2018 FIVE YEAR MOVING AVERAGE STATUS REPORT

January, 2018

MEMBER	ASSESSMENT ALLOCATION (PERCENT)						
	MEASURING YEAR					FIVE YEAR AVERAGE (2)	LAST ASSESSMENT (3)
	2014	2015	2016	2017	2018 (1)		
Clark	9.97%	7.24%	6.02%	7.44%	14.42%	9.02%	7.98%
Cranford	6.29%	8.99%	5.98%	6.69%	2.88%	6.17%	6.67%
Garwood	3.43%	2.88%	1.89%	3.31%	3.52%	3.01%	2.78%
Kenilworth	2.36%	2.61%	5.33%	5.61%	3.86%	3.95%	3.61%
Mountainside	3.76%	3.39%	3.89%	3.88%	3.98%	3.78%	3.70%
Rahway	14.99%	14.41%	18.87%	13.71%	9.40%	14.28%	16.48%
Roselle Park	1.80%	1.38%	1.62%	1.04%	0.45%	1.26%	1.57%
Scotch Plains	5.80%	7.32%	4.62%	5.15%	6.34%	5.85%	5.71%
Springfield	10.84%	11.08%	9.97%	9.18%	11.35%	10.48%	10.37%
Westfield	13.94%	13.49%	18.87%	16.26%	14.88%	15.49%	15.03%
Woodbridge	26.82%	27.21%	22.94%	27.73%	28.92%	26.72%	26.08%

Notes:

(1) = Figures computed based on Flow, BOD and TSS data received as of reporting month.

(2) = Five year moving average consisting of 2014, 2015, 2016, 2017, and month to date for 2018

(3) = Five year moving average consisting of 2013, 2014, 2015, 2016, and 2017

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2018 TOWN ASSESSMENT BREAKDOWN SUMMARY

January, 2018

MEMBER	Up to Date Average Daily Flow (MGD)		Biochemical Oxygen Demand (tons/day)		Total Suspended Solids (tons/day)		Percent of Total Cost of Operation to Date	
	2017	2018	2017	2018	2017	2018	2017	2018
Clark	1.27	1.45	1.51	2.89	1.50	2.51	7.44%	14.42%
Cranford	2.08	1.75	0.97	0.02	1.06	-0.08	6.69%	2.88%
Garwood	0.73	0.59	0.62	0.52	0.60	0.61	3.31%	3.52%
Kenilworth	1.17	0.73	1.08	0.69	1.04	0.49	5.61%	3.86%
Mountainside	0.76	0.71	0.74	0.67	0.76	0.58	3.88%	3.98%
Rahway	5.22	2.96	1.74	0.78	1.73	1.15	13.71%	9.40%
Roselle Park	0.37	0.22	0.10	-0.01	0.19	0.04	1.04%	0.45%
Scotch Plains	1.12	1.17	0.97	0.96	0.94	0.99	5.15%	6.34%
Springfield	2.06	1.98	1.66	1.86	1.70	1.73	9.18%	11.35%
Westfield	3.68	2.88	2.95	2.43	2.98	2.06	16.26%	14.88%
Woodbridge	5.92	4.88	5.14	4.74	5.23	4.53	27.73%	28.92%
TOTAL:	24.38	19.32	17.48	15.55	17.73	14.61	100.00%	100.00%

Notes:

(1): Woodbridge MGD figure represents flow after 0.50 MGD flow credit is applied

(2): Woodbridge TSS figure represents loading after 833 lbs/day credit is applied

(3): All inter-municipality adjustments have been applied

Conversion Factor: Tons/day = Daily Average Load (lbs/day)/2000

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2018 INTER-MUNICIPAL ADJUSTMENTS REPORT

