

PALMDALE WATER DISTRICT

PUBLIC HEARING – OCTOBER 28, 2019

Presentation of Study Process and Recommended Rate
Adjustments for CY 2020 – CY 2024

AGENDA

- Purpose of Study
- Water Today
- Process of Rate Study
- Revenue Requirements
- Recommended Rate Adjustments
- Customer Bill Impacts



PURPOSE OF STUDY

Establish water rates that achieve objectives of

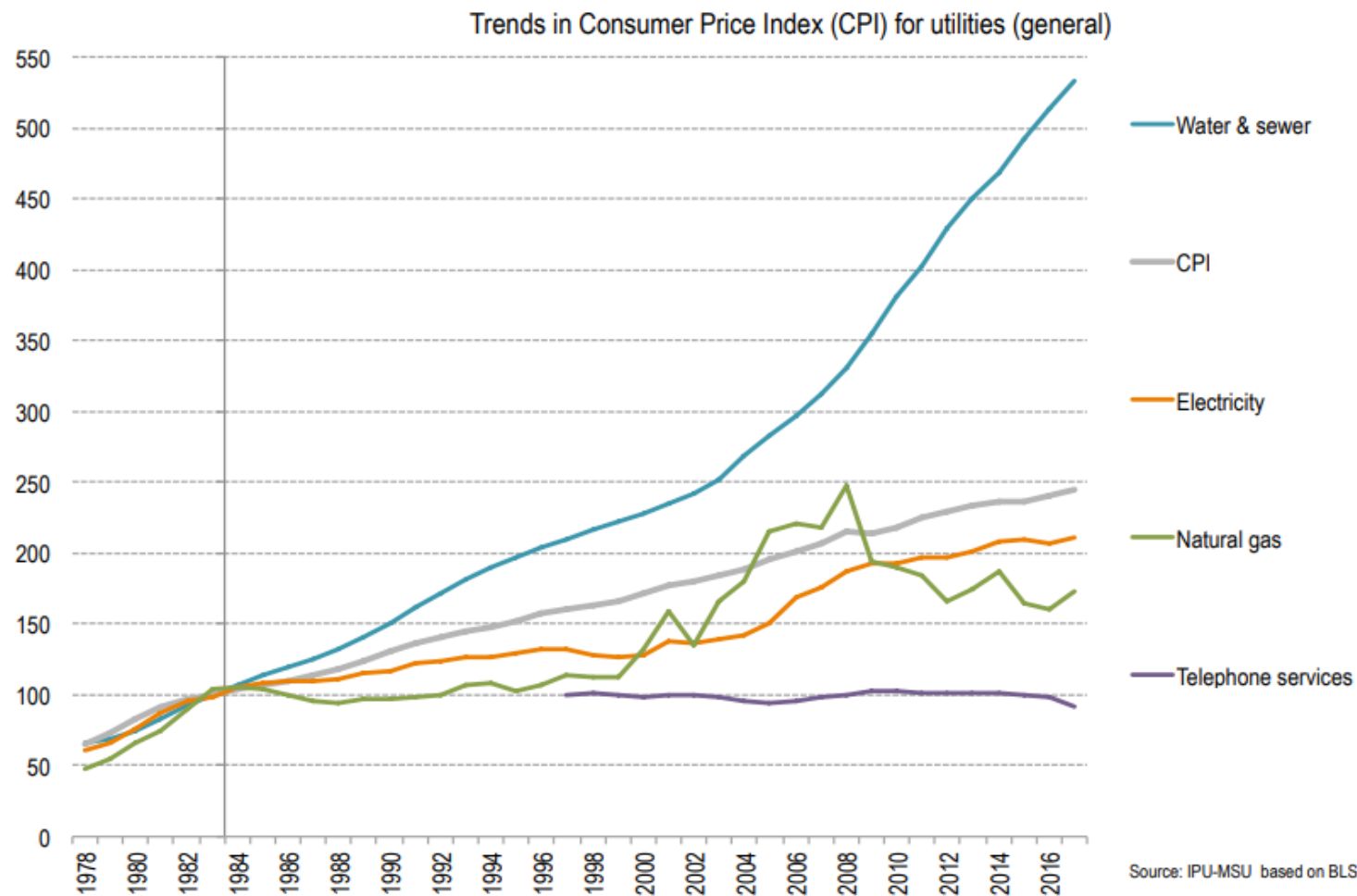
Revenue Stability

Equitable Cost Recovery

Rate Payer Affordability for PWD and its customers

WATER TODAY

CPI trends for utilities (US)



