

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)

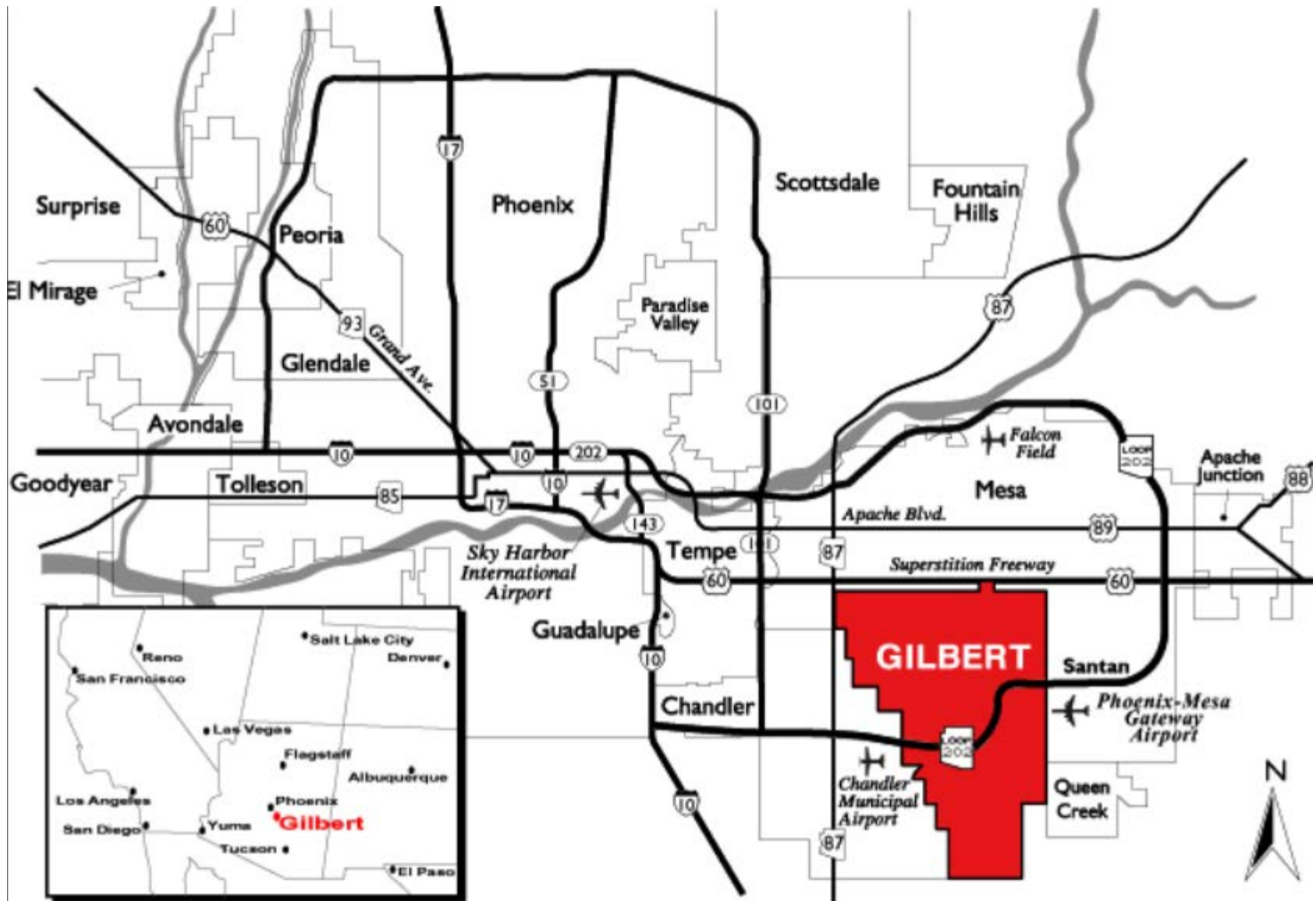


# Save Water, Get Recognized: Water Wise Gilbert

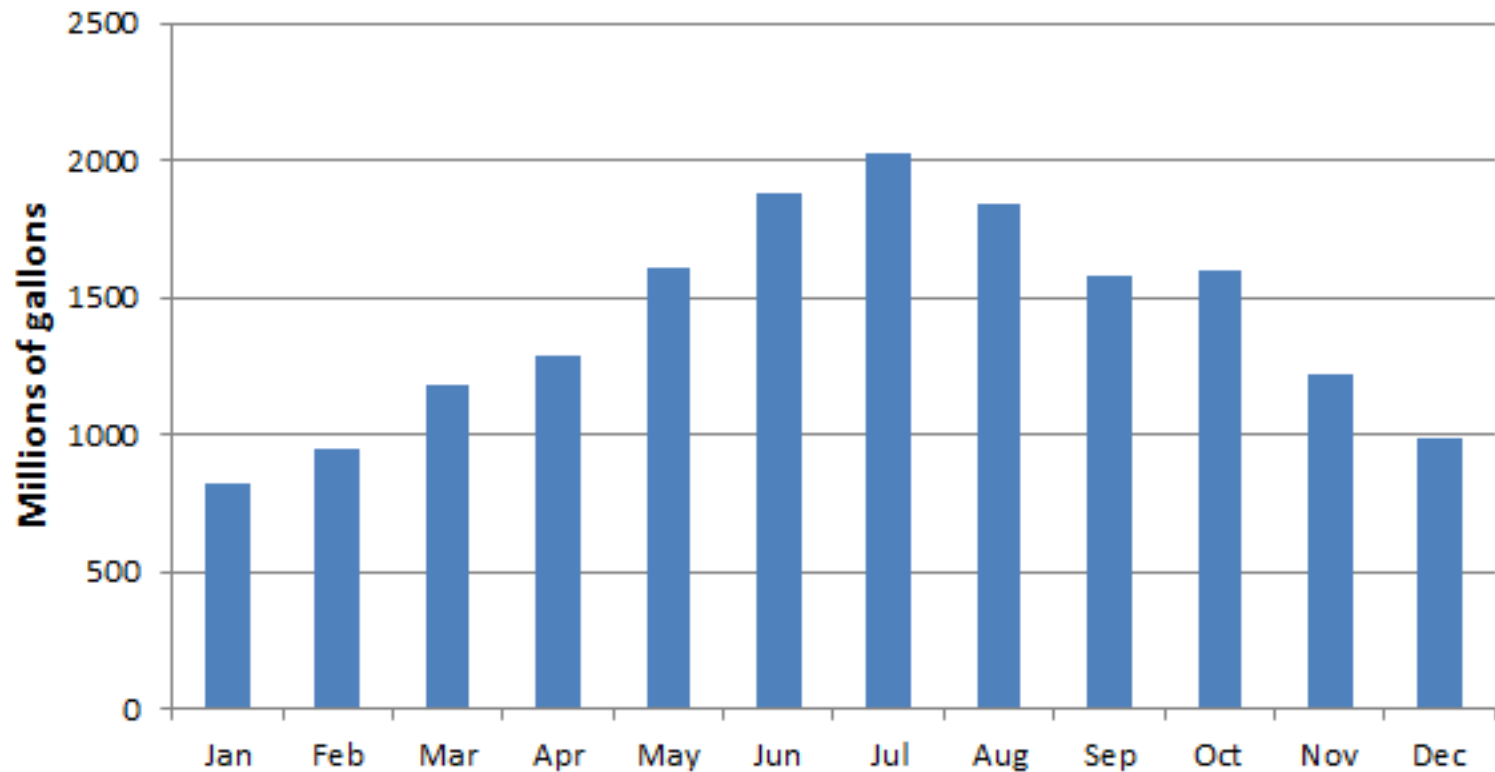
Annikki Chamberlain  
Water Resources Specialist  
Town of Gilbert, Arizona



