

#### **BEAUMONT-CHERRY VALLEY WATER DISTRICT**

DATE: May 29, 2024

TO: Daniel K. Jaggers, PE, General Manager

FROM: William Clayton, Finance Manager

SUBJECT: Recap of 2019 Rate Study and 2024 Rate Study Challenges

#### **BACKGROUND**

#### 2019 Rate Study Recap

The 2019 Rate Study was needed to address the following challenges:

- 1. Rates had not increased between 2012 and 2019, with the most recent rate study having been conducted in 2010
- 2. There was no mechanism available by which imported water supply and pumping power pass-through charges could be adjusted, with the imported water cost increasing from \$317/AF to \$399/AF in May 2019
- 3. Personnel changes had commenced rapidly in 2017 to address growing customer base
  - a) Class/comp study and associated MOU negotiations
  - b) 3 year implementation plan of increases wages and associated benefits beginning in 2018
  - c) Reorganization of District staff (management)
- 4. 15% increase in Consumer price index occurred between 2012 and 2019
- 5. Planned Capital Replacement expenses of \$36 million in the five year period of 2019 to 2024
- 6. Unfunded Other Post-Employment Benefit (OPEB) liability increasing

#### 2024 Rate Study Challenges

The 2024 Rate Study is needed to address the following challenges:

Known and Quantifiable Challenges:

- 1. Substantially increased pavement rehabilitation costs within the City (may change based on coming Agreement under review)
- 2. Increasing rates and changing rate structure for power to pump wells through SCE
- New replacement and/or relocation of District pipelines and/or facilities to support the City's CIP items such as the Pennsylvania Grade Separation and Widening project, ADA Sidewalk project, and Pavement Moratorium
- 4. Recycled Water Implementation
- 5. Inflated costs
- 6. Adequate and safe space for District staff in the near term and into the future, and continued ongoing development of Operations Center site for District staff
- 7. Possible Chromium VI issues (drill new wells or treatment)



#### Known but Unquantifiable Challenges:

- 1. State Mandated Conservation as a way of life with SB606 and AB1668
- 2. State Mandated Electric Fleet requirements under the California Air Resources Board Advanced Clean Fleet Rules
- State Mandated Chromium 6 impacts, from Prop 65 and State Water Resources Control Board
- 4. State Mandated Water Service Inventory requirements from SB 1398, which was amended by SB427 in 2017
- 5. Lead in the pipelines and PFAS requirements
- 6. Potential increased costs for imported water

#### SUMMARY

Many, if not all, of the challenges that the 2019 Rate Study set out to address, which were known at the time of the Rate Study process, were addressed via the automatic rate increases from 2020 through 2024 set forth by the Rate Study. It allowed for the mechanism by which to adjust the imported water supply pass-through charge to cover the \$399/AF cost, as well the pumping power pass-through charge, which was adjusted in August 2021 from \$.32/CCF to \$.42/CCF.

Many of the planned Capital Replacement projects deemed to be funded during the 2019 through 2024 period were completed, with large cost increases due to a lack of availability of materials for extended amounts of time, with other projects having to be put off for a time because of said increased costs. The rate increases allowed for the set aside for, and eventual funding of, an Other Post-Employment Benefit (OPEB) Trust Fund, through the California Employers' Retirement Benefit Trust (CERBT), which led to an immediate \$1.0 M decrease in the District's net OPEB liability in fiscal year 2022.

The challenges that the 2024 Rate Study will need to address are significant and slightly different from those addressed in the 2019 Rate Study. The City of Beaumont has substantially changed the requirements for pavement rehabilitation due to its Pavement Moratorium, which has led to an increased cost approaching \$400K annually. The rate structure and increase in rates associated with power to pump wells through SCE has created a need to recover a higher fixed portion of said rates charged by SCE. Other challenges include mandates from the State of California for water conservation, electric fleets, and Chromium 6 mitigation, which are unquantified at this time but could cost the District tens of millions of dollars.

#### **ATTACHMENTS**

Attachment 1 – Presentation: 2019 Water Rate and Fee Study Discussion #1 – October 17, 2019

Attachment 2 – Presentation: Water Rates Workshop – October 17, 2019

Attachment 3 – Presentation: 2019 Water Rate and Fee Study Discussion #2 – November 5, 2019

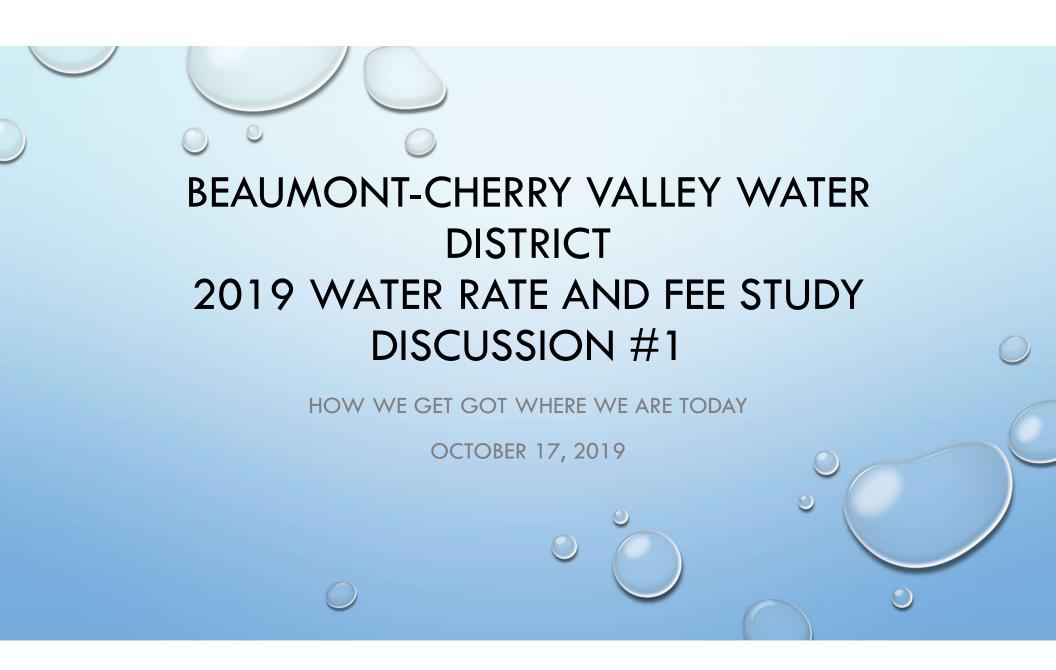
Attachment 4 - Presentation: Water Financial Plan and Utility Rate Study - January 7, 2020

Attachment 5 – Presentation: Proposed Water Rate Changes – February 27, 2020

Attachment 6 – Table of Board actions and links to documents

William Clayton, CPA Finance Manager

William Clayton





- ANNUAL CONTRIBUTION TO CAPITAL REPLACEMENT RESERVES (DEPRECIATION OF CAPITAL FACILITIES) PROJECTED AT \$1M
  - CURRENT ACTUAL ANNUAL DEPRECIATION = \$2.6M
    - \$17M IN CAPITAL ASSETS WERE NOT RECORDED AS OF THE 2010 WATER RATE STUDY
  - CURRENT CAPITAL REPLACEMENT RESERVES = \$23.5M
    - PROJECTS IDENTIFIED IN 2010 WATER RATE STUDY HAVE YET TO BE CONSTRUCTED.
    - DEBT FUNDING AND DEBT SERVICE CONSIDERED IN THE STUDY WAS NOT ISSUED.
- 2010 RATE STUDY PROVIDED THREE RATE INCREASES
  - 15% INCREASE IN 2010
  - 7% IN 2011
  - 6% IN 2012
- NO INCREASE AFTER 2012
- RATES EXPIRED IN 2015
  - NO PASS-THROUGH COST ADJUSTMENTS FOR IMPORTED WATER SUPPLY AND PUMPING POWER CHARGES
     WITHOUT FULFILLING PROPOSITION 2018 PROCESS



- 2015 ~ (DISTRICT NEEDED TO UNDERSTAND COST REQUIREMENTS)
  - COST OF SERVICE STUDY DIFFICULT DURING ONGOING DROUGHT PERIOD
    - ABNORMAL AND LEGISLATED CONSUMPTION PATTERNS HARD TO FORECAST INTO FUTURE
  - 15% INCREASE IN CONSUMER PRICE INDEX OCCURRED BETWEEN 2012 AND 2019
  - LOWER PER DWELLING UNIT (DU) USAGE CONTINUED THROUGH 2016
    - BEGAN TO CLIMB AS DROUGHT RESTRICTIONS ENDED
    - CITY AND COUNTY LANDSCAPING ORDINANCES EFFECTIVE IN 2016 THAT LOWER CONSUMPTION PATTERNS



- DISTRICT PERSONNEL CHANGES COMMENCING IN 2017 TO ADDRESS GROWING NEEDS
  - MANAGEMENT CHANGES
  - CLASS/COMP STUDY AND ASSOCIATED MOU NEGOTIATIONS
    - INCREASE IN 2018 THROUGH 2020 OVER 2017 WAGES AND BENEFITS REQUIRED BY STUDY
    - 3 YEAR IMPLEMENTATION PLAN BEGINNING IN 2018
  - 37.2 % INCREASE IN HEALTH INSURANCE COSTS 2017-2020 (PROJECTED)
  - STAFF REORGANIZATION
    - NECESSARY TO MEET GROWING DISTRICT NEEDS
    - ADDITION OF HUMAN RESOURCES DEPARTMENT
  - DISTRICT SAFETY PROGRAM REMODEL TO MEET CURRENT REGULATIONS



- SGPWA BOARD IDENTIFIED NEED TO FUND NICKEL WATER LEASE (2017-2019)
  - WHOLESALE WATER RATE FUNDING WOULD REQUIRE AN SGPWA WHOLESALE RATE INCREASE
  - SGPWA HELD FIRST RATE STUDY WORKSHOP IN MARCH 2018
  - 6 SCENARIOS FOR A WHOLESALE RATE WERE CONSIDERED AT NEXT WORKSHOP(SEPTEMBER 2018)
    - BEST CASE (LOWEST RATE) OF \$464/AF (46% INCREASE)
    - WORST CASE (HIGHEST RATE) OF \$610/AF (92% INCREASE)
  - SGPWA WHOLESALE RATE INCREASE OF \$399/AF FROM \$317/AF
    - ADOPTED IN BY SGPWA BOARD ON APRIL 15, 2019 (EFFECTIVE) MAY 1, 2019
    - RESULTED IN 26% INCREASE IN WHOLESALE WATER RATE TO SGPWA CUSTOMERS



#### • 2019

- SOUTHERN CALIFORNIA EDISON CHANGED RATE STRUCTURE IN SPRING 2019
  - PAYING MORE ATTENTION TO WELL PRODUCTION SCHEDULE AND COST/BENEFIT EFFECTS
- DISTRICT BOARD AUTHORIZED RATE AND FEE STUDY AT MAY 8, 2019 BOARD MEETING
- ONGOING DISTRICT OTHER POST EMPLOYMENT BENEFITS (OPEB) REQUIREMENTS

