468) Bucks County, PA Lat: 40.074426 Long: -74.906085
<b>DRES_28</b>	Delaware Estuary (25586711) Bucks County, PA Lat: 40.073216 Long: -74.914093
<b>NJ_Patho_11</b>	Delaware Estuary (25474466) Burlington County, NJ Lat: 40.071293 Long: -74.898783
<b>NJ_Patho_12</b>	Delaware Estuary (25586711) Burlington County, NJ Lat: 40.068377 Long: -74.925913
<b>DRES_31</b>	Delaware Estuary (25586707) Bucks County, PA Lat: 40.058668 Long: -74.964358
<b>DRES_30</b>	Delaware Estuary (25586707) Bucks County, PA Lat: 40.057262 Long: -74.963319
<b>DRES_29</b>	Delaware Estuary (25586707) Bucks County, PA Lat: 40.056236 Long: -74.96218
<b>NJ_Patho_13</b>	Delaware Estuary (25586707) Burlington County, NJ Lat: 40.054378 Long: -74.960651
<b>DRES_32</b>	Delaware Estuary (25586567) Philadelphia County, PA Lat: 40.053735 Long: -74.982023
<b>NJ_Patho_14</b>	Delaware Estuary (25586707) Burlington County, NJ Lat: 40.052882 Long: -74.959292
<b>DRES_33</b>	Delaware Estuary (25586567) Philadelphia County, PA Lat: 40.05117 Long: -74.978308
<b>NJ_Patho_15</b>	Delaware Estuary (25586701) Burlington County, NJ Lat: 40.04261 Long: -74.971408
<b>DRES_34</b>	Delaware Estuary (25586699) Philadelphia County, PA Lat: 40.041556 Long: -74.990543
<b>NJ_Patho_16</b>	Delaware Estuary (25586703) Burlington County, NJ Lat: 40.033716 Long: -74.977528
<b>DRES_35</b>	Delaware Estuary (25599209) Philadelphia County, PA Lat: 40.033201 Long: -75.007451
<b>DRES_38</b>	Delaware Estuary (25599215) Philadelphia County, PA

<b>STATION</b>	<b>DESCRIPTION</b>
	Lat: 40.027924 Long: -75.009997
<b>DRES_37</b>	Delaware Estuary (25599215) Philadelphia County, PA Lat: 40.026857 Long: -75.008771
<b>DRES_36</b>	Delaware Estuary (25599215) Philadelphia County, PA Lat: 40.025406 Long: -75.006821
<b>NJ_Patho_17</b>	Delaware Estuary (25599297) Burlington County, NJ Lat: 40.023987 Long: -75.005103
<b>NJ_Patho_18</b>	Delaware Estuary (25599297) Burlington County, NJ Lat: 40.022683 Long: -75.003543
<b>DRES_39</b>	Delaware Estuary (25599217) Philadelphia County, PA Lat: 40.01974 Long: -75.033024
<b>DRES_42</b>	Delaware Estuary (25599217) Philadelphia County, PA Lat: 40.014044 Long: -75.045709
<b>DRES_41</b>	Delaware Estuary (25599217) Philadelphia County, PA Lat: 40.011877 Long: -75.044055
<b>NJ_Patho_19</b>	Delaware Estuary (25599217) Burlington County, NJ Lat: 40.011112 Long: -75.027952
<b>DRES_40</b>	Delaware Estuary (25599217) Burlington County, PA Lat: 40.009961 Long: -75.042942
<b>DRES_43</b>	Delaware Estuary (25599217) Philadelphia County, PA Lat: 40.006746 Long: -75.056195
<b>DRES_47</b>	Delaware Estuary (25595573) Philadelphia County, PA Lat: 39.993596 Long: -75.080699
<b>NJ_Patho_20</b>	Delaware Estuary (25595521) Camden County, NJ Lat: 39.991848 Long: -75.048357
<b>DRES_46</b>	Delaware Estuary (25595373) Philadelphia County, PA Lat: 39.98564 Long: -75.069811
<b>DRES_45</b>	Delaware Estuary (25595373) Philadelphia County, PA Lat: 39.985122 Long: -75.068811
<b>DRES_44</b>	Delaware Estuary (25595373) Philadelphia County, PA Lat: 39.984554 Long: -75.067969
<b>NJ_Patho_21</b>	Delaware Estuary (25595373) Camden County, NJ Lat: 39.983609 Long: -75.066067
<b>NJ_Patho_22</b>	Delaware Estuary (25595373) Camden County, NJ Lat: 39.982726 Long: -75.063969

<b>STATION</b>	<b>DESCRIPTION</b>
<b>DRES_48</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.965488 Long: -75.127301
<b>NJ_Patho_23</b>	Delaware Estuary (25595545) Camden County, NJ Lat: 39.958843 Long: -75.101732
<b>NJ_Patho_24</b>	Delaware Estuary (25595545) Camden County, NJ Lat: 39.952998 Long: -75.110637
<b>DRES_51</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.952242 Long: -75.137727
<b>DRES_50</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.952033 Long: -75.136707
<b>DRES_49</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.951762 Long: -75.135559
<b>NJ_Patho_25</b>	Delaware Estuary (25615876) Camden County, NJ Lat: 39.951503 Long: -75.133848
<b>NJ_Patho_26</b>	Delaware Estuary (25615876) Camden County, NJ Lat: 39.951336 Long: -75.131756
<b>DRES_52</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.944907 Long: -75.139583
<b>NJ_Patho_27</b>	Delaware Estuary (25615876) Camden County, NJ Lat: 39.942173 Long: -75.131384
<b>DRES_53</b>	Delaware Estuary (25615876) Philadelphia County, PA Lat: 39.931832 Long: -75.140165
<b>NJ_Patho_28</b>	Delaware Estuary (25615876) Camden County, NJ Lat: 39.924525 Long: -75.128453
<b>DRES_56</b>	Delaware Estuary (25625946) Philadelphia County, PA Lat: 39.905135 Long: -75.132557
<b>DRES_55</b>	Delaware Estuary (25625946) Philadelphia County, PA Lat: 39.904926 Long: -75.131536
<b>DRES_54</b>	Delaware Estuary (25625946) Philadelphia County, PA Lat: 39.904421 Long: -75.130201
<b>NJ_Patho_29</b>	Delaware Estuary (25625946) Camden County, NJ Lat: 39.90429 Long: -75.127997
<b>SCHU_60</b>	Delaware Estuary (134387020) Philadelphia County, PA Lat: 39.894697 Long: -75.199973
<b>SCHU_61</b>	Delaware Estuary (134387020)

<b>STATION</b>	<b>DESCRIPTION</b>
	Philadelphia County, PA Lat: 39.89401 Long: -75.200883
<b>SCHU_62</b>	Delaware Estuary (134387020) Philadelphia County, PA Lat: 39.89287 Long: -75.201334
<b>DRES_59</b>	Delaware Estuary (25615848) Philadelphia County, PA Lat: 39.886554 Long: -75.171333
<b>DRES_58</b>	Delaware Estuary (25615848) Philadelphia County, PA Lat: 39.885145 Long: -75.171197
<b>DRES_57</b>	Delaware Estuary (25615848) Philadelphia County, PA Lat: 39.883474 Long: -75.171061
<b>NJ_Patho_31</b>	Delaware Estuary (25615848) Gloucester County, NJ Lat: 39.880635 Long: -75.170855
<b>NJ_Patho_32</b>	Delaware Estuary (25615848) Gloucester County, NJ Lat: 39.878253 Long: -75.170755
<b>NJ_Patho_30</b>	Delaware Estuary (25615896) Camden County, NJ Lat: 39.878123 Long: -75.13206
<b>DRES_63</b>	Delaware Estuary (25624948) Philadelphia County, PA Lat: 39.874574 Long: -75.211555
<b>DRES_68</b>	Delaware Estuary (25590699) Philadelphia County, PA Lat: 39.870137 Long: -75.313445
<b>NJ_Patho_33</b>	Delaware Estuary (25615892) Gloucester County, NJ Lat: 39.869885 Long: -75.191464
<b>NJ_Patho_34</b>	Delaware Estuary (25616372) Gloucester County, NJ Lat: 39.863026 Long: -75.194499
<b>DRES_69</b>	Delaware Estuary (25590671) Philadelphia County, PA Lat: 39.860364 Long: -75.32256
<b>DRES_67</b>	Delaware Estuary (25590737) Philadelphia County, PA Lat: 39.860017 Long: -75.303584
<b>DRES_66</b>	Delaware Estuary (25591467) Philadelphia County, PA Lat: 39.855303 Long: -75.256187
<b>NJ_Patho_35</b>	Delaware Estuary (25624942) Gloucester County, NJ Lat: 39.855258 Long: -75.218815
<b>DRES_65</b>	Delaware Estuary (25591467) Philadelphia County, PA Lat: 39.853603 Long: -75.255839
<b>DRES_64</b>	Delaware Estuary (25591467) Philadelphia County, PA

<b>STATION</b>	<b>DESCRIPTION</b>
	Lat: 39.852257 Long: -75.255399
<b>DRES_71</b>	Delaware Estuary (25590657) Philadelphia County, PA Lat: 39.851909 Long: -75.345308
<b>NJ_Patho_36</b>	Delaware Estuary (25624902) Gloucester County, NJ Lat: 39.851093 Long: -75.228234
<b>NJ_Patho_38</b>	Delaware Estuary (25591467) Gloucester County, NJ Lat: 39.8506047 Long: -75.25499808
<b>NJ_Patho_39</b>	Delaware Estuary (25591467) Gloucester County, NJ Lat: 39.8487184 Long: -75.25448721
<b>DRES_70</b>	Delaware Estuary (25591411) Philadelphia County, PA Lat: 39.846719 Long: -75.341065
<b>DRES_72</b>	Delaware Estuary (25590649) Philadelphia County, PA Lat: 39.843829 Long: -75.359213
<b>NJ_Patho_37</b>	Delaware Estuary (25591455) Gloucester County, NJ Lat: 39.839598 Long: -75.282931
<b>NJ_Patho_40</b>	Delaware Estuary (25591335) Gloucester County, NJ Lat: 39.834353 Long: -75.327378
<b>DRES_75</b>	Delaware Estuary (25591393) Philadelphia County, PA Lat: 39.831775 Long: -75.376779
<b>DRES_74</b>	Delaware Estuary (25591393) Philadelphia County, PA Lat: 39.830051 Long: -75.375487
<b>DRES_73</b>	Delaware Estuary (25591393) Philadelphia County, PA Lat: 39.828589 Long: -75.373718
<b>NJ_Patho_42</b>	Delaware Estuary (25591393) Gloucester County, NJ Lat: 39.825366 Long: -75.370469
<b>NJ_Patho_41</b>	Delaware Estuary (25590793) Gloucester County, NJ Lat: 39.825354 Long: -75.346163
<b>NJ_Patho_43</b>	Delaware Estuary (25591393) Gloucester County, NJ Lat: 39.820927 Long: -75.364974
<b>DRES_76</b>	Delaware Estuary (25602819) Philadelphia County, PA Lat: 39.81155 Long: -75.411443
<b>NJ_Patho_44</b>	Delaware Estuary (25602827) Gloucester County, NJ Lat: 39.808316 Long: -75.377205
<b>DRES_79</b>	Delaware Estuary (25602819) Philadelphia County, PA Lat: 39.806507 Long: -75.418985

<b>STATION</b>	<b>DESCRIPTION</b>
<b>DRES_78</b>	Delaware Estuary (25602819) Philadelphia County, PA Lat: 39.804842 Long: -75.416893
<b>DRES_77</b>	Delaware Estuary (25602819) Philadelphia County, PA Lat: 39.802877 Long: -75.414447
<b>NJ_Patho_45</b>	Delaware Estuary (25602819) Gloucester County, NJ Lat: 39.800369 Long: -75.410567
<b>NJ_Patho_46</b>	Delaware Estuary (25602819) Gloucester County, NJ Lat: 39.79717 Long: -75.40521

**APPENDIX B: BACTERIOLOGICAL DATA**

**Table B1. Bacteriological Data – Delaware Estuary.**

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	MST qPCR (GC/<100mL)			
									SWINE	BOVINE	AVIAN	DOG
DRES_01	2616317	4062513_06	6/25/2024	13:48	12	4	21	<100	3792	<100	<100	2106
DRES_01	2617503	4062709_11	6/27/2024	13:41	15	17	49	455228	29595	<100	<100	12398
DRES_01	2619156	4070205_11	7/2/2024	12:25	2	6	14	3537	659	<100	<100	739
DRES_01	2620780	4070910_11	7/9/2024	12:11	6	13	11	<100	499	<100	<100	<100
DRES_01	2625082	4071609_11	7/16/2024	12:45	9	9	23	<100	<100	<100	<100	<100
DRES_01	2625149	4071807_11	7/18/2024	12:47	45	38	79	<100	<100	<100	<100	<100
DRES_02	2616316	4062513_07	6/25/2024	13:40	26	5	240	<100	3668	<100	<100	3306
DRES_02	2617502	4062709_12	6/27/2024	13:29	12	16	33	<100	<100	<100	<100	<100
DRES_02	2619155	4070205_12	7/2/2024	12:21	7	15	8	<100	618	<100	<100	<100
DRES_02	2620779	4070910_12	7/9/2024	12:06	2	11	17	<100	<100	<100	<100	<100
DRES_02	2625459	4071609_12	7/16/2024	12:40	5	19	17	<100	<100	<100	<100	<100
DRES_02	2625148	4071807_12	7/18/2024	12:41	27	50	130	<100	<100	<100	<100	<100
DRES_03	2616315	4062513_08	6/25/2024	13:33	17	15	79	<100	5897	<100	<100	2841
DRES_03	2617501	4062709_13	6/27/2024	13:21	17	66	79	18836	6107	<100	<100	<100
DRES_03	2619154	4070205_13	7/2/2024	12:16	8	14	49	<100	726	<100	<100	<100
DRES_03	2620778	4070910_13	7/9/2024	12:02	11	48	8	<100	<100	<100	<100	<100
DRES_03	2625081	4071609_13	7/16/2024	12:32	11	41	7	<100	<100	<100	<100	<100
DRES_03	2625147	4071807_13	7/18/2024	12:35	23	37	170	<100	<100	<100	<100	<100
DRES_04	2617241	4062608_28	6/26/2024	11:22	13	1	70	<100	19849	<100	<100	<100
DRES_04	2618915	4070111_28	7/1/2024	11:18	6	19	23	<100	<100	<100	<100	668
DRES_04	2620273	4070803_28	7/8/2024	11:06	17	11	33	<100	<100	<100	<100	<100
DRES_04	2623703	4071504_28	7/15/2024	10:49	8	2	33	<100	<100	<100	<100	<100
DRES_04	2625127	4071703_28	7/17/2024	10:38	20	26	33	<100	<100	<100	<100	919
DRES_04	2627145	4072205_28	7/22/2024	11:10	23	31	46	<100	<100	<100	<100	693
DRES_05	2617245	4062608_29	6/26/2024	11:28	23	3	49	<100	<100	<100	<100	<100
DRES_05	2618916	4070111_29	7/1/2024	11:20	11	12	23	<100	1161	<100	<100	420
DRES_05	2620274	4070803_29	7/8/2024	11:08	30	15	130	<100	1519	<100	<100	<100
DRES_05	2623702	4071504_29	7/15/2024	10:47	13	4	17	<100	819	<100	<100	<100
DRES_05	2625125	4071703_29	7/17/2024	10:36	20	8	79	<100	643	<100	<100	<100
DRES_05	2627146	4072205_29	7/22/2024	11:12	33	46	33	<100	<100	<100	<100	<100
DRES_06	2617243	4062608_31	6/26/2024	11:24	47	8	70	<100	<100	<100	<100	2153
DRES_06	2618917	4070111_31	7/1/2024	11:22	21	12	33	<100	<100	<100	<100	<100
DRES_06	2620275	4070803_31	7/8/2024	11:10	73	25	540	<100	4322	<100	<100	<100
DRES_06	2623701	4071504_31	7/15/2024	10:45	26	1	33	<100	<100	<100	<100	<100
DRES_06	2625123	4071703_31	7/17/2024	10:34	32	13	130	<100	<100	<100	<100	<100
DRES_06	2627147	4072205_31	7/22/2024	11:14	40	45	110	<100	<100	<100	<100	<100
DRES_07	2617238	4062608_26	6/26/2024	11:06	11	16	140	321754	<100	<100	<100	5607
DRES_07	2618913	4070111_26	7/1/2024	11:00	33	21	110	17762	5780	<100	<100	332
DRES_07	2620270	4070803_26	7/8/2024	10:48	26	9	350	6010	<100	<100	<100	<100
DRES_07	2623699	4071504_26	7/15/2024	10:27	13	1	79	13393	<100	<100	<100	<100
DRES_07	2625118	4071703_26	7/17/2024	10:21	150	49	1600	38294	<100	<100	<100	6255

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_07	2626974	4072205_26	7/22/2024	10:51	25	21	79	13088	<100	<100	<100	<100
DRES_08	2617239	4062608_25	6/26/2024	11:13	51	8	240	85023	<100	<100	<100	5000
DRES_08	2618914	4070111_25	7/1/2024	11:07	150	11	170	85778	14246	<100	<100	282
DRES_08	2620271	4070803_25	7/8/2024	10:54	29	6	79	<100	<100	<100	<100	<100
DRES_08	2623700	4071504_25	7/15/2024	10:33	42	2	94	3415	<100	<100	<100	<100
DRES_08	2625119	4071703_25	7/17/2024	10:25	285	75	920	68354	<100	<100	<100	<100
DRES_08	2626975	4072205_25	7/22/2024	11:01	9	13	13	6311	<100	<100	<100	<100
DRES_09	2617236	4062608_24	6/26/2024	10:39	60	4	170	194309	<100	<100	66307	13222
DRES_09	2618912	4070111_24	7/1/2024	10:50	12	4	33	6192	3181	<100	<100	<100
DRES_09	2620269	4070803_24	7/8/2024	10:39	24	9	540	8012	<100	<100	<100	<100
DRES_09	2623698	4071504_24	7/15/2024	10:19	12	2	240	<100	<100	<100	<100	<100
DRES_09	2625114	4071703_24	7/17/2024	10:15	20	6	130	61361	7233	<100	<100	870
DRES_09	2626973	4072205_24	7/22/2024	10:41	8	12	23	8821	<100	<100	<100	<100
DRES_10	2617237	4062608_23	6/26/2024	10:53	19	2	49	162340	<100	<100	<100	21602
DRES_10	2618911	4070111_23	7/1/2024	10:44	11	6	49	6715	4168	<100	<100	366
DRES_10	2620268	4070803_23	7/8/2024	10:34	42	24	110	5044	<100	<100	<100	<100
DRES_10	2623697	4071504_23	7/15/2024	10:15	44	1	49	21875	<100	<100	<100	<100
DRES_10	2625110	4071703_23	7/17/2024	10:10	30	15	110	9713	2975	<100	<100	870
DRES_10	2626972	4072205_23	7/22/2024	10:35	17	15	22	28881	<100	<100	<100	<100
DRES_11	2617235	4062608_21	6/26/2024	10:28	20	1	33	20597	<100	<100	<100	12590
DRES_11	2618910	4070111_21	7/1/2024	10:19	8	1	13	4124	4698	<100	<100	1026
DRES_11	2620267	4070803_21	7/8/2024	10:07	56	37	170	1675	<100	<100	<100	473
DRES_11	2623696	4071504_21	7/15/2024	9:54	11	1	33	<100	<100	<100	<100	<100
DRES_11	2625106	4071703_21	7/17/2024	9:48	11	12	17	6474	<100	<100	<100	<100
DRES_11	2626971	4072205_21	7/22/2024	10:03	12	56	49	2906	<100	<100	<100	<100
DRES_12	2617232	4062608_17	6/26/2024	10:16	31	9	49	46397	56667	<100	<100	7983
DRES_12	2629620	4070111_17	7/1/2024	10:11	14	1	49	5834	5142	<100	<100	750
DRES_12	2620264	4070803_17	7/8/2024	9:59	42	10	540	<100	<100	<100	<100	<100
DRES_12	2622873	4071504_17	7/15/2024	9:48	8	1	22	776	<100	<100	<100	<100
DRES_12	2625101	4071703_17	7/17/2024	9:40	11	1	33	8774	2871	<100	<100	1906
DRES_12	2626968	4072205_17	7/22/2024	9:54	24	69	33	6697	<100	<100	<100	<100
DRES_13	2617231	4062608_15	6/26/2024	9:51	57	11	110	29096	19463	<100	<100	6917
DRES_13	2618907	4070111_15	7/1/2024	9:49	52	15	79	165727	8716	<100	<100	4395
DRES_13	2620263	4070803_15	7/8/2024	9:35	32	6	220	16316	652	<100	<100	<100
DRES_13	2622872	4071504_15	7/15/2024	9:28	17	1	22	62982	2577	<100	<100	<100
DRES_13	2625099	4071703_15	7/17/2024	9:20	14	5	49	50351	<100	<100	<100	2886
DRES_13	2626967	4072205_15	7/22/2024	9:31	37	81	49	62817	<100	<100	<100	719
DRES_14	2617230	4062608_11	6/26/2024	9:39	20	5	33	173618	38512	<100	<100	3903
DRES_14	2618486	4070111_11	7/1/2024	9:34	31	8	49	31701	9738	<100	<100	3024
DRES_14	2620262	4070803_11	7/8/2024	9:24	16	9	23	10248	<100	<100	<100	1363
DRES_14	2622871	4071504_11	7/15/2024	9:19	13	4	13	11726	1514	<100	<100	<100
DRES_14	2625095	4071703_11	7/17/2024	9:10	10	13	13	26639	719	<100	<100	<100

