



# Tahoe City Public Utility District

## Water and Sewer Rate Study

### Draft Study Results and Recommendations

**July 22, 2019**

HDR



# Purpose of the Presentation

**Provide an overview of the rate setting process**



**Review the approach to setting cost-based rates**



**Review draft results and recommendations**



**Gain Board feedback and direction on the study**



**Next Steps...**



## Purpose of the Study

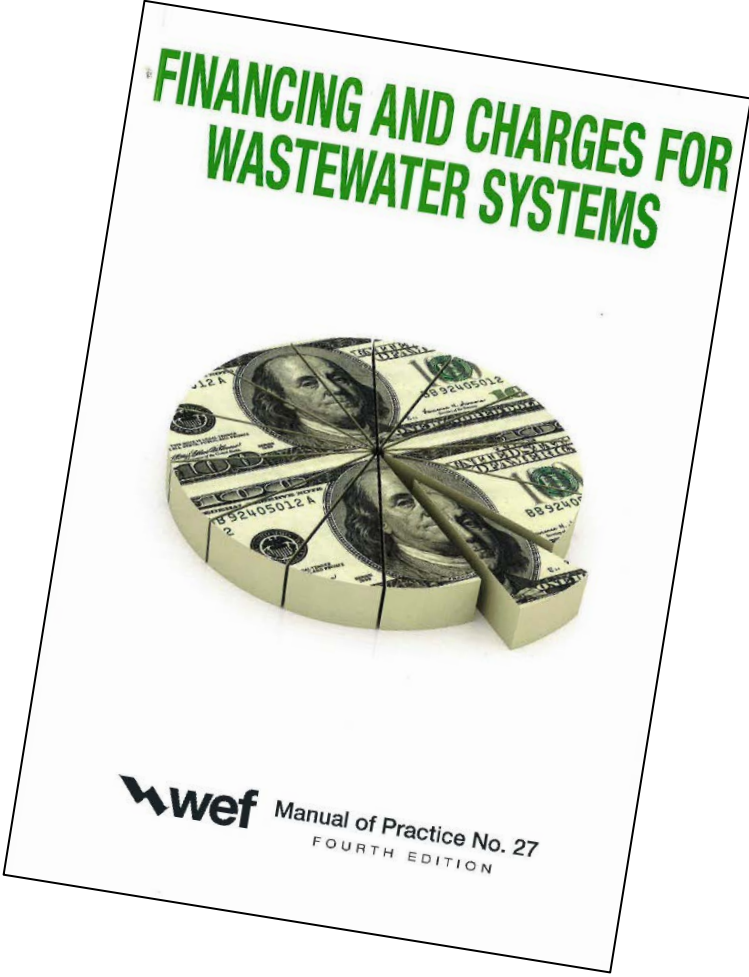
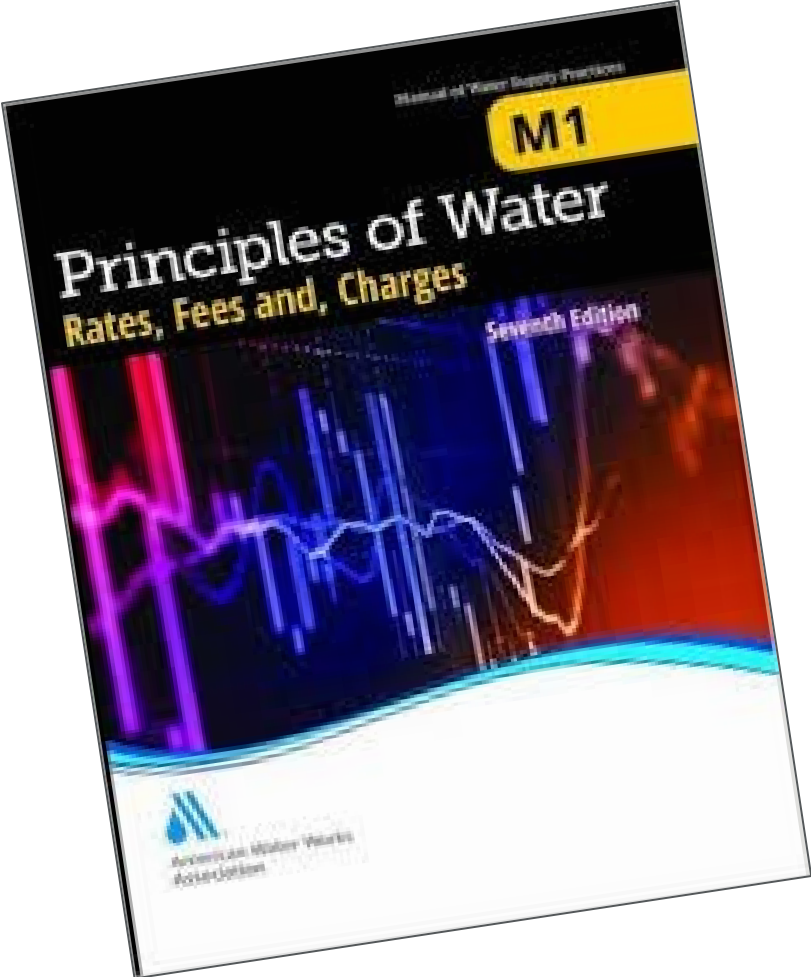
- Provide sufficient revenues to operate and maintain the District's water and sewer infrastructure
- Develop equitable and cost-based rates
  - Meet the intent of Proposition 218
- Establish the administrative record for the study
- Reflect prudent financial planning criteria (LTFP)
  - Maintain target debt service coverage (DSC) ratio
  - Prudent rate funding of capital
  - Meet target reserve balances
- Develop the study using generally accepted methodologies tailored to the District's system and customer characteristics



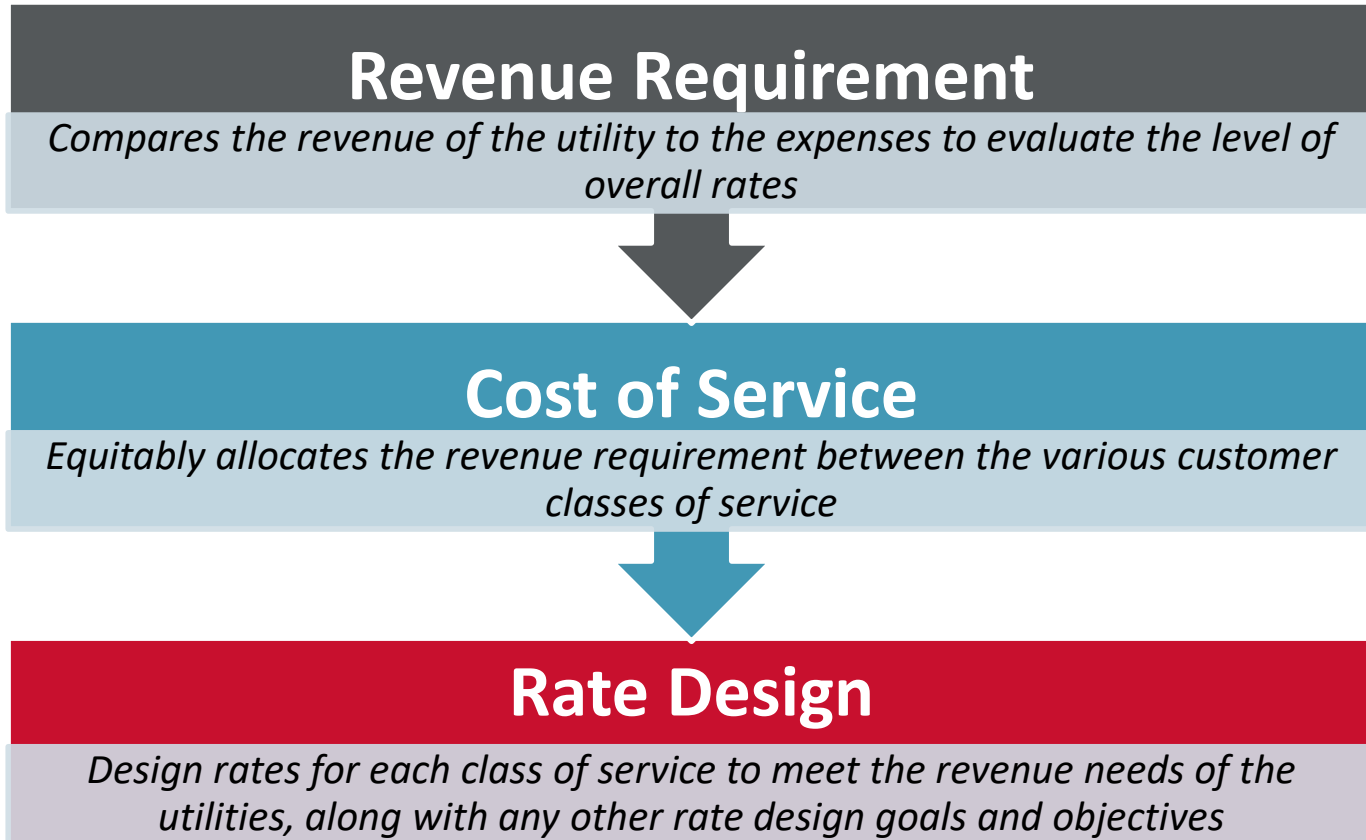
# Proposition 218 Requirements

- Provides the requirement for setting and implementing property related rates and fees
  - California constitution Article XIII D
- Requires a cost basis for establishing the level of the rates
  - “Fees shall not exceed the **reasonable cost** of providing the service”
  - “Fees shall not exceed the **proportional cost** of providing the service attributable to the parcel which it is imposed”
- Requires a customer notification process and protest hearing
- If no majority protest:
  - Board may implement the proposed rates
  - The proposed rates are the maximum rates that can be charged for the time period specified
    - Rate levels will be reviewed during budgeting process
    - Board action necessary to reduce rates lower than noticed levels

# What is “Generally Accepted”?



# Developing Cost-Based Water & Sewer Rates



## Revenue Requirement



# Water and Sewer Revenue Requirement Overview

Compares utility revenues to expenses

- Determines the level of revenue (rate) adjustment necessary

Uses prudent financial planning criteria

- Adequate funding of renewal and replacements
- Meeting target ending reserve balances

Reviews a specific time period

- Ten year period for the District's study
- Rate study focus is next 5-year period

Utilities is analyzed on a "stand-alone basis"

- No transfer of funds between water and sewer
- Rates need to support operations and capital

Utilizes the "cash basis" methodology

- Generally accepted method for municipal utilities



# Overview of the Water Revenue Requirement

- Study includes recently acquired systems
  - Timberland, Tahoe Cedars, and Madden Creek
- Revenues were calculated based on current rate levels and customer characteristics
  - Projected based on minimal growth on the system (0.5% annually)
- O&M expenses start with 2019 adopted budget
  - Projected based on a 10-year period (2020 – 2029)
- Developed a capital funding plan
  - Committee reviewed capital plan
  - Does not fully reflect total capital needs
  - Results in additional funding needs
- Study reflects recently reviewed financial policies related to rate setting (LTFP)

