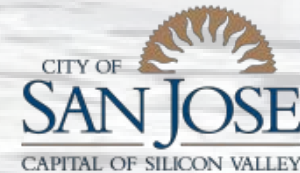
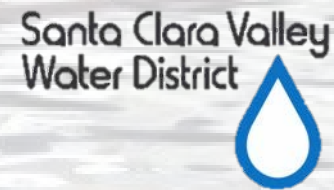


# This presentation premiered at WaterSmart Innovations

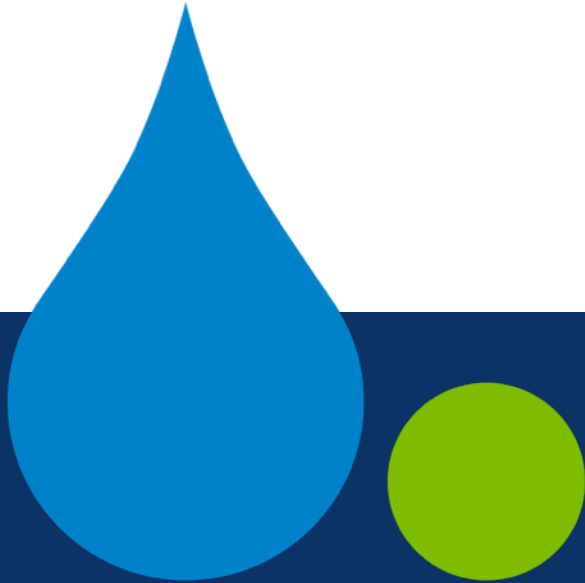
[watersmartinnovations.com](http://watersmartinnovations.com)



# Customer-side Leak Detection Pilot Study



# ABOUT WATERNOW



WaterNow Alliance is a forum for local water leaders who want to champion sustainable, affordable and climate resilient water strategies

# What's the challenge?

## Leak Detection

- On average, 12% of household water use is lost to leaks
- Often, the first sign of a problem is an abnormally high water bill

## Access to the Info

- Water bills often come once a month or bi-monthly
- Bills provided in units not typically understood by customers (e.g. ccfs)

# Customer-side Leak Detection Devices

## Moisture Sensors

- **Strategically placed around the home to sense moisture and send alerts**



## Meter Flow Sensors

- **Attached to the water meter**
- **Monitors the register on the meter**
- **Transmits signal to customer**



## In-line Flow Monitors

- **Installed on the water supply line to monitor flow and send leak alerts**
- **Remote shutoff capabilities**



# In-line Flow Monitors



1. Real time water use
2. Disaggregating water use
3. Units we all understand

# Study Goals

Characterize the typical water savings – **both from leak detection and conservation** – that a customer experiences following installation of one of these devices.

# Pilot Study



**Funders**



**Valley Water**

Clean Water • Healthy Environment • Flood Protection



**Partner  
Cities**



**80 devices in  
single-family  
homes**

**80 control  
group  
households**

**1-year  
study**

**Random  
Control Trial  
Method**





Apply now for your chance to receive a

## FREE LEAK DETECTION DEVICE

WaterNow Alliance, together with its partners, is seeking participants for a study of next generation leak detection devices. Single-family homeowners living in Foster City, Burlingame, San Jose Municipal Water System, and Santa Clara are eligible to apply today!



### Smart Apps Make a Smart Home

Access real-time water use, receive leak alerts, and shut off the water to your home all from your phone.



### Save Water and Money

Use real-time water data and set conservation targets to identify water and money saving opportunities to lower your bill.



### Apply Today

Apply for your chance to participate in a leak detection pilot study and receive a free leak detection device with installation. If you are selected, the device is yours to keep!

