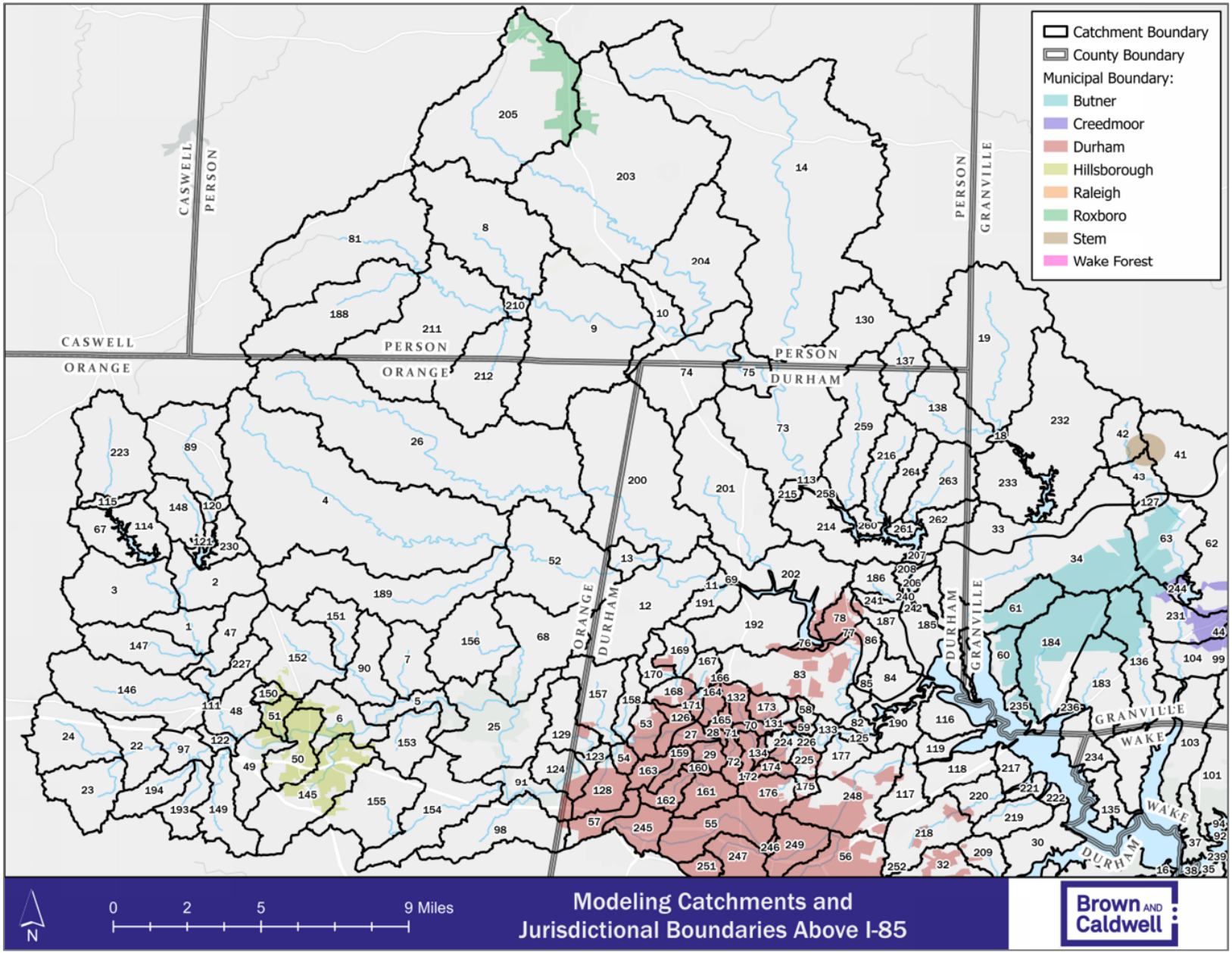
Appendix B: Model Coefficients and Characteristics of WARMF Modeling Catchments for the UNRBA Falls Lake Watershed Model


Catchment Boundary
County Boundary
Municipal Boundary:
Butner
Creedmoor
Durham
Hillsborough
Raleigh
Roxboro
Stem
Wake Forest
CASWELL
PERSON
ORANGE
DURHAM
GRANVILLE
WAKE
N
0 2 5 9 Miles
Modeling Catchments and Jurisdictional Boundaries Above I-85
Brown AND Caldwell

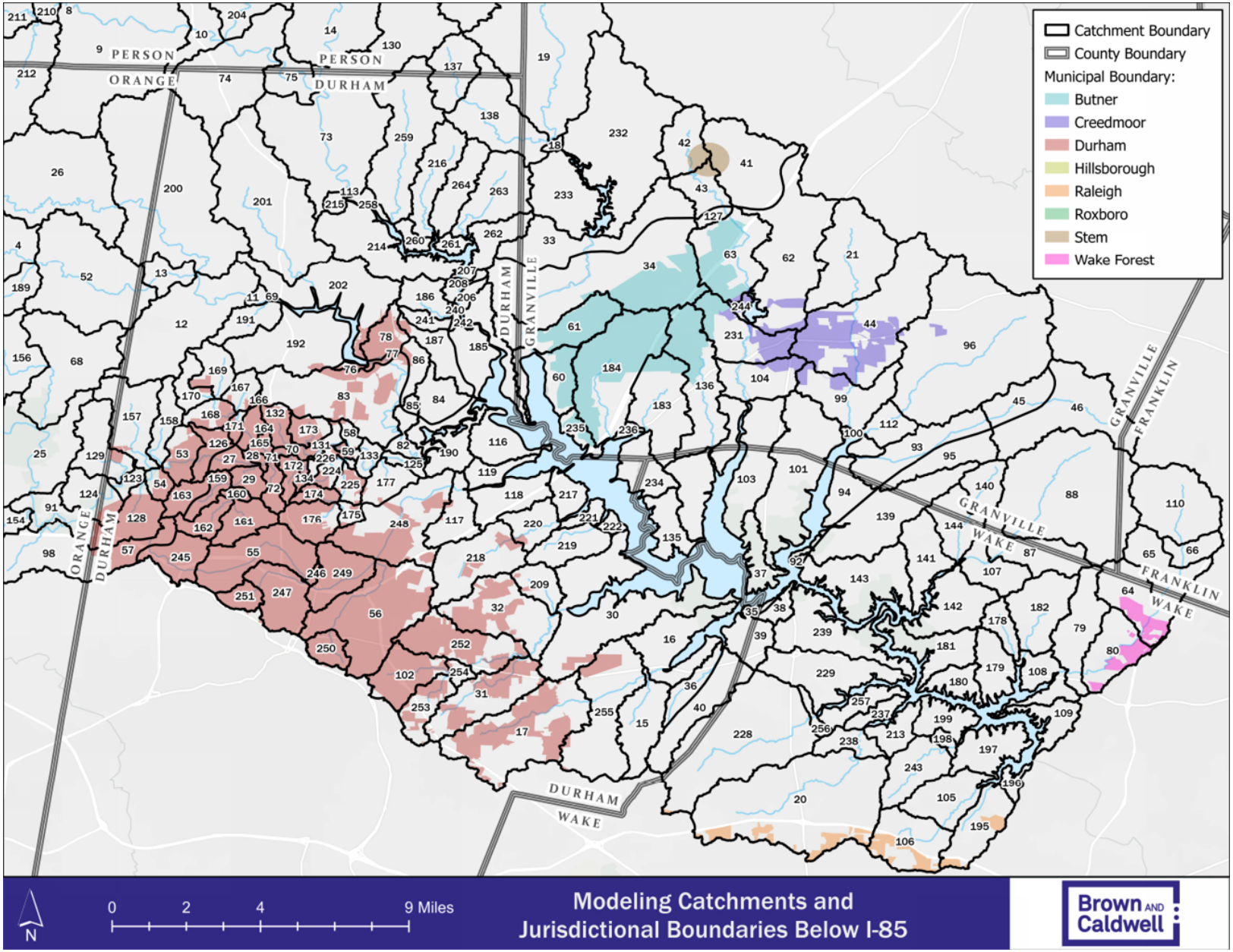

Catchment Boundary
County Boundary
Municipal Boundary:
Butner
Creedmoor
Durham
Hillsborough
Raleigh
Roxboro
Stem
Wake Forest
PERSON
ORANGE
DURHAM
GRANVILLE
FRANKLIN
WAKE
N
0 2 4 9 Miles
Modeling Catchments and Jurisdictional Boundaries Below I-85
Brown AND Caldwell

Table B-1. Catchment Numbers (Catch_ID) and River Reaches (River_ID)												
Catch_ID	River_ID	format_nam	Length_m	Down_ID	ElevMax_m	ElevMin_m	Downstream Reach In Catchment	AvgReachSlope	GNIS_ID	GNIS_Name	ReachCode	Model Area
1	40	R0040	3,316	39	181.2	167.3	Yes	0.4%	984804	Eno River	3020201000535	
2	41	R0041	2,977	40	190.39999	171.5	Yes	0.6%	984501	East Fork Eno River	3020201000538	1
3	99	R0099	3,938	40	183	171	Yes	0.3%	997013	West Fork Eno River	3020201000544	1
4	110	R0110	20,570	109	214.7	149.39999	Yes	0.3%	995155	South Fork Little River	3020201000491	1
5	27	R0027	1,345	26	140.3	135.5	Yes	0.4%	984804	Eno River	3020201000521	1
5	28	R0028	1,379	27	145.10001	138	No	0.5%	984804	Eno River	3020201000523	0
5	29	R0029	664	28	147.60001	142.39999	No	0.8%	984804	Eno River	3020201000524	0
5	30	R0030	1,692	29	149.8	142.8	No	0.4%	984804	Eno River	3020201000525	0
6	31	R0031	961	30	149.3	146	Yes	0.3%	984804	Eno River	3020201000525	1
6	32	R0032	3,535	31	152.7	146.8	No	0.2%	984804	Eno River	3020201000526	0
7	79	R0079	2,822	28	166.3	143.60001	Yes	0.8%	Not applicable	Unnamed Tributary	3020201001936	1
8	134	R0134	5,636	125	171.39999	154.8	Yes	0.3%	980082	Alderidge Creek	3020201000434	1
9	125	R0125	7,289	124	157.60001	142.7	Yes	0.2%	1024310	South Flat River	3020201000427	1
10	124	R0124	2,219	123	146	139.89999	Yes	0.3%	1024310	South Flat River	3020201000421	1
11	106	R0106	1,185	105	117	104.2	Yes	1.1%	1024107	Little River	3020201000466	1
12	107	R0107	3,956	106	130.2	116.9	Yes	0.3%	1024107	Little River	3020201000466	1
13	108	R0108	2,303	107	138.89999	127.4	Yes	0.5%	995155	South Fork Little River	3020201000479	1
14	130	R0130	24,195	129	204.89999	120.9	Yes	0.3%	1023943	Deep Creek	3020201001668	1
15	188	R0188	165	187	80	77	Yes	1.8%	988451	Lick Creek	3020201000576	1
15	191	R0191	2,760	187	92	77	No	0.5%	993570	Rocky Branch	3020201002117	0
16	187	R0187	828	-999	80	76	Yes	0.5%	988451	Lick Creek	3020201000571	1
17	190	R0190	5,687	189	101	82	Yes	0.3%	988451	Lick Creek	3020201000576	1
18	141	R0141	529	-999	115.2	108.3	Yes	1.3%	988037	Knap of Reeds Creek	3020201000377	1
19	144	R0144	9,084	141	146.7	112.3	Yes	0.4%	Not applicable	Knap of Reeds Creek	3020201000386	1
20	183	R0183	7,749	182	118	80	Yes	0.5%	989088	Lower Barton Creek	3020201000582	1
21	156	R0156	4,004	155	102	87.5	Yes	0.4%	993457	Robertson Creek	3020201000321	1
22	90	R0090	2,118	89	179.8	169.3	Yes	0.5%	994515	Sevenmile Creek	3020201000552	1
23	92	R0092	3,003	90	199	177.3	Yes	0.7%	994515	Sevenmile Creek	3020201000553	1
24	91	R0091	4,077	90	205.2	177.10001	Yes	0.7%	Not applicable	Sevenmile Creek	3020201001964	1
25	25	R0025	4,283	24	127.6	119.6	Yes	0.2%	984804	Eno River	3020201000520	1
25	26	R0026	2,813	25	136.8	126.5	No	0.4%	984804	Eno River	3020201000521	0
26	113	R0113	23,079	112	208.10001	155.89999	Yes	0.2%	991225	North Fork Little River	3020201003340	1
27	15	R0015	2,867	14	95.099999	86.199997	Yes	0.3%	984804	Eno River	3020201000506	1
28	14	R0014	517	13	86.400002	84.300003	Yes	0.4%	984804	Eno River	3020201000505	1
29	64	R0064	1,776	14	92.400002	86.400002	Yes	0.3%	Not applicable	Unnamed Tributary	3020201001988	1
30	192	R0192	405	-999	78.599999	76.300003	Yes	0.6%	988698	Little Lick Creek	3020201000563	1
31	198	R0198	5,733	193	106	80	Yes	0.5%	Not applicable	Not applicable	3020201002092	1
32	193	R0193	3,796	192	83	76.900002	Yes	0.2%	988698	Little Lick Creek	3020201002074	1
34	140	R0140	6,658	139	112.4	78.199997	Yes	0.5%	988037	Knap of Reeds Creek	3020201000374	2
36	186	R0186	4,593	-999	113	79	Yes	0.7%	988186	Laurel Creek	3020201001064	2
42	153	R0153	2,195	152	139.2	121.5	Yes	0.8%	988284	Ledge Creek	3020201000347	6
43	152	R0152	3,364	151	126.5	95.5	Yes	0.9%	988284	Ledge Creek	3020201000345	1
44	155	R0155	4,634	154	89.5	80.099999	Yes	0.2%	993457	Robertson Creek	3020201000315	1
46	160	R0160	6,046	159	128.60001	94.199997	Yes	0.6%	994969	Smith Creek	3020201000293	2
47	39	R0039	1,237	38	169.2	164	Yes	0.4%	984804	Eno River	3020201000534	1
48	35	R0035	397	34	157.8	152.5	Yes	1.3%	984804	Eno River	3020201000528	1
48	36	R0036	2,340	35	162.10001	156.60001	No	0.2%	984804	Eno River	3020201000531	0
49	34	R0034	2,237	33	155.2	151.39999	Yes	0.2%	984804	Eno River	3020201000528	1
50	33	R0033	1,937	32	160.3	148.89999	Yes	0.6%	984804	Eno River	3020201000526	1
51	84	R0084	2,382	33	186.8	152.2	Yes	1.5%	Not applicable	Unnamed Tributary	3020201001942	1
52	109	R0109	6,803	108	153.10001	136.39999	Yes	0.2%	995155	South Fork Little River	3020201000482	1
53	16	R0016	1,696	15	98	94.300003	Yes	0.2%	984804	Eno River	3020201000508	1
54	17	R0017	151	16	100	98	Yes	1.3%	984804	Eno River	3020201000509	1
54	18	R0018	972	17	101.9	99.199997	No	0.3%	984804	Eno River	3020201000510	0
55	207	R0207	5,970	206	111.4	90.099999	Yes	0.4%	1020135	Ellerbe Creek	3020201002029	1
56	209	R0209	4,712	204	105.4	82.5	Yes	0.5%	Not applicable	Not applicable	3020201002046	1
58	6	R0006	335	5	82.900002	78.800003	Yes	1.2%	984804	Eno River	3020201000500	2
59	4	R0004	620	3	82.800003	78.400002	Yes	0.7%	Not applicable	Eno River	3020201002008	1
59	5	R0005	1,294	4	82.900002	78.800003	No	0.3%	Not applicable	Eno River	3020201002008	0
61	139	R0139	1,920	-999	79.400002	76.800003	Yes	0.1%	988037	Knap of Reeds Creek	3020201000372	2
63	150	R0150	4,681	-999	95	85.099999	Yes	0.2%	988284	Ledge Creek	3020201000345	2
64	170	R0170	1,643	169	101.1	95	Yes	0.4%	987094	Horse Creek	3020201001049	1
65	171	R0171	2,430	170	109.1	98.300003	Yes	0.4%	987094	Horse Creek	3020201001051	1
66	172	R0172	1,205	171	112.9	106	Yes	0.6%	987094	Horse Creek	3020201001051	1
68	76	R0076	3,483	25	140.2	126.5	Yes	0.4%	982152	Buckwater Creek	3020201001931	2
70	10	R0010	385	9	86.099999	81.199997	Yes	1.3%	984804	Eno River	3020201000502	2
70	11	R0011	678	10	86.599999	81.900002	Yes	0.7%	984804	Eno River	3020201000503	0
71	12	R0012	82	11	84	82.699997	Yes	1.6%	984804	Eno River	3020201000503	1
71	13	R0013	180	12	84.5	82.900002	No	0.9%	984804	Eno River	3020201000504	0
72	57	R0057	1,528	12	110.4	82.900002	Yes	1.8%	Not applicable	Unnamed Tributary	3020201001997	1
73	121	R0121	7,348	120	120.8	105.9	Yes	0.2%	1023976	Flat River	3020201000400	1
74	123	R0123	3,503	122	145.5	131.39999	Yes	0.4%	1023976	Flat River	3020201000405	1
75	122	R0122	3,546	121	132.7	118.2	Yes	0.4%	1023976	Flat River	3020201000403	1

Table B-1. Catchment Numbers (Catch_ID) and River Reaches (River_ID)												
Catch_ID	River_ID	format_nam	Length_m	Down_ID	ElevMax_m	ElevMin_m	Downstream Reach In Catchment	AvgReachSlope	GNIS_ID	GNIS_Name	ReachCode	Model Area
77	104	R0104	968	103	111.3	80.300003	Yes	3.2%	1024107	Little River	3020201000453	2
79	168	R0168	1,235	-999	85	76	Yes	0.7%	987094	Horse Creek	3020201001048	2
80	169	R0169	3,990	168	96	81	Yes	0.4%	987094	Horse Creek	3020201001048	1
81	128	R0128	5,684	127	184	169.3	Yes	0.3%	1024310	South Flat River	3020201001780	1
82	102	R0102	2,334	1	80.099999	75.800003	Yes	0.2%	1024107	Little River	3020201000451	1
83	103	R0103	5,640	102	83.099999	76.599999	Yes	0.1%	1024107	Little River	3020201000452	1
87	164	R0164	1,577	163	86.300003	80.199997	Yes	0.4%	991071	New Light Creek	3020201000274	4
88	165	R0165	6,368	164	125.6	83	Yes	0.7%	997041	West Prong New Light Cr	3020201002136	1
89	43	R0043	5,507	42	215.89999	193.89999	Yes	0.4%	984501	East Fork Eno River	3020201000541	1
90	80	R0080	3,116	29	160.2	143.2	Yes	0.5%	995617	Strouds Creek	3020201001193	1
91	22	R0022	948	21	114.6	110.6	Yes	0.4%	984804	Eno River	3020201000513	1
91	23	R0023	2,622	22	122.4	114.7	No	0.3%	984804	Eno River	3020201000515	0
91	24	R0024	961	23	121.4	119.6	No	0.2%	984804	Eno River	3020201000516	0
93	159	R0159	6,351	-999	96.699997	78	Yes	0.3%	994969	Smith Creek	3020201000289	2
96	158	R0158	7,895	157	106.4	79.800003	Yes	0.3%	980854	Beaverdam Creek	3020201000301	3
97	88	R0088	1,435	87	166.8	159	Yes	0.5%	994515	Sevenmile Creek	3020201000550	1
97	89	R0089	2,284	88	172.89999	161.7	No	0.5%	994515	Sevenmile Creek	3020201000551	0
98	73	R0073	4,073	22	136.8	114.6	Yes	0.5%	993268	Rhodes Creek	3020201001168	1
99	154	R0154	2,473	-999	82.300003	77	Yes	0.2%	993457	Robertson Creek	3020201007159	1
102	196	R0196	2,939	195	105	88	Yes	0.6%	Not applicable	Not applicable	3020201002077	3
104	148	R0148	2,604	-999	85.199997	78.5	Yes	0.3%	988284	Ledge Creek	3020201000333	2
105	175	R0175	2,768	-999	94	76	Yes	0.7%	987018	Honeycutt Creek	3020201001042	1
106	176	R0176	2,573	175	112	90	Yes	0.9%	987018	Honeycutt Creek	3020201001043	1
107	163	R0163	1,260	-999	81.5	78.099999	Yes	0.3%	991071	New Light Creek	3020201000273	1
110	173	R0173	3,092	172	133.10001	111.6	Yes	0.7%	Not applicable	Horse Creek	3020201001472	3
111	37	R0037	350	36	163.7	160.89999	Yes	0.8%	984804	Corp. Lake - downstream	3020201024453	1
112	157	R0157	2,198	-999	81.099999	76.5	Yes	0.2%	980854	Beaverdam Creek	3020201007206	1
115	100	R0100	746	-999	194.39999	191	Yes	0.5%	997013	West Fork Eno River	3020201000545	3
117	203	R0203	622	-999	79.699997	76.599999	Yes	0.5%	1020135	Ellerbe Creek	3020201002022	2
120	42	R0042	1,317	-999	199	187.39999	Yes	0.9%	984501	East Fork Eno River	3020201000540	3
122	86	R0086	1,191	35	158.39999	156.8	Yes	0.1%	994515	Sevenmile Creek	3020201000549	2
122	87	R0087	875	86	171.8	157.5	No	1.6%	994515	Sevenmile Creek	3020201000550	0
123	19	R0019	999	18	105.4	100.6	Yes	0.5%	984804	Eno River	3020201000511	1
123	20	R0020	682	19	105.8	102.6	No	0.5%	984804	Eno River	3020201000512	0
124	21	R0021	2,722	20	111.4	104.1	Yes	0.3%	984804	Eno River	3020201000513	1
125	2	R0002	1,951	1	80.599999	75.900002	Yes	0.2%	984804	Eno River	3020201000497	1
127	151	R0151	683	150	96.099999	93.900002	Yes	0.3%	988284	Ledge Creek	3020201000345	2
128	71	R0071	2,329	18	135.10001	100.6	Yes	1.5%	Not applicable	Unnamed Tributary	3020201001986	1
129	72	R0072	2,221	19	142.39999	103.5	Yes	1.8%	Not applicable	Unnamed Tributary	3020201001927	1
130	129	R0129	1,354	121	127.3	119.1	Yes	0.6%	993502	Rock Fork Branch	3020201001180	1
131	7	R0007	1,629	6	84.800003	79.199997	Yes	0.3%	984804	Eno River	3020201000501	1
131	8	R0008	662	7	85.599999	79.900002	No	0.9%	984804	Eno River	3020201000501	0
131	9	R0009	536	8	83.300003	81.199997	No	0.4%	984804	Eno River	3020201000501	0
132	55	R0055	1,364	9	120.4	82.5	Yes	2.8%	Not applicable	Unnamed Tributary	3020201001914	1
133	3	R0003	2,836	2	78.599999	76.400002	Yes	0.1%	984804	Eno River	3020201000498	1
134	53	R0053	1,425	7	108.3	73.099999	Yes	2.5%	Not applicable	Unnamed Tributary	3020201007757	1
136	147	R0147	5,068	-999	94.900002	77.199997	Yes	0.3%	1951541	Little Ledge Creek	3020201000351	2
137	143	R0143	2,713	142	165.5	145.10001	Yes	0.8%	982520	Camp Creek	3020201001624	1
138	142	R0142	6,270	141	147.10001	113	Yes	0.5%	982520	Camp Creek	3020201001624	1
140	162	R0162	2,644	161	131.8	93.800003	Yes	1.4%	982142	Buckhorn Creek	3020201000983	2
144	161	R0161	2,774	-999	96.800003	77.699997	Yes	0.7%	982142	Buckhorn Creek	3020201000983	4
145	83	R0083	4,349	31	181.60001	147.2	Yes	0.8%	982756	Cates Creek	3020201001002	1
146	96	R0096	465	37	167.2	163.3	Yes	0.8%	989584	Corp. Lake - McGowan Cr	3020201024452	1
146	97	R0097	5,594	96	196.60001	165	No	0.6%	989584	McGowan Creek	3020201001123	0
147	98	R0098	3,813	39	194.39999	169.10001	Yes	0.7%	Not applicable	Unnamed Tributary	3020201001960	1
148	44	R0044	2,254	-999	202.3	187.7	Yes	0.6%	Not applicable	Unnamed Tributary	3020201001950	1
149	95	R0095	5,409	86	206	157.3	Yes	0.9%	993626	Rocky Run	3020201001970	1
150	85	R0085	795	84	196.2	183.2	Yes	1.6%	Not applicable	Unnamed Tributary	3020201001942	1
151	82	R0082	3,281	80	186.10001	159.3	Yes	0.8%	Not applicable	Unnamed Tributary	3020201001940	1
152	81	R0081	3,960	80	190.2	159.2	Yes	0.8%	995617	Strouds Creek	3020201001195	1
153	78	R0078	4,071	27	187.3	137.8	Yes	1.2%	Not applicable	Unnamed Tributary	3020201001977	1
154	74	R0074	5,729	23	144.5	120.4	Yes	0.4%	995554	Stony Creek	3020201001190	1
155	75	R0075	2,426	74	159.39999	143.8	Yes	0.6%	995554	Stony Creek	3020201001191	1
156	77	R0077	3,073	76	155.89999	138	Yes	0.6%	982152	Buckwater Creek	3020201001932	1
157	70	R0070	4,180	17	161.7	99.599999	Yes	1.5%	994514	Sevenmile Creek	3020201001920	1
158	69	R0069	2,325	16	139.2	98.099999	Yes	1.8%	Not applicable	Unnamed Tributary	3020201001917	1
159	68	R0068	1,850	64	108.7	91.199997	Yes	0.9%	Not applicable	Unnamed Tributary	3020201001991	1
160	65	R0065	539	64	94.300003	91.5	Yes	0.5%	Not applicable	Unnamed Tributary	3020201001989	1
161	67	R0067	1,125	65	102.5	93.199997	Yes	0.8%	Not applicable	Unnamed Tributary	3020201001995	1
162	66	R0066	1,524	65	115.6	92.900002	Yes	1.5%	Not applicable	Unnamed Tributary	3020201001990	1
164	59	R0059	2,049	58	117.5	94.199997	Yes	1.1%	983766	Crooked Creek	3020201001015	2
165	58	R0058	1,271	13	96.099999	84.400002	Yes	0.9%	983766	Crooked Creek	3020201001015	1
167	63	R0063	1,114	59	132.8	117.9	Yes	1.3%	Not applicable	Unnamed Tributary	3020201001915	2

Table B-1. Catchment Numbers (Catch_ID) and River Reaches (River_ID)												
Catch_ID	River_ID	format_nam	Length_m	Down_ID	ElevMax_m	ElevMin_m	Downstream Reach In Catchment	AvgReachSlope	GNIS_ID	GNIS_Name	ReachCode	Model Area
168	60	R0060	1,835	59	133	116.7	Yes	0.9%	983766	Crooked Creek	3020201001016	1
169	61	R0061	2,098	60	154.2	131.89999	Yes	1.1%	983766	Crooked Creek	3020201001017	1
170	62	R0062	1,241	60	156.8	131.89999	Yes	2.0%	Not applicable	Unnamed Tributary	3020201001916	1
172	56	R0056	1,522	10	102.8	82	Yes	1.4%	Not applicable	Unnamed Tributary	3020201001998	2
173	54	R0054	1,400	8	111.4	81.199997	Yes	2.2%	Not applicable	Unnamed Tributary	3020201007578	1
174	52	R0052	867	48	96.099999	87.699997	Yes	1.0%	Not applicable	Unnamed Tributary	3020201002006	1
175	49	R0049	109	48	88.5	87.800003	Yes	0.6%	Not applicable	Unnamed Tributary	3020201002001	1
175	51	R0051	373	49	92.5	88.099999	No	1.2%	Not applicable	Unnamed Tributary	3020201007853	0
176	50	R0050	1,562	49	102.7	88.400002	Yes	0.9%	Not applicable	Unnamed Tributary	3020201002001	1
177	45	R0045	1,281	2	86.900002	76.400002	Yes	0.8%	Not applicable	Unnamed Tributary	3020201002009	1
178	166	R0166	2,371	-999	110.4	78	Yes	1.4%	996842	Water Fork	3020201001480	1
182	167	R0167	2,726	-999	104.2	78	Yes	1.0%	989104	Lowery Creek	3020201001481	4
183	146	R0146	2,719	-999	84.599999	76.900002	Yes	0.3%	Not applicable	Unnamed Tributary	3020201000364	1
184	145	R0145	4,810	-999	90	75.400002	Yes	0.3%	Not applicable	Unnamed Tributary	3020201001596	1
186	138	R0138	1,977	137	115	81.800003	Yes	1.7%	Not applicable	Unnamed Tributary	3020201001835	2
188	136	R0136	4,351	127	183.89999	169.2	Yes	0.3%	982324	Bushy Fork Creek	3020201000443	2
189	114	R0114	6,833	109	175.7	149.60001	Yes	0.4%	985314	Forrest Creek	3020201000493	1
190	1	R0001	157	-999	75.900002	75.800003	Yes	0.1%	984804	Eno River	3020201000450	1
191	111	R0111	1,605	105	140.10001	104	Yes	2.2%	Not applicable	Unnamed Tributary	3020201001889	1
193	94	R0094	3,132	88	189.10001	160.7	Yes	0.9%	983695	Crabtree Creek	3020201001969	2
194	93	R0093	2,671	88	185.60001	161	Yes	0.9%	Not applicable	Unnamed Tributary	3020201001968	1
195	174	R0174	2,501	-999	103	76	Yes	1.1%	Not applicable	Unnamed Tributary	3020201002170	1
198	180	R0180	446	-999	79	77	Yes	0.4%	982820	Cedar Creek	3020201024030	3
200	112	R0112	7,559	107	158.5	127.2	Yes	0.4%	991225	North Fork Little River	3020201000469	2
201	116	R0116	6,527	115	141.39999	111	Yes	0.5%	990688	Mountain Creek	3020201000458	1
202	115	R0115	814	-999	113.3	104.5	Yes	1.1%	990688	Mountain Creek	3020201000457	1
203	132	R0132	10,199	131	173.89999	150.89999	Yes	0.2%	1024191	North Flat River	3020201000412	1
204	131	R0131	8,193	123	156	140.2	Yes	0.2%	1024191	North Flat River	3020201000407	1
205	133	R0133	5,645	132	192.39999	172.5	Yes	0.4%	Not applicable	North Flat River	3020201001745	1
206	118	R0118	2,132	117	80.300003	77.400002	Yes	0.1%	1023976	Flat River	3020201000394	1
207	119	R0119	242	118	87.199997	78.400002	Yes	3.6%	1023976	Flat River	3020201000395	1
209	197	R0197	2,230	192	90.400002	77	Yes	0.6%	Not applicable	Unnamed Tributary	3020201002071	2
210	126	R0126	1,472	125	160.7	154.60001	Yes	0.4%	1024310	South Flat River	3020201000436	1
211	127	R0127	6,535	126	171.5	156.2	Yes	0.2%	1024310	South Flat River	3020201000439	1
212	135	R0135	3,991	126	169.7	156.2	Yes	0.3%	988452	Lick Creek	3020201001065	1
215	120	R0120	447	-999	105.9	105.6	Yes	0.1%	1023976	Flat River	3020201024402	3
216	178	R0178	5,523	-999	141	102.9	Yes	0.7%	Not applicable	Not applicable	3020201001826	1
218	202	R0202	3,169	201	95.900002	82.599999	Yes	0.4%	991827	Panther Creek	3020201000556	2
219	200	R0200	2,632	-999	102.6	76.5	Yes	1.0%	Not applicable	Not applicable	3020201002064	1
220	201	R0201	2,647	-999	84.900002	77.699997	Yes	0.3%	991827	Panther Creek	3020201000556	1
223	101	R0101	4,305	100	207.89999	193.3	Yes	0.3%	997013	West Fork Eno River	3020201000547	3
224	47	R0047	2,275	46	108.2	80.300003	Yes	1.2%	Not applicable	Unnamed Tributary	3020201002003	1
225	48	R0048	1,994	46	88.099999	80.300003	Yes	0.4%	Not applicable	Unnamed Tributary	3020201002000	1
226	46	R0046	291	4	83.099999	79.599999	Yes	1.2%	Not applicable	Unnamed Tributary	3020201003319	1
227	38	R0038	1,702	37	166.2	163.39999	Yes	0.2%	984804	Corp. Lake - upstream	3020201024451	1
228	185	R0185	6,520	184	114	78	Yes	0.6%	996545	Upper Barton Creek	3020201000579	1
231	149	R0149	2,557	148	86.599999	80.300003	Yes	0.2%	988284	Ledge Creek	3020201000334	3
238	182	R0182	1,887	-999	84	76	Yes	0.4%	989088	Lower Barton Creek	3020201025244	7
240	137	R0137	839	117	82.199997	77.400002	Yes	0.6%	Not applicable	Unnamed Tributary	3020201001832	2
242	117	R0117	494	-999	79.099999	77.199997	Yes	0.4%	1023976	Flat River	3020201000393	2
243	181	R0181	4,232	180	131	79	Yes	1.2%	982820	Cedar Creek	3020201024030	1
245	208	R0208	2,918	207	149.89999	107.9	Yes	1.4%	1020135	Ellerbe Creek	3020201002030	2
246	206	R0206	369	205	93.599999	88.099999	Yes	1.5%	1020135	Ellerbe Creek	3020201002029	1
247	211	R0211	2,770	205	108.8	88.300003	Yes	0.7%	Not applicable	Not applicable	3020201002039	1
248	204	R0204	5,335	203	83.800003	77.300003	Yes	0.1%	1020135	Ellerbe Creek	3020201002025	1
249	205	R0205	3,182	204	95.099999	82.699997	Yes	0.4%	1020135	Ellerbe Creek	3020201002028	1
250	210	R0210	1,806	209	116	98	Yes	1.0%	Not applicable	Not applicable	3020201002046	1
251	212	R0212	631	211	110.8	105.2	Yes	0.9%	Not applicable	Not applicable	3020201002039	1
252	194	R0194	3,400	193	88	80	Yes	0.2%	988698	Little Lick Creek	3020201002075	1
253	199	R0199	2,193	195	101	89	Yes	0.5%	988698	Little Lick Creek	3020201002091	1
254	195	R0195	1,252	194	90	86	Yes	0.3%	988698	Little Lick Creek	3020201002076	1
255	189	R0189	2,789	188	85	77	Yes	0.3%	988451	Lick Creek	3020201000576	1
256	184	R0184	324	-999	81	78	Yes	0.9%	996545	Upper Barton Creek	3020201000579	1
259	177	R0177	7,297	-999	146.8	101.2	Yes	0.6%	984163	Dial Creek	3020201001018	3
263	179	R0179	4,712	-999	131.39999	102.4	Yes	0.6%	1024273	Rocky Creek	3020201001830	4

Notes:

Catchments 30 and 16 each contain a small reach at the upstream end that routes stream flow to Falls Lake. The catchment area, however, drains directly to Falls Lake and is part of the Near Lake Drainage.

