Chester Public Utility District

Special Board Meeting Presentation

Water and Sewer Utility Rate Study Update

by

PACE Engineering, Inc.

March 2, 2026

CPUD Chester Public Utility District

PACE® ENGINEERING

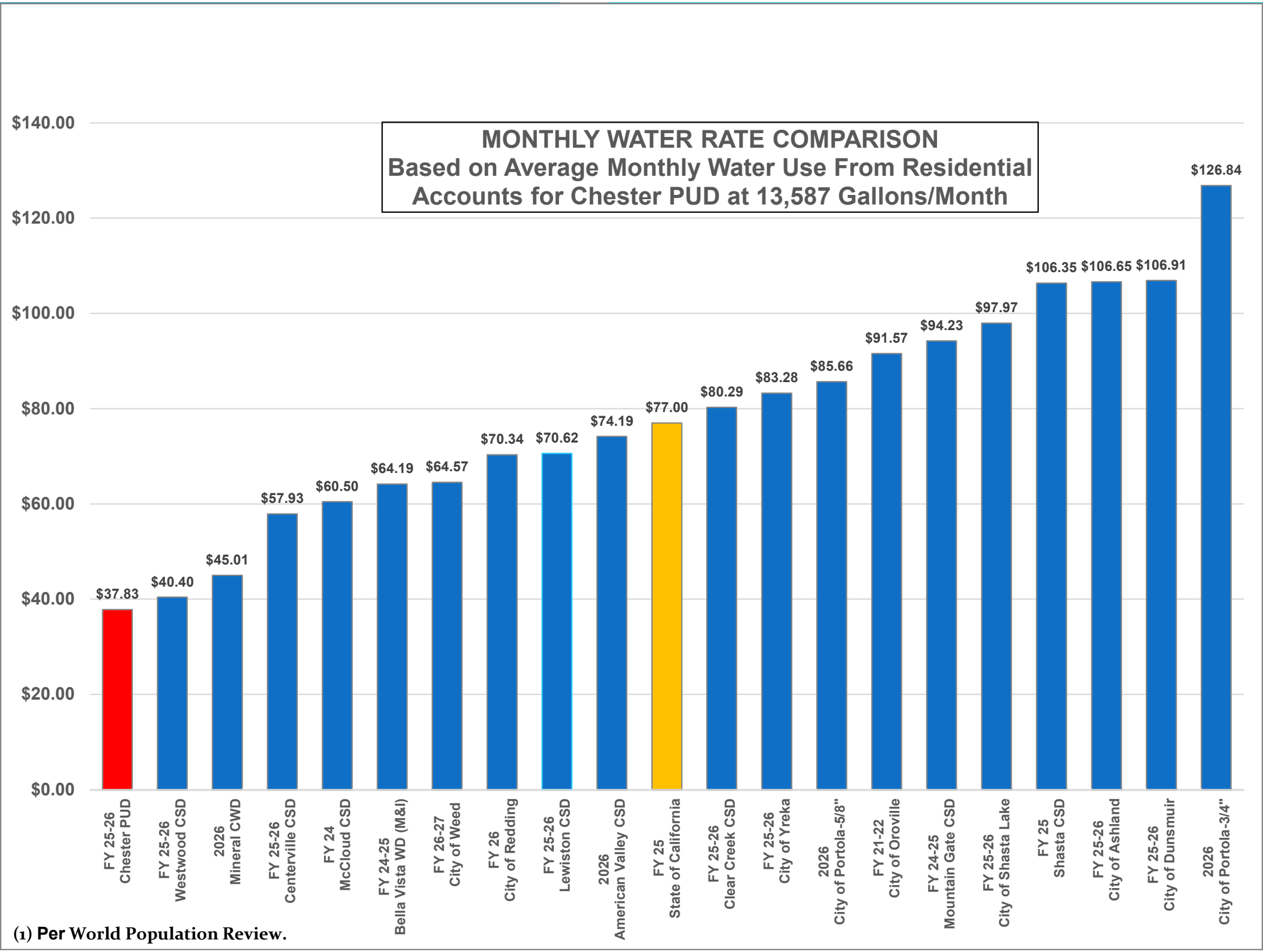
Water Utility

Background of Water Rates

- Last Rate Study was 2023
- Nominal rate increases of 1.2%, 6%, 3%, 3%, & 1% were recommended through FY2027-28
- Currently, 6,000 gallons/month is included with the meter base rates
- Base meter rates (for larger than 5/8” & ¾”) did not follow recommended AWWA guidelines

