

NEUSE RIVER COMPLIANCE ASSOCIATION

Draft Total Nitrogen Mid Year Report (July 1, 2020 thru June 30, 2021) for 2021

August 30, 2021

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NPDES Permit #: NCC00001		END OF PIPE						ESTUARY			
FACILITY	NPDES Permit #	Permit Flow (MGD)	2020-21 Avg. Flow (MGD)	Member TN Allocation (Lbs/Yr.)	Member TN Discharge (Lbs/Yr.)	Transport Zone	Annual Lease Amount	Member Estuary Allocation	Adjusted TN Allocation 2021 (Lbs/Yr.)	2021 TN Delivery (Lbs/Yr.)	% of Estuary Allocation
City of Durham	NC0023841	20.000	6.250	97,655	39,005	10%	0	9,767	0	3,900	40
Town of Hillsborough	NC0026433	3.000	1.113	10,422	5,151	10%	0	1,042	0	515	49
SGWASA	NC0026824	5.500	6.014	22,420	39,252	10%	0	5,860	0	3,925	67
Town of Apex	NC0064050	3.600	1.331	40,547	15,813	50%	0	20,274	0	7,907	39
Town of Benson	NC0020389	1.900	1.590	33,070	15,703	50%	0	16,535	0	7,852	47
Town of Cary ~ North	NC0048879	12.000	6.310	143,246	39,779	50%	0	71,623	0	19,890	28
Town of Cary ~ South	NC0065102	12.800	5.634	180,211	28,919	50%	0	90,105	0	14,459	16
City of Raleigh ~ Smith Creek	NC0030759	3.000	2.254	70,814	30,289	50%	0	35,407	0	15,145	43
City of Raleigh ~ Neuse	NC0029033	75.000	48.434	687,373	247,871	50%	0	341,242	0	123,935	45
Raleigh ~ Ground Water	NA	NA	NA	NA	61,231	50%		NA		30,616	
City of Raleigh ~ Little Creek	NC0079316	2.200	1.000	26,660	6,314	50%	0	13,330	0	3,157	24
Town of Clayton	NC0025453	2.500	1.654	22,832	19,998	50%	0	11,416	0	9,999	88
Neuse Colony, (Aqua NC)	NC0064564	0.350	0.331	8,447	8,727	50%	0	4,224	0	4,364	103
Johnston County	NC0030716	9.500	6.712	71,476	43,872	50%	0	35,738	0	21,936	61
Town of Kenly	NC0064891	0.630	0.472	7,096	8,504	50%	0	3,548	0	4,252	120
Town of Farmville	NC0029572	3.500	1.542	42,211	4,286	50%	0	21,106	0	2,143	10
City of Wilson	NC0023906	14.000	10.996	157,886	80,684	50%	0	78,943	0	40,342	51
Duke Energy ~ H F Lee Plant	NC0003417	NA	0.104	3,260	104	70%	0	2,282	0	73	3
City of Goldsboro	NC0023949	14.200	12.708	199,822	147,480	70%	0	139,876	0	103,236	74
Town of LaGrange	NC0021644	0.750	0.769	8,447	8,406	70%	0	5,913	0	5,884	100
City of Kinston (Regional)	NC0024236	11.850	6.627	126,711	67,682	70%	0	88,697	0	47,377	53
Contentnea MSD	NC0032077	3.500	2.210	37,100	7,712	70%	0	25,970	0	5,399	21
Dupont-Kinston, Inc.	NC0003760	3.600	0.327	25,493	1,702	70%	0	17,845	0	1,191	7
City of New Bern	NC0025348	6.500	3.787	64,210	50,161	100%	0	64,210	0	50,161	78
MCAS Cherry Point	NC0003816	3.500	1.516	39,421	20,085	100%	0	39,421	0	20,085	51
City of Havelock	NC0021253	2.250	1.541	21,400	13,044	100%	0	21,400	0	13,044	61
Craven County	NC0089460	0.860	0.690	NA	4,160	100%	0	0	0	4,160	100+
CWS Systems, Inc.	NC0033111	0.600	0.345	11,263	20,479	100%	0	11,263	0	20,479	182
		217.090	132.259		1,036,415			1,174,755		585,426	

* Indicates expired NPDES permits.