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_14	2626966	4072205_11	7/22/2024	9:21	12	39	49	13655	<100	<100	<100	<100
DRES_15	2617229	4062608_12	6/26/2024	9:36	27	11	23	309331	45025	<100	<100	3527
DRES_15	2618906	4070111_12	7/1/2024	9:32	26	2	46	23403	8022	<100	<100	1622
DRES_15	2620261	4070803_12	7/8/2024	9:22	19	11	13	40512	4437	<100	<100	895
DRES_15	2622870	4071504_12	7/15/2024	9:17	20	1	17	9860	<100	<100	<100	<100
DRES_15	2625094	4071703_12	7/17/2024	9:08	13	7	23	33129	<100	<100	<100	823
DRES_15	2626965	4072205_12	7/22/2024	9:19	111	64	110	24491	<100	<100	<100	<100
DRES_16	2617228	4062608_13	6/26/2024	9:34	56	21	49	604721	37443	<100	<100	10647
DRES_16	2618905	4070111_13	7/1/2024	9:30	29	6	110	23037	5235	<100	<100	732
DRES_16	2620260	4070803_13	7/8/2024	9:20	21	9	23	48101	1896	<100	<100	434
DRES_16	2622869	4071504_13	7/15/2024	9:15	11	4	8	7369	441	<100	<100	<100
DRES_16	2625093	4071703_13	7/17/2024	9:06	17	13	13	28107	<100	<100	<100	5435
DRES_16	2626964	4072205_13	7/22/2024	9:17	30	92	70	69652	<100	<100	<100	<100
DRES_17	2617227	4062608_10	6/26/2024	9:27	59	23	79	226123	18919	<100	<100	4294
DRES_17	2618485	4070111_10	7/1/2024	9:23	88	32	220	52218	5287	<100	<100	<100
DRES_17	2620259	4070803_10	7/8/2024	9:13	59	4	79	6120	<100	<100	<100	639
DRES_17	2622868	4071504_10	7/15/2024	9:10	17	1	17	20381	<100	<100	<100	<100
DRES_17	2625090	4071703_10	7/17/2024	9:01	30	5	79	40853	3006	<100	<100	<100
DRES_17	2626963	4072205_10	7/22/2024	9:11	21	58	33	39231	<100	<100	<100	<100
DRES_18	2617226	4062608_09	6/26/2024	9:23	44	5	23	294368	18440	<100	<100	2669
DRES_18	2618484	4070111_09	7/1/2024	9:17	28	19	79	20668	3063	<100	<100	790
DRES_18	2620258	4070803_09	7/8/2024	9:10	19	1	23	37539	<100	<100	<100	958
DRES_18	2622867	4071504_09	7/15/2024	9:07	17	1	11	<100	<100	<100	<100	<100
DRES_18	2625089	4071703_09	7/17/2024	9:00	24	3	79	28586	<100	<100	<100	1894
DRES_18	2626962	4072205_09	7/22/2024	9:08	34	43	33	57486	<100	<100	<100	<100
DRES_19	2617225	4062608_08	6/26/2024	9:17	31	2	33	34227	<100	<100	<100	<100
DRES_19	2618483	4070111_08	7/1/2024	9:09	13	9	33	21182	3456	<100	<100	889
DRES_19	2620257	4070803_08	7/8/2024	9:04	13	2	49	45235	1843	<100	<100	1569
DRES_19	2622866	4071504_08	7/15/2024	9:03	23	1	23	3842	<100	<100	<100	<100
DRES_19	2625460	4071703_08	7/17/2024	8:55	27	8	33	36828	<100	<100	<100	<100
DRES_19	2626961	4072205_08	7/22/2024	9:03	19	37	79	4261	<100	<100	<100	<100
DRES_20	2617224	4062608_07	6/26/2024	9:14	46	12	46	29650	40373	<100	<100	26519
DRES_20	2618482	4070111_07	7/1/2024	9:06	18	4	79	38322	6251	<100	<100	929
DRES_20	2620256	4070803_07	7/8/2024	9:01	79	7	240	1857	<100	<100	<100	<100
DRES_20	2622865	4071504_07	7/15/2024	9:01	15	1	23	14211	801	<100	<100	854
DRES_20	2625086	4071703_07	7/17/2024	8:53	44	12	130	3371	1882	<100	<100	<100
DRES_20	2626960	4072205_07	7/22/2024	9:00	30	163	94	32953	<100	<100	<100	<100
DRES_21	2617500	4062709_10	6/27/2024	12:18	649	1733	540	23932	56154	<100	<100	1735
DRES_21	2619150	4070205_10	7/2/2024	11:33	16	104	49	21815	634	<100	<100	814
DRES_21	2620777	4070910_10	7/9/2024	11:18	276	1300	280	<100	<100	<100	<100	<100
DRES_21	2621446	4071005_06	7/10/2024	11:31	517	308	350	4410	740	<100	<100	<100
DRES_21	2625080	4071609_10	7/16/2024	11:43	86	98	79	1709	<100	<100	<100	<100

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_21	2625146	4071807_10	7/18/2024	11:43	1553	2420	1600	1384	7358	<100	<100	<100
DRES_22	2617221	4062608_01	6/26/2024	9:00	42	3	79	22549	31347	<100	<100	6394
DRES_22	2618479	4070111_01	7/1/2024	8:56	38	2	110	19445	4702	<100	<100	641
DRES_22	2620253	4070803_01	7/8/2024	8:51	23	4	23	20788	989	<100	<100	<100
DRES_22	2622862	4071504_01	7/15/2024	8:50	33	4	33	5168	<100	<100	<100	<100
DRES_22	2625083	4071703_01	7/17/2024	8:45	18	5	31	5827	<100	<100	<100	1099
DRES_22	2626826	4072205_01	7/22/2024	8:49	21	45	34	13271	1411	<100	<100	<100
DRES_23	2617222	4062608_02	6/26/2024	9:05	32	3	33	16545	32331	<100	<100	8609
DRES_23	2618480	4070111_02	7/1/2024	8:58	28	2	130	<10045	7951	<100	<100	723
DRES_23	2620254	4070803_02	7/8/2024	8:53	12	4	23	<100	<100	<100	<100	<100
DRES_23	2622863	4071504_02	7/15/2024	8:53	39	10	49	<100	587	<100	<100	<100
DRES_23	2625084	4071703_02	7/17/2024	8:46	31	13	23	3822	1458	<100	<100	<100
DRES_23	2626827	4072205_02	7/22/2024	8:51	23	59	43	69172	8216	<100	<100	<100
DRES_24	2617223	4062608_03	6/26/2024	9:08	63	3	79	<100	34052	<100	<100	3081
DRES_24	2618481	4070111_03	7/1/2024	9:00	29	3	23	23669	7155	<100	<100	1131
DRES_24	2620255	4070803_03	7/8/2024	8:55	23	3	49	4113	<100	<100	<100	<100
DRES_24	2622864	4071504_03	7/15/2024	8:55	20	1	79	6295	<100	<100	<100	<100
DRES_24	2625085	4071703_03	7/17/2024	8:48	42	8	33	4133	7431	<100	<100	<100
DRES_24	2626828	4072205_03	7/22/2024	8:53	21	43	79	5620	<100	<100	<100	<100
DRES_25	2616420	4062511_28	6/25/2024	11:41	31	48	240	7979	5587	<100	<100	613
DRES_25	2617494	4062708_28	6/27/2024	11:25	52	76	49	<100	20796	<100	<100	3422
DRES_25	2619151	4070209_28	7/2/2024	11:35	23	249	33	3077	2271	<100	<100	1181
DRES_25	2620775	4070911_28	7/9/2024	11:07	31	43	23	2360	<100	<100	<100	<100
DRES_25	2625077	4071606_28	7/16/2024	10:40	29	13	33	<100	<100	<100	<100	<100
DRES_25	2625995	4071809_28	7/18/2024	11:49	63	50	170	2430	1783	<100	<100	<100
DRES_26	2616421	4062511_27	6/25/2024	11:48	45	36	79	<100	<100	<100	<100	1716
DRES_26	2617497	4062708_27	6/27/2024	11:45	921	1120	1600	18868	55131	<100	<100	3529
DRES_26	2619153	4070209_27	7/2/2024	12:00	23	157	63	<100	626	<100	<100	<100
DRES_26	2620776	4070911_27	7/9/2024	11:13	32	86	70	<100	<100	<100	<100	<100
DRES_26	2625078	4071606_27	7/16/2024	10:48	30	23	33	986	<100	<100	<100	<100
DRES_26	2625996	4071809_27	7/18/2024	11:53	56	81	130	<100	<100	<100	<100	<100
DRES_27	2616422	4062511_26	6/25/2024	12:06	152	44	350	<100	23891	<100	<100	2126
DRES_27	2617495	4062708_26	6/27/2024	11:35	79	52	49	27104	83289	<100	<100	2786
DRES_27	2619152	4070209_26	7/2/2024	11:48	33	238	33	<100	6105	<100	<100	1291
DRES_27	2620774	4070911_26	7/9/2024	10:56	291	260	350	<100	<100	<100	<100	<100
DRES_27	2625076	4071606_26	7/16/2024	10:29	60	32	110	<100	<100	<100	<100	<100
DRES_27	2625734	4071809_26	7/18/2024	11:29	79	88	350	8186	6039	<100	<100	<100
DRES_28	2616419	4062511_25	6/25/2024	11:30	770	272	920	<100	39197	<100	<100	1121
DRES_28	2617492	4062708_25	6/27/2024	11:18	461	770	920	22984	71832	<100	<100	6963
DRES_28	2619149	4070209_25	7/2/2024	11:22	34	236	49	<100	2609	<100	<100	788
DRES_28	2620773	4070911_25	7/9/2024	10:44	249	387	350	<100	<100	<100	<100	<100
DRES_28	2625075	4071606_25	7/16/2024	10:19	26	16	70	<100	<100	<100	<100	<100

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	MST qPCR (GC/<100mL)							
					E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_28	2625733	4071809_25	7/18/2024	11:16	47	40	49	1903	<100	<100	<100	<100
DRES_29	2616314	4062511_19	6/25/2024	11:10	46	28	70	<100	<100	<100	<100	<100
DRES_29	2617489	4062708_19	6/27/2024	11:00	72	115	920	39136	33475	<100	<100	3513
DRES_29	2619146	4070209_19	7/2/2024	11:00	179	517	350	10157	1333	<100	<100	<100
DRES_29	2620770	4070911_19	7/9/2024	10:28	15	35	11	2357	<100	<100	<100	<100
DRES_29	2623264	4071606_19	7/16/2024	10:07	142	20	240	<100	<100	<100	<100	<100
DRES_29	2625732	4071809_19	7/18/2024	10:52	127	326	350	8345	8529	<100	<100	<100
DRES_30	2616418	4062511_20	6/25/2024	11:08	53	29	33	<100	9213	<100	<100	850
DRES_30	2617490	4062708_20	6/27/2024	11:02	96	135	170	19787	37519	<100	<100	3225
DRES_30	2619147	4070209_20	7/2/2024	11:03	219	249	350	7438	4197	<100	<100	<100
DRES_30	2621268	4070911_20	7/9/2024	10:25	21	54	79	3060	<100	<100	<100	<100
DRES_30	2623263	4071606_20	7/16/2024	10:05	91	28	170	1982	<100	<100	<100	<100
DRES_30	2625731	4071809_20	7/18/2024	10:49	326	517	540	2865	5354	<100	<100	<100
DRES_31	2616417	4062511_21	6/25/2024	11:05	54	15	350	<100	3583	<100	<100	910
DRES_31	2617491	4062708_21	6/27/2024	11:05	84	93	220	152339	45535	<100	<100	<100
DRES_31	2619148	4070209_21	7/2/2024	11:06	86	206	170	7592	2700	<100	<100	501
DRES_31	2620769	4070911_21	7/9/2024	10:22	27	78	46	4214	2196	<100	<100	<100
DRES_31	2623262	4071606_21	7/16/2024	10:02	148	12	350	5689	<100	<100	<100	<100
DRES_31	2625730	4071809_21	7/18/2024	10:43	219	172	350	<100	5903	<100	<100	<100
DRES_32	2617496	4062709_07	6/27/2024	11:41	2420	2420	1600	1588448	588250	<100	9882	83220
DRES_32	2619143	4070205_07	7/2/2024	10:44	58	173	350	4240	9210	<100	<100	781
DRES_32	2620771	4070910_07	7/9/2024	10:34	488	816	350	<100	<100	<100	<100	<100
DRES_32	2621443	4071005_03	7/10/2024	10:51	285	980	540	<100	<1005	<100	<100	<100
DRES_32	2623710	4071609_07	7/16/2024	10:58	99	63	170	957	<100	<100	<100	<100
DRES_32	2625143	4071807_07	7/18/2024	10:55	2420	2420	1600	50198	36107	<100	1661	789
DRES_33	2616313	4062511_17	6/25/2024	10:59	326	45	1600	9692	<100	<100	<100	<100
DRES_33	2617487	4062708_17	6/27/2024	10:40	613	649	920	249385	<100545	<100	<100	<100
DRES_33	2619142	4070209_17	7/2/2024	10:37	387	461	540	7357	927	<100	<100	<100
DRES_33	2620767	4070911_17	7/9/2024	10:15	23	78	49	<100	<100	<100	<100	<100
DRES_33	2623261	4071606_17	7/16/2024	9:57	276	38	350	6435	<100	<100	<100	<100
DRES_33	2625729	4071809_17	7/18/2024	10:37	921	1046	1600	11113	16554	<100	<100	<100
DRES_34	2616312	4062511_15	6/25/2024	10:45	1986	84	1600	39097	<100	<100	663	473
DRES_34	2617486	4062708_15	6/27/2024	10:11	1986	2420	1600	2635761	289217	<100	<100	32901
DRES_34	2619141	4070209_15	7/2/2024	10:31	727	457	920	6495	8943	<100	<100	881
DRES_34	2620766	4070911_15	7/9/2024	10:05	56	115	110	<100	341	<100	<100	<100
DRES_34	2622888	4071606_15	7/16/2024	9:47	365	29	1600	2981	<100	<100	<100	<100
DRES_34	2625728	4071809_15	7/18/2024	10:12	613	488	540	8642	53445	<100	<100	<100
DRES_35	2615865	4062513_05	6/25/2024	12:35	214	1300	920	101506	28896	<100	<100	<100
DRES_35	2617493	4062709_06	6/27/2024	11:22	2420	2420	1600	2296702	1016121	<100	11447	148665
DRES_35	2619140	4070205_06	7/2/2024	10:31	411	436	1600	40638	24554	<100	<100	2004
DRES_35	2620768	4070910_06	7/9/2024	10:21	687	1553	540	53929	3848	<100	<100	<100
DRES_35	2623709	4071609_06	7/16/2024	10:43	548	2420	540	1054	<100	<100	<100	<100

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	MST qPCR (GC/<100mL)							
					E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_35	2625142	4071807_06	7/18/2024	10:39	2420	2420	1600	44129	<100	<100	596	<100
DRES_36	2616311	4062511_10	6/25/2024	10:19	260	28	920	5178	23679	<100	<100	1875
DRES_36	2617482	4062708_10	6/27/2024	10:00	2420	517	1600	1354183	382311	<100	<100	27588
DRES_36	2619136	4070209_10	7/2/2024	10:06	727	579	220	49340	8041	<100	<100	933
DRES_36	2620764	4070911_10	7/9/2024	9:42	28	261	23	<100	<100	<100	<100	<100
DRES_36	2622887	4071606_10	7/16/2024	9:29	1986	130	1600	29739	<100	<100	<100	<100
DRES_36	2625727	4071809_10	7/18/2024	9:58	240	291	350	5359	9095	<100	<100	<100
DRES_37	2616310	4062511_11	6/25/2024	10:18	1046	53	1600	23417	18989	<100	<100	594
DRES_37	2617483	4062708_11	6/27/2024	10:03	2420	2420	1600	2424006	<100	<100	<100	44376
DRES_37	2619137	4070209_11	7/2/2024	10:09	1046	328	1600	56018	21228	<100	<100	<100
DRES_37	2620763	4070911_11	7/9/2024	9:40	222	144	130	<100	353	<100	<100	<100
DRES_37	2622886	4071606_11	7/16/2024	9:27	2420	328	1600	40586	1701	<100	<100	<100
DRES_37	2625726	4071809_11	7/18/2024	9:55	816	548	1600	17182	10105	<100	<100	<100
DRES_38	2616309	4062511_12	6/25/2024	10:15	1203	98	1600	38885	<100	<100	<100	<100
DRES_38	2617484	4062708_12	6/27/2024	10:05	2420	2420	1600	2310221	<100	<100	<100	34985
DRES_38	2619139	4070209_12	7/2/2024	10:12	1553	361	1600	45797	20292	<100	<100	1340
DRES_38	2620762	4070911_12	7/9/2024	9:38	980	387	1600	5227	426	<100	<100	<100
DRES_38	2622885	4071606_12	7/16/2024	9:24	1986	99	1600	9935	893	<100	<100	<100
DRES_38	2625725	4071809_12	7/18/2024	9:52	770	921	1600	12399	11392	<100	<100	<100
DRES_39	2616308	4062511_08	6/25/2024	10:08	2420	139	1600	81125	55975	<100	842	1275
DRES_39	2617480	4062708_08	6/27/2024	9:45	2420	2420	1600	2290832	282460	<100	<100	18552
DRES_39	2619135	4070209_08	7/2/2024	9:47	2420	435	1600	74996	13135	<100	<100	1047
DRES_39	2620761	4070911_08	7/9/2024	9:32	2420	238	920	7831	<100	<100	<100	<100
DRES_39	2622884	4071606_08	7/16/2024	9:19	2420	548	1600	6053	718	<100	<100	<100
DRES_39	2625724	4071809_08	7/18/2024	9:39	2420	1046	1600	59473	<100	<100	<100	<100
DRES_40	2616307	4062511_03	6/25/2024	9:57	727	82	350	19901	<100	<100	<100	<100
DRES_40	2617474	4062708_03	6/27/2024	9:30	345	816	920	153964	45591	<100	<100	7886
DRES_40	2619129	4070209_03	7/2/2024	9:27	178	184	540	20352	5296	<100	<100	830
DRES_40	2620759	4070911_03	7/9/2024	9:24	86	260	49	3447	<100	<100	<100	<100
DRES_40	2622883	4071606_03	7/16/2024	9:12	328	64	350	806	<100	<100	<100	<100
DRES_40	2625463	4071809_03	7/18/2024	9:23	173	75	1600	9798	433	<100	<100	<100
DRES_41	2616306	4062511_04	6/25/2024	9:55	1733	50	1600	32822	8066	<100	<100	324
DRES_41	2617475	4062708_04	6/27/2024	9:33	2420	1120	1600	1785814	<100	<100	<100	41110
DRES_41	2619131	4070209_04	7/2/2024	9:31	816	816	1600	32018	5637	<100	<100	2260
DRES_41	2620758	4070911_04	7/9/2024	9:21	816	345	540	9325	<100	<100	<100	<100
DRES_41	2622882	4071606_04	7/16/2024	9:09	921	49	920	6608	439	<100	<100	<100
DRES_41	2625720	4071809_04	7/18/2024	9:27	579	201	1600	7932	9911	<100	<100	<100
DRES_42	2616303	4062511_05	6/25/2024	9:40	2420	154	1600	70872	29547	<100	<100	<100
DRES_42	2617476	4062708_07	6/27/2024	9:35	2420	1986	1600	3136359	<100	<100	<100	37523
DRES_42	2619132	4070209_05	7/2/2024	9:35	2420	435	1600	224728	8740	<100	<100	1713
DRES_42	2620755	4070911_05	7/9/2024	9:15	1414	214	1600	6435	<100	<100	<100	<100
DRES_42	2622879	4071606_05	7/16/2024	9:01	1986	109	1600	7942	592	<100	<100	<100

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_42	2625721	4071809_05	7/18/2024	9:30	2420	1120	1600	114200	32768	<100	<100	<100
DRES_43	2616302	4062511_02	6/25/2024	9:39	2420	178	1600	177568	64765	<100	<100	949
DRES_43	2617252	4062708_02	6/27/2024	9:23	2420	2420	1600	3693843	641754	<100	<100	13922
DRES_43	2619128	4070209_02	7/2/2024	9:22	2420	240	1600	71491	10809	<100	<100	<100
DRES_43	2620754	4070911_02	7/9/2024	9:10	2420	727	1600	11731	<100	<100	<100	<100
DRES_43	2622878	4071606_02	7/16/2024	8:57	2420	173	1600	2048	<100	<100	<100	<100
DRES_43	2625138	4071809_02	7/18/2024	9:18	2420	1300	1600	179355	8107	<100	<100	<100
DRES_44	2617249	4062609_31	6/26/2024	12:05	1733	34	1600	460202	50169	<100	<100	9273
DRES_44	2618217	4070116_31	7/1/2024	12:58	1733	548	1600	174134	54836	<100	<100	15175
DRES_44	2620279	4070808_31	7/8/2024	11:53	866	75	1600	11760	<100	<100	<100	<100
DRES_44	2622875	4071508_31	7/15/2024	12:06	387	6	540	54949	<100	<100	<100	<100
DRES_44	2625133	4071705_31	7/17/2024	11:30	1120	66	1600	91664	17092	<100	<100	1881
DRES_44	2626839	4072207_31	7/22/2024	11:39	1733	649	1600	231513	27862	<100	<100	388
DRES_45	2617250	4062609_29	6/26/2024	12:07	2420	491	1600	592447	45144	<100	<100	7425
DRES_45	2618218	4070116_29	7/1/2024	13:01	2420	1553	1600	184184	20846	<100	<100	<100
DRES_45	2620280	4070808_29	7/8/2024	11:56	2420	28	1600	29164	2800	<100	<100	<100
DRES_45	2622876	4071508_29	7/15/2024	12:09	1120	12	1600	133097	4240	<100	<100	1345
DRES_45	2625134	4071705_29	7/17/2024	11:32	2420	5	1600	91929	<100	<100	<100	2873
DRES_45	2626840	4072207_29	7/22/2024	11:41	2420	816	1600	308699	<100	<100	<100	<100
DRES_46	2617251	4062609_30	6/26/2024	12:08	1986	239	1600	609182	<100	<100	<100	18494
DRES_46	2618219	4070116_30	7/1/2024	13:03	2420	1120	1600	193831	25556	<100	<100	5640
DRES_46	2620281	4070808_30	7/8/2024	11:59	2420	13	1600	50841	2350	<100	<100	<100
DRES_46	2622877	4071508_30	7/15/2024	12:11	1046	11	1600	230563	23315	<100	<100	<100
DRES_46	2625135	4071705_30	7/17/2024	11:34	1733	1	1600	171275	<100	<100	<100	<100
DRES_46	2626841	4072207_30	7/22/2024	11:43	1733	517	1600	805665	<100	<100	<100	1058
DRES_47	2615864	4062513_04	6/25/2024	11:30	2420	2420	1600	858264	<100	<100	<100	6229
DRES_47	2617488	4062709_05	6/27/2024	10:53	2420	2420	1600	7.1E+08	1.1E+07	<100	9092	2341121
DRES_47	2619138	4070205_05	7/2/2024	10:12	770	79	1600	150352	8364	<100	<100	5735
DRES_47	2620765	4070910_05	7/9/2024	10:03	1986	1203	1600	<100	2862	<100	<100	<100
DRES_47	2623708	4071609_05	7/16/2024	10:20	1414	28	920	19947	<100	<100	<100	<100
DRES_47	2625141	4071807_05	7/18/2024	10:15	2420	1414	1600	350771	31138	<100	<100	<100
DRES_48	2617247	4062609_24	6/26/2024	11:38	548	17	1600	456942	<100	<100	<100	13795
DRES_48	2618503	4070116_24	7/1/2024	12:27	1300	2420	1600	198570	12655	<100	<100	<100
DRES_48	2620277	4070808_24	7/8/2024	11:21	687	21	540	5531	1064	<100	<100	<100
DRES_48	2622686	4071508_24	7/15/2024	11:36	276	11	540	110183	5285	<100	<100	<100
DRES_48	2625130	4071705_24	7/17/2024	10:58	816	10	1600	53870	<100	<100	<100	<100
DRES_48	2626836	4072207_24	7/22/2024	11:09	435	93	920	865685	<100	<100	<100	<100
DRES_49	2617244	4062609_19	6/26/2024	11:25	488	28	540	197478	71937	<100	<100	<100
DRES_49	2618502	4070116_19	7/1/2024	12:11	1120	727	1600	147959	7226	<100	<100	4670
DRES_49	2619629	4070808_19	7/8/2024	11:13	387	1	350	3152	<100	<100	<100	<100
DRES_49	2622685	4071508_19	7/15/2024	11:28	133	1	240	44091	<100	<100	<100	<100
DRES_49	2625129	4071705_19	7/17/2024	10:47	222	1	220	22731	4739	<100	<100	6057

