Charting the Course for Compliance

April 23, 2026

CALIFORNIA WATER EFFICIENCY PARTNERSHIP

CALIFORNIA DATA COLLABORATIVE

Agenda

CII Performance Measures - MUM to DIM Requirements

1. **Review of the Charting the Course Series**
2. **CII Performance Measures - MUM to DIM Requirements**
3. **In-Lieu Technology Presentations**
    a. CaDC Presentation - Using AMI to Calculate Outdoor Water Use
    b. Eagle Aerial – Landscape Area Measurement
    c. Bluebot – Smart Water Meter
    d. Senzary – Mixed-Use Irrigation Visibility
4. **Q&A Panel Session**
5. **Available tools and resources to support compliance**

From Data to Compliance: Chart Your Course Today.

Speakers

Melissa Matlock
CalWEP

Christopher Tull
CaDC

Jazmine Molloy
Eagel Aerial

Denis Zaff
Bluebot

Matt Coughlin
Senzary

Overview of Charting the Course Series

Charting the Course - Series Recap from 2025

Session 1 – February 19, 2025 (Recorded)
CII Performance Measures and Classification

Session 2 – April 23, 2025 (Recorded)
Water Loss Reporting

Session 3 – May 2025 (CalWEP Peer-to-Peer)
CII BMP "Shark Tank" Edition

Session 4 – June 25, 2025 (Recorded)
Variances and Alternative Data Pathways

Session 5 – August 2025 (CaDC Data Summit)
2024 Reporting and Insights

Session 6 - November 2025 (Recorded)
2025 Reports

Charting the Course for Compliance

An educational series for urban water suppliers

Presented by: CALIFORNIA DATA COLLABORATIVE | CALIFORNIA WATER EFFICIENCY PARTNERSHIP

Webinar
April 23, 2026; 10:30 am - 12 pm
CII MUM to DIM/ In-Lieu Technology

Peer to Peer
May 2026
Pre-session on UWUO

Data Summit
August 2026
2025 Reporting Analysis

Webinar
Sept 24, 2026; 10:30 am - 12 pm
CII BMPs

Webinar
October 22, 2026; 10:30 am – 12 pm
CII Classifying and High-Water *Users*

Webinar
November 12, 2026; 10:30 am – 12 pm
2026 UWUO Reports

Take the Poll…

CII Performance Measures - MUM to DIM Requirements

Key Definitions

Commercial, Industrial, and Institutional = CII

- Commercial businesses
- Industrial facilities
- Institutional properties (e.g., schools, government, hospitals)

Mixed-Use Meters = MUM

- A single water meter serving both indoor and outdoor water use
- Does not distinguish irrigation from indoor consumption

Dedicated Irrigation Meter = DIM

- A separate meter installed specifically for outdoor irrigation use
- Measures only landscape water use

Key Definitions

In-Lieu Technology

- Defined in regulation as technologies that enable a supplier to:
  - Identify
  - Estimate
  - Analyze outdoor water use
  - Or improve outdoor water use efficiency

Large Landscape

- Landscapes greater than ½ acre or more

Best Management Practices = BMP

- Required actions or program elements implemented by a water supplier to improve water use efficiency

Deadlines - Identify CII Water Users

1. By June 30, 2027
    a. Identify all existing CII water users associated with large landscapes; or
2. By June 30, 2029
    a. Identify all existing CII water users associated with a large landscape and for which estimated outdoor water use exceeds the water budget

Suppliers Unique Climate

x

Amount of Landscape Area

x

Efficiency Factor

Requirements for CII MUM Water Users

1. For CII Large Landscapes
    a. A supplier shall either install DIMs; or
    b. Employ at least 1 in-lieu technologies AND offer 3 BMPs

Requirements for CII MUM Water Users

Employ at least 1 in-lieu technologies

- **Water budget-based management program without a rate structure**
- **Water budget-based rate structures**
- **Installation of technologies that enables the supplier to identify, estimate, and analyze outdoor water use, which may include but is not limited to Advanced Metering Infrastructure**
- **Use of technologies that enable suppliers to identify, estimate, and analyze outdoor water use, which may include but are not limited to remote sensing**
- **Other in-lieu technologies that enable suppliers to identify, estimate, and analyze water use or improve outdoor water use efficiency, subject to Board approval.**

Requirements for CII MUM Water Users

Offer 3 BMPs (1 from Section 974(f)1 and 2 from Section 974(f)(3))

1 Outreach, Technical Assistance, and Education

- Direct contacts
- Bill inserts
- Workshops or developing training videos
- Webpage portals
- Cost-effectiveness analysis tools
- Commercials or advertisements
- Grass roots marketing
- Community based social marketing

2 Landscape Practices

- Landscape and irrigation management practices
- Irrigation system inspections, audits, or surveys
- Irrigation scheduling and maintenance
- New development landscape support
- Turf replacement with climate-ready vegetation and trees
- Install green infrastructure to offset irrigation

Deadlines - Addressing MUM

1. By June 30, 2039
    a. Either install dedicated irrigation meters (DIMs) on, or employ in-lieu water technologies for and offered BMPs to, all the CII MUM Large Landscapes
2. By June 30, 2040
    a. Maintain in-lieu technologies and offer BMPs for 95% CII MUM Large Landscapes

Current Reporting Requirements

Option 1 - Identifying CII Water Users

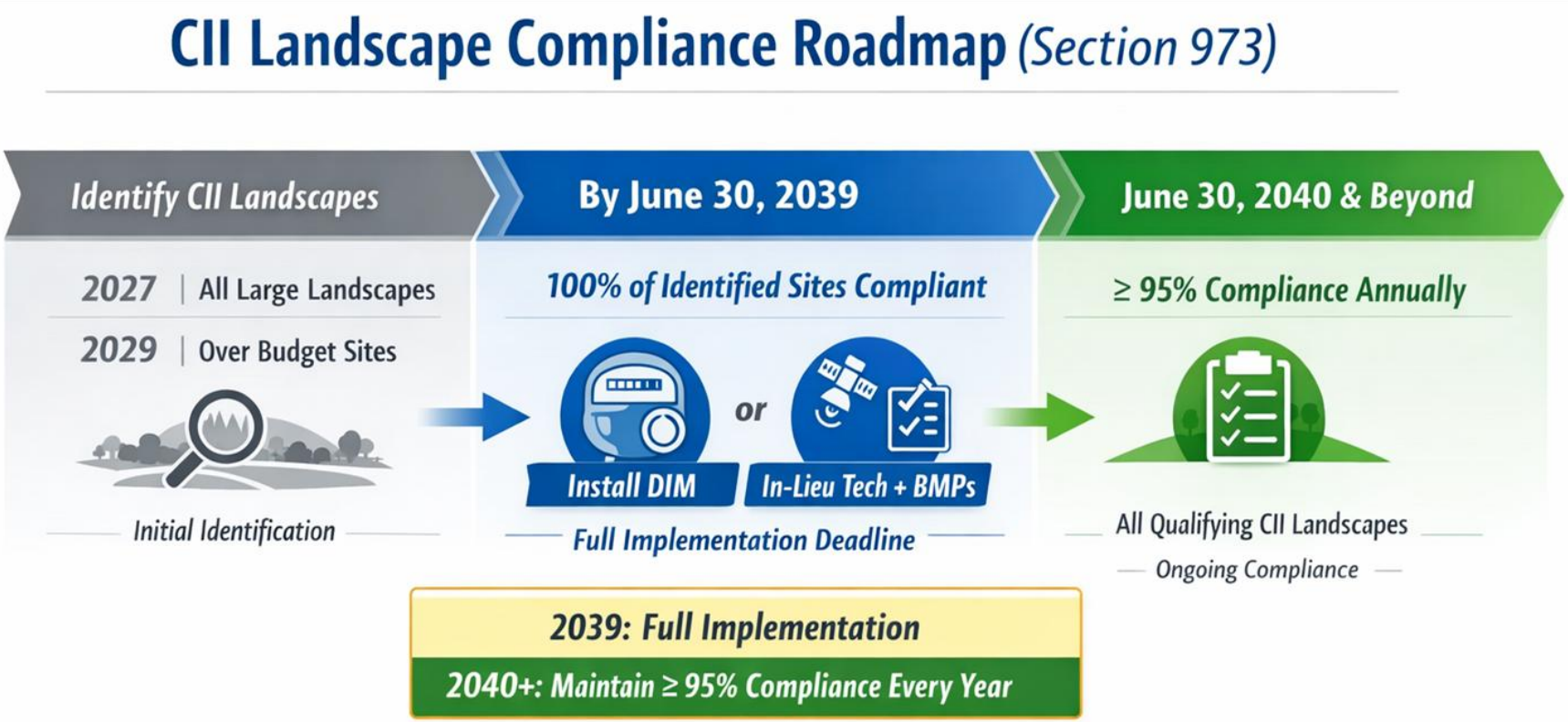
Reporting requirements associated with implementing Section 973(a)	Value	Units
Did your agency identify CII water users pursuant to section 973(a)(1) or 973(a)(2)?	973(a)(1)	N/A
Total number of water users associated with large landscapes		0
Total estimated aggregate volume of water applied to large landscapes		Gallons/Year
Total aggregate square footage of large landscapes		Square Feet

