

## **APPENDIX A. Comparison of Application Data**

The tables in this appendix are summaries of the data provided by applicants. Table A-1 provides a comparison of the population projections provided by the applicants, and the population projections developed by the Division of Water Resources based on data from the Office of State Planning. Table A-2 provides a comparison of water use rates among the applicants. Table A-3 provides a summary of the applicants' projected water needs and the Division's allocation recommendations.

**Table A-1 Population Projections from JL3 Applications**

	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
<b>Orange County</b>											
service area population <sup>1</sup>	2,629	2,848	3,067	3,505	3,724	4,162	4,600	5,038	5,476	6,134	6,791
% of county populations	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
<b>OWASA</b>											
service area population	71,600	78,100	84,400	90,800	97,200	103,600	110,000	116,500	122,900	129,300	135,700
% of county population	61%	60%	59%	58%	58%	58%	57%	57%	57%	57%	56%
<b>Orange County Population</b> <sup>2</sup>	118,227	130,888	143,496	155,325	166,971	179,680	191,868	204,056	216,245	228,433	240,622
<b>City of Durham</b>											
service area population	203,341	221,030	240,530	257,166	276,403	291,397	298,974	306,550	314,127	321,703	329,280
% of county population	91%	90%	90%	89%	89%	87%	84%	81%	78%	76%	74%
<b>Durham County Population</b> <sup>2</sup>	223,314	245,523	268,284	290,007	312,144	334,562	356,753	378,944	401,135	423,326	445,517
<b>Chatham County</b>											
service area population	11,351	15,824	20,542	23,412	26,796	30,805	35,579	41,288	48,146	56,420	<b>66,441</b>
% of county population	23%	29%	34%	36%	39%	41%	45%	49%	54%	60%	<b>67%</b>
<b>Pittsboro</b>											
service area population	2,491	2,725	3,023	3,554	4,233	5,066	6,186	7,717	9,843	12,827	<b>17,060</b>
% of county population	5%	5%	5%	6%	6%	7%	8%	9%	11%	14%	<b>17%</b>
<b>Siler City</b>											
service area population	8,645	9,639	10,754	12,001	13,381	14,722	16,204	17,843	19,658	21,667	<b>23,893</b>
% of county population	18%	18%	18%	19%	19%	20%	20%	21%	22%	23%	<b>24%</b>
<b>Chatham County Population</b> <sup>2</sup>	49,329	54,651	59,559	64,492	69,137	74,308	79,250	84,192	89,134	94,076	99,019
<b>Town of Cary</b>											
service area population	96,217	115,781	134,222	152,601	172,653	192,971	215,679	236,000	236,000	236,000	236,000
% of county population	15%	16%	16%	16%	16%	16%	17%	17%	16%	15%	14%
<b>Town of Apex</b>											
service area population	22,453	35,627	48,800	61,700	74,600	87,500	100,400	102,172	102,172	102,172	102,172
% of county population	4%	5%	6%	6%	7%	7%	8%	7%	7%	6%	6%
<b>Town of Morrisville</b>											
service area population	6,500	14,700	17,750	20,800	23,900	27,000	27,000	27,000	27,000	27,000	27,000
% of county population	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<b>Town of Holly Springs</b>											
service area population	9,192	21,506	37,275	54,235	71,403	87,211	103,890	114,816	122,221	125,002	125,002
% of county population	1%	3%	4%	6%	7%	7%	8%	8%	8%	8%	7%
<b>Wake County Population</b> <sup>2</sup>	627,846	737,805	849,535	959,654	1,071,768	1,182,505	1,293,509	1,404,514	1,515,518	1,626,522	1,737,526
<b>City of Sanford</b>											
service area population	27,000	34,800	40,900	48,000	56,600	66,600	76,000	83,700	92,100	101,400	111,600
% of county population	55%	66%	72%	80%	88%	98%	<b>106%</b>	<b>111%</b>	<b>116%</b>	<b>122%</b>	<b>129%</b>
<b>Lee County Population</b> <sup>2</sup>	49,040	52,970	56,757	60,363	64,038	67,869	71,599	75,329	79,059	82,790	86,520
<b>Harnett County</b>											
service area population	66,097	75,112	85,356	96,997	110,226	125,259	142,342	161,755	183,816	208,885	237,374
% of county population	73%	73%	74%	76%	78%	82%	86%	91%	96%	<b>103%</b>	<b>110%</b>
<b>Harnett County Population</b> <sup>2</sup>	91,025	103,428	115,645	128,323	140,902	153,325	165,805	178,285	190,765	203,246	215,726
<b>City of Fayetteville</b>											
service area population	178,200	210,370	243,160	278,310	315,840	355,740	402,480	423,810	445,140	466,470	487,800
% of county population	59%	66%	73%	79%	86%	93%	<b>101%</b>	<b>103%</b>	<b>104%</b>	<b>105%</b>	<b>106%</b>
<b>Cumberland County Population</b> <sup>2</sup>	302,963	320,003	333,779	351,071	365,182	381,650	397,213	412,775	428,337	443,899	459,461

<sup>1</sup> Orange County service area population projection estimated based on Orange Co projected residential demand and Orange-Alamance residential use rate.

<sup>2</sup> Linear projection created by DWR staff using Office of State Planning county population projections from 2000-2020.

**Table A-2. Gallons per Person per Day from JL3 Allocation Applications**

(Does not include Wake County - RTP-- all use is non-residential with no residential population)

	2000 (gpcd)	2005 (gpcd)	2010 (gpcd)	2015 (gpcd)	2020 (gpcd)	2025 (gpcd)	2030 (gpcd)	2035 (gpcd)	2040 (gpcd)	2045 (gpcd)	2050 (gpcd)
<b>Orange County</b>											
residential use	46	46	46	46	46	46	46	46	46	46	46
non-residential use	23	21	23	20	19	22	22	20	22	21	22
total water demand (no projected conservation)	99	98	98	94	94	96	98	95	97	96	97
<b>OWASA</b>											
residential use	61	63	63	64	64	64	65	65	65	65	64
non-residential use	49	49	50	51	50	51	51	52	51	52	52
total water demand (w/ conservation)	130	131	133	133	134	134	135	136	136	136	136
<b>City of Durham</b>											
residential use	67	79	79	79	80	80	79	80	80	80	80
non-residential use	49	60	60	60	60	60	60	60	60	60	60
total water demand (w/ conservation)	152	155	155	155	155	155	155	155	155	155	155
<b>Chatham County</b>											
residential use	59	104	199	199	199	199	200	201	201	202	203
non-residential use	27	40	52	54	55	56	58	59	60	61	62
total water demand (no projected conservation)	111	181	301	302	303	304	306	308	309	311	312
<b>Pittsboro</b>											
total water demand (no projected conservation)	482	620	602	560	534	509	480	439	400	364	329
<b>Siler City</b>											
total water demand (no projected conservation)	359	359	328	328	328	328	328	328	328	328	328
<b>Town of Cary</b>											
residential use	74	71	68	67	65	64	57	58	58	58	58
non-residential use	21	23	25	28	32	35	35	35	35	35	35
total water demand (w/ conservation)	109	109	108	110	114	114	107	108	108	108	108
<b>Town of Apex</b>											
residential use	71	65	66	62	62	61	61	61	61	61	61
non-residential use	13	8	8	10	9	10	11	11	11	11	11
total water demand (w/ conservation)	98	87	86	84	84	83	85	84	84	84	84
<b>Town of Morrisville</b>											
residential use	77	67	63	58	58	58	58	58	58	58	58
non-residential use	52	41	41	38	40	41	41	41	41	41	41
total water demand (w/ conservation)	149	127	123	115	117	119	119	119	119	119	119
<b>Town of Holly Springs</b>											
residential use	75	75	75	75	75	75	75	75	75	75	75
non-residential use	17	30	31	31	31	31	31	32	34	36	36
total water demand (w/ conservation)	102	115	117	117	117	117	117	118	120	122	122
<b>City of Sanford</b>											
residential use	65	69	69	69	69	69	69	69	69	69	69
non-residential use	111	105	107	112	115	118	126	138	153	168	186
total water demand (no projected conservation)	233	228	231	236	240	244	252	268	287	306	328
<b>Harnett County</b>											
residential use	62	62	62	62	62	62	62	62	62	62	62
non-residential use	7	8	8	8	8	8	8	8	8	8	8
total water demand (no projected conservation)	98	90	90	90	90	90	90	90	89	90	90
<b>City of Fayetteville</b>											
residential use	79	76	73	71	70	68	67	66	65	64	63
non-residential use	48	52	56	60	61	61	61	63	66	69	72
total water demand (w/ conservation)	145	146	148	150	150	149	147	149	150	153	156

