

# This presentation premiered at WaterSmart Innovations

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# ***Keep Austin Wired –*** **Guiding Water Efficient** **Behavior in a Mobile** **World**

**Water Smart Innovations**  
**October 5, 2017**

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# About Austin Water

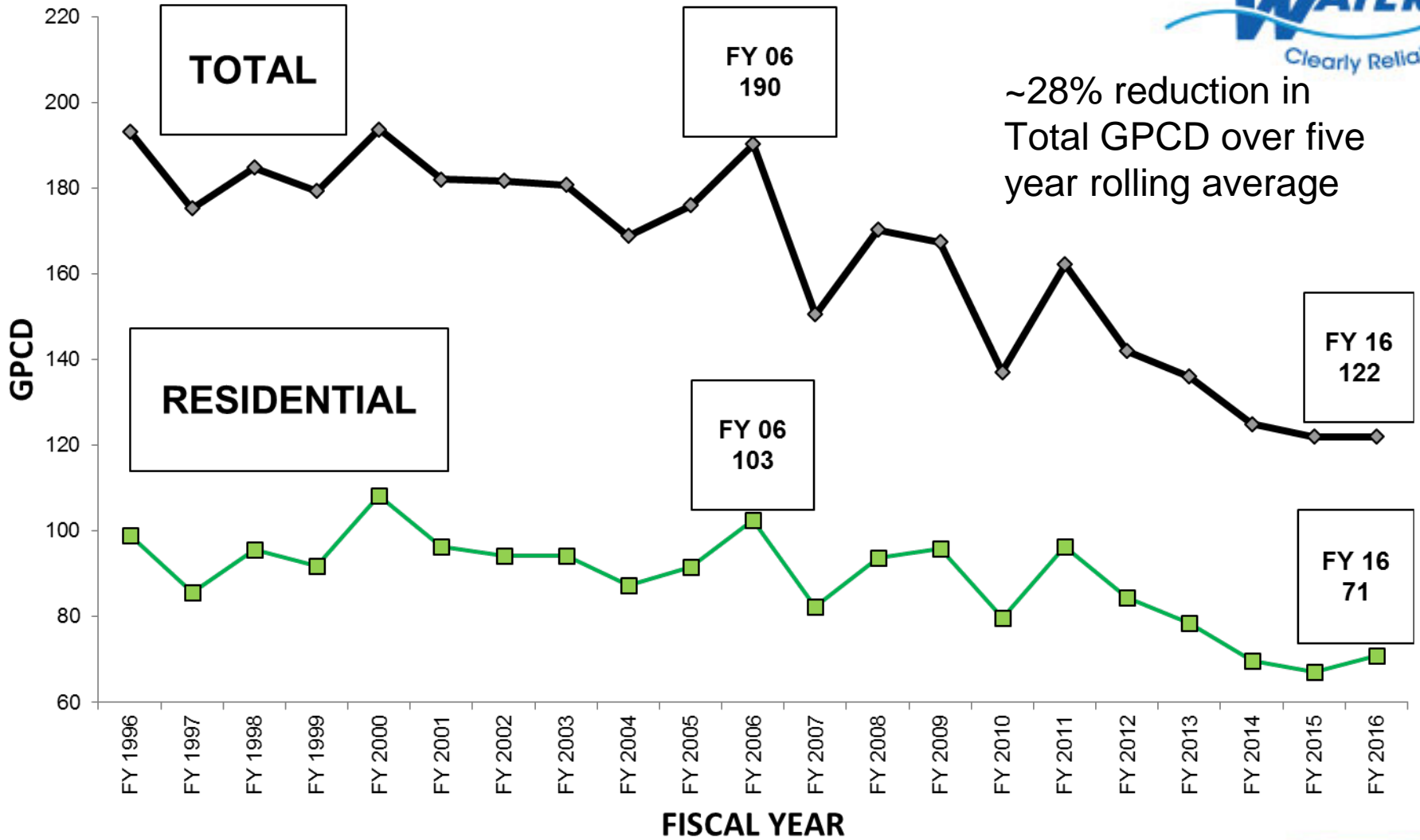
- Large metropolitan utility
  - 548 square miles
  - 225,000+ connections
  - 1,000,000 customers
  - 3,807 miles of mains  
(both transmission and distribution)
- 100% surface water from lower Colorado River
  - Firm water rights backed by stored water contract up to 325,000 acre-feet/year
  - Peak withdrawal ~ 175,000 acre-feet/year