# Overview of the Water Capital Plan For Rate Study

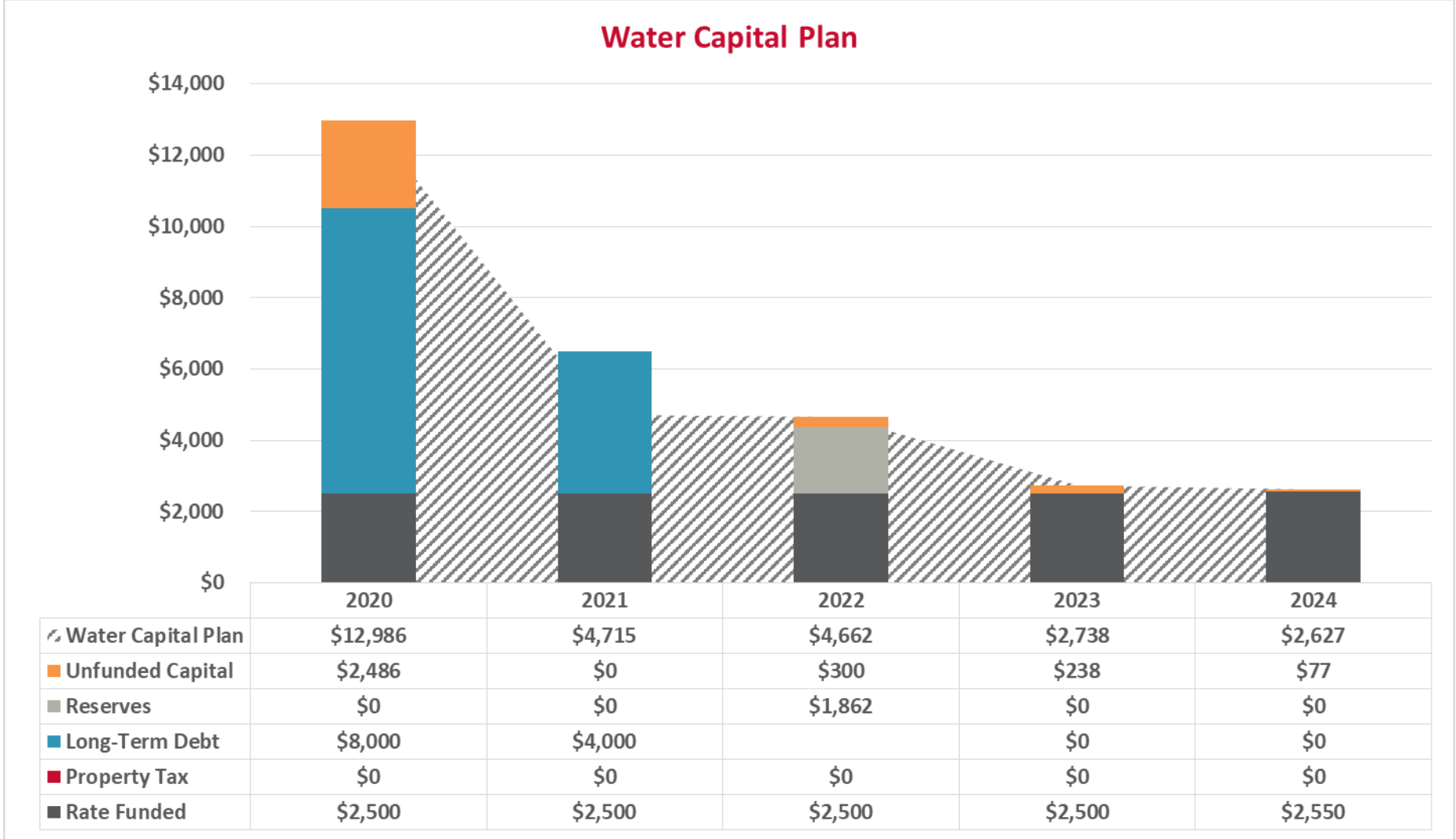
	2020	2021	2022	2023	2024
<b>Capital Plan</b>	\$12,985,630	\$4,715,168	\$4,661,669	\$2,738,154	\$2,626,540
Public Projects Relocations/Upgrades (EIP)					
West Lake Tahoe Regional Water Treatment Plant					
Madden Creek Water System Interconnection and Dist. Improvements					
Timberland Water System Metering and Distribution Improvements					
Tahoe Cedars & Madden Creek Water System Distribution Improvements					
West Shore Storage Augmentation Project					
Lower Meeks Bay PRV					
The Drive WLR					
Rubicon Tank No. 1 Water Feed Line Replacement					
Highlands Easements Svc Line Repl (Polybutylene)					
Smart Meter Replacement Program					
TC Main Emergency Water Supply Project					
Moana Circle WLR					
Dardanelles WLR					
Water System Master Metering					
Operational Projects					

**Total 2020-2024  
Water Capital  
Total = \$27,727,161**

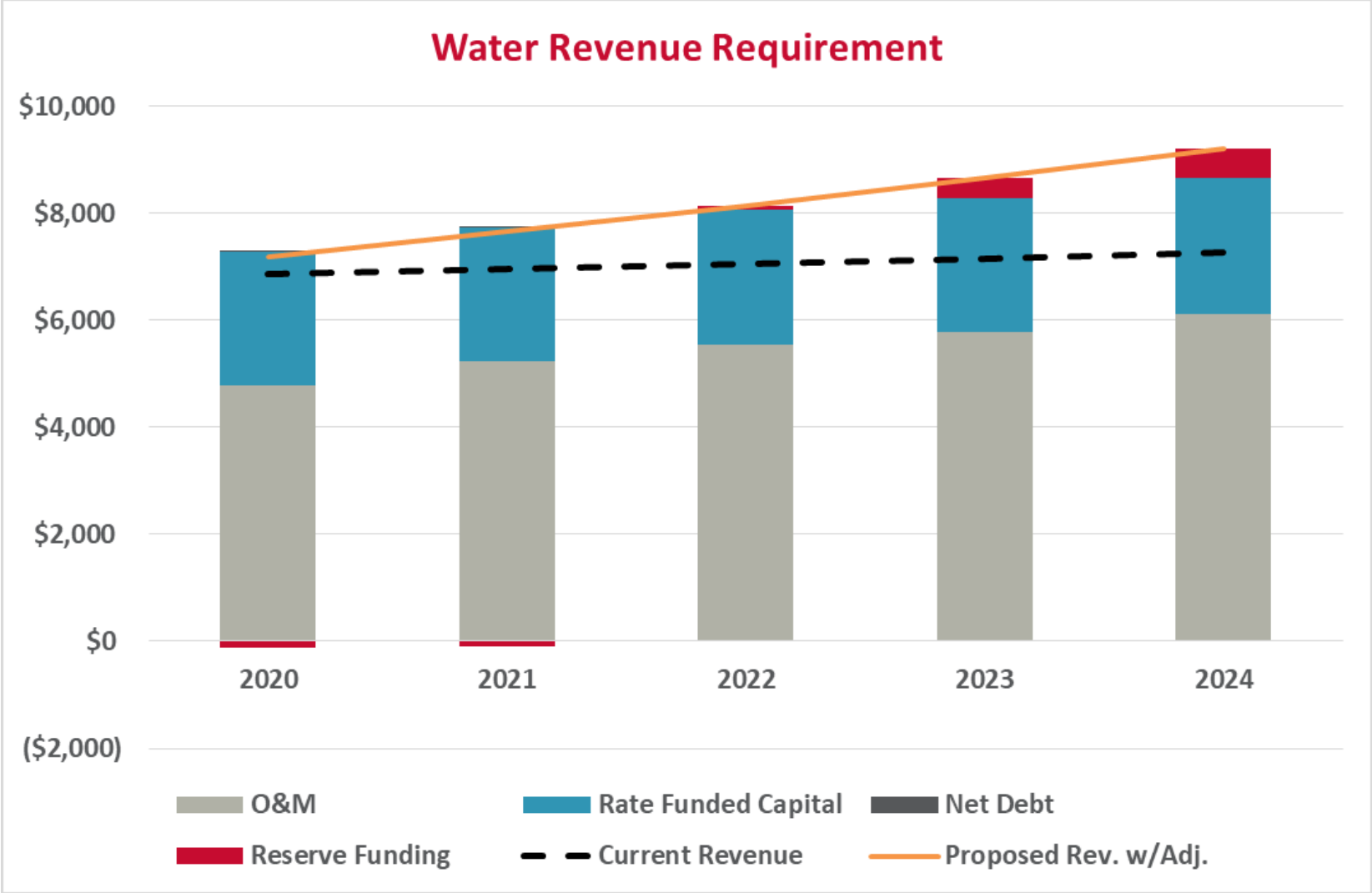
- Water capital plan for Rate Study represents a scaled back capital plan and does not include Rubicon Water System Transmission Improvement, Tahoe City Main Source & Augmentation and the full system replacement for Tahoe Cedars and Madden Creek.
- The WLTRWTP Project will be financed with a SRF - Low Interest Loan with annual payment of approx. \$740,000 for 20 years paid by property tax.