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_49	2626829	4072207_19	7/22/2024	10:01	105	24	350	57944	<100	<100	<100	<100
DRES_50	2617242	4062609_20	6/26/2024	11:23	345	16	540	295282	<100	<100	<100	<100
DRES_50	2618501	4070116_20	7/1/2024	12:08	1120	330	540	200577	<100	<100	<100	1144
DRES_50	2619628	4070808_20	7/8/2024	11:05	411	1	540	22472	3148	<100	<100	1193
DRES_50	2622684	4071508_20	7/15/2024	11:26	238	3	170	35041	<100	<100	<100	<100
DRES_50	2625128	4071705_20	7/17/2024	10:44	727	1	540	50782	11871	<100	<100	<100
DRES_50	2626835	4072207_20	7/22/2024	11:00	214	31	350	9262	2265	<100	<100	<100
DRES_51	2617240	4062609_21	6/26/2024	11:21	517	16	540	373710	<100	<100	<100	6133
DRES_51	2618500	4070116_21	7/1/2024	12:06	2420	980	1600	205716	<100	<100	<100	<100
DRES_51	2620272	4070808_21	7/8/2024	11:03	649	26	540	8057	<100	<100	<100	<100
DRES_51	2622683	4071508_21	7/15/2024	11:24	272	5	170	98157	1751	<100	<100	<100
DRES_51	2623819	4071705_21	7/17/2024	10:42	921	15	920	189463	<100	<100	<100	3866
DRES_51	2626834	4072207_21	7/22/2024	10:58	214	49	350	168947	<100	<100	<100	<100
DRES_52	2617350	4062609_18	6/26/2024	11:16	548	23	920	181151	93004	<100	<100	<100
DRES_52	2618499	4070116_18	7/1/2024	12:02	1120	479	920	167858	<100	<100	<100	<100
DRES_52	2619627	4070808_18	7/8/2024	11:00	299	1	240	30821	2064	<100	<100	<100
DRES_52	2622682	4071508_18	7/15/2024	11:21	102	3	540	25828	591	<100	<100	<100
DRES_52	2625126	4071705_18	7/17/2024	10:38	436	1	350	143138	<100	<100	<100	988
DRES_52	2626833	4072207_18	7/22/2024	10:54	291	47	1600	73334	<100	<100	<100	<100
DRES_53	2617347	4062609_16	6/26/2024	11:08	186	12	350	28287	<100	<100	<100	<100
DRES_53	2618498	4070116_16	7/1/2024	11:52	1733	416	920	193441	25506	<100	<100	8235
DRES_53	2619626	4070808_16	7/8/2024	10:47	231	2	350	15086	21730	<100	<100	<100
DRES_53	2622679	4071508_16	7/15/2024	11:13	186	5	1600	129670	3177	<100	<100	<100
DRES_53	2625120	4071705_16	7/17/2024	10:30	866	1	1600	65332	3287	<100	<100	<100
DRES_53	2626832	4072207_16	7/22/2024	10:47	517	58	350	48069	<100	<100	<100	<100
DRES_54	2617343	4062609_11	6/26/2024	10:53	214	5	920	31970	26473	<100	<100	820
DRES_54	2618495	4070116_11	7/1/2024	11:25	261	46	350	<100243	2331	<100	<100	<100
DRES_54	2619619	4070808_11	7/8/2024	10:31	108	8	540	14532	<100	<100	<100	<100
DRES_54	2622676	4071508_11	7/15/2024	10:59	76	6	110	17180	<100	<100	<100	<100
DRES_54	2625111	4071705_11	7/17/2024	10:12	179	1	540	19160	2793	<100	<100	<100
DRES_54	2626363	4072207_11	7/22/2024	10:33	123	23	920	105141	1234	<100	<100	<100
DRES_55	2617344	4062609_12	6/26/2024	10:55	186	4	280	15581	22123	<100	<100	<100
DRES_55	2618497	4070116_12	7/1/2024	11:30	326	71	240	104921	<100	<100	<100	<100
DRES_55	2619621	4070808_12	7/8/2024	10:34	160	10	220	12825	1706	<100	<100	<100
DRES_55	2622677	4071508_12	7/15/2024	11:02	107	1	170	18938	<100	<100	<100	<100
DRES_55	2625113	4071705_12	7/17/2024	10:15	162	1	110	39129	4263	<100	<100	<100
DRES_55	2626830	4072207_12	7/22/2024	10:36	214	21	920	154479	<100	<100	<100	<100
DRES_56	2617345	4062609_13	6/26/2024	10:57	127	13	350	18144	22137	<100	<100	<100
DRES_56	2618496	4070116_13	7/1/2024	11:27	345	68	350	161823	<100	<100	<100	<100
DRES_56	2619622	4070808_13	7/8/2024	10:36	140	9	920	20262	4673	<100	<100	<100
DRES_56	2622678	4071508_13	7/15/2024	11:04	276	10	130	41196	670	<100	<100	<100
DRES_56	2625116	4071705_13	7/17/2024	10:17	153	1	350	30969	<100	<100	<100	1573

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_56	2626831	4072207_13	7/22/2024	10:37	166	34	130	40391	<100	<100	<100	<100
DRES_57	2617349	4062613_25	6/26/2024	11:12	86	5	70	10592	10388	<100	<100	<100
DRES_57	2618491	4070112_25	7/1/2024	10:43	62	1	350	213914	<100	<100	<100	<100
DRES_57	2619618	4070804_25	7/8/2024	10:28	38	3	46	13601	<100	<100	<100	<100
DRES_57	2622675	4071507_25	7/15/2024	10:59	13	1	49	62177	<100	<100	<100	<100
DRES_57	2625117	4071704_25	7/17/2024	10:19	12	1	170	99880	349	<100	<100	<100
DRES_57	2626369	4072208_25	7/22/2024	10:52	91	13	130	<100	<100	<100	<100	<100
DRES_58	2617348	4062613_26	6/26/2024	11:09	55	2	130	25636	9972	<100	<100	646
DRES_58	2618490	4070112_26	7/1/2024	10:40	260	1	1600	250309	<100	<100	<100	5419
DRES_58	2619617	4070804_26	7/8/2024	10:26	37	2	49	30106	<100	<100	<100	<100
DRES_58	2622674	4071507_26	7/15/2024	10:55	42	1	33	103872	1295	<100	<100	<100
DRES_58	2625115	4071704_26	7/17/2024	10:17	29	1	43	79304	2538	<100	<100	3301
DRES_58	2626368	4072208_26	7/22/2024	10:50	108	5	110	16668	<100	<100	<100	<100
DRES_59	2617346	4062613_24	6/26/2024	11:06	59	8	49	44957	15802	<100	<100	<100
DRES_59	2618489	4070112_24	7/1/2024	10:36	285	1	220	232518	<100	<100	<100	2491
DRES_59	2619620	4070804_24	7/8/2024	10:32	37	5	110	43455	4349	<100	<100	<100
DRES_59	2622673	4071507_24	7/15/2024	10:51	47	1	210	126190	<100	<100	<100	<100
DRES_59	2625112	4071704_24	7/17/2024	10:15	73	2	79	30466	1166	<100	<100	<100
DRES_59	2626367	4072208_24	7/22/2024	10:47	24	21	79	38657	1394	<100	<100	<100
DRES_63	2617340	4062613_19	6/26/2024	10:43	1	1	1.8	93059	32306	<100	<100	<100
DRES_63	2618216	4070112_18	7/1/2024	10:25	53	24	170	307398	<100	<100	<100	5005
DRES_63	2619614	4070804_18	7/8/2024	10:12	71	83	130	10397	9479	<100	<100	<100
DRES_63	2622338	4071507_18	7/15/2024	10:36	25	1	240	22253	881	<100	<100	<100
DRES_63	2625462	4071704_18	7/17/2024	10:02	33	1	34	69342	1317	<100	<100	<100
DRES_63	2626364	4072208_18	7/22/2024	10:34	13	1	49	10456	1084	<100	<100	<100
DRES_64	2616432	4062613_13	6/26/2024	10:28	17	2	33	13122	3285	<100	<100	402
DRES_64	2618215	4070112_13	7/1/2024	10:10	326	436	920	111471	<100	<100	<100	665
DRES_64	2619302	4070804_13	7/8/2024	10:00	13	12	49	15762	1636	<100	<100	<100
DRES_64	2622337	4071507_13	7/15/2024	10:18	3	1	23	3922	<100	<100	<100	<100
DRES_64	2625107	4071704_13	7/17/2024	9:50	16	1	49	12169	<100	<100	<100	<100
DRES_64	2626362	4072208_13	7/22/2024	10:21	23	2	79	18072	<100	<100	<100	<100
DRES_65	2617339	4062613_14	6/26/2024	10:25	27	4	49	47934	48809	<100	<100	2015
DRES_65	2618214	4070112_14	7/1/2024	10:07	579	549	240	72564	7004	<100	<100	583
DRES_65	2619301	4070804_14	7/8/2024	9:57	19	26	23	25388	3063	<100	<100	<100
DRES_65	2622336	4071507_14	7/15/2024	10:15	13	1	22	14102	<100	<100	<100	<100
DRES_65	2625105	4071704_14	7/17/2024	9:47	9	1	14	7647	494	<100	<100	<100
DRES_65	2626361	4072208_14	7/22/2024	10:17	19	3	13	88<100	919	<100	<100	<100
DRES_66	2617338	4062613_15	6/26/2024	10:23	15	6	70	126487	32611	<100	<100	<100
DRES_66	2618213	4070112_15	7/1/2024	10:04	727	1414	1600	596457	12724	<100	<100	440
DRES_66	2619300	4070804_15	7/8/2024	9:55	20	28	94	46548	5094	<100	<100	<100
DRES_66	2622335	4071507_15	7/15/2024	10:11	36	1	79	4080	<100	<100	<100	<100
DRES_66	2625104	4071704_15	7/17/2024	9:45	24	1	79	7011	<100	<100	<100	<100

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_66	2626360	4072208_15	7/22/2024	10:14	12	1	13	179947	<100	<100	<100	<100
DRES_67	2616431	4062613_12	6/26/2024	10:09	44	4	33	11225	3979	<100	<100	<100
DRES_67	2618212	4070112_12	7/1/2024	9:51	1553	2420	1600	195996	17839	<100	<100	1536
DRES_67	2619299	4070804_12	7/8/2024	9:39	49	31	130	11522	1794	<100	<100	<100
DRES_67	2622334	4071507_12	7/15/2024	9:45	71	1	130	1272	767	<100	<100	<100
DRES_67	2625100	4071704_12	7/17/2024	9:32	248	17	240	2553	1216	<100	<100	<100
DRES_67	2626359	4072208_12	7/22/2024	9:45	35	3	94	110205	1455	<100	<100	<100
DRES_68	2615863	4062513_03	6/25/2024	10:35	205	411	1600	65522	22819	<100	<100	3405
DRES_68	2617485	4062709_04	6/27/2024	10:10	1553	2420	1600	115179	154921	<100	<100	13574
DRES_68	2619130	4070205_04	7/2/2024	9:31	121	104	540	48380	8470	<100	<100	878
DRES_68	2620760	4070910_04	7/9/2024	9:31	365	1733	920	<100	3075	<100	<100	<100
DRES_68	2623707	4071609_04	7/16/2024	9:44	119	22	130	1974	<100	<100	<100	<100
DRES_68	2625140	4071807_04	7/18/2024	9:33	70	153	130	4290	1759	<100	1172	0
DRES_69	2617481	4062709_03	6/27/2024	9:55	2420	2420	1600	47001	330555	<100	2284	35823
DRES_69	2619127	4070205_03	7/2/2024	9:18	153	112	280	51995	7148	<100	<100	1739
DRES_69	2620284	4070910_03	7/9/2024	9:20	980	1203	1600	<100	<100	<100	<100	539
DRES_69	2621442	4071005_02	7/10/2024	9:49	816	517	350	<100	5299	<100	<100	<100
DRES_69	2623706	4071609_03	7/16/2024	9:30	205	62	350	5578	<100	<100	<100	<100
DRES_69	2625139	4071807_03	7/18/2024	9:21	130	155	540	5474	2800	<100	<100	<100
DRES_70	2616430	4062613_11	6/26/2024	10:00	26	4	33	6104	6929	<100	<100	<100
DRES_70	2618211	4070112_11	7/1/2024	9:42	93	225	540	38897	7836	<100	<100	1745
DRES_70	2619298	4070804_11	7/8/2024	9:30	16	6	17	31666	723	<100	<100	<100
DRES_70	2622333	4071507_11	7/15/2024	9:36	5	1	4	<100	<100	<100	<100	<100
DRES_70	2625461	4071704_11	7/17/2024	9:26	35	1	49	5183	1126	<100	<100	<100
DRES_70	2626358	4072208_11	7/22/2024	9:37	10	1	49	17437	<100	<100	<100	<100
DRES_71	2617478	4062709_02	6/27/2024	9:38	2420	2420	1600	2483845	800908	<100	14629	73972
DRES_71	2618919	4070205_02	7/2/2024	9:07	260	248	920	51694	17487	<100	<100	1973
DRES_71	2620283	4070910_02	7/9/2024	9:04	1733	1986	1600	4712	<100	<100	<100	<100
DRES_71	2620781	4071005_01	7/10/2024	9:31	1203	727	280	14092	<100	<100	956	<100
DRES_71	2623705	4071609_02	7/16/2024	9:16	687	76	540	<100	<100	<100	<100	<100
DRES_71	2625137	4071807_02	7/18/2024	9:06	365	178	540	10280	8581	<100	<100	<100
DRES_71		4062513_02	6/25/2024	10:05	1300	1046	1600	-	-	-	-	-
DRES_72	2615862	4062513_01	6/25/2024	9:37	1986	1203	350	185515	38669	<100	4495	30642
DRES_72	2617473	4062709_01	6/27/2024	9:24	2420	2420	1600	2.9E+07	2771313	<100	8382	351065
DRES_72	2618918	4070205_01	7/2/2024	8:55	770	488	920	74981	20326	<100	<100	4153
DRES_72	2620282	4070910_01	7/9/2024	8:55	1553	1046	1600	8618	<100	<100	<100	<100
DRES_72	2623704	4071609_01	7/16/2024	9:00	102	36	130	3460	<100	<100	<100	<100
DRES_72	2625136	4071807_01	7/18/2024	8:50	308	134	1600	16227	4142	<100	<100	<100
DRES_73	2616427	4062613_09	6/26/2024	9:45	26	7	49	5229	6386	<100	<100	<100
DRES_73	2618208	4070112_09	7/1/2024	9:29	51	39	240	15078	4240	<100	<100	780
DRES_73	2619295	4070804_09	7/8/2024	9:19	19	10	31	8050	5458	<100	<100	<100
DRES_73	2622330	4071507_09	7/15/2024	9:21	4	1	5	<100	<100	<100	<100	<100

