



Water Use Efficiency Workshop Final Report

JULY 2026

BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
SANTA CLARA VALLEY WATER DISTRICT



EXECUTIVE SUMMARY

From October 2025 – June 2026, the Bay Area Water Supply and Conservation Agency (BAWSCA) and the Santa Clara Valley Water (Valley Water) partnered together to host and fund 12 workshops to engage, inform, and support their member agencies in understanding and meeting California's Making Conservation a California Way of Life water use efficiency regulations.

Member agencies were invited to participate in a dozen interactive, expertly led, and uniquely themed workshops both in person and virtual. Through panel discussions, interactive whiteboard activities, networking opportunities, live polls, and moderated breakout rooms, participants learned from regulatory and industry experts, thought leaders, and each other. At the end, members left with more than 100 resources, tools, and a valuable understanding of the regulations.

Sierra Orr, the primary workshop host, was supported by Water Systems Consulting's (WSC) Cynthia Kahn, Kirk Barron, Spencer Waterman, and Dianne Lee, Madeline Blua of Blua Consulting, as well as Nicki Powell and Michelle Maddaus of Maddaus Water Management. WSC would like to thank BAWSCA and Valley Water for their generosity in funding these interactive workshops.

This **Water Use Efficiency Workshop Final Report** was prepared by WSC and provides an overview of all 12 workshops conducted through Fiscal Year 2025/2026. Each workshop Summary includes an attendee breakdown showing representation from BAWSCA member agencies, Valley Water member agencies, or individuals affiliated with both. Project facilitators and guest speakers are categorized "Other."

Questions and answers from office hours and emails are included in Appendix A. Polls from the workshops are included in Appendix B and survey results can be found in Appendix C.



TABLE OF CONTENTS

Glossary of Terms, Abbreviations, and Acronyms	iii
Workshop 1: CWOL UWUO Overview and Top User Calculations	1
Workshop 2: CII Outdoor: DIM, LAM, MUM and SLA	2
Workshop 3: Performance Measures, BMPs, and Classification	3
Workshop 4: Residential Outdoor Water Use, SLA, and New Landscape Areas	4
Workshop 5: Progress & Perspectives, Lessons Learned	5
Workshop 6: AB1572 Nonfunctional Turf.....	6
Workshop 7: Water Loss	8
Workshop 8: CII Best Management Practices.....	10
Workshop 9: Design Thinking CII WUE In-Person	11
Workshop 10: Behavior Change, Designing Models and Campaigns that Change Habits	13
Workshop 11: The Great Data Dig – From Missing Metrics to Meaningful Action In-Person ..	15
Workshop 12: Breaking Down Silos - Aligning WUE, Growth, and Long-Term Planning.....	17
Office Hours	18
Surveys	19
Appendix A Catalog of Questions and Answers	A
Appendix B Slido Polls	K
Appendix C Survey Results	Y

Glossary of Terms, Abbreviations, and Acronyms

Acronym or Term	Meaning
AB	Assembly Bill
AMI	Advanced Metering Infrastructure
AWUR	Annual Water Use Report
BAWSCA	Bay Area Water Supply and Conservation Agency
BMP	Best Management Practice
CII	Commercial, Industrial, and Institutional
CWOL	Conservation Way of Life
CY	Calendar Year
DIM	Dedicated Irrigation Meter
DWR	(California) Department of Water Resources
eAR	Electronic Annual Report
Eto	Reference Evapotranspiration
FY	Fiscal Year
HOA	Homeowners Association
IRWD	Irvine Ranch Water District
LAM	Landscape Area Measurement
LEF	Landscape Efficiency Factor
MUM	Mixed Use Meter
MWD	Metropolitan Water District (of Southern California)
NFT	Non-Functional Turf
SAFER	Safe and Affordable Funding for Equity and Resilience (California's drinking water program)
SLA	Special Landscape Area
SWRCB	State Water Resources Control Board
UWUO	Urban Water Use Objective
Valley or Valley Water	Santa Clara Valley Water District
WSC	Water Systems Consulting, Inc.
WUCOLS	Water Use Classification of Landscape Species
WUE	Water Use Efficiency

Workshop 1: CWOL UWUO Overview and Top User Calculations

Date and Time: October 29, 2025 | 11 a.m. – 12 p.m.

In this workshop, attendees learned about updates to the FY 2025 water use efficiency reporting form, including a centralized website for materials, embedded hyperlinks, a required-items checklist, conditional formatting, and a new SB X7-7 Backstop Calculation tab. Marielle Rhodeiro shared guidance on CII top percentile calculations and clarified that agencies have some flexibility in how they define users, such as by account or site, as long as definitions are consistent within the form. The discussion also covered agency concerns about missing Department of Water Resources (DWR) land area measurement and evapotranspiration data. Overall, the workshop helped agencies better understand reporting form changes, top-user calculations, and where to find or request needed data.

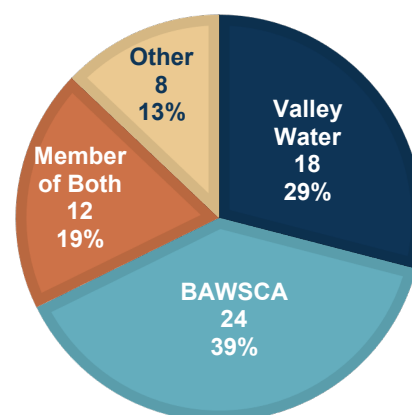
Handouts and Activities

Breakout groups included residential, Commercial, Industrial, and Institutional (CII), and Landscape. WSC included 10 resources for attendees to access, including CII Top Percentile Calculations and frequency asked questions from the California Water Board regarding the “Making Conservation a Way of Life Regulation.”

Guest Speaker

Marielle Rhodeiro, Research Data Specialist, State Water Resources Control Board (SWRCB)

ATTENDANCE TOTAL: 62



CustomerName/Account	MeterID/Type	InstallationAddress	SiteCode	MeterID/Code/Desc	Yr/In	97.5th and above (Top 2.5%)	80th and above (Top 20%)
Customer1042	W00002080	ADD1513	SEMI-CONDUCTOR, SERVICES	Water, Community, 4"	18709		
Customer1042	W00002080	ADD1513	SEMI-CONDUCTOR, SERVICES	Water, Community, 4"	18652		
Customer0945	W00002029	ADD0563	GROCERIES, GENERAL LINE	Water, Community, 4"	26276		
Customer1769	W00003262	ADD1084	RE-CLUB/RESTAURANT/INSTR	Water, 4" Meter Flat Charge	21283		
Customer1752	W00003284	ADD0499	MEDICAL/SURGICAL HOSPITAL	Water, Community, 6"	20461		
Customer1034	W00002294	ADD1580	MEDICAL/SURGICAL HOSPITAL	Water, 4" Meter Flat Charge	19545		
Customer0415	W00002073	ADD0500	IRIGATION ONLY	Irrigation, 4" Meter	17911		
Customer2136	W00002397	ADD2999	Other	Water, Community, 1"	15487		
Customer0486	W00001059	ADD0623	CORRECTIONAL INSTITUTIONS	Water, Community, 4"	14685		
Customer1133	W00002844	ADD2184	ELN/SECONDRARY SCHOOLS	Irrigation, 4" Meter	13066		
Customer1732	W00003219	ADD0454	ELN/SECONDRARY SCHOOLS	Irrigation, 4" Meter	11193		
Customer0415	W00000737	ADD0563	ELN/SECONDRARY SCHOOLS	Irrigation, 3" Meter Flat Charge	10477		
Customer1325	W00001034	ADD1034	ELN/SECONDRARY SCHOOLS	Irrigation, 3" Meter	10140		
Customer0444	W00001349	ADD1034	ELN/SECONDRARY SCHOOLS	Irrigation, 4" Meter	9277		
Customer0771	W00004030	ADD1261	GEN. WASHING & STORAGE	Water, Community, 1"	8714		
Customer0762	W00001485	ADD1137	HOTEL/MOTEL/TOURIST CTS	Water, Community, 4"	8229		
Customer0778	W00001624	ADD1271	CANNABIS MANUFACTURING	Water, Community, 4"	8323		
Customer0482	W00001104	ADD0680	LATINO PLACES	Water, 4" Meter Flat Charge	7936		
Customer0486	W00001240	ADD0824	AIR, WATER, SOLID WASTE MGT	Water, Community, 2"	7689		
Customer0415	W00002078	ADD0578	Irrigation only	Irrigation, 4" Meter	7650		
Customer0415	W00000739	ADD0562	Irrigation only	Irrigation, 4" Meter	6995		
Customer1089	W00002087	ADD1295	GROCE/RY STORES	Water, Community, 3"	6733		
Customer2155	W00000822	ADD9329	OPTICAL INSTRUM LENSES	Water, Community, 1.5"	6333		
Customer1188	W00002239	CAN WASH	Irrigation only	Water, Community, 1.5"	5769		
Customer1807	W00003409	ADD0580	Irrigation only	Irrigation, 3" Meter	5704		
Customer1034	W00002294	ADD0048	OFFICES OF PHYSICIANS	Water, 2" Meter Flat Charge	5480		
Customer0415	W00002074	ADD0563	Irrigation only	Irrigation, 4" Meter	5474		
Customer1343	W00003700	ADD2799	LINE/SUPPLY	Water, Community, 3"	5401		
Customer0415	W00002074	ADD0564	Irrigation only	Irrigation, 4" Meter	5355		
Customer1888	W00002246	ADD1771	CAN WASH	Water, Community, 4"	4854		
Customer0902	W00001836	ADD0493	HOTEL/MOTEL/TOURIST CTS	Water, Community, 4"	4787		
Customer0486	W00001861	ADD0825	CORRECTIONAL INSTITUTIONS	Water, Community, 4"	4625		
Customer2275	W00001834	ADD0493	RESIDENTIAL CARE	Water, Community, 4"	4620		
Customer1333	W00003245	ADD1982	Irrigation only	Irrigation, 2" Meter	4303		
Customer1888	W00002297	ADD1771	CAN WASH	Water, Community, 1.5"	4418		
Customer1808	W00003500	ADD1049	AMUSEMENT/RECREATION	Water, Community, 4"	4347		
Customer0113	W00003031	ADD0242	AUTOMATING & BOOK KEEPING	Irrigation, 3" Meter	4275		
Customer0715	W00001485	ADD1130	RESIDENTIAL CARE	Water, Community, 4"	4263		
Customer1808	W00003489	ADD2649	Irrigation only	Irrigation, 4" Meter	4054		
Customer1402	W00002078	ADD1236	Commercial	Irrigation, 2" Meter	3998		
Customer1637	W00003047	ADD1039	ELN/SECONDRARY SCHOOLS	Water, Community, 2"	3980		
Customer1732	W00002022	ADD0553	Water, Community, 2"	Water, Community, 2"	3821		
Customer3709	W00003329	ADD9322	SKILLED NURSING FACILITY	Water, Community, 3"	3686		
Customer0487	W00001113	ADD0687	Commercial	Water, Community, 1"	3624		
Customer2155	W00000822	ADD9329	OPTICAL INSTRUM LENSES	Water, Community, 3"	3598		
Customer1623	W00002020	ADD2155	CON-OP LANDFILLS	Water, Community, 2"	3578		
Customer1670	W00002022	ADD2177	ELN/SECONDRARY SCHOOLS	Irrigation, 2" Meter	3556		
Customer1776	W00003336	ADD2342	GROCERIES, GENERAL LINE	Water, Community, 2"	3554		
Customer0486	W00001240	ADD0824	AIR, WATER, SOLID WASTE MGT	Water, Community, 2"	3469		

Frequently Asked Questions	
Making Conservation a California Way of Life Regulation	
Contents	
Making Conservation a California Way of Life Regulation	1
General Overview	2
Objective	4
Indoor Residential Water Use	5
Outdoor Water Use	6
Real Water Loss	11
Recycled Water	12
Variances and Temporary Provisions	14
Alternative Data and Methods	16
"No Back-Sliding" Provision	17
Commercial, Industrial, and Institutional Performance Measures	17
Classifying CII Water Users	19
Installing Dedicated Irrigation Meters, Employing In-situ Technologies, and Offering Best Management Practices to Large Landscapes	20
Offering Best Management Practices	23
Reporting	27
Enforcement	28
Additional Resources	29
This FAQ was last updated on September 26, 2025	

Workshop 2: CII Outdoor: DIM, LAM, MUM and SLA

Date and Time: November 5, 2025 | 11 a.m. – 12 p.m.

This workshop discussed CII outdoor water use efficiency and shared findings from comparing WaterFluence landscape mapping with DWR data. John Whitcomb of WaterFluence explained that DWR data can have gaps or inaccuracies, including missing polygons, misclassified turf under tree canopies, mature trees incorrectly counted as irrigated areas, and outdated imagery based on 2020 data. The discussion emphasized that inaccurate landscape area data can lead to unrealistic water use estimates and that agencies may need to calculate and verify their own numbers. Participants were also directed to DWR contacts and the CalWEP LAM Explorer as resources for checking data availability and resolving questions.

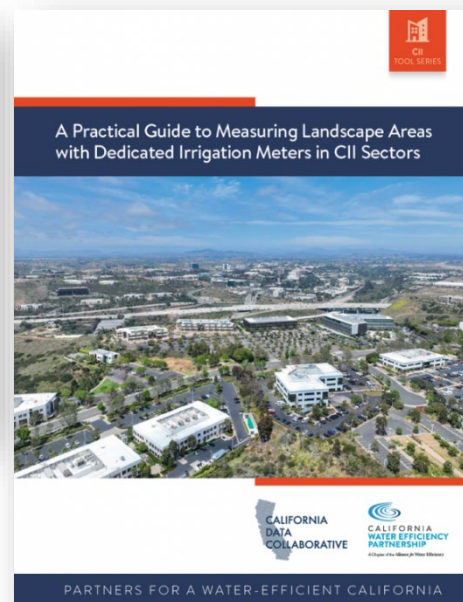
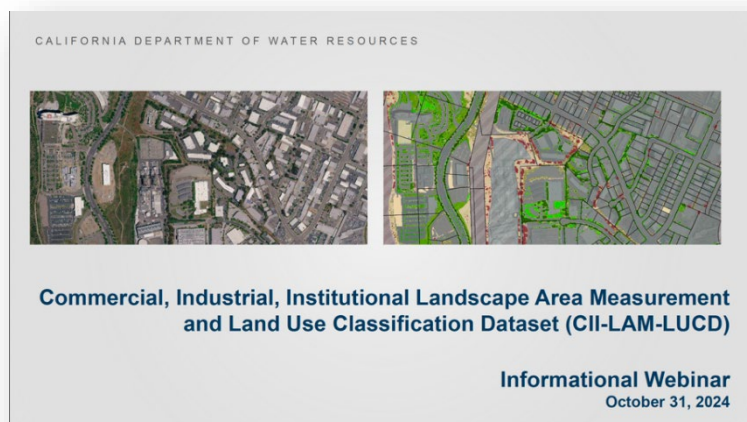
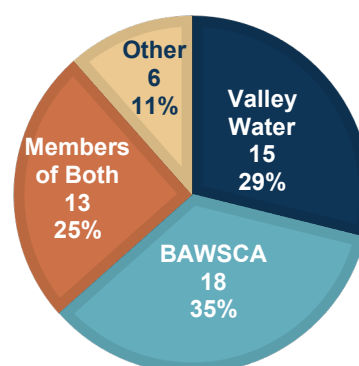
Handouts and Activities

WSC included eight resources for attendees to access, including a Department of Water Resources presentation on CII-LAM-LUCD and a guide to measuring landscape areas.

Guest Speaker

John Whitcomb, Executive Director,
WaterFluence

ATTENDANCE TOTAL: 52



Workshop 3: Performance Measures, BMPs, and Classification

Date and Time: November 19, 2025 | 11 a.m. – 12 p.m.

In this workshop, speakers discussed CII customer classification, BMP reporting, and available conservation programs. Spencer Waterman reviewed the June 30, 2027 CII classification deadline and described methods agencies can use, such as Excel tracking, software, GIS integration, AI tools, and cross-referencing billing data with other datasets. Nikki Powell explained that agencies must report BMP progress annually, even before programs are fully implemented. Kyle Ramey and Philip Dolan highlighted BAWSCA and Valley Water programs that may help agencies meet BMP requirements, and breakout groups explored how existing programs could align with BMP categories.