Currently ~247,000 population



## Gilbert Water Production 2016



Gilbert Water Division produced **16,995,172,000** gallons of water in 2016.

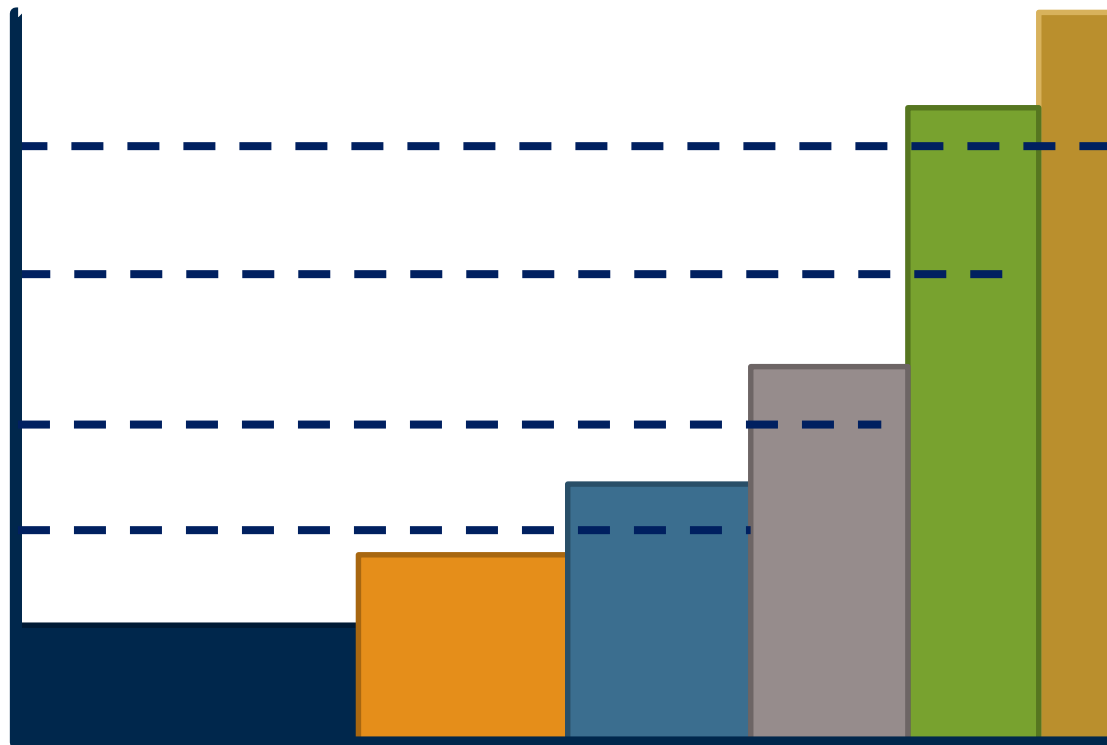
That's 52,156 acre feet  
(325,851 gallons in one acre-foot)

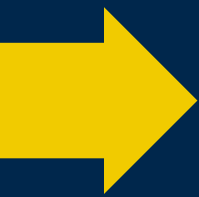
# Gilbert water resources and conservation context

- Conservation a strategy to reduce demand at buildout.
  - Current projections 305,000 population by 2040

