## Water and Wastewater Rate Study

Santa Rosa Water – Santa Rosa City Council Meeting

March 2, 2021







## Agenda

COVID 19 Pandemic Billing Update

Water and Wastewater Rate Study Recommendation

Financial Strategy for the Water Shortage Contingency Plan (WSCP)

## **COVID 19 Pandemic Billing Impacts**

## **Pandemic Response**

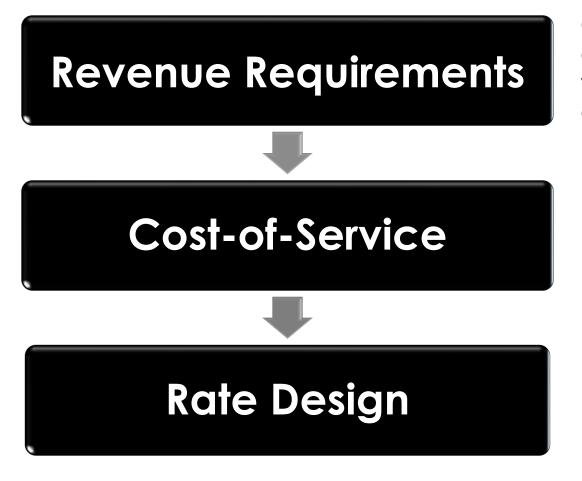
- Moratorium on disconnection for non-payment
  - ❖ March 2020
- Waiver of delinquent fees
  - ❖ March 2020
- Payment plans
  - Accepting any terms
- + H2O outreach (low income assistance program)
- Monitoring Federal and State relief

## Additional Processes and Accounts in Arrears

- Billing system not designed for 90 plus day overdue balances
  - Normal delinquent processes did not allow for over 90 day overdue
  - Payment plans require manual processing
- Tracking overdue bills limited by billing system
- Roughly 3% of accounts overdue 90 plus days
  - Approximately 1,700 accounts
  - Consistent with typical percentage of overdue accounts
  - Current total approximately \$1.4m
  - Sales higher than projected and fund balance available to absorb
- Must continue to collect balances
  - Currently working on solutions for arrearage amounts after moratorium ends

# Water and Wastewater Rate Study Recommendations

## Rate Study Overview

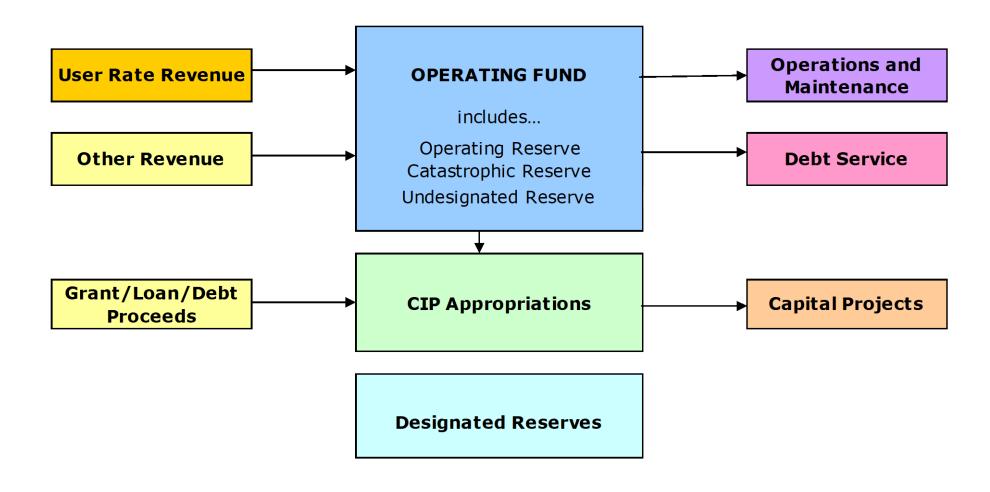


Compare the revenues of the water, wastewater, and subregional utilities to their expenses in multi-year *financial plans* to determine the overall level of annual rate adjustments

Proportionately allocate the FY 21-22 revenue requirement between the various customer classes based on service and demand requirements

Design water and wastewater rates to recover the revenue requirement from each customer class and meet other rate setting objectives

## Fund/Reserve Structure and Cash Flows



## **Project Highlights**

- 1. 2020 Series A (new money) and 2020 Series B (refunding) bonds have been issued
  - 2020 A Series provides the Regional Wastewater System with \$70 million for the Ultraviolet (UV) wastewater treatment project
  - Closed with a par value of \$52.4 million and a premium of \$17.9 million
  - The refunding of the 2012 Wastewater Revenue Bond and will result in approximately \$16.2 million in savings over 14 years
- 2. New water and local wastewater catastrophic reserves targets have been identified, regional wastewater still under review
  - Based on recommendation from GHD Engineers
- Water and wastewater cost of service analyses (COSA) have been updated
- Current water and wastewater rate structures have been retained
- Recommend elimination of automatic pass-through of Sonoma Water rate changes (use forecast instead).

