

2021 CHEMICAL USE REPORT

GALLONS	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL INFLUENT FLOW	2,101,955,000	1,887,988,000	2,020,671,000	2,094,199,000	2,127,692,000	2,493,211,300	2,170,385,000	2,302,155,000
**FLOW, MAY - SEPTEMBER	905,023,000	780,667,000	769,869,000	902,376,000	923,535,000	1,015,345,000	911,676,000	1,101,997,000
TOTAL \$ COST OF PURCHASES								
TREATMENT CHEMICAL	2014	2015	2016	2017	2018	2019	2020	2021
FERRIC SULFATE - ACTIFLO	\$289,797.00	\$282,560.00	\$306,169.00	271,749.00	\$250,405.00	\$327,298.00	\$379,168.00	\$329,078.00
POLYMER - ACTIFLO	67,245.65	41,055.00	48,185.00	41,528.00	46,772.00	39,909.00	44,871.00	\$49,107.00
POLYMER - DAF	23,920.00	20,930.00	26,910.00	26,910.00	39,184.00	30,997.00	37,257.00	\$41,034.00
SULFURIC ACID - BIOFILTER	20,458.29	34,709.00	35,368.00	26,291.00	26,159.00	36,122.00	31,631.00	\$57,259.00
SODIUM HYPOCHLORITE**	14,315.34	14,695.00	14,530.00	19,726.00	21,049.00	29,565.00	35,922.00	\$31,117.00
SODIUM BISULFATE**	<u>2,632.29</u>	<u>2326.00</u>	<u>3,943.00</u>	<u>2902.00</u>	<u>4682.00</u>	<u>5455.00</u>	<u>5641.00</u>	<u>\$10,466.00</u>
TOTAL	\$418,368.57	\$396,275.00	\$435,105.00	\$389,106.00	\$388,251.00	\$469,346.00	\$534,490.00	\$518,061.00
\$ COST / MGD TREATED								
TREATMENT CHEMICAL	2014	2015	2016	2017	2018	2019	2020	2021
FERRIC SULFATE - ACTIFLO	\$137.87	\$149.66	\$151.49	\$129.76	\$117.00	\$131.28	\$174.70	\$142.94
POLYMER - ACTIFLO	31.99	21.75	23.84	19.83	22.00	16.01	20.67	\$21.33
POLYMER - DAF	11.38	11.08	13.32	12.84	18.00	12.43	17.17	\$17.82
SULFURIC ACID - BIOFILTER	9.73	18.38	17.50	12.55	12.00	14.49	14.57	\$24.87
SODIUM HYPOCHLORITE**	15.82	18.82	18.87	21.86	22.80	29.12	39.40	\$28.24
SODIUM BISULFATE**	<u>2.91</u>	<u>2.98</u>	<u>5.12</u>	<u>3.22</u>	<u>5.10</u>	<u>5.37</u>	<u>6.19</u>	<u>\$9.50</u>
TOTAL	\$209.70	\$222.67	\$230.14	\$200.06	\$196.90	\$208.70	\$272.70	\$244.70
TOTAL GALLONS PURCHASED								
TREATMENT CHEMICAL	2014	2015	2016	2017	2018	2019	2020	2021
FERRIC SULFATE - ACTIFLO	149,457	142,252	171,981	179,228	178,333	217,049	205,853	173,953
POLYMER - ACTIFLO	6,375	4,677	5,502	4,731	5,225	4,402	4,952	5,225
POLYMER - DAF	2,200	1,930	2,476	2,476	3,575	2,751	3,301	3,575
SULFURIC ACID - BIOFILTER	6,914	11,587	13,067	10,062	10,062	13,336	11,729	15,022
SODIUM HYPOCHLORITE**	9,130	9,220	9,116	12,360	13,156	16,628	18,360	13,816
SODIUM BISULFATE**	1,533	1,399	2,396	1,754	2,838	3,078	3,051	4,486

