Boulder County LID - Eldorado Springs Wastewater Plant

Operations Report May 2020

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WWTP

- Please see the attached results for the samples and flows collected from the WWTF. Seems like the stay at home orders are affecting the flows and loading of the plant.
- The trees need to be trimmed 2 feet back on either side of the road prior to the gate.

Collections System

• Ken and I met with Peter Spraitz on 6/12. I have provided both the video and repair log to the grinder pumps at his addresses to Peter.

Eldorado Springs WWTP (cells highlighted contain formulas)

Parameter	20-May	20-Apr	20-Mar	20-Feb	20-Jan	19-Dec	19-Nov	19-Oct	19-Sep	19-Aug	19-Jul	19-Jun
Average Influent/Effluent Flow												
(MGD)	0.028993	0.02416	0.0194	0.0165	0.017	0.0175	0.0192	0.0208	0.0198	0.0192	0.0179	0.01685
Maximum Influent/Effluent flow												
(MGD)	0.0347	0.02939	0.0244	0.0194	0.0183	0.0184	0.026	0.0229	0.0267	0.0197	0.0226	0.0216
Average Influent BOD (mg/L)	359	381	193	291	219	386	319	272	249	244	182	390
* Average Influent BOD (#s/d)	38.17	63.55	20.35	39.32	29.59	47.97	49.54	48.55	42.99	38.26	26.56	55.29
Average Influent TSS (mg/L)	273	460	150	256	200	366	290	353	235	88	156	232
* Plant Capacity Flow P (%)	90.60%	75.50%	60.63%	51.56%	53.13%	54.69%	60.00%	65.00%	61.88%	60.00%	55.94%	52.66%
* Plant Capacity Loading Q (%)	52.29%	87.06%	27.88%	53.86%	40.53%	65.71%	67.86%	66.50%	58.89%	52.41%	36.38%	75.75%
Day of sample Influent/Effluent												
Flow (MGD)	0.01275	0.020	0.013	0.016	0.016	0.015	0.019	0.021	0.021	0.019	0.017	0.017
Average Effluent BOD (mg/L)	7	10	5	4	5	2	2	4	2	2	11	8
Average Effluent TSS (mg/L)	6	6	13	9	14	6	8	19	9	11	6	10
* BOD % Removal	98.05%	97.38%	97.41%	98.63%	97.72%	99.48%	99.37%	98.53%	99.20%	99.18%	93.96%	97.95%
* TSS % Removal	97.80%	98.70%	91.33%	96.48%	93.00%	98.36%	97.24%	94.62%	96.17%	87.50%	96.15%	95.69%
Average Effluent Ammonia												
Nitrogen (mg/L)	0.19	0.115	0.45	0.53	0.14	0.14	0.4	2.97	19.77	24.88	6.89	12.52
TIN Monthly Rolling Average	9.268	13.902	13.240	13.990	14.594	16.456	17.758	17.228	16.836	15.468	13.904	13.902
TIN(mg/L)	3.43	11.53	1.31	2.65	5.02	6.28	10.8	5.42	19.77	24.99	7.1	12.91
NO2+NO3 (mg/L)	3.24	11.415	0.86	2.12	4.88	6.14	9.98	2.45	0.19	0.11	0.21	0.39
Ecoli (#/100 ml)	1	1	1	1	2	1	1	1	1	1	49.2	1
* Ecoli Rolling Annual Average	5.10	28.77	28.77	28.77	31.60	31.52	31.52	31.52	31.52	31.52	31.52	27.75
pH (Minimum)	6.54	6.80	6.83	6.81	6.72	6.87	6.64	6.70	6.74	6.89	6.77	6.90
pH (Maximum)	7.12	7.49	7.89	7.06	7.06	7.00	7.12	7.25	7.14	7.31	7.47	7.22
Ave Influent TKN	42.80	86.50	68.30	69.40	71.10	78.00	62.30	49.80	54.00	93.90	92.20	82.10
Ave Effluent TKN	1.10	1.15	1.90	1.70	1.20	1.10	1.90	4.90	19.90	25.00	7.10	14.10