

# **Austin Water**

## **PUC Report**

### **High Water Bills - 2015**

#### **Background**

Beginning in August 2015, Austin Water began receiving a significant number of customer concerns over water consumption and high bills. These billing concerns were first concentrated among residents of former municipal utility districts (MUDs) – specifically those in the River Place and Lost Creek areas. These former MUDs were added to the City's water and wastewater system within the last year. This was these MUDs first summer on the higher water and wastewater rates of the City.

Austin Water and Austin Energy have created an internal team tasked with reviewing these billing issues for customers who have contacted the City's customer service or Council offices. We have coordinated our efforts to provide the best possible customer service for these customers. We have made significant progress on handling the number of concerns that have been reported. We continue to investigate each of the customer concerns individually to address any issues appropriately. We continue to work with Council offices and the media to review any concerns brought by our customers.

The information below provides a summary of the information we have compiled related to the high bill concerns reported by our customers.

#### **Executive Overview**

Austin Water's customers have expressed significant concerns over the summer months related to water usage and the resulting high bill concerns. This unprecedented circumstance has resulted in over 10,800 customer calls to Austin Energy Customer Care. This has also been experienced in other central Texas cities as well as the Dallas area suburbs. All indications are that this high bill concerns are more related to extreme weather conditions during the summer months, a wetter than normal May and June followed by an extremely dry July and August.

Austin Energy and Austin Water customer care divisions have worked tirelessly to provide individualized customer service to review and research each of these concerns. Austin Water has analyzed our water system to ensure that there were no systematic concerns. We have compared consumption and pumpage data for former districts of River Place and Lost Creek to ensure billed levels were consistent with expectations.

The Austin Water and Austin Energy team has reread thousands of meters, tested meters for accuracy, compared individual consumption patterns from prior months and years, performed leak checks for customers, offered and performed hundreds of irrigation system evaluations, reviewed metering processes, and are planning a billing system process audit. If the results of these investigations for the customers required a billing adjustment, we have provided customers bill adjustments. We have communicated with these customers to provide them specific information before closing the escalated calls.

While these customer calls have begun to decline, Austin Water and Austin Energy are committed to continuing our efforts to provide the excellent level of customer service.

## **Council Communications**

Austin Water provided an initial Council memorandum on September 14, 2015. This memorandum detailed the high bill concerns issue brought by our customers. It also provided the Council information on the Austin Water and Austin Energy team created, actions being taken and ongoing efforts, initial determinations and contributing factors, and more detailed information regarding the issues. This memorandum is attached to this report as **Attachment A**.

The City Manager sent a second Council memorandum on September 23, 2015. This memorandum provided additional information on the citizen inquiries on billing and water usage and the significant resources that have been dedicated to address each customer's concerns. The memorandum also included details of a planned third-party audit of the billing system. It also detailed systematic reviews related to the water pumpage and comparisons over the last several years. This memorandum is attached to this report as **Attachment B**.

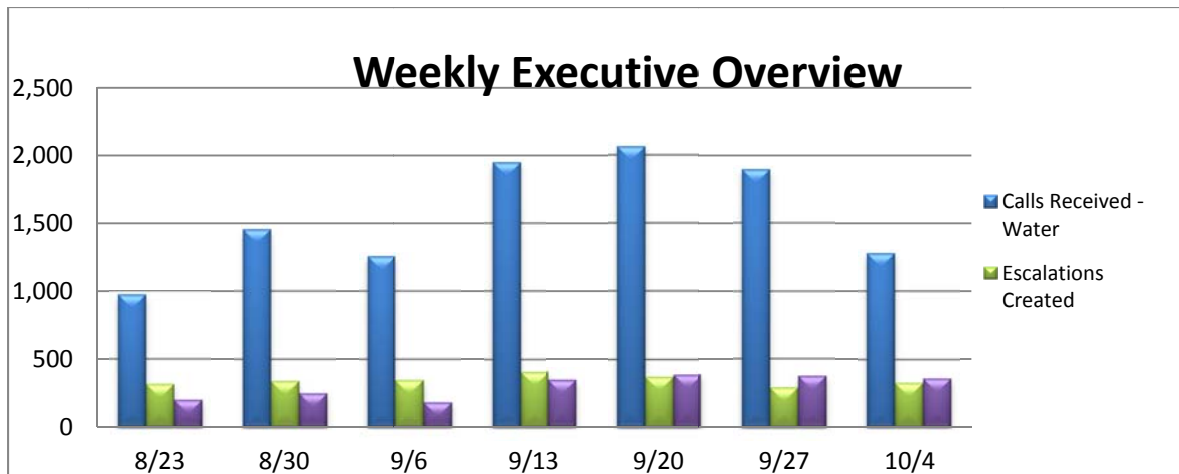
An additional Council memorandum was sent from the City Manager's Office on October 8, 2015. This memorandum included an update on the high bill issues, how many high bill escalations were being worked, details on how customers should be directed to contact the City, information on media inquiries, and information on further updates planned by the City Manager and Austin Energy producing a status report for Council. This memorandum is attached to this report as **Attachment C**.

Austin Energy has created a high bill concern dashboard to provide Council with weekly updates on the call volume, number of escalations, escalations by Council district, and lists of open and closed customer accounts that were escalated and reviewed.

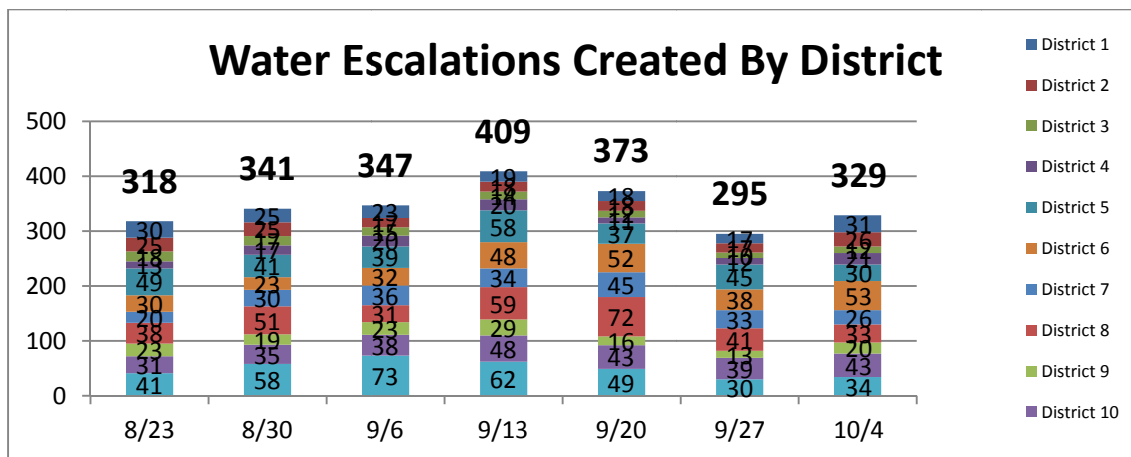
## **Customer Contacts – Austin Energy Call Center**

Over the last 7 weeks from August 23<sup>rd</sup> to October 4<sup>th</sup>, Austin Energy call center has received over 10,877 customer calls related to water billing issues. Most of these calls are related to the high water bill concern. During this same time frame, Austin Energy has escalated over 2,400 of these calls. Additionally, Austin Water has received 256 calls related to high water bill concerns. When a call is escalated, this triggers additional review and investigation that is needed. All other calls that were not escalated were handled and considered closed by the customer service representative. Over 2,100 of AE's escalated calls have been closed and all of Austin Water's escalated calls have been closed.

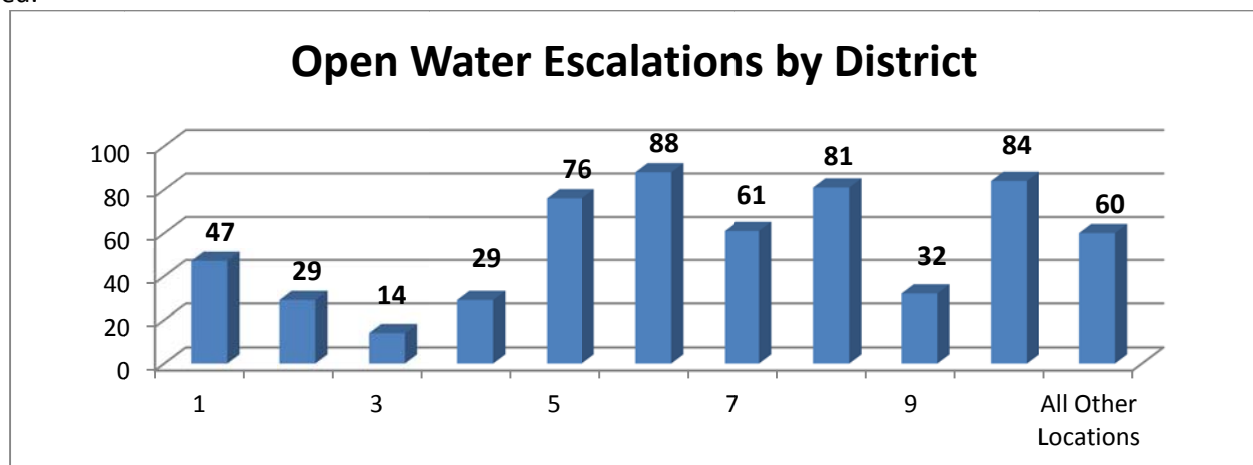
Below is the Austin Energy dashboard graph on number of water calls, escalated calls and escalations closed. During the 3 weeks of September, the number of calls received regarding water issues had peaked. Over the last several weeks, the number of escalations opened is generally the amount of escalations closed. The number of escalations each week has generally been on the decline.



The graph below is also on the weekly dashboard and shows the number of water escalated issues created each week by district.



The graph below provides the open water escalations by district. These continue to change each week as additional calls are escalated and others are completed and closed. Austin Energy's weekly dashboard report to Council provides a listing of the individual customer concerns with addresses and whether the issue is open or closed.



### **Customer Contacts – Austin Water Customer Service**

Austin Water has its own customer service division which handles customer call escalations that require more review or investigation than what Austin Energy provides or have contacted Austin Water specifically. During this time of high bill concerns, Austin Water customer service has assisted 256 customers. Almost all of these customers have been resolved as of October 20, 2015. Austin Water continues to be assigned or get calls that will be reviewed and resolved.

Austin Water and Austin Energy staff have also conducted over 180 leak checks for customers who had reported high bill concerns. Of these leak checks, 162 indicated no leaks were present at the property.

During discussions with a subset of customers who had high bill concerns, Austin Water inquired about whether the customer had an irrigation system, pool, or both. The subset of customers asked was 141 of the 256 that Austin Water has reviewed. Of the 141 customers with high bills asked about whether they had irrigations systems and/or pools, Austin Water found that 121 or 86% of these customers responded positively.

### **Customer Account Review**

As Austin Water and Austin Energy reviewed individual customer high bill concerns, numerous actions were taken to obtain information and resolve the customer issues. Our customer service representatives would verify that the actual calculation of the bill by the billing system was accurate. We would inquire with the customer on specifics of their water usages such as irrigation systems, pools, and possibility of leaks. We would review historical water consumption from other months or years to determine if the water consumption in 2015 was consistent with past historical consumption. Many of the meters were also reread to determine if any meter reading issues could have caused the high consumption. If the customer thought there might be a water leak in their system, both Austin Water and Austin Energy have staff that will provide leak detection services. We offered conservation services from Austin Water such as the evaluation of their irrigation system settings and operation. In some cases, the meter for the customer would be accuracy tested and replaced. After all of these processes and checks, if appropriate, a possible bill adjustment would be provided to the customer. If an actual leak was present, information on submitting information for a leak billing adjustment was provided to the customer and a leak adjustment would be completed as the submittal was received. Austin Water and Austin Energy have resolved the majority of these customer concerns through this process.

### **Public Utility Committee Citizen Concerns**

During the Council's Public Utility Committee meeting on September 16, 2015, there were several citizens who spoke to the Committee regarding their specific high bill concerns. Austin Water's customer service team followed up with these individuals after the meeting to get additional information and let them know we would assist them in reviewing their concerns.

