



## 2020 FIVE YEAR MOVING AVERAGE STATUS REPORT

### March, 2020

Member	Fractional Share of the Contribution ("Percent Share")						5 Year Moving Average	
	Measuring Year (Oct - Sept)						Current Average (2)	Previous Average (3)
	2015	2016	2017	2018	2019 (4)	2020(1)		
Clark	7.24%	6.02%	7.44%	10.17%	8.33%	8.12%	8.02%	7.84%
Cranford	8.99%	5.98%	6.69%	7.25%	9.95%	11.57%	8.29%	7.77%
Garwood	2.88%	1.89%	3.31%	2.74%	2.33%	2.11%	2.48%	2.63%
Kenilworth	2.61%	5.33%	5.61%	4.09%	5.30%	3.48%	4.76%	4.58%
Mountainside	3.39%	3.89%	3.88%	3.68%	2.90%	2.45%	3.36%	3.55%
Rahway	14.41%	18.87%	13.71%	14.04%	18.01%	22.26%	17.38%	15.81%
Roselle Park	1.38%	1.62%	1.04%	0.84%	1.61%	2.18%	1.46%	1.30%
Scotch Plains	7.32%	4.62%	5.15%	5.88%	4.56%	4.04%	4.85%	5.51%
Springfield	11.08%	9.97%	9.18%	9.28%	9.28%	9.29%	9.40%	9.76%
Westfield	13.49%	18.87%	16.26%	14.79%	15.64%	14.70%	16.05%	15.81%
Woodbridge	27.21%	22.94%	27.73%	27.24%	22.09%	19.81%	23.96%	25.44%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.01%	100.01%	100.00%

Notes:

- (1) Figures computed based on Flow, BOD and TSS data received as of reporting month.
- (2) Five year moving average consisting of 2016, 2017, 2018, 2019, and month to date for 2020
- (3) Five year moving average consisting of 2015, 2016, 2017, 2018, and 2019
- (4) Average of Old and New Methods



## 2020 Town Annual Percent Share March, 2020

Member	Average Daily Flow (MGD)		Biochemical Oxygen Demand (Tons/Day)		Total Suspended Solids (Tons/Day)		Annual Percent Share		
	2019	2020	2019	2020	2019	2020	2019	2019(3)	2020
Clark	1.72	1.58	1.40	1.91	1.54	1.62	7.78%	8.33%	8.12%
Cranford	3.71	3.29	1.49	1.95	2.44	2.38	11.66%	9.95%	11.57%
Garwood	0.75	0.58	0.32	0.36	0.51	0.44	2.43%	2.33%	2.11%
Kenilworth	1.59	0.95	0.70	0.60	1.11	0.73	5.27%	5.30%	3.48%
Mountainside	0.78	0.70	0.30	0.41	0.50	0.50	2.40%	2.90%	2.45%
Rahway	5.24	5.96	2.41	3.91	3.74	4.68	17.68%	18.01%	22.26%
Roselle Park	0.66	0.56	0.30	0.40	0.49	0.46	2.24%	1.61%	2.18%
Scotch Plains	1.37	1.16	0.54	0.68	0.89	0.83	4.27%	4.56%	4.04%
Springfield	2.94	2.57	1.27	1.60	2.02	1.94	9.59%	9.28%	9.29%
Westfield	4.52	3.81	2.20	2.63	3.36	3.13	15.76%	15.64%	14.70%
Woodbridge (1)(2)	6.54	5.26	2.88	3.65	4.14	4.00	20.92%	22.09%	19.81%
Totals:	29.82	26.42	13.81	18.09	20.74	20.71	100.00%	100.00%	100.01%

### Equations

Assumptions: 200 gpd flow per unit at 200 mg/L BOD and TSS concentrations

- (a) Flow Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD)
- (b) BOD Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)
- (c) TSS Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)

### Notes:

- (1) Woodbridge MGD Adjustment includes a 0.50 MGD flow credit per section 11.5 of the 1995 Agreement
- (2) Woodbridge TSS Adjustment includes an 833 lbs/day credit per section 11.5 of the 1995 Agreement
- (3) 2019 blended rate of old and new methods



