



RWEPAC

September 13, 2022

WELCOME

Introductions

- Name
- Organization
- Favorite Toilet?



BE WATER SMART

Agenda

- July 2022 Meeting Notes
- Toilet Saturation Study Kick Off Presentation
- Regional Outreach Campaign Update/Grant Funding
- Water Loss Regulation
- Upcoming RFPs – Direct Install and Outdoor Study
- Agency Announcements/Adjournment
- Lunch @ 11:30



BE WATER SMART

Meeting Notes

- July 2022
- Approve and post online?



BE WATER SMART

Toilet Saturation Study

- Budget: \$100,000
- Regional study: all WEP participants
- Focus on SF and MF residential
- Toilets, yes!
- Option for agencies to provide local funding for more
- August 2022 study start, Wrap up by summer/fall 2023
- What we want to know
 - What remaining potential is there
 - Sunset/ramp up programs
- Take it away, Tom!!!



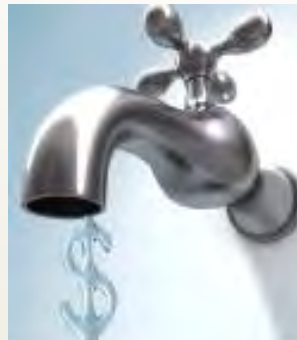
Regional Water Authority Residential Toilet Saturation Study

A & N Technical Services, Inc.
839 Second Street Suite 5
Encinitas, CA 92024
www.antechserv.com

Maureen Erbeznik & Assoc.

Weber's Water Conservation

Sept. 13, 2022



Kickoff Meeting Outline

- Introductions - The Team
- Proposed Approach
 - Finalizing the work plan, milestones, and timeline
- Results:
 - Proposed Toilet Saturation Tables
 - Recommendations for Program Redesign
- Next Steps – Audience Participation Time



REGIONAL WATER EFFICIENCY PROGRAM

California American Water	City of West Sacramento	Placer County Water Agency
Carmichael Water District	Del Paso Manor Water District	Rancho Murieta Community Service District
Citrus Heights Water District	El Dorado Irrigation District	Sacramento County Water Agency
City of Folsom	Elk Grove Water District	Sacramento Suburban Water District
City of Lincoln	Fair Oaks Water District	San Juan Water District
City of Roseville	Golden State Water Company	
City of Sacramento	Orangevale Water Company	

Water Smart Tips and Services. BeWaterSmart.info or call us at **888-WTR-TIPS** (888-987-8477)

The Team

- ▶ Tom Chesnutt, PhD, PStat[®], CAP[®] 32 Years Experience
 - ▶ Project Lead
 - ▶ Predictive Analytics
- ▶ David Pikelney, PhD 30 Years Experience
 - ▶ Descriptive Analytics, GIS
- ▶ Dana Holt, MS 30 Years Experience
 - ▶ Reports Coordinator
- ▶ Maureen Erbeznik 29 Years Experience
 - ▶ Program Design
- ▶ John Weber/Renee Lyn Piper 17 Years Experience
 - ▶ Field Work



Scope of Work

- 1. Assessment Study Design and Implementation
 - 1) Toilet Survey
 - 2) Current High Efficiency Toilet Survey
 - 3) Remaining Non-High Efficiency Toilets
 - 4) RWA Supplier Maps
- 2. Saturation Summary Report
- Meetings with RWA and Suppliers



- **RWA Curated Data**

- **Publicly available data**

Tax Assessor Data--parcel area, building area, no. floors, pool/spa
Socioeconomic Data-- dwelling units, dwelling age, persons per dwelling unit, retail rates, and income

- **Existing Datalogged End Use Studies**

- **Existing Conservation Potential Surveys**

- **Validation Surveys at RWA Water Suppliers**

- **Analysis of RWA System Data-Population Frame**

- **Empirical prior for End Use Saturation**

How can device saturation and use be estimated from data available?

