

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com





My Bill is How High?

The Effect of High Bill Alerts on Water Conservation

Mark Jordan

Conservation Program Coordinator

Water Smart Innovations 2011

About Austin Water

- Approximately 200,000 service connections
- 100% surface water from Lower Colorado River
 - Combination of run-of-river rights and firm storage contract with LCRA
- Conservation programs since 1983

2005 City Council Resolution

- Water Leak Adjustment Policy *(Resolution 20050929-056)*
 - With inclining block rate structure, customers with leaks may experience extremely high bills
 - Leaks may not be noticed until after a high bill
 - Intended to encourage customers to repair leaks and return to normal usage
- Changed calculation for leak adjustments
- Only residential customers eligible

Leak Adjustment Policy

- Normal usage billed at current residential rates
- Billing credit for 50% of metered consumption above normal usage
- Remaining 50% additional consumption billed at discounted rate approved by Council
- Routine leak adjustments handled by central billing with proof of repair; administrative adjustments by Austin Water

2006 Water Conservation Task Force

- Recommended strategies to reduce peak day use 1% per year (25 MGD goal)
 - Mandatory watering restrictions
 - Addition of 5th tier to residential rate structure
 - New reclaimed water projects
 - Strategies projected to save 32 MGD over 10 years
- Also recommended winter leak detection program

High Bill Alerts

- Goal: Alert customers sooner to high bills
 - Combined utility bills mean customers may misattribute increase
 - Increase in customers paying bills online
 - Lag between meter read and receipt of bill
 - Most customers unaware of leak adjustment policy
- Billing system tags 150% increase in use with a “HBWTR” code when new meter read uploaded
- Retail Customer Services (RCS) staff call customer or send postcard between meter read and billing date

Evaluating the Impact

- Over 7,300 HBWTR alerts since 2007
- Studied usage data, account notes to determine:
 - What are the reasons given for high water use?
 - Do customers reduce use after a call?
 - Do customers maintain normal usage after repairs?
 - Are postcards or phone calls more effective?
 - Does a bill credit/adjustment make a difference?

