



Reducing Building Aqua-Prints: *28 billion gallons of water savings possible with cost-effective improvements*

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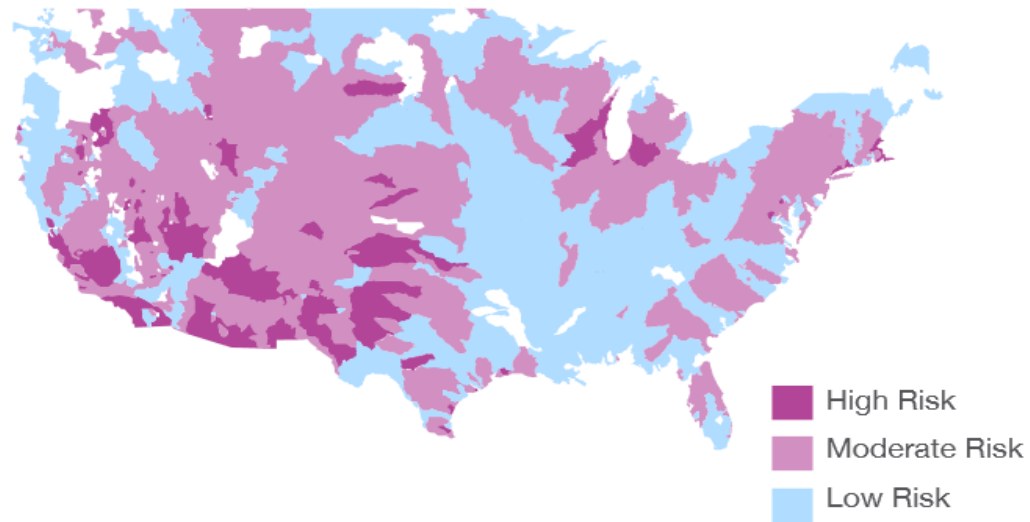
The Collaboration



Water in the U.S.

SCARCITY IS INCREASING IN THE U.S.

Current water risk: <http://aqueduct.wri.org/atlas>



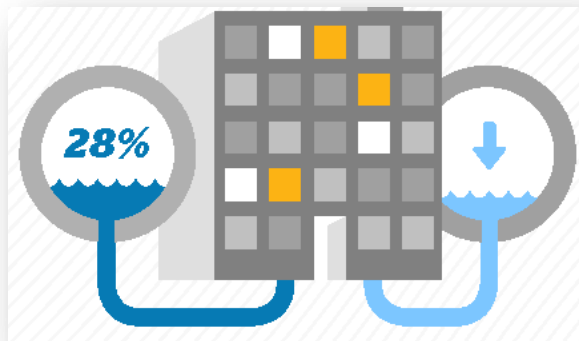
AT&T Water Footprint



- AT&T water footprint: **3.3B gallons of water annually**
- 2012 budget: Water expenditures **2%** of energy expenditures
- AT&T internal water activities: Scorecard, training, pilots

< 2 percent of portfolio (125 facilities) = **50 percent** of total water use
31 in high or very high water stress regions

All had one thing in common: **high evaporative cooling demands**



28%

*Amount of total water
in an office building
devoted to cooling*



The Project

Technical, Operational, and Free Air Cooling



Technical and Free Air Cooling

- **Technical:** One cooling tower filtration system upgrade costs less than \$100,000 to install but promises more than \$60,000 in annual water and sewer savings—paying for itself in less than two years.
- **Free Air Cooling:** A minor \$4,000 equipment upgrade to expand free air cooling promises nearly \$40,000 in annual savings.



The Results



Water Savings

- Our pilots achieved water reduction savings ranging between **14-40%**.

- Potential scalability in the U.S:
 - **28 billion gallons** of water could be saved per year. That amount could:
 - Provide fresh water to the **900 million water deprived people** with fresh water for **≤ 6 days**.*

14 - 40%

Amount this can be reduced through water scorecards, cooling towers and more

28 billion gallons

Water U.S. companies could save annually

*Calculated based on the fact that more than one-in-six people worldwide lack access to the necessary 20-50 liters of fresh water needed to meet basic daily needs (International Fund for Agricultural Development).



Toolkit

www.edf.org/attwater

Free tools to jumpstart a water management program

- For organizational leaders:
 - [Water MAPP](#)
 - Infographics
 - Business case
- For facility managers:
 - [Water MAPP](#)
 - Water audit forms
 - Cooling system videos
 - Cooling tower efficiency guide

Home > Our Projects >

Water Efficiency Tools & Resources for Buildings

Environmental Defense Fund (EDF) and AT&T developed tools and resources to help organizations build their own program to reduce water and energy use in buildings—and save money. Here is the full suite of water efficiency tools and resources.

