Overview of Water Budgets and Proposed Regulatory Framework

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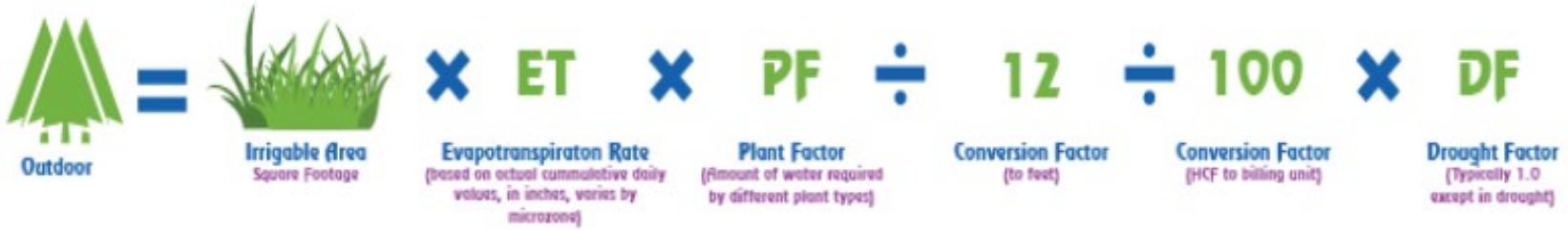
Resource Conservation Manager
July 18, 2023

Water Budgets Overview

1. Indoor Need
2. Outdoor Need
3. Adjustments

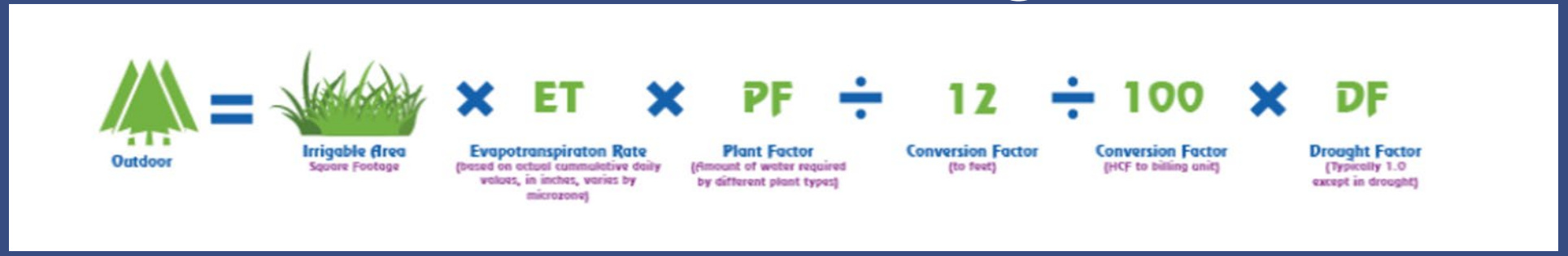
Indoor

Outdoor



Adjustments

Outdoor Budget



- Outdoor Budget Calculated using 4 Factors:
  - Irrigated Area per parcel – includes surface area of pools/spas
  - Daily Evapotranspiration Rate (ET – inches)
    - Water lost to - Daily evaporation + plant transpiration
  - Plant Factor – amount of water required by different plant types
  - Drought Factor – used in times of water supply shortages