<b>Table A-3. Water Use Summary JL3 Allocation Application Data</b>											
	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)	(gpd)
<b>Orange County</b>											
projected demand	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7
current Jordan Lake supply	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
watershed withdrawal <sup>1</sup>		unk	unk	unk	unk	unk	unk	unk	unk	unk	unk
interbasin transfer <sup>1</sup>		unk	unk	unk	unk	unk	unk	unk	unk	unk	unk
<b>OWASA</b>											
projected demand	9.3	10.2	11.2	12.1	13	13.9	14.9	15.8	16.7	17.6	18.4
current Jordan Lake supply	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cane Creek/University Lake supplies	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
Stone Quarry supply								5.1	5.1	5.1	5.1
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
watershed withdrawal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>City of Durham</b>											
projected demand	31.0	34.2	37.2	39.8	42.8	45.1	46.3	47.5	48.6	49.8	51.0
Lake Michie supply	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
projected deficit	0.0	0.0	0.2	2.8	5.8	8.1	9.3	10.5	11.6	12.8	14.0
recommended total Jordan Lake allocation		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
watershed withdrawal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Chatham County</b>											
projected demand	1.3	2.9	6.2	7.1	8.1	9.4	10.9	12.7	14.9	17.5	20.7
adjusted demand <sup>2</sup>	1.3	2.5	3.4	3.9	4.5	5.2	6.0	7.1	8.3	9.7	11.5
current Jordan Lake supply	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Pittsboro supply	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	3.2	5.0
recommended total Jordan Lake allocation		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
watershed withdrawal <sup>3</sup>						1.0	1.2	1.3	1.3	1.3	1.3
interbasin transfer (ADD) <sup>3</sup>						1.0	1.2	1.3	1.3	1.3	1.3
interbasin transfer (MDD) <sup>4</sup>						1.5	1.7	1.9	1.9	1.9	1.9
<b>Town of Pittsboro</b>											
projected demand	1.2	1.7	1.8	2.0	2.3	2.6	3.0	3.4	3.9	4.7	5.6
adjusted demand <sup>5</sup>	0.7		0.8		1.0		1.2		1.7		2.5
Haw River (20% of 7Q10)	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Town of Siler City</b>											
projected demand	3.1	3.5	3.5	3.9	4.4	4.8	5.3	5.9	6.5	7.1	7.8
adjusted demand <sup>6</sup>	2.4		3.1		3.6		4.1		4.7		5.5
Rocky River Reservoirs	3.8	3.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Towns of Cary and Apex</b>											
projected demand	12.7	15.7	18.7	22.0	25.9	29.3	31.5	34.0	34.0	34.0	34.0
current Jordan Lake supply	16.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
projected deficit	0.0	0.0	0.0	1.0	4.9	8.3	10.5	13.0	13.0	13.0	13.0
recommended total Jordan Lake allocation		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
watershed withdrawal <sup>7</sup>		15.5	18.4	21.6	25.4	28.7	30.9	31.3	31.3	31.2	31.1
interbasin transfer (ADD) <sup>8</sup>		13.6	14.2	14.0	14.9	13.6	11.7	10.7	10.8	10.8	10.8
interbasin transfer (MDD) <sup>8</sup>		20.4	21.3	21.0	22.4	20.4	17.6	16.1	16.2	16.2	16.2

**Table A-3. Water Use Summary JL3 Allocation Application Data (continued)**

	2000 (gpd)	2005 (gpd)	2010 (gpd)	2015 (gpd)	2020 (gpd)	2025 (gpd)	2030 (gpd)	2035 (gpd)	2040 (gpd)	2045 (gpd)	2050 (gpd)
<b>Town of Morrisville</b>											
projected demand	1.0	1.9	2.2	2.4	2.8	3.2	3.2	3.2	3.2	3.2	3.2
current Jordan Lake supply	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
projected deficit	0.0	0.0	0.0	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.7
recommended total Jordan Lake allocation		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
watershed withdrawal <sup>7</sup>		1.8	2.0	2.2	2.5	2.9	2.9	2.9	2.9	2.9	2.9
interbasin transfer (ADD)		1.9	2.2	2.5	2.8	3.2	3.1	3.1	3.1	3.1	3.1
interbasin transfer (MDD) <sup>8</sup>		2.8	3.3	3.8	4.3	4.7	4.7	4.7	4.7	4.7	4.7
<b>Wake County - RTP</b>											
projected demand	0.3	1.3	1.7	2.2	2.6	3.1	3.4	3.6	3.9	4.1	4.4
current Jordan Lake supply	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
projected deficit	0.0	0.0	0.2	0.7	1.1	1.6	1.9	2.1	2.4	2.6	2.9
recommended total Jordan Lake allocation		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
watershed withdrawal <sup>10</sup>		1.3	1.7	2.2	2.6	3.1	3.4	3.5	3.5	3.5	3.5
interbasin transfer (ADD) <sup>10</sup>		1.3	1.7	2.2	2.6	3.1	3.4	3.5	3.5	3.5	3.5
interbasin transfer (MDD) <sup>11</sup>		2.0	2.6	3.3	3.9	4.7	5.1	5.3	5.3	5.3	5.3
<b>Town of Holly Springs</b>											
projected demand	0.9	2.5	4.4	6.3	8.3	10.2	12.2	13.6	14.7	15.3	15.3
current Jordan Lake supply	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Cape Fear River supply	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>City of Sanford</b>											
projected demand	6.3	7.9	9.4	11.3	13.6	16.2	19.1	22.4	26.4	31.1	36.6
Cape Fear River supply	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Harnett County</b>											
projected demand	6.4	6.7	7.7	8.7	9.9	11.2	12.8	14.5	16.4	18.7	21.3
Cape Fear River supply	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>City of Fayetteville</b>											
projected demand	25.9	30.7	36.1	41.7	47.3	53.0	59.3	63.0	66.9	71.6	76.0
Glennville Lake supply	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Cape Fear River (20% of 7Q10)	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
projected deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
recommended total Jordan Lake allocation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
watershed withdrawal <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
interbasin transfer <sup>12</sup>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Orange County does not currently have a water supply system. There is likely to be some amount of water withdrawn from the Jordan Lake watershed, as well as some amount transferred from the Haw River Subbasin, but it is impossible to estimate the quantities.

<sup>2</sup> Residential use rate for Chatham County set at 85 gpcd for adjusted residential water demand projection.

<sup>3</sup> Watershed withdrawal and interbasin transfer quantities estimated by assuming 21% of Chatham County's service area will lie in the Deep River Subbasin. Twenty-one percent was based on the proportion of residential customers projected for Chatham County's Northwest and Southwest service areas in the year 2025, as described in the Chatham County Water Feasibility Study Update (2000).

<sup>4</sup> MDD interbasin transfer based on a Max/Ave ratio of 1.5, which occurred in July 2000.

<sup>5</sup> Use rates based on Pittsboro's 1997 Local Water Supply Plan data. Unaccounted-for water set at 10%. See Pittsboro Siler City worksheet.

<sup>6</sup> Use rates based on Siler City's 1997 Local Water Supply Plan data. See Pittsboro Siler City worksheet.

<sup>7</sup> Watershed withdrawal quantity based on amount withdrawn from Lake, less consumptive use in Jordan Lake watershed.

<sup>8</sup> MDD interbasin transfer based on a Max/Ave ratio of 1.5. Cary's highest Max/Ave ratio in 2000 was 1.4, which occurred in November. Apex's highest Max/Ave ratio in 2000 was 1.6, which occurred in November.

<sup>9</sup> MDD interbasin transfer based on a Max/Ave ratio of 1.5. Morrisville did not provide this information in their Jordan Lake application.

<sup>10</sup> Watershed withdrawal and interbasin transfer quantities based on withdrawal amount. Wake County did not provide this information in their Jordan Lake application.

<sup>11</sup> MDD interbasin transfer based on a Max/Ave ratio of 1.5. Wake County did not provide this information in their Jordan Lake application.

<sup>12</sup> Holly Springs, Sanford, Harnett County and Fayetteville may each have interbasin transfer issues in the future. However, any such interbasin transfers will not be a result of our recommended Jordan Lake allocations for round three.

**Table A-4. Summary of Round 3 Allocation Recommendations**

	Current Allocation			Requested Allocation			Recommended Allocation				
	Level I (mgd)	Level II (mgd)	Total (mgd)	Level I (mgd)	Level II (mgd)	Total (mgd)	Level I (mgd)	Level II (mgd)	Total (mgd)	Watershed Withdrawal (mgd) <sup>2</sup>	Interbasin Transfer (mgd) <sup>3</sup>
<b>Orange County</b>	0.0	1.0	<b>1.0</b>	0.0	1.0	1.0	0.0	1.0	<b>1.0</b>	1.0	unk
<b>OWASA</b>	0.0	10.0	<b>10.0</b>	0.0	5.0	5.0	0.0	5.0	<b>5.0</b>	0.0	0.0
<b>City of Durham</b>	0.0	0.0	<b>0.0</b>	16.0	4.0	20.0	10.0	0.0	<b>10.0</b>	0.0	0.0
<b>Chatham County</b>	4.0	2.0	<b>6.0</b>	6.0	4.5	10.5	6.0	0.0	<b>6.0</b>	1.3	1.9
<b>Towns of Cary and Apex</b>	21.0	0.0	<b>21.0</b>	34.0	10.0	44.0	32.0	0.0	<b>32.0</b>	31.3	24.0
<b>Town of Morrisville</b>	2.0	0.5	<b>2.5</b>	4.0	1.0	5.0	3.5	0.0	<b>3.5</b>	2.9	*
<b>Wake County - RTP</b>	1.5	0.0	<b>1.5</b>	3.5	2.0	5.5	3.5	0.0	<b>3.5</b>	3.5	*
<b>Town of Holly Springs</b>	0.0	2.0	<b>2.0</b>	10.0	6.0	16.0	0.0	0.0	<b>0.0</b>	0.0	0.0
<b>City of Sanford</b>	0.0	0.0	<b>0.0</b>	0.0	28.0	28.0	0.0	0.0	<b>0.0</b>	0.0	0.0
<b>Harnett County</b>	0.0	0.0	<b>0.0</b>	0.0	18.0	18.0	0.0	0.0	<b>0.0</b>	0.0	0.0
<b>City of Fayetteville<sup>1</sup></b>	0	0	<b>0.0</b>	?	?	?	0.0	0.0	<b>0.0</b>	0.0	0.0
<b>Total</b>	28.5	15.5	<b>44.0</b>	73.5	79.5	153.0	55.0	6.0	<b>61.0</b>	40.0	25.9

<sup>1</sup> Fayetteville did not quantify their request for an allocation.

<sup>2</sup> Watershed Withdrawal is an estimate of the quantity of water withdrawn from Jordan Lake, but not returned to the Jordan Lake watershed.

This quantity is on an Average Daily Demand basis.

Orange County does not currently have a water supply system and anticipate supplying water to county residents through the Orange-Alamance water system.

There is likely to be some amount of water withdrawn from the Jordan Lake watershed,

but it is impossible to estimate the quantity. We have therefore set the quantity at the maximum possible.

Wake County did not provide the information necessary to calculate the amount of water withdrawn from the Jordan Lake watershed. We have therefore set the quantity at the maximum possible.