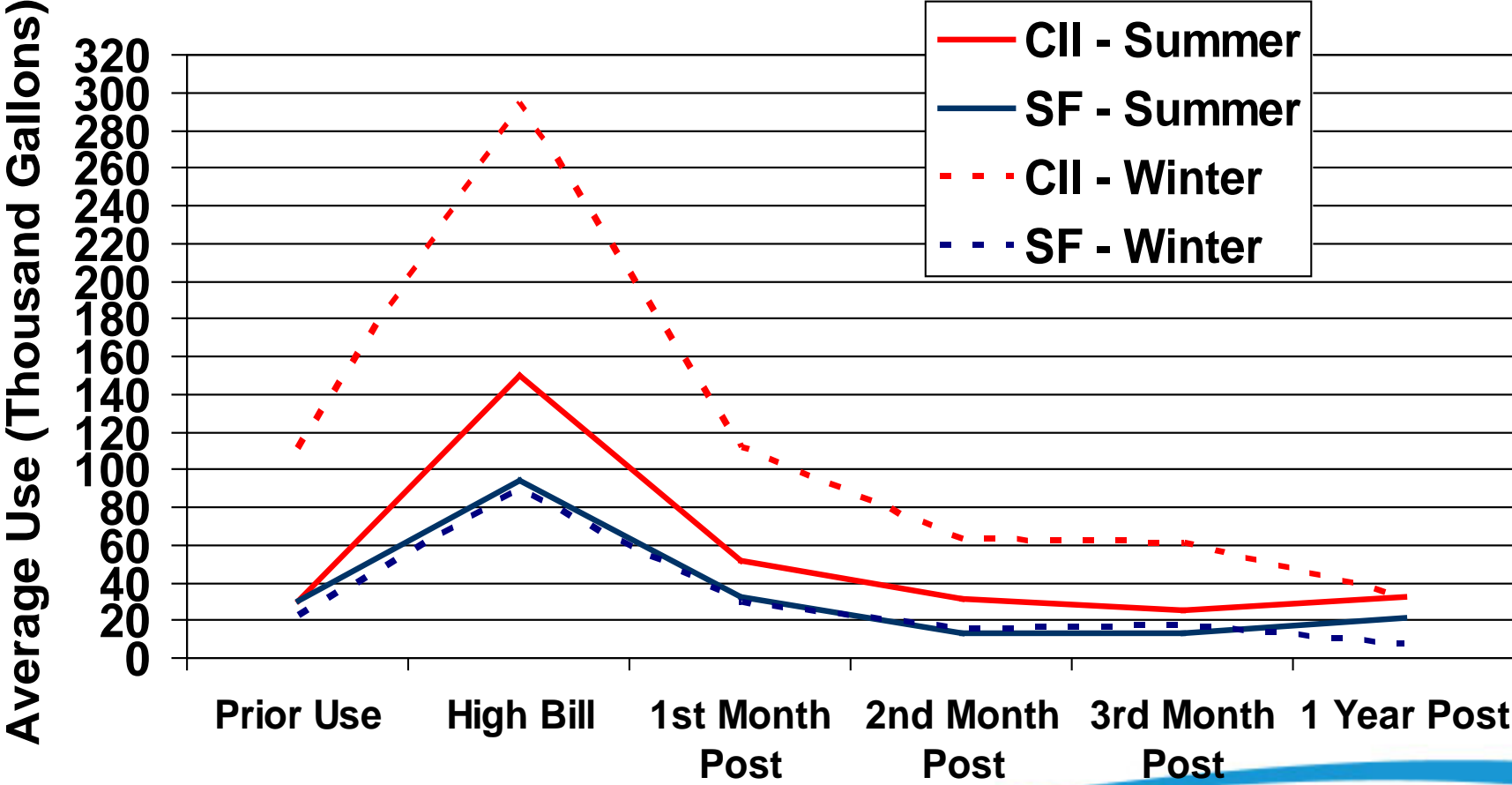
Study of Data Subset

- Because of information in non-searchable fields, selected subsets of data to examine for contact and cause information
- Selected High/Low months
 - Calls made in March represent February usage
 - Calls made in September represent August use
- Excluded:
 - City/State accounts
 - Limited usage information (<1 read prior, <5 reads post)
 - Multiple meters on same account
 - Accounts with meter problems and estimated reads

Accounts Analyzed

- Winter High Use
 - 178 Residential, 30 Commercial
 - 89 Residential, 17 Commercial with data >1 year
- Summer High Use
 - 236 Residential, 28 Commercial
 - 216 Residential, 27 Commercial with data >1 year

