

HOW MUCH WATER WILL BE SAVED BY THE GA WATER STEWARDSHIP ACT?

Prepared by Upper Chattahoochee Riverkeeper and American Rivers, 5/12/10.

The Georgia Water Stewardship Act passed by the 2010 General Assembly is the most comprehensive water efficiency and conservation legislation approved to date. It's a good start for Georgia and we applaud the state legislature for its passage, but we must do more.

We have analyzed the likely water savings from the law's provisions and concluded that it will not do enough to achieve the savings needed to sustain a prosperous and environmentally healthy Metro Atlanta region in the future—given the projected population growth and anticipated future droughts. In addition, because the law's implementation will achieve relatively small water savings, it is not likely to convince downstream communities that Metro Atlanta is doing *all* it can to promote water efficiency, an important consideration in ongoing “water war” discussions.

The Water Stewardship Act contains four mandated measures (*see below*) that should save approximately 23.4 million gallons of water per day (MGD) in metro Atlanta by 2035. These numbers were calculated using data included in the Perdue Water Contingency Task Force Report (12/21/09) and the water plans developed by the Metro North Georgia Water Planning District (5/09).

For comparison purposes, a savings of 23.4 MGD represents about 3.5% of the water demand in metro Atlanta during the 2000s and only 2.1% of the demand anticipated in 2035, based on figures prepared by the Metro Water Planning District.

Other cities in the United States have achieved much more significant water savings through conservation measures, including the following:

- **Boston:** decreased total water demand by 125 MGD or 33% in 29 years.
- **Seattle:** decreased total water demand by 40 MGD or 26% in 19 years.
- **NYC:** decreased total water demand by 70-90 MGD (toilet retrofits) in 3 years. This program saved the city more than \$200 million by deferring expansion of supply and wastewater infrastructure; from its peak in 1988 through 2003, NYC's per capita water use declined by 34% and its total water demand declined by 26%. (*American Rivers*)

<u>Water Stewardship Act Savings in Metro Atlanta:</u>	MGD
(1) Sub-metering for new multi-tenant construction* Individual unit meters required for new residential/commercial/industrial buildings after 7/2012	4.6
(2) High efficiency plumbing code change for new construction* High-efficiency toilets, showerheads, faucets and urinals required in new buildings after 7/2012	6.2
(3) Year-round, daytime outdoor watering restriction (10AM-4PM) Required after 1/2011 in accordance with local ordinances that must be approved	7.2
(4) High efficiency industrial cooling systems Required in all industrial building constructed after 7/2012	5.4
Total Savings (2035)	23.4 MGD

**Retrofits of fixtures in existing buildings would yield more savings, faster.*

We strongly encourage Georgia and metro Atlanta to undertake *additional* important measures—through mandatory requirements and incentives to promote voluntary actions—that can achieve the kind of water conservation other cities have attained and secure a prosperous future for the region.

<u>Metro Atlanta Estimated Water Savings¹:</u>	Low	High
(1) Stop leaks in the water utility distribution pipes.	29	59
<ul style="list-style-type: none"> • In metro Atlanta 117 MGD are lost each day to leaks and unaccounted for uses. Fixing leaks saves water and helps a utility’s bottom line by eliminating the need to treat and pump lost water that they are not paid for producing. The Water Stewardship Act requires a standard methodology for <i>measuring</i> leaks, but does not require any reductions. 		
(2) Price water to encourage efficient use.	54	79
<ul style="list-style-type: none"> • Water is not priced at its true value or cost. Conservation pricing provides a price signal to the customer to conserve, while providing a price structure that protects the utility’s solvency in times of plentiful water and drought. 		
(3) Retrofit all buildings with water efficient fixtures.	36	55
<ul style="list-style-type: none"> • Outdated fixtures and appliances waste water. Retrofitting buildings through incentives such as rebates/tax holidays and through ordinances such as Retrofit on Reconnect generate proven, reliable and significant water savings. A 35% decrease in water use is possible through retrofits alone. 		
(4) Landscape to minimize waste.	Additional	Additional
On average 30% of household drinking water is used to water lawns, trees, and shrubs and 50% of that water is wasted through over-watering and evaporation. Peaks in demand generated by outdoor water use drive the need to develop new water sources and expand costly water infrastructure. By reducing the peak demand, the life of infrastructure is extended and the need for new sources can be eliminated.	.8	6
	119.8	199
Total Water Saved in MGD		

¹ Based on Metropolitan North Georgia Water Planning District 2003 consumption numbers, 652 MGD. The low and high water saving figures were derived from the *Hidden Reservoir* report produced by American Rivers, 2008.