Guest Speakers

Spencer Waterman, Water Resources Planner, Water Systems Consulting, Inc.

Nikki Powell, Water Resources Project Manager, Maddaus Water Management Inc.

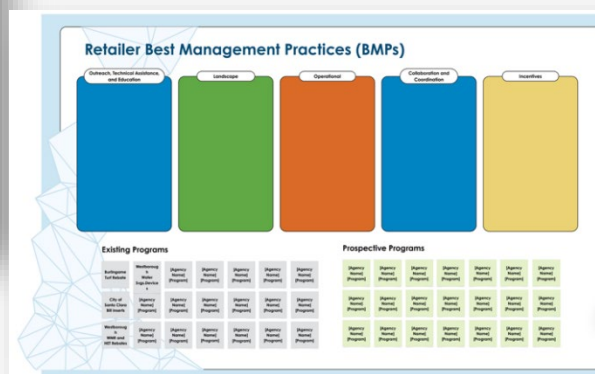
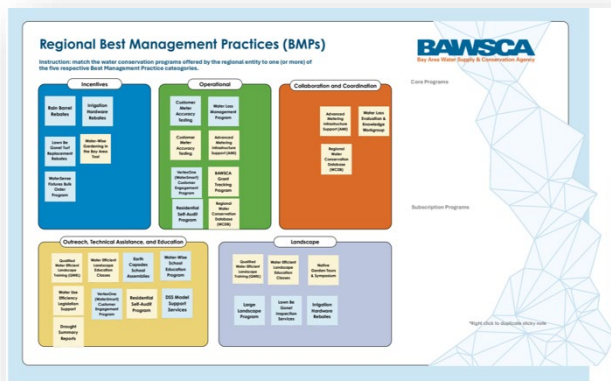
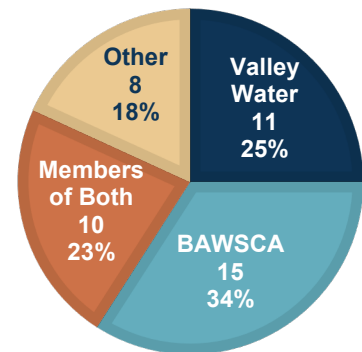
Kyle Ramey, Water Resources Specialist, BAWSCA

Philip Dolan, Water Conservation Specialist III, Santa Clara Valley Water District

Handouts and Activities

WSC provided two interactive white boards, split attendees into breakout groups, and brainstormed together to match water conservation to best management practices both from the regional agencies (BAWSCA and Valley) as well as within their own agency programs. WSC included 12 resources for attendees of the workshop to access.

ATTENDANCE TOTAL: 44



Workshop 4: Residential Outdoor Water Use, SLA, and New Landscape Areas

Date and Time: December 3, 2025 | 11 a.m. – 12 p.m.

This workshop helped agencies understand how data quality and reporting assumptions can influence compliance planning and future budget impacts. Amy McNulty presented Irvine Ranch Water District’s (IRWD) process for developing and receiving DWR approval for alternative residential LAM data while Madeline Blua demonstrated how the unlocked reporting form can be used to test different water budget scenarios. Attendees learned how IRWD’s mapping effort included field verification, parcel-to-meter review, and that the approved dataset showed a 30% reduction in irrigable area compared with DWR’s default data. Madeline Blua showed how changes to inputs such as LEF, ETo, new construction, SLAs, variances, and temporary provisions can affect a supplier’s residential outdoor budget.

Handouts and Activities

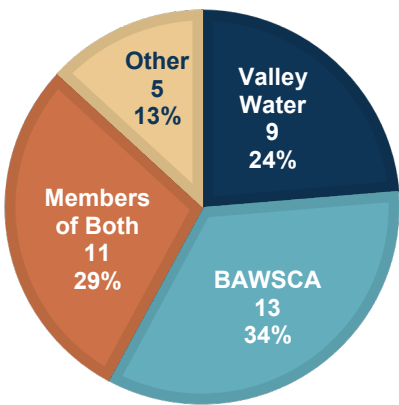
WSC included resources for attendees including an unlocked reporting form to practice in, a California Water Board webinar presentation on variances and temporary provisions request process, and more.

Guest Speakers

Amy McNulty, Water Efficiency Manager, Irvine Ranch Water District

Madeline Blua, Blua Consulting LLC

ATTENDANCE TOTAL: 38



Annual Urban Water Use Objective and Water Use Report (2024-2025 FY)	
Reporting Year Cycle	State Fiscal Year
Start Date	7/1/24
End Date	6/30/25
Number of Days in Reporting Year	365
NOTE: No available residential landscape area or weather data from DWR. UWUO cannot be calculated. Please see Section 2.14 of the guidance doc for instructions.	
In the table below, provide the contact information of the employee who prepared this report in cells B14-B19 and optionally, B20-B23.	
If more than one employee was involved in report preparation, please select a main point of contact that will be able to respond to any follow up questions by State Water Board staff.	
If this party prepared the report, please provide a supplier point of contact in cells B14-B19 and answer "No" in cell B25. Then fill out cells B28-B32.	
Urban Retail Water Supplier Contact Information (Required)	
Name of Urban Retail Water Supplier (select from dropdown list in B11)	
Urban Retail Water Supplier Organization Identifier (ORG ID)	
Number of Public Water Systems	0
Supplier Contact Person Name	
Supplier Contact Person Title	
Supplier Contact Person Phone Number	
Supplier Contact Person Email Address	
Supplier Street Address	
Supplier ZIP Code	
Additional Supplier Contact Person 1 Name	
Additional Supplier Contact Person 1 Email	
Additional Supplier Contact Person 2 Name	
Additional Supplier Contact Person 2 Email	
Was this report prepared by the staff of the supplier named in cell B11?	
If "No" in B25, provide the main point of contact for the third party that prepared the report.	
Report Preparer's Contact Information (Required, if different from the above information (cells B14-B19).	
Preparer's Organization Name	
Preparer's Contact Name	
Preparer's Phone Number	
Preparer's Email Address	
If applicable, other contact Email Address	

Form Version 3.1 (released October 30, 2025) - UNLOCKED VERSION

Workshop 5: Progress & Perspectives, Lessons Learned

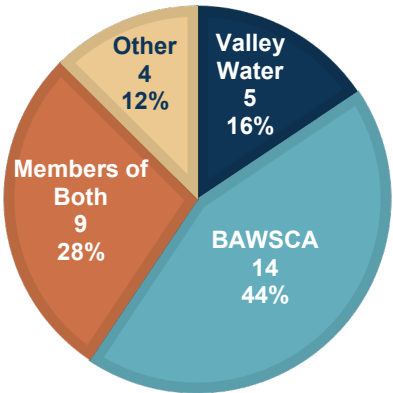
Date and Time: December 17, 2025 | 11 a.m. – 12 p.m.

Sierra Orr, Strategic Communications Lead at Water Systems Consulting Inc., presented a high-level recap of lessons learned and resources from the first four workshops. She reviewed key takeaways on reporting form updates, top-user calculations, CII outdoor data issues, BMP classification, residential outdoor water use, alternative LAM data, and unlocked reporting form scenarios. The workshop also included questions and answers from office hours and email inquiries along with facilitation team tips on reporting form errors, population verification, and water loss objective standards.

Handouts and Activities

Water Systems Consulting, Inc. included 17 resources for attendees of the workshop to access, including SWRCB contact information and multiple document estimating water savings and benefits. Breakout groups discussed remaining questions about the reporting form and provided feedback on the structure and topics for future workshops.

**ATTENDANCE
TOTAL: 32**



“I was only able to attend one workshop - it was excellent. Other members of my team have attended and most of the workshop content provided value for the team.” – Stephanie Nevins, *Alameda County Water District*

State Water Resources Control Board Local Primacy Agency Contact Information			
OFFICE	ADDRESS	TELEPHONE NUMBER	EMERGENCY 24 HOUR HOTLINE
Alpine County Health and Human Services Department: Environmental Health Services	75 Diamond Valley Road, Markleeville, CA 96120	(530) 694-2235	(888) 755-8099
Butte County Public Health Department-Environmental Health Division	202 Mira Loma Drive, Oroville, CA 95965	(530) 552-3880	(530) 552-4000
Calaveras County Environmental Health Department	891 Mountain Ranch Road, San Andreas, CA 95249	(209) 754-6399	
Contra Costa Health Services-Environmental Health Division	2120 Diamond Boulevard, Suite 200, Concord, CA 94520	(925) 608-5500	(888) 959-9911
El Dorado Environmental Management Department: Environmental Health Division	2850 Fairlane Court, Building C, Placerville, CA 95667	Placerville: (530) 621-5300, South Lake Tahoe: (530) 573-3450	
Imperial County Public Health Department Environmental Health & Consumer Protection Services	797 W. Main Street, Suite B, El Centro, CA 92243	(442) 265-1888	

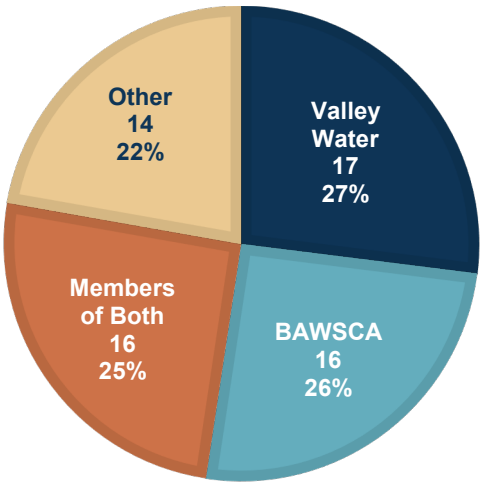


Workshop 6: AB1572 Nonfunctional Turf

Date and Time: January 7, 2026 | 10 a.m. – 12 p.m.

This panel workshop included many speakers who discussed how agencies and partners can prepare for California’s AB 1572 nonfunctional turf requirements. The discussion explained what nonfunctional turf is, which properties are affected, key compliance deadlines, and common misconceptions. Panelists emphasized the need for clear guidance, targeted outreach to HOAs and landscape professionals, phased implementation, and coordination among water agencies, cities, counties, property managers, and contractors. The workshop also highlighted concerns about cost, equity, rebate differences, enforcement approaches, and the importance of sharing resources and model ordinances.

**ATTENDANCE
TOTAL: 63**



Guest Speakers

Melissa Matlock, Ph.D., Deputy Director, California Water Efficiency Partnership

Krista Guerrero, Senior Resource Specialist, Metropolitan Water District of Southern California

Rebecca Pollon, Property Manager, Countrywood HOA

Amy Talbot, Water Efficiency Program Manager, Regional Water Authority

Jackie Marsey, Owner, Designer Paradise Garden and Landscape, Inc.

Karina Herrera, Senior Environmental Scientist, State Water Resources Control Board

Erica Mokrani, Environmental Engineer on the Water Planning & Stewardship Team, Stanford University

Jeanette Asselin, Past President, Countrywood HOA

Kimberly Daga, Senior Vice President of Operations at BellaVista Landscape Services

Eric Santos, President Epic Irrigation Service and Management

Handouts and Activities

Breakout groups discussed:

- Growth Opportunities: The Future of Landscape Transformations and Rebates
- New Blooms: Approaches to Outreach
- Thorny Subjects: Enforcement
- Fertile Ground: Resources & Guidance

WSC included 24 resources for attendees of the workshop to access, including a Non-Functional Turf (NFT) overview and example fliers, bill inserts, and ordinances from various agencies. This gave attendees a better understanding of the topic as well as content to model for their own purposes.

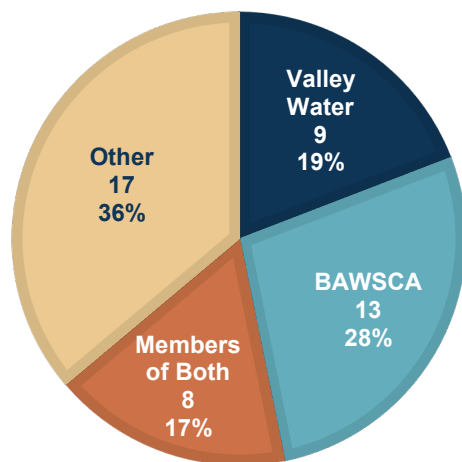


Workshop 7: Water Loss

Date and Time: February 4, 2026 | 10 a.m. – 12 p.m.

This workshop included presentations on water loss standards, reporting, and regional support programs. Sue Mosburg explained California's shift from voluntary water loss best practices to enforceable standards, Nirmala Mahadevan reviewed DWR training and technical resources, and Eric Zúñiga described how water loss fits into UWUO compliance. Case studies from San Jose Water and Eastern Municipal Water District showed how acoustic leak detection, AI-based risk assessment, and targeted monitoring can reduce losses and improve system reliability. The workshop also covered BAWSCA's regional support model, E Source's audit and documentation recommendations, and Valley Water's AMI funding program.

ATTENDANCE TOTAL:41



Guest Speakers

Sue Mosburg, Executive Director of the California-Nevada Section of the American Water Works Association

Nirmala Mahadevan, P.E., Senior Engineer, California Department of Water Resources

Eric Zúñiga, P.E., Drought Response Program Manager, State Water Resources Control Board, Division Of Drinking Water

Eric McNeil, Water Loss Control Administrator, San Jose Water

Dave Brown, Director Of Maintenance, Eastern Municipal Water District

Negin Ashoori, PhD, Senior Water Resources Engineer at Bay Area Water Supply And Conservation Agency

Tim Marcella, M.S., Project Manager, E Source Water Loss Consulting

Justin Burks, Senior Water Conservation Specialist, Santa Clara Valley Water

Handouts and Activities

Water Systems Consulting, Inc. included 20 resources for attendees of the workshop to access, including the California Water Board Water Loss Timeline and an America Water Works Association Leak Registry PowerPoint slides.



Workshop 8: CII Best Management Practices

Date and Time: March 4, 2026 | 10 a.m. – 12 p.m.

The discussion reviewed CII customer classification deadlines, options for identifying high water users, and the requirement to develop and implement BMP programs for high water users. Presenters emphasized that agencies should reach the right people with the right message by focusing on clear value propositions, tailored reports, management engagement, and customer-specific language.

Handouts and Activities

In breakout groups participants discussed the challenges of classifying complex accounts, limited staff capacity, the value of regional collaboration, shared tools, and centralized data resources.

WSC included three resources for attendees to access, including a WaterSense Webinar and a Public Policy Institute of California Business Report.

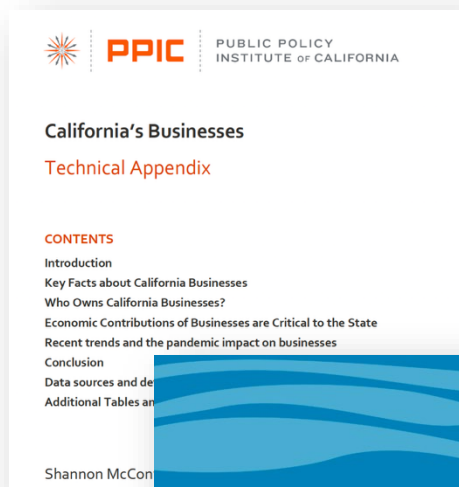
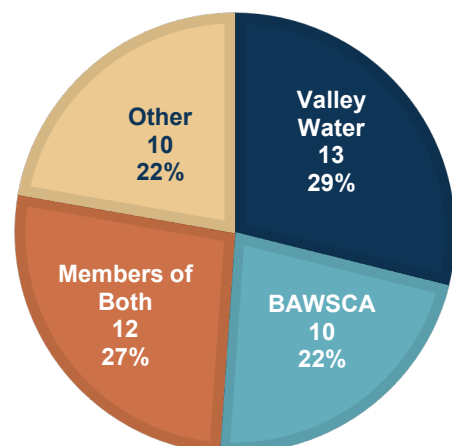
Guest Speakers

Melissa Matlock, Deputy Director
California Water Efficiency
Partnership (CalWEP)

Michelle Maddaus, President and
Principal Engineer, Maddaus Water
Management Inc.