# Beaumont Cherry Valley Water District

### Water Rates Workshop

Board Workshop - October 17, 2019





#### **AGENDA**

- Study Objectives
- Overview of financial planning
- Review proposed 5-year water financial plan
- Cost of Service Allocation
- Review rate structure alternatives and seek recommendations
  - > Option 1: 2-Tier
  - > Option 2: 3-Tier
  - > Option 3: 4-Tier
- Customer Impacts
- Drought rates
- Questions & Discussion



#### STUDY OBJECTIVES

- Recover projected operating and capital costs in the next 5 years
- Finalize 5-year water financial plan
  - > Proposed revenue adjustments
  - > Review reserves
  - > Propose debt funding
- Perform cost of service analysis
- Develop proposed water rates
- Review impacts



### OVERVIEW OF FINANCIAL PLAN



Revenue Adjustment Schedule Multi-Year Financial Plan

## FINANCIAL PLAN ASSUMPTIONS

	CY 2020	CY 2021	CY 2022-24
Escalation Factors			
General	3.0%	3.0%	3.0%
Salary	8.7%	6.0%	3.0%
Benefits	7.2%	6.0%	3.0%
General Utilities	3.0%	3.0%	3.0%
Capital	0.0%	0.0%	0.0%
Non-Inflated	0.0%	0.0%	0.0%
Non-Rate Revenues	0.0%	0.0%	0.0%
Interest Income	1.0%	1.0%	1.0%



#### FINANCIAL PLAN ASSUMPTIONS

- SGPWA rate increase and power cost increase will be passed through every year
- Interest earnings: 1% rate of return
- Account growth:
  - 200 new residential units in CY 2020 dropping to about 110 in CY 2024
  - No non-residential growth
  - Recycled customers increasing by 3 to 4 units per year
- Terms of future revenue bond debt:
  - > 30-year term
  - > 5% interest rate
  - > Issuance costs of 1.5% of total issuance amount

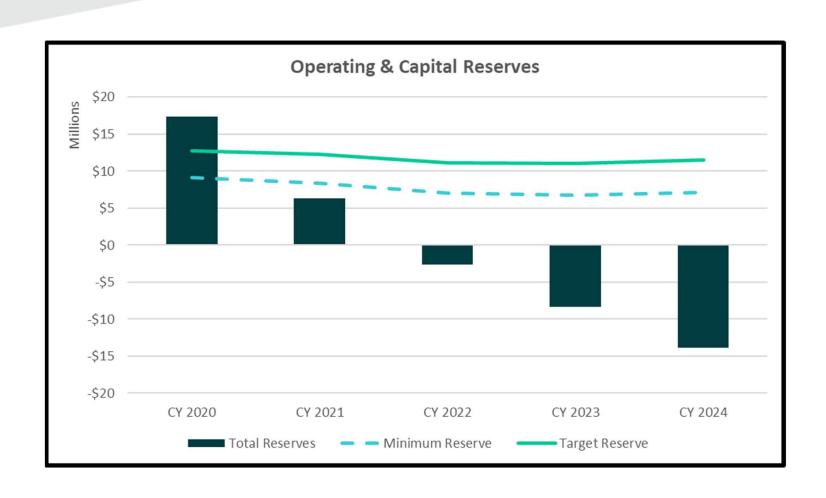


#### RESERVE POLICIES

- Operating Reserves Target:
  - > Min: 90 days of budgeted operating expenses
  - > Max: 180 days of budgeted operating expenses
- Capital Reserves Target:
  - 5- Year Average of non debt funded CIP
- Emergency Reserve Target:
  - > 15% of budgeted operating expenses



### STATUS QUO: ENDING BALANCES

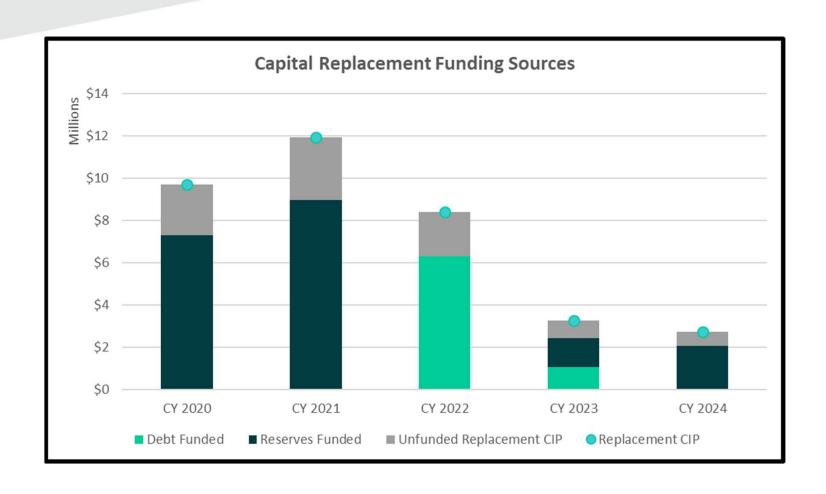


#### WHY DO WE NEED INCREASES

- Rates were last adjusted in January of 2012. The Los Angeles- All Urban Consumers CPI increase by over 15% during that time
- Pass Agency water rates increased from \$317 to \$399 per AF, an increase of 26%, on May 1, 2019
- The District has planned Capital replacement expenses of \$36 million in the five year period
- The District has reorganized to meet growing needs



## PLANNED CIP AND FUNDING SOURCES





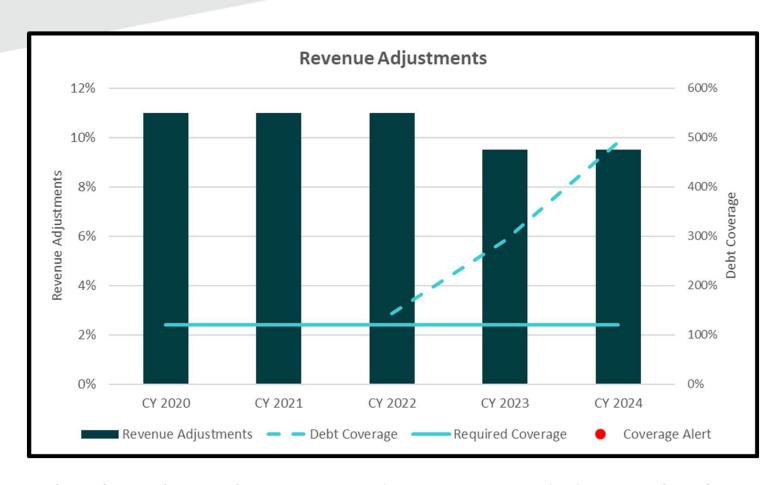
### FINANCIAL PLAN

Revenue adjustments for CY 2020 through CY 2024

CY 2020	March	11.0%
CY 2021	January	11.0%
CY 2022	January	11.0%
CY 2023	January	9.5%
CY 2024	January	9.5%



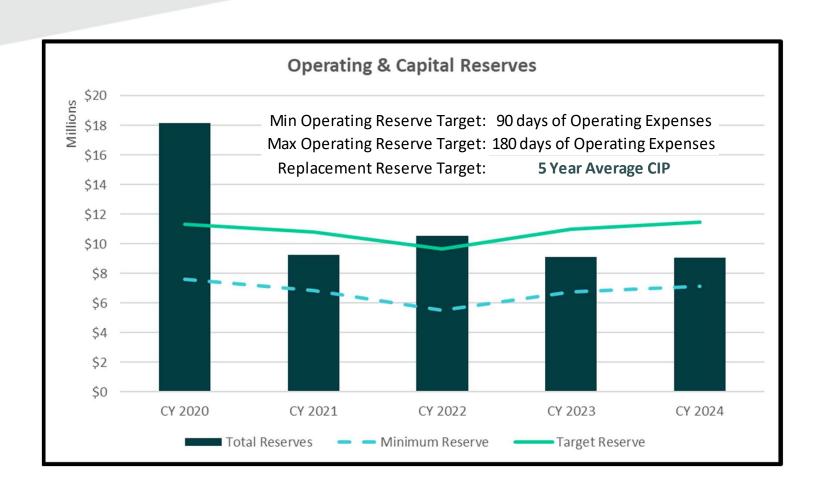
## PROPOSED REVENUE ADJUSTMENTS & DEBT COVERAGE



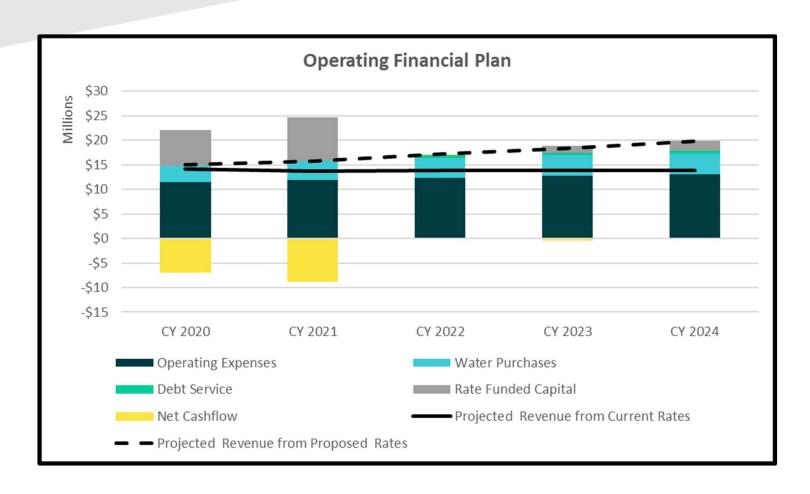
This chart shows the revenue adjustments needed in graphical format along with the debt coverage. With the proposed revenue adjustments for 3 years we barely meet coverage in CY 2022 so we cannot issue debt sooner.



### PROJECTED RESERVES BALANCE

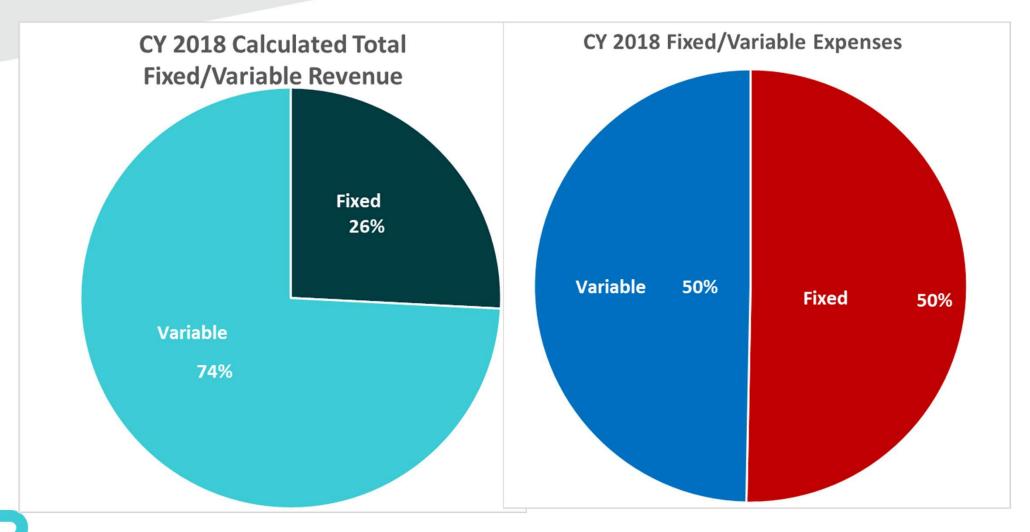


## PROJECTED OPERATING FINANCIAL PLAN





## CURRENT FIXED/ VARIABLE REVENUES AND EXPENSES



The variable rates include recovery of fixed costs so when use drops we cannot fully recover the fixed costs.

