



Tahoe City Public Utility District

Water and Sewer Rate Study

Final Study Results and Recommendations

August 16, 2019

HDR



Purpose of the Presentation

Overview of the Rate Setting Process



Review Prior Board Discussions



Key Assumptions of the Study



Proposed Water and Sewer Rates



Board Discussion and Direction



Purpose of the Study

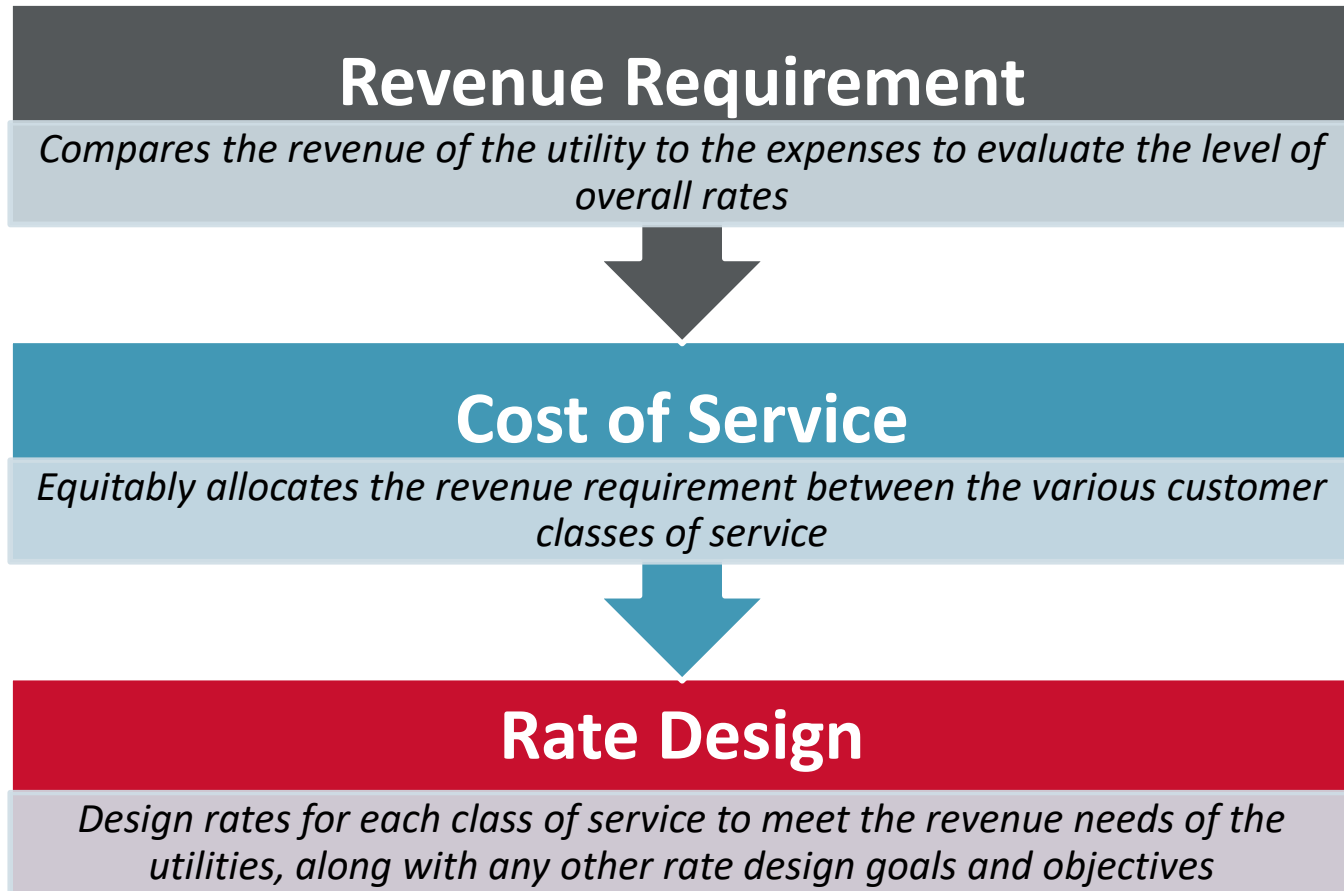
- Provide sufficient revenues to operate and maintain the District's water and sewer infrastructure
- Develop equitable and cost-based rates
 - Meet the intent of Proposition 218
- Establish the administrative record for the study
- Reflect prudent financial planning criteria (LTFP)
 - Maintain target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