## 2020 Intermunicipal Adjustment Report March, 2020

Member	Dwelling Unit Quantity			Average Daily Flow (MGD)			Average BOD (Tons/Day)			Average TSS (Tons/Day)		
	Bill To	Credit To	Total Adjustment	Average Flow	Adjustment (a)	Final Flow	Average BOD	Adjustment (b)	Final BOD	Average TSS	Adjustment (c)	Final TSS
Clark	479	0	479	1.48	0.0958	1.58	1.83	0.0799	1.91	1.54	0.0799	1.62
Cranford	242	1,092	-850	3.46	-0.1700	3.29	2.09	-0.1418	1.95	2.52	-0.1418	2.38
Garwood	54	110	-56	0.60	-0.0112	0.58	0.37	-0.0093	0.36	0.45	-0.0093	0.44
Kenilworth	62	38	24	0.94	0.0048	0.95	0.60	0.0040	0.60	0.73	0.0040	0.73
Mountainside	105	339	-234	0.75	-0.0468	0.70	0.45	-0.0390	0.41	0.54	-0.0390	0.50
Rahway	13	15	-2	5.96	-0.0004	5.96	3.91	-0.0003	3.91	4.68	-0.0003	4.68
Roselle Park	38	117	-79	0.58	-0.0158	0.56	0.41	-0.0132	0.40	0.47	-0.0132	0.46
Scotch Plains	66	413	-347	1.22	-0.0694	1.16	0.73	-0.0579	0.68	0.89	-0.0579	0.83
Springfield	0	186	-186	2.60	-0.0372	2.57	1.63	-0.0310	1.60	1.97	-0.0310	1.94
Westfield	1,425	175	1,250	3.56	0.2500	3.81	2.42	0.2085	2.63	2.92	0.2085	3.13
Woodbridge (1)(2)	10	9	1	5.76	-0.4998	5.26	3.65	0.0002	3.65	4.42	-0.4163	4.00
Totals:	2,494	2,494	0	26.92	-0.5000	26.42	18.09	0.0000	18.09	21.13	-0.4165	20.71

### Equations

Assumptions: 200 gpd flow per unit at 200 mg/L BOD and TSS concentrations

- (a) Flow Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD)
- (b) BOD Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)
- (c) TSS Adj: [Total Adjusted Dwelling Units] x (0.0002 MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)

### Notes:

- (1) Woodbridge MGD Adjustment includes a 0.50 MGD flow credit per section 11.5 of the 1995 Agreement
- (2) Woodbridge TSS Adjustment includes an 833 lbs/day credit per section 11.5 of the 1995 Agreement



## Member BOD and TSS Loading Contribution March, 2020

Member	Average Daily Industrial Loading (1)		Average Daily Flow (MGD)	Inter-Mun Adj(2) (MGD)	Adj. Avg. Daily Flow (MGD)	Member Contribution			
	BOD (Tons/Day)	TSS (Tons/Day)				Domestic Loading		Total Loading	
						BOD (Tons/Day)	TSS (Tons/Day)	BOD (Tons/Day)	TSS (Tons/Day)
Clark	0.83	0.33	1.48	0.0958	1.58	1.00	1.21	1.83	1.54
Cranford			3.46	-0.1700	3.29	2.09	2.52	2.09	2.52
Garwood			0.60	-0.0112	0.58	0.37	0.45	0.37	0.45
Kenilworth	0.00	0.00	0.94	0.0048	0.95	0.60	0.73	0.60	0.73
Mountainside	0.00	0.00	0.75	-0.0468	0.70	0.45	0.54	0.45	0.54
Rahway	0.13	0.11	5.96	-0.0004	5.96	3.78	4.57	3.91	4.68
Roselle Park	0.05	0.04	0.58	-0.0158	0.56	0.36	0.43	0.41	0.47
Scotch Plains			1.22	-0.0694	1.16	0.73	0.89	0.73	0.89
Springfield	0.00	0.00	2.60	-0.0372	2.57	1.63	1.97	1.63	1.97
Westfield			3.56	0.2500	3.81	2.42	2.92	2.42	2.92
Woodbridge	0.00	0.00	5.76	0.0002	5.76	3.65	4.42	3.65	4.42
Totals:	1.01	0.48	26.92	0.00	26.92	17.08	20.65	18.09	21.13

Notes:

- (1) As measured and reported by the RVSA SIU IPP Industrial Loading
- (2) Does not include the 0.50 MGD Woodbridge Credit