# Overview of the Water Capital Funding Plan

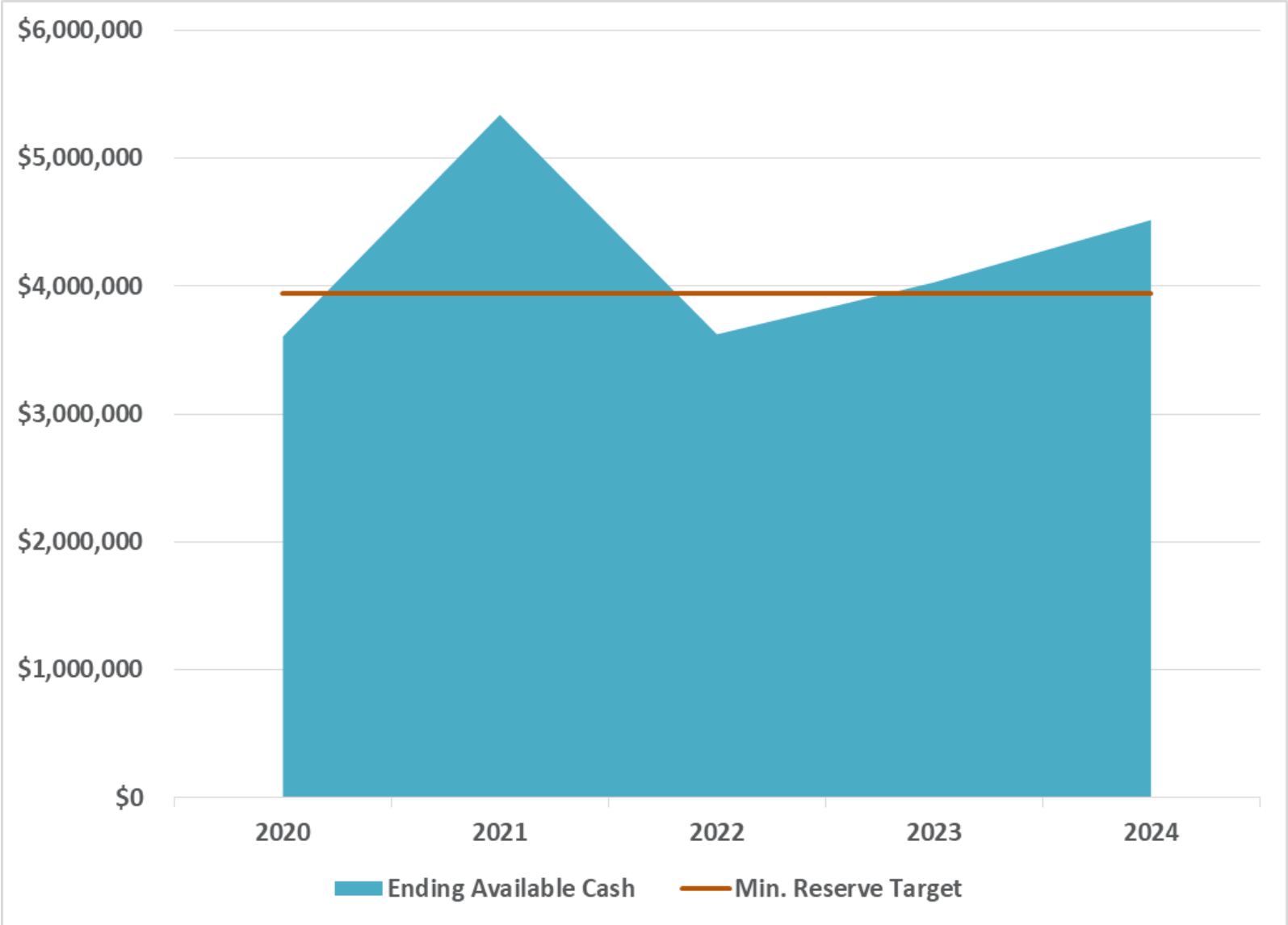
## - Assumes 6% annual revenue adjustments (2020-2024)



# Summary of the Water Revenue Requirement - Assumes 6% annual revenue adjustments (2020-2024)



# Summary of the Water Cash Available and Minimum Reserves - Assumes 6% annual revenue adjustments (2020-2024)



# Water Revenue Requirement Summary

- Water revenue adjustments are necessary

	2020	2021	2022	2023	2024
Water	6.0%	6.0%	6.0%	6.0%	6.0%
Water – Alt Debt	6.0%	12.5%	6.0%	6.0%	6.0%

- Reflects the need to prudently fund O&M and capital needs
  - Current plan includes capital needs as identified on the system
  - Unfunded capital improvements remain even with revenue adjustments
- Reflects overall financial policy goals
  - Need to fund water minimum targets, in addition to revenue adjustments
- Overall change in revenue may not equal change in customer bill
  - Cost of service (proportional allocation) will provide bill impact
  - Transition of acquired system customers will also provide economies of scale in out years (2021-2024)

# Overview of the Sewer Revenue Requirement

- Revenues were calculated based on current rate levels and customer characteristics
  - Assumed zero growth on the system
- O&M expenses start with 2019 adopted budget
  - Projected based on for a 10-year period (2020 – 2029)
- Developed a capital funding plan
  - Board adopted 5-year plan
- Study reflects recently reviewed financial policies related to rate setting (LTFP)

# Overview of the Sewer Capital Plan For Rate Study

	2020	2021	2022	2023	2024
<b>Capital Projects</b>	\$1,249,117	\$2,701,721	\$2,550,749	\$1,875,548	\$1,885,108
Line Replace / Slipline / Manhole Rehab / Laterals					
Dollar/Edgewater Lakefront SLR					
McKinney Sewer Pump Station Modifications					
Emergency Bypass Facilities					
Satellite Pump Station Overflow Wet Wells					
Projects as Defined by Future Sewer Master Plan					
Metering Manholes					
West Shore H2S Control Facilities					
Operational Projects & Vehicles					

**Total 2020-2024  
Sewer Capital  
Total = \$10,262,333**

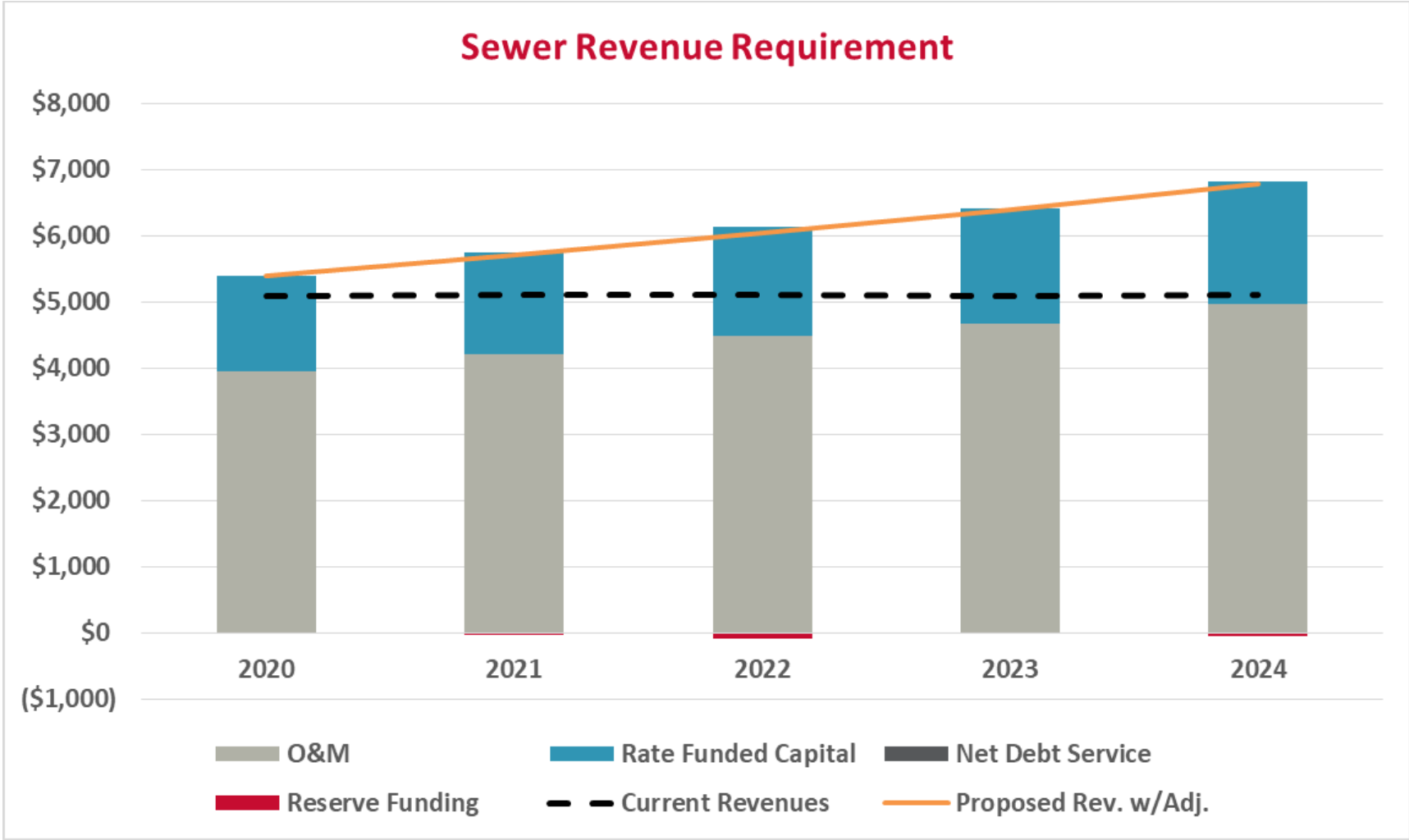


# Overview of the Sewer Capital Funding Plan

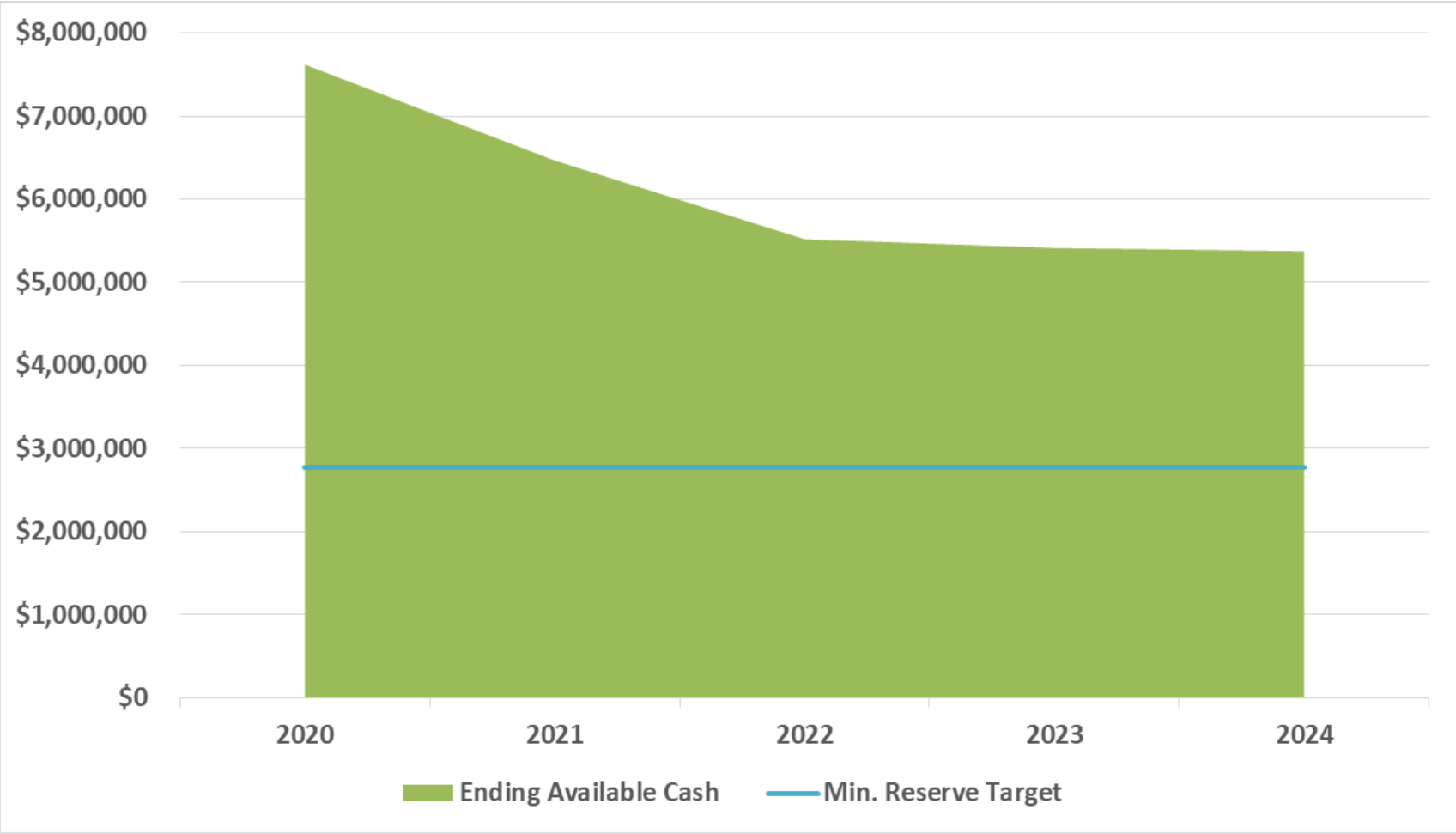
## - Assumes 6% annual revenue adjustments (2020-2024)



