



# WATER CONSERVATION

Status of SCV Water's WaterSAVING Targets

Water Resources and Watershed Committee  
May 17, 2023

# WATERSAVING TARGETS PRESENTATION MILESTONES

- ▶ Discuss Definitions & History
- ▶ Provide Status of Current Project
- ▶ Overview Initial Findings
- ▶ Identify Issues & Challenges
- ▶ Review Next Steps
- ▶ Questions & Comments



# HISTORY OF WATERSAVING TARGETS IN THE SCV

- ▶ Recommended in 2008 SCV Family of Water Suppliers Water Use Efficiency Strategic Plan
- ▶ Residential WaterSMART Allocation (WSA) Program launched by Valencia Water in 2011 (with tiered rates)
- ▶ Dedicated Irrigation Meter WSA Program launched by Valencia in 2012 (with tiered rates)
- ▶ Residential Water Efficiency Targets (WET) launched by Newhall County Water District in 2013
- ▶ Tiered rate structures transitioned to single quantity rate structures prior to SCV Water launch in 2018
- ▶ WSA and WET programs maintained by SCV Water until CIS systems integrated in 2022



# WHAT ARE WATERSAVING TARGETS?

- ▶ Often referred to as “Water Budgets”
- ▶ Often used for residential and landscape customer classes
- ▶ Establish efficient water use efficiency benchmarks based on unique property and customer class characteristics
- ▶ Provide consistent water conservation and water use efficiency communication to water users by comparing actual water use to the water saving target
- ▶ Enable water agencies to identify anomalous water use trends and to prioritize engagement and programmatic expression
- ▶ Often used with tiered rate structures



# Residential



# WaterSAVING Targets

# Dedicated Irrigation

**WaterSmart Allocation Program (Example)**

**Indoor & Outdoor**

Indoor icons: Toilet, Shower, Kitchen, Laundry

Outdoor & Location: Lawn, Garden, Pool, etc.

Flow Type	Flow Rate	Flow Allocation
Indoor	2.5 GPM	Indoor
Outdoor	5 GPM	Outdoor
Pool	1.5 GPM	Pool
Spa	1.5 GPM	Spa
Other	1.5 GPM	Other



**WaterSmart Allocation Program (Example)**

**Dedicated Irrigation**

Dedicated Irrigation Allocation Table:

Flow Type	Flow Rate	Flow Allocation
Indoor	2.5 GPM	Indoor
Outdoor	5 GPM	Outdoor
Pool	1.5 GPM	Pool
Spa	1.5 GPM	Spa
Other	1.5 GPM	Other

Just think how much you could save!

# STATUS OF CURRENT WATERSAVING TARGET PROJECT

- ▶ DWR provide residential landscape measurements in 2021
- ▶ SCV Water - Customer Information System integrated in 2022 (All legacy divisions)
- ▶ SCV Water – Conservation contracted with DCSE in August 2022 to Implement Phase 1A & 1B:
- ▶ Phase 1A Completed May 2022 (in training environment)
- ▶ Phase 1B to be completed in June 2022
- ▶ Phase 1C to be completed following finalization of State UWUO Standards and Methodologies

Legacy Division	RES	DIM	UWUO
Newhall	Y	Phase 1B	Phase 1C
Santa Clarita	Phase 1A	Phase 1B	Phase 1C
Valencia	Y	Y	Phase 1C

Legacy Division	Agency Residential Budget	Agency DIM Budget	Urban Water Use Objectives (Legislation & Recommended)
Newhall	<p>4 Persons X 55 GPD + .84 ETF</p> <p>Aerial Mapping: CSUN GIS Collaborative</p>	<p>.8 ETF</p> <p>Aerial Mapping: NA</p>	<p><b><u>Residential Indoor:</u></b>            &lt;2025 = 55 GPCD            2025-2030 = 47 GPCD            &gt;2030 = 42 GPCD</p>
Santa Clarita	<p>4 Persons X 55 GPD + .84 ETF</p> <p>Aerial Mapping: 2021 DWR</p>	<p>.8 ETF</p> <p>Aerial Mapping: NA</p>	<p><b><u>Residential Outdoor:</u></b>            Existing: .8 (2023), .63 (2030)            New: .55</p> <p><b><u>CII DIM Outdoor:</u></b>            Existing: .8 (2023), .63 (2030)            New: .45</p>
Valencia	<p>4 Persons X 55 GPD + .84 ETF</p> <p>Aerial Mapping: Staff</p>	<p>.8 ETF</p> <p>Aerial Mapping: Staff</p>	<p>Effective Precipitation = .25%</p>