January, 2018

MEMBER	Dwelling Unit Qty			Average Daily Flow (MGD)			Average BOD (Tons)			Average TSS (Tons)		
	Bill To	Credit To	Total Adj.	Average Flow	Adjustment	Final Flow	Average BOD	Adjustment	Final BOD	Average TSS	Adjustment	Final TSS
Clark	479	0	479	1.35	0.0958	1.45	2.81	0.0799	2.89	2.43	0.0799	2.51
Cranford	242	1092	-850	1.92	-0.1700	1.75	0.16	-0.1418	0.02	0.06	-0.1418	-0.08
Garwood	54	110	-56	0.6	-0.0112	0.59	0.53	-0.0093	0.52	0.62	-0.0093	0.61
Kenilworth	62	38	24	0.73	0.0048	0.73	0.69	0.0040	0.69	0.49	0.0040	0.49
Mountainside	105	339	-234	0.76	-0.0468	0.71	0.71	-0.0390	0.67	0.62	-0.0390	0.58
Rahway	13	15	-2	2.96	-0.0004	2.96	0.78	-0.0003	0.78	1.15	-0.0003	1.15
Roselle Park	38	117	-79	0.24	-0.0158	0.22	0.00	-0.0132	-0.01	0.05	-0.0132	0.04
Scotch Plains	66	413	-347	1.24	-0.0694	1.17	1.02	-0.0579	0.96	1.05	-0.0579	0.99
Springfield	0	186	-186	2.02	-0.0372	1.98	1.89	-0.0310	1.86	1.76	-0.0310	1.73
Westfield	1425	175	1250	2.63	0.2500	2.88	2.22	0.2085	2.43	1.85	0.2085	2.06
Woodbridge	10	9	1	5.38	-0.4998	4.88	4.74	0.0002	4.74	4.95	-0.4163	4.53
TOTAL:	2494	2494	0	19.83	-0.5000	19.32	15.55	0.0000	15.55	15.03	-0.4165	14.61

Equations:

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

(1): Flow Adj: [Units] x (0.0002 MGD)

(2): BOD Adj: [Units] x (0.0002MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)

(3): TSS Adj: [Units] x (0.0002MGD) x (200 mg/L) x (8.34 lbs/g) / (2000 lbs/ton)

Notes:

(1): Woodbridge MGD adjustment includes a 0.50 MGD flow credit

(2): Woodbridge TSS adjustment includes an 833 lbs/day credit

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2018 AVERAGE DAILY FLOW REPORT

January, 2018

METER NO.:	2017			2018									Average To Date (2)
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RV01	1.95	2.02	1.99	2.11									2.02
RV02	2.86	2.94	2.91	3.07									2.94
RV03	1.47	1.55	1.42	1.68									1.53
RV04	0.17	0.18	0.17	0.18									0.18
RV05	0.22	0.24	0.23	0.23									0.23
RV06	0.50	0.51	0.51	0.55									0.52
RV07	0.53	0.58	0.57	0.59									0.57
RV09	2.63	2.89	2.94	3.30									2.94
RV10	6.41	6.67	6.52	7.13									6.68
RV11	10.18	10.41	10.50	11.23									10.58
RV12	4.66	4.69	4.67	4.71									4.68
RV13	0.49	0.51	0.51	0.57									0.52
RV14	14.68	14.78	14.26	15.75									14.87
RV15	0.64	0.70	0.66	0.81									0.70
RV17	0.37	0.39	0.38	0.42									0.39
RV18	0.92	0.94	0.88	0.93									0.91
RV19	0.32	0.35	0.33	0.32									0.33
RV20	0.71	0.74	0.77	0.82									0.76
RV29	0.92	0.98	0.94	1.01									0.96
RV30	0.15	0.14	0.15	0.16									0.15
RV31	0.17	0.41	0.23	0.33									0.28
Total Rainfall (inch)	4.18	1.33	1.10	1.21									7.82

Notes: (1) Meter RV31 measures flow through the Gravity Relief Sewer that would otherwise be metered through Meter RV14. Flows from Meter RV31 are therefore added to flows from Meter RV14 for purposes of user charge calculations.

(2) Rainfall figure represtents total rainfall for the billing year.

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2018 METER SITE LOADING RATES

January, 2018

METER NO.:	Avgerage Daily Flow Rate (MGD):	Biochemical Oxygen Demand (BOD)			Total Suspended Solids (TSS)		
		Average (mg/L) (1)	Loading (lbs/day)	Loading (Tons/day)	Average (mg/L) (1)	Loading (lbs/day)	Loading (Tons/day)
RV01	2.02	224	3774	1.89	209	3521	1.76
RV02	2.94	217	5321	2.66	195	4781	2.39
RV03	1.53	219	2794	1.40	210	2680	1.34
RV04	0.18	195	293	0.15	175	263	0.13
RV05	0.23	208	399	0.20	159	305	0.15
RV06	0.52	241	1045	0.52	202	876	0.44
RV07	0.57	267	1269	0.63	202	960	0.48
RV09	2.94	193	4732	2.37	178	4364	2.18
RV10	6.68	158	8802	4.40	139	7744	3.87
RV11	10.58	214	18883	9.44	189	16677	8.34
RV12	4.68	211	8236	4.12	223	8704	4.35
RV13	0.52	209	906	0.45	209	906	0.45
RV14	14.87	181	22447	11.22	169	20959	10.48
RV15	0.70	211	1232	0.62	205	1197	0.60
RV17	0.39	84	273	0.14	84	273	0.14
RV18	0.91	207	1571	0.79	216	1639	0.82
RV19	0.33	168	462	0.23	165	454	0.23
RV20	0.76	224	1420	0.71	197	1249	0.62
RV29	0.96	184	1473	0.74	157	1257	0.63
RV30	0.15	182	228	0.11	153	191	0.10
RV31	0.28	181	423	0.21	169	395	0.20