<sup>3</sup> Interbasin Transfer is an estimate of the quantity of water withdrawn from Jordan Lake, but not returned to the Haw River Subbasin.

This quantity is on an Maximum Day Demand basis.

Only the amount withdrawn from a Jordan Lake allocation is considered for the purpose of estimating interbasin transfer in this table.

Orange County does not currently have a water supply system. There is likely to be some amount of water transferred from the Haw River Subbasin,

but it is impossible to estimate the quantity. In any event, the amount of interbasin transfer would be below the 2.0 mgd threshold set by law.

The total quantity of interbasin transfer for Cary, Apex, Morrisville and Wake-RTP cannot exceed 24.0 mgd, based on their certificate.

## **APPENDIX B. Model Scenario 1 Data**

The tables presented in this section are derived from the Cape Fear River Basin Water Supply Plan. These tables summarize the data we used to develop Model Scenario 1. The purpose of Scenario 1 is to evaluate the long-term water supply needs in the Cape Fear River Basin and the cumulative effects of these demands throughout the basin above Lock & Dam #1. Model Scenario 1 incorporates the maximum projected demands for the Basin's water supply systems in 2050.

Table B-1 provides the service area demand projections we used for this scenario. Table B-2 provides the 2050 withdrawal amounts and the sources of those water demands for each water withdrawal location we modeled. Table B-3 provides the 2050 discharge amounts and the sources of those wastewater discharges for each wastewater discharge location we modeled. We calculated wastewater discharge amounts for each system based on current ratios of water withdrawal amounts to wastewater discharge amounts.

Table B-1 2050 Scenario 1 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE BASIN	WHY INCLUDED	2000 MGD SA Demand	2010 MGD SA Demand	2020 MGD SA Demand	2030 MGD SA Demand	2040 MGD SA Demand	2050 MGD SA Demand
02-79-020		ROCKINGHAM	REIDSVILLE	02-1	source	3.537	3.626	3.674	3.836	3.961	4.086
02-79-050	1	ROCKINGHAM	ROCKINGHAM CO	02-1	source	0.175	0.176	0.176	0.180	0.181	0.182
02-41-010		GUILFORD	GREENSBORO	02-1	source	40.185	42.155	43.731	45.908	47.896	49.885
02-41-020		GUILFORD	HIGH POINT	02-2	source	14.001	14.648	15.339	16.373	17.290	18.206
02-41-030		GUILFORD	JAMESTOWN	02-2	source	0.471	0.565	0.660	0.807	0.932	1.058
02-76-030		RANDOLPH	ARCHDALE	02-2	source	0.664	0.995	1.327	1.628	1.943	2.257
02-76-015		RANDOLPH	RANDLEMAN	02-2	source	1.385	1.529	1.671	1.899	2.095	2.292
02-76-010		RANDOLPH	ASHEBORO	18-3	discharge	4.707	5.255	5.785	6.081	6.476	6.872
none	2	RANDOLPH	RANDOLPH CO	02-2	source	8.760	10.286	11.848	13.446	15.030	16.614
02-76-025		RANDOLPH	LIBERTY	02-2	source	0.319	0.351	0.386	0.410	0.439	0.468
02-76-020		RANDOLPH	RAMSEUR	02-2	source	0.571	0.633	0.691	0.768	0.838	0.907
02-76-035		RANDOLPH	FRANKLINVILLE	02-2	source	0.065	0.069	0.074	0.101	0.119	0.137
02-01-010		ALAMANCE	BURLINGTON	02-1	source	12.776	13.617	14.437	16.101	17.458	18.815
02-01-035		ALAMANCE	ALAMANCE	02-1	source	0.037	0.040	0.044	0.049	0.053	0.057
02-01-025		ALAMANCE	ELON COLLEGE	02-1	source	0.492	0.524	0.556	0.606	0.649	0.692
02-41-010	3	GUILFORD	*GIBSONVILLE	02-1	source	0.687	0.893	1.160	1.397	1.640	1.884
02-01-123	3	ALAMANCE	*OSSISPEE SD	02-1	source	0.032	0.034	0.036	0.041	0.045	0.050
02-01-015		ALAMANCE	GRAHAM	02-1	source	2.034	2.376	2.780	3.135	3.502	3.869
02-01-018		ALAMANCE	MEBANE	02-1	source	1.682	2.354	2.922	3.704	4.427	5.151
02-01-020	4	ALAMANCE	HAW RIVER	02-1	source	0.927	1.065	0.854	0.935	1.001	1.068
02-01-030	3	ALAMANCE	*GREEN LEVEL	02-1	source	0.075	0.078	0.081	0.085	0.090	0.094
03-68-020	5	ORANGE	ORANGE-ALAMANCE/ORANGE CO	10-1	JLapp	1.167	1.591	2.232	2.825	3.418	4.011
03-68-010	5	ORANGE	OWASA	02-1	JLapp	9.300	11.200	13.000	14.900	16.700	18.400
03-32-010	5	DURHAM	DURHAM	10-1	JLapp	31.000	37.200	42.800	46.300	48.600	51.000
03-92-020-045	5	WAKE	CARY/APEX	02-1	JLapp	12.700	18.700	25.900	31.500	34.000	34.000
03-92-075	5	WAKE	MORRISVILLE	02-1	JLapp	1.000	2.200	2.800	3.200	3.200	3.200
none	5	WAKE	WAKE CO - RTP	02-1	JLapp	0.300	1.700	2.600	3.400	3.900	4.400
03-19-xxx	5	CHATHAM	CHATHAM CO COMBINED	02-1.5	JLapp	1.300	6.200	8.100	10.900	14.900	20.700
03-19-025	7	CHATHAM	GOLDSTON-GULF SD	02-2	source	0.140	0.140	0.140	0.140	0.140	0.140
03-19-015	7	CHATHAM	PITTSBORO	02-1	source	1.200	1.800	2.300	3.000	3.900	5.600
03-19-010	7	CHATHAM	SILER CITY	02-2	source	3.100	3.500	4.400	5.300	6.500	7.800
03-62-025	4	MONTGOMERY	STAR	18-1	discharge	0.473	0.577	0.483	0.496	0.510	0.525
03-63-015	4	MOORE	ROBBINS	02-2	source	0.831	0.872	0.830	0.844	0.855	0.865
03-53-010		LEE	SANFORD (Lee Co WSD I)	02-3	JLapp	6.300	9.400	13.600	19.100	26.400	36.600
03-53-015		LEE	BROADWAY	02-3	source	0.094	0.108	0.114	0.125	0.135	0.145
03-53-130	4	LEE	LEE CO	02-2	source	0.828	1.116	0.764	0.769	0.774	0.778



Table B-1 2050 Scenario 1 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE BASIN	WHY INCLUDED	2000 MGD SA Demand	2010 MGD SA Demand	2020 MGD SA Demand	2030 MGD SA Demand	2040 MGD SA Demand	2050 MGD SA Demand
03-92-050	5	WAKE	HOLLY SPRINGS	02-1	JLapp	0.900	4.400	8.300	12.200	14.700	15.300
03-43-045	5	HARNETT	HARNETT CO (Combined)	02-3	JLapp	6.400	7.700	9.900	12.800	16.400	21.300
03-92-055		WAKE	FUQUAY-VARINA	02-3	source	1.008	2.102	4.481	5.478	6.897	8.316
03-43-010		HARNETT	DUNN	02-3	source	2.289	2.508	2.717	3.095	3.414	3.733
03-51-025		JOHNSTON	BENSON	02-3	source	1.454	1.772	2.161	2.570	2.960	3.350
03-26-035		CUMBERLAND	FALCON	02-3	source	0.080	0.085	0.090	0.096	0.103	0.109
03-26-050		CUMBERLAND	GODWIN	02-3	source	0.013	0.014	0.016	0.017	0.019	0.020
03-43-035		HARNETT	ERWIN	02-3	source	0.680	0.780	0.880	0.968	1.063	1.158
03-63-040		MOORE	CAMERON	02-3	source	0.059	0.066	0.072	0.082	0.091	0.100
03-63-025		MOORE	CARTHAGE	02-2	source	0.303	0.331	0.359	0.410	0.451	0.492
03-63-103		MOORE	MOORE CO (HYLAND HILLS - NIAGRA)	02-3	source	0.018	0.019	0.020	0.024	0.027	0.030
03-63-045		MOORE	MOORE CO (VASS)	02-3	source	0.096	0.122	0.155	0.178	0.204	0.230
03-63-010		MOORE	SOUTHERN PINES	09-1	servarea	2.056	2.303	2.519	2.768	3.009	3.251
03-63-108		MOORE	MOORE CO (PINEHURST)	02-3	source	1.813	2.671	3.687	4.522	5.413	6.303
03-63-117		MOORE	MOORE CO (SEVEN LAKES)	02-3	source	0.304	0.412	0.522	0.633	0.744	0.854
03-26-010	5, 8	CUMBERLAND	FAYETTEVILLE	02-3	JLapp	25.900	36.100	47.300	59.300	66.900	76.000
03-26-020		CUMBERLAND	SPRING LAKE	02-3	source	1.049	1.264	1.525	1.747	1.979	2.211
03-47-025		HOKE	HOKE CO RWS	09-1	servarea	1.307	1.690	2.102	2.927	3.582	4.238
03-47-010	3, 4	HOKE	*RAEFORD	09-1	discharge	1.897	2.118	1.867	1.930	1.988	2.047
03-26-040		CUMBERLAND	WADE	02-3	source	0.036	0.041	0.045	0.049	0.054	0.058
03-26-030		CUMBERLAND	STEDMAN	02-4	source	0.080	0.090	0.100	0.109	0.118	0.128
03-26-344		CUMBERLAND	FT BRAGG	02-3	source	7.560	7.560	7.560	7.560	7.560	7.560
03-09-010		BLADEN	ELIZABETHTOWN	02-3	source	0.897	0.963	1.034	1.104	1.174	1.244
03-09-030	9	BLADEN	WHITE LAKE	02-3	source	0.249	0.259	0.270	0.281	0.292	0.303
03-09-060		BLADEN	BLADEN CO WD - 701 NORTH	02-3	source	0.087	0.115	0.144	0.191	0.231	0.271
03-09-065		BLADEN	BLADEN CO WD - EAST ARCADIA	02-3	source	0.098	0.138	0.178	0.248	0.307	0.366
03-09-055		BLADEN	BLADEN CO WD - W BLADEN	09-1	servarea	0.418	0.505	0.592	0.739	0.862	0.984
03-09-035		BLADEN	BLADEN CO WD - WHITE OAK	02-3	source	0.099	0.129	0.159	0.214	0.260	0.306
03-09-025		BLADEN	DUBLIN	09-1	discharge	0.048	0.048	0.048	0.057	0.062	0.067
03-09-040		BLADEN	TAR HEEL	09-1	servarea	0.028	0.030	0.032	0.034	0.036	0.038
04-65-010		NEW HANOVER	WILMINGTON	02-3	source	11.543	11.952	13.078	14.386	15.541	16.696
04-65-510	10	NEW HANOVER	NEW HANOVER CO AIRPORT	02-3	source	0.021	0.024	0.029	0.032	0.036	0.040
04-65-020		NEW HANOVER	WRIGHTSVILLE BEACH	02-6	source	1.005	1.111	1.117	1.221	1.297	1.372
04-65-226		NEW HANOVER	APPLE VALLEY	02-5	source	0.134	0.156	0.174	0.198	0.220	0.241
04-65-191	4	NEW HANOVER	NEW HANOVER CO FLEMINGTON	02-3	source	0.312	0.362	0.293	0.302	0.308	0.315
04-65-119	11	NEW HANOVER	FIGURE EIGHT ISLAND	02-6	source	0.355	0.399	0.444	0.517	0.579	0.642
04-65-015		NEW HANOVER	CAROLINA BEACH	02-3	source	0.645	0.742	0.834	0.923	1.014	1.104
04-65-025		NEW HANOVER	KURE BEACH	02-3	source	0.357	0.414	0.480	0.589	0.677	0.766
04-65-999	10	NEW HANOVER	LOWER CAPE FEAR WSA	02-3	source	6.650	11.650	11.650	11.650	11.650	11.650
04-10-045		BRUNSWICK	BRUNSWICK CO	02-3	source	11.628	14.466	17.022	20.432	23.509	26.586
04-10-035	3, 12	BRUNSWICK	*NORTH BRUNSWICK WSA (LELAND SD)	02-3	source	0.494	0.588	0.647	0.759	0.856	0.953
04-10-065		BRUNSWICK	NAVASSA	02-3	source	0.047	0.053	0.062	0.069	0.076	0.084
04-10-055		BRUNSWICK	CASWELL BEACH	02-3	source	0.169	0.220	0.275	0.270	0.292	0.314