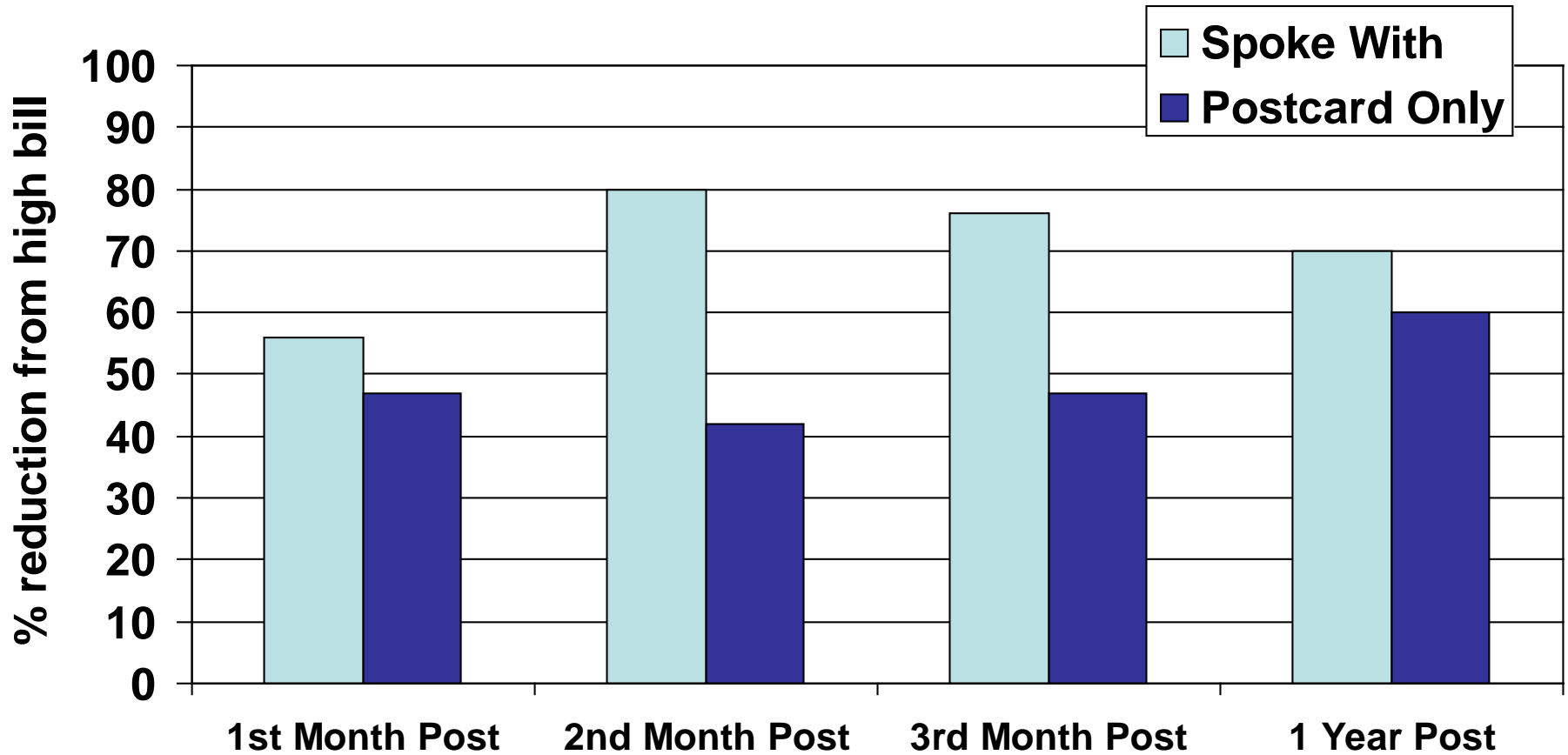
Average Water Use – HBWTR



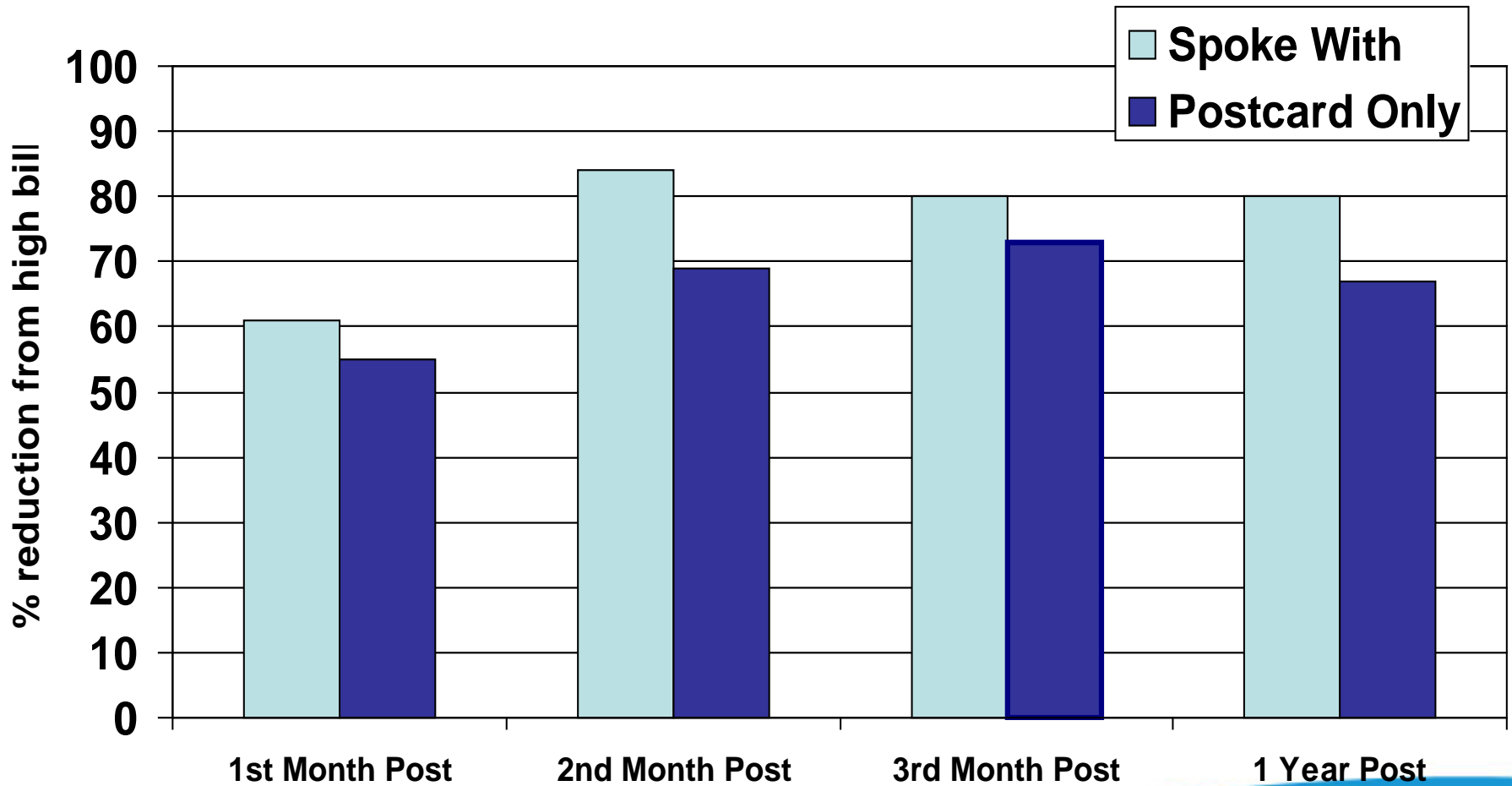
Methods of Contact

- Spoke with 62% of Residential accounts
- Spoke with 53% of Commercial accounts
 - Included situations where customers called back in response to postcard or voice mail
 - Included calls inquiring about leak adjustments
- Postcards mailed to remaining accounts
 - No data on whether postcard received