Current Reporting Requirements

Option 2 - Identifying CII Water Users over Water Budget

Reporting requirements associated with implementing Section 973(a)	Value	Units
Did your agency identify CII water users pursuant to section 973(a)(1) or 973(a)(2)?	973(a)(2)	A
Total number of water users associated with large landscapes		0
Total estimated aggregate volume of water applied to large landscapes		Gallons/Year
Total aggregate square footage of large landscapes		Square Feet
Number of CII water users with large landscapes exceeding the water budget calculated pursuant to 973(c)(1)		0
Estimated aggregate volume of water applied to large landscapes exceeding the water budget		Gallons/Year
TOTAL Square footage of large landscapes exceeding the water budget		Square Feet
Square footage of large landscapes exceeding the water budget that are SLAs		Square Feet
Aggregate Water budget for large landscapes that are NOT SLAs, as calculated pursuant to 973(c)(1)	0	Gallons/Year
Aggregate Water budget for large landscapes that are SLAs, as calculated pursuant to 973(c)(1)	0	Gallons/Year
TOTAL Aggregate Water budget for large landscapes that are SLAs, as calculated pursuant to 973(c)(1)	0	Gallons/Year

Overview Requirements



In-Lieu Technology Presentations

Quantifying Irrigation in CII Mixed-Use Meters

using AMI and Machine Learning

Requirements for CII MUM Water Users

Employ at least 1 in-lieu technologies

- **Water budget-based management program without a rate structure**
- **Water budget-based rate structures**
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Overview

This project applies machine learning to high-resolution hourly water consumption data from advanced metering infrastructure (AMI) to identify and **estimate the volume of outdoor irrigation occurring in mixed-use meters (MUMs)** in the CII sector to support water efficiency compliance efforts to meet CA water conservation regulations

Funding Partners

ICP

San Diego County Water Authority

moulton niguel water district

Data Partners

LONG BEACH Utilities
Water · Gas · Sewer

Study Objectives

1. **Demonstrate the feasibility and accuracy** of using AMI data and ML algorithms to distinguish between indoor and outdoor water consumption patterns on mixed-use CII meters.

2. **Provide a robust technical foundation to support the development of "in-lieu" compliance pathways** under the new state water efficiency framework, offering a potentially cost-effective alternative to physical meter separation.

3. **Produce shareable ML models and code that agencies can utilize** for analysis of their AMI data and compliance reporting. These models could then also be integrated with other tools and software.

Study Status

- Irrigation detection model has been developed and continues to be refined
- Code and trained model published to Github
- Model will also be made available through CaDC's Wavelet software
- Final report on results and usability will be published by end of June

Modeling Approaches

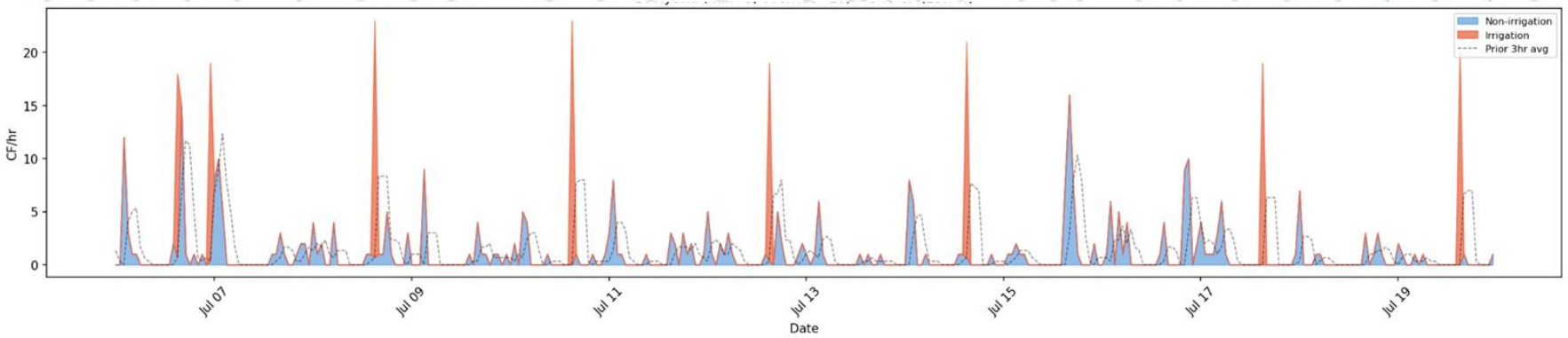
Several different approaches were tried over the course of the project:

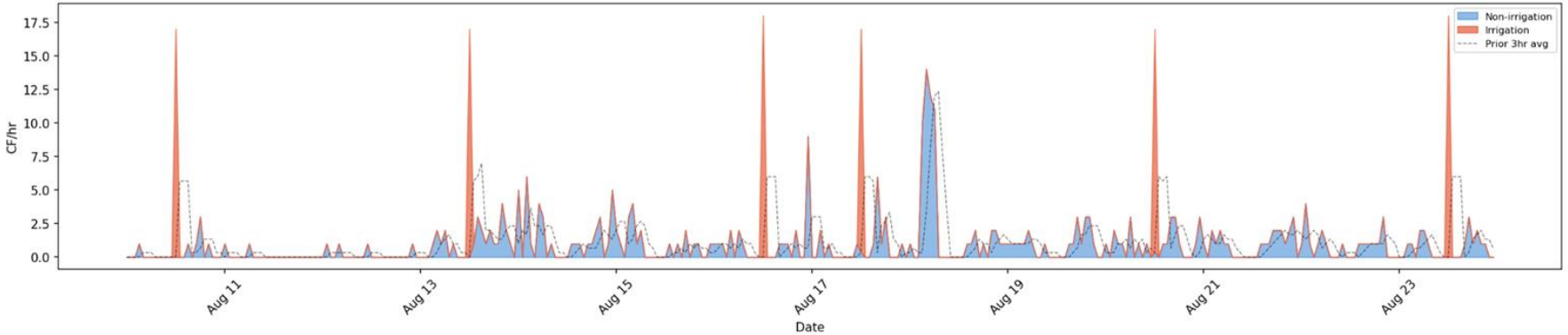
- **Autoencoder**: An unsupervised deep learning approach. A neural network is trained to reconstruct normal (non-irrigation) consumption patterns; intervals with high reconstruction error are flagged as irrigation.

- **DilatedUNet1D**: A supervised deep learning approach. A 1D U-Net is trained on synthetic data (real non-irrigation meter readings mixed with simulated irrigation patterns).

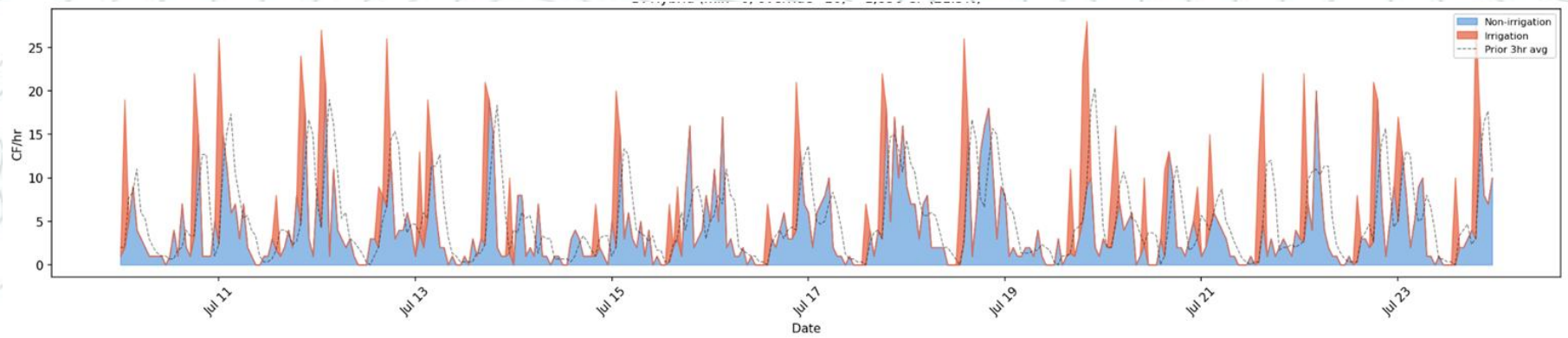
- **Spike Detection with Seasonal Gating**: A statistical approach that requires no training. Irrigation events are flagged when consumption spikes sharply above a baseline. Large spikes are automatically classified as irrigation. Smaller spikes require seasonal confirmation.