# Mature conservation program

- Active/evolving conservation programs since 1983
- Early emphasis on efficient fixtures; later emphasis on efficient practices & regulations
- Council mandates in 2006, 2007, 2010 and 2014
- Peak day and total GPCD goals;
- Peaking factor and delay water supply contract payment







# Incentive program trends

- Traditional “low hanging fruit” implemented
- Many programs phased out due to federal manufacturing standards, market saturation, and state/local requirements
- Shifting focus to high use areas, auxiliary water, higher standards for new development, and innovative technology and methods



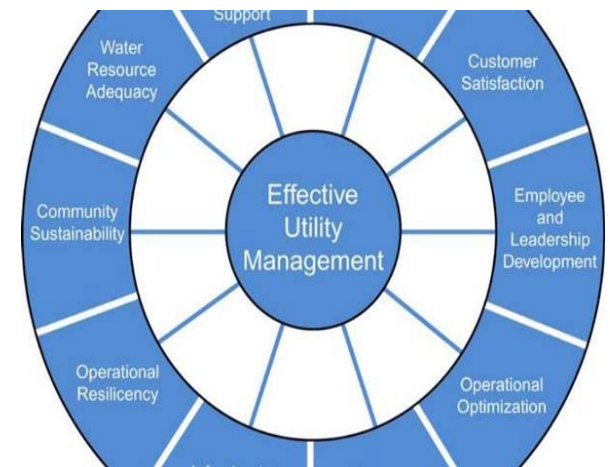
# Customer engagement and behavior modification

- Put more information into hands of customers
- Leverage social norms to change behavior by comparing customer's water use with similar and efficient homes
- Give feedback to the customer on water and cost saving ideas and rebates
- Engage customer to set goals



# Customer Satisfaction

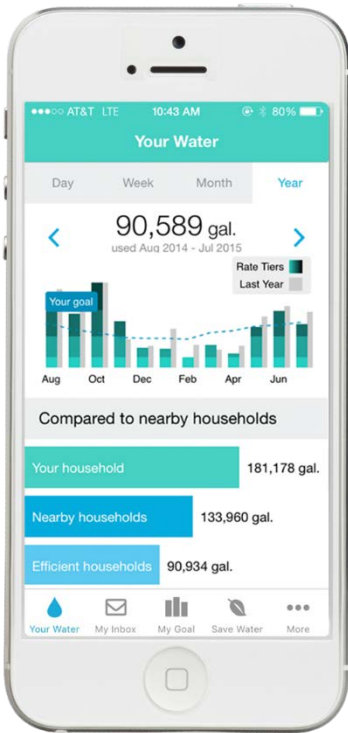
- An effective utility is responsive to customers and receives timely customer feedback to maintain responsiveness to customer needs and emergencies. (Effective Utility Management - A Primer for Water and Wastewater Utilities)
- Mobile apps provide the best customer experience (J.D. Power 2017 Utility Website Evaluation Study)
- Many low income customers use smartphones as their primary communication device (Pew Research Center. “Technology Device Ownership: 2015” )