This Compliance Report has been compiled from co-permittee members' monthly discharge monitoring reports. I certify that this report is accurate and complete to the best of my knowledge.

Daniel F. McLawhorn, Chairman, Neuse River Compliance Association

Date

NOTES: 1. Average Total Nitrogen Concentration End of Pipe by NRCA Members during 2021 (midyear):

2.45 MG/L

2. Average Total Nitrogen Concentration with ground water contribution in 2021 (midyear):

2.61 MG/L

3. NRCA's Midyear Report Prepared By: Haywood M. Phthisic, III, Executive Director

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FACILITY	January, 2021			February, 2021			March, 2021			April, 2021		
	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)
City of Durham	394.000	2.06	6,769	419.000	3.4875	12,187	325.690	1.2380	3,363	292.570	1.546	3,772
Town of Hillsborough	41.518	1.2125	420	51.255	1.8600	795	40.09	1.2080	404	33.666	1.6375	460
SGWASA	60.540	3.0060	1,518	77.451	3.1025	2,004	52.413	2.0150	881	45.435	2.0020	759
Town of Apex	49.642	3.7475	1,552	51.977	4.0800	1,769	43.603	4.5760	1,664	36.014	4.4650	1,341
Town of Benson	67.983	3.6225	2,054	69.216	3.9050	2,254	53.351	3.5540	1,581	39.480	2.7025	890
Town of Cary ~ North	216.850	2.4675	4,463	215.630	2.6050	4,685	195.980	2.3200	3,792	177.680	1.8175	2,693
Town of Cary ~ South	195.170	1.9127	3,113	206.080	2.0000	3,437	189.720	1.7285	2,735	164.150	1.6367	2,241
City of Raleigh ~ Smith Creek	74.702	4.4925	2,799	72.931	4.1850	2,546	69.289	3.9380	2,276	63.302	4.3475	2,295
City of Raleigh ~ Neuse	1,616.103	1.3300	17,926	1,654.063	1.8775	25,900	1,556.970	1.7240	22,386	1,383.540	1.8575	21,433
Raleigh ~ Ground Water			5,054			5,054			5,054	0.000		5,055
City of Raleigh ~ Little Creek	38.630	1.6900	544	46.410	2.1050	815	33.440	2.0380	568	24.488	2.5150	514
Town of Clayton	59.651	5.3600	2,667	63.431	4.0450	2,140	49.470	5.4390	2,244	43.070	1.4080	506
Neuse Colony (Aqua NC)	9.795	7.2130	589	8.227	7.5245	516	9.364	8.3357	651	9.068	8.4470	639
Johnston County	272.273	2.6975	6,125	286.776	3.9775	9,513	234.143	1.3880	2,710	153.450	1.8875	2,416
Town of Kenly	20.281	4.3950	743	22.153	4.8125	889	15.591	4.2020	546	11.432	4.5000	429
Town of Farmville	67.890	0.5500	311	87.790	1.2000	879	54.621	1.4620	666	39.313	1.0075	330
City of Wilson	469.700	2.4875	9,744	501.760	2.7775	11,623	341.810	2.0020	5,707	261.530	1.8450	4,024
Duke Energy ~ H F Lee Plant	6.570	0.5300	29	3.420	0.2700	8	13.510	0.2700	30	0.007	1.2000	0
City of Goldsboro ~ Pipe 01	518.720	3.7300	16,136	539.870	4.2225	19,012	455.100	3.8300	14,537	329.010	2.3300	6,393
City of Goldsboro ~ Pipe 02	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0
Town of LaGrange	39.293	2.8100	921	38.004	2.8150	892	37.063	2.3900	739	26.213	3.1325	685
City of Kinston (Regional)	311.870	1.3125	3,414	321.900	13.2775	35,645	254.630	1.4920	3,168	171.377	1.9850	2,837
Contentnea MSD	97.802	0.9125	744	99.972	1.1500	959	75.764	1.9760	1,249	53.570	0.9325	417
Dupont-Kinston, Inc.	12.338	1.0725	110	12.124	0.8675	88	11.594	1.1250	109	8.190	1.1960	82
City of New Bern	178.220	4.8000	7,135	196.730	5.2600	8,630	161.020	5.9800	8,031	127.910	6.0400	6,443
MCAS Cherry Point	47.340	6.2500	2,468	49.040	4.1000	1,677	41.200	3.4600	1,189	32.940	3.0000	824
City of Havelock	52.811	2.1925	966	56.110	3.1200	1,460	47.412	3.1725	1,254	38.820	2.6660	863
Craven County	16.368	1.3500	184	16.268	1.2000	163	18.135	1.4600	221	19.740	1.4000	230
CWS Systems, Inc.	12.500	17.3650	1,810	11.450	15.6425	1,494	10.740	19.0000	1,702	7.900	19.6500	1,295
Totals	4,948.560		100,309	5,179.038		157,032	4,391.713		89,457	3,593.865		69,866

