# 2021 FIVE YEAR MOVING AVERAGE STATUSREPORT

January, 2021

| 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% | 8.29% | 7.38% | 8.32% | 8.05% |
| Cranford | 5.98% | 6.69% | 7.25% | 9.95% | 11.44% | 11.71% | 9.41% | 8.26% |
| Garwood | 1.89% | 3.31% | 2.74% | 2.33% | 2.03% | 2.37% | 2.56% | 2.46% |
| Kenilworth | 5.33% | 5.61% | 4.09% | 5.30% | 3.54% | 3.40% | 4.39% | 4.77% |
| Mountainside | 3.89% | 3.88% | 3.68% | 2.90% | 2.47% | 2.42% | 3.07% | 3.36% |
| Rahway | 18.87% | 13.71% | 14.04% | 18.01% | 22.54% | 21.58% | 17.98% | 17.43% |
| Roselle Park | 1.62% | 1.04% | 0.84% | 1.61% | 2.23% | 1.72% | 1.49% | 1.47% |
| Scotch Plains | 4.62% | 5.15% | 5.88% | 4.56% | 3.84% | 4.05% | 4.70% | 4.81% |
| Springfield | 9.97% | 9.18% | 9.28% | 9.28% | 9.36% | 9.03% | 9.22% | 9.41% |
| Westfield | 18.87% | 16.26% | 14.79% | 15.64% | 14.72% | 14.71% | 15.22% | 16.06% |
| Woodbridge | 22.94% | 27.73% | 27.24% | 22.09% | 19.55% | 21.63% | 23.65% | 23.91% |
| | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.01% | 99.99% |

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

# 2021 Town Annual Percent Share

## January, 2021

| 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 | 1.54 | 1.56 | 1.74 | 1.85 | 1.57 | 1.48 | 8.29% | 7.38% |
| Cranford | 3.23 | 3.30 | 1.89 | 2.21 | 2.50 | 2.47 | 11.44% | 11.71% |
| Garwood | 0.56 | 0.65 | 0.33 | 0.45 | 0.43 | 0.51 | 2.03% | 2.37% |
| Kenilworth | 0.96 | 0.92 | 0.56 | 0.66 | 0.74 | 0.73 | 3.54% | 3.40% |
| Mountainside | 0.71 | 0.69 | 0.41 | 0.45 | 0.55 | 0.51 | 2.47% | 2.42% |
| Rahway | 5.96 | 5.80 | 3.63 | 4.19 | 4.74 | 4.65 | 22.54% | 21.58% |
| Roselle Park | 0.57 | 0.47 | 0.38 | 0.33 | 0.48 | 0.37 | 2.23% | 1.72% |
| Scotch Plains | 1.10 | 1.15 | 0.64 | 0.76 | 0.85 | 0.85 | 3.84% | 4.05% |
| Springfield | 2.55 | 2.47 | 1.50 | 1.73 | 1.98 | 1.93 | 9.36% | 9.03% |
| Westfield | 3.77 | 3.80 | 2.21 | 2.92 | 2.92 | 3.22 | 14.72% | 14.71% |
| Woodbridge (1)(2) | 5.14 | 5.70 | 3.30 | 4.43 | 4.37 | 4.50 | 19.55% | 21.63% |
| Totals: | 26.07 | 26.51 | 16.59 | 19.98 | 21.13 | 21.22 | 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

