

DAY ONE
1:30PM - 4PM
WEST ROOM

DEPARTMENT OF WATER RESOURCES & STATE WATER RESOURCES CONTROL BOARD WORKSHOP: REPORTING REQUIREMENTS FOR MAKING CONSERVATION A WAY OF LIFE

MODERATOR



Tia Fleming
Executive Director,
External Affairs,
California Water
Efficiency Partnership



Ryan Bailey
Water Use Efficiency Branch
Manager, Department of Water
Resources



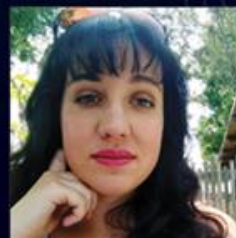
Charlotte Ely
Supervisor of Conservation and
Energy, State Water Resources
Control Board



Karina Herrera
Environmental Scientist,
State Water Resources
Control Board



Kyle Miller
Urban Unit Supervisor -
Water Use Efficiency Branch,
Department of Water Resources




Marielle Rhodeiro
Research Data Specialist,
State Water Resources
Control Board

8TH ANNUAL CA WATER DATA SUMMIT
INTELLIGENT QUESTIONING (IQ)
SHARING WATER WISDOM
SEPTEMBER 7&8, 2023



STANFORD UNIVERSITY | PALO ALTO, CA
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Making Conservation a Way of Life: Proposed Reporting Requirements



Agenda

Part 1: Presentation (25 minutes)

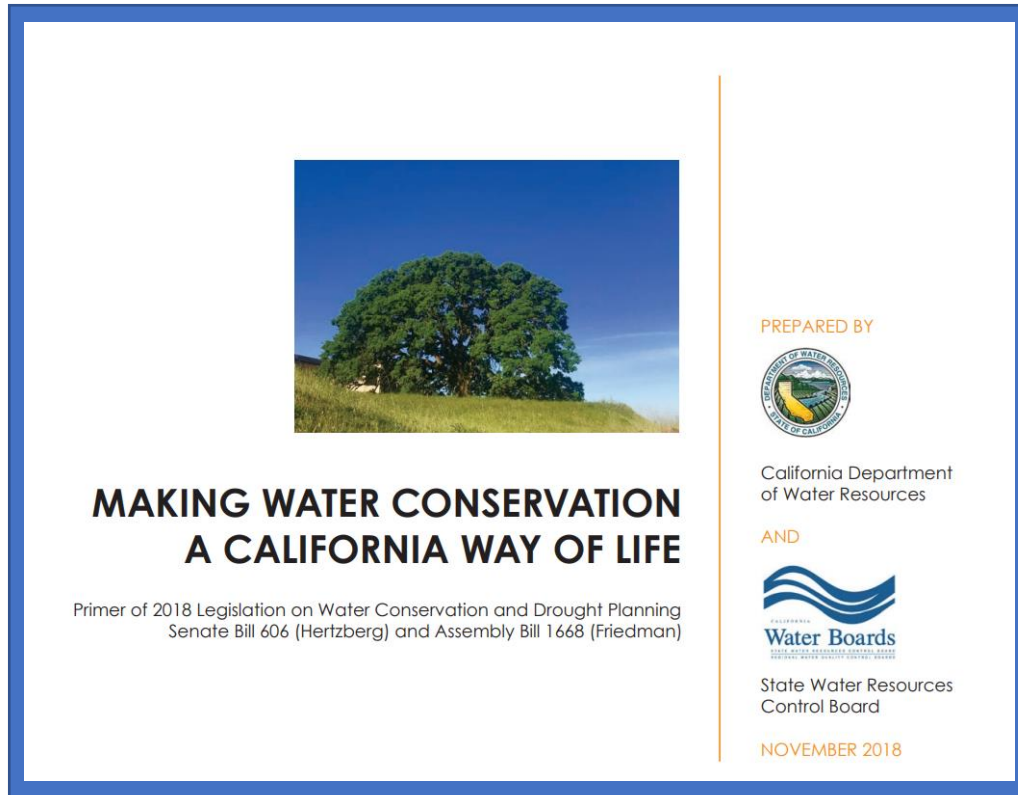
- *Making Conservation a Way of Life* milestones (Ryan)
- Overview of interim reporting form (Kyle)
- Overview of proposed regulatory text (Karina)
- Deep dive into reporting section (Marielle)