Anya Kamenskaya, Water
Conservation Representative East
Bay Municipal Utility District
(EBMUD)

ATTENDANCE TOTAL: 45

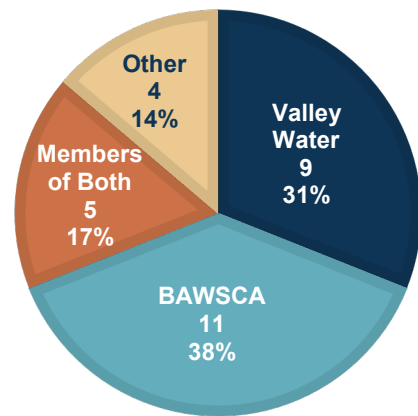


Workshop 9: Design Thinking CII WUE | In-Person

Date and Time: April 13, 2026 | 8:00 a.m. – 2 p.m.

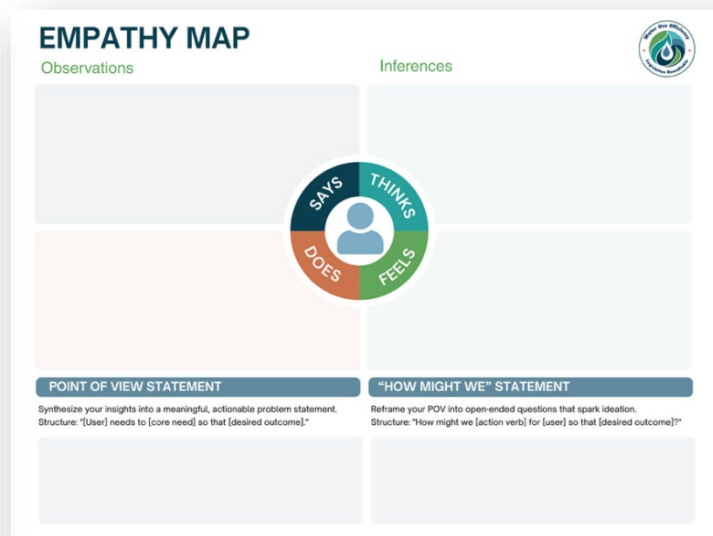
Sierra Orr, Madeline Blua, Nicki Powell, and Kirk Barron facilitated an in-person session focused on using design thinking to develop or improve CII BMPs. Participants began by mapping out key internal and external stakeholders to build empathy profiles, define core problems, and create user personas. From there, the group utilized hands-on brainstorming tools like Crazy Eights and SCAMPER to generate solutions. The workshop equipped attendees to turn CII water use challenges into practical action plans by helping them identify priority problems, define needed resources, design pilots, and commit to immediate next steps for prototyping and testing.

**ATTENDANCE
TOTAL: 29**



Handouts and Activities

Attendees received a Design Thinking Overview, an Empathy map worksheet, and a series of three brainstorming activity worksheets.





Photos from Workshop 9



Mountain View Community Center 201 South Rengstorff Avenue Mountain View, CA 94040

Workshop 10: Behavior Change, Designing Models and Campaigns that Change Habits

Date and Time: May 6, 2026 | 10 a.m. – 12 p.m.

This workshop discussion covered social norms, habit formation, risk perception, AMI-enabled outreach, feedback mechanisms, recognition programs, and community-based social marketing. Krista Guerrero shared lessons from MWD's turf replacement rebate program, including the multiplier effect of program participation and the limits of financial incentives alone, while Jessica Kirk highlighted Denver Water's creative campaigns and outdoor water use reports. The workshop emphasized that successful campaigns should be clear, trusted, repeated over time, tailored to customers, and supported with practical resources, feedback, and visible examples of others changing behavior.

Handouts

WSC included 32 resources for attendees to access, including AMI Resources, communication guides, and Community Based Social Marketing reports.



Guest Speakers

Krista Guerrero, Sr. Resource Specialist, Metropolitan Water District of Southern California

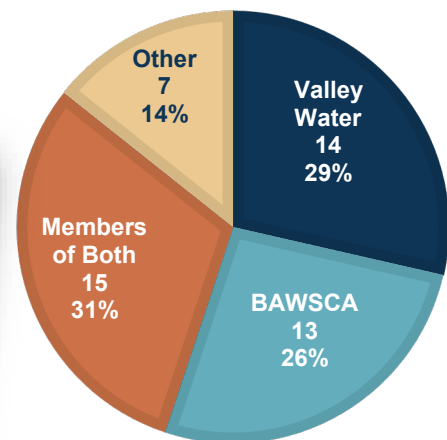
Jessica Kirk, Marketing Specialist, Denver Water

Sierra Orr, Communications Lead, Water Systems Consulting

Nicki Powell, Maddaus Water Management

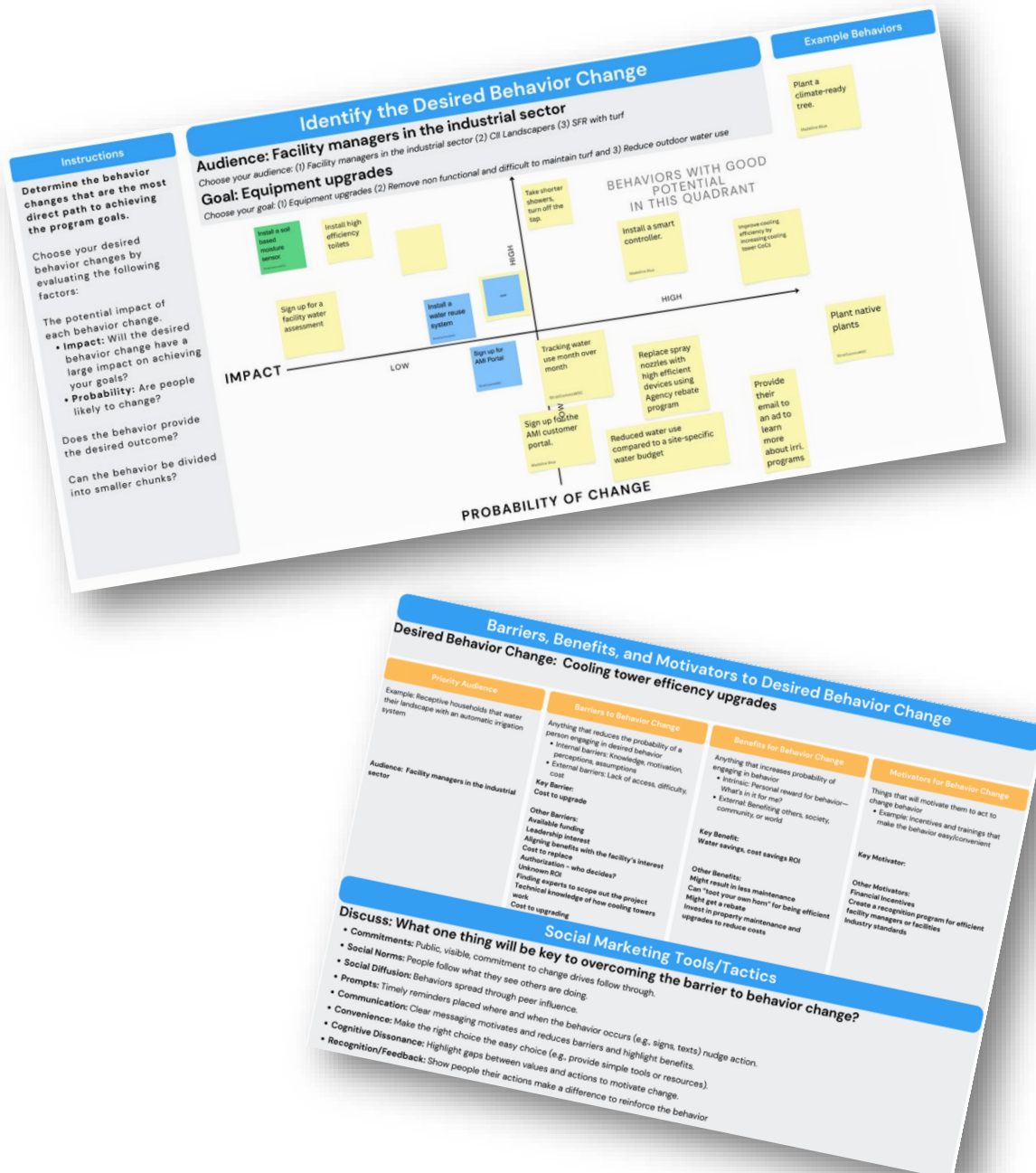
Madeline Blua, Blua Consulting LLC

ATTENDANCE TOTAL: 49



Interactive Elements

This workshop included a whiteboard activity to help attendees identify which audiences were most likely to make identified changes in their behavior, what that behavior was, and how those changes helped the agency reach their water use efficiency goals.



Workshop 11: The Great Data Dig – From Missing Metrics to Meaningful Action | In-Person

Date and Time: June 2, 2026 | 9:30 a.m. – 2:00 p.m.

To help agencies unlock the full potential of their AMI data and software systems, Sierra Orr, Dianne Lee, Madeline Blua, and Michelle Maddaus facilitated an interactive, in-person workshop. Staff from three member agencies shared their experiences, lessons learned, and planned programs related to their AMI data, software, and dashboards. Presentations highlighted technical and operational concepts, helping attendees set goals to better utilize their own AMI data. Additionally, representatives from several vendors were invited to share resources and provide solutions during an interactive Q&A panel. Ultimately, the workshop aimed to spark honest conversations about both successes and setbacks. It also challenged attendees to dig deeper into their own software's capabilities and start planning next steps to leverage their data for CWOL compliance.

Handouts and Activities

Follow Up Worksheet

THE GREAT DATA DIG What I'm Taking Home

From today, one thing I want to start:

One thing I want to avoid:

One question I will ask my team next week:

One question I will ask a vendor in the next month:



Agenda		Table Topics	
Expedition Basecamp Welcome and Overview	9:30 am	Phase 1: Map the Ruins 1. What is one barrier for you, or agencies in this phase? 2. What is one next step you, or other agencies can take? 3. What process can be simplified, automated, documented?	
Phase 1: Map the Ruins Drew Bost, Mid Peninsula Water District QA and Group Discussion	10:00 am	Phase 2: Assemble the Artifacts 1. What system is, or is most likely to be, your single source of truth? 2. What integrations or data points matter most for CWOL reporting? 3. How can you standardize fields in your software to accommodate reporting fields?	
Phase 2: Assemble the Artifacts Shannon Rossow, City of Morgan Hill QA and Group Discussion	10:45 am	Phase 3: Unlock the Treasure 1. Can you build reporting dashboards or modify existing software to pull data from multiple sources? 2. In an ideal future, what are you doing with your data? 3. Based on that ideal future, what insights would you have and how would that change how you plan and what you do?	
LUNCH Host Comments and Panel Discussion	11:30 am 12:00 pm		
Phase 3: Unlock the Treasure Russell Perry, Alameda County Water District QA and Group Discussion	12:30 pm		
Outfitters' Row at the Great Data Dig Complete your Scavenger Hunt by meeting your colleagues and exploring vendor solutions.	1:15 pm		
Wrap Up Scavenger Hunt Raffle	1:45 pm		
Group Photo	2:00 pm		

Brochure

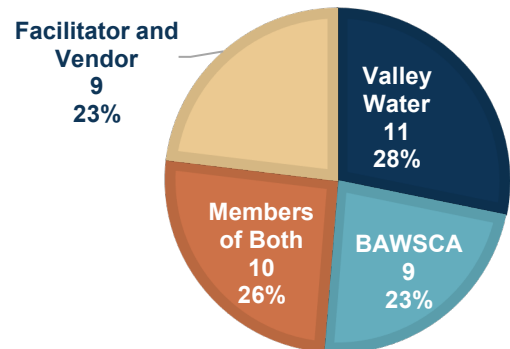
Guest Speakers

Drew Bost, Water Resources Coordinator, Mid-Peninsula Water District

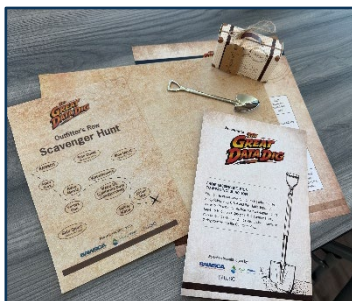
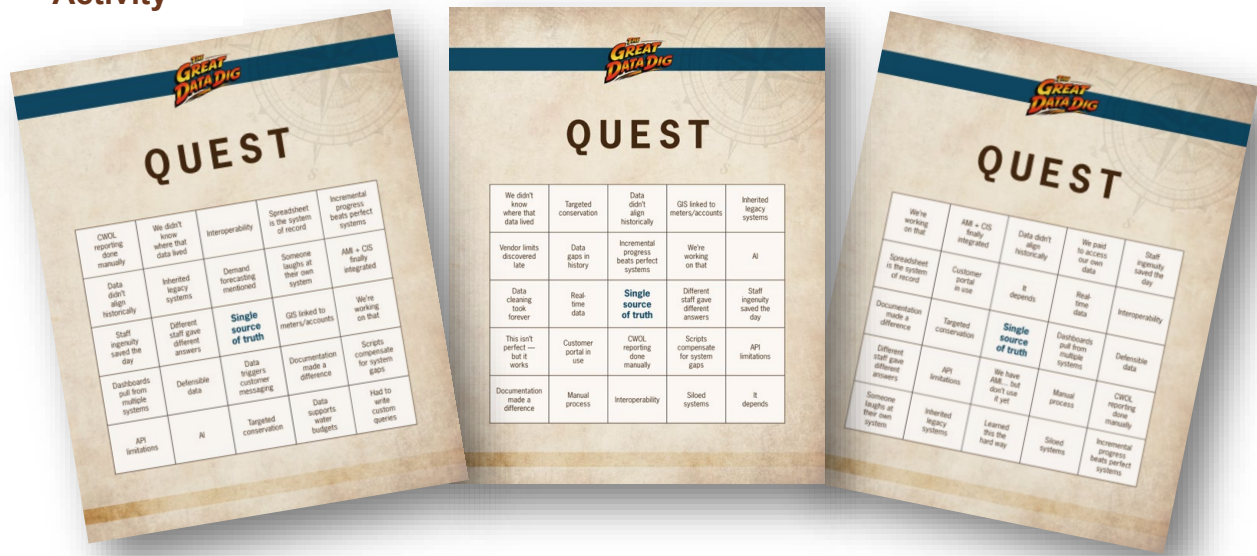
Russell Perry, Water Resources Systems Analyst, Alameda County Water District

Shannon Rossow, Environmental Programs Coordinator, City of Morgan Hill

ATTENDANCE TOTAL: 43



Bingo Activity



Lawrence Station Multi-Purpose Room 2985 Feliz Road, Santa Clara, CA 95051

Workshop 12: Breaking Down Silos - Aligning WUE, Growth, and Long-Term Planning

Date and Time: June 24, 2026 | 10 a.m. – 12 p.m.

This session explored how agencies are navigating the intersection of water use efficiency, land use planning, and economic development in the context of long-term conservation requirements. This workshop brought speakers from the municipal sector and researchers who work in the field of water resource management and planning to discuss how agencies can start to address growth pressures while meeting Urban Water Use Objectives and maintaining water reliability. Much of the conversation revolved around data centers, water use, and the impact on residents.

Handouts and Activities

WSC included nine resources for attendees to access, including news articles on Data Centers, speaker led research, information on Regional Housing Needs Allocations and Accessory Dwelling Units, and a Data Center Water Use Report.

