

City of Goodyear Water + Flume



Emerging Water
Technology Symposium
May 2024

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Enterprise Solutions
Flume

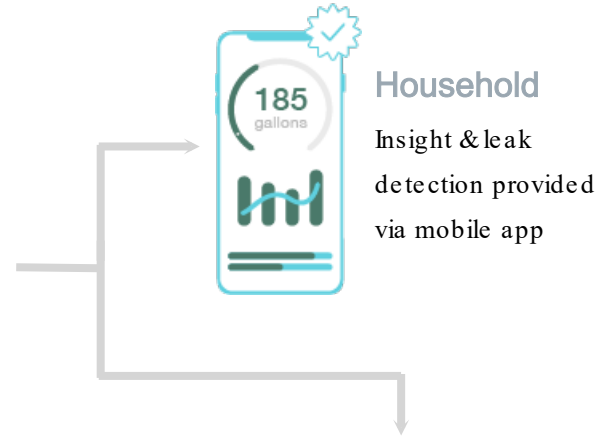


How Water Monitoring Works

Real time water consumption data is transmitted to the cloud

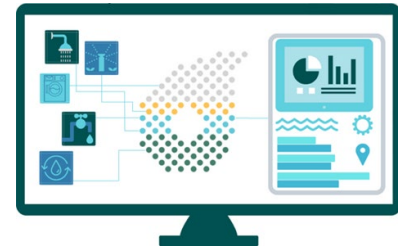


Machine learning algorithms applied to identify consumption by fixture



It Starts Here

The homeowner attaches a sensor to their existing water meter & it captures flow in 5 second intervals



