

## Draft March 2010 Municipal Water Demand Forecasts for the Middle Chattahoochee (MC) Water Planning Region

### MC1. Municipal Per Capita Water Use Rate

COUNTY	Public Supplied <sup>1</sup>	Base Year	Self Supplied <sup>2</sup>
Carroll	146	2005	75
Chattahoochee	94	2005	75
Clay	141	2005	75
Haralson	84	2005	75
Harris	171	2005	75
Heard	129	2005	75
Muscogee	194	2000	75
Quitman	79	2005	75
Randolph	179	2005	75
Stewart	260	2005	75
Troup	206	2005	75

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

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

### MC2. Total Municipal Water Demand (mgd), Average Annual Demand (AAD)

COUNTY	2010	2020	2030	2040	2050
Carroll	15.72	20.16	25.47	30.81	36.24
Chattahoochee	1.47	1.94	2.12	2.24	2.39
Clay	0.36	0.35	0.33	0.31	0.29
Haralson	2.53	3.02	3.57	4.01	4.40
Harris	4.19	5.45	6.92	8.47	10.07
Heard	1.36	1.62	1.89	2.20	2.56
Muscogee	37.07	41.84	46.92	52.24	58.08
Quitman	0.22	0.22	0.23	0.25	0.26
Randolph	1.08	1.03	0.94	0.85	0.75
Stewart	1.11	1.07	1.02	0.98	0.93
Troup	12.05	14.51	17.21	19.13	20.97
<b>Grand Total</b>	<b>77.14</b>	<b>91.21</b>	<b>106.62</b>	<b>121.49</b>	<b>136.93</b>

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**MC2.1 Total Public Supply Water Demand (mgd), AAD**

COUNTY	2010	2020	2030	2040	2050
Carroll	13.79	17.71	22.40	27.13	31.95
Chattahoochee	1.45	1.91	2.08	2.21	2.35
Clay	0.26	0.25	0.23	0.22	0.21
Haralson	2.50	3.00	3.54	3.98	4.36
Harris	3.29	4.30	5.47	6.70	8.00
Heard	1.11	1.33	1.55	1.81	2.11
Muscogee	37.07	41.84	46.92	52.24	58.08
Quitman	0.17	0.18	0.18	0.19	0.20
Randolph	0.94	0.89	0.82	0.74	0.66
Stewart	1.07	1.04	0.99	0.95	0.90
Troup	11.10	13.38	15.89	17.69	19.42
<b>Grand Total</b>	<b>72.74</b>	<b>85.81</b>	<b>100.08</b>	<b>113.86</b>	<b>128.22</b>

**MC2.2 Public Supply Surface Water Demand (mgd), AAD**

COUNTY	2010	2020	2030	2040	2050
Carroll	13.25	17.01	21.52	26.06	30.68
Chattahoochee	1.38	1.82	1.99	2.10	2.24
Clay	0.00	0.00	0.00	0.00	0.00
Haralson	2.50	3.00	3.54	3.98	4.36
Harris	3.23	4.21	5.36	6.57	7.83
Heard	1.03	1.23	1.43	1.67	1.95
Muscogee	37.07	41.84	46.92	52.24	58.08
Quitman	0.00	0.00	0.00	0.00	0.00
Randolph	0.00	0.00	0.00	0.00	0.00
Stewart	0.00	0.00	0.00	0.00	0.00
Troup	11.10	13.38	15.89	17.69	19.42
<b>Grand Total</b>	<b>69.55</b>	<b>82.48</b>	<b>96.64</b>	<b>110.31</b>	<b>124.56</b>

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**MC2.3 Public Supply Groundwater Demand (mgd), AAD**

COUNTY	2010	2020	2030	2040	2050
Carroll	0.55	0.70	0.89	1.07	1.26
Chattahoochee	0.07	0.09	0.10	0.10	0.11
Clay	0.26	0.25	0.23	0.22	0.21
Haralson	0.00	0.00	0.00	0.00	0.00
Harris	0.07	0.09	0.11	0.13	0.16
Heard	0.09	0.10	0.12	0.14	0.16
Muscogee	0.00	0.00	0.00	0.00	0.00
Quitman	0.17	0.18	0.18	0.19	0.20
Randolph	0.94	0.89	0.82	0.74	0.66
Stewart	1.07	1.04	0.99	0.95	0.90
Troup	0.00	0.00	0.00	0.00	0.00
<b>Grand Total</b>	<b>3.20</b>	<b>3.33</b>	<b>3.44</b>	<b>3.55</b>	<b>3.66</b>

**MC2.4 Self Supply Groundwater Demand (mgd), AAD**

COUNTY	2010	2020	2030	2040	2050
Carroll	1.93	2.45	3.07	3.68	4.29
Chattahoochee	0.02	0.03	0.03	0.03	0.04
Clay	0.10	0.10	0.09	0.09	0.08
Haralson	0.02	0.03	0.03	0.03	0.04
Harris	0.89	1.15	1.45	1.76	2.08
Heard	0.25	0.29	0.34	0.39	0.45
Muscogee	0.00	0.00	0.00	0.00	0.00
Quitman	0.05	0.05	0.05	0.05	0.06
Randolph	0.14	0.13	0.12	0.11	0.09
Stewart	0.04	0.04	0.03	0.03	0.03
Troup	0.95	1.13	1.32	1.45	1.56
<b>Grand Total</b>	<b>4.40</b>	<b>5.40</b>	<b>6.54</b>	<b>7.63</b>	<b>8.71</b>