\$\$\$

\$





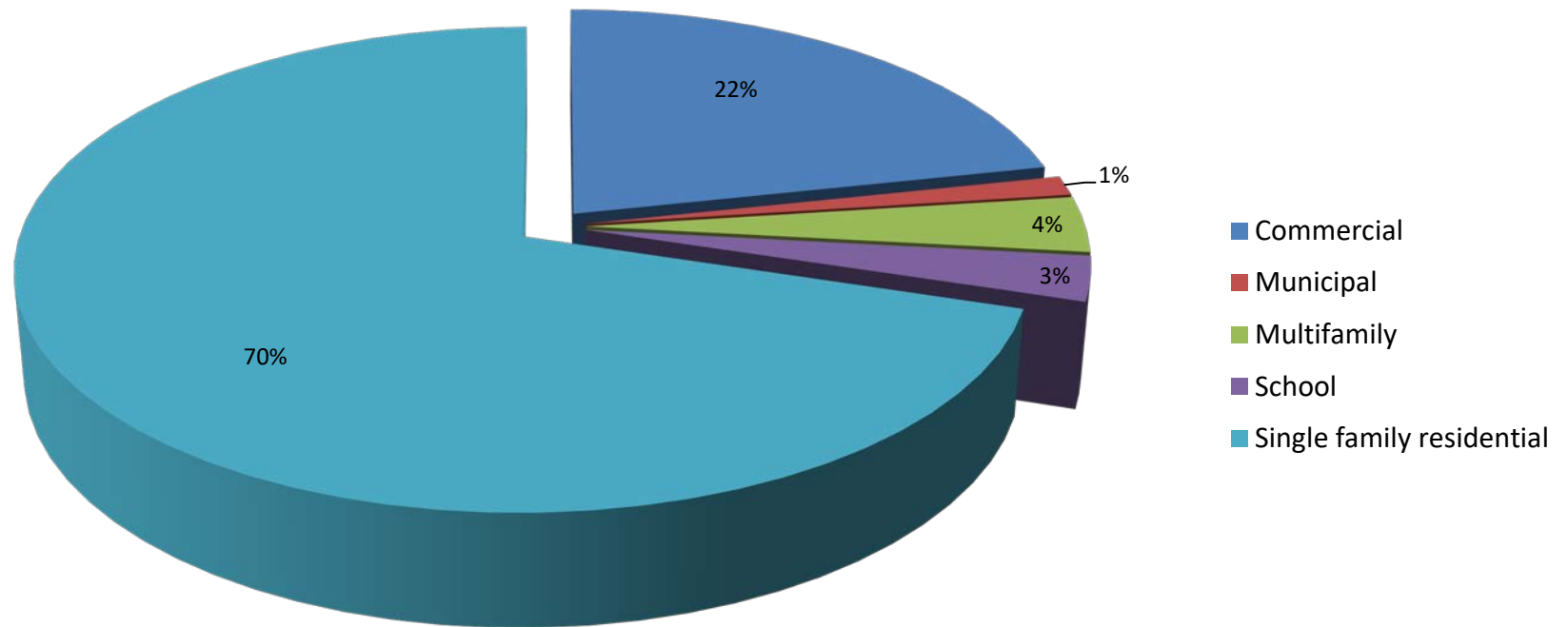
**4,000 Acre Feet**

# Gilbert water resources and conservation context

- Conservation programs benchmarked against the cost of acquiring 100 year right to new water supplies (\$3500/ AF or \$10.74/ 1,000 gal)



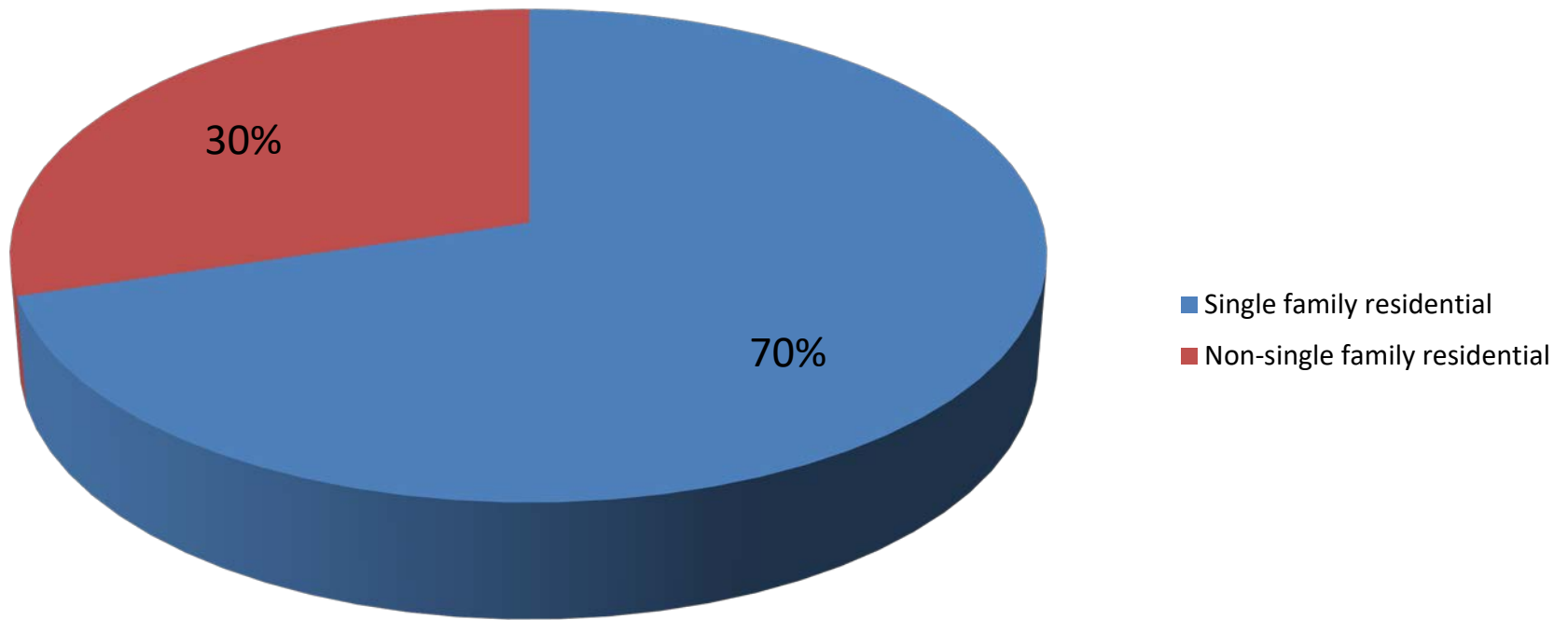
# 2016 Gilbert Water Consumption by Customer Class



# Gilbert water consumption context

- Growing commercial and multifamily water consumption
- Recognition of need to outreach and provide more assistance to schools and churches

Single Family Residential Water Consumption  
versus  
Non-Single Family Residential Water Consumption



# Gilbert customer accounts

	SFR	Non-SFR
Total meters	80,000	5,000
Average monthly use per meter	11,000 gal	76,000 gal
Average annual use per meter	132,000 gal	918,000 gal
Percent of total water use	70%	30%
Percent of total water meters	94.5%	5.8%

# Water Wise Gilbert

- Non-residential water audit service provided since 2000 to Gilbert water customers
  - Lower participation rates than residential water audit service
- Created recognition component in 2015 called Water Wise Gilbert and also boosted outreach and recruitment to non-residential customer class