Geographic Names Information System (GNIS)

Each catchment generally has one stream reach; a reach may include multiple segments.

Table B-2. Reach IDs and Corresponding UNRBA Monitoring Stations, Environment 1 Laboratory Location IDs, USGS Gage Numbers, and Lake Loading (LL) Flags					
Env1_ID	Station_ID	ReachID	USGS GageID	GageDescription	LL
JB01	ENR-49	R0035			No
JB02	ENR-41	R0031			No
JB03	ENR-23	R0021			No
JB04	NLR-27	R0113			No
JB05	SLR-22	R0109			No
JB06	LTR-16	R0107	USGS 0208521324	LITTLE RIVER AT SR1461 NEAR ORANGE FACTORY, NC	No
JB08	NFR-32	R0132			No
JB09	SFR-30	R0125			No
JB10	FLR-25	R0123			No
JB11	DPC-23	R0130			No
JB12	CMP-23	R0143			No
JB13	LLG-0.9	R0147			No
JB14	LGE-17	R0153			No
JB15	LGE-13	R0151			No
JB16	ROB-7.2	R0156			No
JB17	BUC-3.6	R0162			No
JB18	NLC-3.8	R0165			No
JB20	HSE-7.3	R0171			No
JB21	HSE-11	R0173			No
JB23	NFR-41	R0133			No
LL01	KRC-4.5	R0140	USGS 02086624	KNAP OF REEDS CREEK NEAR BUTNER, NC	Yes
LL02	FLR-5.0	R0118			Yes
LL03	LTR-1.9	R0103			Yes
LL04	ENR-8.3	R0003			Yes
LL05	ELC-3.1	R0275	USGS 02086849	ELLERBE CREEK NEAR GORMAN, NC	Yes
LL06	PAC-4.0	R0202			Yes
LL07	LLC-1.8	R0193			Yes
LL08	LKC-2.0	R0189			Yes
LL09	UNT-0.7	R0146			Yes
LL10	LGE-5.1	R0149			Yes
LL11	ROB-2.8	R0155			Yes
LL12	BDC-2.0	R0158			Yes
LL13	SMC-6.2	R0160			Yes
LL14	NLC-2.3	R0164			Yes
LL15	HSE-1.7	R0169			Yes
LL16	UBC-1.4	R0185			Yes
LL17	LBC-2.1	R0183			Yes
LL18	HCC-2.9	R0176			Yes
		R0011	USGS 02085070	ENO RIVER NEAR DURHAM, NC	Yes
		R0116	USGS 0208524090	MOUNTAIN CREEK AT SR1617 NR BAHAMA, NC	No
		R0120	USGS 02085500	FLAT RIVER AT BAHAMA,NC	No
		R0033	USGS 02085000	ENO RIVER AT HILLSBOROUGH, NC	No
		R0207	USGS 0208675010	ELLERBE CREEK AT CLUB BOULEVARD AT DURHAM, NC	No
		R0119	USGS 02086500	FLAT RIVER AT DAM NEAR BAHAMA, NC	Yes
			USGS 0208524975	LITTLE R BL LITTLE R TRIB AT FAIRNTOSH, NC	Yes

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
1	ORANGE		181.8	4,532,338	6.3	443	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
2	ORANGE		217.7	8,177,188	6.2	443	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
3	ORANGE		18.9	13,021,422	3.4	443	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
4	ORANGE		296.3	59,167,813	5.2	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
5	ORANGE		132.2	4,499,232	10.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
6	ORANGE	Hillsborough	324.2	6,000,652	8.5	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
7	ORANGE		248.7	6,498,736	5.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
8	PERSON		282.4	23,351,840	4.9	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
9	PERSON		199.3	32,038,415	5.6	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
10	PERSON		318.7	5,248,054	5.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
11	DURHAM		324.8	581,230	14.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
12	ORANGE		13.5	15,956,757	8.6	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
13	ORANGE		327.0	2,478,492	9.1	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
14	PERSON		280.1	83,080,228	6.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
15	DURHAM		111.4	6,159,056	12.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
16	DURHAM		89.5	7,830,950	10.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
17	DURHAM	Durham	84.5	15,802,947	9.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
18	GRANVILLE		66.0	364,710	14.0	250	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
19	GRANVILLE		282.5	26,995,601	6.4	250	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
20	WAKE	Raleigh	92.2	26,959,212	9.0	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
21	GRANVILLE	Creedmoor	229.0	11,494,569	6.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
22	ORANGE		331.4	6,020,105	6.4	494	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
23	ORANGE		69.4	8,016,829	5.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
24	ORANGE	Mebane	306.9	9,718,139	4.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
25	ORANGE		295.3	16,373,254	10.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
26	PERSON		295.4	52,503,954	5.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
27	DURHAM	Durham	18.9	1,317,176	11.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
28	DURHAM	Durham	314.6	345,098	10.1	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
29	DURHAM	Durham	114.1	1,587,427	8.1	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
30	DURHAM	Durham	90.2	18,705,259	8.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
31	DURHAM	Durham	92.4	8,317,996	7.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
32	DURHAM	Durham	356.0	9,846,557	6.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
33	GRANVILLE		285.0	10,292,915	7.9	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
34	GRANVILLE	Butner	193.6	24,261,857	6.1	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
35	DURHAM		107.6	403,026	13.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
36	DURHAM		23.6	2,533,517	10.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
37	WAKE		237.4	3,070,050	8.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
38	DURHAM		128.7	1,316,947	12.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
39	DURHAM		133.9	3,578,289	10.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
40	DURHAM	Raleigh	124.5	6,478,732	9.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
41	GRANVILLE	Stem	268.0	10,221,069	7.2	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
42	GRANVILLE	Stem	286.3	4,648,544	6.4	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
43	GRANVILLE	Stem	300.4	3,216,557	8.8	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
44	GRANVILLE	Creedmoor	222.7	19,820,472	7.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
45	GRANVILLE		265.8	3,842,048	6.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
46	GRANVILLE		160.5	12,488,830	7.6	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
47	ORANGE		218.1	5,682,857	6.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
48	ORANGE	Hillsborough	254.0	5,085,264	8.8	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
49	ORANGE	Hillsborough	149.4	5,654,910	11.1	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
50	ORANGE	Hillsborough	346.2	5,859,527	9.5	496	CZmv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Mafic metavolcanic rock	CZmv
51	ORANGE	Hillsborough	279.6	2,009,639	7.5	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
52	ORANGE		270.2	18,214,022	6.8	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
53	DURHAM	Durham	284.8	2,918,660	8.2	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
54	DURHAM	Durham	131.2	1,288,537	9.5	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
55	DURHAM	Durham	270.4	8,346,936	6.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
56	DURHAM	Durham	111.6	14,800,966	7.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
57	DURHAM	Durham	307.7	3,012,440	5.7	519	PzZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed gabbro and diorite	PzZg
58	DURHAM	Durham	253.6	802,980	6.5	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
59	DURHAM	Durham	218.9	458,517	5.2	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
60	GRANVILLE	Butner	193.2	4,672,877	5.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
61	GRANVILLE	Butner	246.8	6,779,663	4.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
62	GRANVILLE	Creedmoor	190.9	16,068,641	6.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
63	GRANVILLE	Butner	341.4	9,360,867	5.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
64	GRANVILLE	Wake Forest	302.3	6,468,026	6.5	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
65	FRANKLIN	Youngsville	272.1	5,998,228	6.7	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
66	FRANKLIN	Youngsville	217.0	2,334,610	6.4	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
67	ORANGE		325.6	4,426,250	2.6	400	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
68	ORANGE		221.3	13,007,400	9.2	365	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
69	DURHAM		288.4	96,993	12.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
70	DURHAM	Durham	330.7	363,766	7.4	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
71	DURHAM	Durham	261.2	34,816	11.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
72	DURHAM	Durham	101.2	1,595,992	5.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
73	DURHAM		256.5	20,175,618	8.6	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
74	PERSON		106.1	14,576,070	7.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
75	PERSON		335.0	3,552,337	10.5	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
76	DURHAM	Durham	76.0	335,774	11.2	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
77	DURHAM	Durham	8.0	393,766	10.7	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
78	DURHAM	Durham	283.8	2,740,457	8.8	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
79	GRANVILLE	Raleigh	219.0	6,800,274	8.5	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
80	WAKE	Wake Forest	58.4	5,953,039	8.5	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
81	PERSON		306.7	26,028,917	4.5	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
82	DURHAM		304.7	1,807,545	3.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
83	DURHAM	Durham	328.2	14,213,541	6.1	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
84	DURHAM		268.0	3,472,583	4.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
85	DURHAM		269.2	460,907	5.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
86	DURHAM	Durham	202.7	1,917,521	7.0	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
87	GRANVILLE		188.4	6,151,144	8.7	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
88	GRANVILLE		221.8	25,713,588	8.1	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
89	ORANGE		266.7	12,361,916	4.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
90	ORANGE		285.6	6,800,996	5.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
91	ORANGE	Durham	226.4	4,649,095	8.2	365	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
92	WAKE		249.5	225,711	10.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
93	GRANVILLE		270.5	6,856,920	6.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
94	GRANVILLE		175.9	4,781,018	7.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
95	GRANVILLE		136.3	4,527,765	10.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
96	GRANVILLE	Creedmoor	202.8	32,728,101	6.6	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
97	ORANGE		294.9	3,409,608	8.6	494	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
98	ORANGE	Durham	60.4	10,717,463	6.4	519	PzZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed gabbro and diorite	PzZg
99	GRANVILLE	Creedmoor	252.5	6,980,868	6.6	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
100	GRANVILLE		288.4	228,219	9.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
101	GRANVILLE		318.2	14,117,710	8.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
102	DURHAM	Durham	77.4	5,331,724	7.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
103	GRANVILLE		212.1	15,580,901	7.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
104	GRANVILLE	Creedmoor	230.7	5,376,371	6.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
105	WAKE		39.4	5,770,623	9.5	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
106	WAKE	Raleigh	73.6	7,086,778	7.7	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
107	WAKE		157.1	4,218,750	10.3	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
108	WAKE		145.4	4,142,034	11.0	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
109	WAKE	Raleigh	176.9	3,336,268	10.7	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
110	FRANKLIN		265.2	10,068,107	6.1	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
111	ORANGE		156.6	207,264	10.2	468	CZmv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Mafic metavolcanic rock	CZmv
112	GRANVILLE		183.3	2,727,830	6.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
113	DURHAM		211.2	134,830	14.9	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
114	ORANGE		223.3	4,390,725	3.9	400	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
115	ORANGE		317.6	1,015,461	5.2	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
116	DURHAM		62.6	3,982,001	4.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
117	DURHAM	Durham	46.0	4,080,119	7.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
118	DURHAM		109.3	4,750,371	5.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
119	DURHAM		295.1	2,098,044	6.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
120	ORANGE		253.5	1,190,743	5.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
121	ORANGE		334.2	717,352	4.9	400	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
122	ORANGE		310.9	1,227,144	9.4	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
123	DURHAM	Durham	233.4	1,085,536	9.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
124	ORANGE	Durham	300.3	4,323,240	9.5	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
125	DURHAM		78.9	1,018,422	8.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
126	DURHAM	Durham	301.5	2,180,576	7.2	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
127	GRANVILLE		37.7	801,806	6.1	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
128	DURHAM	Durham	121.7	4,184,500	8.3	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
129	ORANGE	Durham	286.2	5,506,568	6.7	365	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
130	PERSON		252.3	12,483,919	8.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
131	DURHAM	Durham	299.2	1,437,359	6.6	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
132	DURHAM	Durham	289.7	1,870,984	5.4	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
133	DURHAM	Durham	298.0	1,277,017	8.6	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
134	DURHAM	Durham	88.3	610,998	4.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
135	WAKE		219.3	3,758,317	5.6	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
136	GRANVILLE	Butner	300.0	9,884,912	5.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
137	PERSON		306.8	5,233,336	5.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
138	GRANVILLE		276.5	9,744,557	5.0	250	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
139	GRANVILLE		167.0	11,366,838	8.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
140	GRANVILLE		241.5	3,168,524	7.9	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
141	WAKE		294.9	5,446,238	9.8	509	PzZg	Raleigh Belt	Raleigh Belt	Intrusive Rocks	Metamorphosed gabbro and diorite	PzZg
142	WAKE		158.4	6,581,089	10.7	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
143	WAKE		243.7	9,103,172	11.1	509	PzZg	Raleigh Belt	Raleigh Belt	Intrusive Rocks	Metamorphosed gabbro and diorite	PzZg
144	GRANVILLE		282.7	4,843,590	9.5	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
145	ORANGE	Hillsborough	36.7	12,778,810	7.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
146	ORANGE		323.9	16,107,880	5.5	443	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
147	ORANGE		33.6	7,901,079	3.9	443	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
148	ORANGE		300.3	5,598,877	4.3	400	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
149	ORANGE		147.2	6,736,761	6.5	496	CZmv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Mafic metavolcanic rock	CZmv
150	ORANGE	Hillsborough	280.8	986,895	6.3	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
151	ORANGE		289.6	5,233,068	5.1	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
152	ORANGE	Hillsborough	326.1	11,140,440	5.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
153	ORANGE	Hillsborough	121.5	5,804,358	7.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
154	ORANGE		338.4	12,467,190	8.5	365	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
155	ORANGE	Hillsborough	297.2	10,792,335	8.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
156	ORANGE		323.2	10,806,587	7.5	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
157	ORANGE	Durham	298.6	7,017,001	8.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
158	DURHAM	Durham	260.1	3,032,556	7.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
159	DURHAM	Durham	343.7	1,648,089	8.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
160	DURHAM	Durham	165.3	541,803	5.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
161	DURHAM	Durham	111.4	3,501,328	4.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
162	DURHAM	Durham	20.0	2,418,415	5.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
163	DURHAM	Durham	341.6	1,948,875	9.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
164	DURHAM	Durham	266.9	1,427,989	6.7	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
165	DURHAM	Durham	285.4	922,516	7.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
166	DURHAM	Durham	177.4	177,498	3.8	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
167	DURHAM	Durham	253.3	1,876,113	5.6	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
168	DURHAM	Durham	342.1	2,089,586	7.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
169	DURHAM	Durham	318.9	3,099,097	9.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
170	DURHAM	Durham	296.0	2,316,529	8.6	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
171	DURHAM	Durham	351.0	769,857	7.2	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
172	DURHAM	Durham	80.3	1,333,662	6.0	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
173	DURHAM	Durham	281.0	1,856,503	5.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
174	DURHAM	Durham	321.4	1,230,391	6.2	502	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
175	DURHAM	Durham	176.6	949,499	5.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
176	DURHAM	Durham	46.0	3,738,898	5.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
177	DURHAM	Durham	92.4	2,878,654	5.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
178	WAKE		277.5	2,304,135	8.5	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
179	WAKE		351.0	4,087,588	10.2	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
180	WAKE		233.6	2,626,120	10.3	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
181	WAKE		172.3	5,272,005	12.4	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
182	WAKE		205.8	7,048,223	7.8	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
183	GRANVILLE	Butner	233.6	8,818,787	6.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
184	GRANVILLE	Butner	222.0	14,178,532	5.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
185	GRANVILLE		243.6	7,393,369	4.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
186	DURHAM		307.2	2,946,782	8.6	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
187	DURHAM	Durham	16.5	3,460,614	6.2	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
188	PERSON		63.5	18,376,652	7.1	142	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
189	ORANGE		337.5	21,433,028	5.1	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
190	DURHAM		110.9	5,276,077	4.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
191	DURHAM		19.6	3,071,141	7.9	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
192	DURHAM	Durham	27.4	10,705,357	6.4	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
193	ORANGE		103.0	4,298,706	7.6	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
194	ORANGE		55.5	4,620,717	8.0	494	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
195	WAKE	Raleigh	107.5	5,762,204	8.1	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
196	WAKE		123.8	1,058,271	11.4	262	CZlg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Lineated felsic mica gneiss	CZlg
197	WAKE		78.9	5,162,198	10.4	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
198	WAKE		55.9	724,113	7.7	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
199	WAKE		61.0	3,391,444	10.4	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
200	ORANGE		291.3	32,717,212	6.6	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
201	DURHAM		273.3	20,797,251	7.0	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
202	DURHAM	Durham	250.8	11,266,259	8.4	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
203	PERSON	Roxboro	267.5	52,016,537	5.4	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
204	PERSON		254.3	19,331,735	5.5	72	CZve	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Metavolcanic epi-clastic rock	CZve
205	PERSON	Roxboro	255.0	32,905,894	5.4	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
206	DURHAM		252.8	901,159	9.8	351	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
207	DURHAM		160.1	304,704	14.8	351	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
208	DURHAM		307.5	1,015,721	12.7	427	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
209	DURHAM	Durham	293.5	2,870,755	7.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
210	PERSON		248.2	1,143,895	6.0	135	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
211	PERSON		329.6	26,231,476	5.1	142	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
212	PERSON		76.1	13,687,354	5.0	136	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
213	WAKE		113.7	2,819,567	11.0	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
214	DURHAM		33.5	9,773,100	9.7	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
215	DURHAM		33.5	732,299	12.2	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
216	DURHAM		284.3	5,878,424	5.6	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
217	DURHAM		17.8	2,338,309	5.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
218	DURHAM	Durham	14.6	8,415,011	6.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
219	DURHAM		89.2	4,266,335	5.8	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
220	DURHAM	Durham	303.3	3,472,051	6.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
221	DURHAM		88.7	1,243,692	6.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
222	DURHAM		87.6	753,540	7.2	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
223	ORANGE		236.5	13,664,423	4.3	142	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
224	DURHAM	Durham	37.1	1,216,176	6.3	502	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
225	DURHAM	Durham	137.6	1,550,894	5.3	479	Jd	Triassic Basins	Durham-Sanford Subbasins	Intrusive Rocks	Diabase	Jd
226	DURHAM	Durham	108.6	935,318	12.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
227	ORANGE		230.5	3,849,138	7.4	338	CZph	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Phyllite and schist	CZph
228	DURHAM	Raleigh	77.4	21,362,670	9.8	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
229	WAKE		22.5	8,505,908	9.1	583	CZve	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Metavolcanic epi-clastic rock	CZve
230	ORANGE		183.4	3,060,489	6.0	400	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv

Table B-3. Catchment IDs, County, Aspect, Area, Slope, and Geologic Characteristics and Map Unit of Predominant Soil												
Catch_ID	CO_NAME	MunicipalBoundary	Aspect_Degrees	area_sqmet	Slope_pct	GEOL250_ID	GEOCODE	BELT	BELT2	TYPE	FORMATION	MapUnit
231	GRANVILLE	Butner	251.9	6,929,912	6.6	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
232	GRANVILLE		230.5	22,834,297	8.1	250	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
233	GRANVILLE		1.4	7,695,946	8.6	250	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
234	GRANVILLE		183.3	4,240,724	5.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
235	GRANVILLE	Butner	230.8	1,764,960	6.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
236	GRANVILLE		295.5	480,773	6.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
237	WAKE		316.3	1,642,067	11.5	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
238	WAKE		82.4	2,582,681	9.9	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
239	WAKE		61.2	9,092,857	11.0	509	PzZg	Raleigh Belt	Raleigh Belt	Intrusive Rocks	Metamorphosed gabbro and diorite	PzZg
240	DURHAM		309.4	363,254	3.9	427	CZiv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Intermediate metavolcanic rock	CZiv
241	DURHAM		325.6	1,354,251	6.9	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
242	DURHAM		323.9	77,808	6.1	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
243	WAKE		75.8	5,666,011	7.3	217	CZfg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Felsic mica gneiss	CZfg
244	GRANVILLE	Butner	350.2	609,355	8.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
245	DURHAM	Durham	289.9	3,835,854	6.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
246	DURHAM	Durham	235.4	321,363	4.4	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
247	DURHAM	Durham	37.4	5,744,565	6.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
248	DURHAM	Durham	270.8	11,877,535	6.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
249	DURHAM	Durham	307.7	5,011,867	7.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
250	DURHAM	Durham	88.9	2,145,382	6.7	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
251	DURHAM	Durham	8.4	1,699,215	5.3	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
252	DURHAM	Durham	78.2	7,837,343	6.5	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
253	DURHAM	Durham	82.8	3,704,501	7.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
254	DURHAM	Durham	90.4	886,907	6.9	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
255	DURHAM	Durham	92.5	12,329,061	10.0	340	TRc	Triassic Basins	Durham-Sanford Subbasins	Sedimentary Rocks	Chatham Group, Undivided	TRc
256	WAKE		127.0	945,751	10.3	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
257	WAKE		108.1	2,662,298	12.3	405	CZbg	Raleigh Belt	Raleigh Belt	Metamorphic Rocks	Biotite gneiss and schist	CZbg
258	DURHAM		245.1	870,222	13.8	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
259	PERSON		254.7	12,860,999	8.5	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
260	DURHAM		243.3	1,213,319	10.7	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
261	DURHAM		274.1	961,366	9.3	351	CZfv	Carolina Slate Belt	Carolina Slate Belt	Metamorphic Rocks	Felsic metavolcanic rock	CZfv
262	GRANVILLE		185.0	3,564,772	6.9	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
263	GRANVILLE		227.1	7,239,280	5.1	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg
264	DURHAM		279.2	4,837,112	5.6	60	CZg	Carolina Slate Belt	Carolina Slate Belt	Intrusive Rocks	Metamorphosed granitic rock	CZg

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
1	ORANGE	Eno	2016	1120	0.0	0.4	572.6	6.2	0.0	49.5	92.8	22.2	4.4	13.3	175.6	93.5	12.1	11.3	1.8
2	ORANGE	Eno	2016	2021	0.0	0.7	1104.9	11.5	0.0	63.6	170.5	40.8	8.0	24.5	292.0	119.3	22.2	34.0	4.9
3	ORANGE	Eno	2016	3213	0.0	0.8	1773.6	13.2	0.0	135.4	195.8	46.8	9.2	28.1	436.1	243.2	25.5	36.9	10.7
4	ORANGE	Little	2016	14604	4.2	6.2	6041.3	102.5	3.1	892.8	1526.3	365.0	72.0	219.0	2501.2	1495.6	198.6	186.7	96.5
5	ORANGE	Eno	2016	1112	0.0	0.2	821.9	2.5	0.0	23.8	37.2	8.9	1.8	5.3	59.8	60.6	4.8	14.3	2.9
6	ORANGE	Eno	2016	1483	0.0	0.1	535.2	1.0	0.0	93.1	14.9	3.6	0.7	2.1	48.7	202.7	1.9	72.5	4.0
7	ORANGE	Eno	2016	1606	0.0	0.6	621.9	10.8	0.2	50.3	160.1	38.3	7.6	23.0	346.1	120.6	20.8	35.0	24.0
8	PERSON	Flat	2016	5770	1.8	0.0	2482.2	148.0	2.4	359.8	396.1	41.3	123.5	184.6	869.4	608.9	56.3	74.4	39.6
9	PERSON	Flat	2016	7917	5.8	1.0	3192.2	178.6	0.0	357.6	684.8	105.4	146.8	237.8	1064.1	841.7	94.3	119.5	69.2
10	PERSON	Flat	2016	1297	0.0	0.0	347.9	21.7	0.0	95.8	62.7	7.3	18.0	27.4	142.2	345.2	8.8	81.1	2.2
11	DURHAM	Little	2016	144	0.0	0.0	85.5	0.0	0.0	2.2	4.0	1.0	0.2	0.6	18.2	25.2	0.4	0.8	1.3
12	DURHAM	Little	2016	3943	0.0	0.0	2107.7	0.1	0.2	375.2	58.5	14.3	3.1	8.1	263.5	644.9	6.4	104.5	14.7
13	DURHAM	Little	2016	612	0.0	0.0	255.6	0.0	0.0	72.7	23.3	5.7	1.2	3.2	90.8	93.5	2.5	19.2	2.5
14	PERSON	Flat	2016	20343	5.3	0.0	8502.1	406.0	2.4	1326.1	1086.5	113.3	338.7	506.4	2769.0	2753.7	154.4	245.3	131.0
15	DURHAM	Lick Creek	2016	1511	4.0	0.0	484.6	0.0	0.2	274.1	10.5	2.6	0.6	1.5	109.1	319.4	1.1	18.1	5.6
16	DURHAM	Near Lake	2016	1935	0.4	0.0	361.4	0.0	0.4	633.4	19.1	4.7	1.0	2.6	92.8	582.6	2.1	31.2	30.5
17	DURHAM	Lick Creek	2016	3887	0.7	0.0	588.7	0.0	7.8	742.8	57.5	14.1	3.0	8.0	404.3	799.9	6.3	68.7	7.8
18	GRANVILLE	Knap of Reeds	2016	90	0.0	0.0	65.8	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0
19	GRANVILLE	Knap of Reeds	2016	6578	3.6	8.5	2356.6	77.0	0.0	798.6	787.4	93.4	75.9	114.3	600.4	989.6	49.9	36.0	53.6
20	WAKE	Lower Barton C	2016	6611	2.0	1.4	1232.1	9.7	0.0	1030.8	41.9	11.2	0.0	46.7	90.3	1070.2	1.4	563.9	50.1
21	GRANVILLE	Robertson Cree	2016	2823	10.0	4.4	554.9	19.0	9.3	735.3	351.7	42.2	21.9	33.0	134.4	531.1	17.7	36.5	30.0
22	ORANGE	Eno	2016	1488	0.7	0.3	613.7	4.8	0.0	202.9	71.0	17.0	3.4	10.2	86.6	233.2	9.2	79.7	0.4
23	ORANGE	Eno	2016	1956	0.0	0.5	938.2	9.1	0.2	144.9	135.9	32.5	6.4	19.5	248.4	225.3	17.7	12.2	12.9
24	ORANGE	Eno	2016	2385	0.9	0.5	1041.3	9.0	0.0	263.7	133.4	31.9	6.3	19.1	212.0	170.5	17.3	108.3	7.1
25	ORANGE	Eno	2016	4046	0.0	0.1	2748.4	2.1	0.0	403.1	31.6	7.5	1.5	4.5	86.8	555.8	4.1	38.9	3.1
26	ORANGE	Little	2016	12971	0.0	4.9	5491.7	87.0	1.6	904.0	1233.0	293.0	61.8	181.3	2068.3	1317.8	160.6	195.3	83.2
27	DURHAM	Eno	2016	325	0.2	0.0	130.5	0.0	0.0	20.2	0.1	0.0	0.0	0.0	2.0	54.3	0.0	0.0	6.4
28	DURHAM	Eno	2016	85	0.0	0.0	37.8	0.0	0.0	10.9	0.4	0.1	0.0	0.1	1.8	22.0	0.0	0.0	5.3
29	DURHAM	Eno	2016	392	0.2	0.0	110.5	0.0	0.0	30.7	1.3	0.3	0.1	0.2	10.9	42.0	0.1	0.0	0.2
30	DURHAM	Near Lake	2016	4622	0.0	0.0	754.0	0.0	0.2	1460.4	101.0	24.8	5.3	14.0	513.8	1085.4	11.0	61.6	97.4
31	DURHAM	Little Lick Creel	2016	2052	1.8	0.0	191.0	0.0	0.0	278.4	18.2	4.5	1.0	2.5	122.8	244.3	2.0	83.0	29.2
32	DURHAM	Little Lick Creel	2016	2433	8.4	0.0	242.0	0.0	3.4	529.2	34.8	8.5	1.8	4.8	178.2	469.4	3.8	53.9	27.1
33	GRANVILLE	Knap of Reeds	2016	2543	0.0	5.3	406.0	22.6	0.0	647.3	425.3	52.2	26.4	40.3	153.4	599.5	22.0	21.1	7.3
34	GRANVILLE	Knap of Reeds	2016	5995	3.6	2.4	963.8	10.3	4.7	1535.8	196.7	24.6	12.2	18.8	92.2	1062.7	10.4	31.5	8.6
35	WAKE	Near Lake	2016	100	0.0	0.0	31.3	0.0	0.0	31.0	0.0	0.0	0.0	0.0	0.0	19.1	0.0	0.0	16.4
36	DURHAM	Laurel Creek	2016	626	0.7	0.0	147.3	0.0	0.0	201.3	6.4	1.6	0.3	0.9	32.0	176.5	0.7	9.9	1.1
37	WAKE	Near Lake	2016	759	0.0	0.2	33.9	1.5	0.0	540.1	6.5	1.7	0.0	7.2	7.5	98.0	0.2	7.9	26.2
38	WAKE	Near Lake	2016	325	0.0	0.2	149.7	1.0	0.0	49.1	4.5	1.2	0.0	5.1	8.2	63.1	0.1	9.1	8.0
39	WAKE	Near Lake	2016	884	0.0	0.2	234.5	1.3	0.2	280.1	5.9	1.6	0.0	6.2	7.3	261.3	0.2	22.5	14.4
40	DURHAM	Laurel Creek	2016	1601	2.5	0.0	502.4	0.1	0.0	398.1	12.0	2.9	0.6	2.2	95.0	357.7	1.3	41.4	4.2
41	GRANVILLE	Ledge Creek	2016	2514	0.0	4.2	779.2	17.9	1.8	361.1	329.8	39.6	20.5	30.9	83.7	389.6	16.6	66.6	23.4