- **Predictive Analytics for Indoor End Uses**

How can device saturation and use be updated

- **Predictive Analytics for Targeting**

> **WUE Index=Use-Budget**

> **Program Participation Likelihood=f(WUE Index)**

- **Rapid Prototype**

- **Plumbing Device Saturation and Indoor Use**

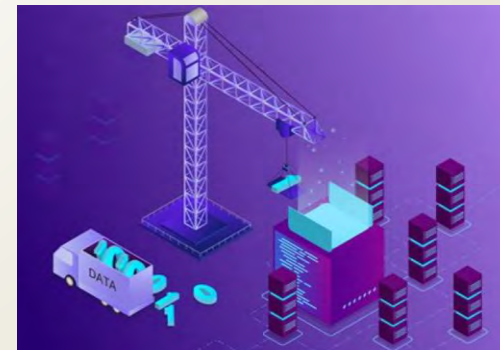
- **Program Targeting**

- **Program Participation Likelihood=f(WUE Index)**

- **Use Case Analysis**

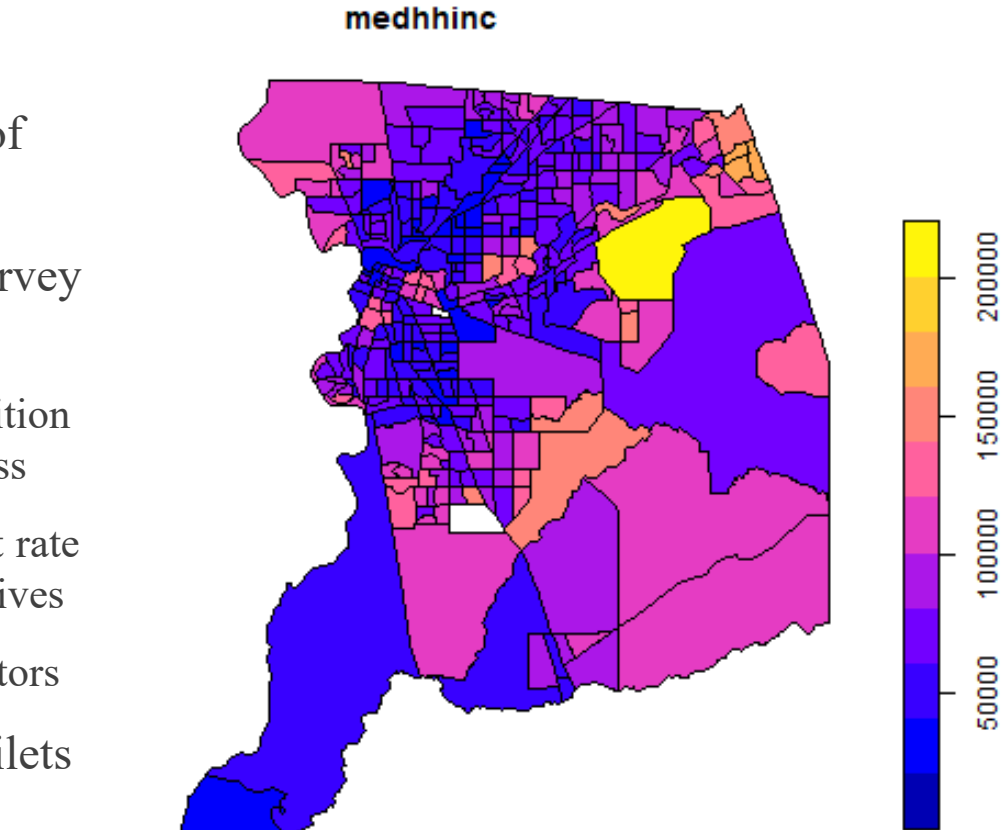
Data Mining

- RWA is providing
 - Past RWA indoor direct installation program data for multifamily properties
 - RWA toilet rebate local supplier participation data for 2003-2021
 - Water rate information for all RWA suppliers
 - Energy intensity (million gallons/kWh) estimates
 - Regional average and individual supplier intensity data
- Publicly available data – Tax Assessor, Socioeconomic
- Existing Datalogged End Use
- Existing Conservation Potential Surveys
- Validation Surveys—Field work! Weber’s Water Conservation



