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# Mobile Home Park Submetering Study in Santa Clara County

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# Outline

- 💧 Introduction to the Santa Clara Valley Water District
- 💧 Mobile Home Park Submetering Program
- 💧 Study
- 💧 Results
- 💧 Program Future



# Santa Clara Valley Water District

- Primary water resources agency for Santa Clara County, California.
- Water wholesaler
- Flood protection agency
- Steward for its streams and creeks, underground aquifers and district-built reservoirs.



# The Santa Clara Valley Water District manages the water resources for the entire county



- 1,300 square miles
- 800 miles of creeks and rivers
- Population of 1.8 million
- 200,000 commuters

# The Santa Clara Valley Water District's Water Use Efficiency Programs

**Water Conservation**



**Water Recycling**



**Desalination**





California is in a drought.



# Submetering Pilot Program

In 2000, the District started a pilot program to submeter mobile home parks.





# What is Submetering?

The term *submetering* refers to the use of separate meters to measure individual tenant water usage in apartments, condominiums, mobile home parks, and small mixed commercial properties, where a utility master meter exists.



# SCVWD's motivation for program: *Saving Water!*

- Staff predicted a water savings of about 15 percent per submeter installed at mobile homes.
- Based on draft AWWA white paper from 1999 and other estimates from that time.



# Submetering Pilot Program

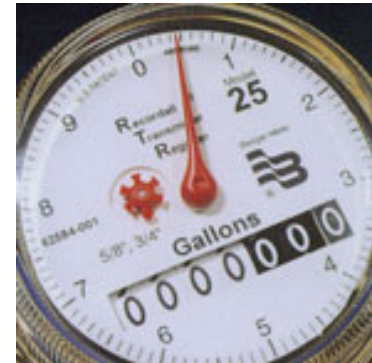
Savings occurs by making residents pay directly for the amount of water they use, thereby encouraging conservation via behavior and equipment changes.

# What's in it for the Mobile Home Parks?

We asked Mobile Home Park Property Management Company:

“The first one is the need for water conservation. The second one is our concern about rising rates and the possibility of fines due to water rationing.”

Makes the park more desirable to live in because it lowers the monthly homeowners dues.





# Marketing tool for complex:

## Mobile Estates

Our Community

Homes for Sale

Incentives

Monthly Rent

Other Communities

Contact



### Monthly Rent:

Submeter a plus!

- The rent is \$371, plus \$14.30 for sewer and \$16.25 for trash.
- Gas and water are submetered.

We worked with Brandenburg, Staedler & Moore, a mobile home park management company.



[About Us](#) | [History](#) | [Team](#) | [Locations](#)

### Communities

- Adobe Wells
- Cape Cod Village
- Fox Hollow
- Millpond
- Mission Bay
- Moss Creek
- Mountain Shadows
- Mountain Springs
- New England Village
- Quail Hollow
- Spanish Cove
- Timber Cove
- Willow Ranch
- Woodbridge

## Welcome

Thank you for seeking information about our upscale mobilehome communities in the southern San Francisco Bay Area. Brandenburg, Staedler & Moore owns and operates 14 communities with 3,500 spaces, some 1,200 of them open to families with children and the remainder being communities focused on older persons. Our communities are noted for their upscale design, full range of amenities, high-quality maintenance and convenient locations. All are friendly and welcoming.



# Mobile Home Park Submeter Pilot Program: **Overview**

In 2000, the District implemented a pilot program to provide water submeters to five mobile home parks

Total of 1,187 submeters

# Mobile Home Park

## Submeter Pilot Program: Installations

5 parks were submetered from 2000 – 2001, for a total of 1,187 installations:

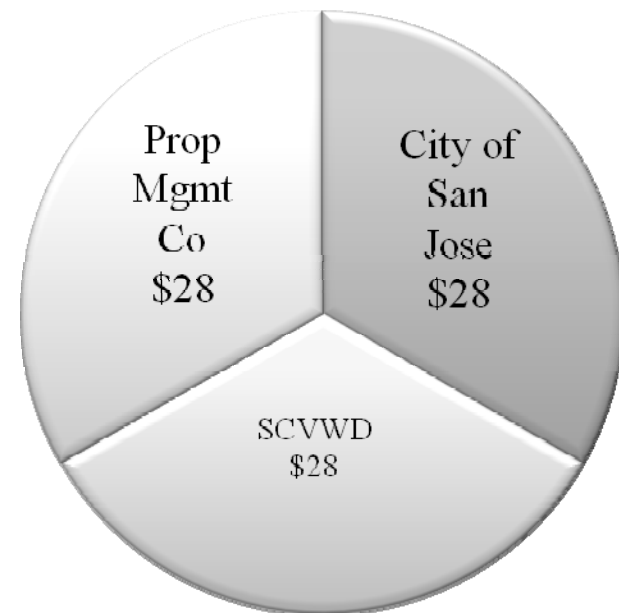
- Fox Hollow: 99 submeters
- Chateau La Salle: 433 submeters (under other management now)
- Millpond: 361 submeters
- Mountain Shadows: 108 submeters
- Quail Hollow: 186 submeters





# Cost of Submeters

- In 2000, submeter + installation = \$84
- Rebate of \$56 per submeter installed – property management company paid for rest
- District cost-shared during this phase of the program with the City of San Jose (split cost of rebate - \$28 each)



# Mobile Home Park

## Submeter Pilot Program: Installations

First, the Property Management Company worked with the District to get a free irrigation system survey for the common landscaped area.

- 1) Gave them percentage outside vs. indoor water use (example: 84% indoor, 16% outside common area landscaping)
- 2) Recommendations for outdoor landscape efficiency.

Second, Property Mgmt Co. bought water submeters (associated permits)

Third, Property Mgmt Co. hired installers.

Fourth, had HOA meeting with SCVWD and homeowners.

# Water Conservation Programs Offered to Mobile Home Parks

- Water Wise House Call – free home survey program
- High-Efficiency Toilet Rebate: \$125
- Clothes Washer Rebate: \$125-\$200
- Irrigation Survey Program and hardware upgrade rebates
- ET Controller Rebates
- Water Efficiency Landscape Rebate Program



# Mobile Home Park

## Submeter Pilot Program: Requirements

- District required that submeters must be installed by a licensed, insured contractor.
- Work with local water retailers.
- District must be given access to water use data.
- District required that all submeters:
  - Be compliant with the Uniform Plumbing Code
  - Be certified for use, before installation, by the Dept. of Weights and Measures
  - Be permitted by the CA Dept. of Housing and Community Development



# Pilot Program Study: Results

- District looked at 10 years of water use data for the four mobile home parks that the property management company still owned:
  - ~ 3 years **before** the submeters were installed
  - ~ 7 years **after** the submeters were installed
- Data collected was normalized for cumulative ETo and occupancy rate

# Results

- Fox Hollow: 15% average reduction
- Millpond: 27.1% average reduction
- Mountain Shadows: 19.4% average reduction
- Quail Hollow: 29.4% average reduction

For all households, the average reduction in water use was 22.5%...

...exceeding our expectation of 15%.



# Results

- The annual water savings was determined to be:
  - 24.8 CCF per household per year or...
  - 18,550 gallons per household per year
  - Household water use was reduced by an average of 22.5 percent
- Roughly 18,700 CCF per year for the 754 submeters installed at the four parks.



# Cost Benefit Analysis

Assuming a 10 year lifespan for water submeters, in the SCVWD service area:

- 10 year lifespan with a \$100 rebate: **2.36**
- 10 year lifespan with a \$50 rebate: **4.73**

Property Management Co. told us that a \$100 rebate would be their tipping point for participating in program now.

Current costs :

\$57 per meter  
+ \$103 per installation  
+ \$12 per meter for required permits  
= \$172 per submeter





# Program Future

- SCVWD decided on rebate of \$100 per submeter installed at mobile home parks and condo complexes.
- SCVWD issued 306 rebates for one mobile home in FY 07/08.
- So far, in FY 08/09, 441 rebates issued.
- Applications for an additional 1,800 rebates submitted for FY 08/09 in Santa Clara County.
- Future Program Expansion to Apartments.



*Thanks!!!*

**Questions?**

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