

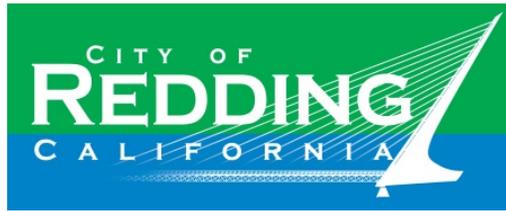
Council Presentation

Proposed Solid Waste, Wastewater, Water Utility Rate Updates

November 19, 2019

Redding Public Works Department

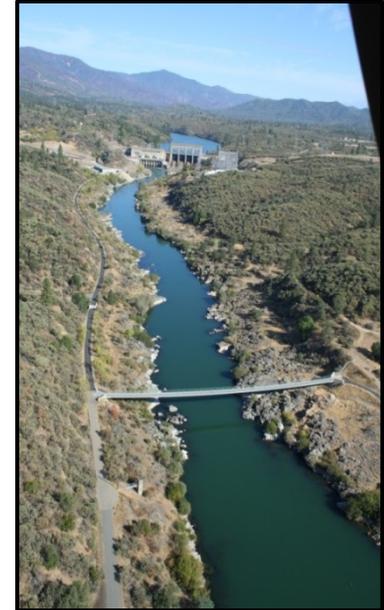




Public Works – Rate Update

Rate Update Working Team

- Public Works Staff – Solid Waste, Wastewater and Water
- Consultant On Board – NBS out of Davis, CA
- Public Works Utilities Rate Advisory Group Support
 - Allie Figura – City Manager’s Advisory Group/Educator
 - James Crockett – Educator
 - Michele Goedert – Commercial Property Manager
 - Sami Kader – Waterworks Engineers
 - Kenny Breedlove – Restaurateur and Real Estate Agent
 - Janice Cunningham - Consultant
- 6 Meetings Plus – Overview, Rate 101, Financial Plans, Draft Rates, Input
- Draft Cost of Service Study
- City Manager Review
- Website and Social Media Posts
- Open House – November 4, 2019



Redding Public Works Department

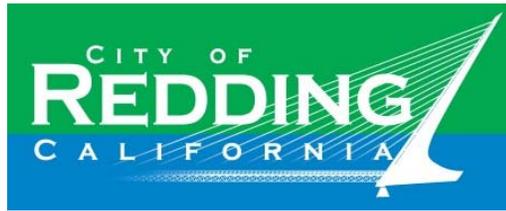




Solid Waste Utility Rate Study

Redding Public Works Department





Public Works – Solid Waste Rate Update

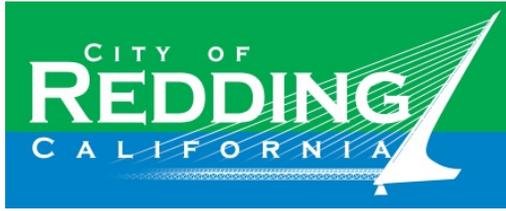
Solid Waste Demand in the City

- Fiscal Year 2018-19
 - **34,200 Customer Accounts** - 82% total residential: single and multi family accounts
 - Annual Waste Wheeler Pickups:
 - Over 1.5 million Grey (garbage) can pickups per year
 - Total over 3 million cans annually including Green Waste & Recycling
 - **Total Waste Collected: 93,700 Tons plus 34,400 Tons of Recyclables (Diversion)**
 - Annual Commercial Pickups Drop Boxes/Containers: 193,000
 - 1,534 Curb Miles of Street Sweeping (832 Commercial Miles and 702 Residential Miles)
 - Number of Vehicles Entering Facility: 121,562



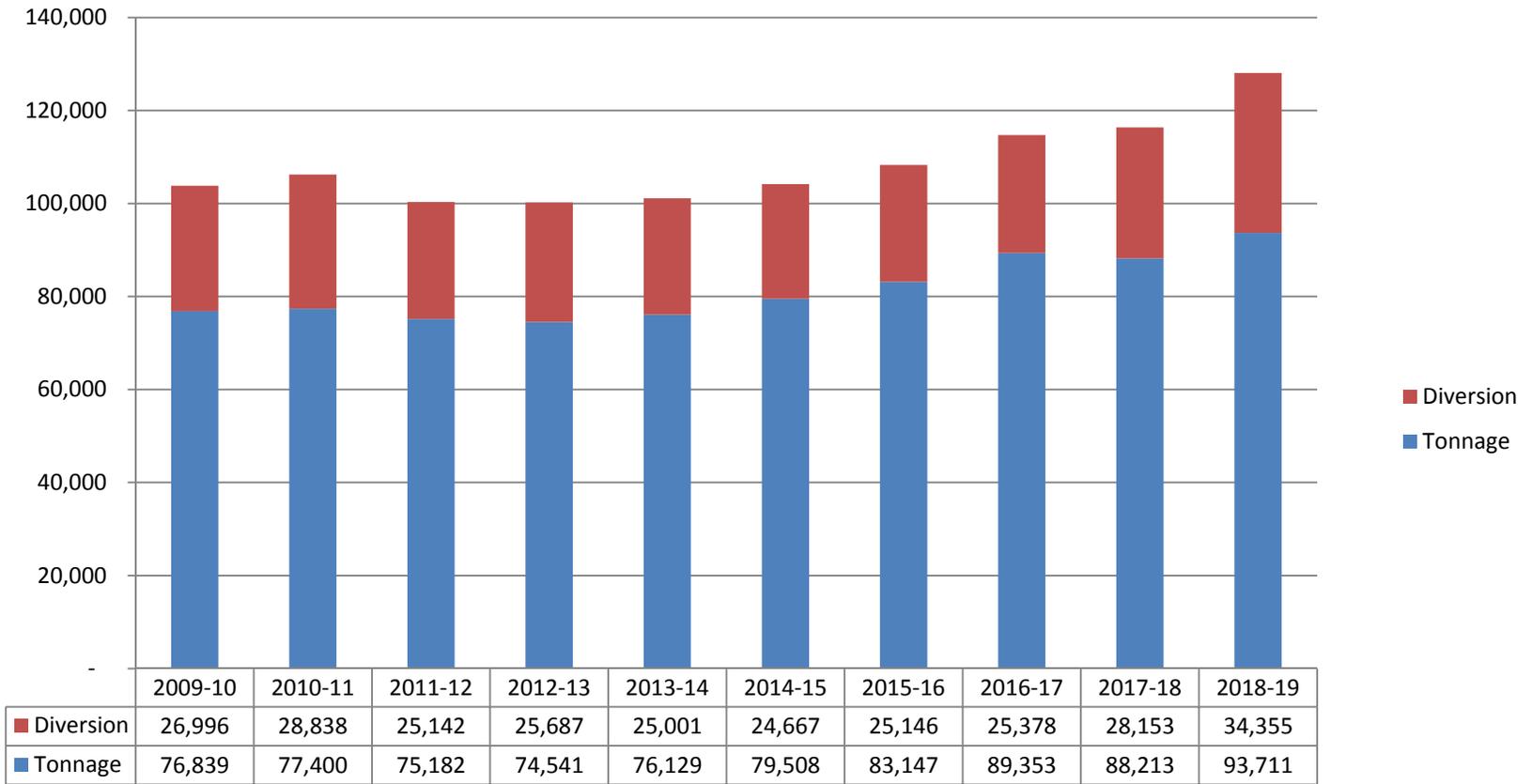
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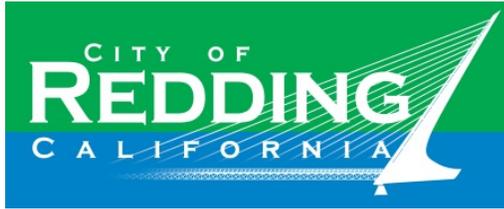
Public Works – Solid Waste Rate Update

Historical Solid Waste Service Demands



Redding Public Works Department





Public Works – Solid Waste Rate Update

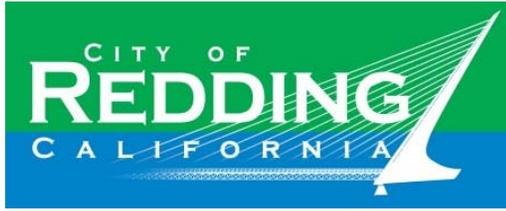
Solid Waste Operational Staff

- **91 Employees** (includes West Central Landfill):
 - 1 Deputy Director
 - 4 Public Works Supervisors
 - 4 Admin Staff
 - 11 Clerks/CSR's
 - 53 Collection Drivers
 - 6 Transfer Truck Operators
 - 4 Building & Facilities Mechanics
 - 3 Hazardous Waste Specialists
 - 5 Heavy Equipment Operators



Redding Public Works Department





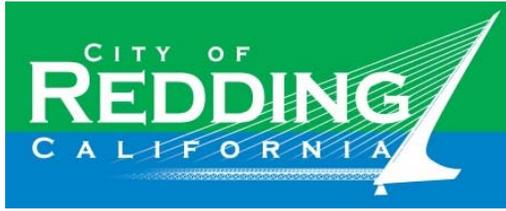
Public Works – Solid Waste Rate Update

Redding Solid Waste Operational Fleet

- **Fleet vehicles (104 Pieces)**
 - 38 Collection Vehicles
 - 20 Residential
 - 9 Commercial
 - 4 Roll Off
 - 5 Transfer Trucks and 5 Trailers
 - 23 Admin & Support Vehicles
- 15 Pieces of Yellow Iron
- 1 Grinder and 1 Trommel
- 26 Pieces at West Central