Table B-1 2050 Scenario 1 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE BASIN	WHY INCLUDED	2000 MGD SA Demand	2010 MGD SA Demand	2020 MGD SA Demand	2030 MGD SA Demand	2040 MGD SA Demand	2050 MGD SA Demand
04-10-060		BRUNSWICK	HOLDEN BEACH	02-3	source	0.411	0.799	1.435	1.757	2.178	2.599
04-10-015		BRUNSWICK	LONG BEACH WATER	02-3	source	0.822	1.030	1.293	1.575	1.842	2.110
04-10-035		BRUNSWICK	OCEAN ISLE BEACH	02-3	source	0.490	0.589	0.708	0.869	1.013	1.157
04-10-025		BRUNSWICK	SHALLOTTE	02-3	source	0.217	0.228	0.239	0.264	0.284	0.303
04-10-010		BRUNSWICK	SOUTHPORT	02-3	source	0.660	0.800	0.928	1.117	1.282	1.446
04-10-050		BRUNSWICK	SUNSET BEACH	02-3	source	0.584	0.628	0.677	0.894	1.040	1.185
04-10-020		BRUNSWICK	YAUPON BEACH	02-3	source	0.167	0.185	0.204	0.229	0.251	0.273
04-65-137		NEW HANOVER	MONTEREY HEIGHTS	02-3	source	0.109	0.122	0.134	0.149	0.163	0.177
04-65-232		NEW HANOVER	MURRAYVILLE	02-5	source	1.333	1.667	1.917	2.243	2.549	2.855
04-65-154		NEW HANOVER	WALNUT HILLS	02-5	source	0.079	0.092	0.103	0.117	0.130	0.143
04-65-190		NEW HANOVER	RUNNYMEADE	02-5	source	0.057	0.066	0.074	0.084	0.094	0.103
04-65-188		NEW HANOVER	PRINCE GEORGE	02-5	source	0.057	0.066	0.074	0.084	0.094	0.103
04-65-229		NEW HANOVER	WESTBAY	02-6	source	0.043	0.050	0.056	0.063	0.070	0.077
04-65-192		NEW HANOVER	BRICKSTONE - MARSH OAKS	02-6	source	0.065	0.075	0.084	0.096	0.106	0.117
04-24-035	4	COLUMBUS	RIEGELWOOD SD	02-3	source	0.643	0.734	0.611	0.620	0.627	0.635
Notes:											
1. Used 2000 water use, service area demand, and population. Population projections adjusted to represent residential use, not service to schools.											
2. System population estimated by subtracting existing system populations from County population.											

**Table B-2 Withdrawal Node 2050 Scenario Inputs**

System	Withdrawal Node (file name)	Demand Source	2050 Withdrawal (mgd)	Safe Yield (mgd)
REIDSVILLE	02-79-020Reidsville	REIDSVILLE	4.086	19
		ROCKINGHAM CO	0.182	
		<b>Total =</b>	<b>4.268</b>	
GREENSBORO	02-41-010Greensboro-TownsendLk	GREENSBORO	15.000	36
			<b>Total =</b>	
	02-41-010GreensboroNLMitchell	GREENSBORO	15.000	see above
			<b>Total =</b>	
GreensboroRL	GREENSBORO	19.885	28.51	
	JAMESTOWN	0.000		
		GIBSONVILLE	0.288	
		<b>Total =</b>	<b>20.173</b>	
HIGH POINT	02-41-020HighPointFWard	HIGH POINT	8.206	21.44
		JAMESTOWN	0.000	
	HighPointRL	ARCHDALE	1.057	10.08
			<b>Total =</b>	
		HIGH POINT	10.000	
		<b>Total =</b>	<b>10.000</b>	
JAMESTOWN	JamestownRL	JAMESTOWN	1.058	1.2
		<b>Total =</b>	<b>1.058</b>	
ARCHDALE	ArchdaleRL	ARCHDALE	1.200	1.2
		<b>Total =</b>	<b>1.200</b>	
RANDLEMAN	02-76-015Randleman	RANDLEMAN	1.500	1.5
			<b>Total =</b>	
		RandlemanRL	0.792	1.01
		<b>Total =</b>	<b>0.792</b>	
RANDOLPH CO	RandolphRL	RANDOLPH CO	6.000	6
		<b>Total =</b>	<b>6.000</b>	
RAMSEUR	02-76-020Ramseur	RAMSEUR	0.907	6.6
		FRANKLINVILLE	0.137	
		<b>Total =</b>	<b>1.044</b>	
BURLINGTON	02-01-010Burlington-Mackintosh	BURLINGTON	17.140	36
		ALAMANCE	0.057	
	02-01-010Burlington-EdThomas	GIBSONVILLE	1.596	12
			<b>Total =</b>	
BURLINGTON	ELON COLLEGE	1.674	2.472	
	HAW RIVER	0.569		
		0.228		
		<b>Total =</b>	<b>2.472</b>	
GRAHAM/ MEBANE	02-01-015-018GrahamMebane	GRAHAM	3.869	12
		MEBANE	5.151	
		HAW RIVER	0.840	
		GREEN LEVEL	0.094	
		ORANGE-ALAMANCE\ORANGE CO	0.000	
			<b>Total =</b>	
ORANGE-ALAMANCE \ ORANGE CO	OrangeJL	ORANGE-ALAMANCE\ORANGE CO	3.541	4.0
		<b>Total =</b>	<b>3.541</b>	
OWASA	03-68-010OWASA	OWASA	5.000	14.3
			<b>Total =</b>	
	03-68-010OWASACaneCrk	OWASA	8.400	see above
			<b>Total =</b>	
		OWASAJL	5.000	5.0
		<b>Total =</b>	<b>5.000</b>	
DURHAM	DuhamJL	DURHAM	14.000	14.0
		<b>Total =</b>	<b>14.000</b>	
CARY\APEX	03-92-020-045CaryApex	CARY\APEX	34.000	34.0
		<b>Total =</b>	<b>34.000</b>	
MORRISVILLE	MorrisvilleJL	MORRISVILLE	3.200	3.5
		<b>Total =</b>	<b>3.200</b>	
WAKE CO - RTP	RTPJL	WAKE CO - RTP	4.400	4.5
		<b>Total =</b>	<b>4.400</b>	
CHATHAM CO (Combined)	ChathamCo	CHATHAM CO (Combined)	14.389	17.0
		SILER CITY	2.000	
		<b>Total =</b>	<b>16.389</b>	
GOLDSTON-GULF SD	03-19-025GoldstonGulf	GOLDSTON-GULF SD	0.140	2.24
		CHATHAM CO (Combined)	2.100	
		<b>Total =</b>	<b>2.240</b>	
PITTSBORO	03-19-015Pittsboro	PITTSBORO	5.600	9.8
		CHATHAM CO (Combined)	4.211	
		<b>Total =</b>	<b>9.811</b>	