WATER TODAY

Infrastructure reinvestment needs

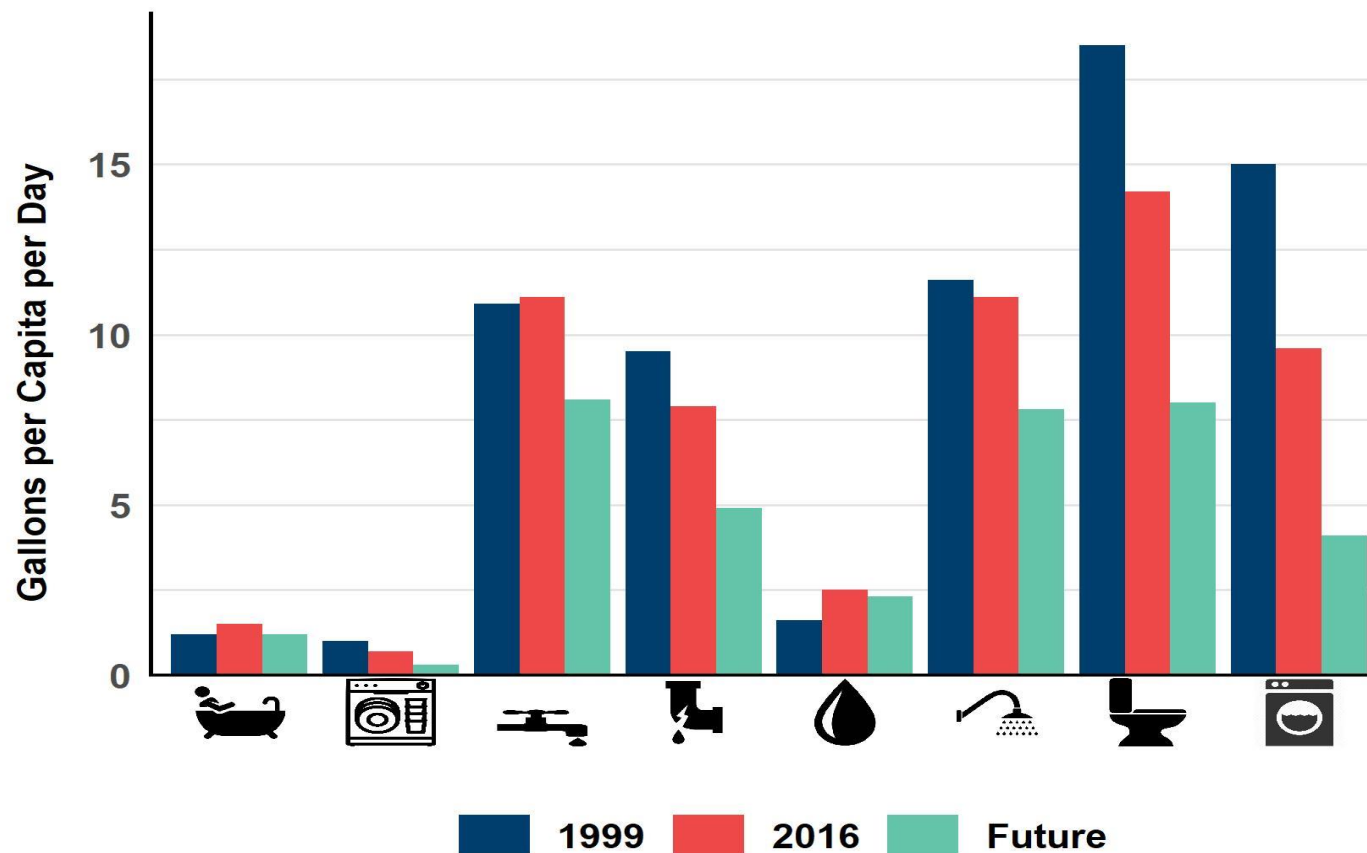


WATER TODAY

Customer Water Use Reduction

- Bath
- Dishwasher
- Sink
- Leak
- Other
- Shower
- Toilet
- Laundry

Other: evaporative cooling,
humidification, water softening



Source: Residential End Uses of Water – Water Research Foundation

WATER TODAY



Typical misconception of
water rates =

“I am paying for water”

COSTS VS. RATES

- Chemicals
- Electricity
- Purchased Water

100%
90%
80%
70%
60%
50%

Variable
Costs, 17%

Fixed Costs Recovered
from Volumetric
Charges

Fixed Costs,
83%

- Transmission and Distribution Mains
- Capital Expense (including Debts)
- Storage
- Hydrants
- Meter Services
- Billing
- Customer Service

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

Volumetric
Charge,
45%

Fixed
Charge,
55%

Revenue Stability

Why don't we recover all the fixed costs from fixed charges?