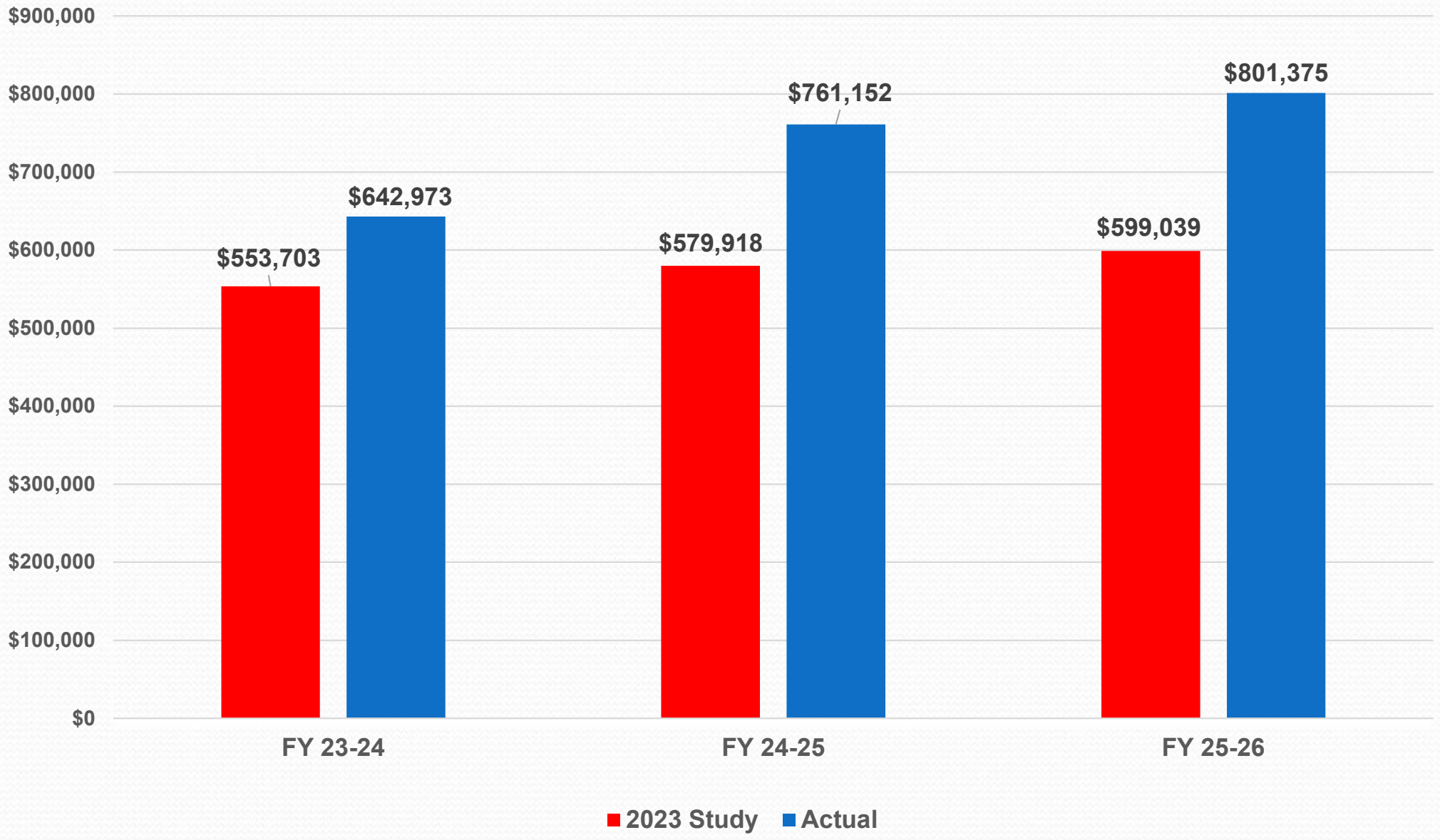
Water Rates-cont.

- 37% of residential accounts use less than 6,000 gallons/month
  - These accounts are subsidizing those that use more water
- Larger (than ¾” meters) are not paying a meter base rate commensurate with the cost to replace said meter
  - Accounts with small meters are subsidizing those with larger meters



(1) **Per** World Population Review.

Water Fund Expense Compare



Fixed Expense Breakdown

Account Code	Account Description	Actual (FY 24-25)	Budgeted (FY 25-26)	Fixed Cost Percentage	Estimated Fixed Cost	Variable Cost Percentage	Estimated Variable Cost
Combined	Wages, Taxes, Benefits	$314,272	$336,392	100%	$336,392	0%	$0
50400	Supplies	$9,194	$9,470	75%	$7,103	25%	$2,368
50450	Repairs	$42,033	$43,294	50%	$21,647	50%	$21,647
50500	Maintenance	$5,209	$5,365	50%	$2,683	50%	$2,683
50660	Annexation Expenses	$0	$0	100%	$0	0%	$0
50700	Engineering	$650	$670	80%	$536	20%	$134
50800	Utilities - All	$172,504	$177,679	40%	$71,072	60%	$106,607
New	Street Light Utilities	$15,844	$15,844	100%	$15,844	0%	$0
60700	Insurance	$24,603	$25,341	100%	$25,341	0%	$0
New	Office Expense	$0	$0	90%	$0	10%	$0
60900	Postage	$6,099	$6,282	100%	$6,282	0%	$0
61100	Auto Expense	$9,236	$9,513	95%	$9,037	5%	$476
61200	Equipment	$34,968	$36,017	75%	$27,013	25%	$9,004
61250	Legal Expense	$7,203	$7,419	100%	$7,419	0%	$0
61300	Professional Services	$97,707	$100,638	100%	$100,638	0%	$0
61700	Dues and Fees	$17,804	$18,338	100%	$18,338	0%	$0
61750	Training and Travel	$6,326	$6,516	100%	$6,516	0%	$0
61800	Other Expenses	-$4,390	$650	100%	$650	0%	$0
60825	Grants	$0	$0	100%	$0	0%	$0
61850	Interest Expense	$1,890	$1,947	100%	$1,947	0%	$0
61900	Depreciation	$0	$0	100%	$0	0%	$0
70300	Gain/Loss of Assets	$0	$0	100%	$0	0%	$0
Inact	Interfund Transfer to Street Lights	$0	$0	100%	$0	0%	$0
	Subtotal	$761,152	$801,375		$658,457		$142,918
					82.2%		17.8%

Financial State of Water Fund

- Currently funding an adequate operating reserve but not:
  - Short-lived Asset (SLA) Reserve
  - Capital Projects Reserve
- SLA Reserve replaces assets with useful life of 5 to 20 years, i.e., pumps, motors, electrical, computers, vehicles, etc.
- Capital Projects Reserve replaces infrastructure with longer than 20-year life, i.e., pipelines, structures, tank coatings, etc.

