Union PUD – Informational Workshop

Overview of Prop 218 and Utility Rate Studies

Presented by:

Jeremy Tamargo, NBS
Associate Director

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PRESENTATION OVERVIEW

Overview of Prop 218

- Background and Related Legislation
- How Prop 218 Governs Rate Setting
- Prop 218 Process & Timeline

Rate Study Methodology

- Rate Study Components
- Financial Plan
- Cost of Service Analysis
- Rate Design Goals

Questions & Answers

OVERVIEW OF PROP 218

Background on Prop 218 Related Legislation

Prop 13
Jarvis Gann Initiative

- Voter Approved in 1978
- Limits Assessed Value Increases to 2%/Year
- Rate Cap on Ad Valorem Property Tax of 1%
- Enshrined in CA Constitution Article XIII

Prop 218
"The Right to Vote on New taxes"

- Voter Approved in 1996
- Limits Rate & Fees to Actual Cost to Serve
- Protest Ballot Process for Approval
- Enshrined in CA Constitution Article XIII C & D

Prop 26
Defines Taxes vs. COS Fees

- Voter Approved in 2010
- Defines What a "Tax" is in the CA Constitution
- "Tax" Excludes Water, Sewer & Solid Waste Rates
- Amended CA Constitution Article XIII A, C & D

OVERVIEW OF PROP 218 *(continued)*

- **How Prop 218 Governs Rate Setting for Enterprise Funds**
  - Limits authority to impose taxes, assessments, fees, and charges. Requires voter approval (i.e., protest hearing) for increases.
  - Charges are limited to the cost of providing the service to each "parcel" (*in effect each type of customer, not each individual parcel*).
  - Rates may not include cost of other governmental services generally available to the public.

OVERVIEW OF PROP 218 *(continued)*

- **Proposition 218…**
  - Water, sewer, and solid waste rates are subject to a ***protest hearing*** process (protests must be 50% + 1 of parcels).
  - Rates may be set for a maximum of 5 years.
  - Property related fees for storm drainage – In addition to a protest hearing, require an affirmative vote (i.e., more votes in favor of the increase than opposed).

PROP 218 PROCESS & TIMELINE

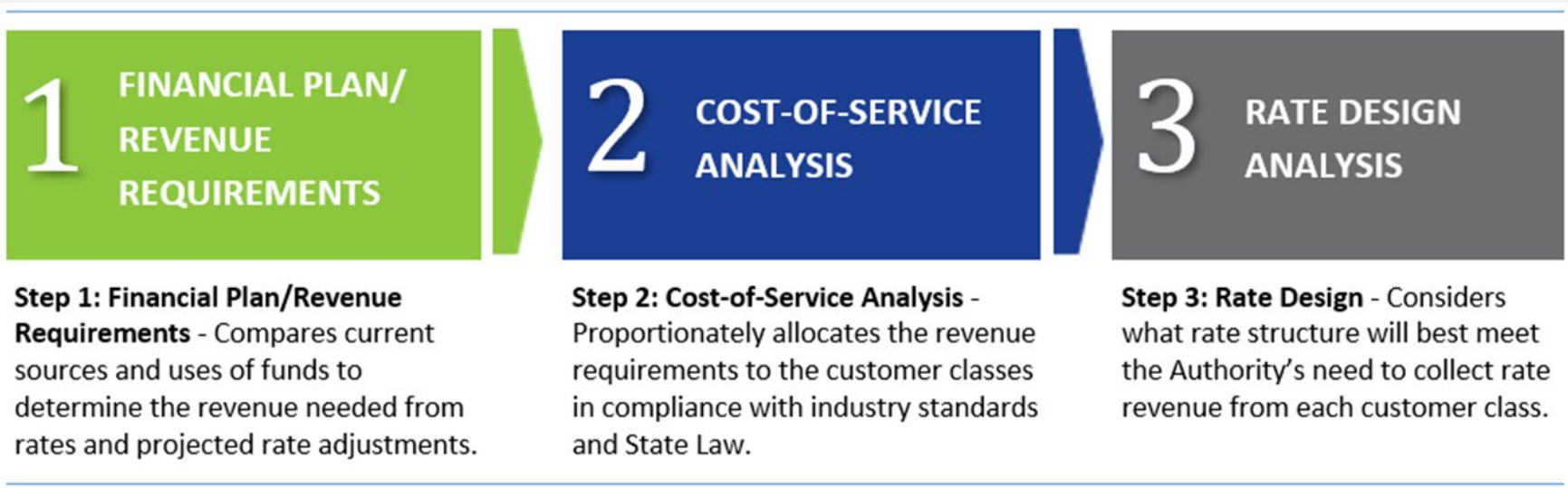
- **Steps in the Prop 218 Process:**
  - Board directs staff to mail out Prop 218 Notices:
    - To all “parcel owners”, meaning customers and typically renters
    - Notice includes the reasons for the rate increases, current and proposed rates, and instruction how to protest the rate increase
  - Allow for a protest period of at least 45-days for protests to be returned, including up to the end of the Prop 218 hearing.
  - After 45 days, open a public hearing to consider the Prop 218 rate increases.
  - After closing the hearing, announce the number of valid protests (if less than 50% + 1, the rates may be adopted).