# Summary of the Sewer Revenue Requirement - Assumes 6% annual revenue adjustments (2020-2024)



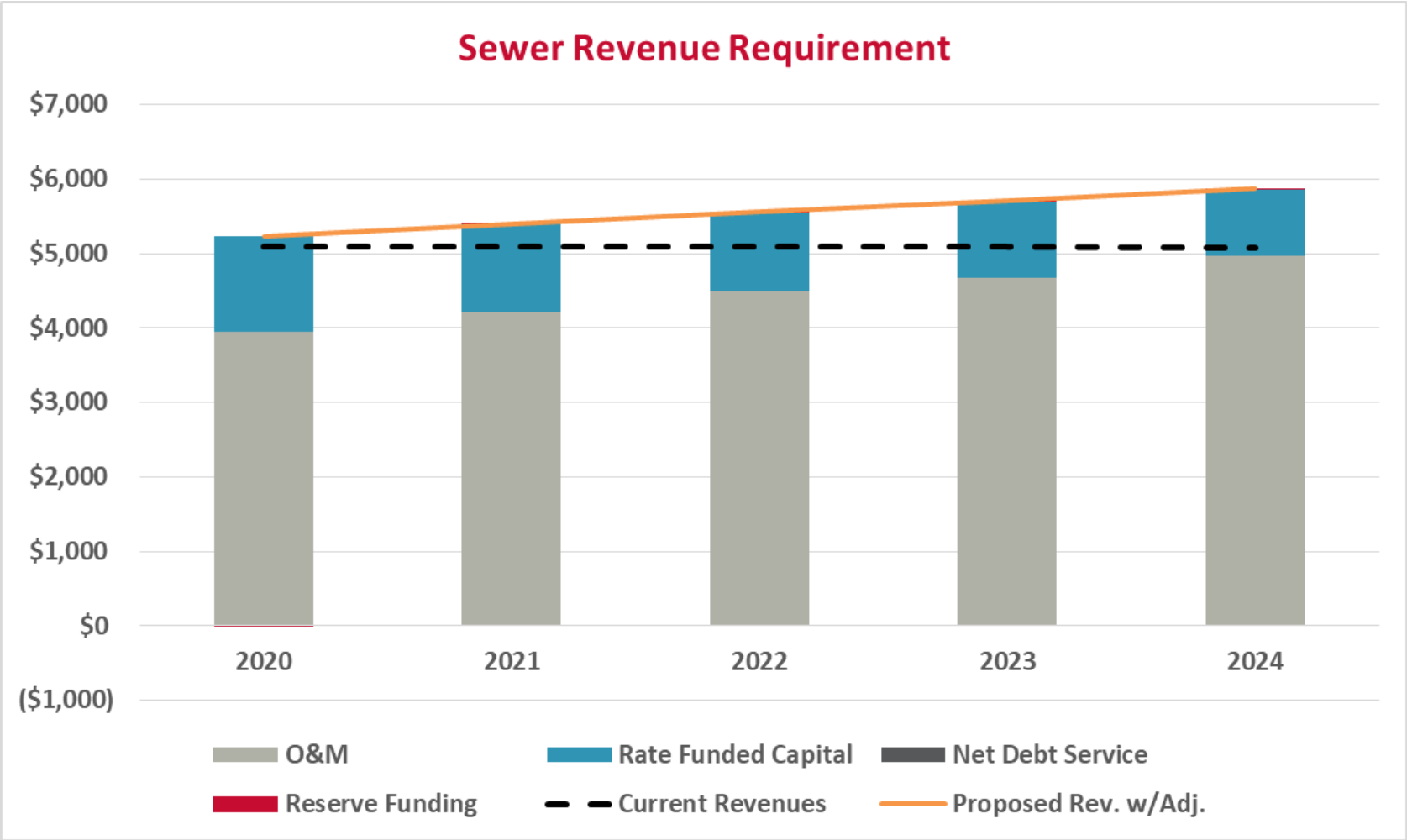
# Summary of the Sewer Cash Available and Minimum Reserves - Assumes 6% annual revenue adjustments (2020-2024)



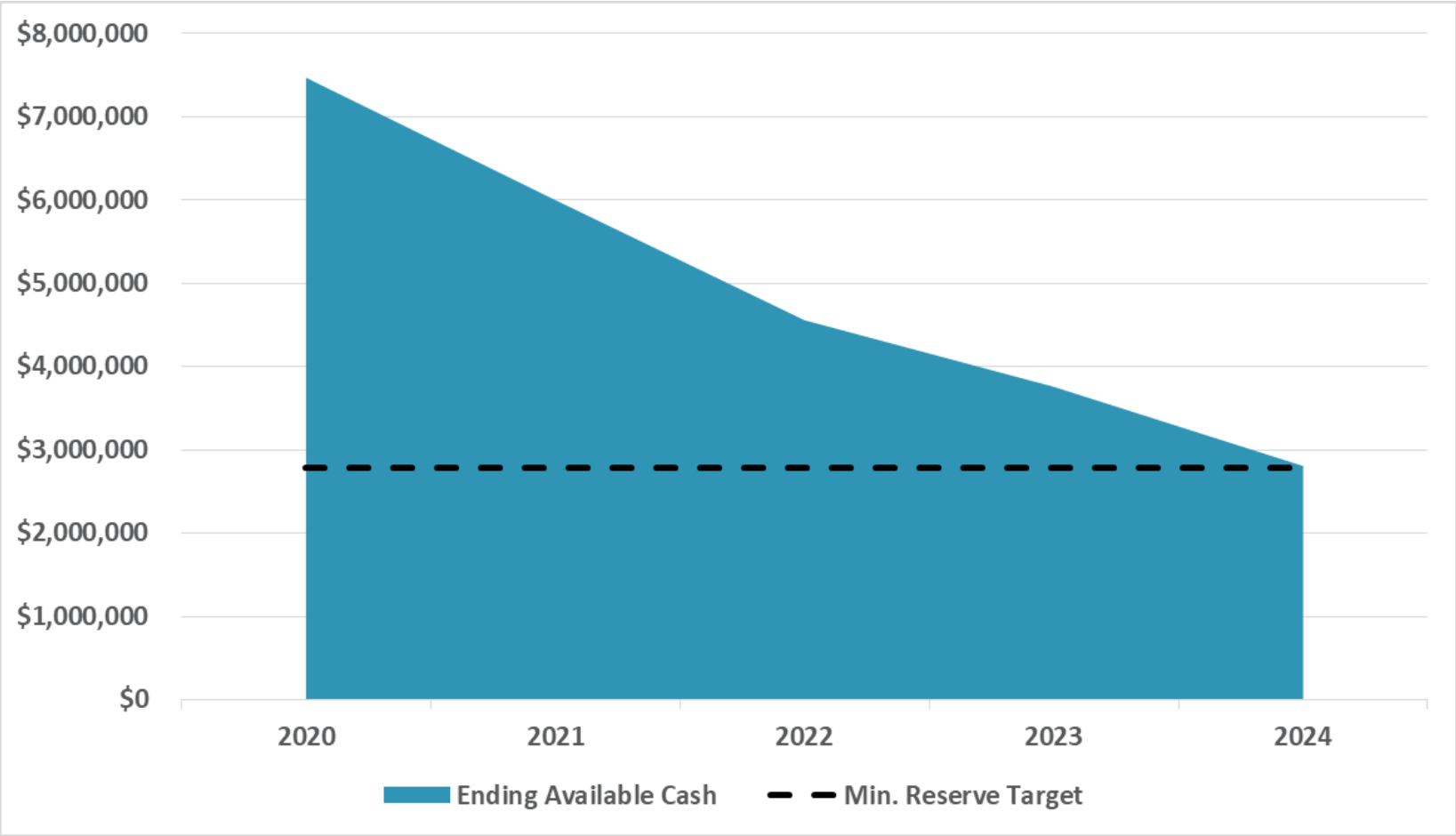
# Overview of the Sewer Alternative Capital Funding Plan - Assumes 3% annual revenue adjustments (2020-2024)



# Summary of the Sewer Alternative Revenue Requirement - Assumes 3% annual revenue adjustments (2020-2024)



# Summary of the Sewer Cash Available and Minimum Reserves Assumes 3% annual revenue adjustments (2020-2024)



# Sewer Revenue Requirement Summary

- Revenue adjustments are necessary

	2020	2021	2022	2023	2024
<b>Sewer</b>	6.0%	6.0%	6.0%	6.0%	6.0%
<b>Sewer – Alt</b>	3.0%	3.0%	3.0%	3.0%	3.0%

- Reflects the need to prudently fund O&M and capital needs for both utilities
  - Prior and future sewer rate “rollbacks” results in reduced capital funding
  - Alternative results in minimum reserves, deferred future capital, and reduced capital funding from rates
- Reflects overall financial policy goals
- Overall change in revenue may not equal change in customer bill
  - Cost of service (proportional allocation) will provide bill impact

## Cost of Service





# Overview of the Water and Sewer Cost of Service

## What is cost of service?

- Analysis to equitably allocate the revenue requirement to the customer classes of service