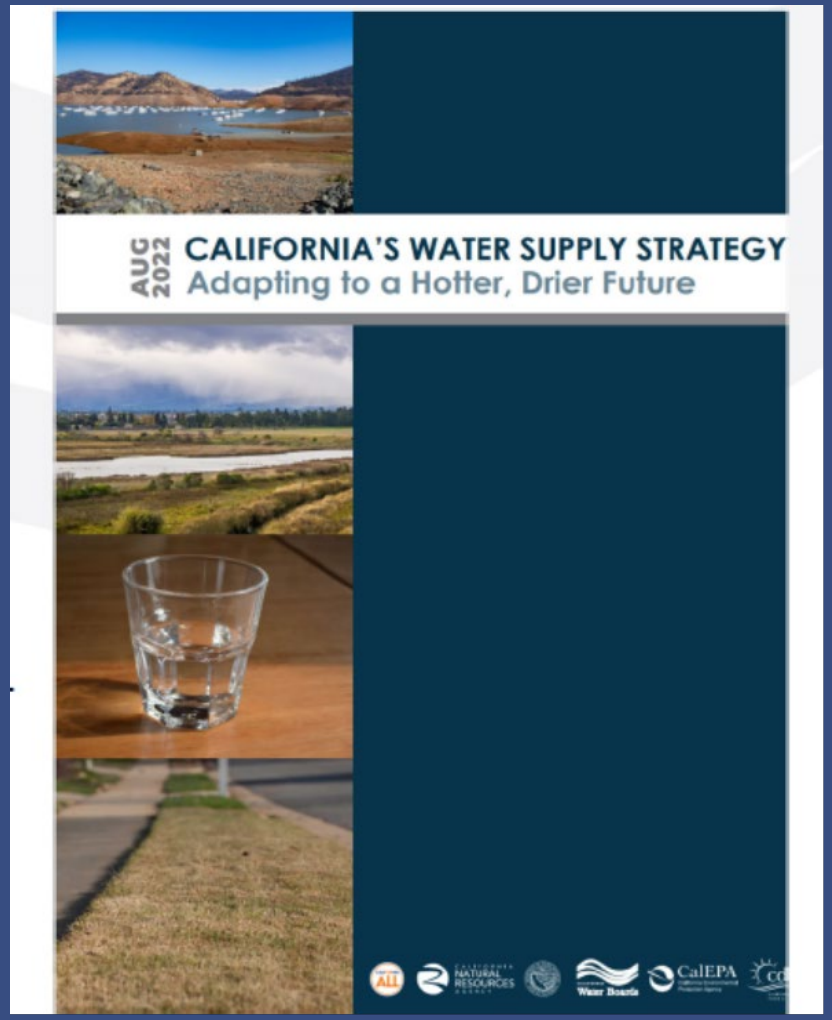
Proposed Regulatory Framework

Create storage space for up to 4 million acre-feet of water

Recycle and reuse at least 800,000 acre-feet of water per year by 2030