Rate Study Purpose

What is the purpose of a utility rate study?

- Ensuring utility rates will be able to cover all operating and maintenance costs, including treatment costs.
- Ensuring sufficient funding for essential Capital Improvement Projects.
- Maintaining appropriate reserve funds.
- Maintaining adequate bond coverage.
- Complying with legal requirements of Prop 218.

RATE STUDY METHODOLOGY



- This approach is widely used across the industry
- Based on industry standards embedded in two publications:
  - American Water Works Association (AWWA) M1 manual, 7th Edition (2017)
  - Water Environment Federation (WEF) Financing and Charges for Wastewater Systems, Manual of Practice 27 (2004)

Rate Study Methodology - Financial Plan

Financial Plan

Utility Revenue: The total income generated from customer service rates to cover operational expenses, debt repayments, and capital projects, minus alternative income sources like fees and fines. It includes a provision for reserves to ensure the utility's long-term financial stability and service reliability.

Operations and Maintenance (O&M) Bucket: This is the first bucket. It covers the costs of running and maintaining the service or infrastructure. The day-to-day expenses to keep things going.

Capital Reserves Bucket: Once O&M is funded, the money can flow to the next bucket. This bucket is for capital reserves, used for future significant investments or infrastructure upgrades.

Rate-Funded Capital or Other Expenditures Bucket: If there's money left over after filling the first two buckets, it can then be allocated to other areas in the water enterprise such as pay-as-you-go rate-funded capital projects.

Rate Study Methodology - Financial Plan

What are "Net Revenue Requirements"?

The Financial Plan estimates the costs to be recovered from customer rates:

O&M Costs + **Debt Service** + **Capital Costs**

− **Non-Rate Revenues***

* *licenses, fines, application fees, etc.*

= **Net Revenue Requirements**

These costs should also include funding for adequate levels of reserves.