#### PROPOSITION 218

- Revenues derived from the fee may not exceed the funds required to provide the service
- The amount of the fee may not exceed the proportional cost of the service attributable to the parcel upon which the fee is imposed
- The fee may not be imposed unless the service is actually used by, or immediately available to, the owner of the property
- Noticing requirements



## COST OF SERVICE ALLOCATION PROCESS AWWA MANUAL M1

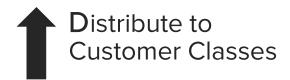
Revenue
Requirement

Functionalize

Functionalized
Revenue
Requirement
Supply, Treatment,
Distribution, Storage

Allocate

Cost of Service by Customer Class

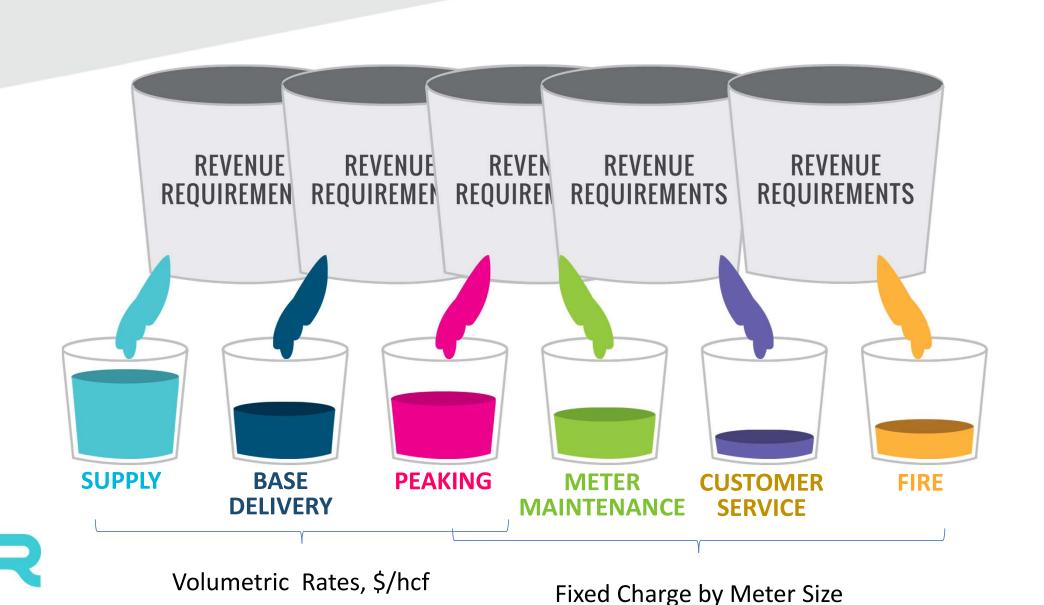


Cost Components

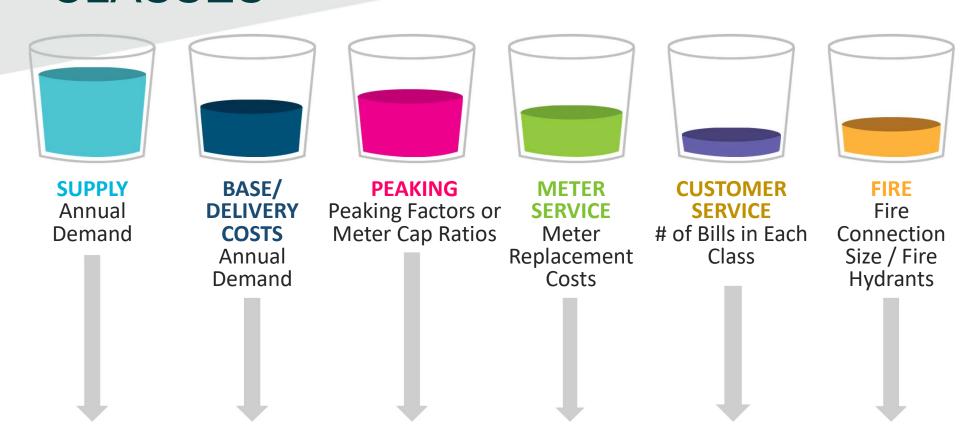
Base, Extra Capacity, Customer, Conservation, Fire



## BASE-EXTRA CAPACITY METHOD AWWA MANUAL M1 6TH EDITION



# SUMMARY: DISTRIBUTE COST COMPONENTS TO CUSTOMER CLASSES

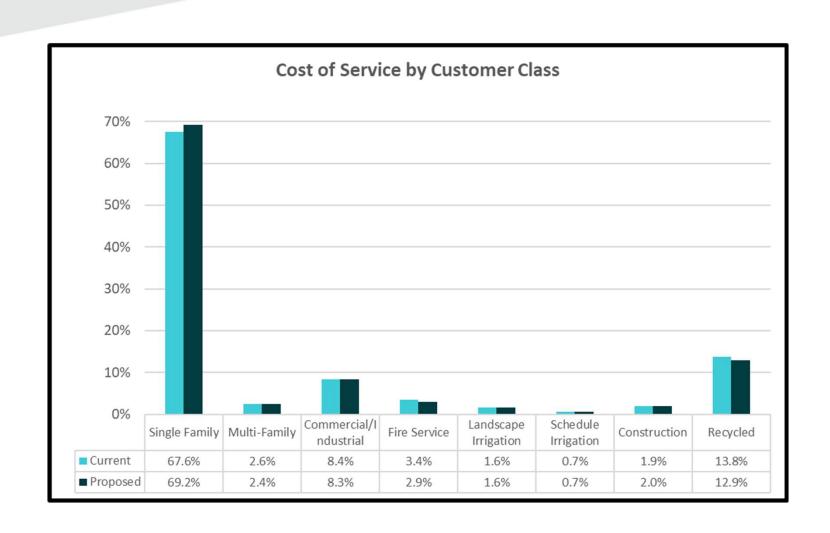


**CUSTOMER CLASSES (Cost to Serve Each Class)** 

(Single Family, Multi-family, Commercial etc.)



### COST OF SERVICE RESULTS



#### PROPOSED STRUCTURES

**Current Bi-Monthly Structure** 

**Proposed Bimonthly Structures** 

Single Family:

Tier 1: 0-44 hcf

Tier 2:> 44 hcf

Multi-Family / account:

Tier 1: 0-35 hcf

Tier 2: >35 hcf

All others: Uniform

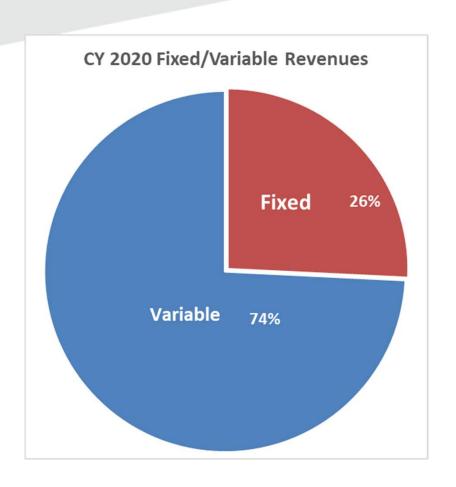
<b>Customer Class</b>	Bi-Monthly Tier Analysis			
Single Family	2-Tiered	3-Tiered	4-Tiered	
Tier 1 16 hcf	44	16	16	
Tier 2 34 hcf	44+	34	34	
Tier 3 34+ hcf		34+	65	
Tier 4			65+	

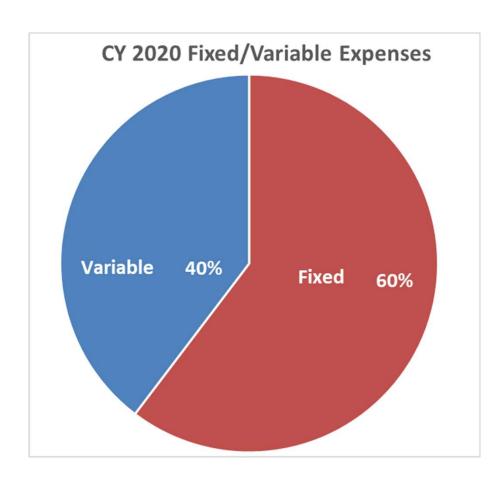
**All others: Uniform** 

34 hcf is annual average usage Use above 65 hcf represents last 10% of use



## PROPOSED FIXED/VARIABLE REVENUES AND EXPENSES







#### RATE STRUCTURE DESIGN

- Retain Current Fixed charge at 26% of rate revenue
  - Increasing fixed rate revenue hurts low volume customers but provides greater revenue stability
- Review 2-Tier, 3-Tier, 4-Tier rate structures for Single Family Residential
- Convert Multi-Family to uniform rates
- All others will remain at uniform rates, the rates will be different for different classes



#### VOLUMETRIC RATE DEVELOPMENT

#### To comply with Prop 218

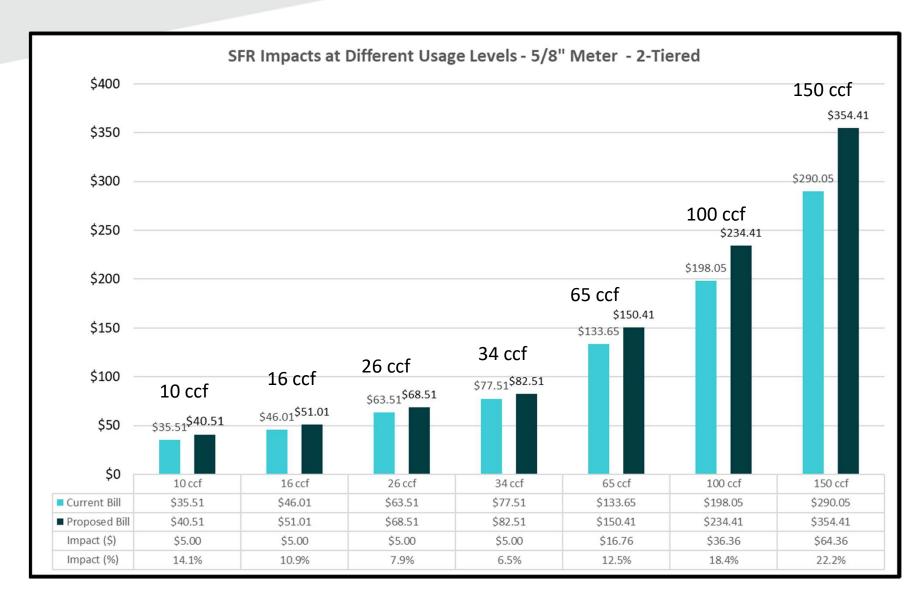
- Volumetric rates are composed of:
  - Supply costs, shown separately
  - Average Delivery costs
  - > Peaking Costs
  - > Pumping costs, shown separately
- Supply costs are average of the different water sources