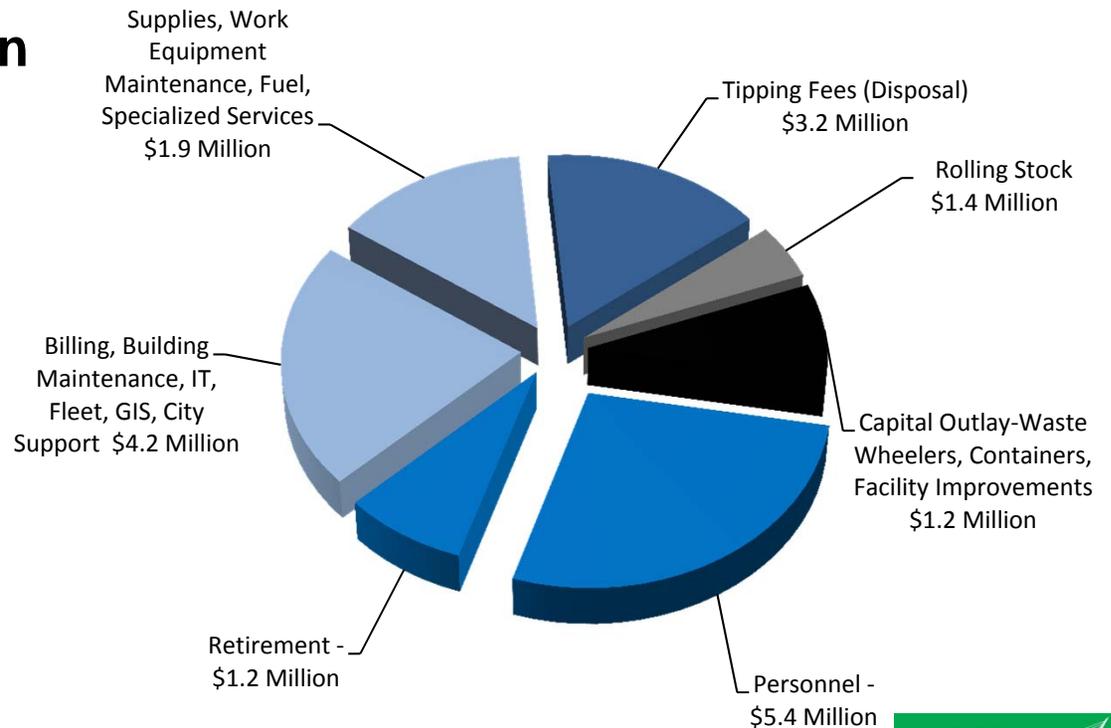
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Public Works – Solid Waste Rate Update

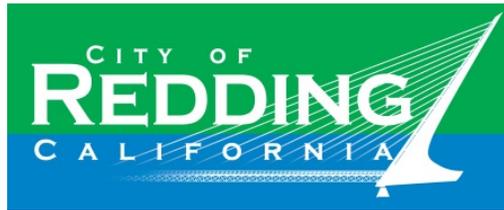
Financial Overview 2019-20 Snapshot...

- **Revenue - \$20.6 million**
 - Rate Revenue - \$17 Million
 - Fee Revenue (transfer station fees, etc.) - \$2.1 Million
 - Other Revenue (Recycling, Compost Sales, Etc.) \$1.5 Million
- **Expenditures - \$22.6 million**



Redding Public Works Department





Public Works – Solid Waste Rate Update

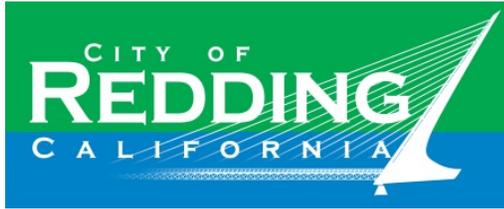
Financial Plan

- 10-Year Financial Plan Developed:
 - FY 2018/19 Actuals & FY 2019/20 Budget used
 - Related AG Input Incorporated

RATE REVENUE REQUIREMENTS SUMMARY ¹	Budget		Projected		
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Sources of Solid Waste Funds					
Rate Revenue Under Prevailing Rates	\$ 16,905,190	\$ 16,960,702	\$ 17,017,858	\$ 17,076,658	\$ 17,136,918
Fee Revenue	2,059,130	2,127,868	2,199,090	2,272,889	2,349,337
Other Revenue	1,547,160	1,552,180	1,557,348	1,562,664	1,568,113
Interest Earnings (in O&M, Capital and Debt Reserves)	161,740	122,017	90,354	83,582	84,765
Total Sources of Funds	\$ 20,673,220	\$ 20,762,768	\$ 20,864,650	\$ 20,995,793	\$ 21,139,134
Uses of Solid Waste Funds					
Operating Expenses:					
Solid Waste Administration	\$ 2,532,420	\$ 2,896,710	\$ 2,779,980	\$ 2,868,580	\$ 2,960,200
Residential Collection Expenses	3,303,070	3,324,720	3,337,790	3,436,180	3,537,400
Commercial Collection Expenses	3,590,250	3,485,730	3,489,320	3,591,910	3,697,350
Roll-Off Collection Expenses	1,076,000	1,104,290	1,134,450	1,168,510	1,203,520
Resource Recovery Expenses	5,274,040	5,132,830	5,283,640	5,440,740	5,598,490
Transfer Station Expenses	2,681,350	2,822,780	2,812,560	2,898,000	2,985,970
Hazardous Household Waste Expenses	453,920	522,890	537,770	554,640	572,060
Street Sweeping Expenses	1,225,600	1,222,860	1,234,960	1,250,550	1,266,650
Subtotal: Operating Expenses	\$ 20,136,650	\$ 20,512,810	\$ 20,610,470	\$ 21,209,110	\$ 21,821,640
Other Expenditures:					
Rate-Funded Capital Expenses ²	51,000	1,035,000	243,450	-	-
Subtotal: Other Expenditures	\$ 51,000	\$ 1,035,000	\$ 243,450	\$ -	\$ -
Total Uses of Solid Waste Funds	\$ 20,187,650	\$ 21,547,810	\$ 20,853,920	\$ 21,209,110	\$ 21,821,640
plus: Revenue from Rate Increases	-	286,329	1,168,333	1,788,027	2,432,755
Annual Surplus/(Deficit)	\$ 485,570	\$ (498,714)	\$ 1,179,063	\$ 1,574,710	\$ 1,750,248
Net Revenue Req't. (Total Uses less Non-Rate Revenue)	\$ 16,419,620	\$ 17,745,745	\$ 17,007,128	\$ 17,289,975	\$ 17,819,424
Total Rate Revenue After Rate Increases	\$ 16,905,190	\$ 17,247,031	\$ 18,186,191	\$ 18,864,685	\$ 19,569,673
Projected Annual Rate Increase ⁴	0.00%	3.00%	3.00%	3.00%	3.00%
Cumulative Increase from Annual Rate Increases	0.00%	3.00%	6.09%	9.27%	12.55%

Redding Public Works Department





Public Works – Solid Waste Rate Update

Cost of Service Highlights

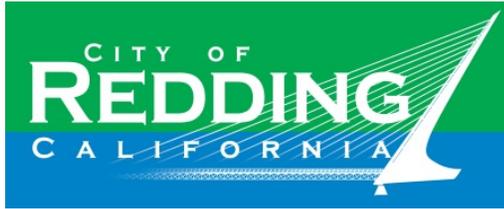
- General – Complete Cost of Service Study
 - Allocation to Residential, Commercial, Roll-Off

Summary of Solid Waste Cost Allocations						
Acct.	Budget Category	Residential	Commercial	Roll-Off	Transfer Station	Basis for Allocation
550	Admin.	✓	✓	✓	✓	Avg. % of Tonnage & No. of Accounts
551	Residential Collection	✓				Customers served
552	Commercial Collection		✓			Customers served
553	Roll-Off Collection			✓		Customers served
556	Resource Recovery	✓	✓		✓	Avg. of Resid/Comm Accts. & Recy. tons
557	Transfer Station	✓	✓	✓	✓	Annual T.S. Tonnage
558	Household Hazardous Waste	✓	✓		✓	6,886 Resid. vs. 186 Comm. HHW customers
559	Street Sweeping	✓	✓			Miles of Streets Swept (46 Res./54 Comm.)
	Less Non-Rate Rev.	✓	✓	✓	✓	Allocated As All Operating Costs

Summary of Current vs. Proposed Rate Revenue				
Current vs. Proposed Budget	Residential	Commercial	Drop Box	Total
Current Rates (FY 2019/20 Budget)	\$ 9,075,093	\$ 6,038,564	\$ 1,847,045	\$ 16,960,702
Proposed Rates (FY 2019/20)	\$ 9,041,985	\$ 6,721,902	\$ 1,705,638	\$ 17,469,524
<i>Percent Change</i>	-0.4%	11.3%	-7.7%	3.0%
<i>Current Rates - % of Total</i>	54%	36%	11%	100%
<i>Proposed Rates - % of Total</i>	52%	38%	10%	100%

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Public Works – Solid Waste Rate Update

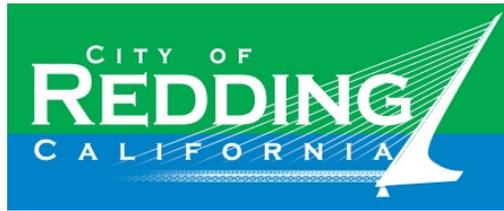
Solid Waste Utility – Key AG Input

- Key AG Input
 - Financial Plan
 - CIP – Do not Include Expansion Projects
 - Look to Bond Out Year Improvements or Reserves
 - Reserve Levels – Keep Current Levels at 90 Days Min Plus Capital (7% of Assets) and Rolling Stock (\$1.7 Million)
 - May Fund Organics Recycling and Trash Amendment
 - Rate Design
 - Maintain Level of Service
 - Green Waste Collection 2nd Cart (approx. 6,800 carts) – Keep Current Rate
 - Cannabis Waste – Provide New Fee