Partial Example of SLA Reserve

Category	Asset No.	Short-Term Asset	Replacement Cost	Expected Life, Yrs	Percent Assigned to Water Fund	Estimated Cost	Annual Reserve Allocation
Vehicles	221	Ram 1500 Quad Cab	$34,882	10	50%	$17,441	$1,744
Vehicles	5785	2017 ford escape (1/3)	$2,658	10	50%	$1,329	$133
Equipment	214	tractor with front loader cab	$35,153	10	50%	$17,577	$1,758
Equipment	258	radios	$19,973	10	50%	$9,987	$999
Equipment	263	conference room audio visual sys	$16,554	10	50%	$8,277	$828
Equipment	274	bendix king digital p25 radios	$7,468	7	50%	$3,734	$533
Equipment	275	fire radios	$6,360	7	50%	$3,180	$454
Office Equipment	267	mite phone systems 1/3 a	$4,088	7	50%	$2,044	$292
Office Equipment	276	Panasonic cf 32 Toughbook (4)	$19,263	5	50%	$9,632	$1,926
Building and Improvements	206	exhaust system for station bays 198 Main	$44,465	20	50%	$22,233	$1,112
Building and Improvements	251	fire sprinklers @1/2 251 CPUD	$10,989	15	50%	$5,495	$366
Building and Improvements	255	Roofing @ 1/2 251 CPUD	$10,117	15	50%	$5,059	$337
Building and Improvements	401	Asphalt Apron 251 CPUD	$9,975	15	50%	$4,988	$333
Building and Improvements	-	Drainage Project 251 CPUD	$10,500	15	50%	$5,250	$350
Building and Improvements	-	Drainage Project 251 CPUD	$26,740	15	50%	$13,370	$891
Equipment	-	Well No.1 Pump/Motor Replacement	$40,000	20	100%	$40,000	$2,000
Equipment	-	Well No.1 Electrical Replacement	$40,000	20	100%	$40,000	$2,000
Equipment	-	Well No.1 LPG Heater	$7,500	10	100%	$7,500	$750
Building and Improvements	-	Well No.1 Roof	$10,000	20	100%	$10,000	$500
Building and Improvements	-	Well No.1 Painting	$10,000	10	100%	$10,000	$1,000
Equipment	-	Well No.2 Pump/Motor Replacement	$40,000	20	100%	$40,000	$2,000
Equipment	-	Well No.2 Electrical Replacement	$40,000	20	100%	$40,000	$2,000
Equipment	-	Well No.2 LPG Heater	$7,500	10	100%	$7,500	$750

Current Capital Replacement Needs

- In 2022, District applied for a planning grant to complete planning/design for a $23.9M Project, which included:
  - Water main replacement
  - Well Improvements
  - Replacing Water Meters
  - SCADA Improvements
  - Tank Recoating and other improvements
- The project is not eligible for grant funding under current funding eligibility rules

Pressing Capital Replacement Needs

- The following capital improvements are considered critical for addressing near-term:
  - Water Meter Replacement
  - SCADA Improvements
  - Tank Recoating and other improvements

Capital Improvement Funding Options

- Wait for grant climate to change
  - Not likely to change in near future
- Raise rates enough to “pay-as-you-go”
  - Can’t raise rates enough to make a difference
- Consider long-term maintenance agreement with Water Tank vendor (Tank Re-painting)
- Consider funding with long-term loans
  - SWRCB DWSRF offers a 20-year, zero-interest loan

Financial Plan Recommendations

- Begin funding a SLA Reserve, beginning in FY2026-27 @ $131,556 per year
- Consider financing options to re-coat existing water tanks
- Take out a $2.5M, zero-interest loan to replace all water meters and make SCADA improvements
- Implement rate increases over five years.
- Maintain Operating Reserve at 25% of annual expenditures

