

Serrano Water District

RATE STUDY WORKSHOP #2

Board Meeting - August 18, 2025



**Water Resources
Economics**

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE

Serrano Water District's Approach to Water Rates



- Approach: “Rate structures must be tailored to community perceptions, realities, and values, while adhering to industry standard approaches to cost allocation and rate design.”
- Guiding principles:
 - Rates should reflect the cost of providing services
 - Rates should be similar for customer types served under similar conditions
 - Customers should be able to understand the rate schedule so they can make rational decisions regarding their purchase of water service

Serrano Water District's Approach to Water Rates (cont.)



- Water rate objectives:
 - Revenue adequacy
 - Customer affordability
 - Equity across different customer types
 - Administrative simplicity
 - Legal and regulatory compliance
 - Efficient use of scarce water resources
- The District is in the final year of its adopted 5-year rate schedule
 - We therefore recommend that a new rate study be conducted this fiscal year to establish a new rate schedule for the Board's consideration



Agenda

- Legal environment of water rates in California
- Review different types of water rate structures
- Review of water budget-based rates analysis
- Next steps



Proposition 218

(Article XIIIC and XIID of California Constitution)

- Applies to property-related fees for service
- Water rate implications:
 - Rates must be proportional to and may not exceed the cost of providing service
 - One customer class may not subsidize another customer class
 - A rate study is typically conducted every 5 years to ensure rates are proportional to costs
- Procedural requirements:
 - Rates must be adopted at a public hearing
 - All customers must be mailed a notice at least 45 days before the public hearing
 - Rates cannot be adopted if a majority of customers submit a formal protest



Implications of Recent *Cozairh v. Otay Water District* Ruling

- Higher burden of proof to show that rates are proportional to costs
- Rates that are primarily designed to promote water efficiency/conservation, even when compliant with industry standards, may not meet Prop 218 requirements
- Tiered rates are now more difficult to justify and vulnerable to legal challenges
- Higher degree of uncertainty regarding which rate structures will pass legal muster



Water Rate Structure Overview

- Water agencies in California typically charge customers based on two components:
 - 1) Fixed charge based on meter size
 - Larger water meters are subject to higher fixed charges
 - 2) Volumetric rates per unit of metered water use
 - Typically measured in one hundred cubic feet [HCF]



Water Rate Structure Overview (cont.)

- There are three main types of volumetric rate structures:
 - 1) Uniform (e.g., Serrano Water District)
 - All water use is subject to the same rate per unit
 - 2) Inclining tiers (e.g., City of Orange)
 - As customers use more water, their water use is subject to higher priced “tiers”
 - Tier allotments are the same for all customers
 - 3) Water budget-based rates (e.g., Irvine Ranch Water District)
 - Similar to inclining tiered rates
 - However, each customer’s tier allotments are individualized based on persons per household, lot size, etc.