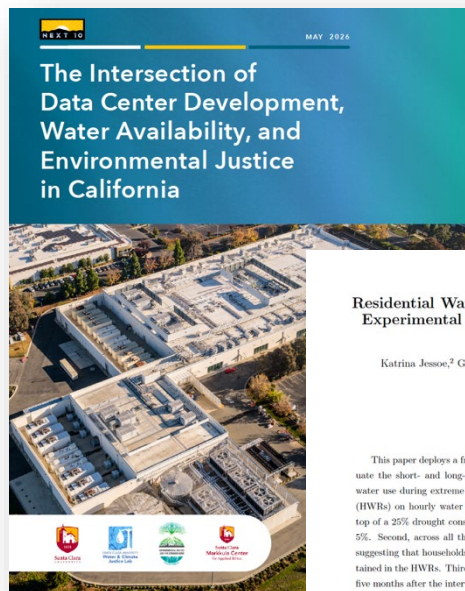
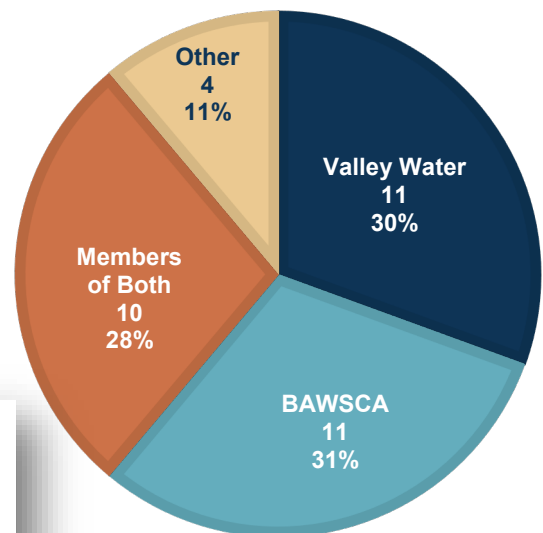
Guest Speakers

Thomas Fleming, Senior Sustainability Analyst, Water Conservation, City of Santa Monica

Iris Stewart-Frey, Professor of Water Resources, Santa Clara University

Katrina K. Jessoe, Associate Professor, UC Davis

ATTENDANCE TOTAL: 39



Residential Water Conservation During Drought: Experimental Evidence from Three Behavioral Interventions¹

Katrina Jessoe,² Gabriel E. Lade,³ Frank Loge,⁴ and Edward Spang⁵

April 2, 2021

Abstract

This paper deploys a framed field experiment and uses high frequency data to evaluate the short- and long-run effects of three behavioral interventions on residential water use during extreme drought. Our study of the effects of Home Water Reports (HWRs) on hourly water use yields three main results. First, even when layered on top of a 25% drought conservation mandate, HWRs led to conservation effects of 4 to 5%. Second, across all three treatments the profile of water conservation is similar, suggesting that households did not respond to the messaging or recommendations contained in the HWRs. Third, the water conservation effect of all interventions dissipated five months after the intervention ended. In our setting, these behavioral interventions aligned with utility incentives to achieve immediate but temporary water conservation in response to drought.

Keywords: Social Norms; Water Use; Long-Run Effects; Randomized Controlled Trial; High-Frequency Data

Office Hours

To provide an open forum for questions not in the scope of the meetings or unique to each agency WSC offered up to fourteen total office hour sessions. Of those, attendees took advantage of five. In addition, any workshop attendee could email the WSC team with other questions. If the team did not know the answer, we reached out to an assortment of subject matter experts and authorities. View the full list of questions and answers in Appendix A.

Office Hours with agency attendance

November, 21, 2025:

1. Drew Bost, Mid-Peninsula Water District

December 5, 2025

1. Conrad Braganza, City of Hayward
2. Emily Yarsinske, City of Mountain View
3. Kyle Ramey, BAWSCA
4. Justin Burks, Valley Water
5. Philip Dolan, Valley Water

December 19, 2025

1. Shannon Rossow, City of Morgan Hill
2. Stephanie Dalton, North Coast County Water District
3. Kyle Ramey, BAWSCA
4. Justin Burks, Valley Water

January 9, 2026

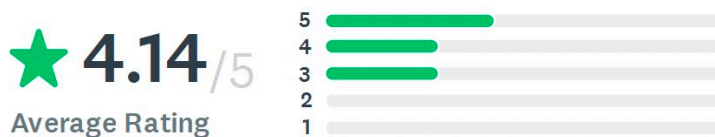
1. Shannon Rossow, City of Morgan Hill
2. Kyle Ramey, BAWSCA

February 13, 2026

1. Noah Craney, City of Burlingame
2. Claire Wong, City of Sunnyvale
3. Shannon Rossow, City of Morgan Hill
4. Justin Burks, Valley Water
5. Tom Francis, BAWSCA

Q6 7 responses

If you've attended, how would you rate the office hours thus far?



Surveys

To ensure the workshop series remained relevant and responsive to participating agencies, the WSC team designed and administered four formal surveys.

The pre-workshop survey was developed to identify priority topics, potential guest speakers, and the specific reporting and compliance challenges agencies were facing before the workshops began. A midpoint survey was also planned to assess remaining knowledge gaps, unanswered questions, and emerging concerns so that future workshop content could be adjusted accordingly.

The survey results directly informed workshop planning and content development. For example, responses gathered prior to Workshop 1 helped identify topics that agencies were struggling with, including changes to reporting requirements and overall readiness for upcoming compliance deadlines. The surveys also revealed broader themes across agencies, such as fragmented data systems, challenges with CII classifications, reporting inefficiencies, and a desire for practical tools, examples, and software solutions to support compliance efforts. These findings were used to shape workshop agendas, select speakers, develop breakout discussions, and ensure the series addressed the most pressing needs of participating agencies. Results from each survey can be found in Appendix C.



Water Use Efficiency Workshop Questions and Answers

Throughout the workshop series, numerous questions were asked by workshop attendees outside of the workshop hours. Some were asked in dedicated Office Hours, and others were sent over email. Sierra Orr of Water Systems Consulting, Inc. used her resources and connections to answer each question. Below is a catalog of questions and answers.

1.0 Multifamily irrigation and top usage reporting

Regarding how to report the top CII usage for the UWUO reporting... Should we include irrigation accounts in the top CII users? Our agency includes multifamily outdoor and CII outdoor accounts in our irrigation accounts.

Answer from Marielle Rhodeiro, State Water Resources Control Board:

It depends on how the account is classified. We allow discretion when it comes to the question of multi-family irrigation because it really could go either way.

- If a supplier chooses to designate multifamily irrigation as CII, that volume should be included in the CII DIMs irrigation volume reported in the SAFER Clearinghouse, and it should be included in the top CII percentile calculations in the CII BMPs section.
- If a supplier chooses to designate multifamily irrigation as multifamily, that volume should be included in the multifamily volume reported in the SAFER Clearinghouse, and it should be included in the top multifamily percentile calculations in the Actual Water Use section.

Additional context:

The agency should match what the agency billing system already does and what has been reported in SAFER. Agencies must choose one method and be consistent moving forward.

2.0 Top 2.5% of CII water users and recycled water

Does CII BMPs 974(c)(1) cell B8 “The number of CII water users at or above the 97.5th percentile for water use” include both potable and recycled water users/accounts?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

Yes.

3.0 Vacant Buildings/Parcels

How are agencies supposed to classify connections/users when there is no current tenant/water use and a building is effectively vacant?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

I would omit those, and make a note in the comments section about those connections/customers.

4.0 HOAs, Apartments and top usage reporting

Do we exclude residential properties such as HOAs and Apartments from the CII 2.5 & 20 top percentile list? It was my understanding based on past conversations that this is to include only true CII properties water volume.

Answer from Sierra Orr, WSC (based on earlier direction for irrigation):

If you define those accounts as CII, then that volume of water is reported as Commercial, Nonresidential Metered Irrigation, or Other in the SAFER clearinghouse and those accounts are included in the calculation for top 2.5 and 20% of CII users (974(c)(1) tab cells B8 and B11 .

However, if you classify them as residential, that volume of water consumption should be included in your residential multifamily consumption in the SAFER clearinghouse (which then populates the Actual Water Use tab cell B3) and those accounts are included in your calculations for Actual Water Use cell B28, “total volume of deliveries to multi family residential customers that are at or above the 90th percentile for multi-family residential water use across the supplier’s service area.”

5.0 Mismatch in CII service connections and CII classification

When it comes to reporting on CII classification, the number of CII service connections (cell B10) may never completely match the number of classified CII water users (cell B11) if the agency selects the option to classify based on account.

Do agencies need to be concerned about that, or is it safe to assume that the SWRCB understands that these (connections/accounts) are different and thus this is not an error and is not an indicator of some percentage not being classified?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

Reporting the number of CII service connections is a holdover from when the reg text didn’t contain the option of using accounts rather than connections; it WAS supposed to give us a

way of measuring progress towards 100% classification, but obviously that doesn't work if using something other than service connections.

We added the optional "Total number of CII water users" in cell B13 to rectify that.

6.0 CII Classification time period

The water use for accounts/connections can change regularly. A building that was an office one month could be vacant the following three months, then be used for retail the next month. With this in mind:

Are agencies supposed to report on the number of classified users (B11) and which classification they fall into (B14-38), based on what they classified at the end of the fiscal year (requiring a kind of snapshot in time)? Or, if they are continually updating classifications – do they update it as close as they can to the end of the calendar year when reporting is due

Answer from Marielle Rhodeiro, State Water Resources Control Board:

Whatever is easiest, logistically, for the supplier. I know a lot of data systems aren't great when it comes to that sort of record keeping.

7.0 Classifying and counting fire service connections

How should agencies classify fire service connections? Are they tied to the category of the rest of the account/connection?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

Are fire service connections considered to be CII? Are they even supposed to be reported under service connections at all? Looking at the eAR, I'm seeing guidance that says "*Do NOT report fire sprinkler connections and fire hydrants. These connections are not counted toward "service connections" for compliance purposes*".

systems.					
Industrial:					
All manufacturing	0	▲▼	122	▲▼	122
					109
Landscape Irrigation:					
Parks, play fields, cemeteries, median strips, golf courses	0	▲▼	36	▲▼	36
					30
Agricultural Irrigation:					
Irrigation of commercially-grown crops	0	▲▼	0	▲▼	
Do NOT report fire sprinkler connections and fire hydrants. These connections are not counted toward "service connections" for compliance purposes.					

8.0 Classifying and counting backflow meters

How should agencies classify backflow meters?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

Backflow prevention assemblies should also not reported under service connections – they are reported in a separate section of the eAR.

10. Backflow–Cross Connection Control ⓘ						
A. Backflow Assemblies and Air Gaps						
	Total Number Reported in 2023	Total Number in System in 2024	Number Installed in 2024	Number Tested in 2024	Number Failed in 2024	Number Repaired/ Replaced
Backflow Assemblies on the Service Connections or Meter (Reduced Pressure Principle and Double Check Valve assemblies) ⓘ	644	646	▲▼ 0	▲▼ 0	▲▼ 0	▲▼ 3
Backflow Assemblies On-site but not on the Service Connections or Meter (Reduced Pressure Principle and Double Check Valve assemblies) ⓘ	0	0	▲▼ 0	▲▼ 0	▲▼ 0	▲▼ 0
Air-gap Separation ⓘ	0	0	▲▼ 0	▲▼		
No. of Inactive Backflow Prevention Assemblies in water system in 2024: ⓘ			0	▲▼		
B. Cross Connection Control Program ⓘ						

9.0 NFT notification and enforcement for county, state, federal properties

What role do water agencies play regarding NFT on county, state, or federal properties? For example, is it the responsibility of a local water agency to notify county-owned properties or federal facilities (such as post offices) and make sure they comply with the law to set a good example for the public?

Answer from Eugenia Wang, State Water Resources Control Board:

As per section 10608.14(d) of the Water Code, “Public water systems shall, by no later than January 1, 2027, revise their regulations, ordinances, or policies governing water service to include the requirements of subdivisions (a) and (b) [...] and shall communicate the requirements to their customers on or before that date.”

Public water systems must therefore both (1) update their policies in order to reflect statute and (2) inform their customers of these updates in a timely manner. This includes a public water system’s county, state, or federal customers.

10.0 5,000 sq. ft. Irrigated area and NFT reporting

Regarding NFT (specifically CHAPTER 2.5. Nonfunctional Turf - 10608.14) and certification to the board, does that “5000 sq. ft. of irrigated area”, or “5,000 sq. ft. of irrigated common areas” for HOAs, include any irrigated area nonfunctional turf, functional turf, and non-turf plantings?

If I were an HOA with 5,000 sq ft. of irrigated trees and shrubs for example, self-certification would still apply, correct?

Answer from Melissa Matlock, CalWEP:

Yes—the definition is based on total irrigated area (5,000 sq ft), which can include turf, water-wise landscape, or other irrigated areas.

11.0 Species included in NFT

Are species not listed in the regulation not considered turf? Also, are native grasses considered turf?

- “turf” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses

Answer from Sierra Orr, WSC:

Based on our discussion with Krista Guerrero from Metropolitan (who helped craft the actual language) Native bunch grasses are generally not included, but water-efficient turf grass (including Buffalograss) is subject to the regulation. WUCOLs has a great list of "Turf Grasses" <https://wucols.ucdavis.edu/plant-factors-turfgrasses>. Krista recommended that list for determination.

12.0 UWUO and eAR CY FY

The UWUO is based on fiscal year, but the eAR is on a calendar year basis. Since cells B41-46 are using CY, if agencies want to update the data in cells B48-53, should that be reported on a FY or CY basis?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

It should match the time period that corresponds to the rest of the CII classification data, ideally.

13.0 SBX7-7 Backstop

If a retailer has not calculated the SBx7-7 backstop, should they put "Unknown" or "0"?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

The only required field is process water. If that is unknown, they may respond "Unknown."

14.0 MUM DIM conversions

Are there any exceptions to the required MUM-DIM conversions?

Answer from Shem Stygar, Department of Water Resources:

Section 973 describes when conversion is required, and only limited recommendations were included. (No broader exceptions beyond what is codified in regulation.)

The conversion of Commercial, Institutional, and Industrial (CII) mixed-use meters (MUM) to a dedicated irrigation meter (DIM) is in California Code of Regulations (CCR), Title 23, Division 3, Chapter 3.5, Section 973 and does not include any exceptions to the CII-MUM to DIM conversion requirements.

Additional time is provided in 23 CCR, section 973(e) for new urban retail water suppliers and for supplier consolidations. The State Water Board's regulation does not specify how the ½ acre in size associated with CII mixed-use meters should be measured. It is unclear

to DWR if the area of the large landscape is measured by an individual CII parcel boundary, spanning multiple CII parcel boundaries, or if there is no defined boundary. We recommend consulting with your in-house legal counsel to determine what is appropriate for your service area, or you may consult the State Water Board at ORPP-WaterConservation@waterboards.ca.gov.

Timeline for completion:

23 CCR, Ch. 3.5, Section 973, defines when the requirements should be met:

[Section 973](#): “(a) Each urban retail water supplier shall either:

(1) By June 30, 2027, identify all existing commercial, industrial, and institutional (CII) water users associated with large landscapes; or

(2) By June 30, 2029, identify all existing CII water users associated with a large landscape and for which estimated outdoor water use exceeds the water budget calculated pursuant to subdivision (c)(1).”

When a CII-MUM is converted to a DIM, it is then subject to the DIM requirements [CCR Title 23, Chapter 3.5, Section 969](#)

15.0 AMI or In Lieu Tech (973)

If a supplier already has AMI on all accounts, do they answer yes on cell B36 (“Did your agency employ in lieu technologies and offer BMPs during the 24-25 FY ...”)? The technology is already there but may not have been installed this FY and wasn’t specific to large landscapes.

Answer from Marielle Rhodeiro, State Water Resources Control Board:

My interpretation of “employ”, going by the dictionary definition of “make use of”, is that they can say “Yes”, they are using AMI on their landscapes.

16.0 Estimated annual water savings associated with BMPs

Some retailers aren’t entirely comfortable entering “0” into cells B10 and B13- estimated annual water savings associated with BMPs. However, without any standardization or guidance on calculating savings, this is a difficult question that will take time to answer. They would like to recommend the option to put Unknown or In Progress, something like that rather than 0.

Answer from Marielle Rhodeiro, State Water Resources Control Board:

I will take this back to the group, but technically for the (c)(1) method suppliers are supposed to have this information by this year. I won't be making changes to this year's form but if management is ok with giving more time for this requirement, I will add the "unknown" option next year. Hopefully we will also be able to provide better guidance on water savings calculations next year!

17.0 Data map from other sources to UWUO Reporting

Does any resource exist that illustrates the path of data populated from eAR, SAFER, AWUR, Water Loss Audits etc. to the UWUO reporting form? So, for example, if an agency enters water consumption into a specific field of SAFER, (this isn't real but...) let's just say cell F10 of that form – is there any kind of data map that shows which cell of the UWUO form that corresponds to? It would be very helpful for agencies to be able to see and understand how all of these reporting processes and platforms tie together to make sure they are entering data consistently and understand the impact.

