2021 FIVE YEAR MOVING AVERAGE STATUSREPORT

November, 2020

MEMBER	Fractional Share of the Contribution ("Percent Share")						5 Year Moving Average	
	MEASURING YEAR (Oct-Sep)						Current Average (2)	Previous Average (3)
	2016	2017	2018	2019	2020	2021 (1)		
Clark	6.02%	7.44%	10.17%	8.33%	8.02%	7.67%	8.32%	8.00%
Cranford	5.98%	6.69%	7.25%	9.95%	11.08%	10.62%	9.12%	8.19%
Garwood	1.89%	3.31%	2.74%	2.33%	2.22%	2.21%	2.56%	2.50%
Kenilworth	5.33%	5.61%	4.09%	5.30%	3.62%	3.52%	4.43%	4.79%
Mountainside	3.89%	3.88%	3.68%	2.90%	2.46%	2.51%	3.09%	3.36%
Rahway	18.87%	13.71%	14.04%	18.01%	22.27%	22.58%	18.12%	17.38%
Roselle Park	1.62%	1.04%	0.84%	1.61%	2.06%	1.70%	1.45%	1.43%
Scotch Plains	4.62%	5.15%	5.88%	4.56%	4.23%	4.19%	4.80%	4.89%
Springfield	9.97%	9.18%	9.28%	9.28%	9.25%	8.76%	9.15%	9.39%
Westfield	18.87%	16.26%	14.79%	15.64%	14.32%	14.14%	15.03%	15.98%
Woodbridge	22.94%	27.73%	27.24%	22.09%	20.47%	22.10%	23.93%	24.09%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	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 2017, 2018, 2019, 2020, and month to date for 2021

(3) Five year moving average consisting of 2016, 2017, 2018, 2019, and 2020

2020 Town Annual Percent Share

November, 2020

Member	Average Daily Flow (MGD)		Biochemical Oxygen Demand (Tons/Day)		Total Suspended Solids (Tons/Day)		Annual Percent Share	
	2020	2021	2020	2021	2020	2021	2020	2021
Clark	1.50	1.46	1.67	1.67	1.45	1.41	8.02%	7.67%
Cranford	2.99	2.73	1.85	1.70	2.37	2.08	11.08%	10.62%
Garwood	0.59	0.55	0.36	0.36	0.46	0.44	2.22%	2.21%
Kenilworth	0.93	0.87	0.58	0.58	0.74	0.70	3.62%	3.52%
Mountainside	0.67	0.65	0.42	0.40	0.53	0.49	2.46%	2.51%
Rahway	5.66	5.48	3.59	3.76	4.58	4.52	22.27%	22.58%
Roselle Park	0.52	0.42	0.35	0.28	0.43	0.34	2.06%	1.70%
Scotch Plains	1.15	1.08	0.71	0.67	0.91	0.82	4.23%	4.19%
Springfield	2.42	2.17	1.49	1.44	1.92	1.74	9.25%	8.76%
Westfield	3.50	3.28	2.16	2.42	2.78	2.88	14.32%	14.14%
Woodbridge (1)(2)	5.13	5.25	3.48	3.89	4.47	4.27	20.47%	22.10%
Totals:	25.06	23.93	16.66	17.17	20.64	19.69	100.00%	100.00%

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 a 833 lbs/day credit, per section 11.5 of the 1995 Agreement