There were several speakers at the Committee from the Green Slopes PUD area. The homes in this area are served by one master meter serving all water usage. Their concerns were related to an inconsistency in their water usage over several months and that their current water usage seemed higher than expected. Austin Water reviewed their water consumption and tested their water meter for accuracy. This review did not provide any indication that Green Slopes had any problems with the meter. Austin Water also provided leak detection

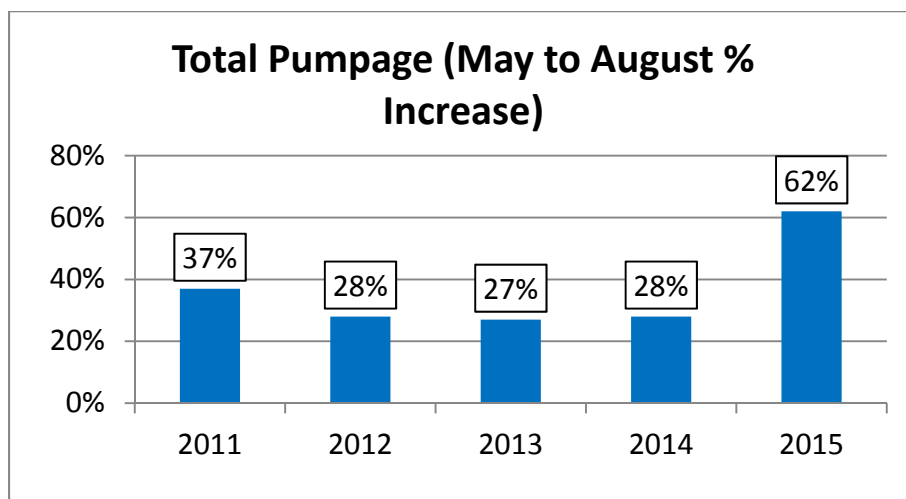
services on the private water lines within Green Slopes. This investigation did not initially identify any leaks within their private system, however on October 20, 2015 a leak seems to be identified at a private Greenslopes valve.

Austin Water also reached out and reviewed the accounts of the other speakers at the Committee. Each of these customers' accounts water usage was processed as all the other customers with high bill concerns. We communicated the results of our review with the specific customers to resolve the issue.

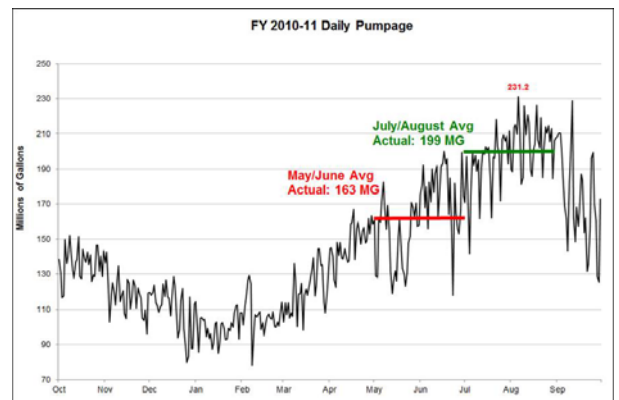
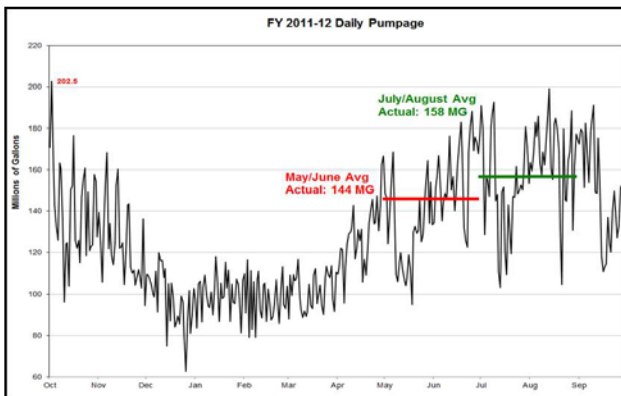
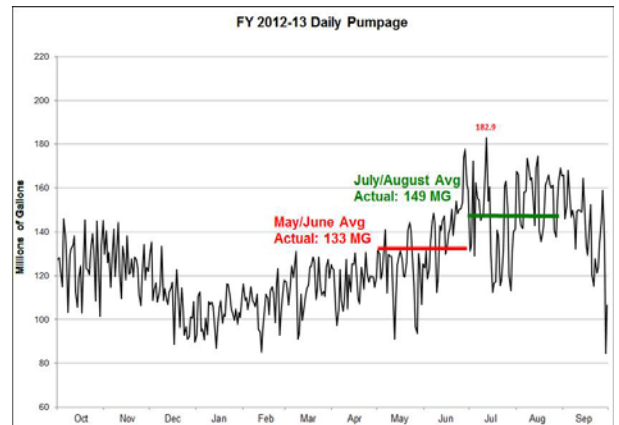
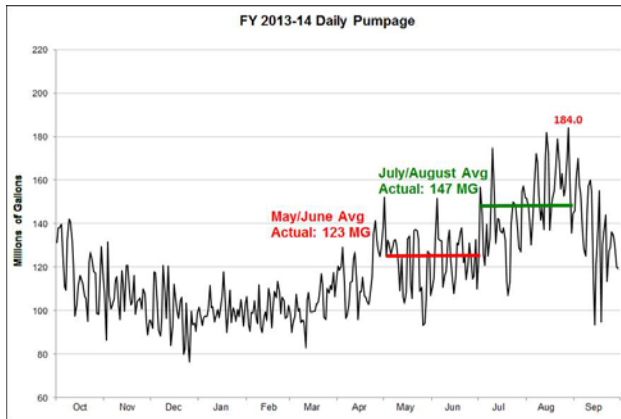
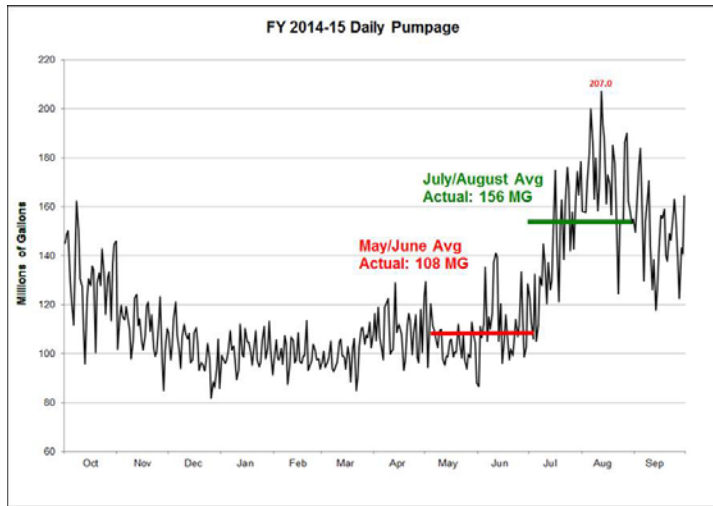
### **Systematic Trends & Checks**

Austin Water has performed numerous systematic trend analyses and checks to better understand the higher consumption issue and provide information on any possible system concerns that could have caused these issues.

Water use in central Texas is very much dependent on weather. During 2015, the Austin area received significant amounts of rainfall in May and June. Then, during the months of July and August, there was generally no measurable rainfall for much of this time. This wetter than normal weather period followed by drier than normal weather period has contributed to the water use patterns and high water bills experienced by our customers. Austin Water has compared water pumpage and consumption patterns from prior years with the current year. The graph below provides the percentage increase in water usage from May to August for this year and prior years. For 2015, the percentage increase is basically double than in prior years.



Austin Water tracks daily total system water pumpage from its water treatment plants. To further illustrate how different our water use patterns have been this July and August 2015 compared to other years, Austin Water has provided the graphs below showing the last five years of water pumpage and providing a May/June average daily usage versus a July/August average daily usage. In 2015, the July/August average was over 50 million gallons higher than the May/June average. In prior years, this variance in average daily usage is much less.



As part of the City's annual external audit process, Austin Water performs a Predictive Revenue Test. This Predictive Revenue Test is designed to provide information to the auditors regarding calculated revenue based on water pumpage for the year and rates compares to the actual water revenue billed to our customers. The process includes aligning water pumpage and the water consumption billed in each of the 20 billing districts for each month of the fiscal year. Since almost all of our billing districts include consumption in more than one month, assumptions are made to align the billed consumption with the pumpage within each month. There is a resulting variance between actual pumpage and billed consumption each month. Billed consumption is always below the pumpage amount for the same period due to system leaks, meter inaccuracies or stopped meters, unbilled water uses, and other water losses.

The final Predictive Revenue Test for FY 2015 will not be completed until November 2015. However, Austin Water has completed a preliminary test for August 2015. The results show that the predicted water revenue based on total consumption and applying the appropriate rates is consistent with actual billed water consumption revenues. This provides a systematic check of billed consumption and expected revenue indicating a level of assurance that the billing system is accurately calculating bills. Additionally, this Predictive Revenue Test provides for a calculation of the water loss percentage between pumpage and billed consumption. Historically, this water loss percentage is generally between 9% and 12%. For the month of August 2015, the water loss percentage is 12%. This level is consistent with historical percentages which indicate that an expected amount of water consumption was billed during the summer of 2015 when compared to what was pumped by our treatment plants over the same period.

### **Metering Processes – Austin Energy**

Austin Energy provides meter reading services for Austin Water Utility accounts through our third party contracted vendor, Corix. Meter readers employed by Corix provide the monthly meter read, as well as any necessary re-reads for billing verification purposes, based upon assigned geographic based routes that align with the City's utility billing system's bill cycles. Most meters, especially in residential areas, are located on the front of the customer's property, often with more than one meter per meter box, and several thousand meters are read across the city on a daily basis.

Similar to most utility meter reading processes, the vendor's meter readers do not see prior month's usage or readings on their handheld equipment. Preprogrammed parameters will alert the meter reader if an unusually high or low meter reading is entered for a premise, requiring the meter reader to double enter for validation purposes. Meter reads are uploaded into staging tables on a daily basis, allowing Austin Energy to verify that reads were obtained for the assigned meters within the daily routes. Reads are verified through a monthly quality assurance review process, where Austin Energy meter services representatives re-read meters read by Corix the previous day, and validate that the read 1) could be obtained and 2) was in line with the read that uploaded into the staging tables. Since inception of the meter read quality assurance process in February 2015, the average monthly accuracy rate is over 97%. In addition, Austin Energy meter services representatives routinely re-read meters for read verification purposes (as part of our escalated re-read process outlined below), which aids in verifying the accuracy of the initial read.

Re-reads of meters are common in two situations: out of range usage (either high or low based on historical consumption) and inability to obtain a read. If an out of range high read is obtained, a request is sent by the billing department to re-read the meter to validate the original read. Although most re-read situations are resolved by this point, if the re-read is still out of range, the billing department further escalates the re-read process to an Austin Energy employee, and the re-read process may warrant a leak check field activity to check the water meter for signs of a potential leak at the premise.

The inability to obtain a read also follows the same re-read escalation process. If a meter ultimately cannot be read because of a site condition (dog in yard, car parked on meter box, flooding, etc.), this information is provided back to Austin Energy. If a meter cannot be read because of a meter issues (broken glass, meter condensation), this information is provided back to Austin Water for meter maintenance.

During September's PUC meeting, Councilmember Zimmerman requested information on the contractor's ability to obtain a read from a seemingly unreadable meter. Here is an excerpt from Austin Energy's response to this type of situation:

The two main reasons water meters dials may be illegible are scratched glass and condensation under the glass. Our third party contracted meter readers employ a variety of methods for obtaining meter reads on what may appear, at first glance to the average utility customer, to be an illegible dial because of scratches. However, a well-known trick by professional meter readers to obtain a read on a moderately scratched face is to wet the face cover, which fills in the scratched surface well enough to allow the reader to obtain a good meter reading. Additionally, meter readers carry tools to aid in reading of illegible or uniquely positioned meters, including mirrors and scopes. For condensation issues, the first course of action is to reread the meter within a day or two to potentially allow the condensation to evaporate.

If a meter dial is truly illegible, a trouble code is entered by the meter reader into their handheld device. The trouble codes cover a variety of issues, but for illegible reads (i.e. scratched meter glass so severe that no read can possibly be obtained) the trouble code triggers a damaged meter field order, which is worked by the AWU meter maintenance shop. AWU meter maintenance will replace the meter entirely, and the meter technician will actually break the scratched glass on the old meter to obtain a valid final read. For condensation under the glass, the trouble code generates a reread field order, and we attempt to obtain a reread after condensation has evaporated. If the meter retains condensation continuously, a trouble code generates a field order to AWU meter maintenance to obtain a valid read and determine next steps.