Part 2: Break-out into groups (switch between groups)

- Group A: 40-minutes with Board staff (discussion about proposed requirements)
- Group B: 40-minutes with DWR (discussion about interim reporting form)

Part 3: Report-outs (15 minutes)

Making Conservation a Way of Life



- AB 1668 & SB 606 passed in 2018
- DWR recommendations in Fall 2022
- State Water Board rulemaking in 2023
- Urban Retail Water Suppliers to:
 - Calculate and comply with objectives
 - Carry CII out performance measures
 - Annually report

DWR

February 2020
Recommendation on Water Loss Reporting Requirements by Urban Wholesale Water Suppliers

Provided on November 2021
Recommendation on Indoor Residential Use Standard

Provided on October 28, 2022

- Recommendations on:
- Outdoor Residential Use Standard
- Standard for CII Outdoor Landscape Area with Dedicated Irrigation Meters
- Appropriate Variances
- Guidelines and Methodologies for Calculating Urban Water Use Objectives
- Performance Measures for CII Water Uses

Provided on October 28, 2022
Measurements for Residential Irrigable for Accuracy

Provided on October 28, 2022¹
Data Related to Unique Local Conditions for Calculating Urban Water Use Objectives

Legislature

Indoor Residential Use Standard Effective on the Jan 1, 2025, as provided by CWC §10609.4

by Jan 10, 2024 Legislative Analyst
Review of Implementation of Urban Water Efficiency Standards

by Jan 1, 2026
Joint Policy Committee Hearing on Implementation of Urban Water Use Standard and Water Use Reporting Requirements with Attendance by State Water Board and DWR

State Water Board

Adopted on Oct 19, 2022
Adoption of Water Loss Standard²

Summer 2024
Adoption of:

- Outdoor Residential Use Standard
- Standard for CII Outdoor Landscape Area with Dedicated Irrigation Meters
- Performance Measures for CII Water Uses

Summer 2024
Adoption of:

- Appropriate Variances
- Guidelines and Methodologies for Calculating Urban Water Use Objectives

DWR
Legislature
State Water Board
Urban Retail Water Suppliers

Urban Retail Water Suppliers

by Jul 1, 2021
UWMP Update Incorporating Water Loss Standard Implementation

By Jan 1, 2024
Annual Report to Urban Water Use Objective and Actual Use

by Jan 1, 2024
UWMP Supplement Incorporating Demand Management Measures to Achieve Urban Water Use Objective by Jan 1, 2027 and Other Water Use Efficiency Standard to be Implemented by 2027

Footnotes
DWR and State Water Board will include stakeholder engagement and public participation throughout the process to implement actions and develop products

1 No specific date in the Legislation—assumed to match the date for recommending standards.
2 The water loss standard will be adopted pursuant to the CWCS10608.34(l).

Water Code Reporting Requirements

No later than January 1, 2024:

An urban retail water supplier shall submit a report to the department (Section 10609.24(a)).

The report shall include all of the following:

- (1) **The urban water use objective** calculated pursuant to Section 10609.20 along with relevant supporting data.
- (2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.
- (3) **Documentation of the implementation of the performance measures for CII water use.**
- (4) **A description of the progress made towards meeting the urban water use objective.**
- (5) The validated water loss audit report conducted pursuant to Section 10608.34



Water Code Calculation Requirements

Urban Water Use Objective

Calculate urban water use objective no later than January 1, 2024 (Section 10609.20(a)).

