



Valley Water's Leak Program Plans

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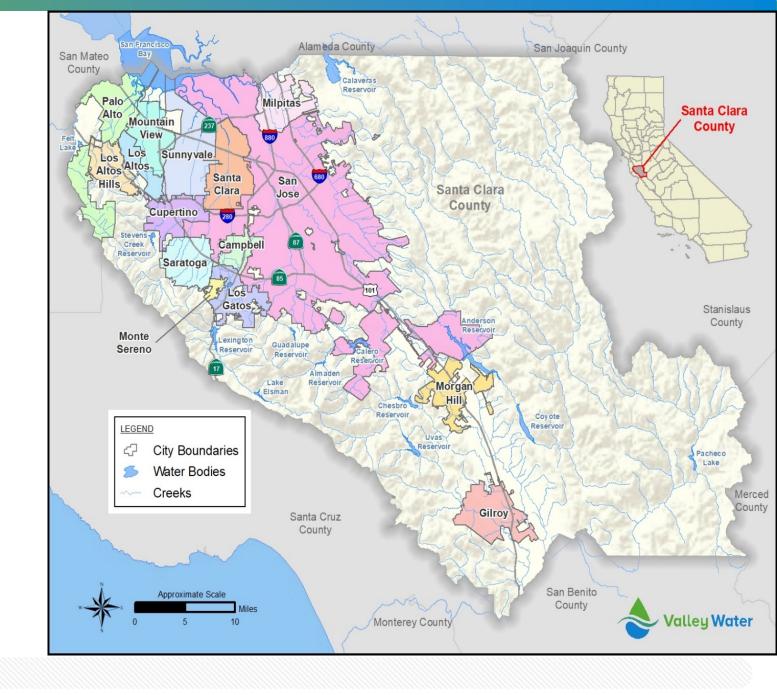
Serving Santa Clara County

1.9 million people

15 cities

13 water retailers

4,700 well owners





Valley Water and BAWSCA Service Areas





Valley Water Provides Santa Clara County









water

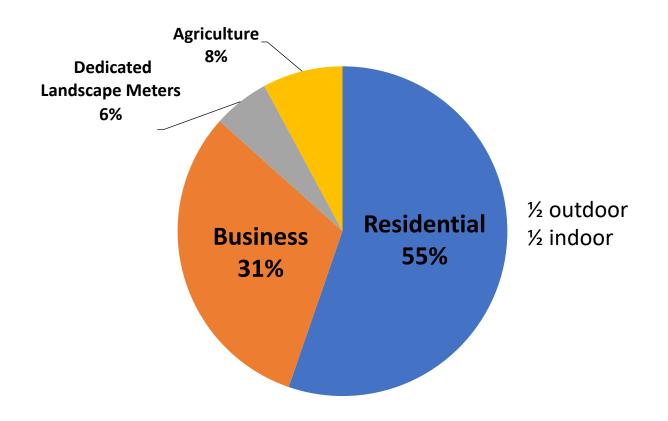
Clean, reliable Flood protection

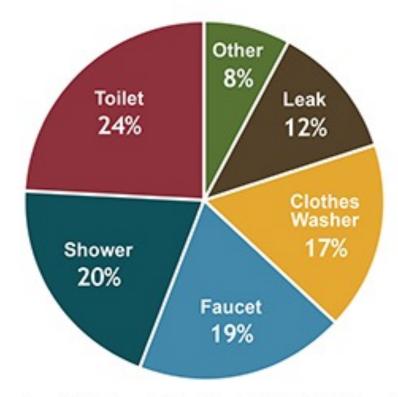
Healthy creeks, ecosystems



Water Use in our County







Source: Water Research Foundation, Residential End Uses of Water, Version 2. 2016





Existing VW Leak Programs

8

Part of WSMP "No Regrets" Package

Detection

Home Water Use Reports

Advance Metering Infrastructure (AMI)

Water Wise Outdoor Survey

Educational Webinars

<u>Repair</u>

Online Shopping Cart (eCart)