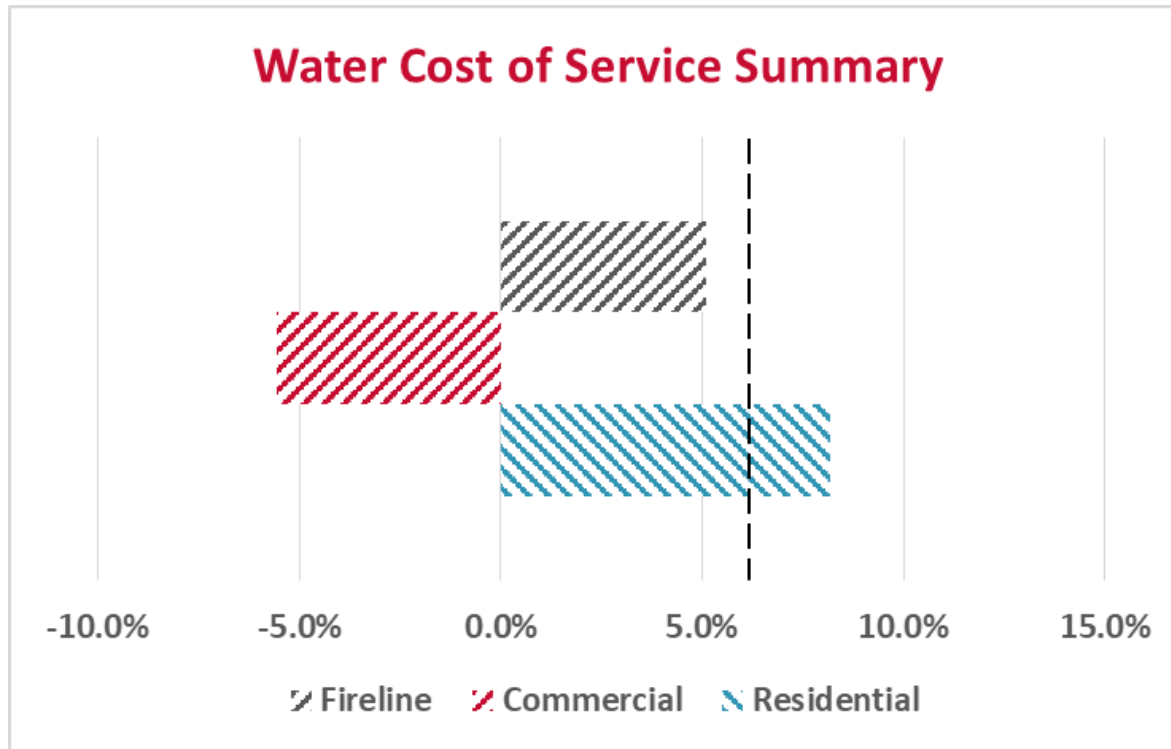
## Why cost of service

- Generally accepted as “fair and equitable”
- Avoids subsidies
- Revenues reflect costs
- Meets the proportionality requirements of Proposition 218

## Objectives of Cost of Service

- Determine if subsidies exist
- Develop average unit costs

# Summary of the Water Cost of Service Analysis - 6% Revenue Adjustment



## Additional / (Decreased) Revenue Generation

- Residential: \$374,000
  - Commercial: ~~-\$47,000~~
  - Fireline: \$12,000
- System Total: \$339,000**

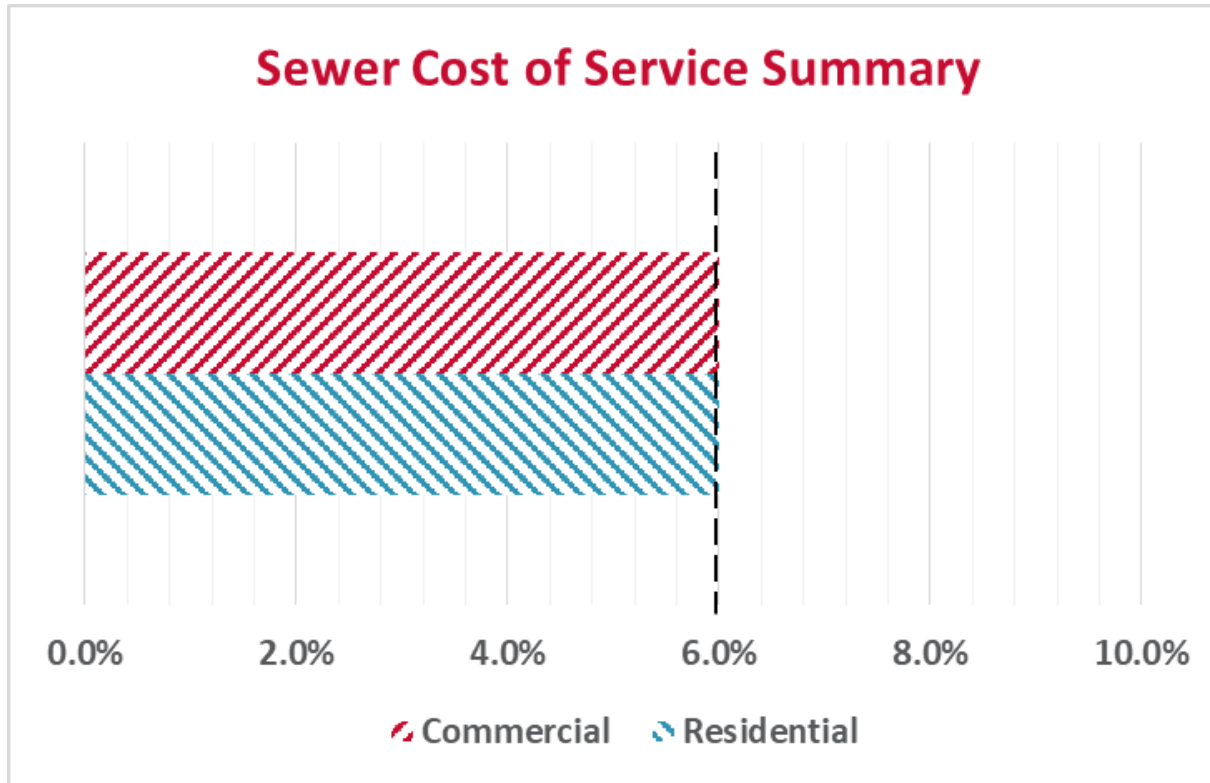
**To avoid legal challenges to rates the District must implement cost-based rates as developed in the cost of service analysis**

# Water Cost of Service Unit Costs

	Res – Tier 1	Res – Tier 2	Res – Tier 3	Res – Tier 4	Commercial	Fireline
<b>Cost of Service</b>						
Variable (\$/1,000)	\$2.97	\$3.88	\$5.59	\$11.05	\$4.20	\$0.00
Fixed (\$/month)	\$79.31					\$29.70
<b>Present Rates</b>						
Variable (\$/1,000)	\$2.68	\$3.64	\$5.32	\$8.25	\$6.74	\$0.00
Fixed (\$/month)	\$74.50				\$89.50	\$28.13

**To avoid legal challenges to rates the District must implement cost-based rates as developed in the cost of service analysis**

# Summary of the Sewer Cost of Service Analysis - 6% Revenue Adjustment



## Additional / (Decreased) Revenue Generation

- Residential: \$248,000
  - Commercial: \$50,000
- System Total: \$298,000**

**To avoid legal challenges to rates the District must implement cost-based rates as developed in the cost of service analysis**

# Sewer Cost of Service Unit Costs

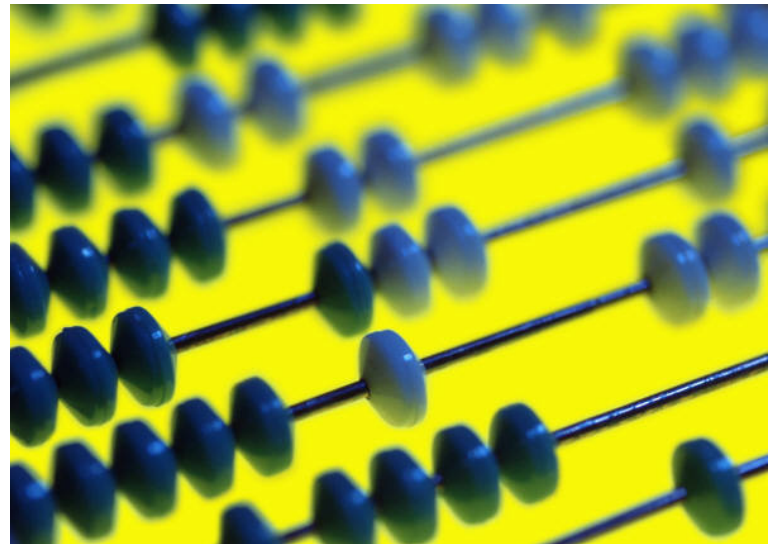
	Cost \$ / EDU
<b>Cost of Service</b>	\$46.79
<b>Present Rates</b>	\$44.14

To avoid legal challenges to rates the District must implement cost-based rates as developed in the cost of service analysis

# Summary of the Water and Sewer Cost of Service

- Cost differences exist for the water cost of service
  - Need to reflect recent legal decisions
  - Calculation of rates by tier and fixed charge
- Sewer cost of service is based on EDU calculation
  - Applied to commercial customers based on relationship of billing unit (seats, fixture unit, etc.) to 1 EDU
- Proposed rates are based on the unit costs as developed in the cost of service analysis
  - Meet the requirement of Proposition 218