**Visit:** [bit.ly/LeakDetectionPilotStudy](https://bit.ly/LeakDetectionPilotStudy)



# Recruitment



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# Recruitment

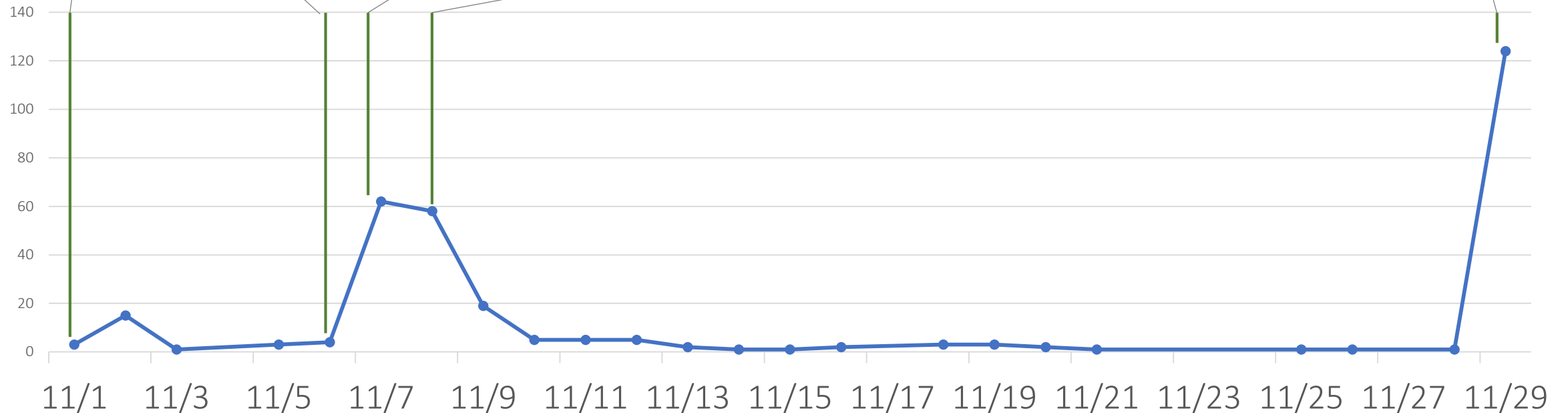
FC press release  
and eNewsletter

SC NextDoor post and tweet; FC  