Proposed Rates

- \$38.22

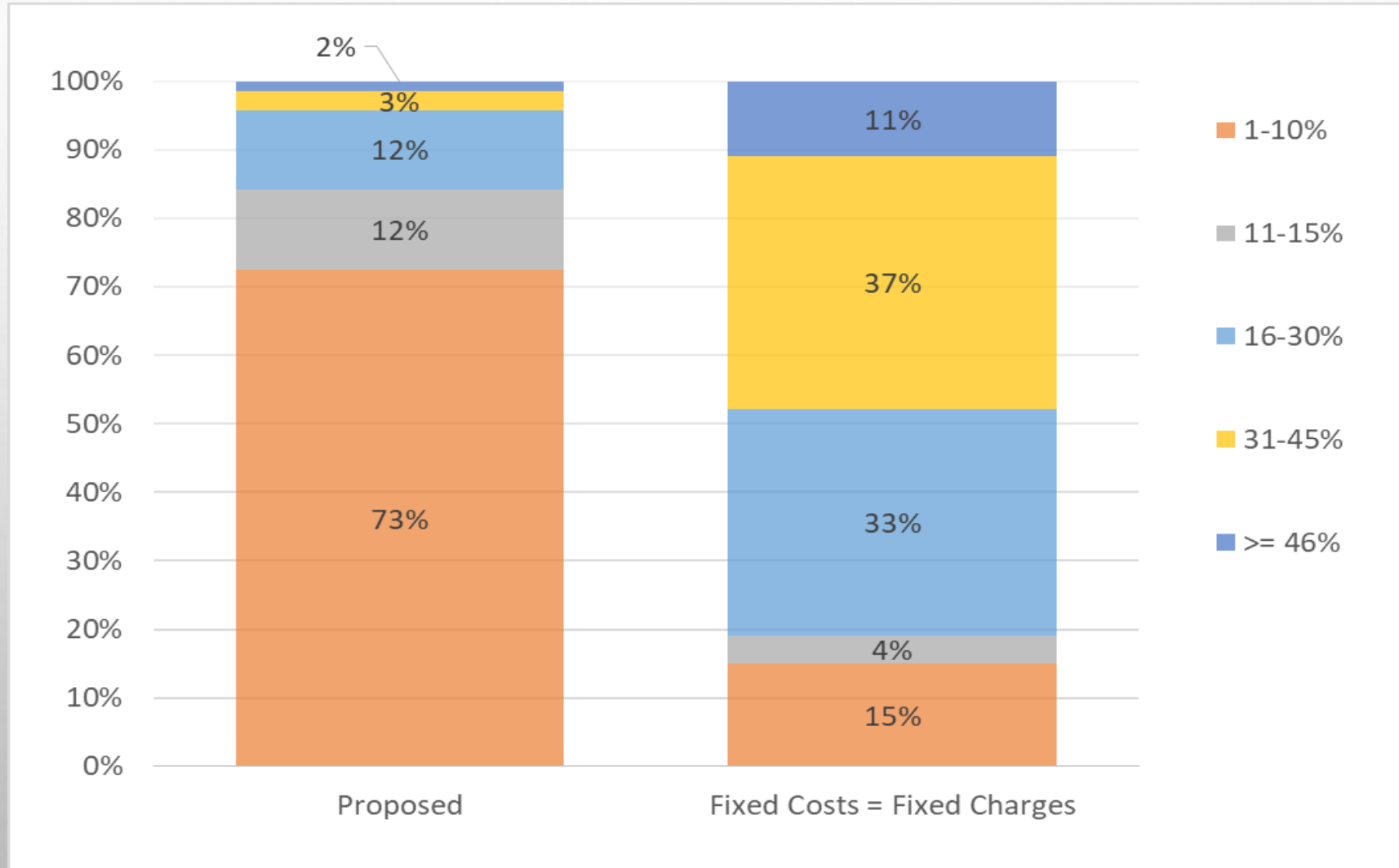


Fixed Cost =
Fixed Charge

- \$61.04

AFFORDABILITY

Bill Impacts

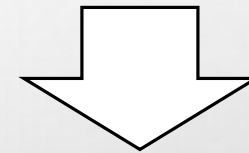


EQUITABILITY

Different Levels of Service Requirements

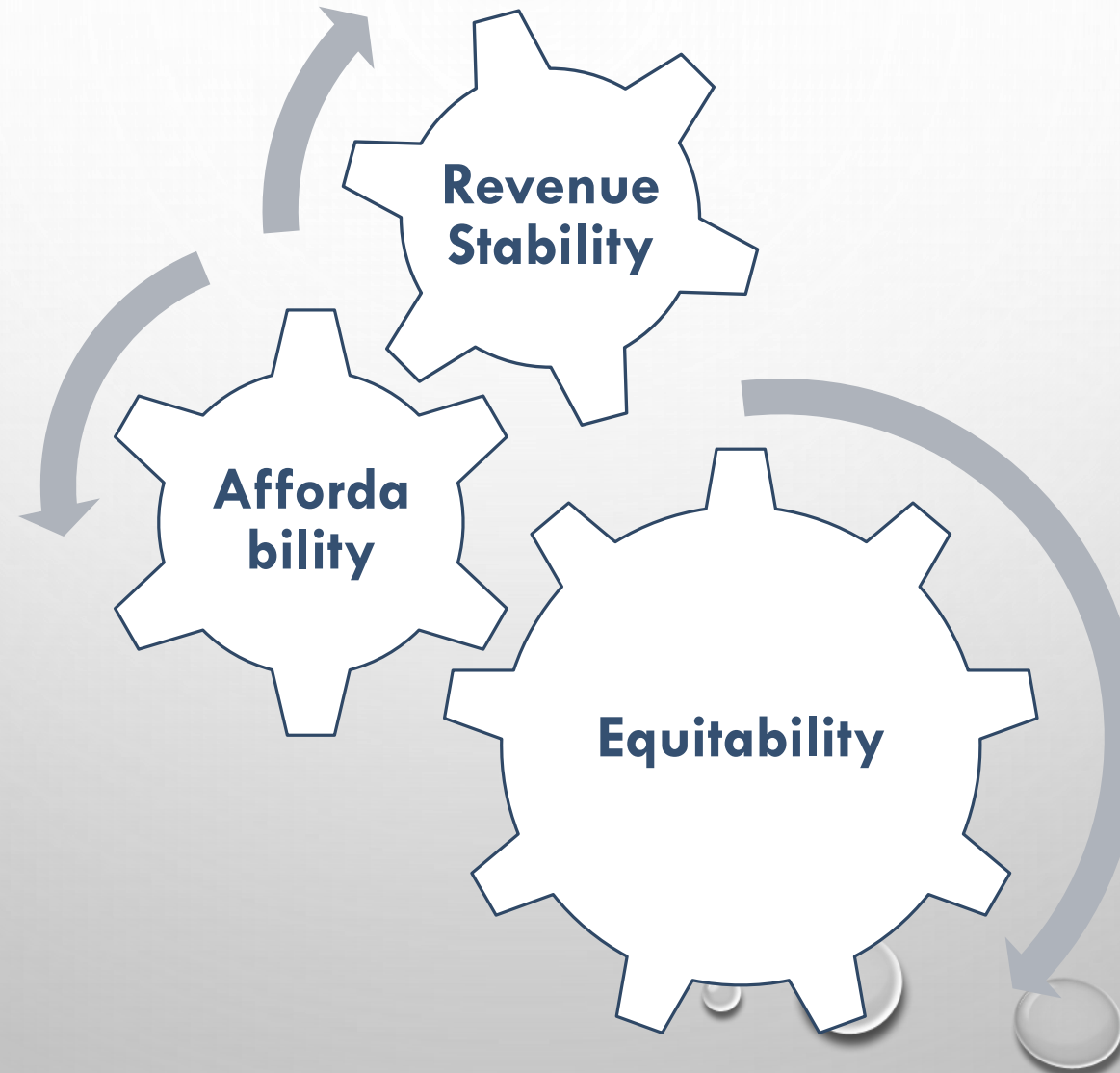


Should a customer who uses 100 hcf of water pay for the same amount of fixed costs as a customer who uses 5 hcf a month?



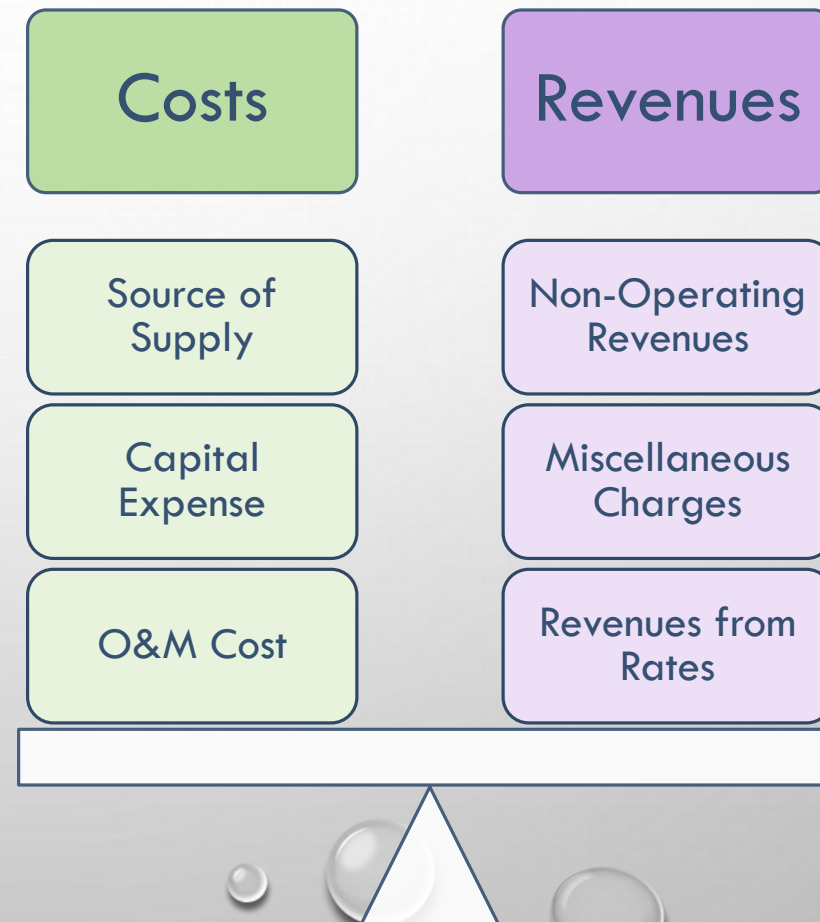
Some users' water usage pattern requires bigger system capacity

