

# Demand Projections

**2020 UWMP**

*Prepared by: Melissa Bland, Program Manager*



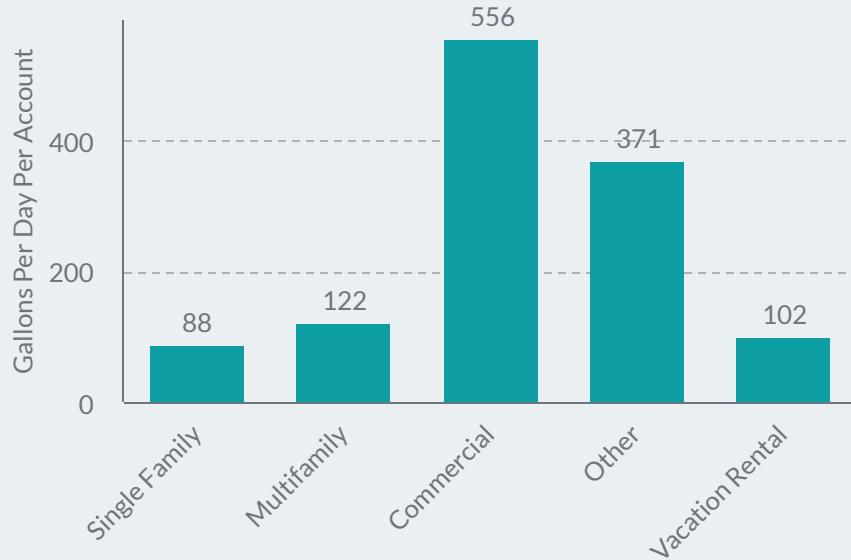
# KEY ASSUMPTIONS

## Water Demand Base Year

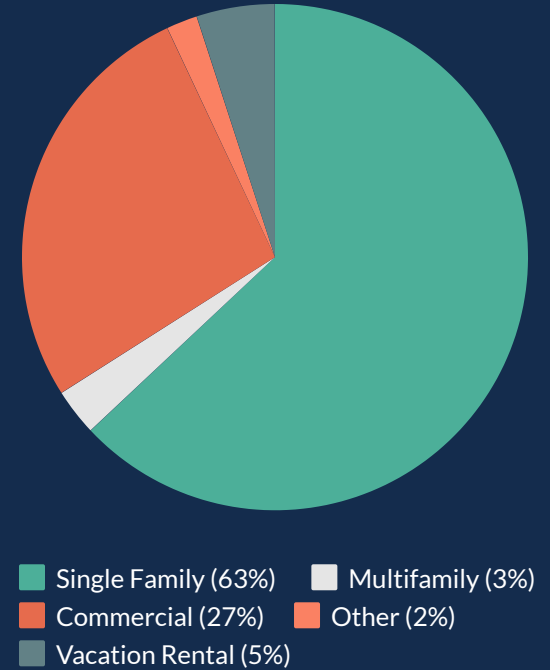
2013, 2018, 2019

## Population Data Source

Utility Billing Data, 2010  
Census, 2019 ACS, AirDNA



## Total Water Use Distribution



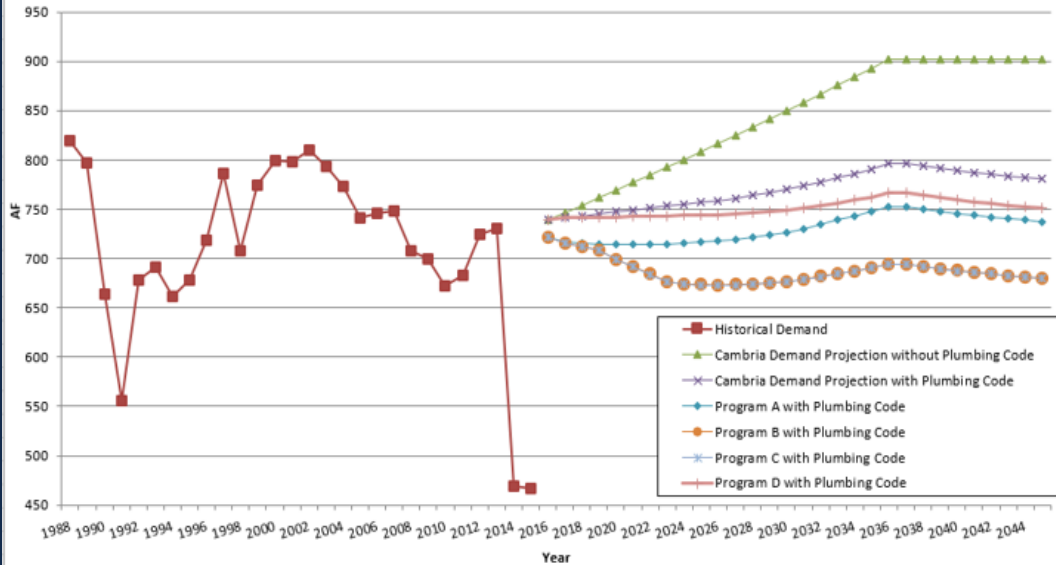
# RESULTS OF ANALYSIS

Note: Population values have been rounded to the nearest 100 people, demand to the nearest 10 AFY.