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
- Rate levels will be reviewed during budgeting process
- Board action necessary to reduce rates lower than noticed levels

Developing Cost-Based Water and Sewer Rates



Prior Board Discussions

- 07/22/19 Board Meeting
 - Gained feedback on overall revenue adjustments for water and sewer
 - Annual rate funding level for infrastructure renewal and replacement
 - Reviewed and discussed the cost of service methodology and results
 - Reviewed preliminary proposed rates based on cost of service results

- 08/06/19 Special Board Workshop
 - Reviewed draft final proposed revenue adjustments
 - Summarized cost of service results (no changes from 07/22/19)
 - Presented draft final proposed water and sewer rates based on Board input from 07/22/19

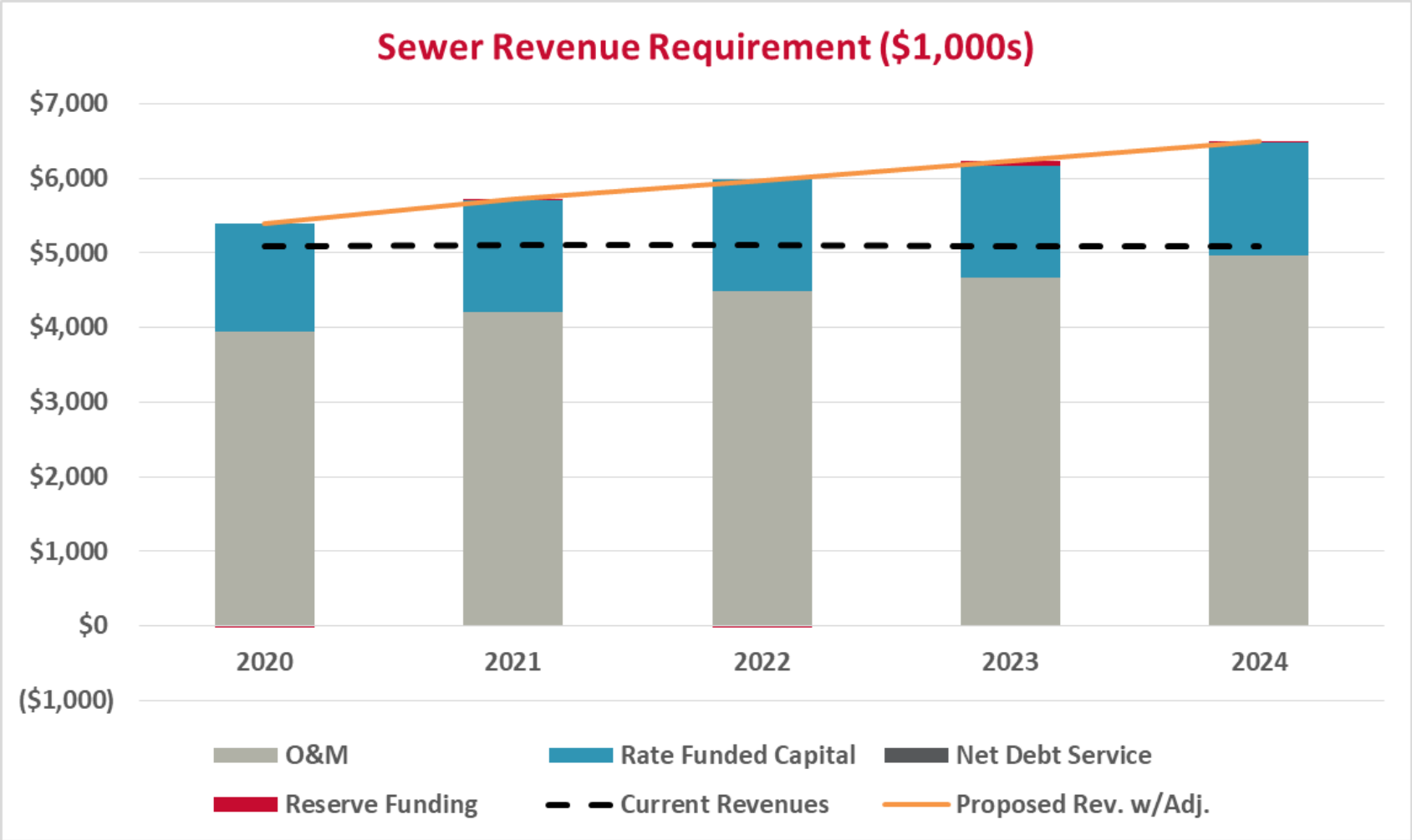
Primary Goals Set By Board of Directors

- Target \$1.5 million annually from sewer rates to fund sewer capital infrastructure
- Target \$2.5 million annually from water rates to fund water capital infrastructure
- Target a single, seven year transition rate for the Tahoe Cedars and Madden Creek service area customers such that Tahoe Cedar and Madden rates achieve the 2024 approved Proposition 218 rates
- Pay 50% of the anticipated debt service for the West Lake Tahoe Regional Water Treatment Plant project from water rate revenue

Sewer Utility Rate Study



Summary of the Sewer Revenue Requirement



Sewer Revenue Requirement Summary

- Revenue (Rate) adjustments are necessary

	2019	2020	2021	2022	2023	2024
Avg Residential Customer Bill / Mo / EDU	\$44.14	\$46.79	\$49.60	\$51.83	\$54.16	\$56.60
Monthly \$ Change		\$2.65	\$2.81	\$2.23	\$2.33	\$2.44
Annual % Change	-	6.0%	6.0%	4.5%	4.5%	4.5%

- Reflects the need to prudently fund annual sewer O&M expenses
- Adequately fund annual infrastructure renewal and replacement
 - \$1.5 million annually
- Meet ending reserve targets
 - Annually using reserves to fund capital improvements
- Annual debt service funded through property tax
 - Minimal outstanding debt for sewer utility

Summary of the Sewer Cost of Service (2020)

- 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

	Cost \$ / EDU
Cost of Service – Unit Costs	\$46.79

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

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
 - Reviewed and maintained current commercial customer relationships



