

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 1. Municipal Per Capita Water Use Rate (gpcd)

COUNTY	Public Supplied ^{1, 3}	Base Year	Self Supplied ^{2, 3}
Banks	101	2005	75
Burke	132	2005	75
Columbia	153	2006	75
Elbert	102	2005	75
Franklin	139	2005	75
Glascock	73	2005	75
Hart	200	2005	75
Jefferson	169	2005	75
Jenkins	101	2005	75
Lincoln	67	2005	75
McDuffie	312	2005	75
Madison	107	2005	75
Oglethorpe	94	2005	75
Rabun	168	2005	75
Richmond	225	2005	75
Screven	161	2005	75
Stephens	144	2005	75
Taliaferro	71	2005	75
Warren	115	2005	75
Wilkes	156	2005	75

1 Based on "Water Use in Georgia 2005" (USGS) or input from local water providers

2 Based on data from "Water Use in Georgia 2005" for residential wells or input from local water providers

3 gpcd = gallons per day per person

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 2. Total Municipal Water Demand (mgd), Annual Average Daily Demand (AADD)

COUNTY	2010	2020	2030	2040	2050
Banks	1.51	1.91	2.36	2.74	3.18
Burke	2.25	2.72	3.21	3.74	4.34
Columbia	16.77	21.79	27.40	32.13	37.00
Elbert	1.82	1.82	1.81	1.78	1.75
Franklin	2.37	2.70	3.08	3.38	3.67
Glascock	0.13	0.13	0.13	0.13	0.13
Hart	2.96	3.44	3.97	4.52	5.09
Jefferson	2.04	1.99	1.90	1.77	1.63
Jenkins	0.75	0.73	0.71	0.68	0.66
Lincoln	0.57	0.65	0.71	0.76	0.80
McDuffie	3.62	4.21	4.78	5.32	5.85
Madison	2.62	3.07	3.56	3.94	4.31
Oglethorpe	1.17	1.58	2.12	2.75	3.25
Rabun	2.43	2.85	3.30	3.75	4.20
Richmond	44.78	47.74	50.47	52.79	55.06
Screven	1.71	1.93	2.14	2.22	2.27
Stephens	3.53	3.72	3.89	4.04	4.18
Taliaferro	0.09	0.09	0.09	0.09	0.08
Warren	0.57	0.59	0.59	0.60	0.63
Wilkes	1.18	1.19	1.20	1.20	1.20
Grand Total	92.88	104.85	117.42	128.34	139.27

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 2.1 Total Public Supply Water Demand (mgd), AADD

COUNTY	2010	2020	2030	2040	2050
Banks	0.76	0.95	1.18	1.38	1.60
Burke	1.12	1.36	1.61	1.89	2.20
Columbia	15.66	20.36	25.61	30.04	34.61
Elbert	1.03	1.03	1.03	1.02	1.00
Franklin	1.51	1.73	1.98	2.17	2.36
Glascock	0.00	0.00	0.00	0.00	0.00
Hart	1.72	2.02	2.34	2.68	3.03
Jefferson	1.46	1.43	1.37	1.28	1.18
Jenkins	0.41	0.40	0.39	0.38	0.37
Lincoln	0.39	0.45	0.48	0.52	0.55
McDuffie	2.55	2.98	3.39	3.79	4.18
Madison	1.47	1.72	2.00	2.22	2.43
Oglethorpe	0.24	0.33	0.44	0.57	0.68
Rabun	2.09	2.45	2.85	3.24	3.63
Richmond	44.48	47.42	50.14	52.45	54.71
Screven	1.02	1.16	1.29	1.35	1.38
Stephens	3.34	3.52	3.69	3.83	3.96
Taliaferro	0.00	0.00	0.00	0.00	0.00
Warren	0.38	0.39	0.39	0.40	0.42
Wilkes	0.79	0.80	0.81	0.81	0.82
Grand Total	80.42	90.51	101.01	110.02	119.10