Notes: (1)Average loading adjusted to disregard the highest and lowest sample reading for each meter site.

(2)lbs/day = mg/L * Average Daily Flow (MGD) * 8.34

(3)Tons/day = lbs/day / 2000

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2018 Biochemical Oxygen Demand Concentration Results

January, 2018

Sample Date	BIOCHEMICAL OXYGEN DEMAND CONCENTRATION [mg/L]																			
	METER NO.																			
	RV01	RV02	RV03	RV04	RV05	RV06	RV07	RV09	RV10	RV11	RV12	RV13	RV14	RV15	RV17	RV18	RV19	RV20	RV29	RV30
10/2/2017			200	138	98.4	141		242						243		260				
10/3/2017			140	209	110	165		112						240		197				
10/4/2017			106	186	108	94.8		57						166		142				
10/5/2017			171	182	183	128		172						316		203				
10/5/2017	316	313	194	241	239	294	227	241	215	293	230	355	224	245	95	262	230	254	254	249
10/16/2017									88.7	126	134	300	165		66.4		222			
10/17/2017									130	167	118	188	95.9		53		136			
10/18/2017	233	216	218	201	270	188	271	219	156	204	237	212	197	223	68	251	207	209	206	137
10/18/2017									120	173	177	170	106		77.7		222			
10/19/2017									124	173	178	114	130		53.5		165			
10/23/2017	100	174					197											184	309	181
10/24/2017	106	119					275											140	176	
10/25/2017	133	146					190											124	281	114
10/26/2017	187	128					201											169	199	172
11/2/2017	255	204	220	240	284	238	168	179	211	243	176	278	196	176	83	287	105	226	134	209
11/15/2017	218	283	204	268	253	276	209	211	140	213	236	161	188	215	74	241	195	285	129	158
11/27/2017			286	222	262	303		142						182		263				
11/28/2017			241	105	167	356		108						228		161				
11/29/2017			400	141	228	302		155						361		134				
11/29/2017	309	234	225	277	259	304	391	200	207	257	212	208	237	265	117	235	258	234	111	158
11/30/2017			201	130	145	317		163						173		174				
12/4/2017									110	152	231	253	122		70.9		142			
12/5/2017									100	152	114	194	140		102		147			
12/6/2017									106	209	200	191	189		138		123			
12/7/2017									222	189	132	175	262		94.8		256			
12/11/2017	214	121					338											198	135	158
12/12/2017	243	203					292											331	118	169
12/13/2017	210	187					794				296								149	105
12/13/2017	227	300	283	222	317	279	276	254	209	330	246	196	221	220	90	252	120	246	173	173
12/14/2017	225	370					327											162	147	183

Sample Date	BIOCHEMICAL OXYGEN DEMAND CONCENTRATION [mg/L]																			
	METER NO.																			
	RV01	RV02	RV03	RV04	RV05	RV06	RV07	RV09	RV10	RV11	RV12	RV13	RV14	RV15	RV17	RV18	RV19	RV20	RV29	RV30
12/26/2017	374	250	327	245	305	320	246	335	274	319	249	310	271	291	138	374	180	343	273	257
1/8/2018	268	256	241	259	298	327	345	233	226	242	240	276	236	268	114	256	212	259	161	224
1/22/2018			228	234	174	214		199						128		137				
1/23/2018			181	110	119	143		213						116		105				
1/24/2018			147	165	144	171		200						109		122				
1/25/2018	216	244	228	182	245	323	226	237	209	238	223	210	211	197	79	223	129	236	220	309
1/25/2018			225	123	165	152		193						122		132				
1/29/2018									119	227	297	214	176		77		124			
1/30/2018									128	221	313	105	122		52.1		106			
1/31/2018									119	188	203	112	137		63.7		114			
Maximum	374	370	400	277	317	356	794	335	274	330	313	355	271	361	138	374	258	343	309	309
Minimum	100	119	106	105	98	95	168	57	89	126	114	105	96	109	52	105	105	124	111	105
Average	226	220	222	194	208	240	293	194	161	216	212	211	181	214	85	210	170	225	187	185
Adjusted Avg	224	217	219	195	208	241	267	193	158	214	211	209	181	211	84	207	168	224	184	182
Count	17	17	21	21	21	21	17	21	20	20	21	20	20	21	20	21	20	16	17	16