## Catastrophic Reserves

#### **Water Utility**

- ✓ Recommended to increase from \$5.75 million to \$17.5 million
- ✓ Target reserves can achieved through available cash balances

#### **Wastewater Utility**

- ✓ Recommended to increase from \$6.8 million to \$21.5 million
- ✓ Target reserves can achieved through available cash balances (due to favorable bond issue)

#### **Regional Wastewater Utility**

- ✓ Recommended to increase from \$1.7 million to \$10.0 million (placeholder)
- ✓ Geysers reserve recommended to increase from \$1.25 million to \$3.3 million

#### **Policy Updates**

- ✓ Allow for broader range of potential uses (e.g., fires, floods, pandemics, drought, etc.)
- ✓ Modify required policy level reserves over time
- ✓ Inflate catastrophic reserve target balances annually for inflation

## Recommended Water Utility Financial Plan

Debt Coverage Ratio:

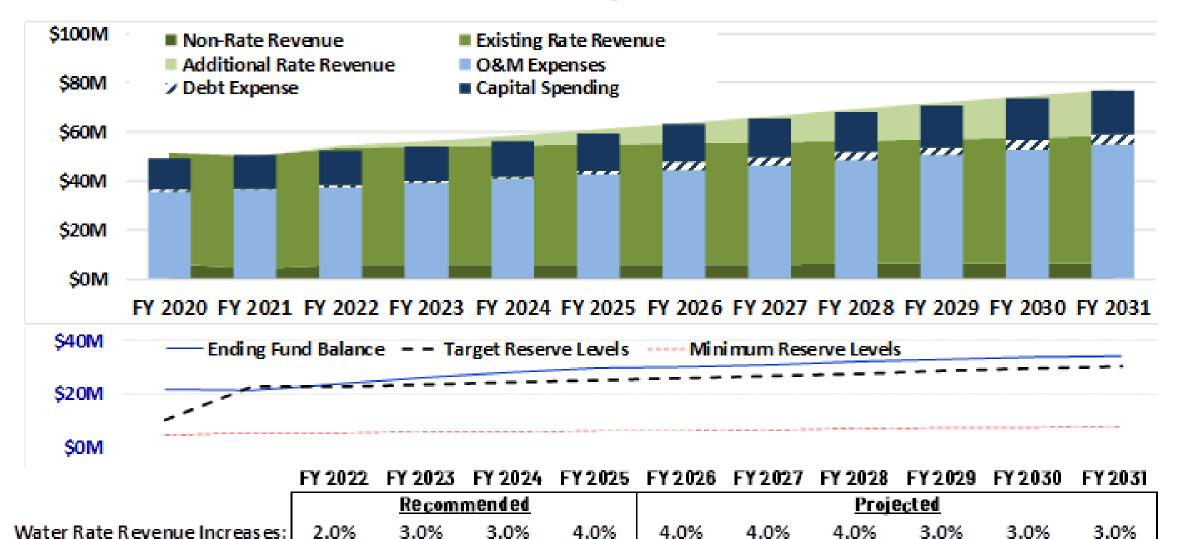
Capital Spending: \$13.8M

20.64

21.09

\$14.2M

21.44



11.03

5.74

6.01

\$14.6M \$15.1M \$15.5M \$16.0M \$16.5M \$17.0M

6.33

6.45

5.82

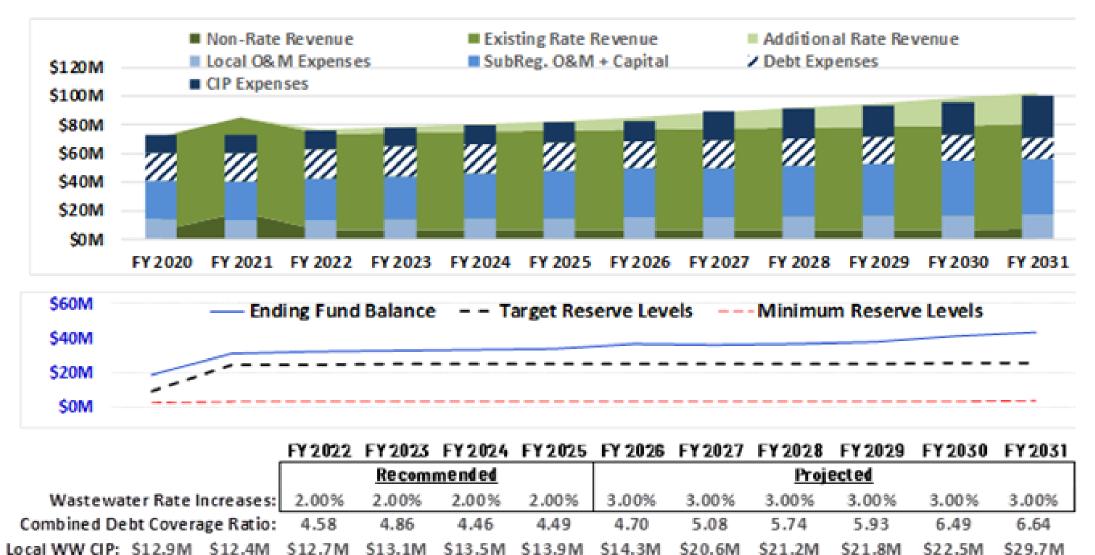
\$17.5M

11

5.84

\$18.0M

## Recommended Wastewater Utility Financial Plan



\$8.1M

\$8.8M

\$9.1M

\$9.3M

\$9.6M

Regional CIP: \$3.4M

\$5.1M

\$5.9M

\$6.6M

\$7.3M

\$10.2M

\$9.9M

# Summary of Recommended Water/Wastewater Rate Adjustments

	Water Rate Adjustments	WW Rate Adjustments
July 2021	2.0%	2.0%
July 2022	3.0%	2.0%
July 2023	3.0%	2.0%
July 2024	4.0%	2.0%

Note: Applies to usage and fixed charges equally.