Redding Public Works Department





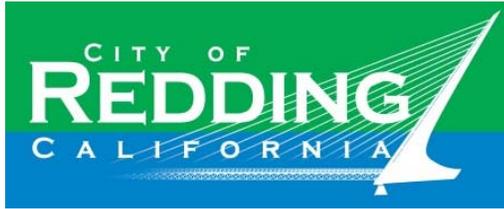
Public Works – Solid Waste Rate Update

Proposed Residential Rate

SOLID WASTE RATE SCHEDULE	Current Rates ('18/19)	Proposed Rates			
		FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
<i>Annual Rate increases as shown in Financial Plan:</i>		3.00%	3.00%	3.00%	3.00%
Residential Wheeled Cart Monthly Rate ¹					
45-Gal Container	\$22.36	\$23.16	\$23.85	\$24.57	\$25.30
64-Gal Container	\$23.37	\$24.20	\$24.93	\$25.68	\$26.45
96-Gal Container	\$25.01	\$25.90	\$26.68	\$27.48	\$28.30
Additional Green Waste Container	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
Landfill Monitoring			(\$0.22/month - no increases)		
Automated Cart Special Collection Rate (per cart)					
45-gallon					
Same Day (50% of monthly fee)	\$11.18	\$11.58	\$11.93	\$12.28	\$12.65
Not Same Day (65% of monthly fee)	\$14.53	\$15.05	\$15.50	\$15.97	\$16.45
64-gallon					
Same Day (50% of monthly fee)	\$11.69	\$12.10	\$12.46	\$12.84	\$13.22
Not Same Day (65% of monthly fee)	\$15.19	\$15.73	\$16.20	\$16.69	\$17.19
96-gallon					
Same Day (50% of monthly fee)	\$12.51	\$12.95	\$13.34	\$13.74	\$14.15
Not Same Day (65% of monthly fee)	\$16.26	\$16.84	\$17.34	\$17.86	\$18.40

1. Residential Service includes trash, recycling, and green waste containers.





Public Works – Solid Waste Rate Update

Proposed Commercial/Roll-Off

- Cost of Service Based – Number of Lifts/Volume/Container
- Commercial – 11.3 percent cost **increase** overall
 - 13 container types (Front Load Compactors and Commercial Containers) – numerous pick up options
 - All will see between 4 and 9 percent increase.
- Roll-Off – 7.7 percent cost **decrease** overall
 - Roll-Off Compactors will see 0 to 6 percent increase
 - Roll Offs will see from 1 percent increase to 3 percent decrease



Business Customers

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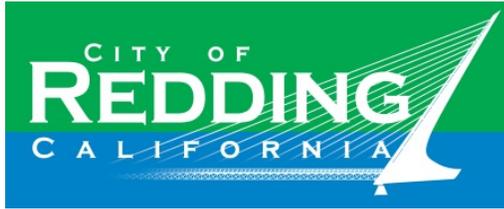
The Solid Waste Utility provides garbage and recycling services to businesses located within the Redding City limits. Commercial accounts are usually established at the time utilities are hooked up. For information on establishing new commercial service, changing existing solid waste/recycling service or general information, call the Solid Waste Utility's Customer Service Department at 224-6201. A Customer Service Representative will assist you with any questions and help you determine the appropriate level of service for your business.

Containers are available for permanent, ongoing solid waste services at established premises. Available container sizes are: 1.5 yd., 2 yd., 3 yd., 4 yd., 6 yd., and 8 yd.



View our [current container rate schedule](#) for permanent garbage containers fees.





Public Works – Solid Waste Rate Update

Key Drivers to Increase

- Keeping up with Inflation
- Maintain Current Level of Service
- Maintain Existing Reserves for Regulatory Actions/Future Expansion
 - Trash Amendment to Water Quality Basin Plan
 - Organics Recycling



Redding Public Works Department





Public Works – Solid Waste Rate Update

Charges from other Divisions (Internal Services)

Notable Annual Charges:

\$2,141,820 Fleet

\$963,970 Utility Customer Service

\$753,500 Streets (Road Maintenance)

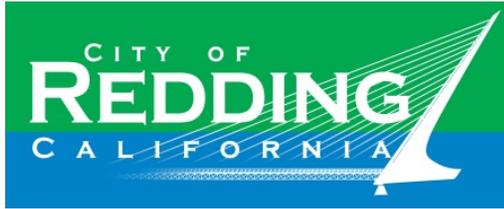
\$498,290 Litter Abatement/Code Enforcement

\$86,660 NPDES

\$117,098 Storm Drain Trash Removal

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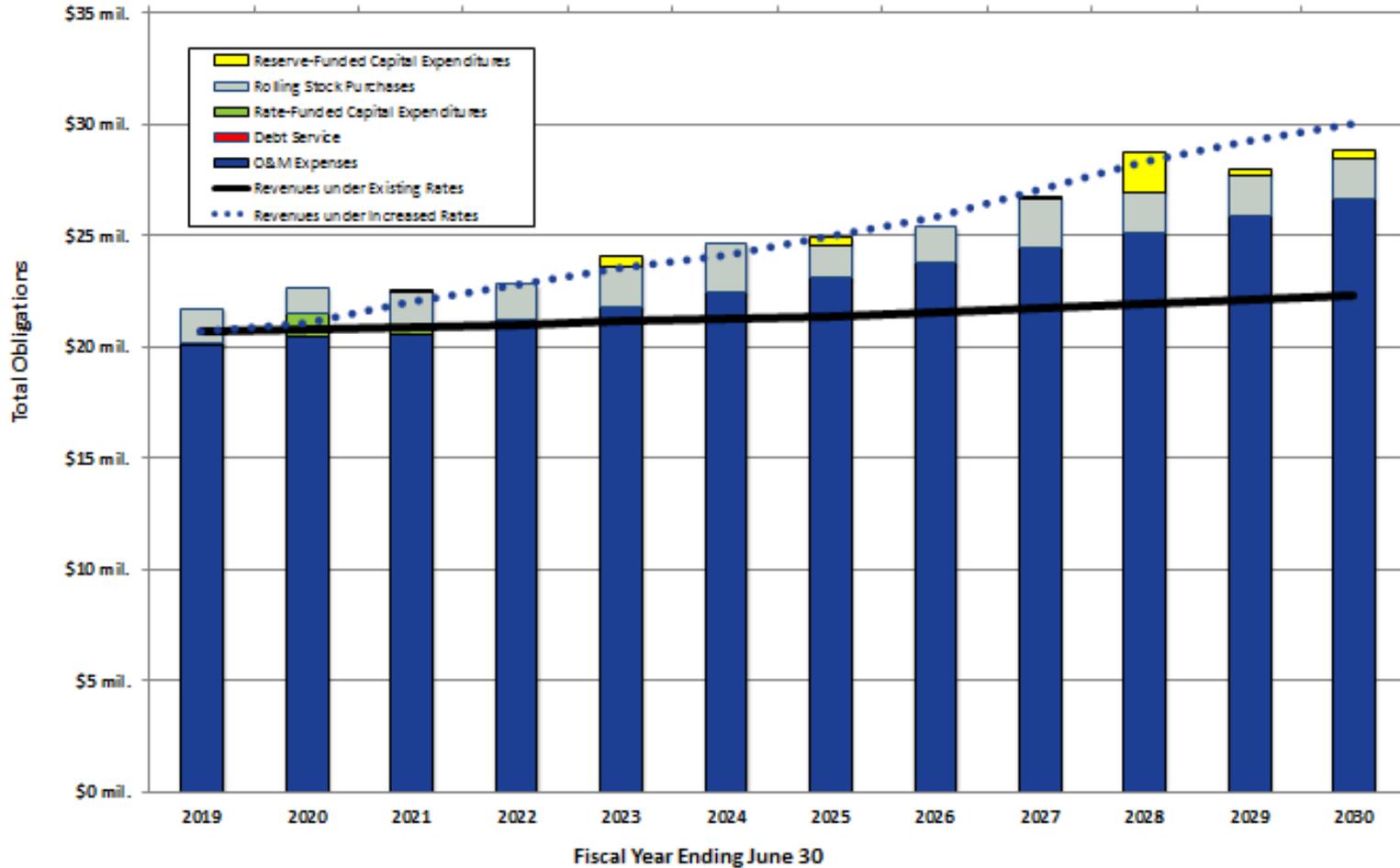




Public Works – Solid Waste Rate Update

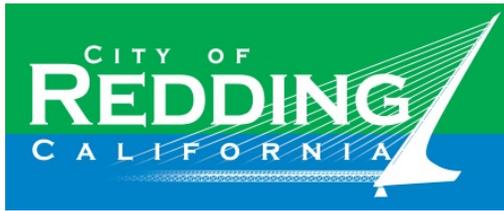
Revenue Requirements

Solid Waste Revenue Requirements vs.
Revenue Under Existing and Recommended Rate Increases