Water Agencies and More

The network shares consolidated data & analytics with water agency

What the Homeowner sees



Leak
Detection



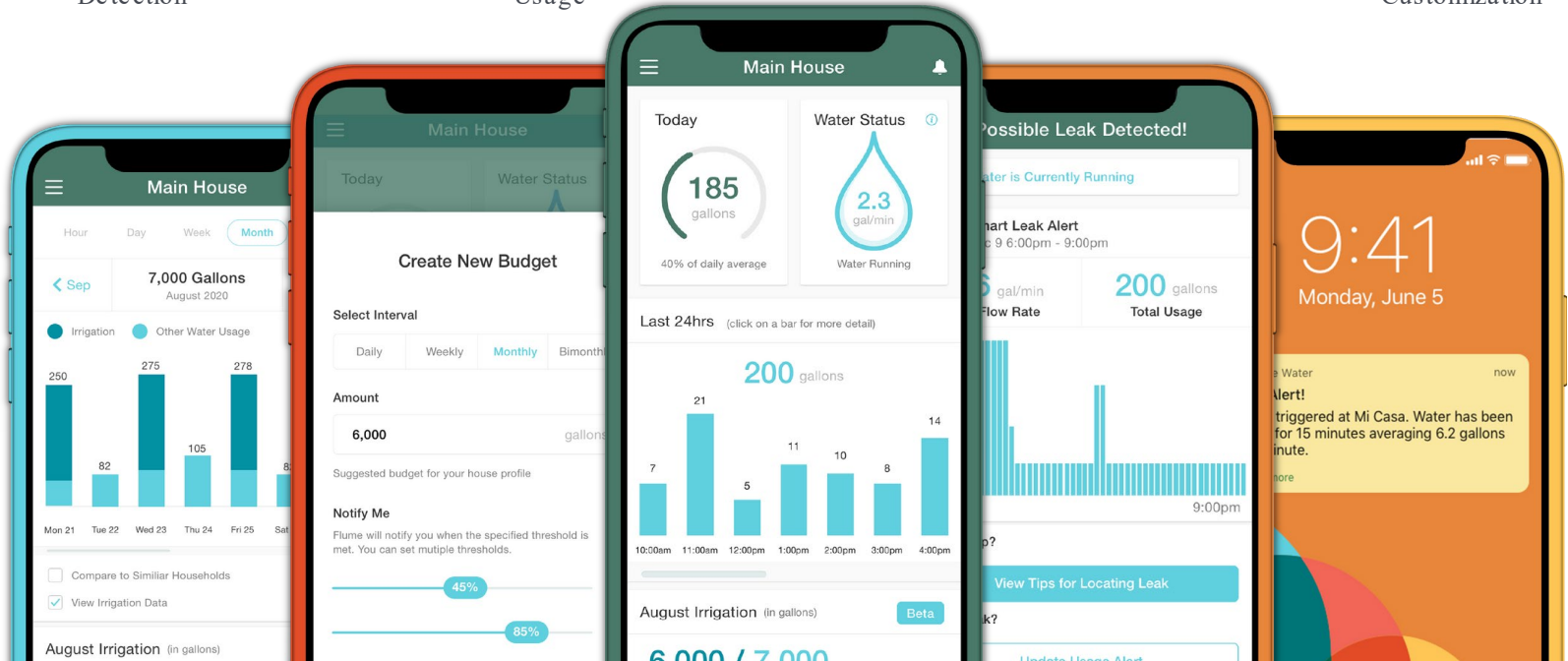
Realtime
Usage



Appliance
Breakdowns



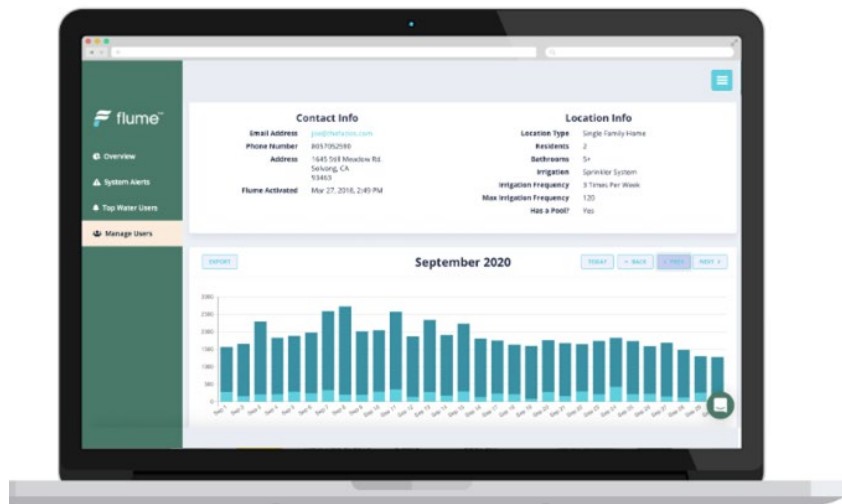
Budgets &
Customization



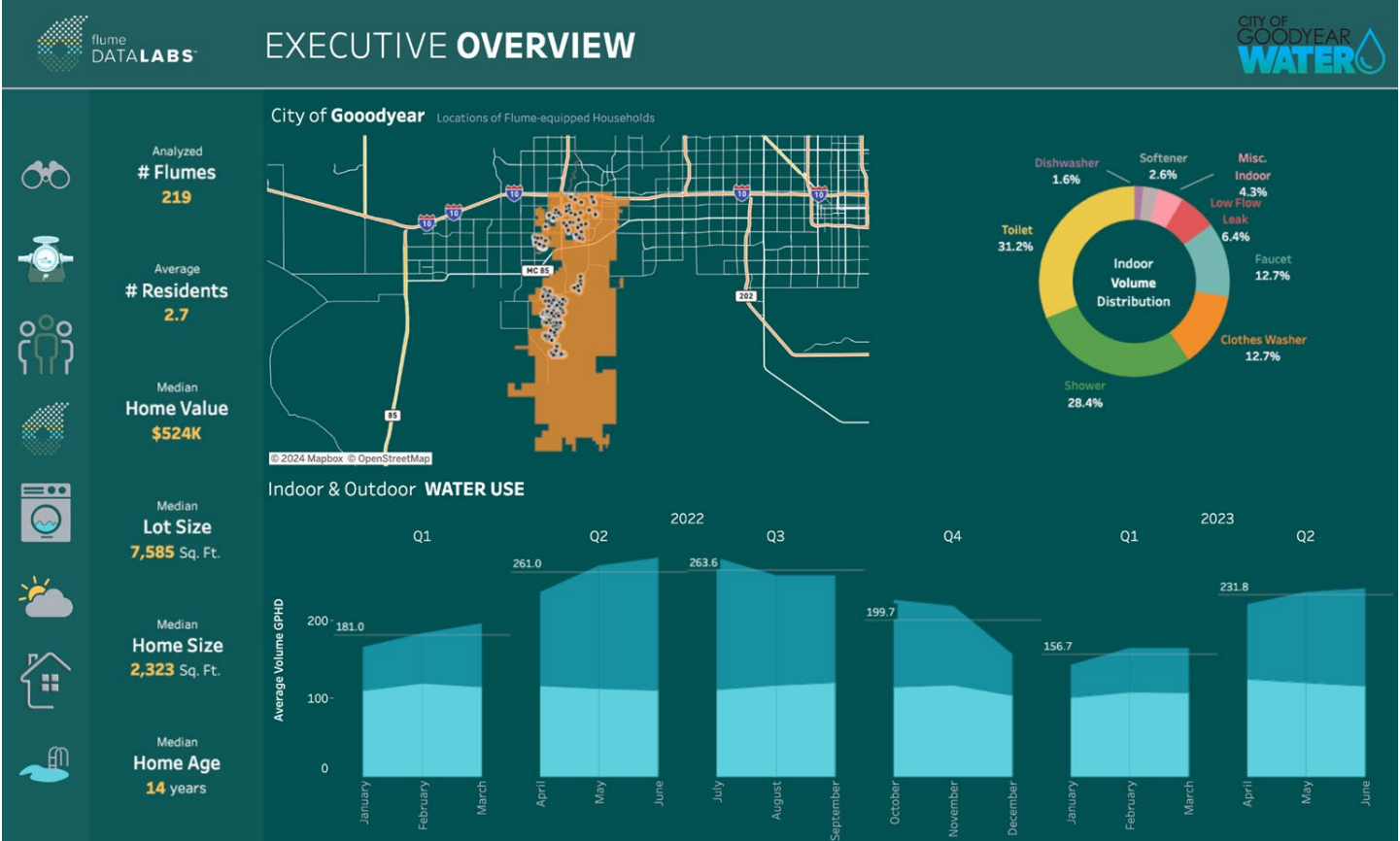
What the Utility sees



Goodyear has realtime access to all customer-specific water use and leak information of all monitored customers in the City.