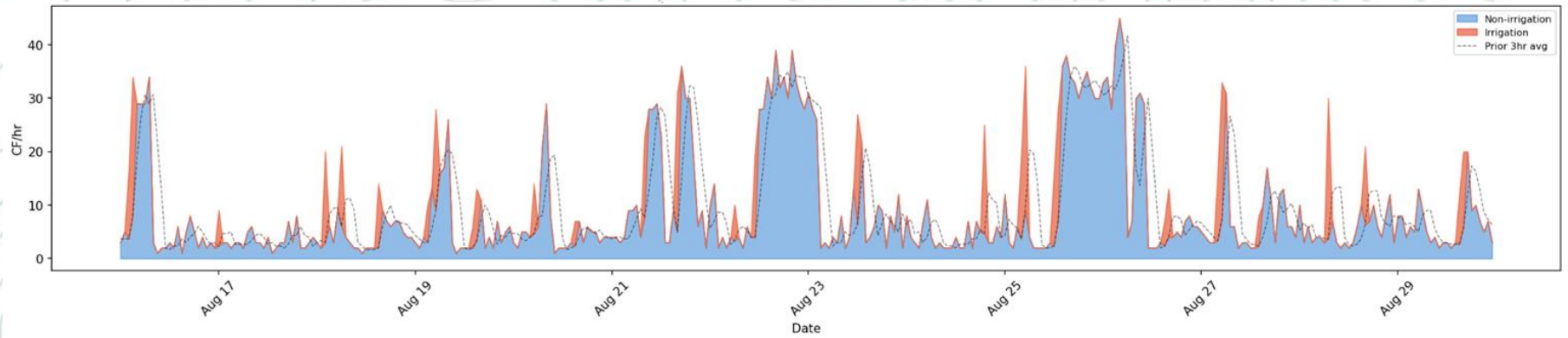
Classification Examples





Classification Examples

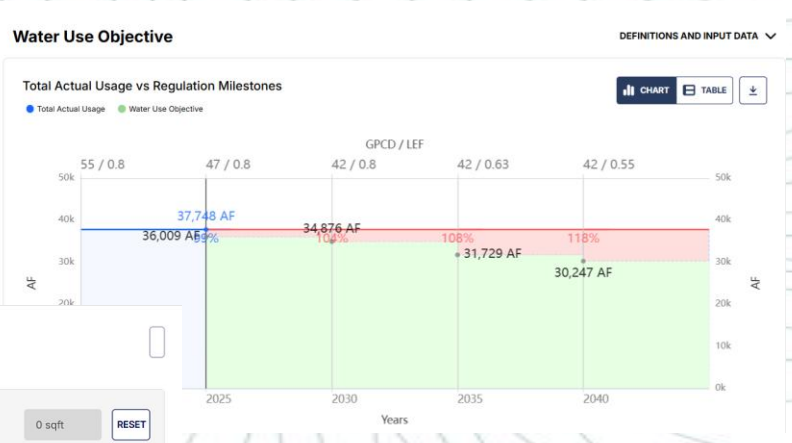


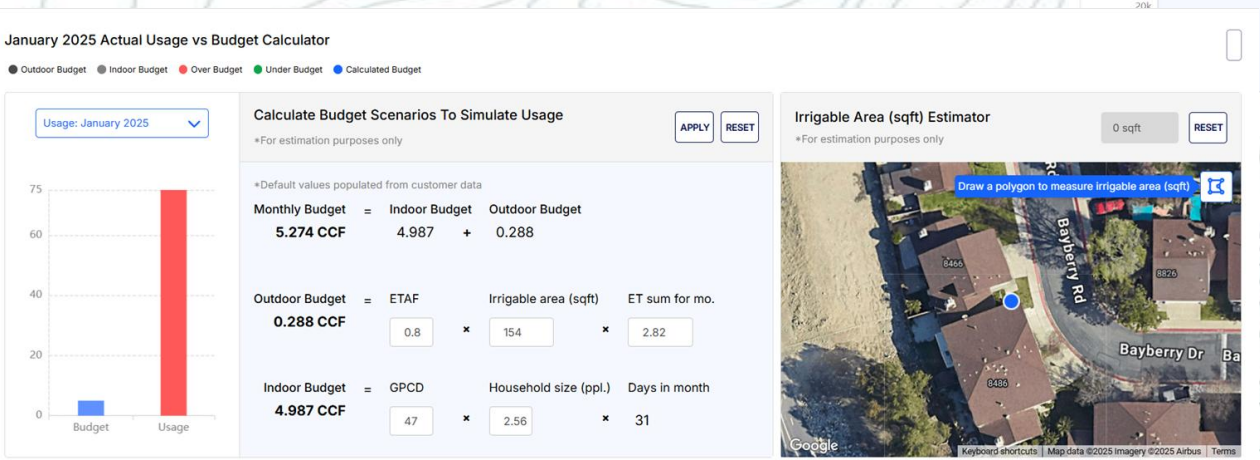


Wavelet

CaDC's water demand software with an UWUO module

- Billed Consumption Data and AMI Data
- CII Classification tool
- Top Water User Lists
- Reports for Compliance





Deploying results in CaDC's Wavelet software

WATER TOWN

Units: Gal

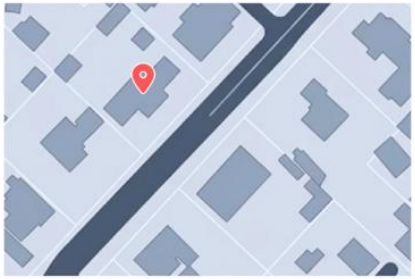
Search
Dashboard
Accounts
Reports
Segments
Water Use Objective
Upload Data
Settings
Manage Agencies
Logout

Account # 11020

19 Reservoir Way
Water Town, 55092

SFR

VIEW ACCOUNT



400% of May 2025 Outdoor Budget

25,032 Gal. Irrigation

6,258 Gal. Outdoor Budget

Irrigation = 90% of May 2025 Total Usage

25,032 Gal. Irrigation

27,789 Gal. Total Usage

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Irrigable Area: 13,251 sqft

Non-Irrigable Area: 0 sqft

Impervious: 2,702 sqft

Pool: 600 sqft

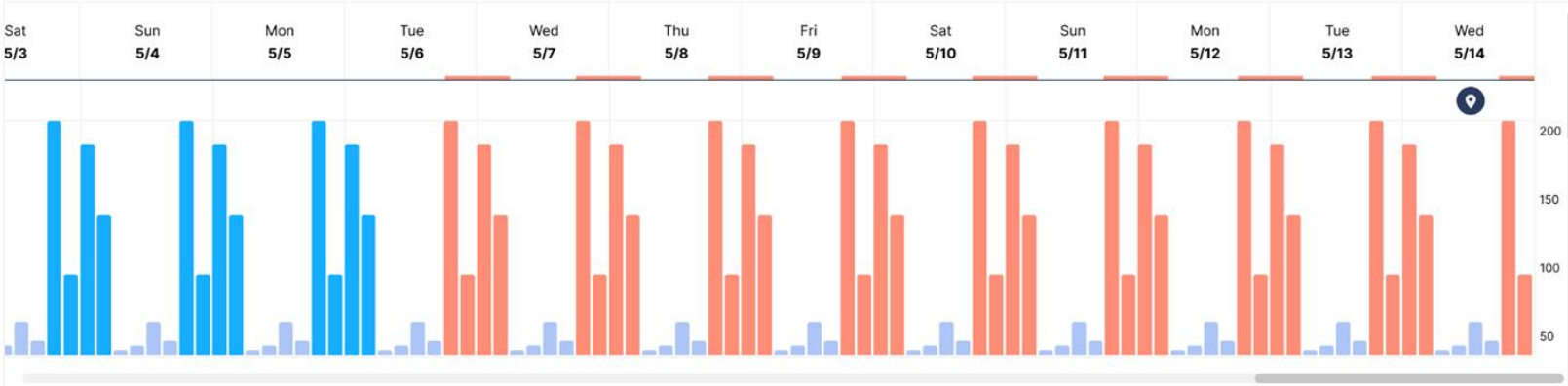
Irrigation Events

MONTH | DAY | HOUR

as of Monday 5/12/2025 @ 9am

Usage | Irrigation | Budget | Over Budget

EXPORT | ACTIVITY



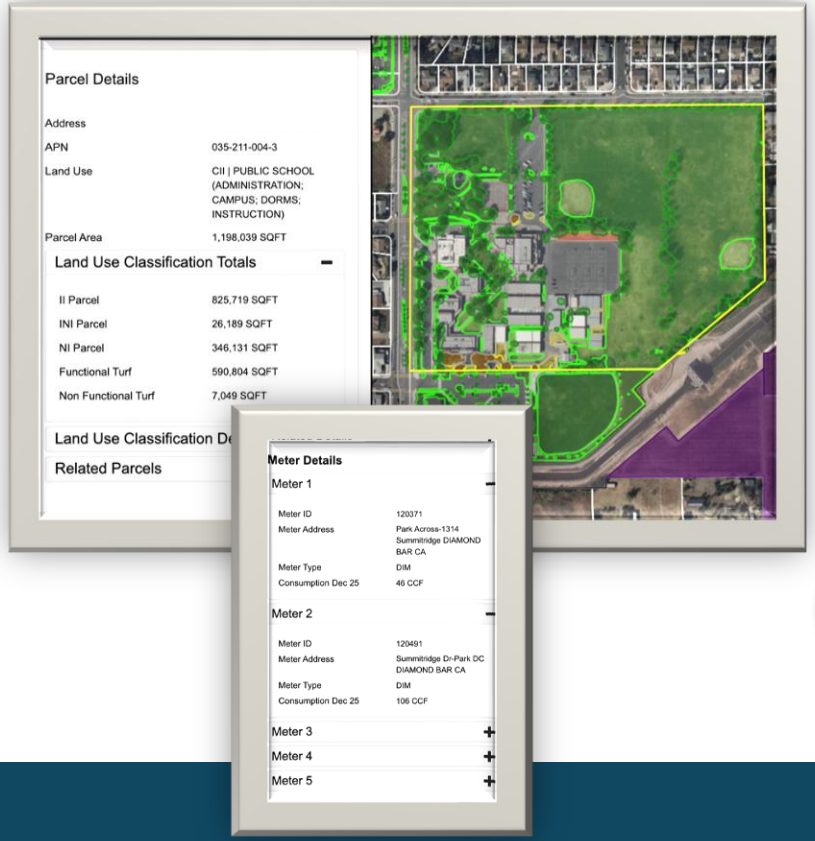
Irrigation Event ID	Irrigation Start	Irrigation End	Irrigation Duration	Irrigation Volume
MN39210	Thu 4-09-2026 1pm	Thu 4-09-2026 3pm	2 HRS	6 Gallons
MN44012	Thu 4-09-2026 4am	Thu 4-09-2026 8am	4 HRS	18 Gallons