**Table B-2 Withdrawal Node 2050 Scenario Inputs**

System	Withdrawal Node (file name)	Demand Source	2050 Withdrawal (mgd)	Safe Yield (mgd)
SILER CITY	03-19-010SilerCity	SILER CITY	5.800	5.8
		<b>Total =</b>	<b>5.800</b>	
ROBBINS	03-63-015Robbins-CBBrooks	ROBBINS	0.865	1.5
		<b>Total =</b>	<b>0.865</b>	
SANFORD	03-53-010Sanford	SANFORD	36.600	61.6
		BROADWAY LEE CO	0.082 0.000	
<b>Total =</b>			<b>36.682</b>	
LEE CO	03-53-130Lee-Cumnock	LEE CO	0.778	2.2
<b>Total =</b>			<b>0.778</b>	
HOLLY SPRINGS	HollySprings <sup>1</sup>	HOLLY SPRINGS	15.300	34.25
		HollySpringsRelease	0.000	
<b>Total =</b>			<b>15.300</b>	
<b>Total =</b>			<b>0.000</b>	0
HARNETT CO (Combined)	03-43-045HarnettCo <sup>1</sup>	HARNETT CO (Combined)	21.300	34.25
		FUQUAY-VARINA HOLLY SPRINGS	7.566 0.000	
<b>Total =</b>			<b>28.866</b>	
<b>Total =</b>			<b>0.000</b>	0
DUNN	03-43-010Dunn	DUNN	3.733	69.8
		BENSON FALCON GODWIN from FALCON	3.150 0.109 0.020	
<b>Total =</b>			<b>7.012</b>	
ERWIN	03-43-035BurlingtonIndustries(SwiftTextiles-Erwin)	ERWIN	1.158	5
<b>Total =</b>			<b>1.158</b>	
CARTHAGE	03-63-025Carthage	CARTHAGE	0.492	1
<b>Total =</b>			<b>0.492</b>	
MOORE CO (VASS)	03-63-045MowasaVass	MOORE CO (VASS)	0.230	1.45
<b>Total =</b>			<b>0.230</b>	
FAYETTEVILLE	3-26-010FayettevillePOHoffer	FAYETTEVILLE	71.000	80.8
		SPRING LAKE	2.211	
		HOKE CO RWS RAEFORD from HOKE CO RWS	2.057 0.000	
<b>Total =</b>			<b>75.268</b>	
03-26-010FayettevilleGlenville	FAYETTEVILLE	5.000	5	
	<b>Total =</b>	<b>5.000</b>		
FayettevilleRelease	FAYETTEVILLE	0.000	0	
<b>Total =</b>		<b>0.000</b>		
FT BRAGG	03-26-344FortBragg	FT BRAGG	7.560	20
<b>Total =</b>			<b>7.560</b>	
WILMINGTON	04-65-010Wilmington <sup>2</sup>	WILMINGTON	16.696	53.3
		NEW HANOVER CO AIRPORT WRIGHTSVILLE BEACH APPLE VALLEY NEW HANOVER CO FLEMINGTON FIGURE EIGHT ISLAND CAROLINA BEACH	0.040 0.150 0.075 0.000 0.078 0.214	
<b>Total =</b>			<b>17.253</b>	
LCFWASA	04-65-999LowerCapeFearWSA <sup>2</sup>	LCFWASA	11.650	53.3
		BRUNSWICK CO	23.168	
		NORTH BRUNSWICK WSA from BRUNSWICK CO	0.953	
		NAVASSA from N. BRUNSWICK SD	0.084	
		CASWELL BEACH from BRUNSWICK CO	0.314	
		HOLDEN BEACH from BRUNSWICK CO	2.599	
		LONG BEACH WATER from BRUNSWICK CO	2.110	
		OCEAN ISLE BEACH from BRUNSWICK CO	1.157	
		SHALLOTTE from BRUNSWICK CO	0.303	
		SOUTHPORT from BRUNSWICK CO	1.093	
		SUNSET BEACH from BRUNSWICK CO	1.185	
		YAUPON BEACH from BRUNSWICK CO	0.090	
		WILMINGTON	0.000	
<b>Total =</b>	<b>44.707</b>			

<sup>1</sup> These intakes will likely be located close together. Therefore, the safe yield of 68.5 will apply to the sum of both withdrawals.

<sup>2</sup> These intakes are located close together. Therefore, the safe yield of 106.6 will apply to the sum of both withdrawals.

**Table B-3 Discharge Node 2050 Scenario Inputs**

System	Discharge Node (file name)	Discharge Source	2050 Discharge (mgd)	Permit Limit (mgd)
REIDSVILLE	nc0024881Reidsville	REIDSVILLE <b>Total =</b>	3.344 <b>3.344</b>	7.5
GREENSBORO	nc0047384GreensboroTZOsborne	GREENSBORO <b>Total =</b>	25.229 <b>25.229</b>	22
	nc0024325GreensboroNBuffalo	GREENSBORO <b>Total =</b>	16.000 <b>16.000</b>	16
	nc0082082UNCGreensboro	GREENSBORO <b>Total =</b>	0.091 <b>0.091</b>	not limited
HIGH POINT	nc0024210HighPoint	HIGH POINT GREENSBORO JAMESTOWN ARCHDALE <b>Total =</b>	11.448 0.051 2.806 3.654 <b>17.958</b>	16
RANDLEMAN	nc0025445Randleman	RANDLEMAN <b>Total =</b>	2.050 <b>2.050</b>	1.745
ASHEBORO	nc0026123Asheboro	ASHEBORO <b>Total =</b>	3.938 <b>3.938</b>	9
RAMSEUR	nc0026565Ramseur	RAMSEUR <b>Total =</b>	0.488 <b>0.488</b>	0.48
FRANKLINVILLE	nc0007820Franklinville	FRANKLINVILLE <b>Total =</b>	0.117 <b>0.117</b>	0.03
BURLINGTON	nc0023876BurlingtonWWTP	BURLINGTON ALAMANCE ELON COLLEGE ELON COLLEGE to GIBSONVILLE GIBSONVILLE <b>Total =</b>	7.185 0.029 0.532 0.351 0.863 <b>8.960</b>	12
	nc0023868Burlington	BURLINGTON GRAHAM HAW RIVER HAW RIVER to GRAHAM GREEN LEVEL to HAW RIVER <b>Total =</b>	6.650 0.520 1.358 0.125 0.074 <b>8.727</b>	12
GRAHAM/ MEBANE	nc0021211Graham	GRAHAM <b>Total =</b>	3.500 <b>3.500</b>	3.5
	nc0021474MebaneWWTP	MEBANE <b>Total =</b>	4.896 <b>4.896</b>	2.5
OWASA	nc0025241OWASA-Mason	OWASA <b>Total =</b>	12.000 <b>12.000</b>	12
DURHAM	nc0047597DurhamSouth	DURHAM OWASA <b>Total =</b>	14.747 3.849 <b>18.596</b>	20
	nc0026051DurhamTriangle	DURHAM <b>Total =</b>	5.128 <b>5.128</b>	6
CARY/APEX	CaryRegionalWWTP	CARY/APEX <b>Total =</b>	19.610 <b>19.610</b>	unk
CHATHAM CO (Combined)	nc0051314NorthChatham	CHATHAM CO (Combined) <b>Total =</b>	0.205 <b>0.205</b>	0.05
PITTSBORO	nc0020354Pittsboro	PITTSBORO <b>Total =</b>	2.471 <b>2.471</b>	0.75
SILER CITY	nc0026441SilerCity	SILER CITY <b>Total =</b>	7.860 <b>7.860</b>	4

**Table B-3 Discharge Node 2050 Scenario Inputs**

System	Discharge Node (file name)	Discharge Source	2050 Discharge (mgd)	Permit Limit (mgd)
STAR	nc0058548Star	STAR	0.342	0.6
		<b>Total =</b>	<b>0.342</b>	
ROBBINS	nc0062855Robbins	ROBBINS	0.781	1.3
		<b>Total =</b>	<b>0.781</b>	
SANFORD	nc0024147Sanford	SANFORD	25.284	5
		<b>Total =</b>	<b>25.284</b>	
	nc0038831CarTrace	SANFORD	0.325	0.325
		<b>Total =</b>	<b>0.325</b>	
BROADWAY	nc0059242Broadway	BROADWAY	0.123	0.145
		<b>Total =</b>	<b>0.123</b>	
HOLLY SPRINGS	nc0063096HollySprings	HOLLY SPRINGS	11.141	1.5
		<b>Total =</b>	<b>11.141</b>	
HARNETT CO (Combined)	nc0031470HarnettCoUtilities	HARNETT CO (Combined)	0.400	0.4
		<b>Total =</b>	<b>0.400</b>	
	nc0030091BuiesCrk	HARNETT CO (Combined)	0.500	0.5
		<b>Total =</b>	<b>0.500</b>	
	nc0021636LillingtonWWTP	HARNETT CO (Combined)	2.929	0.6
<b>Total =</b>		<b>2.929</b>		
nc0082597Angier	HARNETT CO (Combined)	0.500	0.5	
	<b>Total =</b>	<b>0.500</b>		
FUQUAY-VARINA	nc0028118FuquayVarina	FUQUAY-VARINA	7.414	1.2
		<b>Total =</b>	<b>7.414</b>	
DUNN	nc0043176Dunn	DUNN	4.221	3
		<b>Total =</b>	<b>4.221</b>	
ERWIN	nc0064521ErwinSouthWWTP	ERWIN	1.108	1.2
		<b>Total =</b>	<b>1.108</b>	
	nc0001406SwiftTextiles	ERWIN	0.000	2.5
		<b>Total =</b>	<b>0.000</b>	
FAYETTEVILLE	nc0023957FayettevillCrossCrk	FAYETTEVILLE	51.402	22
		<b>Total =</b>	<b>51.402</b>	
	nc0050105FayettevilleRockfishCrk	FAYETTEVILLE	14.000	14
		<b>Total =</b>	<b>14.000</b>	
SPRING LAKE	nc0030970SpringLake	SPRING LAKE	1.784	1.5
		<b>Total =</b>	<b>1.784</b>	
RAEFORD	nc0026514Raeford	RAEFORD	1.780	3
		<b>Total =</b>	<b>1.780</b>	
ELIZABETH TOWN	nc0026671Elizabethtown	ELIZABETH TOWN	0.823	1.275
		DUBLIN	0.088	
		<b>Total =</b>	<b>0.910</b>	

## **APPENDIX C. Model Scenario 2 Data**

The tables presented in this section are derived from the Cape Fear River Basin Water Supply Plan. These tables summarize the data we used to develop Model Scenario 2. The purpose of Model Scenario 2 is to evaluate the Basin water supply needs and recommended Jordan Lake water supply storage allocations for 2030, and the cumulative effects of these demands throughout the basin above Lock & Dam #1. For Scenario 2, we incorporated the same projections used for Scenario 1 adjusted for 2030 with the following exception. For Scenario 2, we adjusted the projected water demands for Chatham County, Siler City and Pittsboro based upon our evaluations of all Jordan Lake water supply storage applications.