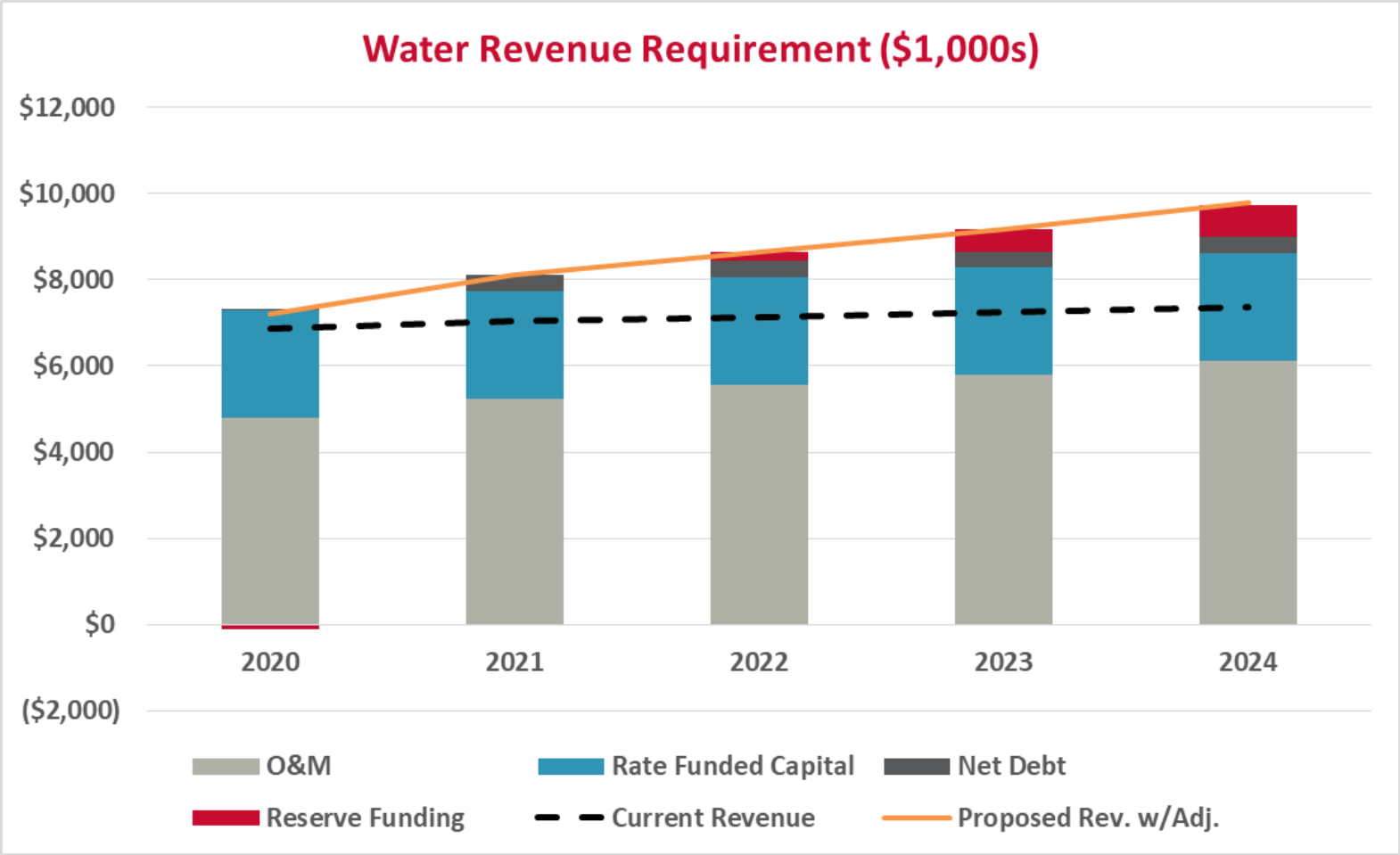
Present and Proposed Maximum Sewer Rates

	<i>Present Rates</i>	<i>Proposed Rates</i>				
		2020	2021	2022	2023	2024
Residential Rates	\$44.14	\$46.79	\$49.60	\$51.83	\$54.16	\$56.60
Commercial Rates						
Motel W/O Kitchen	\$17.96	\$19.04	\$20.18	\$21.39	\$22.35	\$23.36
Motel W/Kitchen	19.14	20.29	21.51	22.80	23.83	24.90
Seating - Per 1/2 Seat	1.23	1.30	1.38	1.46	1.53	1.60
Seating - Per Seat	2.46	2.61	2.76	2.93	3.06	3.20
Laundry - Per Machine	8.98	9.52	10.09	10.70	11.18	11.68
Hotel W/Kitchen	17.96	19.04	20.18	21.39	22.35	23.36
Hotel W/O Kitchen	11.33	12.01	12.73	13.49	14.10	14.73
Campsite W/Sewer	22.26	23.60	25.01	26.51	27.70	28.95
Campsite W/O Sewer	19.14	20.29	21.51	22.80	23.83	24.90
Snackbar	66.34	70.32	74.54	79.01	82.57	86.29
Service Station	66.34	70.32	74.54	79.01	82.57	86.29