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 2.2 Public Supply Surface Water Demand (mgd), AADD

COUNTY	2010	2020	2030	2040	2050
Banks	0.76	0.95	1.18	1.38	1.60
Burke	0.16	0.20	0.23	0.27	0.32
Columbia	15.47	20.12	25.31	29.69	34.19
Elbert	1.03	1.03	1.03	1.02	1.00
Franklin	1.43	1.63	1.87	2.06	2.24
Glascock	0.00	0.00	0.00	0.00	0.00
Hart	1.72	2.02	2.34	2.68	3.03
Jefferson	0.00	0.00	0.00	0.00	0.00
Jenkins	0.00	0.00	0.00	0.00	0.00
Lincoln	0.39	0.45	0.48	0.52	0.55
McDuffie	2.55	2.98	3.39	3.79	4.18
Madison	0.00	0.00	0.00	0.00	0.00
Oglethorpe	0.24	0.33	0.44	0.57	0.68
Rabun	2.03	2.39	2.77	3.15	3.54
Richmond	35.62	37.97	40.15	42.00	43.81
Screven	0.00	0.00	0.00	0.00	0.00
Stephens	3.34	3.52	3.69	3.83	3.96
Taliaferro	0.00	0.00	0.00	0.00	0.00
Warren	0.38	0.39	0.39	0.40	0.42
Wilkes	0.79	0.80	0.81	0.81	0.82
Grand Total	65.91	74.77	84.10	92.16	100.32

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 2.3 Public Supply Groundwater Demand (mgd), AADD

COUNTY	2010	2020	2030	2040	2050
Banks	0.00	0.00	0.00	0.00	0.00
Burke	0.96	1.17	1.38	1.61	1.88
Columbia	0.19	0.24	0.30	0.36	0.41
Elbert	0.00	0.00	0.00	0.00	0.00
Franklin	0.08	0.09	0.10	0.12	0.13
Glascocock	0.00	0.00	0.00	0.00	0.00
Hart	0.00	0.00	0.00	0.00	0.00
Jefferson	1.46	1.43	1.37	1.28	1.18
Jenkins	0.41	0.40	0.39	0.38	0.37
Lincoln	0.00	0.00	0.00	0.00	0.00
McDuffie	0.00	0.00	0.00	0.00	0.00
Madison	1.47	1.72	2.00	2.22	2.43
Oglethorpe	0.00	0.00	0.00	0.00	0.00
Rabun	0.05	0.06	0.07	0.09	0.10
Richmond	8.86	9.45	9.99	10.45	10.90
Screven	1.02	1.16	1.29	1.35	1.38
Stephens	0.00	0.00	0.00	0.00	0.00
Taliaferro	0.00	0.00	0.00	0.00	0.00
Warren	0.00	0.00	0.00	0.00	0.00
Wilkes	0.00	0.00	0.00	0.00	0.00
Grand Total	14.51	15.74	16.91	17.86	18.78

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Water Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 2.4 Self Supply Groundwater Demand (mgd), AADD

COUNTY	2010	2020	2030	2040	2050
Banks	0.76	0.95	1.17	1.36	1.58
Burke	1.13	1.36	1.60	1.85	2.15
Columbia	1.11	1.43	1.79	2.09	2.40
Elbert	0.79	0.78	0.78	0.76	0.75
Franklin	0.86	0.97	1.10	1.20	1.30
Glascock	0.13	0.13	0.13	0.13	0.13
Hart	1.23	1.42	1.63	1.85	2.07
Jefferson	0.58	0.56	0.53	0.49	0.45
Jenkins	0.34	0.33	0.32	0.30	0.29
Lincoln	0.18	0.20	0.22	0.24	0.25
McDuffie	1.07	1.23	1.39	1.53	1.67
Madison	1.16	1.35	1.56	1.72	1.87
Oglethorpe	0.93	1.25	1.68	2.17	2.57
Rabun	0.35	0.40	0.46	0.51	0.57
Richmond	0.30	0.32	0.33	0.34	0.35
Screven	0.68	0.77	0.84	0.87	0.88
Stephens	0.19	0.20	0.21	0.21	0.22
Taliaferro	0.09	0.09	0.09	0.09	0.08
Warren	0.19	0.20	0.20	0.20	0.21
Wilkes	0.39	0.39	0.39	0.39	0.39
Grand Total	12.46	14.34	16.41	18.32	20.17