# How do you become Water Wise Gilbert?



# 1. Schedule a Water Efficiency Checkup with a Gilbert Water Conservation Specialist.

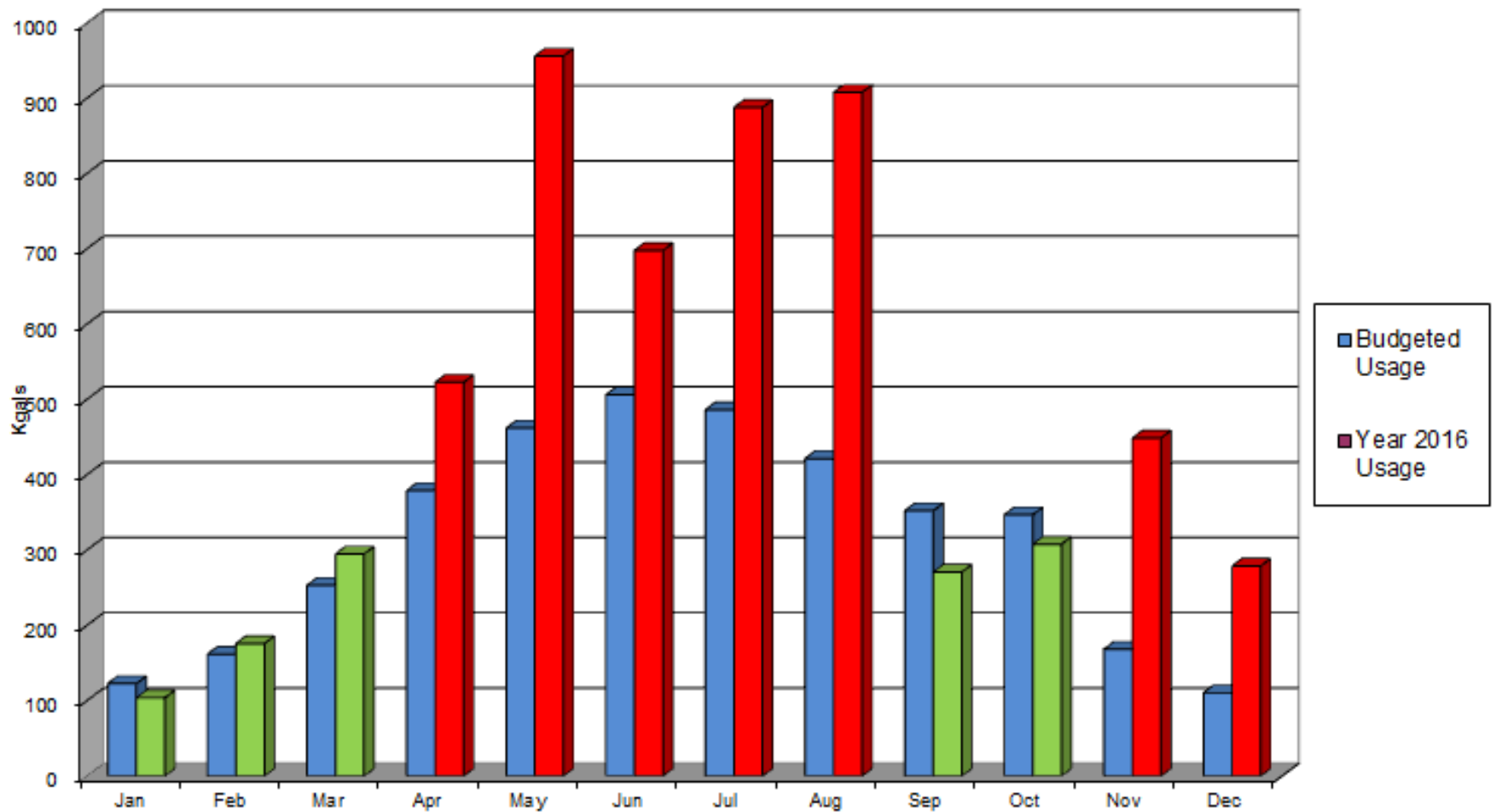


# Recruitment and outreach

- High consumption letters
- Recruit facilities with high community profile
- Recruit facilities with high saving potential
  - Landscape water budgets



**Actual use compared to budgeted use**



[www.gilbertaz.gov/hoa-irrigation](http://www.gilbertaz.gov/hoa-irrigation)

# Recruitment and outreach

- Social media marketing
- Endorsement by elected officials



Save Water: Become Water Wise Gilbert



Gilbert Digital

Subscribe

164 views

+ Add to Share ... More

1 0



**2. Save** water by implementing the suggestions from the Water Conservation Specialist's follow up report.



# Common recommendations

- ▷ Cooling tower monitoring and maintenance
  - ▷ Efficient plumbing installation or replacement
    - ▷ Improved landscape water management
      - ▷ Employee water awareness training
        - ▷ Toilet repairs or fixes
          - ▷ Serve water on request



## SERVING WATER ON REQUEST

### HOW MUCH DO YOU SAVE?

**It's not just the water in the glass that is wasted if no one drinks it.**

For every glass of water not served, as much as 3 gallons of water are saved.  
But there's more...

The resources wasted when an unwanted glass of water is served:

#### WATER:

- in the glass
- in the ice
- rejected by RO Unit
- used to wash glass



#### ENERGY TO:

- make the ice
- run the RO unit
- run dishwasher
- heat wash water



#### MONEY TO PAY:

WATER



ENERGY



SEWER

#### MISSED SOCIAL OPPORTUNITIES:



- Consumers show preference for **environmentally responsible businesses**



- Demonstrate sustainability through water conservation



- Raise awareness that water is precious in Gilbert
- Show you do your part to save water

**Water is precious here in the desert.  
Serving water upon request is one great way to save.**



WATER  
WISE  
GILBERT

[gilbertaz.gov/waterwise](http://gilbertaz.gov/waterwise)

## Water is precious here in the desert.

*You can do your part  
to save water.*

### Our Commitment

Gilbert, AZ is proactive in conserving our water resources. We understand that water is precious here in the desert and we can do our part to conserve it. Small changes can reap huge benefits for my business and for the community. I am committed to doing my part to save water.



#### Serve water upon request.

Serve water only upon request and ask before refilling. An 8-ounce glass of water will need an additional 16 ounces of water to clean the glass...plus the water needed for the ice! Every drop counts!



#### Don't thaw food under running water.

Thawing food under running water for just one hour a day can waste over 150,000 gallons per year. Plan ahead and defrost food beforehand.



#### Only wash full dish washer loads.

Fully load every rack you put in the dish washer. Partial loads can waste thousands of gallons! Also make sure to soak pots and pans and scrape dishes and cookware before washing.



#### Manage dipper well wisely.

Turn dipper well on only at first order, monitor the flow rate, and turn it off when its not in use or at the end of the day. A 0.5 gallon per minute well running 24/7 could waste up to 260,000 gallons a year!



#### Report all leaks immediately.

When looking for water-saving opportunities, fixing leaks is on top of the list. On average, leaks can account for more than 6 percent of a facility's total water use. Leaks often go undetected and can add up quickly.