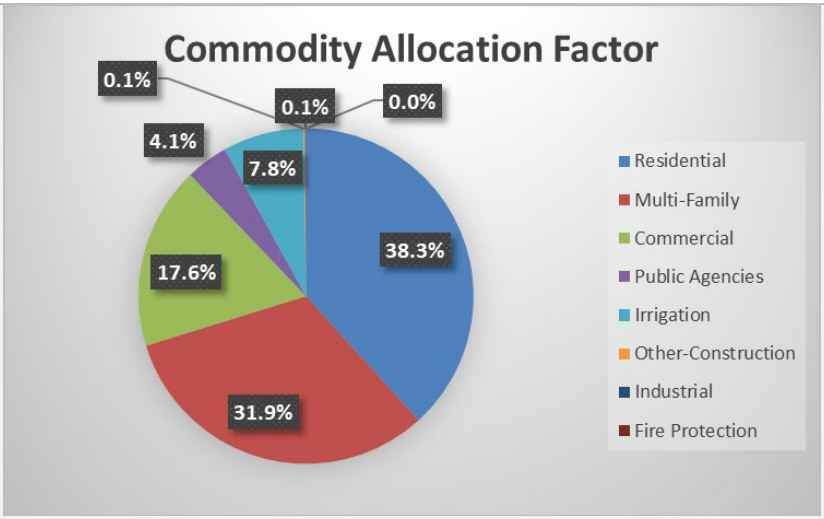
Overview – Cost-of-Service Analysis

How Are Water Costs Assigned to Customers?

Cost of Service Analysis (COSA) allocates costs based on the cost to serve each type of customer.

- **Water Costs** are typically allocated by:
  1. System Capacity Costs (based on system peaking factors)
  2. Commodity Costs (annual consumption)
  3. Customer Costs (number of accounts)
- **Cost Allocations** – Costs are then allocated to each customer class based on their proportional share of the above criteria.

EXAMPLE: Cost-of-Service Analysis



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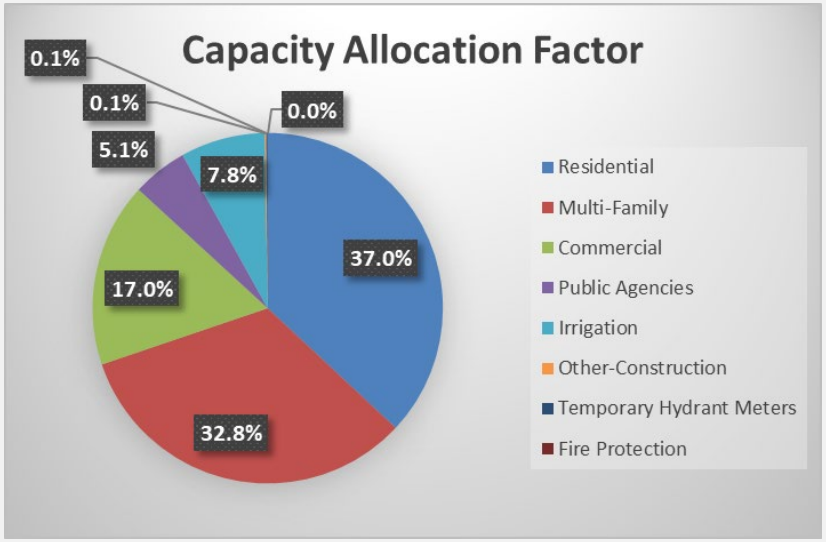

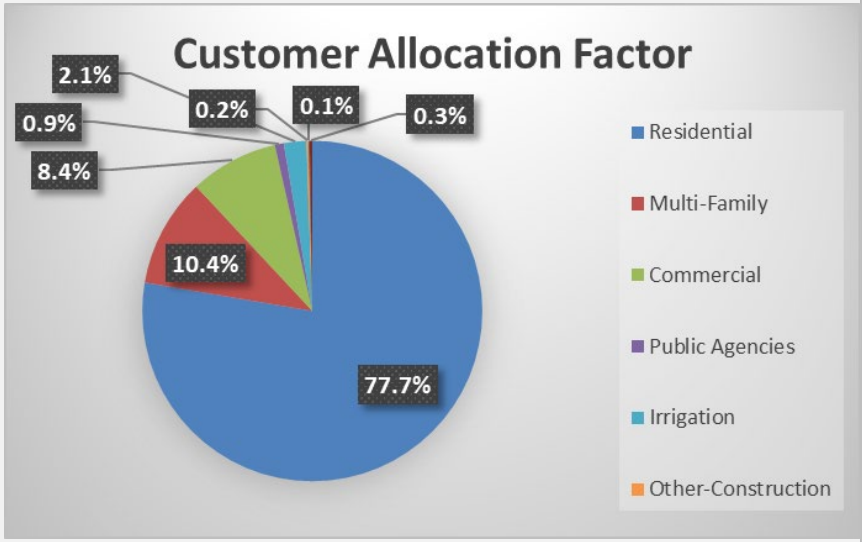

EXAMPLE: COSA Summary

The amount of consumption, the peaking factors, and the number of meters by size are used to allocate costs to customer classes and determine the appropriate rate structures for each.