Answer from Marielle Rhodeiro, State Water Resources Control Board:

That doesn't exist yet. The instructions column has links to the relevant source dataset, but that's as far as we've gotten. If some enterprising individual wants to take that on...;)

18.0 New Construction

Regarding new construction, if an agency received approval last year, is that volume already included in this year, or should they report a cumulative total?

Answer from Marielle Rhodeiro, State Water Resources Control Board:

No approvals were issued last year. All new construction requests should be calculated relative to DWR-provided imagery. Updated requests should include prior amounts plus any new additions. So for example, in 2025, if a supplier requests 5,000,000 new square feet relative to the DWR data and then wants to update that number in 2026 to add an additional 6,000 square feet, the 2026 requested number would be 5,006,000 square feet.

19.0 Rationale behind 90th percentile of residential use

Regarding two of these criteria from the Actual Water Use tab of the UWUO report. Do you know the rationale for why this information (90th percentile residential use) or any background information on the reasoning that I could provide an explanation for?

- Total Volume of deliveries to single-family residential customers that are at or above the 90th percentile for single-family residential water use across the supplier's service area
- Total Volume of deliveries to multi-family residential customers that are at or above the 90th percentile for multi-family residential water use across the supplier's service area

If you have any insight on the long-term goal or reasoning for collecting this data, that would be very helpful, even if it is a brief explanation.

Answer from Sierra Orr, WSC:

I know both of these were required in the language of the actual regulation.

§ 975. Reporting (c) (1)(A) (v) – page 40 of the attached “final text...”.

In terms of why or long-term goals, I certainly cannot speak for the state. However, having worked at an agency during the drought that triggered so much of this, I can give you my perspective.

When the 2012-2015 drought hit, the state had to take drastic actions to reduce water use, at one point mandating that all agencies reduce water consumption by 20% across the board. They took a lot of heat for that action because it wasn't fair or equitable to agencies and communities who were already really efficient or used less water.

As a result, they started really trying to customize their regulatory actions (thus the multiple pathways for compliance). They also began to realize that, rather than “penalize” everyone, it was more prudent to go after the customers/areas where there is likely more water waste. To know where water is being wasted however, there had to have been a realization that (in many ways) there was no central source of data. It goes back to that old phrase, “You can't manage what you don't measure.”

As such – recent regulations now really target the largest consumers of water. That's where we get the top 2.5 and 20% in the CII sector and this 90th percentile in residential. I imagine the thinking is that a disproportionately large volume of water consumption comes from those top users, and thus, most of our efforts should be directed there in order to make significant reductions. While they aren't requiring any specific BMPs for those top residential users at this point, it could be an early effort to identify the potential for savings. That way, once we have done everything we can in the commercial sector – if there is still a need to reduce water use even further we already know who to target in the residential sector and how much capacity there is for more savings.

B

Workshop 1



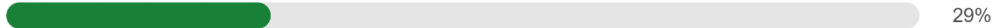
If you could experience just one landscape for the rest of your life, which would it be?

Multiple Choice Poll

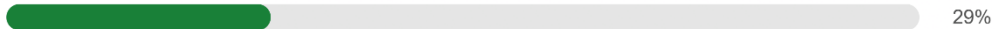
✓ 31 votes

👤 31 participants

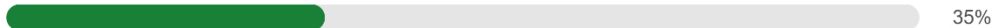
A) Rolling hills with wildflowers (Calm, colorful, inspiring) - 9 votes



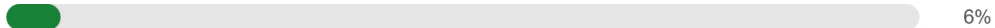
B) A coastline with rugged cliffs (dynamic, fun, always moving) - 9 votes



C) A high mountain lake (serene, reflective, tucked away) - 11 votes



D) An urban green space (lively, welcoming, social) - 2 votes



slido



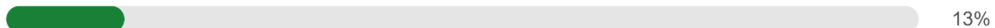
Which sector do you believe contributes the most to overall water waste in your community?

Multiple Choice Poll

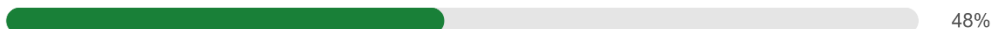
✓ 23 votes

👤 23 participants

Residential (indoor & outdoor) - 3 votes



Institutional and Commercial Landscape Irrigation (parks, medians, golf courses) - 11 votes



Commercial/Industrial/Institutional water use (businesses, schools, hospitals) - 9 votes

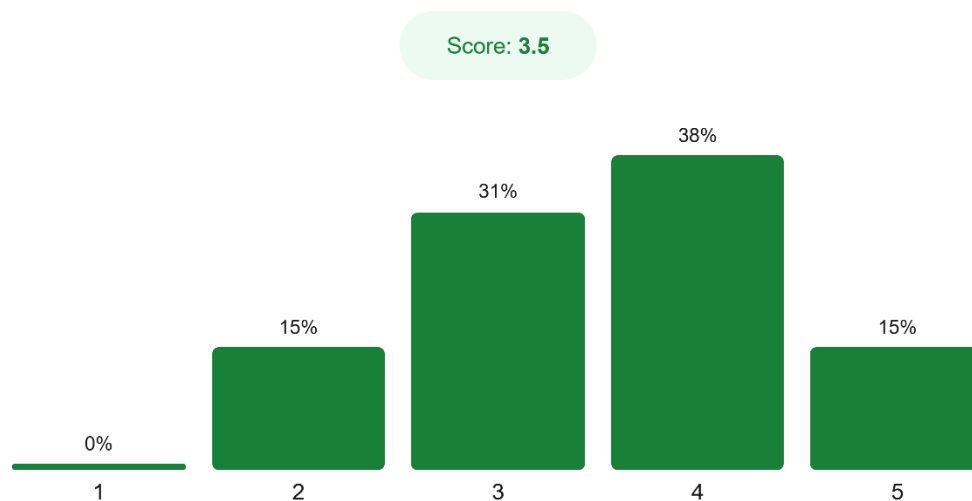


slido



On a scale of 1-5 how are you feeling regarding your understanding of the information shared today? (1 being "Not confident, help!" and 5 being "Much more confident, looking forward to the summary!")

Rating Poll ☒ 13 votes 13 participants



slido

Workshop 2



How's your agency tackling large landscapes with mixed-use meters?

Multiple Choice Poll

18 votes

18 participants

Installing Dedicated Irrigation Meters (DIMs) for qualifying sites - 3 votes



17%

Submeters — installed or in progress - 0 votes



0%

AMI meters (existing or planned) - 8 votes



44%

Water budgets or tiered rate structures - 0 votes



0%

Trying something else? Other In-Lieu tech may need Board approval - 0 votes



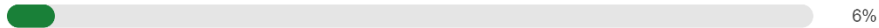
0%

Still figuring it out - 12 votes



67%

Not applicable — we don't serve large mixed-use landscapes - 1 vote



6%

slido

Workshop 4



Do you know if your agency would meet the objective today if the LEF for residential outdoor was 0.55?

Multiple Choice Poll 14 votes 14 participants

Yes, we would. - 2 votes



No, we would not. - 0 votes



I don't know. - 12 votes



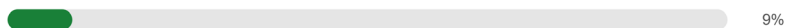
slido



Which of the following outdoor variances or temporary provisions could apply to your agency now or in the future? Select all that apply.

Multiple Choice Poll 11 votes 11 participants

Populations of horses and livestock - 1 vote



Dust control in animal exercise arenas - 1 vote



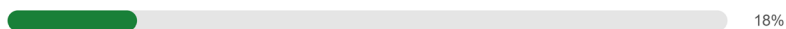
Irrigating agricultural landscapes not classified as irrigable irrigated in the LAM - 1 vote



Landscapes irrigated with recycled water containing high levels of TDS - 5 votes



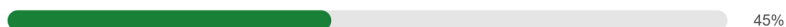
Supplementing ponds and lakes to sustain wildlife as required by existing regulations or local ordinances - 2 votes



Planting new, climate-ready trees - 8 votes



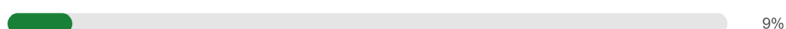
Establishment of qualifying landscapes - 5 votes



Responding to emergency events - 7 votes



None - 1 vote



slido

Workshop 6



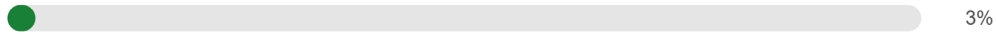
How familiar are you with California's AB 1572?

Multiple Choice Poll

✓ 35 votes

👤 35 participants

Expert (i.e. I helped craft the legislation/ Served on related panels or committees/ Developed educational material) - 1 vote



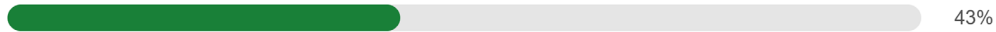
3%

Very familiar (i.e. I know the timeline and who it impacts/ Read the actual bill / Attended sessions or presented on the topic) - 19 votes



54%

Somewhat familiar (i.e. I have attended a session and/or read about it, but I may not recall all of the specifics) - 15 votes



43%

Not Familiar (i.e. I know it has to do with nonfunctional turf but not much more than that.) - 0 votes



0%

AB1572 who? - 0 votes



0%

slido

Workshop 7 (Quiz)



How has California's approach to water loss evolved over time?

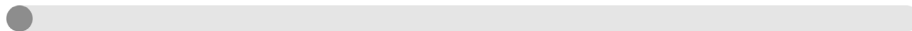
Quiz question 15 answers 15 participants

From voluntary best practices to enforceable performance standards - 15 answers



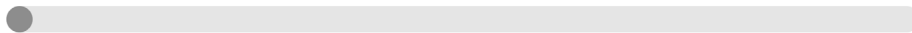
100%

From regional to local-only reporting - 0 answers



0%

From annual to optional reporting - 0 answers



0%

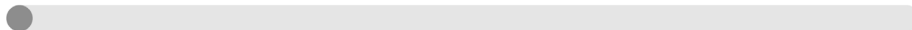
slido



Under California's "Making Conservation a California Way of Life" framework, water loss is considered:

Quiz question 15 answers 15 participants

A best management practice. - 0 answers



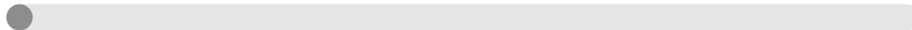
0%

A component of system efficiency standards - 15 answers



100%

A drought-only requirement - 0 answers



0%

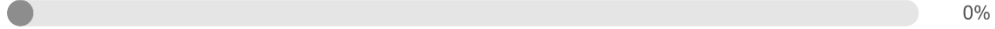
slido



In addition to submitting a water loss audit, suppliers must complete which related reporting element?

Quiz question 13 answers 13 participants

Energy efficiency questionnaire - 0 answers



Water Loss Performance Questionnaire - 13 answers



Climate adaptation assessment - 0 answers



slido



Which entity enforces water loss audit compliance and reviews submitted audits and questionnaires?

Quiz question 13 answers 13 participants

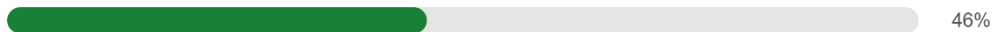
CA-NV AWWA - 1 answer



Department of Water Resources - 6 answers



State Water Resources Control Board - 6 answers



slido



Which organization is best known for providing water loss audit validation training in California?

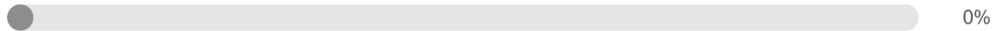
Quiz question 11 answers 11 participants

CA-NV Section of AWWA - 11 answers



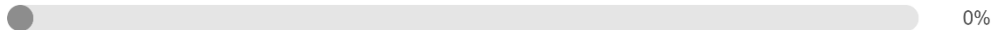
100%

State Water Resources Control Board - 0 answers



0%

U.S. Geological Survey - 0 answers



0%

slido

Workshop 8



How would you describe your agency's current CII program?

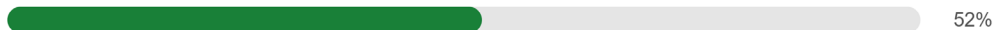
Multiple Choice Poll 21 votes 21 participants

We have active programs with measurable savings - 4 votes



19%

We have programs, but limited tracking - 11 votes



52%

We are designing programs now - 1 vote



5%

We have not really focused on CII programs yet - 5 votes



24%

slido



What message has generated the strongest response from your CII customers?

Multiple Choice Poll

✓ 18 votes

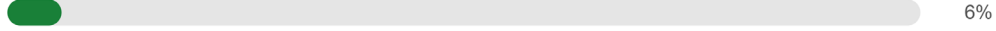
👤 18 participants

Water savings (gallons, acre-feet) - 0 votes



0%

Cost savings (\$ impact) - 1 vote



6%

Regulatory compliance - 2 votes



11%

Sustainability / ESG branding - 0 votes



0%

Rebates and incentives - 3 votes



17%

We don't know yet - 12 votes



67%

None - 0 votes



0%

slido



How are you currently measuring success of your CII programs efforts?

Multiple Choice Poll

✓ 16 votes

👤 16 participants

Participation counts - 9 votes



Rebates issued - 5 votes



Estimated savings (engineering assumptions) - 0 votes



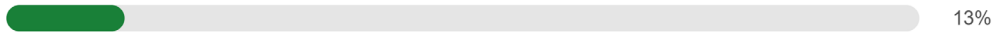
Pre/post consumption analysis - 0 votes



Control group comparison - 0 votes



We are not measuring yet - 2 votes



slido

Workshop 12



Who is your favorite Jeopardy Host or Guest Host?

Multiple Choice Poll

✓ 16 votes

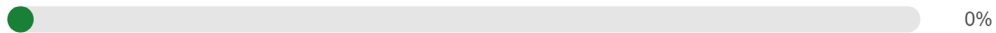
👤 16 participants

Alex Trebek - 13 votes



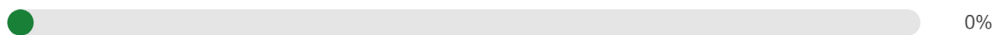
81%

Mayim Bialik - 0 votes



0%

Ken Jennings - 0 votes



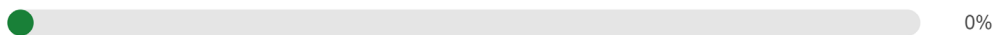
0%

LeVar Burton - 0 votes



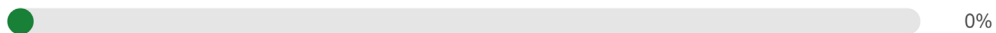
0%

Anderson Cooper - 0 votes



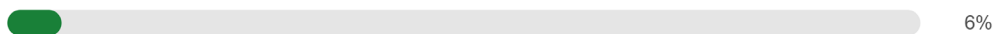
0%

Katie Couric - 0 votes



0%

Aaron Rodgers - 1 vote



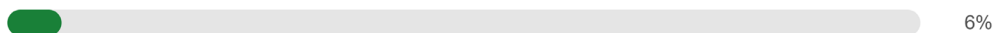
6%

Not enough of a fan to have a favorite - 1 vote



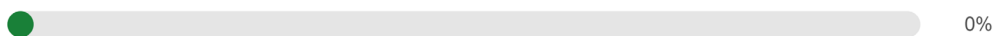
6%

Never watched it - 1 vote



6%

Other - 0 votes



0%

slido



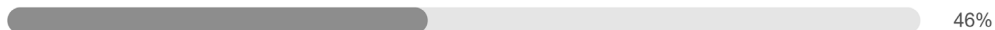
Which entity enforces water loss audit compliance and reviews submitted audits and questionnaires?

Quiz question 13 answers 13 participants

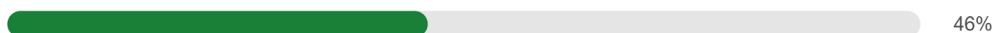
CA-NV AWWA - 1 answer



Department of Water Resources - 6 answers



State Water Resources Control Board - 6 answers



slido



Which organization is best known for providing water loss audit validation training in California?

Quiz question 11 answers 11 participants

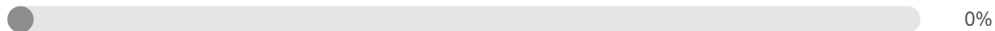
CA-NV Section of AWWA - 11 answers



State Water Resources Control Board - 0 answers



U.S. Geological Survey - 0 answers



slido



In addition to submitting a water loss audit, suppliers must complete which related reporting element?