tweet and retweet from Santa Clara  
Weekly

SJ direct email  
to 3,000+  
customers

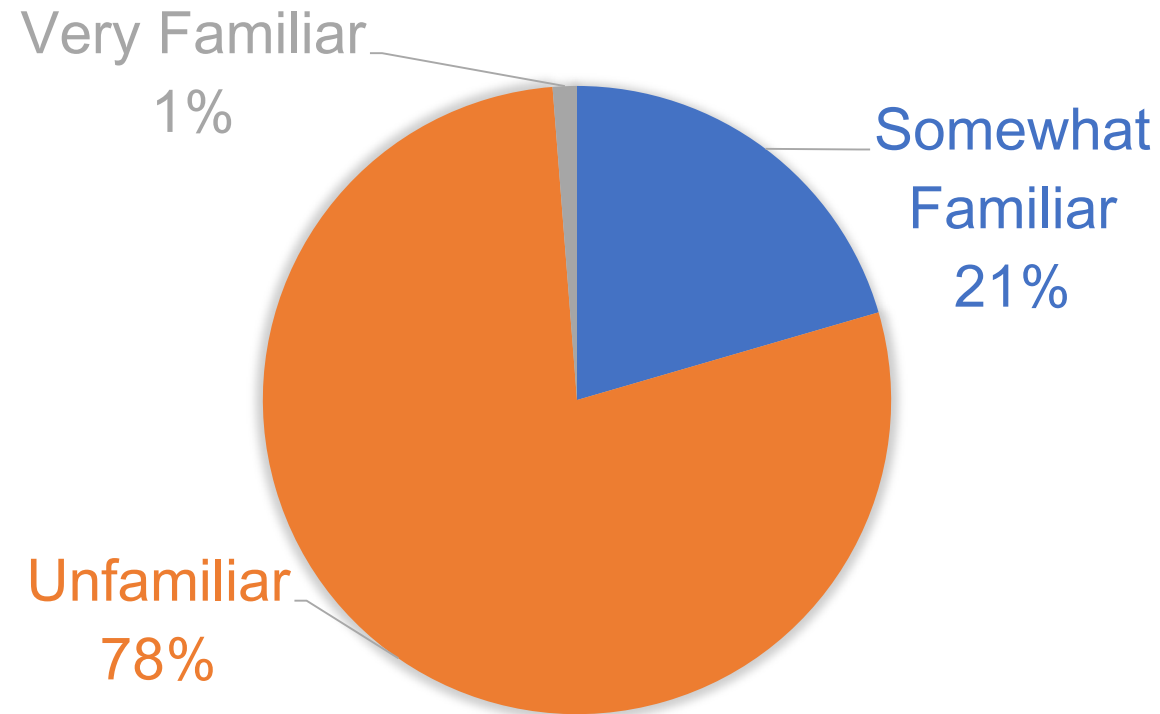
CoB NextDoor post  
and direct email

CoB Facebook post  
and eNewsletter



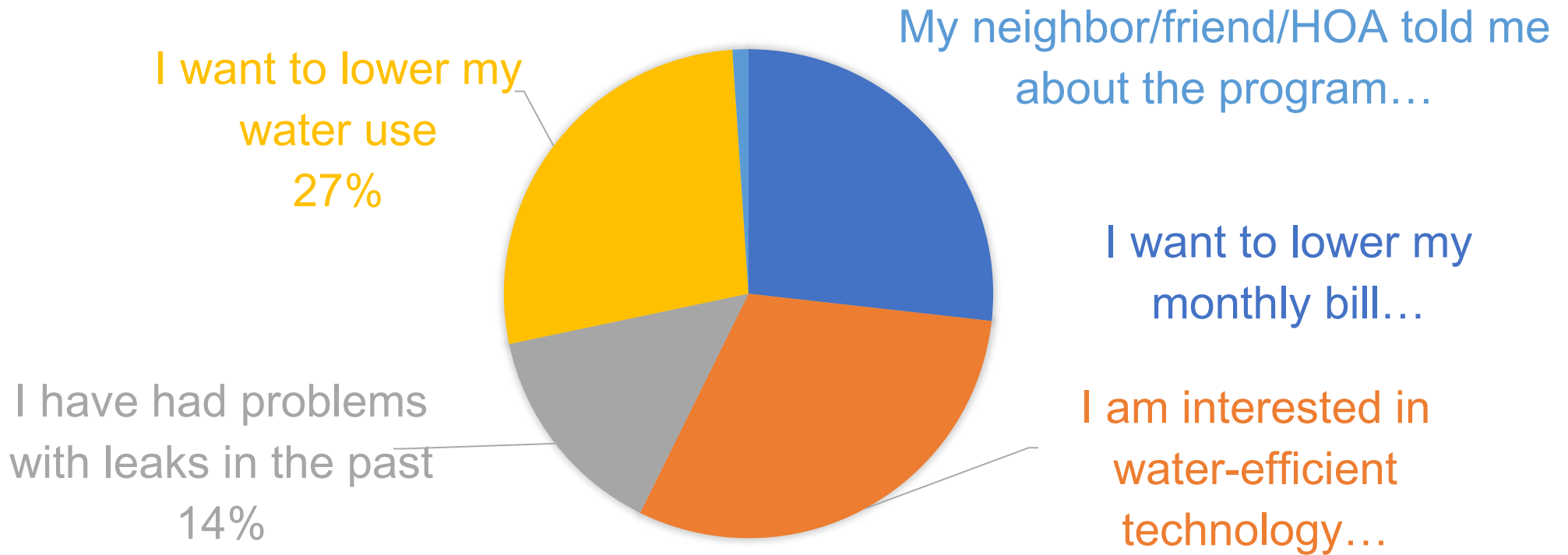
# Recruitment

HOW FAMILIAR ARE YOU WITH LEAK  
DETECTION DEVICES?