BALANCING ACT OF RATE DESIGN



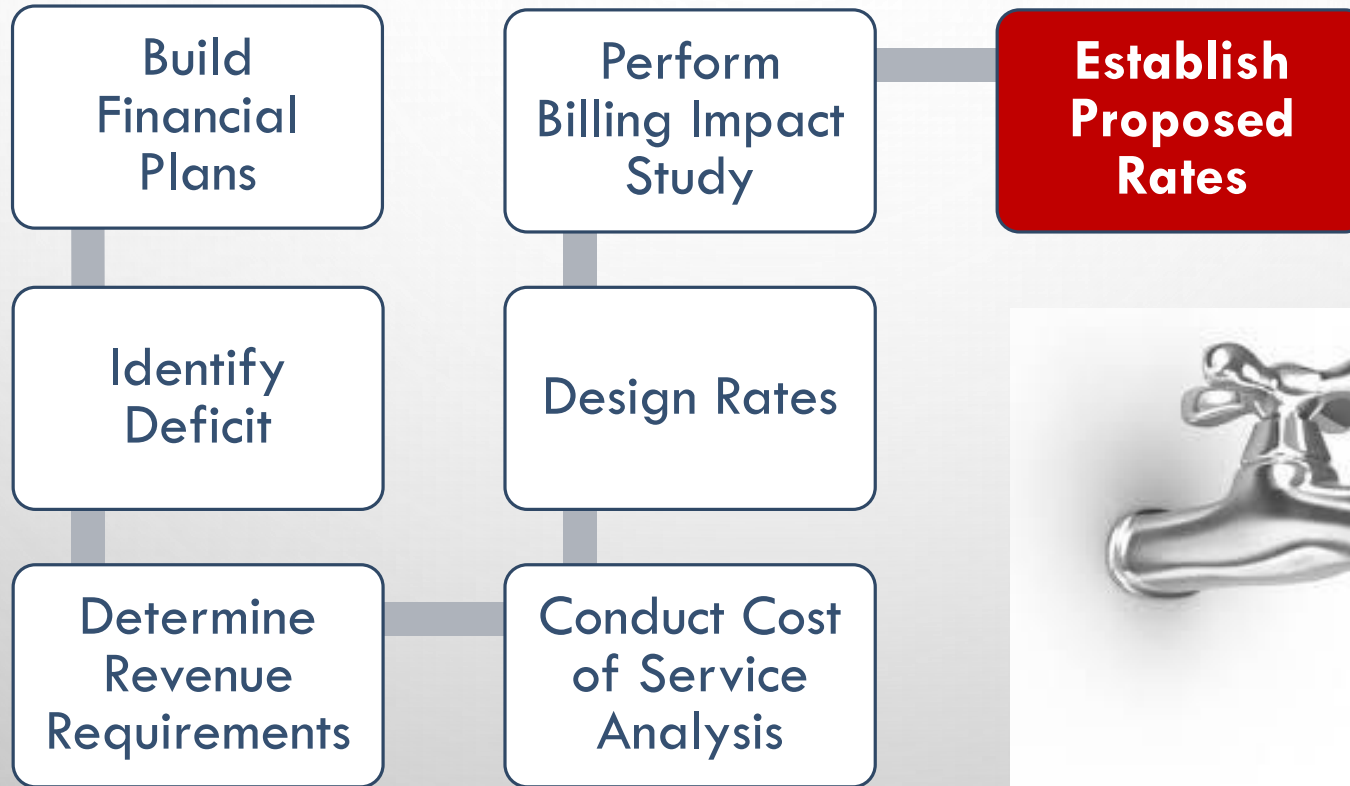
HOW RATES ARE SET

**PWD's operation is
revenue neutral**



RATE STUDY PROCESS

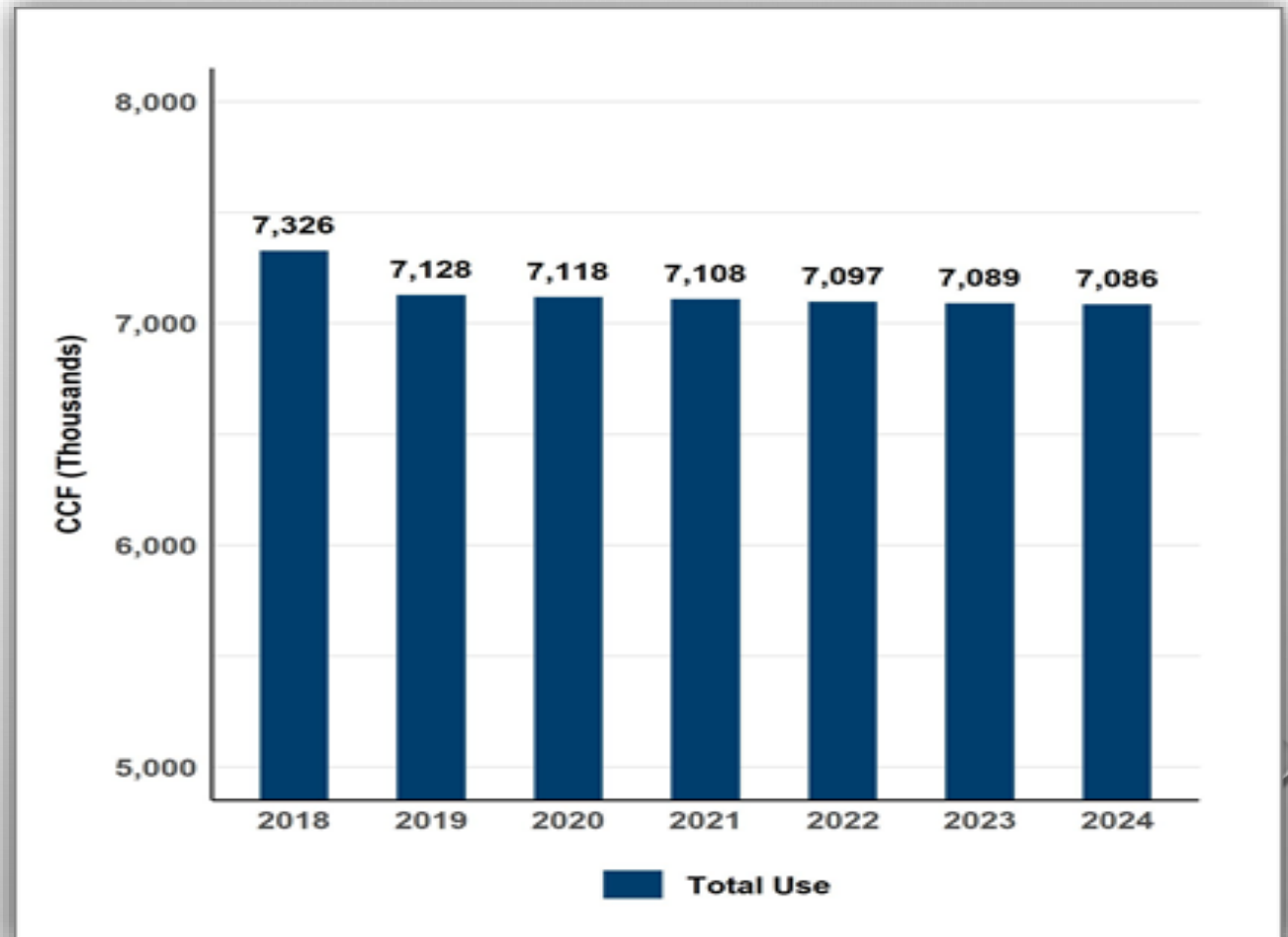
5-Yr Study Period: CY 2020 – CY 2024, Test Year: CY 2020