Quiz question

13 answers

13 participants

Energy efficiency questionnaire - 0 answers



0%

Water Loss Performance Questionnaire - 13 answers



100%

Climate adaptation assessment - 0 answers



0%

slido

C

Pre-Workshop Survey

Water Use Efficiency Legislation Roundtable Pre-Workshop Survey

Tuesday, June 23, 2026

Powered by  SurveyMonkey

1

19

Total Responses

Date Created: Monday, October 13, 2025

Complete Responses: 19

Powered by  SurveyMonkey

2

Q3: The following is an initial list for our first five workshops, meant to address the reporting requirements. Additional workshops will be held January through June, 2026 and may include discussions on NFT, water loss, and more. Are the following workshop topics relevant to your agency's current reporting needs?

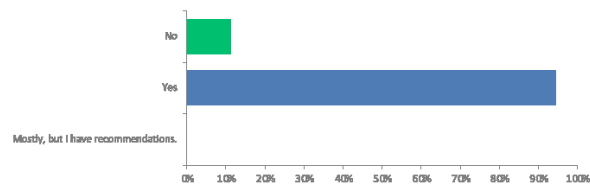
October 29: Overview of Urban Water Use Objective (UWUO) requirements and how to conduct calculations of your top water users (2.5% and 20% of Commercial, Industrial and Institutional (CII) and 10% of single-family and multi-family residential)

November 5: How to address CII Dedicated Irrigation Meters (DIMs), Landscape Area Measurements (LAM), Mixed Use Meters (MUMS), and Special Landscape Areas (SLA)

November 19: CII performance measures, Best Management Practices (BMPs), and classification

December 3: Outdoor residential water use, SLA, and new landscape areas

December 17: A "Progress & Perspectives Meeting" to share lessons learned from workshops and office hours, share report submittals, and address any outstanding questions, ideas, concerns, or knowledge gaps.



Answered: 18 Skipped: 1

Powered by  SurveyMonkey

3

Q3: The following is an initial list for our first five workshops, meant to address the reporting requirements. Additional workshops will be held January through June, 2026 and may include discussions on NFT, water loss, and more. Are the following workshop topics relevant to your agency's current reporting needs?

October 29: Overview of Urban Water Use Objective (UWUO) requirements and how to conduct calculations of your top water users (2.5% and 20% of Commercial, Industrial and Institutional (CII) and 10% of single-family and multi-family residential)

November 5: How to address CII Dedicated Irrigation Meters (DIMs), Landscape Area Measurements (LAM), Mixed Use Meters (MUMS), and Special Landscape Areas (SLA)

November 19: CII performance measures, Best Management Practices (BMPs), and classification

December 3: Outdoor residential water use, SLA, and new landscape areas

December 17: A "Progress & Perspectives Meeting" to share lessons learned from workshops and office hours, share report submittals, and address any outstanding questions, ideas, concerns, or knowledge gaps.

ANSWER CHOICES	RESPONSES	
No	11.11%	2
Yes	94.44%	17
Mostly, but I have recommendations.	0.00%	0
TOTAL		19

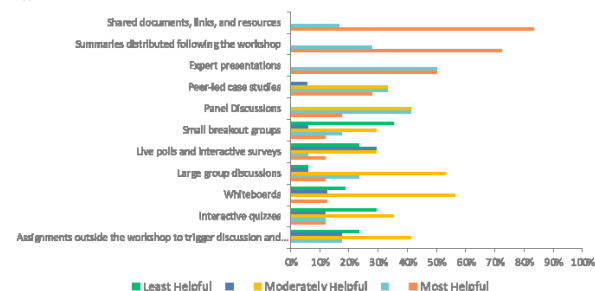
Answered: 18 Skipped: 1

Powered by  SurveyMonkey

4

Q4: What workshop formats and/or tools would help you get the most out of these workshops? Score each from left to right in order of least to most helpful.

Answered: 18 Skipped: 1



Powered by SurveyMonkey

5

Q4: What workshop formats and/or tools would help you get the most out of these workshops? Score each from left to right in order of least to most helpful.

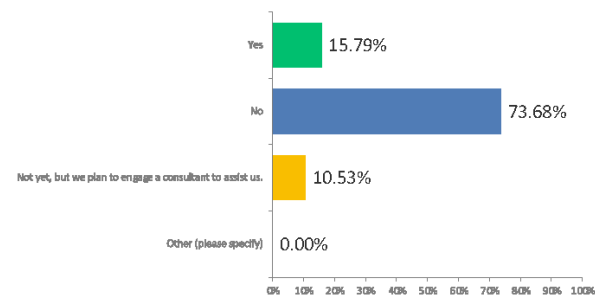
	LEAST HELPFUL		MODERATELY HELPFUL		MOST HELPFUL	TOTAL	WEIGHTED AVERAGE
Shared documents, links, and resources	0.00% 0	0.00% 0	0.00% 0	16.67% 3	83.33% 15	18	4.83
Summaries distributed following the workshop	0.00% 0	0.00% 0	0.00% 0	27.78% 5	72.22% 13	18	4.72
Expert presentations	0.00% 0	0.00% 0	0.00% 0	50.00% 9	50.00% 9	18	4.5
Peer-led case studies	0.00% 0	5.56% 1	33.33% 6	33.33% 6	27.78% 5	18	3.83
Panel Discussions	0.00% 0	0.00% 0	41.18% 7	41.18% 7	17.65% 3	17	3.76
Small breakout groups	35.29% 6	5.88% 1	29.41% 5	17.65% 3	11.76% 2	17	2.65
Live polls and interactive surveys	23.53% 4	29.41% 5	29.41% 5	5.88% 1	11.76% 2	17	2.53
Large group discussions	5.88% 1	5.88% 1	52.94% 9	23.53% 4	11.76% 2	17	3.29
Whiteboards	18.75% 3	12.50% 2	56.25% 9	0.00% 0	12.50% 2	16	2.75
Interactive quizzes	29.41% 5	11.76% 2	35.29% 6	11.76% 2	11.76% 2	17	2.65
Assignments outside the workshop to trigger discussion and thought	23.53% 4	17.65% 3	41.18% 7	17.65% 3	0.00% 0	17	2.53

Powered by SurveyMonkey Answered: 18 Skipped: 1

6

Q5: Does your agency have a consultant assisting with your Annual Water Use Report?

Answered: 19 Skipped: 0



Powered by SurveyMonkey

7

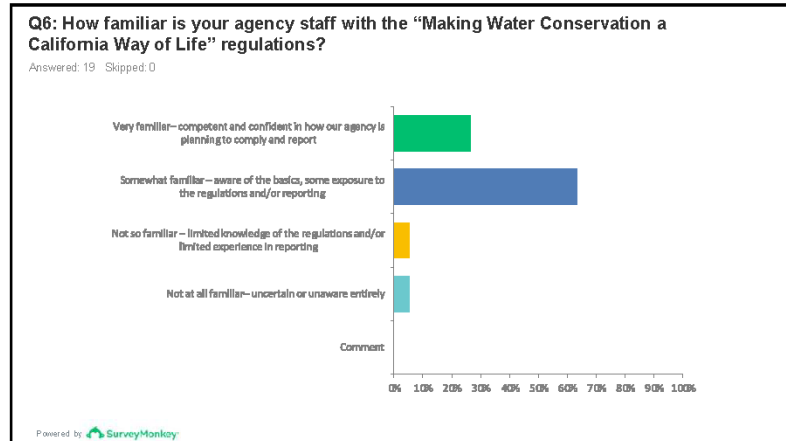
Q5: Does your agency have a consultant assisting with your Annual Water Use Report?

Answered: 19 Skipped: 0

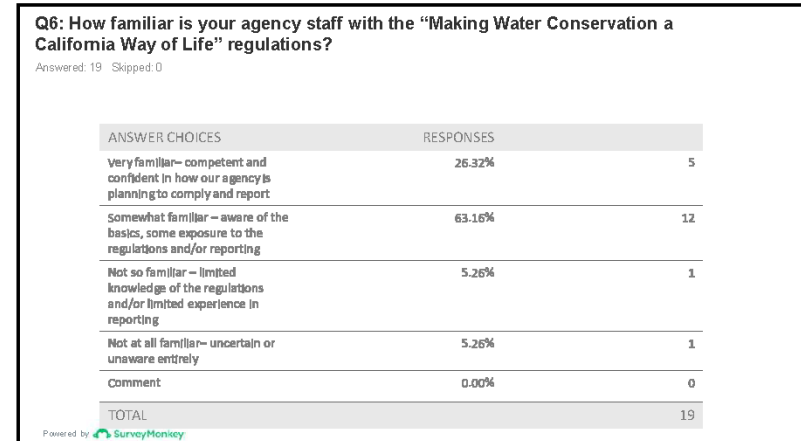
ANSWER CHOICES	RESPONSES
Yes	15.79% 3
No	73.68% 14
Not yet, but we plan to engage a consultant to assist us.	10.53% 2
Other (please specify)	0.00% 0
TOTAL	19

Powered by SurveyMonkey

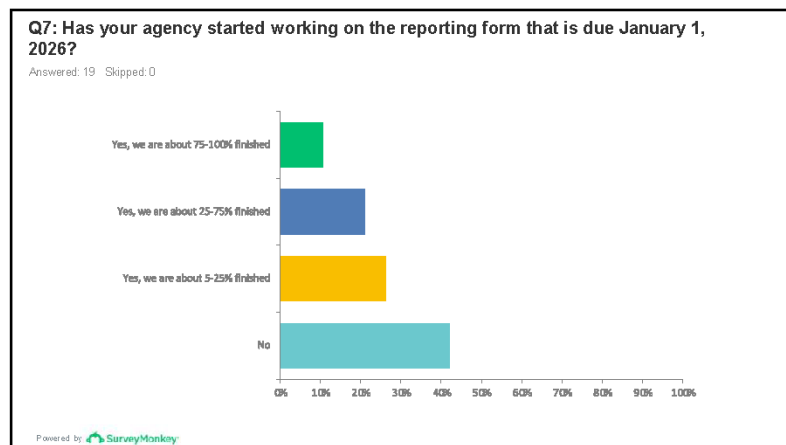
8



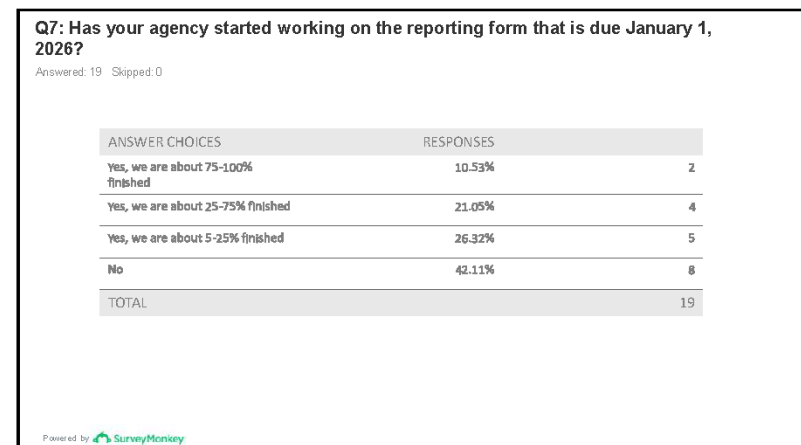
9



10



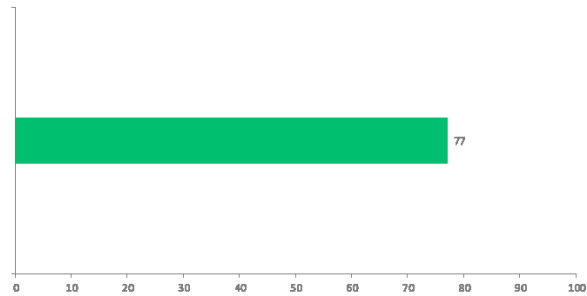
11



12

Q8: How confident is your agency/staff in your reporting approach and ability to meet the January 1, 2026 deadline?

Answered: 18 Skipped: 1



Powered by SurveyMonkey

13

Q8: How confident is your agency/staff in your reporting approach and ability to meet the January 1, 2026 deadline?

Answered: 18 Skipped: 1

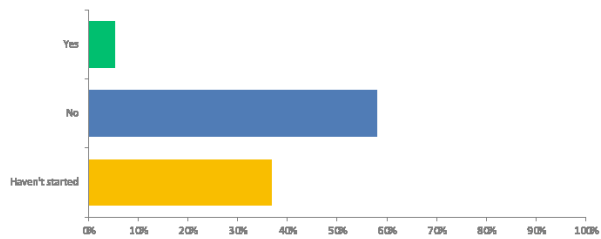
ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	77	1,386	18

Powered by SurveyMonkey

14

Q9: If your agency has started working on your reporting form, would any of your staff be willing to lead a case study or discussion on your process/experience with meeting the Making Water Conservation a California Way of Life regulations, including reporting or other topics?

Answered: 19 Skipped: 0



Powered by SurveyMonkey

15

Q9: If your agency has started working on your reporting form, would any of your staff be willing to lead a case study or discussion on your process/experience with meeting the Making Water Conservation a California Way of Life regulations, including reporting or other topics?

Answered: 19 Skipped: 0

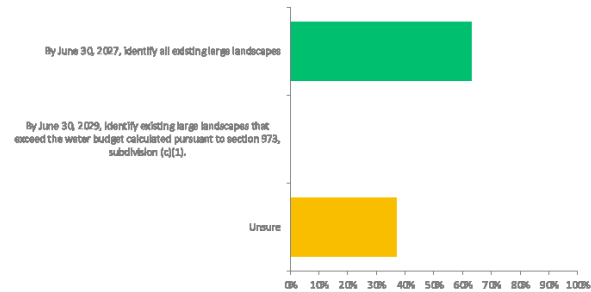
ANSWER CHOICES	RESPONSES
Yes	5.26% 1
No	57.89% 11
Haven't started	36.84% 7
TOTAL	19

Powered by SurveyMonkey

16

Q11: Which reporting route does your agency intend to take on large landscapes?

Answered: 19 Skipped: 0



Powered by SurveyMonkey

17

Q11: Which reporting route does your agency intend to take on large landscapes?

Answered: 19 Skipped: 0

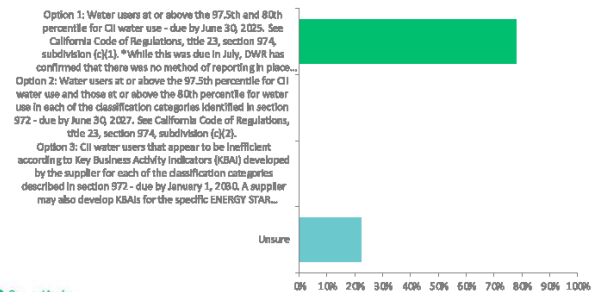
ANSWER CHOICES	RESPONSES	
By June 30, 2027, identify all existing large landscapes	63.16%	12
By June 30, 2029, identify existing large landscapes that exceed the water budget calculated pursuant to section 973, subdivision (c)(1).	0.00%	0
Unsure	36.84%	7
TOTAL		19

Powered by SurveyMonkey

18

Q12: A supplier may choose from three options for identifying the CII water users for which it will offer Best Management Practices (BMPs). Which reporting route does your agency intend to take on BMPs?

Answered: 18 Skipped: 1



Powered by SurveyMonkey

19

Q12: A supplier may choose from three options for identifying the CII water users for which it will offer Best Management Practices (BMPs). Which reporting route does your agency intend to take on BMPs?