In fact, it is estimated that minor water leaks in the U.S. account for almost 1 trillion gallons of wasted water each year. That's enough water for 11 million homes!

If you see a leak, say something quick!

The EPA estimates that  
introducing water conservation  
measures can cut restaurant  
operating costs by 11%.



#### Report constantly running equipment.

##### Reverse Osmosis

It is normal for RO Units to make a hissing sound directly after use; however, if the hissing continues for a long time or starts randomly, it needs service.

##### Water Softener

Water Softeners can regenerate automatically, manually, or at a defined interval. If you hear it running frequently or outside of normal run times, report it.

##### Toilets

If you hear a toilet running, report it. No toilet should run constantly and can waste over 20,000 gallons per month!

##### Drips

Drips may not look like a lot of water, but they can add up fast. One drip a second can waste over 3,000 gallons per year!

##### Constant Water Flows

From hot water heaters to drink machines, any equipment that is using water constantly is suspect and should be reported.

# Daycare center

**2/2/2016  
Water  
Efficiency  
Checkup**

**Fixed toilet issues  
and started  
utilizing smart  
irrigation controller  
to full capabilities.**

**Over  
1,000,000  
gallons  
saved since  
checkup.**

# Brewery

**2/25/16  
Water  
Efficiency  
Checkup**

**Irrigate desert-  
adapted plant  
material  
according to  
landscape water  
budget.**

**425,000  
gallons  
saved on  
landscape  
since  
checkup.**



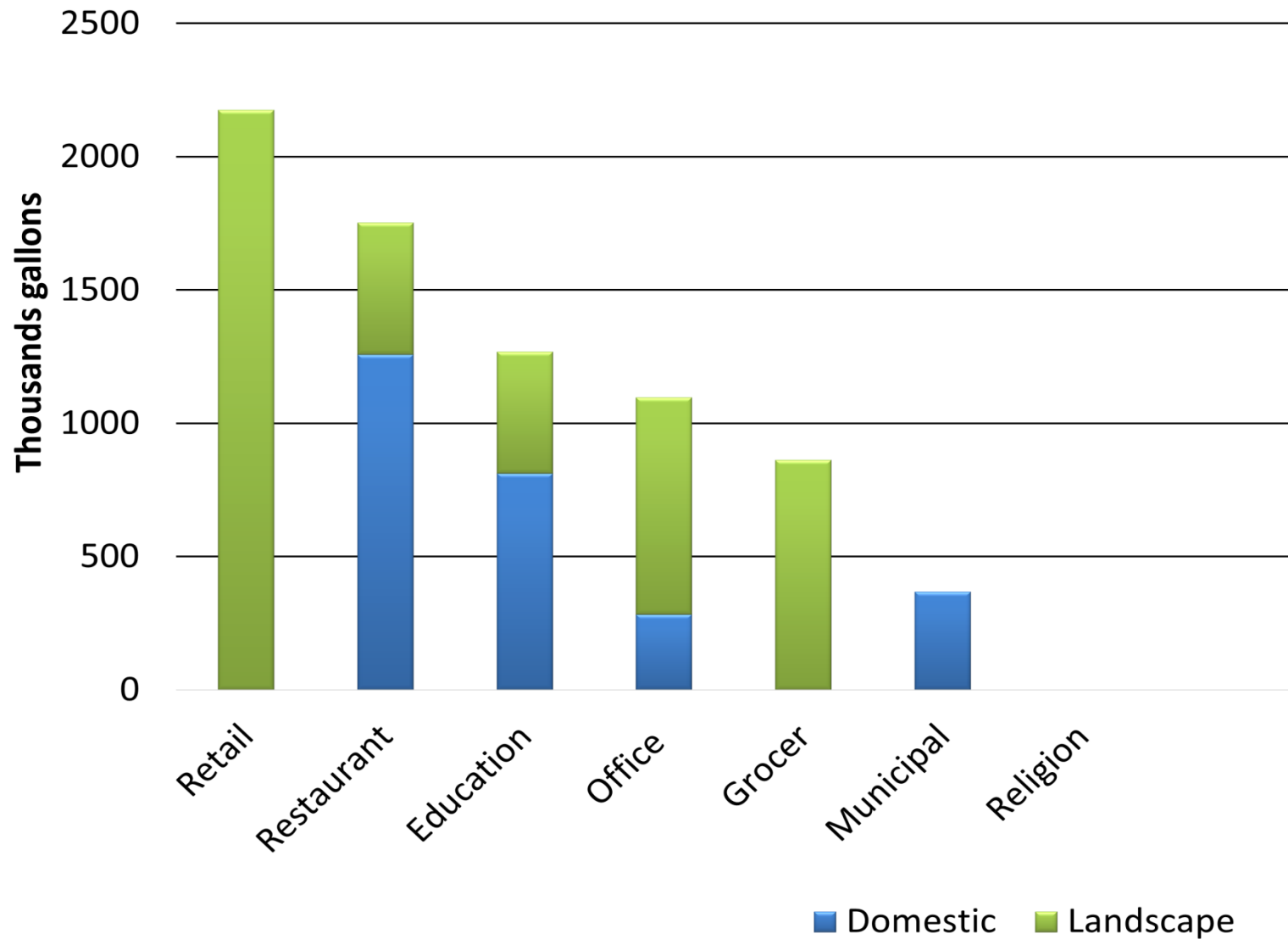
# Breakfast, Lunch, and Dinner Restaurant

**5/18/2016  
Water  
Efficiency  
Checkup**

**Installed 0.5 gpm  
aerators,  
replaced pre-  
rinse spray valve,  
proper water  
softener  
maintenance.**

**131,000  
gallons  
saved inside  
restaurant.**

# Water savings by sector



# Annual program savings

Domestic gallons saved	2,584,000
Landscape gallons saved	4,800,000
<b>Total gallons saved</b>	<b>7,384,000</b>

# Annual program savings

Total active participants (receive monthly email updates)	67 (up from 30!)
Water efficiency checkups since 2015	49
<b>Average annual gallons saved per participant</b> ( <i>based on active participants</i> )	<b>246,000</b>

### 3. **Maintain** your water savings.



# Providing basic information... powerful

- Disjointed world between bill payer, property manager responsible for site, owner who would pay for any upgrades, landscape contractor who is hired by property manager...