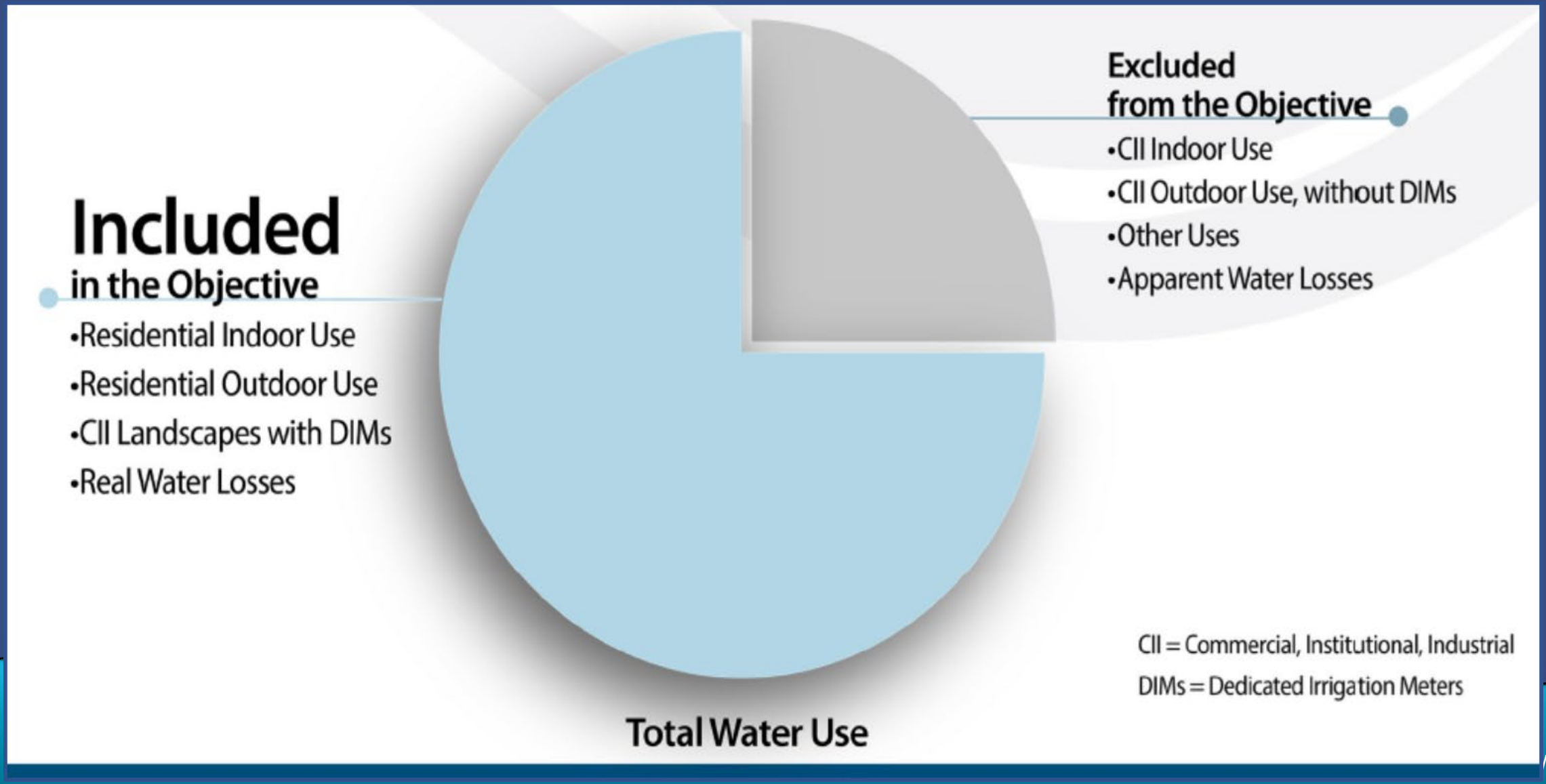
Support local stormwater capture projects in cities and towns with the goal to increase annual supply capacity by at least 250,000 acre-feet by 2030 and 500,000 acre- feet by 2040.