## Rate Design



# Overview of the Water Rate Designs

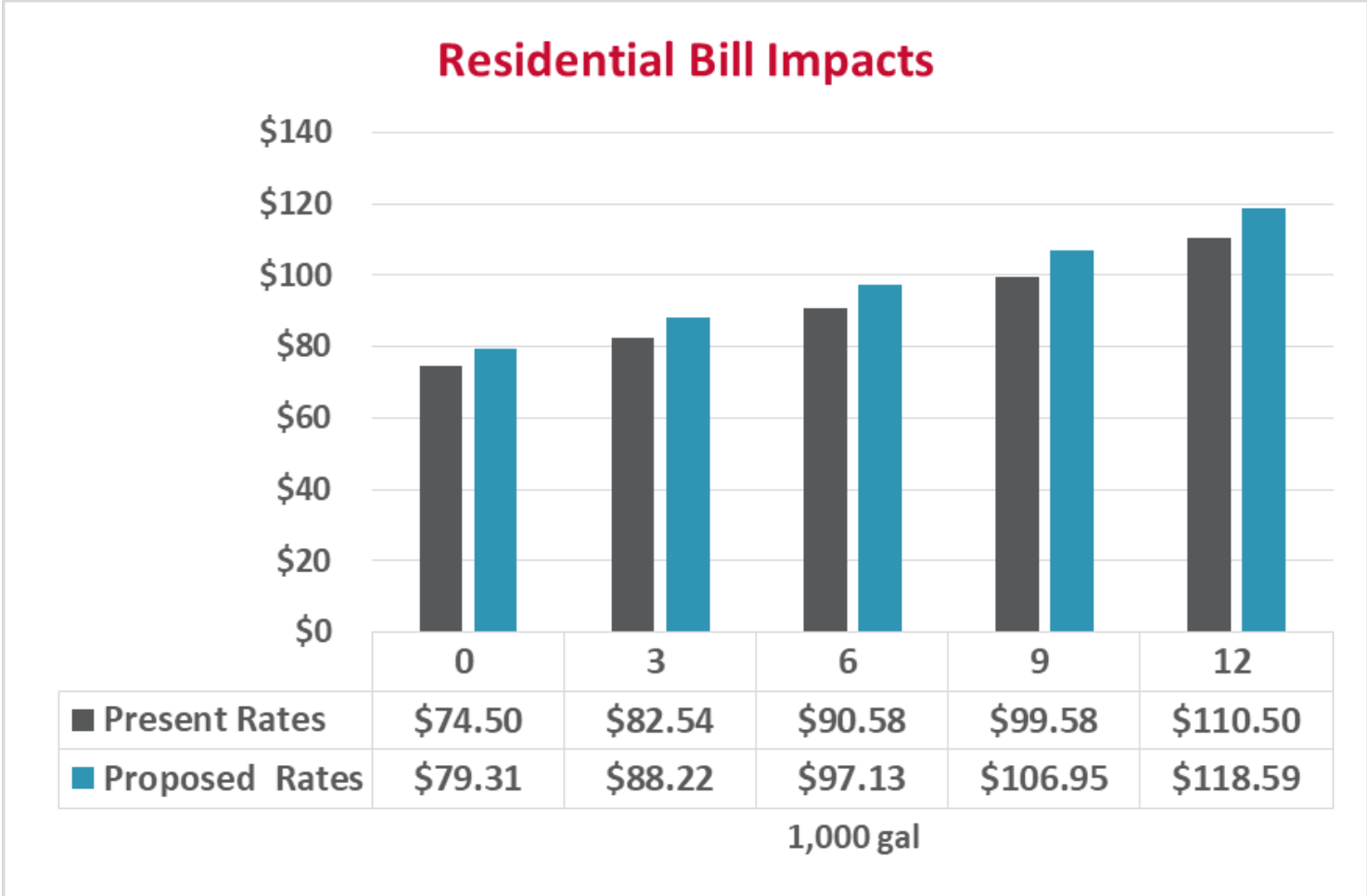
- Maintained the current customer classes of service
  - Residential, commercial, fireline
- Maintained the current rate structures
  - No changes to the tier sizes
  - Tier pricing is based on cost of service unit costs
  - Fixed (meter charge) is based on cost of service unit costs
  - All customer charged the same meter rate by meter size
- Timberland customers are billed at proposed system rates
- Madden Creek and Tahoe Cedars customers transition to system rates
  - Alternative 1 – transition by year 5 of study (7 years from acquisition)
  - Alternative 2 – transition in year 8 (10 years from acquisition)



# Present and Proposed Residential Water Rates

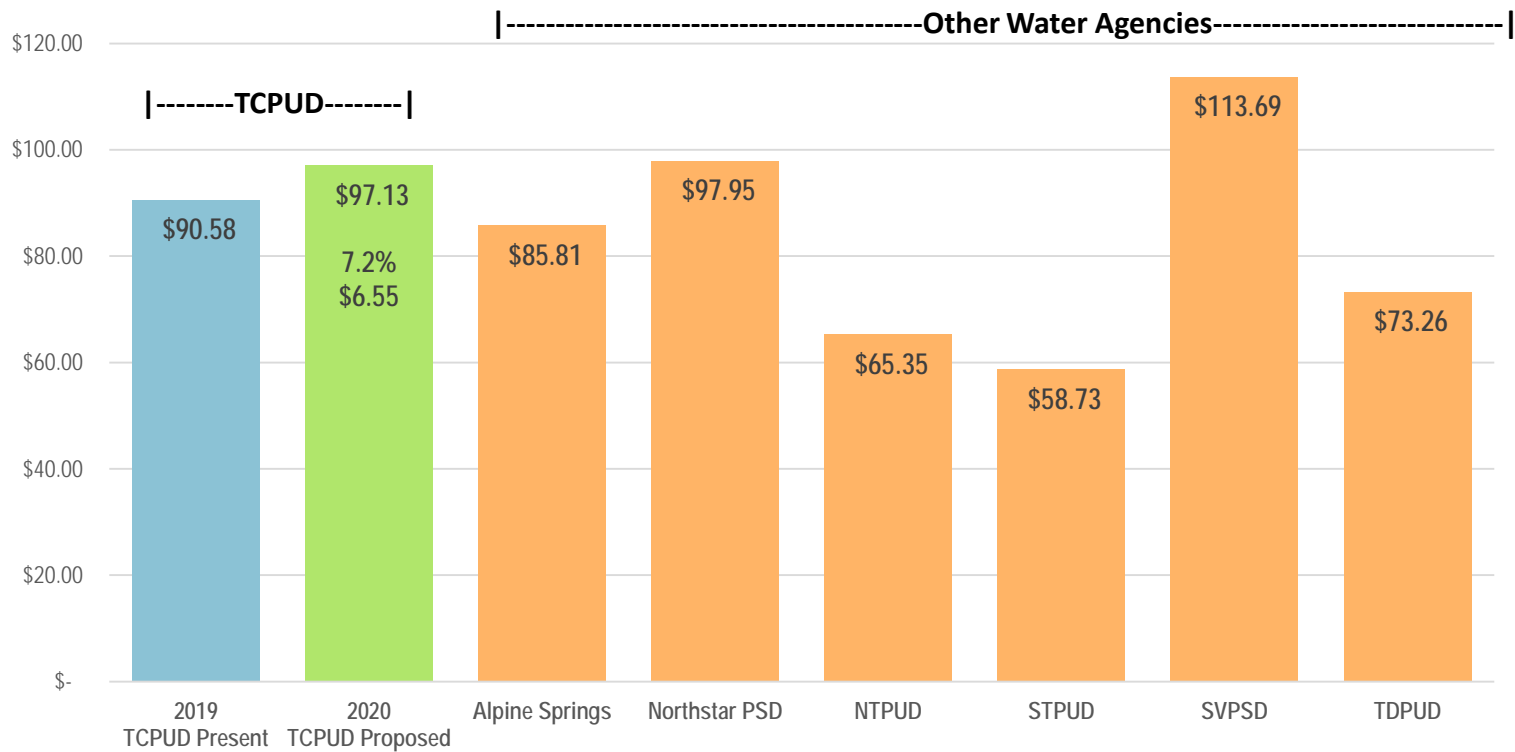
	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Base Charge</b>						
3/4"	\$74.50	\$79.31	\$82.48	\$85.78	\$89.21	\$92.78
1"	112.25	132.45	137.74	143.25	148.98	154.94
1 1/4"	145.00	198.28	206.20	214.45	223.02	231.95
1 1/2"	172.25	264.10	274.66	285.65	297.07	308.96
2"	232.00	422.72	439.62	457.21	475.49	494.52
3"	350.75	793.10	824.80	857.80	892.10	927.80
4"	462.00	1,322.10	1,374.94	1,429.95	1,487.13	1,546.64
6"	693.50	2,643.40	2,749.06	2,859.05	2,973.37	3,092.36
8"	--	4,229.60	4,398.66	4,574.65	4,757.57	4,947.96
Unmetered	\$93.10	\$97.13	\$101.02	\$105.04	\$109.25	\$113.60
<b>Consumption</b>						
0 - 8,000 gal	\$2.68	\$2.97	\$3.09	\$3.21	\$3.34	\$3.47
8,000 - 20,000 gal	3.64	3.88	4.04	4.19	4.36	4.53
20,000 - 40,000 gal	5.32	5.59	5.82	6.04	6.29	6.53
40,000 + gal	8.25	8.75	9.10	9.46	9.84	10.23

# Present and Proposed Year 1 Residential Water Rates



# Residential Water Bills Comparison to Other Water Agencies

TCPUD Residential Average Monthly Bill Comparison  
(based on 6,000 gallons avg. monthly consumption)



# Present and Proposed Commercial Water Rates

	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Base Charge</b>						
3/4"	\$89.50	\$79.31	\$82.48	\$85.78	\$89.21	\$92.78
1"	143.25	132.45	137.74	143.25	148.98	154.94
1 1/4"	173.75	198.28	206.20	214.45	223.02	231.95
1 1/2"	208.75	264.10	274.66	285.65	297.07	308.96
2"	279.50	422.72	439.62	457.21	475.49	494.52
3"	418.75	793.10	824.80	857.80	892.10	927.80
4"	553.75	1,322.10	1,374.94	1,429.95	1,487.13	1,546.64
6"	829.75	2,643.40	2,749.06	2,859.05	2,973.37	3,092.36
8"	1,110.50	4,229.60	4,398.66	4,574.65	4,757.57	4,947.96
<b>Consumption</b>						
All Usage	\$6.74	\$4.20	\$4.37	\$4.54	\$4.72	\$4.91

# Alternative Commercial Fixed Charge Transition

	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	2020	2021	2022	2023	2024
<b>Base Charge</b>						
3/4"	\$89.50	\$92.78	\$92.78	\$92.78	\$92.78	\$92.78
1"	\$143.25	\$152.16	\$154.94	\$154.94	\$154.94	\$154.94
1 1/4"	\$173.75	\$200.40	\$210.61	\$219.89	\$227.31	\$231.95
1 1/2"	\$208.75	\$269.06	\$279.27	\$290.40	\$299.68	\$308.96
2"	\$279.50	\$417.51	\$445.34	\$473.18	\$491.73	\$494.52
3"	\$418.75	\$695.85	\$732.96	\$788.63	\$858.22	\$927.80
4"	553.75	1,066.97	1,182.95	1,298.92	1,414.90	1,546.64
6"	829.75	2,164.56	2,303.73	2,489.29	2,739.79	3,092.36
8"	1,110.50	3,092.36	3,463.48	3,927.38	4,391.28	4,947.96
<b>Consumption</b>						
All Usage	\$6.74	\$4.20	\$4.37	\$4.54	\$4.72	\$4.91

# Present and Proposed Fire Service Charges

		<i>Present Rates</i>	<i>Proposed</i>				
			2020	2021	2022	2023	2024
3/4"	<i>3/4" Domestic or Commercial Service</i>	\$74.50	\$79.31	\$82.48	\$85.78	\$89.21	\$92.78
	<i>3/4" Private Fire Protection Service</i>	\$28.13	\$29.70	\$30.89	\$32.13	\$33.42	\$34.76
<i>CFS - 3/4"</i>		\$102.63	\$109.01	\$113.37	\$117.91	\$122.63	\$127.54
1"	<i>3/4" Domestic or Commercial Service</i>	\$74.50	\$79.31	\$82.48	\$85.78	\$89.21	\$92.78
	<i>1" Private Fire Protection</i>	\$37.50	\$39.60	\$41.19	\$42.84	\$44.56	\$46.35
<i>CFS - 1"</i>		\$112.00	\$118.91	\$123.67	\$128.62	\$133.77	\$139.13
1.5"	<i>1" Domestic or Commercial Service</i>	\$112.25	\$132.45	\$137.74	\$143.25	\$148.98	\$154.94
	<i>1.5" Private Fire Protection</i>	\$56.25	\$70.40	\$73.23	\$76.16	\$79.21	\$82.40
<i>CFS - 1.5"</i>		\$168.50	\$202.85	\$210.97	\$219.41	\$228.19	\$237.34
2"	<i>1" Domestic or Commercial Service</i>	\$112.25	\$132.45	\$137.74	\$143.25	\$148.98	\$154.94
	<i>2" Private Fire Protection</i>	\$75.00	\$93.87	\$97.64	\$101.55	\$105.61	\$109.87
<i>CFS - 2"</i>		\$187.25	\$226.32	\$235.38	\$244.80	\$254.59	\$264.81
>2"	<i>Service Classification Size Determined by District</i>	TBD	TBD	TBD	TBD	TBD	TBD