Draft Water Financial Plan

	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
STARTING RESERVE BALANCES						
Operating Reserve-Checking Acct	$190,288	$200,344	$163,847	$212,545	$218,921	$225,489
Short-Lived Asset Reserve	$0	$0	$131,556	$263,112	$394,668	$526,224
Capital Projects Reserve	$217,107	$255,699	$188,238	$9,480	$2,064	$90,802
REVENUE						
Rates	$701,522	$768,259	$896,800	$1,043,424	$1,158,866	$1,274,753
Other	$141,181	$152,216	$159,608	$167,278	$174,212	$180,206
Interest	$7,320	$7,539	$7,766	$7,999	$8,238	$8,400
EXPENSES						
Operating	$801,375	$825,416	$850,178	$875,684	$901,954	$929,013
Short-lived Asset-Annual Contribution	$0	$131,556	$131,556	$131,556	$131,556	$131,556
CAPITAL PROJECTS						
10-year Tank Maintenance Program	$0	$75,000	$75,000	$75,000	$75,000	$75,000
CAPITAL PROJECT-DEBT SERVICE						
Water Meter Replacement	$0	$0	$110,000	$110,000	$110,000	$110,000
SCADA System Replacement	$0	$0	$27,500	$27,500	$27,500	$27,500
ENDING RESERVE BALANCES						
Operating Reserve-Checking Acct	$200,344	$163,847	$212,545	$218,921	$225,489	$232,253
Short-Lived Asset Reserve	$0	$131,556	$263,112	$394,668	$526,224	$657,780
Capital Projects Reserve	$255,699	$188,238	$9,480	$2,064	$90,802	$274,328
TOTAL RESERVES	$456,043	$483,641	$485,137	$615,653	$842,515	$1,164,361
Percentage Operating Reserve	25.0%	19.9%	25.0%	25.0%	25.0%	25.0%

Proposed Changes to Water Rates

- Eliminate 6,000 gallons of water in base meter rate.
- Standby fees should be the equivalent of a full meter fixed charge to compensate for a fair portion of the District's fixed cost
- Decrease consumption rate to account for shifting more revenue to fixed expenses
  - Current: 74%/26% - Fixed/Consumption
  - Desired: 82%/18% - Fixed/Consumption
- Change meter factors to match AWWA guidelines and recommendations from 2023 rate study
  - **This will have major rate impacts on those accounts with larger than 5/8" and ¾" meters**

Current and Proposed Meter Factors

Water Meter Size, In	Current Meter Factors (Ratio of Meter size to 5/8" Size)	Proposed Cost-Based Meter Factors per AWWA M1 & Recommended in 2023 Rate Study
5/8	1.00	1.00
3/4	1.00	1.00
1	1.43	1.67
1-1/2	2.49	3.33
2	3.77	5.33
3	6.75	10.00
4	11.01	16.67
6	21.67	33.33

Current and Modified Base Meter Rates

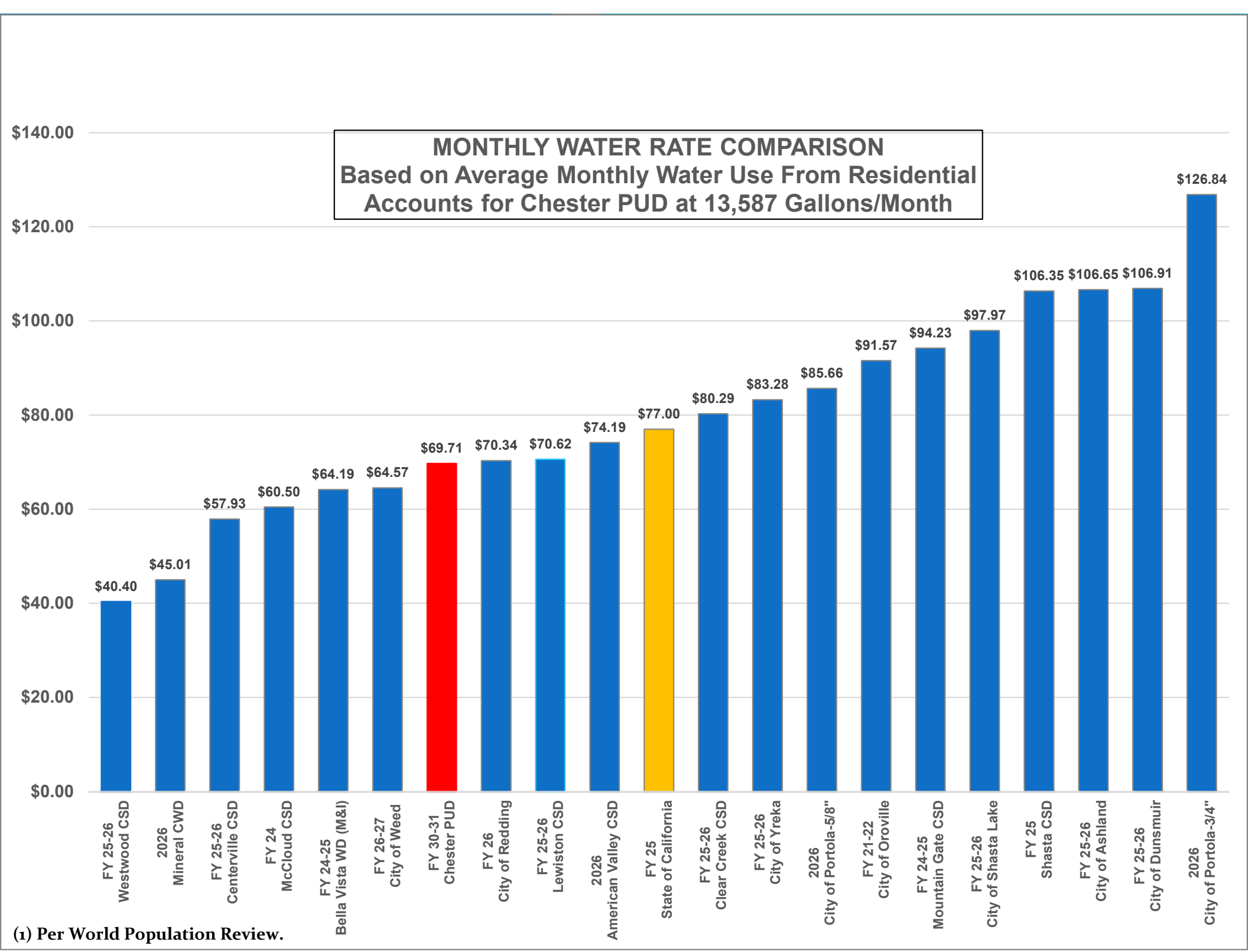
Water Meter Size, In	Current FY 2025-26 Base Meter Rates	FY 2025-25 Base Meter Rate after Removing 6,000-Gallons from Base Rates
5/8	$30.01	$27.02
3/4	$30.01	$27.02
1	$42.80	$45.12
1-1/2	$74.77	$89.98
2	$113.13	$144.02
3	$202.64	$270.20
4	$330.51	$450.42
6	$650.18	$900.58