Predictive Analytics

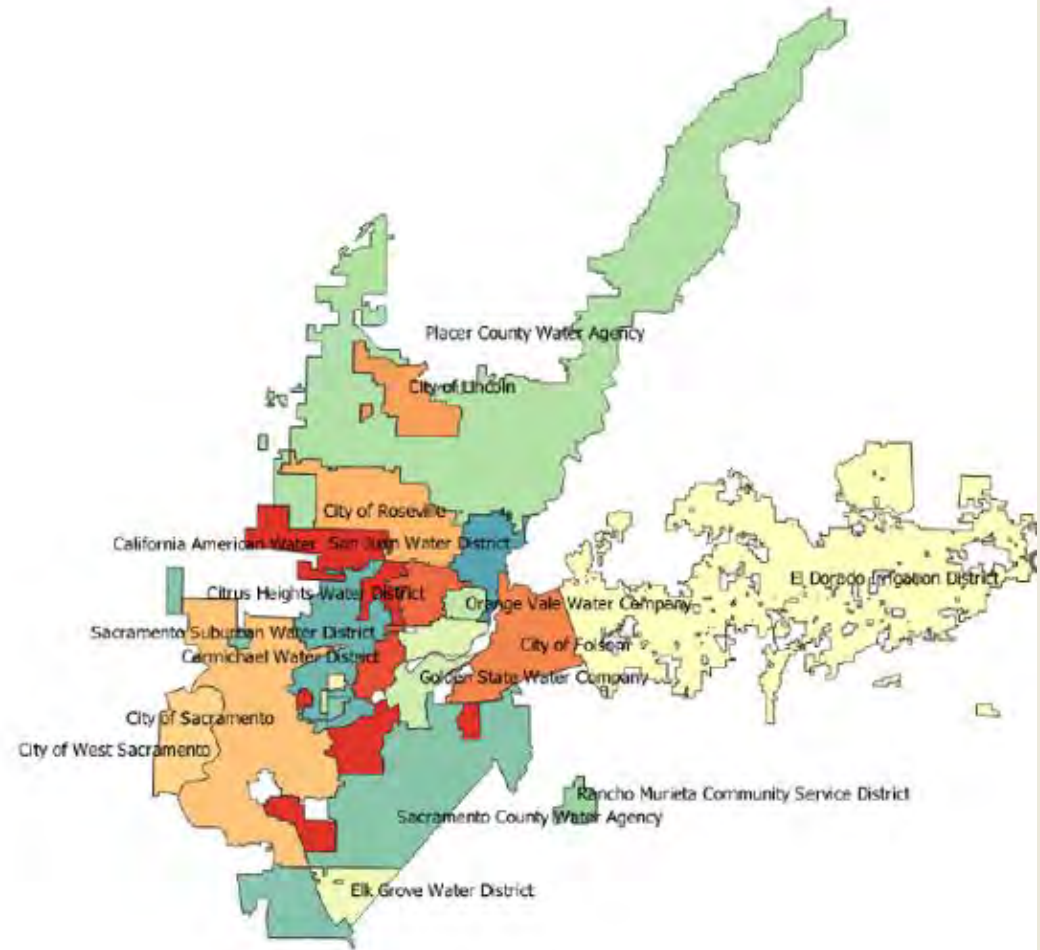
- 1) Toilet survey (total # inventory of toilets)
- 2) High Efficiency Toilet (HET) survey (a subset)
 - 2a) WaterSense provides the definition of efficient toilets at 1.28 gpf or less
 - 2b) estimate “natural” replacement rate AND replacement rate with incentives
 - 2c) account for socioeconomic factors
- 3) Estimate remaining non-HET toilets