Efficient water use for (Section 10609.20(c)):

- indoor residential +
- outdoor residential +
- CII-DIM +
- water loss +
- *variances* +
- *bonus incentive for potable reuse water*

Actual Urban Water Use

Calculate actual urban water use no later than January 1, 2024 (Section 10609.22(a)).

The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year (Section 10609.22 (b))

Actual water use for (Section 10609.22 (c)):

- residential +
- CII-DIM +
- aggregate water losses.



Interim Annual Water Use Report Template Under Development

- DWR is developing a spreadsheet template for reporting in order to satisfy the statutory requirement as best as possible – we welcome your feedback.
- This current version is based on a quick review of the Draft Regulation and our understanding of the requirements.
 - We also have spreadsheet tools to try out the variances and bonus incentive calculation.
 - This will provide a good opportunity for a test run for everyone.
- Anticipated submittal is as a simple attachment through WUEdata portal.



Overview

Summaries: Actual Use Compared to Draft Urban Water Use Objective

Actual Use Compared to Draft Urban Water Use Objective (WITHOUT Variances)		
Summary	Actual Water Use	Urban Water Use Objective
Total Residential Water Use (Indoor + Outdoor)		#REF!
Outdoor Irrigation of Landscape Areas Using CII-DIM Water Use	0	#REF!
System Water Loss	0	#DIV/0!
Variances (Total Volume)	N/A	N/A
Bonus Incentive	N/A	0
Total	0	#REF!

Actual Use Compared to Draft Urban Water Use Objective (WITH Variances)		
Summary	Actual Water Use	Urban Water Use Objective
Total Residential Water Use (Indoor + Outdoor)		#REF!
Outdoor Irrigation of Landscape Areas Using CII-DIM Water Use	0	#REF!
System Water Loss	0	#DIV/0!
Variances (Total Volume)	N/A	0
Bonus Incentive	N/A	0
Total	0	#REF!

Note: This summary is for planning purposes ONLY.

Are you planning on including variances for 2025 Annual Water Use Report?	Yes
How much water do you expect to claim for variances in the 2025 Annual Water Use Report? (gallons/year)	0



Basic Info

Annual Water Use Report Information	
Urban Retail Water Supplier's Contact Information (Required)	
Name of Entity:	
Contact Person Name:	
Contact Person Title:	
Street Address:	
ZIP Code:	
Phone Number:	
Email Address:	
Report Preparer's Contact Information (Required, if different from the above information (cells B4-10). If the same as above, include "n/a" in cells B12-15.)	
Preparer's Organization Name:	
Preparer's Contact Name:	
Phone Number:	
Email Address:	
Year Covered By This Report (Required)	
Reporting Year Cycle	Calendar Year <input type="button" value="v"/>
Start Date (MM/DD/YYYY)	01/01/2022
End Date (MM/DD/YYYY)	12/31/2022
Other Annual Water Use Reporting Components (Required) (select all that apply to this report)	