Preliminary Water Rates

Fixed Charge	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
5/8-in	$30.01	**$34.21**	**$40.37**	**$46.83**	**$51.51**	**$56.66**
3/4-in	$30.01	**$34.21**	**$40.37**	**$46.83**	**$51.51**	**$56.66**
1-in	$42.80	**$57.13**	**$67.42**	**$78.20**	**$86.02**	**$94.63**
1 1/2-in	$74.77	**$113.92**	**$134.43**	**$155.94**	**$171.53**	**$188.69**
2-in	$113.13	**$182.35**	**$215.17**	**$249.60**	**$274.56**	**$302.01**
3-in	$202.64	**$342.11**	**$403.69**	**$468.29**	**$515.11**	**$566.63**
4-in	$330.51	**$570.30**	**$672.96**	**$780.63**	**$858.70**	**$944.56**
6-in	$650.18	**$1,140.27**	**$1,345.51**	**$1,560.80**	**$1,716.88**	**$1,888.56**
Variable Charge	**Budgeted (FY 25-26)**	**Projected (FY 26-27)**	**Projected (FY 27-28)**	**Projected (FY 28-29)**	**Projected (FY 29-30)**	**Projected (FY 30-31)**
Residential						
Tier 1	$0.00	**$0.58**	**$0.69**	**$0.80**	**$0.88**	**$0.96**
Tier 2	$1.03					
Commercial						
Tier 1	$0.61	**$0.58**	**$0.69**	**$0.80**	**$0.88**	**$0.96**
Tier 2	$0.00					

Notes:

1. Beginning July 1, 2026, no water will be included with the base meter rate.
2. Beginning July 1, 2026, there will be no distinction between Residential & Commercial tiered rates. All water accounts will pay the same tiered rate.
3. Tiered rate is per 1,000 gallons/month.



(1) Per World Population Review.

Questions on Water Utility?

Sewer Utility

Background of Sewer Rates

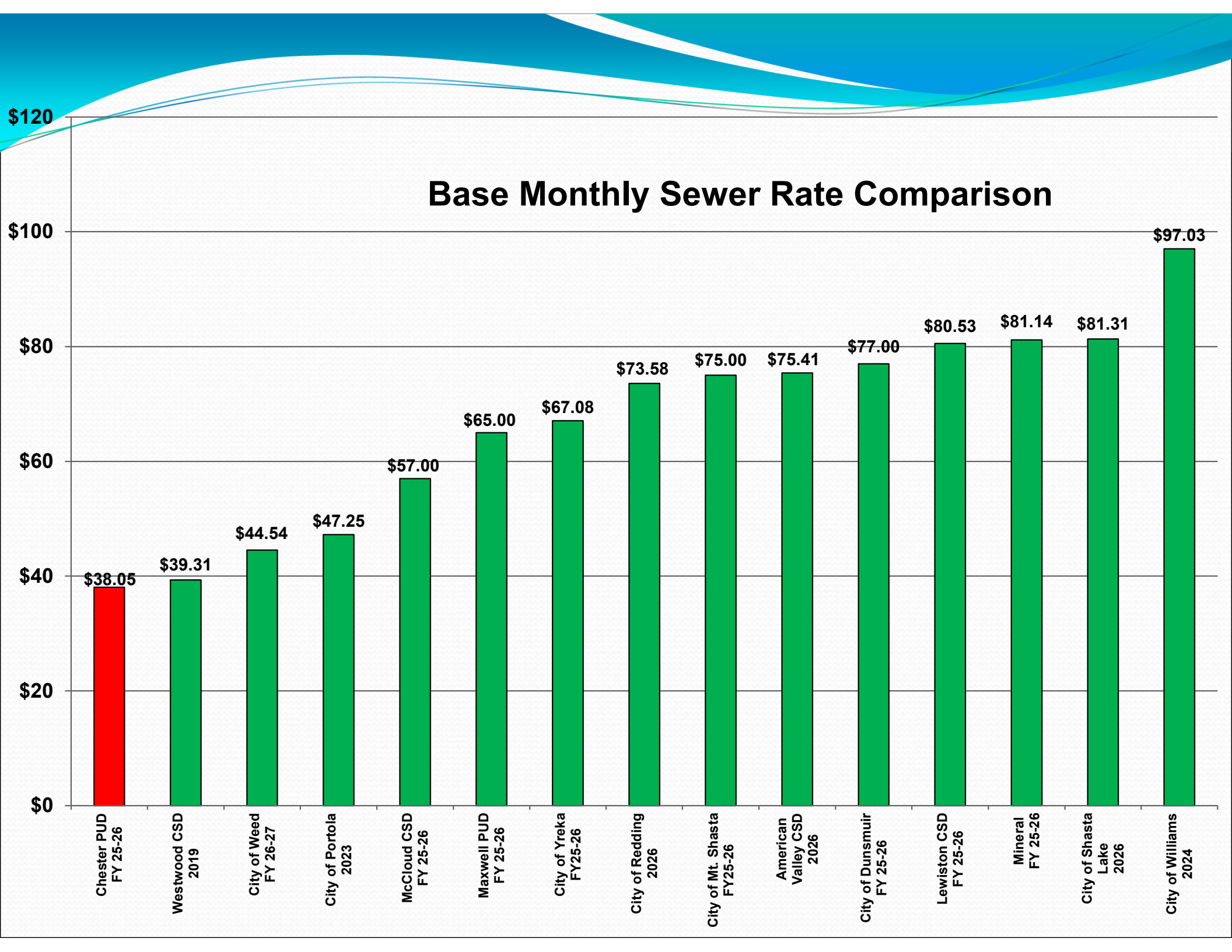
- Last Rate Study was 2023
- No rate increases were proposed.
- All customers pay a flat monthly rate, regardless of meter size
- Commercial customers pay $1.16/1,000 gallons after consuming 32,800 gallons of water