**R manipulation of Spatial 2020
Census Data: Median Household
Income in Sacramento County**

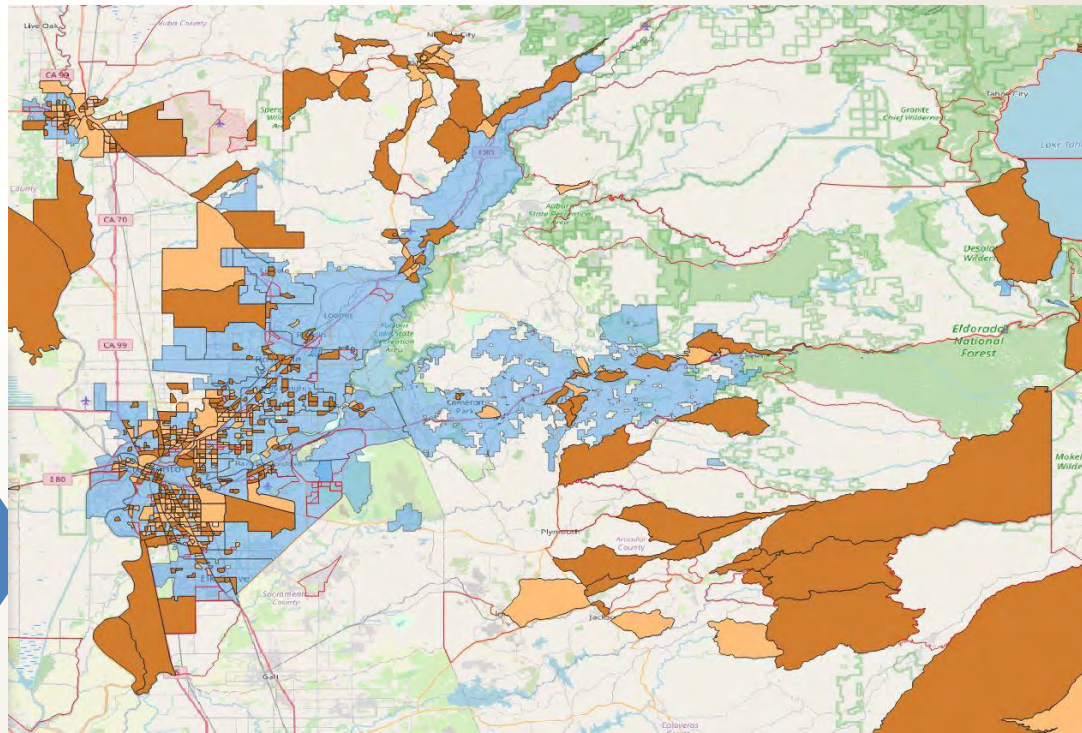
Visualization

- ▶ Maps for each Supplier
- ▶ Stepping stone toward future interactive visualization tool



Disadvantaged Communities (DAC) Breakouts


Identification of DAC for potential Grant Funding!



What you will receive: Proposed Toilet Saturation Tables

Proposed RWA Toilet Saturation Tables

RWA Member	Single Family Toilets			Multi-Family Toilets		
	Total	Efficient	Inefficient	Total	Efficient	Inefficient
1 California American Water						
2 Carmichael Water District						
3 Citrus Heights Water District						
4 City of Folsom						
5 City of Lincoln						
6 City of Roseville						
7 City of Sacramento						
8 City of West Sacramento						
9 Del Paso Manor Water District						
10 El Dorado Irrigation District						
11 Elk Grove Water District						
12 Fair Oaks Water District						
13 Golden State Water Company						
14 Orange Vale Water Company						
15 Placer County Water Agency						
16 Rancho Murieta Community Services District						
17 Sacramento County Water Agency						
18 Sacramento Suburban Water District						
19 San Juan Water District						



Recommendations for Program Redesign

Based on estimated Toilet Saturation data, how should further programs be sculpted?