Reduce annual urban water demand by at least half a million acre-feet by 2030.

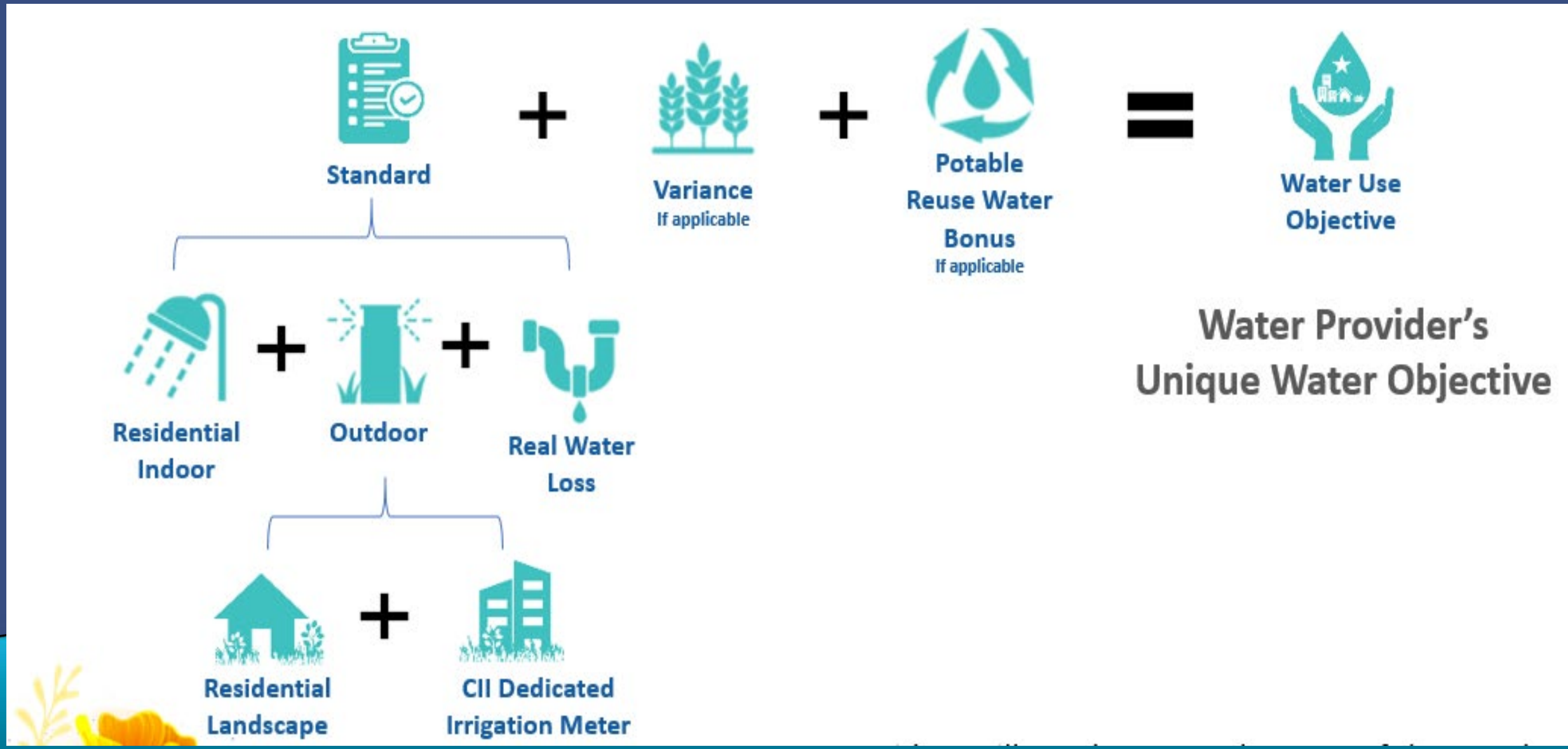


Urban Water Use Objective

What is in and What is out?



Calculating Urban Water Use

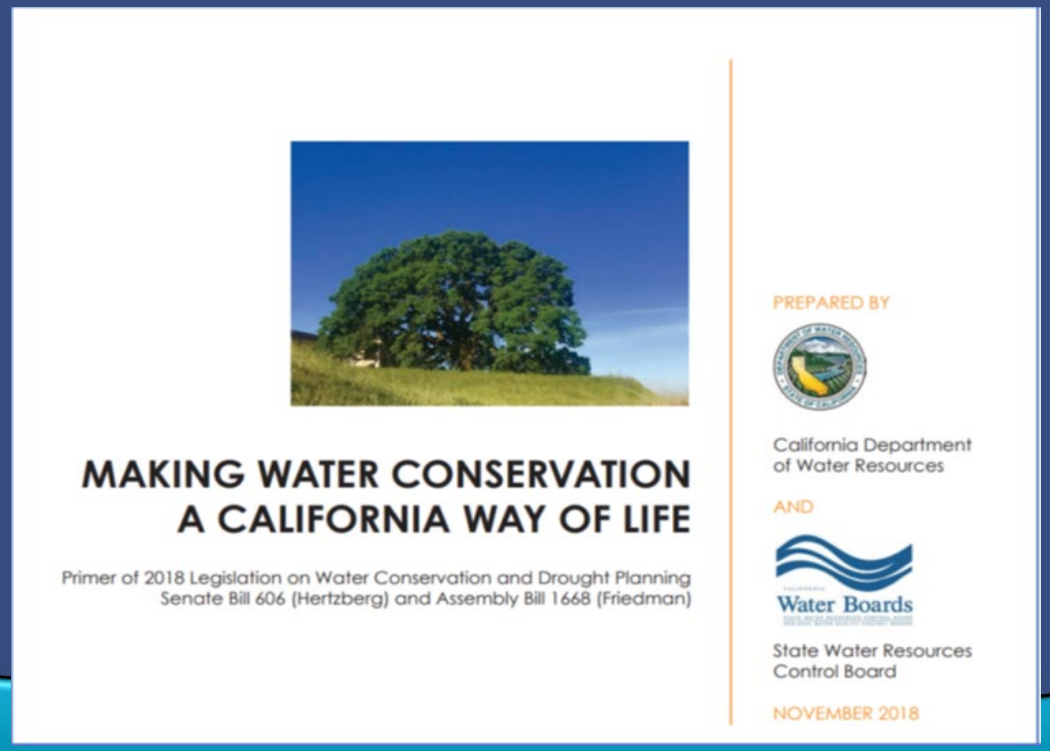


Regulatory Framework – Where are we?