# INITIAL FINDINGS

## ▶ Aggregate Residential Sales Data Compared to Agency and State Budget Methodologies:

- ▶ Actual sales are less than Agency Budgets (R-USE v. A-BUD)
  - ▶ R-USE ranges from 86-93% of A-BUD
  - ▶ 2022 exception R-USE 23% of A-BUD (Drought Year – WSCP 1&2)
- ▶ Actual sales are significantly greater than urban water use objective (R-USE v. S-BUD)
  - ▶ R-USE ranges from 7-16% greater than S-BUD
  - ▶ 2022 exception R-USE was 6% below S-BUD
- ▶ Need to consider alternative Agency Budget methodologies

**Table 1.** 2018 Residential Use vs. Agency Budget and State Budget (Proposed)

Metric	CCF	AF	Gallons	Percent of BUD
R-USE	7,285,965	16,726	5,449,901,820	
A-BUD	8,295,543	19,044	6,205,066,164	88%
S-BUD	6,729,820	15,450	5,033,905,360	108%

**Table 2.** 2019 Residential Use vs. Agency Budget and State Budget (Proposed)

Metric	CCF	AF	Gallons	Percent of BUD
R-USE	6,762,947	15,526	5,058,684,356	
A-BUD	7,884,546	18,100	5,897,640,408	86%
S-BUD	6,294,947	14,451	4,708,620,356	107%

**Table 3.** 2020 Residential Use vs. Agency Budget and State Budget (Proposed)

Metric	CCF	AF	Gallons	Percent of BUD
R-USE	7,702,105	17,682	5,761,174,540	
A-BUD	8,529,234	19,580	6,379,867,032	90%
S-BUD	6,721,348	15,430	5,027,568,304	115%

**Table 4.** 2021 Residential Use vs. Agency Budget and State Budget (Proposed)

Metric	CCF	AF	Gallons	Percent of BUD
R-USE	7,964,051	18,283	5,957,110,148	
A-BUD	8,527,566	19,577	6,378,619,368	93%
S-BUD	6,852,569	15,731	5,125,721,612	116%

**Table 5.** 2022 Residential Use vs. Agency Budget and State Budget (Proposed)

Metric	CCF	AF	Gallons	Percent of BUD
R-USE	11,146,253	25,588	8,337,397,244	
A-BUD	14,480,332	33,242	10,831,288,336	77%
S-BUD	11,899,885	27,318	8,901,113,980	94%



# ISSUES & CHALLENGES – RESIDENTIAL AND CII DIM OVERLAP



Actual LAM = 2,929  
DWR LAM = 14,989

DWR LAM includes areas that are classified as CII-DIM.

Aggregate areas will be equal in UWUO, but must be allocated by class to effectively communicate target.

# ISSUES & CHALLENGES – AERIAL IMAGE DISTORTION

Irrigated Area outside of Parcel  
Boundary:

Actual LAM = 8,676

DWR LAM = 8,099

DWR LAM does not include  
irrigated areas outside of parcel  
boundary.

Distortion is a wide-spread issue  
with aggregate impact between  
7-11% of total Landscaped Area  
Measurements.