Sewer Rates-cont.

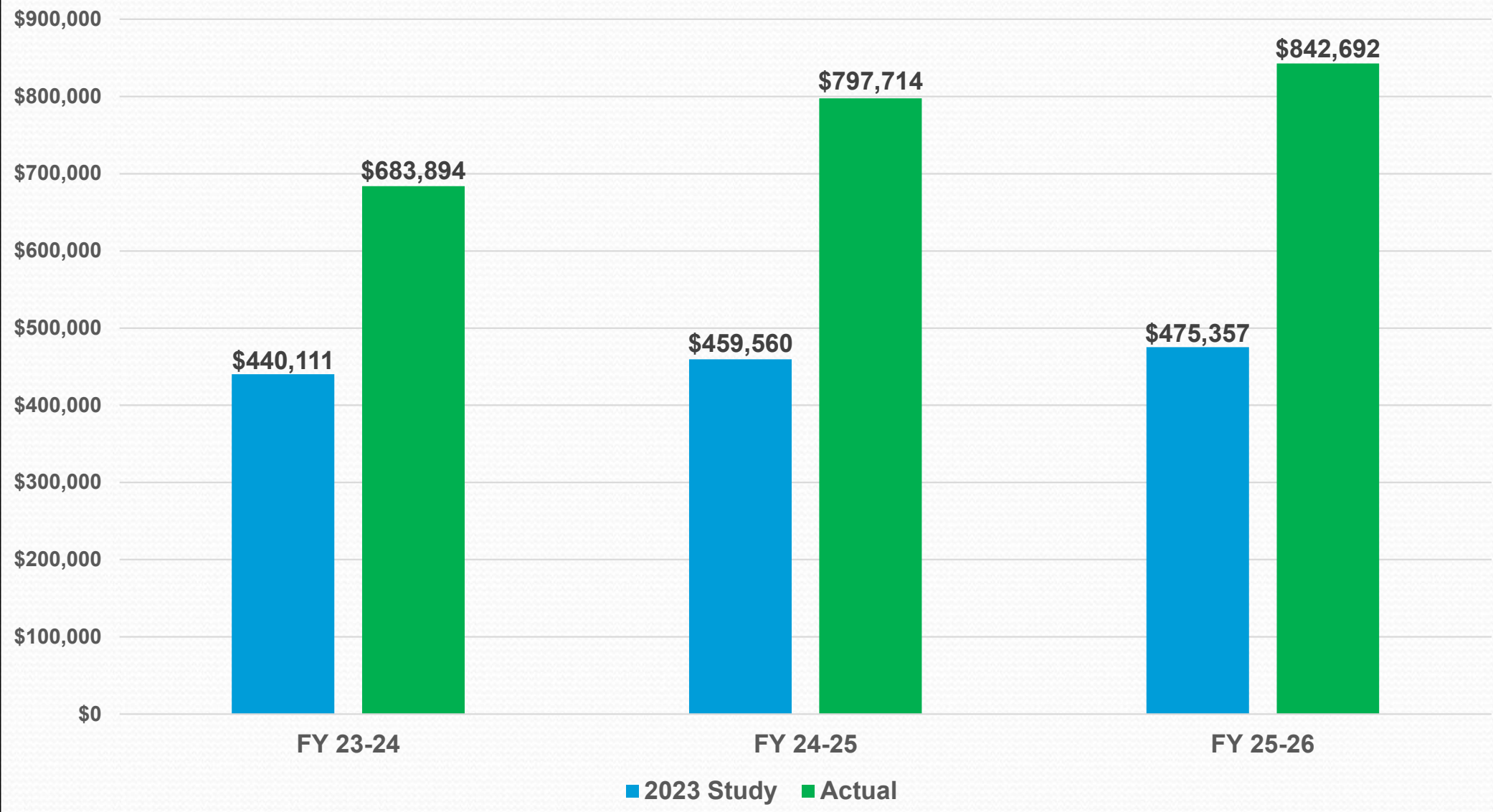
- The average wintertime water use in CPUD for residential customers is about 6,000 gallons/month
  - This is the basis for the flat rate charge.
- Using the current rate of $38.05/month for 6,000 gallons of sewage, that equates to about $6.34/1,000 gallons
- Currently, commercial customers are allowed to consume up to 32,800 gallons/month (equivalent of 5-1/2 homes) and then pay $1.16/1,000 gallons after that

Sewer Rates-cont.