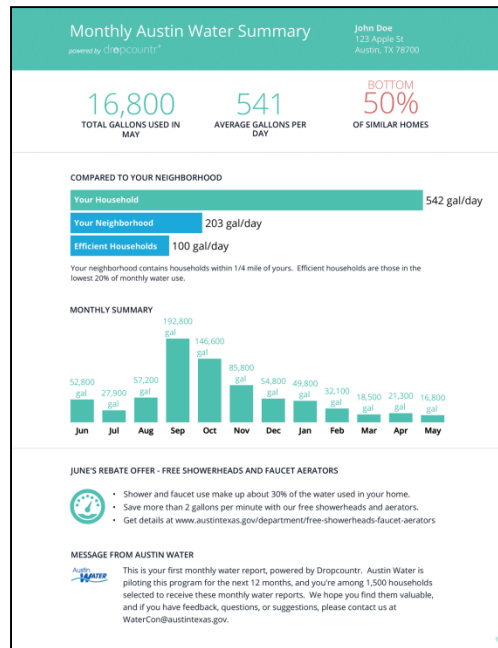


# Platform selection criteria

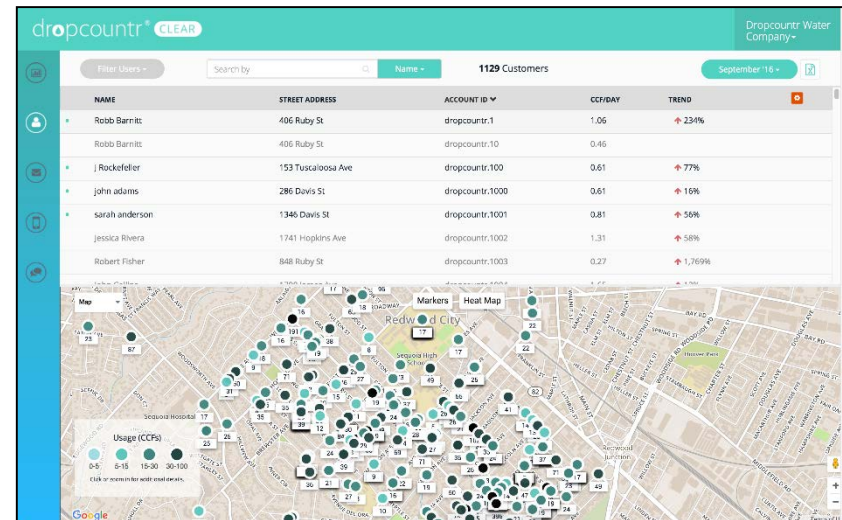
- “Native” mobile app and web based
- Custom home water use reports
- Analytics package
- Push alerts
- Intuitive
- Flexibility
- Cost