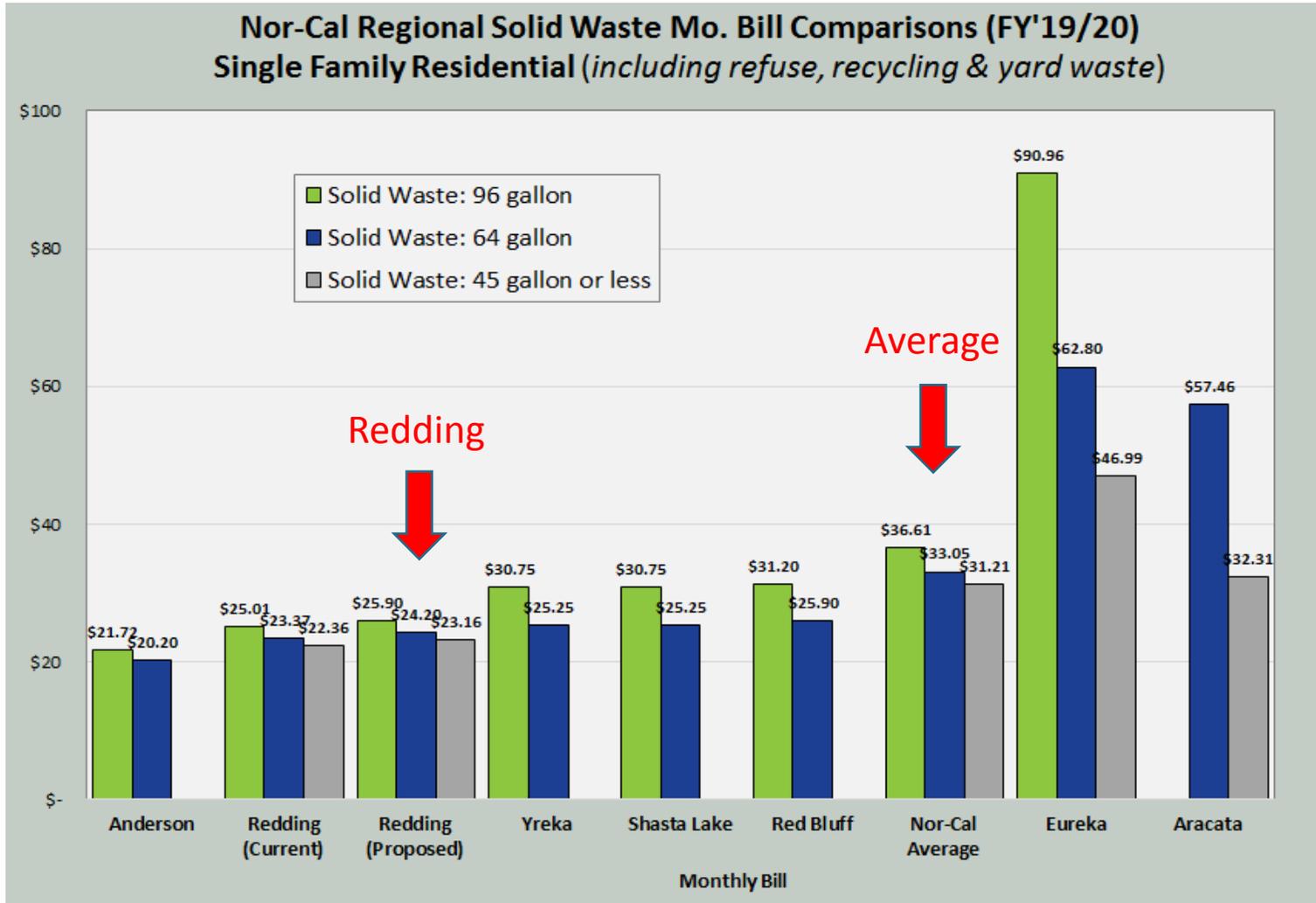


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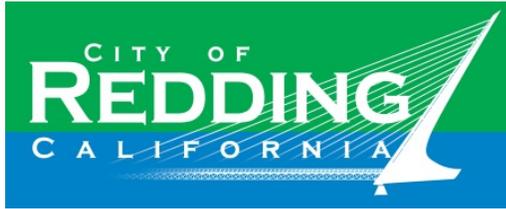


Public Works – Solid Waste Rate Update Nor Cal Comparison



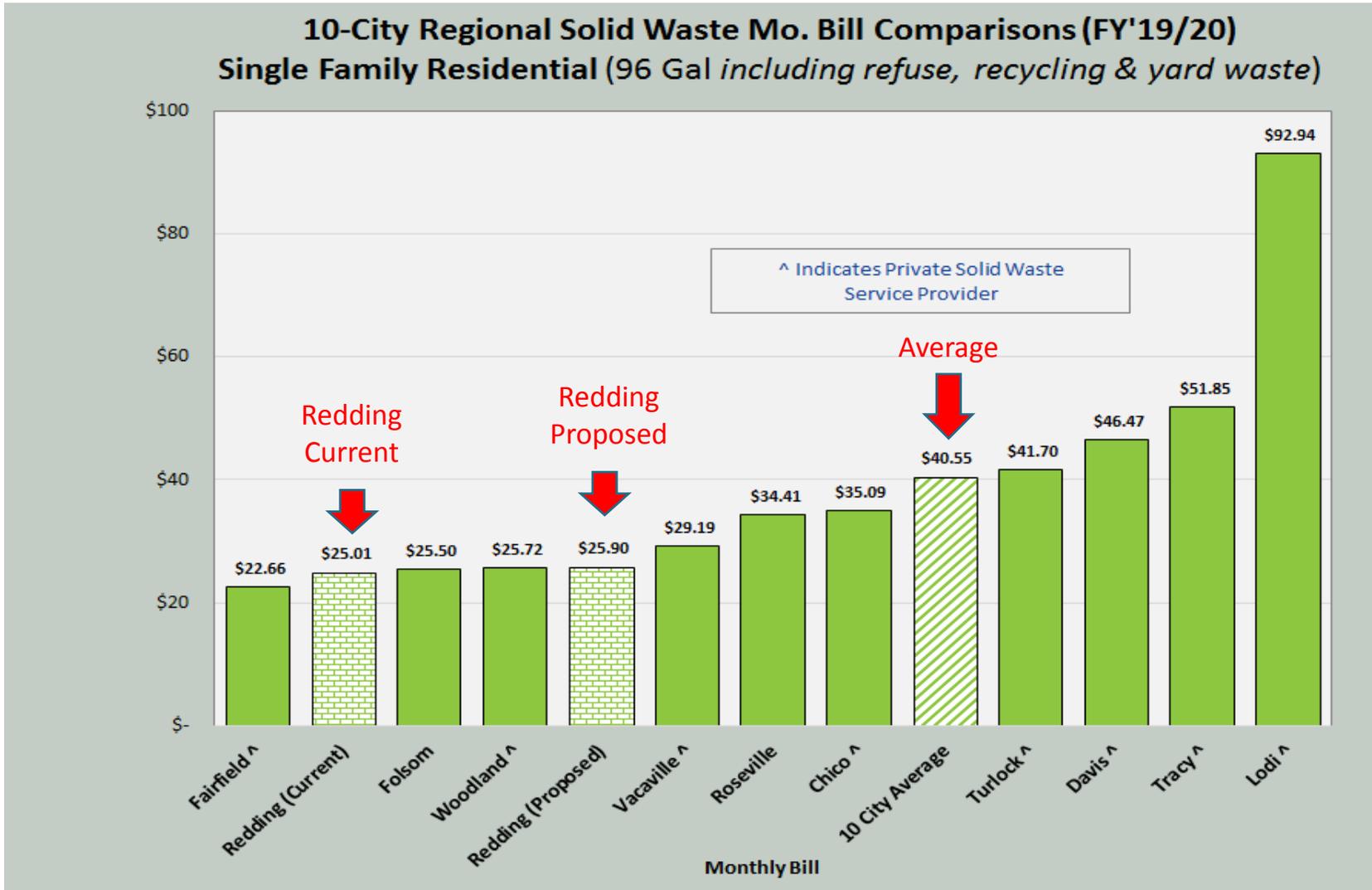
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Public Works – Solid Waste Rate Update

10 City Comparison



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Wastewater Rate Study

Redding Public Works Department

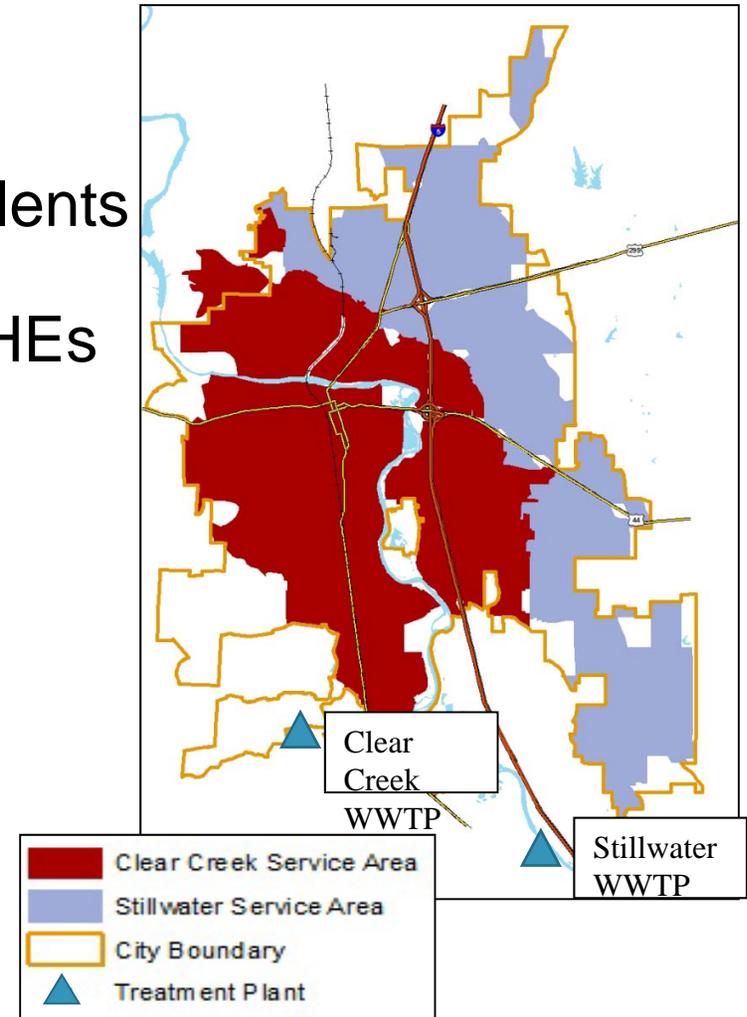




Public Works – Wastewater Rate Update

Wastewater Utility Demand

- Wastewater Service Area
- Demand:
 - Expressed as Household Equivalents
 - HE = 240 gallons per day
 - Redding Service Area – 43,150 HEs
 - 54% Single Family
 - 21% Multiple Family
 - 25% Commercial/Industrial/Public Facility



Redding Public Works Department





Public Works – Wastewater Rate Update

Collection and Treatment

- **Collection System:**
 - 38,182 Connections – 92 Percent Residential
 - 435 miles of collection system pipe and 17 lift stations
 - Pretreatment Program – Food Service, Industrial, Vehicle Cleaning

- **Treatment:**
 - Clear Creek WWTP – 9.4 mgd (dry) to 40 mgd (wet)
 - Stillwater WWTP – 3.6 mgd (dry) to 14.4 mgd (wet)



Redding Public Works Department





Public Works – Wastewater Rate Update

Wastewater Utility Staffing

- 41 Employees – 4 Seasonal
- Wastewater Utility Manager
- Collection System
 - Supervisor, 14 collection maintenance staff , 2 temporary positions
 - Lift Station, Viewing, Cleaning, Construction
- Two Wastewater Treatment Plants
 - 2 supervisors, 12 operators, 3 laboratory technicians, 2 electrical technicians, 1 facility mechanic, and 2 seasonal landscape maintenance staff
- Industrial Waste Pretreatment
 - Supervisor, 3 industrial waste analysts
- Wastewater Compliance
 - 1 compliance coordinator

Redding Public Works Department





Public Works – Wastewater Rate Update

Collection System Needs

- **Replacement**
 - \$24 million through 2025, \$37 million to 2030
 - Magnolia St. Area – \$3.5 million (11,600 feet)
 - Bechelli Ln.– \$1.5 million (2,600 ft. replace)

- **I/I Control**
 - \$9.3 million through 2025
 - Lake Blvd./Magnums – \$2.5 million (23,000 ft. lining)

- **Large Diameter**
 - Westside Interceptor - \$5.7 million (3,200 ft. new)
 - Lake Redding Interceptor - \$7.8 million
 - Buenaventura Sewer - \$5.1 million

- **Locust Lift Station - \$1 million**
 - Upgrade/originally constructed in 1963



Redding Public Works Department





Public Works – Wastewater Rate Update

Treatment System Needs

- **Disinfection**
 - UV project at SWWTP – \$6.3 million
 - UV project at CCWWTP– \$9.9 million

- **Biosolids**
 - Current Masterplan update
 - Drying facility
 - Land application
 - Acquire land (+300 acres)
 - Annual maintenance

- **Maintenance**
 - SWWTP – \$400,000/yr.
 - CCWWTP– \$600,000/yr.