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
DRES_73	2625096	4071704_09	7/17/2024	9:15	12	2	8	<100	<100	<100	<100	<100
DRES_73	2626355	4072208_09	7/22/2024	9:23	11	1	46	61738	934	<100	<100	<100
DRES_74	2616428	4062613_07	6/26/2024	9:48	28	5	49	3995	10585	<100	<100	806
DRES_74	2618209	4070112_07	7/1/2024	9:32	121	192	220	123793	11745	<100	<100	3699
DRES_74	2619296	4070804_07	7/8/2024	9:22	32	22	49	3648	3164	<100	<100	<100
DRES_74	2622331	4071507_07	7/15/2024	9:26	6	2	7	<100	1676	<100	<100	<100
DRES_74	2625097	4071704_07	7/17/2024	9:18	15	1	33	<100	<100	<100	<100	<100
DRES_74	2626356	4072208_07	7/22/2024	9:26	11	1	22	52615	6261	<100	<100	<100
DRES_75	2616429	4062613_08	6/26/2024	9:52	74	13	130	8435	10237	<100	<100	<100
DRES_75	2619297	4070804_08	7/8/2024	9:24	125	44	540	4642	5564	<100	<100	<100
DRES_75	2622332	4071507_08	7/15/2024	9:30	13	5	130	14697	<100	<100	<100	<100
DRES_75	2625098	4071704_08	7/17/2024	9:20	96	4	79	4461	<100	<100	<100	<100
DRES_75	2626357	4072208_08	7/22/2024	9:30	82	15	79	7368	119508	<100	1047	<100
DRES_76	2616426	4062613_06	6/26/2024	9:29	58	60	110	4461	3867	<100	<100	<100
DRES_76	2618207	4070112_06	7/1/2024	9:16	1046	291	920	374302	<100	<100	<100	732
DRES_76	2619294	4070804_06	7/8/2024	9:09	39	33	33	3210	2527	<100	<100	<100
DRES_76	2622329	4071507_06	7/15/2024	9:11	27	11	49	<100	1431	<100	<100	<100
DRES_76	2625092	4071704_06	7/17/2024	9:06	88	1	49	<100	<100	<100	<100	<100
DRES_76	2626354	4072208_06	7/22/2024	9:12	21	6	46	9088	11760	<100	<100	<100
DRES_77	2616423	4062613_03	6/26/2024	9:11	18	7	8	2178	4762	<100	<100	<100
DRES_77	2618204	4070112_03	7/1/2024	9:03	47	27	49	10919	2913	<100	<100	692
DRES_77	2619291	4070804_03	7/8/2024	8:57	8	13	8	<100	1150	<100	<100	<100
DRES_77	2622326	4071507_03	7/15/2024	8:58	2	4	5	<100	1115	<100	<100	<100
DRES_77	2625087	4071704_03	7/17/2024	8:57	3	3	11	<100	<100	<100	<100	<100
DRES_77	2626351	4072208_03	7/22/2024	8:58	4	1	11	<100	68304	<100	<100	<100
DRES_78	2616424	4062613_02	6/26/2024	9:19	19	4	33	2400	3559	<100	<100	828
DRES_78	2618205	4070112_02	7/1/2024	9:07	613	42	540	59976	8624	<100	<100	1604
DRES_78	2619292	4070804_02	7/8/2024	9:00	5	11	8	<100	1525	<100	<100	<100
DRES_78	2622327	4071507_02	7/15/2024	9:02	6	4	8	<100	6519	<100	1708	<100
DRES_78	2625088	4071704_02	7/17/2024	9:00	13	1	33	3664	1107	<100	<100	<100
DRES_78	2626352	4072208_02	7/22/2024	9:03	11	1	17	<100	113276	<100	1330	<100
DRES_79	2616425	4062613_01	6/26/2024	9:23	40	23	79	5619	5667	<100	1158	1242
DRES_79	2618206	4070112_01	7/1/2024	9:11	649	517	1600	222300	<100	<100	<100	7345
DRES_79	2619293	4070804_01	7/8/2024	9:03	20	28	33	<100	2550	<100	<100	<100
DRES_79	2622328	4071507_01	7/15/2024	9:06	11	3	33	4114	4779	<100	<100	<100
DRES_79	2625091	4071704_01	7/17/2024	9:03	48	7	130	10709	<100	<100	<100	<100
DRES_79	2626353	4072208_01	7/22/2024	9:06	17	3	33	10561	28218	<100	<100	<100
NJ_PATHO_01	-	4062513_09	6/25/2024	13:30	22	6	70	-	-	-	-	-
NJ_PATHO_01	-	4062709_14	6/27/2024	13:16	25	33	33	-	-	-	-	-
NJ_PATHO_01	-	4070205_14	7/2/2024	12:12	5	19	17	-	-	-	-	-
NJ_PATHO_01	-	4070910_14	7/9/2024	11:57	6	93	8	-	-	-	-	-
NJ_PATHO_01	-	4071609_14	7/16/2024	12:27	3	308	13	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_01	-	4071807_14	7/18/2024	12:29	21	38	46	-	-	-	-	-
NJ_PATHO_02	-	4062608_30	6/26/2024	11:19	23	1	49	-	-	-	-	-
NJ_PATHO_02	-	4070111_30	7/1/2024	11:55	13	33	49	-	-	-	-	-
NJ_PATHO_02	-	4070803_30	7/8/2024	11:04	30	18	920	-	-	-	-	-
NJ_PATHO_02	-	4071504_30	7/15/2024	10:43	14	1	23	-	-	-	-	-
NJ_PATHO_02	-	4071703_30	7/17/2024	10:32	39	14	240	-	-	-	-	-
NJ_PATHO_02	-	4072205_30	7/22/2024	11:08	86	74	49	-	-	-	-	-
NJ_PATHO_03	-	4062608_27	6/26/2024	11:10	28	1	49	-	-	-	-	-
NJ_PATHO_03	-	4070111_27	7/1/2024	11:03	40	25	94	-	-	-	-	-
NJ_PATHO_03	-	4070803_27	7/8/2024	10:51	60	16	170	-	-	-	-	-
NJ_PATHO_03	-	4071504_27	7/15/2024	10:30	46	1	110	-	-	-	-	-
NJ_PATHO_03	-	4071703_27	7/17/2024	10:23	206	128	540	-	-	-	-	-
NJ_PATHO_03	-	4072205_27	7/22/2024	10:57	91	38	130	-	-	-	-	-
NJ_PATHO_04	-	4062608_22	6/26/2024	10:46	387	72	540	-	-	-	-	-
NJ_PATHO_04	-	4070111_22	7/1/2024	10:34	26	24	170	-	-	-	-	-
NJ_PATHO_04	-	4070803_22	7/8/2024	10:26	141	2420	280	-	-	-	-	-
NJ_PATHO_04	-	4071504_22	7/15/2024	10:08	44	3	33	-	-	-	-	-
NJ_PATHO_04	-	4071703_22	7/17/2024	10:02	129	98	240	-	-	-	-	-
NJ_PATHO_04	-	4072205_22	7/22/2024	10:21	187	2420	540	-	-	-	-	-
NJ_PATHO_05	-	4062608_20	6/26/2024	10:10	118	67	170	-	-	-	-	-
NJ_PATHO_05	-	4070111_20	7/1/2024	10:05	21	7	33	-	-	-	-	-
NJ_PATHO_05	-	4070803_20	7/8/2024	9:55	214	13	920	-	-	-	-	-
NJ_PATHO_05	-	4071504_20	7/15/2024	9:44	10	2	9	-	-	-	-	-
NJ_PATHO_05	-	4071703_20	7/17/2024	9:36	19	4	350	-	-	-	-	-
NJ_PATHO_05	-	4072205_20	7/22/2024	9:48	5	792	920	-	-	-	-	-
NJ_PATHO_06	-	4062608_16	6/26/2024	10:03	19	1	13	-	-	-	-	-
NJ_PATHO_06	-	4070111_16	7/1/2024	9:58	10	4	33	-	-	-	-	-
NJ_PATHO_06	-	4070803_16	7/8/2024	9:47	20	1	49	-	-	-	-	-
NJ_PATHO_06	-	4071504_16	7/15/2024	9:35	23	1	8	-	-	-	-	-
NJ_PATHO_06	-	4071703_16	7/17/2024	9:30	15	3	49	-	-	-	-	-
NJ_PATHO_06	-	4072205_16	7/22/2024	9:42	6	111	23	-	-	-	-	-
NJ_PATHO_07	-	4062608_14	6/26/2024	9:42	26	5	23	-	-	-	-	-
NJ_PATHO_07	-	4070111_14	7/1/2024	9:39	26	8	79	-	-	-	-	-
NJ_PATHO_07	-	4070803_14	7/8/2024	9:27	38	9	13	-	-	-	-	-
NJ_PATHO_07	-	4071504_14	7/15/2024	9:21	20	6	23	-	-	-	-	-
NJ_PATHO_07	-	4071703_14	7/17/2024	9:12	22	12	33	-	-	-	-	-
NJ_PATHO_07	-	4072205_14	7/22/2024	9:23	24	58	240	-	-	-	-	-
NJ_PATHO_08	-	4062608_06	6/26/2024	8:45	238	58	350	-	-	-	-	-
NJ_PATHO_08	-	4070111_06	7/1/2024	8:44	33	9	49	-	-	-	-	-
NJ_PATHO_08	-	4070803_06	7/8/2024	8:36	345	43	920	-	-	-	-	-
NJ_PATHO_08	-	4071504_06	7/15/2024	8:38	21	1	13	-	-	-	-	-
NJ_PATHO_08	-	4071703_06	7/17/2024	8:33	86	31	220	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_08	-	4072205_06	7/22/2024	8:38	387	2420	920	-	-	-	-	-
NJ_PATHO_09	-	4062608_04	6/26/2024	8:58	30	3	46	-	-	-	-	-
NJ_PATHO_09	-	4070111_04	7/1/2024	8:54	24	4	110	-	-	-	-	-
NJ_PATHO_09	-	4070803_04	7/8/2024	8:48	11	1	46	-	-	-	-	-
NJ_PATHO_09	-	4071504_04	7/15/2024	8:49	31	3	79	-	-	-	-	-
NJ_PATHO_09	-	4071703_04	7/17/2024	8:43	26	11	31	-	-	-	-	-
NJ_PATHO_09	-	4072205_04	7/22/2024	8:47	26	70	23	-	-	-	-	-
NJ_PATHO_10	-	4062608_05	6/26/2024	8:54	57	1	170	-	-	-	-	-
NJ_PATHO_10	-	4070111_05	7/1/2024	8:52	29	9	79	-	-	-	-	-
NJ_PATHO_10	-	4070803_05	7/8/2024	8:45	42	4	49	-	-	-	-	-
NJ_PATHO_10	-	4071504_05	7/15/2024	8:47	34	1	13	-	-	-	-	-
NJ_PATHO_10	-	4071703_05	7/17/2024	8:42	56	28	130	-	-	-	-	-
NJ_PATHO_10	-	4072205_05	7/22/2024	8:45	38	86	49	-	-	-	-	-
NJ_PATHO_11	-	4062511_29	6/25/2024	11:37	43	34	46	-	-	-	-	-
NJ_PATHO_11	-	4062708_29	6/27/2024	11:22	96	89	170	-	-	-	-	-
NJ_PATHO_11	-	4070209_29	7/2/2024	11:30	43	199	49	-	-	-	-	-
NJ_PATHO_11	-	4070911_29	7/9/2024	11:10	57	62	79	-	-	-	-	-
NJ_PATHO_11	-	4071606_29	7/16/2024	10:44	35	12	49	-	-	-	-	-
NJ_PATHO_11	-	4071809_29	7/18/2024	11:44	23	15	49	-	-	-	-	-
NJ_PATHO_12	-	4062511_24	6/25/2024	11:25	96	76	170	-	-	-	-	-
NJ_PATHO_12	-	4062708_24	6/27/2024	11:14	70	91	49	-	-	-	-	-
NJ_PATHO_12	-	4070209_24	7/2/2024	11:16	38	261	540	-	-	-	-	-
NJ_PATHO_12	-	4070911_24	7/9/2024	10:40	161	118	170	-	-	-	-	-
NJ_PATHO_12	-	4071606_24	7/16/2024	10:14	56	27	350	-	-	-	-	-
NJ_PATHO_12	-	4071809_24	7/18/2024	11:09	34	21	130	-	-	-	-	-
NJ_PATHO_13	-	4062511_22	6/25/2024	11:12	30	10	79	-	-	-	-	-
NJ_PATHO_13	-	4062708_22	6/27/2024	10:57	67	214	130	-	-	-	-	-
NJ_PATHO_13	-	4070209_22	7/2/2024	10:58	68	365	350	-	-	-	-	-
NJ_PATHO_13	-	4070911_22	7/9/2024	10:31	8	118	79	-	-	-	-	-
NJ_PATHO_13	-	4071606_22	7/16/2024	10:09	91	27	130	-	-	-	-	-
NJ_PATHO_13	-	4071809_22	7/18/2024	10:57	125	147	130	-	-	-	-	-
NJ_PATHO_14	-	4062511_23	6/25/2024	11:15	39	16	33	-	-	-	-	-
NJ_PATHO_14	-	4062708_23	6/27/2024	10:54	71	135	110	-	-	-	-	-
NJ_PATHO_14	-	4070209_23	7/2/2024	10:55	61	238	920	-	-	-	-	-
NJ_PATHO_14	-	4070911_23	7/9/2024	10:33	23	70	49	-	-	-	-	-
NJ_PATHO_14	-	4071606_23	7/16/2024	10:11	78	36	130	-	-	-	-	-
NJ_PATHO_14	-	4071809_23	7/18/2024	10:59	99	104	130	-	-	-	-	-
NJ_PATHO_15	-	4062511_18	6/25/2024	10:50	248	291	350	-	-	-	-	-
NJ_PATHO_15	-	4062708_18	6/27/2024	10:46	190	921	350	-	-	-	-	-
NJ_PATHO_15	-	4070209_18	7/2/2024	10:45	83	411	920	-	-	-	-	-
NJ_PATHO_15	-	4070911_18	7/9/2024	10:10	172	517	350	-	-	-	-	-
NJ_PATHO_15	-	4071606_18	7/16/2024	9:52	105	32	540	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_15	-	4071809_18	7/18/2024	10:30	86	240	350	-	-	-	-	-
NJ_PATHO_16	-	4062511_16	6/25/2024	10:34	649	145	920	-	-	-	-	-
NJ_PATHO_16	-	4062708_16	6/27/2024	10:20	214	435	540	-	-	-	-	-
NJ_PATHO_16	-	4070209_16	7/2/2024	10:22	73	204	350	-	-	-	-	-
NJ_PATHO_16	-	4070911_16	7/9/2024	9:58	185	281	220	-	-	-	-	-
NJ_PATHO_16	-	4071606_16	7/16/2024	9:41	186	343	540	-	-	-	-	-
NJ_PATHO_16	-	4071809_16	7/18/2024	10:20	66	115	170	-	-	-	-	-
NJ_PATHO_17	-	4062511_13	6/25/2024	10:21	411	45	540	-	-	-	-	-
NJ_PATHO_17	-	4062708_13	6/27/2024	9:55	479	135	1600	-	-	-	-	-
NJ_PATHO_17	-	4070209_13	7/2/2024	10:03	285	222	350	-	-	-	-	-
NJ_PATHO_17	-	4070911_13	7/9/2024	9:45	75	222	170	-	-	-	-	-
NJ_PATHO_17	-	4071606_13	7/16/2024	9:31	313	59	540	-	-	-	-	-
NJ_PATHO_17	-	4071809_13	7/18/2024	10:01	104	153	920	-	-	-	-	-
NJ_PATHO_18	-	4062511_14	6/25/2024	10:24	214	93	540	-	-	-	-	-
NJ_PATHO_18	-	4062708_14	6/27/2024	9:57	148	411	1600	-	-	-	-	-
NJ_PATHO_18	-	4070209_14	7/2/2024	10:00	93	199	240	-	-	-	-	-
NJ_PATHO_18	-	4070911_14	7/9/2024	9:47	32	344	220	-	-	-	-	-
NJ_PATHO_18	-	4071606_14	7/16/2024	9:33	125	48	240	-	-	-	-	-
NJ_PATHO_18	-	4071809_14	7/18/2024	10:04	42	53	170	-	-	-	-	-
NJ_PATHO_19	-	4062511_09	6/25/2024	10:04	548	411	920	-	-	-	-	-
NJ_PATHO_19	-	4062708_09	6/27/2024	9:49	178	2420	240	-	-	-	-	-
NJ_PATHO_19	-	4070209_09	7/2/2024	9:51	68	144	130	-	-	-	-	-
NJ_PATHO_19	-	4070911_09	7/9/2024	9:28	31	199	170	-	-	-	-	-
NJ_PATHO_19	-	4071606_09	7/16/2024	9:16	228	66	350	-	-	-	-	-
NJ_PATHO_19	-	4071809_09	7/18/2024	9:43	113	140	240	-	-	-	-	-
NJ_PATHO_20	-	4062511_01	6/25/2024	9:28	2420	1733	1600	-	-	-	-	-
NJ_PATHO_20	-	4062708_01	6/27/2024	9:16	517	687	1600	-	-	-	-	-
NJ_PATHO_20	-	4070209_01	7/2/2024	9:10	276	184	1600	-	-	-	-	-
NJ_PATHO_20	-	4070911_01	7/9/2024	8:58	687	1414	920	-	-	-	-	-
NJ_PATHO_20	-	4071606_01	7/16/2024	8:50	488	70	350	-	-	-	-	-
NJ_PATHO_20	-	4071809_01	7/18/2024	9:08	179	86	350	-	-	-	-	-
NJ_PATHO_21	-	4062609_32	6/26/2024	12:04	687	6	1600	-	-	-	-	-
NJ_PATHO_21	-	4070116_32	7/1/2024	12:56	980	365	1600	-	-	-	-	-
NJ_PATHO_21	-	4070808_32	7/8/2024	11:50	91	22	280	-	-	-	-	-
NJ_PATHO_21	-	4071508_32	7/15/2024	12:05	146	3	920	-	-	-	-	-
NJ_PATHO_21	-	4071705_32	7/17/2024	11:28	1203	25	1600	-	-	-	-	-
NJ_PATHO_21	-	4072207_32	7/22/2024	11:38	1203	461	1600	-	-	-	-	-
NJ_PATHO_22	-	4062609_33	6/26/2024	12:02	548	49	350	-	-	-	-	-
NJ_PATHO_22	-	4070116_33	7/1/2024	12:54	1414	184	1600	-	-	-	-	-
NJ_PATHO_22	-	4070808_33	7/8/2024	11:48	291	70	540	-	-	-	-	-
NJ_PATHO_22	-	4071508_33	7/15/2024	12:03	128	1	920	-	-	-	-	-
NJ_PATHO_22	-	4071705_33	7/17/2024	11:25	276	1	920	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_22	-	4072207_33	7/22/2024	11:35	115	59	240	-	-	-	-	-
NJ_PATHO_23	-	4062609_28	6/26/2024	11:49	291	40	350	-	-	-	-	-
NJ_PATHO_23	-	4070116_28	7/1/2024	12:45	2420	1733	1600	-	-	-	-	-
NJ_PATHO_23	-	4070808_28	7/8/2024	11:37	218	4	350	-	-	-	-	-
NJ_PATHO_23	-	4071508_28	7/15/2024	11:52	1553	5	1600	-	-	-	-	-
NJ_PATHO_23	-	4071705_28	7/17/2024	11:16	687	2	1600	-	-	-	-	-
NJ_PATHO_23	-	4072207_28	7/22/2024	11:25	75	31	170	-	-	-	-	-
NJ_PATHO_24	-	4062609_27	6/26/2024	11:46	517	137	540	-	-	-	-	-
NJ_PATHO_24	-	4070116_27	7/1/2024	12:47	2420	2420	1600	-	-	-	-	-
NJ_PATHO_24	-	4070808_27	7/8/2024	11:31	1414	26	920	-	-	-	-	-
NJ_PATHO_24	-	4071508_27	7/15/2024	11:47	1553	16	920	-	-	-	-	-
NJ_PATHO_24	-	4071705_27	7/17/2024	11:08	1300	1	1600	-	-	-	-	-
NJ_PATHO_24	-	4072207_27	7/22/2024	11:19	1300	816	540	-	-	-	-	-
NJ_PATHO_25	-	4062609_22	6/26/2024	11:27	272	11	920	-	-	-	-	-
NJ_PATHO_25	-	4070116_22	7/1/2024	12:16	1414	816	1600	-	-	-	-	-
NJ_PATHO_25	-	4070808_22	7/8/2024	11:10	91	20	130	-	-	-	-	-
NJ_PATHO_25	-	4071508_22	7/15/2024	11:30	260	1	350	-	-	-	-	-
NJ_PATHO_25	-	4071705_22	7/17/2024	10:50	387	4	350	-	-	-	-	-
NJ_PATHO_25	-	4072207_22	7/22/2024	11:03	88	21	350	-	-	-	-	-
NJ_PATHO_26	-	4062609_23	6/26/2024	11:29	649	23	540	-	-	-	-	-
NJ_PATHO_26	-	4070116_23	7/1/2024	12:18	2420	980	1600	-	-	-	-	-
NJ_PATHO_26	-	4070808_23	7/8/2024	11:08	613	32	920	-	-	-	-	-
NJ_PATHO_26	-	4071508_23	7/15/2024	11:31	980	2	1600	-	-	-	-	-
NJ_PATHO_26	-	4071705_23	7/17/2024	10:52	1203	6	1600	-	-	-	-	-
NJ_PATHO_26	-	4072207_23	7/22/2024	11:05	1046	89	350	-	-	-	-	-
NJ_PATHO_27	-	4062609_17	6/25/2024	11:13				-	-	-	-	-
NJ_PATHO_27	-	4070116_17	7/1/2024	11:58	2420	579	1600	-	-	-	-	-
NJ_PATHO_27	-	4070808_17	7/8/2024	10:53	921	1	1600	-	-	-	-	-
NJ_PATHO_27	-	4071508_17	7/15/2024	11:17	866	7	240	-	-	-	-	-
NJ_PATHO_27	-	4071705_17	7/17/2024	10:35	1986	1	1600	-	-	-	-	-
NJ_PATHO_27	-	4072207_17	7/22/2024	10:52	579	80	920	-	-	-	-	-
NJ_PATHO_28	-	4062609_15	6/26/2024	11:03	214	10	350	-	-	-	-	-
NJ_PATHO_28	-	4070116_15	7/1/2024	11:42	2420	2420	1600	-	-	-	-	-
NJ_PATHO_28	-	4070808_15	7/8/2024	10:43	687	4	540	-	-	-	-	-
NJ_PATHO_28	-	4071508_15	7/15/2024	11:09	548	4	920	-	-	-	-	-
NJ_PATHO_28	-	4071705_15	7/17/2024	10:25	2420	1	1600	-	-	-	-	-
NJ_PATHO_28	-	4072207_15	7/22/2024	10:43	866	142	920	-	-	-	-	-
NJ_PATHO_29	-	4062609_14	6/26/2024	10:51	260	14	240	-	-	-	-	-
NJ_PATHO_29	-	4070116_14	7/1/2024	11:29	461	60	350	-	-	-	-	-
NJ_PATHO_29	-	4070808_14	7/8/2024	10:28	179	2	540	-	-	-	-	-
NJ_PATHO_29	-	4071508_14	7/15/2024	10:57	48	1	49	-	-	-	-	-
NJ_PATHO_29	-	4071705_14	7/17/2024	10:10	179	1	130	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_29	-	4072207_14	7/22/2024	10:31	111	12	350	-	-	-	-	-
NJ_PATHO_30	-	4062609_10	6/26/2024	10:42	435	130	350	-	-	-	-	-
NJ_PATHO_30	-	4070116_10	7/1/2024	11:07	921	51	920	-	-	-	-	-
NJ_PATHO_30	-	4070808_10	7/8/2024	10:19	82	5	170	-	-	-	-	-
NJ_PATHO_30	-	4071508_10	7/15/2024	10:47	91	1	350	-	-	-	-	-
NJ_PATHO_30	-	4071705_10	7/17/2024	9:56	173	1	350	-	-	-	-	-
NJ_PATHO_30	-	4072207_10	7/22/2024	10:22	32	45	49	-	-	-	-	-
NJ_PATHO_31	-	4062613_27	6/26/2024	11:16	99	8	140	-	-	-	-	-
NJ_PATHO_31	-	4070112_27	7/1/2024	10:48	77	1	110	-	-	-	-	-
NJ_PATHO_31	-	4070804_27	7/8/2024	10:31	66	6	170	-	-	-	-	-
NJ_PATHO_31	-	4071507_27	7/15/2024	11:03	11	1	33	-	-	-	-	-
NJ_PATHO_31	-	4071704_27	7/17/2024	10:22	71	1	140	-	-	-	-	-
NJ_PATHO_31	-	4072208_27	7/22/2024	10:56	86	24	170	-	-	-	-	-
NJ_PATHO_32	-	4062613_28	6/26/2024	11:19	163	12	350	-	-	-	-	-
NJ_PATHO_32	-	4070112_28	7/1/2024	10:51	276	11	350	-	-	-	-	-
NJ_PATHO_32	-	4070804_28	7/8/2024	10:32	124	13	350	-	-	-	-	-
NJ_PATHO_32	-	4071507_28	7/15/2024	11:06	31	1	70	-	-	-	-	-
NJ_PATHO_32	-	4071704_28	7/17/2024	10:25	91	7	540	-	-	-	-	-
NJ_PATHO_32	-	4072208_28	7/22/2024	10:59	86	36	130	-	-	-	-	-
NJ_PATHO_33	-	4062609_09	6/26/2024	10:27	43	10	79	-	-	-	-	-
NJ_PATHO_33	-	4070116_09	7/1/2024	10:48	178	14	170	-	-	-	-	-
NJ_PATHO_33	-	4070808_09	7/8/2024	10:00	33	9	170	-	-	-	-	-
NJ_PATHO_33	-	4071508_09	7/15/2024	10:30	16	1	11	-	-	-	-	-
NJ_PATHO_33	-	4071705_09	7/17/2024	9:42	86	1	110	-	-	-	-	-
NJ_PATHO_33	-	4072207_09	7/22/2024	10:09	29	62	33	-	-	-	-	-
NJ_PATHO_34	-	4062609_08	6/26/2024	10:21	517	1986	540	-	-	-	-	-
NJ_PATHO_34	-	4070116_08	7/1/2024	10:43	118	13	240	-	-	-	-	-
NJ_PATHO_34	-	4070808_08	7/8/2024	9:53	328	299	350	-	-	-	-	-
NJ_PATHO_34	-	4071508_08	7/15/2024	10:25	36	1	79	-	-	-	-	-
NJ_PATHO_34	-	4071705_08	7/17/2024	9:36	51	1	33	-	-	-	-	-
NJ_PATHO_34	-	4072207_08	7/22/2024	10:05	345	2420	350	-	-	-	-	-
NJ_PATHO_35	-	4062609_07	6/26/2024	10:16	38	90	33	-	-	-	-	-
NJ_PATHO_35	-	4070116_07	7/1/2024	10:33	88	8	240	-	-	-	-	-
NJ_PATHO_35	-	4070808_07	7/8/2024	9:44	30	37	130	-	-	-	-	-
NJ_PATHO_35	-	4071508_07	7/15/2024	10:17	21	1	33	-	-	-	-	-
NJ_PATHO_35	-	4071705_07	7/17/2024	9:29	66	1	79	-	-	-	-	-
NJ_PATHO_35	-	4072207_07	7/22/2024	9:56	43	123	33	-	-	-	-	-
NJ_PATHO_36	-	4062609_06	6/26/2024	10:12	285	250	240	-	-	-	-	-
NJ_PATHO_36	-	4070116_06	7/1/2024	10:25	76	4	49	-	-	-	-	-
NJ_PATHO_36	-	4070808_06	7/8/2024	9:39	142	101	79	-	-	-	-	-
NJ_PATHO_36	-	4071508_06	7/15/2024	10:12	29	1	49	-	-	-	-	-
NJ_PATHO_36	-	4071705_06	7/17/2024	9:24	52	1	220	-	-	-	-	-

