

Boulder County LID – Eldorado Springs Wastewater Plant
Operations Report
December 2020

Prepared by Gabby Begeman, ORC Water Professionals

WWTP

- Please see the attached results for the samples and flows collected from the WWTF.
- The annual Status/Progress report was completed by ORC and sent to Boulder County for signature and submittal.
- Looking for some discussion regarding the EAS equipment sent in a separate email.

Eldorado Springs WWTP (cells highlighted contain formulas)

Parameter	21-Jan	20-Dec	20-Nov	20-Oct	20-Sep	20-Aug	20-Jul	20-Jun	20-May	20-Apr	20-Mar	20-Feb
Average Influent/Effluent Flow (MGD)		0.018146	0.0202	0.017167	0.016911	0.018469	0.01663	0.020489	0.028993	0.02416	0.0194	0.0165
Maximum Influent/Effluent flow (MGD)		0.02229	0.0209	0.022265	0.020842	0.01974	0.018864	0.02825	0.0347	0.02939	0.0244	0.0194
Average Influent BOD (mg/L)	311	259	229	343	347	354	333	453	359	381	193	291
* Average Influent BOD (#s/d)	0.00	38.77	35.16	49.26	54.12	55.05	52.39	65.76	38.17	63.55	20.35	39.32
Average Influent TSS (mg/L)	338	374	218	294	747	337	312	558	273	460	150	256
* Plant Capacity Flow P (%)	0.00%	56.71%	63.13%	53.65%	52.85%	57.72%	51.97%	64.03%	90.60%	75.50%	60.63%	51.56%
* Plant Capacity Loading Q (%)	0.00%	53.11%	48.16%	67.48%	74.13%	75.41%	71.77%	90.08%	52.29%	87.06%	27.88%	53.86%
Day of sample Influent/Effluent Flow (MGD)		0.018	0.018	0.017	0.019	0.019	0.019	0.017405	0.01275	0.020	0.013	0.016
Average Effluent BOD (mg/L)	6	6	2	2	6	5	5	2	7	10	5	4
Average Effluent TSS (mg/L)	16	7	6	8	14	12	12	7	6	6	13	9
* BOD % Removal	98.07%	97.68%	99.13%	99.42%	98.27%	98.59%	98.50%	99.56%	98.05%	97.38%	97.41%	98.63%
* TSS % Removal	95.27%	98.13%	97.25%	97.28%	98.13%	96.44%	96.15%	98.75%	97.80%	98.70%	91.33%	96.48%
Average Effluent Ammonia Nitrogen (mg/L)	0.42	0.89	0.34	1.85	3.43	9.3	1.8	0.05	0.19	0.115	0.45	0.53
TIN Monthly Rolling Average	6.787	6.835	6.635	6.310	5.982	7.119	8.370	8.573	9.268	13.902	13.240	13.990
TIN(mg/L) 10 max	4.44	8.69	14.69	9.36	6.13	9.975	4.67	4.57	3.43	11.53	1.31	2.65
NO2+NO3 (mg/L)	4.02	7.8	14.34	7.52	2.69	0.67	2.87	4.52	3.24	11.415	0.86	2.12
Ecoli (#/100 ml)	1	1	1	1	1	3	1	1	69.56	1	1	1
* Ecoli Rolling Annual Average	6.88	6.96	6.96	6.96	6.96	6.96	6.80	10.81	10.81	28.77	28.77	28.77
pH (Minimum)		6.85	6.90	6.75	6.78	6.82	6.81	6.59	6.54	6.80	6.83	6.81
pH (Maximum)		7.08	7.49	7.16	7.03	7.02	7.21	6.91	7.12	7.49	7.89	7.06
Ave Influent TKN	87.30	109.60	63.10	90.62	112.00	109.40	61.10	80.60	42.80	86.50	68.30	69.40
Ave Effluent TKN	2.90	1.00	1.10	1.90	4.80	13.70	1.80	0.03	1.10	1.15	1.90	1.70
* Average #'s Nitrate	0.00	1.17	2.20	1.08	0.42	0.10	0.45	0.66	0.34	1.90	0.09	0.29