# 2021 Intermunicipal Adjustments Report

## January, 2021

| 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 | 1.47 | 0.0958 | 1.56 | 1.77 | 0.0799 | 1.85 | 1.40 | 0.0799 | 1.48 |
| Cranford | 242 | 1,092 | -850 | 3.47 | -0.1700 | 3.30 | 2.35 | -0.1418 | 2.21 | 2.61 | -0.1418 | 2.47 |
| Garwood | 54 | 110 | -56 | 0.66 | -0.0112 | 0.65 | 0.46 | -0.0093 | 0.45 | 0.52 | -0.0093 | 0.51 |
| Kenilworth | 62 | 38 | 24 | 0.92 | 0.0048 | 0.92 | 0.66 | 0.0040 | 0.66 | 0.73 | 0.0040 | 0.73 |
| Mountainside | 105 | 339 | -234 | 0.74 | -0.0468 | 0.69 | 0.49 | -0.0390 | 0.45 | 0.55 | -0.0390 | 0.51 |
| Rahway | 13 | 15 | -2 | 5.80 | -0.0004 | 5.80 | 4.19 | -0.0003 | 4.19 | 4.65 | -0.0003 | 4.65 |
| Roselle Park | 38 | 117 | -79 | 0.48 | -0.0158 | 0.47 | 0.34 | -0.0132 | 0.33 | 0.38 | -0.0132 | 0.37 |
| Scotch Plains | 66 | 413 | -347 | 1.22 | -0.0694 | 1.15 | 0.82 | -0.0579 | 0.76 | 0.91 | -0.0579 | 0.85 |
| Springfield | 0 | 186 | -186 | 2.51 | -0.0372 | 2.47 | 1.76 | -0.0310 | 1.73 | 1.96 | -0.0310 | 1.93 |
| Westfield | 1,425 | 175 | 1,250 | 3.55 | 0.2500 | 3.80 | 2.71 | 0.2085 | 2.92 | 3.01 | 0.2085 | 3.22 |
| Woodbridge (1)(2) | 10 | 9 | 1 | 6.20 | -0.4998 | 5.70 | 4.43 | 0.0002 | 4.43 | 4.92 | -0.4163 | 4.50 |
| Totals: | 2,494 | 2,494 | 0 | 27.01 | -0.5000 | 26.51 | 19.98 | 0.0001 | 19.98 | 21.64 | -0.4164 | 21.22 |

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

## January, 2021

| 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 | 0.65 | 0.16 | 1.47 | 0.0958 | 1.56 | 1.12 | 1.24 | 1.77 | 1.40 |
| Cranford | 0.00 | 0.00 | 3.47 | -0.1700 | 3.30 | 2.35 | 2.61 | 2.35 | 2.61 |
| Garwood | 0.00 | 0.00 | 0.66 | -0.0112 | 0.65 | 0.46 | 0.52 | 0.46 | 0.52 |
| Kenilworth | 0.00 | 0.00 | 0.92 | 0.0048 | 0.92 | 0.66 | 0.73 | 0.66 | 0.73 |
| Mountainside | 0.00 | 0.00 | 0.74 | -0.0468 | 0.69 | 0.49 | 0.55 | 0.49 | 0.55 |
| Rahway | 0.06 | 0.05 | 5.80 | -0.0004 | 5.80 | 4.13 | 4.60 | 4.19 | 4.65 |
| Roselle Park | 0.01 | 0.01 | 0.48 | -0.0158 | 0.47 | 0.33 | 0.37 | 0.34 | 0.38 |
| Scotch Plains | 0.00 | 0.00 | 1.22 | -0.0694 | 1.15 | 0.82 | 0.91 | 0.82 | 0.91 |
| Springfield | 0.00 | 0.00 | 2.51 | -0.0372 | 2.47 | 1.76 | 1.96 | 1.76 | 1.96 |
| Westfield | 0.00 | 0.00 | 3.55 | 0.2500 | 3.80 | 2.71 | 3.01 | 2.71 | 3.01 |
| Woodbridge | 0.00 | 0.00 | 6.20 | 0.0002 | 6.20 | 4.43 | 4.92 | 4.43 | 4.92 |
| Totals: | 0.72 | 0.22 | 27.01 | 0.00 | 27.01 | 19.27 | 21.42 | 19.98 | 21.64 |

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

## January, 2021

| | 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 | 30.74 | 28.4 | | | | | | | | | 26.99 |
| Avg. BOD (mg/L) (2) | 159 | 178 | 218 | 149 | | | | | | | | | 176 |
| Avg. TSS (mg/L) (2) | 214 | 182 | 215 | 159 | | | | | | | | | 193 |
| **Total Influent Loading (a)(b)** | | | | | | | | | | | | | |
| BOD (Tons/Day) | 15.72 | 18.65 | 27.94 | 17.65 | | | | | | | | | 19.99 |
| TSS (Tons/Day) | 21.16 | 19.06 | 27.56 | 18.83 | | | | | | | | | 21.65 |