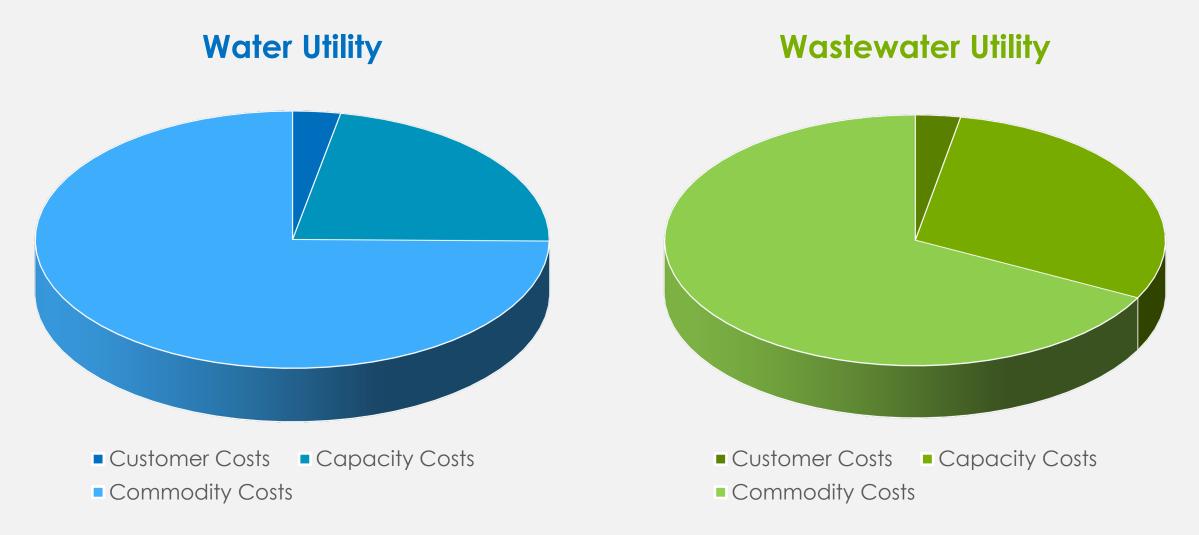
## Rate Setting Objectives

- Financial sufficiency and sustainability
- Legal compliance
- Water conservation
- Revenue stability and predictability
- Minimize rate increases
- Affordability
- Public understanding

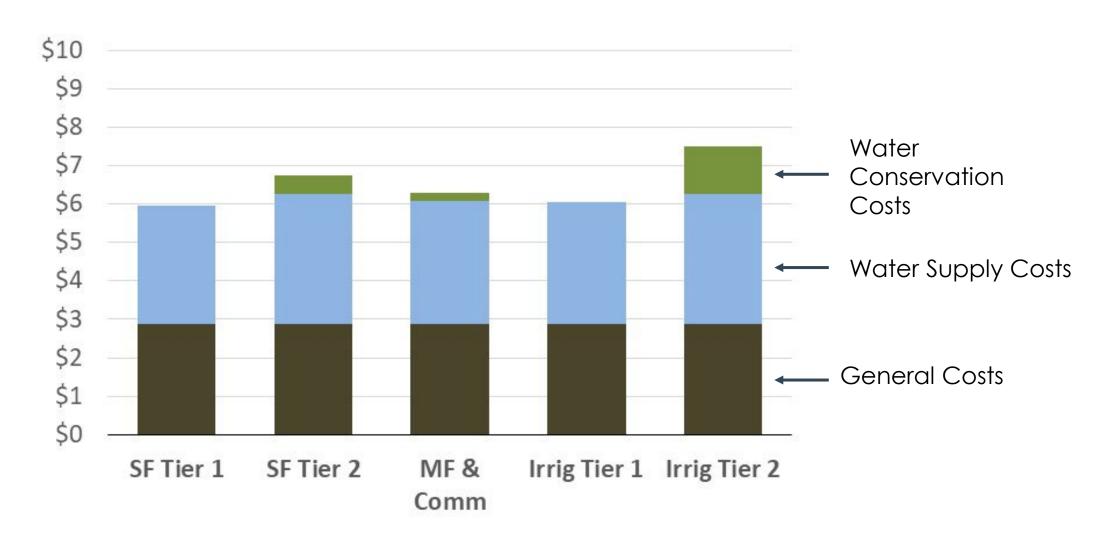
## **Cost Allocation Principles**

- Customer costs
  - ✓ Assigned to each customer on an equal basis
- Capacity costs
  - ✓ Assigned to each customer based on meter size
- Commodity costs
  - ✓ Assigned to each customer based on usage
- Water supply and water conservation costs
  - ✓ Assigned to tiered water usage rates
- Wastewater treatment costs
  - ✓ Assigned to sewer usage rates based on flow and strength