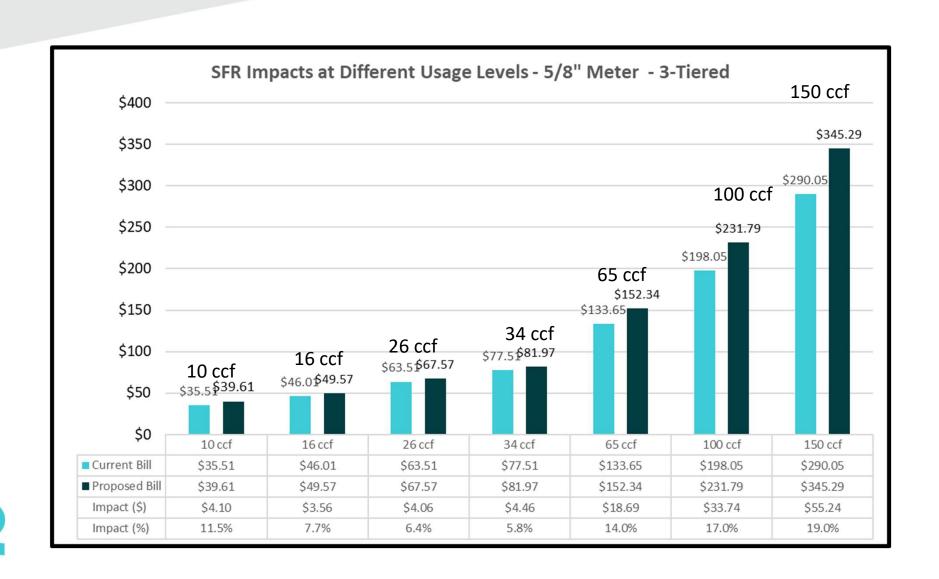
### BI-MONTHLY FIXED METER CHARGE

Bi-Monthly Service Charge	Proposed Charge	Current Charge	Difference (\$)	No of Meters
5/8"	\$23.01	\$18.01	\$5.00	13,686
3/4"	\$31.78	\$27.02	\$4.76	412
1"	\$49.32	\$45.03	\$4.29	4,413
1 1/2"	\$93.18	\$90.06	\$3.12	193
2"	\$145.81	\$144.09	\$1.72	369
3"	\$312.47	\$288.18	\$24.29	1
4"	\$558.07	\$450.28	\$107.79	2
6"	\$1,145.77	\$900.55	\$245.22	-
8"	\$2,461.52	\$1,440.88	\$1,020.64	1
10"	\$3,689.54	\$2,071.27	\$1,618.27	-
12"	\$4,654.42	\$2,791.71	\$1,862.71	-

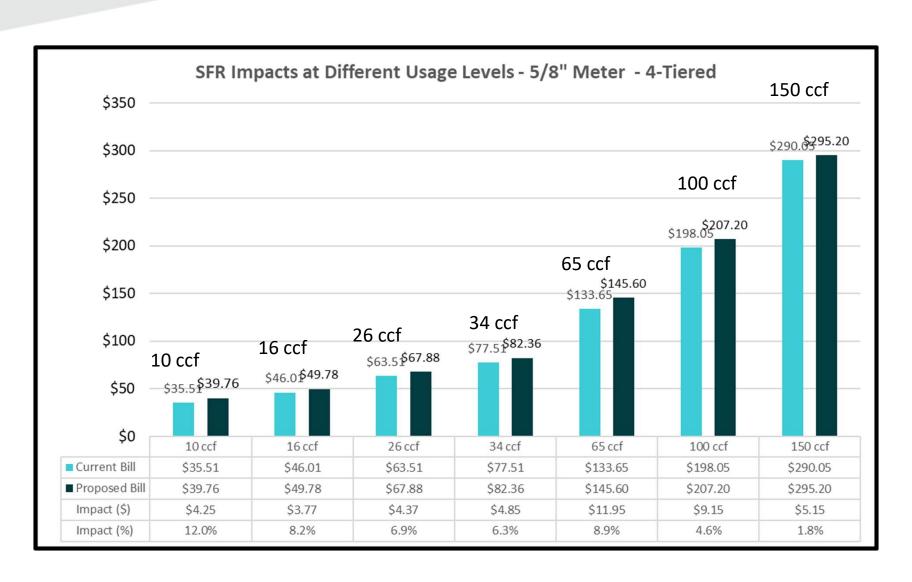
### **BI-MONTHLY SFR IMPACTS: 2-TIER**



### **BI-MONTHLY SFR IMPACTS: 3-TIER**



#### **BI-MONTHLY SFR IMPACTS: 4-TIER**

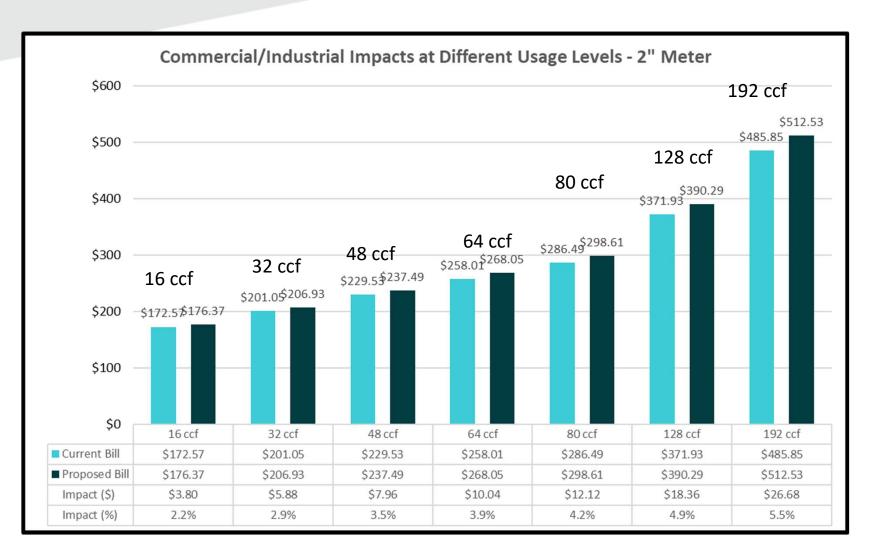


# COMPARISON OF SFR RATE STRUCTURES

2-Tier	3-Tier	4-Tier
Retains Current Rate Structure	Ties the tiers to basic requirements	Ties the tiers to basic requirements
Impacts smaller users	Overall lower impacts than current rate structure	Impacts larger users
	affordability for small	Provides greater affordability for small users



## BI-MONTHLY COMMERCIAL/INDUSTRIAL IMPA©TS



#### DROUGHT RATES

At Declared drought stages, each variable rate will need to be increased to mitigate the loss of rate revenue because reduced sales will not recover the fixed costs included in variable rates

	Use Reduction						
	10%	20%	30%	40%			
2-Tier	\$0.14	\$0.30	\$0.50	\$0.81			
3-Tier	\$0.15	\$0.33	\$0.55	\$0.84			
4 Tier	\$0.15	\$0.33	\$0.55	\$0.83			

State regulations such as AB 1668 and SB 606 will continue to promote conservation as a way of life in CA



#### **NEXT STEPS**

- Finalize water rates
  - > Board direction on preferred rate option
- Prepare water report
- Proposition 218 hearing



# Questions & Discussion

# Thankyou!

#### Contact:

Sudhir Pardiwala – P: 626.583.1894 / E: <a href="mailto:spardiwala@raftelis.com">spardiwala@raftelis.com</a> Lauren Demine - p: 951.376.4405 / E: <a href="mailto:ldemine@raftelis.com">ldemine@raftelis.com</a>



DRAFT 10-31-2019

### Beaumont-Cherry Valley Water District 2019 Water Rate and Fee Study Discussion #2

November 5, 2019

### FINANCIAL PLAN

Overall revenue adjustments for CY 2020 through CY 2024

		10/17		11/7
CY 2020 March	11.0%	12.0%		
CY 2021 January	11.0%		5.9%	
CY 2022 January	11.0%		6.2%	
CY 2023 January	9.5%		6.2%	
CY 2024 January	9.5%		6.2%	

### WHAT CHANGED?

- Pass-through revenues (SGPWA, SCE) were projected at current rates
  - Lower than current costs
  - · Larger adjustment needed overall each subsequent year
  - · Pass-through revenues weren't separated
- Pass-through revenues are adjusted to actual cost in 2020
  - Larger overall increase than previously in first year
  - Subsequent years held at cost, with no projected increases

**BCVWD**Proposed Rate Structures for 2020

Fixed Rates for Service Based on Meter Size (1)									
		Proposed with	Proposed with	Proposed with					
Meter	Current Cost	2-Tier Rate	3-Tier Rate	4-Tier Rate					
Size	(bi-monthly)	(bi-monthly)	(bi-monthly)	(bi-monthly)					
5/8"	18.01	22.39	22.39	22.47					
1"	45.03	47.87	47.86	48.06					
2"	144.09	141.27	141.25	141.87					

	Current	Variable	Proposed			Proposed			Proposed		
	2-Tier	Cost nor	2-Tier		tnor	3-Tier		t nor	4-Tier		st nor
	_	Cost per	_		t per			st per	_		st per
	(ccf)	unit (ccf)	(ccf)	unit	t (ccf)	(ccf)	uni	t (ccf)	(ccf)	un	it (ccf)
Tier 1	44	\$ 0.96	44	\$	0.77	16	\$	0.67	16	\$	0.68
Tier 2	44+	\$ 1.05	44+	\$	1.53	34	\$	0.83	34	\$	0.84
Tier 3						34+	\$	1.38	65	\$	1.11
Tier 4									65+	\$	1.67
SPW Impo			\$ 0.72 \$ 0.37								

- (1) The rates chosen are the most common device sizes within the District boundaries. The full rate study report will list all meter sizes available.
- (2) These rates are dependent on the amount of water that is recorded through the meter on site. Changes in consumption will directly impact the total amount billed.
- (3) Pass thru charge for the State Project Water Importation is evenly applied to all tiers of consumption. This amount is directly impacted by changes to the San Gorgonio Pass Water Agency water supply cost.
- (4) Pass thru charge to recover costs associated with the electricity used to provide service. This charge is evenly applied to all tiers of consumption.