**Total Industrial Contribution (3)**

| | |
|---|---|
| IPP BOD (Tons/Day) | 0.72 |
| IPP TSS (Tons/Day) | 0.23 |

**Total Domestic Influent Loading**

| | |
|---|---|
| BOD (Tons/Day) | 19.27 |
| TSS (Tons/Day) | 21.42 |

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

## January, 2021

| | 2020 | | | 2021 | | | | | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Meter # | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | To Date |
| RV01 | 2.14 | 2.27 | 2.75 | 2.86 | | | | | | | | | 2.51 |
| RV02 | 3.10 | 3.23 | 3.73 | 3.88 | | | | | | | | | 3.49 |
| RV03 | 1.61 | 1.69 | 1.75 | 1.58 | | | | | | | | | 1.66 |
| RV04 | 0.25 | 0.25 | 0.31 | 0.30 | | | | | | | | | 0.27 |
| RV05 | 0.36 | 0.37 | 0.46 | 0.45 | | | | | | | | | 0.41 |
| RV06 | 0.47 | 0.48 | 0.16 | 0.14 | | | | | | | | | 0.31 |
| RV07 | 0.59 | 0.61 | 0.75 | 0.75 | | | | | | | | | 0.67 |
| RV09 | 2.95 | 3.22 | 4.49 | 4.42 | | | | | | | | | 3.77 |
| RV10 | 7.82 | 8.40 | 9.91 | 10.07 | | | | | | | | | 9.05 |
| RV11 | 11.69 | 12.51 | 15.51 | 15.53 | | | | | | | | | 13.81 |
| RV12 | 4.76 | 5.03 | 5.84 | 5.24 | | | | | | | | | 5.22 |
| RV13 | 0.59 | 0.67 | 0.81 | 0.78 | | | | | | | | | 0.71 |
| RV14 | 18.86 | 20.05 | 24.82 | 23.15 | | | | | | | | | 21.72 |
| RV15 | 0.86 | 0.87 | 1.18 | 1.03 | | | | | | | | | 0.98 |
| RV16A | 24.62 | 25.61 | 30.53 | 28.78 | | | | | | | | | 27.38 |
| RV17 | 0.46 | 0.47 | 0.50 | 0.48 | | | | | | | | | 0.48 |
| RV18 | 0.76 | 0.81 | 0.94 | 0.84 | | | | | | | | | 0.84 |
| RV19 | 0.35 | 0.38 | 0.42 | 0.38 | | | | | | | | | 0.38 |
| RV20 | 0.68 | 0.71 | 0.78 | 0.77 | | | | | | | | | 0.74 |
| RV22 | 14.07 | 15.07 | 18.12 | 18.08 | | | | | | | | | 16.34 |
| RV27 | 0.42 | 0.26 | 1.33 | 0.51 | | | | | | | | | 0.63 |
| RV28 | 0.24 | 0.13 | 0.45 | 0.16 | | | | | | | | | 0.24 |
| RV29 | 1.19 | 1.28 | 1.49 | 1.53 | | | | | | | | | 1.37 |
| RV30 | 0.20 | 0.21 | 0.23 | 0.22 | | | | | | | | | 0.21 |
| RV31 | 0.10 | 0.04 | 0.08 | 0.01 | | | | | | | | | 0.06 |