Landscape Area Measurement with Eagle Aerial

WATERVIEW
By Eagle Aerial Solutions

Waterview operates as an In-Lieu technology by leveraging meter data, spatial landscape data (LUCD), and climate inputs to **identify** qualifying sites, **calculate** landscape-based water budgets (CIIMUM), **estimate** outdoor water use, and evaluate performance against regulatory thresholds.

How WaterView functions as an In Lieu Technology:



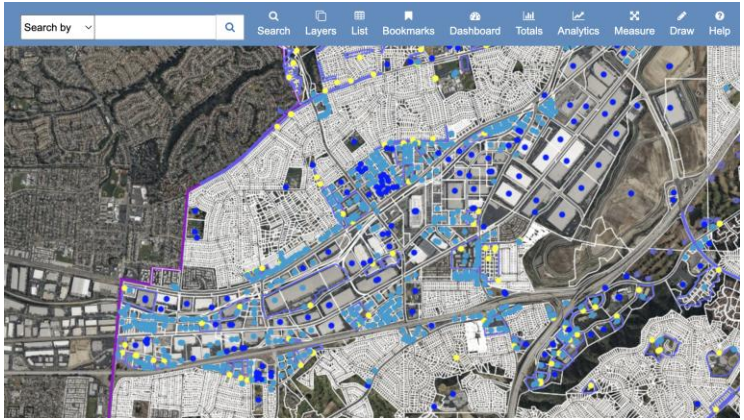
Identify which mixed-use meters serve large landscapes

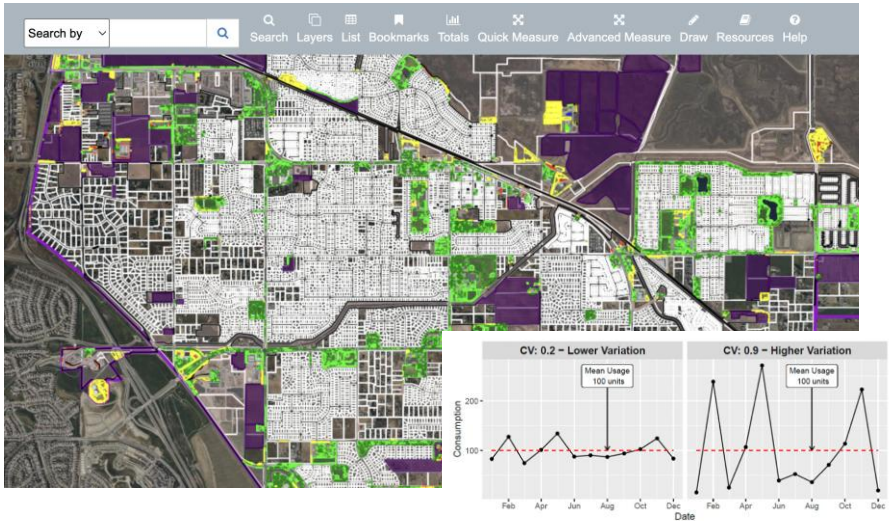
WATERVIEW
By Eagle Aerial Solutions

Calculate the allowable irrigation budget vs actual use

Estimate the outdoor water component

IDENTIFY: Mixed Use Meter Analysis





Geolocate and link meters to parcels and customer classifications to establish a defensible spatial and account-level foundation

Identify mixed-use meters serving irrigated landscapes using parcel, consumption, and ET data together with DWR CII LUCD (or other remotely sensed mapped data)

IDENTIFY: Mixed Use Meter Analysis

Final Output:

Spatial dataset of:

- All MUMs that are irrigating landscapes equal or greater than the 0.5 acre threshold
- The parcels & customers associated with the subset of MUMs
- MUM consumption trends

CALCULATE: Outdoor Irrigation Budget

Apply the formula for the allowable outdoor water budget for CII large landscapes:

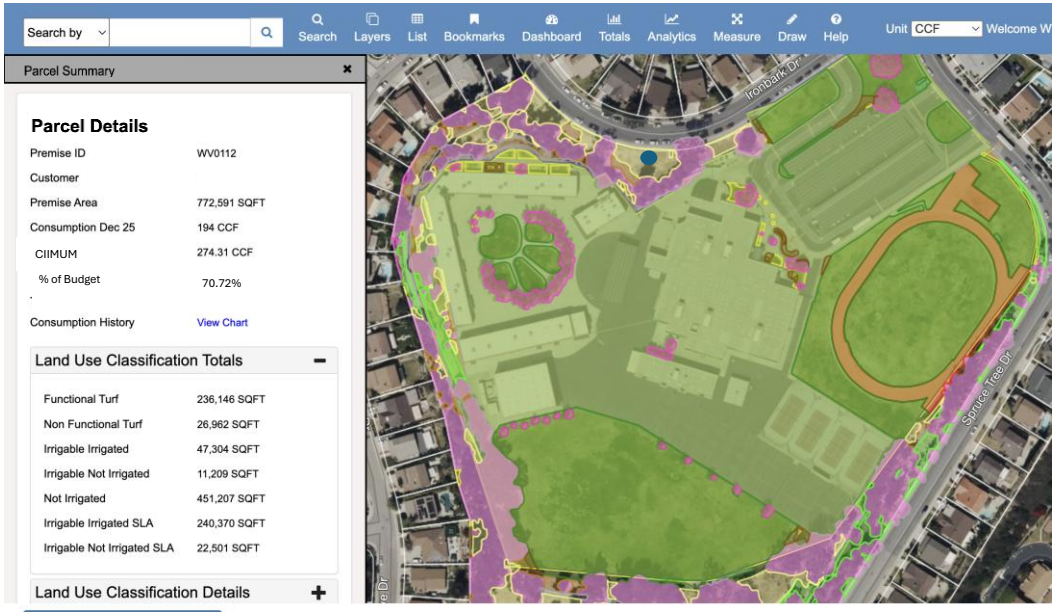
Input:

- LALL (from mapping)
- Net ET_0 (climate data)
- LEF (0.63 or 1.0 for SLA)

* Calculate *

Output:

Expected outdoor water budget (CIIMUM)



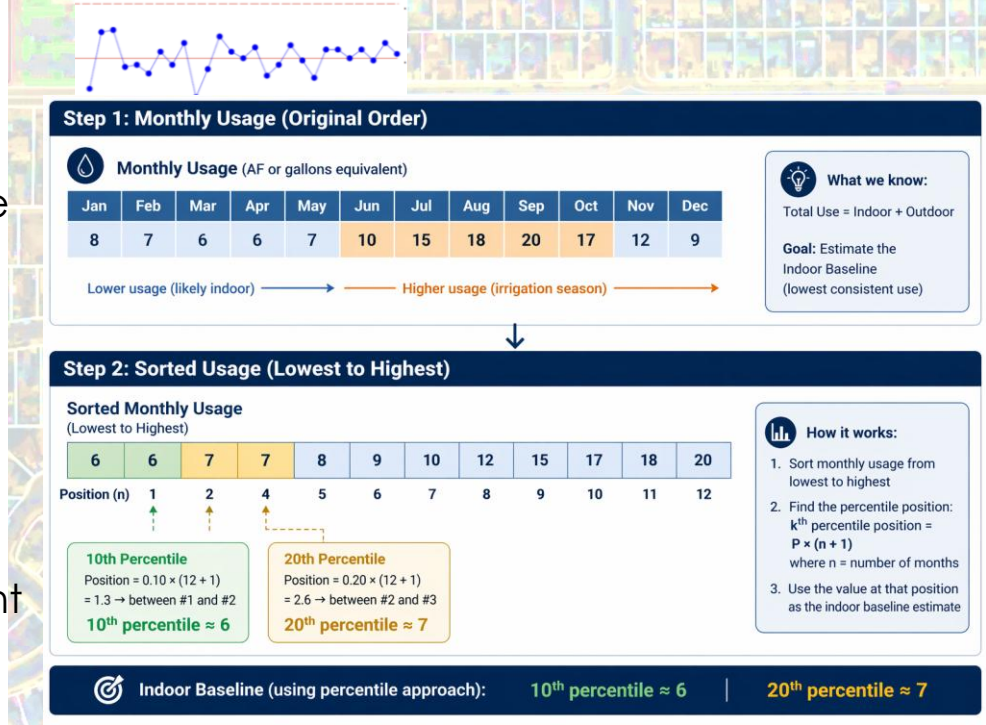
Estimate: Outdoor Water Use

WaterView applies a consistent analytical model across all identified MUMs using the meter's:

- consumption data
- mapped landscape area
- climate inputs

Percentile-based indoor baselines are calculated to identify the lowest consistent level of water use for MUM.

$$\text{Outdoor Use}_t = \text{Total Use}_t - \text{Baseline}$$

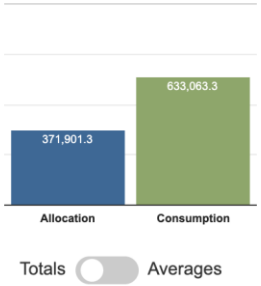


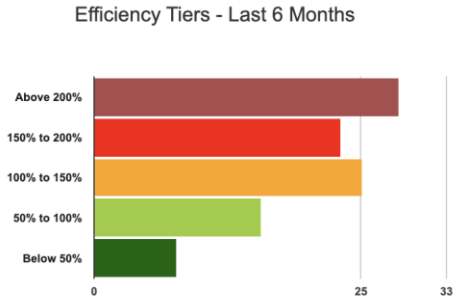
[Compared to seasonally based approaches - This allows us to establish a stable estimate of indoor demand, even when seasonal patterns are imperfect or noisy]

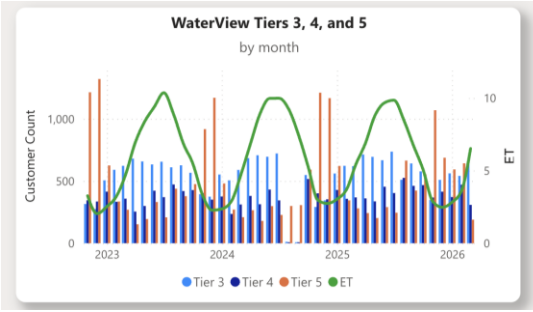
Track & Report: Estimated Outdoor Tiers

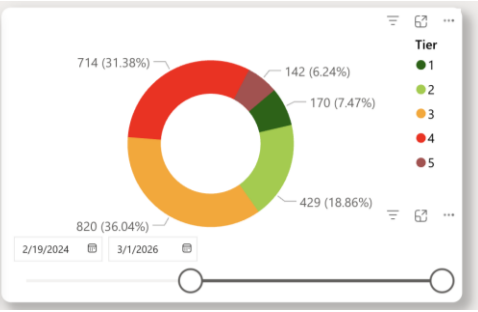
WATERVIEW
By Eagle Aerial Solutions

Organizes MUMs into performance tiers based on how estimated outdoor use compares to its efficient irrigation budget.









This allows suppliers to quickly prioritize accounts for action, focusing on outreach and program resources.

Data outputs align with State reporting requirements, providing a defensible, standardized way to demonstrate how each account performs relative to its water budget.

Bluebot Smart Water Meter

BLUEBOT SMART WATER METER

A practical in-lieu technology for California agencies managing large mixed-use CII landscapes

CalWEP webinar • April 23, 2026

Focus: how Bluebot can help suppliers identify, estimate, and analyze outdoor water use

bluebot®

Why mixed-use meters create a compliance problem

The supplier needs defensible outdoor-use insight, but the site often has only one blended customer meter.

The practical gap

- One utility account can serve restrooms, cooling, kitchens, and irrigation from the same meter.
- The agency still has to identify, estimate, and analyze outdoor use for the qualifying landscape.
- DIM retrofits may require design review, excavation, shutdowns, backflow work, and customer coordination. Always expensive and usually lengthy!
- Agencies want a faster retrofit path that can start generating data before a full meter conversion.

Best fit: accessible irrigation branches or paired-meter layouts

Where Bluebot fits in the regulation

A strong fit for §973(b)(2)(C): technologies that enable the supplier to identify, estimate, and analyze outdoor water use.

Bluebot gives agencies a retrofit-friendly way to collect site-level flow data without cutting the pipe or replacing the existing utility meter first.

- Clamp-on ultrasonic meter; no service shutdown and no pipe cutting.
- Live flow, historical usage, alerts, and budget-style monitoring through app + FloDash web dashboard.
- Broad pipe coverage from 3/4" to 4" and compatibility with 80+ pipe size/type combinations.
- Wi-Fi, LoRaWAN, and optional 4G options for sites where meter pits or branches do not have reliable Wi-Fi.

bluebot®

Bluebot Water Meter Product Line

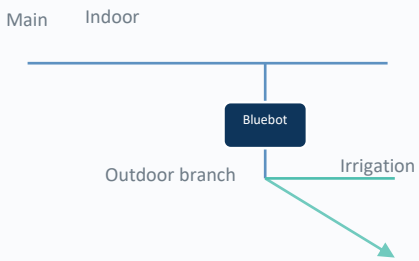
Application	Bluebot type				Connectivity options	
Diameters	Mini	Regular	Prime	Max	LoRa	Wi-Fi
1/2"	✔				✔	✔
3/4"	✔	✔	✔		✔	✔
1"	✔	✔	✔		✔	✔
1.25"		✔	✔		✔	✔
1.5"		✔	✔		✔	✔
2"		✔	✔		✔	✔
2.5"			✔		✔	✔
3"			✔		✔	✔
4"			✔	✔	✔	✔
5"				✔	✔	✔
6"				✔	✔	✔
7"				✔	✔	✔
8"				✔	✔	✔
9"				✔	✔	✔
10"				✔	✔	✔
11"				✔	✔	✔
12"				✔	✔	✔

bluebot®

How agencies can deploy Bluebot on large mixed-use sites

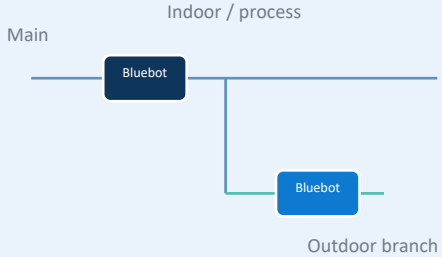
The best configuration depends on site hydraulics, branch access, pipe size, and connectivity at the meter location.

1. Direct irrigation branch



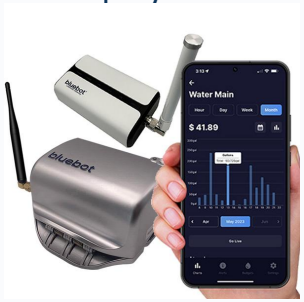
Install Bluebot on the exposed irrigation branch to directly track outdoor flow and irrigation events.

2. Paired-meter layout



Where branches are accessible, combine a main-line meter with a second meter on an indoor or irrigation branch to estimate outdoor use through subtraction and validation.

3. Campus / no-Wi-Fi deployment



One gateway supports thousands of meters within its operational range

Use ProLink options where Wi-Fi is weak or inaccessible.

Data Flows Immediately

1. **See data live**
   The Bluebot provides a measurement data point every 2 seconds to form a live view of the flow

2. **Use 10-minute, hourly, weekly, monthly summaries**
   View or download processed data in your desired resolution

3. **Integrate your data systems via API Integration**
   Crunch the data on your existing infrastructure. Open Flow API enables robust and secure data access

4. **Share data with different users**
   Invite others to view Bluebot data as required

What the agency gets

- Site-level flow history
- Water consumption history
- Leak / continuous-flow alerts
- Threshold use alerts
- Detailed, actionable data
- Evidence for irrigation audits
- Better decisions

Bluebot data is always available and accessible

Three ways to access data

- Anywhere you go: mobile Apps: iOS & Android
- From your office desk on the web: dashboard.bluebot.com
- Integrate data systems via open Flow API

Bluebot can help agencies start now

Three takeaways

- Bluebot is most compelling where agencies need a retrofit-friendly path to get outdoor-use visibility without cutting in a new meter.
- Its clearest regulatory fit is §973(b)(2)(C): technology that helps identify, estimate, and analyze outdoor water use.
- It is an “in-lieu” technology with robust reporting workflow.

bluebot®

THANK YOU!

Irrigation Visibility through Senzary

Water IQ + IoTLogIQ

Mixed-Use Irrigation Visibility for California Water Agencies

Opportunity: Resistance to Intrusive Metering

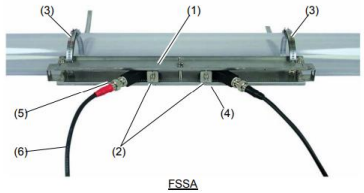
- Dedicated Irrigation Meters (DIMs) are intrusive and costly.
- **Step 1**: Senzary offers a multiple In-Lieu Technology options to minimize install time, cost, and risk while delivering high-quality data.
- **Step 2:** Once in place, Senzary WaterIQ platform aggregates and analyzes data across all users.
- **Step 3**: WaterIQ with IoTLogIQ platform can scale well beyond simple water metering to incorporate sensors of any type – irrigation intelligence, environmental data, even controls, utilizing the some utility data layer and platform.

