Using Data to Engage with Water Users

How to improve our water conservation and outreach efforts

Matt Olsen, Communications Department Manager
Todd Schultz, Senior Business Data Analyst
What do Utahns think about water use?

Are you familiar with how much **MONEY** you spend on water?
- Yes 63%
- No 37%

Are you familiar with how much **WATER** you use each month?
- Yes 30%
- No 70%

* 2014 iUTAH Household Survey of randomly selected households in neighborhoods across three Utah valleys – Cache, Salt Lake, and Heber/Midway
How do Utahns perceive their use compares to others?

- 53 percent of respondents perceive themselves as being average in their water use.
- 35 percent think they use less than average.
- Only 12 percent think they use more than average.

* 2014 iUTAH Household Survey of randomly selected households in neighborhoods across three Utah valleys – Cache, Salt Lake, and Heber/Midway
A recent survey from GoBankingRates.com finds more than half of Americans have less than $10,000 saved for retirement, with one in three having nothing saved.
A recent survey from GoBankingRates.com finds more than half of Americans have less than $10,000 saved for retirement, with one in three having nothing saved.
Effective water conservation programs are based on three primary building blocks:

- Regulations
- Education
- Incentives
We and our water users have lacked timely and relevant information to guide our actions.
“We want to turn rate payers into educated water consumers.” – Bart Forsyth, Assistant General Manager
# Becoming an Educated Water Consumer

## Relevant Personalized Information
- Water use trends (hourly, daily, monthly, yearly)
- Leak alerts
- Correlation between water used and money spent
- Customized water use tips
- Water units vs. total gallons

## Relevant Comparisons
- Efficient Use Benchmarks
  - Indoor and outdoor watering needs based on weather, landscape needs, and number of people living at the home
- Social Norms Theory
  - Misperceptions about our peers influences our own behaviors
  - Counter by showing what peers are really doing
Account Summary

Account Number
825 South 1300 West
West Jordan, UT 84088
Phone (801) 565-4300

Service Address
LOOKOUT PEAK DR
RIVERTON, UT

Bill Date
5/8/2017

Previous Balance
$16.94

Adjustments
$0.00

Last Payment
$0.00

Interest/Penalty
$0.00

Unpaid Balance
$16.94

Current Charges
$89.24

TOTAL DUE
$106.18

Due Date
6/5/2017

Billing details located on back.

Visit mywater.jvwwcd.org for detailed account and water use information.
managing your USAGE

GALLONS OF WATER USED IN APRIL 2017

YOU
NEIGHBOR AVERAGE
EFFICIENT USE

43,926
6,560
3,516

how do you compare?

Compared to efficient use this April:
You used an additional 40,410 gallons of water, costing you an extra $79.20 this month.

water use TIP

Learn about our conservation programs and how you can participate at ConservationGardenPark.org.
**Daily Usage**

Billing total may be different from actual water use. Your bill is based on 1,000 gallon water use increments.

**Total Gallons Used This Billing Period**

43,926

**Daily Average**

April 2017
1,464 gallons/day

**Water Use Tip**

Learn about our conservation programs and how you can participate at ConservationGardenPark.org.

**Due Date**

6/5/2017

Total Amount Due

$106.18
Your next bill is due on:

Dec 5, 2017 in the amount of $250.41

If your statement download does not begin after clicking the link, try right-clicking and selecting ‘Open Link in New Tab.’

REPORTS

<table>
<thead>
<tr>
<th>Report Date</th>
<th>View / Download Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 06, 2017</td>
<td>View / Download PDF</td>
</tr>
</tbody>
</table>

PAST STATEMENTS

<table>
<thead>
<tr>
<th>Statement Period</th>
<th>View / Download Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 01, 2017 - Nov 01, 2017</td>
<td>View / Download PDF</td>
</tr>
<tr>
<td>Sep 01, 2017 - Oct 01, 2017</td>
<td>View / Download PDF</td>
</tr>
<tr>
<td>Aug 01, 2017 - Sep 01, 2017</td>
<td>View / Download PDF</td>
</tr>
<tr>
<td>Jul 01, 2017 - Aug 01, 2017</td>
<td>View / Download PDF</td>
</tr>
</tbody>
</table>
Your current notification settings are:

- **Water Bill**: Receive notifications when your bill is due.
- **Semi-Annual Report**: Review your recent usage and see how you are doing compared to others. Delivered twice a year with tips to help you prepare for upcoming seasons.
- **Leak Detection**: (Coming Soon) We can send you a notification when things don’t seem quite right with your meter readings. For example, if there are signs of a leak like a toilet running or a sprinkler leaking.
- **Emergency Notifications**: This notification will only be sent in emergencies and for water shut-off notices.
- **Other District Publications**: Receive our newsletter, legislative updates, water quality reports, etc.
- **Water Use Alerts**: Set up an alert to know when you’ve used a certain number of gallons each month.