DEMAND PROJECTIONS



Class	Annual Change
Commercial & Industrial	-2
Construction	-2
Irrigation	-1
Multi-Family Residential	2
Single-Family Residential	21



REVENUE ANALYSIS

Revenue Type	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Revenues from rates	\$23.1	\$23.1	\$23.1	\$23.1	\$23.0	\$23.0
Other operating revenues	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2
Non-operating revenues	\$2.9	\$2.9	\$2.9	\$3.0	\$3.0	\$3.1
Total	\$27.2	\$27.2	\$27.2	\$27.2	\$27.3	\$27.3



O&M EXPENSE

	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Total O&M Expense	\$21.8	\$23.1	\$23.8	\$24.6	\$25.3	\$26.1
% Annual Increase		5.8%	3.1%	3.1%	3.1%	3.2%

Expense Escalation Factors	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
<i>Overall Inflation Rate:</i>	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
<i>Utility/Chemical Inflation Rate:</i>	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%
<i>Treatment Inflation Rate:</i>	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
<i>Purchased Water Inflation Rate</i>	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
<i>Employee Expenses Inflation Rate:</i>	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%
<i>Equipment Inflation Rate:</i>	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
<i>Fuels and Automobile Inflation Rate:</i>	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
<i>Construction Inflation Rate:</i>	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
<i>No Escalation:</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

CAPITAL EXPENSE

Total = \$30 million

	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Replacement/New Equipment	\$440,217	\$608,922	\$375,113	\$373,115	\$483,704
Studies and Planning	\$604,985	\$125,000	\$200,000	\$125,000	\$125,000
Water Supply	\$512,177	\$786,976	\$806,143	\$1,101,034	\$0
Replacement Capital Projects	\$3,056,808	\$3,985,035	\$4,469,925	\$5,758,578	\$2,554,233
New Capital Projects	\$578,810	\$0	\$529,664	\$0	\$3,120,913
Total CIP Expense	\$5,192,998	\$5,505,934	\$6,380,845	\$7,357,728	\$6,283,850

DEBT SERVICE

	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Principal	\$1.9	\$1.9	\$2.0	\$2.7	\$2.6	\$2.8
Interest	\$2.6	\$2.5	\$2.5	\$3.1	\$3.1	\$3.0
Debt Service Total	\$4.5	\$4.5	\$4.5	\$5.8	\$5.7	\$5.8

- 2012 Private Placement
- 2013A Series Water Revenue Bonds
- 2018A Series Water Revenue Bond
- Capital Leases Payable – 2017
- 2021 Bond Issuance - \$20 million

OTHER OBLIGATIONS

Reserves: District's Goal based on Reserve
Policy Resolution No, 18-10 is \$16.2 million
= **\$950,000 Annual Contribution**