MST qPCR (GC/<100mL)

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_36	-	4072207_06	7/22/2024	9:52	118	914	130	-	-	-	-	-
NJ_PATHO_37	-	4062609_05	6/26/2024	10:02	23	3	63	-	-	-	-	-
NJ_PATHO_37	-	4070116_05	7/1/2024	10:10	161	5	540	-	-	-	-	-
NJ_PATHO_37	-	4070808_05	7/8/2024	9:27	6	4	8	-	-	-	-	-
NJ_PATHO_37	-	4071508_05	7/15/2024	10:04	13	1	22	-	-	-	-	-
NJ_PATHO_37	-	4071705_05	7/17/2024	9:13	27	1	23	-	-	-	-	-
NJ_PATHO_37	-	4072207_05	7/22/2024	9:43	2	4	5	-	-	-	-	-
NJ_PATHO_38	-	4062613_16	6/26/2024	10:31	19	3	17	-	-	-	-	-
NJ_PATHO_38	-	4070804_16	7/8/2024	10:03	11	10	8	-	-	-	-	-
NJ_PATHO_38	-	4071507_16	7/15/2024	10:24	3	1	14	-	-	-	-	-
NJ_PATHO_38	-	4071704_16	7/17/2024	9:54	8	1	8	-	-	-	-	-
NJ_PATHO_38	-	4072208_16	7/22/2024	10:23	23	3	23	-	-	-	-	-
NJ_PATHO_39	-	4062613_17	6/26/2024	10:35	46	27	49	-	-	-	-	-
NJ_PATHO_39	-	4070112_17	7/1/2024	10:16	44	68	79	-	-	-	-	-
NJ_PATHO_39	-	4070804_17	7/8/2024	10:05	56	122	130	-	-	-	-	-
NJ_PATHO_39	-	4071507_17	7/15/2024	10:29	7	1	17	-	-	-	-	-
NJ_PATHO_39	-	4071704_17	7/17/2024	9:55	10	1	17	-	-	-	-	-
NJ_PATHO_39	-	4072208_17	7/22/2024	10:26	35	17	70	-	-	-	-	-
NJ_PATHO_40	-	4062609_04	6/26/2024	9:51	26	7	13	-	-	-	-	-
NJ_PATHO_40	-	4070116_04	7/1/2024	9:51	128	8	220	-	-	-	-	-
NJ_PATHO_40	-	4070808_04	7/8/2024	9:15	111	286	130	-	-	-	-	-
NJ_PATHO_40	-	4071508_04	7/15/2024	9:50	23	1	70	-	-	-	-	-
NJ_PATHO_40	-	4071705_04	7/17/2024	9:00	127	1	240	-	-	-	-	-
NJ_PATHO_40	-	4072207_04	7/22/2024	9:32	75	435	63	-	-	-	-	-
NJ_PATHO_41	-	4062609_03	6/26/2024	9:46	866	1046	540	-	-	-	-	-
NJ_PATHO_41	-	4070116_03	7/1/2024	9:43	127	3	79	-	-	-	-	-
NJ_PATHO_41	-	4070808_03	7/8/2024	9:08	866	2420	920	-	-	-	-	-
NJ_PATHO_41	-	4071508_03	7/15/2024	9:43	49	1	94	-	-	-	-	-
NJ_PATHO_41	-	4071705_03	7/17/2024	8:54	89	1	130	-	-	-	-	-
NJ_PATHO_41	-	4072207_03	7/22/2024	9:25	770	2420	920	-	-	-	-	-
NJ_PATHO_42	-	4062613_10	6/26/2024	9:41	186	34	170	-	-	-	-	-
NJ_PATHO_42	-	4070112_10	7/1/2024	9:25	38	6	49	-	-	-	-	-
NJ_PATHO_42	-	4070804_10	7/8/2024	9:16	11	12	33	-	-	-	-	-
NJ_PATHO_42	-	4071507_10	7/15/2024	9:18	4	4	17	-	-	-	-	-
NJ_PATHO_42	-	4071704_10	7/17/2024	9:12	11	1	49	-	-	-	-	-
NJ_PATHO_42	-	4072208_10	7/22/2024	9:19	15	2	13	-	-	-	-	-
NJ_PATHO_43	-	4062609_02	6/26/2024	9:40	38	18	79	-	-	-	-	-
NJ_PATHO_43	-	4070116_02	7/1/2024	9:32	115	6	130	-	-	-	-	-
NJ_PATHO_43	-	4070808_02	7/8/2024	9:01	55	31	79	-	-	-	-	-
NJ_PATHO_43	-	4071508_02	7/15/2024	9:36	16	1	21	-	-	-	-	-
NJ_PATHO_43	-	4071705_02	7/17/2024	8:48	49	1	110	-	-	-	-	-
NJ_PATHO_43	-	4072207_02	7/22/2024	9:18	78	261	240	-	-	-	-	-

STATION <sup>1</sup>	SAMPLE	NJ_SAMPLE	DATE	TIME	E. COLI	MST qPCR (GC/<100mL)						
						ENTEROCOCCUS	FECAL	HUMAN	SWINE	BOVINE	AVIAN	DOG
NJ_PATHO_44	-	4062609_01	6/26/2024	9:30	41	177	33	-	-	-	-	-
NJ_PATHO_44	-	4070808_01	7/8/2024	8:52	54	326	130	-	-	-	-	-
NJ_PATHO_44	-	4071508_01	7/15/2024	9:24	10	1	33	-	-	-	-	-
NJ_PATHO_44	-	4071705_01	7/17/2024	8:38	22	1	49	-	-	-	-	-
NJ_PATHO_44	-	4072207_01	7/22/2024	9:10	96	2420	350	-	-	-	-	-
NJ_PATHO_45	-	4062613_04	6/26/2024	9:02	24	4	13	-	-	-	-	-
NJ_PATHO_45	-	4070112_04	7/1/2024	8:50	201	3	240	-	-	-	-	-
NJ_PATHO_45	-	4070804_04	7/8/2024	8:49	8	23	4	-	-	-	-	-
NJ_PATHO_45	-	4071507_04	7/15/2024	8:53	3	3	21	-	-	-	-	-
NJ_PATHO_45	-	4071704_04	7/17/2024	8:44	26	2	33	-	-	-	-	-
NJ_PATHO_45	-	4072208_04	7/22/2024	8:42	11	4	23	-	-	-	-	-
NJ_PATHO_46	-	4062613_05	6/26/2024	8:55	13	5	13	-	-	-	-	-
NJ_PATHO_46	-	4070112_05	7/1/2024	8:57	16	3	110	-	-	-	-	-
NJ_PATHO_46	-	4070804_05	7/8/2024	8:45	11	11	33	-	-	-	-	-
NJ_PATHO_46	-	4071507_05	7/15/2024	8:46	50	9	170	-	-	-	-	-
NJ_PATHO_46	-	4071704_05	7/17/2024	8:40	579	39	540	-	-	-	-	-
NJ_PATHO_46	-	4072208_05	7/22/2024	8:38	12	2	17	-	-	-	-	-
SCHU_60	2617353	4062613_22	6/26/2024	11:33	105	10	240	6015	42776	<100	<100	283
SCHU_60	2618494	4070112_22	7/1/2024	11:04	727	1	1600	63904	19934	<100	<100	1076
SCHU_60	2619625	4070804_22	7/8/2024	10:44	1986	7	1600	<100	<100	<100	<100	<100
SCHU_60	2622681	4071507_22	7/15/2024	11:19	816	27	1600	12551	5082	<100	<100	<100
SCHU_60	2625124	4071704_22	7/17/2024	10:35	126	8	540	27170	5057	<100	<100	1690
SCHU_60	2626372	4072208_22	7/22/2024	11:12	29	3	130	<100	3828	<100	<100	<100
SCHU_61	2617352	4062613_23	6/26/2024	11:30	222	3	170	4721	<100	<100	<100	294
SCHU_61	2618493	4070112_23	7/1/2024	11:01	1046	2	1600	62000	13516	<100	<100	3269
SCHU_61	2619624	4070804_23	7/8/2024	10:42	1414	6	1600	9798	3549	<100	<100	<100
SCHU_61	2622680	4071507_23	7/15/2024	11:16	921	36	1600	25191	5724	<100	<100	<100
SCHU_61	2625122	4071704_23	7/17/2024	10:33	78	1	110	2960	<100	<100	<100	1833
SCHU_61	2626371	4072208_23	7/22/2024	11:10	30	1	70	<100	2712	<100	<100	<100
SCHU_62	2617351	4062613_21	6/26/2024	11:27	173	7	220	4072	17770	<100	<100	<100
SCHU_62	2618492	4070112_21	7/1/2024	10:58	1046	1	920	48253	19299	<100	<100	2378
SCHU_62	2619623	4070804_21	7/8/2024	10:39	980	10	280	6972	4945	<100	<100	<100
SCHU_62	2622341	4071507_21	7/15/2024	11:13	1733	24	1600	7861	<100	<100	<100	<100
SCHU_62	2625121	4071704_21	7/17/2024	10:31	151	3	49	2655	2134	<100	<100	1740
SCHU_62	2626370	4072208_21	7/22/2024	11:07	23	1	33	<100	2839	<100	<100	<100

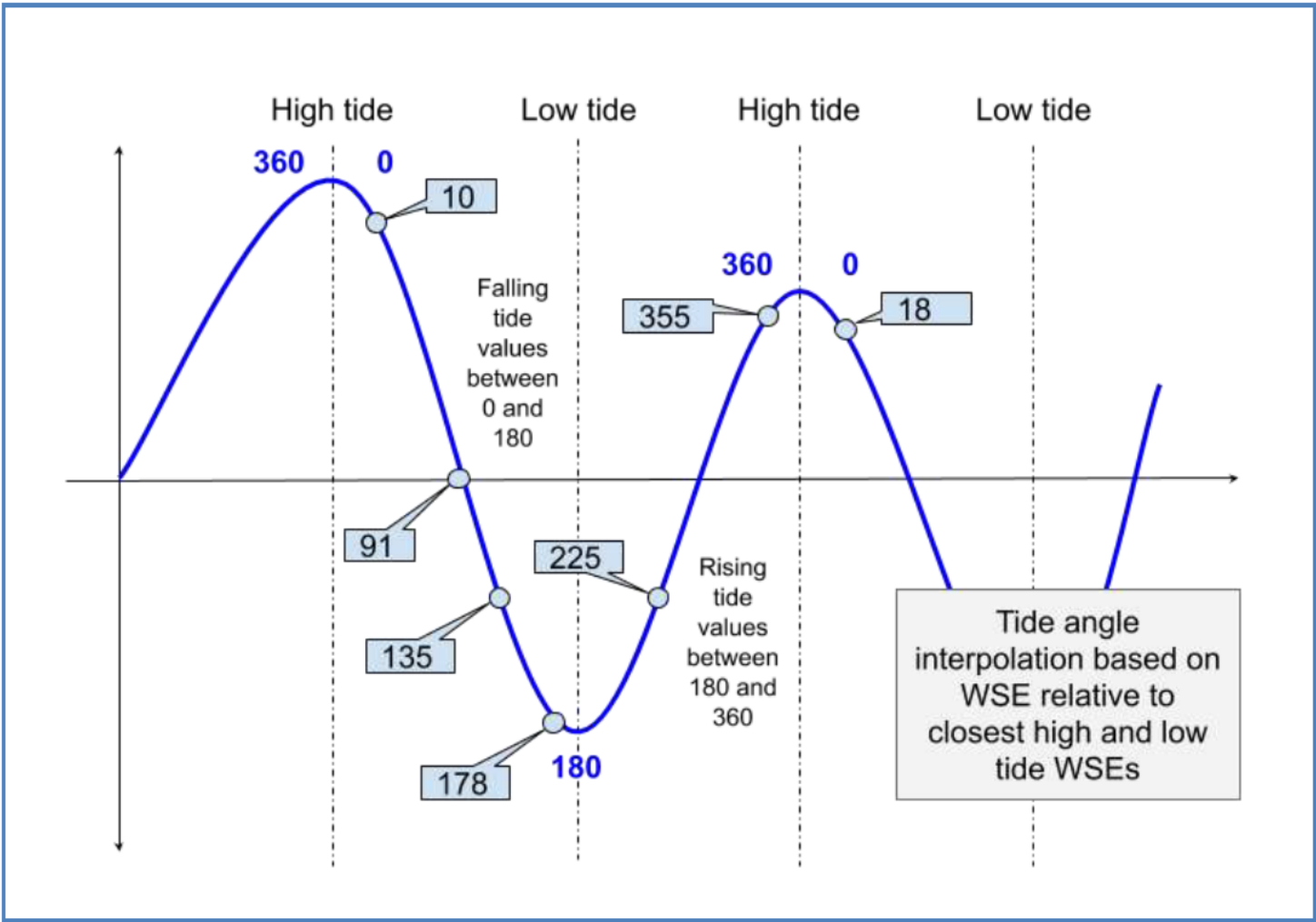
<sup>1</sup>Refer to Figure 1 & Table 1 for Station Locations.

"<" Indicates Concentrations Below the Reporting Limit.

"-" Indicates Parameter Was Not Tested.



**APPENDIX C: TIDAL ANGLE DURING SAMPLE COLLECTION**



Sampled	Sample ID	Lat	Long	RM	Tide Angle
6/25/24 1:30 PM	6107-135	40.219994	-74.777527	134.2	239.558011
6/25/24 1:33 PM	6107-134	40.218444	-74.778994	134.2	242.5745856
6/25/24 1:40 PM	6107-133	40.218843	-74.778646	134.2	249.6132597
6/25/24 1:48 PM	6107-132	40.219275	-74.77821	134.2	257.5690608
6/27/24 1:16 PM	6107-135	40.219994	-74.777527	134.2	179.2477064
6/27/24 1:21 PM	6107-134	40.218444	-74.778994	134.2	179.7522936
6/27/24 1:29 PM	6107-133	40.218843	-74.778646	134.2	179.9724771
6/27/24 1:41 PM	6107-132	40.219275	-74.77821	134.2	181.1137124
7/2/24 12:12 PM	6107-135	40.219994	-74.777527	134.2	14.24460432
7/2/24 12:16 PM	6107-134	40.218444	-74.778994	134.2	15.97122302
7/2/24 12:21 PM	6107-133	40.218843	-74.778646	134.2	18.17266187
7/2/24 12:25 PM	6107-132	40.219275	-74.77821	134.2	20.07194245
7/9/24 11:57 AM	6107-135	40.219994	-74.777527	134.2	184.8247423
7/9/24 12:02 PM	6107-134	40.218444	-74.778994	134.2	186.6804124
7/9/24 12:06 PM	6107-133	40.218843	-74.778646	134.2	188.443299

7/9/24 12:11 PM	6107-132	40.219275	-74.77821	134.2	190.7628866
7/16/24 12:27 PM	6107-135	40.219994	-74.777527	134.2	59.29714286
7/16/24 12:32 PM	6107-134	40.218444	-74.778994	134.2	62.89714286
7/16/24 12:40 PM	6107-133	40.218843	-74.778646	134.2	68.65714286
7/16/24 12:45 PM	6107-132	40.219275	-74.77821	134.2	72.32142857
7/18/24 12:29 PM	6107-135	40.219994	-74.777527	134.2	3.023689878
7/18/24 12:35 PM	6107-134	40.218444	-74.778994	134.2	4.651830581
7/18/24 12:41 PM	6107-133	40.218843	-74.778646	134.2	6.435032304
7/18/24 12:47 PM	6107-132	40.219275	-74.77821	134.2	8.605886576
6/26/24 11:24 AM	6107-131	40.206082	-74.767981	133.2	159.1559818
7/1/24 11:22 AM	6107-131	40.206082	-74.767981	133.2	16.94240838
7/8/24 11:10 AM	6107-131	40.206082	-74.767981	133.2	183.1213873
7/15/24 10:45 AM	6107-131	40.206082	-74.767981	133.2	26.56551724
7/17/24 10:34 AM	6107-131	40.206082	-74.767981	133.2	353.2399404
7/22/24 11:14 AM	6107-131	40.206082	-74.767981	133.2	221.5756098
6/26/24 11:19 AM	6107-130	40.206848	-74.765613	133.1	156.9025745
6/26/24 11:22 AM	6107-128	40.206565	-74.766394	133.1	158.2655225
6/26/24 11:28 AM	6107-129	40.206315	-74.767268	133.1	160.9369006
7/1/24 11:18 AM	6107-128	40.206565	-74.766394	133.1	15.18324607
7/1/24 11:20 AM	6107-129	40.206315	-74.767268	133.1	16.02094241
7/1/24 11:55 AM	6107-130	40.206848	-74.765613	133.1	33.35078534
7/8/24 11:04 AM	6107-130	40.206848	-74.765613	133.1	181.8034682
7/8/24 11:06 AM	6107-128	40.206565	-74.766394	133.1	182.2427746
7/8/24 11:08 AM	6107-129	40.206315	-74.767268	133.1	182.6820809
7/15/24 10:43 AM	6107-130	40.206848	-74.765613	133.1	25.3737931
7/15/24 10:47 AM	6107-129	40.206315	-74.767268	133.1	27.75724138
7/15/24 10:49 AM	6107-128	40.206565	-74.766394	133.1	28.94896552
7/17/24 10:32 AM	6107-130	40.206848	-74.765613	133.1	352.5961252
7/17/24 10:36 AM	6107-129	40.206315	-74.767268	133.1	353.8837556
7/17/24 10:38 AM	6107-128	40.206565	-74.766394	133.1	354.5275708
7/22/24 11:08 AM	6107-130	40.206848	-74.765613	133.1	216.2634146
7/22/24 11:10 AM	6107-128	40.206565	-74.766394	133.1	217.9756098
7/22/24 11:12 AM	6107-129	40.206315	-74.767268	133.1	219.7756098
6/26/24 11:10 AM	6107-127	40.186674	-74.753876	131.6	152.6501767
7/1/24 11:03 AM	6107-127	40.186674	-74.753876	131.6	9.267015707
7/8/24 10:51 AM	6107-127	40.186674	-74.753876	131.6	180.0924855
7/15/24 10:30 AM	6107-127	40.186674	-74.753876	131.6	18.12413793
7/17/24 10:23 AM	6107-127	40.186674	-74.753876	131.6	349.2295082
7/22/24 10:57 AM	6107-127	40.186674	-74.753876	131.6	207.0768293
6/26/24 11:06 AM	6107-126	40.183333	-74.752778	131.4	150.7238768
7/1/24 11:00 AM	6107-126	40.183333	-74.752778	131.4	8.167539267
7/8/24 10:48 AM	6107-126	40.183333	-74.752778	131.4	179.9427966
7/15/24 10:27 AM	6107-126	40.183333	-74.752778	131.4	16.63448276
7/17/24 10:21 AM	6107-126	40.183333	-74.752778	131.4	348.4515648
7/22/24 10:51 AM	6107-126	40.183333	-74.752778	131.4	202.4012195
6/26/24 11:13 AM	6107-125	40.170101	-74.738445	130.2	154.0676426
7/1/24 11:07 AM	6107-125	40.170101	-74.738445	130.2	10.73298429

7/8/24 10:54 AM	6107-125	40.170101	-74.738445	130.2	180.3699422
7/15/24 10:33 AM	6107-125	40.170101	-74.738445	130.2	19.76275862
7/17/24 10:25 AM	6107-125	40.170101	-74.738445	130.2	350.0074516
7/22/24 11:01 AM	6107-125	40.170101	-74.738445	130.2	210.2707317
6/26/24 10:39 AM	6107-124	40.169666	-74.732127	129.9	137.4215043
7/1/24 10:50 AM	6107-124	40.169666	-74.732127	129.9	5.02617801
7/8/24 10:39 AM	6107-124	40.169666	-74.732127	129.9	179.5614407
7/15/24 10:19 AM	6107-124	40.169666	-74.732127	129.9	12.73655172
7/17/24 10:15 AM	6107-124	40.169666	-74.732127	129.9	345.9836066
7/22/24 10:41 AM	6107-124	40.169666	-74.732127	129.9	195.497561
6/26/24 10:53 AM	6107-123	40.158767	-74.724229	128.9	144.3361938
7/1/24 10:44 AM	6107-123	40.158767	-74.724229	128.9	3.581151832
7/8/24 10:34 AM	6107-123	40.158767	-74.724229	128.9	178.7987288
7/15/24 10:15 AM	6107-123	40.158767	-74.724229	128.9	11.04827586
7/17/24 10:10 AM	6107-123	40.158767	-74.724229	128.9	343.90462
7/22/24 10:35 AM	6107-123	40.158767	-74.724229	128.9	192.0182927
6/26/24 10:46 AM	6107-122	40.151302	-74.715956	128.4	140.8743059
7/1/24 10:34 AM	6107-122	40.151302	-74.715956	128.4	1.612565445
7/8/24 10:26 AM	6107-122	40.151302	-74.715956	128.4	177.2351695
7/15/24 10:08 AM	6107-122	40.151302	-74.715956	128.4	8.242758621
7/17/24 10:02 AM	6107-122	40.151302	-74.715956	128.4	340.1490313
7/22/24 10:21 AM	6107-122	40.151302	-74.715956	128.4	185.2682927
6/26/24 10:28 AM	6107-121	40.132205	-74.767276	125.4	131.8425038
7/1/24 10:19 AM	6107-121	40.132205	-74.767276	125.4	0
7/8/24 10:07 AM	6107-121	40.132205	-74.767276	125.4	171.1430085
7/15/24 9:54 AM	6107-121	40.132205	-74.767276	125.4	3.897931034
7/17/24 9:48 AM	6107-121	40.132205	-74.767276	125.4	333.3889717
7/22/24 10:03 AM	6107-121	40.132205	-74.767276	125.4	180.7134146
6/26/24 10:10 AM	6107-120	40.122846	-74.764096	125.3	122.6653205
7/1/24 10:05 AM	6107-120	40.122846	-74.764096	125.3	179.5566502
7/8/24 9:55 AM	6107-120	40.122846	-74.764096	125.3	165.8898305
7/15/24 9:44 AM	6107-120	40.122846	-74.764096	125.3	1.737931034
7/17/24 9:36 AM	6107-120	40.122846	-74.764096	125.3	327.3800298
7/22/24 9:48 AM	6107-120	40.122846	-74.764096	125.3	179.8221344
6/26/24 10:16 AM	6107-117	40.12794	-74.775699	124.9	125.772842
6/26/24 10:17 AM	6107-118	40.12794	-74.775699	124.9	126.2907622
6/26/24 10:18 AM	6107-119	40.12794	-74.775699	124.9	126.8086825
7/1/24 10:11 AM	6107-117	40.12794	-74.775699	124.9	0
7/1/24 10:13 AM	6107-118	40.12794	-74.775699	124.9	0
7/1/24 10:15 AM	6107-119	40.12794	-74.775699	124.9	0
7/8/24 9:59 AM	6107-117	40.12794	-74.775699	124.9	167.7966102
7/8/24 10:01 AM	6107-118	40.12794	-74.775699	124.9	168.6832627
7/8/24 10:03 AM	6107-119	40.12794	-74.775699	124.9	169.503178
7/15/24 9:48 AM	6107-117	40.12794	-74.775699	124.9	2.482758621
7/15/24 9:50 AM	6107-118	40.12794	-74.775699	124.9	2.855172414
7/15/24 9:52 AM	6107-119	40.12794	-74.775699	124.9	3.376551724
7/17/24 9:40 AM	6107-117	40.12794	-74.775699	124.9	329.4187779