EXAMPLE: Allocated Net Revenue Requirements

FY 2023/24						
Customer Classes	Classification Components					Cost of Service Net Rev. Req'ts
	VARIABLE	*FIXED*				
	Total Commodity Costs	Capacity-Related Costs	SDCWA Infrastructure Access Charge	Customer-Related Costs	Fire Protection-Related Costs	
Residential	$ 17,740,351	$ 1,295,480	$ 815,709	$ 938,105	$ -	$ 20,789,645
Multi-Family	14,806,283	1,150,607	724,488	125,273	-	16,806,652
Commercial	8,173,543	596,597	375,652	101,579	-	9,247,371
Public Agencies	1,892,996	179,035	112,731	10,287	-	2,195,049
Irrigation	3,626,852	273,768	172,380	25,917	-	4,098,917
Other-Construction	66,097	4,400	2,770	2,489	-	75,756
Industrial	39,892	4,443	2,798	1,095	-	48,228
Fire Protection	3,266	273	172	3,053	6,653	13,418
Total Net Revenue Requirement	**$ 46,349,281**	**$ 3,504,602**	**$ 2,206,700**	**$ 1,207,800**	**$ 6,653**	**$ 53,275,036**

Rate Design Objectives

What are Rate Design Objectives?

- Rates are proportional to cost of service (i.e., the cost to serve each customer class)
- The San Juan Capistrano court decision (2015) mandated that rates "demonstrate the cost basis" in order to comply with Prop 218
  - Primarily related to tiered water rates
  - Basic principles apply to all rates
- Equitable & non-discriminating
- Ease of administration and understanding
- Provide revenue stability

Note: AWWA Manual M1 mentions that other community values and interests may also be considered such as conservation, low-income assistance, etc.

Rate Design Considerations

- Primary rate-design decision is the % of costs allocated to “fixed” vs. “variable” charges
- Many water utilities, including UPUD, use a combination of fixed and variable fees to calculate water rates.
  - Fixed charges are a base amount that customers pay each billing period, regardless of how much water they use.
  - Variable charges, also known as volumetric rates, are based on the amount of water a customer uses.

Rate Design – Fixed Charges

Calculation of Fixed Service Charges

The fixed meter charge recognizes that the water utility incurs fixed costs regardless of whether customers use water.

Two components comprise the fixed meter charge:

(1) the capacity component, and

(2) the customer component.

- The **capacity component** recovers infrastructure costs associated with sizing the water system to ensure there is sufficient system capacity to meet peak demand. A user class with higher-peaking factor is allocated a proportionately higher share of the capacity-related costs compared to customer classes with lower a peaking factor.
- The **customer component** includes those costs related to reading and maintaining meters, customer billing and collection, and other customer service-related costs.

Rate Design – Fixed Charges (cont.)

Calculation of Fixed Service Charges

- Meter sizes have different fixed charges based on the capacity requirements of each size meter connected to the system.
- This is because larger meters have the potential to use more of the system's capacity.
- The potential capacity demanded (peaking) is proportional to the maximum hydraulic flow through each meter size as established by the AWWA hydraulic capacity ratios .

Meter Size	Standard Meters	
	Meter Capacity (GPM)[1]	Equivalency to 3/4 inch
	Displacement Meters	
3/4 inch	30	1.00
1 inch	50	1.67
1 1/2 inch	100	3.33
2 inch	160	5.33
	Compound Class I Meters	
3 inch	320	10.67
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
	Turbine Class II Meters	
10 inch	4,200	140.00
12 inch	5,300	176.67

1. Per AWWA, M1 Manual, Table B-1.

Rate Design – Volumetric Charges

Commodity-Related (volumetric) costs are those that change with the volume of water produced and delivered. These commonly include the costs of energy related to pumping for transmission and distribution, source of supply, water quality testing, etc.