Actual Use Example

Actual Water Use	Values	Units	Calculation Instructions
Aggregate Actual Water Use	#VALUE!	gallons/year	Calculated
Actual Residential Water Use (Required)			
Total Volume of Single-family Residential Water Use in Your Service Area		gallons/year	From eAR or equivalent pursuant to HSC Section 116530. This water use includes all potable and non-potable water for indoor plus outdoor uses delivered to property classified as residential in the county assessor rolls, regardless of whether the service connections and meters providing this water have been classified by the urban retail water supplier as residential.
Total Volume of Multifamily Residential Water Use in Your Service Area		gallons/year	From eAR or equivalent pursuant to HSC Section 116530. This water use includes all potable and non-potable water for indoor plus outdoor uses delivered to property classified as residential in the county assessor rolls, regardless of whether the service connections and meters providing this water have been classified by the urban retail water supplier as residential.
Total Volume, if any, of Unmetered Residential Water Use in Your Service Area	#DIV/0!	gallons/year	See Actual Use Tools for estimated unmetered single family and/or multi family residential water use.
Total Residential Water Use		gallons/year	Calculated
Actual Outdoor Irrigation of Landscape Areas with DIM in Connection with CII Water Use (Required)			
Volume of Potable and Non-potable Water Delivered through CII-DIM (or equivalent technology) for Outdoor Irrigation		gallons/year	CII DIM water use as reported in the eAR or equivalent pursuant to HSC Section 116530 (through June 30, 2028).
Actual System Water Loss (Required)			
Total Annual Volume of Real Losses		0 gallons/year	The water loss volume can be obtained from the real losses volume reported in your water loss audit report (note that this report is NOT part of this workbook): tab "Reporting Worksheet", "Real Losses = Water Losses - Apparent Losses", cell G52. If you have multiple public water systems, you can use 'Actual Use Tools' tab to calculate the total. The Reports can be found on WUE Data Portal at: https://wuedata.water.ca.gov/awwa_plans . Note that the value should be entered in this workbook as gallons/year. Multiply "acre-ft/year" by 325851.43 to get "gallons/year." or use the 'Actual Use Tools' tab.
COMMENT (Not Required; the urban retail water supplier may use this comment box to provide additional information.)			



Bonus Incentive and Variances

Bonus Incentive	Value	Units	Calculation Instructions
Bonus Incentive Water Volume	0	gallons/year	Refer to "Bonus Incentive" Workbook for example and template for assistance calculating the Bonus Incentive.
Qualified Bonus Incentive for Existing Facility (Required)			
Qualified Bonus Incentive for "Existing Facility" in Your Service Area		gallons/year	<p>The bonus incentive shall not exceed 15 percent of the urban retail water supplier's UWUO for potable recycled water produced at an Existing Facility. For the purpose of bonus incentive calculations, an Existing Facility means a facility that meets all of the following:</p> <p>REMINDER: As of <add date>, the State Water Board has not completed its rulemaking process nor has it adopted a regulatory framework. As an urban retail water supplier must apply for and receive approval from the State Water Board prior to reporting any variances. As such reporting of variances in the 2024 Annual Water Use Report is speculative.</p> <p>DWR has included this worksheet for an urban retail water supplier's planning purposes ONLY. The estimated water use calculations in this worksheet can be carried into in the 2024 Annual Water Use Report UWUO calculations ("Urban Water Use Objective" tab) for informational purposes. DWR has prepared individual worksheets for each variance calculation that can be used to inform values entered into this worksheet.</p>
Qualified Bonus Incentive for Other Facility (Required)			
Qualified Bonus Incentive for "Other Facility" in Your Service Area		gallons/year	

Variances (Informational only for the 2024 Report)	Unit	Calculation Instructions
Variances - Total Efficient Water Use Volume	0 gallons/year	
Variance for Significant Fluctuations in Seasonal Populations		
Aggregate Efficient Water Use for This Variance (assuming that the use of this variance is approved by the State Water Board)	gallons/year	Refer to separate guidance on how to calculate Seasonal Population Variance
Variance Water Use as a Percentage of the UWUO without Variances		
Variance for Significant Use of Evaporative Coolers		
Aggregate Efficient Water Use for This Variance (assuming that the use of this variance is approved by the State Water Board)	gallons/year	Refer to "Evaporative Cooler-Water Use Calculation" Workbook.
Variance Water Use as a Percentage of the UWUO without Variances		
Variance for Significant Use of Water for Commercial or Noncommercial Agricultural Use		
Aggregate Efficient Water Use for This Variance (assuming that the use of this variance is approved by the State Water Board)	gallons/year	Refer to "Other_Variences_Water Use Calculation" Workbook.
Variance Water Use as a Percentage of the UWUO without Variances		
Variance for Significant Populations of Horses and Other Livestock		
Aggregate Efficient Water Use for This Variance (assuming that the use of this variance is approved by the State Water Board)	gallons/year	Refer to "Other_Variences_Water Use Calculation" Workbook.