# Proposed Flat Rates Madden Creek

	<i>Present Rates</i>	<i>Proposed</i>							
		2020	2021	2022	2023	2024	2025	2026	2027
<b>Proposed Unmetered</b>	\$93.10	\$97.13	\$101.02	\$105.04	\$109.25	\$113.60	\$117.57	\$121.71	\$125.97
<b>7-Year Transition</b>	<b>Property Tax = \$250,000</b>				<b>Property Tax = \$500,000</b>				
Unmetered	--	64.88	74.65	85.82	98.76	113.60	--	--	--
Year Round SFR	56.39	--	--	--	--	--	--	--	--
Seasonal SFR	41.9	--	--	--	--	--	--	--	--
Yr Round SFR +2nd Unit	88.71	--	--	--	--	--	--	--	--
<b>10-Year Transition</b>									
Unmetered	--	\$62.36	\$68.90	\$76.15	\$84.12	\$93.15	\$102.87	\$113.80	\$125.97
Year Round SFR	\$56.39	--	--	--	--	--	--	--	--
Seasonal SFR	\$41.90	--	--	--	--	--	--	--	--
Yr Round SFR +2nd Unit	\$88.71	--	--	--	--	--	--	--	--

\* Metered rate would also be transitioned for Madden Creek customers

\*\* New connections would pay current TCPUD adopted rates

# Proposed Flat Rates Tahoe Cedars

	<i>Present Rates</i>	<i>Proposed</i>							
		2020	2021	2022	2023	2024	2025	2026	2027
<b>Proposed Unmetered</b>	\$93.10	\$97.13	\$101.02	\$105.04	\$109.25	\$113.60	\$117.57	\$121.71	\$125.97
<b>7-Year Transition</b>		<b>Property Tax = \$2.0 Million</b>				<b>Property Tax = \$3.5 Million</b>			
Unmetered	--	53.23	64.35	77.73	93.96	113.60	--	--	--
Year Round SFR	44.06	--	--	--	--	--	--	--	--
Seasonal SFR	40.97	--	--	--	--	--	--	--	--
Yr Round SFR +2nd Unit	71.99	--	--	--	--	--	--	--	--
Yr Round SFR +2 Unit	99.92	--	--	--	--	--	--	--	--
<b>10-Year Transition</b>									
Unmetered	--	\$50.22	\$57.28	\$65.33	\$74.51	\$84.97	\$97.00	\$110.76	\$125.97
Year Round SFR	\$44.06	--	--	--	--	--	--	--	--
Seasonal SFR	\$40.97	--	--	--	--	--	--	--	--
Yr Round SFR +2nd Unit	\$71.99	--	--	--	--	--	--	--	--
Yr Round SFR +2 Unit	\$99.92	--	--	--	--	--	--	--	--

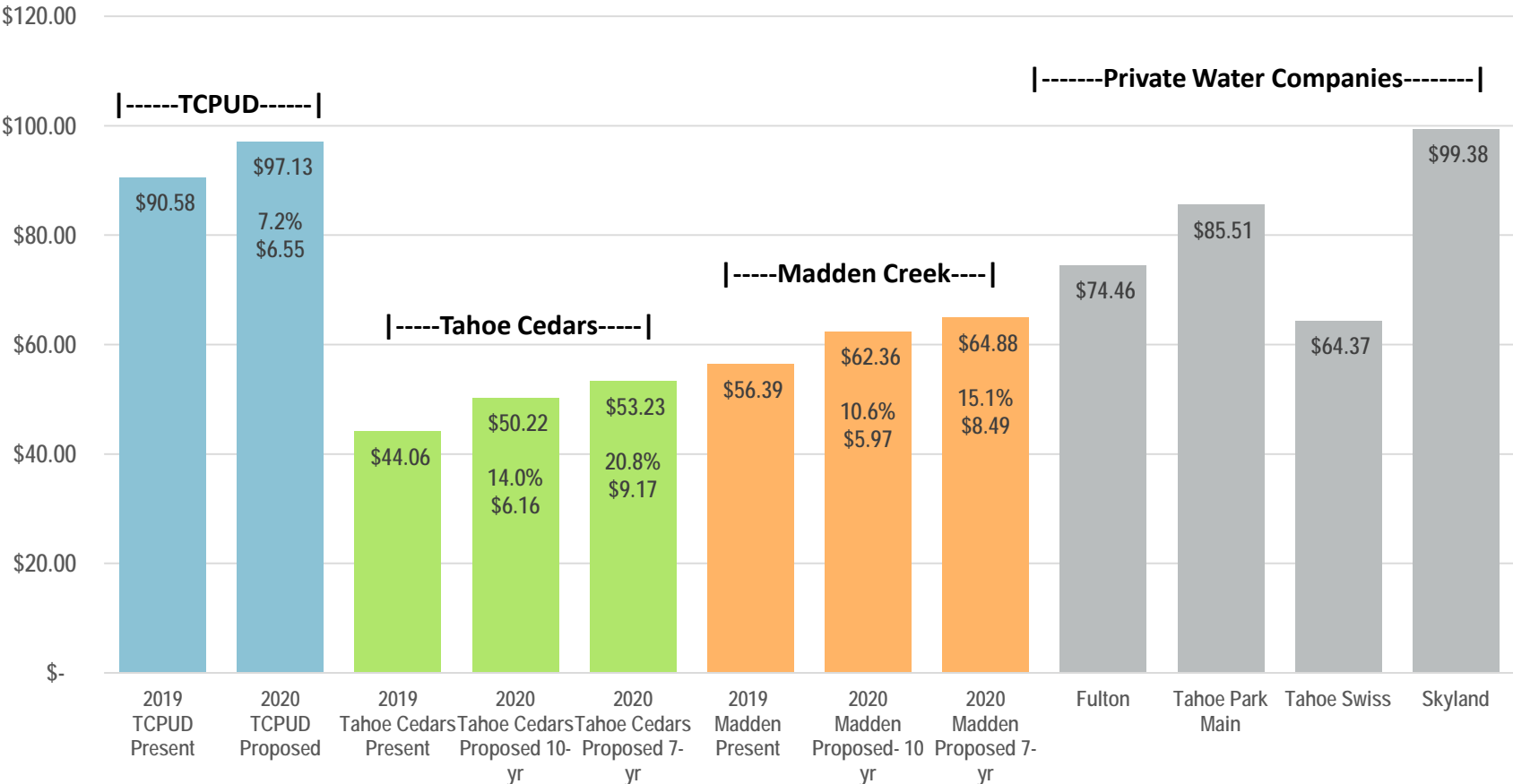
\* Metered rate would also be transitioned for Tahoe Cedars customers

\*\* New connections would pay current TCPUD adopted rates



# Compare TCPUD, Tahoe Cedars and Madden Creek Unmetered Rate To Private Water Companies

Tahoe Cedars & Madden Creek - Transition Rates  
 Compare Residential Year Round Flat Rate to Private Water Companies



# Proposed Metered Rates Madden Creek – 7-Year Transition (2018 – 2024)

	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Base Charge</b>						
3/4"	\$26.61	\$52.98	\$60.95	\$70.08	\$80.65	\$92.78
1"	44.36	88.48	101.79	117.04	134.68	154.94
1 1/4"	--	132.45	152.38	175.21	201.61	231.95
1 1/2"	53.23	176.42	202.97	233.38	268.55	308.96
2"	70.97	282.38	324.88	373.54	429.84	494.52
3"	--	529.79	609.53	700.82	806.46	927.80
4"	212.92	883.16	1,016.08	1,168.27	1,344.37	1,546.64
6"	--	1,765.79	2,031.56	2,335.84	2,687.93	3,092.36
8"	--	2,825.37	3,250.61	3,737.49	4,300.84	4,947.96
<b>Consumption</b>						
All Usage	\$2.56	--	--	--	--	--
0 - 8,000 gal	--	\$1.98	\$2.28	\$2.62	\$3.02	\$3.47
8,000 - 20,000 gal	--	2.59	2.99	3.42	3.94	4.53
20,000 - 40,000 gal	--	3.73	4.30	4.93	5.69	6.53
40,000 + gal	--	5.85	6.72	7.73	8.90	10.23

# Proposed Metered Rates Tahoe Cedars– 7-Year Transition (2018 – 2024)

	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	2020	2021	2022	2023	2024
<b>Base Charge</b>						
3/4"	\$35.28	\$43.46	\$52.54	\$63.48	\$76.72	\$92.78
1"	54.88	72.58	87.74	106.01	128.12	154.94
1 1/4"	--	108.66	131.35	158.69	191.80	231.95
1 1/2"	--	144.73	174.96	211.38	255.48	308.96
2"	105.93	231.65	280.04	338.34	408.92	494.52
3"	--	434.62	525.40	634.77	767.21	927.80
4"	248.01	724.51	875.84	1,058.16	1,278.93	1,546.64
6"	--	1,448.58	1,751.15	2,115.70	2,557.10	3,092.36
8"	--	2,317.82	2,801.95	3,385.24	4,091.51	4,947.96
<b>Consumption</b>						
All Usage	\$2.66	--	--	--	--	--
0 - 8,000 gal	--	\$1.63	\$1.97	\$2.38	\$2.87	\$3.47
8,000 - 20,000 gal	--	2.13	2.57	3.10	3.75	4.53
20,000 - 40,000 gal	--	3.06	3.71	4.47	5.41	6.53
40,000 + gal	--	4.80	5.80	7.00	8.46	10.23