If a meter dial is illegible, or if we cannot obtain a read for any other purpose (i.e. car over meter box, loose dogs, etc.), we first attempt to reread the meter through a series of field escalations. During this time however, we do not hold a customer's bill, as they may have valid billing data for the other utilities. At that point, our billing system employs an algorithm to estimate the monthly water consumption based on historical actual reads and consumption. When a valid read is obtained, we re-bill the customer with the correct read, and ensure that the consumption falls within the appropriate billing month so that the customer is not incorrectly pushed into a higher rate tier.

### **Conservation Services**

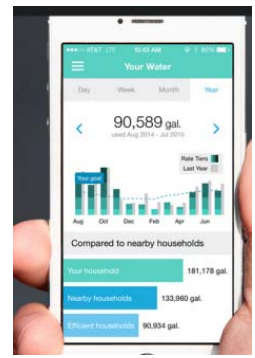
Austin Water offers its customers conservation services to assist the customer in managing their water use. These services include irrigation evaluations, Dropcountr mobile app, and rebates for water wise landscapes. During this high bill concern period, Austin Water has worked with our customers to offer these services to those customers with high bill concerns.

- During the last several months Austin Water has conducted or scheduled more irrigation evaluations than normal. The numbers are detailed below:
  - Completed audits August to Current: 138
  - Scheduled through November: 159





- Austin Water has implemented a Dropcountr mobile app on a pilot basis. Customers can sign up on the app and get information on their water usage, graphs on historical monthly water usage, and comparisons to other customers in their neighborhood. This app provides the customer with more information on their water usage which can help the customer increase water conservation efforts.
- Austin Water also provides rebates for water-wise landscapes installed by our customers. These rebates provide an incentive for customers to make their landscapes more water-wise and enhance water conservation and reduce their water bills.



## Other City Experiences

Austin Water was not alone in the high water bill issue. Cities across central Texas and the Dallas area saw similar complaints from their customers on high water bills. The City of Cedar Park, Round Rock, and San Antonio Water System all had similar issues. In the Dallas area suburbs, the high bill concerns were also issues this summer. The widespread nature of this issue indicates it is unlikely that any computer glitch or metering issues are to blame. However, what is common to these areas is the significantly different weather patterns we experienced in May and June being extremely wet, while July and August were virtually dry the entire time.

### Why have water bills gone up?

Posted: 1:57 p.m. Sunday, Sept. 13, 2015

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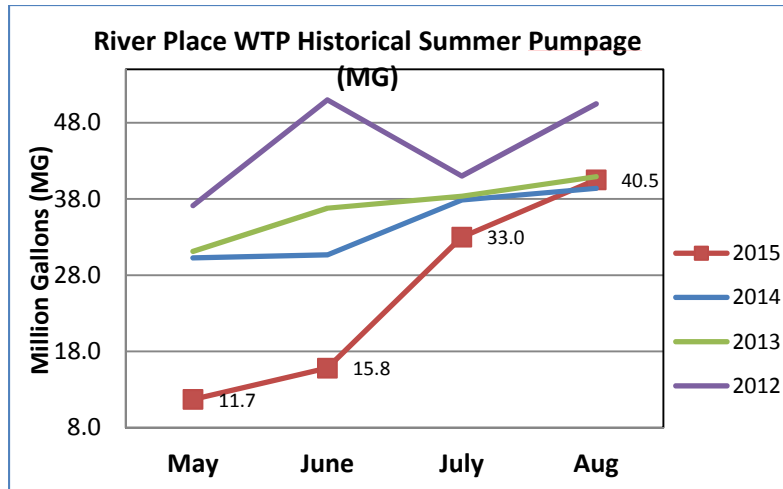
By [Claire Osborn](#) and [Sean Collins Walsh](#) - American-Statesman Staff

After a surge in complaints about high water bills this summer, utility operators in Austin, Round Rock and Cedar Park are working to solve the mystery of why bills have spiked.

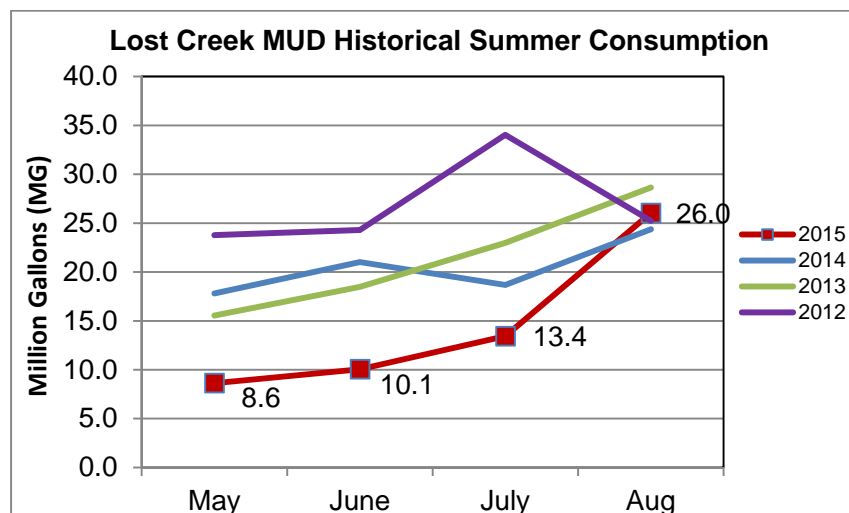
The municipalities do not share a billing system, so it's unlikely that a computer glitch led to inflated invoices being sent out. And there's no apparent reason that the typical causes of high bills — leaky irrigation systems, running toilets, etc. — would have become more prevalent this summer.

## Lost Creek and River Place MUDs Analysis

The initial customer concerns over high water bills came from River Place MUD and Lost Creek MUD. Austin Water performed systematic checks of the water use in these areas. For River Place, Austin Water has a separate water treatment plant that serves only the River Place area and the Glen Lake area. The graph below provides the historical summer pumpage from this separate water treatment plant. In the previous 3 years, the pumpage during May and June were typically much higher than the current 2015 pumpage. This is consistent with the weather conditions affecting the total water pumpage in Austin's system. For River Place, the water pumpage in July and August was generally consistent with the prior years. The expected water bills for River Place would generally be less than prior years in May through July, but consistent with the August consumption in prior years.

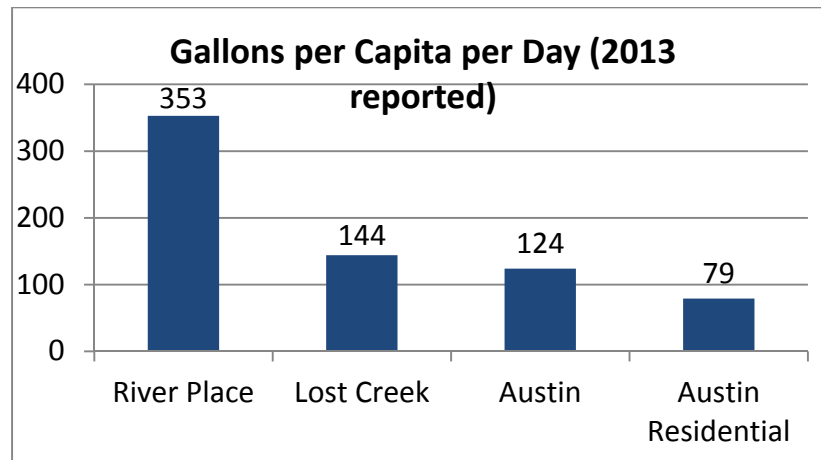


For the Lost Creek MUD, Austin Water produced similar information on the historical summer consumption for these customers. The graphic results below are very consistent with the results from River Place MUD. The water consumption in 2015 for May through July was lower than historical patterns, while the August consumption is much higher, but consistent with prior August consumption.



For Lost Creek, Austin Water still has the master MUD meter in place that served the customers. This master meter has continued to be read each month after the MUD customers were assumed as Austin Water customers. This provides us an opportunity to compare the master meter reads for total water consumption for Lost Creek with the individual customer meter reads. Since the meter reads for the individual customers are read at a different time of the month, Austin Water can approximate the consumption of the individual customers aligned with the master meter read dates. For the month of August 2015, the results of this comparison show that the individual customer's total consumption during these summer months was approximately 96.6% of the master meter consumption. The difference can be accounted for by any system or customer water leaks, approximation of consumption to align the two read dates, meter inaccuracies, and other reasons. The individual customer total consumption is consistent with Austin Water's expectations.

The water use by Lost Creek and River Place MUD customers is generally higher than Austin's average residential customers. The graph below provides the gallons per capita per day comparison of Austin and these former MUD customers.

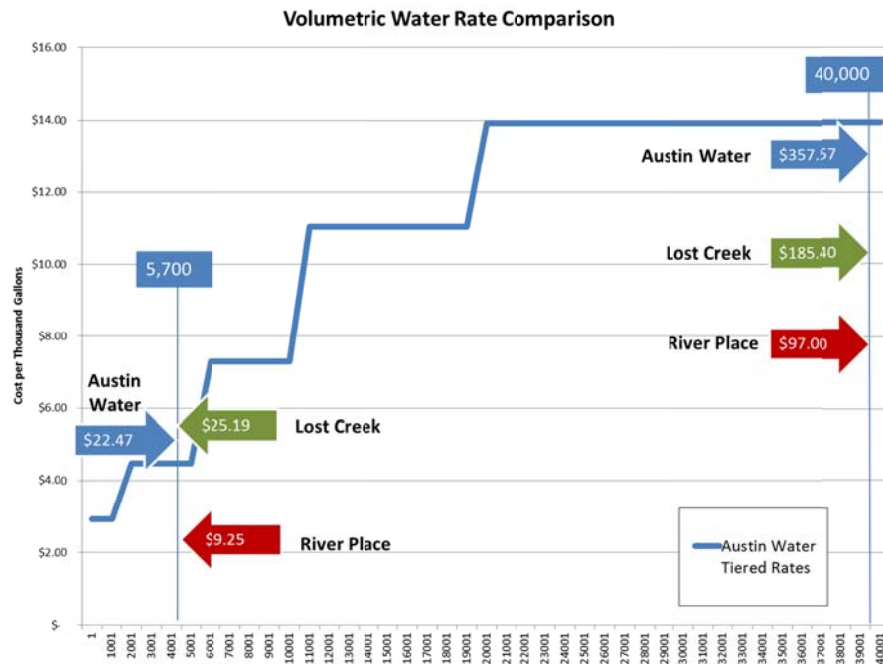


#### Rate Changes – River Place MUD & Lost Creek MUD

When Austin Water assumed the River Place and Lost Creek MUD water and wastewater systems, the customers water and wastewater rates were converted to Austin Water residential rates. Each of the MUDs rates prior to Austin Water taking over were significantly lower and therefore the possible rate shock experienced by these customers could be significant, especially during the first summer months under the City rates. The table below provides a comparison of Austin Water current rates and the former MUD rates. While the former MUD water rates did have a tiered rate structure as does Austin Water, the City rates are much higher rate levels and start at a lower gallons. The highlights in yellow below provide this comparison of the tiered water rates. Similarly, the wastewater rates for the former MUDs were significantly lower than current Austin Water wastewater rates.

Austin Water Utility Water Rates		River Place Water Rates		Lost Creek Water Rates	
<b>Meter Charge:</b>	<b>Current</b>	<b>Meter Charge:</b>		<b>Meter Charge:</b>	
5/8"	\$7.10	5/8"	\$31.00	5/8"	\$14.50
<b>Residential Tiered Minimum Charge:</b>					
0-2,000 Gals	\$1.05				
2,001-6,000 Gals	3.00				
6,001-11,000 Gals	7.60				
11,001-20,000 Gals	23.75				
20,001 - Over Gals	23.75				
<b>Volume Unit Charge: Per 1,000 gallons</b>		<b>Volume Unit Charge: Per 1,000 gallons</b>		<b>Volume Unit Charge: Per 1,000 gallons</b>	
0-2,000 Gals	\$2.93	0-2,000 Gals	\$0.00	0-10,000 Gals	\$4.42
2,001-6,000 Gals	4.49	2,001-20,000 Gals	2.50	10,001-35,000 Gals	5.16
6,001-11,000 Gals	7.29	20,001-30,000 Gals	3.50	35,001 - Over Gals	7.20
11,001-20,000 Gals	11.03	30,001 - Over Gals	7.00		
20,001 - Over Gals	13.93				
<b>Water Revenue Stability Reserve Fund Surcharge</b>					
All Volumes per 1,000 Gals	\$0.19				
Austin Water Utility Wastewater Rates		River Place Wastewater Rates		Lost Creek Wastewater Rates	
<b>Customer Charge:</b>		<b>Customer Charge:</b>		<b>Customer Charge:</b>	
All Accounts	\$10.30	All Accounts	\$0.00	All Accounts	\$9.00
<b>Volume Unit Charge: Per 1,000 gallons</b>		<b>Volume Unit Charge:</b>		<b>Volume Unit Charge:</b>	
0-2,000 Gals	\$4.51	Per 1,000 gallons	\$3.14	Per 1,000 gallons	\$1.39
2,001-Over Gals	9.13				

The chart below provides a comparison of water bills for 5,700 gallons and 40,000 gallons at the Austin Water rates and the former Lost Creek and River Place MUD rates. Austin Water bills using 5,700 gallons is just below that of Lost Creek, however River Place rates at this level of consumption are much less than Austin Water. However when you consider the 40,000 gallon level, Austin Water rates are considerably higher than both of the MUD rates. This rate differential during the first summer months these customers of the MUDs have experienced at the higher Austin Water rates could contribute to the high bill concerns expressed by these customers.