COMMENT (Not Required; the urban retail water supplier may use this comment box to provide additional information.)



Making Conservation a Way of Life: Proposed Reporting Requirements

Dr. Marielle Rhodeiro

Research Data Specialist

Karina Herrera

Conservation Supervisor



Proposed rulemaking schedule

First Public Comment Period*	August 18 - October 17, 2023
Public Hearing	October 4, 2023
Consideration for Adoption	Summer 2024
Rule becomes effective, if adopted	October 1, 2024

Sections of the Proposed Regulation

Section 965: Definitions

Section 966: Calculating the Urban Water Use Objective

Section 967: Indoor Residential Water Use and Associated Variances

Section 968: Outdoor Residential Water Use and Associated Variances

Section 969: Budgets for CII landscapes with DIMs and Associated Variances

Section 970: Water Loss

Section 971: Bonus Incentive

Sections 972 – 974: CII Performance Measures

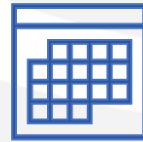
Section 975: Reporting

Section 978: Enforcement

Proposed Regulation: Reporting

- **Section 975: Reporting**
 - (a) Requires Suppliers to also submit the 10609.24 reports to the Board
 - (b) Requires, starting in 2025, that Suppliers report data relevant to the objective on a form provided by the Board
 - (b)(1) through (b)(7) Defines what the relevant data are and identifies the source for that data
 - (c) Requires, starting in 2025, that Suppliers report data relevant to actual use on a form provided by the Board
 - (c)(1) and (c)(2) Defines what the relevant data are and identifies the source for that data
 - (d) Requires, starting in 2025, that Suppliers report data relevant to the CII performance measures on a form provided by the Board
 - (d)(1) through (d)(3) Defines what the relevant data are and identifies the source for that data
- **Section 966(e) and (f):** If a system owned and operated by a supplier is lacking data needed to calculate the budgets, the system can be excluded from the objective. Requisite data must be obtained by July 1, 2028, to obtain the requisite data (or 5 years after the system meets the criteria to be considered a supplier or consolidates with a supplier).

Efficient Residential Indoor Budget



**Residential
Indoor Standard**
(GPCD)

Population
Number of people in
Supplier's service area

365
Number of
days in the year

**Residential
Indoor Budget**
Gallons Per Year

Parameter	Source Specified in Reg Text	Alternative Data Allowed?	Reg Text Section
Service Area Population	Board (Electronic Annual Report)	No	975(b)(1)(B)

Efficient Residential Outdoor Budget



0.62



Res-Outdoor Standard
(LEF)

Net ETo
Inches per year
Reference ET – Effective precipitation

Landscape Area
Square feet of
Irrigable Area

Unit Conversion Factor

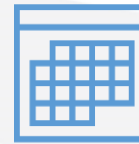
Res-Outdoor Budget
(Gallons Per Year)

Parameter	Source Specified in Reg Text	Alternative data allowed?	Reg Text Section
Reference ET	DWR (CIMIS)	Yes	975(b)(2)(B)
Effective Precipitation	DWR (Cal-SIMETAW)	Yes	975(b)(2)(B)
Landscape Area	DWR (LAM)	Yes	975(b)(2)(C)

Additions to outdoor budget: Special landscape areas (SLAs) and new construction

Parameter	Source Specified in Reg Text	Alternative Data allowed?	LEF	Reg Text Section
Residential SLAs (dedicated solely to edible plants)	Supplier	N/A	1.0	975(b)(2)(D)
Residential SLAs (irrigated with recycled water)	Supplier	N/A	1.0	975(b)(2)(D)
New Construction	Annual reporting required by section 495(b)(6) (MWELo reporting)	No	0.55	975(b)(2)(E)