Beauty / Barber Shop (Per Chair)	23.92	25.36	26.88	28.49	29.77	31.11
Theatre	132.61	140.57	149.01	157.95	165.06	172.49
Boat Pump	66.34	70.32	74.54	79.01	82.57	86.29
Standby Sewer Service	8.69	9.21	9.76	10.35	10.82	11.31
Food Service Estab Lic	29.40	31.17	33.03	35.01	36.59	38.24
Backwash (Pool/Spa Filters)	22.26	23.60	25.01	26.51	27.70	28.95
Unclassified Sewer	44.14	46.79	49.60	52.58	54.95	57.42
Unclassified Sewer W/O Kitchen	17.96	19.04	20.18	21.39	22.35	23.36
.5 Sewer Unit (1-10 Fixtures)	22.26	23.60	25.01	26.51	27.70	28.95
1.0 Sewer Unit (11-20 Fixtures)	44.14	46.79	49.60	52.58	54.95	57.42
Comm'Cl Non-Rest < 1,000 Sq Ft	44.14	46.79	49.60	52.58	54.95	57.42
Comm'Cl Non-Rest > 1,000 Sq Ft	22.26	23.60	25.01	26.51	27.70	28.95
Pro-Rated Sewer Charge	1.21	1.28	1.36	1.44	1.50	1.57