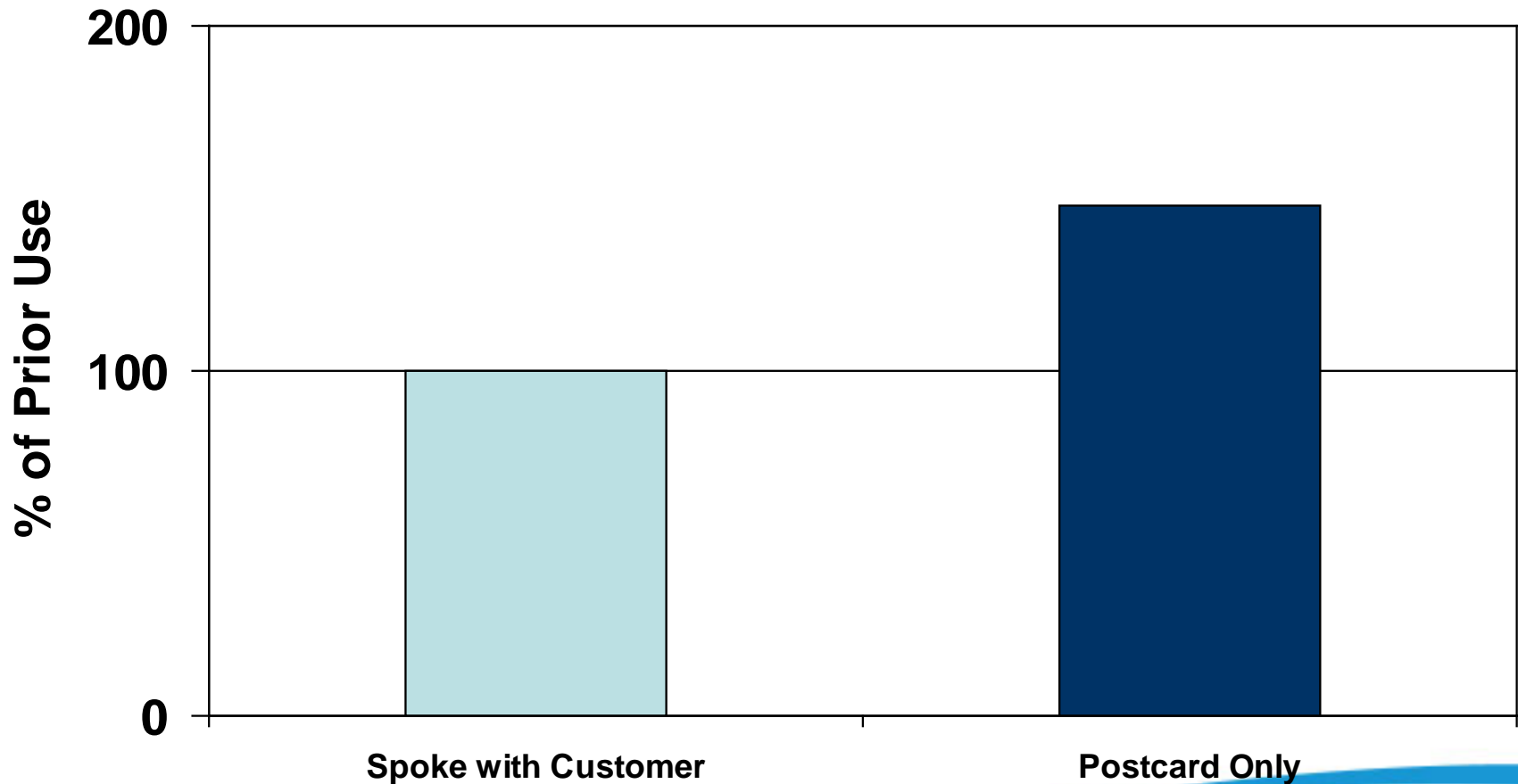
Contact Methods - Commercial



Contact Methods - Residential



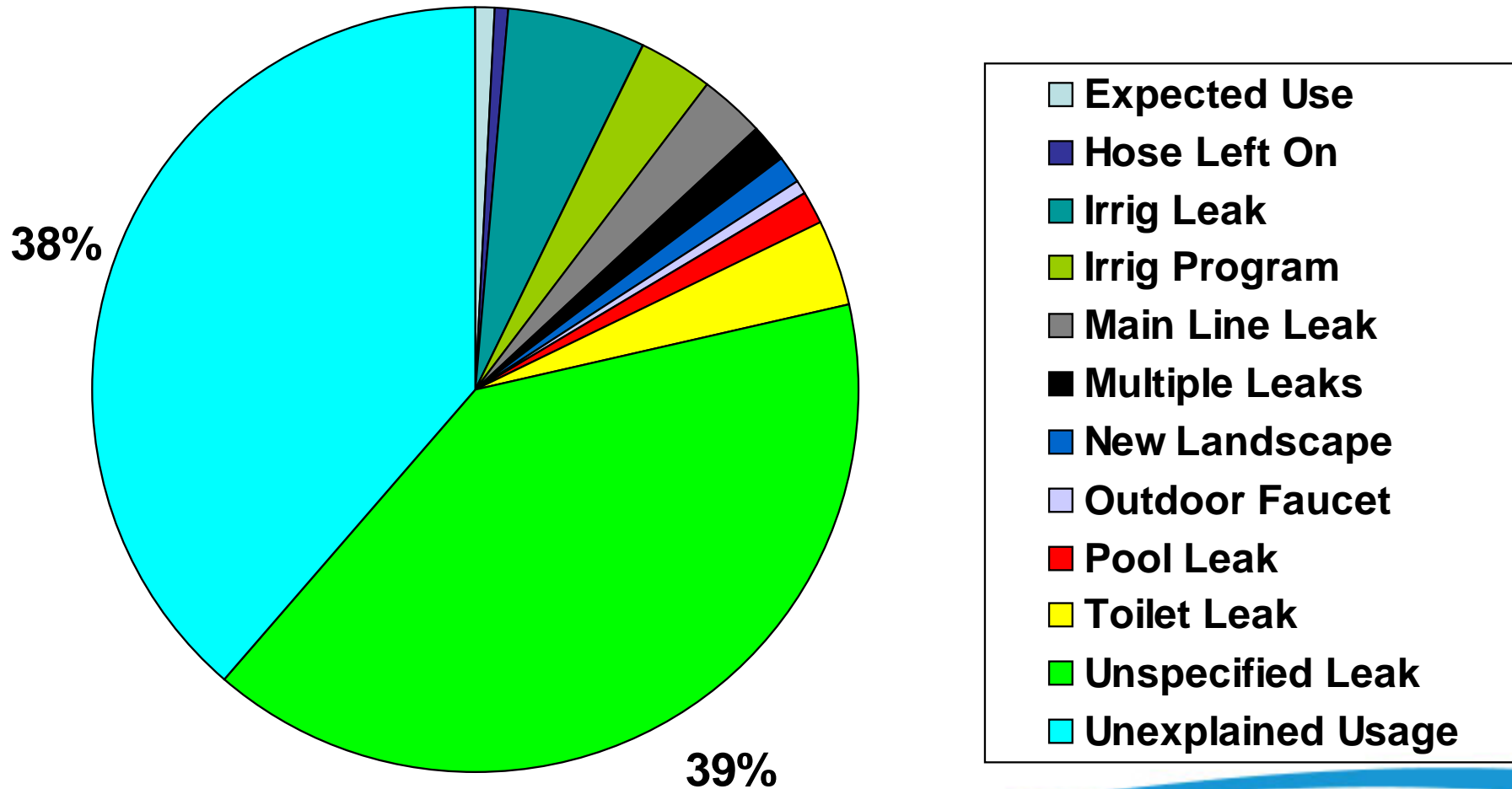
Residential Use 1 Year After High Bill



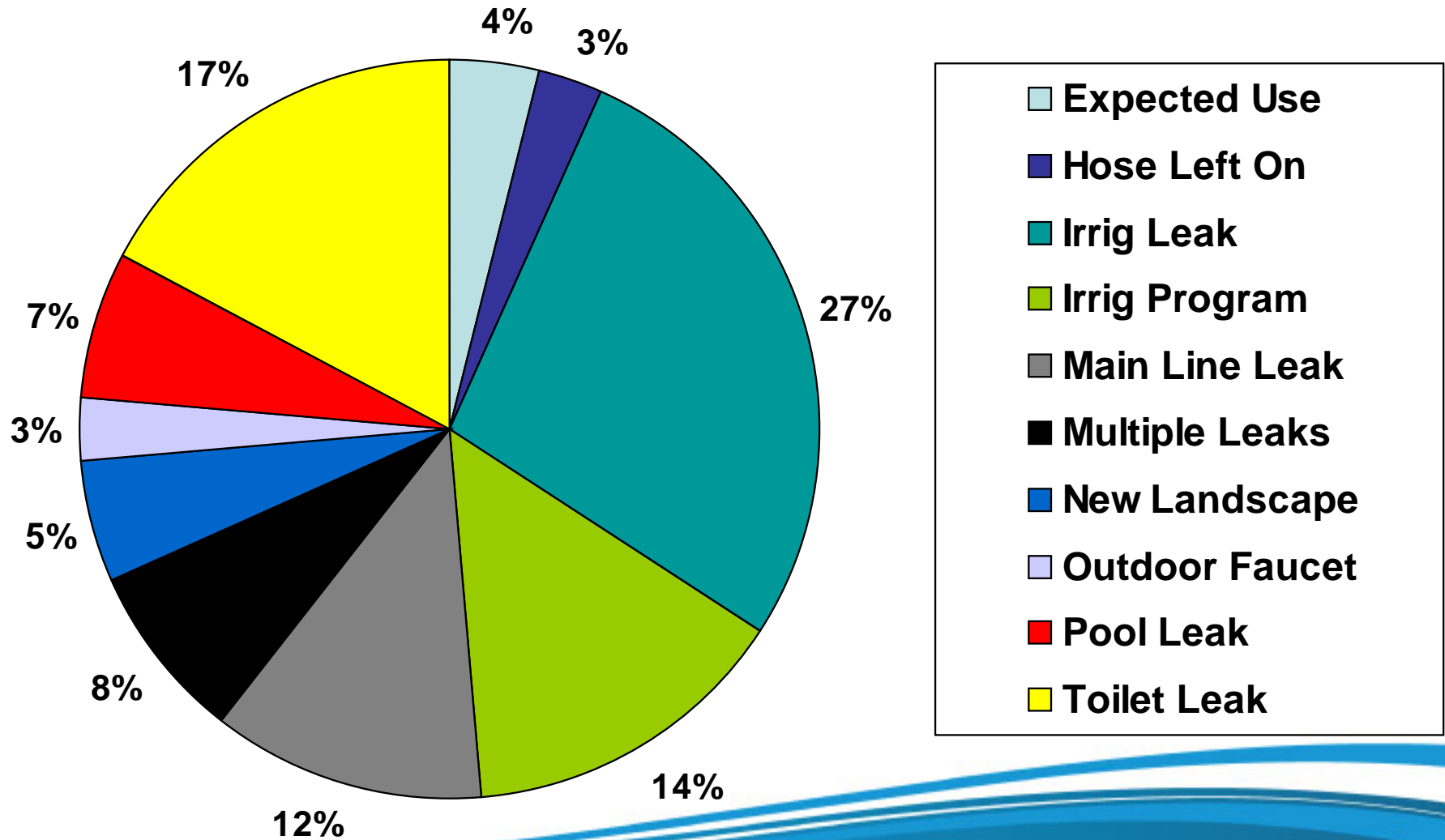
The Conservation Conversation

- Staff offer tips to find the source of the high use
- Referrals for irrigation check-up or meter re-read
- Customers learn about remedies for high bills
- Leak adjustment requires proof of repair
- Customers address the problem faster than if they waited to receive the high bill
- Positive interaction may promote ongoing awareness of water use