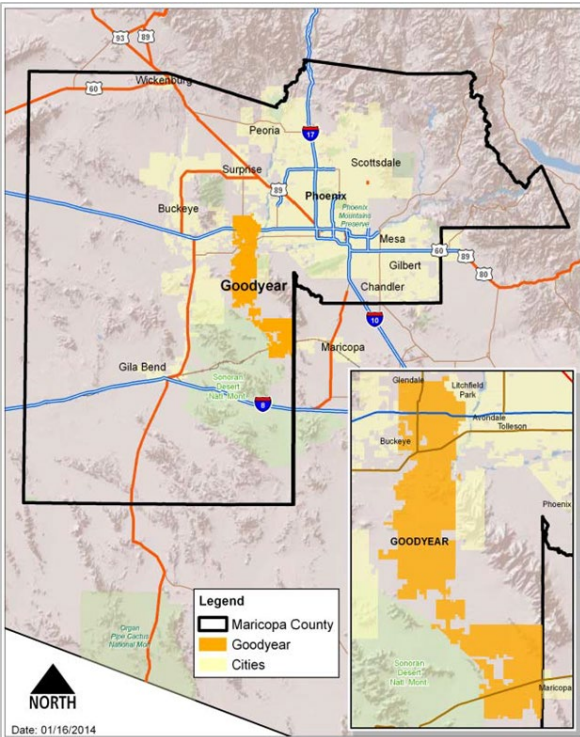
End Use Analysis



Goodyear, AZ



AND GROWING...



- Sonoran Desert
- Low to medium density
- Most homes have yards
- ~23,000 Connections
- Colorado River



Municipal Water Conservation

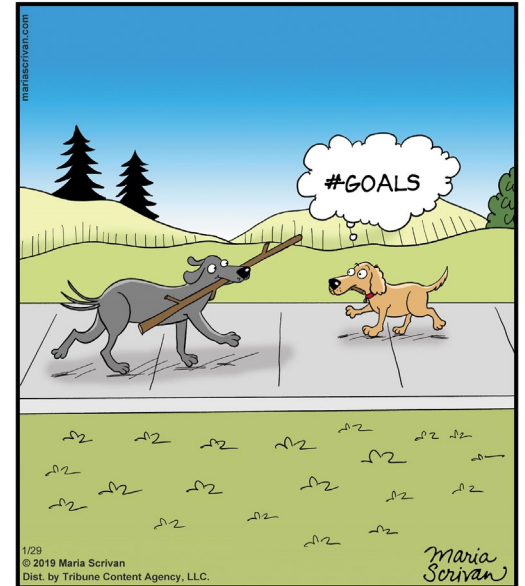


SINGLE FAMILY RES PROGRAM GOALS

We are looking for:

- ✓ Outdoor Water Savings*
- ✓ Indoor Water Savings*
- ✓ Water Use Awareness & Behavior Adaptation
- ✓ Community Culture of Water Efficiency