Efficient Real Water Loss Budget



System-Specific Standard

Connections OR Miles

365

Water loss Budget

Gallons Per Connection per Day
(or Gallons Per Mile per Day)

Number of connections (or
miles) served by Supplier

Number of days
in the year

Gallons Per Year

Parameter	Source Specified in Reg Text	Alternative Data Allowed?	Reg Text Section
Number of Connections (per water system)	DWR (Water Loss Audit)	No	975(b)(4)(B)
Length of mains (per water system)	DWR (Water Loss Audit)	No	975(b)(4)(C)

Efficient CII Landscapes Outdoor Budget



0.62 =



CII Landscapes Standard (LEF)

Net ETo
Inches per year
Reference ET – Effective precipitation

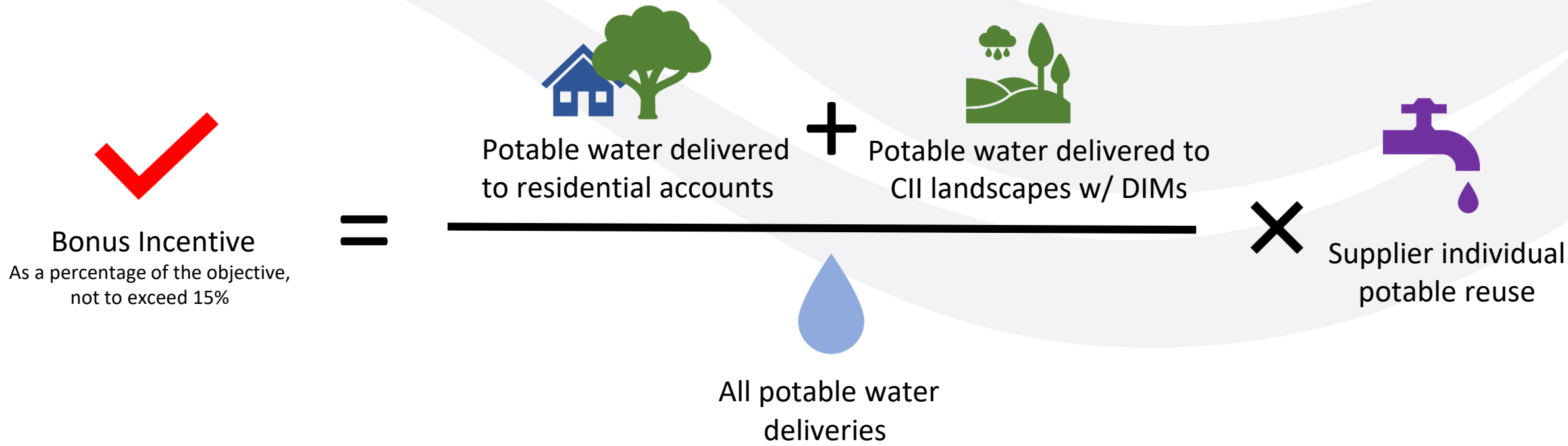
CII Landscape Area with DIMs
Square feet of Irrigable Irrigated Area

Unit Conversion Factor

CII Landscapes Budget
(Gallons Per Year)