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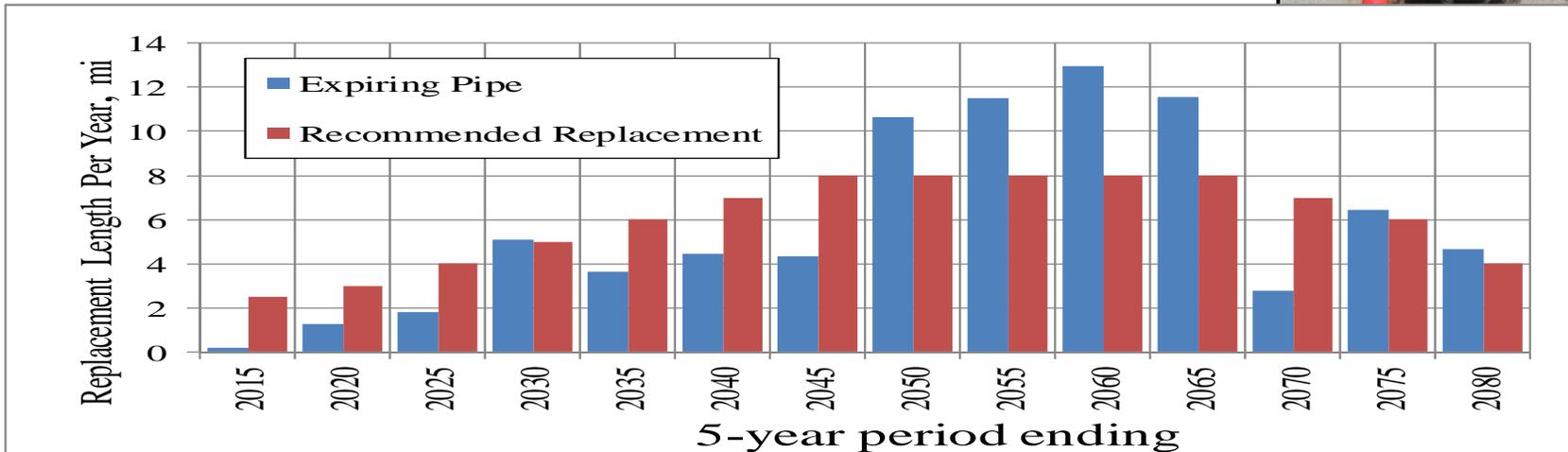




Public Works – Wastewater Rate Update

Redding Rate Pressures

- Regulatory - Effluent to Sacramento River
 - High Treatment Standards
 - Recent Treatment Plant Upgrades – ahead of the curve
 - Maintenance Levels - Large Nor Cal Target – CSPA, River Watch
- Land Use – 60 square miles, 90,000 population
 - City system dating to 1800s.
 - Large Collection System Inventory
 - Annexation – Inherited Old Pipes
 - 2 treatment plants to manage



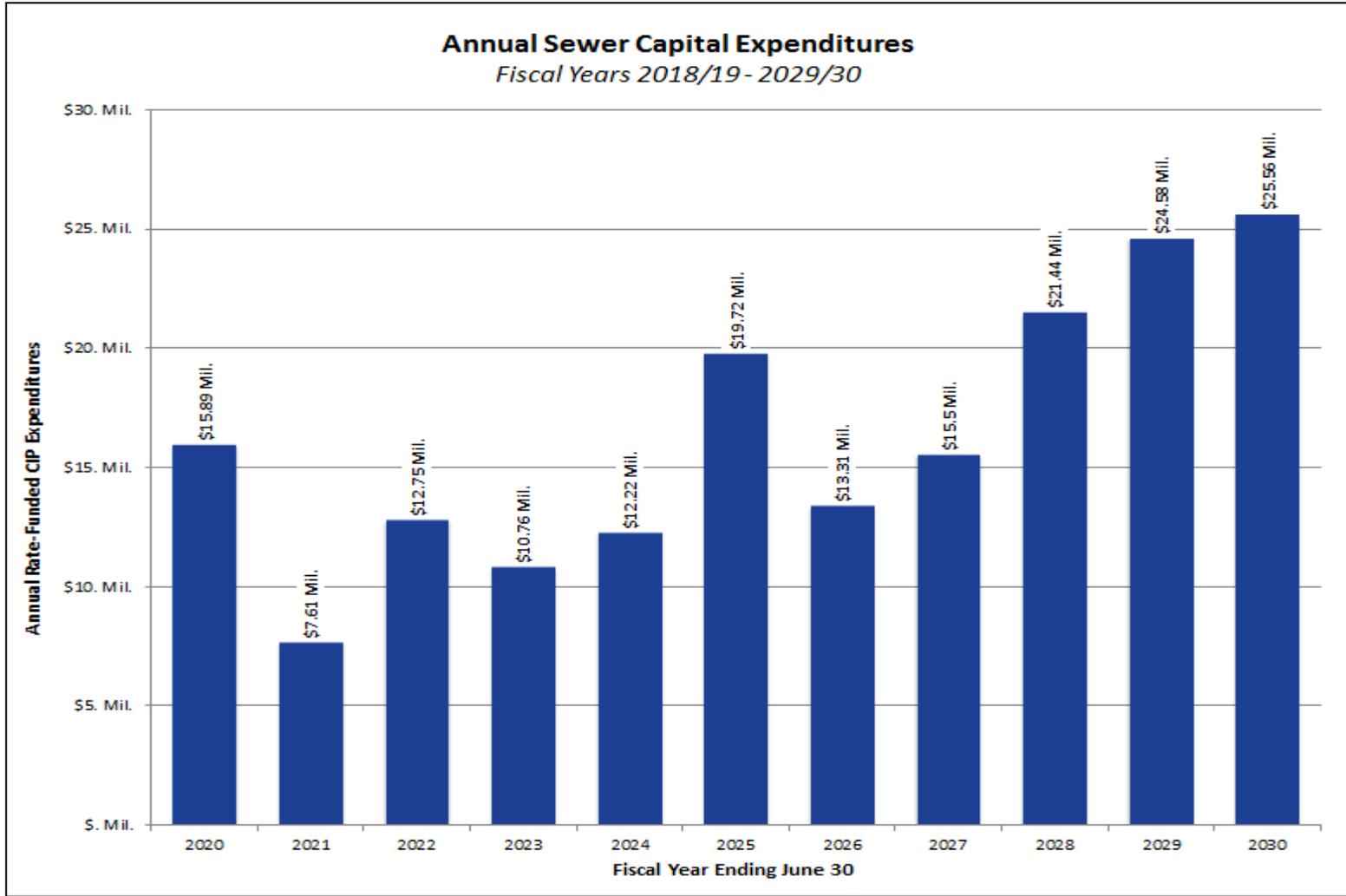
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Public Works – Wastewater Rate Update