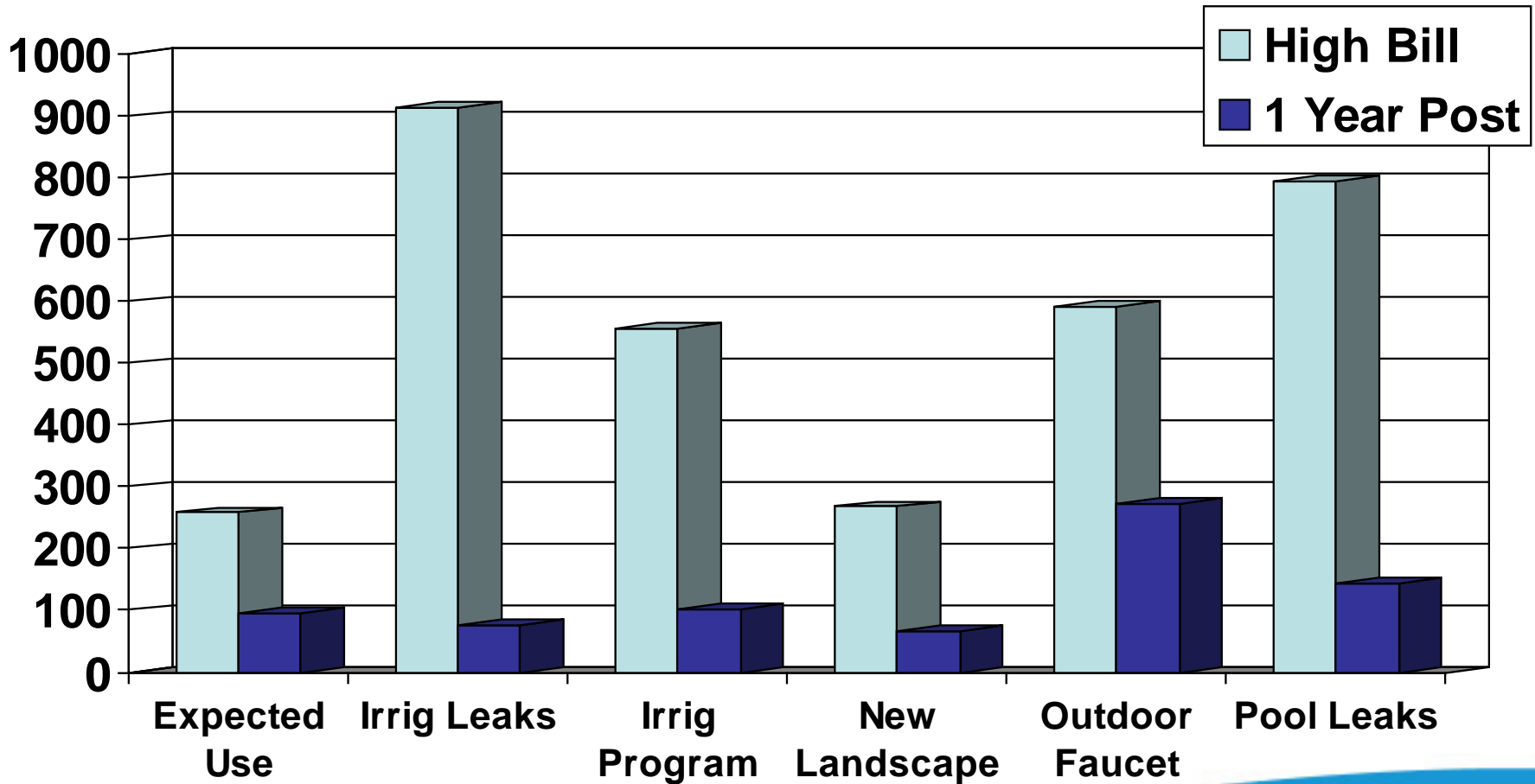
Cause of Residential High Bills



Cause of Residential High Bills



Water Use Reductions by Cause



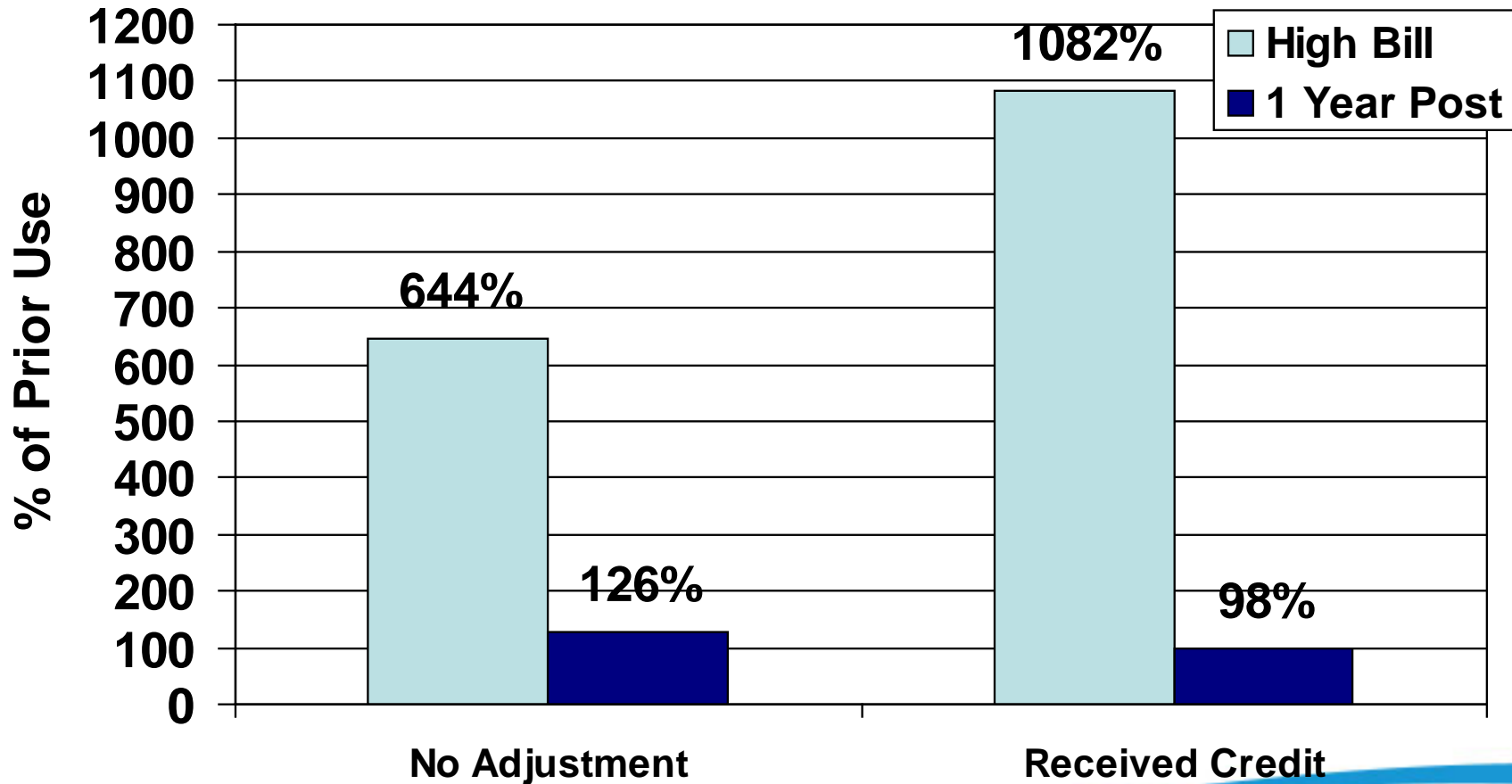
Effect of Billing Adjustments

- New policy in 2005 led to some increase
- Adjustments increased dramatically after high bill alert calls began in 2007
- New policy passed by City Council in 2011
 - Better align with water conservation initiatives
 - Continue to provide fair resolution for customers who promptly repair leaks

New Leak Adjustment Policy

- Leak adjustments (processed by central billing)
 - Limited to hidden outdoor leaks; indoor leaks outside of customer's control
 - Limit to one adjustment per 12 months
 - Calculated 12 months from date credit applied
- Administrative adjustments (processed by AWU)
 - May exclude customers with pools, irrigation systems
 - Possible violations of water use ordinance
 - Limit to one adjustment per 18 months

Effect of Leak Adjustment



Conclusions

- High bill alerts appear to prompt customers to address high use more quickly
- High bill alerts that prompt a conversation with the customer appear to reduce long-term water use
- Customers receiving leak adjustments may be more likely to reduce use in the long term

Program Recommendations

- Trigger High Bill Alert by % increase *and* usage threshold
- Explore auto-alerts in new billing system
- Monitor effects of new leak adjustment policy
- Continue to explore broader baseline sample
 - Attempt to quantify water savings related to alerts

Questions?

Mark Jordan, Conservation Pgm Coordinator
(512) 974-3901

mark.jordan@austintexas.gov

Drema Gross, Water Conservation Manager
(512) 974-2787

drema.gross@austintexas.gov

www.waterwiseaustin.org