Table C-1 2030 Scenario 2 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE BASIN	WHY INCLUDED	2000	2010	2020	2030	2040	2050
						MGD	MGD	MGD	MGD	MGD	MGD
						SA Demand	SA Demand	SA Demand	SA Demand	SA Demand	SA Demand
02-79-020		ROCKINGHAM	REIDSVILLE	02-1	source	3.537	3.626	3.674	3.836	3.961	4.086
02-79-050	1	ROCKINGHAM	ROCKINGHAM CO	02-1	source	0.175	0.176	0.176	0.180	0.181	0.182
02-41-010		GUILFORD	GREENSBORO	02-1	source	40.185	42.155	43.731	45.908	47.896	49.885
02-41-020		GUILFORD	HIGH POINT	02-2	source	14.001	14.648	15.339	16.373	17.290	18.206
02-41-030		GUILFORD	JAMESTOWN	02-2	source	0.471	0.565	0.660	0.807	0.932	1.058
02-76-030		RANDOLPH	ARCHDALE	02-2	source	0.664	0.995	1.327	1.628	1.943	2.257
02-76-015		RANDOLPH	RANDLEMAN	02-2	source	1.385	1.529	1.671	1.899	2.095	2.292
02-76-010		RANDOLPH	ASHEBORO	18-3	discharge	4.707	5.255	5.785	6.081	6.476	6.872
none	2	RANDOLPH	RANDOLPH CO	02-2	source	8.760	10.286	11.848	13.446	15.030	16.614
02-76-025		RANDOLPH	LIBERTY	02-2	source	0.319	0.351	0.386	0.410	0.439	0.468
02-76-020		RANDOLPH	RAMSEUR	02-2	source	0.571	0.633	0.691	0.768	0.838	0.907
02-76-035		RANDOLPH	FRANKLINVILLE	02-2	source	0.065	0.069	0.074	0.101	0.119	0.137
02-01-010		ALAMANCE	BURLINGTON	02-1	source	12.776	13.617	14.437	16.101	17.458	18.815
02-01-035		ALAMANCE	ALAMANCE	02-1	source	0.037	0.040	0.044	0.049	0.053	0.057
02-01-025		ALAMANCE	ELON COLLEGE	02-1	source	0.492	0.524	0.556	0.606	0.649	0.692
02-41-010	3	GUILFORD	*GIBSONVILLE	02-1	source	0.687	0.893	1.160	1.397	1.640	1.884
02-01-123	3	ALAMANCE	*OSSIPPEE SD	02-1	source	0.032	0.034	0.036	0.041	0.045	0.050
02-01-015		ALAMANCE	GRAHAM	02-1	source	2.034	2.376	2.780	3.135	3.502	3.869
02-01-018		ALAMANCE	MEBANE	02-1	source	1.682	2.354	2.922	3.704	4.427	5.151
02-01-020	4	ALAMANCE	HAW RIVER	02-1	source	0.927	1.065	0.854	0.935	1.001	1.068
02-01-030	3	ALAMANCE	*GREEN LEVEL	02-1	source	0.075	0.078	0.081	0.085	0.090	0.094
03-68-020	5	ORANGE	ORANGE-ALAMANCE/ORANGE CO	10-1	JLapp	1.167	1.591	2.232	2.825	3.418	4.011
03-68-010	5	ORANGE	OWASA	02-1	JLapp	9.300	11.200	13.000	14.900	16.700	18.400
03-32-010	5	DURHAM	DURHAM	10-1	JLapp	31.000	37.200	42.800	46.300	48.600	51.000
03-92-020-045	5	WAKE	CARY/APEX	02-1	JLapp	12.700	18.700	25.900	31.500	34.000	34.000
03-92-075	5	WAKE	MORRISVILLE	02-1	JLapp	1.000	2.200	2.800	3.200	3.200	3.200
none	5	WAKE	WAKE CO - RTP	02-1	JLapp	0.300	1.700	2.600	3.400	3.900	4.400
03-19-xxx	5, 6	CHATHAM	CHATHAM CO COMBINED	02-1, 02-2	JLapp	1.300	3.400	4.500	6.000	8.300	11.500
03-19-025	7	CHATHAM	GOLDSTON-GULF SD	02-2	source	0.140	0.140	0.140	0.140	0.140	0.140
03-19-015	6, 7	CHATHAM	PITTSBORO	02-1	source	0.700	0.800	1.000	1.200	1.700	2.500
03-19-010	6, 7	CHATHAM	SILER CITY	02-2	source	2.400	3.100	3.600	4.100	4.700	5.500
03-62-025	4	MONTGOMERY	STAR	18-1	discharge	0.473	0.577	0.483	0.496	0.510	0.525
03-63-015	4	MOORE	ROBBINS	02-2	source	0.831	0.872	0.830	0.844	0.855	0.865
03-53-010	5	LEE	SANFORD (Lee Co WSD I)	02-3	JLapp	6.300	9.400	13.600	19.100	26.400	36.600
03-53-015		LEE	BROADWAY	02-3	source	0.094	0.108	0.114	0.125	0.135	0.145
03-53-130	4	LEE	LEE CO	02-2	source	0.828	1.116	0.764	0.769	0.774	0.778



Table C-1 2030 Scenario 2 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE	WHY	2000	2010	2020	2030	2040	2050
						MGD	MGD	MGD	MGD	MGD	MGD
				BASIN	INCLUDED	SA Demand	SA Demand	SA Demand	SA Demand	SA Demand	SA Demand
03-92-050	5	WAKE	HOLLY SPRINGS	02-1	JLapp	0.900	4.400	8.300	12.200	14.700	15.300
03-43-045	5	HARNETT	HARNETT CO (Combined)	02-3	JLapp	6.400	7.700	9.900	12.800	16.400	21.300
03-92-055		WAKE	FUQUAY-VARINA	02-3	source	1.008	2.102	4.481	5.478	6.897	8.316
03-43-010		HARNETT	DUNN	02-3	source	2.289	2.508	2.717	3.095	3.414	3.733
03-51-025		JOHNSTON	BENSON	02-3	source	1.454	1.772	2.161	2.570	2.960	3.350
03-26-035		CUMBERLAND	FALCON	02-3	source	0.080	0.085	0.090	0.096	0.103	0.109
03-26-050		CUMBERLAND	GODWIN	02-3	source	0.013	0.014	0.016	0.017	0.019	0.020
03-43-035		HARNETT	ERWIN	02-3	source	0.680	0.780	0.880	0.968	1.063	1.158
03-63-040		MOORE	CAMERON	02-3	source	0.059	0.066	0.072	0.082	0.091	0.100
03-63-025		MOORE	CARTHAGE	02-2	source	0.303	0.331	0.359	0.410	0.451	0.492
03-63-103		MOORE	MOORE CO (HYLAND HILLS - NIAGRA)	02-3	source	0.018	0.019	0.020	0.024	0.027	0.030
03-63-045		MOORE	MOORE CO (VASS)	02-3	source	0.096	0.122	0.155	0.178	0.204	0.230
03-63-010		MOORE	SOUTHERN PINES	09-1	servarea	2.056	2.303	2.519	2.768	3.009	3.251
03-63-108		MOORE	MOORE CO (PINEHURST)	02-3	source	1.813	2.671	3.687	4.522	5.413	6.303
03-63-117		MOORE	MOORE CO (SEVEN LAKES)	02-3	source	0.304	0.412	0.522	0.633	0.744	0.854
03-26-010	5, 8	CUMBERLAND	FAYETTEVILLE	02-3	JLapp	25.900	36.100	47.300	59.300	66.900	76.000
03-26-020		CUMBERLAND	SPRING LAKE	02-3	source	1.049	1.264	1.525	1.747	1.979	2.211
03-47-025		HOKE	HOKE CO RWS	09-1	servarea	1.307	1.690	2.102	2.927	3.582	4.238
03-47-010	3, 4	HOKE	*RAEFORD	09-1	discharge	1.897	2.118	1.867	1.930	1.988	2.047
03-26-040		CUMBERLAND	WADE	02-3	source	0.036	0.041	0.045	0.049	0.054	0.058
03-26-030		CUMBERLAND	STEDMAN	02-4	source	0.080	0.090	0.100	0.109	0.118	0.128
03-26-344		CUMBERLAND	FT BRAGG	02-3	source	7.560	7.560	7.560	7.560	7.560	7.560
03-09-010		BLADEN	ELIZABETHTOWN	02-3	source	0.897	0.963	1.034	1.104	1.174	1.244
03-09-030	9	BLADEN	WHITE LAKE	02-3	source	0.249	0.259	0.270	0.281	0.292	0.303
03-09-060		BLADEN	BLADEN CO WD - 701 NORTH	02-3	source	0.087	0.115	0.144	0.191	0.231	0.271
03-09-065		BLADEN	BLADEN CO WD - EAST ARCADIA	02-3	source	0.098	0.138	0.178	0.248	0.307	0.366
03-09-055		BLADEN	BLADEN CO WD - W BLADEN	09-1	servarea	0.418	0.505	0.592	0.739	0.862	0.984
03-09-035		BLADEN	BLADEN CO WD - WHITE OAK	02-3	source	0.099	0.129	0.159	0.214	0.260	0.306
03-09-025		BLADEN	DUBLIN	09-1	discharge	0.048	0.048	0.048	0.057	0.062	0.067
03-09-040		BLADEN	TAR HEEL	09-1	servarea	0.028	0.030	0.032	0.034	0.036	0.038
04-65-010		NEW HANOVER	WILMINGTON	02-3	source	11.543	11.952	13.078	14.386	15.541	16.696
04-65-510	10	NEW HANOVER	NEW HANOVER CO AIRPORT	02-3	source	0.021	0.024	0.029	0.032	0.036	0.040
04-65-020		NEW HANOVER	WRIGHTSVILLE BEACH	02-6	source	1.005	1.111	1.117	1.221	1.297	1.372
04-65-226		NEW HANOVER	APPLE VALLEY	02-5	source	0.134	0.156	0.174	0.198	0.220	0.241
04-65-191	4	NEW HANOVER	NEW HANOVER CO FLEMINGTON	02-3	source	0.312	0.362	0.293	0.302	0.308	0.315
04-65-119	11	NEW HANOVER	FIGURE EIGHT ISLAND	02-6	source	0.355	0.399	0.444	0.517	0.579	0.642
04-65-015		NEW HANOVER	CAROLINA BEACH	02-3	source	0.645	0.742	0.834	0.923	1.014	1.104
04-65-025		NEW HANOVER	KURE BEACH	02-3	source	0.357	0.414	0.480	0.589	0.677	0.766
04-65-999	10	NEW HANOVER	LOWER CAPE FEAR WSA	02-3	source	6.650	11.650	11.650	11.650	11.650	11.650
04-10-045		BRUNSWICK	BRUNSWICK CO	02-3	source	11.628	14.466	17.022	20.432	23.509	26.586
04-10-035	3, 12	BRUNSWICK	*NORTH BRUNSWICK WSA (LELAND SD)	02-3	source	0.494	0.588	0.647	0.759	0.856	0.953
04-10-065		BRUNSWICK	NAVASSA	02-3	source	0.047	0.053	0.062	0.069	0.076	0.084
04-10-055		BRUNSWICK	CASWELL BEACH	02-3	source	0.169	0.220	0.275	0.270	0.292	0.314