2020 Intermunicipal Adjustments Report

November, 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	1.37	0.0958	1.46	1.59	0.0799	1.67	1.33	0.0799	1.41
Cranford	242	1,092	-850	2.90	-0.1700	2.73	1.84	-0.1418	1.70	2.22	-0.1418	2.08
Garwood	54	110	-56	0.56	-0.0112	0.55	0.37	-0.0093	0.36	0.45	-0.0093	0.44
Kenilworth	62	38	24	0.86	0.0048	0.87	0.58	0.0040	0.58	0.70	0.0040	0.70
Mountainside	105	339	-234	0.70	-0.0468	0.65	0.44	-0.0390	0.40	0.53	-0.0390	0.49
Rahway	13	15	-2	5.48	-0.0004	5.48	3.76	-0.0003	3.76	4.52	-0.0003	4.52
Roselle Park	38	117	-79	0.43	-0.0158	0.42	0.29	-0.0132	0.28	0.35	-0.0132	0.34
Scotch Plains	66	413	-347	1.15	-0.0694	1.08	0.73	-0.0579	0.67	0.88	-0.0579	0.82
Springfield	0	186	-186	2.21	-0.0372	2.17	1.47	-0.0310	1.44	1.77	-0.0310	1.74
Westfield	1,425	175	1,250	3.03	0.2500	3.28	2.21	0.2085	2.42	2.67	0.2085	2.88
Woodbridge (1)(2)	10	9	1	5.75	-0.4998	5.25	3.89	0.0002	3.89	4.69	-0.4163	4.27
Totals:	2,494	2,494	0	24.43	-0.5000	23.93	17.17	0.0001	17.17	20.11	-0.4164	19.69

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 a 833 lbs/day credit, per section 11.5 of the 1995 Agreement

Member BOD and TSS Loading Contribution

November, 2020

Member	Average Daily Industrial Loading (1)		Average Daily Flow (MGD)	Inter-Mun Adj (2) (MGD)	Adj. Avg. Daily Flow (MGD)	Member Contribution			
						Domestic Loading		Total Loading	
	BOD (Tons/Day)	TSS (Tons/Day)				BOD (Tons/Day)	TSS (Tons/Day)	BOD (Tons/Day)	TSS (Tons/Day)
Clark	0.60	0.14	1.37	0.0958	1.46	0.99	1.19	1.59	1.33
Cranford	0.00	0.00	2.90	-0.1700	2.73	1.84	2.22	1.84	2.22
Garwood	0.00	0.00	0.56	-0.0112	0.55	0.37	0.45	0.37	0.45
Kenilworth	0.00	0.00	0.86	0.0048	0.87	0.58	0.70	0.58	0.70
Mountainside	0.00	0.00	0.70	-0.0468	0.65	0.44	0.53	0.44	0.53
Rahway	0.06	0.06	5.48	-0.0004	5.48	3.70	4.46	3.76	4.52
Roselle Park	0.01	0.01	0.43	-0.0158	0.42	0.28	0.34	0.29	0.35
Scotch Plains	0.00	0.00	1.15	-0.0694	1.08	0.73	0.88	0.73	0.88
Springfield	0.00	0.00	2.21	-0.0372	2.17	1.47	1.77	1.47	1.77
Westfield	0.00	0.00	3.03	0.2500	3.28	2.21	2.67	2.21	2.67
Woodbridge	0.00	0.00	5.75	0.0002	5.75	3.89	4.69	3.89	4.69
Totals:	0.67	0.21	24.43	0.00	24.43	16.51	19.90	17.17	20.11

Notes:

(1) As measured and reported by the RVSA SIU IPP Industrial Loading

(2) Does not include the 0.50 MGD Woodbridge Credit

2021 Plant Influent Loading

November, 2020

	2020			2021									Average T/D
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Plant Influent Flow and Sample Data													
Avg. Daily Flow (MGD) (1)	23.71	25.12											24.41
Avg. BOD (mg/L) (2)	159	178											168
Avg. TSS (mg/L) (2)	214	182											198
Total Influent Loading (a)(b)													
BOD (Tons/Day)	15.72	18.65											17.18
TSS (Tons/Day)	21.16	19.06											20.11

Total Industrial Contribution (3)

IPP BOD (Tons/Day)	0.68
IPP TSS (Tons/Day)	0.21

Total Domestic Influent Loading

BOD (Tons/Day)	16.51
TSS (Tons/Day)	19.90

Equations:

(a) BOD Loading (Tons/Day) = Average Daily Flow (MGD) x Avg BOD (mg/L) x (8.34 lbs/gal) / (2000 lbs/ton)

