



## Brunswick / Glynn County Joint Water & Sewer Commission

Dec. 2018

### WWTF Capacity Rating

	Weekly Limit		Monthly Limit		Current Average		% OF CAPACITY
ACADEMY CREEK WWTF	16.9	MGD	13.5	MGD	11.24	MGD	83.26% *1 (I & I PROBLEM)
DUNBAR CREEK WWTF	5	MGD	4	MGD	3.635	MGD	90.88% *2 (I & I PROBLEM)
SOUTH PORT WWTF	1.875	MGD	1.5	MGD	0.450	MGD	30.00%

*NOTE \*1: Academy Creek WWTF has an I & I Problem, which if fixed would reduce the amount of flow.*

*There are several projects under way to repair the system and reduce the I & I Problem.*

*NOTE \*2: Dunbar Creek WWTF has an "EXTREME" I & I Problem, which if fixed would reduce the amount of flow.*

*There are several projects under way to repair the system and reduce the I & I Problem.*

FINAL EFFLUENT COMPOSITE SAMPLES

DEC 2018	FLOW MGD	7-DAY AVG	BOD mg/L	7-DAY AVG	BOD LBS/DAY	7-DAY AVG	TSS mg/L	7-DAY AVG	TSS LBS/DAY	7-DAY COD AVG mg/L	7-DAY AVG	COD LBS/DAY	7-DAY AVG	
1	8.67													
2	15.67													
3	23.99		13		01		27		5402	104		20808		
4	15.03		9		1128		26		3259	77		9652		
5	13.32		12		1333		20		2222	49		5443		
6	11.67		10		973		15		1460	58		5645		
7	10.74	14.16	8	10	717	1350	18	21	1612	2791	70	72	6270	9564
8	10.77	14.46		10		1350		21		2791		72		9564
9	12.45	14.00		10		1350		21		2791		72		9564
10	11.35	12.19	11	10	1041	1038	16	19	1515	2014	97	70	9182	7238
11	10.46	11.54	9	10	785	970	15	17	1309	1623	64	68	5583	6425
12	10.20	11.09	7	9	595	822	14	16	1191	1417	60	70	5104	6357
13	10.41	10.91	9	9	781	784	13	15	1129	1351	56	69	4862	6200
14	12.16	11.11	9	9	913	823	14	14	1420	1312	59	67	5983	6143
15	13.16	11.46		9		823		14		1312		67		6143
16	11.52	11.32		9		823		14		1312		67		6143
17	11.17	11.30	8	8	745	764	16	14	1491	1308	60	60	5589	5424
18	10.45	11.30	8	8	697	746	16	15	1394	1325	69	61	6014	5510
19	10.21	11.30	10	9	852	798	13	14	1107	1308	63	61	5365	5563
20	11.07	11.39	7	8	646	771	13	14	1200	1322	55	62	5477	5680
21	10.28	11.12	7	8	600	708	13	14	1115	1261	71	64	5187	5700
22	9.24	10.56		8		708		14		1261		64		5700
23	8.13	10.08		8		708		14		1261		64		5700
24	8.76	9.73	9	8	658	691	16	14	1169	1197	65	65	4749	5532
25	8.04	9.39	11	9	738	699	16	14	1073	1133	57	63	3822	5094
26	8.86	9.20	7	8	517	632	9	13	665	1044	44	59	3251	4671
27	9.10	8.92	7	8	531	609	10	13	759	956	47	57	3567	4295
28	10.08	8.89	7	8	588	606	11	12	925	918	57	54	4792	4036
29	11.52	9.21		8		606		12		918		54		4036
30	10.01	9.48		8		606		12		918		54		4036
31	9.83	9.63	8	8	656	606	8	11	656	815	52	51	4263	3939
<b>TOTAL</b>	<b>348.32</b>													
<b>AVERAGE</b>	<b>11.24</b>	<b>10.95</b>	9	9	830	816	15	15	1423	1427	64	64	5971	5930
<b>MAXIMUM</b>	<b>23.99</b>	<b>14.46</b>	13	10	2601	1350	27	21	5402	2791	104	72	20808	9564
<b>MINIMUM</b>	<b>8.04</b>	<b>8.89</b>	7	8	517	606	8	11	656	815	44	51	3251	3939