**BCVWD**Proposed Rate Structures for 2021

	Fixed Rates for Service Based on Meter Size (1)								
	Proposed with Proposed with								
Meter	Current Cost	2-Tier Rate	3-Tier Rate	4-Tier Rate					
Size	(bi-monthly)	(bi-monthly)	(bi-monthly)	(bi-monthly)					
5/8"	18.01	24.07	24.07	24.16					
1"	45.03	51.47	51.45	51.67					
2"	144.09	151.87	151.85	152.52					

	Variable Rates for Single Family Residential Service (2)								
	Current		<b>Proposed</b>		Proposed		<b>Proposed</b>		
	2-Tier	Cost per	2-Tier	Cost per	3-Tier	Cost per	4-Tier	Cost pe	er
	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (co	cf)
Tier 1	44	\$ 0.96	44	\$ 0.83	16	\$ 0.73	16	\$ 0.7	74
Tier 2	44+	\$ 1.05	44+	\$ 1.65	34	\$ 0.90	34	\$ 0.9	91
Tier 3					34+	\$ 1.49	65	\$ 1.2	20
Tier 4							65+	\$ 1.8	30

**BCVWD**Proposed Rate Structures for 2022

	Fixed Rates for Service Based on Meter Size (1)								
		Proposed with							
Meter	Current Cost	2-Tier Rate	3-Tier Rate	4-Tier Rate					
Size	(bi-monthly)	(bi-monthly)	(bi-monthly)	(bi-monthly)					
5/8"	18.01	25.88	25.88	25.98					
1"	45.03	55.34	55.31	55.55					
2"	144.09	163.27	163.24	163.96					

Variable Rates for Single Family Residential Service (2)								
	Current		Proposed		Proposed		Proposed	
	2-Tier	Cost per	2-Tier	Cost per	3-Tier	Cost per	4-Tier	Cost per
	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)
Tier 1	44	\$ 0.96	44	\$ 0.90	16	\$ 0.79	16	\$ 0.80
Tier 2	44+	\$ 1.05	44+	\$ 1.78	34	\$ 0.97	34	\$ 0.98
Tier 3					34+	\$ 1.61	65	\$ 1.29
Tier 4							65+	\$ 1.94

**BCVWD**Proposed Rate Structures for 2023

	Fixed Rates for Service Based on Meter Size (1)								
		Proposed with							
Meter	Current Cost	2-Tier Rate	3-Tier Rate	4-Tier Rate					
Size	(bi-monthly)	(bi-monthly)	(bi-monthly)	(bi-monthly)					
5/8"	18.01	27.83	27.83	27.93					
1"	45.03	59.50	59.46	59.72					
2"	144.09	175.52	175.49	176.26					

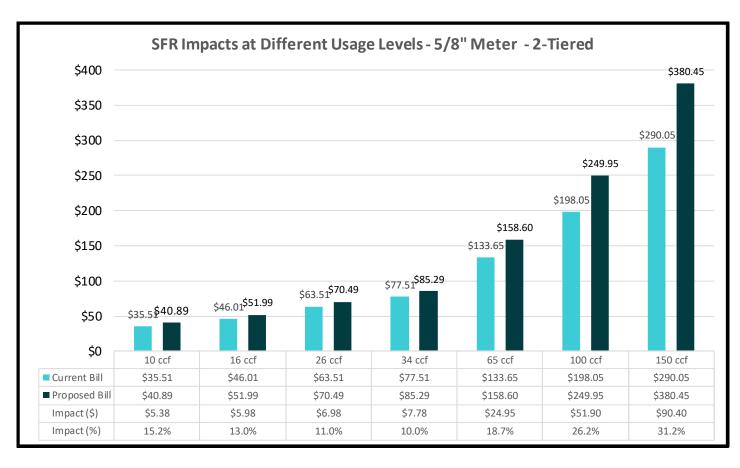
Variable Rates for Single Family Residential Service (2)								
	Current		<b>Proposed</b>		<b>Proposed</b>		<b>Proposed</b>	
	2-Tier	Cost per	2-Tier	Cost per	3-Tier	Cost per	4-Tier	Cost per
	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)
Tier 1	44	\$ 0.96	44	\$ 0.97	16	\$ 0.85	16	\$ 0.86
Tier 2	44+	\$ 1.05	44+	\$ 1.92	34	\$ 1.05	34	\$ 1.06
Tier 3					34+	\$ 1.74	65	\$ 1.39
Tier 4							65+	\$ 2.09

**BCVWD**Proposed Rate Structures for 2024

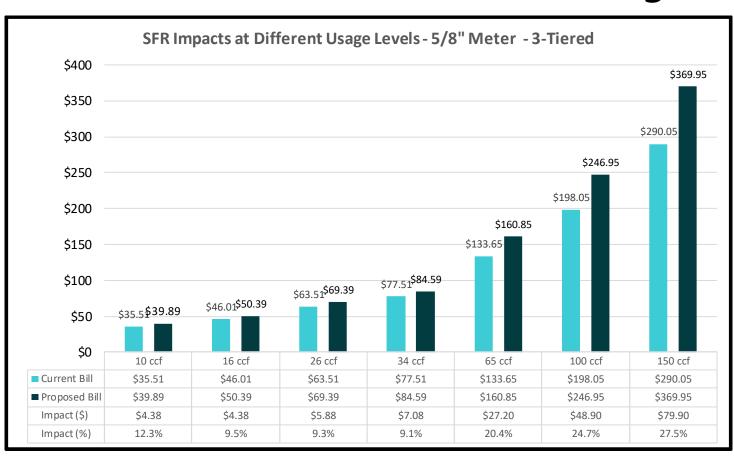
	Fixed Rates for Service Based on Meter Size (1)								
	Proposed with Proposed with								
Meter	Current Cost	2-Tier Rate	3-Tier Rate	4-Tier Rate					
Size	(bi-monthly)	(bi-monthly)	(bi-monthly)	(bi-monthly)					
5/8"	18.01	29.92	29.92	30.03					
1"	45.03	63.97	63.92	64.20					
2"	144.09	188.69	188.66	189.48					

Variable Rates for Single Family Residential Service (2)										
	Current		<b>Proposed</b>		Proposed	l	Proposed			
	2-Tier	Cost per	2-Tier	Cost per	3-Tier	Cost per	4-Tier	Cos	st per	
	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	unit (ccf)	(ccf)	uni	t (ccf)	
Tier 1	44	\$ 0.96	44	\$ 1.05	16	\$ 0.92	16	\$	0.93	
Tier 2	44+	\$ 1.05	44+	\$ 2.07	34	\$ 1.13	34	\$	1.14	
Tier 3					34+	\$ 1.88	65	\$	1.50	
Tier 4							65+	\$	2.25	

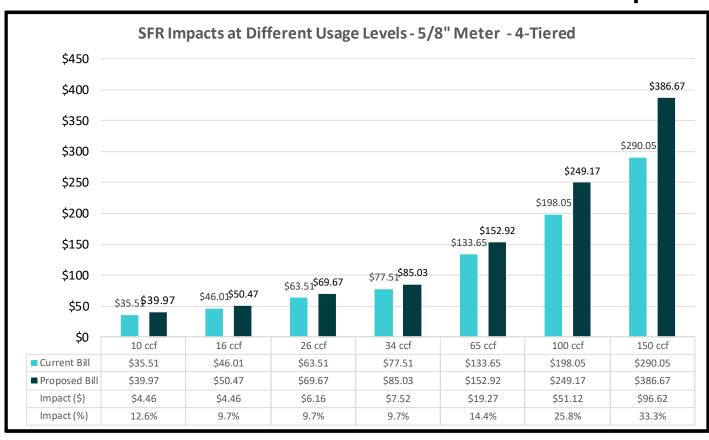
#### 2020 BI-MONTHLY SFR IMPACTS: 2-TIER



### 2020 BI-MONTHLY SFR IMPACTS: 3-TIER



### 2020 BI-MONTHLY SFR IMPACTS: 4-TIER



# Beaumont Cherry Valley Water District

Water Financial Plan and Utility Rate Study

Board of Directors Meeting—January 7, 2020





### Agenda

- California Legal Requirements
- Financial Plan
- Rates
- Bill Impacts
- Next Steps



### Proposition 218 Requirements

- An agency cannot collect revenue beyond what is necessary to provide service.
- 2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed.
- 3. The amount of the fee may not exceed the proportional cost of service for the parcel.
- 4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
- 5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.



### Financial Plan



# Proposed Water Financial Plan – Reserves Policy

Reserve	Policy			
Onematina	Minimum: 90 days			
Operating	Target: 180 days			
Capital Replacement	5-Year Average CIP			
Emergency	15% of Annual Operating Expenses			
Debt Service Reserve	One Year of Debt Service			



### Financial Plan Summary (\$ Millions)

ltem	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Total Revenue	\$14.76	\$15.77	\$16.66	\$17.63	\$18.64
Potable Water Purchases	4.34	4.37	4.50	4.62	4.73
Non-Potable Water Purchases	1.02	0.89	0.92	0.96	0.99
Operations and Maintenance	9.10	9.81	10.05	10.42	10.65
New Proposed Debt	0.00	0.00	0.39	0.39	0.39
Rate Funded CIP	<u>7.58</u>	<u>8.95</u>	0.77	<u>2.44</u>	2.06
Total Expenses	22.04	24.02	16.62	18.82	18.82
Net Cashflow	-7.28	-8.26	0.04	-1.19	-0.18
Combined Ending Operating and Capital Reserve Balance	\$17.8	\$9.5	\$9.4	\$8.2	\$7.9

### Revenue Adjustments Summary

Percentage Revenue Increases	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Rate Revenue Adjustments (not including purchased water and power costs)	1.0%	7.0%	7.0%	7.0%	7.0%
Pass-Thru Adjustments (include purchase water and power)	28.1% (Note 1)	4.6%	2.9%	2.9%	2.6%
Overall Percentage Increase	10.1%	7.4%	6.3%	6.3%	6.1%

Note 1: San Gorgonio Pass Water Agency increase from \$317/AF to \$399/AF

### Rate Funded Capital

Line		CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
No.	Α	В	С	D	E	F	G
1	Percent of CIP to Fund	<b>75%</b>	<b>75</b> %	<b>75</b> %	<b>75</b> %	<b>75%</b>	<b>75</b> %
2	Capital Replacement Projects						
3	Potable Infrastructure Projects	\$147,768	\$3,425,346	\$4,370,885	\$4,029,278	\$576,431	\$569,890
4	Non-Potable Infrastructure Projects	\$0	\$0	\$0	\$0	\$0	\$0
5	Potable Pipeline Replacement Projects	\$33,914	\$1,712,142	\$2,612,590	\$835,641	\$660,376	\$683,643
6	IT Infrastructure Projects	\$242,369	\$1,306,730	\$1,076,988	\$948,417	\$1,028,460	\$803,716
7	Aministrative Projects & Acquisitions	\$10,827	\$147,160	\$28,633	\$30,246	\$0	\$0
8	Vehicle and Equipment Acquisitions	\$87,478	\$62,859	\$120,453	\$270,951	\$0	\$0
9	Engineering and Operations Center (EOC)	\$0	\$750,000	\$570,000	\$0	\$0	\$0
10	Disaster Preparedness Equipment	\$0	\$174,800	\$174,800	\$174,800	\$174,800	\$0
11	Subtotal Capital Replacement Projects	\$522,356	\$7,579,036	\$8,954,349	\$6,289,333	\$2,440,067	\$2,057,249



### Water Rates

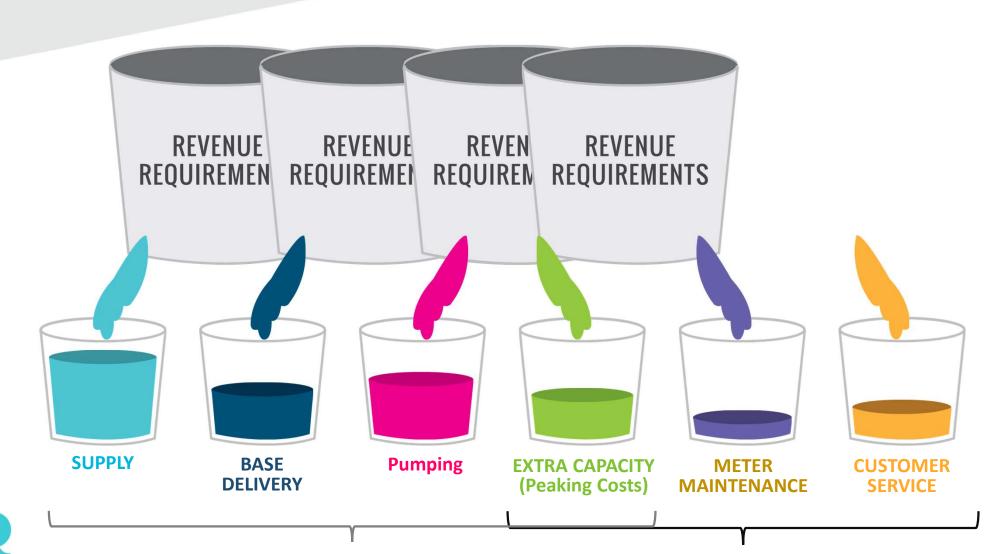
### Water Rate Objectives and Recommendation