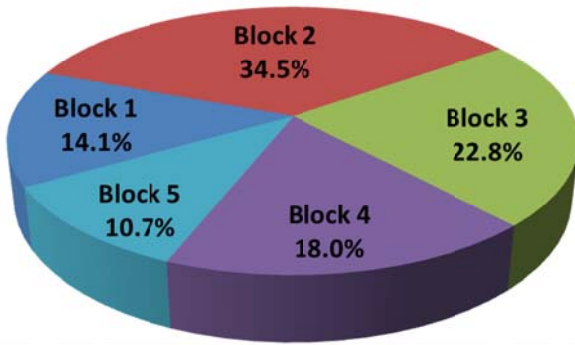
Another contributing factor for high bill concerns for customers within the former River Place and Lost Creek MUDs is the higher than average water consumption levels for these customers. The graphs below provide a comparison of the customers that have bills in each of the 5 water rate tiers in Austin's water rates during August 2015. For Austin water customers, almost 50% of our customers have bills within blocks 1-2 which is below 6,000 gallons. For both Lost Creek and River Place customers, only 17% and 9% of customers have bills in blocks 1-2, respectively. Approximately 83% of Lost Creek and 90% of River Place customers during August 2015 had bills in blocks 3-5. Blocks 3-5 for Austin Rates start at 6,000 gallons, where Lost Creek rates don't get to Austin levels until after 35,000 gallons. River Place rates do not get to the level of Austin's block 3 level at all.

### Austin vs. Lost Creek – August 2015

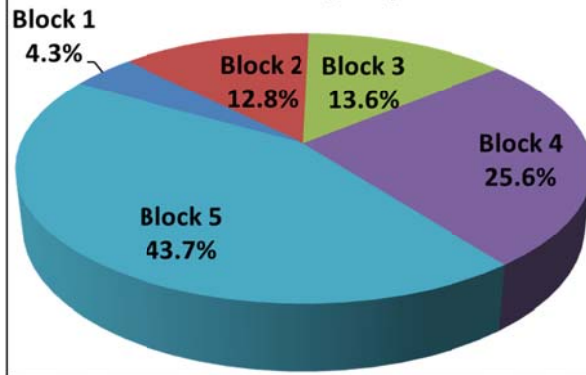
City of Austin  
Blocks 1 & 2 = 48.6%  
Blocks 3 – 5 = 51.4%

Lost Creek  
Blocks 1 & 2 = 17.1%  
Blocks 3 – 5 = 82.9%

**City of Austin Usage by Block**



**Lost Creek Usage by Block**

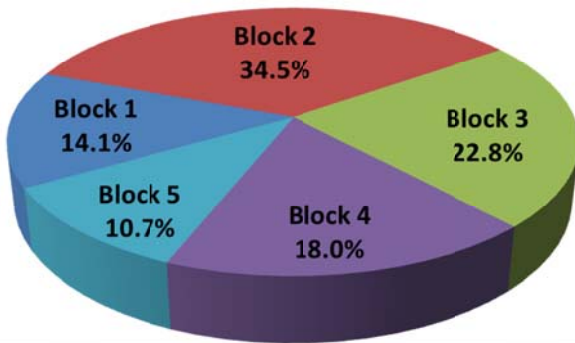


### Austin vs. River Place – August 2015

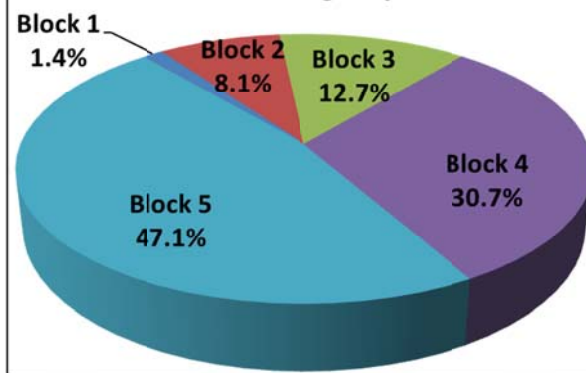
City of Austin  
Blocks 1 & 2 = 48.6%  
Blocks 3 – 5 = 51.4%

River Place  
Blocks 1 & 2 = 9.5%  
Blocks 3 – 5 = 90.5%

**City of Austin Usage by Block**



**River Place Usage by Block**



### Attachments

The following attachments are included in this report:

- **Attachment A:** Council Memo – September 14, 2015
- **Attachment B:** Council Memo – October 8, 2015
- **Attachment C:** PUC Presentation – September 16, 2015
- **Attachment D:** PUC Presentation – October 21, 2015

Attachment A  
Memo to Mayor and Council  
September 14, 2015



## MEMORANDUM

**To:** Mayor and Council

**From:** Greg Meszaros, Director, Austin Water

**Date:** September 14, 2015

**Subject:** Austin Water Customer Consumption and Billing Issues

As you know, there have been recent customer concerns regarding Austin Water consumption and billing. I am sending this memo to provide background on this issue, as well as detail our efforts to help mitigate customer concerns. Attached to this memo is a comprehensive report detailing historic water usage relative to recent trends. This information will help provide numerical context to the recent concerns.

### Background

Customer bill concerns were first concentrated among residents of former municipal utility districts (MUDs)—specifically those in the River Place and Lost Creek areas. These former MUDs were added to our water and wastewater system within the last year. Further, a number of bill concerns are also coming from other areas of the city, resulting in significant calls and emails to your offices. The major bill concerns from customers and alleged causes are listed below:

Customer Bill Concerns	Alleged Causes
Higher-than-expected water usage amount, resulting in larger payment due	System-Wide Billing Error Individual Billing Error Broken Water Meter Pipe Leaking
Higher-than-expected payment due, despite comparable usage to previous billing cycles	

### Actions Taken and Ongoing Efforts

Austin Water understands customer frustration associated with unanticipated usage or bill amounts. Our staff is committed to reviewing every bill concern to ensure accurate billing and correct any potential errors. Customer service personnel facilitate calls each and every day, helping customers resolve billing issues and learn more about our service. This most recent instance of customer concerns has involved a concerted effort to evaluate the concerns, investigate complaints, and determine the most appropriate outcome for each customer.

Specifically, Austin Water and Austin Energy have developed an internal team tasked with reviewing billing issues for customers who have contacted City customer service or Council offices. The team is making significant progress, and will continue to investigate each customer concern individually.

Austin Water specifically reviewed several customers' bills within the River Place MUD, recalculating each bill to ensure system accuracy. As a result, each bill reviewed for this area was determined to have been accurately generated by the City's billing system.

After reviewing some customer concerns in this area, some leaks have been found on customer's properties. These leaks can contribute significantly to increased water usage.

In others cases, a number of meters in the River Place area are being reread to ensure accuracy. If merited, billing adjustments will be made for inoperable meters.

Additionally, Austin Water has taken multiple steps to investigate all billing and usage concerns regardless of district. Over the last three weeks, staff has:

- Investigated the individual circumstance of hundreds of customer accounts to verify water billing accuracy, and track results
- Analyzed billing concern trends for particular streets and neighborhoods to verify specific problem areas
- Scheduled 37 Irrigation system audits in the last week alone to help customers' outdoor watering conservation
- Authorized overtime and shifted staff to help aid the efforts to give individual attention to each customer's concern

Austin Water is encouraging customers who believe they have been billed incorrectly to call Austin Energy customer care line at 512-494-9400, or email [CustomerCare@COAutilities.com](mailto:CustomerCare@COAutilities.com)

Customers are also encouraged to review online resources related to Austin Water billing, which can be found at: <http://www.austintexas.gov/highwaterbill>

Staff is also communicating with other local governments who have had similar issues. The media have reported on complaints about large, unexpected bills in Round Rock, Cedar Park, and cities in North Texas as well.

While our investigation efforts continue, we also wanted to inform you of a number of determinations which have been made, as well as expand on likely factors contributing to these concerns.



## Initial Determinations and Contributing Factors

As mentioned above, there are a number of individual causes for which customer bills could have reflected higher-than-expected usage or payment due. These include isolated billing errors, a broken water meter, or a leaky pipe. Austin Water will continue to identify and mitigate these individual cases, however there is no indication that the recent widespread customer concerns are attributable to these causes on any significant scale.

Given the unusually large amount of customer concerns that have been received, a large systemic error was among the first potential causes investigated by staff. Based on a thorough, system-wide review, there is no current evidence of a widespread, systematic billing issue within Austin Water and Austin Energy.

Rather, Austin Water believes that these concerns are the result of multiple converging factors, including recent weather conditions and a block rate structure, which is new to some Austin Water customers. The next section of this memo, as well as the attached report, will fully explain these factors and shed light on the likely source of many of these customer concerns.

### Contributing Factors to Higher-Than-Expected Water Bills

After a thorough review, Austin Water believes there are two major contributing factors to recent customer billing concerns: 1) Increased Usage Due to Recent Weather Conditions, and 2) Austin Water's Block Rate System:

Customer Bill Concerns	Contributing Factors*
Higher-than-expected water usage amount, resulting in larger payment due	Increased Usage due to Weather Conditions
Higher-than-expected payment due, despite comparable usage to previous billing cycles	Austin Water's Block Rate System

***\*For more detailed information regarding these factors, please see the attached report from Austin Water.***

#### Factor #1: Increased Usage due to Weather Conditions

July and August have been significantly drier than normal this year, which has resulted in higher than normal water usage system-wide. Further, May and June usage was lower than normal across the system, likely due to wetter than normal conditions during those months. Spikes in usage during the summer are typical, however this year's spike is much more significant than in years past. In short, individuals are using more water system-wide.

## Factor #2: Austin Water's Block Rate System

The August billing cycle is the first time in which Austin Water's conservation-based block rate structure has been in place for customers in newly annexed areas. The block rates rise significantly at higher levels of usage, thus increasing customer bills at a higher rate than under these areas' previous rates. Austin Water block rates are intended to encourage conservation and to help ensure that we continue to be good stewards of our water supply.

### **Working with customers to reduce water usage and bills**

Austin Water recognizes how maintaining an extensive infrastructure, serving a large customer base, and conservation based rates can affect our customers. Therefore, we provide various programs through our Water Conservation program to assist our customers with methods to reduce their usage which can result in a lower water bill. In our communications to citizens raising issues about their bills, we have provided information and websites for them to visit to receive tips for ways to possibly reduce their water usage.

Our Water Conservation team also has licensed irrigators who are available to perform individual irrigation system evaluations for customers. These evaluations typically take about an hour and cover recommended run times, strategies to reduce run-off and identify system or programming issues to benefit the customers. There have been several irrigation evaluations performed already in these areas and more are scheduled. The Water Conservation Division has reassigned staff to expand the number of evaluations that can be done and overtime has also been authorized. Our team can also deliver a homeowner seminar in particular areas if there is significant interest. The seminars offer more detail about how irrigation systems operate, common design and mechanical problems, do-it-yourself (DIY) repairs, and information about recommended settings and strategies to lower use, and have been popular when held at our Waller Creek location.

While, as detailed, Austin Water and Austin Energy teams will continue to work with citizens on billing issues, the increasing water use raises another concern. Austin Water is proud of the gains that have been made in reducing water usage citywide. We think most of those gains are permanent, meaning the City will never return to previous levels of usage. The patterns in August, however, are concerning. While we have emphasized since the rains that the drought is not over and that we need to conserve the additional water our region now has, we are concerned about the uptick in usage and will redouble our conservation efforts.