Total Capital Needs



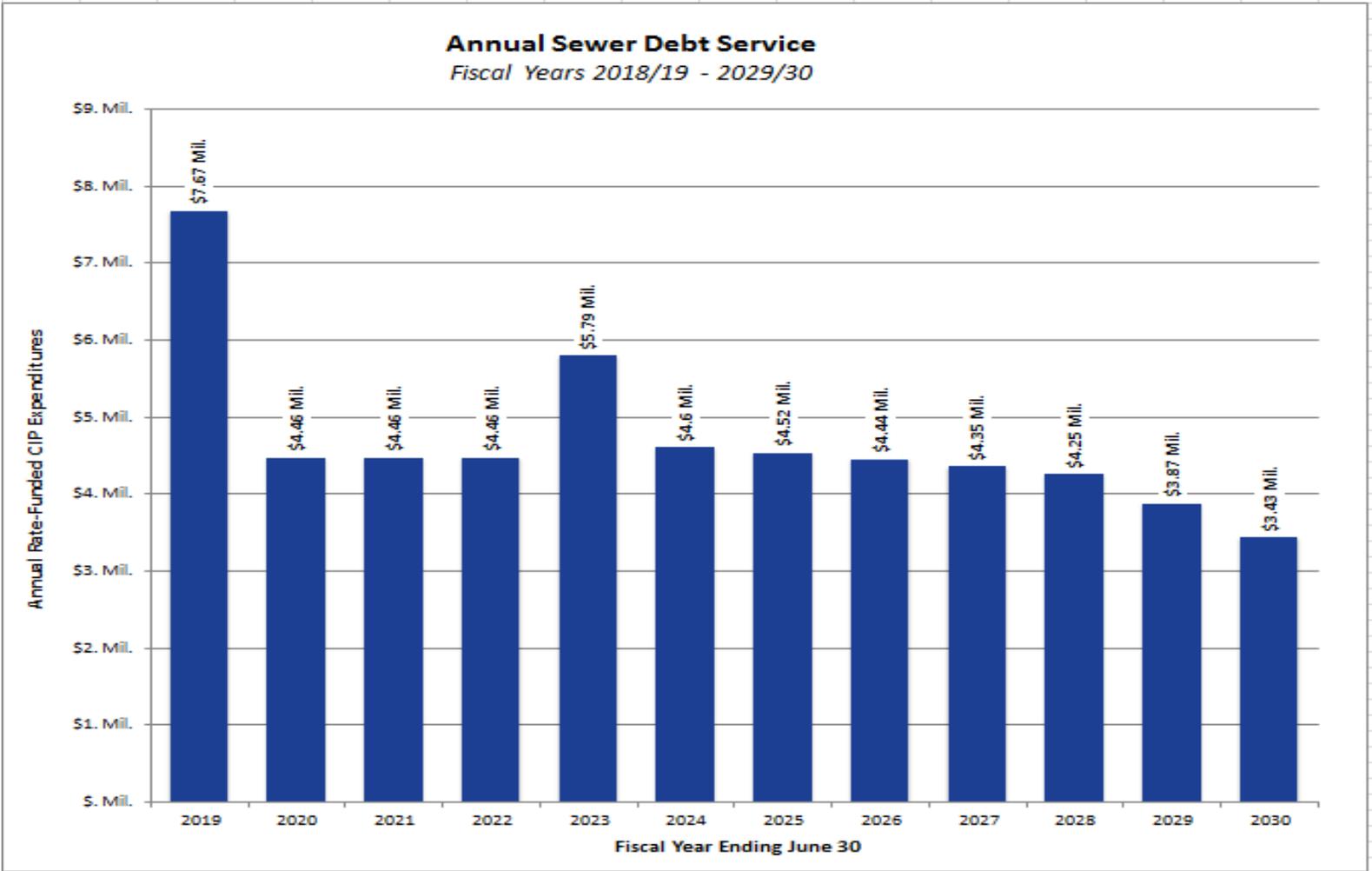
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Public Works – Wastewater Rate Update

Debt Service Pressure



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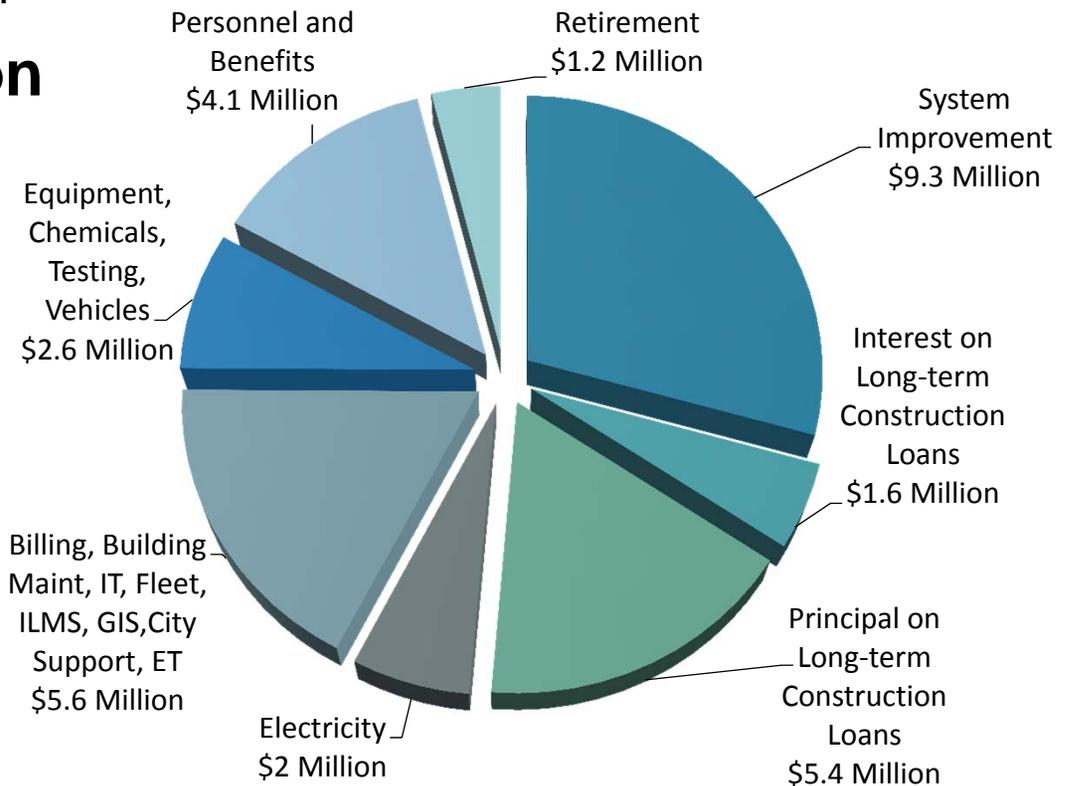




Public Works – Wastewater Rate Update

Financial Overview 2019-20

- **Revenue - \$30.7 million**
 - Rate Revenue - \$29.8 million
 - Fee Revenue - \$0.9 million
- **Expense - \$31.6 million**



Redding Public Works Department





Public Works – Wastewater Rate Update

Financial Plan

- 10-Year Financial Plan Developed:
 - FY 2018/19 Actuals & FY 2019/20 Budget used
 - Results with Recommended Rate Increases

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget		Projected		
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Sources of Sewer Funds					
Rate Revenue Under Prevailing Rates	\$ 28,961,550	\$ 29,056,653	\$ 29,154,571	\$ 29,255,304	\$ 29,358,541
Non-Rate Revenues	(11,040)	(9,192)	(9,152)	(9,071)	(8,988)
Interest Earnings	-	280,300	195,210	254,862	249,204
Total Sources of Funds	\$ 28,950,510	\$ 29,327,761	\$ 29,340,628	\$ 29,501,095	\$ 29,598,757
Uses of Sewer Funds					
Operating Expenses	\$ 15,143,480	\$ 15,245,120	\$ 15,960,750	\$ 16,387,235	\$ 16,825,237
Debt Service	7,666,240	4,463,740	4,463,740	4,463,740	5,788,071
Rate-Funded Capital Expenses	-	8,288,921	5,583,628	7,124,394	5,630,265
Transfer to Rolling Stock	(350,000)	(300,000)	(300,000)	(300,000)	(300,000)
Total Use of Funds	\$ 22,459,720	\$ 27,697,781	\$ 25,708,118	\$ 27,675,368	\$ 27,943,573
Surplus (Deficiency) before Rate Increase	\$ 6,490,790	\$ 1,629,981	\$ 3,632,510	\$ 1,825,727	\$ 1,655,184
Additional Revenue from Rate Increases	\$ -	\$ 1,162,266	\$ 2,379,013	\$ 3,652,934	\$ 4,986,799
Surplus (Deficiency) after Rate Increase	\$ 6,490,790	\$ 2,792,247	\$ 6,011,523	\$ 5,478,662	\$ 6,641,984
<i>Projected Annual Rate Increase</i>	<i>0.00%</i>	<i>4.00%</i>	<i>4.00%</i>	<i>4.00%</i>	<i>4.00%</i>
<i>Cumulative Rate Increases</i>	<i>0.00%</i>	<i>4.00%</i>	<i>8.16%</i>	<i>12.49%</i>	<i>16.99%</i>
Net Revenue Requirement ¹	\$ 22,820,760	\$ 27,726,672	\$ 25,822,061	\$ 27,729,577	\$ 28,003,356

1. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from sewer rates.





Public Works – Wastewater Rate Update

Key AG Input

- Key AG Input
 - Financial Plan/Masterplan/CIP
 - I&I/Aging Infrastructure – Maintain
 - Cleaning/Viewing/Etc. Maintenance – Continue
 - Treatment Plant Staffing – Budget
 - Private Lateral Program – Do Not Continue
 - Reserve Levels – Maintain 90 Days plus Capital (\$8M), Debt (\$4M) and Rolling Stock
 - Rate Design:
 - Residential Rates – Fixed Rate (no variable component)
 - Commercial Food Prep Rate – Stay the Course



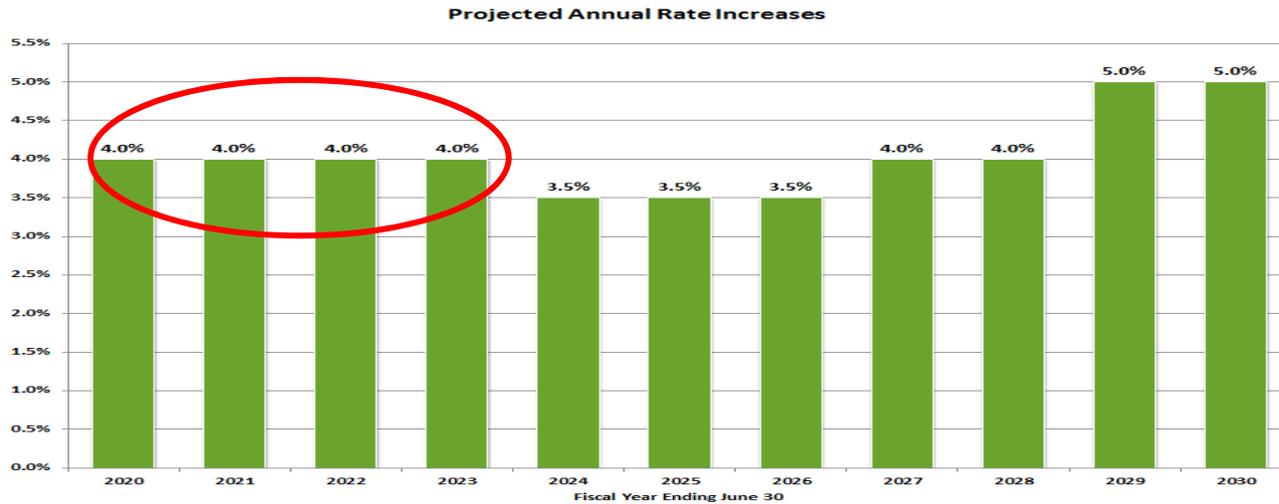
Redding Public Works Department





Public Works – Wastewater Rate Update Proposed Rates

SEWER RATE SCHEDULE	Current Rates ¹	Proposed Rates			
		FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
<i>Annual Rate increases as shown in Financial Plan:</i>		4.00%	4.00%	4.00%	4.00%
Monthly Service Charges:					
Single Family Dwelling (\$/residence)	\$54.86	\$57.05	\$59.33	\$61.70	\$64.17
Multi Family Dwelling (\$/unit)	\$40.59	\$42.21	\$43.90	\$45.66	\$47.49
Standard Commercial billed monthly (\$/ccf)	\$5.64	\$5.87	\$6.10	\$6.34	\$6.59
Standard Commercial calculated annually (\$/# HE) ²	\$54.86	\$57.05	\$59.33	\$61.70	\$64.17
Commercial Food Preparation billed monthly (\$/ccf)	\$11.28	\$11.73	\$12.20	\$12.69	\$13.20
Commercial Food Preparation calculated annually (\$/# HE)	\$109.72	\$114.11	\$118.67	\$123.42	\$128.36



