

Metro Atlanta's Water: Everything You Wanted To Know About Your Water

(but were afraid to ask)

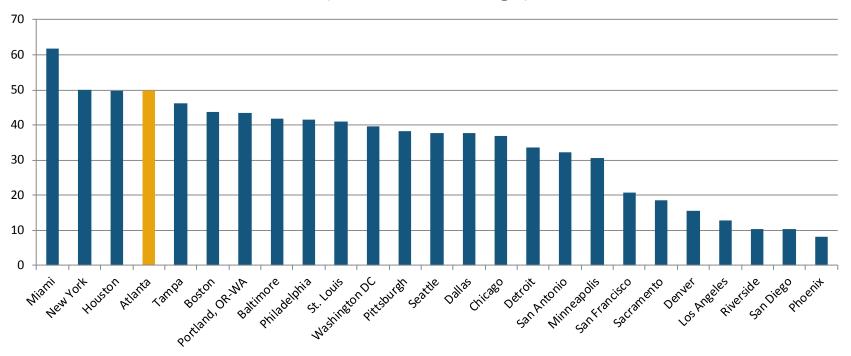
June 2014 Regional Snapshot Atlanta Regional Commission For more information, contact: KZitsch@atlantaregional.com





Rainfall in the Atlanta Region

Average Annual Rainfall (inches): 25 Largest Metro Areas (1981-2010 Average)



Overall, the Atlanta area receives a lot of rainfall. This chart shows a 30-year average rainfall amount for the 25 largest metro areas in the nation. As you can see, the Atlanta area gets about 50 inches of rain per year, ranking it fourth among the areas listed here.

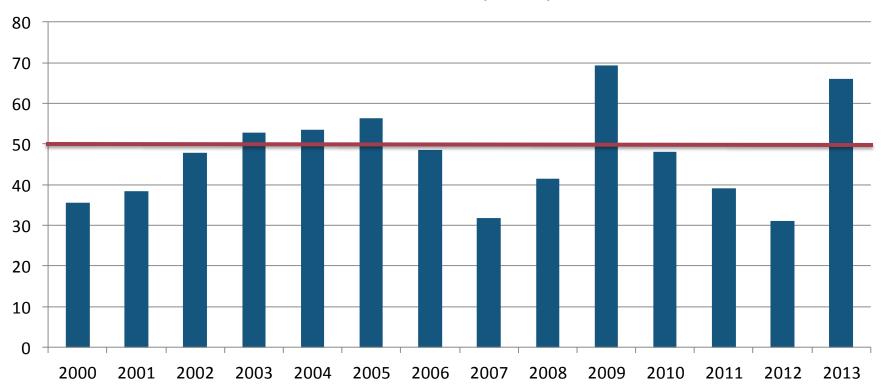






Rainfall in the Atlanta Region

Annual Rainfall (Inches)



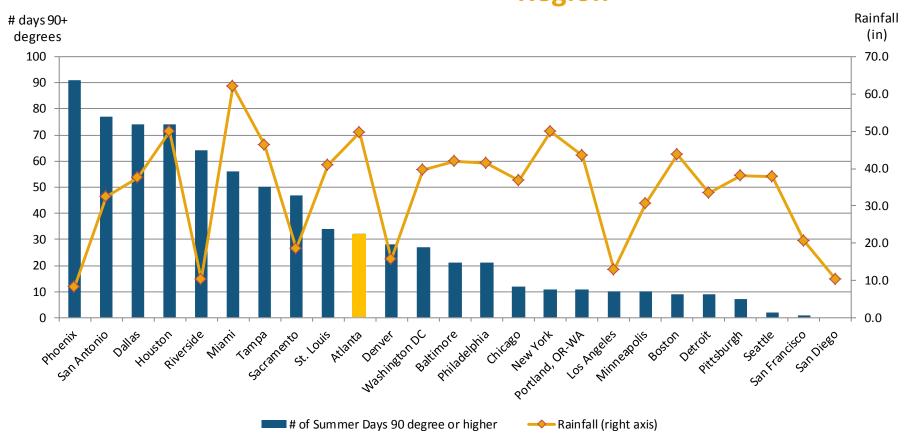
But rainfall amounts vary widely year-to-year. Last year, it rained a lot, as it did in 2009. But as recently as 2012, rainfall amounts were among the lowest annual totals over the past decade or so.