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## Draft March 2010 Municipal Wastewater Demand Forecasts for the Middle Chattahoochee (MC) Water Planning Region

### MC3. Total Municipal Wastewater Produced (mgd), max monthly demand

COUNTY	2010	2020	2030	2040	2050
Carroll	14.29	18.33	23.17	28.03	32.96
Chattahoochee	1.30	1.71	1.86	1.97	2.10
Clay	0.35	0.34	0.32	0.30	0.28
Haralson	2.21	2.65	3.13	3.52	3.86
Harris	3.30	4.29	5.45	6.67	7.94
Heard	1.06	1.27	1.48	1.72	2.00
Muscogee	38.20	43.12	48.36	53.84	59.85
Quitman	0.18	0.19	0.20	0.21	0.22
Randolph	0.93	0.89	0.81	0.73	0.65
Stewart	1.09	1.06	1.01	0.96	0.92
Troup	10.96	13.20	15.66	17.41	19.09
<b>Grand Total</b>	<b>73.89</b>	<b>87.05</b>	<b>101.45</b>	<b>115.37</b>	<b>129.87</b>

### MC3.1 Municipal Septic Wastewater (mgd), max month

COUNTY	2010	2020	2030	2040	2050
Carroll	8.68	11.13	14.05	16.99	19.96
Chattahoochee	0.31	0.41	0.45	0.47	0.50
Clay	0.15	0.14	0.13	0.13	0.12
Haralson	1.46	1.75	2.07	2.32	2.55
Harris	2.84	3.70	4.69	5.74	6.83
Heard	0.96	1.14	1.33	1.55	1.80
Muscogee	1.25	1.41	1.59	1.77	1.96
Quitman	0.15	0.16	0.16	0.17	0.18
Randolph	0.32	0.31	0.28	0.25	0.22
Stewart	0.35	0.34	0.32	0.31	0.29
Troup	5.57	6.70	7.95	8.82	9.66
<b>Grand Total</b>	<b>22.06</b>	<b>27.20</b>	<b>33.03</b>	<b>38.52</b>	<b>44.09</b>

### MC3.2 Municipal Septic Wastewater (% of wastewater flow)

COUNTY	2010	2020	2030	2040	2050
Carroll	61%	61%	61%	61%	61%
Chattahoochee	24%	24%	24%	24%	24%
Clay	43%	43%	43%	42%	42%
Haralson	66%	66%	66%	66%	66%
Harris	86%	86%	86%	86%	86%
Heard	90%	90%	90%	90%	90%
Muscogee	3%	3%	3%	3%	3%
Quitman	82%	82%	82%	82%	82%
Randolph	35%	35%	35%	34%	34%
Stewart	32%	32%	32%	32%	32%
Troup	51%	51%	51%	51%	51%
<b>Grand Total</b>	<b>30%</b>	<b>31%</b>	<b>33%</b>	<b>33%</b>	<b>34%</b>

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## MC3.3 Municipal Centralized Wastewater (mgd), max month

COUNTY	2010	2020	2030	2040	2050
Carroll	5.61	7.21	9.12	11.04	13.00
Chattahoochee	0.99	1.30	1.42	1.50	1.60
Clay	0.20	0.19	0.18	0.17	0.16
Haralson	0.75	0.90	1.06	1.19	1.31
Harris	0.46	0.60	0.76	0.93	1.11
Heard	0.10	0.12	0.14	0.17	0.20
Muscogee	36.95	41.71	46.77	52.08	57.89
Quitman	0.03	0.03	0.04	0.04	0.04
Randolph	0.61	0.58	0.53	0.48	0.43
Stewart	0.74	0.72	0.68	0.65	0.62
Troup	5.39	6.50	7.72	8.59	9.43
<b>Grand Total</b>	<b>51.83</b>	<b>59.85</b>	<b>68.42</b>	<b>76.85</b>	<b>85.79</b>

## MC3.4 Municipal Centralized Wastewater (% of wastewater flow)

COUNTY	2010	2020	2030	2040	2050
Carroll	39%	39%	39%	39%	39%
Chattahoochee	76%	76%	76%	76%	76%
Clay	57%	57%	57%	58%	58%
Haralson	34%	34%	34%	34%	34%
Harris	14%	14%	14%	14%	14%
Heard	10%	10%	10%	10%	10%
Muscogee	97%	97%	97%	97%	97%
Quitman	18%	18%	18%	18%	18%
Randolph	65%	65%	65%	66%	66%
Stewart	68%	68%	68%	68%	68%
Troup	49%	49%	49%	49%	49%
<b>Grand Total</b>	<b>70%</b>	<b>69%</b>	<b>67%</b>	<b>67%</b>	<b>66%</b>

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