(b) TSS Loading (Tons/Day) = Average Daily Flow (MGD) x Avg TSS (mg/L) x (8.34 lbs/gal) / (2000 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

2021 Average Daily Flow Report

November, 2020

	2020			2021									Average
Meter #	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	To Date
RV01	2.14	2.27											2.21
RV02	3.10	3.23											3.17
RV03	1.61	1.69											1.65
RV04	0.25	0.25											0.25
RV05	0.36	0.37											0.36
RV06	0.47	0.48											0.48
RV07	0.59	0.61											0.60
RV09	2.95	3.22											3.08
RV10	7.82	8.40											8.11
RV11	11.69	12.51											12.10
RV12	4.76	5.03											4.89
RV13	0.59	0.67											0.63
RV14	18.86	20.05											19.45
RV15	0.86	0.87											0.86
RV16A	24.62	25.61											25.11
RV17	0.46	0.47											0.46
RV18	0.76	0.81											0.78
RV19	0.35	0.38											0.36
RV20	0.68	0.71											0.70
RV22	14.07	15.07											14.57
RV27	0.42	0.26											0.34
RV28	0.24	0.13											0.18
RV29	1.19	1.28											1.23
RV30	0.20	0.21											0.20
RV31	0.10	0.04											0.07

2021 Average Industrial TSS Loading Report

November, 2020

Town	SIU Name	Average Daily TSS Loading (Tons/Day) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average T/D
Clark	Kerry 1	0.000												0.0000
	Kerry 2	0.006												0.0060
	Kerry 3													0.0000
	Kerry 4	0.129												0.1290
													Clark Total:	**0.135**
Kenilworth	B&M Finishers													0.0000
	Kenilworth Anodizing	0.000												0.0000
													Kenilworth Total:	**0.000**
Mountainside	American Aluminum	0.001												0.0010
													Mountainside Total:	**0.001**
Rahway	Clean Haven													0.0000
	Guest Packaging 02													0.0000
	Guest Packaging 03	0.000												0.0000
	Merck 007	0.005												0.0050
	Merck 012	0.037												0.0370
	Quala Systems	0.013												0.0130
	Suez Water Rahway	0.004												0.0040
													Rahway Total:	**0.059**
Roselle Park	Crossfield Products	0.004												0.0040
	Merck Kenilworth	0.008												0.0080
													Roselle Park Total:	**0.012**
Springfield	Valcor Engineering	0.003												0.0030
													Springfield Total:	**0.003**
Woodbridge	BASF 1	0.002												0.0020
	BASF 2													0.0000
	Gentek Building Products	0.001												0.0010
													Woodbridge Total:	**0.003**

2021 Average Industrial BOD Loading Report

November, 2020

Town	SIU Name	Average Daily BOD Loading (Tons/Day) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average T/D
Clark	Kerry 1	0.000												0.0000
	Kerry 2	0.018												0.0180
	Kerry 3													0.0000
	Kerry 4	0.579												0.5790
													Clark Total:	**0.597**
Kenilworth	B&M Finishers													0.0000
	Kenilworth Anodizing	0.000												0.0000
													Kenilworth Total:	**0.000**
Mountainside	American Aluminum	0.000												0.0000
													Mountainside Total:	**0.000**
Rahway	Clean Haven													0.0000
	Guest Packaging 02													0.0000
	Guest Packaging 03	0.001												0.0010
	Merck 007	0.003												0.0030
	Merck 012	0.021												0.0210
	Quala Systems	0.040												0.0400
	Suez Water Rahway	0.000												0.0000
													Rahway Total:	**0.065**
Roselle Park	Crossfield Products	0.002												0.0020
	Merck Kenilworth	0.008												0.0080
													Roselle Park Total:	**0.010**
Springfield	Valcor Engineering	0.002												0.0020
													Springfield Total:	**0.002**
Woodbridge	BASF 1	0.001												0.0010
	BASF 2													0.0000
	Gentek Building Products	0.000												0.0000
													Woodbridge Total:	**0.001**