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Wastewater Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 3. Total Municipal Wastewater Produced (mgd), Annual Average Daily Flow (AADF)

COUNTY	2010	2020	2030	2040	2050
Banks	1.16	1.47	1.81	2.11	2.45
Burke	1.84	2.22	2.61	3.05	3.54
Columbia	14.95	19.44	24.44	28.66	33.01
Elbert	1.62	1.62	1.61	1.58	1.56
Franklin	2.06	2.34	2.67	2.93	3.18
Glascock	0.11	0.11	0.11	0.11	0.10
Hart	2.58	3.00	3.47	3.95	4.45
Jefferson	1.90	1.86	1.77	1.65	1.52
Jenkins	0.62	0.61	0.59	0.57	0.55
Lincoln	0.52	0.59	0.64	0.68	0.73
Madison	2.10	2.45	2.80	3.11	3.40
McDuffie	3.58	4.18	4.79	5.33	5.85
Oglethorpe	1.02	1.38	1.85	2.40	2.85
Rabun	2.14	2.51	2.90	3.29	3.69
Richmond	44.44	47.38	50.09	52.40	54.65
Screven	1.40	1.59	1.76	1.83	1.86
Stephens	3.20	3.37	3.52	3.66	3.78
Taliaferro	0.07	0.07	0.07	0.07	0.07
Warren	0.54	0.55	0.56	0.57	0.59
Wilkes	1.00	1.00	1.01	1.02	1.02
Grand Total	86.85	97.73	109.09	118.96	128.82

mgd = million gallons per day

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Wastewater Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 3.1 Municipal Septic Wastewater (mgd), AADF

COUNTY	2010	2020	2030	2040	2050
Banks	1.16	1.47	1.81	2.11	2.45
Burke	1.23	1.49	1.75	2.03	2.36
Columbia	2.67	3.46	4.35	5.09	5.86
Elbert	0.93	0.93	0.92	0.90	0.89
Franklin	1.83	2.07	2.37	2.60	2.81
Glascock	0.11	0.11	0.11	0.11	0.10
Hart	2.18	2.54	2.93	3.33	3.75
Jefferson	0.91	0.88	0.84	0.78	0.72
Jenkins	0.33	0.33	0.31	0.30	0.29
Lincoln	0.42	0.48	0.52	0.56	0.59
Madison	2.10	2.45	2.80	3.11	3.40
McDuffie	0.98	1.15	1.32	1.46	1.59
Oglethorpe	1.02	1.38	1.85	2.40	2.85
Rabun	1.72	2.01	2.33	2.64	2.96
Richmond	6.21	6.62	6.99	7.31	7.62
Screven	0.88	0.99	1.09	1.13	1.15
Stephens	2.03	2.14	2.24	2.32	2.40
Taliaferro	0.07	0.07	0.07	0.07	0.07
Warren	0.30	0.31	0.31	0.32	0.33
Wilkes	0.47	0.47	0.47	0.47	0.47
Grand Total	27.56	31.34	35.41	39.06	42.66

mgd = million gallons per day

Table 3.2 Municipal Septic Wastewater (% of wastewater flow)