## **Cost Allocation Summary**



## Water Usage Rate Calculations



## Recommended FY 2021-22 **Water Rate** Schedule

		Current	<b>July 2021</b>	Chai	nge
Water Usa	ge Rates (\$/TGAL)			\$	%
Single Family	Residential & Duplex				
Tier 1	Use up to Sewer Cap (1)	\$5.84	\$5.99	\$0.15	2.6%
Tier 2	Above Sewer Cap	\$6.79	\$6.79	\$0.00	0.0%
Single Family	with No Irrigation Needs (Z=Y) (2)				
	All water use	\$5.84	\$5.99	\$0.15	2.6%
Multi-Family,	Commercial, Industrial, and Institutional				
	All water use	\$6.20	\$6.33	\$0.13	2.1%
Irrigation (pot	table water) (3)				
Tier 1	Use up to 125% of water budget	\$5.90	\$6.09	\$0.19	3.2%
Tier 2	Over 125% of water budget	\$7.34	\$7.54	\$0.20	2.7%
	ycled water) (3)				
Tier 1	Use up to 125% of water budget	\$5.60	\$5.79	\$0.19	3.4%
Tier 2	Over 125% of water budget	\$7.34	\$7.54	\$0.20	2.7%
Monthly Se	ervice Charges (Potable Water)				
_	5/8" meter	\$13.76	\$14.09	\$0.33	2.4%
	1" meter	\$30.86	\$31.63	\$0.77	2.5%
	1 1/2" meter	\$59.36	\$60.86	\$1.50	2.5%
	2" meter	\$93.57	\$95.95	\$2.38	2.5%
	3" meter	\$173.36	\$177.81	\$4.45	2.6%
	4" meter	\$287.36	\$294.76	\$7.40	2.6%
	6" meter	\$572.36	\$587.13	\$14.77	2.6%
Monthly Se	ervice Charges (Recycled Water)				
	5/8" meter	\$12.39	\$12.68	\$0.29	2.3%
	1" meter	\$27.77	\$28.47	\$0.70	2.5%
	1 1/2" meter	\$53.42	\$54.77	\$1.35	2.5%
	2" meter	\$84.21	\$86.36	\$2.15	2.6%
	3" meter	\$156.03	\$160.03	\$4.00	2.6%
	4" meter	\$258.63	\$265.28	\$6.65	2.6%
	6" meter	\$515.12	\$528.42	\$13.30	2.6%
Notes:					

Current

Tuly 2021

Change

- (1) The Sewer Cap is calculated for each customer based on the average monthly water use during November through March.
- (2) "Z=Y" accounts are single family or duplex accounts with no outdoor usage.
- (3) The landscape water budget varies for each customer each month and is determined using the site's square footage for the types of plants and the evapotranspiration rate for the billing period.

## Recommended FY 2021-22 Wastewater Rate Schedule

	Current	<b>July 2021</b>	Cha	nge
Wastewater Usage Rates (\$/TGAL) (1		\$	%	
Single Family and Multi-Family (2)	\$14.86	\$15.12	\$0.26	1.7%
Commercial, Industrial, and Institutional				
Low Strength	\$12.35	\$12.42	\$0.07	0.6%
Standard Strength	\$14.86	\$15.12	\$0.26	1.7%
Medium Strength	\$16.48	\$16.85	\$0.37	2.2%
High Strength	\$20.36	\$21.01	\$0.65	3.2%
Monthly Service Charges				
Single Family	\$25.85	\$26.06	\$0.21	0.8%
Multi-Family, Commercial, Industrial, Ins	stitutional			
5/8" & 3/4" meters	\$25.85	\$26.06	\$0.21	0.8%
1" meter	\$62.26	\$60.15	-\$2.11	-3.4%
1 1/2" meter	\$122.91	\$116.96	-\$5.95	-4.8%
2" meter	\$195.72	\$185.14	-\$10.58	-5.4%
3" meter	\$365.58	\$344.22	-\$21.36	-5.8%
4" meter	\$608.24	\$571.48	-\$36.76	-6.0%
6" meter	\$1,214.89	\$1,139.63	-\$75.26	-6.2%

#### Notes:

<sup>(1)</sup> Wastewater usage charge applies to the estimated wastewater generated. For single-family residential accounts and multi-family accounts without a separate irrigation meter the esimated wastewater is based on the lower of current water use or the Sewer Cap. The Sewer Cap is calculated for these residential accounts based on the average water use from complete billing periods within the months of November through March. For Multi-family accounts with a dedicated irrigation meter or no irrigation from City water, as well as non-residential accounts, wastewater charges are based on actual monthly water usage from the domestic meter.

<sup>(2)</sup> Multifamily accounts include duplex, and triplex accounts.