Redding Public Works Department





Public Works – Wastewater Rate Update

Key Drivers to Increase

- Keep up with Inflation
- Maintain Collection System I&I Improvements – Pipe Replacement/Lining
- Maintain CSPA Driven Level of Service – Cleaning, Viewing, Etc.
- Meet Debt Service on Treatment Plant Upgrades
- Regulatory Impacts - Biosolids



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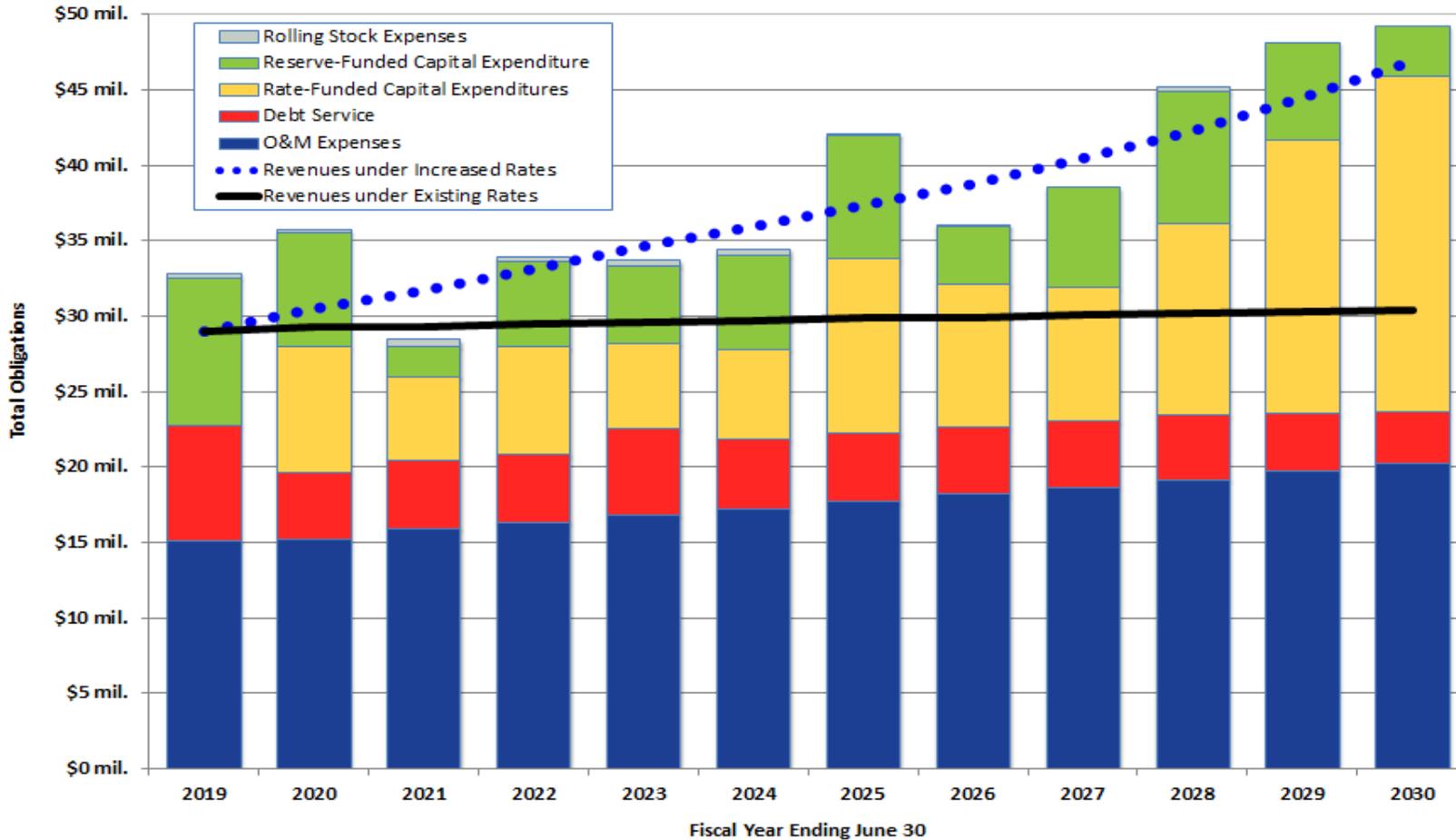




Public Works – Wastewater Rate Update

Revenue Requirements

Wastewater Revenue Under Existing and Proposed Rates Compared to Annual Revenue Requirements by Type



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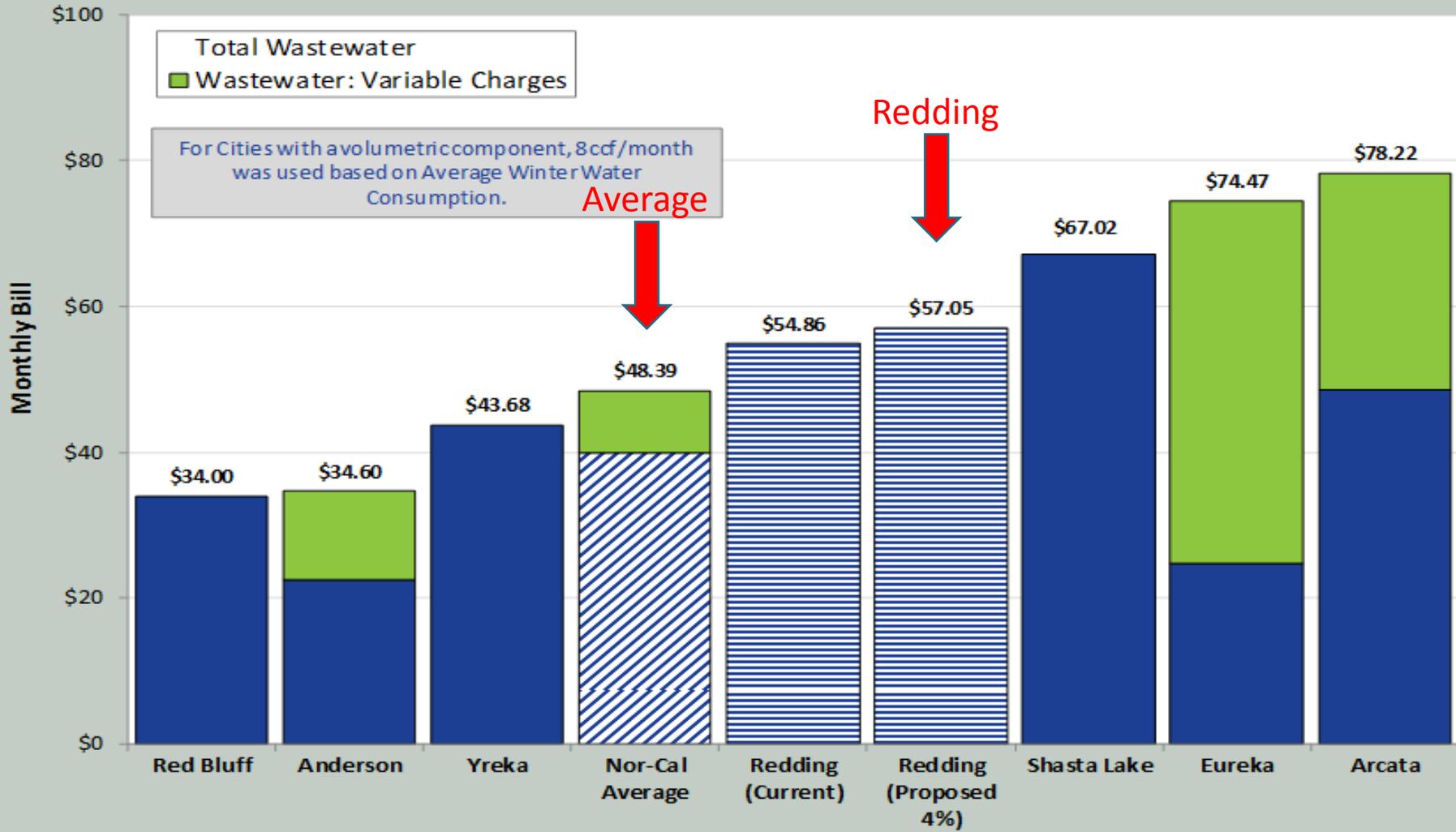




