This presentation premiered at WaterSmart Innovations

watersmartinnovations.com
Once Bitten, Twice as High: Maintaining a Conservation Focus

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Fall 2017 - Customers began reporting unusual billing patterns (low August, high September)
An acute increase in high water escalations began in October 2017.

Austin Water & Austin Energy took a four part approach with an immediate focus on individual restorative efforts.

Analytic:
Perform meter to bill data analytics to identify specific issues

Restorative:
Solve any immediate issues and make the customer whole

Preventative:
Improve existing business processes and quality assurance measures

Proactive:
Identify future opportunities to improve customer experience
Initial Analysis Found No Irregularities

Billed consumption in 2017 aligned with previous years.

2017 Annual Residential Water Billed Consumption

Austin Water pumpage and billed consumption aligned with rainfall patterns as expected.

FY16 – FY17 System Pumpage & Billed Consumption vs Rainfall
Deeper Analysis… Still a Mystery

August to September consumption at the cycle level aligned with seasonal trends as expected.

Billing system estimates were within expected range. Typically, less than 1% of Residential bills are estimated.
About as Useful as a White Crayon?
Finally… A Root Cause!

Unusual Usage Patterns

- Analysis of escalation cases created between July and December
- Confirmed clustering of cases in particular neighborhoods
- Unusual usage patterns identified in 135 routes
- Characterized by an unusually low August read followed by higher September read
- Eventually, investigation discovered fraudulent reads linked to two meter readers with disproportionate number of routes assigned.
AW & AE worked together to “smooth” the consumption between the two months, which will result in a credit for ~7,400 customers

- Average credit of $20
- Credit not exceeding $80 in most cases
- Credits total approximately $138K
- Affected Customers are already receiving notification letters
- Bill Smoothing completed by March 15, 2018, but…
- Many customers still unsatisfied

**A TALE OF THREE HOUSES**

**EXAMPLE 1**

**MONTH 1:**
- 2,000 GAL = $15.09

**MONTH 2:**
- 40,000 GAL = $518.69

Total non-smoothing cost for months 1 + 2 = $533.78

**SMOOTHING IS:**

\[(\text{MONTHS 1+2}) \div 2 \times \text{TIER RATE} \]

**MONTH 1:**
- 21,000 GAL = $240.91
**MONTH 2:**
- 21,000 GAL = $240.91

Total for smoothing cost for months 1 + 2 = $481.82

**CREDIT = $51.96**

Smoothing will adjust the affected customer’s water bill by spreading the amount evenly across the two months, minimizing the effect of the tiered water rate structure and potentially resulting in a credit.

**EXAMPLE 2**

**MONTH 1:**
- 17,000 GAL = $186.96

**MONTH 2:**
- 30,000 GAL = $372.49

Total non-smoothing cost for months 1 + 2 = $559.45

**EXAMPLE 3**

**MONTH 1:**
- 11,000 GAL = $87.80

**MONTH 2:**
- 20,000 GAL = $226.29

Total non-smoothing cost for months 1 + 2 = $346.09

**NO CHANGE**

Total for smoothing cost for months 1 + 2 = $334.60

**CREDIT = $4.51**

*If smoothing results in a higher bill than the original amount, customers will not be charged or receive a credit.*
Step Two: Technical & Process Improvements

- January 2018 – AW read verification
- January 2018 – Photos of most meter reads
- May 2018 – Policy changes related to adjustments and hearings
- June 2018 - Temporary staff added to AW meter services to speed response
Step Three: Customer Service Improvements

- March-August 2018 – Customer Service training for all AW staff
- May 2018 – AE increased number of customer experience Quality Assurance reviews of agent calls
- May 2018 – AE launched “tone & empathy” training for leaders and customer service representatives
- October 2018 – new permanent positions in AW consumer services and meter shop to facilitate review and response
- 2019 – AW reorganization & new position: Assistant Director for Customer Experience
Step Four: Ongoing Stakeholder Communications

- December 2017-August 2018 – Joint workgroup of Electric Utility and Water/Wastewater Commissions
- February 2018 – Briefings & Memos to City Council and Public Utility Commission
- February-April 2018 – Multiple community open houses
- October 2018-May 2019 – Monthly customer service metric reports to Water/Wastewater Commission
Step Five: Ongoing Preventative Screening

- GPS screening reports to guard against meter reading fraud
- Adjustments to prioritize very high reads for further review
- Efforts to reduce estimated bills and review accounts with consecutive estimates
- New flag and review for bill segments over specified $
- GPS tool to review daily meter reads for unexpected high use
• (Note: this is the critical one…)
• New webpage dedicated to high bills
• Water enforcement staff retasked for additional irrigation audits during high demand periods
• Joint Austin Energy/Austin Water “Summer Savings” campaign
  – Print, radio, TV, morning news spots & community events
• Email to customers whose bill $ doubled from April to July prior year
  – 49% open rate
Overall JD Power satisfaction scores improving…

… but regaining trust is a long process, with many influences.
JD Power Customer Service Trends

Bill Complaints Begin

Process Improvements

Meter Fraud Announced

City-Wide Boil Water Event
Final Thoughts

- Processes are stronger and more customer-friendly after this experience, with additional dedicated resources.
- Customers continue to underestimate typical summer use.
- Overall utility trust is key to successful conservation education.
- … and AMI will need this level of trust to facilitate customer adoption.
- Good news: 2019 was our hottest September and our lowest GPCD!