Water Utility Rate Study



Summary of the Water Revenue Requirement (Step)



Water Revenue Requirement Summary

- Water Revenue (Rate) adjustments are necessary

	2019	2020	2021	2022	2023	2024
Avg. Residential Bill	\$90.58	\$97.13	\$102.97	\$107.11	\$111.39	\$115.87
Monthly \$ Change		\$6.55	\$5.84	\$4.14	\$4.28	\$4.48
Annual % Change	-	7.2%	6.0%	4.0%	4.0%	4.0%

- Reflects the need to prudently fund annual water O&M expenses
- Adequately fund annual infrastructure renewal and replacement
 - \$2.5 million annually
- Meet ending reserve targets
 - Annually using reserves to fund capital improvements
- 50% of annual WTP debt service funded through rates
 - All other outstanding debt funded through property tax revenue

Summary of the Water Cost of Service (2020)

- Cost differences exist for the water cost of service
 - Need to reflect recent legal decisions
 - Calculation of rates by tier and fixed charge
- Proposed rates are based on the unit costs as developed in the cost of service analysis
 - Meet the requirement of Proposition 218

	Res – Tier 1	Res – Tier 2	Res – Tier 3	Res – Tier 4	Commercial	Fireline
Cost of Service						
Variable (\$/1,000)	\$2.97	\$3.88	\$5.59	\$11.05	\$4.20	\$0.00
Fixed (\$/month)	\$79.31					\$29.70
Present Rates						
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

Overview of the Water Rate Designs

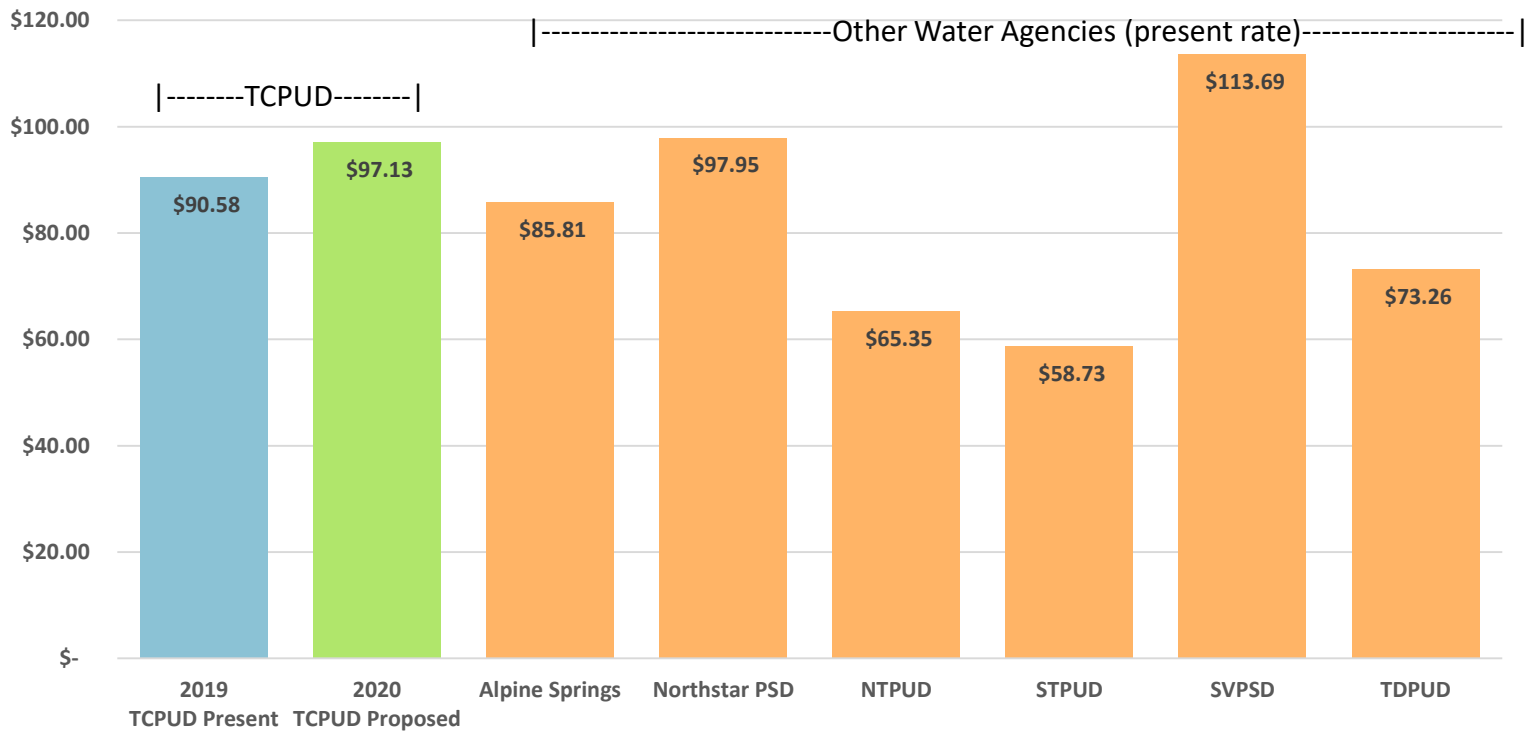
- Maintained the current customer classes of service
- Maintained the current rate structures
 - No changes to the tier sizes
 - Tier pricing is based on cost of service unit costs
 - Fixed (meter charge) is based on cost of service unit costs
 - All customer charged the same meter rate by meter size
- Timberland customers are billed at proposed system rates (2020)
- Madden Creek and Tahoe Cedars customers transition to system rates by 2024
 - Revised Transition Rate Structure so both Tahoe Cedars and Madden Creek are on a single rate transition plan