# Providing basic information... powerful

- Many stakeholders that need communicated this information:
  - Owner/board
  - Property management company
  - Landscape contractor for site

# Enter the Water Use Scorecard

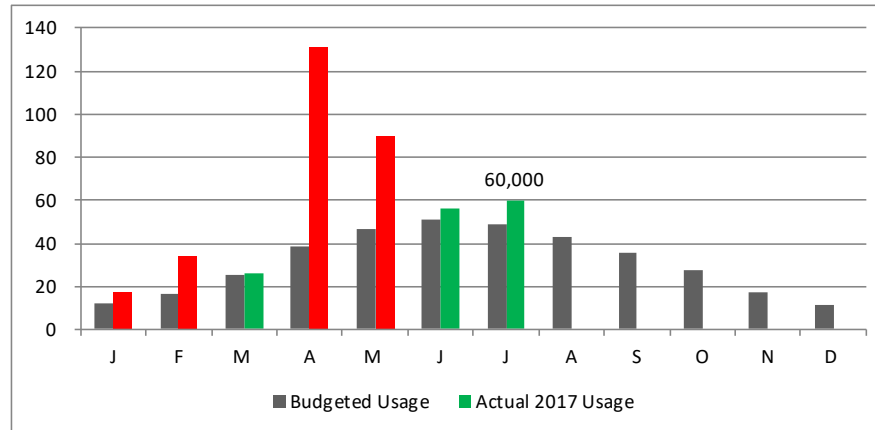


# Development of the Scorecard

- ▷ Realization that monthly water use updates needed
- ▷ We learned the lesson from our HOA water budget program. Savings don't persist without constant reinforcement.
- ▷ Needed a time-efficient way to inform stakeholders on-the-ground of monthly water use (because most of the time, those with the ability to affect water use, don't see the bills!)



# Landscape Water Budget Scorecard



## Monthly Water Budget

22 %  
10,800 gal

ON TRACK

Great job!

## Year-to-Date Water Budget

73 %  
174,000 gal

OVER BUDGET

Consider reducing watering frequency.

## Year-to-Date Financials

\$305

OVER BUDGET

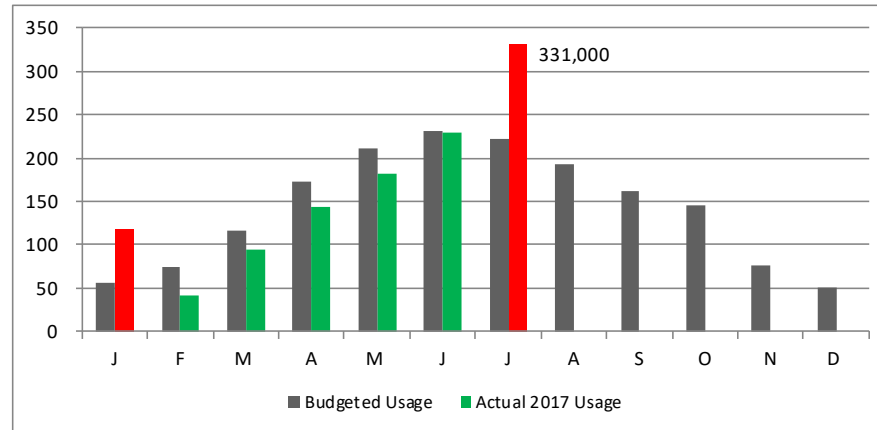
Extra water use adds up.

## Year-to-Date Water Use

414,000 gal

TOTAL

For calendar year 2017



## Monthly Water Budget

49 %  
108,600 gal

**OVER BUDGET**

**Inspect irrigation system for leaks.**

## Year-to-Date Water Budget

5 %  
54,000 gal

**OVER BUDGET**

**Within 20% of the budget is considered success!**

## Year-to-Date Financials

\$97

**OVER BUDGET**

**Great job!**

## Year-to-Date Water Use

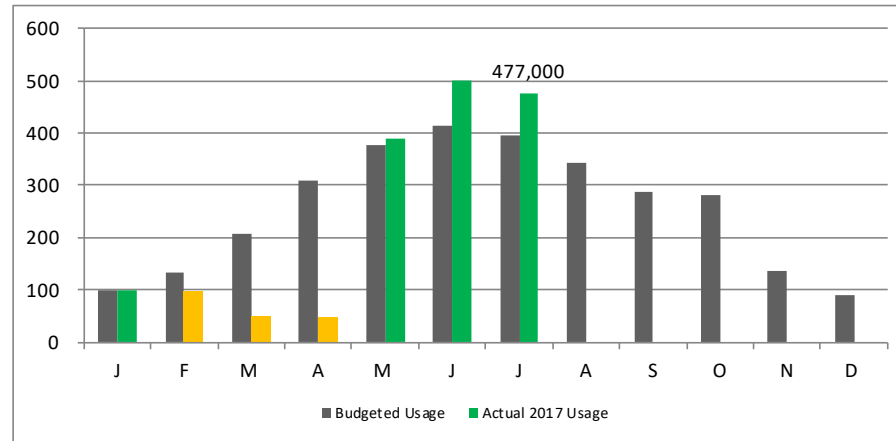
1,138,000 gal

**TOTAL**

**For calendar year 2017**



# Landscape Water Budget Scorecard



## Monthly Water Budget

**20 %**  
**80,400 gal**

**OVER BUDGET**

Within 20% is awesome!  
Great job!

## Year-to-Date Water Budget

**14 %**  
**277,000 gal**

**UNDER BUDGET**

You're an Irrigation Rock  
Star!

## Year-to-Date Financials

**\$498**

**UNDER BUDGET**

Saving water pays off!