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
42	GRANVILLE	Ledge Creek	2016	1137	0.2	2.5	274.6	10.5	0.0	129.9	194.6	23.4	12.1	18.3	16.2	297.1	9.8	18.0	8.7
43	GRANVILLE	Ledge Creek	2016	795	0.2	1.5	184.9	6.5	0.0	166.0	120.7	14.5	7.5	11.3	10.3	206.2	6.1	7.2	4.4
44	GRANVILLE	Robertson Cree	2016	4891	2.2	5.5	746.7	23.7	17.1	1116.9	438.2	52.6	27.3	41.1	120.2	1072.7	22.1	42.6	50.5
45	GRANVILLE	Smith Creek	2016	949	0.0	0.7	138.4	3.1	0.0	269.3	57.7	6.9	3.6	5.4	19.5	288.4	2.9	3.0	0.0
46	GRANVILLE	Smith Creek	2016	2970	0.2	2.0	638.4	17.2	0.0	707.7	178.8	19.2	12.0	15.0	51.9	865.7	8.1	82.1	16.0
47	ORANGE	Eno	2016	1404	0.0	0.4	794.2	6.1	0.0	39.8	90.1	21.6	4.3	12.9	152.4	120.3	11.7	22.5	8.7
48	ORANGE	Eno	2016	1257	0.9	0.1	549.1	1.3	0.0	173.5	19.4	4.6	0.9	2.8	66.7	221.7	2.5	28.1	5.8
49	ORANGE	Eno	2016	1397	25.6	0.1	503.8	2.3	0.0	58.7	33.6	8.0	1.6	4.8	79.6	145.0	4.4	127.8	9.6
50	ORANGE	Eno	2016	1448	4.2	0.0	403.1	0.8	0.0	22.4	11.8	2.8	0.6	1.7	31.2	77.0	1.5	77.8	6.0
51	ORANGE	Eno	2016	497	0.0	0.0	35.3	0.1	0.0	1.8	1.9	0.4	0.1	0.3	4.7	6.0	0.2	5.5	0.0
52	ORANGE	Little	2016	4501	0.9	1.0	2173.4	16.1	0.0	391.3	239.7	57.3	11.3	34.4	509.5	628.2	31.2	86.3	14.2
53	DURHAM	Eno	2016	721	0.2	0.0	122.4	0.0	0.0	26.9	1.5	0.4	0.1	0.2	7.5	74.4	0.2	19.2	2.0
54	DURHAM	Eno	2016	318	0.0	0.0	118.5	0.0	0.0	27.9	0.5	0.1	0.0	0.1	2.2	76.4	0.1	0.0	3.8
55	DURHAM	Ellerbe	2016	2048	7.3	0.0	26.4	0.0	0.2	110.0	0.9	0.2	0.0	0.1	3.2	57.3	0.1	0.0	9.8
56	DURHAM	Ellerbe	2016	3646	2.4	0.0	234.1	0.0	0.2	177.9	1.4	0.3	0.1	0.2	33.6	185.9	0.2	25.6	2.4
57	DURHAM	Ellerbe	2016	744	0.0	0.0	66.5	0.0	0.0	123.9	0.8	0.2	0.0	0.1	9.1	43.9	0.1	0.1	0.2
58	DURHAM	Eno	2016	198	0.0	0.0	140.7	0.0	0.0	2.7	0.5	0.1	0.0	0.1	2.5	10.5	0.1	4.4	2.0
59	DURHAM	Eno	2016	113	0.0	0.0	39.6	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.7	0.0
60	GRANVILLE	Near Lake	2016	1155	3.1	0.8	260.1	3.6	3.8	299.2	69.4	8.7	4.3	6.6	64.0	187.1	3.7	0.1	40.6
61	GRANVILLE	Knap of Reeds	2016	1675	0.2	1.3	222.2	5.5	2.0	421.2	115.8	15.6	7.1	11.5	44.4	247.8	6.6	2.1	10.4
62	GRANVILLE	Ledge Creek	2016	3952	0.0	6.8	754.1	29.2	5.1	1012.8	538.3	64.6	33.5	50.5	72.0	754.3	27.2	97.2	50.1
63	GRANVILLE	Ledge Creek	2016	2313	0.6	2.8	207.4	11.9	16.9	681.0	219.7	26.4	13.7	20.6	40.3	457.7	11.1	55.6	49.4
64	WAKE	Horse Creek	2016	1595	0.0	0.8	172.0	9.5	0.7	284.2	34.7	6.6	1.1	26.7	30.9	218.6	0.9	60.5	23.6
65	FRANKLIN	Horse Creek	2016	1481	0.9	0.0	321.6	33.6	0.2	364.4	75.8	0.3	8.0	1.2	29.7	280.7	0.0	55.8	3.6
66	FRANKLIN	Horse Creek	2016	574	0.0	0.0	45.9	25.1	0.0	245.2	56.3	0.0	6.0	0.0	4.5	110.5	0.0	16.8	0.0
67	ORANGE	Eno	2016	1089	0.0	0.4	437.1	6.0	0.0	71.8	89.2	21.3	4.2	12.8	139.7	113.2	11.6	21.2	15.6
68	ORANGE	Eno	2016	3214	0.0	0.5	1595.0	9.1	0.0	280.9	135.5	32.4	6.4	19.4	316.0	502.2	17.6	40.2	4.9
69	DURHAM	Little	2016	24	0.0	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.6	0.0	0.0	0.2
70	DURHAM	Eno	2016	90	0.2	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
71	DURHAM	Eno	2016	9	0.0	0.0	4.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.4
72	DURHAM	Eno	2016	394	0.7	0.0	46.1	0.0	0.0	9.6	0.0	0.0	0.0	0.0	1.6	29.2	0.0	0.0	0.0
73	DURHAM	Flat	2016	4985	2.7	0.0	1963.5	0.0	0.0	708.8	284.3	69.7	14.9	39.4	586.5	817.1	30.9	38.9	48.2
74	DURHAM	Flat	2016	3602	2.7	0.0	1547.2	6.6	0.2	251.0	174.6	40.4	13.4	29.7	609.4	482.1	19.7	110.9	32.7
75	DURHAM	Flat	2016	878	0.0	0.0	422.7	2.5	0.2	39.6	32.3	7.0	3.4	6.7	111.0	183.8	3.7	11.7	4.2
76	DURHAM	Little	2016	83	0.0	0.0	42.5	0.0	0.0	4.2	0.6	0.2	0.0	0.1	3.8	2.4	0.1	0.0	21.6
77	DURHAM	Little	2016	97	0.0	0.0	7.2	0.0	0.0	11.4	0.7	0.2	0.0	0.1	6.5	6.5	0.1	0.0	1.3
78	DURHAM	Little	2016	677	0.2	0.0	96.4	0.0	0.0	29.4	1.7	0.4	0.1	0.2	8.1	38.1	0.2	0.6	0.9
79	WAKE	Horse Creek	2016	1680	0.0	1.8	202.0	12.1	0.0	466.1	52.1	13.9	0.0	58.1	72.6	446.0	1.7	72.3	24.7
80	WAKE	Horse Creek	2016	1446	0.0	0.7	219.7	4.7	0.9	264.8	20.4	5.4	0.0	22.7	43.6	332.5	0.7	68.6	1.8
81	PERSON	Flat	2016	6383	1.6	0.0	1960.2	230.7	0.7	474.1	617.3	64.4	192.5	287.7	1101.5	717.7	87.7	94.9	68.7
82	DURHAM	Little	2016	447	0.0	0.0	65.8	0.0	12.7	14.1	18.1	4.4	0.9	2.5	27.8	21.4	2.0	3.9	3.6

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
83	DURHAM	Little	2016	3512	3.3	0.0	1238.0	0.0	17.8	252.0	32.7	8.0	1.7	4.5	185.4	457.4	3.6	108.8	35.6
84	DURHAM	Near Lake	2016	858	0.2	0.0	308.2	0.0	0.2	89.2	8.5	2.1	0.4	1.2	41.3	139.2	0.9	34.0	4.2
85	DURHAM	Little	2016	114	0.0	0.0	25.3	0.0	0.0	4.9	0.5	0.1	0.0	0.1	6.4	30.0	0.1	3.4	4.2
86	DURHAM	Little	2016	474	0.0	0.0	176.5	0.0	1.3	66.2	1.0	0.2	0.1	0.1	21.0	77.7	0.1	0.0	0.2
87	WAKE	New Light Cree	2016	1520	0.0	2.5	197.7	14.9	1.3	439.1	123.6	21.7	4.8	58.9	85.1	381.7	5.4	16.5	8.5
88	GRANVILLE	New Light Cree	2016	6351	0.7	5.3	1458.5	58.3	0.4	1163.1	500.9	50.7	34.6	40.0	169.0	1792.5	21.3	137.9	22.7
89	ORANGE	Eno	2016	3041	0.7	1.7	1029.8	28.4	2.4	117.1	422.1	100.9	19.9	60.6	611.5	170.3	54.9	49.2	66.2
90	ORANGE	Eno	2016	1681	0.0	0.6	662.2	9.2	0.0	46.5	137.2	32.8	6.5	19.7	244.1	146.8	17.9	82.7	2.2
91	ORANGE	Eno	2016	1149	0.0	0.1	377.7	1.2	0.0	166.9	17.6	4.2	0.8	2.5	43.7	263.3	2.3	41.2	10.0
92	WAKE	Near Lake	2016	56	0.0	0.0	3.1	0.0	2.7	37.2	0.0	0.0	0.0	0.0	0.0	10.8	0.0	0.0	2.0
93	GRANVILLE	Smith Creek	2016	1694	0.0	1.5	206.7	6.6	4.2	626.8	122.7	14.7	7.6	11.5	20.7	317.7	6.2	15.1	13.6
94	WAKE	Near Lake	2016	1181	0.2	0.1	72.7	0.5	0.0	653.9	7.0	1.0	0.4	1.5	23.2	226.6	0.3	14.3	87.8
95	GRANVILLE	Smith Creek	2016	1119	0.0	0.1	192.8	0.6	0.0	428.8	11.5	1.4	0.7	1.1	4.0	411.5	0.6	6.6	0.4
96	GRANVILLE	Beaverdam Cre	2016	8059	7.6	14.1	1260.9	60.5	16.7	2448.7	1117.0	134.1	69.5	104.8	77.0	1644.0	56.3	97.5	50.1
97	ORANGE	Eno	2016	843	0.0	0.2	474.8	3.0	0.0	106.0	45.3	10.8	2.1	6.5	30.2	88.0	5.9	45.7	0.0
98	ORANGE	Eno	2016	2628	0.2	0.2	815.6	2.8	0.0	464.5	42.2	10.1	2.0	6.1	140.1	546.1	5.5	121.5	15.8
99	GRANVILLE	Robertson Cree	2016	1725	1.1	3.5	215.7	14.9	13.8	395.7	274.9	33.0	17.1	25.8	40.9	419.2	13.9	19.4	28.7
100	GRANVILLE	Near Lake	2016	57	0.0	0.0	4.6	0.2	0.0	14.6	3.0	0.4	0.2	0.3	1.5	20.8	0.2	2.0	4.8
101	WAKE	Near Lake	2016	3489	5.1	5.0	203.5	27.5	0.4	1389.8	287.6	44.4	13.7	95.6	224.3	653.0	13.3	56.7	48.5
102	DURHAM	Little Lick Creel	2016	1307	0.7	0.0	93.9	0.0	0.2	90.3	8.0	2.0	0.4	1.1	89.3	107.9	0.9	3.6	3.3
103	WAKE	Near Lake	2016	3850	0.0	5.1	385.6	32.3	2.9	1346.3	198.6	41.7	4.8	142.7	117.9	1105.1	7.8	49.5	77.8
104	GRANVILLE	Ledge Creek	2016	1329	0.7	2.4	223.8	10.2	0.9	279.6	188.0	22.6	11.7	17.6	22.4	281.0	9.5	19.4	8.2
105	WAKE	Honeycutt Cree	2016	1426	0.0	0.3	229.6	2.0	0.7	394.0	8.8	2.4	0.0	9.8	32.8	274.4	0.3	65.1	18.1
106	WAKE	Honeycutt Cree	2016	1722	1.6	0.4	120.3	3.0	0.0	441.9	13.1	3.5	0.0	14.6	21.5	327.3	0.4	128.5	23.1
107	WAKE	New Light Cree	2016	1042	0.0	0.6	212.1	4.3	0.0	187.1	18.7	5.0	0.0	20.8	23.1	318.0	0.6	27.8	2.4
108	WAKE	Near Lake	2016	1022	0.0	0.4	241.9	2.6	0.2	173.2	11.1	3.0	0.0	12.3	54.5	361.5	0.4	43.0	24.7
109	WAKE	Near Lake	2016	808	0.0	0.6	87.1	3.9	0.0	135.7	16.7	4.5	0.0	18.6	27.7	272.4	0.5	16.7	16.2
110	FRANKLIN	Horse Creek	2016	2449	0.4	0.0	604.1	67.1	1.8	516.5	150.3	0.0	16.0	0.0	29.7	502.9	0.0	96.2	4.4
111	ORANGE	Eno	2016	51	0.0	0.0	13.2	0.0	0.0	7.8	0.1	0.0	0.0	0.0	1.6	20.0	0.0	3.3	4.3
112	GRANVILLE	Beaverdam Cre	2016	674	0.9	0.9	84.9	3.9	4.7	182.4	72.6	8.7	4.5	6.8	7.1	90.0	3.7	5.7	16.0
113	DURHAM	Flat	2016	33	0.0	0.0	27.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.7
114	ORANGE	Eno	2016	1085	0.4	0.6	522.0	9.3	0.0	19.3	139.1	33.3	6.6	20.0	145.5	74.9	18.1	9.9	28.2
115	ORANGE	Eno	2016	251	2.5	0.1	121.0	2.3	0.0	0.4	34.3	8.2	1.6	4.9	39.3	10.0	4.5	3.7	2.7
116	DURHAM	Near Lake	2016	984	0.0	0.0	120.7	0.0	15.6	120.5	45.5	11.1	2.4	6.3	125.4	133.2	4.9	13.5	144.5
117	DURHAM	Ellerbe	2016	1008	1.1	0.0	260.9	0.0	0.0	189.9	11.7	2.9	0.6	1.6	72.8	231.5	1.3	37.7	6.9
118	DURHAM	Near Lake	2016	1174	26.0	0.0	189.2	0.0	4.2	282.4	27.6	6.8	1.4	3.8	117.9	208.1	3.0	96.1	16.9
119	DURHAM	Near Lake	2016	518	1.8	0.0	70.7	0.0	2.9	123.9	16.3	4.0	0.9	2.3	97.2	94.2	1.8	8.3	11.1
120	ORANGE	Eno	2016	294	0.0	0.1	114.9	2.1	0.2	7.4	30.7	7.3	1.4	4.4	64.2	16.5	4.0	6.5	0.0
121	ORANGE	Eno	2016	177	0.0	0.1	81.9	1.3	0.2	0.2	19.1	4.6	0.9	2.7	25.1	11.1	2.5	6.4	5.2
122	ORANGE	Eno	2016	303	0.0	0.1	143.4	1.6	0.0	6.2	23.8	5.7	1.1	3.4	38.3	31.9	3.1	16.0	0.4
123	DURHAM	Eno	2016	268	0.0	0.0	71.6	0.0	0.0	76.1	1.7	0.4	0.1	0.2	7.8	76.5	0.2	4.3	3.8

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)																		
Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
124	ORANGE	Eno	2016	1068	0.0	0.0	332.4	0.7	0.0	196.4	11.4	2.7	0.5	1.6	94.5	214.4	1.5	17.6	2.2
125	DURHAM	Eno	2016	252	0.0	0.0	127.5	0.0	0.0	24.6	8.5	2.1	0.4	1.2	26.8	51.4	0.9	0.4	0.0
126	DURHAM	Eno	2016	539	0.0	0.0	82.4	0.0	0.0	53.7	0.7	0.2	0.0	0.1	2.9	60.1	0.1	0.3	2.0
127	GRANVILLE	Ledge Creek	2016	198	0.0	0.3	20.2	1.1	0.0	97.8	20.5	2.5	1.3	1.9	0.8	29.5	1.0	2.7	3.1
128	DURHAM	Eno	2016	1034	0.0	0.0	165.5	0.0	0.0	16.0	1.9	0.5	0.1	0.3	15.2	62.1	0.2	1.0	0.4
129	ORANGE	Eno	2016	1361	0.0	0.1	397.8	0.8	0.0	357.5	15.2	3.7	0.7	2.2	58.7	290.0	1.9	27.2	3.6
130	PERSON	Flat	2016	3058	0.0	0.0	1308.7	25.0	0.0	335.3	83.9	11.1	21.7	33.5	365.0	514.4	11.4	27.4	8.7
131	DURHAM	Eno	2016	355	9.3	0.0	111.9	0.0	0.0	12.0	4.0	1.0	0.2	0.5	18.0	38.3	0.4	5.1	0.0
132	DURHAM	Eno	2016	462	0.0	0.0	91.3	0.0	0.0	19.1	0.6	0.1	0.0	0.1	17.0	44.9	0.1	1.0	0.0
133	DURHAM	Eno	2016	316	0.0	0.0	173.3	0.0	0.0	27.7	0.8	0.2	0.0	0.1	4.2	70.7	0.1	11.9	2.7
134	DURHAM	Eno	2016	151	3.1	0.0	22.8	0.0	0.0	34.0	0.0	0.0	0.0	0.0	0.4	14.6	0.0	0.0	0.0
135	WAKE	Near Lake	2016	929	0.0	1.2	89.4	8.5	0.2	359.7	36.8	9.8	0.0	41.0	41.3	249.4	1.2	6.3	14.2
136	GRANVILLE	Little Ledge Cre	2016	2443	0.4	4.4	257.8	19.3	9.1	621.3	343.1	41.8	21.1	36.0	87.2	357.5	17.2	37.5	37.6
137	PERSON	Knap of Reeds	2016	1293	0.0	0.0	420.8	11.8	0.2	78.0	70.3	12.8	11.8	20.1	293.1	205.9	8.7	25.4	4.5
138	DURHAM	Knap of Reeds	2016	2408	0.0	0.0	497.6	2.2	0.4	951.3	106.4	25.2	7.1	16.6	168.5	430.4	11.7	14.7	15.1
139	WAKE	Near Lake	2016	2809	0.0	1.3	370.9	6.1	0.0	1114.0	98.7	12.4	5.9	13.3	43.9	922.6	4.9	37.9	24.9
140	GRANVILLE	Buckhorn Cree	2016	783	0.2	1.1	84.6	4.9	0.0	168.4	89.9	10.8	5.6	8.4	5.5	288.9	4.5	8.9	10.5
141	WAKE	Near Lake	2016	1346	0.0	0.3	219.1	2.1	0.9	323.0	9.2	2.5	0.0	10.3	20.3	439.7	0.3	35.6	7.6
142	WAKE	Near Lake	2016	1626	0.0	1.0	318.5	6.6	0.4	528.1	28.3	7.6	0.0	31.6	52.9	437.8	0.9	27.2	36.9
143	WAKE	Near Lake	2016	2249	0.0	0.0	361.0	0.3	0.9	922.6	1.4	0.4	0.0	1.5	19.4	692.7	0.0	26.2	34.7
144	WAKE	Buckhorn Cree	2016	1197	0.0	1.0	108.6	6.2	0.0	303.6	44.0	8.5	1.4	26.1	26.9	420.5	1.8	31.1	4.0
145	ORANGE	Eno	2016	3153	0.0	0.2	1339.6	3.3	0.0	208.3	48.5	11.6	2.3	7.0	176.4	288.4	6.3	161.8	12.2
146	ORANGE	Eno	2016	3966	0.0	1.1	1580.2	18.0	0.4	260.5	267.8	64.0	12.6	38.4	507.5	497.0	34.8	144.3	24.7
147	ORANGE	Eno	2016	1947	0.0	0.8	833.4	12.7	0.0	84.2	188.5	45.1	8.9	27.1	378.3	130.9	24.5	38.8	12.7
148	ORANGE	Eno	2016	1384	0.0	0.6	589.3	9.5	0.0	45.0	140.7	33.7	6.6	20.2	249.8	107.1	18.3	7.3	17.8
149	ORANGE	Eno	2016	1648	0.0	0.2	853.5	2.8	0.0	140.9	42.2	10.1	2.0	6.1	90.3	283.1	5.5	40.3	8.9
150	ORANGE	Eno	2016	244	0.0	0.0	42.8	0.5	0.0	6.0	7.4	1.8	0.3	1.1	15.7	32.1	1.0	5.6	0.4
151	ORANGE	Eno	2016	1293	0.0	0.6	572.3	9.5	0.0	45.2	141.9	33.9	6.7	20.4	261.2	120.6	18.5	16.2	11.1
152	ORANGE	Eno	2016	2753	0.0	0.6	1139.9	9.2	0.0	190.2	136.3	32.6	6.4	19.6	298.7	387.6	17.7	90.6	8.7
153	ORANGE	Eno	2016	1434	0.0	0.2	777.0	2.5	0.0	46.2	37.9	9.1	1.8	5.4	76.9	129.1	4.9	51.4	10.4
154	ORANGE	Eno	2016	3070	0.0	0.2	1650.4	3.5	0.2	211.7	51.4	12.3	2.4	7.4	165.3	580.7	6.7	106.4	28.5
155	ORANGE	Eno	2016	2654	0.0	0.1	1327.1	1.7	0.0	209.7	24.6	5.9	1.2	3.5	51.2	377.2	3.2	157.5	16.7
156	ORANGE	Eno	2016	2670	0.0	0.9	1120.2	14.9	0.0	182.8	221.8	53.0	10.5	31.8	471.1	352.3	28.8	22.5	12.0
157	DURHAM	Eno	2016	1734	0.0	0.0	548.0	0.6	0.0	189.3	17.9	4.3	0.9	2.5	66.0	404.9	2.1	81.9	23.1
158	DURHAM	Eno	2016	749	0.0	0.0	179.7	0.0	0.0	89.3	3.1	0.8	0.2	0.4	15.7	139.8	0.3	38.8	7.6
159	DURHAM	Eno	2016	407	0.0	0.0	60.5	0.0	0.0	32.7	2.7	0.7	0.1	0.4	22.1	49.8	0.3	0.0	12.2
160	DURHAM	Eno	2016	134	0.2	0.0	10.9	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.4	4.2	0.0	0.0	0.4
161	DURHAM	Eno	2016	865	0.0	0.0	2.7	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	2.0
162	DURHAM	Eno	2016	598	0.0	0.0	26.5	0.0	0.0	4.9	1.0	0.2	0.1	0.1	6.1	6.7	0.1	0.0	0.0
163	DURHAM	Eno	2016	482	0.0	0.0	102.7	0.0	0.0	76.6	1.9	0.5	0.1	0.3	27.3	114.5	0.2	0.0	0.7
164	DURHAM	Eno	2016	353	0.0	0.0	92.7	0.0	0.0	13.3	2.0	0.5	0.1	0.3	9.3	45.3	0.2	0.0	0.0

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
165	DURHAM	Eno	2016	228	0.0	0.0	57.3	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0	29.8	0.0	0.0	0.0
166	DURHAM	Eno	2016	44	0.0	0.0	0.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0	1.7	0.9	0.0	1.6	0.0
167	DURHAM	Eno	2016	464	0.0	0.0	166.2	0.0	0.0	28.5	1.0	0.3	0.1	0.1	8.1	94.0	0.1	22.6	3.3
168	DURHAM	Eno	2016	516	0.0	0.0	144.1	0.0	0.0	57.6	0.4	0.1	0.0	0.1	2.7	76.5	0.0	15.5	1.3
169	DURHAM	Eno	2016	766	0.0	0.0	369.7	0.0	0.0	58.8	5.3	1.3	0.3	0.7	30.6	156.9	0.6	33.1	0.0
170	DURHAM	Eno	2016	572	0.0	0.0	267.5	0.0	0.0	61.1	9.8	2.4	0.5	1.4	50.0	110.6	1.1	14.1	1.1
171	DURHAM	Eno	2016	190	0.0	0.0	38.4	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.4	20.0	0.0	0.0	0.0
172	DURHAM	Eno	2016	330	0.0	0.0	16.5	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0	0.4
173	DURHAM	Eno	2016	459	0.0	0.0	171.6	0.0	0.0	9.8	1.5	0.4	0.1	0.2	7.2	23.6	0.2	11.2	0.0
174	DURHAM	Eno	2016	304	0.2	0.0	31.1	0.0	1.3	72.7	0.1	0.0	0.0	0.0	25.8	63.3	0.0	0.0	3.1
175	DURHAM	Eno	2016	235	0.0	0.0	22.9	0.0	0.4	103.1	0.1	0.0	0.0	0.0	4.3	65.2	0.0	6.1	0.9
176	DURHAM	Eno	2016	924	1.1	0.0	45.0	0.0	0.2	53.0	0.0	0.0	0.0	0.0	3.6	61.1	0.0	2.1	5.6
177	DURHAM	Eno	2016	711	0.7	0.0	88.6	0.0	0.7	183.9	16.9	4.1	0.9	2.3	66.3	154.0	1.8	18.9	3.8
178	WAKE	Water Fork	2016	569	0.0	0.1	37.1	0.8	0.0	160.5	3.6	1.0	0.0	4.0	24.7	123.6	0.1	11.2	14.0
179	WAKE	Near Lake	2016	1010	0.0	0.6	263.9	4.1	0.0	142.7	17.5	4.7	0.0	19.5	35.3	261.3	0.6	39.8	2.0
180	WAKE	Near Lake	2016	649	0.0	0.9	86.0	6.4	0.0	209.5	27.7	7.4	0.0	30.8	40.1	196.8	0.9	19.3	6.4
181	WAKE	Near Lake	2016	1303	0.0	0.3	151.7	2.2	0.2	540.3	9.6	2.6	0.0	10.7	19.2	370.3	0.3	20.1	43.4
182	WAKE	Lowery Creek	2016	1742	0.2	3.1	267.7	21.2	0.0	348.5	91.6	24.5	0.0	102.0	87.3	460.3	3.0	34.4	18.0
183	GRANVILLE	Unnamed Tribu	2016	2179	1.3	3.7	245.8	16.6	1.8	584.4	280.9	34.8	17.0	34.1	78.0	494.9	14.0	39.1	36.0
184	GRANVILLE	Unnamed Tribu	2016	3504	136.6	1.1	351.4	4.9	105.9	797.3	90.3	10.8	5.6	8.5	146.2	347.0	4.6	114.0	79.6
185	DURHAM	Near Lake	2016	1827	0.0	0.1	384.1	0.6	4.6	196.4	60.3	13.4	3.3	7.9	148.6	251.4	5.9	11.7	16.7
186	DURHAM	Flat	2016	728	0.0	0.0	476.7	0.0	0.0	41.2	1.5	0.4	0.1	0.2	16.2	146.1	0.2	3.3	0.0
187	DURHAM	Near Lake	2016	855	0.7	0.0	385.1	0.0	0.0	106.9	8.9	2.2	0.5	1.2	46.9	151.3	1.0	7.6	0.4
188	PERSON	Flat	2016	4536	1.3	0.0	1940.1	133.3	0.4	248.9	359.7	38.0	111.2	166.5	601.3	419.1	51.1	60.8	29.4
189	ORANGE	Little	2016	5296	0.0	1.5	2180.0	24.6	0.0	612.3	365.4	87.4	17.2	52.4	668.0	744.9	47.5	69.9	31.1
190	DURHAM	Near Lake	2016	1304	0.0	0.0	246.2	0.0	3.6	150.2	29.6	7.2	1.5	4.1	144.8	170.7	3.2	19.6	14.5
191	DURHAM	Little	2016	759	0.0	0.0	304.6	0.0	0.0	94.8	24.1	5.9	1.3	3.3	67.1	151.9	2.6	13.9	7.8
192	DURHAM	Little	2016	2645	0.0	0.0	993.5	0.0	0.7	233.5	106.9	26.2	5.6	14.8	341.3	472.2	11.6	95.2	67.6
193	ORANGE	Eno	2016	1046	0.9	0.0	489.4	0.5	0.2	185.2	8.1	1.9	0.4	1.2	61.2	257.1	1.1	3.4	1.1
194	ORANGE	Eno	2016	1139	0.0	0.1	694.0	1.8	0.0	110.2	27.0	6.5	1.3	3.9	49.3	106.2	3.5	6.2	18.7
195	WAKE	Unnamed Tribu	2016	1391	0.4	0.4	208.4	2.8	0.0	232.5	12.2	3.3	0.0	13.6	36.2	297.6	0.4	95.7	21.0
196	WAKE	Near Lake	2016	255	0.0	0.0	67.5	0.0	0.0	49.8	0.0	0.0	0.0	0.0	0.4	80.8	0.0	4.2	8.3
197	WAKE	Near Lake	2016	1276	0.0	0.1	191.3	0.4	0.2	351.2	1.6	0.4	0.0	1.7	9.0	380.0	0.1	72.9	57.8
198	WAKE	Cedar Creek	2016	179	0.9	0.1	15.1	0.9	0.0	55.3	3.9	1.0	0.0	4.4	5.4	19.3	0.1	7.1	4.4
199	WAKE	Near Lake	2016	838	0.2	0.1	73.3	0.7	0.4	319.1	2.9	0.8	0.0	3.3	7.2	269.4	0.1	30.0	35.7
200	DURHAM	Little	2016	8085	33.1	0.9	3674.3	14.6	3.3	731.1	460.3	111.5	23.0	64.9	1128.5	1017.2	54.7	94.6	72.5
201	DURHAM	Little	2016	5139	0.9	0.0	2210.8	0.0	0.9	255.2	399.8	98.0	20.9	55.4	968.7	540.0	43.5	163.9	24.0
202	DURHAM	Little	2016	2784	0.4	0.0	962.8	0.0	1.6	288.7	161.2	39.5	8.4	22.3	406.0	513.0	17.5	43.2	66.2
203	PERSON	Flat	2016	12832	0.4	0.0	4848.3	342.1	2.2	595.9	915.5	95.5	285.4	426.7	2093.6	1093.6	130.1	267.0	99.4
204	PERSON	Flat	2016	4777	0.9	0.0	1850.7	96.4	1.8	448.4	257.9	26.9	80.4	120.2	529.4	732.0	36.7	64.6	20.2
205	PERSON	Flat	2016	8103	0.4	0.0	3338.8	162.0	2.0	287.7	433.5	45.2	135.1	202.0	972.3	671.0	61.6	169.4	45.6