- Update fixed charges
- Two tier to three tier rate structure with revised breakpoints for Single-Family Residential (SFR)
  - Revise tiers to reflect District customer water demand patterns
- Uniform rate for Multi-Family Residential (MFR)
- Uniform rate for non-residential and irrigation customers
- Maintain current split of fixed and variable water revenues, approximately 25/75



#### Cost of Service Evaluation

Allocation to Cost Components



### CY 2020 Customer Class COS

Customer Class	CY 2020 Revenue at Existing Rates	CY 2020 COS	Difference
Single Family	\$8,438,536	\$9,433,779	11.8%
Multi-Family	317,469	329,109	3.7%
Commercial/Industrial	1,034,676	1,134,896	9.7%
Fire Service	433,723	418,371	-3.5%
Landscape Irrigation	201,921	221,357	9.6%
Schedule Irrigation	88,167	94,523	7.2%
Construction	237,416	268,700	13.2%
Non-Potable	<u>1,785,873</u>	<u>1,790,205</u>	0.2%
Total System	\$12,537,781	\$13,690,939	

### Water Commodity Rates-Single-Family Residential (SFR) Tiers

	Bi-Monthly Tier Breakpoint (ccf)							
SFR	Current	3-Tiered						
Tier 1	44	16						
Tier 2	44+	34						
Tier 3		34+						



### Water Commodity Rates

<b>Customer Class</b>	Proposed Bi-Monthly Tiers (ccf)	Current Charge	March 2020	January 2021	January 2022	January 2023	January 2024
Single Family							
Tier 1	16	\$0.96	\$0.66	\$0.71	\$0.76	\$0.82	\$0.88
Tier 2	34	\$1.05	\$0.81	\$0.87	\$0.94	\$1.01	\$1.09
Tier 3	34+		\$1.36	\$1.46	\$1.57	\$1.68	\$1.80
Multi-Family							
Tier 1	Uniform	\$0.96	\$1.01	\$1.09	\$1.17	\$1.26	\$1.35
Tier 2	Omiomi	\$0.98	\$0.98	Ş1.0 <i>3</i>	<b>Ş1.17</b>	Ş1.20	Ş1.33
<b>Commercial/Industrial</b>	Uniform	\$0.99	\$0.95	\$1.02	\$1.10	\$1.18	\$1.27
Fire Service	Uniform	\$0.99	\$1.17	\$1.26	\$1.35	\$1.45	\$1.56
Landscape Irrigation	Uniform	\$1.15	\$1.06	\$1.14	\$1.22	\$1.31	\$1.41
Schedule Irrigation	Uniform	\$1.01	\$1.06	\$1.14	\$1.22	\$1.31	\$1.41
Construction	Uniform	\$1.15	\$1.17	\$1.26	\$1.35	\$1.45	\$1.56
Non-Potable	Uniform	\$1.15	\$0.72	\$0.96	\$0.96	\$0.98	\$0.98
State Project Water (SGPV	VA)	\$0.46	\$0.72	Pass-Through	Pass-Through	Pass-Through	Pass-Through
SCE Power Charge (Pumpi	ng)	\$0.33	\$0.32	Pass-Through	Pass-Through	Pass-Through	Pass-Through
Non-potable Water Suppl	у	\$0.46	\$0.93	Pass-Through	Pass-Through	Pass-Through	Pass-Through
Non-potable Water Powe	r	\$0.33	\$0.31	Pass-Through	Pass-Through	Pass-Through	Pass-Through



### Bi-Monthly Meter Fixed Charges

	Current	March	January	January	January	January
Meter Size	Charge	2020	2021	2022	2023	2024
5/8"	\$18.01	\$22.58	\$24.17	\$25.87	\$27.69	\$29.63
3/4"	\$27.02	\$31.13	\$33.31	\$35.65	\$38.15	\$40.83
1"	\$45.03	\$48.24	\$51.62	\$55.24	\$59.11	\$63.25
1 1/2"	\$90.06	\$91.01	\$97.39	\$104.21	\$111.51	\$119.32
2"	\$144.09	\$142.33	\$152.30	\$162.97	\$174.38	\$186.59
3"	\$288.18	\$304.84	\$326.18	\$349.02	\$373.46	\$399.61
4"	\$450.28	\$544.34	\$582.45	\$623.23	\$666.86	\$713.55
6"	\$900.55	\$1,117.43	\$1,195.66	\$1,279.36	\$1,368.92	\$1,464.75
8"	\$1,440.88	\$2,400.46	\$2,568.50	\$2,748.30	\$2,940.69	\$3,146.54
10"	\$2,071.27	\$3,597.95	\$3,849.81	\$4,119.30	\$4,407.66	\$4,716.20
12"	\$2,791.71	\$4,538.84	\$4,856.56	\$5,196.52	\$5,560.28	\$5,949.50



### Monthly Fire Service Charges

	Current	March	January	January	January	January
Fire Meter Size	Charge	2020	2021	2022	2023	2024
4"	\$51.82	\$44.25	\$47.35	\$50.67	\$54.22	\$58.02
6"	\$150.53	\$118.12	\$126.39	\$135.24	\$144.71	\$154.84
8"	\$320.79	\$245.52	\$262.71	\$281.10	\$300.78	\$321.84
10"	\$576.89	\$437.17	\$467.78	\$500.53	\$535.57	\$573.06
12"	\$931.84	\$702.78	\$751.98	\$804.62	\$860.95	\$921.22

Customer Class	Bi-Monthly	March	January	January	January	January
	Tiers (ccf)	2020	2021	2022	2023	2024
Fire Service	Uniform	\$1.17	\$1.26	\$1.35	\$1.45	\$1.56

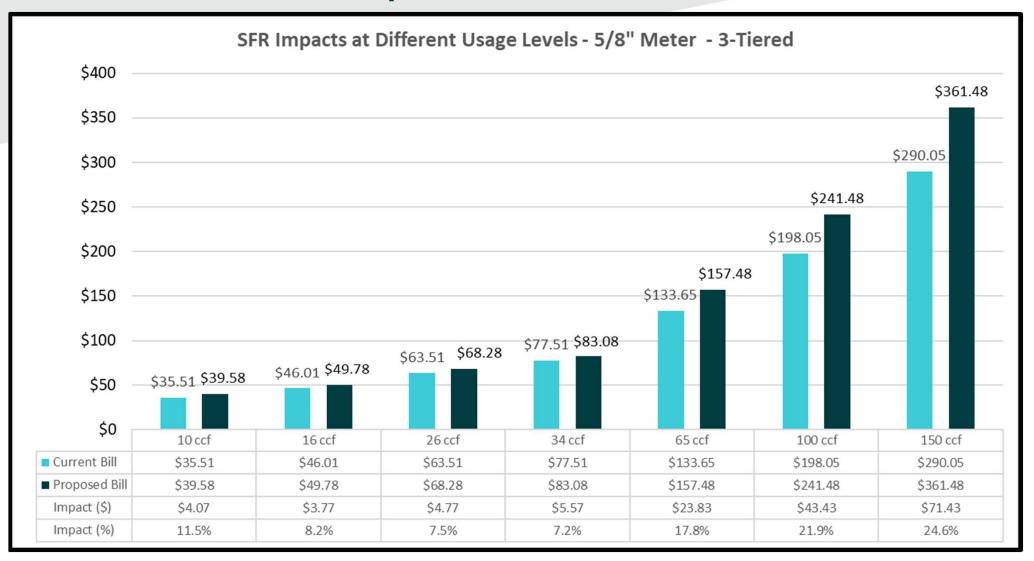
State Project Water (SGPWA)
SCE Power Charge (Pumping)

\$0.72 Pass-Through Pass-Through Pass-Through \$0.32 Pass-Through Pass-Through Pass-Through Pass-Through

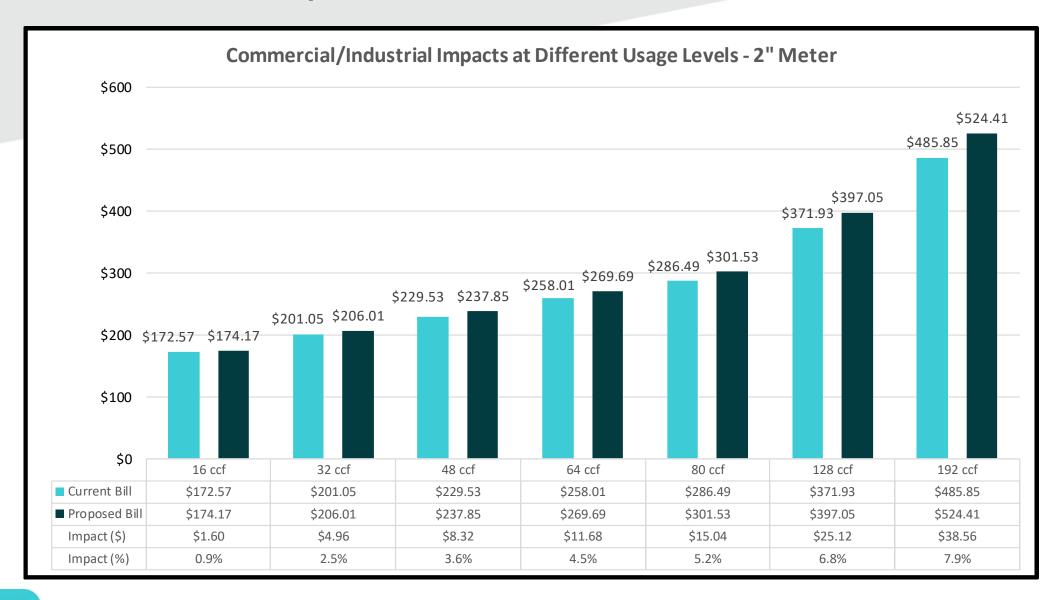


# Bill Impacts

### Water Bill Impacts – SFR 5/8" Meter



### Water Bill Impacts – Commercial 2" Meter



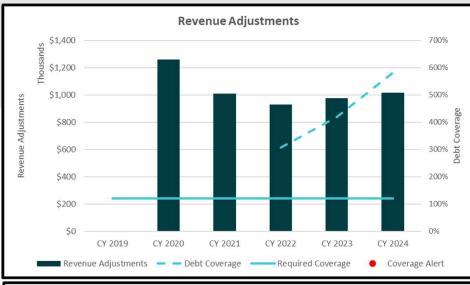
#### **Next Steps**

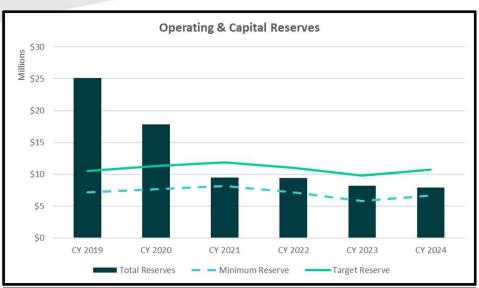
- Town Hall Meeting
  - > February 20, 2020
- Public Hearing
  - > February 27,2020
- Rates Effective March 1, 2020