SENZARY.COM
SENSING AND DELIVERING ACTIONABLE INSIGHTS

Step One:
In-Lieu Monitoring Options

Clamp-on Ultrasonic Flow Meter

- Fuji liquid ultrasonic flowmeters are clamp-on, non-contact, and installed on the outside of the pipe without pipe cutting.
- Senzary offers multiple sensor and gateway options.
- LoRaWAN/cellular wireless data



SENZARY.COM
SENSING AND DELIVERING ACTIONABLE INSIGHTS

Step Two: Scalable Utility Platform

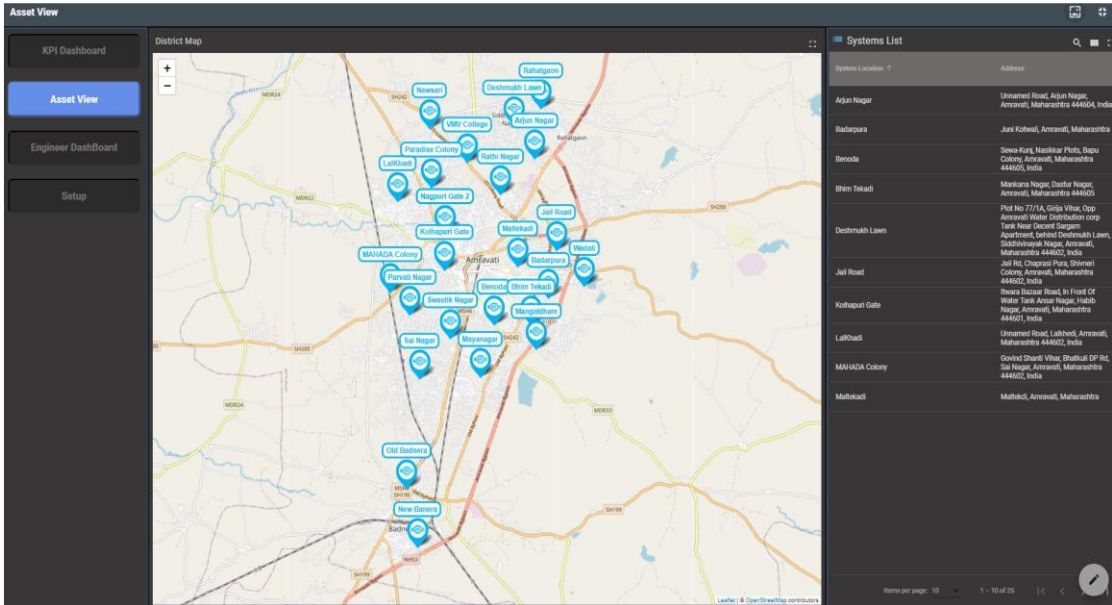
Senzary WaterIQ

- Real-time data, automated reporting on user-friendly dashboard
- Alerts and notifications
- Infinitely scalable - Add sensors, gateways, and outputs as required

SENZARY.COM
SENSING AND DELIVERING ACTIONABLE INSIGHTS

Step 3: Senzary WaterIQ as Utility Operating System

- WaterIQ sits on top of Senzary's IoTLogIQ platform
- Integrate virtually any sensor type
- Integration with legacy systems, SCADA, MODBUS, MQTT, cellular
- Advanced security protocols



SENZARY

Matt Coughlin
matt@senzary.com

Q&A

Speakers

Melissa Matlock
CalWEP

Christopher Tull
CaDC

Jazmine Molloy
Eagel Aerial

Denis Zaff
Bluebot

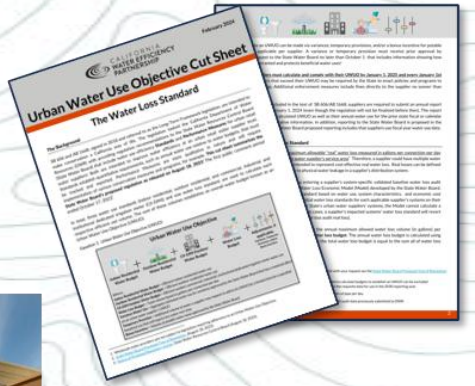
Matt Coughlin
Senzary

Resources

Framework Resources

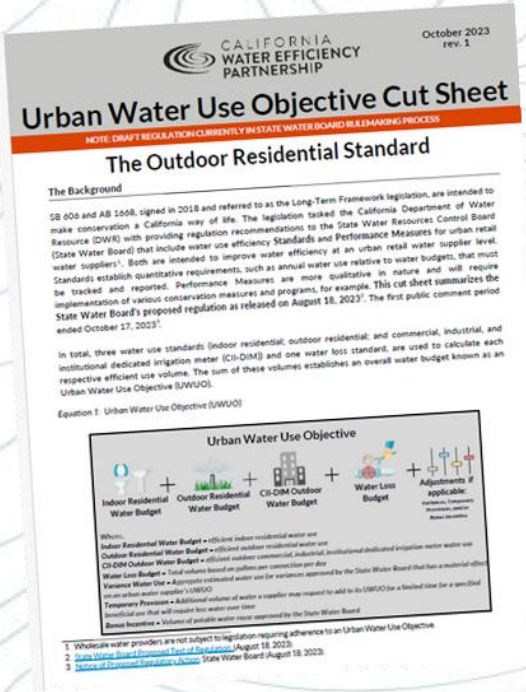
CalWEP is your implementation partner.

AVAILABLE NOW:



- Cut sheets for each standard and CII performance measures
- Framework 101 slide deck
- NAICS to ESPM Crosswalk
- Disclosable Buildings Toolkit
- RFP Guidance and Template RFP
- CII DIM Identification Guidebook
- CII Classification Guidance Document
- CalWEP LAM Viewer Powered by WaterView
- CalWEP Compliance Resource Hub (with interactive timeline!)

Resources: Understanding the Framework



CALIFORNIA WATER EFFICIENCY PARTNERSHIP

October 2023 rev. 1

Urban Water Use Objective Cut Sheet

NOTE: DRAFT REGULATION CURRENTLY IN STATE WATER BOARD RULEMAKING PROCESS

The Outdoor Residential Standard

The Background

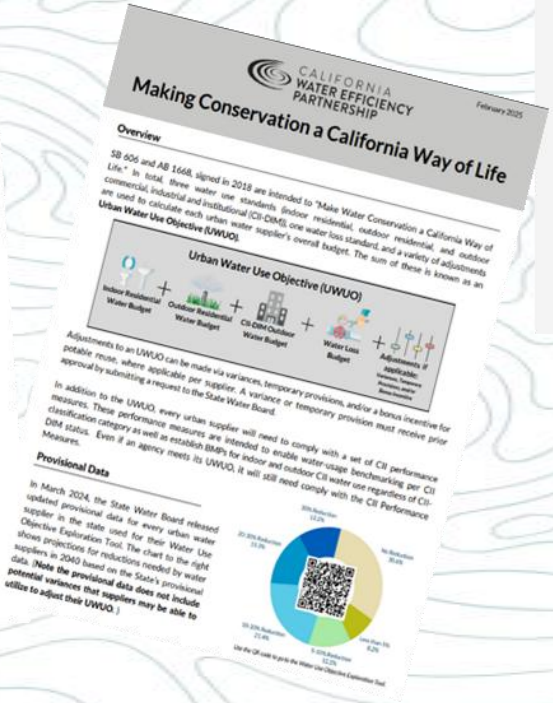
SB 606 and AB 1668, signed in 2018 and referred to as the Long-Term Framework legislation, are intended to make conservation a California way of life. The legislation tasked the California Department of Water Resource (DWR) with providing regulation recommendations to the State Water Resources Control Board (State Water Board) that include water use efficiency Standards and Performance Measures for urban retail water suppliers[1]. Both are intended to improve water efficiency at an urban retail water supplier level. Standards establish quantitative requirements, such as annual water use relative to water budgets, that must be tracked and reported. Performance Measures are more qualitative in nature and will require implementation of various conservation measures and programs, for example. This cut sheet summarizes the State Water Board's proposed regulation as released on August 18, 2023[2]. The first public comment period ended October 17, 2023[3].

In total, three water use standards (indoor residential; outdoor residential; and commercial, industrial, and institutional dedicated irrigation meter (CII-DIM)) and one water loss standard, are used to calculate each respective efficient use volume. The sum of these volumes establishes an overall water budget known as an Urban Water Use Objective (UWUO).