Fixture Replacement Program

Landscape Rebate Program



Successful Leak Program Needs

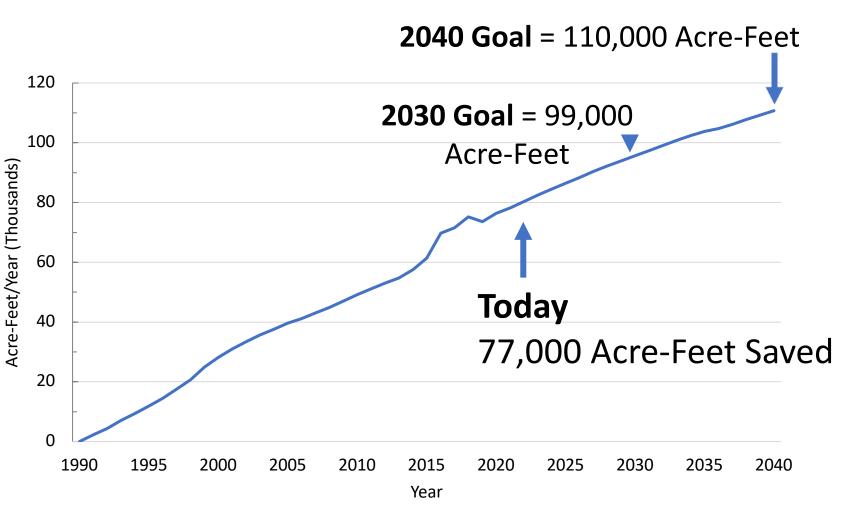
- 1. Information and data
- 2. Qualified professionals



QUESTIONS



Water Conservation Goals





Addressing Gaps

12

Leak Detection and Repair Certification Training Project (>3 years)

- Phase 1 research leak detection and repair certification training program for tradespeople to address residential customer-side leaks.
- Phase 2 develop training framework and RFP templates to launch indoor and outdoor leak detection training framework

Leak Assessment and Repair Project (> 1-2 years)

- Leverage PG&E's existing low-income Energy Savings Program to install cost effective energy and water savings devices, plus retrofit of qualifying leaking fixtures and sprinklers.
- ❖ 6-month pilot starting in July 2022



The Why . . . Agencies Need a Solution-Based Response

- ➤ Increased agency to customer high water use notifications thanks to AMI
- Increased customer interest due to smart flow monitoring technologies, like Flume

"Many customers do not have a relationship with a plumbing company and will spend substantial amounts of time asking friends and neighbors for recommendations, particularly amid concerns of being "ripped off."

Residential Leak Detection & Repair Certification Training – Phase I: Research and Discovery

- Virtual Focus Groups Completed in Feb.
 - \geq 2 + 1 bonus (Plumbers)
 - ► 2 (Landscapers)
- Training and Industry Interviews
 - ➤ Trade Organizations (IAPMO, CLCA)
 - ➤ Training Organizations (Leaktroniks)
 - ➤ Large Service Outlets (Landscape Care Co.)



- Agency Staff Survey
 - ➤ Reps. from 9 geographically distinct regions w/ customerside leak detection experience
 - ➤ Communications and program management experience



Business Cultures: Conservation Staff & Tradespeople



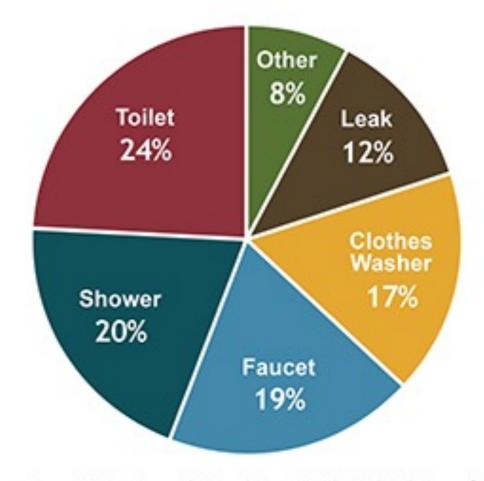
- 1. Value different forms of education
- 2. Lack of formal education does not equal an unskilled workforce
- 3. Brief training modules/ vignettes work best
- 4. Motivations: Job efficiency, New Business, Low Cost



Characterizing Leaks — Where to focus training??

Breaking down the 12% of the pie:

- The top 10% of leaks comprised nearly 50% of total leak volume
- 80% of leaking homes wasted less than 5 gphd, accounting for only 17% of total leak volume
- 3 indicators of a high leak home: water feature, pool auto fill system, and a pool.



Source: Water Research Foundation, Residential End Uses of Water, Version 2. 2016

Agency Survey – Select Takeaways

Toilet and irrigation leaks are the most reported by residential customers.

Continuous irrigation leaks tend to waste significantly more water than toilet leaks. Annual water loss due to leaks ranged from 37 to 78 acre feet for two respective data sets

Customer response to agency notifications can be lackluster signifying that add'l interventions are needed to inspire corrective action.

Offsetting the costs of leak repairs through subsidies, rebates, coupons or direct installs could increase repairs. This is especially true for low-income customers.

Industry Interviews – Select Takeaways

A lack of licensing requirements for plumbers in the state of California poses a significant barrier (i.e. education is undervalued).

On the other hand, a training course could appeal to those looking to set themselves apart from the status-quo.

Design your training so that it offers more than an easy to access YouTube tutorial

A training should be: affordable, relevant and fiscally sustainable. It must also meet ANSI standards and the core concepts be legally defensible.

Online training for leak detection could be a viable and successful format

The greater the investment of time and money, the less likely landscape professionals are to participate in training