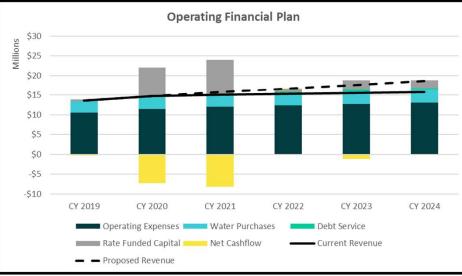


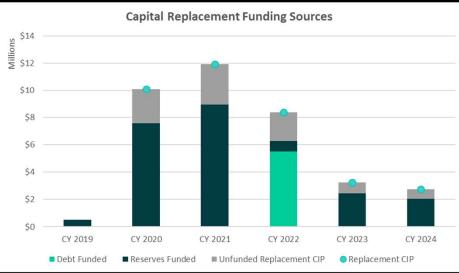


#### Water Financial Plan









## Beaumont Cherry Valley Water District

**Proposed Water Rate Changes** 

**Public Hearing** 

February 27, 2020





#### Overview

- What your water rates pay for
- Why water rate changes are needed
- Overview of the rate study process
- How the District developed the proposed rates
- Proposed water rate changes
- Keeping rates as low as good service allows
- Customer bill impact analysis over the rate study period
  - > 5/8" Meter, 34 hcf
  - > 1" Meter, 34 hcf



#### What Your Water Rates Pay For

- How many customers pay a utility bill?
  - > 17,695 Single Family Residential Customers
  - > 159 Multi-Family Residential Customers
  - > 561 Commercial Customers
  - > 143 Irrigation Customers
  - 300 Non-potable Customers
- Water utility is funded entirely by the money it receives from the water rates on utility bills sent to customers
- Water utility is an enterprise fund—it does not receive money from taxes
- The water rates you pay on your utility bill fund all the operating costs and the infrastructure investments for the District's water system



#### WHY DO WE NEED INCREASES

- Last Rate Study was performed by Willdan in 2010
  - Study period expired in 2015
- Rates were last adjusted in January of 2012.
  - The Los Angeles- All Urban Consumers CPI increased by over 15% during the period of 2012 through 2019
- Pass Agency water rates increased from \$317 to \$399 per AF on May 1, 2019,
  - > An increase of 26%,
- Due to mandated drought restrictions, District operating revenues did not keep pace proportionally with operating expenses
- The District has reorganized to meet growing community needs and costs to provide service
- The District has planned Capital replacement expenses of \$36 million in the upcoming five year period



#### STUDY OBJECTIVES

- Recover projected operating and capital costs in the next 5 years
- Finalize 5-year water financial plan
  - > Proposed revenue adjustments
  - > Review reserves
  - > Propose debt funding
- Perform cost of service analysis
- Develop proposed water rates
- Review impacts



#### Proposition 218 Requirements

- An agency cannot collect revenue beyond what is necessary to provide service.
- 2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed.
- 3. The amount of the fee may not exceed the proportional cost of service for the parcel.
- 4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
- 5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.



#### Terms You Will Hear Tonight

- Rate Study The process of determining proposed future water rates
- Revenue The amount of money the District receives from water rates
- Cost of Service The utility's cost to provide water service to each customer class based on the demands they place on the utility
- Customer Class Single Family Residential, Multifamily,
   Commercial/Industrial, Irrigation, and Non-Potable
- Meter size Meters track water usage at the property; the size is determined by it's supply line. Most residential meters are 5/8"
- Volumetric rate The amount charged per unit of water used
- Fixed charge The amount charged by meter size (not vary by water use)
- Uniform rate structure Charging the same amount per unit of water used, regardless of how much water is used
- Tiered rate structure Pricing water so that the cost per unit increases as consumption increases
- hcf The unit of measure the District uses to charge for water. hcf = 100 cubic feet = 748 gallons. This is a commonly used billing unit in California.

# Overview of the Rate Study Process

#### Rate Study Process

Step 1:

Financial Planning

How much rate revenue is required from all customers?

Step 2:

Cost of Service Study

How much should each customer class pay given the costs they impose on the system?

Step 3:

Rate Design

What rates should each customer class pay to recover their cost of service?



## Step 1: Financial Planning A Multi-Year Financial Roadmap

#### Inputs:

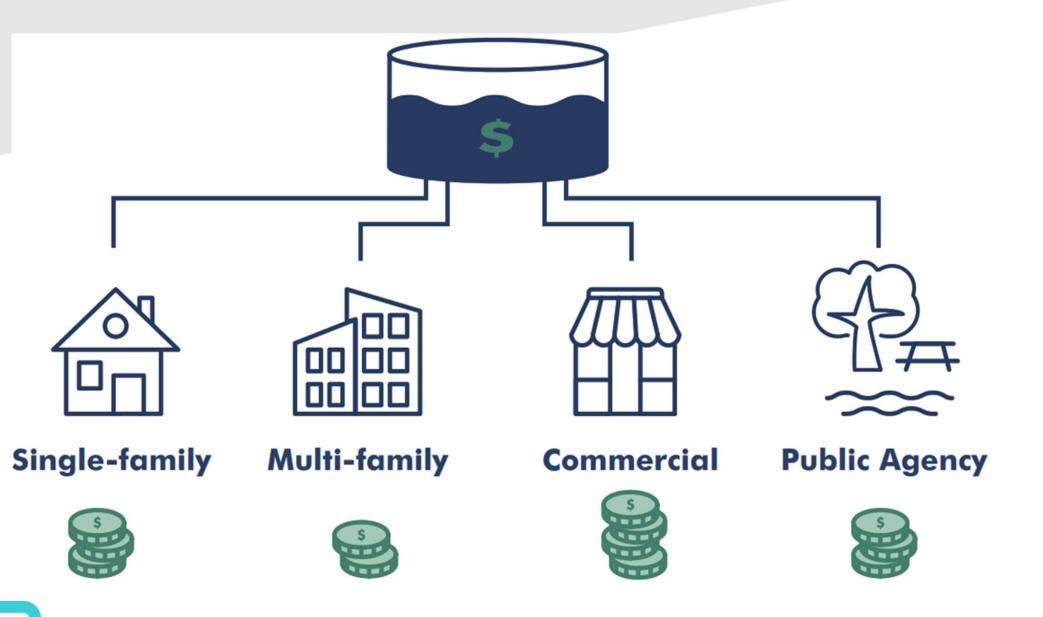
- Customer Account Growth
- Customer Billed Consumption
- Water Supply Costs
- O&M Expenses
- Capital Improvement Expenditures
- Capital Financing Strategy
- Debt Service
- Cash Reserves
- Debt Service Coverage Ratios

#### Outputs:

- Projected
   Annual %
   Rate Revenue
   Increases
- Amount of
   Rate Revenue
   Required to
   Fund
   Operations



#### Step #2: Cost of Service Study



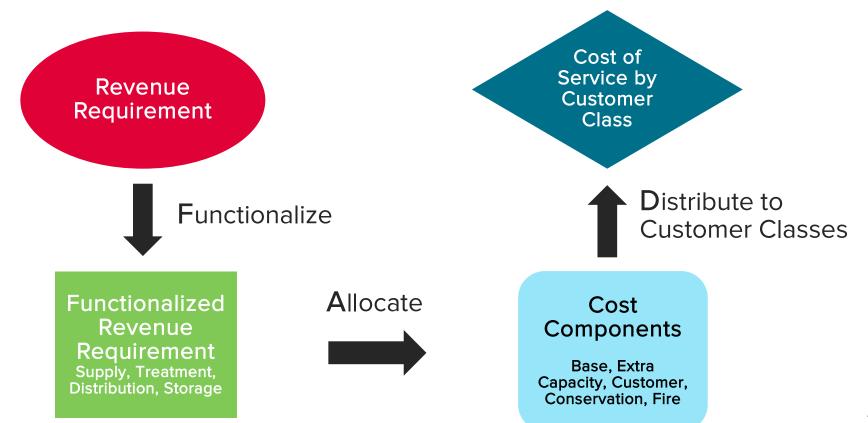
## Why is a Cost of Service Study Necessary?

- Different types of customers generate different costs because their usage characteristics vary
- Cost of service matches rate revenue recovery to the costs incurred by the utility to provide service
- Each customer class "pays its own way"
- Maximizes fairness and equity
- Eliminates cross subsidies between customer classes



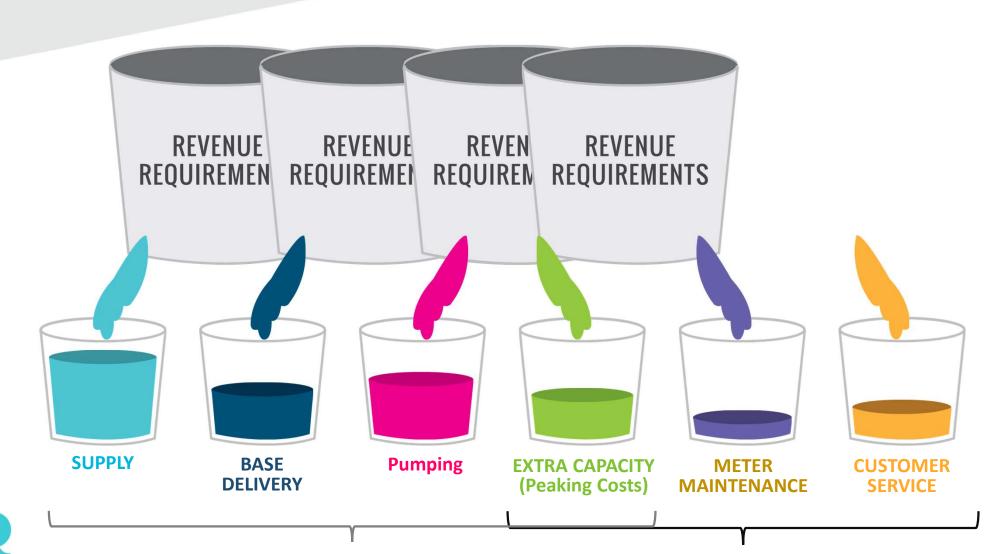
#### Cost of Service Study Guidelines

- Industry Standards
  - American Water Association publication, <u>Manual of</u> <u>Water Supply Practices M1, Principles of Water Rates,</u> <u>Fees, and Charges</u>, Seventh Edition



#### Cost of Service Evaluation

Allocation to Cost Components



#### Step #3: Rate Design

- How should the cost of service be recovered from each customer class?
  - Volumetric rates (rates based on customer usage)
  - Fixed charges (monthly charges that do not vary with usage)
  - > Considerations:
    - Utility pricing objectives
    - Proposition 218 compliance
      - Rates in each consumption Tier must be cost based



## Water Rate Objectives & Recommendations

- Update fixed charges
- Two tier to three tier rate structure with revised breakpoints for Single-Family Residential (SFR)
  - Revise tiers to reflect District customer water demand patterns
- Uniform rate for Multi-Family Residential (MFR)
- Maintain uniform rate for non-residential and irrigation customers
- Maintain current split of fixed and variable water revenues, approximately 25/75