Equation 1: Urban Water Use Objective (UWUO)

Where,
Indoor Residential Water Budget = efficient indoor residential water use
Outdoor Residential Water Budget = efficient outdoor residential water use
CII-DIM Outdoor Water Budget = efficient outdoor commercial, industrial, institutional dedicated irrigation meter water use
Water Loss Budget = Total volume based on gallons per connection per day
Variance Water Use = Appropriate estimated water use for variances approved by the State Water Board that has a material effect on an urban water supplier's UWUO
Temporary Provision = Additional volume of water a supplier may request be add to its UWUO for a limited time for a specified beneficial use that will require less water over time
Bonus Incentive = Volume of potable water reuse approved by the State Water Board

1. Wholesale water providers are not subject to legislation requiring adherence to an Urban Water Use Objective
2. State Water Board Proposed Text of Regulation (August 18, 2023)
3. Notice of Proposed Regulation Action, State Water Board (August 18, 2023)



CALIFORNIA WATER EFFICIENCY PARTNERSHIP

February 2025

Making Conservation a California Way of Life

Overview

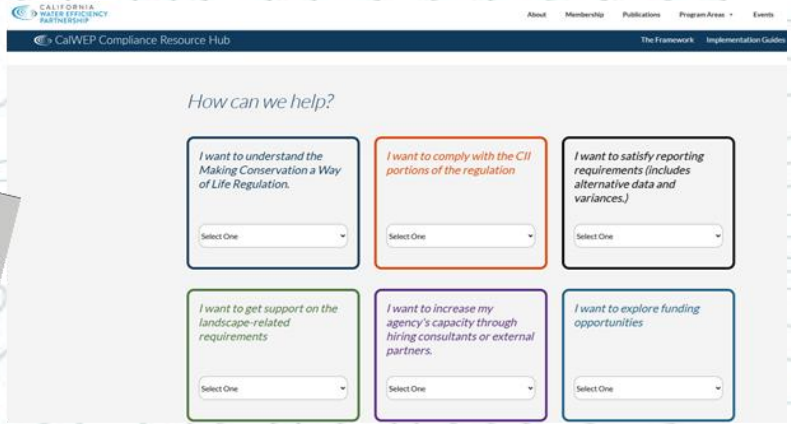
SB 606 and AB 1668, signed in 2018 are intended to "Make Water Conservation a California Way of Life." In total, three water use standards (indoor residential, outdoor residential, and outdoor commercial, industrial and institutional (CII-DIM)), one water loss standard, and a variety of adjustments are used to calculate each urban water supplier's overall budget. The sum of these is known as an **Urban Water Use Objective (UWUO).**

Adjustments to an UWUO can be made via variances, temporary provisions, and/or a bonus incentive for potable reuse, where applicable per supplier. A variance or temporary provision must receive prior approval by submitting a request to the State Water Board.

In addition to the UWUO, every urban supplier will need to comply with a set of CII performance measures. These performance measures are intended to enable water usage benchmarking per CII classification category as well as establish BMPs for indoor and outdoor CII water use regardless of CII-DIM status. Even if an agency meets its UWUO, it will still need comply with the CII Performance Measures.

Provisional Data

In March 2024, the State Water Board released updated provisional data for every urban water supplier in the state used for their Water Use Objective Exploration Tool. The chart to the right shows projections for reductions needed by water suppliers in 2040 based on the State's provisional data. **(Note the provisional data does not include potential variances that suppliers may be able to utilize to adjust their UWUO.)**



CALIFORNIA WATER EFFICIENCY PARTNERSHIP

About Membership Publications Program Areas Events

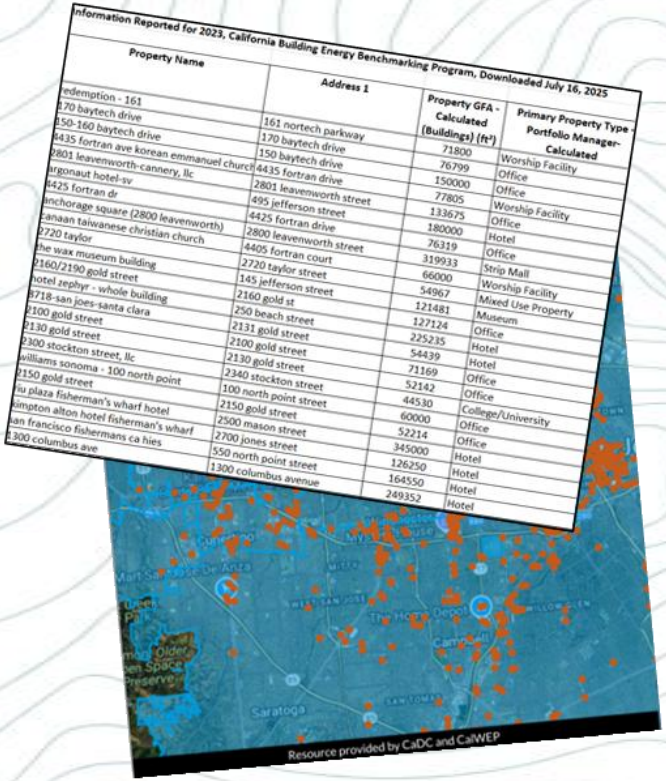
CalWEP Compliance Resource Hub

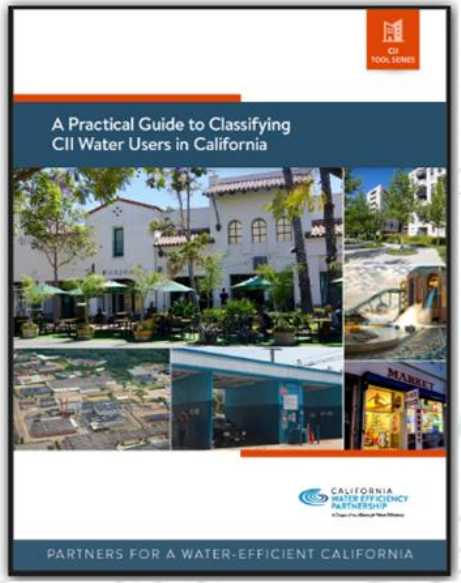
The Framework Implementation Guides

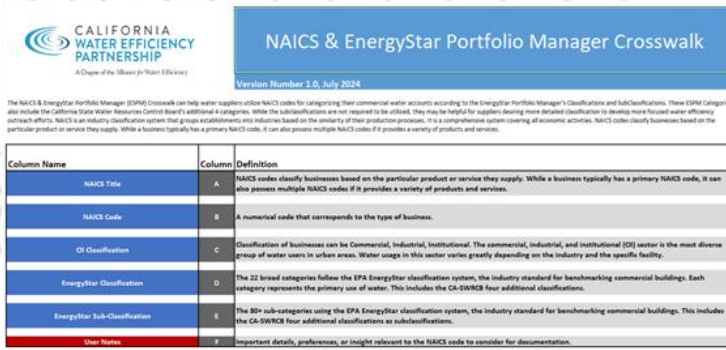
How can we help?

I want to understand the Making Conservation a Way of Life Regulation. Select One	*I want to comply with the CII portions of the regulation* Select One	*I want to satisfy reporting requirements (includes alternative data and variances.)* Select One
I want to get support on the landscape-related requirements Select One	*I want to increase my agency's capacity through hiring consultants or external partners.* Select One	*I want to explore funding opportunities* Select One

Resources: Identify CII Customers







Direct Technical Assistance

Get UWUO-Ready with Less Time, Less Cost, and More Confidence

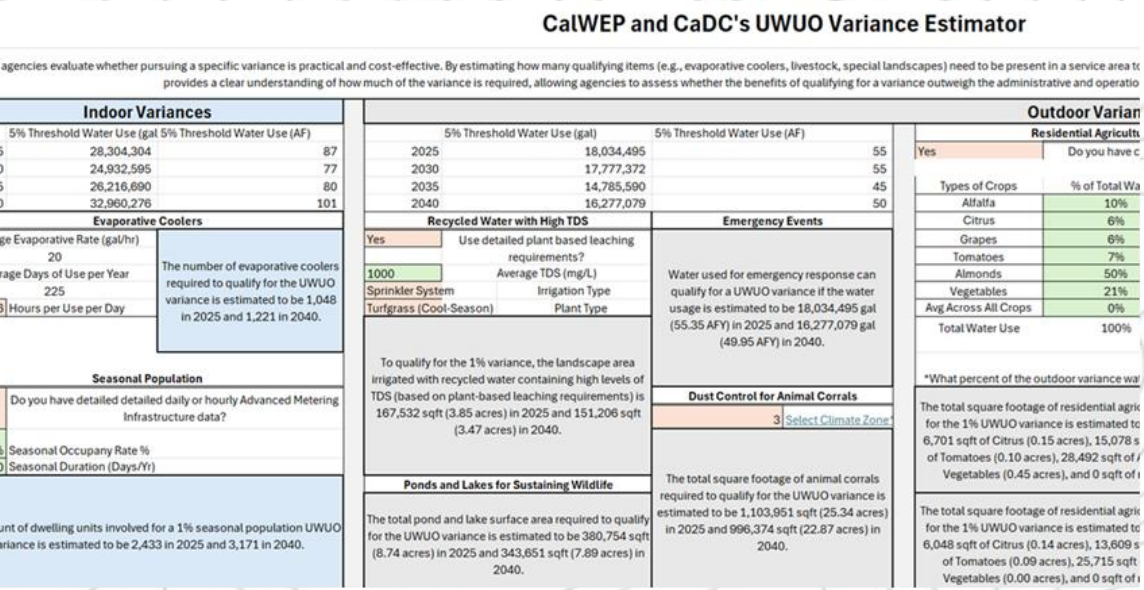
Join CalWEP's Direct Technical Assistance Pilot: AI-Assisted CII Classification