*Mostly achieved through leak minimization and landscape watering efficiency improvements

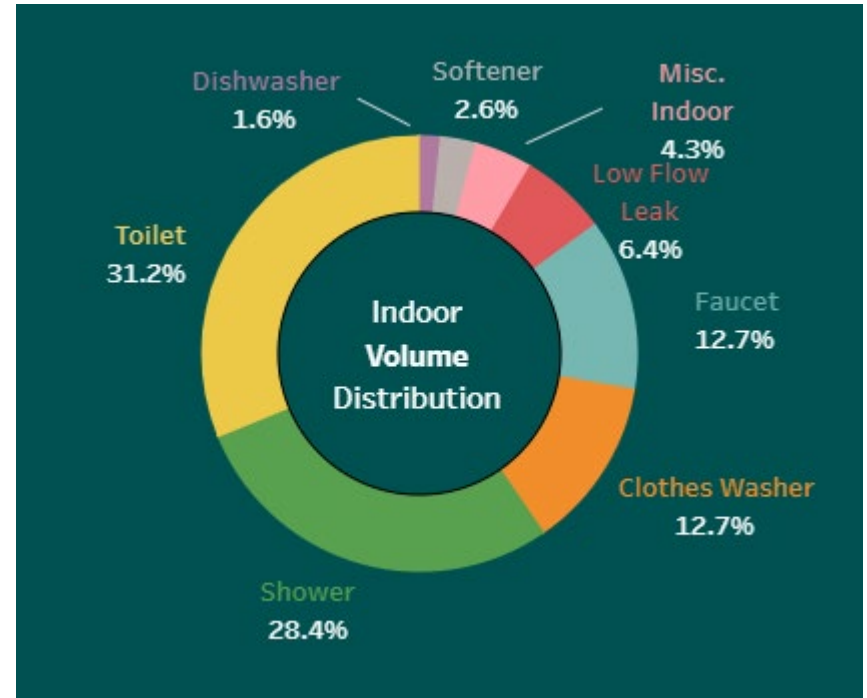


Why Water Monitoring?

PROGRAM GOALS

We needed:

- ☑ Leak Alerts (Custom Thresholds)
- ☑ High Consumption Monitoring
- ☑ Outdoor/Indoor Breakdowns
- ☑ Solution for Seasonal Residents
- ☑ Residential Water Use Analysis



Why Water Monitoring?



PROGRAM IMPLEMENTATION

Low labor, high effectiveness

- ✓ Customer Sign up Page
- ✓ Device mailed
- ✓ Field Assistance offered if needed by resident
- ✓ Water Data Interpretation through Utility Dashboard

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Get Flume For Just \$40 after Rebate from Goodyear!
Only 88 Remaining

[GET OFFER](#)

Goodyear Water & Flume

Special Offer! Get Flume for just \$40 (plus shipping) after rebate from Goodyear Water!

Order now and we will include an extra battery pack to double the life of your Flume for FREE (a \$19.99 value).

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SID OF GOODYEAR WATER

Main House

Today

185
80% of daily average

Water Status
2.3
Water Running

Last 24hrs
200 gallons

Hour	Usage (gallons)
7:00am	2
8:00am	11
9:00am	3
10:00am	11
11:00am	10
12:00pm	8
1:00pm	14

August Irrigation (in gallons)