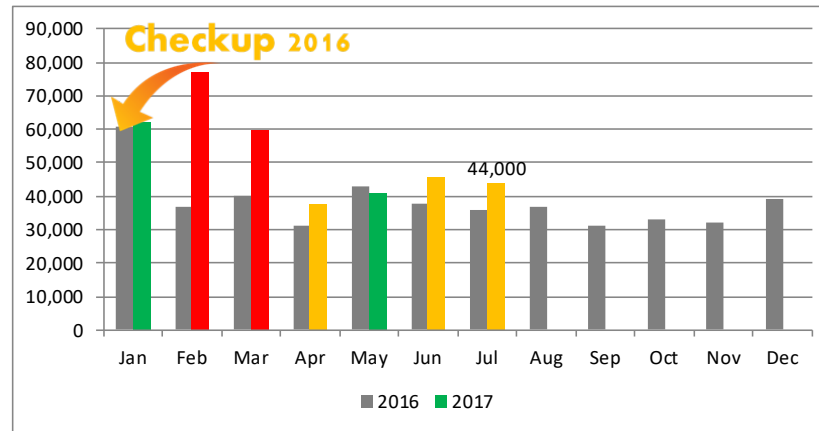
## Year-to-Date Water Use

**1,657,000 gal**

**TOTAL**

For calendar year 2017

# Indoor Water Use Scorecard



## Monthly Difference

**22 %**  
**8,000 gal**

**OVER**

**Check your toilets for leaks.**

## Year-to-Date Difference

**29 %**  
**82,000 gal**

**OVER**

**Check your water purification systems.**

## Year-to-Date Financial Difference

**\$322**

**OVER**

**Extra water use adds up**

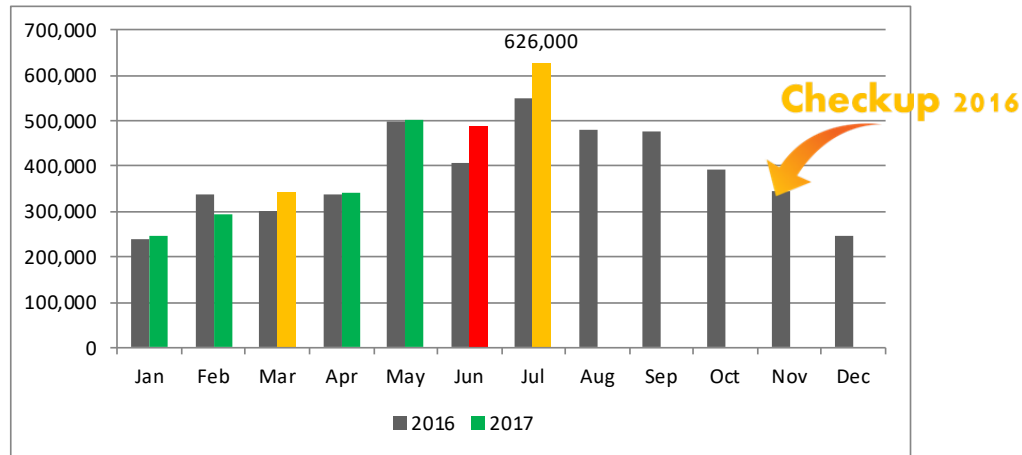
## Year-to-Date Water Use

**368,000 gal**

**TOTAL**

**For calendar year 2017**

# Indoor Water Use Scorecard



## Monthly Water Use

**14 %**  
**76,000 gal**

**OVER**

**Check cooling tower float for constant flow.**

## Year-to-Date Water Use

**6 %**  
**172000 gal**

**OVER**

**Ensure cooling tower maintenance is up-to-date.**

## Year-to-Date Financials

**\$676**

**OVER**

**Extra water use adds up!**

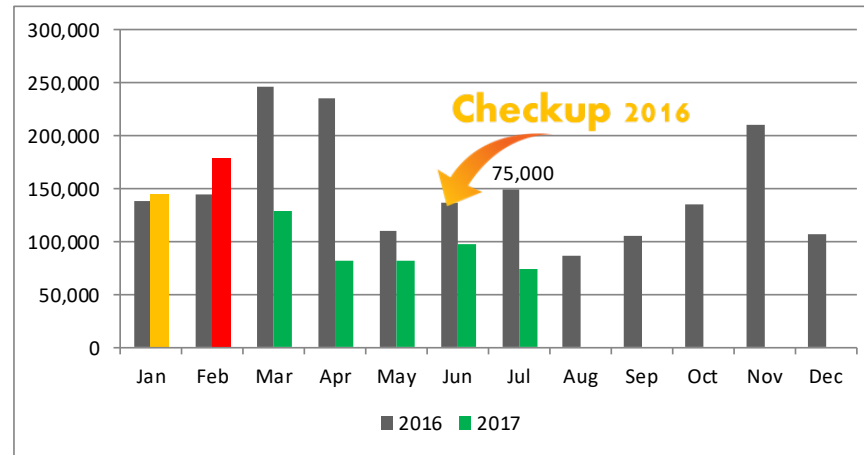
## Year-to-Date Water Use

**2,840,000 gal**

**TOTAL**

**For calendar year 2017**

# Indoor Water Use Scorecard



## Monthly Water Use

**50 %**  
**74,000 gal**

**LESS**

**Another month in the  
green!**

## Year-to-Date Water Use

**32 %**  
**373000 gal**

**LESS**

**Excellent water savings!**

## Year-to-Date Financials

**\$1,466**

**SAVED**

**Saving water pays off!**

## Year-to-Date Water Use

**790,000 gal**

**TOTAL**

**For calendar year 2017**

**4. Promote:** Utilize free promotional materials provided by Gilbert Water Conservation to share your accomplishments with your customers.





# BIG WATER SAVINGS, LITTLE CUSTOMERS



CHILDREN'S  
LEARNING  
ADVENTURE  
**SAVES BIG**



**MONITORS  
INDOOR  
WATER USE**

**SMART  
CONTROLLER  
IRRIGATES  
LANDSCAPE**

**380,000**

GALLONS SAVED  
BY CHECKING  
FOR LEAKING  
TOILETS



**149,000**

GALLONS SAVED  
BY ADJUSTING  
IRRIGATION TO  
LOCAL CLIMATE  
CONDITIONS

**GILBERTAZ.GOV/WATERWISE**



Let's  
Celebrate

**EARTH MONTH**

Gilbert Style!

Promote Water  
Wise Gilbert  
program  
champions in  
hopes of enticing  
others and driving  
consumer  
demand



**SAVE • PLEDGE • WIN**

[gilbertaz.gov/water](http://gilbertaz.gov/water)

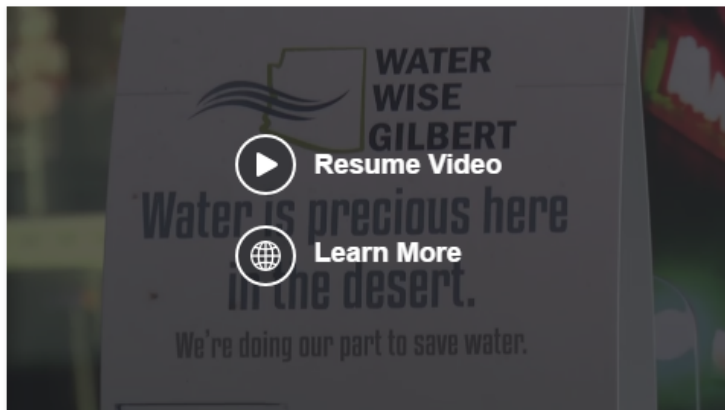


## Gilbert Town Hall

April 17 at 8:52am · 🌐

CONTEST: Water is precious here in the desert and Gilbert businesses are doing their part to save. Find out who is Water Wise Gilbert and how to join the club at [www.gilbertaz.gov/waterwise](http://www.gilbertaz.gov/waterwise).