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)																		
Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
206	DURHAM	Flat	2016	223	0.0	0.0	157.7	0.0	0.0	2.4	3.8	0.9	0.2	0.5	13.3	8.0	0.4	3.2	12.0
207	DURHAM	Flat	2016	76	0.0	0.0	56.4	0.0	0.0	0.7	0.6	0.1	0.0	0.1	4.8	8.9	0.1	0.1	1.8
208	DURHAM	Flat	2016	251	0.0	0.0	222.0	0.0	0.0	4.7	0.7	0.2	0.0	0.1	2.9	6.7	0.1	1.1	4.9
209	DURHAM	Little Lick Creel	2016	709	0.0	0.0	154.4	0.0	0.0	153.7	13.8	3.4	0.7	1.9	63.6	184.3	1.5	15.0	0.2
210	PERSON	Flat	2016	283	0.0	0.0	128.3	8.5	0.0	9.3	22.8	2.4	7.1	10.6	42.5	21.6	3.2	5.2	1.8
211	PERSON	Flat	2016	6482	0.2	0.9	2605.1	132.7	0.9	249.8	532.1	84.6	108.8	178.4	1128.5	600.2	73.0	89.8	50.3
212	ORANGE	Flat	2016	3382	0.0	0.7	1613.7	29.9	0.0	168.1	223.2	46.8	23.4	47.7	519.2	298.2	29.6	68.4	20.7
213	WAKE	Near Lake	2016	697	0.4	0.3	128.6	2.2	0.0	164.3	9.4	2.5	0.0	10.5	16.1	162.5	0.3	26.9	45.8
214	DURHAM	Flat	2016	2415	0.0	0.0	1006.7	0.0	0.0	258.3	59.9	14.7	3.1	8.3	276.4	569.6	6.5	31.3	28.0
215	DURHAM	Flat	2016	181	0.0	0.0	82.2	0.0	0.0	53.3	1.4	0.3	0.1	0.2	8.6	25.5	0.1	0.7	0.0
216	DURHAM	Flat	2016	1453	1.3	0.0	434.5	0.0	0.2	136.5	117.0	28.7	6.1	16.2	303.1	189.7	12.7	17.7	27.1
217	DURHAM	Near Lake	2016	578	0.2	0.0	38.8	0.0	0.9	220.8	12.8	3.1	0.7	1.8	49.2	120.8	1.4	22.6	7.8
218	DURHAM	Panther Creek	2016	2079	1.1	0.0	374.8	0.0	0.4	427.3	22.2	5.4	1.2	3.1	128.7	495.6	2.4	65.3	7.6
219	DURHAM	Unnamed Tribu	2016	1054	0.0	0.0	175.1	0.0	0.0	308.3	48.8	12.0	2.6	6.8	192.8	197.8	5.3	19.9	20.0
220	DURHAM	Panther Creek	2016	858	0.7	0.0	207.1	0.0	1.8	171.8	26.0	6.4	1.4	3.6	106.1	196.4	2.8	11.1	2.7
221	DURHAM	Near Lake	2016	307	0.0	0.0	18.9	0.0	0.2	161.8	1.4	0.3	0.1	0.2	11.2	67.0	0.2	4.0	14.5
222	DURHAM	Near Lake	2016	186	0.0	0.0	28.2	0.0	0.0	71.0	4.0	1.0	0.2	0.6	32.0	29.5	0.4	3.9	4.2
223	ORANGE	Eno	2016	3358	5.3	1.8	1213.5	29.4	3.3	142.5	437.9	104.7	20.7	62.8	686.0	286.6	57.0	39.5	64.3
224	DURHAM	Eno	2016	301	0.0	0.0	40.0	0.0	8.9	17.3	0.0	0.0	0.0	0.0	15.5	14.6	0.0	4.9	3.6
225	DURHAM	Eno	2016	383	0.0	0.0	54.5	0.0	1.3	33.7	0.1	0.0	0.0	0.0	9.1	65.8	0.0	7.8	0.4
226	DURHAM	Eno	2016	231	27.2	0.0	44.2	0.0	0.4	29.4	0.0	0.0	0.0	0.0	24.5	15.2	0.0	0.0	38.1
227	ORANGE	Eno	2016	951	0.0	0.5	408.8	8.1	0.0	35.4	120.3	28.8	5.7	17.3	171.5	83.2	15.6	13.0	9.3
228	WAKE	Upper Barton C	2016	5258	1.3	2.0	1111.2	14.0	1.3	893.9	62.8	16.7	0.1	67.8	82.5	1204.3	2.2	281.7	32.5
229	WAKE	Near Lake	2016	2102	1.6	0.6	327.2	4.0	0.0	537.0	17.1	4.6	0.0	19.1	46.6	691.6	0.6	153.3	22.0
230	ORANGE	Eno	2016	756	0.0	0.4	261.8	6.3	0.0	10.5	93.3	22.3	4.4	13.4	196.3	28.9	12.1	9.8	26.0
231	GRANVILLE	Ledge Creek	2016	1712	0.7	1.3	162.1	5.5	15.3	368.5	102.4	12.3	6.4	9.6	100.2	292.0	5.2	15.9	17.6
232	GRANVILLE	Knap of Reeds	2016	5622	0.0	5.8	2267.1	25.0	0.0	1164.8	460.8	55.3	28.7	43.2	61.6	978.0	23.2	28.3	76.5
233	GRANVILLE	Knap of Reeds	2016	1902	0.0	1.8	710.8	7.6	0.0	434.8	140.6	16.9	8.7	13.2	29.4	387.0	7.1	13.9	7.6
234	WAKE	Near Lake	2016	1048	1.8	1.3	150.6	7.9	0.9	391.7	56.6	10.9	1.8	33.3	31.1	213.7	2.4	16.6	24.9
235	GRANVILLE	Near Lake	2016	436	0.0	0.1	34.1	0.6	0.5	260.6	11.2	1.3	0.7	1.0	1.9	61.4	0.6	18.6	3.1
236	GRANVILLE	Near Lake	2016	119	0.0	0.1	14.0	0.5	0.0	28.5	8.8	1.1	0.5	0.8	0.0	31.6	0.4	11.0	0.4
237	WAKE	Near Lake	2016	406	0.0	0.1	97.7	0.4	0.4	106.1	1.8	0.5	0.0	2.0	5.1	122.4	0.1	20.2	5.3
238	WAKE	Lower Barton C	2016	638	0.0	0.7	114.9	4.8	0.0	80.6	20.8	5.6	0.0	23.2	17.8	124.9	0.7	40.0	0.9
239	WAKE	Near Lake	2016	2247	3.1	0.7	320.5	4.6	0.0	765.3	19.7	5.3	0.0	22.0	43.6	809.5	0.6	50.9	51.8
240	DURHAM	Flat	2016	90	0.0	0.0	35.8	0.0	0.0	5.2	7.3	1.8	0.4	1.0	14.2	8.2	0.8	1.2	0.0
241	DURHAM	Flat	2016	335	0.0	0.0	105.7	0.0	0.0	84.4	0.3	0.1	0.0	0.0	1.1	114.4	0.0	1.9	0.4
242	DURHAM	Flat	2016	19	0.0	0.0	7.8	0.0	0.0	0.0	1.8	0.5	0.1	0.3	1.1	0.0	0.2	0.0	0.0
243	WAKE	Near Lake	2016	1400	0.0	0.3	148.7	2.0	0.7	321.5	8.8	2.4	0.0	9.9	21.6	297.3	0.3	101.4	31.0
244	GRANVILLE	Ledge Creek	2016	151	0.0	0.0	71.3	0.1	0.0	27.2	1.1	0.1	0.1	0.1	0.0	42.6	0.1	1.5	2.0
245	DURHAM	Ellerbe	2016	905	0.2	0.0	37.2	0.0	0.0	12.7	2.3	0.6	0.1	0.3	15.1	10.2	0.2	0.0	4.9
246	DURHAM	Ellerbe	2016	79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)																		
Catch_ID or Reservoir Name	County	Loading Area	NLCDyear	Total	Barren.Land	Conventional. Grain.Corn	Deciduous. Forest_ adjust	Double.cropped. Soybeans	Emergent. Herbaceuous. Wetlands	Evergreen.Forest	Fescue..Pasture.	Fescue_Hay	Flue.Cured. Tobacco	Full.Season. Soybeans	Herbaceuous_ NotManaged	Mixed.Forest	No.Till. Grain.Corn	Not Connected DOT	Open.Water
247	DURHAM	Ellerbe	2016	1410	10.2	0.0	1.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4	3.3	0.0	0.0	0.0
248	DURHAM	Ellerbe	2016	2935	3.1	0.0	425.2	0.0	8.2	376.8	45.2	11.1	2.4	6.3	286.3	438.7	4.9	71.1	10.9
249	DURHAM	Ellerbe	2016	1238	39.3	0.0	53.6	0.0	12.2	39.6	0.8	0.2	0.0	0.1	9.5	35.8	0.1	0.0	7.1
250	DURHAM	Ellerbe	2016	508	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
251	DURHAM	Ellerbe	2016	364	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
252	DURHAM	Little Lick Creel	2016	1937	0.4	0.0	142.8	0.0	0.2	133.0	7.5	1.8	0.4	1.0	46.0	186.6	0.8	55.8	10.2
253	DURHAM	Little Lick Creel	2016	908	0.4	0.0	99.1	0.0	0.0	210.9	1.2	0.3	0.1	0.2	16.0	131.4	0.1	33.0	0.0
254	DURHAM	Little Lick Creel	2016	219	0.0	0.0	36.6	0.0	0.0	22.2	6.6	1.6	0.3	0.9	15.7	38.2	0.7	5.6	0.0
255	DURHAM	Lick Creek	2016	3032	2.4	0.0	682.1	0.0	2.7	675.2	25.8	6.3	1.4	3.6	274.1	835.0	2.8	36.5	12.2
256	WAKE	Upper Barton C	2016	234	0.0	0.0	80.3	0.3	0.0	47.4	1.3	0.3	0.0	1.4	1.0	59.3	0.0	4.2	0.2
257	WAKE	Near Lake	2016	658	0.0	0.1	193.1	0.7	0.0	145.1	3.1	0.8	0.0	3.4	6.6	200.7	0.1	15.3	38.9
258	DURHAM	Flat	2016	215	0.0	0.0	146.5	0.0	0.0	14.7	1.7	0.4	0.1	0.2	8.7	26.3	0.2	1.3	2.0
259	DURHAM	Flat	2016	3178	0.0	0.0	1363.0	2.6	4.2	362.6	92.8	21.7	6.7	15.2	417.0	467.3	10.3	28.0	23.3
260	DURHAM	Flat	2016	300	0.4	0.0	105.1	0.0	0.0	5.3	47.9	11.7	2.5	6.6	35.1	54.5	5.2	1.7	6.2
261	DURHAM	Flat	2016	238	0.0	0.0	103.9	0.0	0.0	55.8	3.8	0.9	0.2	0.5	16.9	48.7	0.4	0.5	4.0
262	DURHAM	Flat	2016	881	0.0	0.7	315.3	3.0	0.2	51.6	91.5	15.6	5.3	10.2	176.1	130.1	6.8	10.5	24.2
263	DURHAM	Flat	2016	1789	0.0	0.4	323.9	1.9	0.0	664.9	95.1	19.0	5.3	11.6	150.2	406.2	8.3	14.9	9.6
264	DURHAM	Flat	2016	1195	0.0	0.0	186.4	0.0	0.0	336.2	65.4	16.0	3.4	9.1	280.9	184.8	7.1	14.7	9.3
West Fork Eno River Reservoir	ORANGE	2016	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	0
Lake Orange	ORANGE	2016	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	0
Little River Reservoir	DURHAM	2016	554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	554	0
Lake Michie	DURHAM	2016	482	0	0	0	0	0	0	0	0	0	0	0	0	0	0	482	0
Lake Holt	GRANVILLE	2016	618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	618	0
Falls Lake	MULTIPLE	2016	12410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21737	0

Table notes:

NLCD: USGS National Land Cover Data

Connected refers to direct connection to storm sewer system

Adjust refers to calculations of land use areas as decribed in the UNRBA Falls Lake WARMF Watershed Model Report.

NLCD developed areas were apportioned into existing development (ExD), new development (NewD), and Interim development using previous NLCD land cover data and local data provided by UNRBA members.

Existing development, new development, and interim development are described in the UNRBA Falls Lake WARMF Watershed Model Report

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
1	1.4	1.8	0.0	2.0	1.8	0.0	3.2	0.0
2	4.8	3.1	0.0	3.7	14.0	0.0	2.3	0.0
3	2.9	91.6	0.0	4.3	16.0	0.0	8.3	0.0
4	17.1	184.3	0.0	33.4	72.7	0.0	60.4	1.4
5	2.1	0.0	0.0	0.8	0.2	0.0	6.1	0.4
6	7.7	18.7	0.0	0.3	0.0	20.4	87.3	51.4
7	0.5	1.3	0.0	3.5	0.0	0.2	5.1	2.9
8	5.0	137.7	0.0	9.8	15.6	0.0	25.4	0.7
9	16.5	176.6	0.0	16.3	5.1	6.9	69.0	23.3
10	24.2	5.6	0.0	1.5	2.2	0.0	21.1	3.1
11	0.1	0.0	0.0	0.6	0.0	0.0	0.2	0.0
12	10.1	66.7	0.0	8.4	6.2	0.7	22.5	2.7
13	0.8	8.7	0.0	3.4	0.0	0.0	1.1	0.0
14	21.5	808.8	0.0	27.0	222.4	0.9	117.9	6.0
15	2.8	129.2	10.6	1.5	15.5	8.0	14.7	19.8
16	1.7	13.8	61.1	2.8	20.9	0.0	2.4	0.2
17	38.1	24.5	0.0	8.4	189.9	23.6	299.1	195.4
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	3.3	311.0	0.0	6.4	49.8	0.0	8.5	0.4
20	64.3	14.7	0.0	1.2	149.0	9.1	275.7	77.3
21	3.6	79.4	0.0	1.6	69.4	2.4	14.3	11.1
22	1.4	4.0	0.0	1.6	1.6	0.5	32.4	5.4
23	1.2	69.1	0.0	3.0	12.7	0.0	2.6	0.0
24	10.8	38.7	0.0	2.9	2.0	34.0	60.2	46.2
25	2.2	25.1	0.0	0.7	0.0	0.0	4.3	1.8
26	25.5	234.5	0.0	27.0	96.3	0.2	65.9	2.2
27	3.7	0.0	0.0	0.0	0.0	0.7	20.5	6.2
28	0.0	0.0	0.0	0.1	4.4	0.0	0.0	0.0
29	20.2	4.0	0.0	0.2	1.6	0.2	62.9	23.9
30	12.2	42.0	0.0	14.8	148.8	0.9	22.8	6.0
31	22.7	3.6	0.0	2.7	23.6	13.3	352.2	144.9
32	4.9	12.9	104.7	5.1	85.1	7.3	190.7	126.4
33	2.1	2.4	0.0	3.1	3.1	0.4	16.2	1.1
34	79.1	18.0	92.0	1.9	273.9	125.8	416.0	260.6
35	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	1.7	14.8	0.0	0.9	6.6	0.0	2.2	0.4
37	4.6	0.0	0.0	0.2	0.0	1.1	1.4	1.3
38	2.7	1.8	0.0	0.1	0.0	0.0	0.6	0.0
39	2.8	0.0	0.0	0.2	1.3	0.0	4.6	0.9
40	2.4	8.5	0.0	1.7	0.0	0.0	24.9	4.3
41	24.3	80.5	0.0	1.5	47.6	0.0	47.4	5.1

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
42	5.3	13.8	0.0	0.9	0.0	0.0	20.1	2.0
43	3.3	0.0	0.0	0.5	0.0	0.2	9.8	2.9
44	35.2	90.7	0.0	1.9	316.2	18.4	233.9	72.2
45	0.2	57.6	0.0	0.3	74.1	0.0	1.8	0.0
46	5.7	29.1	0.0	0.7	26.3	0.7	52.0	3.3
47	0.8	46.7	0.0	2.0	5.8	0.0	7.7	1.6
48	11.5	40.0	0.0	0.4	0.9	0.0	12.6	0.2
49	17.8	10.0	0.0	0.7	2.0	9.1	80.5	36.0
50	48.6	14.5	0.0	0.3	0.2	41.4	169.1	107.6
51	19.4	1.1	0.0	0.0	0.0	4.3	108.9	33.3
52	5.8	44.7	0.0	5.2	13.1	0.4	12.9	0.9
53	4.9	0.2	0.0	0.2	0.0	0.0	66.7	10.7
54	2.3	0.0	0.0	0.1	0.0	0.0	15.5	4.4
55	100.8	0.2	0.0	0.1	4.7	84.7	402.6	215.2
56	209.6	4.7	0.0	0.2	88.2	146.3	895.1	435.7
57	58.2	0.4	0.0	0.1	4.2	40.6	94.8	75.8
58	0.0	0.0	0.0	0.1	18.0	0.0	6.4	0.0
59	0.0	0.2	0.0	0.0	39.2	0.0	0.0	0.0
60	8.7	4.9	50.8	0.7	63.5	0.0	12.4	0.2
61	22.0	3.3	35.0	2.5	169.6	4.9	104.4	31.6
62	20.4	15.6	0.0	2.4	205.1	5.3	54.7	11.8
63	143.7	26.9	0.0	1.0	148.5	16.7	39.8	38.7
64	11.4	2.7	0.0	0.7	19.8	0.0	91.5	7.1
65	2.1	12.9	0.0	0.0	50.9	2.7	47.6	24.4
66	0.5	1.6	0.0	0.0	26.9	2.7	4.7	4.5
67	0.0	52.7	0.0	1.9	0.0	0.0	8.5	0.2
68	4.0	102.3	0.0	3.0	0.0	0.2	4.5	1.3
69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	4.5	0.0	0.0	0.0	0.2	5.3	18.5	7.7
71	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0
72	11.9	0.0	0.0	0.0	0.0	13.3	73.0	20.0
73	6.6	97.4	0.0	41.7	3.3	0.0	17.8	0.9
74	12.5	64.8	0.0	22.9	19.4	0.4	31.1	1.7
75	3.9	0.2	0.0	3.9	0.7	0.0	1.8	0.0
76	0.0	0.0	0.0	0.1	0.2	0.0	0.7	0.0
77	0.0	0.0	0.0	0.1	6.7	0.0	4.9	1.8
78	0.0	1.1	0.0	0.2	0.0	0.4	75.2	9.1
79	1.4	8.0	0.0	1.5	0.2	0.0	35.9	2.0
80	27.0	1.6	0.0	0.6	0.0	3.6	83.3	21.9
81	6.7	181.0	0.0	15.3	20.2	0.7	62.6	2.7
82	0.2	5.6	46.0	2.7	209.7	0.0	0.0	0.0

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
83	26.0	14.2	0.4	4.8	485.9	8.2	100.0	43.4
84	4.4	0.0	0.0	1.2	71.2	29.1	31.4	37.6
85	0.0	0.0	0.0	0.1	2.7	4.0	9.8	5.8
86	0.0	3.6	0.0	0.1	43.3	16.2	14.4	31.5
87	2.3	8.7	0.0	1.7	41.6	0.4	8.9	0.7
88	7.2	40.5	0.0	1.9	102.5	0.4	97.0	8.7
89	2.5	60.5	0.0	9.2	15.3	0.0	36.6	2.9
90	6.9	1.3	0.0	3.0	0.0	0.0	61.6	6.2
91	13.3	0.0	0.0	0.4	0.2	0.7	13.0	2.6
92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	0.6	5.6	0.0	0.5	269.1	0.0	2.9	0.0
94	4.2	7.8	0.0	0.1	58.3	0.0	2.7	0.0
95	0.0	2.4	0.0	0.1	7.3	0.0	1.2	0.0
96	8.9	101.7	0.0	5.0	504.1	0.4	37.2	4.7
97	0.9	0.2	0.0	1.0	0.0	0.2	9.6	1.0
98	16.7	71.2	0.0	0.9	0.2	12.0	54.6	34.7
99	3.9	13.1	0.0	1.2	125.3	0.0	10.8	1.3
100	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0
101	11.8	162.6	0.0	3.0	75.4	0.0	24.3	0.6
102	48.4	2.4	0.0	1.2	3.8	6.7	251.0	73.1
103	4.4	77.2	0.0	3.9	81.3	0.0	21.7	0.9
104	9.8	2.2	0.0	0.8	86.5	0.4	50.3	4.7
105	6.6	1.3	0.0	0.3	1.1	0.0	47.7	7.8
106	18.8	6.9	0.0	0.4	8.7	0.7	115.4	17.1
107	1.3	5.1	0.0	0.5	81.2	0.0	22.0	0.9
108	1.7	3.1	0.0	0.3	0.9	0.2	11.7	1.6
109	0.0	2.0	0.0	0.5	0.0	0.2	43.3	4.9
110	8.1	32.4	0.0	0.0	31.8	20.0	73.7	23.1
111	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
112	0.2	1.3	0.0	0.3	157.3	0.0	5.8	0.0
113	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114	0.7	15.8	0.0	3.0	0.0	0.0	3.8	0.2
115	0.8	1.1	0.0	0.8	0.0	0.0	2.8	0.2
116	0.0	6.9	0.0	6.7	205.2	0.4	8.3	3.3
117	7.1	14.9	0.0	1.7	99.7	3.3	16.6	2.9
118	5.9	7.3	0.0	4.0	64.9	1.1	29.7	10.0
119	0.2	5.5	0.0	2.4	35.0	8.4	8.4	2.7
120	0.4	0.0	0.0	0.7	4.2	0.4	4.8	0.2
121	0.0	0.7	0.0	0.4	1.6	0.0	1.4	0.0
122	2.9	0.4	0.0	0.5	10.5	0.0	0.2	0.0
123	1.2	0.0	0.0	0.3	0.0	0.0	1.4	0.2

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
124	12.6	2.4	0.0	0.4	0.0	0.0	28.9	2.0
125	0.9	0.4	0.0	1.2	2.9	0.2	0.1	0.9
126	15.0	0.4	0.0	0.1	0.2	1.6	86.7	27.5
127	0.2	0.4	0.0	0.1	6.2	0.0	0.9	0.0
128	33.8	0.0	0.0	0.3	0.0	4.7	113.4	16.1
129	4.9	19.4	0.0	0.7	0.0	0.0	26.5	5.6
130	2.3	164.5	0.0	4.2	56.7	0.0	6.6	0.2
131	0.1	0.0	0.0	0.6	8.2	0.0	46.3	1.6
132	16.7	0.2	0.0	0.1	0.0	6.4	49.7	16.9
133	1.1	0.0	0.0	0.1	3.1	0.0	0.2	0.0
134	1.9	0.0	0.0	0.0	0.0	0.2	14.4	2.4
135	5.6	6.4	0.0	1.1	12.7	0.0	4.3	0.0
136	45.4	12.7	0.0	1.6	82.3	19.6	131.3	55.4
137	3.9	18.9	0.0	6.5	40.8	0.0	11.8	0.9
138	2.2	48.7	0.0	14.8	58.3	0.0	3.4	0.0
139	3.4	21.6	0.0	0.5	0.0	0.9	13.0	1.1
140	0.1	2.7	0.0	0.4	1.6	0.2	17.1	0.4
141	3.6	1.3	0.0	0.3	28.3	0.0	26.2	1.8
142	2.9	2.0	0.0	0.8	14.0	0.0	13.5	2.2
143	4.5	1.3	0.0	0.0	0.0	0.2	19.4	2.2
144	1.7	4.9	0.0	0.7	17.1	0.2	33.5	0.2
145	37.8	50.3	0.0	1.1	0.0	64.2	200.3	122.5
146	3.7	48.4	0.0	5.9	38.7	4.7	95.0	20.3
147	0.7	50.1	0.0	4.1	8.9	0.0	11.7	0.2
148	1.1	84.6	0.0	3.1	0.0	0.0	3.8	0.4
149	8.4	6.7	0.0	0.9	0.0	0.0	5.6	0.4
150	8.6	2.0	0.0	0.2	0.0	0.2	32.0	3.1
151	2.7	0.9	0.0	3.1	0.0	0.0	3.4	0.0
152	11.3	41.6	0.0	3.0	0.0	4.5	82.5	21.9
153	1.4	2.2	0.0	0.8	0.4	0.0	23.8	2.4
154	15.9	7.3	0.0	1.1	0.0	4.0	20.6	9.8
155	3.9	18.5	0.0	0.5	2.4	12.2	68.0	30.0
156	0.4	6.9	0.0	4.8	0.0	0.2	3.1	0.2
157	15.4	6.9	0.0	1.5	0.0	0.4	22.7	4.2
158	9.4	0.2	0.0	0.5	0.0	0.0	4.3	0.2
159	23.7	0.0	0.0	0.4	0.0	6.4	59.9	33.8
160	5.4	0.0	0.0	0.0	1.8	4.4	40.0	19.4
161	12.0	0.0	0.0	0.0	3.6	7.8	230.2	44.5
162	11.5	1.3	0.0	0.1	2.9	4.2	179.3	44.1
163	9.0	11.8	0.0	0.3	0.0	0.0	30.3	6.0
164	3.2	0.0	0.0	0.3	0.0	2.2	26.8	15.8

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
165	11.5	0.0	0.0	0.0	0.0	7.5	12.6	18.9
166	0.8	0.2	0.0	0.0	0.0	0.4	5.3	10.2
167	4.9	0.9	0.0	0.2	0.0	1.3	12.8	6.9
168	5.3	2.7	0.0	0.1	0.0	0.0	63.3	21.3
169	8.8	41.2	0.0	0.8	0.0	0.0	1.8	0.0
170	3.3	10.3	0.0	1.4	2.9	0.0	1.1	0.0
171	1.3	0.0	0.0	0.0	0.0	0.0	17.1	1.1
172	12.9	0.0	0.0	0.0	0.0	8.4	65.4	28.5
173	0.7	0.0	0.0	0.2	1.6	0.0	68.7	2.2
174	7.0	11.1	0.0	0.0	7.1	0.2	20.5	21.8
175	2.7	0.0	0.0	0.0	0.4	0.2	2.9	1.1
176	29.8	40.3	0.0	0.0	3.6	70.9	203.1	188.8
177	3.6	1.1	0.0	2.5	18.7	21.0	36.9	50.7
178	0.0	2.0	0.0	0.1	0.0	0.4	32.3	7.2
179	7.9	0.0	0.0	0.5	0.0	0.9	22.5	10.9
180	0.1	1.8	0.0	0.8	0.0	0.0	1.8	0.0
181	3.7	7.6	0.0	0.3	0.2	0.0	17.5	1.6
182	3.3	2.9	0.0	2.7	0.0	1.3	40.1	7.6
183	26.4	12.8	0.0	1.4	70.9	3.6	49.4	4.9
184	119.9	61.8	0.0	0.4	422.4	70.1	190.8	115.9
185	2.7	13.8	412.7	7.3	243.0	0.0	4.8	0.7
186	0.5	15.1	0.0	0.2	2.2	0.0	1.3	0.0
187	1.5	1.8	0.0	1.3	48.2	0.9	21.3	2.9
188	4.3	172.6	0.0	8.9	1.3	0.2	29.2	2.1
189	4.4	101.9	0.0	8.0	54.9	2.7	19.3	4.2
190	2.5	11.6	0.6	4.3	470.2	0.7	1.9	0.9
191	4.5	3.8	0.0	3.5	0.0	0.0	6.3	0.0
192	4.7	6.2	0.0	15.7	2.0	0.0	32.1	2.5
193	0.0	2.2	0.0	0.2	3.8	0.0	2.6	0.0
194	0.0	69.3	0.0	0.6	3.8	0.0	0.4	0.0
195	20.4	2.7	0.0	0.4	1.6	7.1	102.9	34.4
196	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0
197	4.8	0.9	0.0	0.0	0.0	0.0	11.6	0.7
198	0.4	0.9	0.0	0.1	0.0	0.0	7.4	2.0
199	0.5	0.0	0.0	0.1	0.0	0.0	12.0	0.0
200	10.4	81.4	0.0	40.3	119.1	0.7	35.7	4.9
201	35.0	80.9	0.0	58.7	10.2	0.0	21.0	1.8
202	5.3	11.8	0.0	23.6	0.2	0.0	32.2	2.0
203	46.1	290.5	0.0	22.7	89.2	84.0	209.3	107.1
204	5.4	178.2	0.0	6.4	10.9	0.4	39.2	2.6
205	91.3	158.1	0.0	10.8	12.7	113.6	356.7	200.9

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
206	2.0	9.8	0.0	0.6	0.4	0.0	0.0	0.0
207	0.4	0.0	0.0	0.1	0.0	0.0	0.2	0.2
208	1.2	0.2	0.0	0.1	0.0	0.0	0.0	0.0
209	2.7	13.3	0.0	2.0	33.6	0.4	13.5	1.1
210	0.1	0.0	0.0	0.6	2.9	0.0	2.0	0.0
211	12.3	240.4	0.0	12.6	11.6	0.2	48.3	2.2
212	3.1	125.4	0.0	5.0	0.2	0.0	11.2	0.0
213	1.1	0.7	0.0	0.3	0.2	0.7	23.9	3.1
214	1.5	5.6	0.0	8.8	0.0	0.2	29.8	4.0
215	0.0	0.0	0.0	0.2	0.0	0.0	0.7	0.0
216	0.9	0.9	0.0	17.2	74.3	0.0	13.2	0.4
217	17.4	19.6	0.0	1.9	10.5	0.0	9.4	2.8
218	5.2	12.7	0.0	3.3	65.2	2.2	133.2	52.3
219	0.8	3.8	0.0	7.2	2.4	0.0	12.0	1.6
220	0.0	5.5	0.0	3.8	73.7	0.0	5.0	0.0
221	5.5	1.1	0.0	0.2	2.7	0.0	0.7	0.0
222	3.7	0.4	0.0	0.6	0.4	0.0	0.2	0.0
223	2.3	33.3	0.0	9.6	54.5	0.0	27.8	1.1
224	1.9	0.7	0.0	0.0	52.2	3.6	45.4	36.6
225	2.3	0.0	0.0	0.0	39.0	8.4	43.7	56.1
226	0.2	2.2	0.0	0.0	14.5	8.0	7.8	10.9
227	0.4	3.8	0.0	2.6	0.0	0.0	3.5	0.0
228	8.5	6.7	0.0	2.1	120.3	1.1	165.0	20.7
229	7.4	5.3	0.0	0.5	3.6	0.4	48.6	4.0
230	0.1	24.0	0.0	2.0	0.0	0.0	2.1	0.2
231	36.4	1.3	0.0	0.5	161.9	27.1	134.9	64.6
232	3.0	216.7	0.0	2.0	0.0	0.0	7.4	0.4
233	1.5	75.8	0.0	0.6	0.0	2.0	7.6	6.2
234	1.5	15.5	0.0	1.0	56.3	0.0	4.2	0.0
235	4.0	0.2	0.0	0.0	0.4	0.0	15.3	2.0
236	0.7	4.0	0.0	0.0	6.9	0.0	1.2	0.2
237	0.5	1.1	0.0	0.1	0.2	0.0	2.2	0.2
238	1.0	0.9	0.0	0.6	21.7	1.3	39.5	4.9
239	16.5	11.8	0.0	0.6	0.0	5.1	13.9	10.9
240	2.6	0.9	0.0	1.1	1.6	0.0	0.0	0.0
241	0.4	10.2	0.0	0.0	3.3	0.0	0.4	0.0
242	0.0	0.0	0.0	0.3	7.2	0.0	0.0	0.0
243	8.1	0.0	0.0	0.3	23.0	0.4	37.3	6.9
244	1.2	0.0	0.0	0.0	0.0	0.0	1.4	0.0
245	122.3	0.0	0.0	0.3	0.0	43.5	110.0	98.0
246	1.6	0.0	0.0	0.0	7.3	0.9	23.6	4.1

Table B-4. Land Use Acreages for the Recent Modeling Period (2014 to 2018)