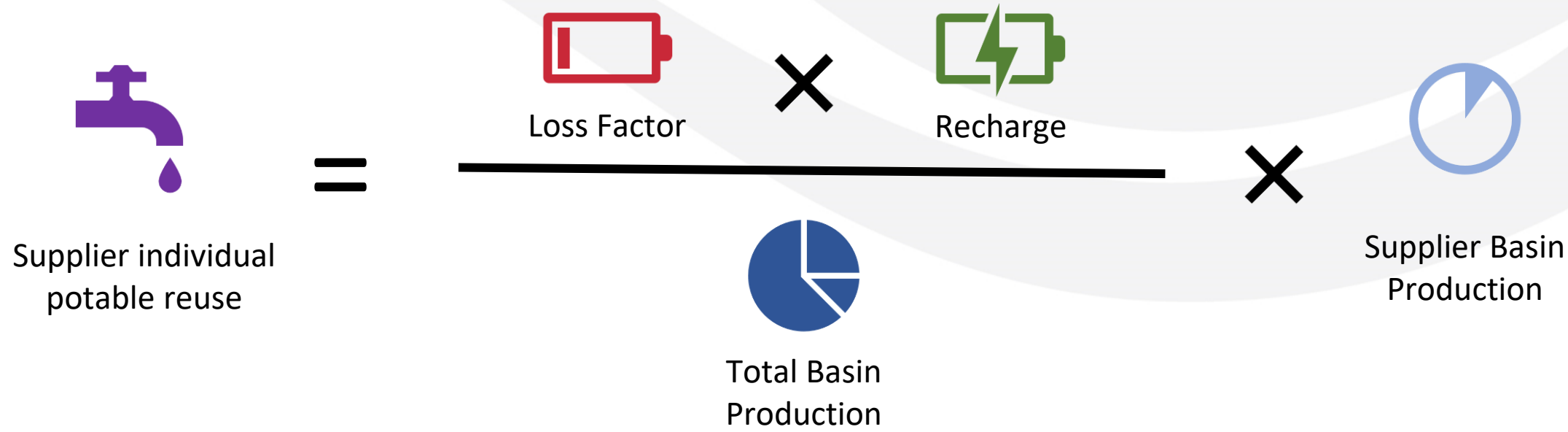
Parameter	Source Specified in Reg Text	Alternative data allowed?	Reg Text Section
Reference ET	DWR (CIMIS)	Yes	975(b)(3)(B)
Effective Precipitation	DWR (Cal-SIMETAW)	Yes	975(b)(3)(B)
CII DIMs Landscape Area	Supplier	N/A	975(b)(3)(C)

Bonus Incentive for Potable Reuse



Parameter	Source Specified in Reg Text	Alternative data allowed?	Reg Text Section
Potable water deliveries to residential accounts	Supplier	N/A	975(b)(5)(C)
Potable water deliveries to CII landscapes w/ DIMs	Supplier	N/A	975(b)(5)(C)
All potable water deliveries	Supplier	N/A	975(b)(5)(B)

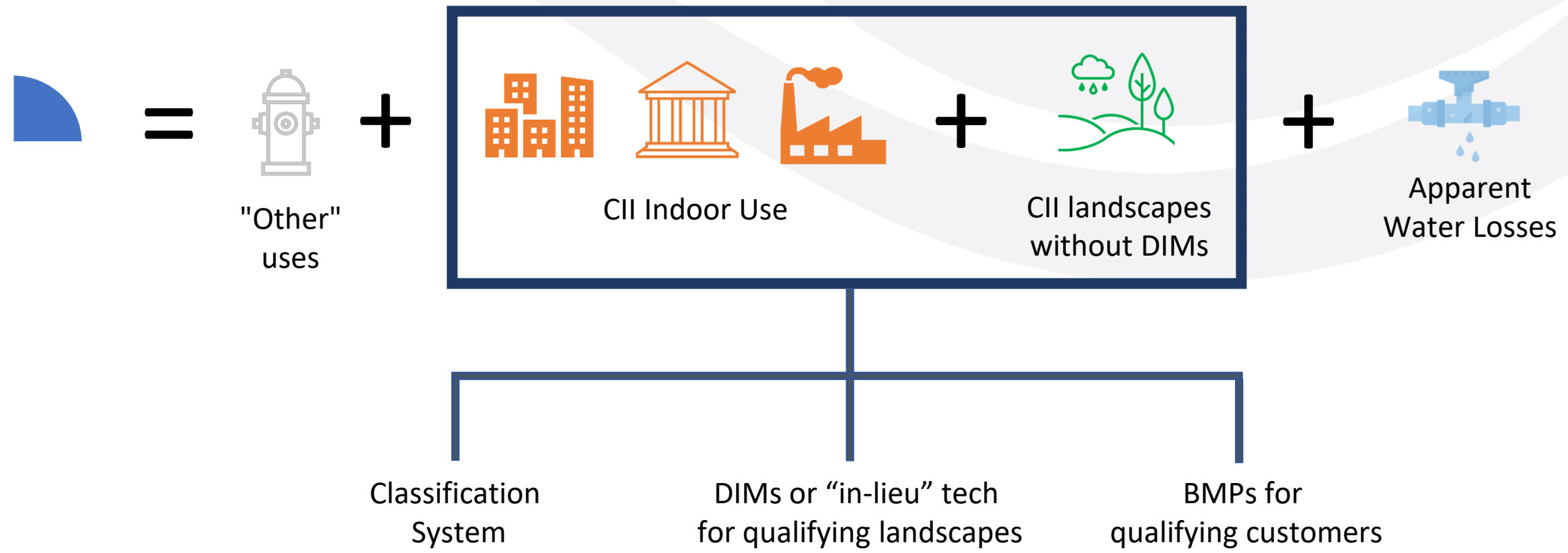
Calculating volume of potable reuse water: *Sourced from groundwater*