7/17/24 9:42 AM	6107-118	40.12794	-74.775699	124.9	330.4113264
7/17/24 9:44 AM	6107-119	40.12794	-74.775699	124.9	331.4038748
7/22/24 9:54 AM	6107-117	40.12794	-74.775699	124.9	180.0878049
7/22/24 9:56 AM	6107-118	40.12794	-74.775699	124.9	180.1317073
7/22/24 9:58 AM	6107-119	40.12794	-74.775699	124.9	180.1756098
6/26/24 10:03 AM	6107-116	40.118759	-74.789187	123.9	119.1034831
7/1/24 9:58 AM	6107-116	40.118759	-74.789187	123.9	358.7807882
7/8/24 9:47 AM	6107-116	40.118759	-74.789187	123.9	161.904661
7/15/24 9:35 AM	6107-116	40.118759	-74.789187	123.9	0.55862069
7/17/24 9:30 AM	6107-116	40.118759	-74.789187	123.9	324.3219076
7/22/24 9:42 AM	6107-116	40.118759	-74.789187	123.9	179.2885375
6/26/24 9:51 AM	6107-115	40.134611	-74.814557	122.4	112.9156991
7/1/24 9:49 AM	6107-115	40.134611	-74.814557	122.4	357.1958128
7/8/24 9:35 AM	6107-115	40.134611	-74.814557	122.4	155.3548729
7/15/24 9:28 AM	6107-115	40.134611	-74.814557	122.4	0.099310345
7/17/24 9:20 AM	6107-115	40.134611	-74.814557	122.4	319.2250373
7/22/24 9:31 AM	6107-115	40.134611	-74.814557	122.4	177.4298419
6/26/24 9:34 AM	6107-113	40.117214	-74.832646	121.2	104.111055
6/26/24 9:36 AM	6107-112	40.117037	-74.831936	121.2	105.1468955
6/26/24 9:39 AM	6107-111	40.116756	-74.830991	121.2	106.7006562
6/26/24 9:42 AM	6107-114	40.116305	-74.829099	121.2	108.254417
7/1/24 9:30 AM	6107-113	40.117214	-74.832646	121.2	351.5763547
7/1/24 9:32 AM	6107-112	40.117037	-74.831936	121.2	352.2413793
7/1/24 9:34 AM	6107-111	40.116756	-74.830991	121.2	352.9064039
7/1/24 9:39 AM	6107-114	40.116305	-74.829099	121.2	354.5689655
7/8/24 9:20 AM	6107-113	40.117214	-74.832646	121.2	146.7266949
7/8/24 9:22 AM	6107-112	40.117037	-74.831936	121.2	147.8898305
7/8/24 9:24 AM	6107-111	40.116756	-74.830991	121.2	149.0529661
7/8/24 9:27 AM	6107-114	40.116305	-74.829099	121.2	150.7976695
7/15/24 9:15 AM	6107-113	40.117214	-74.832646	121.2	179.5982143
7/15/24 9:17 AM	6107-112	40.117037	-74.831936	121.2	107.7589286
7/15/24 9:19 AM	6107-111	40.116756	-74.830991	121.2	35.91964286
7/15/24 9:21 AM	6107-114	40.116305	-74.829099	121.2	0.012413793
7/17/24 9:06 AM	6107-113	40.117214	-74.832646	121.2	312.0357675
7/17/24 9:08 AM	6107-112	40.117037	-74.831936	121.2	313.0819672
7/17/24 9:10 AM	6107-111	40.116756	-74.830991	121.2	314.1281669
7/17/24 9:12 AM	6107-114	40.116305	-74.829099	121.2	315.147541
7/22/24 9:17 AM	6107-113	40.117214	-74.832646	121.2	173.4189723
7/22/24 9:19 AM	6107-112	40.117037	-74.831936	121.2	174.1304348
7/22/24 9:21 AM	6107-111	40.116756	-74.830991	121.2	174.7618577
7/22/24 9:23 AM	6107-114	40.116305	-74.829099	121.2	175.3132411
6/26/24 9:27 AM	6107-110	40.103418	-74.838511	120.1	100.4856133
7/1/24 9:23 AM	6107-110	40.103418	-74.838511	120.1	348.7832512
7/8/24 9:13 AM	6107-110	40.103418	-74.838511	120.1	142.5222458
7/15/24 9:10 AM	6107-110	40.103418	-74.838511	120.1	359.1964286
7/17/24 9:01 AM	6107-110	40.103418	-74.838511	120.1	309.4202683
7/22/24 9:11 AM	6107-110	40.103418	-74.838511	120.1	171.284585

6/26/24 9:23 AM	6107-109	40.100021	-74.842603	119.8	98.41393236
7/1/24 9:17 AM	6107-109	40.100021	-74.842603	119.8	346.2229064
7/8/24 9:10 AM	6107-109	40.100021	-74.842603	119.8	140.720339
7/15/24 9:07 AM	6107-109	40.100021	-74.842603	119.8	358.7142857
7/17/24 9:00 AM	6107-109	40.100021	-74.842603	119.8	308.8971684
7/22/24 9:08 AM	6107-109	40.100021	-74.842603	119.8	170.0928854
6/26/24 9:17 AM	6107-108	40.093864	-74.855805	119	95.3064109
7/1/24 9:09 AM	6107-108	40.093864	-74.855805	119	342.5431034
7/8/24 9:04 AM	6107-108	40.093864	-74.855805	119	137.1737288
7/15/24 9:03 AM	6107-108	40.093864	-74.855805	119	358.0714286
7/17/24 8:55 AM	6107-108	40.093864	-74.855805	119	306.2146051
7/22/24 9:03 AM	6107-108	40.093864	-74.855805	119	168.0029644
6/26/24 9:14 AM	6107-107	40.092799	-74.857774	118.9	93.75265018
7/1/24 9:06 AM	6107-107	40.092799	-74.857774	118.9	341.046798
7/8/24 9:01 AM	6107-107	40.092799	-74.857774	118.9	135.4004237
7/15/24 9:01 AM	6107-107	40.092799	-74.857774	118.9	357.75
7/17/24 8:53 AM	6107-107	40.092799	-74.857774	118.9	305.1415797
7/22/24 9:00 AM	6107-107	40.092799	-74.857774	118.9	166.7490119
6/27/24 12:18 PM	6107-106	40.094019	-74.862505	118.8	161.7798165
7/2/24 11:33 AM	6107-106	40.094019	-74.862505	118.8	2.017985612
7/9/24 11:18 AM	6107-106	40.094019	-74.862505	118.8	179.0975477
7/10/24 11:31 AM	6107-106	40.094019	-74.862505	118.8	172.6610738
7/16/24 11:43 AM	6107-106	40.094019	-74.862505	118.8	29.40428571
7/18/24 11:43 AM	6107-106	40.094019	-74.862505	118.8	357.9015206
6/26/24 8:45 AM	6107-105	40.081954	-74.850113	118.6	78.73296315
7/1/24 8:44 AM	6107-105	40.081954	-74.850113	118.6	329.3423645
7/8/24 8:36 AM	6107-105	40.081954	-74.850113	118.6	120.9661017
7/15/24 8:38 AM	6107-105	40.081954	-74.850113	118.6	351.6696429
7/17/24 8:33 AM	6107-105	40.081954	-74.850113	118.6	293.9016393
7/22/24 8:38 AM	6107-105	40.081954	-74.850113	118.6	156.0948617
6/26/24 8:54 AM	6107-104	40.080334	-74.86985	117.8	83.39424533
7/1/24 8:52 AM	6107-104	40.080334	-74.86985	117.8	333.7980296
7/8/24 8:45 AM	6107-104	40.080334	-74.86985	117.8	126.0381356
7/15/24 8:47 AM	6107-104	40.080334	-74.86985	117.8	354.3348214
7/17/24 8:42 AM	6107-104	40.080334	-74.86985	117.8	299.1326379
7/22/24 8:45 AM	6107-104	40.080334	-74.86985	117.8	159.6343874
6/26/24 8:58 AM	6107-103	40.081012	-74.870086	117.7	85.4659263
6/26/24 9:00 AM	6107-100	40.081692	-74.870452	117.7	86.50176678
6/26/24 9:05 AM	6107-101	40.082438	-74.870647	117.7	89.091368
6/26/24 9:08 AM	6107-102	40.082971	-74.870842	117.7	90.64512872
7/1/24 8:54 AM	6107-103	40.081012	-74.870086	117.7	334.862069
7/1/24 8:56 AM	6107-100	40.081692	-74.870452	117.7	335.9261084
7/1/24 8:58 AM	6107-101	40.082438	-74.870647	117.7	336.9901478
7/1/24 9:00 AM	6107-102	40.082971	-74.870842	117.7	338.0541872
7/8/24 8:48 AM	6107-103	40.081012	-74.870086	117.7	127.7542373
7/8/24 8:51 AM	6107-100	40.081692	-74.870452	117.7	129.4894068
7/8/24 8:53 AM	6107-101	40.082438	-74.870647	117.7	130.6716102

7/8/24 8:55 AM	6107-102	40.082971	-74.870842	117.7	131.8538136
7/15/24 8:49 AM	6107-103	40.081012	-74.870086	117.7	354.8973214
7/15/24 8:50 AM	6107-100	40.081692	-74.870452	117.7	355.1785714
7/15/24 8:53 AM	6107-101	40.082438	-74.870647	117.7	355.9017857
7/15/24 8:55 AM	6107-102	40.082971	-74.870842	117.7	356.3839286
7/17/24 8:43 AM	6107-103	40.081012	-74.870086	117.7	299.6825633
7/17/24 8:45 AM	6107-100	40.081692	-74.870452	117.7	300.7824143
7/17/24 8:46 AM	6107-101	40.082438	-74.870647	117.7	301.3323398
7/17/24 8:48 AM	6107-102	40.082971	-74.870842	117.7	302.4321908
7/22/24 8:47 AM	6107-103	40.081012	-74.870086	117.7	160.6304348
7/22/24 8:49 AM	6107-100	40.081692	-74.870452	117.7	161.6264822
7/22/24 8:51 AM	6107-101	40.082438	-74.870647	117.7	162.5869565
7/22/24 8:53 AM	6107-102	40.082971	-74.870842	117.7	163.5118577
6/25/24 11:37 AM	6107-099	40.071293	-74.898783	116.1	178.9272727
6/25/24 11:41 AM	6107-098	40.075593	-74.901183	116.1	179.4272727
6/27/24 11:22 AM	6107-099	40.071293	-74.898783	116.1	135.0458716
6/27/24 11:25 AM	6107-098	40.075593	-74.901183	116.1	136.559633
7/2/24 11:30 AM	6107-099	40.071293	-74.898783	116.1	1.402877698
7/2/24 11:35 AM	6107-098	40.075593	-74.901183	116.1	2.428057554
7/9/24 11:07 AM	6107-098	40.075593	-74.901183	116.1	177.106267
7/9/24 11:10 AM	6107-099	40.071293	-74.898783	116.1	177.8419619
7/16/24 10:40 AM	6107-098	40.075593	-74.901183	116.1	2.057142857
7/16/24 10:44 AM	6107-099	40.071293	-74.898783	116.1	2.982857143
7/18/24 11:44 AM	6107-099	40.071293	-74.898783	116.1	358.0709631
7/18/24 11:49 AM	6107-098	40.075593	-74.901183	116.1	358.9181752
6/25/24 11:48 AM	6107-097	40.074426	-74.906085	115.8	179.8727273
6/27/24 11:45 AM	6107-097	40.074426	-74.906085	115.8	146.4678899
7/2/24 12:00 PM	6107-097	40.074426	-74.906085	115.8	9.496402878
7/9/24 11:13 AM	6107-097	40.074426	-74.906085	115.8	178.3128065
7/16/24 10:48 AM	6107-097	40.074426	-74.906085	115.8	3.908571429
7/18/24 11:53 AM	6107-097	40.074426	-74.906085	115.8	251.3613324
6/25/24 12:06 PM	6107-096	40.084692	-74.911183	115.7	181.679558
6/27/24 11:35 AM	6107-096	40.084692	-74.911183	115.7	141.559633
7/2/24 11:48 AM	6107-096	40.084692	-74.911183	115.7	5.611510791
7/9/24 10:56 AM	6107-096	40.084692	-74.911183	115.7	174.0555858
7/16/24 10:29 AM	6107-096	40.084692	-74.911183	115.7	0.578571429
7/18/24 11:29 AM	6107-096	40.084692	-74.911183	115.7	354.4605358
6/25/24 11:30 AM	6107-095	40.073216	-74.914093	115.3	177.9090909
6/27/24 11:18 AM	6107-095	40.073216	-74.914093	115.3	133.0275229
7/2/24 11:22 AM	6107-095	40.073216	-74.914093	115.3	0.539568345
7/9/24 10:44 AM	6107-095	40.073216	-74.914093	115.3	169.6414169
7/16/24 10:19 AM	6107-095	40.073216	-74.914093	115.3	35.95933735
7/18/24 11:16 AM	6107-095	40.073216	-74.914093	115.3	349.9637944
6/25/24 11:25 AM	6107-094	40.068377	-74.925913	114.7	176.7272727
6/27/24 11:14 AM	6107-094	40.068377	-74.925913	114.7	131.0091743
7/2/24 11:16 AM	6107-094	40.068377	-74.925913	114.7	0.194244604
7/9/24 10:40 AM	6107-094	40.068377	-74.925913	114.7	168.0326975

7/16/24 10:14 AM	6107-094	40.068377	-74.925913	114.7	215.7560241
7/18/24 11:09 AM	6107-094	40.068377	-74.925913	114.7	347.1745112
6/25/24 11:15 AM	6107-093	40.052882	-74.959292	112.6	174
6/27/24 10:54 AM	6107-093	40.052882	-74.959292	112.6	120.7706422
7/2/24 10:55 AM	6107-093	40.052882	-74.959292	112.6	358.5546634
7/9/24 10:33 AM	6107-093	40.052882	-74.959292	112.6	164.8741144
7/16/24 10:11 AM	6107-093	40.052882	-74.959292	112.6	323.6340361
7/18/24 10:59 AM	6107-093	40.052882	-74.959292	112.6	342.7168718
6/25/24 11:05 AM	6107-091	40.058668	-74.964358	112.5	170.6818182
6/25/24 11:08 AM	6107-090	40.057262	-74.963319	112.5	171.7454545
6/25/24 11:10 AM	6107-089	40.056236	-74.96218	112.5	172.4545455
6/25/24 11:12 AM	6107-092	40.054378	-74.960651	112.5	173.0727273
6/27/24 10:57 AM	6107-092	40.054378	-74.960651	112.5	122.3119266
6/27/24 11:00 AM	6107-089	40.056236	-74.96218	112.5	123.853211
6/27/24 11:02 AM	6107-090	40.057262	-74.963319	112.5	124.8807339
6/27/24 11:05 AM	6107-091	40.058668	-74.964358	112.5	126.4220183
7/2/24 10:58 AM	6107-092	40.054378	-74.960651	112.5	359.0216183
7/2/24 11:00 AM	6107-089	40.056236	-74.96218	112.5	359.3329216
7/2/24 11:03 AM	6107-090	40.057262	-74.963319	112.5	251.5330451
7/2/24 11:06 AM	6107-091	40.058668	-74.964358	112.5	143.7331686
7/9/24 10:22 AM	6107-091	40.058668	-74.964358	112.5	159.5182561
7/9/24 10:25 AM	6107-090	40.057262	-74.963319	112.5	161.0190736
7/9/24 10:28 AM	6107-089	40.056236	-74.96218	112.5	162.519891
7/9/24 10:31 AM	6107-092	40.054378	-74.960651	112.5	163.9716621
7/16/24 10:02 AM	6107-091	40.058668	-74.964358	112.5	358.5090361
7/16/24 10:05 AM	6107-090	40.057262	-74.963319	112.5	358.9156627
7/16/24 10:07 AM	6107-089	40.056236	-74.96218	112.5	359.186747
7/16/24 10:09 AM	6107-092	40.054378	-74.960651	112.5	359.4578313
7/18/24 10:43 AM	6107-091	40.058668	-74.964358	112.5	334.9355539
7/18/24 10:49 AM	6107-090	40.057262	-74.963319	112.5	337.9855177
7/18/24 10:52 AM	6107-089	40.056236	-74.96218	112.5	339.4322954
7/18/24 10:57 AM	6107-092	40.054378	-74.960651	112.5	341.7784214
6/25/24 10:50 AM	6107-088	40.04261	-74.971408	111.7	164.8181818
6/27/24 10:46 AM	6107-088	40.04261	-74.971408	111.7	116.6238532
7/2/24 10:45 AM	6107-088	40.04261	-74.971408	111.7	356.553428
7/9/24 10:10 AM	6107-088	40.04261	-74.971408	111.7	153.3188011
7/16/24 9:52 AM	6107-088	40.04261	-74.971408	111.7	356.503012
7/18/24 10:30 AM	6107-088	40.04261	-74.971408	111.7	328.1969587
6/25/24 10:59 AM	6107-087	40.05117	-74.978308	111.6	168.5
6/27/24 10:40 AM	6107-087	40.05117	-74.978308	111.6	113.4862385
7/2/24 10:37 AM	6107-087	40.05117	-74.978308	111.6	354.3298332
7/9/24 10:15 AM	6107-087	40.05117	-74.978308	111.6	155.9182561
7/16/24 9:57 AM	6107-087	40.05117	-74.978308	111.6	357.5873494
7/18/24 10:37 AM	6107-087	40.05117	-74.978308	111.6	331.8464881
6/27/24 11:41 AM	6107-084	40.053735	-74.982023	111.5	144.5229358
6/27/24 11:48 AM	6107-086	40.053735	-74.982023	111.5	147.9266055
6/27/24 11:52 AM	6107-085	40.053735	-74.982023	111.5	149.8348624

7/2/24 10:44 AM	6107-084	40.053735	-74.982023	111.5	356.3088326
7/2/24 10:45 AM	6107-085	40.053735	-74.982023	111.5	356.553428
7/2/24 10:48 AM	6107-086	40.053735	-74.982023	111.5	357.2872143
7/9/24 10:34 AM	6107-084	40.053735	-74.982023	111.5	165.3253406
7/9/24 10:37 AM	6107-086	40.053735	-74.982023	111.5	166.6790191
7/9/24 10:40 AM	6107-085	40.053735	-74.982023	111.5	168.0326975
7/10/24 10:51 AM	6107-084	40.053735	-74.982023	111.5	156
7/10/24 10:55 AM	6107-086	40.053735	-74.982023	111.5	157.852349
7/10/24 11:00 AM	6107-085	40.053735	-74.982023	111.5	160.1677852
7/16/24 10:58 AM	6107-084	40.053735	-74.982023	111.5	6.942857143
7/16/24 11:02 AM	6107-086	40.053735	-74.982023	111.5	8.408571429
7/16/24 11:08 AM	6107-085	40.053735	-74.982023	111.5	10.87714286
7/18/24 10:55 AM	6107-084	40.053735	-74.982023	111.5	340.839971
7/18/24 10:59 AM	6107-086	40.053735	-74.982023	111.5	342.7168718
7/18/24 11:02 AM	6107-085	40.053735	-74.982023	111.5	344.0724113
6/25/24 10:34 AM	6107-083	40.033716	-74.977528	111.1	157.5272727
6/27/24 10:20 AM	6107-083	40.033716	-74.977528	111.1	102.9357798
7/2/24 10:22 AM	6107-083	40.033716	-74.977528	111.1	348.7041384
7/9/24 9:58 AM	6107-083	40.033716	-74.977528	111.1	146.9231608
7/16/24 9:41 AM	6107-083	40.033716	-74.977528	111.1	353.5075301
7/18/24 10:20 AM	6107-083	40.033716	-74.977528	111.1	322.9833454
6/25/24 10:45 AM	6107-082	40.041556	-74.990543	110.7	162.5909091
6/27/24 10:11 AM	6107-082	40.041556	-74.990543	110.7	98.14678899
7/2/24 10:31 AM	6107-082	40.041556	-74.990543	110.7	352.3285979
7/9/24 10:05 AM	6107-082	40.041556	-74.990543	110.7	150.6702997
7/16/24 9:47 AM	6107-082	40.041556	-74.990543	110.7	355.2153614
7/18/24 10:12 AM	6107-082	40.041556	-74.990543	110.7	318.7081825
6/25/24 12:35 PM	6107-081	40.033201	-75.007451	109.6	193.2044199
6/27/24 11:22 AM	6107-081	40.033201	-75.007451	109.6	135.0458716
7/2/24 10:31 AM	6107-081	40.033201	-75.007451	109.6	352.3285979
7/9/24 10:21 AM	6107-081	40.033201	-75.007451	109.6	159.0179837
7/16/24 10:43 AM	6107-081	40.033201	-75.007451	109.6	2.751428571
7/18/24 10:39 AM	6107-081	40.033201	-75.007451	109.6	332.8892107
6/25/24 10:21 AM	6107-079	40.023987	-75.005103	109.4	151.3
6/25/24 10:24 AM	6107-080	40.022683	-75.003543	109.4	152.7454545
6/27/24 9:55 AM	6107-079	40.023987	-75.005103	109.4	89.5412844
6/27/24 9:57 AM	6107-080	40.022683	-75.003543	109.4	90.60550459
7/2/24 10:00 AM	6107-080	40.022683	-75.003543	109.4	337.6528721
7/2/24 10:03 AM	6107-079	40.023987	-75.005103	109.4	339.2872143
7/9/24 9:45 AM	6107-079	40.023987	-75.005103	109.4	139.8310627
7/9/24 9:47 AM	6107-080	40.022683	-75.003543	109.4	140.9100817
7/16/24 9:31 AM	6107-079	40.023987	-75.005103	109.4	350.1731928
7/16/24 9:33 AM	6107-080	40.022683	-75.003543	109.4	350.8509036
7/18/24 10:01 AM	6107-079	40.023987	-75.005103	109.4	312.7125272
7/18/24 10:04 AM	6107-080	40.022683	-75.003543	109.4	314.3548154
6/25/24 10:15 AM	6107-078	40.027924	-75.009997	109.3	148.3181818
6/25/24 10:18 AM	6107-077	40.026857	-75.008771	109.3	149.8181818