Catch_ID or Reservoir Name	ConnectedDOT	Shrub_adjust	Waterfowl. Impoundment	Wheat_Only	Woody.Wetlands	NLCDDeveloped High.Intensity_ All	NLCDDeveloped Low.Intensity_All	NLCDDeveloped Medium.Intensity_All
247	103.0	0.0	0.0	0.0	3.1	140.1	401.0	210.5
248	26.1	18.9	0.0	6.6	360.3	19.8	239.7	92.4
249	71.0	0.9	0.0	0.1	137.1	40.4	218.2	90.4
250	14.9	0.0	0.0	0.0	0.0	28.0	238.4	127.6
251	4.4	0.0	0.0	0.0	0.0	20.9	142.1	74.7
252	15.6	1.8	0.0	1.1	48.0	9.8	447.4	91.4
253	11.4	5.1	0.0	0.2	1.1	3.6	124.4	30.5
254	0.2	0.0	0.0	1.0	0.0	1.1	48.1	9.5
255	6.8	28.4	25.0	3.8	203.7	0.0	16.4	5.1
256	0.2	0.9	0.0	0.0	0.0	0.0	3.3	0.0
257	0.5	0.7	0.0	0.1	0.0	0.0	3.1	0.2
258	1.4	0.0	0.0	0.3	0.0	0.0	0.9	0.0
259	1.2	127.8	0.0	12.7	106.5	0.0	15.1	0.0
260	0.1	1.3	0.0	7.0	0.0	0.0	1.8	0.2
261	0.0	0.0	0.0	0.6	0.0	0.0	0.7	0.0
262	0.8	11.3	0.0	5.6	1.1	0.2	1.7	1.3
263	0.9	5.3	0.0	9.0	0.0	0.7	11.8	3.1
264	1.4	8.4	0.0	9.6	11.6	0.0	9.9	0.2
West Fork Eno River Reservoir	0	0	0	0	0	0	0	
Lake Orange	0	0	0	0	0	0	0	
Little River Reservoir	0	0	0	0	0	0	0	
Lake Michie	0	0	0	0	0	0	0	
Lake Holt	0	0	0	0	0	0	0	
Falls Lake	0	0	0	0	0	0	0	

Table B-5. Location of Major and Minor Point Source Discharges with respect to Modeling Catchment IDs for the Recent Modeling Period (2014 to 2018)						
Catch_ID	Permit_Number	PERM_STAT	FacilityName	PERMITTEE	COUNTY	MAJ_MIN
48	NC0082759	Active	Orange-Alamance Water System WTP	Orange Alamance Water System	Orange	Minor
6	NC0026433	Active	Hillsborough WWTP	Town of Hillsborough	Orange	Major
154	NC0037869	Active	Arbor Hill MHP WWTP	Arbor Hills Mobile Home Park	Orange	Minor
157	NC0085111	Active	Heather Glen WTP	Cws Systems Inc	Durham	Minor
56	NC0023841	Active	North Durham WRF	City of Durham	Durham	Major
61	NC0026824	Active	SGWASA WWTP	South Granville Water & Sewer Authority	Granville	Major
217	NC0059099	Active	Lake Ridge Aero Park WWTP	Aqua North Carolina Inc	Durham	Minor
61	NC0058416	Active	SGWASA WTP	South Granville Water & Sewer Authority	Granville	Minor
228	NC0049662	Active	Hawthorne Subdivision WWTP	Aqua North Carolina Inc	Wake	Minor
20	NC0063614	Active	Wildwood Green WWTP	Aqua North Carolina Inc	Wake	Minor
80	NC0085863	Active	Waterfall Plantation WTP	Aqua North Carolina Inc	Wake	Minor

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
1	0	63	5	1	0	0	0	0	0	1,120	0.06
2	1	190	13	1	0	0	0	0	0	2,021	0.10
3	0	205	14	0	0	0	0	0	0	3,213	0.07
4	0	736	49	9	1	0	4	2	0	14,604	0.05
5	0	121	8	2	0	0	0	6	0	1,112	0.12
6	0	511	33	1	0	0	0	2	0	1,483	0.37
7	0	245	16	4	0	0	0	0	0	1,606	0.17
8	0	199	23	0	0	0	0	0	0	5,770	0.04
9	0	688	71	2	0	0	0	1	0	7,917	0.10
10	0	162	18	0	0	0	0	1	0	1,297	0.14
11	0	8	1	1	0	0	0	0	0	144	0.07
12	1	574	54	54	10	1	0	20	0	3,943	0.18
13	0	26	3	13	2	0	0	0	0	612	0.07
14	0	1,274	142	0	0	0	0	1	0	20,343	0.07
15	0	22	2	3	1	0	0	8	0	1,511	0.02
16	0	31	3	7	1	0	0	14	0	1,935	0.03
17	0	149	15	3	0	0	0	18	0	3,887	0.05
19	0	102	8	1	0	0	0	0	0	6,578	0.02
20	0	3,024	228	12	2	0	0	0	0	6,611	0.49
21	0	77	5	0	0	0	0	1	0	2,823	0.03
22	0	149	10	4	0	0	1	0	0	1,488	0.11
23	0	74	5	8	0	0	1	1	0	1,956	0.05
24	0	206	13	7	0	0	0	1	0	2,385	0.10
25	2	255	17	8	1	0	0	2	0	4,046	0.07
26	0	540	36	15	1	0	12	5	0	12,971	0.05
27	0	15	1	1	0	0	0	18	0	325	0.11
28	0	2	0	0	0	0	0	0	0	85	0.02
29	0	4	0	0	0	0	0	2	0	392	0.02
30	0	109	11	18	3	0	0	40	0	4,622	0.04
31	0	168	17	1	0	0	0	44	0	2,052	0.11
32	0	107	11	9	2	0	0	79	0	2,433	0.09
33	0	27	2	0	0	0	0	0	0	2,543	0.01
34	0	12	0	0	0	0	0	0	0	5,995	0.00
36	0	6	0	0	0	0	0	5	0	626	0.02
37	0	4	0	0	0	0	0	0	0	759	0.01
38	0	16	1	0	0	0	0	0	0	325	0.05
39	0	127	9	3	0	0	0	0	0	884	0.16
40	0	162	14	5	1	0	0	9	0	1,601	0.12
41	0	168	12	0	0	0	0	0	0	2,514	0.07
42	0	54	3	0	0	0	0	0	0	1,137	0.05
43	0	17	1	0	0	0	0	1	0	795	0.02

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
44	0	156	10	0	0	0	0	0	0	4,891	0.03
45	0	38	3	0	0	0	0	0	0	949	0.04
46	0	743	49	0	0	0	0	0	0	2,970	0.27
47	0	106	7	0	0	0	0	0	0	1,404	0.08
48	0	168	11	2	0	0	0	0	0	1,257	0.14
49	0	255	17	6	0	0	0	2	0	1,397	0.20
50	1	359	24	1	0	0	0	0	0	1,448	0.27
51	0	33	2	0	0	0	0	0	0	497	0.07
52	0	420	31	22	3	0	0	1	0	4,501	0.11
53	0	119	12	5	1	0	0	13	0	721	0.21
54	0	38	4	5	1	0	0	3	0	318	0.16
55	0	19	2	0	0	0	0	15	0	2,048	0.02
56	0	70	7	1	0	0	0	46	0	3,646	0.03
57	0	9	1	7	1	0	0	1	0	744	0.03
58	0	15	2	1	0	0	0	1	0	198	0.10
59	0	13	1	0	0	0	0	0	0	113	0.12
61	0	5	1	1	0	0	0	1	0	1,675	0.00
62	0	147	10	0	0	0	0	0	0	3,952	0.04
63	0	33	2	0	0	0	0	0	0	2,313	0.02
64	0	568	39	1	0	0	0	0	0	1,595	0.38
65	0	431	24	0	0	0	0	0	0	1,481	0.31
66	0	108	6	0	0	0	0	0	0	574	0.20
67	0	127	8	0	0	0	0	0	0	1,089	0.12
68	1	246	16	11	1	0	0	0	0	3,214	0.09
72	0	9	1	0	0	0	0	5	0	394	0.04
73	0	146	14	18	3	1	0	0	0	4,985	0.04
74	0	247	25	24	5	0	0	2	0	3,602	0.08
75	0	45	5	4	1	0	0	0	0	878	0.06
78	0	5	1	1	0	0	0	0	0	677	0.01
79	0	518	39	2	0	0	0	0	0	1,680	0.33
80	0	444	33	3	0	0	0	0	0	1,446	0.33
81	0	251	28	0	0	0	0	0	0	6,383	0.04
82	0	-	0	0	0	0	0	1	0	447	0.00
83	0	595	61	28	6	0	0	69	0	3,512	0.22
87	0	205	16	0	0	0	0	0	0	1,520	0.15
88	0	1,229	78	0	0	0	0	0	0	6,351	0.21
89	0	101	7	6	0	0	1	2	0	3,041	0.04
90	0	650	43	5	0	0	0	0	0	1,681	0.42
91	0	217	15	7	0	0	0	2	0	1,149	0.21
93	0	37	2	2	0	0	0	0	0	1,694	0.02
94	0	4	0	1	0	0	0	0	0	1,181	0.00

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
95	0	35	3	0	0	0	0	0	0	1,119	0.03
96	0	323	21	0	0	0	0	0	0	8,059	0.04
97	0	10	0	0	0	0	0	0	0	843	0.01
98	0	430	28	19	2	0	1	6	0	2,628	0.18
99	0	75	5	0	0	0	0	0	0	1,725	0.05
100	0	1	0	0	0	0	0	0	0	57	0.02
101	0	94	7	7	0	0	0	0	0	3,489	0.03
102	0	70	7	0	0	0	0	16	0	1,307	0.07
103	0	141	10	30	2	0	0	1	0	3,850	0.05
104	0	43	3	0	0	0	0	0	0	1,329	0.03
105	0	490	36	7	1	0	0	0	0	1,426	0.37
106	1	465	35	6	1	0	0	0	0	1,722	0.30
107	0	199	15	0	0	0	0	0	0	1,042	0.21
108	0	164	12	2	0	0	0	0	0	1,022	0.17
109	0	146	11	1	0	0	0	0	0	808	0.20
110	0	844	43	0	0	0	0	0	0	2,449	0.36
112	0	32	2	0	0	0	0	0	0	674	0.05
114	0	43	3	0	0	0	0	0	0	1,085	0.04
115	0	16	1	0	0	0	0	0	0	251	0.07
116	0	17	2	2	0	0	0	1	0	984	0.02
117	0	44	5	3	0	0	0	6	0	1,008	0.06
118	0	64	7	5	1	0	0	5	0	1,174	0.07
119	0	7	1	1	0	0	0	1	0	518	0.02
120	0	59	3	1	0	0	0	0	0	294	0.21
121	0	69	4	0	0	0	0	0	0	177	0.41
122	0	25	1	1	0	0	0	0	0	303	0.09
123	0	21	2	0	0	0	0	3	0	268	0.10
124	1	133	11	4	0	0	0	3	0	1,068	0.14
126	0	50	5	6	1	0	0	12	0	539	0.14
127	0	4	0	0	0	0	0	0	0	198	0.02
128	0	82	8	8	2	0	0	11	0	1,034	0.11
129	0	190	13	9	1	0	1	6	0	1,361	0.16
130	0	146	16	0	0	0	0	1	0	3,058	0.05
131	0	11	1	0	0	0	0	2	0	355	0.04
132	0	50	5	0	0	0	0	10	0	462	0.14
133	0	34	3	0	0	0	0	2	0	316	0.12
134	0	2	0	0	0	0	0	2	0	151	0.03
135	0	34	3	8	1	0	0	0	0	929	0.05
136	0	182	12	2	0	0	0	0	0	2,443	0.08
137	0	71	8	1	0	0	0	0	0	1,293	0.06
138	0	12	1	1	0	0	0	0	0	2,408	0.01

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
139	0	218	16	8	1	0	0	0	0	2,809	0.09
140	0	127	9	0	0	0	0	0	0	783	0.17
141	0	335	26	2	0	0	0	0	0	1,346	0.27
142	0	253	19	1	0	0	0	0	0	1,626	0.17
143	0	194	14	2	0	0	0	0	0	2,249	0.09
144	0	346	24	0	0	0	0	0	0	1,197	0.31
145	0	352	23	6	0	0	0	0	0	3,153	0.12
146	0	639	42	3	0	0	0	3	0	3,966	0.17
147	0	151	10	1	0	0	0	0	0	1,947	0.08
148	1	58	3	3	0	0	0	0	0	1,384	0.05
149	0	265	17	9	1	0	1	3	0	1,648	0.18
150	0	26	2	0	0	0	0	0	0	244	0.11
151	0	50	4	2	0	0	0	1	0	1,293	0.04
152	0	425	28	4	0	0	0	5	0	2,753	0.17
153	0	343	23	4	0	0	0	0	0	1,434	0.26
154	0	386	26	9	2	0	0	1	0	3,070	0.14
155	0	743	50	13	1	0	0	9	0	2,654	0.31
156	0	171	11	1	0	0	1	0	0	2,670	0.07
157	0	484	45	48	9	0	0	14	1	1,734	0.35
158	0	278	27	33	7	0	0	25	0	749	0.49
159	0	8	1	0	0	0	0	4	0	407	0.03
160	0	3	0	0	0	0	0	0	0	134	0.02
161	0	12	1	0	0	0	0	15	0	865	0.03
162	0	3	0	0	0	0	0	3	0	598	0.01
163	0	16	2	1	0	0	0	9	0	482	0.06
164	0	21	2	0	0	0	0	3	0	353	0.07
165	0	16	2	0	0	0	0	4	0	228	0.10
166	0	3	0	1	0	0	0	0	0	44	0.09
167	0	166	16	15	3	0	0	25	0	464	0.49
168	0	104	11	9	2	0	0	4	0	516	0.25
169	0	141	14	6	1	0	0	4	0	766	0.22
170	0	111	11	16	3	0	0	2	0	572	0.25
171	0	42	4	1	0	0	0	3	0	190	0.26
172	0	3	0	0	0	0	0	4	0	330	0.02
173	0	31	3	0	0	0	0	7	0	459	0.09
174	0	17	2	0	0	0	0	0	0	304	0.06
175	0	8	1	0	0	0	0	3	0	235	0.05
176	0	35	4	0	0	0	0	6	0	924	0.05
177	0	13	1	1	0	0	0	0	0	711	0.02
178	0	254	19	1	0	0	0	0	0	569	0.48
179	0	273	20	1	0	0	0	0	0	1,010	0.29

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
180	0	35	2	1	0	0	0	0	0	649	0.06
181	0	204	15	1	0	0	0	0	0	1,303	0.17
182	0	326	25	1	0	0	0	0	0	1,742	0.20
183	0	130	8	0	0	0	0	2	0	2,179	0.06
184	0	9	0	0	0	0	0	0	0	3,504	0.00
185	0	15	1	3	0	0	0	1	0	1,827	0.01
186	0	7	0	2	0	0	0	0	0	728	0.01
187	0	1	0	0	0	0	0	0	0	855	0.00
188	0	152	16	0	0	0	0	0	0	4,536	0.04
189	0	340	23	11	1	0	0	2	0	5,296	0.07
190	0	5	0	0	0	0	0	6	0	1,304	0.01
191	0	91	8	4	1	0	0	1	0	759	0.14
192	0	385	39	37	7	0	0	79	1	2,645	0.21
193	0	34	2	2	0	0	0	0	0	1,046	0.04
194	0	22	1	3	0	0	0	0	0	1,139	0.02
195	0	378	29	4	0	1	0	0	0	1,391	0.30
196	0	25	2	0	0	0	0	0	0	255	0.11
197	0	345	26	0	0	0	0	0	0	1,276	0.29
198	0	56	5	1	0	0	0	0	0	179	0.35
199	0	204	16	1	0	0	0	0	0	838	0.26
200	0	367	31	35	6	0	2	3	0	8,085	0.05
201	0	319	31	54	10	0	0	6	0	5,139	0.08
202	0	140	14	33	6	1	0	6	0	2,784	0.07
203	0	981	110	0	0	0	0	3	0	12,832	0.09
204	0	454	51	0	0	0	0	0	0	4,777	0.11
205	0	851	95	0	0	0	0	0	0	8,103	0.12
206	0	4	0	0	0	0	0	0	0	223	0.02
208	0	2	0	0	0	0	0	0	0	251	0.01
209	0	51	5	3	0	0	0	18	0	709	0.11
210	0	21	2	0	0	0	0	0	0	283	0.08
211	0	327	34	0	0	0	1	4	0	6,482	0.06
212	0	313	28	2	0	0	0	4	0	3,382	0.10
213	0	177	13	8	1	0	0	1	0	697	0.29
214	0	173	18	26	5	1	0	4	0	2,415	0.09
215	0	5	1	0	0	0	0	0	0	181	0.03
216	0	56	6	6	1	0	0	1	0	1,453	0.05
217	0	45	5	0	0	0	0	0	0	578	0.09
218	0	144	15	6	1	0	0	34	0	2,079	0.10
219	0	64	7	4	1	0	0	9	0	1,054	0.08
220	0	35	4	2	0	0	0	14	0	858	0.06
221	0	14	1	1	0	0	0	1	0	307	0.06

Table B-6. Number of Onsite Wastewater Treatment Systems by Catchment ID for the Recent Modeling Period (2014 to 2018)											
Catch_ID	Privy	Conv., fxn., subsurface	Conv., malfxn., subsurface	Adv. Trtmnt., fxn. subsurface, single family	Adv. Trtmnt., malfxn. subsurface, single family	Adv. Trtmnt., subsurface, >3000 gpd	Single pass, sand filter discharging to land surface	Single pass, sand filter discharging to stream	Recirculating sand filter discharging to stream	CatchmentArea_ac	Number Of Systems Per ac
222	0	1	0	0	0	0	0	0	0	186	0.01
223	0	90	6	4	0	0	0	0	0	3,358	0.03
224	0	13	1	0	0	0	0	11	0	301	0.08
225	0	10	1	0	0	0	0	7	0	383	0.05
226	0	3	0	1	0	0	0	0	0	231	0.02
227	0	34	2	0	0	0	0	0	0	951	0.04
228	0	2,361	180	28	3	0	0	0	0	5,258	0.49
229	0	547	42	8	1	0	0	0	0	2,102	0.28
230	0	52	4	4	0	0	0	0	0	756	0.08
231	0	72	5	0	0	0	0	0	0	1,712	0.04
232	0	161	10	0	0	0	0	0	0	5,622	0.03
233	0	7	0	0	0	0	0	0	0	1,902	0.00
234	0	34	2	2	0	0	0	0	0	1,048	0.04
236	0	4	0	0	0	0	0	0	0	119	0.03
237	0	61	4	1	0	0	0	0	0	406	0.16
238	0	183	14	4	0	0	0	0	0	638	0.31
239	0	245	18	5	0	1	0	0	0	2,247	0.12
243	0	773	58	4	0	0	0	0	0	1,400	0.60
244	0	6	0	0	0	0	0	0	0	151	0.04
245	0	12	1	0	0	0	0	1	0	905	0.02
247	0	5	1	0	0	0	0	1	0	1,410	0.00
248	0	167	17	4	1	0	0	54	0	2,935	0.08
249	0	5	0	0	0	0	0	2	0	1,238	0.01
250	0	4	0	0	0	0	0	0	0	508	0.01
251	0	1	0	0	0	0	0	0	0	364	0.00
252	0	74	8	5	1	0	0	24	0	1,937	0.06
253	0	65	7	3	0	0	0	66	0	908	0.16
254	0	10	1	1	0	0	0	4	0	219	0.07
255	0	78	7	13	3	0	0	10	0	3,032	0.04
256	0	64	5	0	0	0	0	0	0	234	0.30
257	0	104	7	2	0	0	0	0	0	658	0.17
258	0	10	1	0	0	0	0	0	0	215	0.05
259	0	153	15	3	1	0	0	1	0	3,178	0.05
260	0	7	1	0	0	0	0	0	0	300	0.03

Table Notes:

System types are defined in the UNRBA Falls Lake WARMF Watershed Model Report.

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
114	0.994179	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	1000	10	0.8	856.478	3000
1	0.989695	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
2	1.00191	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
3	0.992466	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
4	1.01776	0.5	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	856.475	3000
5	1.00821	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
6	0.99557	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	856.478	3000
7	0.998307	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
8	0.998495	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
9	1.00776	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
10	1.00381	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
11	1.00906	0.5	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.23	0.35	245000	5	0.78	2569.43	3000
12	0.997879	0.5	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	1712.95	3000
13	0.999236	0.5	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	1712.95	3000
14	0.997225	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1712.95	3000
15	0.994538	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	1027.78	300
16	1.01062	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	1027.78	300
17	1.00433	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	1027.78	3000
18	1.00338	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.6	256.942	3000
19	1.00629	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.6	256.942	3000
20	0.986193	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	513.887	3000
21	0.992282	0.1	0	0.01	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	570.987	3000
22	1.01567	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
23	1.0045	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
24	1.00807	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
25	1.00987	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
26	1.00316	0.5	0	0.01	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	856.475	3000
27	1.00544	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.21	0.21	0.45	40000	15	0.7	513.887	3000
28	1.00534	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.45	40000	15	0.7	513.887	3000
29	1.00708	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.26	0.26	0.45	40000	15	0.7	513.887	3000
30	0.991311	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	513.888	300
31	0.995342	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.25	0.25	0.5	5000	3.5	0.5	513.888	3000
32	1.00652	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.25	0.25	0.5	5000	3.5	0.5	513.888	3000
33	0.993965	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.22	0.4	0.5	200000	15	0.61	256.942	3000
34	0.998515	0.6	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.26	0.26	0.35	5000	3.5	0.5	256.942	3000
38	0.986401	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.22	0.22	0.335	5000	3.5	0.5	1027.78	300
35	0.986142	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	1027.78	300
36	1.0097	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	1027.78	300
37	0.987492	0.1	0	0.01	0	0	0.15	0	0.05	0.1	0	0	0	0	0	20	0.17	0.17	0.5	5000	3.5	0.5	642.356	300
39	0.986345	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.19	0.19	0.335	5000	3.5	0.5	1027.78	300
40	1.00769	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.2	0.2	0.335	5000	3.5	0.5	1027.78	300

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
41	1.00002	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.2	0.2	0.4	120000	15	0.75	513.885	3000
42	1.0013	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.21	0.21	0.41	120000	15	0.75	513.885	3000
43	1.00339	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.2	0.2	0.4	120000	15	0.75	513.885	3000
44	0.998915	0.1	0	0.01	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	642.36	3000
45	1.00991	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	1284.73	3000
46	1.00248	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.21	0.21	0.335	5000	3.5	0.5	1284.73	3000
47	1.00399	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
48	1.00846	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
49	1.01489	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
50	0.991861	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
51	0.989291	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
52	1.0041	0.5	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	856.475	3000
53	1.00882	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.35	20000	15	0.58	513.887	3000
54	1.0132	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.35	20000	15	0.58	513.887	3000
55	1.00522	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	5	0.57	642.36	3000
56	1.00554	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
57	0.988474	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.55	100000	5	0.53	642.357	3000
58	1.00002	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.28	0.28	0.45	40000	15	0.7	513.887	3000
59	1.00034	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.27	0.27	0.45	40000	15	0.7	513.887	3000
60	0.999071	0.1	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.23	0.5	10000	2.75	0.5	642.356	300
61	1.00093	0.1	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.26	0.26	0.5	10000	2.75	0.5	256.942	300
62	0.989651	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	10000	2.75	0.5	513.885	3000
63	0.993291	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.5	10000	2.75	0.5	513.885	3000
64	0.992574	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.19	0.19	0.335	5000	3.5	0.5	2569.44	3000
65	0.997434	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.21	0.21	0.335	5000	3.5	0.5	2569.44	3000
66	0.998519	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.22	0.22	0.335	5000	3.5	0.5	2569.44	3000
67	0.994624	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	1000	10	0.8	856.478	3000
68	0.996009	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
69	1.00726	0.5	0	0.005	0	0	0.05	0.01	0.05	0.1	0	0	0	0	0	20	0.3	0.23	0.35	245000	5	0.78	2569.43	3000
70	1.00413	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000
71	1.00464	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.26	0.26	0.45	40000	15	0.6	513.887	3000
72	1.00683	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.27	0.27	0.45	40000	15	0.7	513.887	3000
73	0.998771	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	856.475	3000
74	0.994437	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
75	0.993916	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	856.475	3000
76	0.985185	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.42	120000	5	0.75	2569.43	3000
77	0.991254	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.43	120000	15	0.75	2569.43	3000
78	1.01646	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.2	0.35	245000	5	0.78	2569.43	3000
79	1.01142	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	2569.44	300
80	1.00982	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.18	0.18	0.335	5000	3.5	0.5	2569.44	3000
81	1.00619	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
85	0.995115	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0.4	0	0	20	0.3	0.2	0.35	245000	5	0.78	2569.45	300
82	1.00533	0.8	0	0.005	0	0	0.05	0	0	0.1	0	0	0.4	0	0	20	0.26	0.26	0.45	40000	15	0.7	2569.45	300
83	0.989987	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.45	40000	15	0.7	2569.45	3000
84	0.994047	0.1	0	0.01	0	0	0.05	0.01	0.05	0.1	0	0	0.4	0	0	20	0.21	0.21	0.35	245000	5	0.78	1712.96	300
86	0.991686	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.2	0.35	245000	5	0.78	2569.43	3000
87	1.00657	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.19	0.19	0.335	5000	3.5	0.5	856.48	3000
88	1.00197	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.21	0.21	0.335	5000	3.5	0.5	856.48	3000
89	1.00796	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.45	0.25	0.45	1000	25	0.8	856.478	3000
90	0.996089	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
91	0.980117	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
92	0.98055	0.1	0	0.02	0	0	0.01	0	0.05	0.1	0	0	0.4	0	0	20	0.2	0.2	0.4	5000	3.5	0.5	1284.73	300
93	0.991422	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	1284.73	300
94	1.02559	0.1	0	0.02	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.21	0.21	0.5	5000	3.5	0.5	1284.73	300
95	0.988605	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.21	0.21	0.335	5000	3.5	0.5	1284.73	300
96	1.01206	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	1027.78	3000
97	0.986562	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
98	0.990739	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.35	20000	15	0.58	513.887	3000
99	1.01585	0.1	0	0.01	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	642.36	300
100	1.01012	0.1	0	0.01	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.2	0.2	0.5	5000	3.5	0.5	642.36	300
101	0.980599	0.1	0	0.01	0	0	0.05	0	0.05	0.1	0	0	0	0	0	20	0.19	0.19	0.5	5000	3.5	0.5	642.36	300
102	0.991873	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	513.888	3000
103	1.00026	0.1	0	0.02	0	0	0.15	0	0.05	0.1	0	0	0	0	0	20	0.19	0.19	0.5	5000	3.5	0.5	642.356	300
104	0.98624	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.5	10000	2.75	0.5	513.885	300
105	0.98961	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	467.173	300
106	0.992709	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	467.173	3000
107	1.00707	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.18	0.18	0.335	5000	3.5	0.5	856.48	3000
108	0.991349	0.1	0	0.01	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	2569.44	300
109	0.997201	0.1	0	0.01	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	2569.44	300
110	0.99636	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.19	0.19	0.335	5000	3.5	0.5	2569.44	3000
111	1.0033	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
112	0.999485	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	1027.78	300
113	0.997997	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	856.475	3000
115	0.993297	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	1000	10	0.8	856.478	3000
116	1.00203	0.1	0	0.01	0	0	0.05	0	0	0.001	0	0	0.4	0	0	20	0.24	0.24	0.5	10000	2.75	0.5	642.36	300
117	0.991638	0.8	0	0.05	0	0	0.15	0.05	0.05	0.001	0	0	0.4	0	0	20	0.48	0.48	0.5	100000	2.75	0.5	642.36	300
118	1.00704	0.1	0	0.05	0	0	0.08	0.05	0.05	0.001	0	0	0.4	0	0	20	0.26	0.26	0.5	10000	2.75	0.5	642.36	300
119	1.00445	0.1	0	0.05	0	0	0.08	0.05	0.05	0.001	0	0	0.4	0	0	20	0.24	0.24	0.5	10000	2.75	0.5	642.36	300
120	0.992168	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.45	0.25	0.45	1000	25	0.8	856.478	3000
121	0.996261	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.45	0.25	0.45	1000	25	0.8	856.478	3000
122	1.00854	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
123	1.01643	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
124	1.02035	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
125	1.00688	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0.4	0	0	20	0.25	0.25	0.45	40000	15	0.7	428.239	300
126	1.01007	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.23	0.23	0.35	20000	15	0.58	513.887	3000
127	0.990938	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.5	10000	2.75	0.5	513.885	3000
128	0.98095	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.35	20000	15	0.58	513.887	3000
129	1.01133	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
130	1.01043	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	856.475	3000
131	1.00029	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.26	0.26	0.45	40000	15	0.7	513.887	3000
132	0.996243	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.45	40000	15	0.7	513.887	3000
133	1.0001	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.27	0.27	0.45	40000	15	0.7	513.887	3000
134	1.00124	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.28	0.28	0.45	40000	15	0.7	513.887	3000
135	1.00362	0.1	0	0.02	0	0	0.15	0	0.05	0.1	0	0	0	0	0	20	0.18	0.18	0.5	5000	3.5	0.5	513.885	300
136	0.989752	0.1	0	0.02	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	513.885	3000
137	1.00499	0.4	0	0.01	0	0	0.15	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.6	256.942	3000
138	1.00241	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.6	256.942	3000
139	0.998959	0.1	0	0.02	0	0	0.05	0	0.05	0.01	0	0	0.4	0	0	20	0.2	0.2	0.335	5000	3.5	0.5	1284.73	300
140	1.00442	0.1	0	0.1	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.22	0.22	0.335	5000	3.5	0.5	1284.73	3000
141	0.997031	0.1	0	0.1	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	1284.73	3000
142	0.999792	0.1	0	0.02	0	0	0.05	0	0.05	0.01	0	0	0.4	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	642.36	3000
143	1.01512	0.1	0	0.1	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.19	0.19	0.335	5000	3.5	0.5	1284.73	300
144	1.00505	0.1	0	0.1	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.2	0.2	0.335	5000	3.5	0.5	1284.73	3000
145	0.97051	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	856.478	3000
146	1.02406	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
147	0.986633	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
148	0.992302	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.45	0.25	0.45	1000	25	0.8	856.478	3000
149	1.02371	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
150	1.01414	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
151	0.992132	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
152	0.991327	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
153	1.01509	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
154	0.97626	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.23	0.23	0.35	20000	15	0.58	513.887	3000
155	0.996029	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
156	0.99173	0.8	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
157	0.997334	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
158	0.999481	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
159	1.01475	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.45	40000	15	0.7	513.887	3000
160	1.00842	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.28	0.28	0.45	40000	15	0.7	513.887	3000
161	1.00461	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.27	0.27	0.45	40000	15	0.7	513.887	3000
162	0.975519	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000
163	1.01507	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.2	0.2	0.35	20000	15	0.58	513.887	3000
164	0.994801	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
165	1.0041	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.26	0.26	0.45	40000	15	0.7	513.887	3000
166	0.993809	0.1	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	120000	15	0.75	513.887	3000
167	0.993079	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
168	0.999	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
169	0.997598	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
170	0.998145	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.35	20000	15	0.58	513.887	3000
171	0.994218	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.35	20000	15	0.58	513.887	3000
172	1.00602	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.45	40000	15	0.7	513.887	3000
173	0.997698	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.28	0.28	0.45	40000	15	0.7	513.887	3000
174	1.00182	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.45	40000	15	0.7	513.887	3000
175	0.996612	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000
176	0.997071	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000
177	1.00821	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0.4	0	0	20	0.21	0.21	0.45	40000	15	0.7	513.887	300
178	1.0156	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	2569.44	300
179	0.995278	0.1	0	0.01	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	2569.44	300
180	0.986508	0.1	0	0.02	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	1284.72	300
181	0.984569	0.1	0	0.02	0	0	0.05	0	0.05	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	642.36	300
182	1.00858	0.1	0	0.01	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.18	0.18	0.335	5000	3.5	0.5	2569.44	300
183	1.0038	0.1	0	0.02	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	513.885	3000
184	1.00176	0.1	0	0.02	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.5	5000	3.5	0.5	642.356	300
187	1.01764	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.22	0.22	0.32	75000	5	0.78	1027.77	300
185	1.01394	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.25	0.25	0.5	10000	2.75	0.5	856.487	300
186	1.00834	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.23	0.23	0.32	75000	5	0.78	856.473	3000
188	0.998904	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
189	0.995467	0.5	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	856.475	3000
190	1.00086	0.1	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0.4	0	0	20	0.26	0.26	0.5	10000	2.75	0.5	1712.96	300
191	1.01174	0.5	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.24	0.35	245000	5	0.78	2569.43	3000
192	1.00924	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.24	0.35	245000	5	0.78	2569.43	3000
193	0.99823	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
194	0.997046	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
195	1.01759	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	467.173	300
196	0.999147	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	467.171	300
197	1.00197	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	467.171	300
198	0.992105	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	467.173	300
199	0.988868	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	467.171	300
200	1.00504	0.5	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.3	0.35	245000	5	0.78	1712.95	3000
201	1.00629	0.4	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.25	0.28	0.35	245000	10	0.75	2569.43	3000
202	1.00218	0.1	0	0.005	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.3	0.23	0.35	245000	5	0.78	2569.43	3000
203	0.999683	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
204	1.00714	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
205	1.00493	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
206	1.00636	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.5	10000	2.75	0.5	856.475	3000
207	1.0005	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.3	75000	6	0.8	856.475	3000
208	1.0042	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.23	0.23	0.3	75000	6	0.8	856.475	3000
209	0.998917	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	513.888	3000
210	0.995776	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
211	1.00459	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
212	1.00112	0.25	0	0.02	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	1027.77	3000
213	0.997961	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.16	0.16	0.335	5000	3.5	0.5	513.887	300
214	1.00401	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.3	75000	6	0.8	856.475	3000
215	0.998576	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.24	0.32	75000	5	0.78	856.475	3000
216	1.00499	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.21	0.21	0.3	75000	6	0.8	856.475	3000
217	1.0177	0.1	0	0.02	0	0	0.05	0	0.05	0.1	0	0	0.4	0	0	20	0.26	0.26	0.5	5000	3.5	0.5	642.36	300
218	0.996435	0.1	0	0.02	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	642.36	3000
219	0.989452	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	642.36	300
220	0.985282	0.1	0	0.02	0	0	0.05	0	0	0.1	0	0	0.4	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	642.36	300
221	0.984363	0.1	0	0.02	0	0	0.05	0	0.05	0.1	0	0	0.4	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	642.36	300
222	0.983598	0.1	0	0.02	0	0	0.05	0	0.05	0.2	0	0	0.2	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	642.36	300
223	0.997819	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	1000	10	0.8	856.478	3000
224	1.00102	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.45	40000	15	0.7	513.887	3000
225	1.00124	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.45	40000	15	0.7	513.887	3000
226	1.00071	0.8	0	0.01	0	0	0.05	0	0	0.001	0	0	0	0	0	20	0.26	0.26	0.45	40000	15	0.7	513.887	3000
227	1.01139	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.25	0.25	0.38	50000	15	0.68	856.478	3000
228	0.994657	0.1	0	0.02	0	0	0.02	0	0	0.1	0	0	0	0	0	20	0.18	0.18	0.335	5000	3.5	0.5	642.36	3000
229	1.00828	0.1	0	0.02	0	0	0.02	0	0	0.1	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	642.36	300
230	0.995134	0.1	10	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.45	0.25	0.45	1000	25	0.8	856.478	3000
231	0.999954	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.23	0.23	0.5	10000	2.75	0.5	513.885	3000
232	1.00117	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.61	256.942	3000
233	1.00576	0.4	0	0.01	0	0	0.05	0.01	0.05	0.001	0	0	0	0	0	20	0.23	0.4	0.5	200000	15	0.61	256.942	3000
234	1.01281	0.1	0	0.02	0	0	0.05	0	0.05	0.1	0	0	0	0	0	20	0.21	0.21	0.5	5000	3.5	0.5	642.356	300
235	1.00328	0.1	0	0.02	0	0	0.05	0	0.05	0.001	0	0	0	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	642.356	300
236	1.00212	0.1	0	0.02	0	0	0.05	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	5000	3.5	0.5	642.356	300
237	1.00259	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	513.887	300
238	1.00957	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0.4	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	513.887	300
239	1.02567	0.1	0	0.02	0	0	0.02	0	0	0.1	0	0	0	0	0	20	0.18	0.18	0.335	5000	3.5	0.5	642.36	300
241	1.01032	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.21	0.21	0.32	75000	5	0.78	856.473	3000
240	1.00843	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.25	0.25	0.5	10000	2.75	0.5	856.473	3000
242	1.00996	0.1	0	0.01	0	0	0.15	0	0	0.001	0	0	0.4	0	0	20	0.27	0.27	0.5	10000	2.75	0.5	1027.77	3000
243	0.992361	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	467.173	300
244	0.999826	0.1	0	0.005	0	0	0.15	0	0	0.1	0	0	0	0	0	20	0.22	0.22	0.5	10000	2.75	0.5	513.885	3000
245	0.987436	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	5	0.57	642.36	3000
246	0.999374	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000