# Proposed Metered Rates Madden Creek – 10-Year Transition (2018 – 2027)

	<i>Present Rates</i>	<i>Proposed</i>							
		2020	2021	2022	2023	2024	2025	2026	2027
<b>Base Charge</b>									
3/4"	\$26.61	\$50.92	\$56.25	\$62.19	\$68.69	\$76.08	\$84.03	\$92.93	\$102.87
1"	44.36	85.03	93.94	103.86	114.71	127.05	140.32	155.19	171.79
1 1/4"	--	127.30	140.63	155.48	171.73	190.20	210.07	232.33	257.18
1 1/2"	--	169.55	187.32	207.10	228.74	253.35	279.81	309.46	342.56
2"	70.97	271.39	299.82	331.48	366.13	405.51	447.86	495.32	548.30
3"	--	509.17	562.51	621.91	686.92	760.80	840.26	929.30	1,028.70
4"	212.92	848.79	937.71	1,036.71	1,145.09	1,268.24	1,400.72	1,549.14	1,714.84
6"	--	1,697.06	1,874.86	2,072.81	2,289.49	2,535.74	2,800.60	3,097.35	3,428.66
8"	--	2,715.40	2,999.89	3,316.62	3,663.33	4,057.33	4,481.12	4,955.94	5,486.06
<b>Consumption</b>									
All Usage	\$2.56	--	--	--	--	--	--	--	--
0 - 8,000 gal	--	\$1.91	\$2.11	\$2.33	\$2.57	\$2.85	\$3.14	\$3.48	\$3.85
8,000 - 20,000 gal	--	2.49	2.76	3.04	3.36	3.71	4.10	4.54	5.03
20,000 - 40,000 gal	--	3.59	3.97	4.38	4.84	5.35	5.92	6.55	7.25
40,000 + gal	--	5.62	6.21	6.86	7.58	8.39	9.27	10.25	11.34

# Proposed Metered Rates Tahoe Cedars— 10-Year Transition (2018 – 2027)

	<i>Present</i>	<i>Proposed</i>							
	<i>Rates</i>	2020	2021	2022	2023	2024	2025	2026	2027
<b>Base Charge</b>									
3/4"	\$35.28	\$41.00	\$46.77	\$53.36	\$60.84	\$69.40	\$79.22	\$90.44	\$102.87
1"	54.88	68.48	78.10	89.10	101.60	115.90	132.31	151.04	171.79
1 1/4"	--	102.51	116.92	133.39	152.10	173.50	198.07	226.12	257.18
1 1/2"	--	136.54	155.73	177.67	202.60	231.10	263.82	301.18	342.56
2"	105.93	218.55	249.26	284.38	324.28	369.90	422.27	482.07	548.30
3"	--	410.03	467.66	533.55	608.41	693.99	792.25	904.45	1,028.70
4"	248.01	683.53	779.59	889.43	1,014.22	1,156.89	1,320.68	1,507.72	1,714.84
6"	--	1,366.64	1,558.72	1,778.33	2,027.84	2,313.09	2,640.56	3,014.53	3,428.66
8"	--	2,186.70	2,494.04	2,845.43	3,244.66	3,701.07	4,225.06	4,823.43	5,486.06
<b>Consumption</b>									
All Usage	\$2.66	--	--	--	--	--	--	--	--
0 - 8,000 gal	--	\$1.54	\$1.75	\$2.00	\$2.28	\$2.60	\$2.96	\$3.39	\$3.85
8,000 - 20,000 gal	--	1.54	2.29	2.61	2.97	3.39	3.87	4.42	5.03
20,000 - 40,000 gal	--	1.54	3.30	3.76	4.29	4.88	5.58	6.37	7.25
40,000 + gal	--	1.54	5.16	5.88	6.71	7.65	8.74	9.97	11.34

# Overview of the Sewer Rate Designs

- Maintained the current customer classes of service
  - Residential
  - Commercial – by customer type
- Maintained the current rate structures
  - Charged per EDU

# Present and Proposed Sewer Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		2020	2021	2022	2023	2024
<b>Base Charge - 6% Annual Adj.</b>						
Residential	\$44.14	\$46.79	\$49.60	\$52.58	\$55.73	\$59.07
<b>Base Charge - 3% Annual Adj.</b>						
Residential	\$44.14	\$45.46	\$46.83	\$48.23	\$49.68	\$51.17

# Present and Proposed Sewer Rates (cont.) (6% annually)

<b>Non-Residential Rates (monthly)</b>						
	<i>Present Rates</i>	<i>Proposed Rates</i>				
		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Non-Residential Rates</b>						
Motel W/O Kitchen	\$17.96	\$19.04	\$20.18	\$21.39	\$22.67	\$24.03
Motel W/Kitchen	19.14	20.29	21.51	22.80	24.17	25.62
Seating - Per 1/2 Seat	1.23	1.30	1.38	1.46	1.55	1.64
Seating - Per Seat	2.46	2.61	2.76	2.93	3.11	3.30
Laundry - Per Machine	8.98	9.52	10.09	10.70	11.34	12.02
Hotel W/Kitchen	17.96	19.04	20.18	21.39	22.67	24.03
Hotel W/O Kitchen	11.33	12.01	12.73	13.49	14.30	15.16
Campsite W/Sewer	22.26	23.60	25.01	26.51	28.10	29.79
Campsite W/O Sewer	19.14	20.29	21.51	22.80	24.17	25.62
Snackbar	66.34	70.32	74.54	79.01	83.75	88.78
Service Station	66.34	70.32	74.54	79.01	83.75	88.78
Beauty / Barber Shop (Per Chair)	23.92	25.36	26.88	28.49	30.20	32.01
Theatre	132.61	140.57	149.01	157.95	167.43	177.48
Boat Pump	66.34	70.32	74.54	79.01	83.75	88.78
Standby Sewer Service	8.69	9.21	9.76	10.35	10.97	11.63
Food Service Estab Lic	29.40	31.17	33.03	35.01	37.11	39.34
Backwash (Pool/Spa Filters)	22.26	23.60	25.01	26.51	28.10	29.79
Unclassified Sewer	44.14	46.79	49.60	52.58	55.73	59.07
Unclassified Sewer W/O Kitchen	17.96	19.04	20.18	21.39	22.67	24.03
.5 Sewer Unit (1-10 Fixtures)	22.26	23.60	25.01	26.51	28.10	29.79
1.0 Sewer Unit (11-20 Fixtures)	44.14	46.79	49.60	52.58	55.73	59.07
Comm'l Non-Rest < 1,000 Sq F	44.14	46.79	49.60	52.58	55.73	59.07
Comm'l Non-Rest > 1,000 Sq F	22.26	23.60	25.01	26.51	28.10	29.79
Pro-Rated Sewer Charge	1.21	1.28	1.36	1.44	1.53	1.62

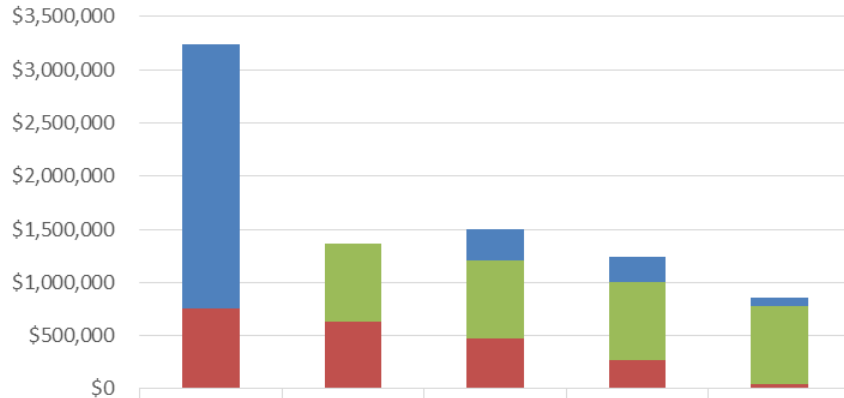


# General Fund – Available Property Tax Revenue

- District (Board) has the authority to utilize property tax revenues at their discretion
- Historically property tax revenues have funded, and are expected to continue to fund:
  - Parks, recreation, and golf course/WSP property O&M expenses
  - Annual debt service (water and sewer)
- Study has identified unfunded capital improvements for the water utility based on target revenue adjustments
- Study has assumed property tax revenues will fund
  - WTP annual debt service
  - Transition recently acquired customers (systems) to District rate levels
- Further Board direction is necessary to confirm the use of property tax revenues for these purposes during the LTFP update

# Annual General Fund Property Tax – Water Needs

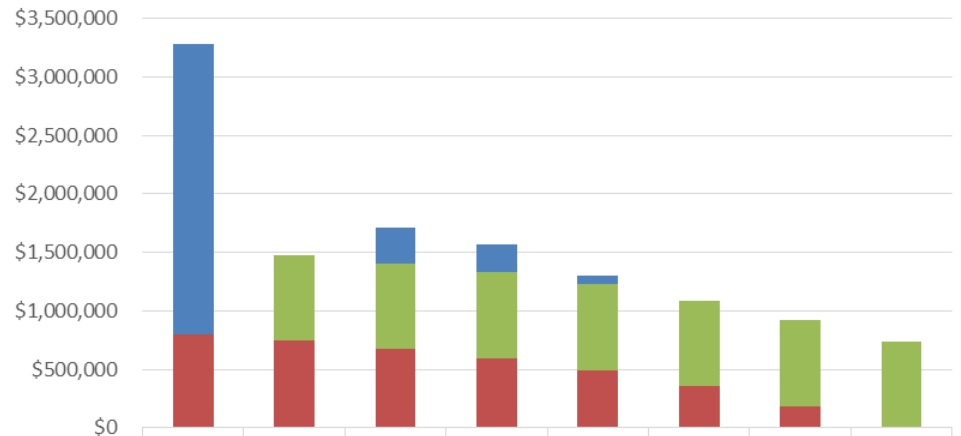
General Fund Property Tax - Water Funding Needs



	2020	2021	2022	2023	2024
Unfunded Water Capital	\$2,485,630	\$0	\$300,000	\$238,154	\$76,540
WTP Annual Debt Service	\$0	\$735,127	\$735,127	\$735,127	\$735,127
7-Year Customer Transition	\$751,944	\$629,507	\$467,636	\$267,051	\$45,668

← Property Tax for Rate Transition \$2,161,806

General Fund Property Tax - Water Funding Needs



	2020	2021	2022	2023	2024	2025	2026	2027
Unfunded Water Capital	\$2,485,630	\$0	\$300,000	\$238,154	\$76,540	\$0	\$0	\$0
WTP Annual Debt Service	\$0	\$735,127	\$735,127	\$735,127	\$735,127	\$735,127	\$735,127	\$735,127
10-Year Customer Transition	\$797,998	\$743,927	\$672,218	\$596,625	\$490,924	\$352,836	\$188,083	\$0

Property Tax for Rate Transition \$3,842,611→

## **Board Direction**

- Overall revenue goal
- Proposed rates
- Transition time period for Tahoe Cedars / Madden Creek
- 4<sup>th</sup> tier residential rate
- Commercial fixed charge approach
- WTP debt service funding
- Timing of next steps

## Next Steps

- Gain direction from the Board on the study results
- Finalize the water and sewer technical analyses
- Present findings and recommendations
- Targeting August Board meeting to set public hearing and mail customer notification
- Public outreach meetings
- Public Hearing October Board Meeting
- Adopt proposed rates at November Board Meeting
  - *(if no majority protest)*



# Discussion