EXAMPLE: Commodity rate calculation

(13% Fixed / 87% Variable)

Customer Classes	Number of Meters[1]	Water Consumption (hcf/yr)[2]	Source of Supply Costs	Other Volumetric Costs	Target SWA Vol. Rev. Req't[3]	Uniform SWA Commodity Rates[3] ($/hcf)	*SDCWA Wholesale Water Purchase*	*Uniform SDCWA Commodity Rates ($/hcf)*	% of Total Commodity Rate Revenue
Residential	28,269	2,708,878	$ 4,172,945	$ 12,167,600	$ 16,340,545	*4 Tiers*	$ 1,399,806	$0.517	*38.3%*
Multi-Family	3,775	2,260,858	3,482,784	10,155,207	13,637,990	$6.032	1,168,293	$0.517	*31.9%*
Commercial	3,061	1,248,066	1,922,608	5,605,999	7,528,608	$6.032	644,935	$0.517	*17.6%*
Public Agencies	310	289,053	445,277	1,298,352	1,743,629	$6.032	149,367	$0.517	*4.1%*
Irrigation	781	553,805	853,120	2,487,554	3,340,674	$6.032	286,178	$0.517	*7.8%*
Other-Construction	75	10,093	15,548	45,334	60,882	$6.032	5,215	$0.517	*0.1%*
Industrial	33	6,091	9,384	27,361	36,745	$6.032	3,148	$0.517	*0.1%*
Fire Protection	92	499	768	2,240	3,009	$6.032	258	$0.517	*0.0%*
Total Potable Water	**36,396**	**7,077,344**	**$ 10,902,433**	**$ 31,789,647**	**$ 42,692,081**	--	**$ 3,657,200**	--	***100%***

1. Consumption data is based on the SWA billing data.
2. Water consumption is actual consumption for FY 2021/22 and includes an adjustment of 5% for conservation. See Table 30.
3. Excluding SDCWA Wholesale Water Purchase costs.

Current Irrigation Rate Structure

We would love to hear from you on the existing rate structure.

We also welcome any questions you may have about water rates and/or the existing rate structure.

IRRIGATION RATES as of 3/1/2024:	2023	2024	2025	2026	2027
Meter Size					
5/8" or 3/4"	$32.83	$32.83	$36.11	$39.72	$43.70
1"	$45.16	$45.16	$49.68	$54.64	$60.11
1.5"	$75.97	$75.97	$83.57	$91.92	$101.12
2"	$112.95	$112.95	$124.25	$136.67	$150.34
3"	$199.24	$199.24	$219.16	$241.08	$265.19
4"	$322.51	$322.51	$354.76	$390.24	$429.26
5"	$630.67	$630.67	$693.74	$763.11	$839.42
Consumption (per HCF)	$0.17	$0.09	$0.10	$0.11	$0.12

PREVIOUS IRRIGATION RATES:

Meter Size					
5/8" or 3/4"	$32.83	$36.44	$40.09	$44.09	$48.50
1"	$45.16	$50.13	$55.14	$60.65	$66.72
1.5"	$75.97	$84.33	$92.76	$102.04	$112.24
2"	$112.95	$125.37	$137.91	$151.70	$166.87
3"	$199.24	$221.16	$243.27	$267.60	$294.36
4"	$322.51	$357.99	$393.78	$433.16	$476.48
5"	$630.67	$700.04	$770.05	$847.05	$931.76
Consumption (per HCF)	$0.17	$0.19	$0.21	$0.23	$0.25

Thank you!

Jeremy Tamargo
Associate Director
800.676.7516
jtamargo@nbsgov.com