Table B-7. Model Coefficients for Catchments

Catchment ID	Precipitation Weighting Factor	Manning's n	Detention Storage (percent)	Org. Carbon Decay (1/day)			Nitrification (1/day)			Denitrification (1/day)			Wetland Denitr. (1/day)			Soil Layer 1								
				Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Soil	Surface	Canopy	Thickness (centimeters)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (centimeters per day, cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (liters per kilogram, L/kg)	Phosphate Adsorption (L/kg)
247	1.00855	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
248	0.993413	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
249	1.00303	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
250	1.00623	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
251	1.01393	0.8	0	0.02	0	0	0.15	0.05	0.05	0.001	0	0	0	0	0	20	0.35	0.48	0.5	100000	2	0.5	642.36	3000
252	1.00735	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	513.888	3000
253	0.996465	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	513.888	3000
254	0.994273	0.1	0	0.02	0	0	0.05	0	0	0.2	0	0	0.2	0	0	20	0.24	0.24	0.5	5000	3.5	0.5	513.888	3000
255	0.996196	0.1	0	0.02	0	0	0.05	0	0	0.01	0	0	0	0	0	20	0.23	0.23	0.5	5000	3.5	0.5	1027.78	3000
256	1.01105	0.1	0	0.02	0	0	0.02	0	0	0.1	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	642.36	300
257	1.00453	0.1	0	0.02	0	0	0.02	0	0	0.1	0	0	0	0	0	20	0.17	0.17	0.335	5000	3.5	0.5	642.36	300
258	0.997668	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.3	75000	6	0.8	856.475	3000
259	1.0072	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.21	0.21	0.3	75000	6	0.8	856.475	3000
260	1.00305	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.19	0.19	0.3	75000	6	0.8	856.475	3000
261	1.00031	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.3	75000	6	0.8	856.475	3000
262	1.00094	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.3	75000	6	0.8	856.475	3000
263	1.00352	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.24	0.24	0.3	75000	6	0.8	856.475	3000
264	1.003	0.25	0	0.01	0	0	0.15	0	0	0.001	0	0	0	0	0	20	0.22	0.22	0.3	75000	6	0.8	856.475	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
114	30	0.32	0.32	0.46	8000	5	0.2	342.404	3000	50	0.33	0.33	0.45	300	5	0	326.083	3000
1	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
2	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
3	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
4	30	0.31	0.31	0.37	45000	3.2	0.1	428.007	3000	50	0.34	0.34	0.39	18000	10	0.06	1304.33	3000
5	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
6	30	0.32	0.31	0.4	40000	3	0.18	342.404	3000	50	0.34	0.34	0.45	30000	3	0.12	326.083	3000
7	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
8	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.33	0.4	750	10	0.06	1304.33	3000
9	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.34	0.4	750	10	0.06	1304.33	3000
10	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.33	0.4	750	10	0.06	1304.33	3000
11	30	0.31	0.26	0.42	45000	3.5	0.1	1141.35	3000	50	0.34	0.32	0.43	18000	10	0.06	1304.33	3000
12	30	0.31	0.32	0.37	45000	3.5	0.1	856.014	3000	50	0.34	0.33	0.38	18000	10	0.06	1304.33	3000
13	30	0.31	0.31	0.37	45000	3.2	0.1	856.014	3000	50	0.34	0.32	0.39	18000	10	0.06	1304.33	3000
14	30	0.31	0.33	0.39	7500	5	0.1	1712.03	3000	50	0.3	0.32	0.4	750	10	0.06	1739.11	3000
15	30	0.34	0.34	0.48	200000	0.9	0.2	856.01	300	50	0.42	0.33	0.45	10000	1.25	0.13	1304.33	300
16	30	0.31	0.31	0.48	200000	0.9	0.2	856.01	300	50	0.4	0.31	0.45	10000	1.25	0.13	1304.33	300
17	30	0.37	0.37	0.48	200000	0.9	0.2	856.01	3000	50	0.44	0.35	0.45	10000	1.25	0.13	1304.33	3000
18	30	0.3	0.27	0.45	5000	0.9	0.18	142.669	3000	50	0.32	0.3	0.4	2000	10	0.12	217.388	3000
19	30	0.3	0.31	0.45	5000	0.9	0.18	142.669	3000	50	0.32	0.32	0.4	2000	10	0.12	217.388	3000
20	30	0.34	0.34	0.38	200000	0.9	0.2	856.016	3000	50	0.32	0.32	0.395	10000	10	0.13	1304.33	3000
21	30	0.36	0.36	0.48	200000	0.9	0.2	190.224	3000	50	0.34	0.34	0.45	10000	1.25	0.13	163.041	3000
22	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
23	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
24	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
25	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
26	30	0.31	0.31	0.37	45000	3.2	0.1	428.007	3000	50	0.34	0.33	0.39	18000	10	0.06	1304.33	3000
27	30	0.29	0.29	0.51	100	1.25	0.18	244.575	3000	50	0.33	0.33	0.49	200	1.25	0.12	260.866	3000
28	30	0.29	0.29	0.51	100	1.25	0.18	244.575	3000	50	0.33	0.33	0.49	200	1.25	0.12	260.866	3000
29	30	0.32	0.32	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
30	30	0.37	0.37	0.48	200000	0.9	0.2	171.202	300	50	0.44	0.35	0.45	10000	1.25	0.13	130.433	300
31	30	0.39	0.39	0.48	200000	0.9	0.2	171.202	3000	50	0.44	0.36	0.45	10000	1.25	0.13	130.433	3000
32	30	0.39	0.39	0.48	200000	0.9	0.2	171.202	3000	50	0.36	0.36	0.45	10000	1.25	0.13	130.433	3000
33	30	0.31	0.31	0.45	5000	0.9	0.13	142.669	3000	50	0.33	0.33	0.4	2000	10	0.1	217.388	3000
34	30	0.34	0.34	0.4	200000	0.9	0.2	142.669	3000	50	0.31	0.31	0.4	10000	10	0.13	217.388	3000
38	30	0.34	0.34	0.38	200000	0.9	0.2	856.01	300	50	0.4	0.32	0.395	10000	10	0.13	1304.33	300
35	30	0.32	0.32	0.48	200000	0.9	0.2	856.01	300	50	0.4	0.31	0.45	10000	1.25	0.13	1304.33	300
36	30	0.32	0.32	0.48	200000	0.9	0.2	856.01	300	50	0.4	0.32	0.45	10000	1.25	0.13	1304.33	300
37	30	0.31	0.31	0.48	200000	0.9	0.2	155.639	300	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	300
39	30	0.32	0.32	0.38	200000	0.9	0.2	856.01	300	50	0.31	0.31	0.395	10000	10	0.13	1304.33	300
40	30	0.34	0.34	0.38	200000	0.9	0.2	856.01	300	50	0.32	0.32	0.395	10000	10	0.13	1304.33	300

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
41	30	0.34	0.34	0.53	1200	0.9	0.1	214.004	3000	50	0.33	0.33	0.5	200	10	0.1	217.388	3000
42	30	0.32	0.32	0.51	1200	0.9	0.1	214.004	3000	50	0.33	0.33	0.5	200	10	0.1	217.389	3000
43	30	0.32	0.32	0.51	1200	0.9	0.1	214.004	3000	50	0.33	0.33	0.5	200	10	0.1	217.389	3000
44	30	0.35	0.35	0.48	200000	0.9	0.2	155.638	3000	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	3000
45	30	0.36	0.36	0.48	200000	0.9	0.2	856.01	3000	50	0.35	0.35	0.45	10000	1.25	0.13	1304.33	3000
46	30	0.36	0.36	0.38	200000	0.9	0.2	856.01	3000	50	0.35	0.35	0.395	10000	10	0.13	1304.33	3000
47	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
48	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
49	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
50	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
51	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
52	30	0.31	0.31	0.37	45000	3.2	0.1	428.007	3000	50	0.34	0.33	0.39	18000	10	0.06	1304.33	3000
53	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
54	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
55	30	0.4	0.45	0.48	50000	0.22	0.2	263.387	3000	50	0.41	0.41	0.45	10000	1.25	0.13	434.777	3000
56	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
57	30	0.4	0.45	0.5	50000	3	0.19	263.389	3000	50	0.41	0.41	0.45	50000	3	0.13	434.777	3000
58	30	0.35	0.35	0.51	100	1.25	0.18	244.575	3000	50	0.27	0.27	0.49	200	1.25	0.12	260.866	3000
59	30	0.31	0.31	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
60	30	0.34	0.34	0.48	50	0.225	0.2	155.639	300	50	0.33	0.33	0.45	5000	1.25	0.13	130.433	300
61	30	0.35	0.35	0.48	200000	0.9	0.2	142.669	300	50	0.32	0.32	0.45	10000	10	0.13	217.388	300
62	30	0.36	0.36	0.48	50	0.2	0.2	214.004	3000	50	0.35	0.35	0.45	5000	1.25	0.13	217.388	3000
63	30	0.36	0.36	0.48	50	0.2	0.2	214.004	3000	50	0.34	0.34	0.45	5000	1.25	0.13	217.388	3000
64	30	0.34	0.34	0.38	200000	0.9	0.2	1712.02	3000	50	0.33	0.33	0.395	10000	10	0.13	2608.66	3000
65	30	0.35	0.35	0.38	200000	0.9	0.2	1712.02	3000	50	0.33	0.33	0.395	10000	10	0.13	2608.66	3000
66	30	0.35	0.35	0.38	200000	0.9	0.2	1712.02	3000	50	0.32	0.32	0.395	10000	10	0.13	2608.66	3000
67	30	0.32	0.32	0.46	8000	5	0.2	342.404	3000	50	0.33	0.33	0.45	300	5	0	326.083	3000
68	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
69	30	0.31	0.27	0.42	45000	3.5	0.1	1141.35	3000	50	0.33	0.33	0.43	18000	10	0.06	1304.33	3000
70	30	0.3	0.3	0.51	100	1.25	0.18	244.575	3000	50	0.33	0.33	0.49	200	1.25	0.12	260.866	3000
71	30	0.3	0.3	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
72	30	0.36	0.36	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
73	30	0.31	0.33	0.39	7500	5	0.1	380.452	3000	50	0.3	0.34	0.4	750	10	0.06	434.777	3000
74	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.32	0.4	750	10	0.06	1304.33	3000
75	30	0.31	0.33	0.39	7500	5	0.1	380.452	3000	50	0.3	0.33	0.4	750	10	0.06	434.777	3000
76	30	0.26	0.26	0.45	1200	3.5	0.18	1141.35	3000	50	0.34	0.34	0.51	200	10	0.12	652.165	3000
77	30	0.25	0.25	0.44	1200	1.25	0.1	1141.35	3000	50	0.28	0.28	0.45	200	1.25	0.1	1304.33	3000
78	30	0.31	0.29	0.42	45000	3.5	0.1	1141.35	3000	50	0.33	0.32	0.43	18000	10	0.06	1304.33	3000
79	30	0.34	0.34	0.38	200000	0.9	0.2	1712.02	300	50	0.32	0.32	0.395	10000	10	0.13	2608.66	300
80	30	0.34	0.34	0.38	200000	0.9	0.2	1712.02	3000	50	0.32	0.32	0.395	10000	10	0.13	2608.66	3000
81	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.32	0.4	750	10	0.06	1304.33	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
85	30	0.31	0.21	0.42	45000	3.5	0.1	1141.34	300	50	0.33	0.25	0.43	18000	10	0.06	1304.33	300
82	30	0.29	0.29	0.51	100	1.25	0.15	1141.34	300	50	0.29	0.29	0.49	200	1.25	0.1	1304.33	300
83	30	0.29	0.29	0.51	100	1.25	0.15	1141.34	3000	50	0.31	0.31	0.49	200	1.25	0.1	1304.33	3000
84	30	0.28	0.28	0.42	45000	3.5	0.1	856.01	300	50	0.4	0.32	0.43	18000	10	0.06	1304.33	300
86	30	0.31	0.23	0.42	45000	3.5	0.1	1141.35	3000	50	0.33	0.3	0.43	18000	10	0.06	1304.33	3000
87	30	0.34	0.34	0.38	200000	0.9	0.2	428.008	3000	50	0.32	0.32	0.395	10000	10	0.13	652.164	3000
88	30	0.35	0.35	0.38	200000	0.9	0.2	428.008	3000	50	0.34	0.34	0.395	10000	10	0.13	652.164	3000
89	30	0.46	0.32	0.46	8000	10	0.2	342.404	3000	50	0.45	0.33	0.45	300	5	0	326.083	3000
90	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
91	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
92	30	0.36	0.36	0.55	200000	0.9	0.2	856.01	300	50	0.31	0.31	0.48	10000	1.25	0.13	1304.33	300
93	30	0.34	0.34	0.48	200000	0.9	0.2	856.01	300	50	0.33	0.33	0.45	10000	1.25	0.13	1304.33	300
94	30	0.33	0.33	0.48	200000	0.9	0.2	856.01	300	50	0.34	0.34	0.45	10000	1.25	0.13	1304.33	300
95	30	0.36	0.36	0.38	200000	0.9	0.2	856.01	300	50	0.34	0.34	0.395	10000	10	0.13	1304.33	300
96	30	0.35	0.35	0.48	200000	0.9	0.2	428.004	3000	50	0.35	0.35	0.45	10000	1.25	0.13	434.777	3000
97	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
98	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
99	30	0.36	0.36	0.48	200000	0.9	0.2	155.638	300	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	300
100	30	0.29	0.29	0.48	200000	0.9	0.2	155.638	300	50	0.29	0.29	0.45	10000	1.25	0.13	130.433	300
101	30	0.33	0.33	0.48	200000	0.9	0.2	155.638	300	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	300
102	30	0.36	0.36	0.48	200000	0.9	0.2	171.202	3000	50	0.44	0.35	0.45	10000	1.25	0.13	130.433	3000
103	30	0.34	0.34	0.48	200000	0.9	0.2	155.639	300	50	0.36	0.36	0.45	10000	1.25	0.13	130.433	300
104	30	0.35	0.35	0.48	50	0.2	0.2	214.004	300	50	0.33	0.33	0.45	5000	1.25	0.13	217.388	300
105	30	0.33	0.33	0.38	200000	0.9	0.2	214.004	300	50	0.31	0.31	0.395	10000	10	0.13	260.866	300
106	30	0.34	0.34	0.38	200000	0.9	0.2	214.004	3000	50	0.32	0.32	0.395	10000	10	0.13	260.866	3000
107	30	0.33	0.33	0.38	200000	0.9	0.2	428.008	3000	50	0.31	0.31	0.395	10000	10	0.13	652.164	3000
108	30	0.34	0.34	0.38	200000	0.9	0.2	1712.03	300	50	0.31	0.31	0.395	10000	10	0.13	2608.66	300
109	30	0.34	0.34	0.38	200000	0.9	0.2	1712.03	300	50	0.31	0.31	0.395	10000	10	0.13	2608.66	300
110	30	0.35	0.35	0.38	200000	0.9	0.2	1712.02	3000	50	0.33	0.33	0.395	10000	10	0.13	2608.66	3000
111	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
112	30	0.35	0.35	0.48	200000	0.9	0.2	428.004	300	50	0.34	0.34	0.45	10000	1.25	0.13	434.777	300
113	30	0.31	0.33	0.39	15000	5	0.1	380.451	3000	50	0.3	0.31	0.4	750	10	0.06	434.777	3000
115	30	0.32	0.32	0.46	8000	5	0.2	342.404	3000	50	0.33	0.33	0.45	300	5	0	326.083	3000
116	30	0.33	0.33	0.48	50	0.2	0.2	155.638	300	50	0.33	0.33	0.45	5000	1.25	0.13	130.433	300
117	30	0.45	0.45	0.48	50000	0.2	0.2	263.387	300	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	300
118	30	0.37	0.37	0.48	50	0.2	0.2	263.387	300	50	0.33	0.33	0.45	5000	1.25	0.13	434.777	300
119	30	0.37	0.37	0.48	50	0.2	0.2	263.387	300	50	0.35	0.35	0.45	5000	1.25	0.13	434.777	300
120	30	0.46	0.32	0.46	8000	10	0.2	342.404	3000	50	0.45	0.33	0.45	300	5	0	326.083	3000
121	30	0.46	0.32	0.46	8000	10	0.2	342.404	3000	50	0.45	0.33	0.45	300	5	0	326.083	3000
122	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
123	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
124	30	0.32	0.3	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
125	30	0.31	0.31	0.51	100	1.25	0.18	214.003	300	50	0.3	0.3	0.49	200	1.25	0.12	260.866	300
126	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.35	0.35	0.45	30000	3	0.12	260.866	3000
127	30	0.37	0.37	0.48	50	0.2	0.2	214.004	3000	50	0.35	0.35	0.45	5000	1.25	0.13	217.389	3000
128	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
129	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
130	30	0.31	0.33	0.39	7500	5	0.1	380.451	3000	50	0.3	0.31	0.4	750	10	0.06	434.777	3000
131	30	0.31	0.31	0.51	100	1.25	0.18	244.575	3000	50	0.28	0.28	0.49	200	1.25	0.12	260.866	3000
132	30	0.31	0.31	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
133	30	0.33	0.33	0.51	100	1.25	0.18	244.575	3000	50	0.28	0.28	0.49	200	1.25	0.12	260.866	3000
134	30	0.36	0.36	0.51	100	1.25	0.18	244.575	3000	50	0.28	0.28	0.49	200	1.25	0.12	260.866	3000
135	30	0.33	0.33	0.48	200000	0.9	0.2	214.004	300	50	0.36	0.36	0.45	10000	1.25	0.13	217.388	300
136	30	0.36	0.36	0.48	200000	0.9	0.2	214.004	3000	50	0.34	0.34	0.45	10000	1.25	0.13	217.388	3000
137	30	0.3	0.32	0.45	5000	0.9	0.18	142.669	3000	50	0.32	0.33	0.4	2000	10	0.12	217.388	3000
138	30	0.3	0.3	0.45	5000	0.9	0.18	142.669	3000	50	0.32	0.33	0.4	2000	10	0.12	217.388	3000
139	30	0.34	0.34	0.38	200000	0.9	0.2	856.01	300	50	0.33	0.33	0.395	10000	10	0.13	1304.33	300
140	30	0.36	0.36	0.38	200000	0.9	0.2	856.016	3000	50	0.35	0.35	0.395	10000	10	0.13	1304.33	3000
141	30	0.33	0.33	0.38	200000	0.9	0.2	856.016	3000	50	0.31	0.31	0.395	10000	10	0.13	1304.33	3000
142	30	0.33	0.33	0.38	200000	0.9	0.2	428.007	3000	50	0.31	0.31	0.395	10000	10	0.13	652.165	3000
143	30	0.33	0.33	0.38	200000	0.9	0.2	856.016	300	50	0.3	0.3	0.395	10000	10	0.13	1304.33	300
144	30	0.35	0.35	0.38	200000	0.9	0.2	856.016	3000	50	0.33	0.33	0.395	10000	10	0.13	1304.33	3000
145	30	0.32	0.32	0.4	40000	3	0.18	342.404	3000	50	0.34	0.34	0.45	30000	3	0.12	326.083	3000
146	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
147	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
148	30	0.46	0.32	0.46	8000	10	0.2	342.404	3000	50	0.45	0.33	0.45	300	5	0	326.083	3000
149	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
150	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
151	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
152	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
153	30	0.32	0.33	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
154	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
155	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
156	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.32	0.32	0.45	30000	3	0.12	260.866	3000
157	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
158	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
159	30	0.3	0.3	0.51	100	1.25	0.18	244.575	3000	50	0.4	0.31	0.49	200	1.25	0.12	260.866	3000
160	30	0.34	0.34	0.51	100	1.25	0.18	244.575	3000	50	0.27	0.27	0.49	200	1.25	0.12	260.866	3000
161	30	0.35	0.35	0.51	100	1.25	0.18	244.575	3000	50	0.31	0.31	0.49	200	1.25	0.12	260.866	3000
162	30	0.33	0.33	0.51	100	1.25	0.18	244.575	3000	50	0.31	0.31	0.49	200	1.25	0.12	260.866	3000
163	30	0.32	0.29	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
164	30	0.32	0.32	0.51	100	1.25	0.18	244.575	3000	50	0.32	0.32	0.49	200	1.25	0.12	260.866	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
165	30	0.33	0.33	0.51	100	1.25	0.18	244.575	3000	50	0.31	0.31	0.49	200	1.25	0.12	260.866	3000
166	30	0.33	0.33	0.51	1200	3	0.18	244.575	3000	50	0.35	0.35	0.49	200	3	0.12	260.866	3000
167	30	0.32	0.31	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
168	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
169	30	0.32	0.34	0.4	40000	3	0.18	244.575	3000	50	0.35	0.35	0.45	30000	3	0.12	260.866	3000
170	30	0.32	0.33	0.4	40000	3	0.18	244.575	3000	50	0.34	0.34	0.45	30000	3	0.12	260.866	3000
171	30	0.32	0.32	0.4	40000	3	0.18	244.575	3000	50	0.33	0.33	0.45	30000	3	0.12	260.866	3000
172	30	0.3	0.3	0.51	100	1.25	0.18	244.575	3000	50	0.3	0.3	0.49	200	1.25	0.12	260.866	3000
173	30	0.34	0.34	0.51	100	1.25	0.18	244.575	3000	50	0.27	0.27	0.49	200	1.25	0.12	260.866	3000
174	30	0.36	0.36	0.51	100	1.25	0.18	244.575	3000	50	0.44	0.35	0.49	200	1.25	0.12	260.866	3000
175	30	0.36	0.36	0.51	100	1.25	0.18	244.575	3000	50	0.33	0.33	0.49	200	1.25	0.12	260.866	3000
176	30	0.36	0.36	0.51	100	1.25	0.18	244.575	3000	50	0.32	0.32	0.49	200	1.25	0.12	260.866	3000
177	30	0.27	0.27	0.51	100	1.25	0.18	244.575	300	50	0.4	0.31	0.49	200	1.25	0.12	260.866	300
178	30	0.34	0.34	0.38	200000	0.9	0.2	1712.02	300	50	0.32	0.32	0.395	10000	10	0.13	2608.66	300
179	30	0.34	0.34	0.38	200000	0.9	0.2	1712.03	300	50	0.31	0.31	0.395	10000	10	0.13	2608.66	300
180	30	0.34	0.34	0.38	200000	0.9	0.2	856.014	300	50	0.32	0.32	0.395	10000	10	0.13	1304.33	300
181	30	0.32	0.32	0.38	200000	0.9	0.2	428.007	300	50	0.29	0.29	0.395	10000	10	0.13	652.165	300
182	30	0.33	0.33	0.38	200000	0.9	0.2	1712.02	300	50	0.32	0.32	0.395	10000	10	0.13	2608.66	300
183	30	0.35	0.35	0.48	200000	0.9	0.2	244.576	3000	50	0.34	0.34	0.45	10000	1.25	0.13	260.866	3000
184	30	0.34	0.34	0.48	200000	0.9	0.2	155.639	300	50	0.3	0.3	0.45	10000	1.25	0.13	130.433	300
187	30	0.31	0.31	0.39	7500	5	0.1	570.676	300	50	0.32	0.32	0.4	750	10	0.1	1304.33	300
185	30	0.31	0.31	0.48	50	0.2	0.2	380.449	300	50	0.31	0.31	0.45	5000	1.25	0.13	434.777	300
186	30	0.3	0.3	0.39	7500	5	0.1	380.452	3000	50	0.33	0.33	0.4	750	10	0.1	434.777	3000
188	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.34	0.4	750	10	0.06	1304.33	3000
189	30	0.31	0.31	0.37	45000	3.2	0.1	428.007	3000	50	0.34	0.32	0.39	18000	10	0.06	1304.33	3000
190	30	0.33	0.33	0.48	50	0.2	0.2	856.009	300	50	0.32	0.32	0.45	5000	1.25	0.13	130.433	300
191	30	0.31	0.3	0.42	45000	3.5	0.1	1141.35	3000	50	0.34	0.33	0.43	18000	10	0.06	1304.33	3000
192	30	0.31	0.31	0.42	45000	3.5	0.1	1141.35	3000	50	0.33	0.33	0.43	18000	10	0.06	1304.33	3000
193	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
194	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
195	30	0.33	0.33	0.38	200000	0.9	0.2	214.004	300	50	0.32	0.32	0.395	10000	10	0.13	260.866	300
196	30	0.34	0.34	0.38	200000	0.9	0.2	214.004	300	50	0.32	0.32	0.395	10000	10	0.13	260.866	300
197	30	0.34	0.34	0.38	200000	0.9	0.2	214.004	300	50	0.31	0.31	0.395	10000	10	0.13	260.866	300
198	30	0.34	0.34	0.38	200000	0.9	0.2	214.004	300	50	0.32	0.32	0.395	10000	10	0.13	260.866	300
199	30	0.33	0.33	0.38	200000	0.9	0.2	214.004	300	50	0.31	0.31	0.395	10000	10	0.13	260.866	300
200	30	0.31	0.31	0.37	45000	3.2	0.1	856.014	3000	50	0.34	0.32	0.39	18000	10	0.06	1304.33	3000
201	30	0.32	0.3	0.42	5000	10	0.1	1141.35	3000	50	0.33	0.32	0.43	500	10	0.06	1304.33	3000
202	30	0.31	0.3	0.42	45000	3.5	0.1	1141.35	3000	50	0.33	0.32	0.43	18000	10	0.06	1304.33	3000
203	30	0.31	0.33	0.39	7500	5	0.1	570.676	3000	50	0.3	0.34	0.4	750	10	0.06	1304.33	3000
204	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.32	0.4	750	10	0.06	1304.33	3000
205	30	0.31	0.33	0.39	15000	5	0.1	570.675	3000	50	0.3	0.34	0.4	750	10	0.06	1304.33	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
206	30	0.32	0.32	0.48	50	0.2	0.2	380.452	3000	50	0.33	0.33	0.45	5000	1.25	0.13	434.777	3000
207	30	0.26	0.26	0.38	40000	2.3	0.11	380.452	3000	50	0.44	0.36	0.39	500	10	0.07	434.777	3000
208	30	0.28	0.28	0.38	40000	2.3	0.11	380.452	3000	50	0.34	0.34	0.39	500	10	0.07	434.777	3000
209	30	0.4	0.4	0.48	200000	0.9	0.2	171.202	3000	50	0.37	0.37	0.45	10000	1.25	0.13	130.433	3000
210	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.34	0.4	750	10	0.06	1304.33	3000
211	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.33	0.4	750	10	0.06	1304.33	3000
212	30	0.31	0.33	0.39	7500	5	0.1	570.677	3000	50	0.3	0.33	0.4	750	10	0.06	1304.33	3000
213	30	0.33	0.33	0.38	200000	0.9	0.2	856.016	300	50	0.3	0.3	0.395	10000	10	0.13	1304.33	300
214	30	0.32	0.32	0.38	40000	2.3	0.11	380.451	3000	50	0.33	0.33	0.39	500	10	0.07	434.777	3000
215	30	0.31	0.33	0.39	7500	5	0.1	380.451	3000	50	0.3	0.34	0.4	750	10	0.06	434.777	3000
216	30	0.31	0.31	0.38	40000	2.3	0.11	380.451	3000	50	0.34	0.34	0.39	500	10	0.07	434.777	3000
217	30	0.38	0.38	0.48	200000	0.9	0.2	285.336	300	50	0.33	0.33	0.45	10000	1.25	0.13	326.083	300
218	30	0.39	0.39	0.48	200000	0.9	0.2	285.336	3000	50	0.46	0.37	0.45	10000	1.25	0.13	326.083	3000
219	30	0.38	0.38	0.48	200000	0.9	0.2	285.336	300	50	0.36	0.36	0.45	10000	1.25	0.13	326.083	300
220	30	0.38	0.38	0.48	200000	0.9	0.2	285.336	300	50	0.36	0.36	0.45	10000	1.25	0.13	326.083	300
221	30	0.38	0.38	0.48	200000	0.9	0.2	285.336	300	50	0.36	0.36	0.45	10000	1.25	0.13	326.083	300
222	30	0.34	0.34	0.48	200000	0.9	0.2	285.336	300	50	0.35	0.35	0.45	10000	1.25	0.13	326.083	300
223	30	0.32	0.32	0.46	8000	5	0.2	342.404	3000	50	0.33	0.33	0.45	300	5	0	326.083	3000
224	30	0.3	0.3	0.51	100	1.25	0.18	244.575	3000	50	0.42	0.33	0.49	200	1.25	0.12	260.866	3000
225	30	0.31	0.31	0.51	100	1.25	0.18	244.575	3000	50	0.4	0.31	0.49	200	1.25	0.12	260.866	3000
226	30	0.31	0.31	0.51	100	1.25	0.18	244.575	3000	50	0.38	0.29	0.49	200	1.25	0.12	260.866	3000
227	30	0.32	0.32	0.4	50000	3.5	0.19	342.404	3000	50	0.33	0.33	0.4	50000	3.5	0.11	326.083	3000
228	30	0.34	0.34	0.38	200000	0.9	0.2	570.676	3000	50	0.31	0.31	0.395	10000	10	0.13	652.165	3000
229	30	0.34	0.34	0.38	200000	0.9	0.2	570.676	300	50	0.32	0.32	0.395	10000	10	0.13	652.165	300
230	30	0.46	0.32	0.46	8000	10	0.2	342.404	3000	50	0.45	0.33	0.45	300	5	0	326.083	3000
231	30	0.35	0.35	0.48	50	0.2	0.2	214.004	3000	50	0.35	0.35	0.45	5000	1.25	0.13	217.388	3000
232	30	0.3	0.3	0.45	5000	0.9	0.13	142.669	3000	50	0.32	0.32	0.4	2000	10	0.1	217.388	3000
233	30	0.3	0.31	0.45	5000	0.9	0.13	142.669	3000	50	0.32	0.31	0.4	2000	10	0.1	217.388	3000
234	30	0.34	0.34	0.48	200000	0.9	0.2	155.639	300	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	300
235	30	0.34	0.34	0.48	200000	0.9	0.2	155.639	300	50	0.34	0.34	0.45	10000	1.25	0.13	130.433	300
236	30	0.37	0.37	0.48	200000	0.9	0.2	155.639	300	50	0.37	0.37	0.45	10000	1.25	0.13	130.433	300
237	30	0.33	0.33	0.38	200000	0.9	0.2	856.016	300	50	0.31	0.31	0.395	10000	10	0.13	1304.33	300
238	30	0.33	0.33	0.38	200000	0.9	0.2	856.016	300	50	0.31	0.31	0.395	10000	10	0.13	1304.33	300
239	30	0.33	0.33	0.38	200000	0.9	0.2	570.676	300	50	0.3	0.3	0.395	10000	10	0.13	652.165	300
241	30	0.28	0.28	0.39	7500	5	0.1	380.452	3000	50	0.32	0.32	0.4	750	10	0.1	434.777	3000
240	30	0.28	0.28	0.48	50	0.2	0.2	380.452	3000	50	0.3	0.3	0.45	5000	1.25	0.13	434.777	3000
242	30	0.29	0.29	0.48	50	0.2	0.2	380.451	3000	50	0.3	0.3	0.45	5000	1.25	0.13	434.777	3000
243	30	0.34	0.34	0.38	200000	0.9	0.2	214.004	300	50	0.33	0.33	0.395	10000	10	0.13	260.866	300
244	30	0.33	0.33	0.48	50	0.2	0.2	214.004	3000	50	0.32	0.32	0.45	5000	1.25	0.13	217.388	3000
245	30	0.4	0.45	0.48	50000	0.22	0.2	263.387	3000	50	0.41	0.41	0.45	10000	1.25	0.13	434.777	3000
246	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 2									Soil Layer 3								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
247	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
248	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
249	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
250	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
251	30	0.4	0.45	0.48	50000	0.2	0.2	263.387	3000	50	0.41	0.41	0.45	5000	1.25	0.13	434.777	3000
252	30	0.38	0.38	0.48	200000	0.9	0.2	171.202	3000	50	0.36	0.36	0.45	10000	1.25	0.13	130.433	3000
253	30	0.38	0.38	0.48	200000	0.9	0.2	171.202	3000	50	0.44	0.36	0.45	10000	1.25	0.13	130.433	3000
254	30	0.37	0.37	0.48	200000	0.9	0.2	171.202	3000	50	0.35	0.35	0.45	10000	1.25	0.13	130.433	3000
255	30	0.34	0.34	0.48	200000	0.9	0.2	856.01	3000	50	0.43	0.34	0.45	10000	1.25	0.13	1304.33	3000
256	30	0.34	0.34	0.38	200000	0.9	0.2	570.676	300	50	0.31	0.31	0.395	10000	10	0.13	652.165	300
257	30	0.33	0.33	0.38	200000	0.9	0.2	570.676	300	50	0.3	0.3	0.395	10000	10	0.13	652.165	300
258	30	0.35	0.35	0.38	40000	2.3	0.11	380.451	3000	50	0.33	0.33	0.39	500	10	0.07	434.777	3000
259	30	0.32	0.32	0.38	40000	2.3	0.11	380.451	3000	50	0.33	0.33	0.39	500	10	0.07	434.777	3000
260	30	0.33	0.33	0.38	40000	2.3	0.11	380.451	3000	50	0.32	0.32	0.39	500	10	0.07	434.777	3000
261	30	0.32	0.32	0.38	40000	2.3	0.11	380.451	3000	50	0.34	0.34	0.39	500	10	0.07	434.777	3000
262	30	0.3	0.3	0.38	40000	2.3	0.11	380.451	3000	50	0.33	0.33	0.39	500	10	0.07	434.777	3000
263	30	0.3	0.3	0.38	40000	2.3	0.11	380.451	3000	50	0.32	0.32	0.39	500	10	0.07	434.777	3000
264	30	0.3	0.3	0.38	40000	2.3	0.11	380.451	3000	50	0.32	0.32	0.39	500	10	0.07	434.777	3000