## 2020 Plant Influent Loading March, 2020

	2019			2020									Average To Date
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
<b>Plant Influent Flow and Sample Data</b>													
Avg. Daily Flow (MGD) (1)	22.94	22.96	33.86	26.41	27.68	27.67	0.00	0.00	0.00	0.00	0.00	0.00	26.92
Avg. BOD (mg/l) (2)	146	147	155	187	165	156							159
Avg. TSS (mg/l) (2)	206	188	150	223	186	186							189.73
<b>Total Influent Loading (a)(b)</b>													
BOD (Tons/Day)	13.97	14.08	21.88	20.59	19.04	17.99	0.00	0.00	0.00	0.00	0.00	0.00	17.93
TSS (Tons/Day)	19.71	18.00	21.18	24.52	21.47	21.43	0.00	0.00	0.00	0.00	0.00	0.00	21.05
<b>Total Industrial Contribution (3)</b>													
BOD (Tons/Day)	0.48	0.98	1.59	1.13	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
TSS (Tons/Day)	0.27	0.57	0.97	0.34	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
<b>Total Domestic Influent Loading</b>													
BOD (Tons/Day)	13.49	13.10	20.30	19.46	18.16	17.99	0.00	0.00	0.00	0.00	0.00	0.00	17.08
TSS (Tons/Day)	19.44	17.43	20.21	24.17	21.18	21.43	0.00	0.00	0.00	0.00	0.00	0.00	20.65

**Equations**

- (a)  $\text{BOD Loading (Tons/Day)} = \text{Average Daily Flow (MGD)} \times \text{Avg BOD (mg/L)} \times (8.34 \text{ lbs/gal}) / (2000 \text{ lbs/ton})$
- (b)  $\text{TSS Loading (Tons/Day)} = \text{Average Daily Flow (MGD)} \times \text{Avg TSS (mg/L)} \times (8.34 \text{ lbs/gal}) / (2000 \text{ lbs/ton})$

**Notes:**

- (1) Average Daily Flow = RV12 + RV14 + RV31
- (2) BOD and TSS Concentrations measured at the RVSA Raw Influent Sampler as reported to the NJDEP
- (3) As measured and reported by the RVSA SIU IPP Industrial Loading



## 2020 Average Daily Flow Report March, 2020

Meter #	2019			2020									Average To Date
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RV01	2.28	2.29	3.06	2.72	2.64	2.62							2.60
RV02	3.59	3.24	4.03	3.60	3.64	3.55							3.61
RV03	1.63	1.58	2.26	1.76	1.87	1.85							1.83
RV04	0.26	0.24	0.31	0.25	0.25	0.26							0.26
RV05	0.37	0.35	0.49	0.41	0.40	0.40							0.40
RV06	0.49	0.48	0.74	0.57	0.59	0.53							0.57
RV07	0.65	0.62	0.79	0.67	0.70	0.70							0.69
RV09	2.90	2.92	4.37	3.55	3.84	3.76							3.56
RV10	8.04	8.24	11.60	9.49	9.70	9.40							9.41
RV11	11.74	11.93	17.23	14.06	14.63	14.21							13.97
RV12	3.81	3.96	5.75	4.40	4.63	4.99							4.59
RV13	0.62	0.66	0.94	0.75	0.80	0.75							0.75
RV14	19.12	19.00	27.99	21.93	23.05	22.66							22.29
RV15	0.90	0.92	1.67	1.12	1.23	1.18							1.17
RV16A	23.01	22.48	33.48	25.77	27.01	27.77							26.59
RV17	0.47	0.45	0.54	0.47	0.49	0.48							0.48
RV18	0.89	0.80	0.79	0.65	0.93	0.96							0.84
RV19	0.34	0.35	0.44	0.40	0.40	0.40							0.39
RV20	0.71	0.71	0.84	0.76	0.76	0.73							0.75
RV22	14.31	14.56	19.83	16.50	17.16	16.69							16.51
RV27	0.35	0.03	1.93	0.00	0.12	0.34							0.46
RV28	0.13	0.00	0.73	0.05	0.01	0.19							0.18
RV29	1.26	1.33	1.79	1.47	1.48	1.45							1.46
RV30	0.17	0.19	0.27	0.17	0.17	0.21							0.20
RV31	0.02	0.00	0.12	0.08	0.00	0.03							0.04