Present and Proposed Maximum Residential Water Rates

	<i>Present Rates</i>	<i>Proposed</i>				
		2020	2021	2022	2023	2024
Base Charge						
3/4"	\$74.50	\$79.31	\$84.07	\$87.43	\$90.93	\$94.57
1"	112.25	132.45	140.40	146.01	151.85	157.93
1 1/4"	145.00	198.28	210.17	218.58	227.33	236.42
1 1/2"	172.25	264.10	279.95	291.14	302.80	314.92
2"	232.00	422.72	448.09	466.00	484.66	504.06
3"	350.75	793.10	840.70	874.30	909.30	945.70
4"	462.00	1,322.10	1,401.45	1,457.46	1,515.80	1,576.48
6"	693.50	2,643.40	2,802.05	2,914.04	3,030.70	3,152.02
8"	--	4,229.60	4,483.45	4,662.64	4,849.30	5,043.42
Unmetered	\$93.10	\$97.13	\$102.97	\$107.11	\$111.39	\$115.87
Consumption						
0 - 8,000 gal	\$2.68	\$2.97	\$3.15	\$3.28	\$3.41	\$3.55
8,000 - 20,000 gal	3.64	3.88	4.12	4.28	4.45	4.64
20,000 - 40,000 gal	5.32	5.59	5.93	6.17	6.42	6.68
40,000 + gal	8.25	11.05	11.72	12.20	12.69	13.21