#### Water Commodity Rates-Single-Family Residential (SFR) Tiers

	Bi-Monthly Tier Breakpoint (ccf)			
SFR	Current	3-Tiered		
Tier 1	44	16		
Tier 2	44+	34		
Tier 3		34+		



#### Proposed Bi-Monthly Meter Fixed Charges

Meter Size	Current Fixed Charge	March 2020	January 2021	January 2022	January 2023	January 2024
5/8"	\$18.01	\$22.58	\$24.17	\$25.87	\$27.69	\$29.63
3/4"	\$27.02	\$31.13	\$33.31	\$35.65	\$38.15	\$40.83
1"	\$45.03	\$48.24	\$51.62	\$55.24	\$59.11	\$63.25
1 1/2"	\$90.06	\$91.01	\$97.39	\$104.21	\$111.51	\$119.32
2"	\$144.09	\$142.33	\$152.30	\$162.97	\$174.38	\$186.59
3"	\$288.18	\$304.84	\$326.18	\$349.02	\$373.46	\$399.61
4"	\$450.28	\$544.34	\$582.45	\$623.23	\$666.86	\$713.55
6"	\$900.55	\$1,117.43	\$1,195.66	\$1,279.36	\$1,368.92	\$1,464.75
8"	\$1,440.88	\$2,400.46	\$2,568.50	\$2,748.30	\$2,940.69	\$3,146.54
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12"	\$2,791.71	\$4,538.84	\$4,856.56	\$5,196.52	\$5,560.28	\$5,949.50



#### Proposed Volumetric Rates

_							
Customer Class	Proposed Bimonthly Tiers (hcf)	Current Rate (\$/hcf)	March 2020	January 2021	January 2022	January 2023	January 2024
Single-Family Residential							
Tier 1	16	\$0.96	\$0.66	\$0.71	\$0.76	\$0.82	\$0.88
Tier 2	34	\$1.05	\$0.81	\$0.87	\$0.94	\$1.01	\$1.09
Tier 3	34+		\$1.36	\$1.46	\$1.57	\$1.68	\$1.80
Multi-Family Residential							
Tier 1	Uniform	\$0.96	\$1.01	\$1.09	\$1.17	\$1.26	\$1.35
Tier 2		\$0.98					
Commercial/Industrial	Uniform	\$0.99	\$0.95	\$1.02	\$1.10	\$1.18	\$1.27
Fire Service	Uniform	\$0.99	\$1.17	\$1.26	\$1.35	\$1.45	\$1.56
Landscape Irrigation	Uniform	\$1.15	\$1.06	\$1.14	\$1.22	\$1.31	\$1.41
Schedule Irrigation	Uniform	\$1.01	\$1.06	\$1.14	\$1.22	\$1.31	\$1.41
Construction	Uniform	\$1.15	\$1.17	\$1.26	\$1.35	\$1.45	\$1.56
Non-potable	Uniform	\$1.15	\$0.72	\$0.96	\$0.96	\$0.98	\$0.98
State Project Water (SGPWA)	Uniform	\$0.46	\$0.72	Pass-Through	Pass-Through	Pass-Through	Pass-Through
SCE Power Charge	Uniform	\$0.33	\$0.32	Pass-Through	Pass-Through	Pass-Through	Pass-Through
Non-potable Water Supply	Uniform	\$0.46	\$0.93	Pass-Through	Pass-Through	Pass-Through	Pass-Through
Non-potable Water Power	Uniform	\$0.33	\$0.31	Pass-Through	Pass-Through	Pass-Through	Pass-Through



#### **DROUGHT RATES**

- At declared drought stages, the variable rate will be increased to mitigate the loss of rate revenue
  - Reduced sales will not recover the fixed costs included in variable rates

	Water Shortage Conditions			
	Stage 1	Stage 2	Stage 3	Stage 4
% Reduction	10%	20%	30%	40%
<b>Drought Rate Increase</b>	\$0.17	\$0.36	\$0.60	\$0.92

 State regulations such as AB 1668 and SB 606 will continue to promote conservation as a way of life in CA



## Keeping Rates as Low as Good Service Allows



#### Keeping Rates as Low as Good Service Allows

Affordability is a major consideration and concern, here's how the District is working to keep rates as low as good service allows:

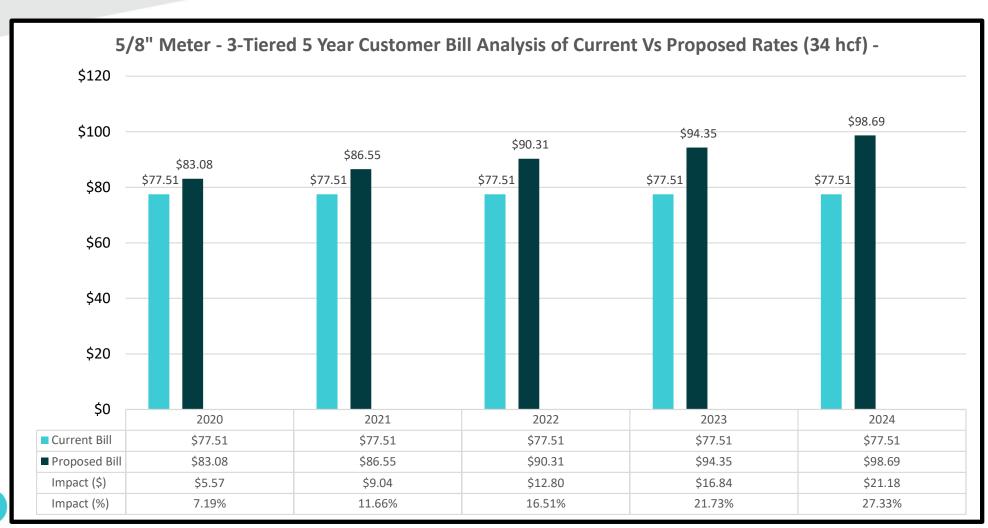
- Using reserves the District will use cash reserves to offset operating and capital expenses
- Spreading out infrastructure projects over a longer time
- Issuing debt to spread the recovery of capital costs over a longer time horizon
- Adjusting the current rate structure to three tiers:
  - Promotes affordability for customers that use lower amounts of water (< 16 hcf, about 64% of single-family customers)
  - > Promotes conservation and efficient water use



# Customer Bill Impacts

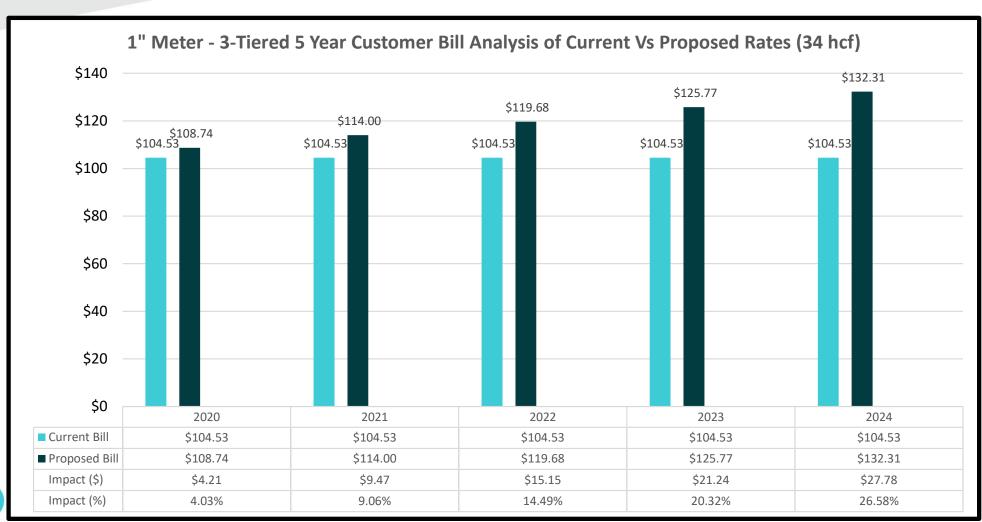
#### Customer Bill Impacts – SFR 5/8" Meter

- 5/8" meters account for approximately 72% of all meters
- 34 hcf average usage per bi-monthly period accounts for approximately 71% of all annual Single-Family Residential (SFR) usage



#### Customer Bill Impacts – SFR 1" Meter

- 1" meters account for approximately 23% of all meters
- 34 hcf average usage per bi-monthly period accounts for approximately 71% of all annual SFR usage





#### **ATTACHMENT 6**

#### **Table of Board Actions and Links to Documents**

Below, please find links to the background / historical information related to the 2019 Water Financial Plan and Utility Rate Study prepared by Raftelis, and the approval action by the Board in January, 2020. All of this information is available to the public on the District's website for full transparency.

1	2019 Water Financial Plan and Utility Rate Study	approved by the Board on 02/27/2020			
	https://bcvwd.gov/wp-content/uploads/2020/01/2019-Water-Rate	e-Study.pdf			
2	<b>Resolution 2020-02</b> : Resolution of Intent to Increase Rates and Charges for the Users of the District's Water Services and Systems	approved by the Board on 01/07/2020			
	https://bcvwd.gov/wp-content/uploads/2020/01/2020-02.pdf				
3	Regular Meeting Minutes – Jan. 7, 2020 See Item 4				
	https://bcvwd.gov/wp-content/uploads/2020/02/2020-01-07-Spe	cial-Meeting-Minutes.pdf			
4	Staff Report: Special Board Meeting Jan. 7, 2020 See Agenda Item 4 starting on page 70 of the packet				
	https://bcvwd.gov/wp-content/uploads/2020/01/2020-01-07-Special-Meeting-Agenda.pdf				
5	<b>Resolution 2020-04</b> : Amending Part 5 of the District's Rules and Regulations Governing Water Service Rates, Fees and Charges	approved by the Board on 02/27/2020			
	https://bcvwd.gov/wp-content/uploads/2020/02/2020-4.pdf				
6	Regular Meeting Minutes – Feb. 27, 2020 See Item 1				
	https://bcvwd.gov/wp-content/uploads/2020/02/2020-02-27-Wor	kshop-Minutes.pdf			
7	Staff Report: Regular Board Meeting Feb. 27, 2020 See Agenda Item 1 starting on page 4 of the packet				
	https://bcvwd.gov/wp-content/uploads/2020/02/2020-02-27-Regular-Meeting-Agenda.pdf				

The initiation of proceedings and updates can be followed through these 2019 meeting minutes:

8	Meeting Minutes: Regular Board Meeting May 8, 2019 Approval of professional services agreement with Raftelis				
	https://bcvwd.gov/wp-content/uploads/2019/04/2019-05-08-Reg	ular-Meeting-Minutes.pdf			
9	Meeting Minutes: Regular Board Meeting Oct. 17, 2019 Raftelis preliminary findings, round 1				
	https://bcvwd.gov/wp-content/uploads/2019/10/2019-10-17-Regular-Meeting-Minutes.pdf				
10	Meeting Minutes: Regular Board Meeting Nov. 5, 2019 Raftelis preliminary findings, round 2				
	https://bcvwd.gov/wp-content/uploads/2019/11/2019-11-05-Regular-Meeting-Minutes.pdf				