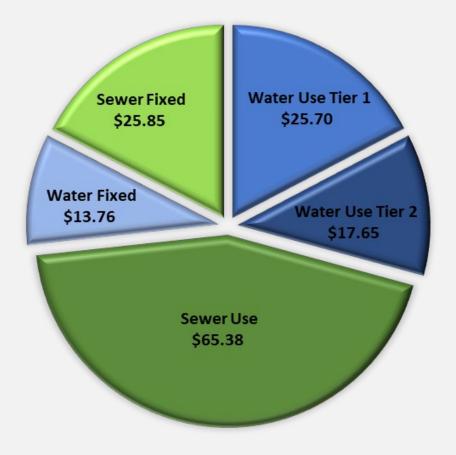
## Preliminary FY 2021-22 Bill Impact Analysis

	Meter	Wtr. Use	WW Use	Bills With Current Water/WW Rates			Bills With P	roposed Water	Change in	Total Bill	
	Size	(TGAL)	(TGAL)	Water	Wastewater	Total	Water	Wastewater	Total	<b>\$</b>	%
Single Family Residential											
Low Water Use	5/8"	4	4	\$37.12	\$85.29	\$122.41	\$38.05	\$86.54	\$124.59	\$2.18	1.8%
Median Water Use	5/8"	7	5	\$56.54	\$100.15	\$156.69	\$57.62	\$101.66	\$159.28	\$2.59	1.7%
High Water Use	5/8"	12	6	\$89.54	\$115.01	\$204.55	\$90.77	\$116.78	\$207.55	\$3.00	1.5%
Very High Water Use	5/8"	20	7	\$142.91	\$129.87	\$272.78	\$144.29	\$131.90	\$276.19	\$3.41	1.3%
Duplex	5/8"	8	6	\$62.38	\$115.01	\$177.39	\$63.61	\$116.78	\$180.39	\$3.00	1.7%
Small Apartment (4 DUs)	1"	15	12	\$123.86	\$240.58	\$364.44	\$126.58	\$241.59	\$368.17	\$3.73	1.0%
Large Apartment (24 DUs)	2"	80	80	\$589.57	\$1,384.52	\$1,974.09	\$602.35	\$1,394.74	\$1,997.09	\$23.00	1.2%
Very Lrg. Apart. (100 DUs)	4"	320	320	\$2,271.36	\$5,363.44	\$7,634.80	\$2,320.36	\$5,409.88	\$7,730.24	\$95.44	1.3%
Small Retail	5/8"	6	6	\$50.96	\$99.95	\$150.91	\$52.07	\$100.58	\$152.65	\$1.74	1.2%
Large Retail	2"	80	80	\$589.57	\$1,183.72	\$1,773.29	\$602.35	\$1,178.74	\$1,781.09	\$7.80	0.4%
Office Building	1 1/2"	40	40	\$307.36	\$616.91	\$924.27	\$314.06	\$613.76	\$927.82	\$3.55	0.4%
Car Wash	2"	60	60	\$465.57	\$936.72	\$1,402.29	\$475.75	\$930.34	\$1,406.09	\$3.80	0.3%
Mixed Comm. w/ Food	1" 3"	35 200	35 200	\$247.86	\$774.86	\$1,022.72	\$253.18	\$795.50	\$1,048.68 \$5,000.03	\$25.96	2.5% 2.4%
Hotel w/ Restaurant				\$1,413.36	\$4,437.58	\$5,850.94	\$1,443.81	\$4,546.22	\$5,990.03	\$139.09	
Restaurant	1 1/2"	50	50	\$369.36	\$1,140.91	\$1,510.27	\$377.36	\$1,167.46	\$1,544.82	\$34.55	2.3%
Supermarket	2"	160	160	\$1,085.57	\$2,832.52	\$3,918.09	\$1,108.75	\$2,881.14	\$3,989.89	\$71.80	1.8%
Mortuary	1"	20	20	\$154.86	\$469.46	\$624.32	\$158.23	\$480.35	\$638.58	\$14.26	2.3%
Small Winery	1"	10	10	\$92.86	\$265.86	\$358.72	\$94.93	\$270.25	\$365.18	\$6.46	1.8%
Sm. Irrig. (Wtr Budg.=18 tg)	1"	20		\$151.74	(na)	\$151.74	\$156.33	(na)	<b>\$156.33</b>	\$4.59	3.0%
Lrg. Irrig. (Wtr. Budg.=250 tg)	4"	300		\$2,129.36	(na)	\$2,129.36	\$2,121.76	(na)	\$2,121.76	-\$7.60	-0.4%