Water Conservation Rebate Program/Change in
Investment in PRWA = **\$535,500**

REVENUE REQUIREMENTS

CY 2020

O&M Expense - \$23.1 million

CIP Expense - \$5.2 million

Debt Service - \$4.5 million

Other Obligations - \$1.5 million

Total Cost - \$34.3 million

Offset by Non-Rate Revenues - \$4.1 million

Revenue Requirements - \$30.2 million

REVENUE REQUIREMENTS

CY 2020

Revenues from Rates - \$23 million

Revenue Requirements - \$30 million

Deficit- \$7 million

An annual 8.1%
rate adjustment

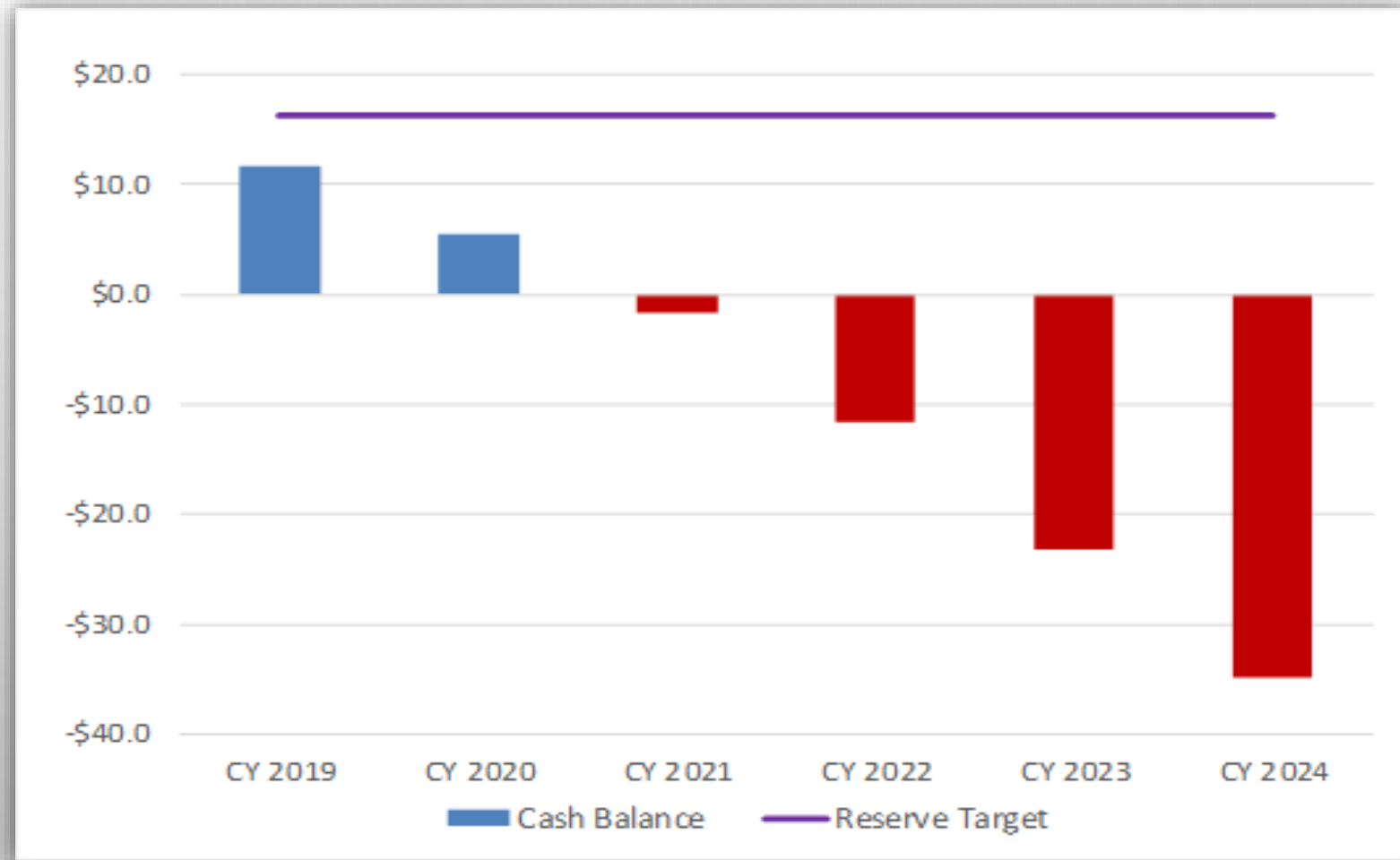


\$5 million from reserves
\$2 million from rates

Adjusted Revenue Requirements for CY 2020: \$25 million

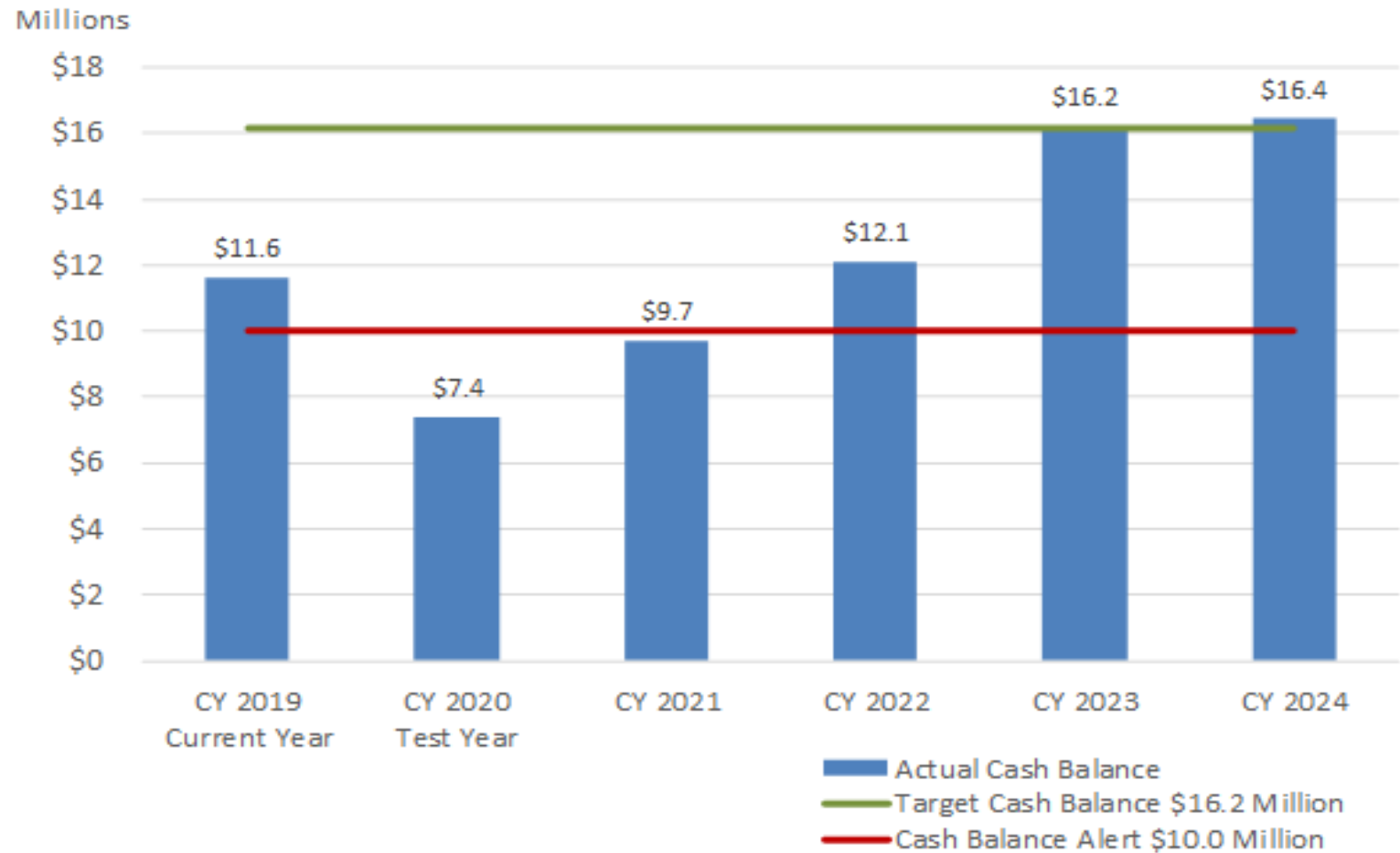
NO ACTION IS TAKEN – CASH BALANCE

No rate
adjustments,
plus no new
bond issuances



RECOMMENDED RATE ADJUSTMENTS – CASH BALANCE

An annual 8.1%
rate adjustment



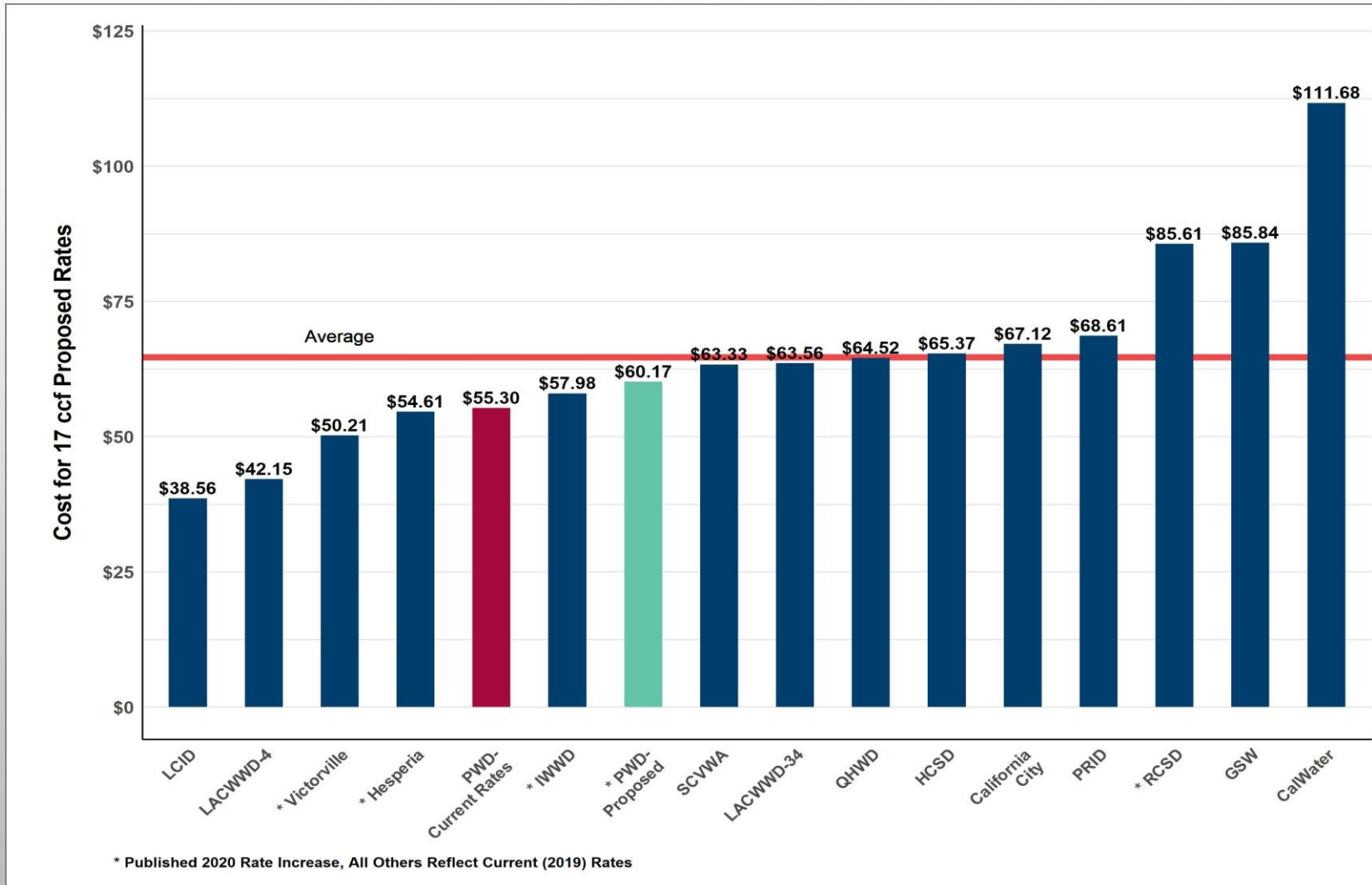
PROPOSED RATES