6,000 / 7,000

100% of Overall Usage for August

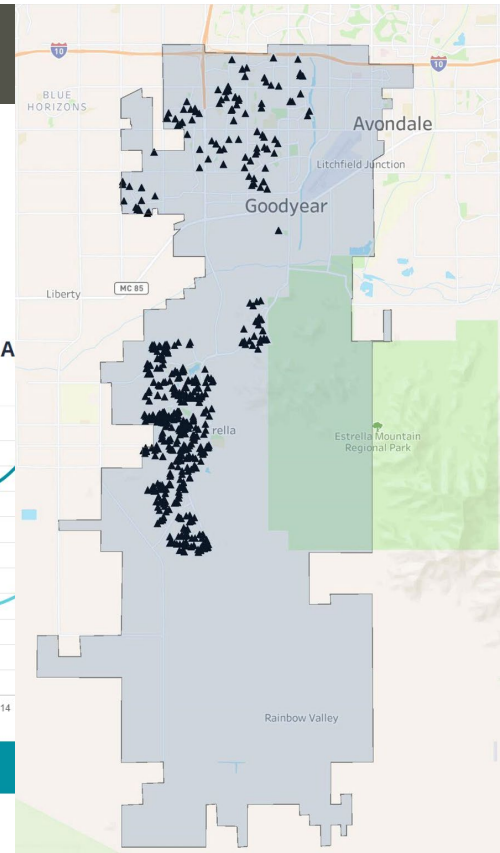
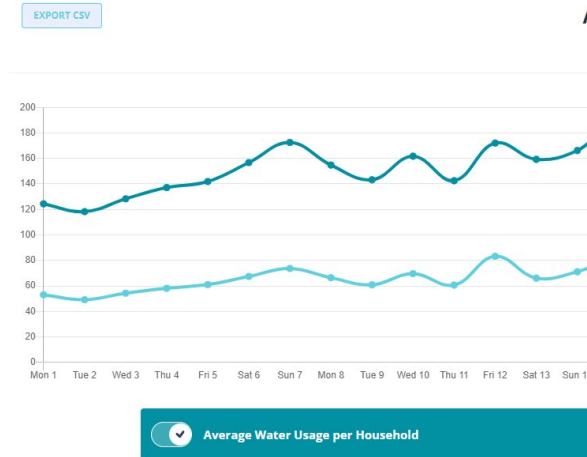
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Why Water Monitoring?



PROGRAM RESULTS

- ✓ 12 – 15% Water Savings
- ✓ ~ 20,000 gal/customer/year
- ✓ ~370 active devices
- ✓ ~83% Engagement Rate
- ✓ Consistent, steady interest through word of mouth

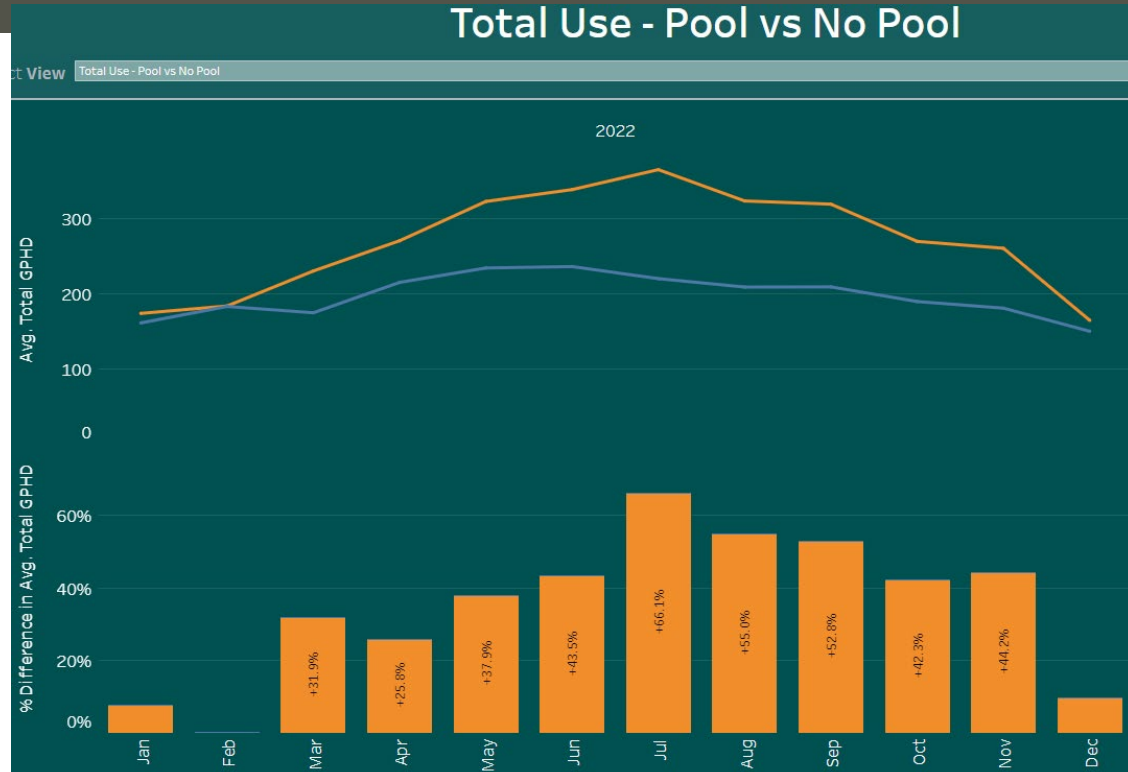


Why Water Monitoring?