Residential Water Bills Comparison to Other Water Agencies

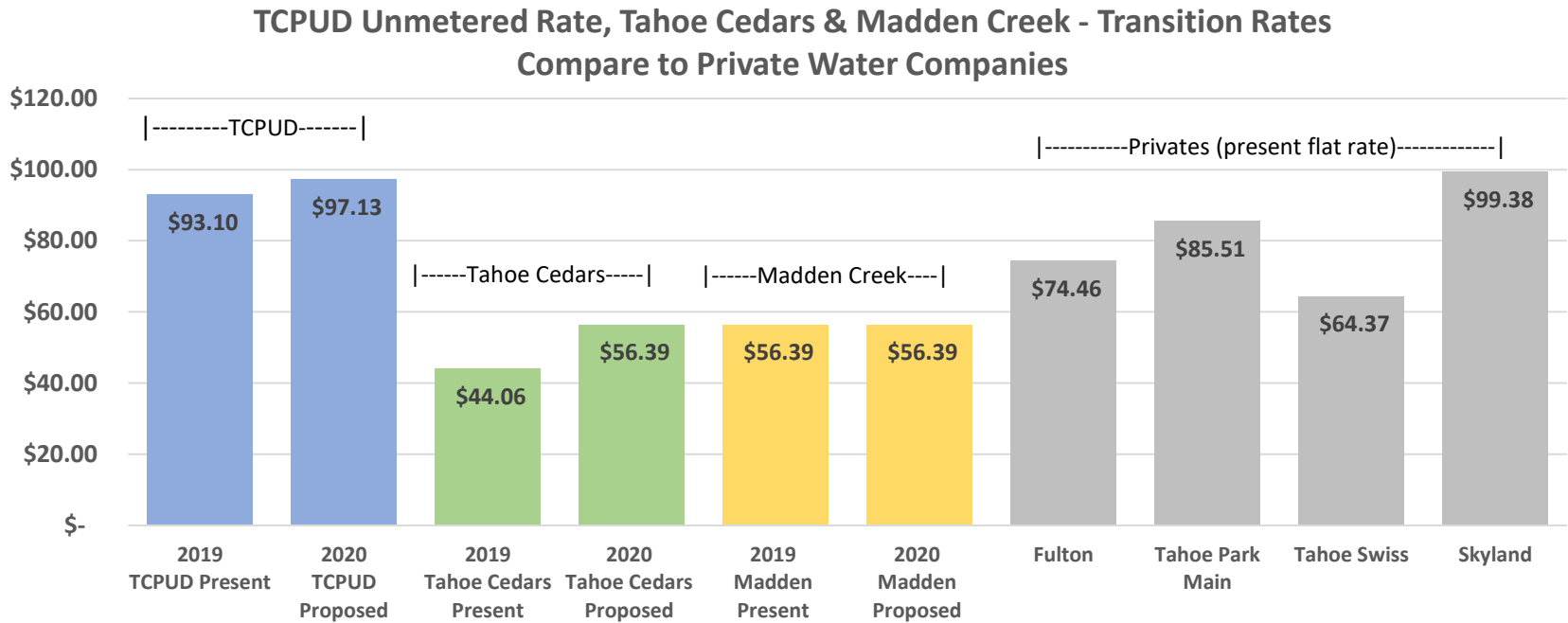
TCPUD Residential Average Monthly Bill Comparison
(based on 6,000 gallons avg. monthly consumption)



Present and Proposed Madden Creek / Tahoe Cedars Rate Transition Plan (to be adopted annually by Board)

	<i>Present Rates</i>		<i>Proposed</i>				
	TC	MC	2020	2021	2022	2023	2024
Unmetered	--	--	\$56.39	\$71.26	\$86.13	\$101.00	\$115.87
Year Round SFR	\$44.06	\$56.39	--	--	--	--	--
Seasonal SFR	40.97	41.90	--	--	--	--	--
Yr Round SFR +2nd Unit	71.99	88.71	--	--	--	--	--
Yr Round SFR +2 Unit	99.92	--	--	--	--	--	--
Base Charge							
3/4"	\$35.28	\$26.61	\$46.05	\$58.18	\$70.30	\$82.45	\$94.57
1"	54.88	44.36	76.90	97.16	117.41	137.68	157.93
1 1/4"	--	--	115.12	145.44	175.76	206.12	236.42
1 1/2"	--	53.23	153.34	193.73	234.11	274.55	314.92
2"	105.93	70.97	245.43	310.08	374.71	439.44	504.06
3"	--	--	460.47	581.76	703.02	824.46	945.70
4"	248.01	212.92	767.61	969.80	1,171.94	1,374.38	1,576.48
6"	--	--	1,534.76	1,939.02	2,343.18	2,747.94	3,152.02
8"	--	--	2,455.71	3,102.55	3,749.23	4,396.86	5,043.42
Consumption							
All Usage	\$2.66	\$2.56	--	--	--	--	--
0 - 8,000 gal	--	--	\$1.72	\$2.18	\$2.64	\$3.09	\$3.55
8,000 - 20,000 gal	--	--	2.25	2.85	3.44	4.03	4.64
20,000 - 40,000 gal	--	--	3.25	4.10	4.96	5.82	6.68
40,000 + gal	--	--	6.42	8.11	9.81	11.51	13.21