- ▶ New Program Concepts
 - ▶ Ensure incentive level is sufficient to drive activity
 - ▶ Build awareness through community-based outreach, customer targeting, and user-driven marketing tactics
 - ▶ Market through in-store promotions
 - ▶ Provide direct installation for multi-family properties and install toilet leak detection technology along with toilet replacements
 - ▶ Offer AquaMizer toilet retrofit and leak prevention technology
 - ▶ Partner with SMUD/PG&E to offer toilets through low-income assistance programs
- ▶ Recommended phase out of less successful Programs



Next Steps

Besides Project Team Work (Data and Analytics)...

- ▶ Web Customer Survey – This project needs help in getting a customer survey distributed to your customers. RWA provides a short link to a customer web survey that you can embed:
 - ▶ Ongoing customer engagement—newsletters, email, Customer Bill Inserts, Web link, postcard targeting.
- ▶ We are eliciting RWA member participation in toilet saturation fieldwork? Got Questions? Need Answers?

PROJECT TITLE: Residential Toilet Saturation

Executive Summary: The A&N Team will collaborate with RWA staff and stakeholders to design and implement a high-level regional assessment of the saturation of high efficiency toilets (1.28 gallons per flush or less). The purpose of this saturation assessment is to inform decisions for active conservation programs. This process will speed up the natural replacement rate of inefficient toilets in RWA water suppliers' service areas.

Scope Statement:

1. Assessment Study Design and Implementation
 - 1) Toilet Survey
 - 2) Current High Efficiency Toilet Survey
 - 3) Remaining Non-High Efficiency Toilets
 - 4) RWA Supplier Maps
2. Saturation Summary Report
- Meetings with RWA and Suppliers

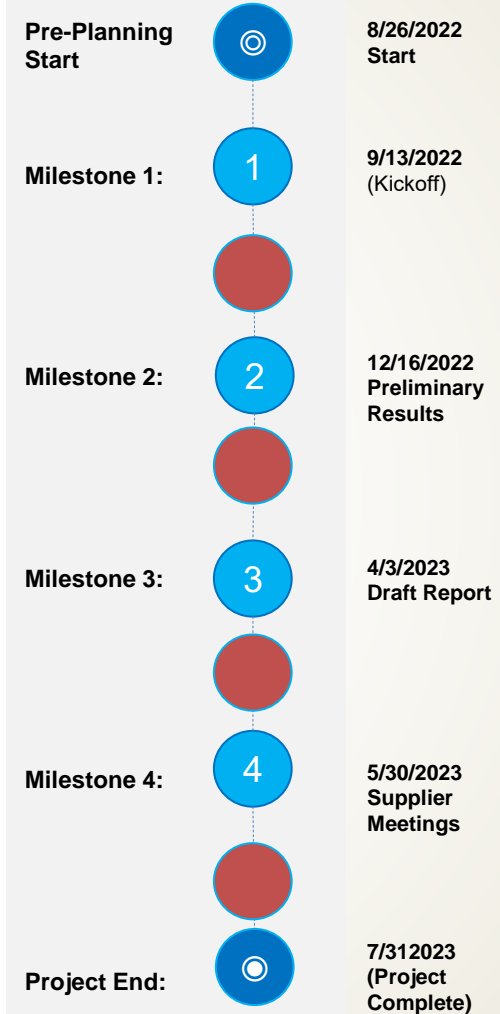
Project Risks:

- RWA Member Participation
- External Disruption

Key Deliverables:

- Task 1 – Saturation Tables and Maps
- Task 2 – Summary Report
- Supplier Meetings

PROJECT MILESTONES



PROJECT BUDGET

\$100,000

PROJECT OWNERSHIP

Project Sponsor:

- Regional Water Authority

Project Manager:

- Thomas Chesnutt,
tom@antechserv.com

Stakeholders:

- RWA - Internal
- RWA Members
- Customers

SYSTEM SUPPORT

Consultant Lead:

- Dr. Tom Chesnutt, Lead
- Dr. David Pekelney, Modeling Lead
- Dana Holt, IS

Implementation Team

- John Weber – Validation Surveys
- Maureen Erbezniak, Program Desing

Initial Data Needs

- Participation data
- Existing GIS Records

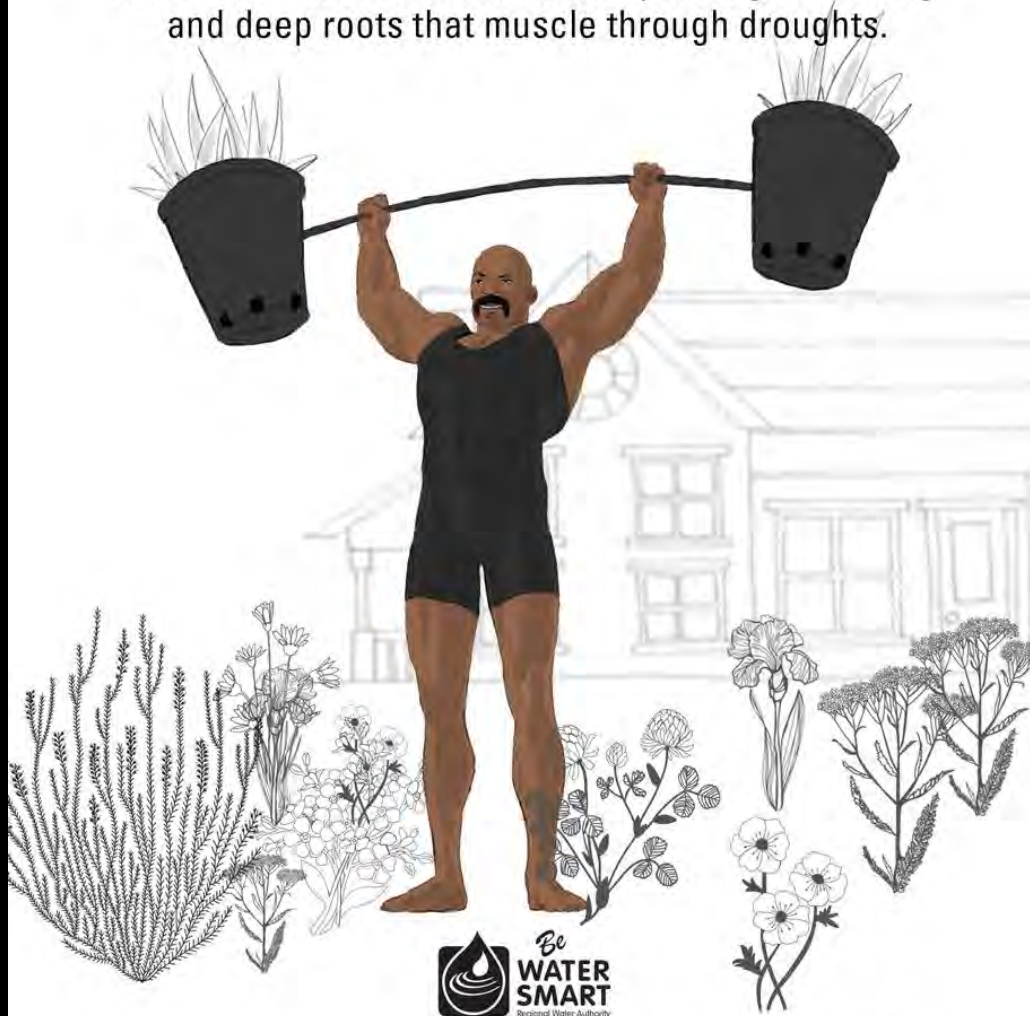


PROJECT EVALUATION

- Milestones Met
- Timely Deliverable
- Public Engagement & Support
- Utilization of Deliverable
- Provides Action Items for Short and Long-term Implementation
- Promotes Sustainability and Innovation

ARE YOU DROUGHT TOUGH?

Maurice is. He knows that native plants grow strong
and deep roots that muscle through droughts.



Learn to be Drought Tough like Maurice at BeWaterSmart.info

ARE YOU DROUGHT TOUGH?

Sarah is. She went the extra mile by installing
drip irrigation and a weather-based sprinkler timer.