Parameter	Source Specified in Reg Text	Alternative data allowed?	Reg Text Section
Loss factor	Supplier	N/A	975(b)(5)(E)
Recharge	Supplier	N/A	975(b)(5)(F)
Total basin production	Supplier	N/A	975(b)(5)(H)
Supplier basin production	Supplier	N/A	975(b)(5)(I)

Demands excluded from the Objective

Some of which will be subject to CII Performance Measures



CII Classification System

Parameter	Source Specified in Reg Text	Alternative data allowed?	Reg Text Section
Total CII Customer Served	Supplier	N/A	975(2)(D)(A)
Number of CII customers classified	Supplier	N/A	975(2)(D)(B)
Number of CII account by category	Supplier	N/A	975(2)(D)(C)

- Classification effort is to be completed over 5 years
- Reporting: numerical information
- 20% Milestones beginning 2025

CII Large Landscape Threshold

- CII landscape conversion effort to be completed over 5 years
- 20% Milestones beginning 2025

Parameter	Reg Text Section
Number of large CII landscapes	975(2)(d)(A)
Aggregate volume of water used by large CII landscapes	975(2)(d)(B)
The aggregate square footage associated with large landscapes	975(2)(d)(C)
Number of large CII landscapes converted to a DIM	975(2)(d)(D)
Number of large CII landscapes that employed in-lieu technologies	975(2)(d)(E)(ii)
Type of employed in-lieu technologies	975(2)(d)(E)(iii)
Estimated water savings for converted landscapes	975(2)(d)(E)(iv)

CII BMP Threshold

Parameter	Reg Text Section
Number of CII customers exceeding each threshold	975(2)(d)(3)(A)
The BMPs implemented	975(2)(d)(3)(c)(I)
Implementation status of BMPs	975(2)(d)(3)(c)(ii)
Estimated water savings as a result of implemented BMPs	975(2)(d)(3)(c)(iii)

- 20% Milestones beginning 2025
- BMP thresholds are mostly descriptive
 - Design and plan a BMP program for different categories and the top 2.5% of CII water users in service area.
 - Practices implemented

Download Excel file at

www.cawaterdatasummit.org/agenda

Guiding questions for discussions

- DWR
 1. Does this template seem useful?
 2. How could it be improved or simplified?
 3. Is there any information that needs to be clarified?
- Board
 - A. Will integrating data from other reports make these proposed reporting requirements easier to meet?
 - B. What would make data integration easier?
 - C. What additional tools or resources would help you meet the proposed long-term reporting requirements?
 - D. Ideas on how to navigate statutory deadlines?
 - E. Any clarifications needed on timelines?

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