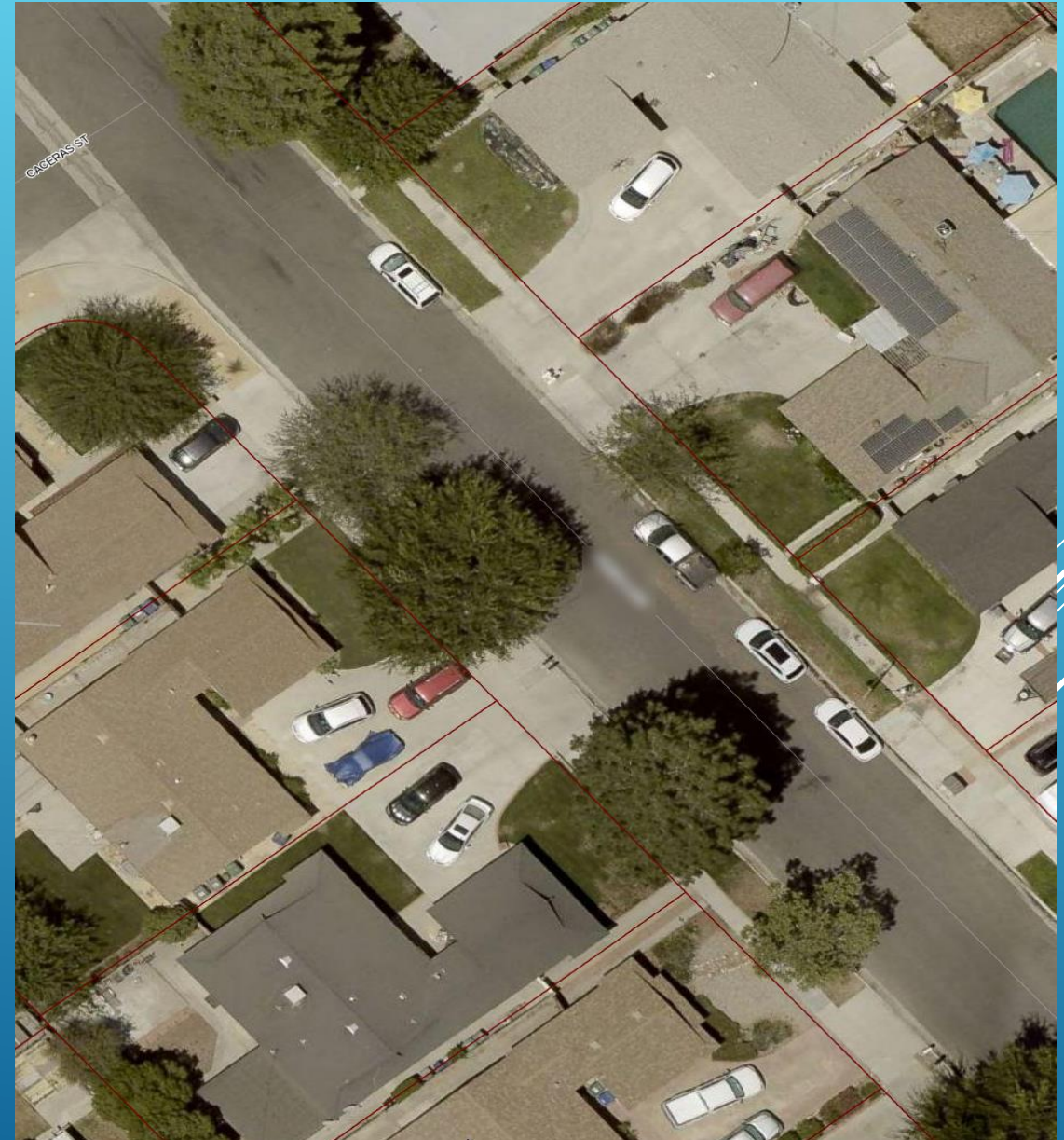
# ISSUES & CHALLENGES – RESIDENTIAL PARKWAY STRIPS

Parkway strips are located outside of the property boundary, but are often maintained by the residential homeowner.

DWR LAM does not include irrigated areas outside of parcel boundary.