Be like Sarah and learn to be Drought Tough at BeWaterSmart.info

ARE YOU DROUGHT TOUGH?

Be a team player and turn off your sprinklers this winter.
Your yard shouldn't need any extra water during the cooler off-season.



YOU'RE OFF!

- Reducing lawn watering by 2 minutes while continuing to water trees.
- Checking soil moisture before turning on sprinklers.
- Watering plants early in the morning to reduce evaporation



Learn how to be Drought Tough at BeWaterSmart.info.

THIRSTY LAWN

REQUIRES OVER **4,100 GALLONS** OF WATER PER MONTH IN SUMMER, ONCE ESTABLISHED



Cool Season Fescue

POLLINATOR PARADISE

THRIVES ON **20 GALLONS** OF WATER PER MONTH IN SUMMER, ONCE ESTABLISHED



Autumn Sage

Other Grant Funding

- \$200,000 reimbursement back from DWR for previous grants retention
- Spend in calendar year 2023
- Potential Plan:
 - Fall Drought Media Buy Extension - \$55,000
 - School Education Program Revamp - \$20,000
 - WEP BWS Website Revamp - \$25,000
 - Consulting Services - \$10,000
 - Spring Turf Transition Outreach Campaign - \$40,000
 - CII DIM supplemental funding - \$50,000
 - Rachio regional program?
 - Moisture meters?



Extended Media Buy – OK to approve?

Media Outlet	# of Spots	Dates	Net Reach	Frequency	Impressions	Cost
Bonneville Radio: KYMX-FM, KNCI-FM, KZZO-FM	548	9/19 – 10/30	718,200	3.2	2,332,200	\$16,998
Cap Radio: KXJZ-FM and KXPR-FM	180	9/26 – 10/30	232,300	3.3	764,000	\$12,100
Cap Radio Digital	125,000	9/26 – 10/30	N/A	N/A	125,000	\$2,125
KXTV-TV / Monica Woods Tips and Ads	50	9/26 – 10/30	340,021	3.0	1,001,000	\$9,000
Premion Streaming	250,000	9/26 - 10/30	N/A	N/A	250,000	\$9,000
KSCO-TV Telemundo 33	64	9/26 – 10/30	24,203	11.6	76,800	\$2,600
Peacock Streaming – Spanish Language	57,292	9/26 – 10/30	N/A	N/A	57,292	\$2,406
TOTAL	433,134				4,606,292	\$54,229

School Education Recommendation

- Current: Water Spots- Do your part to be water smart
- Current Budget: \$15,000
- Talked with:
 - Blueblossom Consulting
 - Bussing to MOSAC
 - ZunZun - \$850/assembly
 - STEMhero
- New: Develop curriculum in partnership with MOSAC
 - Ready by next summer
- School Education Committee back together?
- MOSAC - \$5,000/year for 2 more years



BE WATER SMART

Water Loss Regulation

- CHECK YOUR TARGETS!
- 2nd formal rulemaking period – comments due 19th @noon
- Better but not great
- BCR<1, small systems and multiple targets
- Reporting starts 2024, compliance in 2028
- Board vote for approval expected this fall
- Comment letter drafts – RWA and Coalition



BE WATER SMART

Outdoor Study RFP

- Measure CII dedicated irrigation accounts landscape area – in line with 606/1668 requirements
- 14 agencies with about 22,000 accounts
- Some basic location information matched with accounts
- **EMAIL ME YOUR SPECIFIC # of DIM ACCOUNTS if you are interested in this project by 9/21**
- Release RFP September 26th
- Need review panel volunteers
- Project timeline January 2023 – summer 2023



BE WATER SMART

Indoor Direct Installation Program RFP

- Urban and Multibenefit Drought Relief Grant funding
- Multifamily and CII, DACs
- Toilets, urinals, showerheads, & aerators
- \$500,000 budget
- 2 years
- Release RFP September 26th (if DWR contract signed)
- Need review panel volunteers
- Project timeline – January 2023-January 2025



BE WATER SMART

CII High Water User Rebates

- Targets high water use commercial sectors
- Customer proposes upgrades to RWA, RWA hires contractor (MWM) to evaluate savings and provides estimated rebate amount to customer for approval
- Flyer ready!
- Interested parties: West Sac business, CA brewery organization.