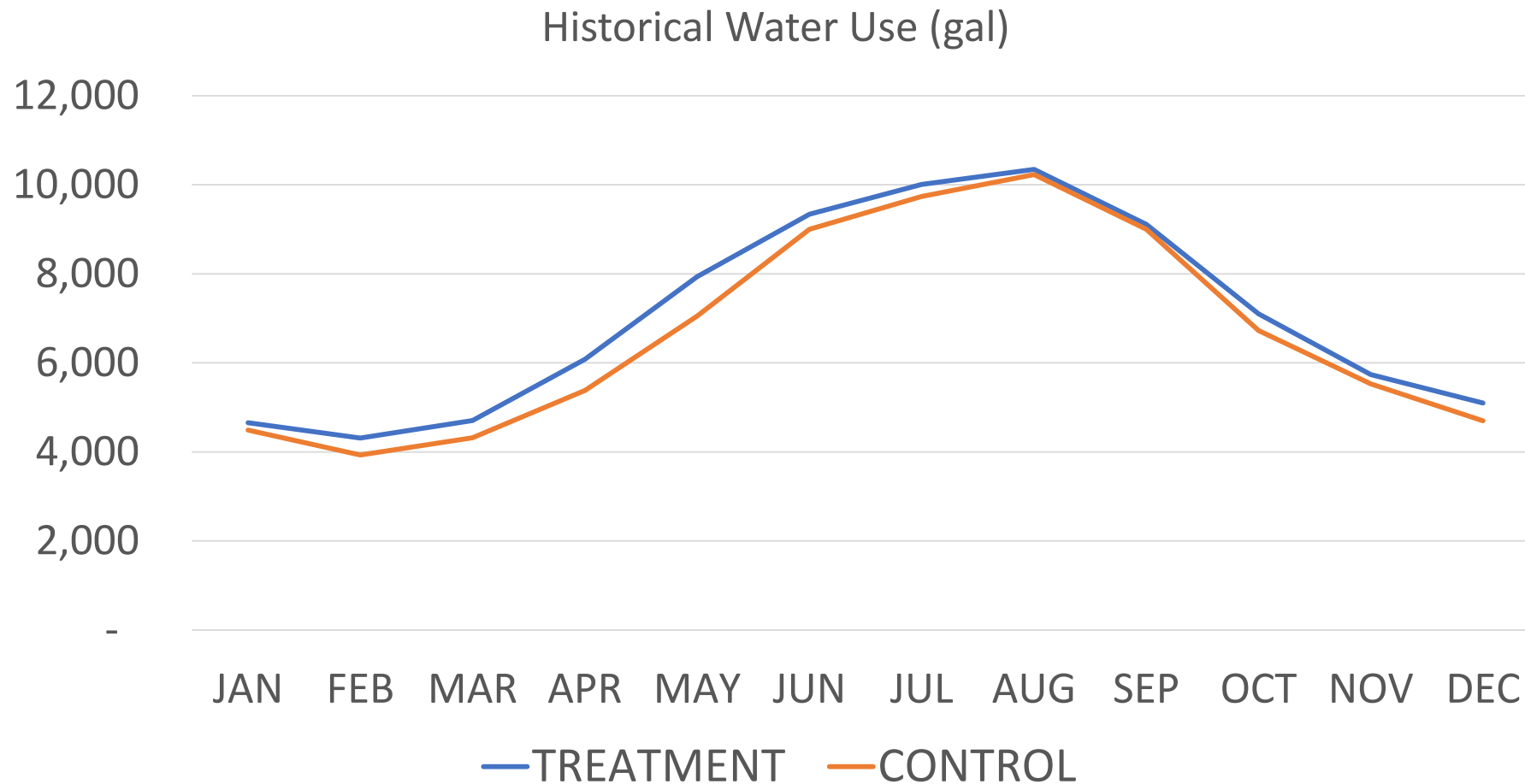


# Recruitment

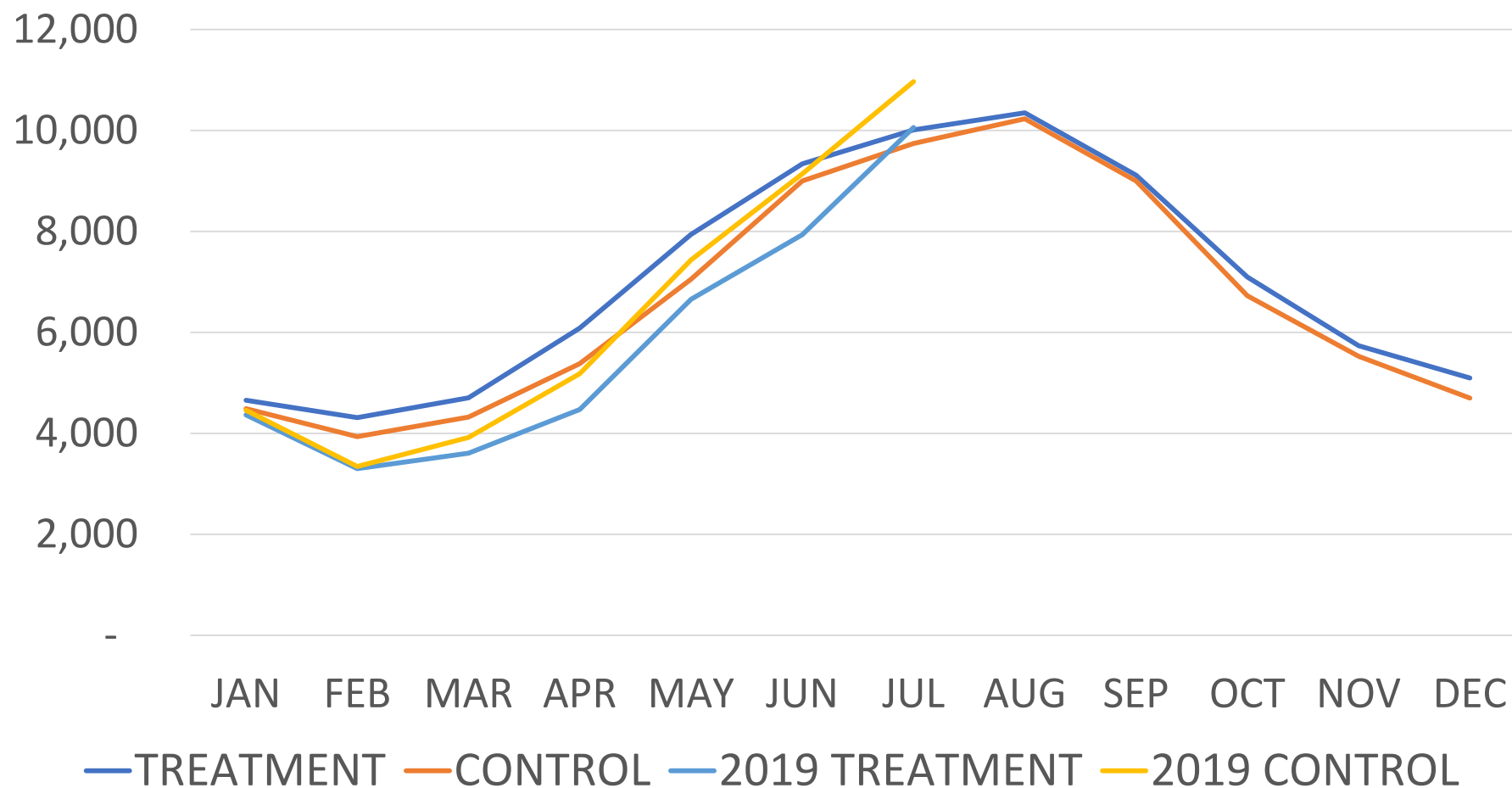
WHY ARE YOU INTERESTED IN APPLYING FOR THE PILOT STUDY?