## Monthly Bill Impacts – Average Residential Bill

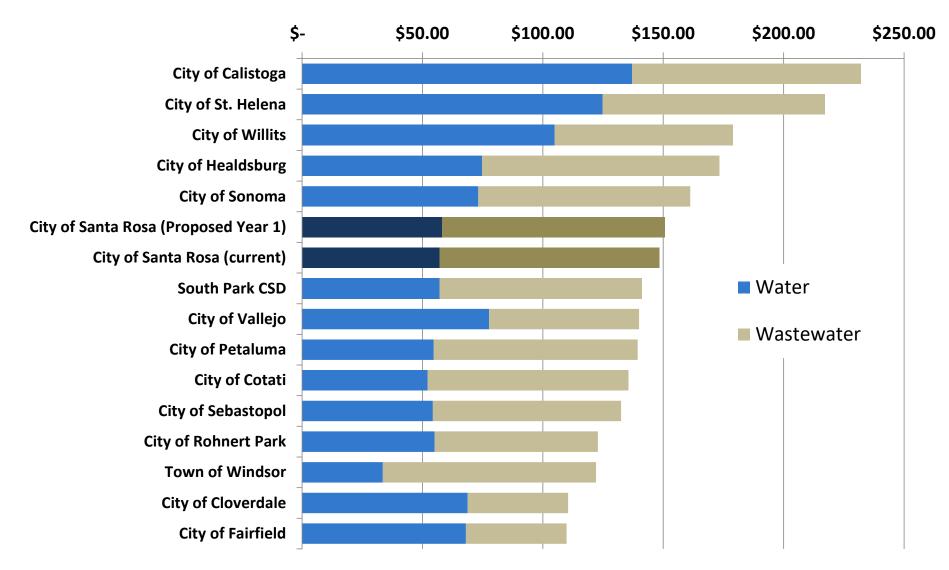
- Four residents
  - √ 7,000 gallons of water
  - √ 4.4 Sewer Cap (4,400 gallons)
- ❖ Current bill \$148.34
- Monthly increase by Year
  - ✓ July 2021 \$2.38
  - ✓ July 2022 \$3.59
  - ✓ July 2023 \$3.68
  - ✓ July 2024 \$4.39





## Regional Water & Wastewater Rate Survey\*

For single family homes with 7,000 Gallons of water usage



<sup>\*</sup> Where available the rates are those adopted to be implemented on July 1, 2021

## Water Shortage Contingency Plan

## Water Shortage Contingency Plan

- \*WSCP is a component of the State-mandated Urban Water Management Plan (UWMP), which is updated every five years
  - UWMP and WSCP last updated in 2016
  - New updates to be adopted in 2021
- The State has prescribed water shortage stages, each with water use reduction goals
- The City's proposed WSCP includes 8 water shortage stages
- \*Water shortage charges (WSC) and Excess Use Penalties (EUP) are part of the City's financial strategy for dealing with shortage conditions

## Proposed WSCP Shortage Charges and Penalties

		Use Reduction	WSC	EUP
Stage 1	Voluntary	Up to 10%		
Stage 2	Mandatory	11% to 15%	✓	
Stage 3	Mandatory	16% to 20%	✓	
Stage 4	Mandatory	21% to 25%	✓	
Stage 5	Mandatory	26% to 30%	✓	<b>✓</b>
Stage 6	Mandatory	31% to 40%	✓	✓
Stage 7	Mandatory	41% to 50%	✓	<b>✓</b>
Stage 8	Mandatory	Over 50%	✓	✓