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GALLONS OF CHEMICAL / MGD TREATED									
TREATMENT CHEMICAL	2014	2015	2016	2017	2018	2019	2020	2021	
FERRIC SULFATE - ACTIFLO	71.10	75.35	85.10	85.61	85.2	87.1	94.8	75.6	
POLYMER - ACTIFLO	3.03	2.48	2.72	2.26	2.5	1.77	2.28	2.27	
POLYMER - DAF	1.05	1.02	1.23	1.18	1.7	1.10	1.52	1.55	
SULFURIC ACID - BIOFILTER	3.29	6.14	6.47	4.80	4.7	5.36	5.4	6.53	
SODIUM HYPOCHLORITE**	10.09	11.81	11.84	13.69	14.2	16.38	20.14	12.54	
SODIUM BISULFATE**	1.69	1.79	1.19	1.94	3.0	3.03	3.35	4.07	
** May through September chemical use only									
## Emptied bulk tank contents and switched to totes. Gallons estimated.									
GAS, ELECTRIC AND WATER CONSUMPTION									
NATURAL GAS	2014	2015	2016	2017	2018	2019	2020	2021	
Therms	104,315	81,752	70,013	76,013	89,690	82,885	200,826	200,641	
Cost \$	\$90,580.17	\$51,661.64	\$38,836.02	\$44,583.71	\$47,502.00	\$42,814.71	\$36,413.73	\$35,034.20	
\$ Cost / MGD Treated	-	-	-	-	\$22.33	\$17.00	\$16.78	\$15.22	
Therms / MGD Treated	-	-	-	-	-	-	92.53	87.15	
POTABLE WATER	2014	2015	2016	2017	2018	2019	2020	2021	
Cubic Feet	447,992	385,130	380,677	458,500	476,500	491,400	464,900	502,581.00	
Cost \$	\$21,010.64	\$20,226.56	\$20,436.52	\$22,278.74	\$22,655.00	\$24,437.90	\$21,920.54	\$24,462.34	
\$ Cost / MGD Treated	-	-	-	-	\$10.65	\$9.80	\$10.10	\$10.63	
Cubic Feet / MGD Treated	-	-	-	-	224	197	214	218	
ELECTRICAL POWER	2014	2015	2016	2017	2018	2019	2020	2021	
KWH	7,589,498	7,356,888	7,446,624	7,468,201	7,682,476	8,051,500	7,957,863	8,189,111	
COST \$	\$527,632.56	\$534,006.19	\$499,300.03	\$509,871.00	\$508,330.00	\$504,393.43	\$494,540.75	\$537,709.43	
KWH / MGD Treated	3,610.7	3,896.68	3,684.62	3,566.14	3,610	3,229.38	3,664.85	3,557.08	
\$ Cost / MGD Treated	-	-	-	-	\$238.91	\$202.31	\$227.86	\$233.56	

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REMOVAL EFFICIENCY							
SOLIDS							
					<u>2019</u>	<u>2020</u>	<u>2021</u>
Raw Influent					-	-	3,792,868
Final Effluent					-	-	131,927
Total Pounds Removed					-	-	3,660,941
Percent Removed					-	-	97%
PHOSPHORUS							
					<u>2019</u>	<u>2020</u>	<u>2021</u>
Raw Influent					75,998	84,460	91,720
Final Effluent					3,648	5,006	3,434
Total Pounds Removed					72,350	79,454	88,286
Percent Removed					95%	94%	96%
AMMONIA							
					<u>2019</u>	<u>2020</u>	<u>2021</u>
Raw Influent					-	-	705,049
Final Effluent					-	-	4,789
Total Pounds Removed					-	-	700,260
Percent Removed					-	-	99%
BOD							
					<u>2019</u>	<u>2020</u>	<u>2021</u>
Raw Influent					-	-	5,006,411
Final Effluent					-	-	110,270
Total Pounds Removed					-	-	4,896,141
Percent Removed					-	-	98%