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



Present and Proposed Maximum Commercial Water Rates

	<i>Present</i>	<i>Proposed</i>				
	<i>Rates</i>	2020	2021	2022	2023	2024
Base Charge						
3/4"	\$89.50	\$79.31	\$84.07	\$87.43	\$90.93	\$94.57
1"	143.25	132.45	140.40	146.01	151.85	157.93
1 1/4"	173.75	198.28	210.17	218.58	227.33	236.42
1 1/2"	208.75	264.10	279.95	291.14	302.80	314.92
2"	279.50	422.72	448.09	466.00	484.66	504.06
3"	418.75	793.10	840.70	874.30	909.30	945.70
4"	553.75	1,322.10	1,401.45	1,457.46	1,515.80	1,576.48
6"	829.75	2,643.40	2,802.05	2,914.04	3,030.70	3,152.02
8"	1,110.50	4,229.60	4,483.45	4,662.64	4,849.30	5,043.42
Consumption						
All Usage	\$6.74	\$4.20	\$4.45	\$4.63	\$4.82	\$5.01

Present and Proposed Maximum Fireline Rates – Combined Fire Service

Final Proposed Maximum Monthly <u>Residential/Commercial</u> Combined Fire Service (CFS) rates by meter size								
CFS Size		<i>Present</i>	<i>Present</i>	<i>Proposed</i>				
		<i>Comm</i>	<i>Res</i>	2020	2021	2022	2023	2024
		<i>Rates</i>	<i>Rates</i>					
3/4"	<i>CFS - 3/4"</i>	\$117.63	\$102.63	\$109.01	\$117.48	\$122.84	\$128.46	\$134.35
1"	<i>CFS - 1"</i>	\$127.00	\$112.00	\$118.91	\$128.62	\$134.64	\$140.97	\$147.61
1.5"	<i>CFS - 1.5"</i>	\$199.50	\$168.50	\$202.85	\$219.60	\$229.94	\$240.81	\$252.22
2"	<i>CFS - 2"</i>	\$218.25	\$187.25	\$226.32	\$246.00	\$257.92	\$270.46	\$283.65
> 2"	<i>Service Classification Size Determined by District</i>	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Present and Proposed Maximum Fireline Rates

Final Proposed Maximum Monthly Private Fire Protection and / or Private Fire Hydrant Base Rate Schedule
(Only applies to customers with an approved private fire protection service or a private fire hydrant)
(if applicable, add to standard base rate)

	<i>Present Rates</i>	<i>Proposed</i>				
		2020	2021	2022	2023	2024
<i>Private Fire Protection ⁽¹⁾</i> <i>(per inch diameter)</i>	\$37.50	\$39.60	\$44.55	\$47.21	\$50.04	\$53.04
<i>Private Fire Hydrant</i> <i>(per inch diameter)</i>	\$37.50	\$39.60	\$44.55	\$47.21	\$50.04	\$53.04

⁽¹⁾ *Add to Standard Base Rate when fire protection service provide by separate service line.
 Not to be added to Combined Fire Service Base Rate.*

Next Steps

- Approve rate structure as proposed, Initiate Prop. 218 process and set public hearing date
 - October 18, 2019
- Staff Conduct Public Workshops
 - Sep. 17 – 5:30-7pm
 - Sep. 19 – 11:30-1pm
- October 18th Board Meeting
 - Hold Public Hearing
 - *(if no majority protest)*
 - » Adopt Comprehensive Rate Study
 - » Approve 5 year maximum rates
- November Board Meeting – Adopt 2020 rates



Discussion & Staff Recommendation

- Recommend final proposed maximum water and sewer rates based on the 2019 Comprehensive Water & Sewer Rate Study
- Set Proposition 218 Hearing Date
 - October 18, 2019
- Initiate Proposition 218 Process
 - Public notification (no later than September 3, 2019)