Rainfall & Average Temperature in the Atlanta Region



While it is hot in the Atlanta region, other places are hotter. On average over the past 30 years, the Atlanta region has about 32 days per summer where the temperature reaches at least 90 degrees. Of the areas that are hotter based on this metric, only Houston and Miami receive more or comparable rainfall.









Overall, the Atlanta area receives a lot of rain.

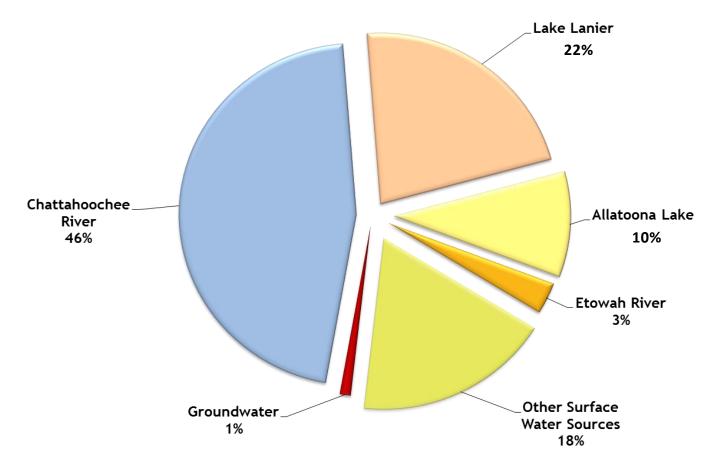
So, we don't have water challenges, right?







Where the Atlanta Region Gets Its Water



Because the region is located mostly on bedrock, groundwater supply is almost non-existent. This means that almost 99 percent of the region's water supply comes from surface water sources, like Lake Lanier, Allatoona Lake and the Chattahoochee River.



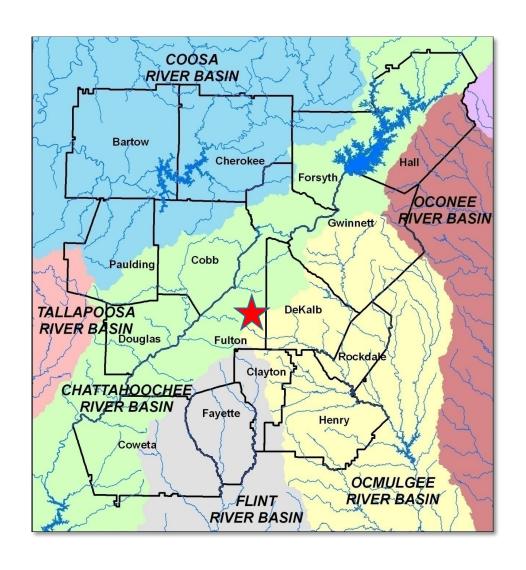




Where the Atlanta Region Gets Its Water

In addition, Atlanta was founded as a transportation hub, so having great access to railroads was initially more important than having great access to water.

Thus, the metro region is located at the headwaters of six major river basins.