GET FREE WATER EFFICIENCY EQUIPMENT WHILE SAVING WATER AND MONEY PROFESSIONAL INSTALLATION INCLUDED

The Regional Water Authority (RWA) is pleased to offer this first-come, first-served rebate program for free indoor water efficient equipment for your business with professional installation included. Eligible businesses include commercial laundry, food and beverage, science/research and brewery facilities. The program's goal is to reduce water and energy use.



EACH ELIGIBLE PROPERTY WILL RECEIVE UP TO **\$15,000** IN INDOOR WATER EFFICIENT EQUIPMENT

Potential upgrades include:

- High-efficiency clothes washers
- High-efficiency faucets
- Sterilization equipment
- Flushing and bottling equipment
- Cooling tower equipment
- And more!!!



HAVE AN IDEA IN MIND ALREADY?

Great! Business needs are diverse. We are counting on you to tell us what you need to save water. Share your idea with us to see if it is eligible for funding.

HOW DOES THE PROGRAM WORK?

The program replaces existing indoor equipment your business already has with a more water efficient version to save water and energy and we pay for it. Both labor and equipment are eligible.

IS THERE A DEADLINE TO PARTICIPATE?

The program is first-come first-served until funding is gone. All projects must be completed and installed by September 2023.

GEOGRAPHIC AREA

Businesses must be located within the RWA-member area in Sacramento, Placer and El Dorado counties plus the City of West Sacramento.

INTERESTED??? QUESTIONS???

For more information and to verify eligibility, please contact Chris Perry at rwacilprogram@gmail.com or 916-967-7653.



Regional Water Authority
REGULATED BY THE STATE OF CALIFORNIA
5620 Birdcage St., Suite 180
Citrus Heights, CA 95610
(916) 967-7692

BE WATER SMART

WEP Reserve Policy - APPROVED

- Original

- \$150,000 for grant floating
- \$50,000 for drought/redesign
- \$100,000 for program
- All amounts indexed to inflation

- Revised

- \$150,000 for grant floating
- \$50,000 for drought/redesign
- 17% of WEP budget (\$100,000)
- No indexing for inflation

Approval Process:

RWEPAC PAC – RWEPAC - RWA Staff – RWA Executive Committee – RWA Board



BeWaterSmart.info

BE WATER SMART

Rachio Controller Program

- Regional transition to local programs
 - CWD, SJWD and Folsom
 - Using Prop 1 rebate funding to reimburse costs
 - 2,300 controller sent out so far
 - <https://rwa.rachio.com/>
- Online – direct delivery to customer
- Customer pays \$75, supplier pays \$100
- Less/no cost share option available now
- Contact Amy or Danielle if interested

Danielle Cumming | Senior Manager of Utility

- danielle@rachio.com
- rachio.com



BeWaterSmart.info

1157 - New Legislation for Indoor Regulation

- Indoor GPCD standards will be 47 in 2025 and 42 in 2030.
 - Past was 52.5 in 2025 and 50 in 2030
- Requires DWR to quantify economic benefits and impacts of the new standards, including with end use saturation studies. Additionally, it requires DWR to consider other regional and statewide studies.
- Allows for a delay in the implementation of the 2030 standard if there are undue impacts on affordability
- Provides for additional variances that are based not just on things that increase use (as is in existing law) but have other system impacts.
- Veto support letter sent
- Governor to sign by September 30th



BE WATER SMART

2022 RWEPAAC Meetings

Date

~~January 11, 2022~~

~~March 8, 2022~~

~~May 10, 2022~~

~~July 12, 2022~~

~~September 13, 2022~~

November 8, 2022

December 13, 2022

January 10, 2023



Announcements & Events