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FACILITY	May, 2021			June, 2021			July, 2020			August, 2020		
	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)
City of Durham	253.88	1.3560	2,871	272.720	1.8050	4,105	42.112	2.3083	811	52.990	1.6100	712
Town of Hillsborough	27.405	1.4575	333	27.272	1.5060	343	23.257	1.5550	302	24.548	1.7660	362
SGWASA	36.113	2.0920	630	41.881	2.2175	775	272.590	2.1400	4,865	297.180	2.9280	7,257
Town of Apex	32.759	4.4775	1,223	33.170	4.4520	1,232	34.451	3.2025	920	39.411	3.0775	1,012
Town of Benson	25.110	2.9850	625	31.350	2.9380	768	37.250	2.0940	651	54.752	2.2570	1,031
Town of Cary ~ North	174.630	2.2350	3,255	179.530	2.4350	3,646	175.090	2.4875	3,632	188.530	1.7225	2,708
Town of Cary ~ South	153.770	1.4950	1,917	157.670	1.3492	1,774	156.270	1.4384	1,875	168.067	1.6276	2,281
City of Raleigh ~ Smith Creek	65.141	5.2400	2,847	64.640	3.3880	1,826	63.231	4.8160	2,540	71.272	5.3075	3,155
City of Raleigh ~ Neuse	1,337.182	1.8225	20,325	1,367.734	1.6440	18,753	1,329.962	1.6725	18,551	1,498.592	1.7175	21,466
Raleigh ~ Ground Water			5,054			5,054			5,151			5,151
City of Raleigh ~ Little Creek	20.432	2.6450	451	24.051	2.5280	507	22.800	2.7750	528	38.817	2.0680	669
Town of Clayton	42.145	3.5725	1,256	45.437	3.4680	1,314	42.251	3.4425	1,213	56.862	1.9475	924
Neuse Colony (Aqua NC)	11.029	9.9571	916	10.457	10.7888	941	10.680	8.8750	791	10.626	7.8425	695
Johnston County	132.525	2.0175	2,230	163.290	2.4880	3,388	163.742	1.7180	2,346	202.709	1.7725	2,997
Town of Kenly	9.079	4.1150	312	14.583	3.8600	469	9.774	8.5320	695	14.212	7.3070	866
Town of Farmville	23.479	0.6300	123	58.009	0.7440	360	23.320	0.8150	159	35.268	0.8800	259
City of Wilson	192.680	2.3250	3,736	351.170	2.0760	6,080	217.050	2.5925	4,693	353.510	1.8780	5,537
Duke Energy ~ H F Lee Plant	0.000	0.0000	0	3.850	0.2900	9	2.511	0.2900	6	2.263	0.2200	4
City of Goldsboro ~ Pipe 01	266.820	2.2525	5,012	389.840	2.9800	9,689	321.120	3.5940	9,625	397.850	3.4675	11,505
City of Goldsboro ~ Pipe 02	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0
Town of LaGrange	13.644	3.9500	449	24.503	4.5400	928	15.637	5.5620	725	20.683	4.2675	736
City of Kinston (Regional)	110.230	2.0775	1,910	144.100	1.4200	1,707	134.010	2.9700	3,319	235.070	2.0760	4,070
Contentnea MSD	40.813	0.9925	338	86.341	1.0280	740	47.941	1.3500	540	64.093	1.5500	829
Dupont-Kinston, Inc.	6.572	8.6350	473	10.740	3.5250	316	9.078	0.9020	68	12.587	0.7100	75
City of New Bern	0.000	0.0000	0	138.520	3.0700	3,547	0.000	0.0000	0	132.040	4.4300	4,878
MCAS Cherry Point	31.060	4.7500	1,230	43.200	3.5600	1,283	56.260	5.0500	2,370	56.450	4.1200	1,940
City of Havelock	35.092	4.0750	1,193	48.870	4.1750	1,702	42.406	3.8160	1,350	54.899	2.3900	1,094
Craven County	28.892	1.5000	361	27.360	1.6600	379	24.025	1.1500	230	21.855	1.1750	214
CWS Systems, Inc.	8.340	19.4575	1,353	9.500	20.4120	1,617	9.900	24.2530	2,002	10.600	24.1840	2,138
Totals	3,078.822		60,425	3,769.788		73,251	3,286.718		69,957	4,115.736		84,563

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FACILITY	September, 2020			October, 2020			November, 2020			December, 2020		
	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)	Flow (MG)	TN Conc. (mg/L)	TN Disch. (Lbs.)
City of Durham	54.848	2.1825	998	54.023	2.3133	1,042	51.917	1.8575	804	67.338	2.7960	1,570
Town of Hillsborough	26.473	1.7850	394	31.021	1.6250	420	33.393	1.4220	396	46.267	1.3550	523
SGWASA	298.890	1.6700	4,163	310.560	2.3325	6,041	298.310	1.9640	4,886	403.900	1.6250	5,474
Town of Apex	39.727	3.6840	1,221	39.237	3.7625	1,231	39.546	3.6575	1,206	46.123	3.7520	1,443
Town of Benson	56.079	3.0380	1,421	45.180	2.9325	1,105	51.750	3.8500	1,662	48.949	4.0720	1,662
Town of Cary ~ North	188.720	1.6020	2,521	186.380	1.4550	2,262	192.030	1.5300	2,450	212.050	2.0760	3,671
Town of Cary ~ South	164.540	1.6758	2,300	159.510	1.4730	1,960	161.550	1.8136	2,444	179.930	1.8941	2,842
City of Raleigh ~ Smith Creek	68.164	5.0260	2,857	70.325	4.4550	2,613	70.007	3.2550	1,900	69.789	4.5280	2,635
City of Raleigh ~ Neuse	1,471.018	1.6120	19,776	1,408.101	0.9650	11,333	1,475.331	1.7660	21,729	1,579.690	2.1475	28,292
Raleigh ~ Ground Water			5,151			5,151			5,151			5,151
City of Raleigh ~ Little Creek	26.902	2.0075	450	25.908	1.6675	360	30.913	1.6520	426	32.198	1.7925	481
Town of Clayton	54.375	4.5450	2,061	47.224	4.0260	1,586	48.907	6.0850	2,482	50.805	3.7920	1,607
Neuse Colony (Aqua NC)	10.398	7.9750	692	10.645	8.1846	727	10.107	8.8667	747	10.460	9.4461	824
Johnston County	231.444	1.4900	2,876	163.742	1.5625	2,134	226.020	1.8600	3,506	219.666	1.9820	3,631
Town of Kenly	12.096	15.7520	1,589	12.088	6.7800	684	14.929	5.2010	648	16.197	4.6875	633
Town of Farmville	31.979	0.8560	228	30.873	0.9700	250	53.237	0.7500	333	56.932	0.8180	388
City of Wilson	313.810	2.3350	6,111	279.780	2.8450	6,638	357.180	3.2700	9,741	373.570	2.2625	7,049
Duke Energy ~ H F Lee Plant	2.940	0.3000	7	0.820	0.2200	2	0.000	0.0000	0	2.000	0.5000	8
City of Goldsboro ~ Pipe 01	300.090	4.1775	10,455	304.980	4.6160	11,741	416.100	5.2800	18,323	398.870	4.5240	15,049
City of Goldsboro ~ Pipe 02	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0	0.000	0.0000	0
Town of LaGrange	11.114	4.9950	463	10.912	4.7620	433	19.230	4.3325	695	24.211	3.6620	739
City of Kinston (Regional)	170.040	2.4900	3,531	147.540	2.2375	2,753	220.674	1.4620	2,691	197.250	1.6025	2,636
Contentnea MSD	51.489	0.8540	367	48.474	0.9750	394	66.754	1.0280	572	73.571	0.9200	564
Dupont-Kinston, Inc.	8.746	1.1125	81	8.055	1.6960	114	9.339	0.9425	73	10.088	1.3420	113
City of New Bern	133.870	2.6000	2,903	131.270	2.5200	2,759	34.000	0.6700	190	148.770	4.5500	5,645
MCAS Cherry Point	46.330	4.1500	1,604	46.810	4.7000	1,835	53.460	4.0600	1,810	49.210	4.5250	1,857
City of Havelock	42.972	2.8450	1,020	43.997	3.4480	1,265	47.558	0.8625	342	51.505	1.2480	536
Craven County	20.349	1.2800	217	20.057	9.0750	1,518	20.550	1.2000	206	18.135	1.5600	236
CWS Systems, Inc.	10.500	21.4525	1,879	10.690	21.2775	1,897	11.470	16.1380	1,544	12.300	17.0375	1,748
Totals	3,847.903		77,337	3,648.202		70,247	4,014.262		86,958	4,399.774		97,012