WSC = Water shortage charge

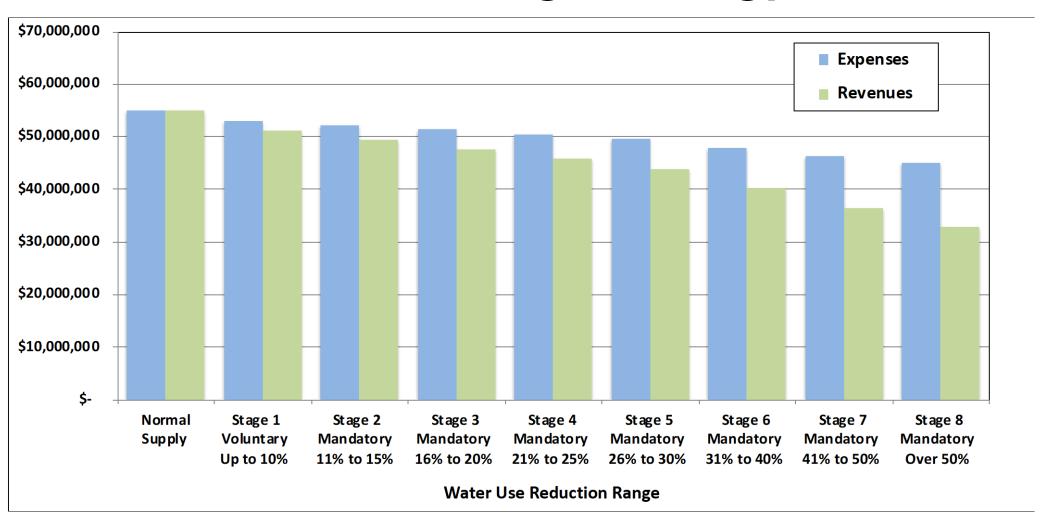
EUP = Excess use penalty

# Three-Pronged Financial Strategy to Bridge the Financial Deficit Created by Shortage Conditions

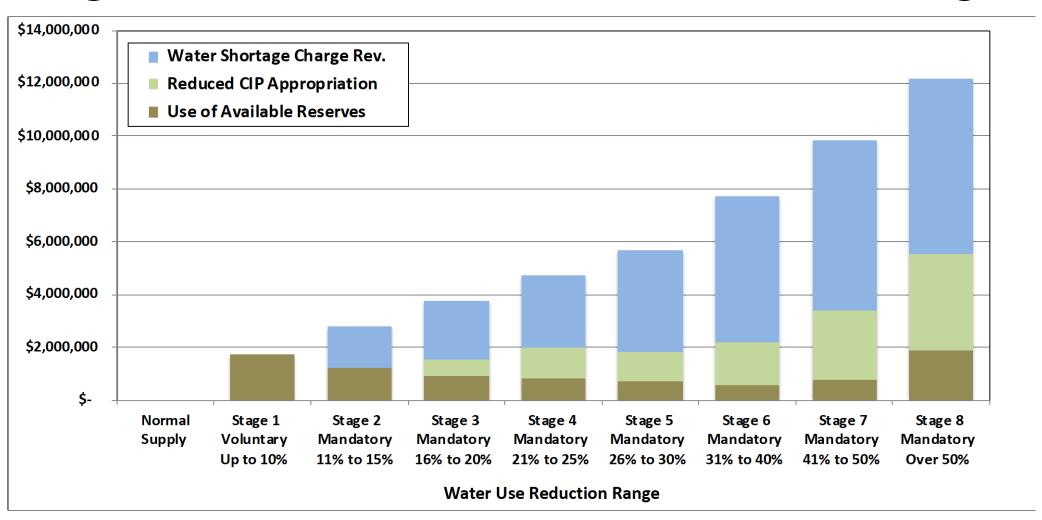
- 1. Utilize a portion of available financial reserves
  - >Undesignated and/or catastrophic reserves
- 2. Implement a water shortage charge\*
- 3. Defer a portion of the capital improvement program

<sup>\*</sup> Excess use penalties would be imposed in Stages 5, 6, 7, and 8, but are not expected to generate any revenue, as the penalties can be avoided.

# Impact of Reduced Water Use on Expenses and Revenues Without a Shortage Strategy



# Bridging the Financial Deficit Created by Water Shortage Conditions and Reduced Water Usage



## Water Shortage Rate Structures – July 2021 (1)

	Water Use Reduction Ranges										
	Normal Water Usage Rates	Stage 2 Mandatory 11% to 15%	Stage 3 Mandatory 16% to 20%	Stage 4 Mandatory 21% to 25%	Stage 5 Mandatory 26% to 30%	Stage 6 Mandatory 31% to 40%	Stage 7 Mandatory 41% to 50%	Stage 8 Mandatory Over 50%			
Water Shortage	e Charge (2)>	5%	7.5%	10%	15%	25%	35%	45%			
Tier 2 Excess Use Penalty (3)> Tier 3 Excess Use Penalty (3)>					10% 20%	25% 50%	40% 80%	50% 100%			
Water Usage Rates (\$/1,00	00 gallons)										
Single Family and Duplex A	ccounts										
Tier 1	\$5.97	\$6.27	\$6.42	\$6.57							
Tier 2	\$6.76	\$7.10	\$7.27	\$7.44							
Single Family with No Irrig I	Needs										
All water use	\$5.97	\$6.27	\$6.42	\$6.57							
Multi-Family/Comm./Indus.,	/Inst.										
All water use	\$6.30	\$6.62	\$6.77	\$6.93							
Irrigation (potable water)											
Tier 1	\$6.06	\$6.36	\$6.51	\$6.67							
Tier 2	\$7.51	\$7.89	\$8.07	\$8.26							
Irrigation (recycled water)											
Tier 1	\$5.76	\$6.05	\$6.19	\$6.34							
Tier 2	\$7.51	\$7.89	\$8.07	\$8.26							
All Water Customers Tier 1 - Up to 100% of wa Tier 2 - 101% to 150% of Tier 3 - Over 150% of wa	f water alloc. (4)				\$7.25 \$7.98 \$8.70	\$7.88 \$9.85 \$11.82	\$8.51 \$11.91 \$15.32	\$9.14 \$13.71 \$18.28			

#### Notes:

- (1) Water shortage charges and excess use penalties are expressed as percentages applied to normal water usage rates. Monthly service charges are unaffected by the water shortage rates and charges. The normal water usage rates shown herein are the water usage rates proposed for July. 2021, and are used for illustrative purposes.
- (2) When the water use reduction goal exceeds 10 percent the normal water usage rates are increased by the water shortage charge percentage shown. The water shortage charge increment provides supplemental revenue to help bridge the financial deficit created by shortage conditions.
- (3) When the water use reduction goal exceeds 25 percent the 2-tier rate structures for single family, duplex, and irrigation accounts and the uniform water rate for other customer classes are replaced. The normal uniform water usage rate plus the indicated water shortage charge create a new Tier 1 water rate, applicable to water usage up to the allocation. Tier water allocations are defined for each customer class in the Water Shortage Contingency Plan. Excess use penalties then apply for use above the allocation.
- (4) Water usage rates shown for Tier 2 and Tier 3, in Stages 5 through 8, include the water shortage charge and excess use penalty, as indicated.