Table C-1 2030 Scenario 2 Input											
PWSID	notes	COUNTY	WATER SYSTEM	SOURCE BASIN	WHY INCLUDED	2000	2010	2020	2030	2040	2050
						MGD	MGD	MGD	MGD	MGD	MGD
						SA Demand	SA Demand	SA Demand	SA Demand	SA Demand	SA Demand
04-10-060		BRUNSWICK	HOLDEN BEACH	02-3	source	0.411	0.799	1.435	1.757	2.178	2.599
04-10-015		BRUNSWICK	LONG BEACH WATER	02-3	source	0.822	1.030	1.293	1.575	1.842	2.110
04-10-035		BRUNSWICK	OCEAN ISLE BEACH	02-3	source	0.490	0.589	0.708	0.869	1.013	1.157
04-10-025		BRUNSWICK	SHALLOTTE	02-3	source	0.217	0.228	0.239	0.264	0.284	0.303
04-10-010		BRUNSWICK	SOUTHPORT	02-3	source	0.660	0.800	0.928	1.117	1.282	1.446
04-10-050		BRUNSWICK	SUNSET BEACH	02-3	source	0.584	0.628	0.677	0.894	1.040	1.185
04-10-020		BRUNSWICK	YAUPON BEACH	02-3	source	0.167	0.185	0.204	0.229	0.251	0.273
04-65-137		NEW HANOVER	MONTEREY HEIGHTS	02-3	source	0.109	0.122	0.134	0.149	0.163	0.177
04-65-232		NEW HANOVER	MURRAYVILLE	02-5	source	1.333	1.667	1.917	2.243	2.549	2.855
04-65-154		NEW HANOVER	WALNUT HILLS	02-5	source	0.079	0.092	0.103	0.117	0.130	0.143
04-65-190		NEW HANOVER	RUNNYMEADE	02-5	source	0.057	0.066	0.074	0.084	0.094	0.103
04-65-188		NEW HANOVER	PRINCE GEORGE	02-5	source	0.057	0.066	0.074	0.084	0.094	0.103
04-65-229		NEW HANOVER	WESTBAY	02-6	source	0.043	0.050	0.056	0.063	0.070	0.077
04-65-192		NEW HANOVER	BRICKSTONE - MARSH OAKS	02-6	source	0.065	0.075	0.084	0.096	0.106	0.117
04-24-035	4	COLUMBUS	RIEGELWOOD SD	02-3	source	0.643	0.734	0.611	0.620	0.627	0.635
Notes:											
1. Used 2000 water use, service area demand, and population. Population projections adjusted to represent residential use, not service to schools.											
2. System population estimated by subtracting existing system populations from County population.											
3. No 1997 LWSP submitted, therefore data based on 1992 LWSP.											
4. Current industrial use is greater than 60% of total water use. Therefore, industrial use assumed to remain constant while other uses projected linearly.											
5. Data from Jordan Lake application.											
6. Projected demand adjusted by DWR.											
7. Population & demand from Chatham Co Jordan Lake application.											
8. Includes Hope Mills.											
9. Summer population is 3x permanent population.											
10. Projected demands for 1992-2020 used for projections of 2030-2050.											
11. Seasonal population used for projections.											
12. System also referred to as the N. Brunswick SD.											

**Table C-2 Withdrawal Node 2030 Scenario Inputs**

System	Withdrawal Node (file name)	Demand Source	2030 Withdrawal (mgd)	Safe Yield (mgd)
REIDSVILLE	02-79-020Reidsville	REIDSVILLE	3.836	19
		ROCKINGHAM CO	0.180	
		<b>Total =</b>	<b>4.016</b>	
GREENSBORO	02-41-010Greensboro-TownsendLk	GREENSBORO	15.000	36
			<b>Total =</b>	
	02-41-010GreensboroNLMitchell	GREENSBORO	15.000	see above
			<b>Total =</b>	
GreensboroRL	GREENSBORO	15.908	28.5	
	JAMESTOWN	0.000		
		<b>Total =</b>	<b>16.121</b>	
HIGH POINT	02-41-020HighPointFWard	HIGH POINT	7.873	21.4
		JAMESTOWN	0.000	
	HighPointRL	ARCHDALE	0.428	10.1
			<b>Total =</b>	
	HIGH POINT	8.500		
		<b>Total =</b>	<b>8.500</b>	
JAMESTOWN	JamestownRL	JAMESTOWN	0.807	1.2
		<b>Total =</b>	<b>0.807</b>	
ARCHDALE	ArchdaleRL	ARCHDALE	1.200	1.2
		<b>Total =</b>	<b>1.200</b>	
RANDLEMAN	02-76-015Randleman	RANDLEMAN	1.500	1.5
			<b>Total =</b>	
RandlemanRL	RANDLEMAN	0.399	1.0	
		<b>Total =</b>		<b>0.399</b>
RANDOLPH CO	RandolphRL	RANDOLPH CO	6.000	6
		<b>Total =</b>	<b>6.000</b>	
RAMSEUR	02-76-020Ramseur	RAMSEUR	0.768	6.6
		FRANKLINVILLE	0.101	
		<b>Total =</b>	<b>0.869</b>	
BURLINGTON	02-01-010Burlington-Mackintosh	BURLINGTON	14.668	36
		ALAMANCE	0.049	
	02-01-010Burlington-EdThomas	GIBSONVILLE	1.184	12
			<b>Total =</b>	
Burlington-EdThomas	BURLINGTON	1.433	12	
	ELON COLLEGE	0.496		
	HAW RIVER	0.200		
		<b>Total =</b>	<b>2.129</b>	
GRAHAM/ MEBANE	02-01-015-018GrahamMebane	GRAHAM	3.135	12
		MEBANE	3.704	
		HAW RIVER	0.735	
		GREEN LEVEL	0.085	
		ORANGE-ALAMANCE\ORANGE CO	1.355	
			<b>Total =</b>	
ORANGE-ALAMANCE \ ORANGE CO	OrangeJL	ORANGE-ALAMANCE\ORANGE CO	1.000	1.0
		<b>Total =</b>	<b>1.000</b>	
OWASA	03-68-010OWASA	OWASA	3.000	14.3
			<b>Total =</b>	
	03-68-010OWASACaneCrk	OWASA	7.400	see above
			<b>Total =</b>	
OWASAJL	OWASA	4.500	5.0	
		<b>Total =</b>	<b>4.500</b>	
DURHAM	DuhamJL	DURHAM	9.300	10.0
		<b>Total =</b>	<b>9.300</b>	
CARY/APEX	03-92-020-045CaryApex	CARY/APEX	31.500	32.0
		<b>Total =</b>	<b>31.500</b>	
MORRISVILLE	MorrisvilleJL	MORRISVILLE	3.200	3.5
		<b>Total =</b>	<b>3.200</b>	
WAKE CO - RTP	RTPJL	WAKE CO - RTP	3.400	3.5
		<b>Total =</b>	<b>3.400</b>	
CHATHAM CO (Combined)	ChathamCo	CHATHAM CO (Combined)	5.500	6.0
		SILER CITY	0.000	
		<b>Total =</b>	<b>5.500</b>	
GOLDSTON-GULF SD	03-19-025GoldstonGulf	GOLDSTON-GULF SD	0.140	2.2
		CHATHAM CO (Combined)	0.000	
		<b>Total =</b>	<b>0.140</b>	
PITTSBORO	03-19-015Pittsboro	PITTSBORO	1.200	9.8
		CHATHAM CO (Combined)	0.500	
		<b>Total =</b>	<b>1.700</b>	