Answered: 18 Skipped: 1

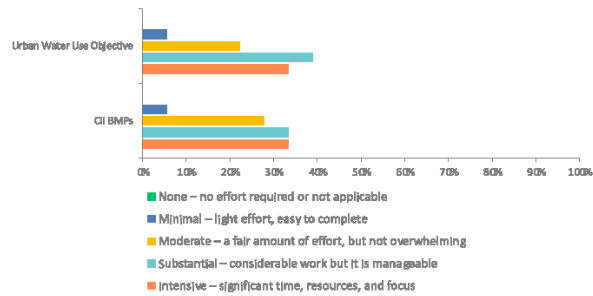
ANSWER CHOICES	RESPONSES	
Option 1: Water users at or above the 97.5th and 80th percentile for CII water use - due by June 30, 2025. See California Code of Regulations, title 23, section 974, subdivision (c)(1). *While this was due in July, DWR has confirmed that there was no method of reporting in place and thus, no agency is considered late at this point.	77.78%	14
Option 2: Water users at or above the 97.5th percentile for CII water use and those at or above the 80th percentile for water use in each of the classification categories identified in section 972 - due by June 30, 2027. See California Code of Regulations, title 23, section 974, subdivision (c)(2).	0.00%	0
Option 3: CII water users that appear to be inefficient according to Key Business Activity Indicators (KBAI) developed by the supplier for each of the classification categories described in section 972 - due by January 1, 2030. A supplier may also develop KBAs for the specific ENERGY STAR property types	0.00%	0
Unsure	22.22%	4
TOTAL		18

Powered by SurveyMonkey

20

Q13: What is your agency's expected level of effort required to meet your Urban Water Use Objective and CII BMPs?

Answered: 18 Skipped: 1



Powered by SurveyMonkey

21

Q13: What is your agency's expected level of effort required to meet your Urban Water Use Objective and CII BMPs?

Answered: 18 Skipped: 1

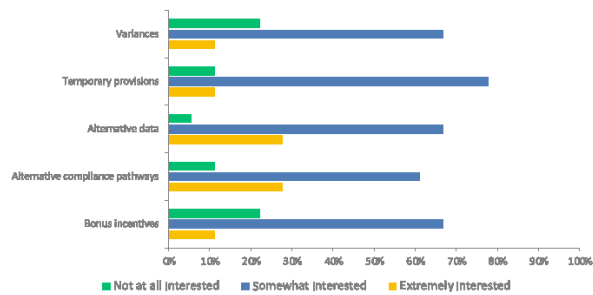
	NONE – NO EFFORT REQUIRED OR NOT APPLICABLE	MINIMAL – LIGHT EFFORT, EASY TO COMPLETE	MODERATE – FAIR AMOUNT OF EFFORT, BUT NOT OVERWHELMING	SUBSTANTIAL – CONSIDERABLE WORK BUT IT IS MANAGEABLE	INTENSIVE – SIGNIFICANT TIME, RESOURCES, AND FOCUS	TOTAL	WEIGHTED AVERAGE
Urban Water Use Objective	0.00% 0	5.56% 1	22.22% 4	38.89% 7	33.33% 6	18	4
CII BMPs	0.00% 0	5.56% 1	27.78% 5	33.33% 6	33.33% 6	18	3.94

Powered by SurveyMonkey

22

Q14: How interested are you in learning about the following?

Answered: 18 Skipped: 1



Powered by SurveyMonkey

23

Q14: How interested are you in learning about the following?

Answered: 18 Skipped: 1

	NOT AT ALL INTERESTED	SOMEWHAT INTERESTED	EXTREMELY INTERESTED	TOTAL	WEIGHTED AVERAGE
Variances	22.22% 4	66.67% 12	11.11% 2	18	2.78
Temporary provisions	11.11% 2	77.78% 14	11.11% 2	18	3
Alternative data	5.56% 1	66.67% 12	27.78% 5	18	3.44
Alternative compliance pathways	11.11% 2	61.11% 11	27.78% 5	18	3.33
Bonus incentives	22.22% 4	66.67% 12	11.11% 2	18	2.78

Powered by SurveyMonkey

24

Midway Survey

Water Use Efficiency - Feedback Survey

Tuesday, February 03, 2026

12

Total Responses

Date Created: Thursday, January 15, 2026

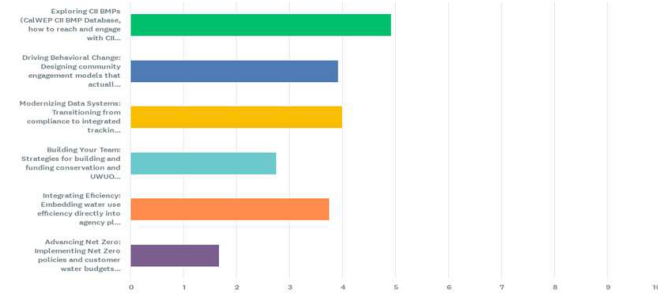
Complete Responses: 12

Powered by  SurveyMonkey

1

Q3: Of the following topics we're considering for the remaining sessions, please rate in order of most to least beneficial for your agency:

Answered: 12 Skipped: 0

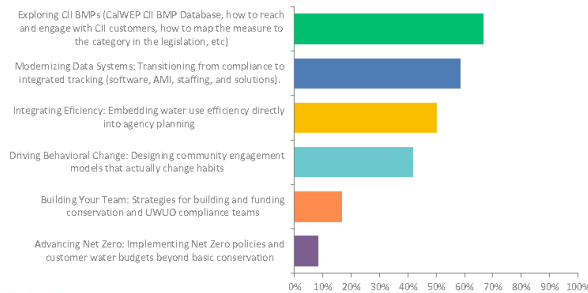


Powered by  SurveyMonkey

2

Q4: Two sessions will be in-person and estimated to last 6 hours each. Please select which topics/activities (top 2-4) you think we should cover at these in-person sessions.

Answered: 12 Skipped: 0



Powered by  SurveyMonkey

3

Q4: Two sessions will be in-person and estimated to last 6 hours each. Please select which topics/activities (top 2-4) you think we should cover at these in-person sessions.

Answered: 12 Skipped: 0

ANSWER CHOICES	RESPONSES	
Exploring CII BMPs (CalWEP CII BMP Database, how to reach and engage with CII customers, how to map the measure to the category in the legislation, etc)	66.67%	8
Modernizing Data Systems: Transitioning from compliance to integrated tracking (software, AMI, staffing, and solutions).	58.33%	7
Integrating Efficiency: Embedding water use efficiency directly into agency planning	50.00%	6
Driving Behavioral Change: Designing community engagement models that actually change habits	41.67%	5
Building Your Team: Strategies for building and funding conservation and UWUO compliance teams	16.67%	2
Advancing Net Zero: Implementing Net Zero policies and customer water budgets beyond basic conservation	8.33%	1
TOTAL		29

Powered by  SurveyMonkey

4

Q6: If you've attended, how would you rate the office hours thus far?

Answered: 7 Skipped: 5



Powered by SurveyMonkey

5

Q6: If you've attended, how would you rate the office hours thus far?

Answered: 7 Skipped: 5

	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
★	0.00% 0	0.00% 0	28.57% 2	28.57% 2	42.86% 3	7	4.14

Powered by SurveyMonkey

6

Q7: How would you rate the workshops thus far?

Answered: 11 Skipped: 1



Powered by SurveyMonkey

7

Q7: How would you rate the workshops thus far?

Answered: 11 Skipped: 1

	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
★	0.00% 0	0.00% 0	18.18% 2	45.45% 5	36.36% 4	11	4.18

Powered by SurveyMonkey

8

BMP and Classification Survey

WUE CII BMP and Classification Survey

Monday, November 10, 2025

Powered by  SurveyMonkey

1

8

Total Responses

Date Created: Monday, November 10, 2025

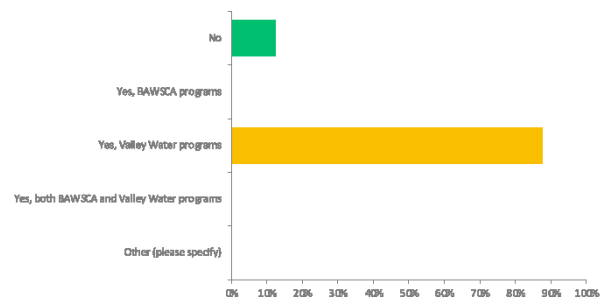
Complete Responses: 8

Powered by  SurveyMonkey

2

Q3: Do you participate in any Commercial, Industrial, or Institutional (CII) conservation related programs through a regional entity?

Answered: 8 Skipped: 0



Powered by  SurveyMonkey

3

Q3: Do you participate in any Commercial, Industrial, or Institutional (CII) conservation related programs through a regional entity?

Answered: 8 Skipped: 0

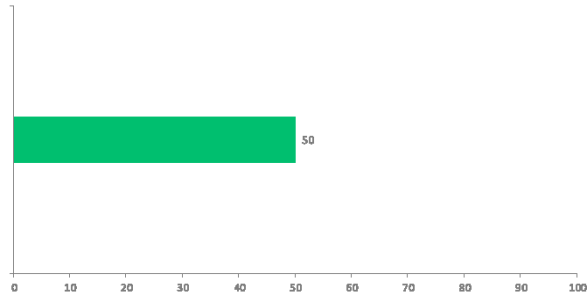
ANSWER CHOICES	RESPONSES	
No	12.50%	1
Yes, BAWSCA programs	0.00%	0
Yes, Valley Water programs	87.50%	7
Yes, both BAWSCA and Valley Water programs	0.00%	0
Other (please specify)	0.00%	0
TOTAL		8

Powered by  SurveyMonkey

4

Q5: How far along are you on completing CII Customer Classification?

Answered: 8 Skipped: 0



Powered by SurveyMonkey

5

Q5: How far along are you on completing CII Customer Classification?

Answered: 8 Skipped: 0

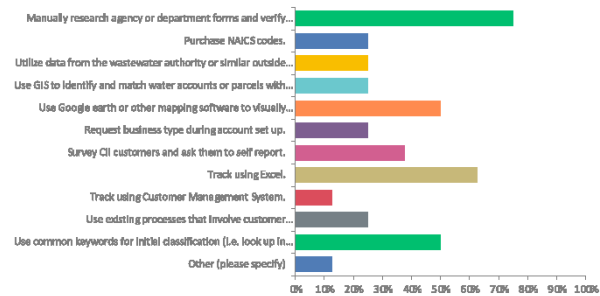
ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	50	400	8

Powered by SurveyMonkey

6

Q6: Which methodology(ies) are you using, or plan to use, for customer classification? Your approach may involve one or any combination of these.

Answered: 8 Skipped: 0



Powered by SurveyMonkey

7

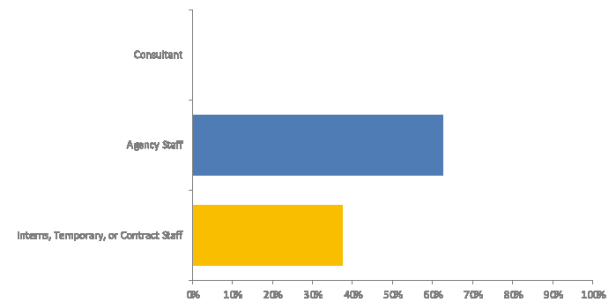
Q6: Which methodology(ies) are you using, or plan to use, for customer classification? Your approach may involve one or any combination of these.

ANSWER CHOICES	RESPONSES
Manually research agency or department forms and verify the classification for each.	75.00% 6
Purchase NAICS codes.	25.00% 2
Utilize data from the wastewater authority or similar outside agency or department (solid waste, business licenses, waste permits).	25.00% 2
Use GIS to identify and match water accounts or parcels with NAICS/other.	25.00% 2
Use Google earth or other mapping software to visually research the classification for each.	50.00% 4
Request business type during account set up.	25.00% 2
Survey CII customers and ask them to self report.	37.50% 3
Track using Excel.	62.50% 5
Track using Customer Management System.	12.50% 1
Use existing processes that involve customer outreach/research/site visits to confirm customer category.	25.00% 2
Use common keywords for initial classification (i.e. look up in the "church," "bank," "school" in the customer management system and classify accordingly.	50.00% 4
Other (please specify)	12.50% 1
TOTAL	34

8

Q7: Who is taking primary responsibility for CII Customer Classification?

Answered: 8 Skipped: 0



Powered by SurveyMonkey

9

Q7: Who is taking primary responsibility for CII Customer Classification?

Answered: 8 Skipped: 0

ANSWER CHOICES	RESPONSES	
Consultant	0.00%	0
Agency Staff	62.50%	5
Interns, Temporary, or Contract Staff	37.50%	3
TOTAL		8

Powered by SurveyMonkey

10

Data Survey



Water Systems Data Survey Results Summary

1

Water Data Systems Survey Results



Survey Participants & Scope

20 diverse Bay Area water agencies and utility organizations

Data Management Challenges

Varied data maturity; manual reconciliation and reporting are common pain points.

AMI Deployment & Analytics

AMI deployment varies; agencies want stronger analytics.

Future Priorities

Integrated platforms, better regulatory reporting, and modernized systems.

2

Who Responded



Diverse Utility Participants

Utilities of all sizes and types, from small to large.

Operational Challenges

Shared struggles consolidating data and meeting regulatory requirements.

Technology and Resource Gaps

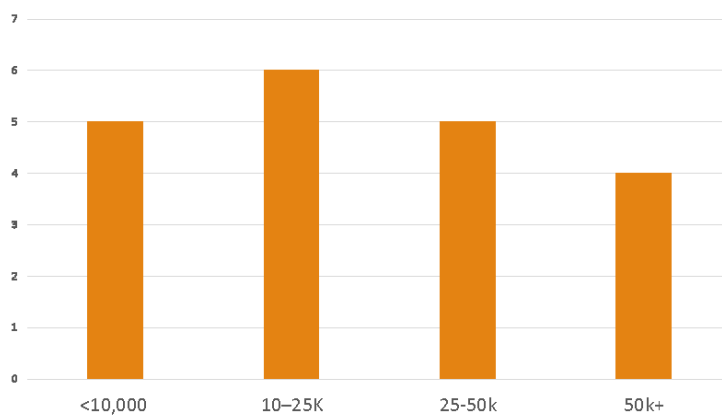
Small agencies rely on manual processes; large ones juggle multiple systems.

Opportunity for Shared Solutions

Shared solutions can adapt across maturity levels.

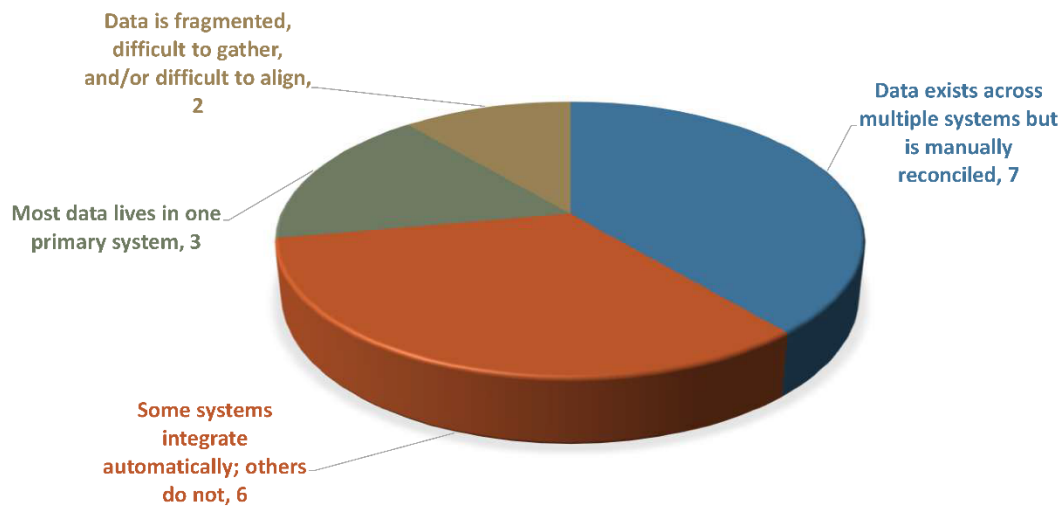
3

Count of approximate number of active service connections



4

Which statement best describes your current data environment?



5

How Agencies Manage Data Today



Fragmented Data Environments

Data spread across multiple systems needs manual reconciliation before reporting.

Workflow Bottlenecks and Errors

Limited integration causes delays and errors.

Demand for Integration Solutions

Strong demand for integration platforms, dashboards, and automated workflows.

Challenges Impacting Efficiency

Inconsistent data and manual work cut efficiency and raise reporting risk.

6

Common CIS Platforms

Variety of CIS Platforms

Agencies use a wide range of CIS platforms.

Answers included Tyler / Eden (most common), Cayenta, Nimble, NorthStar, Oracle, Advanced, Salesforce, and Custom: MOM.