# Sample Single Family Residential Water Bills (with Shortage Charges)

Shortage Stage	Single Family Use Reduction Goal	Monthly Water Use (Gallons)	S	onthly ervice harge		Water Usage Charge	Sh	Water ortage harge	Excess Use enalty		Total Ionthly Water Bill	fror	Change n Normal Bill (3)
Average Single Family						onar ge		ilarge -	Chaicy	, Dill			Jiii (3)
Normal Conditions	0%	10,000	\$	14.25	\$	64.84		n/a	n/a	\$	79.09		
Stage 1 Voluntary	10%	9,000	\$	14.25	\$	58.08		n/a	n/a	\$	72.33	\$	(6.76)
Stage 2 Mandatory	15%	8,500	\$	14.25	\$	54.70	\$	2.73	n/a	\$	71.68	\$	(7.41)
Stage 3 Mandatory	20%	8,000	\$	14.25	\$	51.32	\$	3.85	n/a	\$	69.41	\$	(9.67)
Stage 4 Mandatory	25%	7,500	\$	14.25	\$	47.94	\$	4.79	n/a	\$	66.98	\$	(12.11)
Stage 5 Mandatory	(2)	6,500	\$	14.25	\$	41.18	\$	6.18	\$ -	\$	61.60	\$	(17.48)
Stage 6 Mandatory	(2)	4,900	\$	14.25	\$	30.36	\$	7.59	\$ -	\$	52.20	\$	(26.89)
Stage 7 Mandatory	(2)	3,200	\$	14.25	\$	19.10	\$	6.69	\$ -	\$	40.04	\$	(39.04)
Stage 8 Mandatory	(2)	2,700	\$	14.25	\$	16.12	\$	7.25	\$ -	\$	37.62	\$	(41.46)
Average Single Family	Customer Wi	th No Water U	lse R	eduction	(1)								
Normal Conditions	0%	10,000	\$	14.25	\$	64.84		n/a	n/a	\$	79.09		
Stage 1 Voluntary	10%	10,000	\$	14.25	\$	64.84		n/a	n/a	\$	79.09	\$	-
Stage 2 Mandatory	15%	10,000	\$	14.25	\$	64.84	\$	3.24	n/a	\$	82.33	\$	3.24
Stage 3 Mandatory	20%	10,000	\$	14.25	\$	64.84	\$	4.86	n/a	\$	83.95	\$	4.86
Stage 4 Mandatory	25%	10,000	\$	14.25	\$	64.84	\$	6.48	n/a	\$	85.57	\$	6.48
Stage 5 Mandatory	(2)	10,000	\$	14.25	\$	64.84	\$	9.73	\$ 4.30	\$	93.11	\$	14.03
Stage 6 Mandatory	(2)	10,000	\$	14.25	\$	64.84	\$	16.21	\$ 32.05	\$	127.34	\$	48.25
Stage 7 Mandatory	(2)	10,000	\$	14.25	\$	64.84	\$	22.69	\$ 131.29	\$	233.07	\$	153.98
Stage 8 Mandatory	(2)	10,000	\$	14.25	\$	64.84	\$	29.18	\$ 230.67	\$	338.94	\$	259.85
Notes													

#### Notes:

- $\overline{(1)}$  Assumes single family customer with 5/8" meter, a 3-person household, summertime irrigation, and a sewer cap of 3,500 gallons.
- (2) During Stages 5, 6, 7, and 8 customers would be subject to specific water allocations in order to meet required use reduction targets.
- (3) Comparison is with water bill based on normal water usage and standard water rates.

Single

Total

## Value of Water Campaign

## Investing in our public water system is critical

Using the power of video to boost engagement

Connecting with customers through:

- City Connections eNewsletter
- Social media
- Digital advertising
- srcity.org/water
- Bill inserts
- Radio



## **Proposition 218 Noticing**

- Proposition 218, also known as "Right to Vote on Taxes Act"
  - Approved by voters in 1996
- Establishes process for public noticing for property related rates
  - Includes water and wastewater rates
- Requires 45 day period for review and comment by customers
- Responses to be submitted at a public hearing
- City Council Public Hearing Scheduled May 2021

## **BPU Review and Recommendations**

- ❖ BPU Budget Subcommittee Review
  - October 13 & 29, 2020 and December 15, 2020
- BPU Budget Subcommittee Recommendation
  - January 19, 2021
- ❖ BPU Review
  - February 4, 2020
- BPU Recommendation
  - February 18, 2020

## **Next Steps**

- Additional City Council Study Session (if needed) March 23, 2021
- Prop. 218 notification mailing March 25, 2021
- City Council Public Hearing May 2021

## Summary

- Prop. 218 notification mailing March 2021
  - 45 days prior to Public Hearing
- City Council Public Hearing May 2021

	Water Rate Adjustments	WW Rate Adjustments
July 2021	2.0%	2.0%
July 2022	3.0%	2.0%
July 2023	3.0%	2.0%
July 2024	4.0%	2.0%

Note: Applies to usage and fixed charges equally.