Share your comments below for a chance to win \$20 to Water Wise Gilbert business [Liberty Market](#). Two winners will be randomly selected and notified. Must be local to pick up gift certificate.



### Water Wise Gilbert

[Learn More](#)

8.4K Views

[Like](#) [Comment](#) [Share](#)

[You](#), [Eric Braun](#), [Jennifer Alvarez](#) and 48 others

[Chronological](#)

2 shares



**Andrew Kellie Burkhardt** Love Liberty Market. Best blueberry pancakes ever! Glad to hear they are water wise as well. Thanks for a chance to enter. - Kellie  
Like · Reply · [1](#) · April 17 at 5:30pm · Edited



**Gilbert Town Hall** [✓](#) Thanks for your comments, Kellie! 😊  
Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:07am



**Andrea Santacruz Brown** Love Flancer's and liberty market!  
Like · Reply · April 17 at 8:11pm



**Gilbert Town Hall** [✓](#) Thanks for your feedback, Andrea!



**Richard Burkhardt** Liberty Market has an awesome local feel. Truly one of the gems of Gilbert. Thank you for being water wise!!

Like · Reply · April 17 at 8:11pm



**Gilbert Town Hall** [✓](#) We love our Water Wise businesses! 😊❤️

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:08am



**Michelle Potter** In almost 27 yrs of living in Gilbert I have never been to Liberty Market. Guess I must try it.

Like · Reply · April 17 at 8:30pm

[View 1 more reply](#)



**Gilbert Town Hall** [✓](#) Hope you get to try it soon, Michelle!

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:09am



**Arielle Alvarez** Liberty market is so delicious!!

Like · Reply · April 17 at 8:55pm



**Gilbert Town Hall** [✓](#) Yum yum yum! ❤️

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:09am



**Sharla Best** Love Liberty Market. Love H2O. Conserve and be water wise ❤️ Go Gilbert, born and raised!

Like · Reply · April 17 at 9:49pm · Edited



**Gilbert Town Hall** [✓](#) Love this! Thanks Sharla! 😊

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:09am



**Jill Sneddon Ostergaard** I wish everyone would be water wise! Awesome that businesses like Liberty Market are!

Like · Reply · April 18 at 7:16am



**Gilbert Town Hall** [✓](#) We think so, too, Jill! 😊

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 9:09am



**Katie Pollak** This is so great!

Like · Reply · [1](#) · April 18 at 10:23am



**Gilbert Town Hall** [✓](#) We agree, Katie!

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 11:57am



**Ashley Barinka** Great to hear this! Liberty Market is awesome too. We love Gilbert.

Like · Reply · [1](#) · April 18 at 11:52am



**Gilbert Town Hall** [✓](#) We ❤️ you! 😊

Like · Reply · Commented on by Bobby Gilbert (?) · April 18 at 11:58am



Gilbert Town Hall

April 24 at 9:15am · 🌐

Join Mayor Jenn Daniels in using water and energy efficiently and help Gilbert win the title of "Most Water Wise" in the nation! Make a pledge to save water and energy: [www.mywaterpledge.com](http://www.mywaterpledge.com). The city with the most pledges is entered to win great prizes, like a Toyota Prius!

ON TOP OF THAT, share your comments below for a chance to win \$40 to Water Wise Gilbert restaurant JC's Steakhouse! One winner will be randomly selected and notified. Must be local to pick up gift certificate.



👍 Like    💬 Comment    ➦ Share

👍❤️😱 Eric Braun, Jennifer Alvarez and 241 others

Chronological ▾


29 shares

View 31 more comments

# Program cost

Program	\$ / thousand gallons
HOA Water Budget program	\$0.23
Water Wise Gilbert	\$3.06
Residential water checkup	\$3.33
Turf conversion rebate	\$6.00
Municipal Facility Retrofit	\$10.21
Water acquisition costs for 100 year water right	\$10.74

# Growing Pains

- Time management
  - Customer Relations Management Software
  - Prioritize actual savings vs community visibility
  - Waterfluence
- Responsiveness
  - 3-4 months until response
  - Generally good feedback....eventually
- Cooling towers

# Example....

WATER  
Hi Annikki,

A check of fixtures/plumbing throughout the facility revealed no leaks or constant flows. My thinking is the slight increase in domestic water usage this past month is due in part to added heads (7 new employees), Cooling Tower PM, and recent PM's of our large CNC machines, i.e. coolant change-outs. I think this past month's usage was mostly an anomaly, so it will be interesting to see what the next cycle comes in at.

As for the landscape water usage, the property manager had the water shut off about two weeks ago what with the rain events and all. Also, a new landscape management company is now under contract and is tasked with bringing water usage under control, so we'll find out soon enough the effects of this.

Thank you for the continued monthly reporting. 😊

Regards,

56 %	OVER BUDGET	Check for a stuck valve and large puddles.
1,338,000 gal		
Year-to-Date Financials		
\$2,409	OVER BUDGET	Extra water use adds up.
Year-to-Date Water Use		
3,711,000 gal	TOTAL	For calendar year 2017

WATER

Year-to-Date Water Use		
14 %	MORE	Check for constant flows.
46000 gal		
Year-to-Date Financials		
\$181	OVER	Extra water use adds up
Year-to-Date Water Use		
376,000 gal	TOTAL	For calendar year 2017

## Up next...

- Staff time efficiency through software
- Certification criteria
- Continual improvement



# Questions?

Chiliquiles Burger on Jalapeno  
Ciabatta



BRILLIANT BURGERS  
+  
WATER WISE



Liberty Market partnered with Gilbert Water Conservation to improve the water efficiency and has been saving ever since! In fact, they saved over 130,000 gallons of water last year!

We are proud to label them:

