One Water & Stewardship Committee

Update on Household Water Use Study

Item 6c

April 10, 2023

Household Water Use Study

Background

- Devices included in residential leak detection rebate program (Flume is one accepted manufacturer)
- Self-installed on water meter to capture indoor and outdoor use
- Real-time water use and detection
- 14,587 total devices

Household Water Use Study

Study Methodology

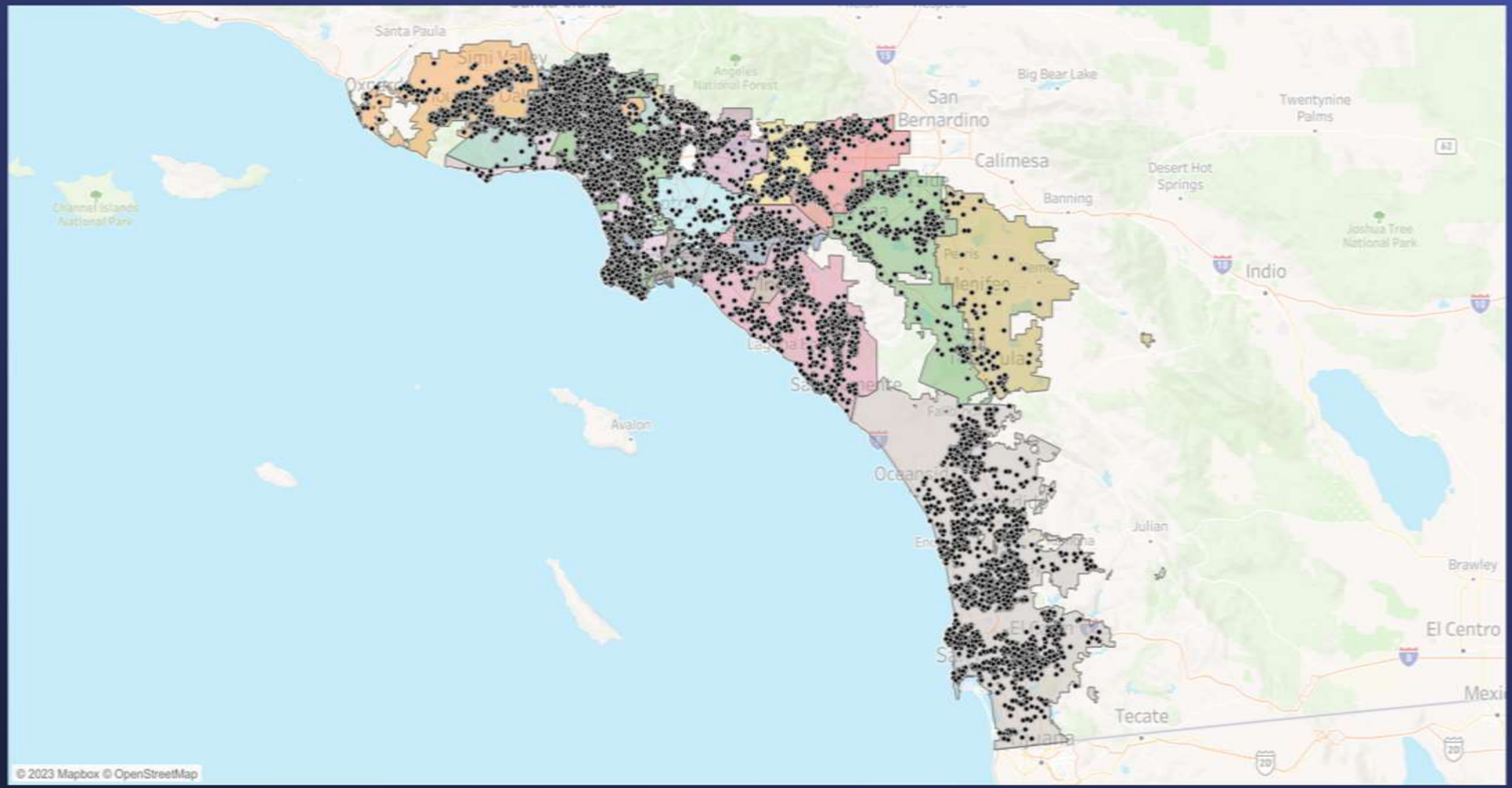
- Water use type determined by water signature
  - Smart technology continually learns use patterns
  - Breakdown of indoor and outdoor use
- Analyzed aggregate water use patterns for MWD service area

Household Water Use Study

Study Considerations

- Customers are self-selected
  - Greater awareness of water use
- Higher than average income
  - Indoor use similar to general population
  - Outdoor use higher than general population
- Household demographics are self-reported

Over 14,000 Devices Installed in MWD Service Area



Demographics

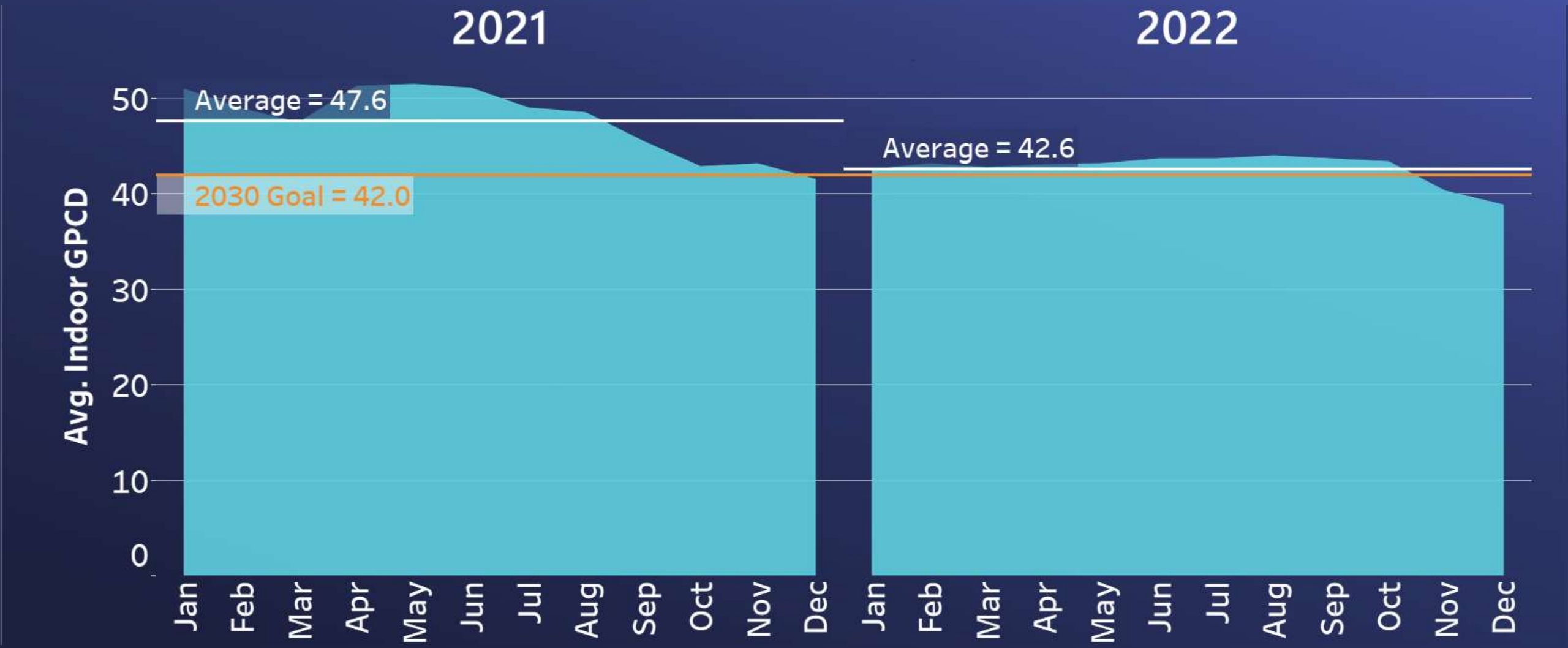
Number of Households	14,587
Avg. Home Age	53 years
Avg. Number of Residents	3.1
Avg. Lot Size	17,776 Sq Ft
Median Lot Size	8,030 Sq Ft

Indoor and Outdoor Gallons per Household per Day

Outdoor Water Use Ranges from 50-80% of Total Water Use

Indoor Use Analysis (GPCD)

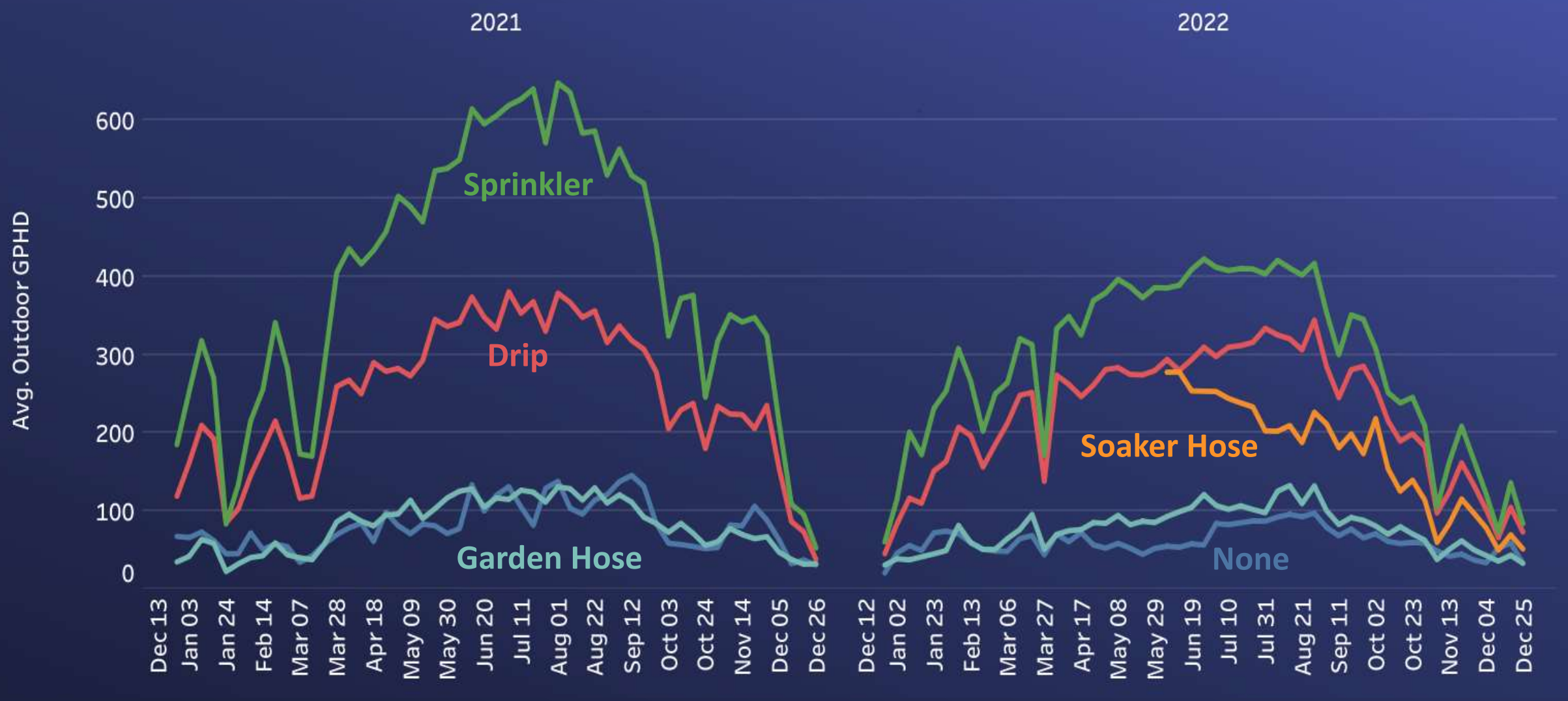
Indoor Use Trending Towards SB606/AB1668 Long-Term Conservation Framework 2030 Goal



Indoor Water Use Breakdown

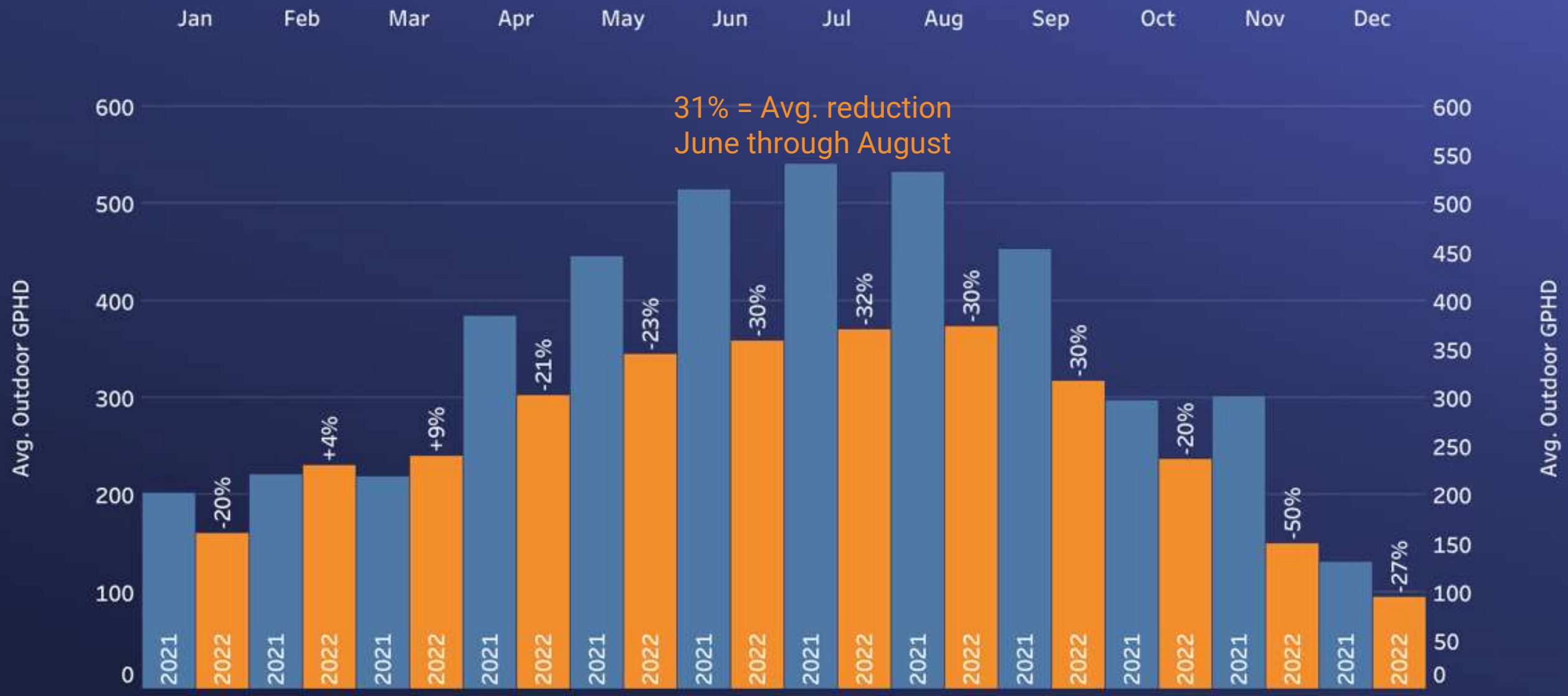
Outdoor Use Analysis (GPHD)

Large Variation in Water Use by Irrigation Type



Number of Irrigation Days Follows Seasonal Pattern

AVG Outdoor GPHD Decreased from 2021 to 2022

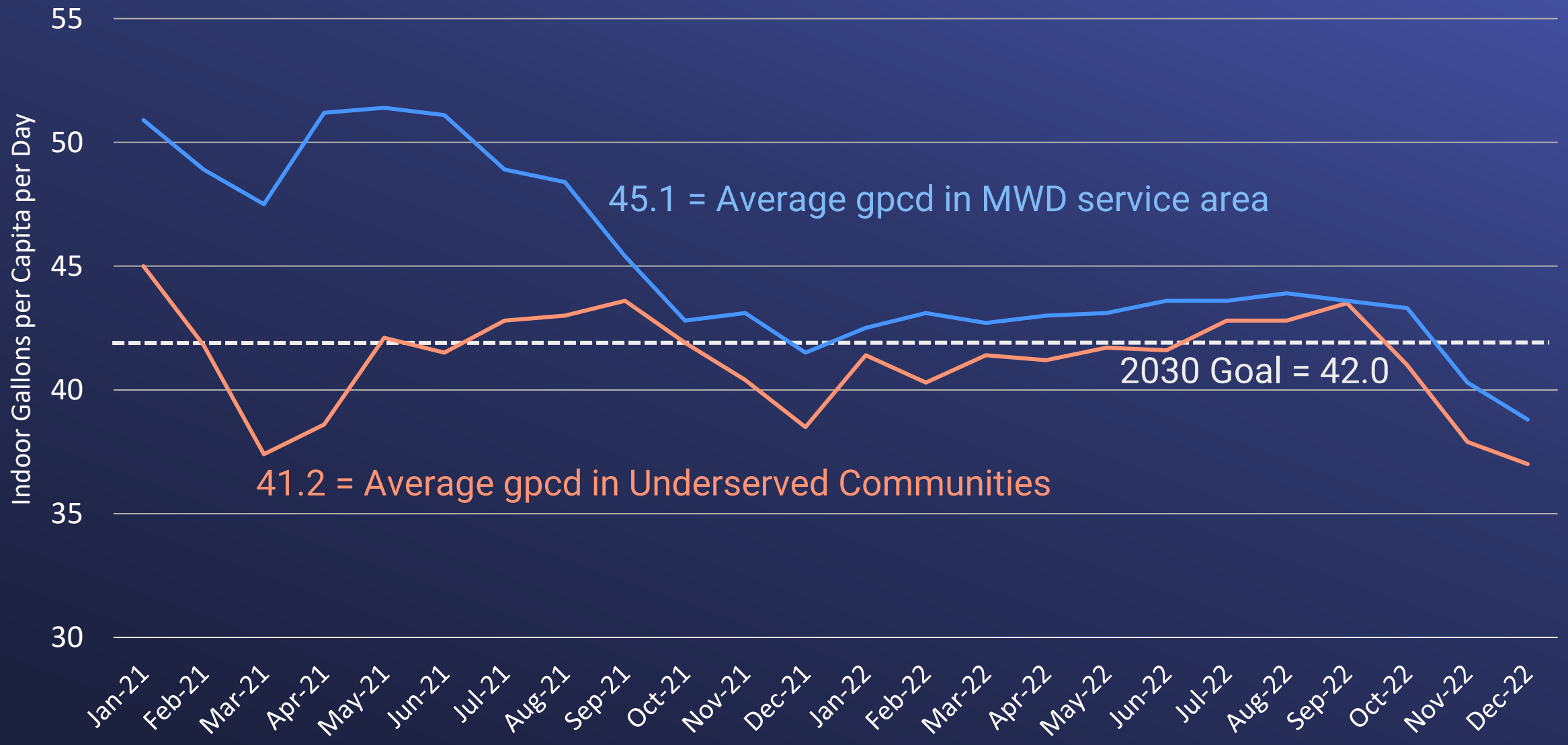


Outdoor household water use is declining compared to 2021 (limited data before 2021)

Underserved Community Analysis

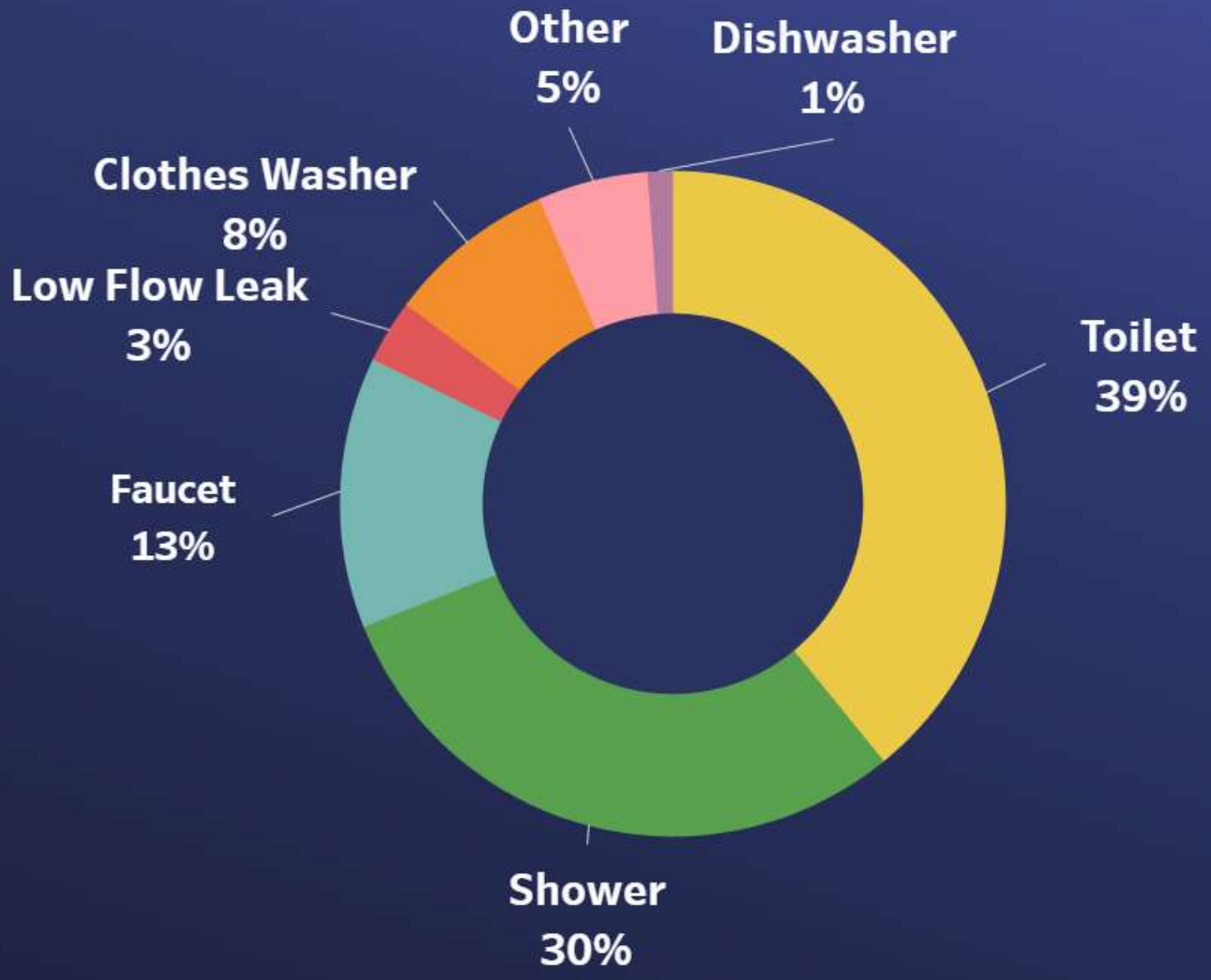
Total Use in Underserved Communities Significantly Lower

Indoor Use Below SB606/AB1668 Long-Term Conservation Framework 2030 Goal in Underserved Communities