If Council needs additional information on these issues, Austin Water will be glad to provide it to you.

-Attachment

cc: Marc A. Ott, City Manager  
Robert Goode P.E., Assistant City Manager  
David Anders, Assistant Director, Austin Water  
Daryl Slusher, Assistant Director, Austin Water

## Factor 1 | Weather Conditions and Increased Usage

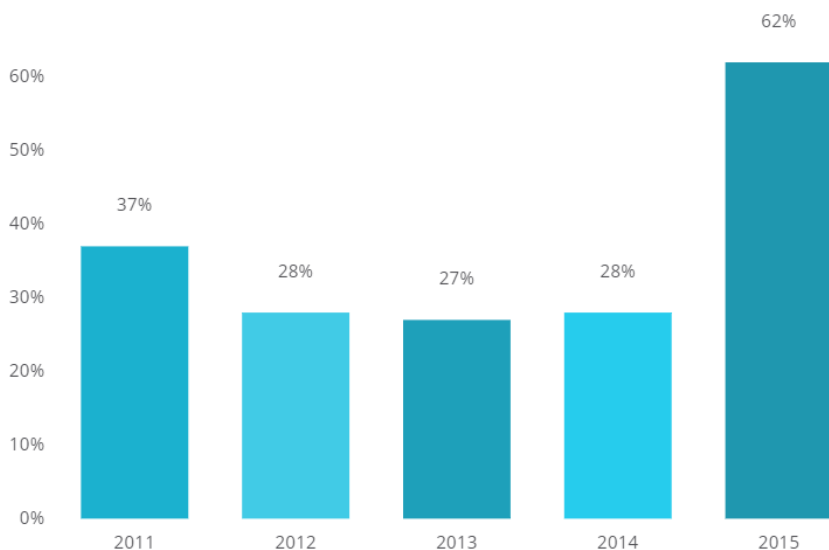
The chart below shows Austin Water pumpage, from all treatment plants combined, for the months of May through August, 2011-2015.

**Total Pumpage** (in millions)

Month	2011	2012	2013	2014	2015
May	4,637.54	4,028.26	3,815.01	3,766.52	3,222.41
June	5,283.14	4,794.52	4,286.62	3,731.65	3,379.15
July	5,953.89	4,640.93	4,432.47	4,291.33	4,415.87
Aug	6,373.17	5,165.21	4,851.73	4,847.90	5,236.86

Note that the pumpage in August of this year is 62% higher than May. In the other years the difference between May and August ranged from a high of 37% in 2011 to lows of 27% in 2012 and 2014. This illustrates the point about dramatic increases during August.

**Overall Pumpage** (comparing August to May)



This pattern can also be seen even more dramatically in the chart below which shows the pumpage from the River Place Water Treatment Plant since 2012.

### **Pumpage for River Place 2012 - 2015 (May – August each year)**

River Place WTP Historical Summer Pumpage (MG)

<b>Month</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>May</b>	37.1	31.1	30.2	11.7
<b>June</b>	50.9	36.7	30.6	15.8
<b>July</b>	41.0	38.3	37.8	32.9
<b>Aug</b>	50.4	40.9	39.3	40.5

The River Place plant is now managed by Austin Water, but still supplies all of River Place's water. As can be seen in the chart, 11.7 million gallons were pumped from the plant in May 2015 and 15.8 million in June 2015. The numbers rose to 32.9 million and 40.5 million in July and August 2015 respectively. (Corresponding numbers for Lost Creek are not as readily available because the area is not served by a separate water treatment plant, but Austin Water staff is compiling similar available information for the area.)

It is also worth noting that pumpage in May and June of the other years was always over 30 million gallons, emphasizing the point that May and June usage this year was less.

### **Factor 2 | Customer's First Experience with Block Rate System**

The table below provides the current Austin Water rates for water and wastewater service as well as the MUD rates that were in effect prior to these customers joining Austin Water in October and December of 2014. To aid in understanding the comparisons in the table the list immediately below is provided to show the charges in Austin Water's ascending rate blocks.

## Austin Water Tiered Rate Structure July 2015

- **Tier/Block 1** (0-2,000 Gallons) (\$2.93 per 1,000)
- **Tier/Block 2** (2,001-6,000 Gallons) (\$4.49 per 1,000)
- **Tier/Block 3** (6,001-11,000 Gallons) (\$7.29 per 1,000)
- **Tier/Block 4** (11,001-20,000 Gallons) (\$11.03 per 1,000)
- **Tier/Block 5** (20,001 Gallons - Over) (\$13.93 per 1,000)

In comparison to the above rates, the former River Place MUD rates did not reach \$7.00 per 1,000 gallons until 30,000 gallons was used, and then remained at \$7 per 1,000 gallons – no matter how much was used. In contrast Austin Water's rates rise to \$7.29 per 1,000 gallons for volumes between 6,001 gallons and 11,000 gallons. Austin Water's rates continue to rise with the level of usage, reaching \$13.93 per 1,000 gallons for usage above 20,000 gallons. The differences in the rate structures can be further explored in the table below.

Austin Water Utility Water Rates			River Place Water Rates			Lost Creek Water Rates		
<b>Meter Charge:</b>			<b>Meter Charge:</b>			<b>Meter Charge:</b>		
5/8"	Current	\$7.10	5/8"		\$31.00	5/8"		\$14.50
<b>Residential Tiered Minimum Charge:</b>								
0-2,000 Gals		\$1.05						
2,001-6,000 Gals		3.00						
6,001-11,000 Gals		7.60						
11,001-20,000 Gals		23.75						
20,001 - Over Gals		23.75						
<b>Volume Unit Charge: Per 1,000 gallons</b>			<b>Volume Unit Charge: Per 1,000 gallons</b>			<b>Volume Unit Charge: Per 1,000 gallons</b>		
0-2,000 Gals		\$2.93	0-2,000 Gals		\$0.00	0-10,000 Gals		\$4.42
2,001-6,000 Gals		4.49	2,001-20,000 Gals		2.50	10,001-35,000 Gals		5.16
6,001-11,000 Gals		7.29	20,001-30,000 Gals		3.50	35,001 - Over Gals		7.20
11,001-20,000 Gals		11.03	30,001 - Over Gals		7.00			
20,001 - Over Gals		13.93						
<b>Water Revenue Stability Reserve Fund Surcharge</b>								
All Volumes per 1,000 Gals		\$0.19						

Austin Water Utility Wastewater Rates			River Place Wastewater Rates			Lost Creek Wastewater Rates		
<b>Customer Charge:</b>			<b>Customer Charge:</b>			<b>Customer Charge:</b>		
All Accounts		\$10.30	All Accounts		\$0.00	All Accounts		\$9.00
<b>Volume Unit Charge: Per 1,000 gallons</b>			<b>Volume Unit Charge:</b>			<b>Volume Unit Charge:</b>		
0-2,000 Gals		\$4.51	Per 1,000 gallons		\$3.14	Per 1,000 gallons		\$1.39
2,001-Over Gals		9.13						

Customers within these former MUD areas generally have higher average water consumption as compared to the Austin Water system-wide average customer. For example the average residential usage in Austin overall is 5,800 gallons per month while average usage in River Place is near 17,000 gallons per month. Furthermore, in July 2015, 67% of Austin Water's residential customers consumed less than 6,000 gallons per month (blocks 1-2), while 68% of River Place customers consumed more than 6,000 gallons per month (blocks 3-5). Additionally, more than 13% of River Place residents consumed more than 20,000 gallons – the point at which Austin's highest block rate begins compared to less than 3% for the City as a whole.

## STAY CONNECTED



For more information, visit us at: [AustinWater.org](https://www.austinwater.org)


Click [HERE](#) to download our DropCountr App

Attachment B  
Memo to Mayor and Council  
September 23, 2015



## MEMORANDUM

**TO:** Mayor and Council

**FROM:** Marc A. Ott, City Manager 

**DATE:** September 23, 2015

**SUBJECT:** Citizen Inquiries on Billing and Water Usage

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Over the past few weeks we have all noted the customer concerns about elevated water bills and usage during recent summer months. These concerns are being reported in large volume to the Austin Energy call center, and in many cases to your offices directly. While some Council districts have received a higher volume of calls, this issue appears to be widespread throughout the city.

I want to make it clear that we do not take these concerns lightly. Affordability remains a primary focus for our community, so it is imperative that our residents are paying an accurate cost for the services we provide. Further, we have an obligation to be good stewards of our precious and limited resources, including our water supply. As such, we will continue to fully examine both our water use and any potential billing anomalies reported by customers. Those efforts are being jointly led by staff in both Austin Energy, which manages the billing system, and Austin Water.

Significant resources have been devoted to address each customer concern. Specifically, staff reviews past and present usage and verifies water billing and meter accuracy. Upon request, staff will audit lawn irrigation systems for correct settings and watering days, and assist residents to locate "hidden" leaks that may exist on their side of the meter. It goes without saying that swift resolution will be provided for any customer who has received an inaccurate bill.

**Billing System Review** - Both departments have assured me that no system-wide irregularities have been discovered. However, Councilmember Zimmerman has questioned whether these high bills may be the result of the City "catching up" on meter readings that were not performed by our contracted meter reading vendor during previous billing cycles. This is a serious allegation that suggests a violation of contract terms by our vendor, and one that I've asked staff to thoroughly investigate. In response, staff has shared the following information:

- Austin Energy conducted an internal quality assurance review of vendor meter reads between May and June of this year. The day after the vendor read the meter, Austin Energy staff physically verified the reading. They sampled about 330 meters a month. The results show that 97.5% of the reviewed meter reads were accurate and appropriately obtained by the vendor.
- This quality assurance program is an ongoing effort to ensure compliance by the contracted meter reading vendor.

As an additional measure, I have directed Austin Energy to conduct a third-party audit of the customer billing system. This is in part due to the discussion and issues brought forth during the Council's Public Utility Committee meeting last week. We feel confident that this audit will confirm the accuracy of our billing system. Combined with the quality assurance review process described above, this will help us confirm that the issue is not a systemic one.



**Water Pumpage Review** – We have also taken a close look at the amount of water pumped through all of our treatment plants during the period in question. That evaluation showed that the measured output delivered in to the water system in August was the highest since 2011. You may be aware that neighboring communities (Pflugerville, Round Rock, Cedar Park, and San Antonio) are seeing similar spikes in water bills with the same media attention that we are experiencing, which points to increased water use throughout the region compared to May, June and July.

The chart below shows Austin Water pumpage from all treatment plants combined for the months of May through August, 2011-2015.

**Total Pumpage (in millions)**

Month	2011	2012	2013	2014	2015
May	4,637.54	4,028.26	3,815.01	3,766.52	3,222.41
June	5,283.14	4,794.52	4,286.62	3,731.65	3,379.15
July	5,953.89	4,640.93	4,432.47	4,291.33	4,415.87
Aug	6,373.17	5,165.21	4,851.73	4,847.90	<b>5,236.86</b>

I have asked that Austin Energy and Austin Water continue to thoroughly investigate individual customer concerns, and they will report their findings back to management. The satisfaction our residents have with City services is and will remain a key measure of our success, so we take these concerns seriously. We will continue to share results of further investigations with the Council.

As always, if you have any questions, please feel free to contact me.

**XC:** Robert D. Goode, Assistant City Manager  
Greg Meszaros, Water Director  
Larry Weis, Austin Energy General Manager  
Ray Baray, Chief of Staff  
Doug Matthews, Chief Communications Officer

Attachment C  
Memo to Mayor and Council  
October 8, 2015



## MEMORANDUM

**TO:** Mayor and Council

**FROM:** Robert Goode, Assistant City Manager

**DATE:** October 8, 2015

**SUBJECT:** Resources for Water Use and Billing Concerns

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As we work through resident concerns regarding water usage and bills, our staff in Austin Energy and Austin Water are working hard to ensure that the communication channels are working well, and that concerns are managed and resolved efficiently. Because many concerned residents are contacting your offices directly, we wanted to provide you with a reminder regarding the escalation process.

### **ESCALATIONS**

We are currently reviewing about 600 escalated issues related to water use and bills. That is the equivalent of a year's escalations under normal circumstances. As you can imagine, this has affected turnaround times from complaint to final resolution – from about two days to an average of 12-15 days. At this time, we have closed more than 1,800 escalations. All customers are contacted within 24 hours to collect basic information and provide an estimated turnaround time.