Components	Draft Available (Most Recent)	Final Approved
Indoor Residential WUE Standard	Yes – 11/30/21	Yes – 9/28/22
Water Loss Standard	Yes – 9/2/22	Yes – 10/19/22
Outdoor Residential WUE Standard	Yes – 3/15/23	
WUE Standards for CII Outdoor Irrigation of Landscape Area with Dedicated Irrigation meters	Yes – 3/15/23	
Variances for Unique Uses of Water	Yes – 3/15/23	
CII Water Use Performance Measures	Yes – 3/15/23	
Guidelines and Methodologies for Calculating Urban Water Use Objectives	Yes – 9/29/22	

Terminology

- BMP = Best Management Practice
- CII= Commercial, Industrial, Institutional
- DIM= Dedicated Irrigation Meter
- EP = Effective Precipitation
- ETAF= Evapotranspiration Adjustment Factor
- ET0 = Reference Evapotranspiration
- GPCD= Gallons Per Capita (Persons) Per Day
- LEF= Landscape Efficiency Factor
- MWELO= Model Water Efficiency Ordinance
- SLA = Special Landscape Areas
- UWUO= Urban Water Use Objective



Residential Indoor Budget

Defined in Water Code Section 10609.4

Year	1157 Standards - DWR/SWRCB Recommendation (GPCD)
2020-2024	55
2025-2029	47
2030 +	42

X  Population X  365 =  Residential Indoor Budget

No proposed changes since SB 1157 (2022)

Residential Landscape

Calculating Residential Outdoor Budget

Residential Outdoor Standard

Landscape Efficiency Factor

×

Net Eto

Reference Eto- Effective annual precipitation

×

Landscape Area

Sq. Ft. of Irrigable + Irrigated Area

×

0.62 Conversion Factor

=

Residential Outdoor Budget

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

Residential Outdoor Budget

Existing Landscapes

Year	Standard	INI Buffer
2020	0.80	Up to 20%
2030	0.63	Up to 20%
2035	0.55	Up to 20%
Special Landscape Areas	1.00	NA

Landscapes – New Construction

Year	Standard	INI Buffer
Any	0.55	NA

Water suppliers would need to demonstrate need for INI Buffer

Residential SLAs include areas irrigated with recycled water.

CII Dedicated Irrigation Meter

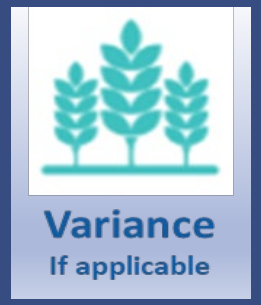
CII With DIMs

Year	Standard
Through Sept. 30, 2030	0.80
Oct. 1, 2030 – Sept. 30, 2035	0.63
Oct. 1, 2035 onward	0.45

- All CII-DIM landscapes must be measured by 2028.
- DWR currently working on CII-LAM-LUCD.
- Starting in 2028, suppliers will calculate their CII outdoor water budgets for those accounts with DIMs.
- CII SLAs excludes areas planted with non functional turf.

Defining Residential Special Landscape Areas (SLAs)

Landscape Types included as SLAs	Staff Proposal	DWR Recommendation
Areas with edible plants	Yes	No
Areas irrigated with recycled water	Yes (excluding non-functional turf)	No