Dropcountr HOME App



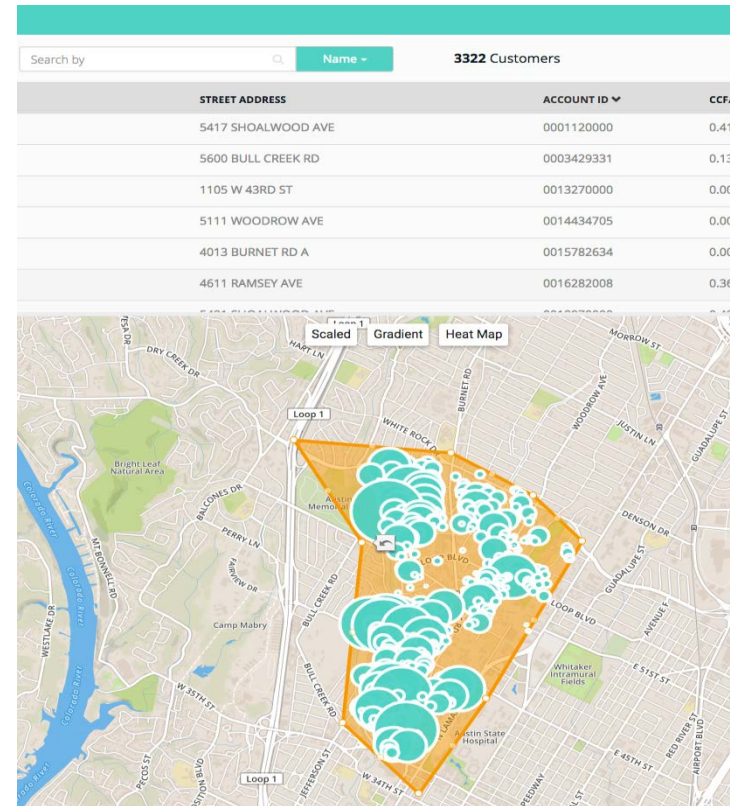
Mailed Home Water Report



Dropcountr CLEAR Analytics Platform

# Provide actionable information

- Contextual water usage
- Rate tiers and costs
- Suggested measures, and fixtures
- Goal setting/surveys
- Leak notifications
- Push alerts (e.g., service outages, boil water notices, smoke testing, line breaks/repairs)



# Program Results 2015-16

- Over 15,000 signed up
- 9% aggregate water savings  
17% savings among high-use customers
- 41 million gallons saved (attributable to program)
- Increased customer engagement, initiation of the “Conservation Conversation”
- Cost-effective outreach – rebates, push alerts, announcements



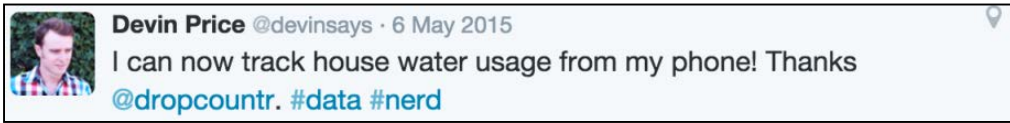


# Customer response

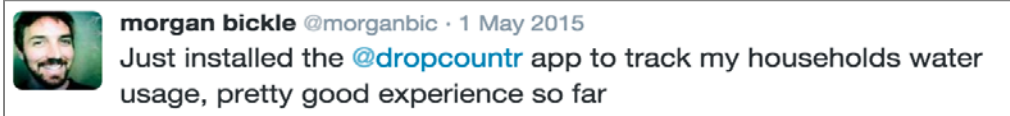
- 86% prefer native iOS and Android mobile apps (negligible mobile browser use).
- Increased interest in having “smart meter” data, leak alerts
- 88% would recommend to a friend.



**Jeremy B. Mazur** @jeremybmazur · 16 Sep 2015  
 Props to @AustinWater for enabling residents to use @dropcountr app to monitor our #txwater use! Great tool for wise water use!



**Devin Price** @devinsays · 6 May 2015  
 I can now track house water usage from my phone! Thanks @dropcountr. #data #nerd



**morgan bickle** @morganbic · 1 May 2015  
 Just installed the @dropcountr app to track my households water usage, pretty good experience so far



**Karthik Gaekwad** @iteration1 · Following  
 kudos on the @austinwater integration with @dropcountr! Gives you insight into your water usage compared to folks around you.



**Miró Cassetta** @miro\_cassetta · Follow  
 Way too excited about @dropcountr for @AustinWater! I've got some serious cutting down to do. #conservewater #goals

Your household (13,800 gal.)
Similar households (23,600 gal.)

# Lessons learned

- Cost/benefit of home water use reports should not be based on water savings alone
  - Expected water savings will vary among utilities and customer
  - Of equal benefit is the ease, speed, economy, desirability, access and “friendliness” of customer engagement and communication using an “opt-in” native mobile app
  - Many mailed “opt out” reports returned, less-interactive
  - Multi-faceted benefits and services should be equitably provided to all residential customers regardless of individual water savings potential



# What's Next

- Provide Spanish language version
- AMI pilot study
  - Cost and technical feasibility study
  - Up to 160 smart meter pilot participants with near real time water use data and leak alerts
- Explore possibility of ICI/MF portals





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