**FINAL EFFLUENT COMPOSITE SAMPLES**

DECEMBER 2018	FLOW MGD	7-DAY AVG	BOD mg/L	7-DAY AVG	BOD LBS/DAY	7-DAY AVG	TSS mg/L	7-DAY AVG	TSS LBS/DAY	7-DAY AVG	D.O. mg/L	TEMP OUTFALL	pH SU	Enterococci COLIFORM #/100 ml	7-DAY GEO MEAN
1	2.734										8.56	21.3	7.32		
2	4.700										8.41	21.5	7.58		
3	5.365		2		89.5		3.0		134.2		8.28	22.4	7.75		
4	4.344		1		36.2		2.0		72.5		8.45	21.8	7.58	95	
5	3.800		9		285.2		2.0		63.4		8.67	20.9	7.59		
6	3.542										8.90	20.3	7.73	56	
7	3.717	4.029		4.0		137.0		2.3		90.0	8.79	20.4	7.72		73
8	3.498	4.138		4.0		137.0		2.3		90.0	8.82	20.9	7.78		73
9	3.803	4.010		4.0		137.0		2.3		90.0	8.91	21.4	7.50		73
10	3.485	3.741	2	4.0	58.1	126.5	2	2.0	58.1	64.7	8.56	20.4	7.70		73
11	3.414	3.608	1	4.0	28.5	123.9	2	2.0	56.9	59.5	8.79	19.8	7.79	50	53
12	3.983	3.635	8	3.7	265.7	117.4	1.0	1.7	33.2	49.4	8.92	19.6	7.72		53
13	3.445	3.621	1	3.0	28.7	95.3	2.00	1.8	57.5	51.4	8.53	20.0	7.68	47	48
14	4.681	3.758		3.0		95.3		1.8		51.4	8.67	21.1	7.70		48
15	3.709	3.789		3.0		95.3		1.8		51.4	9.62	21.3	7.56		48
16	3.430	3.735		3.0		95.3		1.8		51.4	9.51	20.9	7.78		48
17	3.400	3.723	2	3.0	56.7	94.9	2	1.8	56.7	51.1	8.83	20.3	7.89	176	75
18	3.892	3.791	1	3.0	32.5	95.9	2	1.8	64.9	53.1	8.78	20.0	7.59	160	110
19	3.257	3.688	1	1.3	27.2	36.3	2.0	2.0	54.3	58.4	9.17	20.3	7.97	12	63
20	3.434	3.686	1	1.3	28.6	36.2	2.00	2.0	57.3	58.3	8.47	20.8	7.73	30	56
21	3.696	3.545		1.3		36.2		2.0		58.3	8.91	20.6	7.94		56
22	3.036	3.449		1.3		36.2		2.0		58.3	9.14	19.7	7.76		56
23	2.743	3.351		1.3		36.2		2.0		58.3	9.13	19.7	7.69		56
24	3.151	3.316	2	1.3	52.6	35.2	2	2.0	52.6	57.3	9.15	19.7	7.63		39
25	2.944	3.180	1	1.3	24.6	33.2	2	2.0	49.1	53.3	8.94	19.5	7.83	30	22
26	3.070	3.153		1.3		35.3		2.0		53.0	8.77	19.9	7.67		30
27	3.261	3.129	1.0	1.3	27.2	34.8	3	2.3	81.6	61.1	9.21	20.3	7.58	12	19
28	5.093	3.328		1.3		34.8		2.3		61.1	8.70	21.1	7.56		19
29	3.532	3.399		1.3		34.8		2.3		61.1	8.38	22.3	7.89		19
30	2.867	3.417		1.3		34.8		2.3		61.1	8.53	21.5	7.61		19
31	3.664	3.490	4	2.0	122.2	58.0	3	2.7	91.7	74.1	8.26	21.8	7.61		19
<b>TOTAL</b>	<b>112.89</b>														
<b>AVERAGE</b>	<b>3.635</b>	<b>3.588</b>	<b>2</b>	<b>2.4</b>	<b>78</b>	<b>73.3</b>	<b>2.1</b>	<b>2.0</b>	<b>66</b>	<b>61</b>	<b>7.8</b>	<b>20.7</b>	<b>7.7</b>	<b>67</b>	<b>46</b>
<b>MAXIMUM</b>	<b>5.365</b>	<b>4.138</b>	<b>9.0</b>	<b>4.0</b>	<b>285</b>	<b>137.0</b>	<b>3.0</b>	<b>2.7</b>	<b>134</b>	<b>90</b>	<b>9.62</b>	<b>22.4</b>	<b>7.97</b>	<b>176</b>	<b>110</b>
<b>MINIMUM</b>	<b>2.734</b>	<b>3.129</b>	<b>1.0</b>	<b>1.3</b>	<b>25</b>	<b>33.2</b>	<b>1.0</b>	<b>1.7</b>	<b>33</b>	<b>49</b>	<b>8.3</b>	<b>19.5</b>	<b>7.3</b>	<b>12</b>	<b>19</b>
Hgt 7 day avg				4.0		137.0		2.7		90.0					
AVG LIMIT				5.0											
WKLY LIMIT				7.5											