- The basis for the 32,800 gallons/month from the previous rate study is unclear
- A better, and more fair approach, is to bill all customers based on wintertime (Jan, Feb, Mar) water use
  - Until Water meters are replaced, will use avg water use over months not being read
  - The theory is that majority of wintertime water use is discharged into the sewer, although that may not be true in all cases, especially for non-res accounts


Base Monthly Sewer Rate Comparison
$120
$100
$80
$60
$40
$20
$0
$38.05
$39.31
$44.54
$47.25
$57.00
$65.00
$67.08
$73.58
$75.00
$75.41
$77.00
$80.53
$81.14
$81.31
$97.03
Chester PUD FY 25-26
Westwood CSD 2019
City of Weed FY 26-27
City of Portola 2023
McCloud CSD FY 25-26
Maxwell PUD FY 25-26
City of Yreka FY25-26
City of Redding 2026
City of Mt. Shasta FY25-26
American Valley CSD 2026
City of Dunsmuir FY 25-26
Lewiston CSD FY 25-26
Mineral FY 25-26
City of Shasta Lake 2026
City of Williams 2024

Sewer Fund Expense Compare



Financial State of Sewer Fund

- Currently NOT funding:
  - Operating Reserve – Projected to be negative
  - Short-lived Asset (SLA) Reserve
  - Capital Projects Reserve
- Operating Reserve should be 25% of annual operating expenses
- SLA Reserve replaces assets with useful life of 5 to 20 years, i.e., pumps, motors, electrical, computers, vehicles, etc.
- Capital Projects Reserve replaces infrastructure with longer than 20-year life, i.e., sewers, manholes, WWTP infrastructure, etc.

Current Capital Replacement Needs

- The District has received:
  - CWSRF Planning Grant-WWTP: $554,089
  - CWSRF Planning Grant-Collection: $499,970
- In next couple months, the District will receive $19.07M CWSRF grant for WWTP
- Will be applying for multi-million dollar grant to for Collection Improvements
- District has approx. $1.2M in Capital Projects Reserve

Financial Plan Recommendations

- Use portion of Capital Projects reserve to fund Operating reserve @ 25% annual operating expenses – $546K over five years
- Use portion of Capital Projects Reserve to make annual contribution to SLA Reserve - $159K over five years
- Given grant opportunities, no new debt for capital improvements
- Implement rate increases over five years.
- Maintain Operating Reserve at 25% of annual expenditures

Draft Sewer Financial Plan

		Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
STARTING RESERVE BALANCES							
	Operating Reserve-Checking Acct	$33,250	$240,518	$283,493	$223,503	$230,208	$300,624
	Short-Lived Asset Reserve	$0	$0	$31,806	$63,612	$95,418	$127,224
	Capital Projects Reserve	$1,295,210	$1,009,050	$907,602	$986,354	$1,073,506	$941,474
REVENUE							
	Rates	$596,907	$673,311	$769,962	$865,127	$954,797	$1,050,277
	Other	$136,694	$140,794	$145,018	$149,369	$153,850	$158,465
	Interest	$30,200	$27,200	$29,600	$32,000	$28,000	$28,000
EXPENSES							
	Operating	$842,692	$867,973	$894,012	$920,832	$1,166,457	$1,201,451
	Short-lived Asset-Annual Contribution	$0	$0	$0	$0	$0	$0
CAPITAL PROJECTS							
		$0	$0	$0	$0	$0	$0
CAPITAL PROJECT-DEBT SERVICE							
		$0	$0	$0	$0	$0	$0
TRANSFERS FROM CAPITAL PROJECTS RESERVE							
	To Operating Reserve	$316,360	$96,842	$0	$0	$128,226	$4,620
	To Short-Lived Asset Reserve	$0	$31,806	$31,806	$31,806	$31,806	$31,806
ENDING RESERVE BALANCES							
	Operating Reserve-Checking Acct	$240,518	$283,493	$223,503	$230,208	$300,624	$304,983
	Short-Lived Asset Reserve	$0	$31,806	$63,612	$95,418	$127,224	$159,030
	Capital Projects Reserve	$1,009,050	$907,602	$986,354	$1,073,506	$941,474	$940,600
	TOTAL RESERVES	$1,249,569	$1,254,707	$1,305,275	$1,430,938	$1,401,128	$1,436,419
	Percentage Operating Reserve	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%