Supplementary Systems Usage

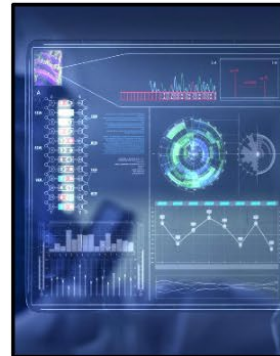
Many supplement with GIS, spreadsheets, and conservation software.

Demand for Enhanced Reporting

Users want better reporting for compliance, conservation, and customers.

Integration Challenges

Integration across CIS, AMI, GIS, and portals is critical.



7

Top Reporting Pain Points

Time-Consuming Reporting Tasks

Data cleanup and quality control eat up significant time.

Challenges in Data Integration

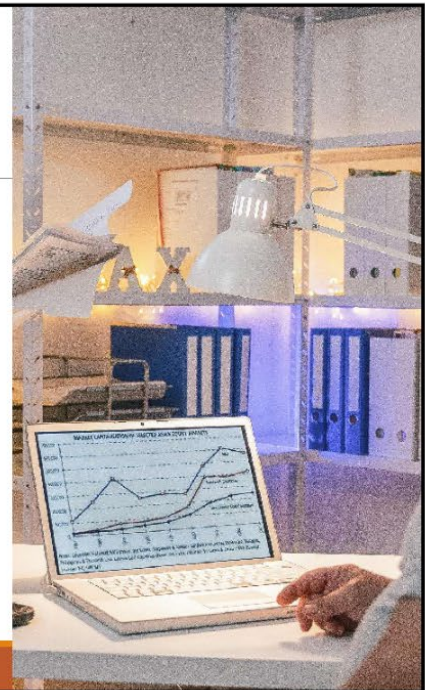
Reconciling data across systems and departments is a common hurdle.

Need for Automation

Automated dashboards and reports would cut manual work.

Impact on Agency Resources

Efficiency gains free resources for conservation, customers, and planning.



8



The Most Common Regulatory Challenge

CII Classification Challenges

Accurate CII classification is complex to track and categorize.

Reporting and Compliance Burdens

Multiple reporting obligations and limited system support force manual workarounds.

Need for Automation and Integration

Strong demand for automation and integration to streamline CII reporting.

Opportunity for Improvement

Better software and training can cut workload and boost data confidence.

9



Advanced Metering Infrastructure Trends

AMI Deployment Status

Many agencies run AMI partially or systemwide, unlocking detailed meter data.

Key Use Cases for AMI

Uses include leak detection, flow monitoring, consumption analysis, and water loss management.

Data Challenges and Needs

Challenges: limited data access, hard reporting, and incomplete integration.

Opportunities for Improvement

Priorities: better analytics, dashboards, and customer engagement tools.

10

Desired Capabilities and Key Takeaways



Integrated Information Systems

Integrated dashboards and centralized access as a single source of truth.

Automation and Data Sharing

Eliminate repetitive entry; enable automatic data exchange across systems.

User-Friendly Platforms

Consolidate data sources and strengthen customer-facing tools like usage alerts.

Focus on Collaboration and Efficiency

Workshop focus: automation, regulatory alignment, analytics, and less redundancy.

Name	Agency	Approximate number of active service connections	Which statement best describes your current data environment?	Customer Information System (CIS) does your agency primarily use?	Other	Does your CIS currently have the ability to track any of the following? (Select all that apply)	How do you track conservation program participation (rebates, training, audits)?	If tracking, where do you currently track CII classifications?
Names and Agencies Obscured for Confidentiality		50k+	Data exists across multiple systems but is manually reconciled	Other (please specify)	Cayenta	Other customer interactions (letters sent, calls, emails)	Separate program database, spreadsheets	Spreadsheet
		<10,000	Some systems integrate automatically; others do not	Tyler / Eden		Other customer interactions (letters sent, calls, emails)	Vendor platform: BAWSCA's droplet	Spreadsheet
		10-25K	Data exists across multiple systems but is manually reconciled	Other (please specify)	Nimble	Not sure	vendor platforms: Valley Water	Unsure
		50k+	Data exists across multiple systems but is manually reconciled	Tyler / Eden	NorthStar	Not sure	Not tracked consistently	Spreadsheet, GIS, Not consistently tracked
		10-25K	Some systems integrate automatically; others do not	Tyler / Eden		CII classification (per regulation) Other customer interactions (letters sent, calls, emails)	vendor platforms: Valley Water	CIS; Not consistently tracked
		25-50k	Data exists across multiple systems but is manually reconciled	Tyler / Eden		CII classification (per regulation)	Spreadsheets	CIS and Spreadsheet
		<10,000	Some systems integrate automatically; others do not			None of the above	Separate program database: BAWSCA, Spreadsheets	
		10-25K	Some systems integrate automatically; others do not	Tyler / Eden		CII classification (per regulation) Customer notifications specifically related to WUE requirements Other customer interactions (letters sent, calls, emails)	Separate program database	CIS and Spreadsheet
		10-25K	Data exists across multiple systems but is manually reconciled	Not sure	Aquatrax?	CII classification (per regulation) Other customer interactions (letters sent, calls, emails)	Spreadsheets	Spreadsheet

Name	Agency	Approximate number of active service connections	Which statement best describes your current data environment?	Customer Information System (CIS) does your agency primarily use?	Other	Does your CIS currently have the ability to track any of the following? (Select all that apply)	How do you track conservation program participation (rebates, training, audits)?	If tracking, where do you currently track CII classifications?
Names and Agencies Obscured for Confidentiality		10-25K	Data exists across multiple systems but is manually reconciled	Other (please specify)	No CIS, currently RFP for one	CII classification (per regulation), Conservation program participation (rebates, audits, training), Customer notifications specifically related to WUE requirements, Other customer interactions (letters sent, calls, emails)	Separate program database, vendor platforms: Watersmart, Waterfluence, Valley Water	Not consistently tracked
		25-50k	Most data lives in one primary system	Other (please specify)	Northstar Harris	CII classification (per regulation)	Spreadsheets	CIS
		25-50k	Data exists across multiple systems but is manually reconciled	Not sure	Oracle	None of the above	Spreadsheets, Vendor platform (please specify): Valley Water sends participation data annually	Not consistently tracked
		<10,000	Some systems integrate automatically; others do not	Not sure		Not sure	Spreadsheets	Unsure
		25-50k	Data is fragmented, difficult to gather, and/or difficult to align	Other (please specify)	Advanced	Other customer interactions (letters sent, calls, emails)	Spreadsheets	CIS
		25-50k	Data is fragmented, difficult to gather, and/or difficult to align	Other (please specify)	Advanced	None of the above	Spreadsheets	Spreadsheet
		<10,000	Some systems integrate automatically; others do not	Not sure		Not sure	Spreadsheets	Spreadsheet
		50k+	Data exists across multiple systems but is manually reconciled Some systems integrate automatically; others do not Data is fragmented, difficult to gather, and/or difficult to align	Other (please specify)	SalesForce	Not sure	CIS, Spreadsheets	CIS
		50k+	Data exists across multiple systems but is manually reconciled Some systems integrate automatically; others do not	Oracle	Wholesaler not retailer		Separate program database	Unsure
		10-25K	Most data lives in one primary system	Not sure		Not sure		Unsure
		<10,000	Most data lives in one primary system	Other (please specify)	Custom: MOM	CII classification (per regulation)	Spreadsheets	Spreadsheet

Name	CII classification notes	AMI deployed?	AMI notes	AMI vendor (if applicable)	...which types of AMI Reports do you use or have available? (Select all that apply)	What AMI based reports or insights would be most helpful but are difficult or impossible to generate?	Do you use any customer-side water monitoring + residential analytics tools or portals?	When it comes to reporting what takes the most staff time today?	If applicable which system is your single source of truth today (what do you rely on the most)?
Names and Agencies Obscured for Confidentiality		Yes – systemwide		Badger	Leak detection / continuous flow; Customer notifications or outreach triggers	Statistics on leaks (duration, unique leaks, volume of water lost vs. saved)	Badger Meter BEACON / EyeOnWater	Data cleanup	Our Water Use Efficiency program database (for program data); BEACON (for water use data)
		No – planning or piloting		Sensus				Data cleanup	Tyler
		Yes – partial deployment		None yet	Leak detection / continuous flow; Customer usage analysis	unsure, I have limited experience with AMI's.	unsure	All of the above	nimble energy
		No – not currently considering		None yet		Leak detection, Waterloss, CII identification / Customer notification	unknown	All of the above	Northstar
	Not fully categorized	Yes – partial deployment		90% Sensus	Leak detection / continuous flow; Customer usage analysis; Customer notifications or outreach triggers	None	Aquatrax starting May 1	All of the above	Sensus
	Goal is GIS in the future	Yes – systemwide	Actara (vendor)	Other (please specify):	Leak detection / continuous flow; Customer usage analysis	Anything involving landscapes	WaterSmart	Data cleanup; QA/QC before reporting (for example, ensuring consistency across systems or reports)	Tyler/ Munis
		Yes – systemwide		Sensus	Leak detection / continuous flow; Customer usage analysis; Water loss / NRW inputs; CII identification or classification support; Customer notifications or outreach triggers; Regulatory reporting support	Top percentage users	Flume; Aquatrax	QA/QC before reporting (for example, ensuring consistency across systems or reports)	Sensus
		Yes – systemwide			Leak detection / continuous flow; Customer usage analysis; CII identification or classification support; Customer notifications or outreach triggers		AquaTrax	Data cleanup; QA/QC before reporting (for example, ensuring consistency across systems or reports)	Aquatrax

Name	CII classification notes	AMI deployed?	AMI notes	AMI vendor (if applicable)	...which types of AMI Reports do you use or have available? (Select all that apply)	What AMI based reports or insights would be most helpful but are difficult or impossible to generate?	Do you use any customer-side water monitoring + residential analytics tools or portals?	When it comes to reporting, what takes the most staff time today?	If applicable which system is your single source of truth today (what do you rely on the most)?
Names and Agencies Obscured for Confidentiality		No – planning or piloting		None yet	NA	NA	WaterSmart, WaterFluence	All of the above	
		Yes – partial deployment	small segment	None yet				All of the above	
		No – planning or piloting		None yet	Not sure	Not sure yet	Other	QA/QC before reporting (for example, ensuring consistency across systems or reports)	We rely on the data that the Finance Dept gives us about water consumption
		Yes – systemwide		Sensus	Regulatory reporting support - we pull from Weblogs		Sensus (Xylem) Customer Portal	All of the above	
		No – planning or piloting		Badger		Leak and consumption data	AquaTrax; WaterSmart	All of the above	CIS
		No – planning or piloting		Badger		would like all of them, CII classification, Top users, I don't know yet	WaterSmart	All of the above	CIS
		Yes – systemwide	Itron meters, Watersmart dashboard	Itron	Customer notifications or outreach; Leak detection / continuous flow; Customer usage analysis	Reports that are specific to our user groups (Specific issue to Stanford)	WaterSmart	All of the above	monthly billed data
		Yes – systemwide		Badger, Neptune, Mueller	NA		WaterSmart	All of the above	NA
								Data transfers between systems	
				Sensus	Leak detection / continuous flow				
		No – not currently considering	Have AMR	Sensus	Customer usage analysis outreach triggers	Listing of customers with increased usage (after Specifying a percentage).		Data transfers between systems	

Name	If you could redesign your data systems to support WUE compliance and decision making, what might that look like?	In a few words finish this sentence, if our data systems worked better, we could finally:	Where does your data break or fail most often?	Which reporting or regulation causes the most rework?	Are there any companies, agencies, or specific speakers you would like to hear from when it comes to managing data..	What other platforms, software, or providers does your agency rely on, or have you considered..
Names and Agencies Obscured for Confidentiality	Simple dashboard displays that pull data from various sources/systems to create reports	pull all needed data from 1 location/system and reports would talk to each other to auto fill data that has already been provided previously	When manual entry of processing is needed	Annual eAR for the State that connects to monthly SAFER reports	SWRCB and DWR to reduce reporting redundancy	Currently use California Data Collaborative, spreadsheets, in house Power BI Dashboards; have used MWM; May consider other
	Including fields for CII classifications/integrating NAICS codes	pull all necessary information for state - compliance with one report instead of multiple	Trying to filter multiple customer classes or other data at once (all multifamily and irrigation customers instead of either or)	Water Loss Audits		Currently use ESRI/GIS, spreadsheets, in house dashboards, Water fluence; Engle Aerial water view
	High usage detection, correspondence w/ regulations	track water conservation progress	Leak detection errors / system failure/ glitch	unsure	N/a	Currently use ESRI / GIS tools; Spreadsheets. In house dashboards
	No idea; Needs to be easily accessible, user-friendly, self-directed and able to upload, download, transfer information	have one stop shop for all regulatory data needs that's accurate, current, and easily accessible	Silos, Consistent data records, input, training, staffing	CII Classification		Currently use ESRI / GIS tools; Spreadsheets
	We would have all of our CII Sub classifications already done.	Submit all of our reports without crying.	Transferring from one Department to another. Not having access to all data.	UWUO Reporting	Not sure	Currently use Aquatrax, ESRI/GIS, spreadsheets, in house dashboards, Sensus
	More ways to slice and dice day before exporting		QA/QC data before reporting. Clean up legacy data, especially from multiple ERP upgrades		Database capabilities - dealing with a lot of reports/static files can lead to errors. If there is a vendor or org that provides technical assistance here, would love to hear it	Currently use California Data Collaborative, MWM, spreadsheets, in house databases or dashboards, have used ESRI/GIS
	Take the reports needed, give that to a software developer, have them tailor their functionalities to achieve all requirements	track outdoor irrigation systems in use at SFR and CII properties	Transferring from Tyler to Aquatrax	CII Classifications + MUMS to DIMS	State LAM data updates and specifically how to QA/QC their measurements	Currently use Aquatrax, ESRI/GIS, spreadsheets; Have used WaterSmart
		generate accurate water use reports to help with reporting and outreach without much additional data cleanup				Currently use Aquatrax, spreadsheets

Name	If you could redesign your data systems to support WUE compliance and decision making, what might that look like?	In a few words finish this sentence, if our data systems worked better, we could finally:	Where does your data break or fail most often?	Which reporting or regulation causes the most rework?	Are there any companies, agencies, or specific speakers you would like to hear from when it comes to managing data..	What other platforms, software, or providers does your agency rely on, or have you considered..
Names and Agencies Obscured for Confidentiality	Report compliance areas within billin system, and or customer side monitoring and analytical tools	Report quicker	If we manually make changes	NFT, CII Classification		Have used CaDC, MWM Currently use ESRI/GIS, Spreadsheets, in house dashboards
	Exporting of reports for DIMs only, categorization for recycled water (DIMs dual-plumb, cooling, etc.)	classify CII customers accurately without reliance on our Finance Department (who currently holds all access - water & Sewer currently has read-only access)	Inconsistent reporting for specific time periods (data shifts when reports are re-run later for static date range)	Highest water user data gathering, CII classification		
	The data system will incorporate the 22 categories, up to date contact info, visualizationn such as charts, dashboards of water usage, and rebate resources, watering status of landscapes	be more efficient wuth it comes to gathering data for reports so that we don't need to reach out to multiple departments to gather data	CII categories. We havent started yet but our system might not have the 22 and we'll need to do manual work.	CII Classification		HAVE ESRI, spreadsheets, in house dashboards, may consider all others
					It would be great to see case studies	Currently use MWM, spreadsheets; Have used California Data Collaborative
	Creating and adding specific reports within CIS for WUE reporting data	manage, ccollect, and organize our data more efficiently	Billing adjustments, data being collected and kept on different systems (CIS, ViewWorks, GIS)	CII Classification or NFT	Aquatrax, WaterFluence	AquaTrax, WSC
	Get everything from Aquatrax or one place / Dashboards templates w/ reporting format	have basic customer/account/meter level customer consumption lol	CIS shuts down	CII Classification	AMI reports, Aquatrax reports, CII classification	Currently use ESRI/GIS, spreadsheets, CIS; Watersmart; Waterfluence
	NA	connect customers with resources				
						Spreadsheets, MOMs
	System Sends out notifications automatically when Customers consumption increases.	allow customers to monitor their own usage .	No problem with data.	Not sure.	Not sure .	Currently use spreadhseets and in house dashboards, would consider all others