Please continue to send any requests for escalation to [CustomerCare@COAutilities.com](mailto:CustomerCare@COAutilities.com). At the same time, please be mindful that we are often getting multiple requests to escalate the same residential customer. When this occurs, staff has to take time to track down the escalation, which turns out to be a “re-escalation”. The time to verify that the customer is already on the escalation list is costing valuable time. To help ensure that we do not receive redundant requests, we have created a list of open and closed customer escalations that is searchable by customer name and district number. That list is attached and will be delivered to your offices each Wednesday. It will be helpful if you reference this list prior to creating a new escalation.

As a reminder, during the process staff works individually with each customer to research historic use patterns and discuss any potential changes in household use or irrigation settings. If

the situation calls for it, we will send staff to check for leaks, re-read meters and audit irrigation systems. All of this requires time from a limited number of staff.

### **MEDIA INQUIRIES**

Because multiple departments are involved in this process, the City Manager has assigned the Communications and Public Information Office (CPIO) as the lead on communications to ensure a unified voice and message. Feel free to refer media inquiries to CPIO's main media line at 512-974-2220.

### **UPDATES AND INFORMATION**

The City Manager is planning on providing a substantive status report to the Mayor and Council within the next few weeks. He is directing staff to provide data on the status of escalations, results of these specific investigations, etc.

We have posted significant additional information on a [web page](#) dedicated to this issue. The page provides memos, updates, tools and videos with an emphasis on conservation and rate structures. We will continue to update this resource with new and relevant information as it becomes available.

Thank you for your help in addressing this issue, and please provide feedback on the new information we will be providing on customer escalations. Hopefully this will better prepare you to provide the kind of proactive service we know is important to you.

Contact [Jeff Vice](#) at Austin Energy for more information.

CC: Marc A. Ott, City Manager  
Larry Weis, Austin Energy General Manager  
Greg Meszaros, Austin Water Utility Director

Attachment D  
Presentation to PUC  
September 16, 2015



# Public Utilities Committee

## Water Billing Concerns

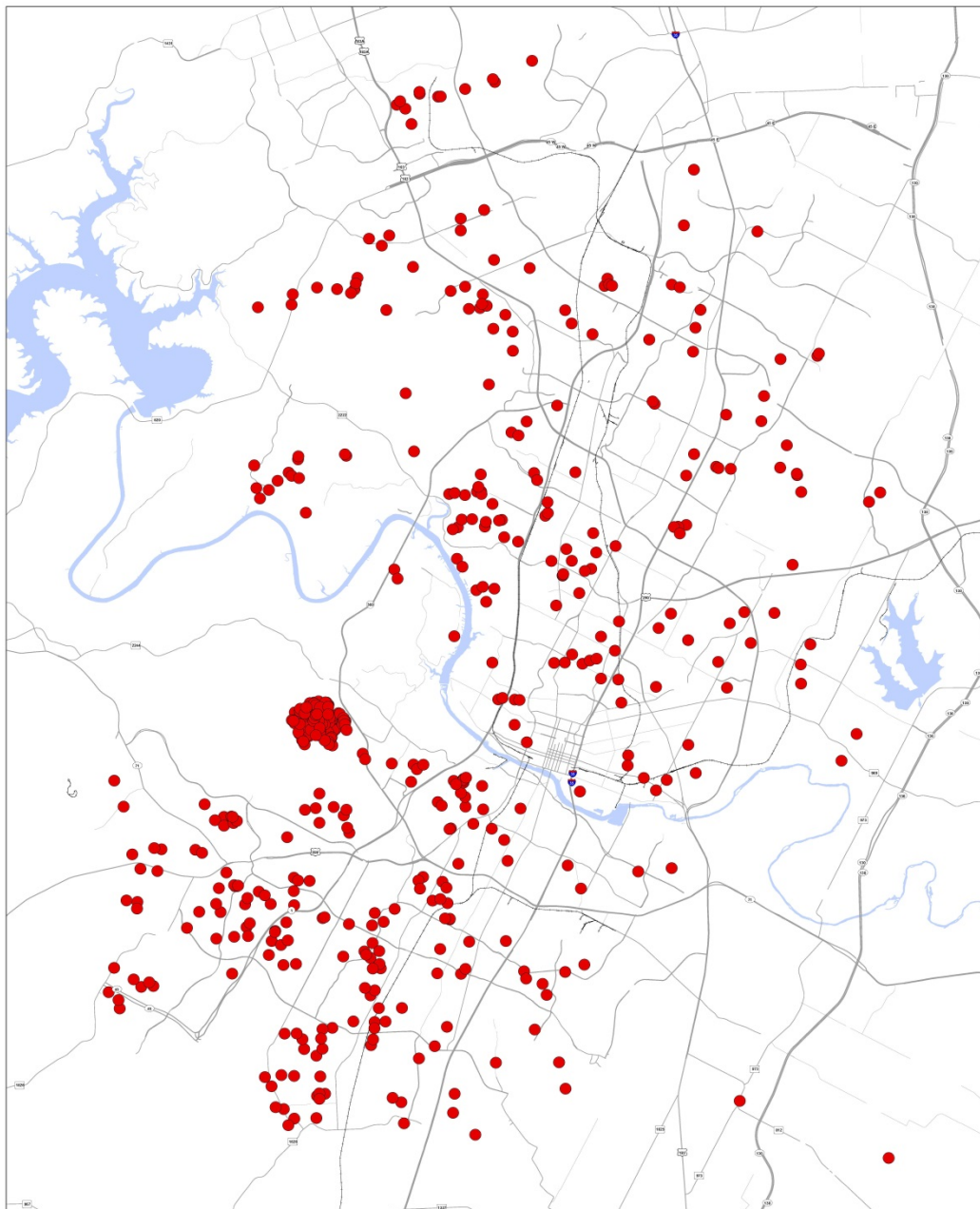
September 16, 2015

# Ongoing Actions

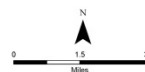
- Received over 1,000 high bill calls over last several weeks
  - Initially concentrated among customers of former River Place and Lost Creek Municipal Utility Districts (MUDs)
  - Broadened to include other areas of the City
- Formed a joint Austin Water/Austin Energy response team
- Authorized overtime and shifted staff to assist effort
  - Example: Completed 33 irrigation system audits & 84 scheduled
- Evaluated system pumping, use and billing system trends
- Enhanced website information and resources



# Customer Call Distribution



● Customers Who Complained of High Water Bills



City of Austin  
Austin Water  
September, 2015



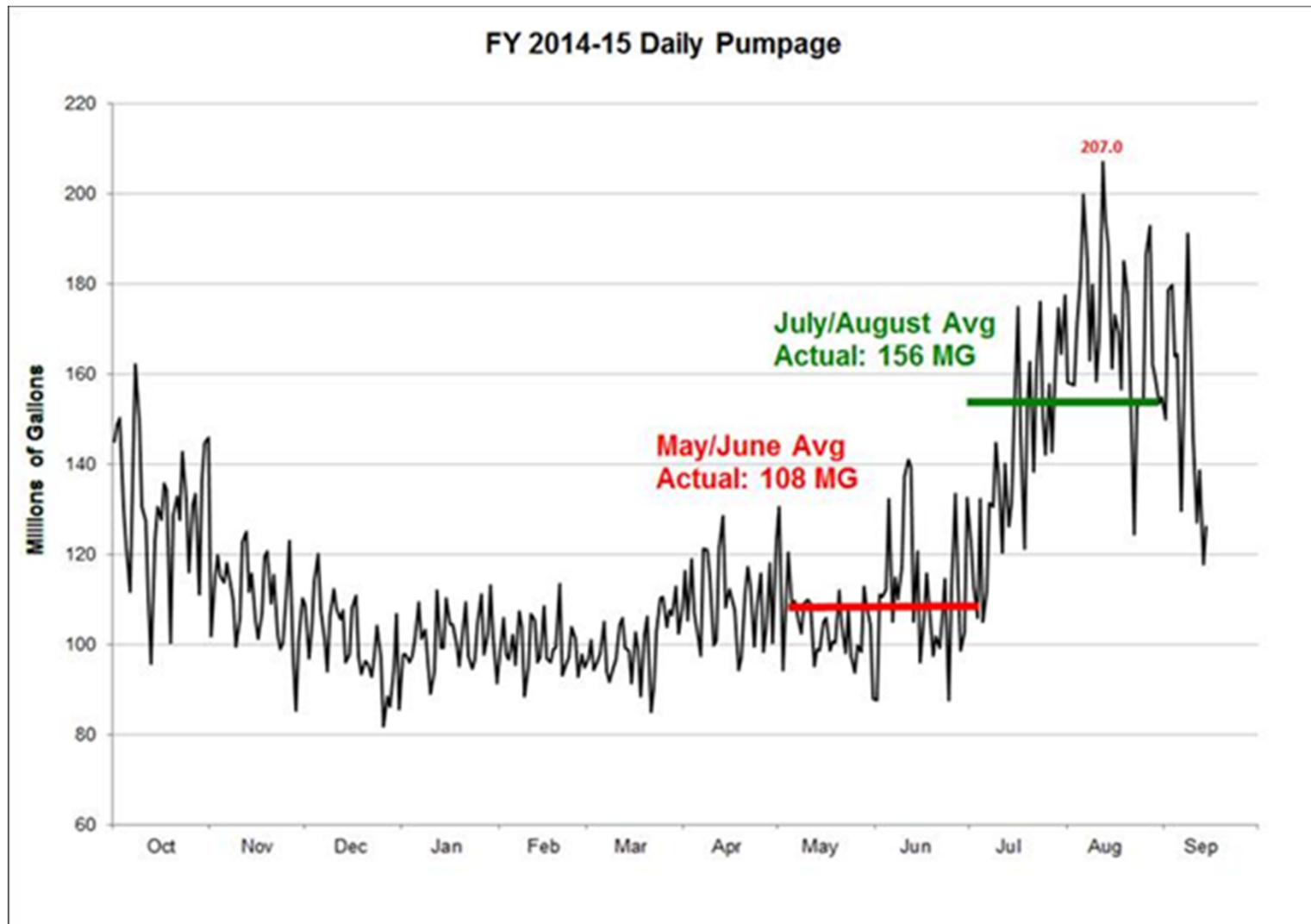
High Water Bill Complaints  
Overall

Produced by GIS Services (2015)