Proposed Changes to Sewer Rates

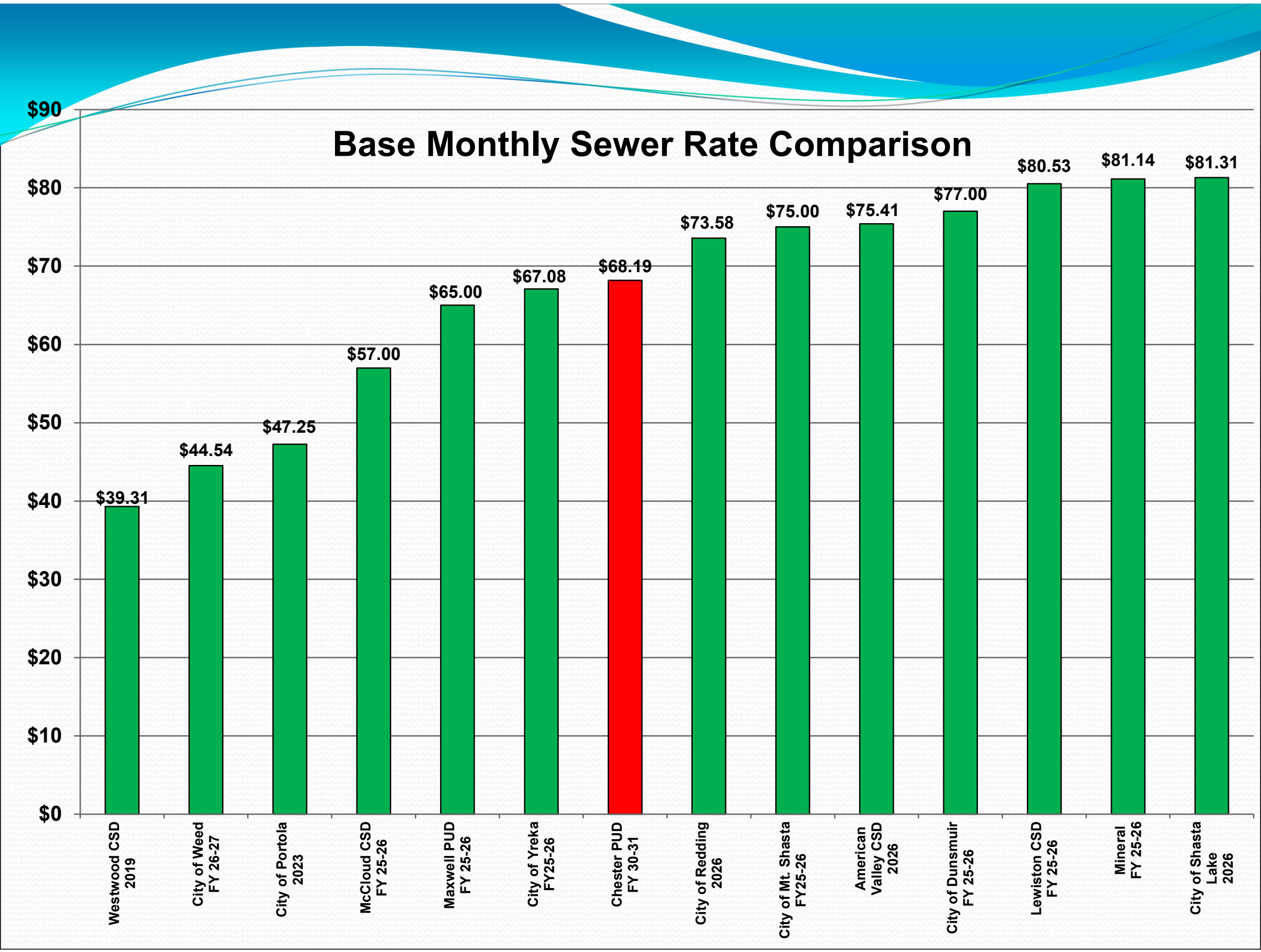
- Change user classes to “Residential” & “Non-residential.”
- All Customers: Switch to wintertime (Jan, Feb, Mar) water use.
  - Typical wintertime water use for a single-family residence is 6,000 gallons/month.
  - Reduce the 32,800 gallons in base usage to 6,000 gallons per month.
  - If fixed charge is $38.05/month, the usage rate should be: $38.05 / 6,000 gallons x 1,000 = $6.34/1,000 gallons/month.
- These changes will have large impacts of non-residential customers who use a lot of wintertime water.
  - Of about 241 accounts, 51 will see monthly bill increase more than $10/month; 17 will see bills increase greater than $100/month.
  - 74% (178) of non-residential accounts would see bills increase less than $10/month.

Proposed Changes to Sewer Rates

- Monthly standby charges should be a full monthly fixed charge to compensate for the fixed expenses incurred by the District.
- Consider the following:
  - Visiting non-residential accounts to learn wintertime water-use practices.
  - Plumbing modifications or additional flowmeters to isolate sewage-generating water supply from other
  - 6-month grace period for on-site changes to be made, after which time the new rate structure would be implemented

Preliminary Sewer Rates

Customer Class	Budgeted (FY 25-26)	Projected (FY 26-27)	Projected (FY 27-28)	Projected (FY 28-29)	Projected (FY 29-30)	Projected (FY 30-31)
Fixed Charge						
Residential	$38.05	**$44.14**	**$50.32**	**$56.36**	**$61.99**	**$68.19**
Non-Residential	$38.05	**$44.14**	**$50.32**	**$56.36**	**$61.99**	**$68.19**
Variable Charge						
Non-Residential, $/1,000 Gallons[1]	$1.16	**$7.36**	**$8.39**	**$9.39**	**$10.33**	**$11.37**
Notes:						
1. The Variable charge applies to wintertime water consumption in excess of 6,000 gallons per month.						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$80
$70
$60
$50
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Lewiston CSD FY 25-26
Mineral FY 25-26
City of Shasta Lake 2026

Questions on Sewer Utility?