Boulder County LID - Eldorado Springs Wastewater Plant

Operations Report July 2020

Prepared by Gabby Begeman, ORC Water Professionals

WWTP

• Please see the attached results for the samples and flows collected from the WWTF. Flows are down 54% from May.

Collections System

- The grinder pump at 67 Fowler was replaced on July 17. This was the first time this home had a pump replacement and this is the second placement for the pump in its lifetime.
- The grinder pump at 148 Artesian was replaced on July 29. This is the third replacement for this address and the pump placed into service at tis location is brand new.

Eldorado Springs WWTP (cells highlighted contain formulas)

Parameter	20-Jul	20-Jun	20-May	20-Apr	20-Mar	20-Feb	20-Jan	19-Dec	19-Nov	19-Oct	19-Sep	19-Aug
Average Influent/Effluent Flow												
(MGD)	0.01663	0.020489	0.028993	0.02416	0.0194	0.0165	0.017	0.0175	0.0192	0.0208	0.0198	0.0192
Maximum Influent/Effluent flow												
(MGD)	0.018864	0.02825	0.0347	0.02939	0.0244	0.0194	0.0183	0.0184	0.026	0.0229	0.0267	0.0197
Average Influent BOD (mg/L)	333	453	359	381	193	291	219	386	319	272	249	244
* Average Influent BOD (#s/d)	52.39	65.76	38.17	63.55	20.35	39.32	29.59	47.97	49.54	48.55	42.99	38.26
Average Influent TSS (mg/L)	312	558	273	460	150	256	200	366	290	353	235	88
* Plant Capacity Flow P (%)	51.97%	64.03%	90.60%	75.50%	60.63%	51.56%	53.13%	54.69%	60.00%	65.00%	61.88%	60.00%
* Plant Capacity Loading Q (%)	71.77%	90.08%	52.29%	87.06%	27.88%	53.86%	40.53%	65.71%	67.86%	66.50%	58.89%	52.41%
Day of sample Influent/Effluent												
Flow (MGD)	0.019	0.017405	0.01275	0.020	0.013	0.016	0.016	0.015	0.019	0.021	0.021	0.019
Average Effluent BOD (mg/L)	5	2	7	10	5	4	5	2	2	4	2	2
Average Effluent TSS (mg/L)	12	7	6	6	13	9	14	6	8	19	9	11
* BOD % Removal	98.50%	99.56%	98.05%	97.38%	97.41%	98.63%	97.72%	99.48%	99.37%	98.53%	99.20%	99.18%
* TSS % Removal	96.15%	98.75%	97.80%	98.70%	91.33%	96.48%	93.00%	98.36%	97.24%	94.62%	96.17%	87.50%
Average Effluent Ammonia												
Nitrogen (mg/L)	1.8	0.05	0.19	0.115	0.45	0.53	0.14	0.14	0.4	2.97	19.77	24.88
TIN Monthly Rolling Average	8.370	8.573	9.268	13.902	13.240	13.990	14.594	16.456	17.758	17.228	16.836	15.468
TIN(mg/L)	4.67	4.57	3.43	11.53	1.31	2.65	5.02	6.28	10.8	5.42	19.77	24.99
NO2+NO3 (mg/L)	2.87	4.52	3.24	11.415	0.86	2.12	4.88	6.14	9.98	2.45	0.19	0.11
Ecoli (#/100 ml)	1	1	69.56	1	1	1	2	1	1	1	1	1
* Ecoli Rolling Annual Average	6.80	10.81	10.81	28.77	28.77	28.77	31.60	31.52	31.52	31.52	31.52	31.52
pH (Minimum)	6.81	6.59	6.54	6.80	6.83	6.81	6.72	6.87	6.64	6.70	6.74	6.89
pH (Maximum)	7.21	6.91	7.12	7.49	7.89	7.06	7.06	7.00	7.12	7.25	7.14	7.31
Ave Influent TKN	61.10	80.60	42.80	86.50	68.30	69.40	71.10	78.00	62.30	49.80	54.00	93.90
Ave Effluent TKN	1.80	0.03	1.10	1.15	1.90	1.70	1.20	1.10	1.90	4.90	19.90	25.00