<b>Table C-2 Withdrawal Node 2030 Scenario Inputs</b>				
System	Withdrawal Node (file name)	Demand Source	2030 Withdrawal (mgd)	Safe Yield (mgd)
SILER CITY	03-19-010SilerCity	SILER CITY	4.100	5.8
		<b>Total =</b>	<b>4.100</b>	
ROBBINS	03-63-015Robbins-CBBrooks	ROBBINS	0.844	1.5
		<b>Total =</b>	<b>0.844</b>	
SANFORD	03-53-010Sanford	SANFORD	19.100	61.6
		BROADWAY LEE CO	0.062 0.000	
<b>Total =</b>			<b>19.162</b>	
LEE CO	03-53-130Lee-Cumnock	LEE CO	0.769	2.2
		<b>Total =</b>	<b>0.769</b>	
HOLLY SPRINGS	HollySprings <sup>1</sup>	HOLLY SPRINGS	12.200	34.25
		<b>Total =</b>	<b>12.200</b>	
	HollySpringsRelease	HOLLY SPRINGS	0.000	0
		<b>Total =</b>	<b>0.000</b>	
HARNETT CO (Combined)	03-43-045HarnettCo <sup>1</sup>	HARNETT CO (Combined)	12.800	34.25
		FUQUAY-VARINA HOLLY SPRINGS	4.728 0.000	
<b>Total =</b>			<b>17.528</b>	
	HarnettRelease	HARNETT CO (Combined)	0.000	0
		<b>Total =</b>	<b>0.000</b>	
DUNN	03-43-010Dunn	DUNN	3.095	69.8
		BENSON FALCON GODWIN from FALCON	2.393 0.096 0.017	
<b>Total =</b>			<b>5.601</b>	
ERWIN	03-43-035BurligtonIndustries(SwiftTextiles-Er	ERWIN	0.968	5
		<b>Total =</b>	<b>0.968</b>	
CARTHAGE	03-63-025Carthage	CARTHAGE	0.410	1
		<b>Total =</b>	<b>0.410</b>	
MOORE CO (VASS)	03-63-045MowasaVass	MOORE CO (VASS)	0.178	1.5
		<b>Total =</b>	<b>0.178</b>	
FAYETTEVILLE	3-26-010FayettevillePOHoffer	FAYETTEVILLE	54.300	80.8
		SPRING LAKE	1.747	
		HOKE CO RWS RAEFORD from HOKE CO RWS	0.746 0.000	
<b>Total =</b>			<b>56.793</b>	
	03-26-010FayettevilleGlenville	FAYETTEVILLE	5.000	5
		<b>Total =</b>	<b>5.000</b>	
		FayettevilleRelease	0.000	
<b>Total =</b>	<b>0.000</b>			
FT BRAGG	03-26-344FortBragg	FT BRAGG	7.560	20
		<b>Total =</b>	<b>7.560</b>	
WILMINGTON	04-65-010Wilmington <sup>2</sup>	WILMINGTON	14.386	53.3
		NEW HANOVER CO AIRPORT WRIGHTSVILLE BEACH APPLE VALLEY NEW HANOVER CO FLEMINGTON FIGURE EIGHT ISLAND CAROLINA BEACH	0.032 0.000 0.032 0.000 0.000 0.033	
<b>Total =</b>			<b>14.483</b>	
LCFWASA	04-65-999LowerCapeFearWSA <sup>2</sup>	LCFWASA	11.650	53.3
		BRUNSWICK CO NORTH BRUNSWICK WSA from BRUNSWICK CO NAVASSA from N. BRUNSWICK SD CASWELL BEACH from BRUNSWICK CO HOLDEN BEACH from BRUNSWICK CO LONG BEACH WATER from BRUNSWICK CO OCEAN ISLE BEACH from BRUNSWICK CO SHALLOTTE from BRUNSWICK CO SOUTHPORT from BRUNSWICK CO SUNSET BEACH from BRUNSWICK CO YAUPON BEACH from BRUNSWICK CO WILMINGTON	17.014 0.759 0.069 0.270 1.757 1.575 0.869 0.264 0.764 0.894 0.075 0.000	
<b>Total =</b>			<b>35.960</b>	

<sup>1</sup> These intakes will likely be located close together. Therefore, the safe yield of 68.5 will apply to the sum of both withdrawals.

<sup>2</sup> These intakes are located close together. Therefore, the safe yield of 106.6 will apply to the sum of both withdrawals.

**Table C-3 Discharge Node 2030 Scenario Inputs**

System	Discharge Node (file name)	Discharge Source	2030 Discharge (mgd)	Permit Limit (mgd)
REIDSVILLE	nc0024881Reidsville	REIDSVILLE <b>Total =</b>	3.139 <b>3.139</b>	7.5
GREENSBORO	nc0047384GreensboroTZOsbone	GREENSBORO <b>Total =</b>	21.942 <b>21.942</b>	22
	nc0024325GreensboroNBuffalo	GREENSBORO <b>Total =</b>	16.000 <b>16.000</b>	16
	nc0082082UNCGreensboro	GREENSBORO <b>Total =</b>	0.084 <b>0.084</b>	not limited
HIGH POINT	nc0024210HighPoint	HIGH POINT GREENSBORO JAMESTOWN ARCHDALE <b>Total =</b>	10.295 0.047 2.139 2.635 <b>15.117</b>	16
RANDLEMAN	nc0025445Randleman	RANDLEMAN <b>Total =</b>	1.699 <b>1.699</b>	1.7
ASHEBORO	nc0026123Asheboro	ASHEBORO <b>Total =</b>	3.485 <b>3.485</b>	9
RAMSEUR	nc0026565Ramseur	RAMSEUR <b>Total =</b>	0.413 <b>0.413</b>	0.48
FRANKLINVILLE	nc0007820Franklinville	FRANKLINVILLE <b>Total =</b>	0.086 <b>0.086</b>	0.03
BURLINGTON	nc0023876BurlingtonWWTP	BURLINGTON ALAMANCE ELON COLLEGE ELON COLLEGE to GIBSONVILLE GIBSONVILLE <b>Total =</b>	6.148 0.025 0.466 0.308 0.640 <b>7.586</b>	12
	nc0023868Burlington	BURLINGTON GRAHAM HAW RIVER HAW RIVER to GRAHAM GREEN LEVEL to HAW RIVER <b>Total =</b>	5.691 0.120 1.275 0.023 0.068 <b>7.177</b>	12
GRAHAM/ MEBANE	nc0021211Graham	GRAHAM <b>Total =</b>	3.137 <b>3.137</b>	3.5
	nc0021474MebaneWWTP	MEBANE <b>Total =</b>	3.521 <b>3.521</b>	2.5
OWASA	nc0025241OWASA-Mason	OWASA <b>Total =</b>	12.000 <b>12.000</b>	12
DURHAM	nc0047597DurhamSouth	DURHAM OWASA <b>Total =</b>	13.388 0.834 <b>14.222</b>	20
	nc0026051DurhamTriangle	DURHAM <b>Total =</b>	4.656 <b>4.656</b>	6
CARY/APEX	CaryRegionalWWTP	CARY/APEX <b>Total =</b>	17.390 <b>17.390</b>	unk
CHATHAM CO (Combined)	nc0051314NorthChatham	CHATHAM CO (Combined) <b>Total =</b>	0.059 <b>0.059</b>	0.05
PITTSBORO	nc0020354Pittsboro	PITTSBORO <b>Total =</b>	0.530 <b>0.530</b>	0.75
SILER CITY	nc0026441SilerCity	SILER CITY <b>Total =</b>	4.132 <b>4.132</b>	4

**Table C-3 Discharge Node 2030 Scenario Inputs**

System	Discharge Node (file name)	Discharge Source	2030 Discharge (mgd)	Permit Limit (mgd)
STAR	nc0058548Star	STAR	0.323	0.6
		<b>Total =</b>	<b>0.323</b>	
ROBBINS	nc0062855Robbins	ROBBINS	0.762	1.3
		<b>Total =</b>	<b>0.762</b>	
SANFORD	nc0024147Sanford	SANFORD	13.039	5
		<b>Total =</b>	<b>13.039</b>	
	nc0038831CarTrace	SANFORD	0.325	0.325
<b>Total =</b>	<b>0.325</b>			
BROADWAY	nc0059242Broadway	BROADWAY	0.106	0.145
		<b>Total =</b>	<b>0.106</b>	
HOLLY SPRINGS	nc0063096HollySprings	HOLLY SPRINGS	8.883	1.5
		<b>Total =</b>	<b>8.883</b>	
HARNETT CO (Combined)	nc0031470HarnettCoUtilities	HARNETT CO (Combined)	0.400	0.4
		<b>Total =</b>	<b>0.400</b>	
	nc0030091BuiesCrk	HARNETT CO (Combined)	0.500	0.5
		<b>Total =</b>	<b>0.500</b>	
	nc0021636LillingtonWWTP	HARNETT CO (Combined)	1.201	0.6
<b>Total =</b>		<b>1.201</b>		
nc0082597Angier	HARNETT CO (Combined)	0.500	0.5	
	<b>Total =</b>	<b>0.500</b>		
FUQUAY-VARINA	nc0028118FuquayVarina	FUQUAY-VARINA	4.884	1.2
		<b>Total =</b>	<b>4.884</b>	
DUNN	nc0043176Dunn	DUNN	3.499	3
		<b>Total =</b>	<b>3.499</b>	
ERWIN	nc0064521ErwinSouthWWTP	ERWIN	0.926	1.2
		<b>Total =</b>	<b>0.926</b>	
	nc0001406SwiftTextiles	ERWIN	0.000	2.5
<b>Total =</b>	<b>0.000</b>			
FAYETTEVILLE	nc0023957FayettevillCrossCrk	FAYETTEVILLE	37.031	22
		<b>Total =</b>	<b>37.031</b>	
	nc0050105FayettevilleRockfishCrk	FAYETTEVILLE	14.000	14
<b>Total =</b>	<b>14.000</b>			
SPRING LAKE	nc0030970SpringLake	SPRING LAKE	1.410	1.5
		<b>Total =</b>	<b>1.410</b>	
RAEFORD	nc0026514Raeford	RAEFORD	1.678	3
		<b>Total =</b>	<b>1.678</b>	
ELIZABETHTOWN	nc0026671Elizabethtown	ELIZABETHTOWN	0.730	1.275
		DUBLIN	0.074	
		<b>Total =</b>	<b>0.805</b>	