Please select your preference for usage alerts in gallons used/billing cycle:

- 3,000
- 6,000
- 9,000
- 12,000
- 15,000
- 20,000
- 25,000
- 30,000
- 35,000
- 40,000
- 50,000
my PROFILE

2

NEEDED

acre

11,000

sq. ft.

756

sq. ft.

people in your household

lot size

lawn area

planting bed area

Charts are based on your profile information. For the most accurate comparisons, please make sure your profile is correct. Changes can be made online.

UPDATE YOUR PROFILE AT MYWATER.JWWCD.ORG
your 2017 summer water use **BY MONTH**

---

**YOU**

Your total actual indoor and outdoor water use.

---

**NEIGHBOR AVERAGE**

An average of what your 100 closest neighbors would use if they had your house and landscape.

---

**EFFICIENT USE**

What you **NEEDED** to use based on weather and your profile information.

---

**want to DO BETTER?**

We offer many programs that will help you water **MORE EFFICIENTLY** next year. See the other side of this sheet to learn more.
Did you know most water waste happens in the fall? It’s easy to over-water as the weather begins to cool, mainly because we forget to change our sprinkler clocks. Want an easy way to remember? Set a reminder on your phone or mark it on your calendar. Or visit our water guide at jwcd.org/guide.

**Dial It Down**

Dial back your watering. Most water waste happens in the Fall.

---

**tip 1**

**Drain water** from above-ground swimming pools and sprinkler lines following manufacturer’s and installer’s directions. Do not put antifreeze in these lines unless directed.

**tip 2**

**Remove, drain, and store** all outdoor hoses. Shut off your sprinkling system. Open any outside faucets to allow water to drain. Keep the outside valve partially open so that the pipe can expand if needed.

**tip 3**

**Check around the home** for other water lines in unheated areas. Both hot- and cold-water pipes in these areas should be insulated.
Jordan Valley Water Conservancy District
2017 Retail Service Area
Single-Family Residential Estimated Outdoor Water Use

Number of Accounts

Estimated Outdoor Water Use (in)

Below Average | Above Average | Above Average and Using More Than Required

*\(n = 5,050\), Average = 26.49", Required = 18.46" + 65% D.U.
How should a water utility prioritize customer engagement strategies?
Strategy #1

Target customers based on water use trends
WATER USE RATIO (WUR)

Managing Your Usage
Gallons of Water Used in April 2017

- **You**: 43,926
- **Neighbor Avg**: 6,560
- **Efficient Use**: 3,516

**You / Efficient Use = Water Use Ratio**

\[
\frac{43,926}{3,516} = 12.49
\]

This Customer used 12.49 times more than what they theoretically needed.
APRIL 2017 WATER USE RATIO – MAP
Strategy #2

Target customers based on ineffective irrigation practices
Customers irrigated a total of 6,236 times from October 15 to November 15, 2017.

Gallons of water were wasted during that time.
So far this year..

Customers irrigated a total of 13,441 times from April 15 to May 17, 2018.
<table>
<thead>
<tr>
<th>Account #</th>
<th>2018 Irrigation Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
</tr>
</tbody>
</table>

Continue on for 2754 more accounts

![Graph showing water use over time with two categories: Indoor Only (green) and Outdoor Watering Used (yellow).]
Strategy #3
Target customers based on leaks
578
Low level leaks detected
Today
May 17, 2018

594,096
Gallons of water will be wasted today
Strategy #4

Avoid targeting customers that underuse water
Your water use last summer was:

Using more than average.

Compared to efficient use:

You saved 91,724 gallons of water and $206.40.

Should we encourage additional water conservation with customers that are dramatically underwatering their current landscape?
July 2017 Comparison Distribution

- Using More Than Average: 1,701
- Efficient: 1,847
- Risk: 1,024
- Good: 517
JULY 2017 COMPARISON DISTRIBUTION
JULY 2017 WATER USE RATIO

SUM(WUR)
- 0.000
- 2.000
- 4.000
- 6.000
- 7.959

USING MORE THAN AVERAGE 😞
GOOD 😊
EFFICIENT 😊
RISK