	Table B-7. Model Coefficients for Catchments																	
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
114	50	0.4	0.28	0.4	100	3	0	151.308	3000	48	0.35	0.25	0.35	100	1	0	280.2	3000
1	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	34	0.3	0.25	0.33	2000	3.5	0	280.2	3000
2	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	40	0.3	0.25	0.33	2000	3.5	0	280.2	3000
3	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	43	0.3	0.25	0.33	2000	3.5	0	280.2	3000
4	50	0.25	0.28	0.35	500	10	0.03	403.488	3000	45	0.2	0.24	0.3	10	10	0.03	280.201	3000
5	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	21	0.25	0.25	0.33	5000	3	0.05	280.2	3000
6	50	0.29	0.29	0.35	30000	3	0.07	151.308	3000	32	0.25	0.24	0.33	5000	3	0.05	280.2	3000
7	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	50	0.25	0.25	0.33	5000	3	0.05	280.2	3000
8	50	0.28	0.22	0.35	75	10	0.03	403.488	3000	47	0.26	0.2	0.3	10	10	0.03	280.201	3000
9	50	0.28	0.27	0.35	75	10	0.03	403.488	3000	42	0.26	0.23	0.3	10	10	0.03	280.201	3000
10	50	0.28	0.28	0.35	75	10	0.03	403.488	3000	36	0.26	0.25	0.3	10	10	0.03	280.201	3000
11	43	0.25	0.26	0.35	500	10	0.03	605.232	3000									
12	50	0.25	0.28	0.35	500	10	0.03	605.232	3000	28	0.2	0.25	0.3	10	10	0.03	1401.01	3000
13	50	0.25	0.27	0.35	500	10	0.03	605.232	3000	16	0.2	0.25	0.3	10	10	0.03	1401.01	3000
14	50	0.28	0.27	0.35	75	10	0.03	605.232	3000	28	0.26	0.25	0.3	10	10	0.03	560.4	3000
15	29	0.45	0.29	0.44	1000	1.25	0.1	605.232	300									
16	22	0.44	0.28	0.44	1000	1.25	0.1	605.232	300									
17	41	0.45	0.29	0.44	1000	1.25	0.1	605.232	3000									
18	20	0.24	0.22	0.35	100	10	0.1	100.872	3000									
19	50	0.24	0.25	0.35	100	10	0.1	100.872	3000	33	0.26	0.23	0.3	50	10	0	140.1	3000
20	50	0.33	0.25	0.35	1000	1.25	0.1	605.232	3000	51	0.38	0.23	0.3	100	1.25	0.07	1401	3000
21	50	0.41	0.33	0.44	1000	1.25	0.1	43.2309	3000	45	0.44	0.29	0.35	100	1.25	0.07	20.0143	3000
22	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	37	0.3	0.25	0.33	2000	3.5	0	280.2	3000
23	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	34	0.3	0.25	0.33	2000	3.5	0	280.2	3000
24	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	39	0.3	0.25	0.33	2000	3.5	0	280.2	3000
25	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	21	0.25	0.25	0.33	5000	3	0.05	280.2	3000
26	50	0.25	0.27	0.35	500	10	0.03	403.488	3000	43	0.2	0.23	0.3	10	10	0.03	280.201	3000
27	50	0.24	0.26	0.43	90	1.25	0.07	302.616	3000	18	0.3	0.23	0.4	20000	1.25	0.05	280.2	3000
28	50	0.24	0.27	0.43	90	1.25	0.07	302.616	3000	21	0.3	0.23	0.4	20000	1.25	0.05	280.2	3000
29	50	0.24	0.24	0.43	90	1.25	0.07	302.616	3000	21	0.3	0.22	0.4	20000	1.25	0.05	280.2	3000
30	46	0.45	0.29	0.44	1000	1.25	0.1	33.624	300									
31	49	0.44	0.28	0.44	1000	1.25	0.1	33.624	3000									
32	50	0.37	0.29	0.44	1000	1.25	0.1	33.624	3000	3	0.45	0.3	0.35	100	1.25	0.07	15.5667	3000
33	50	0.24	0.27	0.35	100	10	0.09	100.872	3000	35	0.26	0.23	0.3	50	10	0.07	140.1	3000
34	50	0.35	0.27	0.35	1000	1.25	0.1	100.872	3000	27	0.41	0.26	0.41	100	1.25	0.07	140.1	3000
38	37	0.35	0.19	0.35	1000	1.25	0.1	605.232	300									
35	28	0.4	0.24	0.44	1000	1.25	0.1	605.232	300									
36	24	0.44	0.28	0.44	1000	1.25	0.1	605.232	300									
37	50	0.37	0.29	0.44	1000	1.25	0.1	33.624	300	33	0.41	0.26	0.35	100	1.25	0.07	15.5667	300
39	50	0.31	0.23	0.35	1000	1.25	0.1	605.232	300	37	0.36	0.21	0.3	100	1.25	0.07	15.5667	300
40	50	0.33	0.25	0.35	1000	1.25	0.1	605.232	300	12	0.35	0.2	0.3	100	1.25	0.07	15.5667	300

	Table B-7. Model Coefficients for Catchments																	
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
41	50	0.32	0.24	0.4	90	10	0.05	60.5232	3000	48	0.38	0.23	0.38	20	10	0	46.7001	3000
42	50	0.33	0.25	0.41	90	10	0.05	60.5232	3000	46	0.37	0.22	0.37	20	10	0	46.7002	3000
43	50	0.33	0.25	0.41	90	10	0.05	60.5232	3000	49	0.38	0.23	0.38	20	10	0	46.7002	3000
44	50	0.44	0.36	0.44	1000	1.25	0.1	33.624	3000	46	0.47	0.32	0.35	100	1.25	0.07	15.5667	3000
45	50	0.41	0.33	0.44	1000	1.25	0.1	605.232	3000	50	0.43	0.28	0.35	100	1.25	0.07	1401	3000
46	50	0.37	0.29	0.35	1000	1.25	0.1	605.232	3000	51	0.36	0.21	0.3	100	1.25	0.07	1401	3000
47	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	36	0.3	0.25	0.33	2000	3.5	0	280.2	3000
48	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	36	0.3	0.25	0.33	2000	3.5	0	280.2	3000
49	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	14	0.3	0.25	0.33	2000	3.5	0	280.2	3000
50	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	29	0.3	0.25	0.33	2000	3.5	0	280.2	3000
51	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	32	0.3	0.25	0.33	2000	3.5	0	280.2	3000
52	50	0.25	0.28	0.35	500	10	0.03	403.488	3000	35	0.2	0.25	0.3	10	10	0.03	280.201	3000
53	50	0.29	0.27	0.35	30000	3	0.07	302.616	3000	27	0.25	0.24	0.33	5000	3	0.05	280.2	3000
54	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	24	0.25	0.24	0.33	5000	3	0.05	280.2	3000
55	50	0.36	0.36	0.42	10000	1.25	0.07	151.308	3000	4	0.25	0.25	0.32	1000	1.25	0.03	140.1	3000
56	48	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000									
57	50	0.28	0.28	0.35	50000	3	0.08	151.308	3000	46	0.21	0.21	0.28	5000	3	0.02	140.1	3000
58	50	0.24	0.21	0.43	90	1.25	0.07	302.616	3000	20	0.3	0.21	0.4	20000	1.25	0.05	280.2	3000
59	50	0.24	0.28	0.43	90	1.25	0.07	302.616	3000	35	0.3	0.28	0.4	20000	1.25	0.05	280.2	3000
60	50	0.4	0.32	0.44	5000	1.25	0.1	33.624	300	39	0.45	0.3	0.35	5000	1.25	0.07	15.5667	300
61	50	0.37	0.29	0.44	1000	1.25	0.1	100.872	300	33	0.43	0.28	0.35	5000	1.25	0.07	140.1	300
62	50	0.42	0.34	0.44	5000	1.25	0.1	60.5232	3000	46	0.46	0.31	0.35	5000	1.25	0.07	46.7001	3000
63	50	0.41	0.33	0.44	5000	1.25	0.1	60.5232	3000	47	0.45	0.3	0.35	5000	1.25	0.07	46.7001	3000
64	50	0.34	0.26	0.35	1000	1.25	0.1	3026.16	3000	50	0.38	0.23	0.3	100	1.25	0.07	1401	3000
65	50	0.34	0.26	0.35	1000	1.25	0.1	3026.16	3000	51	0.37	0.22	0.3	100	1.25	0.07	1401	3000
66	50	0.34	0.26	0.35	1000	1.25	0.1	3026.16	3000	51	0.37	0.22	0.3	100	1.25	0.07	1401	3000
67	50	0.4	0.28	0.4	100	3	0	151.308	3000	44	0.35	0.25	0.35	100	1	0	280.2	3000
68	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	27	0.25	0.25	0.33	5000	3	0.05	280.2	3000
69	45	0.28	0.27	0.35	500	10	0.03	605.232	3000									
70	50	0.24	0.29	0.43	90	1.25	0.07	302.616	3000	49	0.3	0.25	0.4	20000	1.25	0.05	280.2	3000
71	50	0.24	0.28	0.43	90	1.25	0.07	302.616	3000	38	0.3	0.27	0.4	10000	1.25	0.05	280.2	3000
72	50	0.24	0.24	0.43	90	1.25	0.07	302.616	3000	29	0.3	0.22	0.4	20000	1.25	0.05	280.2	3000
73	50	0.28	0.28	0.35	75	10	0.03	403.488	3000	33	0.26	0.24	0.3	10	10	0.03	280.201	3000
74	50	0.28	0.27	0.35	75	10	0.03	403.488	3000	29	0.26	0.24	0.3	10	10	0.03	280.201	3000
75	50	0.28	0.28	0.35	75	10	0.03	403.488	3000	17	0.26	0.25	0.3	10	10	0.03	280.201	3000
76	50	0.37	0.29	0.45	50	10	0.07	302.616	3000	8	0.42	0.27	0.42	20	10	0.05	280.202	3000
77	50	0.34	0.26	0.42	50	1.25	0.05	605.232	3000	21	0.38	0.23	0.38	20	1.25	0	1401.01	3000
78	50	0.28	0.24	0.35	50	10	0.03	605.232	3000	20	0.25	0.21	0.3	10	10	0.03	1401.01	3000
79	50	0.33	0.25	0.35	1000	1.25	0.1	3026.16	300	51	0.38	0.23	0.3	100	1.25	0.07	1401	300
80	50	0.34	0.26	0.35	1000	1.25	0.1	3026.16	3000	51	0.39	0.24	0.3	100	1.25	0.07	1401	3000
81	50	0.28	0.24	0.35	75	10	0.03	403.488	3000	45	0.26	0.22	0.3	10	10	0.03	280.201	3000

	Table B-7. Model Coefficients for Catchments																	
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
85	50	0.28	0.23	0.35	500	10	0.03	605.232	300	34	0.25	0.2	0.3	10	10	0.03	1401.01	300
82	50	0.35	0.27	0.43	90	1.25	0.05	605.232	300	46	0.41	0.26	0.4	20000	1.25	0	1401.01	300
83	50	0.36	0.28	0.43	90	1.25	0.05	605.232	3000	17	0.4	0.25	0.4	20000	1.25	0	1401.01	3000
84	50	0.44	0.28	0.35	500	10	0.03	403.488	300									
86	43	0.28	0.28	0.35	500	10	0.03	605.232	3000									
87	50	0.34	0.26	0.35	1000	1.25	0.1	302.616	3000	51	0.37	0.22	0.3	100	1.25	0.07	280.201	3000
88	50	0.36	0.28	0.35	1000	1.25	0.1	302.616	3000	50	0.36	0.21	0.3	100	1.25	0.07	280.201	3000
89	50	0.4	0.28	0.4	100	3	0	151.308	3000	50	0.35	0.25	0.35	100	1	0	280.2	3000
90	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	49	0.25	0.25	0.33	5000	3	0.05	280.2	3000
91	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	36	0.25	0.24	0.33	5000	3	0.05	280.2	3000
92	50	0.24	0.16	0.32	1000	1.25	0.1	605.232	300	7	0.31	0.16	0.31	100	1.25	0.07	1401	300
93	50	0.4	0.32	0.44	1000	1.25	0.1	605.232	300	44	0.44	0.29	0.35	100	1.25	0.07	1401	300
94	50	0.36	0.28	0.44	1000	1.25	0.1	605.232	300	33	0.41	0.26	0.35	100	1.25	0.07	1401	300
95	50	0.36	0.28	0.35	1000	1.25	0.1	605.232	300	48	0.36	0.21	0.3	100	1.25	0.07	1401	300
96	50	0.43	0.35	0.44	1000	1.25	0.1	151.308	3000	43	0.46	0.31	0.35	100	1.25	0.07	140.1	3000
97	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	33	0.3	0.25	0.33	2000	3.5	0	280.2	3000
98	50	0.29	0.26	0.35	30000	3	0.07	302.616	3000	47	0.25	0.22	0.33	5000	3	0.05	280.2	3000
99	50	0.44	0.36	0.44	1000	1.25	0.1	33.624	300	48	0.47	0.32	0.35	100	1.25	0.07	15.5667	300
100	50	0.43	0.35	0.44	1000	1.25	0.1	33.624	300	15	0.46	0.31	0.35	100	1.25	0.07	15.5667	300
101	50	0.4	0.32	0.44	1000	1.25	0.1	33.624	300	39	0.43	0.28	0.35	100	1.25	0.07	15.5667	300
102	43	0.44	0.28	0.44	1000	1.25	0.1	33.624	3000									
103	50	0.39	0.31	0.44	1000	1.25	0.1	33.624	300	47	0.43	0.28	0.35	100	1.25	0.07	15.5667	300
104	50	0.41	0.33	0.44	5000	1.25	0.1	60.5232	300	41	0.45	0.3	0.35	5000	1.25	0.07	46.7001	300
105	50	0.32	0.24	0.35	1000	1.25	0.1	100.872	300	51	0.38	0.23	0.3	100	1.25	0.07	140.1	300
106	50	0.33	0.25	0.35	1000	1.25	0.1	100.872	3000	51	0.38	0.23	0.3	100	1.25	0.07	140.1	3000
107	50	0.32	0.24	0.35	1000	1.25	0.1	302.616	3000	51	0.37	0.22	0.3	100	1.25	0.07	280.201	3000
108	50	0.33	0.25	0.35	1000	1.25	0.1	3026.16	300	51	0.38	0.23	0.3	100	1.25	0.07	1401.01	300
109	50	0.32	0.24	0.35	1000	1.25	0.1	3026.16	300	51	0.37	0.22	0.3	100	1.25	0.07	1401.01	300
110	50	0.35	0.27	0.35	1000	1.25	0.1	3026.16	3000	51	0.38	0.23	0.3	100	1.25	0.07	1401	3000
111	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	31	0.3	0.25	0.33	2000	3.5	0	280.2	3000
112	50	0.42	0.34	0.44	1000	1.25	0.1	151.308	300	49	0.46	0.31	0.35	100	1.25	0.07	15.5667	300
113	45	0.28	0.31	0.35	75	10	0.03	403.488	3000	1	0.26	0.31	0.3	10	10	0.03	605.232	3000
115	50	0.4	0.28	0.4	100	3	0	151.308	3000	51	0.35	0.25	0.35	100	1	0	280.2	3000
116	50	0.36	0.28	0.44	5000	1.25	0.1	33.624	300	38	0.41	0.26	0.35	5000	1.25	0.07	15.5667	300
117	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	300	7	0.24	0.23	0.35	5000	1.25	0.07	140.1	300
118	50	0.33	0.25	0.44	5000	1.25	0.1	151.308	300	13	0.36	0.21	0.35	5000	1.25	0.07	140.1	300
119	50	0.38	0.3	0.44	5000	1.25	0.1	151.308	300	23	0.43	0.28	0.35	5000	1.25	0.07	140.1	300
120	50	0.4	0.28	0.4	100	3	0	151.308	3000	44	0.35	0.25	0.35	100	1	0	280.2	3000
121	50	0.4	0.28	0.4	40000	3	0	151.308	3000	43	0.35	0.25	0.35	100	1	0	280.2	3000
122	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	28	0.3	0.25	0.33	2000	3.5	0	280.2	3000
123	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	15	0.25	0.25	0.33	5000	3	0.05	280.2	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
124	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	19	0.25	0.24	0.33	5000	3	0.05	280.2	3000
125	50	0.24	0.27	0.43	90	1.25	0.07	302.616	300	14	0.3	0.26	0.4	20000	1.25	0.05	280.2	300
126	50	0.29	0.27	0.35	30000	3	0.07	302.616	3000	40	0.25	0.24	0.33	5000	3	0.05	280.2	3000
127	50	0.42	0.34	0.44	5000	1.25	0.1	60.5232	3000	49	0.45	0.3	0.35	5000	1.25	0.07	46.7002	3000
128	50	0.29	0.26	0.35	30000	3	0.07	302.616	3000	38	0.25	0.22	0.33	5000	3	0.05	280.2	3000
129	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	27	0.25	0.25	0.33	5000	3	0.05	280.2	3000
130	50	0.28	0.27	0.35	75	10	0.03	403.488	3000	25	0.26	0.24	0.3	10	10	0.03	280.201	3000
131	50	0.24	0.25	0.43	90	1.25	0.07	302.616	3000	7	0.3	0.24	0.4	20000	1.25	0.05	280.2	3000
132	50	0.24	0.26	0.43	90	1.25	0.07	302.616	3000	9	0.3	0.21	0.4	20000	1.25	0.05	280.2	3000
133	50	0.24	0.22	0.43	90	1.25	0.07	302.616	3000	17	0.3	0.22	0.4	20000	1.25	0.05	280.2	3000
134	50	0.24	0.22	0.43	90	1.25	0.07	302.616	3000	11	0.3	0.2	0.4	20000	1.25	0.05	280.2	3000
135	50	0.37	0.29	0.44	1000	1.25	0.1	75.654	300	49	0.41	0.26	0.35	100	1.25	0.07	35.0251	300
136	50	0.42	0.34	0.44	1000	1.25	0.1	75.654	3000	41	0.46	0.31	0.35	100	1.25	0.07	35.0251	3000
137	50	0.24	0.22	0.35	100	10	0.1	100.872	3000	48	0.26	0.2	0.4	50	10	0	140.1	3000
138	50	0.24	0.24	0.35	100	10	0.1	100.872	3000	42	0.26	0.21	0.3	50	10	0	140.1	3000
139	50	0.33	0.25	0.35	1000	1.25	0.1	605.232	300	36	0.37	0.22	0.3	100	1.25	0.07	1401	300
140	50	0.37	0.29	0.35	1000	1.25	0.1	605.232	3000	51	0.36	0.21	0.3	100	1.25	0.07	1401.01	3000
141	50	0.31	0.23	0.35	1000	1.25	0.1	605.232	3000	51	0.37	0.22	0.3	100	1.25	0.07	1401.01	3000
142	50	0.31	0.23	0.35	1000	1.25	0.1	302.616	3000	51	0.36	0.21	0.3	100	1.25	0.07	280.201	3000
143	50	0.29	0.21	0.35	1000	1.25	0.1	605.232	300	38	0.35	0.2	0.3	100	1.25	0.07	1401.01	300
144	50	0.35	0.27	0.35	1000	1.25	0.1	605.232	3000	51	0.36	0.21	0.3	100	1.25	0.07	1401.01	3000
145	50	0.29	0.29	0.35	30000	3	0.07	151.308	3000	38	0.25	0.25	0.33	5000	3	0.05	280.2	3000
146	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	45	0.3	0.25	0.33	2000	3.5	0	280.2	3000
147	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	46	0.3	0.25	0.33	2000	3.5	0	280.2	3000
148	50	0.4	0.28	0.4	100	3	0	151.308	3000	48	0.35	0.25	0.35	100	1	0	280.2	3000
149	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	33	0.3	0.25	0.33	2000	3.5	0	280.2	3000
150	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	35	0.3	0.25	0.33	2000	3.5	0	280.2	3000
151	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	35	0.25	0.25	0.33	5000	3	0.05	280.2	3000
152	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	39	0.25	0.25	0.33	5000	3	0.05	280.2	3000
153	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	38	0.25	0.26	0.33	5000	3	0.05	280.2	3000
154	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	34	0.25	0.25	0.33	5000	3	0.05	280.2	3000
155	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	34	0.25	0.24	0.33	5000	3	0.05	280.2	3000
156	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	33	0.25	0.24	0.33	5000	3	0.05	280.2	3000
157	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	34	0.25	0.25	0.33	5000	3	0.05	280.2	3000
158	50	0.29	0.28	0.35	30000	3	0.07	302.616	3000	45	0.25	0.25	0.33	5000	3	0.05	280.2	3000
159	47	0.24	0.26	0.43	90	1.25	0.07	302.616	3000									
160	50	0.24	0.22	0.43	90	1.25	0.07	302.616	3000	26	0.3	0.2	0.4	20000	1.25	0.05	280.2	3000
161	50	0.24	0.25	0.43	90	1.25	0.07	302.616	3000	27	0.3	0.23	0.4	20000	1.25	0.05	280.2	3000
162	50	0.24	0.26	0.43	90	1.25	0.07	302.616	3000	18	0.3	0.22	0.4	20000	1.25	0.05	280.2	3000
163	50	0.29	0.26	0.35	30000	3	0.07	302.616	3000	16	0.25	0.22	0.33	5000	3	0.05	280.2	3000
164	50	0.24	0.27	0.43	90	1.25	0.07	302.616	3000	38	0.3	0.25	0.4	20000	1.25	0.05	280.2	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
165	50	0.24	0.27	0.43	90	1.25	0.07	302.616	3000	28	0.3	0.25	0.4	20000	1.25	0.05	280.2	3000
166	50	0.37	0.29	0.43	90	3	0.07	302.616	3000	51	0.41	0.26	0.4	20	3	0.05	280.2	3000
167	50	0.29	0.27	0.35	30000	3	0.07	302.616	3000	45	0.25	0.25	0.33	5000	3	0.05	280.2	3000
168	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	48	0.25	0.26	0.33	5000	3	0.05	280.2	3000
169	50	0.29	0.3	0.35	30000	3	0.07	302.616	3000	35	0.25	0.25	0.33	5000	3	0.05	280.2	3000
170	50	0.29	0.29	0.35	30000	3	0.07	302.616	3000	39	0.25	0.25	0.33	5000	3	0.05	280.2	3000
171	50	0.29	0.27	0.35	30000	3	0.07	302.616	3000	44	0.25	0.26	0.33	5000	3	0.05	280.2	3000
172	50	0.24	0.26	0.43	90	1.25	0.07	302.616	3000	10	0.3	0.21	0.4	20000	1.25	0.05	280.2	3000
173	50	0.24	0.22	0.43	90	1.25	0.07	302.616	3000	23	0.3	0.2	0.4	20000	1.25	0.05	280.2	3000
174	43	0.24	0.28	0.43	90	1.25	0.07	302.616	3000									
175	50	0.24	0.27	0.43	90	1.25	0.07	302.616	3000	12	0.3	0.24	0.4	20000	1.25	0.05	280.2	3000
176	50	0.24	0.25	0.43	90	1.25	0.07	302.616	3000	9	0.3	0.21	0.4	20000	1.25	0.05	280.2	3000
177	45	0.24	0.28	0.43	90	1.25	0.07	302.616	300									
178	50	0.33	0.25	0.35	1000	1.25	0.1	3026.16	300	51	0.38	0.23	0.3	100	1.25	0.07	1401	300
179	50	0.32	0.24	0.35	1000	1.25	0.1	3026.16	300	51	0.38	0.23	0.3	100	1.25	0.07	1401.01	300
180	50	0.33	0.25	0.35	1000	1.25	0.1	302.616	300	51	0.37	0.22	0.3	100	1.25	0.07	280.201	300
181	50	0.29	0.21	0.35	1000	1.25	0.1	302.616	300	51	0.35	0.2	0.3	100	1.25	0.07	280.201	300
182	50	0.33	0.25	0.35	1000	1.25	0.1	3026.16	300	51	0.38	0.23	0.3	100	1.25	0.07	1401	300
183	50	0.42	0.34	0.44	1000	1.25	0.1	100.872	3000	37	0.47	0.32	0.35	100	1.25	0.07	140.1	3000
184	50	0.33	0.25	0.44	1000	1.25	0.1	33.624	300	16	0.43	0.28	0.35	100	1.25	0.07	15.5667	300
187	50	0.36	0.28	0.35	75	10	0.05	33.624	300	16	0.4	0.25	0.3	10	20	0.03	15.5667	300
185	50	0.36	0.28	0.44	5000	1.25	0.1	403.488	300	36	0.41	0.26	0.35	5000	1.25	0.07	15.5667	300
186	50	0.33	0.25	0.35	75	10	0.05	403.488	3000	36	0.37	0.22	0.3	10	20	0.03	280.201	3000
188	50	0.28	0.24	0.35	75	10	0.03	403.488	3000	47	0.26	0.23	0.3	10	10	0.03	280.201	3000
189	50	0.25	0.28	0.35	500	10	0.03	403.488	3000	37	0.2	0.25	0.3	10	10	0.03	280.201	3000
190	50	0.37	0.29	0.44	5000	1.25	0.1	33.624	300	25	0.43	0.28	0.35	5000	1.25	0.07	15.5667	300
191	50	0.25	0.27	0.35	50	10	0.03	605.232	3000	27	0.2	0.25	0.3	10	10	0.03	1401.01	3000
192	50	0.28	0.27	0.35	50	10	0.03	605.232	3000	37	0.25	0.24	0.3	10	10	0.03	1401.01	3000
193	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	30	0.3	0.25	0.33	2000	3.5	0	280.2	3000
194	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	29	0.3	0.25	0.33	2000	3.5	0	280.2	3000
195	50	0.34	0.26	0.35	1000	1.25	0.1	100.872	300	51	0.38	0.23	0.3	100	1.25	0.07	140.1	300
196	50	0.32	0.24	0.35	1000	1.25	0.1	100.872	300	51	0.37	0.22	0.3	100	1.25	0.07	15.5667	300
197	50	0.32	0.24	0.35	1000	1.25	0.1	100.872	300	51	0.37	0.22	0.3	100	1.25	0.07	15.5667	300
198	50	0.34	0.26	0.35	1000	1.25	0.1	100.872	300	51	0.38	0.23	0.3	100	1.25	0.07	140.1	300
199	50	0.31	0.23	0.35	1000	1.25	0.1	100.872	300	51	0.37	0.22	0.3	100	1.25	0.07	15.5667	300
200	50	0.25	0.28	0.35	500	10	0.03	605.232	3000	32	0.2	0.25	0.3	10	10	0.03	1401.01	3000
201	50	0.36	0.28	0.35	50	10	0.05	605.232	3000	40	0.4	0.25	0.3	5	10	0.04	1401.01	3000
202	50	0.28	0.26	0.35	50	10	0.03	605.232	3000	33	0.25	0.23	0.3	10	10	0.03	1401.01	3000
203	50	0.28	0.26	0.35	75	10	0.03	403.488	3000	45	0.26	0.23	0.3	10	10	0.03	280.201	3000
204	50	0.28	0.27	0.35	75	10	0.03	403.488	3000	32	0.26	0.25	0.3	10	10	0.03	280.201	3000
205	50	0.28	0.26	0.35	75	10	0.03	403.489	3000	48	0.26	0.23	0.3	10	10	0.03	280.199	3000

	Table B-7. Model Coefficients for Catchments																	
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
206	50	0.36	0.28	0.44	5000	1.25	0.1	403.488	3000	38	0.41	0.26	0.35	5000	1.25	0.07	280.201	3000
207	40	0.35	0.3	0.35	10	10	0.02	403.488	3000									
208	50	0.35	0.29	0.35	10	10	0.02	403.488	3000	14	0.3	0.25	0.3	10	10	0	280.201	3000
209	50	0.37	0.29	0.44	1000	1.25	0.1	33.624	3000	1	0.46	0.31	0.35	100	1.25	0.07	15.5667	3000
210	50	0.28	0.23	0.35	75	10	0.03	403.488	3000	49	0.26	0.22	0.3	10	10	0.03	280.201	3000
211	50	0.28	0.25	0.35	75	10	0.03	403.488	3000	42	0.26	0.23	0.3	10	10	0.03	280.201	3000
212	50	0.28	0.29	0.35	75	10	0.03	403.488	3000	36	0.26	0.26	0.3	10	10	0.03	280.201	3000
213	50	0.31	0.23	0.35	1000	1.25	0.1	605.232	300	51	0.37	0.22	0.3	100	1.25	0.07	1401	300
214	50	0.34	0.26	0.35	10	10	0.02	403.488	3000	36	0.3	0.23	0.3	10	10	0	280.201	3000
215	50	0.28	0.28	0.35	75	10	0.03	403.488	3000	30	0.26	0.24	0.3	10	10	0.03	280.201	3000
216	50	0.31	0.23	0.35	10	10	0.02	403.488	3000	48	0.3	0.21	0.3	10	10	0	280.201	3000
217	50	0.33	0.25	0.44	1000	1.25	0.1	151.308	300	11	0.35	0.2	0.35	100	1.25	0.07	15.5667	300
218	44	0.43	0.27	0.44	1000	1.25	0.1	151.308	3000									
219	50	0.37	0.29	0.44	1000	1.25	0.1	151.308	300	15	0.42	0.27	0.35	100	1.25	0.07	15.5667	300
220	50	0.36	0.28	0.44	1000	1.25	0.1	151.308	300	3	0.41	0.26	0.35	100	1.25	0.07	15.5667	300
221	50	0.38	0.3	0.44	1000	1.25	0.1	151.308	300	22	0.44	0.29	0.35	100	1.25	0.07	15.5667	300
222	50	0.4	0.32	0.44	1000	1.25	0.1	151.308	300	16	0.46	0.31	0.35	100	1.25	0.07	15.5667	300
223	50	0.4	0.28	0.4	100	3	0	151.308	3000	51	0.35	0.25	0.35	100	1	0	280.2	3000
224	29	0.24	0.29	0.43	90	1.25	0.07	302.616	3000									
225	48	0.24	0.27	0.43	90	1.25	0.07	302.616	3000									
226	13	0.24	0.25	0.43	90	1.25	0.07	302.616	3000									
227	50	0.28	0.28	0.35	30000	3.5	0.02	151.308	3000	35	0.3	0.25	0.33	2000	3.5	0	280.2	3000
228	50	0.32	0.24	0.35	1000	1.25	0.1	302.616	3000	51	0.37	0.22	0.3	100	1.25	0.07	280.201	3000
229	50	0.33	0.25	0.35	1000	1.25	0.1	302.616	300	51	0.38	0.23	0.3	100	1.25	0.07	280.201	300
230	50	0.4	0.28	0.4	100	3	0	151.308	3000	41	0.35	0.25	0.35	100	1	0	280.2	3000
231	50	0.42	0.34	0.44	5000	1.25	0.1	60.5232	3000	50	0.46	0.31	0.35	5000	1.25	0.07	46.7001	3000
232	50	0.24	0.26	0.35	100	10	0.09	100.872	3000	16	0.26	0.24	0.3	50	10	0.07	140.1	3000
233	50	0.24	0.24	0.35	100	10	0.09	100.872	3000	29	0.26	0.21	0.3	50	10	0.07	140.1	3000
234	50	0.38	0.3	0.44	1000	1.25	0.1	33.624	300	44	0.43	0.28	0.35	100	1.25	0.07	15.5667	300
235	50	0.42	0.34	0.44	1000	1.25	0.1	33.624	300	51	0.46	0.31	0.35	100	1.25	0.07	15.5667	300
236	50	0.45	0.37	0.44	1000	1.25	0.1	33.624	300	51	0.47	0.32	0.35	100	1.25	0.07	15.5667	300
237	50	0.3	0.22	0.35	1000	1.25	0.1	605.232	300	51	0.36	0.21	0.3	100	1.25	0.07	1401	300
238	50	0.32	0.24	0.35	1000	1.25	0.1	605.232	300	51	0.38	0.23	0.3	100	1.25	0.07	1401	300
239	50	0.3	0.22	0.35	1000	1.25	0.1	302.616	300	48	0.36	0.21	0.3	100	1.25	0.07	280.201	300
241	50	0.33	0.25	0.35	75	10	0.05	403.488	3000	32	0.36	0.21	0.3	10	20	0.03	280.201	3000
240	50	0.36	0.28	0.44	5000	1.25	0.1	403.488	3000	34	0.41	0.26	0.35	5000	1.25	0.07	280.201	3000
242	50	0.38	0.3	0.44	5000	1.25	0.1	33.624	3000	51	0.45	0.3	0.35	5000	1.25	0.07	15.5667	3000
243	50	0.34	0.26	0.35	1000	1.25	0.1	100.872	300	51	0.38	0.23	0.3	100	1.25	0.07	140.1	300
244	50	0.42	0.34	0.44	5000	1.25	0.1	60.5232	3000	30	0.45	0.3	0.35	5000	1.25	0.07	46.7001	3000
245	50	0.36	0.36	0.42	10000	1.25	0.07	151.308	3000	15	0.25	0.24	0.32	1000	1.25	0.03	140.1	3000
246	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000	6	0.3	0.23	0.35	5000	1.25	0.07	140.1	3000

Table B-7. Model Coefficients for Catchments																		
	Soil Layer 4									Soil Layer 5								
Catchment ID	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)	Thickness (cm)	Initial Soil Moisture (fraction by volume)	Field Capacity (fraction by volume)	Saturation Moisture (fraction by volume)	Horizontal Hydraulic Conductivity (cm/d)	Vertical Hydraulic Conductivity (cm/d)	Root Distribution (fraction of total)	Ammonia Adsorption (L/kg)	Phosphate Adsorption (L/kg)
247	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000	7	0.3	0.26	0.35	5000	1.25	0.07	140.1	3000
248	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000	7	0.3	0.26	0.35	5000	1.25	0.07	140.1	3000
249	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000	8	0.3	0.27	0.35	5000	1.25	0.07	140.1	3000
250	50	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000	5	0.3	0.14	0.35	5000	1.25	0.07	140.1	3000
251	48	0.36	0.36	0.44	5000	1.25	0.1	151.308	3000									
252	50	0.37	0.29	0.44	1000	1.25	0.1	33.624	3000	8	0.44	0.29	0.35	100	1.25	0.07	15.5667	3000
253	42	0.43	0.27	0.44	1000	1.25	0.1	33.624	3000									
254	50	0.37	0.29	0.44	1000	1.25	0.1	33.624	3000	15	0.44	0.29	0.35	100	1.25	0.07	15.5667	3000
255	39	0.44	0.28	0.44	1000	1.25	0.1	605.232	3000									
256	50	0.33	0.25	0.35	1000	1.25	0.1	302.616	300	51	0.38	0.23	0.3	100	1.25	0.07	280.201	300
257	50	0.3	0.22	0.35	1000	1.25	0.1	302.616	300	51	0.36	0.21	0.3	100	1.25	0.07	280.201	300
258	50	0.36	0.28	0.35	10	10	0.02	403.488	3000	33	0.3	0.23	0.3	10	10	0	280.201	3000
259	50	0.33	0.25	0.35	10	10	0.02	403.488	3000	41	0.3	0.21	0.3	10	10	0	280.201	3000
260	50	0.3	0.22	0.35	10	10	0.02	403.488	3000	36	0.3	0.2	0.3	10	10	0	280.201	3000
261	50	0.37	0.29	0.35	10	10	0.02	403.488	3000	39	0.3	0.25	0.3	10	10	0	280.201	3000
262	50	0.35	0.27	0.35	10	10	0.02	403.488	3000	32	0.3	0.23	0.3	10	10	0	280.201	3000
263	50	0.34	0.26	0.35	10	10	0.02	403.488	3000	35	0.3	0.24	0.3	10	10	0	280.201	3000
264	50	0.31	0.23	0.35	10	10	0.02	403.488	3000	39	0.3	0.2	0.3	10	10	0	280.201	3000

Table B-8. Model Coefficients for Reaches

River ID	Mannings N	Convective Heat Factor	Volume of River Impoundments (cubic meters)	Sediment Detachment Velocity Multiplier	Sediment Detachment Velocity Exponent	Vegetation Factor	Bank Stability Factor	Bed Diffusion Rate (square meters per day)	Reaeration Rate Multiplier	Portion of Stream Shaded (percent)	Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
											Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
101	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
100	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
99	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
43	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
42	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
44	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
41	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
40	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
98	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
39	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
110	0.04	0.000004	0	0.0000006	2	0	0.00008	0	1	100	0.05	0.01	0	1	1	1
114	0.04	0.000004	0	0.0000006	2	0	0.00008	0	1	100	0.05	0.01	0	1	1	1
109	0.04	0.000004	0	0.0000006	2	0	0.00008	0	1	100	0.05	0.01	0	1	1	1
38	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
97	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
96	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
37	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
36	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
95	0.04	0.000004	10	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
91	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
92	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
90	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
89	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
94	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
93	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
88	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
87	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
86	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
35	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
34	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
85	0.04	0.000004	10	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
84	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
33	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
32	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
83	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
31	0.04	0.000004	0	0.0000006	2	0	0.000005	0	1	100	0.1	0.01	0	1.5	1.5	1.5
30	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
81	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
82	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
80	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
29	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
79	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
28	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5

Table B-8. Model Coefficients for Reaches

River ID	Mannings N	Convective Heat Factor	Volume of River Impoundments (cubic meters)	Sediment Detachment Velocity Multiplier	Sediment Detachment Velocity Exponent	Vegetation Factor	Bank Stability Factor	Bed Diffusion Rate (square meters per day)	Reaeration Rate Multiplier	Portion of Stream Shaded (percent)	Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
											Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
78	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
27	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
134	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
128	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
136	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
127	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
135	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
126	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
125	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
124	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
133	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
132	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
131	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
123	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	100	0.05	0.01	0	1	1	1
113	0.04	0.000004	0	0.0000008	2	0	0.0008	0	1	100	0.05	0.01	0	1	1	1
112	0.04	0.000004	0	0.0000005	2	0	0.00001	0	1	100	0.02	0.01	0	1	1	1
108	0.04	0.000004	0	0.0000005	2	0	0.00001	0	1	100	0.02	0.01	0	1	1	1
107	0.04	0.000004	0	0.0000005	2	0	0.00001	0	1	100	0.02	0.01	0	1	1	1
106	0.04	0.000004	0	0.0000005	2	0	0.000003	0	1	60	0.005	0.01	0	1	1	1
130	0.07	0.000004	0	0.00000005	2	0	0.00000005	0	1	85	0.05	0.01	0	1	1	1
129	0.07	0.000004	0	0.00000005	1.6	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
191	0.04	0.000002	136900	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
190	0.04	0.000002	281350	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
189	0.04	0.000002	138000	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
188	0.04	0.000002	0	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
187	0.04	0.000002	0	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
144	0.04	0.0000004	0	0.000006	2	0	0.00006	0	1	100	0.01	0.01	0	1	1	1
143	0.04	0.0000002	0	0.000006	2	0	0.00006	0	1	100	0.01	0.01	0	1	1	1
142	0.04	0.0000004	10	0.000006	2	0	0.00006	0	1	100	0.01	0.01	0	1	1	1
141	0.04	0.000004	0	0.000006	2	0	0.00006	0	1	25	0.01	0.01	0	1	1	1
183	0.04	0.000002	380000	0.000006	2	0	0.0000009	0	1	60	0.02	0.01	0	1.25	1	1.25
182	0.04	0.000002	92500	0.000006	2	0	0.0000009	0	1	60	0.02	0.01	0	1.25	1	1.25
156	0.04	0.000002	198000	0.0000006	2	0	0.000006	0	1	30	0.01	0.01	0	2.25	4	1.75
155	0.04	0.000002	228900	0.0000006	2	0	0.000006	0	1	30	0.01	0.01	0	2.25	4	1.75
26	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
77	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
76	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
25	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
24	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
75	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
74	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
23	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
73	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5

Table B-8. Model Coefficients for Reaches

River ID	Mannings N	Convective Heat Factor	Volume of River Impoundments (cubic meters)	Sediment Detachment Velocity Multiplier	Sediment Detachment Velocity Exponent	Vegetation Factor	Bank Stability Factor	Bed Diffusion Rate (square meters per day)	Reaeration Rate Multiplier	Portion of Stream Shaded (percent)	Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
											Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
22	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
21	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
20	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
72	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
19	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
71	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
18	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
70	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
17	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
69	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
16	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
15	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
68	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
67	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
66	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
65	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
64	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
14	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
63	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
61	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
62	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
60	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
59	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
58	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
13	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
199	0.04	0.000005	0	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
196	0.04	0.000005	0	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
195	0.04	0.000005	0	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
194	0.04	0.000005	168300	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
198	0.04	0.000005	284050	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
193	0.04	0.000005	188300	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
197	0.04	0.000005	109800	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
192	0.04	0.000005	0	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	2	1.5
140	0.04	0.000004	330050	0.0000006	2	0	0.000006	0	1	25	0	0.01	0	1	1	1.25
139	0.04	0.000004	94700	0.0000006	2	0	0.000006	0	1	25	0	0.01	0	2	0	2
186	0.04	0.000002	227250	0.0000006	2	0	0.00009	0	0.1	50	0.02	0.01	0	1.6	1	1.2
153	0.04	0.000001	0	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
152	0.04	0.000001	0	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
151	0.04	0.000001	0	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
154	0.04	0.000002	121750	0.0000006	2	0	0.000006	0	1	30	0.01	0.01	0	2.25	1	1.75
160	0.04	0.000004	298100	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	1.25	1.5	1.25
159	0.04	0.000004	313250	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	1.25	1.5	1.25
208	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75

Table B-8. Model Coefficients for Reaches

River ID	Mannings N	Convective Heat Factor	Volume of River Impoundments (cubic meters)	Sediment Detachment Velocity Multiplier	Sediment Detachment Velocity Exponent	Vegetation Factor	Bank Stability Factor	Bed Diffusion Rate (square meters per day)	Reaeration Rate Multiplier	Portion of Stream Shaded (percent)	Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
											Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
207	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
206	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
212	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
211	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
205	0.04	0.000002	31500	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
210	0.04	0.000002	0	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
209	0.04	0.000002	46740	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
272	0.04	0.000002	14350	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
275	0.04	0.000002	117950	0.0000006	1.3	0	0.00009	0	1.25	30	0.04	0.2	0	1.75	2	1.75
203	0.04	0.000002	30841	0.0000006	1.3	0	0.00009	0	1.25	50	0.04	0.1	0	1.75	2	1.75
57	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
12	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
11	0.04	0.0000005	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
56	0.04	0.0000003	0	0.000008	2	0	0.000002	0	1	100	0.01	0.01	0	1.5	1.5	1.5
10	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
55	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
9	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
54	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
8	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
53	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
7	0.04	0.000004	86000	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
6	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
5	0.04	0.000004	63300	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
52	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
50	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
51	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
49	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
48	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
47	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
46	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
4	0.04	0.000004	30250	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
3	0.04	0.000004	140650	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
150	0.04	0.000003	0	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
173	0.04	0.000002	153100	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
172	0.04	0.000002	59500	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
171	0.04	0.000002	119600	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
170	0.04	0.000002	80500	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
122	0.07	0.000004	0	0.00000005	1.6	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
121	0.07	0.000004	0	0.00000005	1.6	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
111	0.04	0.000004	0	0.0000005	2	0	0.000003	0	1	60	0.005	0.01	0	1	1	1
105	0.04	0.000004	0	0.0000005	2	0	0.0008	0	1	100	0.005	0.01	0	1	1	1
116	0.04	0.000004	0	0.0000005	2	0	0.000003	0	1	60	0.005	0.01	0	1	1	1
115	0.04	0.000004	0	0.0000005	2	0	0.000003	0	1	60	0.005	0.01	0	1	1	1

Table B-8. Model Coefficients for Reaches

River ID	Mannings N	Convective Heat Factor	Volume of River Impoundments (cubic meters)	Sediment Detachment Velocity Multiplier	Sediment Detachment Velocity Exponent	Vegetation Factor	Bank Stability Factor	Bed Diffusion Rate (square meters per day)	Reaeration Rate Multiplier	Portion of Stream Shaded (percent)	Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
											Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
104	0.04	0.000004	47600	0.0000005	2	0	0.000003	0	1	100	0.005	0.01	0	1	1	1
103	0.04	0.000004	279700	0.0000005	2	0	0.000003	0	1	100	0.005	0.01	0	1	1	1
169	0.04	0.000002	197500	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
168	0.04	0.000002	60600	0.000006	2	0	0.0000009	0	1	50	0.02	0.01	0	0.57	0.57	0.57
45	0.04	0.000004	0	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
2	0.04	0.000004	100000	0.000008	2	0	0.000002	0	1	50	0.01	0.01	0	1.5	1.5	1.5
102	0.04	0.000004	115750	0.0000005	2	0	0.000003	0	1	100	0.005	0.01	0	1	1	1
1	0.04	0.000004	0	0.0000005	2	0	0.000002	0	1	50	0.1	0.1	0	1.25	1.75	1.25
165	0.04	0.000002	315000	0.000006	2	0	0.0000009	0	1	25	0.02	0.01	0	1.25	1	1.25
164	0.04	0.000002	77500	0.000006	2	0	0.0000009	0	1	25	0.02	0.01	0	1.25	1	1.25
163	0.04	0.000002	61500	0.000006	2	0	0.0000009	0	1	25	0.02	0.01	0	1.25	1	1.25
158	0.04	0.000002	389000	0.0000006	2	0	0.000006	0	1	25	0.005	0.01	0	2.25	4	1.75
157	0.04	0.000002	107650	0.0000006	2	0	0.000006	0	1	25	0.005	0.01	0	2.25	4	1.75
273	0.04	0.000003	815824	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
149	0.04	0.000003	126600	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
148	0.04	0.000003	128250	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2.25	2.75	1.75
147	0.04	0.000004	251050	0.0000006	2	0	0.000006	0	1	60	0.02	0.01	0	2.5	1	2.5
176	0.04	0.000001	125500	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	2.5	1.5
175	0.04	0.000001	136850	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	2.5	1.5
167	0.04	0.000002	134200	0.000006	2	0	0.0000009	0	1	100	0.02	0.01	0	1.25	1	1.25
162	0.04	0.000002	131000	0.000006	2	0	0.0000009	0	1	25	0.02	0.01	0	1.5	1	1.5
161	0.04	0.000002	137500	0.000006	2	0	0.0000009	0	1	25	0.02	0.01	0	1.5	1	1.5
166	0.04	0.000002	117500	0.000006	2	0	0.0000009	0	1	100	0.02	0.01	0	1.25	1	1.25
146	0.04	0.000004	134200	0.0000006	2	0	0.000006	0	1	50	0.02	0.01	0	2	3.5	2
145	0.04	0.000001	238600	0.0000006	2	0	0.000006	0	1	100	0.02	0.01	0	2.5	1	2.5
138	0.04	0.000004	97900	0.0000005	2	0	0.0000005	0	1	40	0.01	0.01	0	1	1	1
137	0.04	0.000004	41100	0.0000005	2	0	0.0000005	0	1	40	0.01	0.01	0	1	1	1
177	0.04	0.000004	0	0.00000005	2	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
178	0.04	0.000004	0	0.00000005	2	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
179	0.04	0.000004	0	0.00000005	2	0	0.00000005	0	1	85	0.01	0.01	0	1	1	1
120	0.04	0.000004	0	0.0000006	1.6	0	0.0000004	0	1	100	0.01	0.01	0	1	1	1
119	0.04	0.000004	11900	0.0000008	2	0	0.0000008	0	1	40	0.01	0.01	0	1	1	1
118	0.04	0.000004	105500	0.0000008	2	0	0.0000008	0	1	40	0.01	0.01	0	1	1	1
117	0.04	0.000004	24300	0.0000005	2	0	0.0000005	0	1	40	0.1	0.01	0	1	1	1
174	0.04	0.000001	123900	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	2.5	1.5
202	0.04	0.000002	156900	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	1.5	1.25
201	0.04	0.000002	130950	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	1.5	1.25
181	0.04	0.000001	210000	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	2.5	1.5
180	0.04	0.000001	21650	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	2.5	1.5
200	0.04	0.000002	130400	0.000006	2	0	0.00009	0	1	50	0.02	0.01	0	1.5	1.5	1.25
185	0.04	0.000001	323000	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	1.5	1	1.25
184	0.04	0.000002	0	0.000006	2	0	0.0000009	0	0.1	50	0.02	0.01	0	2.5	3	2.5
271	0.04	0.00001	0	0.000001	1.3	0	0	0	1	0	0.1	0.1	0	1	1	0.15

Table B-8. Model Coefficients for Reaches

River ID	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			River Bed Reaction Rates (1/day)			Water Ammonia Adsorption (liters per kilogram)	Water Phosphate Adsorption (liters per kilogram)	Bed Ammonia Adsorption (liters per kilogram)	Bed Phosphate Adsorption (liters per kilogram)
	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification				
101	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
100	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
99	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
43	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
42	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
44	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
41	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
40	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
98	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
39	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
110	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
114	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
109	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
38	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
97	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
96	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
37	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
36	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
95	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
91	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
92	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
90	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
89	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
94	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
93	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
88	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
87	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
86	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
35	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
34	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
85	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
84	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
33	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
32	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
83	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
31	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
30	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
81	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
82	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
80	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
29	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
79	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
28	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000

Table B-8. Model Coefficients for Reaches

River ID	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			River Bed Reaction Rates (1/day)			Water Ammonia Adsorption (liters per kilogram)	Water Phosphate Adsorption (liters per kilogram)	Bed Ammonia Adsorption (liters per kilogram)	Bed Phosphate Adsorption (liters per kilogram)
	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification				
78	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
27	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
134	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
128	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
136	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
127	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
135	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
126	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
125	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
124	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
133	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
132	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
131	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
123	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
113	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
112	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
108	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
107	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
106	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
130	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
129	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
191	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
190	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
189	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
188	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
187	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
144	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
143	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
142	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
141	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
183	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
182	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
156	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
155	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
26	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
77	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
76	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
25	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
24	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
75	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
74	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
23	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
73	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000

Table B-8. Model Coefficients for Reaches

River ID	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			River Bed Reaction Rates (1/day)			Water Ammonia Adsorption (liters per kilogram)	Water Phosphate Adsorption (liters per kilogram)	Bed Ammonia Adsorption (liters per kilogram)	Bed Phosphate Adsorption (liters per kilogram)
	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification				
22	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
21	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
20	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
72	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
19	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
71	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
18	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
70	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
17	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
69	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
16	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
15	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
68	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
67	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
66	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
65	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
64	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
14	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
63	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
61	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
62	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
60	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
59	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
58	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
13	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
199	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
196	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
195	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
194	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
198	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
193	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
197	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
192	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
140	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
139	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
186	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
153	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
152	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
151	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
154	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
160	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
159	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
208	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000

Table B-8. Model Coefficients for Reaches

River ID	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			River Bed Reaction Rates (1/day)			Water Ammonia Adsorption (liters per kilogram)	Water Phosphate Adsorption (liters per kilogram)	Bed Ammonia Adsorption (liters per kilogram)	Bed Phosphate Adsorption (liters per kilogram)
	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification				
207	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
206	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
212	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
211	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
205	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
210	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
209	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
272	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
275	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
203	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
57	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
12	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
11	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
56	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
10	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
55	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
9	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
54	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
8	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
53	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
7	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
6	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
5	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
52	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
50	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
51	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
49	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
48	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
47	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
46	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
4	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
3	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
150	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
173	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
172	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
171	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
170	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
122	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
121	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
111	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
105	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
116	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
115	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000

Table B-8. Model Coefficients for Reaches

River ID	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			River Bed Reaction Rates (1/day)			Water Ammonia Adsorption (liters per kilogram)	Water Phosphate Adsorption (liters per kilogram)	Bed Ammonia Adsorption (liters per kilogram)	Bed Phosphate Adsorption (liters per kilogram)
	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification				
104	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
103	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0.005	0	0	6233.81	15000	6233.81	15000
169	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
168	0.05	0.05	0.05	0.01	0.01	0.01	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
45	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
2	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
102	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0	6233.81	15000	6233.81	15000
1	0.15	0.15	0.15	0.05	0.01	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
165	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
164	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
163	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
158	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
157	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
273	0.15	0.15	0.15	0.05	0.05	0.05	1	1	1	0	0	0.1	6233.81	15000	6233.81	15000
149	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
148	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
147	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
176	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
175	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
167	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
162	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
161	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
166	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
146	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
145	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
138	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
137	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
177	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
178	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
179	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
120	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
119	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
118	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
117	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
174	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
202	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
201	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
181	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
180	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
200	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
185	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
184	0.15	0.15	0.15	0.05	0.05	0.05	0	0	0	0	0	0.1	6233.81	15000	6233.81	15000
271	0.15	0.15	0.05	0.05	0.05	0.1	0.2	0.2	0.1	0	0	0.1	6233.81	15000	6233.81	15000

Table B-9. Model Coefficients for Watershed Impoundments													
								Water Column Reaction Rates (1/day)			Algae Growth (1/day)		
Lake Segment ID	Precipitation Weight	Wind Speed Multiplier	Fraction Radiation Absorbed in Top Layer	Depth of Radiation Fraction (meters)	Minimum Diffusion Coefficient (square meters per second)	Sediment Thickness (centimeters)	Sediment Diffusion (square meters per day)	Organic Carbon Decay	Nitrification	Denitrification	Blue-Green	Diatom	Other
251	1.00601	1.2	0.5	0.5	0.000005	5	0.0000002	0.001	0.009	0.1	1.15	0.9	1.25
250	1.00284	1	0.5	0.5	0.000005	5	0.0000002	0.01	0.02	0.1	1	0.75	1
243	1.00435	1.2	0.5	0.5	0.000005	5	0.0000002	0.012	0.005	0.05	1.5	1.5	2
247	0.994913	1	0.5	0.5	0.000005	5	0.0000002	0.01	0.01	0.1	2.5	2.5	2.5
246	0.996931	1	0.5	0.5	0.000005	5	0.0000002	0.01	0.01	0.1	2.5	2.5	2.5
245	0.999685	1	0.5	0.5	0.000005	5	0.0000002	0.01	0.01	0.1	1	1	1
278	0.9	1	0.5	0.5	0	3.037	0.000008	0.01	0.015	0.5	0.9	1.8	0.9
276	0.9	1	0.5	0.5	0	3.521	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
277	0.9	1	0.5	0.5	0	8.815	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
285	0.9	1	0.5	0.5	0	5.679	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
280	0.9	1	0.5	0.5	0	6.648	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
268	0.9	1	0.5	0.5	0	6.303	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
281	0.9	1	0.5	0.5	0	5.988	0.00003	0.01	0.015	0.5	0.9	1.8	0.9
269	0.9	1	0.5	0.5	0	12.366	0.00003	0.01	0.015	0.5	0.9	1.8	0.9

Table B-9. Model Coefficients for Watershed Impoundments																
	Algae Respiration (1/day)			Algae Mortality (1/day)			Algae Settling (meters per day)			Bed Reaction Rates (1/day)			Water Ammonia	Water Phosphate	Bed Ammonia	Bed Phosphate
Lake Segment ID	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Blue-Green	Diatom	Other	Organic Carbon Decay	Nitrification	Denitrification	Adsorption (liters per kilogram)	Adsorption (liters per kilogram)	Adsorption (liters per kilogram)	Adsorption (liters per kilogram)
251	0.1	0.1	0.1	0.05	0.05	0.05	0.01	0.2	0.05	0	0	0.1	6233.81	15000	6233.81	15000
250	0.05	0.05	0.05	0.025	0.025	0.025	0.01	0.2	0.05	0	0.005	0.1	6233.81	15000	6233.81	15000
243	0.1	0.1	0.1	0.025	0.025	0.025	0.03	0.2	0.15	0.012	0.005	0.05	6233.81	15000	6233.81	15000
247	0.1	0.1	0.1	0.05	0.05	0.05	0.01	0.2	0.05	0	0	0.1	6233.81	15000	6233.81	15000
246	0.1	0.1	0.1	0.05	0.05	0.05	0.01	0.2	0.05	0	0	0.1	6233.81	15000	6233.81	15000
245	0.15	0.15	0.15	0.05	0.05	0.05	0.1	0.2	0.2	0	0	0.1	6233.81	15000	6233.81	15000
278	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
276	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
277	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
285	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
280	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
268	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
281	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	60	10000
269	0.01	0.01	0.01	0.02	0.1	0.02	0.018	0.18	0.054	0.01	0.015	0.5	6233.81	10000	263	10000