Who should use the water efficiency toolkit?
If you can answer “yes” to any of these questions, you should take a look at the toolkit to see how it might help your operations:

- Do you have operations in water-stressed areas?
- Do you (or your landlord/facilities service provider) manage buildings as part of your operations?
- Do you want to learn from others’ experience to develop a business case for water efficiency?
- Do you want to contribute to the efficient use of this critical resource?

How is AT&T using the toolkit?
126 of AT&T’s facilities (representing 50% of total water use) have implemented the water score card, and many of AT&T facility managers use the educational material to increase their knowledge of the cooling system process. This process has been very helpful as AT&T engages with different vendors and technical solutions. These tools are critical to AT&T’s success as they strive to meet their goal of saving 150 million gallons of water from 2013-2015.

WATERMAPP
The Water Management Application is a multi-tabbed spreadsheet that has two primary integrated components: the [Water Scorecard](#) and the Water Efficiency Calculator. The scorecard is the fundamental tool used to create visibility for water performance at facilities. The calculator estimates water and financial savings from cooling tower or free-air cooling improvements—key data for making the water-efficiency investment business case.

COOLING SYSTEM EFFICIENCY GUIDE & VIDEOS
This [Guide](#) and 12 [video series](#) can be used by anyone in your organization who would like more information on the fundamentals of how a cooling system works, and how systems can be managed to minimize their use of water, energy and chemicals.

SAMPLE WATER AUDIT FORMS [PDF]
In order to build a robust water management program, it is essential to know where your water is used. These water audit templates will assist in defining the unique water profile of your building(s).



The Impact



Expansion and Adoption – AT&T

Goals

1. Realize **150 million gallons** – roughly 15 percent of cooling tower water use and 5 percent of total water use – of annualized water savings by the end of 2015
2. Realize **400 million kWh** in annualized electricity savings from free air cooling projects by the end of 2015
3. Include water goal question in **Supplier Survey** by the end of 2013 with the intent of motivating suppliers to reduce their water use
4. Develop regional water outreach plan for **five water-stressed regions** to expand awareness, increase use of the water efficiency toolkit and begin outreach to key stakeholders by the end of 2013



Expansion and Adoption – Nationally and Globally

- Sharing the results through existing relationships:
 - AT&T suppliers
 - Municipal governments
 - Nongovernmental organizations
 - Trade associations
- We invite you to join us! Get involved with the toolkit at www.edf.org/attwater.



Beneficiaries



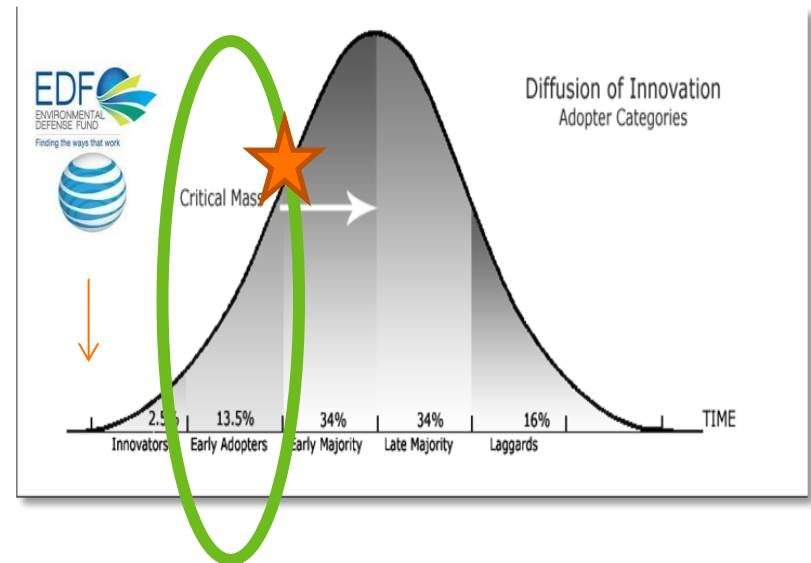
Expansion and Adoption – Getting to 28 Billion

EDF Climate Corps Fellow and EDF focused exclusively on scaling to organizations around the U.S:

- Replicable local outreach plans
- Targeted, localized water savings projections

Outreach toolkit contains:

- Program manual
- Conversation framing guide
- 12 priority city factsheets
- FAQ
- National and regional events
- Social media and blogs
- Webinar



Rethink Possible® 



www.edf.org/attwater

Thank you.

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