A Smarter, Faster Way to Meet UWUO Requirements

- One-time, cost-effective technical assistance
- AI + expert review delivers secure, accurate, UWUO-ready results in weeks (95%+ accuracy)
- Powered by CalWEP | Delivered by MEA | Built for California water suppliers

MEA = Maureen Erbeznik & Associates

Resources: Variances and Alternative Data



CalWEP and CaDC's UWUO Variance Estimator

agencies evaluate whether pursuing a specific variance is practical and cost-effective. By estimating how many qualifying items (e.g., evaporative coolers, livestock, special landscapes) need to be present in a service area to provides a clear understanding of how much of the variance is required, allowing agencies to assess whether the benefits of qualifying for a variance outweigh the administrative and operatio

Indoor Variances

5% Threshold Water Use (gal	5% Threshold Water Use (AF)
28,304,304	87
24,932,595	77
26,216,690	80
32,960,276	101

Evaporative Coolers

ge Evaporative Rate (gal/hr): 20
rage Days of Use per Year: 225
Hours per Use per Day

The number of evaporative coolers required to qualify for the UWUO variance is estimated to be 1,048 in 2025 and 1,221 in 2040.

Seasonal Population

Do you have detailed detailed daily or hourly Advanced Metering Infrastructure data?

Seasonal Occupany Rate %
Seasonal Duration (Days/Yr)

unt of dwelling units involved for a 1% seasonal population UWUO riance is estimated to be 2,433 in 2025 and 3,171 in 2040.

	5% Threshold Water Use (gal)	5% Threshold Water Use (AF)
2025	18,034,495	55
2030	17,777,372	55
2035	14,785,590	45
2040	16,277,079	50

Recycled Water with High TDS

Yes — Use detailed plant based leaching requirements?
1000 — Average TDS (mg/L)
Sprinkler System — Irrigation Type
Turfgrass (Cool-Season) — Plant Type

To qualify for the 1% variance, the landscape area irrigated with recycled water containing high levels of TDS (based on plant-based leaching requirements) is 167,532 sqft (3.85 acres) in 2025 and 151,206 sqft (3.47 acres) in 2040.

Ponds and Lakes for Sustaining Wildlife

The total pond and lake surface area required to qualify for the UWUO variance is estimated to be 380,754 sqft (8.74 acres) in 2025 and 343,651 sqft (7.89 acres) in 2040.

Emergency Events

Water used for emergency response can qualify for a UWUO variance if the water usage is estimated to be 18,034,495 gal (55.35 AFY) in 2025 and 16,277,079 gal (49.95 AFY) in 2040.

Dust Control for Animal Corrals

3 Select Climate Zone*

The total square footage of animal corrals required to qualify for the UWUO variance is estimated to be 1,103,951 sqft (25.34 acres) in 2025 and 996,374 sqft (22.87 acres) in 2040.

Outdoor Varian

Residential Agricultu

Yes — Do you have c

Types of Crops	% of Total Wa
Alfalfa	10%
Citrus	6%
Grapes	6%
Tomatoes	7%
Almonds	50%
Vegetables	21%
Avg Across All Crops	0%
Total Water Use	100%

*What percent of the outdoor variance wa

The total square footage of residential agric for the 1% UWUO variance is estimated to 6,701 sqft of Citrus (0.15 acres), 15,078 s of Tomatoes (0.10 acres), 28,492 sqft of A Vegetables (0.45 acres), and 0 sqft of

The total square footage of residential agric for the 1% UWUO variance is estimated to 6,048 sqft of Citrus (0.14 acres), 13,609 s of Tomatoes (0.09 acres), 25,715 sqft Vegetables (0.00 acres), and 0 sqft of

CALIFORNIA WATER EFFICIENCY PARTNERSHIP

Making Conservation a California Way of Life
Requesting Approval of Alternative Data Sources

Introduction

This guidance document helps water suppliers request approval for various alternative data sources under the Making Conservation a California Way of Life regulatory framework and Urban Water Use Reporting. It provides a detailed explanation of the minimum requirements, the process for approval, and considerations for supplier staff resources.

A supplier may, for each reporting year, use an alternative data source for reference if it demonstrates to the Department of Water Resources (DWR), in coordination with the State Water Board, that the data are equivalent, or superior, in quality and accuracy to the data provided by the DWR.

Before requesting approval for alternative data sources, it is recommended to first determine if the supplier can meet its Urban Water Use Objective using the standard data. Exploring all possibilities with the available standard data can help streamline compliance efforts, save money, and ensure that the alternative data request is truly necessary for achieving your objectives.

This document includes the following Sections:
1. Types of Alternative Data Sources and Request Process
2. General Documentation Requirements for All Alternative Data Sources
3. Public Process Requirement for Alternative Data Approval
4. Submitting Alternative Data Request
5. Approval Process
6. Validity and Revalidation
7. Who Alternative Data May Be Necessary

Section 1: Types of Alternative Data Sources and Request Process

Water suppliers may request approval for several types of alternative data sources. Request for approval of an alternative data source can be made either separately for each type of data or combined.

When documenting the use of alternative da on each data type. Additional details can be f Guidelines and Methodologies for Calculatin 2023 (GL)" document or by contacting DWR

CALIFORNIA WATER EFFICIENCY PARTNERSHIP

Making Conservation a California Way of Li
Urban Water Use Objective Reporting Contacts:
Agency Staff and Required Data

This contact list provides a comprehensive directory of agency staff responsible for data related to th Urban Water Use Objective (UWUO). It is designed to help agencies easily identify where and to who they should direct their data inquiries. Each entry includes the name and email of key contacts, ensuri smooth communication and support for compliance efforts.

Preferred Email Subject Line:
"Urban Water Use Objective Support: [Agency Name] - Assistance Needed on [Specific Data/Topic]"

For any topics not listed or for general assistance, please reach out to OWPP-WaterConservation@waterboards.ca.gov or WUEStandards@water.ca.gov

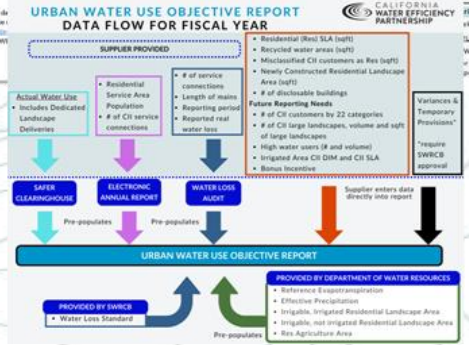
General Reporting Questions
Marielle Rhodoire
Marielle.Rhodoire@Waterboards.ca.gov
State Water Board
For inquiries related to overall report submission and guidelines.

Residential Service Area Population
DDW District Office Contacts
DDW-EAR@waterboards.ca.gov
Electronic Annual Report
For questions on calculating or updating population data

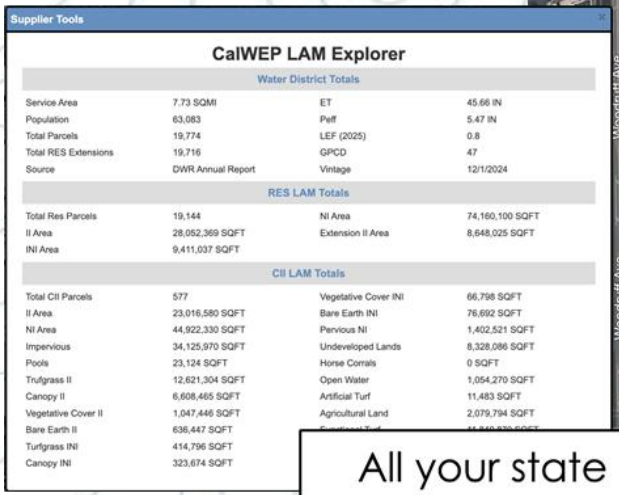
Reference Evapotranspiration
Bekele Temesgen, Ricardo Trezza
WUE_LAM@water.ca.gov
DWR - CIMIS
For assistance with using or validating

Effective Precipitation
Bekele Temesgen, Morteza Orang
WUE_LAM@water.ca.gov
DWR - CalSIM ETAW
For support with effective precipitati (a and methodologies.

rigable not Irrigated LAM – Res
ekele Temesgen, Scott Hayes
UE_LAM@water.ca.gov
WR
r clarification on classifying and porting these areas.



Resources: Landscape Area Measurement



All your state provided data in ONE PLACE

Indoor Residential Water Budget + Outdoor Residential Water Budget + CII-DIM Outdoor Water Budget

CalWEP **LAM Explorer**

POWERED BY WATERVIEW

Charting the Course for Compliance

An educational series for urban water suppliers

Presented by:

CALIFORNIA DATA COLLABORATIVE

CALIFORNIA WATER EFFICIENCY PARTNERSHIP