Fixed Charge Monthly					
Meter Size	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
5/8-in	\$38.22	\$41.60	\$45.52	\$49.79	\$54.43
3/4-in	\$38.22	\$41.60	\$45.52	\$49.79	\$54.43
1-in	\$38.22	\$41.60	\$45.52	\$49.79	\$54.43
1 1/2-in	\$92.99	\$101.49	\$111.51	\$122.47	\$134.37
2-in	\$140.84	\$153.81	\$169.16	\$185.96	\$204.21
3-in	\$252.48	\$275.89	\$303.69	\$334.10	\$367.16
4-in	\$412.05	\$450.38	\$495.96	\$545.84	\$600.07
6-in	\$810.62	\$886.21	\$976.21	\$1,074.72	\$1,181.81
8-in	\$1,289.09	\$1,409.41	\$1,552.74	\$1,709.62	\$1,880.17
10-in	\$1,847.47	\$2,019.99	\$2,225.56	\$2,450.56	\$2,695.17

Commodity Charges per HCF					
Proposed Rates	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024
Tier 1	\$0.88	\$0.93	\$0.98	\$1.03	\$1.08
Tier 2	\$1.52	\$1.63	\$1.74	\$1.86	\$1.98
Tier 3	\$2.03	\$2.15	\$2.27	\$2.40	\$2.54
Tier 4	\$3.29	\$3.51	\$3.74	\$3.98	\$4.23
Tier 5	\$4.64	\$5.01	\$5.39	\$5.79	\$6.23