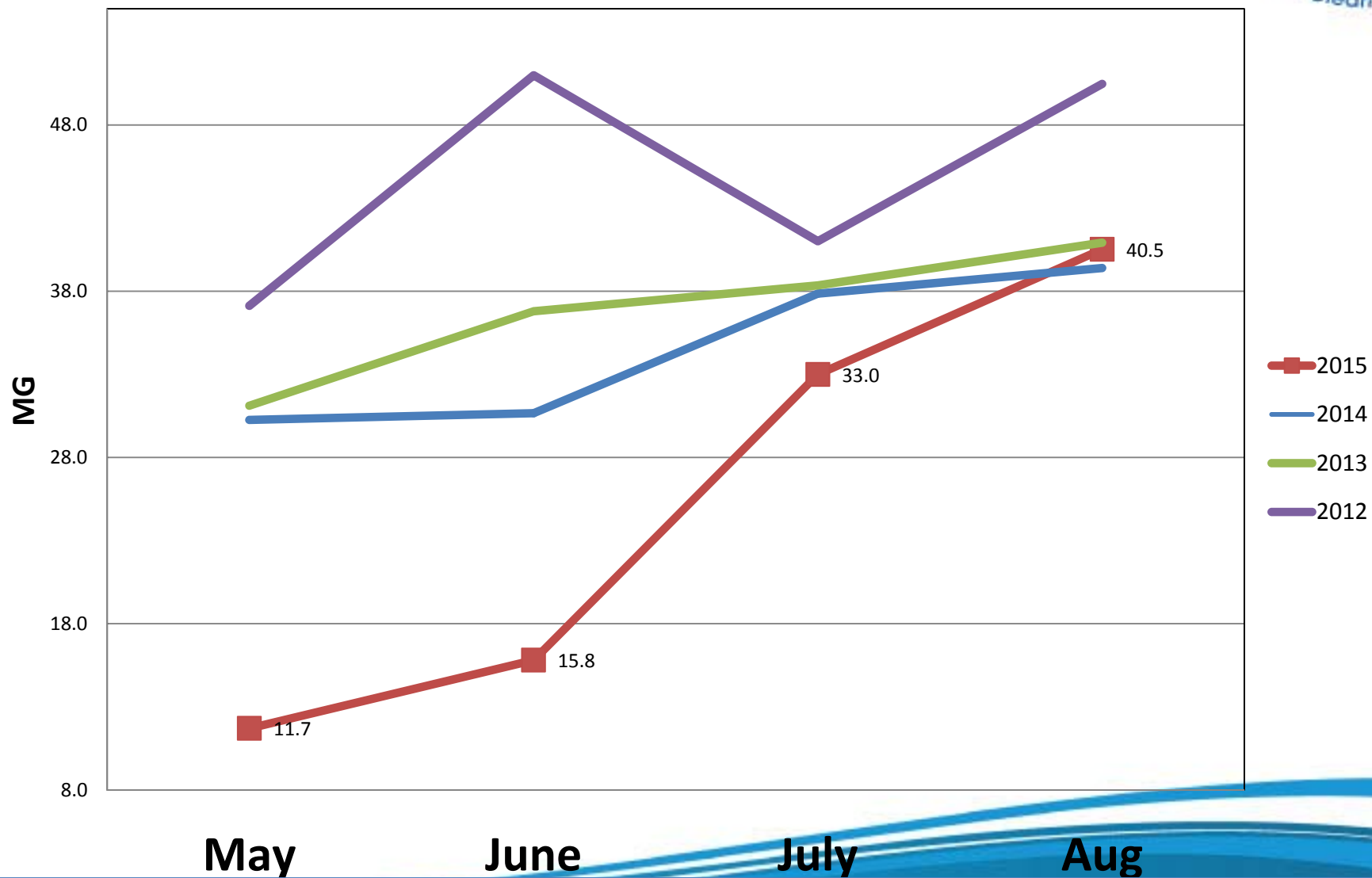


# Systematic Trends

# Current Year Daily Pumpage



## River Place WTP Historical Summer Pumpage (MG)



# River Place – July 2015

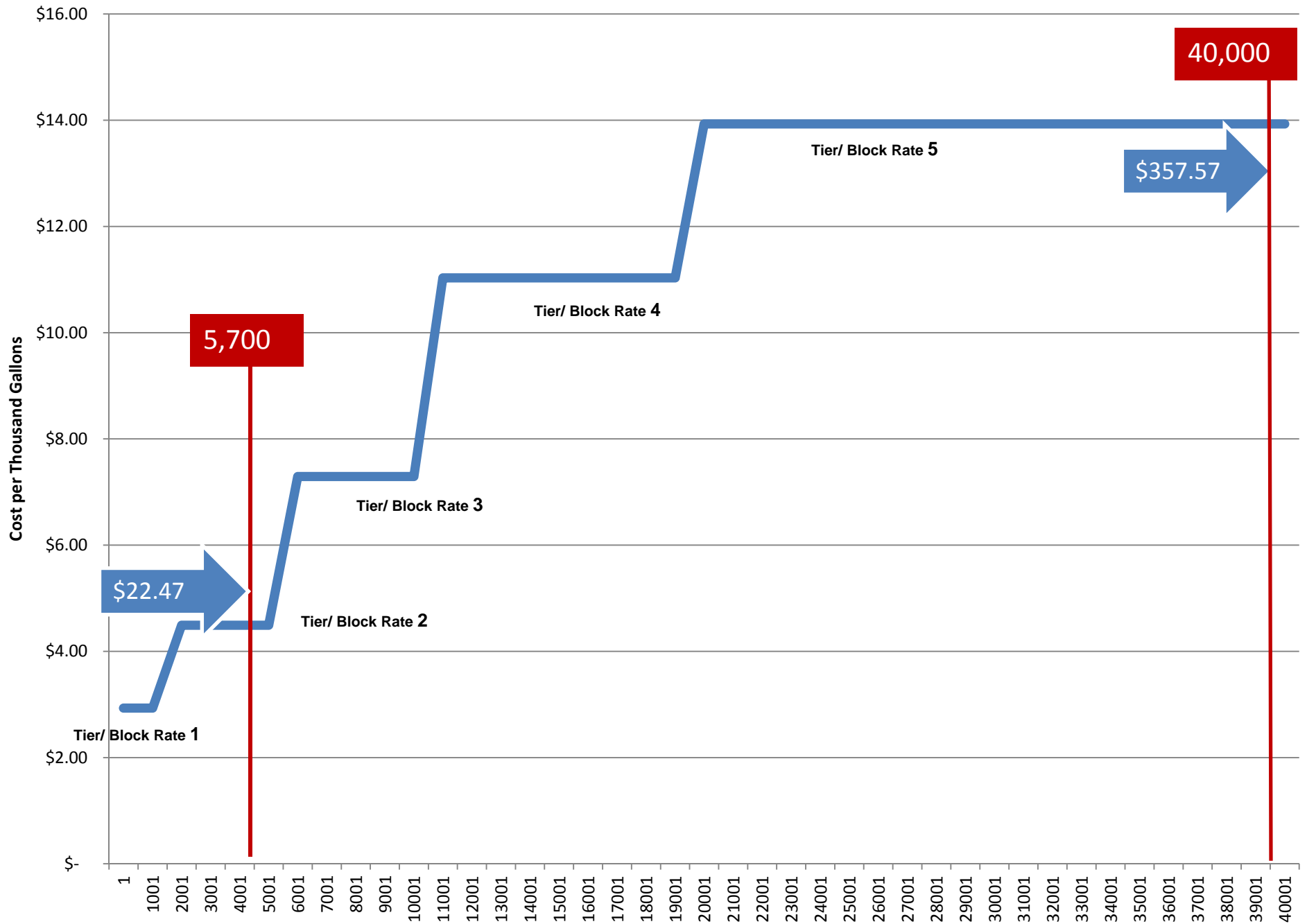
## WTP Pumpage vs. Consumption

- Water plant pumpage to River Place residents only for July 2015 is 21.5 MG
- Austin Water totaled the water consumption billed to River Place residents for July 2015 at 21.3MG
- Consumption billed is 99.1% of water plant pumpage

# Additional Systematic Checks

- Meter system re-read checks on high bill calls coming back accurate (98.5% of checks were accurate original reads).
- Meter accuracy bench tests indicate that meters are reading within American Water Works Association (AWWA) accuracy standards or under registering
  - Example: The Glen Lake and Westminster Glen area
    - 400 customers served by the Riverplace Plant
    - 65 meters pulled at random (16%) for accuracy testing
      - 0% Over registering
      - 50% Accurate
      - 50% Slight under registering
  - Preparing for Phase 2 of Riverplace System Check – 100 random meters pulled

# Volumetric Water Rate Comparison



## Why have water bills gone up?

Posted: 1:57 p.m. Sunday, Sept. 13, 2015



Email

12



Share

53



Tweet

4



ShareThis

133

By [Claire Osborn](#) and [Sean Collins Walsh](#) - American-Statesman Staff

After a surge in complaints about high water bills this summer, utility operators in Austin, Round Rock and Cedar Park are working to solve the mystery of why bills have spiked.

The municipalities do not share a billing system, so it's unlikely that a computer glitch led to inflated invoices being sent out. And there's no apparent reason that the typical causes of high bills — leaky irrigation systems, running toilets, etc. — would have become more prevalent this summer.

# Individual Account Services

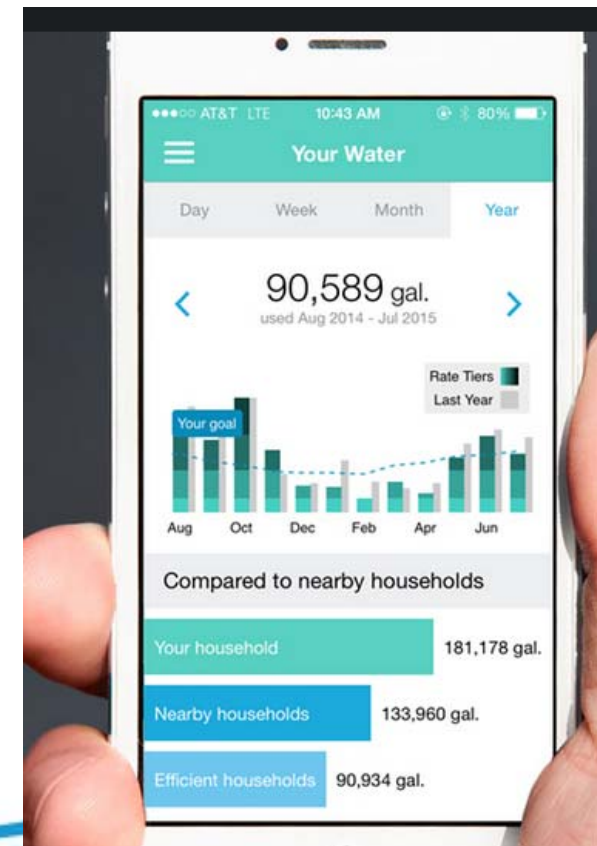


# Actions to Review Accounts

- Review customer concerns
- Ensure calculation of bill is accurate
- Inquire with customer on specifics of their usage, i.e. irrigation systems, pools, possible leaks
- Provide links to website information on conservation
- Provide rate differential information to new transition customers
- Order reread of customer meter
  - Compare to most recent meter read for consistency
- Adjust bill if appropriate

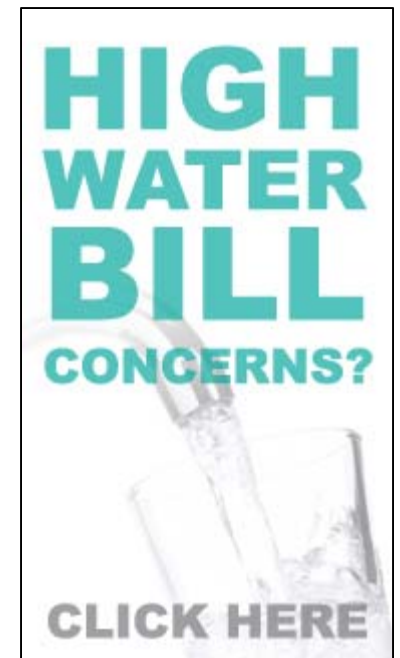
# Conservation Assistance

- Irrigation evaluations for high users
- Dropcountr mobile app
- Rebates for water-wise landscapes



# Working with Customers

- Follow tips on [www.AustinTexas.gov/water](http://www.AustinTexas.gov/water) to check for leaks, irrigation settings & more
- Download free Dropcountr mobile app from Apple or Android app stores
- Compare to previous usage online
  - [www.COUtilities.com](http://www.COUtilities.com)
- Call AE Customer Care for assistance
  - (512) 494-9400



## Conclusions / Next Steps

- Austin Water and Austin Energy care about our customers and their concerns about water billing issues
- We will continue to evaluate concerns and correct any issues found
- Austin Water will perform irrigation assessments for those customers
- Provide contact numbers and information for customers to call if they have concerns

# Questions?

Attachment E  
Presentation to PUC  
October 21, 2015





# Public Utilities Committee

## Water Billing Concerns Update

October 21, 2015

# Customer Service Update



# High Bill Calls & Escalations

- Since August, the Contact Center has received 10,877 high bill concerns
  - 27% increase to call handle time in order to review customer usage, checklists, explanation of process, and a 40% increase in escalations to Center Supervisors
  - Call volumes have peaked and are declining
- High Bill Escalations beyond Initial Contact
  - Since August, over 2,400 escalations through AE and 256 with Austin Water
  - 2,100 resolved and closed

# PUC Meeting Citizen Outreach

- Update on citizens who spoke at last meeting
- Greenslopes
  - 113 homes receiving water from a 4" water meter
  - Meter was installed in June 2015 and tested for accuracy in September
  - Austin Water crews performed leak detection on private lines & hydrants
    - Initial Review - No leaks were discovered but several valves were buried
    - Follow Up Work – Buried valves recovered and leak source discovered
- Austin Water reached out to other citizens who spoke
  - Investigated their specific issues and communicated findings

# Irrigation Audits

- Irrigation audit stats – August to Current
  - Number completed: 144
  - Scheduled through November: 159
- Audit results and examples
  - 83% of audited systems were set with multiple day, multiple start times, and/or excessive run times
  - Irrigation water use for systems with excessive day and/or run time settings average 384% of recommended irrigation levels
  - Examples include the potential in some cases to use 100,000 – 300,000 gallons in one month