	2020 (Actual)	2025	2030	2035	2040	2045
Population	6,032	6,000	6,300	6,500	6,800	6,900
Demands with NO Passive Savings (AFY)		600	630	660	690	700
Demands with Passive Savings (AFY)	540	580	590	610	630	630
Demands with Passive Savings AND Climate Change (AFY)		590	600	620	640	650

# 2015 - 2020 PLAN COMPARISON

Water Demand Projections with Conservation

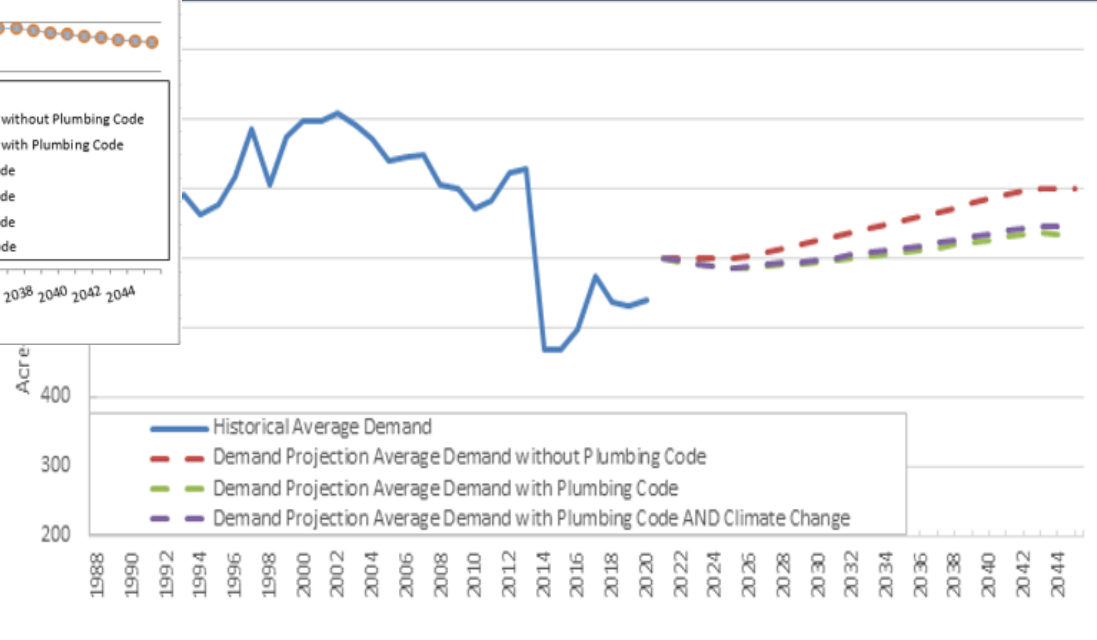


'15

**Assumed Pre-Drought Consumption**  
Growth at 1% starting in 2017

**Assumes Efficient Consumption**  
Growth at 1% starting in 2026

'20





The data tells a  
story, but the  
future is unwritten.

# Questions?



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# Water Shortage Severity Stages

Legacy Stage 1



Water Use Efficiency  
is a Way of Life



**VOLUNTARY  
ACTION**



Water Shortage  
Watch



**MANDATORY  
ACTION**



Water Shortage  
Warning



**MANDATORY  
ACTION**

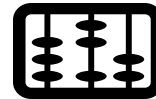
Legacy Stage 2



Water Shortage  
Emergency



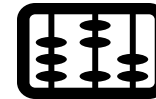
**MANDATORY  
ACTION**



Extreme Water  
Shortage  
Emergency



**MANDATORY  
ACTION**



WRF

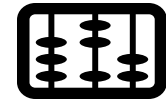
Legacy Stage 3



Exceptional Water  
Shortage  
Emergency



**MANDATORY  
ACTION**



WRF

+ **DRY SEASON**

Start Date  
April - October

+ **SS4/9P2**

Gradient  
-0.53 - 4.93

+ **SAN SIMEON**

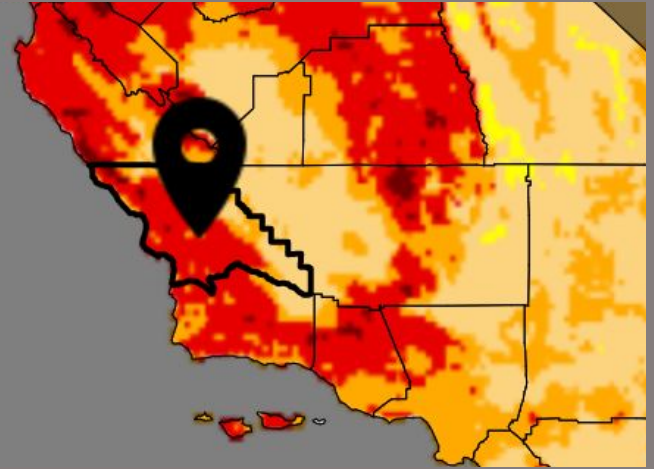
Well Levels  
0.88' to 25.3'

+ **WBE/WBW**

Well Levels  
2.84 - 11.35

+ **RAINFALL**

% of average



**SHORTAGE  
INDICATORS**



# DECISION POINTS

Are the allocations appropriately sized?

Residential Average in CCF	75 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile
7.13 CCF	8.71 CCF	15.25 CCF

At least 1,000 customers per billing cycle over 8 CCF  
Based on 2016-2020 CCSD billing data for dry season

Does your Board support the excess use surcharge structure? Or...

## Tiered System

Tier	% used in Excess	Fee per CCF
1	< 25%	500%
2	> 25%	1000%

## Current System

Offense	Fee per CCF
First	500% of all units in excess of allotment
Subsequent	1000% of all units in excess of allotment

Using today's rates...

a 500% penalty charge would equate to \$61.05 per CCF  
a 1000% penalty charge would equate to \$122.10 per CCF