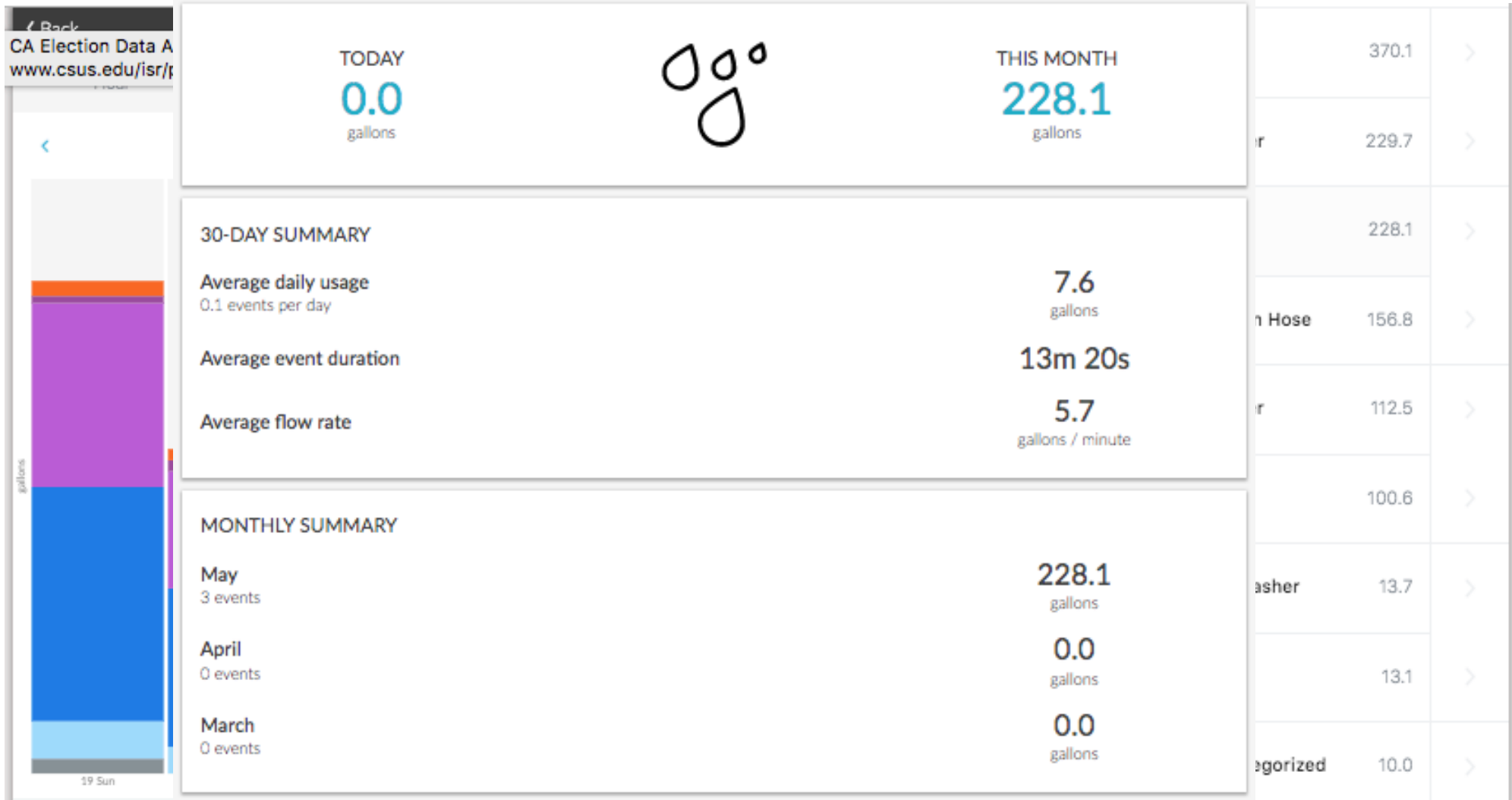
# Pilot Study



# Preliminary Results



# Preliminary Results



# Insights/Lessons Learned

- Free vs. nominal fee – “skin in the game”
- Installer network – recognizing value add to their business accelerates installs
- Streamline installation process
  - Verify installation compatibility
- Clear channel of communication of what is permissible for the cities



# What about AMI?

- Real time water use vs 15 min to 1 hour delay
- AMI is cost prohibitive for many utilities
- Low sign up rate for AMI online portals (~3%-9%)
- Bridge to AMI
  - Early adopters/folks that want to conserve



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