# Irrigation Audits – First 20 Completed

Zip Code	Date	Current Controller Schedule	Current Setting Potential Gallons Used	Recommended Setting Usage in Gallons	% <b>ABOVE</b> / <b>BELOW</b> Recommend	Reduction Recommend
78717	7/28/2015	Multiple start times	22,291	6,467	<b>245%</b>	Yes
78739	8/5/2015	Multiple days	21,930	5,323	<b>312%</b>	Yes
78731	8/10/2015	Multiple start/excessive run times	33,712	7,620	<b>342%</b>	Yes
78759	8/10/2015	Multiple days/start times	45,580	9,795	<b>365%</b>	Yes
78660	8/11/2015	Multiple days	340,456	3,397	<b>9922%</b>	Yes
78746	8/11/2015	Unable to verify scheduling	14,995	11,266	<b>33%</b>	Yes
78730	8/12/2015	Multiple days/Excessive run times	36,791	11,008	<b>234%</b>	Yes
78739	8/17/2015	Manage seasonally	14,199	14,199	<b>0%</b>	Target
78739	8/18/2015	High operating system pressure	8,836	11,520	<b>-23%</b>	Conserving
78739	8/19/2015	High operating system pressure	4,068	3,354	<b>21%</b>	Yes
78717	8/20/2015	Excessive run times	16,701	10,681	<b>56%</b>	Yes
78750	8/20/2015	Excessive run times	195,415	7,000	<b>2692%</b>	Yes
78746	8/24/2015	Multiple start times	53,372	17,174	<b>211%</b>	Yes
78747	8/26/2015	Multiple days/start times	14,836	7,043	<b>111%</b>	Yes
78730	8/31/2015	Unable to verify scheduling	10,406	10,406	<b>0%</b>	Target
78730	9/1/2015	Excessive run times	11,653	7,783	<b>50%</b>	Yes
78731	9/2/2015	Good condition	6,708	6,708	<b>0%</b>	Target
78739	9/2/2015	Excessive run times	76,303	8,084	<b>844%</b>	Yes
78746	9/8/2015	Multiple days/start times	3,595	1,600	<b>125%</b>	Yes
78751	9/8/2015	Multiple start times/excessive run times	61,920	3,509	<b>1665%</b>	Yes

# Irrigation Systems & Pools

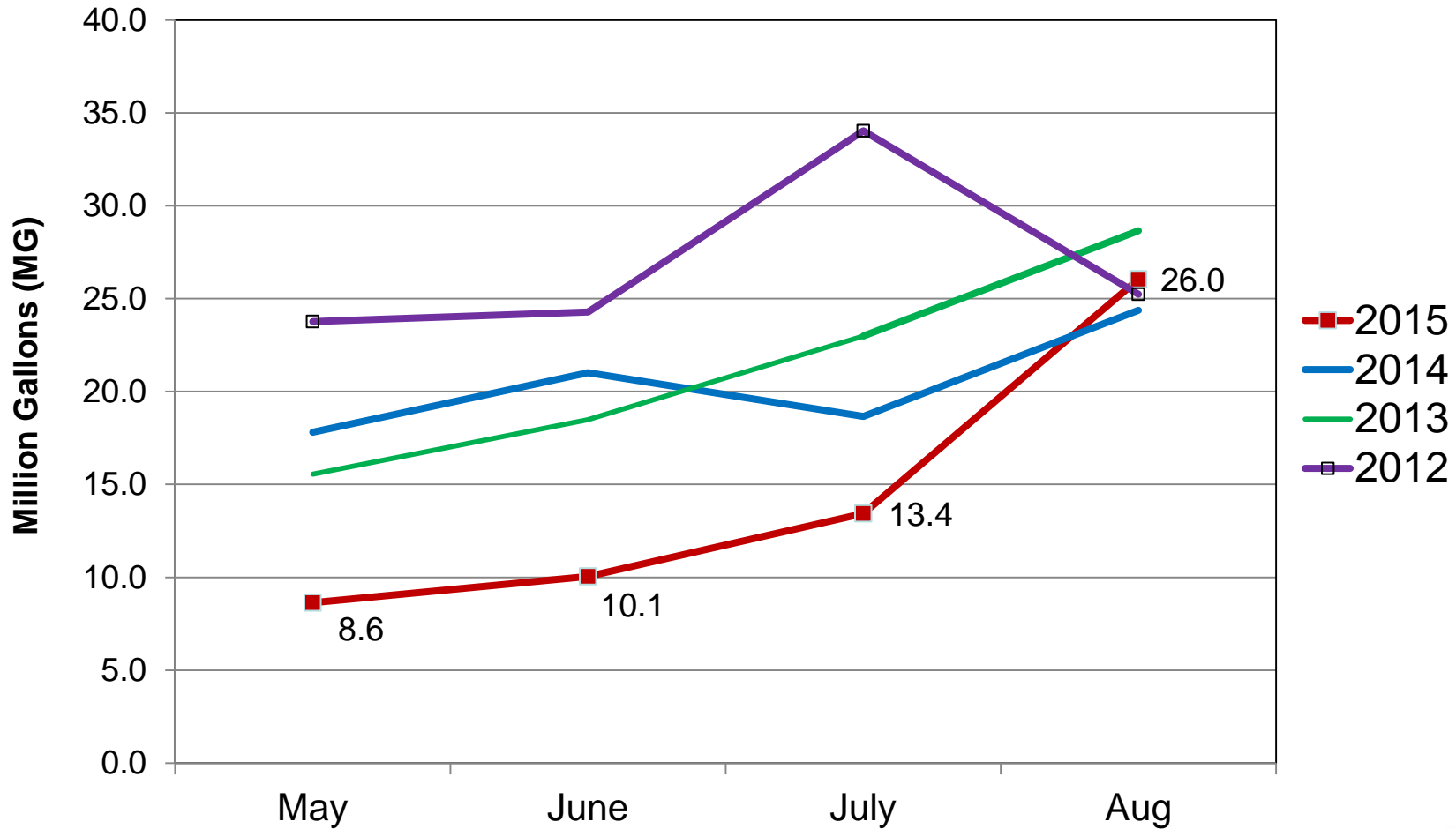
- Sampling of Austin Water Bill Escalations
  - Subset of bill escalations asked whether they had an irrigation system or pool
  - 141 customer sample with escalations were polled
  - 121 (86%) of these customers had irrigation systems
    - Out of the 121 with irrigation systems one third of these customers also had pools

# Updated Systematic Checks

# Pumpage vs. Consumption Checks

- Riverplace results presented at the September PUC
- Lost Creek analysis completed
- Austin Water system completed

## Lost Creek MUD Historical Summer Consumption

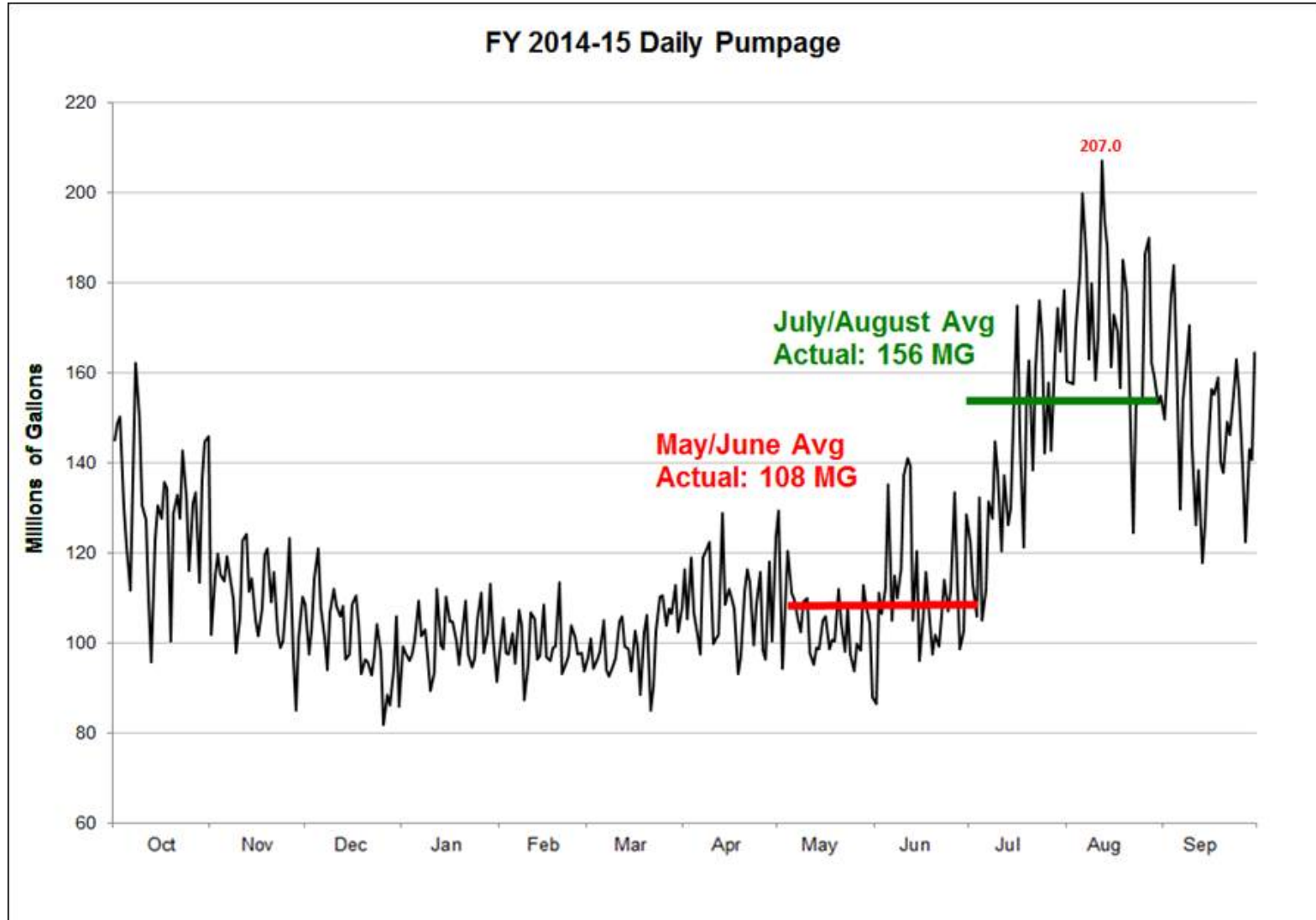




# Lost Creek Consumption Master Meter vs. Customer Meter

- Master meter from former MUD still being read
  - Aggregate of all consumption for Lost Creek area
  - Comparison of master meter data with the individual customer metered consumption
- August 2015 – customer metered consumption was 96.6% of the master meter water that was delivered to the Lost Creek system

# FY 2015 Austin Daily Pumpage



# System Pumpage vs. Consumption

- Results of system wide pumpage vs. customer metered consumption for August 2015
  - Total metered consumption is 88% of same period pumpage
  - Consistent with expectations and prior years

# Metering Processes

# Meter Read Process

- Corix, a contracted third party, provides the first level of meter read
  - Meter readers assigned routes tied to 20 billing cycles/month
  - System does not allow meter readers to see prior reads
  - Preprogrammed parameters prompt meter reader to validate high or low reads
- Reads are validated through Austin Energy internal quality review
  - Recent quarterly results showed a 97.5% accuracy rate in the read process
  - The remaining 2.5% of reads are handled through our standard re-read process
- Austin Energy further verifies read accuracy as they help validate high or low reads through the re-read process
  - The re-read process also shows 97% accuracy of initial read

# Meter Re-read Process

- The re-read process helps validate any out of range reads
  - Billing generates a bill for the customer with the validated usage
  - A field order is created to proactively identify any leaks
- However, meter or location conditions may prevent success obtaining a valid read
  - If meter is initially unreadable, a series of field activities escalate the read process
  - If meter equipment issue exists, AWU meter technicians will replace or repair the meter
  - If meter is still inaccessible, the billing system estimates a read based on historical consumption

# Bill Estimation

- Less than 1% of water bills are estimated on a monthly basis
- Why is a bill estimated?
  - If a valid meter read cannot be obtained, billing system algorithm reviews historical usage patterns and calculates an estimation
  - Estimation process is important tool to help to ensure customers receive a timely monthly bill
- How is an estimated bill resolved?
  - Once a valid meter read is obtained, the estimated bill is appropriately rebilled across the correct billing months
  - Unusual weather or pronounced changes in usage patterns between years may result in high or low estimations



# Conclusions / Next Steps

- Austin Energy and Austin Water continuing joint effort to work through high bill matters
- Billing system and meter system functioning properly
- Irrigation audits providing customers valuable feedback on optimizing outdoor water use
- AE billing system audit RFQ underway
  - RFQ closes 10/23/15
  - 4 week deliverable once contract initiated



# Questions?