6/25/24 10:19 AM	6107-076	40.025406	-75.006821	109.3	150.3181818
6/27/24 10:00 AM	6107-076	40.025406	-75.006821	109.3	92.20183486
6/27/24 10:03 AM	6107-077	40.026857	-75.008771	109.3	93.82568807
6/27/24 10:05 AM	6107-078	40.027924	-75.009997	109.3	94.90825688
7/2/24 10:06 AM	6107-076	40.025406	-75.006821	109.3	340.9215565
7/2/24 10:09 AM	6107-077	40.026857	-75.008771	109.3	342.5558987
7/2/24 10:12 AM	6107-078	40.027924	-75.009997	109.3	344.0568252
7/9/24 9:38 AM	6107-078	40.027924	-75.009997	109.3	136.0544959
7/9/24 9:40 AM	6107-077	40.026857	-75.008771	109.3	137.133515
7/9/24 9:42 AM	6107-076	40.025406	-75.006821	109.3	138.2125341
7/16/24 9:24 AM	6107-078	40.027924	-75.009997	109.3	347.4759036
7/16/24 9:27 AM	6107-077	40.026857	-75.008771	109.3	348.6551205
7/16/24 9:29 AM	6107-076	40.025406	-75.006821	109.3	349.4412651
7/18/24 9:52 AM	6107-078	40.027924	-75.009997	109.3	307.7856626
7/18/24 9:55 AM	6107-077	40.026857	-75.008771	109.3	309.4279508
7/18/24 9:58 AM	6107-076	40.025406	-75.006821	109.3	311.070239
6/25/24 10:04 AM	6107-075	40.011112	-75.027952	108	142.8181818
6/27/24 9:49 AM	6107-075	40.011112	-75.027952	108	86.33944954
7/2/24 9:51 AM	6107-075	40.011112	-75.027952	108	332.4496603
7/9/24 9:28 AM	6107-075	40.011112	-75.027952	108	130.6790191
7/16/24 9:16 AM	6107-075	40.011112	-75.027952	108	344.2228916
7/18/24 9:43 AM	6107-075	40.011112	-75.027952	108	302.6763215
6/25/24 10:08 AM	6107-074	40.01974	-75.033024	107.8	144.8181818
6/27/24 9:49 AM	6107-074	40.01974	-75.033024	107.8	86.33944954
7/2/24 9:47 AM	6107-074	40.01974	-75.033024	107.8	330.0370599
7/9/24 9:32 AM	6107-074	40.01974	-75.033024	107.8	132.8174387
7/16/24 9:19 AM	6107-074	40.01974	-75.033024	107.8	345.4834337
7/18/24 9:39 AM	6107-074	40.01974	-75.033024	107.8	300.3692976
6/25/24 9:40 AM	6107-071	40.014044	-75.045709	107.1	130.7272727
6/25/24 9:45 AM	6107-073	40.014044	-75.045709	107.1	133.2727273
6/25/24 9:48 AM	6107-072	40.014044	-75.045709	107.1	134.8
6/25/24 9:55 AM	6107-070	40.011877	-75.044055	107.1	138.3181818
6/25/24 9:57 AM	6107-069	40.009961	-75.042942	107.1	139.3181818
6/27/24 9:30 AM	6107-069	40.009961	-75.042942	107.1	76.14678899
6/27/24 9:33 AM	6107-070	40.011877	-75.044055	107.1	77.74311927
6/27/24 9:37 AM	6107-073	40.014044	-75.045709	107.1	79.87155963
6/27/24 9:38 AM	6107-072	40.014044	-75.045709	107.1	80.40366972
6/27/24 9:39 AM	6107-071	40.014044	-75.045709	107.1	80.93577982
7/2/24 9:27 AM	6107-069	40.009961	-75.042942	107.1	317.4515133
7/2/24 9:31 AM	6107-070	40.011877	-75.044055	107.1	320.0531192
7/2/24 9:35 AM	6107-071	40.014044	-75.045709	107.1	322.5880173
7/2/24 9:36 AM	6107-072	40.014044	-75.045709	107.1	323.2217418
7/2/24 9:37 AM	6107-073	40.014044	-75.045709	107.1	323.8554663
7/9/24 9:15 AM	6107-071	40.014044	-75.045709	107.1	123.8419619
7/9/24 9:17 AM	6107-072	40.014044	-75.045709	107.1	124.8817439
7/9/24 9:19 AM	6107-073	40.014044	-75.045709	107.1	125.9215259
7/9/24 9:21 AM	6107-070	40.011877	-75.044055	107.1	126.9711172

7/9/24 9:24 AM	6107-069	40.009961	-75.042942	107.1	128.560218
7/16/24 9:01 AM	6107-071	40.014044	-75.045709	107.1	337.6762048
7/16/24 9:03 AM	6107-072	40.014044	-75.045709	107.1	338.5707831
7/16/24 9:05 AM	6107-073	40.014044	-75.045709	107.1	339.4653614
7/16/24 9:09 AM	6107-070	40.011877	-75.044055	107.1	341.2545181
7/16/24 9:12 AM	6107-069	40.009961	-75.042942	107.1	342.5421687
7/18/24 9:23 AM	6107-069	40.009961	-75.042942	107.1	290.7110789
7/18/24 9:27 AM	6107-070	40.011877	-75.044055	107.1	293.2136133
7/18/24 9:30 AM	6107-071	40.014044	-75.045709	107.1	295.0905141
7/18/24 9:31 AM	6107-072	40.014044	-75.045709	107.1	295.6770456
7/18/24 9:32 AM	6107-073	40.014044	-75.045709	107.1	296.2635771
6/25/24 9:39 AM	6107-068	40.006746	-75.056195	106.4	130.2181818
6/27/24 9:23 AM	6107-068	40.006746	-75.056195	106.4	72.42201835
7/2/24 9:22 AM	6107-068	40.006746	-75.056195	106.4	314.1717109
7/9/24 9:10 AM	6107-068	40.006746	-75.056195	106.4	121.2425068
7/16/24 8:57 AM	6107-068	40.006746	-75.056195	106.4	335.8463855
7/18/24 9:18 AM	6107-068	40.006746	-75.056195	106.4	287.5047067
6/25/24 9:28 AM	6107-067	39.991848	-75.048357	105.7	124.6181818
6/27/24 9:16 AM	6107-067	39.991848	-75.048357	105.7	68.66055046
7/2/24 9:10 AM	6107-067	39.991848	-75.048357	105.7	306.1890056
7/9/24 8:58 AM	6107-067	39.991848	-75.048357	105.7	115.1215259
7/16/24 8:50 AM	6107-067	39.991848	-75.048357	105.7	332.6204819
7/18/24 9:08 AM	6107-067	39.991848	-75.048357	105.7	280.8052136
6/26/24 12:02 PM	6107-066	39.982726	-75.063969	104.8	174.0212014
7/1/24 12:54 PM	6107-066	39.982726	-75.063969	104.8	66.4921466
7/8/24 11:48 AM	6107-066	39.982726	-75.063969	104.8	202.3815029
7/15/24 12:03 PM	6107-066	39.982726	-75.063969	104.8	80.49103448
7/17/24 11:25 AM	6107-066	39.982726	-75.063969	104.8	0.847212165
7/22/24 11:35 AM	6107-066	39.982726	-75.063969	104.8	241.2439024
6/26/24 12:04 PM	6107-065	39.983609	-75.066067	104.7	174.5845533
6/26/24 12:05 PM	6107-064	39.984554	-75.067969	104.7	174.8662292
7/1/24 12:56 PM	6107-065	39.983609	-75.066067	104.7	67.64397906
7/1/24 12:58 PM	6107-064	39.984554	-75.067969	104.7	68.79581152
7/8/24 11:50 AM	6107-065	39.983609	-75.066067	104.7	203.699422
7/8/24 11:53 AM	6107-064	39.984554	-75.067969	104.7	205.849711
7/15/24 12:05 PM	6107-065	39.983609	-75.066067	104.7	81.93103448
7/15/24 12:06 PM	6107-064	39.984554	-75.067969	104.7	82.65103448
7/17/24 11:28 AM	6107-065	39.983609	-75.066067	104.7	1.199131064
7/17/24 11:30 AM	6107-064	39.984554	-75.067969	104.7	1.433743664
7/22/24 11:38 AM	6107-065	39.983609	-75.066067	104.7	244.1414634
7/22/24 11:39 AM	6107-064	39.984554	-75.067969	104.7	245.1073171
6/26/24 12:07 PM	6107-062	39.985122	-75.068811	104.6	175.429581
6/26/24 12:08 PM	6107-063	39.98564	-75.069811	104.6	175.7112569
7/1/24 1:01 PM	6107-062	39.985122	-75.068811	104.6	70.51308901
7/1/24 1:03 PM	6107-063	39.98564	-75.069811	104.6	71.64397906
7/8/24 11:56 AM	6107-062	39.985122	-75.068811	104.6	208
7/8/24 11:59 AM	6107-063	39.98564	-75.069811	104.6	210.150289

7/15/24 12:09 PM	6107-062	39.985122	-75.068811	104.6	84.81103448
7/15/24 12:11 PM	6107-063	39.98564	-75.069811	104.6	86.25103448
7/17/24 11:32 AM	6107-062	39.985122	-75.068811	104.6	1.85083273
7/17/24 11:34 AM	6107-063	39.98564	-75.069811	104.6	2.267921796
7/22/24 11:41 AM	6107-062	39.985122	-75.068811	104.6	247.0170732
7/22/24 11:43 AM	6107-063	39.98564	-75.069811	104.6	248.904878
6/25/24 11:30 AM	6107-061	39.993596	-75.080699	104.4	177.9090909
6/27/24 10:53 AM	6107-061	39.993596	-75.080699	104.4	120.2568807
7/2/24 10:12 AM	6107-061	39.993596	-75.080699	104.4	344.0568252
7/9/24 10:03 AM	6107-061	39.993596	-75.080699	104.4	149.6108992
7/16/24 10:20 AM	6107-061	39.993596	-75.080699	104.4	0
7/18/24 10:15 AM	6107-061	39.993596	-75.080699	104.4	320.3113686
6/26/24 11:49 AM	6107-060	39.958843	-75.101732	102.3	169.6143362
7/1/24 12:45 PM	6107-060	39.958843	-75.101732	102.3	61.30890052
7/8/24 11:37 AM	6107-060	39.958843	-75.101732	102.3	195.3757225
7/15/24 11:52 AM	6107-060	39.958843	-75.101732	102.3	72.47172414
7/17/24 11:16 AM	6107-060	39.958843	-75.101732	102.3	0.1564084
7/22/24 11:25 AM	6107-060	39.958843	-75.101732	102.3	231.695122
6/26/24 11:46 AM	6107-059	39.952998	-75.110637	101.7	168.4422009
7/1/24 12:47 PM	6107-059	39.952998	-75.110637	101.7	62.46073298
7/8/24 11:31 AM	6107-059	39.952998	-75.110637	101.7	191.9075145
7/15/24 11:47 AM	6107-059	39.952998	-75.110637	101.7	68.84689655
7/17/24 11:08 AM	6107-059	39.952998	-75.110637	101.7	71.8390462
7/22/24 11:19 AM	6107-059	39.952998	-75.110637	101.7	226.0756098
6/26/24 11:36 AM	6107-057	39.965488	-75.127301	101	164.3897022
6/26/24 11:38 AM	6107-056	39.965488	-75.127301	101	165.2438163
6/26/24 11:39 AM	6107-058	39.965488	-75.127301	101	165.6708733
7/1/24 12:27 PM	6107-056	39.965488	-75.127301	101	51.07853403
7/1/24 12:28 PM	6107-058	39.965488	-75.127301	101	51.64397906
7/1/24 12:30 PM	6107-057	39.965488	-75.127301	101	52.77486911
7/8/24 11:20 AM	6107-057	39.965488	-75.127301	101	186.7052023
7/8/24 11:21 AM	6107-056	39.965488	-75.127301	101	187.1676301
7/8/24 11:23 AM	6107-058	39.965488	-75.127301	101	188.0924855
7/15/24 11:36 AM	6107-056	39.965488	-75.127301	101	60.92689655
7/15/24 11:37 AM	6107-057	39.965488	-75.127301	101	61.64689655
7/15/24 11:39 AM	6107-058	39.965488	-75.127301	101	63.08689655
7/17/24 10:58 AM	6107-056	39.965488	-75.127301	101	358.8733234
7/17/24 10:59 AM	6107-057	39.965488	-75.127301	101	359.0342772
7/17/24 11:01 AM	6107-058	39.965488	-75.127301	101	323.2757079
7/22/24 11:09 AM	6107-056	39.965488	-75.127301	101	217.1195122
7/22/24 11:10 AM	6107-058	39.965488	-75.127301	101	217.9756098
7/22/24 11:11 AM	6107-057	39.965488	-75.127301	101	218.8756098
6/26/24 11:27 AM	6107-054	39.951503	-75.133848	100	160.4916709
6/26/24 11:29 AM	6107-055	39.951336	-75.131756	100	161.3821302
7/1/24 12:16 PM	6107-054	39.951503	-75.133848	100	44.90052356
7/1/24 12:18 PM	6107-055	39.951336	-75.131756	100	46.0104712
7/8/24 11:08 AM	6107-055	39.951336	-75.131756	100	182.6820809

7/8/24 11:10 AM	6107-054	39.951503	-75.133848	100	183.1213873
7/15/24 11:30 AM	6107-054	39.951503	-75.133848	100	56.60689655
7/15/24 11:31 AM	6107-055	39.951336	-75.131756	100	57.32689655
7/17/24 10:50 AM	6107-054	39.951503	-75.133848	100	357.585693
7/17/24 10:52 AM	6107-055	39.951336	-75.131756	100	357.9076006
7/22/24 11:03 AM	6107-054	39.951503	-75.133848	100	211.9829268
7/22/24 11:05 AM	6107-055	39.951336	-75.131756	100	213.695122
6/26/24 11:21 AM	6107-053	39.952242	-75.137727	99.9	157.8202928
6/26/24 11:23 AM	6107-052	39.952033	-75.136707	99.9	158.7107521
6/26/24 11:25 AM	6107-051	39.951762	-75.135559	99.9	159.6012115
7/1/24 12:06 PM	6107-053	39.952242	-75.137727	99.9	39.35078534
7/1/24 12:08 PM	6107-052	39.952033	-75.136707	99.9	40.46073298
7/1/24 12:11 PM	6107-051	39.951762	-75.135559	99.9	42.12565445
7/8/24 11:03 AM	6107-051	39.951762	-75.135559	99.9	181.583815
7/8/24 11:05 AM	6107-052	39.952033	-75.136707	99.9	182.0231214
7/8/24 11:13 AM	6107-053	39.952242	-75.137727	99.9	184.1965318
7/15/24 11:24 AM	6107-053	39.952242	-75.137727	99.9	52.36137931
7/15/24 11:26 AM	6107-052	39.952033	-75.136707	99.9	53.77655172
7/15/24 11:28 AM	6107-051	39.951762	-75.135559	99.9	55.19172414
7/17/24 10:42 AM	6107-053	39.952242	-75.137727	99.9	355.6542474
7/17/24 10:44 AM	6107-052	39.952033	-75.136707	99.9	356.1371088
7/17/24 10:47 AM	6107-051	39.951762	-75.135559	99.9	356.8614009
7/22/24 10:01 AM	6107-051	39.951762	-75.135559	99.9	180.3841463
7/22/24 10:58 AM	6107-053	39.952242	-75.137727	99.9	207.8560976
7/22/24 11:00 AM	6107-052	39.952033	-75.136707	99.9	209.4146341
6/26/24 11:16 AM	6107-050	39.944907	-75.139583	99.4	155.4851085
7/1/24 12:02 PM	6107-050	39.944907	-75.139583	99.4	37.13089005
7/8/24 11:00 AM	6107-050	39.944907	-75.139583	99.4	180.9248555
7/15/24 11:21 AM	6107-050	39.944907	-75.139583	99.4	50.23862069
7/17/24 10:38 AM	6107-050	39.944907	-75.139583	99.4	354.5275708
7/22/24 10:54 AM	6107-050	39.944907	-75.139583	99.4	204.7390244
6/26/24 11:13 AM	6107-049	39.942173	-75.131384	99.3	154.0676426
7/1/24 11:58 AM	6107-049	39.942173	-75.131384	99.3	34.95287958
7/8/24 10:53 AM	6107-049	39.942173	-75.131384	99.3	180.2774566
7/15/24 11:17 AM	6107-049	39.942173	-75.131384	99.3	47.44551724
7/17/24 10:35 AM	6107-049	39.942173	-75.131384	99.3	353.561848
7/22/24 10:52 AM	6107-049	39.942173	-75.131384	99.3	203.1804878
6/26/24 11:08 AM	6107-048	39.931832	-75.140165	98.6	151.6870268
7/1/24 11:52 AM	6107-048	39.931832	-75.140165	98.6	31.7486911
7/8/24 10:47 AM	6107-048	39.931832	-75.140165	98.6	179.9141949
7/15/24 11:13 AM	6107-048	39.931832	-75.140165	98.6	44.66482759
7/17/24 10:30 AM	6107-048	39.931832	-75.140165	98.6	351.95231
7/22/24 10:47 AM	6107-048	39.931832	-75.140165	98.6	199.5804878
6/26/24 11:03 AM	6107-047	39.924525	-75.128453	97.8	149.2791519
7/1/24 11:42 AM	6107-047	39.924525	-75.128453	97.8	26.57591623
7/8/24 10:43 AM	6107-047	39.924525	-75.128453	97.8	179.7997881
7/15/24 11:09 AM	6107-047	39.924525	-75.128453	97.8	41.90896552

7/17/24 10:25 AM	6107-047	39.924525	-75.128453	97.8	350.0074516
7/22/24 10:43 AM	6107-047	39.924525	-75.128453	97.8	196.8585366
6/26/24 10:51 AM	6107-046	39.90429	-75.127997	96.8	143.3366986
7/1/24 11:29 AM	6107-046	39.90429	-75.127997	96.8	20.16753927
7/8/24 10:28 AM	6107-046	39.90429	-75.127997	96.8	177.7118644
7/15/24 10:57 AM	6107-046	39.90429	-75.127997	96.8	33.97655172
7/17/24 10:10 AM	6107-046	39.90429	-75.127997	96.8	343.90462
7/22/24 10:31 AM	6107-046	39.90429	-75.127997	96.8	189.7792683
6/26/24 10:53 AM	6107-043	39.904421	-75.130201	96.7	144.3361938
6/26/24 10:55 AM	6107-044	39.904926	-75.131536	96.7	145.335689
6/26/24 10:57 AM	6107-045	39.905135	-75.132557	96.7	146.3351843
7/1/24 11:25 AM	6107-043	39.904421	-75.130201	96.7	18.32460733
7/1/24 11:27 AM	6107-045	39.905135	-75.132557	96.7	19.2460733
7/1/24 11:30 AM	6107-044	39.904926	-75.131536	96.7	20.62827225
7/8/24 10:31 AM	6107-043	39.904421	-75.130201	96.7	178.3411017
7/8/24 10:34 AM	6107-044	39.904926	-75.131536	96.7	178.7987288
7/8/24 10:36 AM	6107-045	39.905135	-75.132557	96.7	179.1038136
7/15/24 10:59 AM	6107-043	39.904421	-75.130201	96.7	35.24275862
7/15/24 11:02 AM	6107-044	39.904926	-75.131536	96.7	37.21655172
7/15/24 11:04 AM	6107-045	39.905135	-75.132557	96.7	38.55724138
7/17/24 10:12 AM	6107-043	39.904421	-75.130201	96.7	344.7362146
7/17/24 10:15 AM	6107-044	39.904926	-75.131536	96.7	345.9836066
7/17/24 10:17 AM	6107-045	39.905135	-75.132557	96.7	346.8152012
7/22/24 10:33 AM	6107-043	39.904421	-75.130201	96.7	190.8987805
7/22/24 10:36 AM	6107-044	39.904926	-75.131536	96.7	192.5780488
7/22/24 10:37 AM	6107-045	39.905135	-75.132557	96.7	193.1378049
6/26/24 10:42 AM	6107-042	39.878123	-75.13206	95.2	138.9116608
7/1/24 11:07 AM	6107-042	39.878123	-75.13206	95.2	10.73298429
7/8/24 10:19 AM	6107-042	39.878123	-75.13206	95.2	175.4618644
7/15/24 10:47 AM	6107-042	39.878123	-75.13206	95.2	27.75724138
7/17/24 9:56 AM	6107-042	39.878123	-75.13206	95.2	337.2786885
7/22/24 10:22 AM	6107-042	39.878123	-75.13206	95.2	185.7073171
6/26/24 11:09 AM	6107-039	39.885145	-75.171197	93.7	152.1686017
6/26/24 11:12 AM	6107-038	39.883474	-75.171061	93.7	153.595154
6/26/24 11:16 AM	6107-040	39.880635	-75.170855	93.7	155.4851085
6/26/24 11:19 AM	6107-041	39.878253	-75.170755	93.7	156.9025745
7/1/24 10:40 AM	6107-039	39.885145	-75.171197	93.7	2.617801047
7/1/24 10:43 AM	6107-038	39.883474	-75.171061	93.7	3.340314136
7/1/24 10:48 AM	6107-040	39.880635	-75.170855	93.7	4.544502618
7/1/24 10:51 AM	6107-041	39.878253	-75.170755	93.7	5.340314136
7/8/24 10:26 AM	6107-039	39.885145	-75.171197	93.7	177.2351695
7/8/24 10:28 AM	6107-038	39.883474	-75.171061	93.7	177.7118644
7/8/24 10:31 AM	6107-040	39.880635	-75.170855	93.7	178.3411017
7/8/24 10:32 AM	6107-041	39.878253	-75.170755	93.7	178.4936441
7/15/24 10:55 AM	6107-039	39.885145	-75.171197	93.7	32.71034483
7/15/24 10:59 AM	6107-038	39.883474	-75.171061	93.7	35.24275862
7/15/24 11:03 AM	6107-040	39.880635	-75.170855	93.7	37.88689655