COUNTY	2010	2020	2030	2040	2050
Banks	100%	100%	100%	100%	100%
Burke	67%	67%	67%	67%	67%
Columbia	18%	18%	18%	18%	18%
Elbert	57%	57%	57%	57%	57%
Franklin	89%	89%	89%	89%	89%
Glascock	100%	100%	100%	100%	100%
Hart	85%	85%	84%	84%	84%
Jefferson	48%	48%	47%	47%	47%
Jenkins	54%	53%	53%	53%	53%
Lincoln	82%	82%	82%	82%	82%
Madison	100%	100%	100%	100%	100%
McDuffie	27%	27%	28%	27%	27%
Oglethorpe	100%	100%	100%	100%	100%
Rabun	80%	80%	80%	80%	80%
Richmond	14%	14%	14%	14%	14%
Screven	62%	62%	62%	62%	62%
Stephens	64%	64%	63%	63%	63%
Taliaferro	100%	100%	100%	100%	100%
Warren	57%	56%	56%	56%	56%
Wilkes	47%	47%	47%	46%	46%
Grand Total	32%	32%	32%	33%	33%

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010

Draft March 2010 Municipal Wastewater Demand Forecasts for the Savannah- Upper Ogeechee Water Planning Region

Table 3.3 Municipal Centralized Wastewater (mgd), AADF

COUNTY	2010	2020	2030	2040	2050
Banks	0.00	0.00	0.00	0.00	0.00
Burke	0.60	0.73	0.87	1.01	1.18
Columbia	12.28	15.97	20.09	23.57	27.15
Elbert	0.69	0.69	0.69	0.68	0.67
Franklin	0.23	0.26	0.30	0.33	0.36
Glascock	0.00	0.00	0.00	0.00	0.00
Hart	0.40	0.46	0.54	0.62	0.70
Jefferson	0.99	0.97	0.93	0.87	0.80
Jenkins	0.29	0.28	0.28	0.27	0.26
Lincoln	0.09	0.11	0.12	0.12	0.13
Madison	0.00	0.00	0.00	0.00	0.00
McDuffie	2.60	3.04	3.46	3.87	4.26
Oglethorpe	0.00	0.00	0.00	0.00	0.00
Rabun	0.42	0.50	0.58	0.66	0.74
Richmond	38.23	40.76	43.10	45.08	47.02
Screven	0.53	0.60	0.67	0.70	0.71
Stephens	1.17	1.23	1.29	1.34	1.38
Taliaferro	0.00	0.00	0.00	0.00	0.00
Warren	0.23	0.24	0.24	0.25	0.26
Wilkes	0.53	0.53	0.54	0.54	0.54
Grand Total	59.28	66.38	73.68	79.90	86.16

mgd = million gallons per day

Table 3.4 Municipal Centralized Wastewater (% of wastewater flow)

COUNTY	2010	2020	2030	2040	2050
Banks	0%	0%	0%	0%	0%
Burke	33%	33%	33%	33%	33%
Columbia	82%	82%	82%	82%	82%
Elbert	43%	43%	43%	43%	43%
Franklin	11%	11%	11%	11%	11%
Glascock	0%	0%	0%	0%	0%
Hart	15%	15%	16%	16%	16%
Jefferson	52%	52%	53%	53%	53%
Jenkins	46%	47%	47%	47%	47%
Lincoln	18%	18%	18%	18%	18%
Madison	0%	0%	0%	0%	0%
McDuffie	73%	73%	72%	73%	73%
Oglethorpe	0%	0%	0%	0%	0%
Rabun	20%	20%	20%	20%	20%
Richmond	86%	86%	86%	86%	86%
Screven	38%	38%	38%	38%	38%
Stephens	36%	36%	37%	37%	37%
Taliaferro	0%	0%	0%	0%	0%
Warren	43%	44%	44%	44%	44%
Wilkes	53%	53%	53%	54%	54%
Grand Total	68%	68%	68%	67%	67%

These draft forecasts are for discussion and use in regional water planning only. They reflect an application of current management practices into the future. As such, Councils may opt to adjust this current application.

4/20/2010