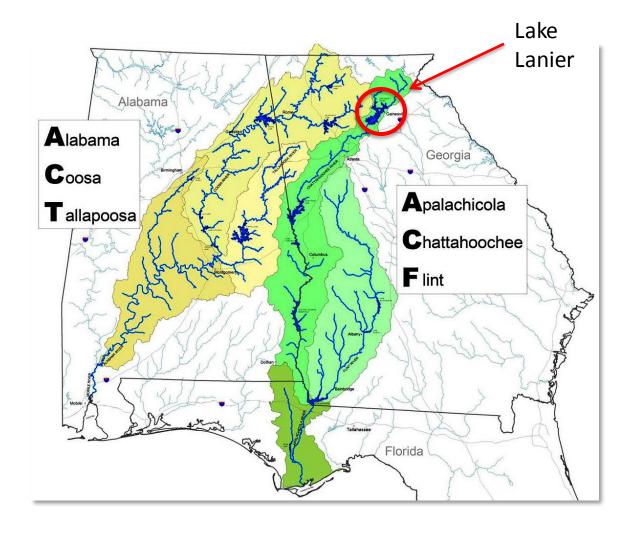






Where the Atlanta Region Gets Its Water

In fact, only about six percent of the ACF basin lies above Lake Lanier, meaning that only a fraction of all the rain we get can be stored in Lake Lanier.









Metro Water District Conservation Measures

- Conservation pricing
- 2. Replace old, inefficient toilets
- 3. Pre-rinse spray valve education
- Rain sensor shut-off on new irrigation systems
- 5. Sub-unit meters in new multi-family buildings
- 6. Water system leak reduction and repair
- 7. Residential water audits
- 8. Low-flow retrofit kits to customers
- 9. Commercial water audits
- 10. Education programs

- 11. Install HET toilets and urinals in government buildings
- 12. Require new car washes to recycle
- Expedited Water Loss Reduction *
- 14. Multi-Family HET Rebates *
- 15. Point of Use Leak Detection Meters *
- 16. Private Fire Line Meters *
- 17. Dedicated Water Conservation Programs*
- Water Waste Policy
- 19. High Efficiency Plumbing Fixtures

For all of the reasons listed previously, water conservation is critical in the Atlanta region. The Metropolitan North Georgia Water Planning District has developed a program of 19 water conservation measures. Go to www.northgeorgiawater.org to learn more.



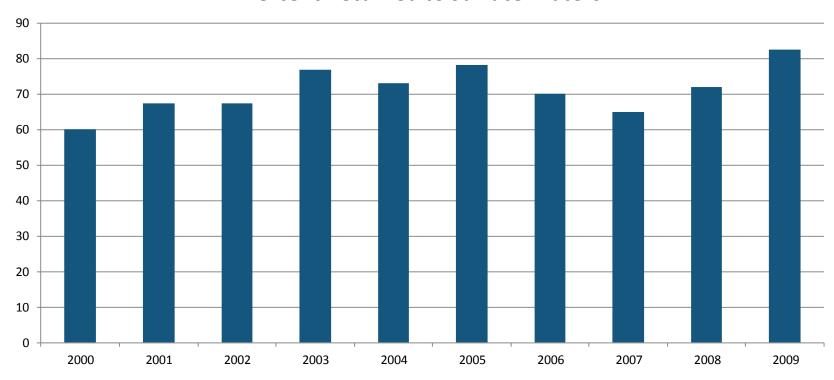


^{*} Lanier / Chattahoochee Only



Water Returns to Surface Waters

Percent Returned to Surface Waters



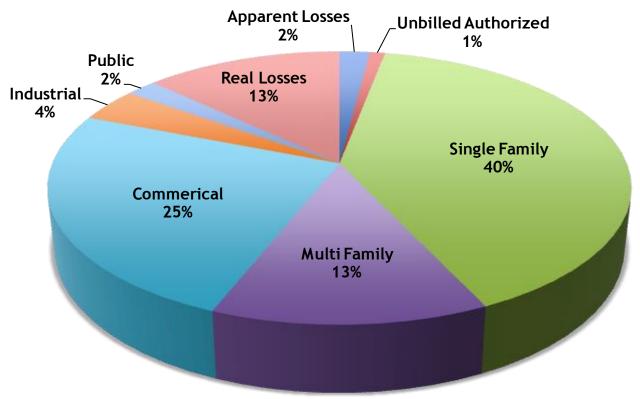
In addition to conservation, the region returns the majority of water it uses – after it is treated – back into the basin. In 2009, some 81 percent of water was returned back to the surface waters.