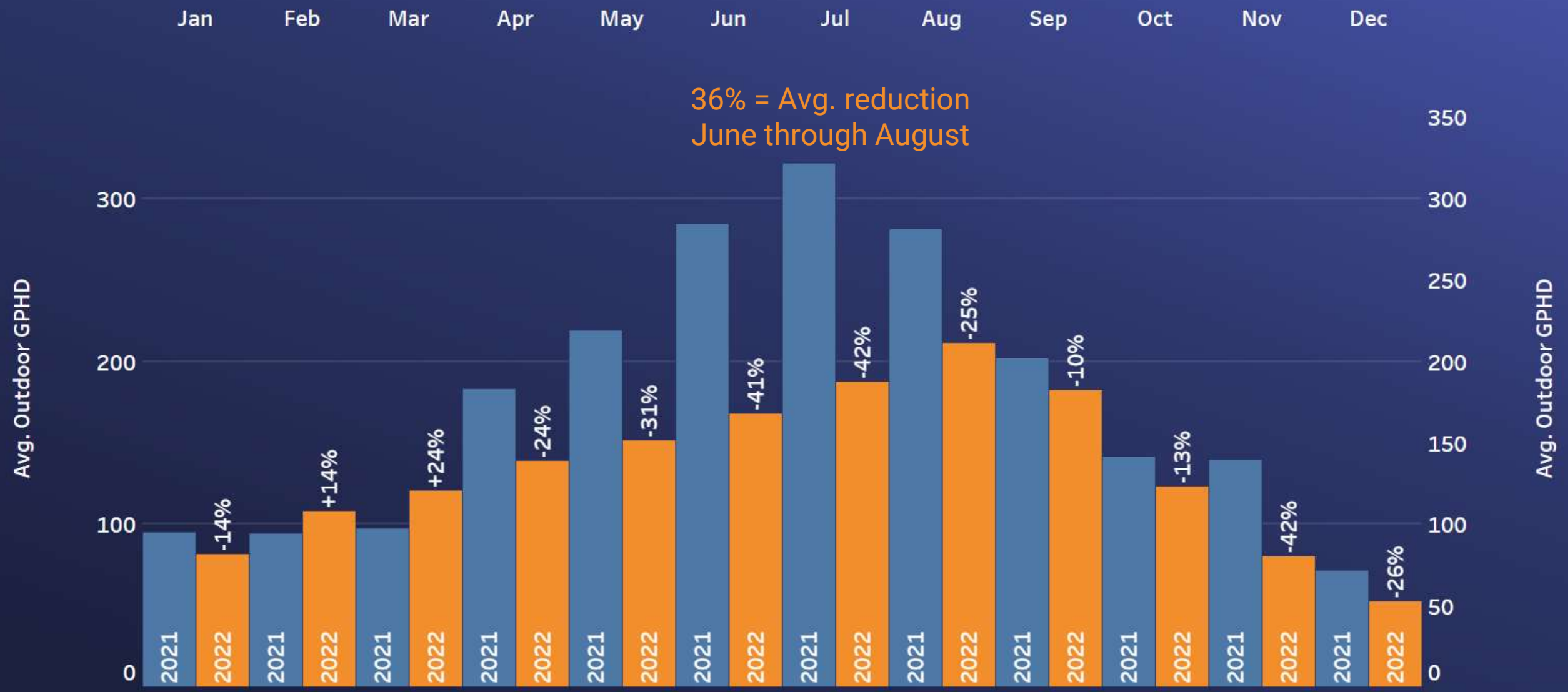


Underserved Communities' Outdoor Water Use Ranges from 35-70% of Total Water Use

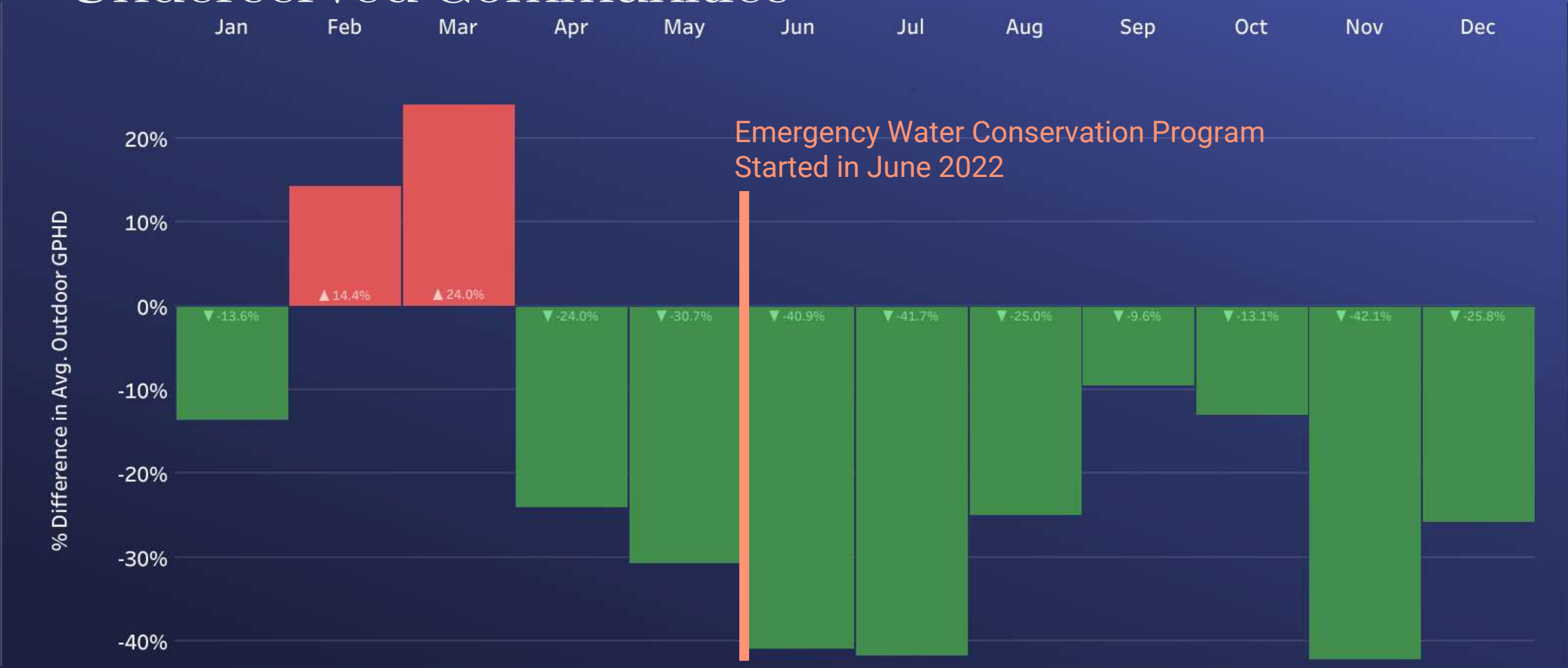
Indoor Use Breakdown Indicates Presence of Older Toilets in Underserved Communities



Underserved Communities Show Large Decrease in Outdoor Use During Drought



Lower Reduction in Overall Water Use in Underserved Communities



Household Water Use Study

Key Findings

- Indoor use is flat & trending toward 2030 long-term conservation framework goal
- Underserved Communities:
  - Indoor use already below 2030 framework goal
  - Greater reduction in outdoor use
  - Less water savings during drought
- Outdoor use dropped between 2021 and 2022
  - Effective drought messaging
  - SWP dependent area restrictions

Household Water Use Study

Potential Considerations for Program Development or Changes

- Continued indoor savings will become more difficult
- Targeting toilet programs may be most effective
- Focus on outdoor watering/landscape changes
- Messaging/tools to adjust outdoor watering days presents an opportunity

Household Water Use Study

Next Steps

- Study continues through end of 2023
- Board update in early 2024 with complete study analysis
  - MWD service area
  - Underserved community analysis
- Continued marketing of residential leak program to increase number of devices
  - Potential USBR grant application for underserved communities direct install program


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928