Variances

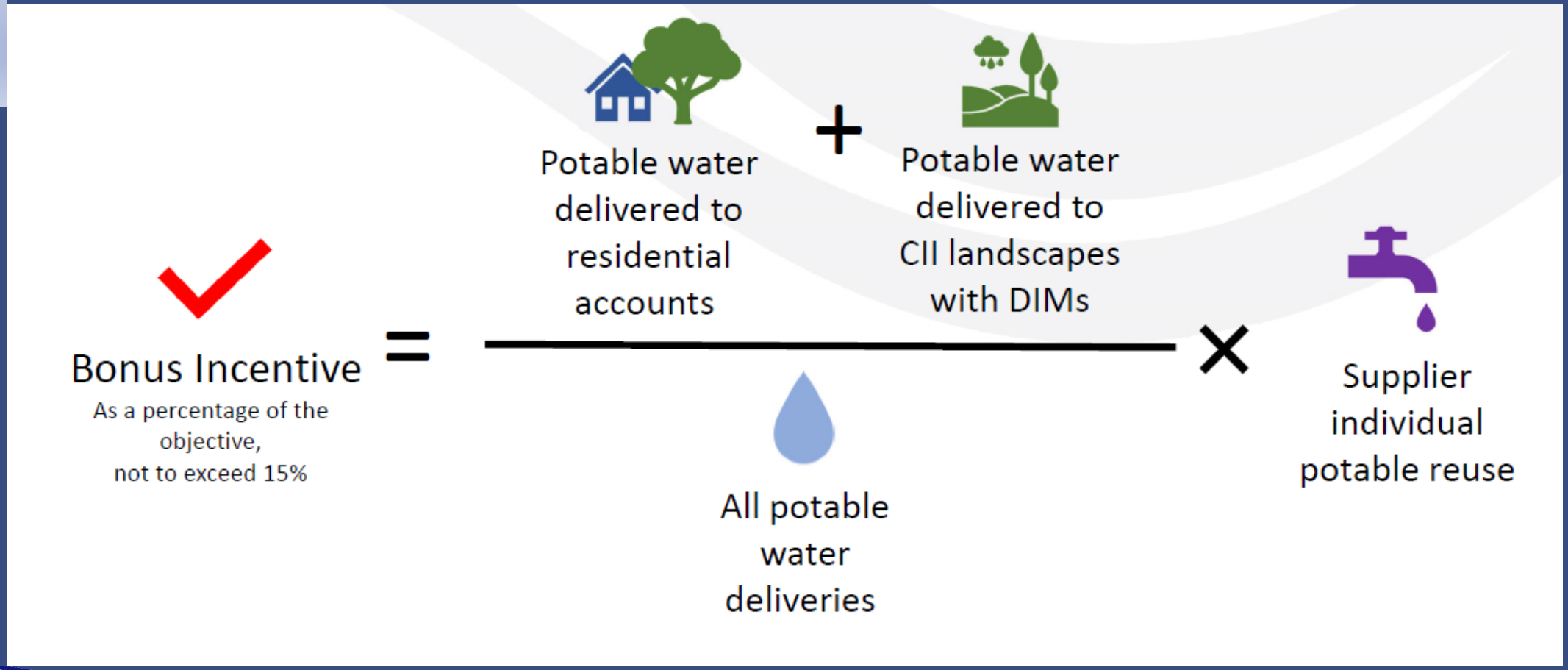
Variances Added in SWRCB Staff Proposal

	State Water Board Staff proposal	Department Recommendation
Pools and spas	☑	☒
Urban tree health (e.g., establishing climate-ready trees)	☑	☒
Landscapes requiring temporary irrigation (e.g., LID projects)	☑	☒

Potable Reuse Water Bonus

If applicable

Bonus Incentive = Potable Reuse



WUE Standard Timeline

Task	Start date
Board workshop	March 22, 2023
Start rulemaking (45-day public comment period)	May 2023
Consideration of Adoption (**NOT** scheduled yet)	Winter 2023-24
Following possible adoption: Final 15-day comment period	Winter 2023-24
Submit to OAL	Spring 2024
Rule becomes effective	Summer 2024

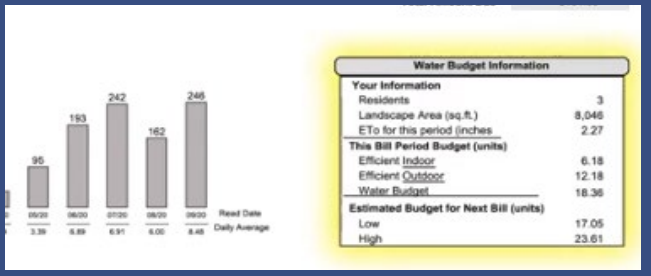
Summary of Concerns - Unintended Consequences

- Highly complex, infeasible variance process with data burden and uncertainty
- Inadequate time for water suppliers to analyze and asses how to implement effectively (develop new programs, develop budgets, and hire staff)
- Timeline, cost and complexity create unintended impacts
- Administrative reporting burdens that don't achieve actual water savings
- Rate impacts to customers (disproportionately affect low income customers)

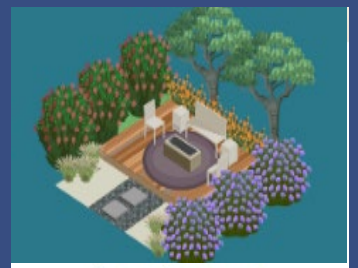
Road to Feasibility

- Develop meaningful standards and objectives to meet California's climate resiliency goals
- Standards should be feasible to implement:
  - Existing landscapes
  - Performance-based – real world
  - Factor in customer behavior
- Significant state funding and technical resources needed to support local efforts

Positioned for Success



- Implementation of Budget Based Rates (2013)
- Advanced Metering Implementation - Watersmart
- Potable Reuse – Pure Water Project – Drought Resiliency
- Launching new supplemental Landscape Transformation Programs
- Grant Funded Programs
- Continue to work with ACWA and CASA to lobby for feasible outcomes




TIME FOR QUESTIONS