How We Use Water in the Atlanta Region



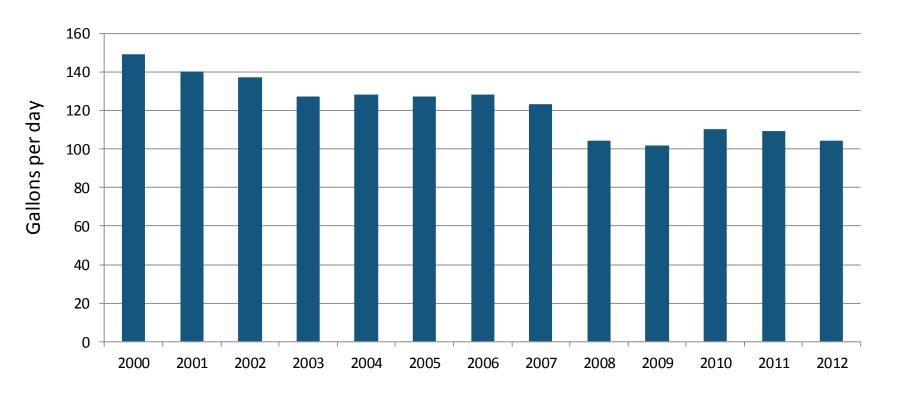
Most might think that business and industry are the biggest users of water in the region, **but residential uses actually consume more water. Put together, single-family and multi-family residences use about 53 percent** of the region's total water supply. Because of this, most of the water conservation measures adopted in recent years focus on single-family homes (like replacing old toilets, or on multi-family units, like sub-metering). Also notice that about 15 percent of our water is lost due to leaks and other issues of insufficient infrastructure.







Per Capita Water Use Declining Significantly



As this chart shows, the Atlanta region has done a good job at conserving water. **Per capita water usage is down more than 20 percent since 2000**. (Note: 2011 and 2012 numbers are still preliminary).







Per Capita Water Use By County

(gallons per day)

											Percent
											Change, 2000-
County/Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009
Bartow	307	252	236	227	222	225	214	205	171	161	-47.6%
Cherokee	125	117	122	117	120	118	112	113	100	100	-20.0%
Clayton	130	123	119	116	118	113	109	107	100	99	-23.8%
Cobb	141	133	133	124	126	123	126	121	97	95	-32.6%
Coweta	90	89	81	81	85	80	88	96	78	77	-14.4%
DeKalb	148	136	131	123	122	121	119	112	102	103	-30.4%
Douglas	106	104	108	99	102	106	110	98	85	83	-21.7%
Fayette	121	101	117	115	113	108	106	101	94	94	-22.3%
Forsyth	166	147	144	122	130	124	131	130	94	99	-40.4%
Fulton											
Atlanta Service Area	201	187	183	169	165	169	167	160	137	125	-37.8%
East Point/College Park	214	195	176	134	149	154	157	161	135	129	-39.7%
North Fulton	148	142	140	126	122	120	124	119	95	100	-32.4%
Palmetto	137	130	130	123	118	115	112	101	100	98	-28.5%
Gwinnett	137	137	124	116	123	118	125	116	94	92	-32.8%
Hall	139	129	124	114	118	116	119	111	93	93	-33.1%
Henry	115	110	116	113	116	106	104	108	99	96	-16.5%
Paulding	85	80	76	76	75	83	91	85	71	75	-11.8%
Rockdale	87	92	168	138	144	138	143	149	131	132	51.7%
REGION	149	140	137	127	128	127	128	123	104	102	-31.5%

Each jurisdiction in the 15-county Atlanta Region experienced significant declines in per capita water usage between 2000 and 2009. These decreases are due to a number of factors including the economic recession, improvements in water efficiency and water conservation efforts across the region.