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FACILITY	Total Q (MG)	EOP Total Nitrogen (Lbs)	EOP Avg Conc. (mg/L)	Avg Q (MGD)
City of Durham	2,281.088	39,005	2.05	6.250
Town of Hillsborough	406.165	5,151	1.52	1.113
SGWASA	2,195.263	39,252	2.14	6.014
Town of Apex	485.660	15,813	3.90	1.331
Town of Benson	580.450	15,703	3.24	1.590
Town of Cary ~ North	2,303.100	39,779	2.07	6.310
Town of Cary ~ South	2,056.427	28,919	1.69	5.634
City of Raleigh ~ Smith Creek	822.793	30,289	4.41	2.254
City of Raleigh ~ Neuse	17,678.286	247,871	1.68	48.434
Raleigh ~ Ground Water		61,231		
City of Raleigh ~ Little Creek	364.989	6,314	2.07	1.000
Town of Clayton	603.628	19,998	3.97	1.654
Neuse Colony (Aqua NC)	120.856	8,727	8.66	0.331
Johnston County	2,449.780	43,872	2.15	6.712
Town of Kenly	172.415	8,504	5.91	0.472
Town of Farmville	562.711	4,286	0.91	1.542
City of Wilson	4,013.550	80,684	2.41	10.996
Duke Energy ~ H F Lee Plant	37.891	104	0.33	0.104
City of Goldsboro ~ Pipe 01	4,638.370	147,479	3.81	12.708
City of Goldsboro ~ Pipe 02	0.000	0	0.00	0.000
Town of LaGrange	280.507	8,406	3.59	0.769
City of Kinston (Regional)	2,418.691	67,682	3.36	6.627
Contentnea MSD	806.584	7,712	1.15	2.210
Dupont-Kinston, Inc.	119.451	1,702	1.71	0.327
City of New Bern	1,382.350	50,161	4.35	3.787
MCAS Cherry Point	553.300	20,085	4.35	1.516
City of Havelock	562.452	13,044	2.78	1.541
Craven County	251.734	4,160	1.98	0.690
CWS Systems, Inc.	125.890	20,479	19.50	0.345
Operating Totals	45,587.128	931,027	2.45	124.896
Association Totals	45,587.128	992,258	2.61	124.896