## 2020 Average Industrial TSS Loading Report March, 2020

		Average Daily TSS Loading (Tons/Day)												AVG T/D	Town Total
		Oct 31	Nov 30	Dec 31	Jan 31	Feb 29	Mar 31	Apr 30	May 31	Jun 30	Jul 31	Aug 31	Sep 30		
Kerry 1	Clark	0.002	0.003	0.002	0.001	0.003								0.0022	0.33000
Kerry 2	Clark	0.011	0.004	0.008	0.008	0.006								0.0073	
Kerry 3	Clark	0.003	0.019	0.004	0.028	0.027								0.0165	
Kerry 4	Clark	0.110	0.381	0.709	0.193	0.138								0.3061	
B&M Finishers	Kenilworth	0.000	0.000	0.000	0.000	0.000								0.0001	0.00000
Kenilworth Anodizing	Kenilworth	0.000	0.000	0.000	0.000	0.000								0.0000	
American Aluminum	Mountainside	0.002	0.001	0.002	0.001	0.001								0.0012	0.00000
Clean Haven	Rahway														
Guest Packaging 02	Rahway	0.001	0.002	0.003	0.007	0.001								0.0029	0.11000
Guest Packaging 03	Rahway	0.001	0.002	0.002	0.001	0.001								0.0013	
Merck 007	Rahway	0.017	0.013	0.016	0.018	0.011								0.0150	
Merck 012	Rahway	0.090	0.081	0.144	0.046	0.050								0.0822	
Quala Systems	Rahway	0.002	0.016	0.009	0.005	0.007								0.0079	
Suez Water Rahway	Rahway	0.001	0.002	0.001	0.002	0.001								0.0013	
Crossfield Products (Not currently an SIU)	Roselle Park	0.001			0.002									0.0015	0.04000
Merck Kenilworth (formerly Schering)	Roselle Park	0.024	0.040	0.064	0.027	0.026								0.0361	
Valcor Engineering	Springfield	0.000	0.003	0.003	0.001	0.007								0.0027	0.00000
BASF 1	Woodbridge	0.004	0.003	0.001	0.002	0.002								0.0021	0.00000
BASF 2	Woodbridge	0.002	0.001	0.001	0.001	0.002								0.0013	
Gentek Building Products	Woodbridge	0.000	0.000		0.000	0.000								0.0001	
<b>Total Tons</b>		0.271	0.570	0.968	0.343	0.284	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.4879	0.48000



## 2020 Average Industrial BOD Loading Report March, 2020

		Average Daily BOD Loading (Tons/Day)												AVG T/D	Town Total
		Oct 31	Nov 30	Dec 31	Jan 31	Feb 29	Mar 31	Apr 30	May 31	Jun 30	Jul 31	Aug 31	Sep 30		
Kerry 1	Clark	0.002	0.003	0.002	0.002	0.001								0.0019	0.83000
Kerry 2	Clark	0.062	0.036	0.022	0.067	0.032								0.0437	
Kerry 3	Clark	0.073	0.033	0.012	0.096	0.314								0.1057	
Kerry 4	Clark	0.079	0.693	1.380	0.818	0.431								0.6802	
B&M Finishers	Kenilworth	0.000	0.000	0.000	0.000	0.000								0.0000	0.00000
Kenilworth Anodizing	Kenilworth	0.000	0.000	0.000	0.000	0.000								0.0000	
American Aluminum	Mountainside	0.000	0.001	0.000	0.000	0.001								0.0004	0.00000
Clean Haven	Rahway														
Guest Packaging 02	Rahway	0.006	0.006	0.010	0.011	0.005								0.0076	0.13000
Guest Packaging 03	Rahway	0.004	0.012	0.006	0.002	0.002								0.0052	
Merck 007	Rahway	0.008	0.007	0.007	0.008	0.007								0.0073	
Merck 012	Rahway	0.034	0.035	0.056	0.034	0.033								0.0385	
Quala Systems	Rahway	0.181	0.078	0.032	0.030	0.011								0.0662	
Suez Water Rahway	Rahway	0.002	0.003	0.001	0.001	0.002								0.0018	
Crossfield Products (Not currently an SIU)	Roselle Park	0.001			0.001									0.0009	0.05000
Merck Kenilworth (formerly Schering)	Roselle Park	0.024	0.065	0.052	0.057	0.036								0.0470	
Valcor Engineering	Springfield	0.001	0.003	0.003	0.001	0.003								0.0023	0.00000
BASF 1	Woodbridge	0.002	0.001	0.002	0.002	0.001								0.0015	0.00000
BASF 2	Woodbridge	0.001	0.001	0.001	0.002	0.002								0.0012	
Gentek Building Products	Woodbridge	0.000	0.000		0.000	0.000								0.0001	
Total Tons		0.479	0.978	1.586	1.131	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.0117	1.01000