**PLANT EFFLUENT**

DECEMBER 2018	EFF FLOW MGD	FLOW 7-DAY AVG	EFF BOD mg/L	BOD 7-DAY AVG	EFF BOD LBS/DAY	BOD 7-DAY AVG	EFF TSS mg/L	TSS 7-DAY AVG	EFF TSS LBS/DAY	TSS 7-DAY AVG	WATER METER READING	TOTAL USE MGD	EFF D.O. mg/L	EFF TEMP	EFF PH SU	FECAL #/100 ML	7-DAY GEO MEAN
1	0.389										7384.00	0.010	8.15	19.5	7.38		
2	0.956										7385.00	0.010	8.38	20.1	7.43		
3	0.781		3.0		19.54		7		45.59		7385.00	0.010	8.45	22.4	7.25		
4	0.430		1		3.59		2		7.17		7386.00	0.010	8.44	18.5	7.38	61	
5	0.419		9		31.45		3		10.48		7388.00	0.020	8.65	20.5	7.39		
6	0.412										7389.00	0.010	8.87	17.1	7.36	53	
7	0.399	0.541		4.3		18.19		4.00		21.08	7390.00	0.010	8.73	19.3	7.29		57
8	0.408	0.544		4.3		18.19		4.00		21.08	7390.00	0.010	8.29	19.7	7.37		57
9	0.449	0.471		4.3		18.19		4.00		21.08	7392.00	0.020	8.36	20.3	7.43		57
10	0.439	0.422	2.0	4.0	7.32	14.12	3	2.67	10.98	9.55	7394.00	0.020	8.05	17.6	7.40		57
11	0.412	0.420	1	4.0	3.44	14.07	3	3.00	10.31	10.59	7396.00	0.020	8.79	18.3	7.39	22	34
12	0.408	0.418	6	3.0	20.42	10.39	2	2.67	6.81	9.37	7397.00	0.010	8.42	18.8	7.61		34
13	0.455	0.424		3.0		10.39		2.67		9.37	7398.00	0.010	8.81	18.6	7.58	8	13
14	0.456	0.432		3.0		10.39		2.67		9.37	7399.00	0.010	8.47	20.0	7.57		13
15	0.478	0.442		3.0		10.39		2.67		9.37	7400.00	0.010	8.67	20.6	7.43		13
16	0.427	0.439		3.0		10.39		2.67		9.37	7400.00	0.030	8.79	20.5	7.57		13
17	0.488	0.446	2	3.0	8.14	10.66	4	3.00	16.28	11.13	7403.00	0.030	8.74	19.5	7.63		13
18	0.417	0.447	2	3.3	6.96	11.84	3	3.00	10.43	11.17	7406.00	0.010	7.75	18.6	7.60	1	3
19	0.475	0.457	3	2.3	11.88	8.99	5	4.00	19.81	15.51	7407.00	0.030	7.64	19.2	7.57		3
20	0.425	0.452		2.3		8.99		4.00		15.51	7410.00	0.010	7.13	20.0	7.50	1	1
21	0.427	0.448		2.3		8.99		4.00		15.51	7411.00	0.010	9.68	20.0	7.73		1
22	0.393	0.436		2.3		8.99		4.00		15.51	7413.00	0.020	8.91	19.5	7.93		1
23	0.379	0.429		2.3		8.99		4.00		15.51	7414.00	0.010	8.93	19.1	7.59		1
24	0.352	0.410	2.0	2.3	5.87	8.24	3	3.67	8.81	13.02	7415.00	0.020	10.14	18.2	7.66		2
25	0.309	0.394	1	2.0	2.58	6.78	2	3.33	5.15	11.26	7417.00	0.010	10.48	17.7	7.69	1	1
26	0.385	0.381	5	2.7	16.05	8.17	2	2.33	6.42	6.79	7418.00	0.010	8.72	18.3	7.30		1
27	0.419	0.381		2.7		8.17		2.33		6.79	7419.00	0.010	8.48	19.0	7.32	4	2
28	0.458	0.385		2.7		8.17		2.33		6.79	7420.00	0.020	8.02	20.1	7.24		2
29	0.469	0.396		2.7		8.17		2.33		6.79	7422.00	0.010	8.18	21.3	7.39		2
30	0.423	0.402		2.7		8.17		2.33		6.79	7423.00	0.010	8.41	22.4	7.43		2
31	0.402	0.409	4	3.3	13.41	10.68	3	2.33	10.06	7.21	7424.00	0.010	7.87	21.4	7.30		2
TOTAL	13.939	10.828															
AVERAGE	0.450	0.433	3	3.0	11.59	10.75	3	3.120	12.95	11.82		0.440	8.6	19.6	7.47	19	6
MAXIMUM	0.956	0.544	9	4.3	31.45	18.2	7	4.00	45.6	21.1		0.028	10.5	22.4	7.93	61	57
MINIMUM	0.309	0.381	1	2.0	2.58	6.8	2	2.33	5.2	6.8		0.010	7.1	17.1	7.24	1	1