# 2021 Average Industrial TSS Loading Report

## January, 2021

| Town | SIU Name | Average Daily TSS Loading (Tons/Day) | | | | | | | | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | T/D |
| Clark | Kerry 1 | 0.000 | 0.001 | 0.001 | | | | | | | | | | 0.0007 |
| | Kerry 2 | 0.006 | | 0.011 | | | | | | | | | | 0.0085 |
| | Kerry 3 | | 0.030 | 0.044 | | | | | | | | | | 0.0370 |
| | Kerry 4 | 0.129 | | 0.094 | | | | | | | | | | 0.1115 |
| | | | | | | | | | | | | | **Clark Total:** | **0.158** |
| Kenilworth | B&M Finishers | | 0.000 | 0.000 | | | | | | | | | | 0.0000 |
| | Kenilworth Anodizing | 0.000 | | 0.000 | | | | | | | | | | 0.0000 |
| | | | | | | | | | | | | | **Kenilworth Total:** | **0.000** |
| Mountainside | American Aluminum | 0.001 | | 0.002 | | | | | | | | | | 0.0015 |
| | | | | | | | | | | | | | **Mountainside Total:** | **0.002** |
| Rahway | Clean Haven | | | 0.000 | | | | | | | | | | 0.0000 |
| | Guest Packaging 02 | | | 0.004 | | | | | | | | | | 0.0040 |
| | Guest Packaging 03 | 0.000 | 0.000 | 0.000 | | | | | | | | | | 0.0000 |
| | Merck 007 | 0.005 | 0.001 | 0.008 | | | | | | | | | | 0.0047 |
| | Merck 012 | 0.037 | 0.025 | 0.041 | | | | | | | | | | 0.0343 |
| | Quala Systems | 0.013 | 0.005 | 0.009 | | | | | | | | | | 0.0090 |
| | Suez Water Rahway | 0.004 | 0.003 | 0.001 | | | | | | | | | | 0.0027 |
| | | | | | | | | | | | | | **Rahway Total:** | **0.055** |
| Roselle Park | Crossfield Products | 0.004 | | 0.000 | | | | | | | | | | 0.0020 |
| | Merck Kenilworth | 0.008 | 0.006 | 0.008 | | | | | | | | | | 0.0073 |
| | | | | | | | | | | | | | **Roselle Park Total:** | **0.009** |
| Springfield | Valcor Engineering | 0.003 | 0.001 | 0.003 | | | | | | | | | | 0.0023 |
| | | | | | | | | | | | | | **Springfield Total:** | **0.002** |
| Woodbridge | BASF 1 | 0.002 | | 0.000 | | | | | | | | | | 0.0010 |
| | BASF 2 | | | 0.001 | | | | | | | | | | 0.0010 |
| | Gentek Building Products | 0.001 | | 0.000 | | | | | | | | | | 0.0005 |
| | | | | | | | | | | | | | **Woodbridge Total:** | **0.003** |

# 2021 Average Industrial BOD Loading Report

## January, 2021

| Town | SIU Name | Average Daily BOD Loading (Tons/Day) | | | | | | | | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | T/D |
| Clark | Kerry 1 | 0.000 | 0.000 | 0.001 | | | | | | | | | | 0.0003 |
| | Kerry 2 | 0.018 | | 0.015 | | | | | | | | | | 0.0165 |
| | Kerry 3 | | 0.280 | 0.265 | | | | | | | | | | 0.2725 |
| | Kerry 4 | 0.579 | | 0.146 | | | | | | | | | | 0.3625 |
| | | | | | | | | | | | | | **Clark Total:** | **0.652** |
| Kenilworth | B&M Finishers | | 0.000 | 0.000 | | | | | | | | | | 0.0000 |
| | Kenilworth Anodizing | 0.000 | | 0.000 | | | | | | | | | | 0.0000 |
| | | | | | | | | | | | | | **Kenilworth Total:** | **0.000** |
| Mountainside | American Aluminum | 0.000 | | 0.000 | | | | | | | | | | 0.0000 |
| | | | | | | | | | | | | | **Mountainside Total:** | **0.000** |
| Rahway | Clean Haven | | | | | | | | | | | | | 0.0000 |
| | Guest Packaging 02 | | | 0.004 | | | | | | | | | | 0.0040 |
| | Guest Packaging 03 | 0.001 | 0.000 | 0.001 | | | | | | | | | | 0.0007 |
| | Merck 007 | 0.003 | 0.001 | 0.003 | | | | | | | | | | 0.0023 |
| | Merck 012 | 0.021 | 0.011 | 0.011 | | | | | | | | | | 0.0143 |
| | Quala Systems | 0.040 | 0.031 | 0.038 | | | | | | | | | | 0.0363 |
| | Suez Water Rahway | 0.000 | 0.000 | 0.001 | | | | | | | | | | 0.0003 |
| | | | | | | | | | | | | | **Rahway Total:** | **0.058** |
| Roselle Park | Crossfield Products | 0.002 | | | | | | | | | | | | 0.0020 |
| | Merck Kenilworth | 0.008 | 0.006 | 0.006 | | | | | | | | | | 0.0067 |
| | | | | | | | | | | | | | **Roselle Park Total:** | **0.009** |
| Springfield | Valcor Engineering | 0.002 | 0.002 | 0.004 | | | | | | | | | | 0.0027 |
| | | | | | | | | | | | | | **Springfield Total:** | **0.003** |
| Woodbridge | BASF 1 | 0.001 | | 0.002 | | | | | | | | | | 0.0015 |
| | BASF 2 | | | 0.001 | | | | | | | | | | 0.0010 |
| | Gentek Building Products | 0.000 | | 0.000 | | | | | | | | | | 0.0000 |
| | | | | | | | | | | | | | **Woodbridge Total:** | **0.003** |