2018 Total Suspended Solids Results

January, 2018

Sample Date	TOTAL SUSPENDED SOLIDS [mg/L]																			
	METER NO.																			
	RV01	RV02	RV03	RV04	RV05	RV06	RV07	RV09	RV10	RV11	RV12	RV13	RV14	RV15	RV17	RV18	RV19	RV20	RV29	RV30
10/2/2017			132	76	42	76		278						282		324				
10/3/2017			42	210	80	180		76						318		280				
10/4/2017			30	278	150	100		70						400		210				
10/5/2017			148	198	186	68		114						398		276				
10/5/2017	274	242	144	226	142	170	220	178	192	222	190	340	192	188	56	258	296	260	256	224
10/16/2017									50	154	64	314	220		110		336			
10/17/2017									124	170	62	300	54		56		250			
10/18/2017	296	206	190	202	142	170	150	244	228	180	214	242	200	214	48	278	112	198	148	100
10/18/2017									134	200	274	214	42		144		474			
10/19/2017									78	58	216	58	170		42		198			
10/23/2017	66	162					186											166	528	264
10/24/2017	36	72					190											34	194	
10/25/2017	54	56					86											54	284	126
10/26/2017	170	70					96											124	210	206
11/2/2017	202	184	254	242	162	182	146	186	200	192	150	138	166	162	86	282	76	212	94	116
11/15/2017	236	306	208	168	162	178	134	208	168	196	290	230	476	200	56	260	160	294	106	128
11/27/2017			252	208	202	402		44						102		246				
11/28/2017			260	66	176	464		58						216		108				
11/29/2017			294	72	150	370		74						412		88				
11/29/2017	262	238	210	288	134	172	300	194	176	190	184	156	174	196	88	292	118	242	98	124
11/30/2017			242	52	68	446		128						198		194				
12/4/2017									72	148	280	378	72		78		168			
12/5/2017									50	120	68	242	162		156		144			
12/6/2017									44	192	288	212	182		188		88			
12/7/2017									202	136	54	226	276		108		444			
12/11/2017	198	70					278											164	44	168
12/12/2017	240	166					234											456	210	54
12/13/2017	252	192					302				310								52	70
12/13/2017	240	274	322	134	266	270	194	198	236	310	224	208	186	168	78	216	112	210	122	128
12/14/2017	240	436					266											82	46	220

Sample Date	TOTAL SUSPENDED SOLIDS [mg/L]																			
	METER NO.																			
	RV01	RV02	RV03	RV04	RV05	RV06	RV07	RV09	RV10	RV11	RV12	RV13	RV14	RV15	RV17	RV18	RV19	RV20	RV29	RV30
12/26/2017	284	270	338	310	302	252	210	350	224	228	286	258	298	254	136	330	140	316	240	168
1/8/2018	232	256	188	192	302	166	238	188	200	192	192	248	186	190	78	234	104	224	126	180
1/22/2018			662	312	172	180		198						68		144				
1/23/2018			234	62	100	128		356						88		54				
1/24/2018			72	194	124	84		214						60		106				
1/25/2018	182	210	204	134	180	228	186	232	214	204	190	146	200	184	70	220	82	208	166	178
1/25/2018			256	70	132	78		192						68		92				
1/29/2018									56	214	284	164	158		80		46			
1/30/2018									66	240	486	58	62		24		72			
1/31/2018									64	222	464	64	88		46		68			
Maximum	296	436	662	312	302	464	302	356	236	310	486	378	476	412	188	330	474	456	528	264
Minimum	36	56	30	52	42	68	86	44	44	58	54	58	42	60	24	54	46	34	44	54
Average	204	201	223	176	161	208	201	180	139	188	227	210	178	208	86	214	174	203	172	153
Adjusted Avg	209	195	210	175	159	202	202	178	139	189	223	209	169	205	84	216	165	197	157	153
Count	17	17	21	21	21	21	17	21	20	20	21	20	20	21	20	21	20	16	17	16