7/15/24 11:06 AM	6107-041	39.878253	-75.170755	93.7	39.89793103
7/17/24 10:17 AM	6107-039	39.885145	-75.171197	93.7	346.8152012
7/17/24 10:19 AM	6107-038	39.883474	-75.171061	93.7	347.6467958
7/17/24 10:22 AM	6107-040	39.880635	-75.170855	93.7	348.8405365
7/17/24 10:25 AM	6107-041	39.878253	-75.170755	93.7	350.0074516
7/22/24 10:50 AM	6107-039	39.885145	-75.171197	93.7	201.6219512
7/22/24 10:52 AM	6107-038	39.883474	-75.171061	93.7	203.1804878
7/22/24 10:56 AM	6107-040	39.880635	-75.170855	93.7	206.297561
7/22/24 10:59 AM	6107-041	39.878253	-75.170755	93.7	208.6353659
6/26/24 11:06 AM	6107-037	39.886554	-75.171333	93.6	150.7238768
7/1/24 10:36 AM	6107-037	39.886554	-75.171333	93.6	1.947643979
7/8/24 10:23 AM	6107-037	39.886554	-75.171333	93.6	176.5201271
7/15/24 10:51 AM	6107-037	39.886554	-75.171333	93.6	30.17793103
7/17/24 10:15 AM	6107-037	39.886554	-75.171333	93.6	345.9836066
7/22/24 10:47 AM	6107-037	39.886554	-75.171333	93.6	199.5804878
6/26/24 11:30 AM	6107-036	39.89401	-75.200883	92.5	161.8273599
6/26/24 11:33 AM	6107-035	39.894697	-75.199973	92.5	163.108531
7/1/24 11:01 AM	6107-036	39.89401	-75.200883	92.5	8.534031414
7/1/24 11:04 AM	6107-035	39.894697	-75.199973	92.5	9.633507853
7/8/24 10:42 AM	6107-036	39.89401	-75.200883	92.5	179.7711864
7/8/24 10:44 AM	6107-035	39.894697	-75.199973	92.5	179.8283898
7/15/24 11:16 AM	6107-036	39.89401	-75.200883	92.5	46.75034483
7/15/24 11:19 AM	6107-035	39.894697	-75.199973	92.5	48.83586207
7/17/24 10:33 AM	6107-036	39.89401	-75.200883	92.5	352.9180328
7/17/24 10:35 AM	6107-035	39.894697	-75.199973	92.5	353.561848
7/22/24 11:10 AM	6107-036	39.89401	-75.200883	92.5	217.9756098
7/22/24 11:12 AM	6107-035	39.894697	-75.199973	92.5	219.7756098
6/26/24 11:28 AM	6107-034	39.89287	-75.201334	92.4	160.9369006
7/1/24 10:58 AM	6107-034	39.89287	-75.201334	92.4	7.539267016
7/8/24 10:39 AM	6107-034	39.89287	-75.201334	92.4	179.5614407
7/15/24 11:13 AM	6107-034	39.89287	-75.201334	92.4	44.66482759
7/17/24 10:31 AM	6107-034	39.89287	-75.201334	92.4	352.2742176
7/22/24 11:07 AM	6107-034	39.89287	-75.201334	92.4	215.4073171
6/26/24 10:27 AM	6107-033	39.869885	-75.191464	92.3	131.3427562
7/1/24 10:48 AM	6107-033	39.869885	-75.191464	92.3	4.544502618
7/8/24 10:00 AM	6107-033	39.869885	-75.191464	92.3	168.2733051
7/15/24 10:30 AM	6107-033	39.869885	-75.191464	92.3	18.12413793
7/17/24 9:42 AM	6107-033	39.869885	-75.191464	92.3	330.4113264
7/22/24 10:09 AM	6107-033	39.869885	-75.191464	92.3	181.7012195
6/26/24 10:21 AM	6107-032	39.863026	-75.194499	91.9	128.3442706
7/1/24 10:43 AM	6107-032	39.863026	-75.194499	91.9	3.340314136
7/8/24 9:53 AM	6107-032	39.863026	-75.194499	91.9	164.9364407
7/15/24 10:25 AM	6107-032	39.863026	-75.194499	91.9	15.64137931
7/17/24 9:36 AM	6107-032	39.863026	-75.194499	91.9	327.3800298
7/22/24 10:05 AM	6107-032	39.863026	-75.194499	91.9	181.0426829
6/26/24 10:43 AM	6107-029	39.874574	-75.211555	91.4	139.4023221
6/26/24 10:48 AM	6107-030	39.874574	-75.211555	91.4	141.8556285

6/26/24 10:53 AM	6107-031	39.874574	-75.211555	91.4	144.3361938
7/1/24 10:25 AM	6107-029	39.874574	-75.211555	91.4	0.471204188
7/1/24 10:26 AM	6107-031	39.874574	-75.211555	91.4	0.565445026
7/1/24 10:27 AM	6107-030	39.874574	-75.211555	91.4	0.659685864
7/8/24 10:12 AM	6107-029	39.874574	-75.211555	91.4	173.059322
7/8/24 10:13 AM	6107-031	39.874574	-75.211555	91.4	173.4025424
7/8/24 10:14 AM	6107-030	39.874574	-75.211555	91.4	173.7457627
7/15/24 10:36 AM	6107-029	39.874574	-75.211555	91.4	21.40137931
7/15/24 10:39 AM	6107-031	39.874574	-75.211555	91.4	23.04
7/15/24 10:42 AM	6107-030	39.874574	-75.211555	91.4	24.77793103
7/17/24 10:02 AM	6107-029	39.874574	-75.211555	91.4	340.1490313
7/17/24 10:04 AM	6107-031	39.874574	-75.211555	91.4	341.0879285
7/17/24 10:07 AM	6107-030	39.874574	-75.211555	91.4	342.4962742
7/22/24 10:34 AM	6107-029	39.874574	-75.211555	91.4	191.4585366
7/22/24 10:36 AM	6107-030	39.874574	-75.211555	91.4	192.5780488
7/22/24 10:38 AM	6107-031	39.874574	-75.211555	91.4	193.697561
6/26/24 10:16 AM	6107-028	39.855258	-75.218815	90.5	125.772842
7/1/24 10:33 AM	6107-028	39.855258	-75.218815	90.5	1.445026178
7/8/24 9:44 AM	6107-028	39.855258	-75.218815	90.5	160.3029661
7/15/24 10:17 AM	6107-028	39.855258	-75.218815	90.5	11.89241379
7/17/24 9:29 AM	6107-028	39.855258	-75.218815	90.5	323.8122206
7/22/24 9:56 AM	6107-028	39.855258	-75.218815	90.5	180.1317073
6/26/24 10:12 AM	6107-027	39.851093	-75.228234	89.9	123.701161
7/1/24 10:25 AM	6107-027	39.851093	-75.228234	89.9	0.471204188
7/8/24 9:39 AM	6107-027	39.851093	-75.228234	89.9	157.6048729
7/15/24 10:12 AM	6107-027	39.851093	-75.228234	89.9	9.782068966
7/17/24 9:24 AM	6107-027	39.851093	-75.228234	89.9	321.2637854
7/22/24 9:52 AM	6107-027	39.851093	-75.228234	89.9	180.0439024
6/26/24 10:23 AM	6107-024	39.855303	-75.256187	88.6	129.3437658
6/26/24 10:25 AM	6107-023	39.853603	-75.255839	88.6	130.343261
6/26/24 10:28 AM	6107-022	39.852257	-75.255399	88.6	131.8425038
6/26/24 10:31 AM	6107-025	39.8506047	-75.25499808	88.6	133.3508329
6/26/24 10:35 AM	6107-026	39.8487184	-75.25448721	88.6	135.3861686
7/1/24 10:04 AM	6107-024	39.855303	-75.256187	88.6	215.4679803
7/1/24 10:07 AM	6107-023	39.853603	-75.255839	88.6	107.7339901
7/1/24 10:10 AM	6107-022	39.852257	-75.255399	88.6	0
7/1/24 10:13 AM	6107-025	39.8506047	-75.25499808	88.6	0
7/1/24 10:16 AM	6107-026	39.8487184	-75.25448721	88.6	0
7/8/24 9:57 AM	6107-023	39.853603	-75.255839	88.6	166.8432203
7/8/24 9:59 AM	6107-024	39.855303	-75.256187	88.6	167.7966102
7/8/24 10:00 AM	6107-022	39.852257	-75.255399	88.6	168.2733051
7/8/24 10:03 AM	6107-025	39.8506047	-75.25499808	88.6	169.503178
7/8/24 10:05 AM	6107-026	39.8487184	-75.25448721	88.6	170.3230932
7/15/24 10:11 AM	6107-024	39.855303	-75.256187	88.6	9.36
7/15/24 10:15 AM	6107-023	39.853603	-75.255839	88.6	11.04827586
7/15/24 10:18 AM	6107-022	39.852257	-75.255399	88.6	12.31448276
7/15/24 10:24 AM	6107-025	39.8506047	-75.25499808	88.6	15.14482759

7/15/24 10:29 AM	6107-026	39.8487184	-75.25448721	88.6	17.62758621
7/17/24 9:45 AM	6107-024	39.855303	-75.256187	88.6	331.900149
7/17/24 9:47 AM	6107-023	39.853603	-75.255839	88.6	332.8926975
7/17/24 9:50 AM	6107-022	39.852257	-75.255399	88.6	334.3815201
7/17/24 9:54 AM	6107-025	39.8506047	-75.25499808	88.6	336.3129657
7/17/24 9:55 AM	6107-026	39.8487184	-75.25448721	88.6	336.7958271
7/22/24 10:14 AM	6107-024	39.855303	-75.256187	88.6	183.0512195
7/22/24 10:17 AM	6107-023	39.853603	-75.255839	88.6	183.9402439
7/22/24 10:21 AM	6107-022	39.852257	-75.255399	88.6	185.2682927
7/22/24 10:23 AM	6107-025	39.8506047	-75.25499808	88.6	186.1463415
7/22/24 10:26 AM	6107-026	39.8487184	-75.25448721	88.6	187.4634146
6/26/24 10:02 AM	6107-021	39.839598	-75.282931	87.1	118.5946492
7/1/24 10:10 AM	6107-021	39.839598	-75.282931	87.1	0
7/8/24 9:27 AM	6107-021	39.839598	-75.282931	87.1	150.7976695
7/15/24 10:04 AM	6107-021	39.839598	-75.282931	87.1	6.852413793
7/17/24 9:13 AM	6107-021	39.839598	-75.282931	87.1	315.657228
7/22/24 9:43 AM	6107-021	39.839598	-75.282931	87.1	179.3774704
6/26/24 10:09 AM	6107-020	39.860017	-75.303584	86	122.1564866
7/1/24 9:57 AM	6107-020	39.860017	-75.303584	86	358.614532
7/8/24 9:39 AM	6107-020	39.860017	-75.303584	86	157.6048729
7/15/24 9:45 AM	6107-020	39.860017	-75.303584	86	1.924137931
7/17/24 9:32 AM	6107-020	39.860017	-75.303584	86	325.3412817
7/22/24 9:45 AM	6107-020	39.860017	-75.303584	86	179.555336
6/25/24 10:35 AM	6107-019	39.870137	-75.313445	85.5	158
6/27/24 10:10 AM	6107-019	39.870137	-75.313445	85.5	97.6146789
7/2/24 9:31 AM	6107-019	39.870137	-75.313445	85.5	320.0531192
7/9/24 9:31 AM	6107-019	39.870137	-75.313445	85.5	132.2779292
7/16/24 9:44 AM	6107-019	39.870137	-75.313445	85.5	354.3614458
7/18/24 9:33 AM	6107-019	39.870137	-75.313445	85.5	296.8501086
6/27/24 9:55 AM	6107-018	39.860364	-75.32256	85.1	89.5412844
7/2/24 9:18 AM	6107-018	39.860364	-75.32256	85.1	311.5256331
7/9/24 9:20 AM	6107-018	39.860364	-75.32256	85.1	126.4414169
7/10/24 9:49 AM	6107-018	39.860364	-75.32256	85.1	125.647651
7/16/24 9:30 AM	6107-018	39.860364	-75.32256	85.1	349.8343373
7/18/24 9:21 AM	6107-018	39.860364	-75.32256	85.1	289.4598117
6/26/24 9:51 AM	6107-017	39.834353	-75.327378	84.8	112.9156991
7/1/24 9:51 AM	6107-017	39.834353	-75.327378	84.8	357.6169951
7/8/24 9:15 AM	6107-017	39.834353	-75.327378	84.8	143.7235169
7/15/24 9:50 AM	6107-017	39.834353	-75.327378	84.8	2.855172414
7/17/24 9:00 AM	6107-017	39.834353	-75.327378	84.8	308.8971684
7/22/24 9:32 AM	6107-017	39.834353	-75.327378	84.8	177.6166008
6/26/24 10:00 AM	6107-016	39.846719	-75.341065	84.1	117.5769813
7/1/24 9:42 AM	6107-016	39.846719	-75.341065	84.1	355.41133
7/8/24 9:30 AM	6107-016	39.846719	-75.341065	84.1	152.5423729
7/15/24 9:36 AM	6107-016	39.846719	-75.341065	84.1	0.645517241
7/17/24 9:26 AM	6107-016	39.846719	-75.341065	84.1	322.2831595
7/22/24 9:37 AM	6107-016	39.846719	-75.341065	84.1	178.5503953

6/25/24 10:05 AM	6107-015	39.851909	-75.345308	84	143.3181818
6/27/24 9:38 AM	6107-015	39.851909	-75.345308	84	80.40366972
7/2/24 9:07 AM	6107-015	39.851909	-75.345308	84	304.1877702
7/9/24 9:05 AM	6107-015	39.851909	-75.345308	84	118.6920981
7/10/24 9:31 AM	6107-015	39.851909	-75.345308	84	116.7684564
7/16/24 9:16 AM	6107-015	39.851909	-75.345308	84	344.2228916
7/18/24 9:06 AM	6107-015	39.851909	-75.345308	84	279.4236061
6/25/24 9:37 AM	6107-013	39.843829	-75.359213	83.1	129.2
6/26/24 9:46 AM	6107-014	39.825354	-75.346163	83.1	110.3260979
6/27/24 9:24 AM	6107-013	39.843829	-75.359213	83.1	72.95412844
7/1/24 9:43 AM	6107-014	39.825354	-75.346163	83.1	355.6662562
7/2/24 8:55 AM	6107-013	39.843829	-75.359213	83.1	296.1828289
7/8/24 9:08 AM	6107-014	39.825354	-75.346163	83.1	139.5381356
7/9/24 8:55 AM	6107-013	39.843829	-75.359213	83.1	113.5912807
7/15/24 9:43 AM	6107-014	39.825354	-75.346163	83.1	1.551724138
7/16/24 9:00 AM	6107-013	39.843829	-75.359213	83.1	337.2289157
7/17/24 8:54 AM	6107-014	39.825354	-75.346163	83.1	305.6780924
7/18/24 8:50 AM	6107-013	39.843829	-75.359213	83.1	267.7190442
7/22/24 9:25 AM	6107-014	39.825354	-75.346163	83.1	175.8646245
6/26/24 9:40 AM	6107-012	39.820927	-75.364974	82	107.2185765
7/1/24 9:32 AM	6107-012	39.820927	-75.364974	82	352.2413793
7/8/24 9:01 AM	6107-012	39.820927	-75.364974	82	135.4004237
7/15/24 9:36 AM	6107-012	39.820927	-75.364974	82	0.645517241
7/17/24 8:48 AM	6107-012	39.820927	-75.364974	82	302.4321908
7/22/24 9:18 AM	6107-012	39.820927	-75.364974	82	173.7747036
6/26/24 9:41 AM	6107-011	39.825366	-75.370469	81.8	107.7364967
6/26/24 9:45 AM	6107-010	39.828589	-75.373718	81.8	109.8081777
7/1/24 9:25 AM	6107-011	39.825366	-75.370469	81.8	349.5812808
7/1/24 9:29 AM	6107-010	39.828589	-75.373718	81.8	351.1773399
7/8/24 9:16 AM	6107-011	39.825366	-75.370469	81.8	144.3241525
7/8/24 9:19 AM	6107-010	39.828589	-75.373718	81.8	146.1260593
7/15/24 9:18 AM	6107-011	39.825366	-75.370469	81.8	71.83928571
7/15/24 9:21 AM	6107-010	39.828589	-75.373718	81.8	0.012413793
7/17/24 9:12 AM	6107-011	39.825366	-75.370469	81.8	315.147541
7/17/24 9:15 AM	6107-010	39.828589	-75.373718	81.8	316.6766021
7/22/24 9:19 AM	6107-011	39.825366	-75.370469	81.8	174.1304348
7/22/24 9:23 AM	6107-010	39.828589	-75.373718	81.8	175.3132411
6/26/24 9:48 AM	6107-008	39.830051	-75.375487	81.7	111.3619384
6/26/24 9:52 AM	6107-009	39.831775	-75.376779	81.7	113.4336194
7/1/24 9:19 AM	6107-009	39.831775	-75.376779	81.7	347.1317734
7/1/24 9:32 AM	6107-008	39.830051	-75.375487	81.7	352.2413793
7/1/24 9:35 AM	6107-009	39.831775	-75.376779	81.7	353.2389163
7/8/24 9:22 AM	6107-008	39.830051	-75.375487	81.7	147.8898305
7/8/24 9:24 AM	6107-009	39.831775	-75.376779	81.7	149.0529661
7/15/24 9:26 AM	6107-008	39.830051	-75.375487	81.7	0.074482759
7/15/24 9:30 AM	6107-009	39.831775	-75.376779	81.7	0.124137931
7/17/24 9:18 AM	6107-008	39.830051	-75.375487	81.7	318.2056632

7/17/24 9:20 AM	6107-009	39.831775	-75.376779	81.7	319.2250373
7/22/24 9:26 AM	6107-008	39.830051	-75.375487	81.7	176.1403162
7/22/24 9:30 AM	6107-009	39.831775	-75.376779	81.7	177.243083
6/26/24 9:30 AM	6107-007	39.808316	-75.377205	81	102.0393741
7/8/24 8:52 AM	6107-007	39.808316	-75.377205	81	130.0805085
7/15/24 9:24 AM	6107-007	39.808316	-75.377205	81	0.049655172
7/17/24 8:38 AM	6107-007	39.808316	-75.377205	81	296.852459
7/22/24 9:10 AM	6107-007	39.808316	-75.377205	81	170.9288538
6/26/24 9:29 AM	6107-006	39.81155	-75.411443	79.2	101.5214538
7/1/24 9:16 AM	6107-006	39.81155	-75.411443	79.2	345.7684729
7/8/24 9:09 AM	6107-006	39.81155	-75.411443	79.2	140.1292373
7/15/24 9:11 AM	6107-006	39.81155	-75.411443	79.2	323.2767857
7/17/24 9:06 AM	6107-006	39.81155	-75.411443	79.2	312.0357675
7/22/24 9:12 AM	6107-006	39.81155	-75.411443	79.2	171.6403162
6/26/24 8:55 AM	6107-005	39.79717	-75.40521	79.1	83.91216557
7/1/24 8:57 AM	6107-005	39.79717	-75.40521	79.1	336.4581281
7/8/24 8:45 AM	6107-005	39.79717	-75.40521	79.1	126.0381356
7/15/24 8:46 AM	6107-005	39.79717	-75.40521	79.1	354.0535714
7/17/24 8:40 AM	6107-005	39.79717	-75.40521	79.1	298.0327869
7/22/24 8:38 AM	6107-005	39.79717	-75.40521	79.1	156.0948617
6/26/24 9:02 AM	6107-004	39.800369	-75.410567	78.9	87.53760727
7/1/24 8:50 AM	6107-004	39.800369	-75.410567	78.9	332.7339901
7/8/24 8:49 AM	6107-004	39.800369	-75.410567	78.9	128.3262712
7/15/24 8:53 AM	6107-004	39.800369	-75.410567	78.9	355.9017857
7/17/24 8:44 AM	6107-004	39.800369	-75.410567	78.9	300.2324888
7/22/24 8:42 AM	6107-004	39.800369	-75.410567	78.9	158.1403162
6/26/24 9:11 AM	6107-003	39.802877	-75.414447	78.8	92.19888945
7/1/24 9:03 AM	6107-003	39.802877	-75.414447	78.8	339.5504926
7/8/24 8:57 AM	6107-003	39.802877	-75.414447	78.8	133.0360169
7/15/24 8:58 AM	6107-003	39.802877	-75.414447	78.8	357.1071429
7/17/24 8:57 AM	6107-003	39.802877	-75.414447	78.8	307.2876304
7/22/24 8:58 AM	6107-003	39.802877	-75.414447	78.8	165.8241107
6/26/24 9:19 AM	6107-002	39.804842	-75.416893	78.7	96.34225139
7/1/24 9:07 AM	6107-002	39.804842	-75.416893	78.7	341.5455665
7/8/24 9:00 AM	6107-002	39.804842	-75.416893	78.7	134.809322
7/15/24 9:02 AM	6107-002	39.804842	-75.416893	78.7	357.9107143
7/17/24 9:00 AM	6107-002	39.804842	-75.416893	78.7	308.8971684
7/22/24 9:03 AM	6107-002	39.804842	-75.416893	78.7	168.0029644
6/26/24 9:23 AM	6107-001	39.806507	-75.418985	78.6	98.41393236
7/1/24 9:11 AM	6107-001	39.806507	-75.418985	78.6	343.4963054
7/8/24 9:03 AM	6107-001	39.806507	-75.418985	78.6	136.5826271
7/15/24 9:06 AM	6107-001	39.806507	-75.418985	78.6	358.5535714
7/17/24 9:03 AM	6107-001	39.806507	-75.418985	78.6	310.466468
7/22/24 9:06 AM	6107-001	39.806507	-75.418985	78.6	169.256917