ANALYSIS REPORT

- ✓ Helps direct conservation program efforts
- ✓ Helps understand peak demand
- ✓ Granularity of home characteristics with expected water use



Why Water Monitoring?



Hourly Outdoor Water Use

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DATA LABS™

Select View **Hourly**

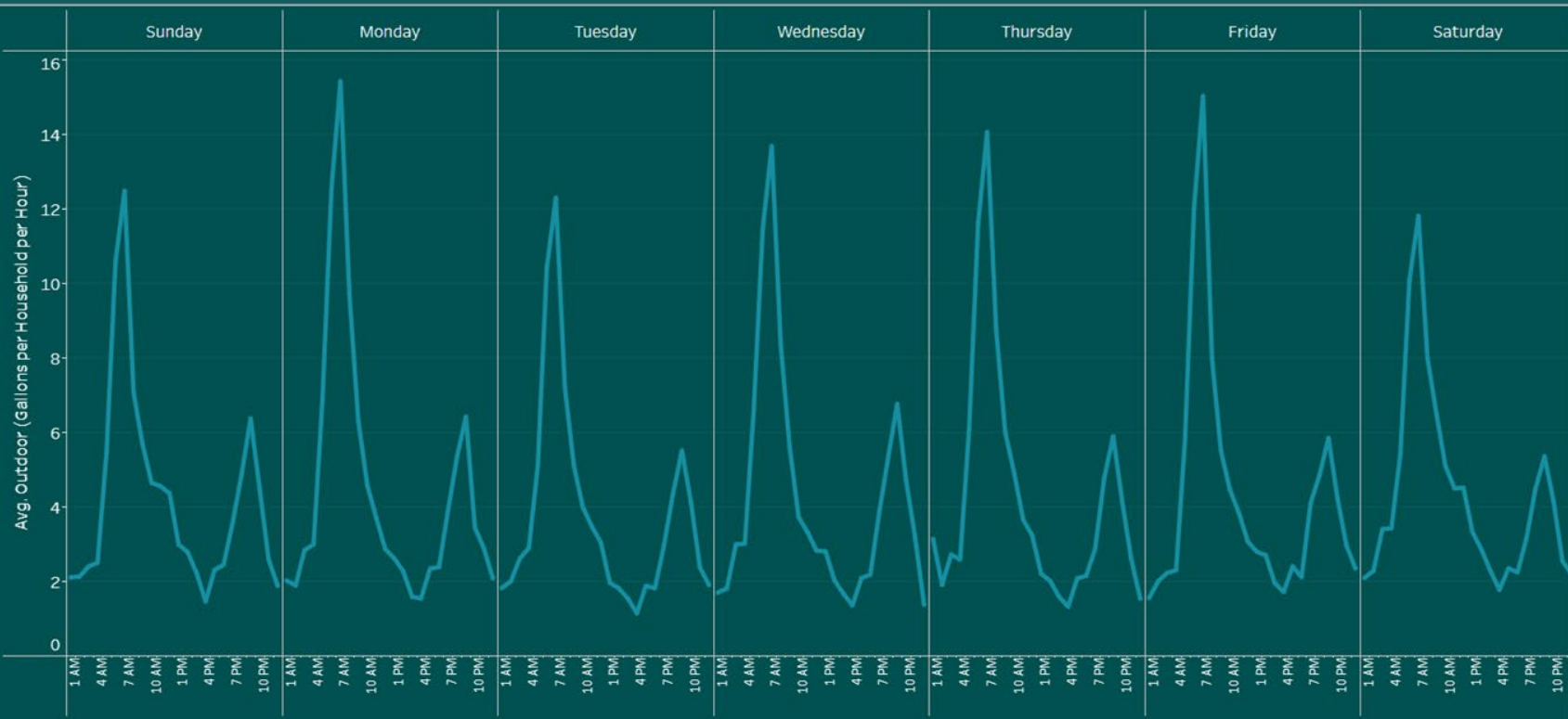


WATER USE

- Indoor
- Outdoor
- Total

The charts on this page examine water use for Flume users in the City of Goodyear.

Except where noted, outdoor water use is analyzed using Gallons per Household per Day (GPHD) and indoor water use is analyzed using Gallons per Capita per Day (GPCD).



Future?



TARGETED WATER SAVINGS

- ✓ Target groups with high water savings
- ✓ Maintain connected users & Device maintenance
- ✓ Messaging streamlining
- ✓ Expanded consumption patterns analysis
- ✓ Expanded water budgeting



Thank you!

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