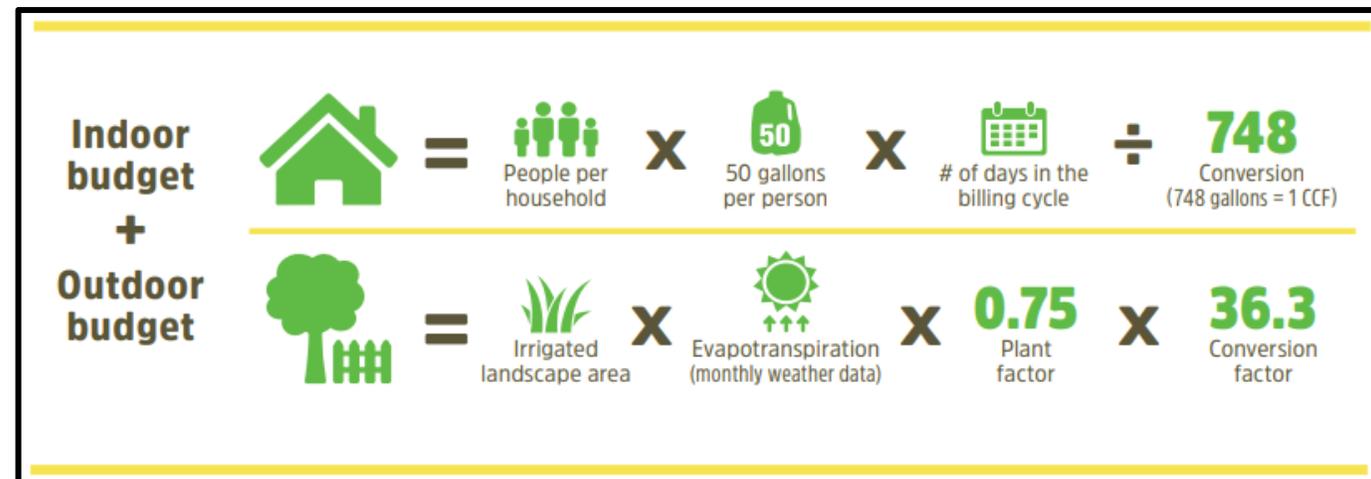
Water Budget-Based Rates

Example: Irvine Ranch Water District

Volumetric Rate Structure:

Rate tier	Water budget
Tier 1: Low volume	Up to 40% of your budget
Tier 2: Base rate	41% to 100% of your budget
Tier 3: Inefficient	101% to 140% of your budget
Tier 4: Wasteful	141% and over of your budget

Tier Allotments based on Water Budget Formulas:





Volumetric Rate Structure Comparison

Rate Structure	Rationale	Pros	Cons
1. Uniform	-Water rates should help to communicate the cost of providing water	-Revenue stability -Administrative ease -Easy to understand	-Weak conservation signal -Less affordable for essential water use
2. Inclining Tiers	-Water rates should incentivize customers to use less water	-Promotes conservation -Affordable for essential use -Easy to administer -Easy to understand	-Increased revenue instability -Disproportionately impacts high water users
3. Water Budget	-Water rates can be a tool to allocate limited water resources	-Promotes water efficiency -Affordable for essential use -Drought allocation tool -Revenue stability	-High administrative cost -Harder to understand for customers -Disproportionately impacts inefficient & wasteful water users



FY 2024/25 Serrano WD Rates

- 1) Fixed charge based on meter size
- 2) Uniform volumetric rate per HCF

Currently Adopted Water Rates	FY 2025
Readiness to Serve Charge (per month)	
5/8-inch	\$45.23
3/-4-inch	\$45.23
1-inch	\$45.23
1.5-inch	\$50.12
2-inch	\$54.94
3-inch	\$64.61
4-inch	\$74.32
6-inch	\$132.33
Volumetric Rate (per HCF)	
All Customer Classes	\$5.58



Water Budget-Based Rates Analysis

- We evaluated the potential of changing the current uniform volumetric rate structure to:
 1. Water budget-based rates: Individualized tier allotments for each customer
 2. Traditional tiered rates: Same tier allotments for all residential customers (see below)

Tier	Monthly Allotment	Basis
Tier 1: Indoor	0-8 HCF	<i>Efficient indoor water (47 gpcd) use for a 4-person household</i>
Tier 2: Outdoor	9-28 HCF	<i>Efficient outdoor water use based on median irrigable landscape area & evapotranspiration</i>
Tier 3: Inefficient	29-40 HCF	<i>100-140% of Tier 1 & 2 allotment</i>
Tier 4: Wasteful	>40 HCF	<i>>140% of Tier 1 & 2 allotment</i>



Key Takeaways

- Fewer than 40% of customers bills would stay within their water budget
- Both alternate rate structures would cause significant distributional impacts to customers:
 - Low/average water users would see small to moderate bill decreases
 - High water users would see moderate to extreme bill increases
- ***WRE's professional opinion:***
 - Switching to either alternate rate structure would significantly increase the risk of a Prop 218-related legal challenge
 - Switching to a water budget-based rate structure would require significant staff time/resources to implement and administer



Next Steps

- The District is in the final year of its currently adopted 5-year rate schedule
- We therefore recommend that a new rate study be completed before the end of FY 2025/26 to:
 - Ensure sufficient near-term funding for critical capital projects
 - Continue to meet Prop 218 requirements
 - Ensure that rates are equitable to customers
- Rate Study Workshop #3:
 - Cost-of-service
 - Capital requirements
 - Finalized rate structure



Water Resources Economics

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE

Contact Information

Sanjay Gaur
Founder / President
sgaur@water-economics.com