RATE COMPARISON STUDY

Rate Comparison @ 17 hcf



RATE COMPARISON STUDY

The recent rate adjustments implemented by the neighboring agencies

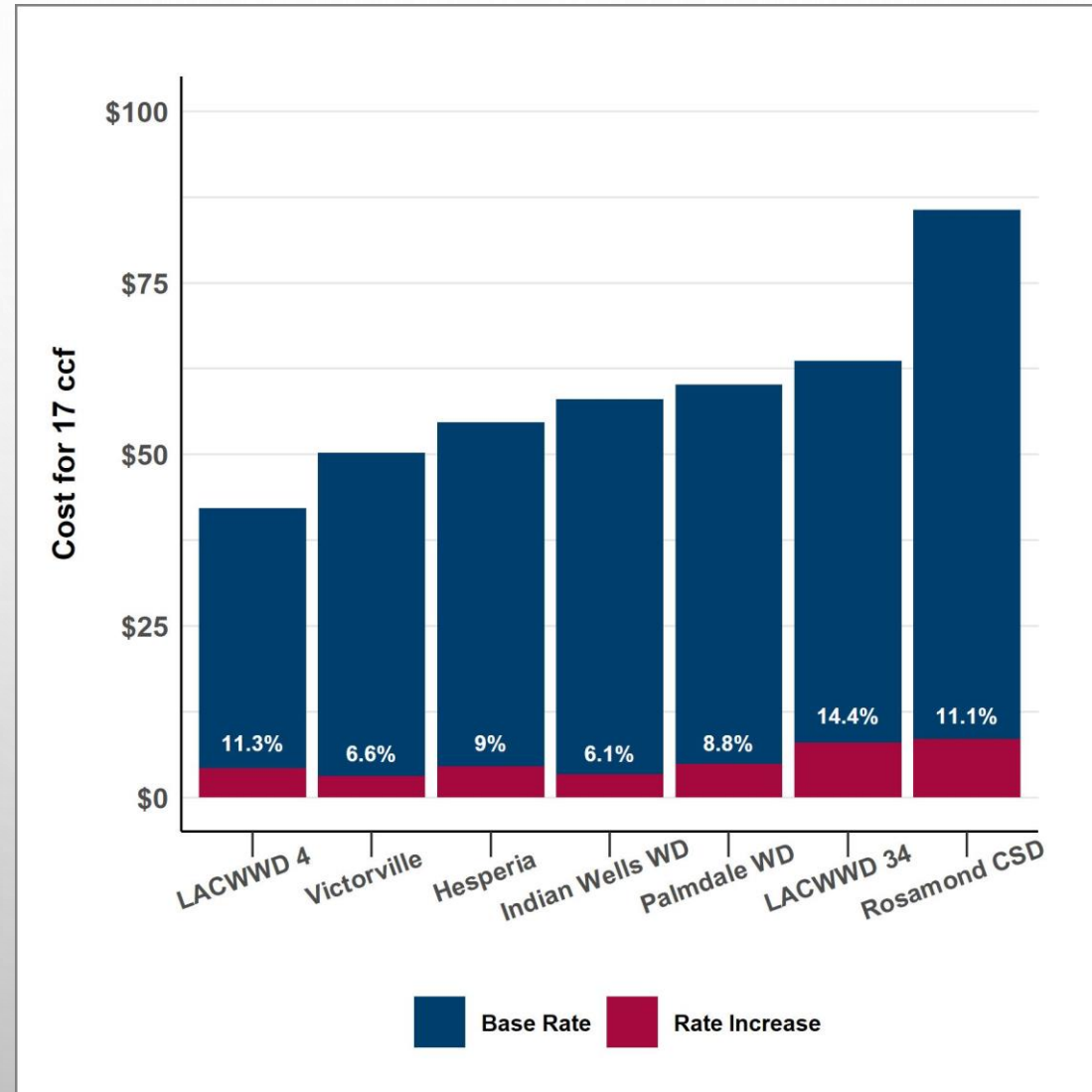
Rate Comparison @ 17 hcf

	LACWWD 4	Hesperia	Rosamond CSD	Victorville	Palmdale WD	LACWWD 34	Indian Wells WD
Old	\$37.88	\$50.12	\$77.09	\$47.10	\$55.29	\$55.58	\$54.66
New	\$42.15	\$54.61	\$85.61	\$50.21	\$60.17	\$63.56	\$57.98
Increase	\$4.27	\$4.49	\$8.52	\$3.11	\$4.88	\$7.98	\$3.32

The PWD rate includes water treatment charge of \$0.11/HCF

RATE COMPARISON STUDY

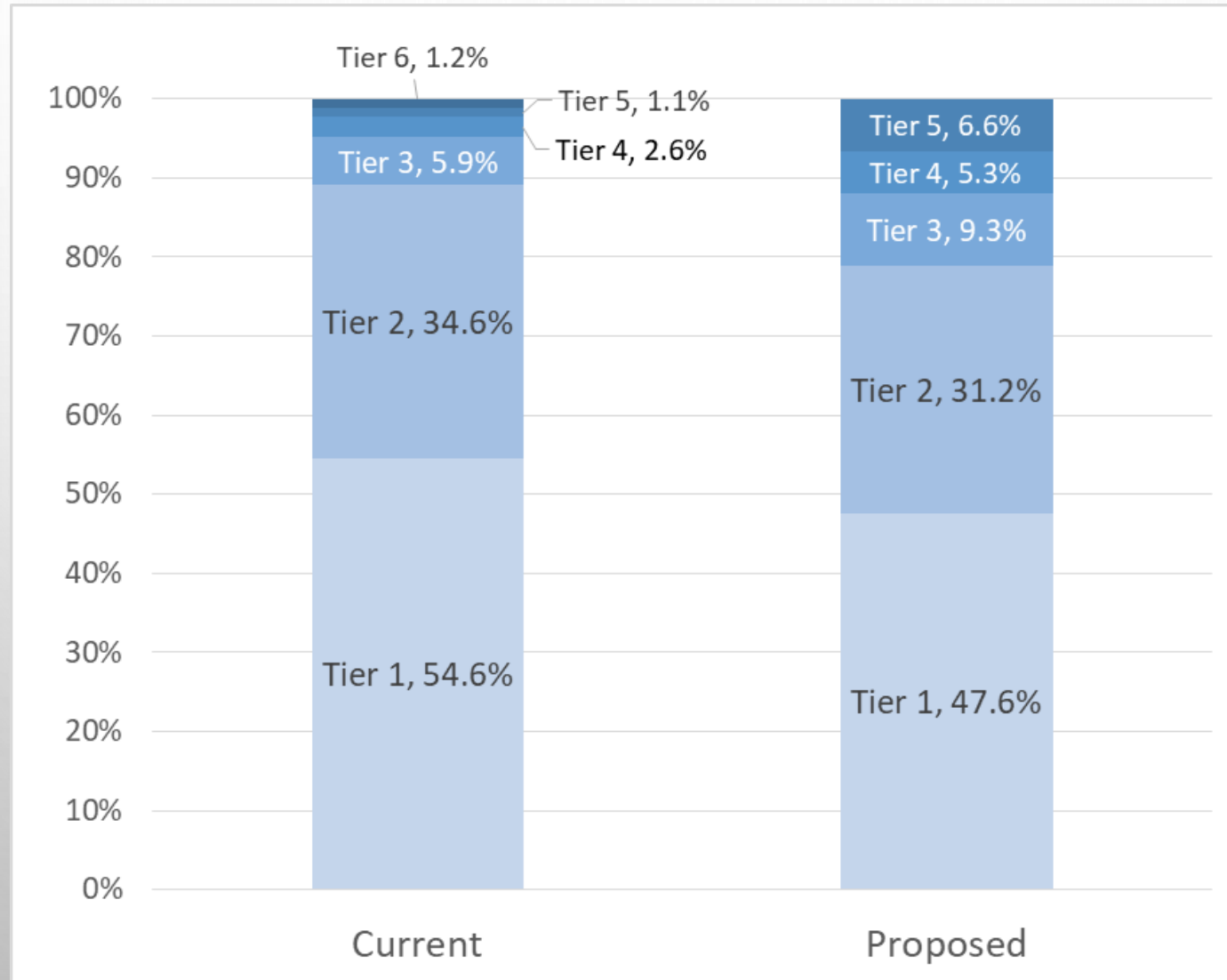
Rate Comparison @ 17 hcf



RECOMMENDED STRUCTURAL CHANGE

- Reduce number of tiers from six to five
- Reduce water allocation per capita per day (GPCD) from 66 to 55
- Establish “Irrigable Area” for each parcel using Eagle Aerial data
- Use the water budget allocation method of Single Family Residential customers for Multi-Family residential customers
- Establish “Exempt Irrigation Accounts” to receive 100 % landscape factor (LF) for their water budget

RECOMMENDED STRUCTURAL CHANGE



QUESTIONS