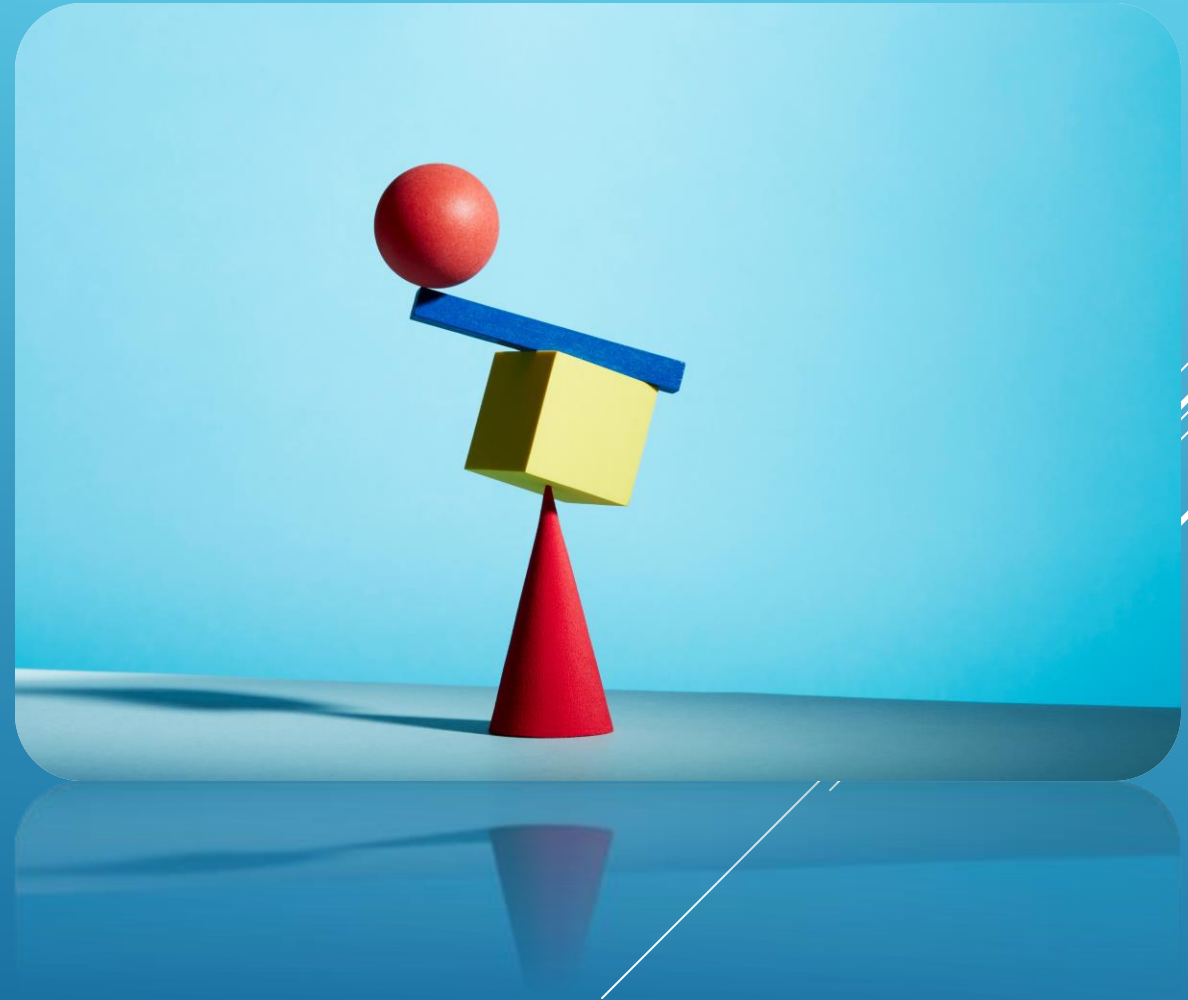
Many homes have a parkway strip. Micro impact between 5-10% of residential landscaped areas with parkway strips.

Need to determine if these areas will be impacted by non-functional turf regulations.



# ISSUES & CHALLENGES – ADDITIONAL ISSUES

- ▶ CII-DIM Measurements for Legacy Newhall and Santa Clarita Customers – consider factor approach
- ▶ Slope Correction Factors – need to determine if these were included considering SCV topography
- ▶ Develop process and procedures for maintenance, new accounts, updated LAM from DWR
- ▶ Run scenarios to identify Agency Budget methodologies for target calculations



# NEXT STEPS

1. Complete Phase 1B - CII-DIM LAM Measurements

2. Incorporate Finalized State Methodologies

3. Develop Agency Methodologies

4. Test in Training Environment

5. Public Engagement & Education

6. Move to Production – Go Live

7. Document Maintenance & Training

8. Performance Management



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