Public Works – Wastewater Rate Update

Nor Cal Rate Comparisons

**Nor-Cal Regional Wastewater Bill Comparisons (Monthly)
Single Family Residential**

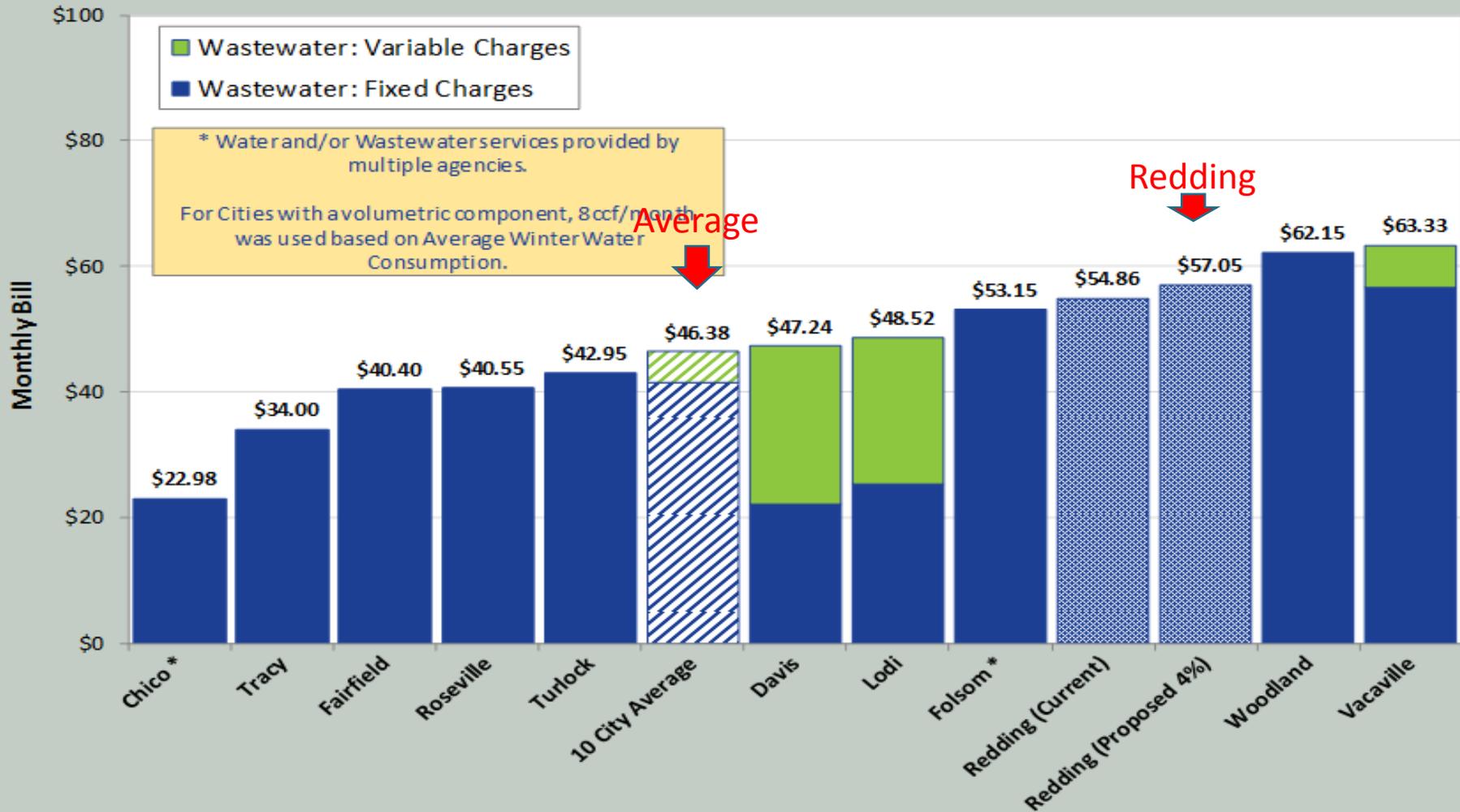




Public Works – Wastewater Rate Update

10 City Rate Comparisons

10-City Regional Wastewater Bill Comparisons (Monthly)
Single Family Residential (FY 2019/20)





Water Rate Study

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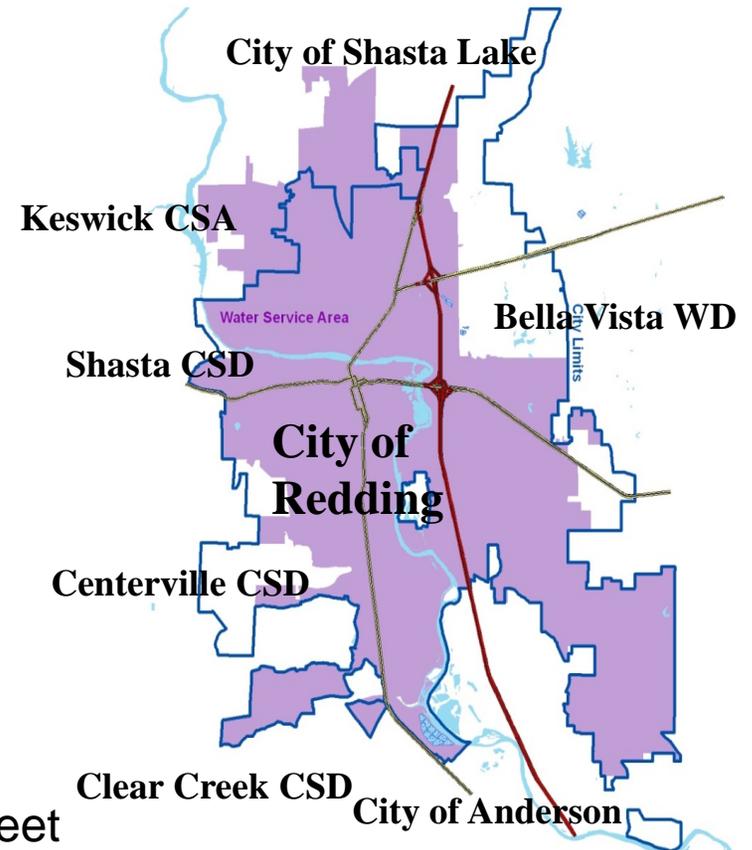




Public Works – Water Utility Rate Update

Water Utility – Demand

- **Water Supply – approx. 41,000**
 - Sac River – 21,000 Acre Feet
 - Spring Creek Conduit – 6,140 AF
 - ACID Contract – 4,000 AF
 - 17 Wells – Approx 10,000 AF
- **Customer Base:**
 - Service Area: City Limits +-
 - 29,896 Customers
- **Water Use – 24,700 Acre Feet**
 - Sacramento River – 10,300 Acre Feet
 - Spring Creek (Whiskeytown) – 6,700 Acre Feet
 - Enterprise and Cascade Wells – 7,700 Acre Feet



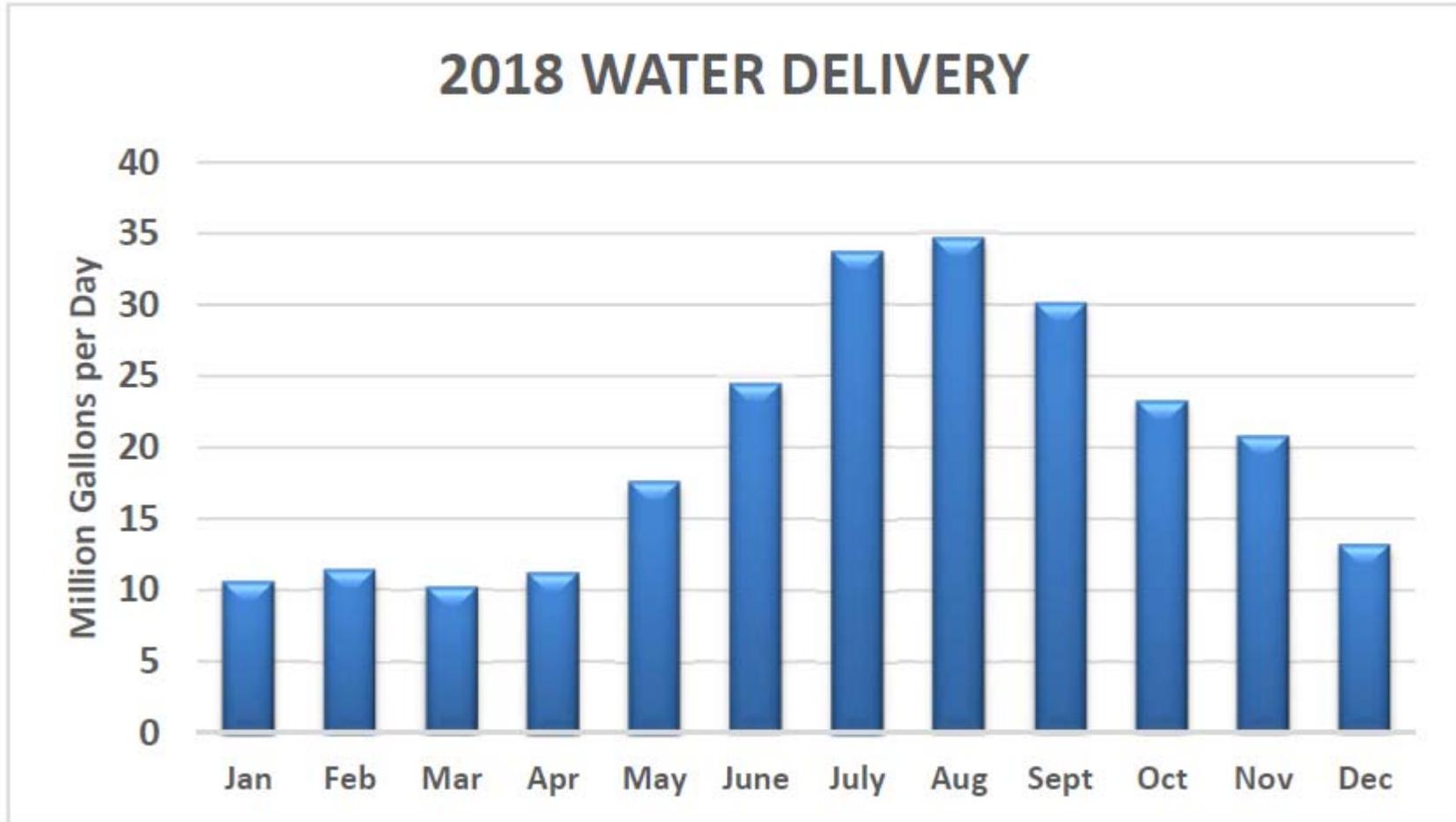
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Public Works – Water Utility Rate Update

Water Utility – Demand



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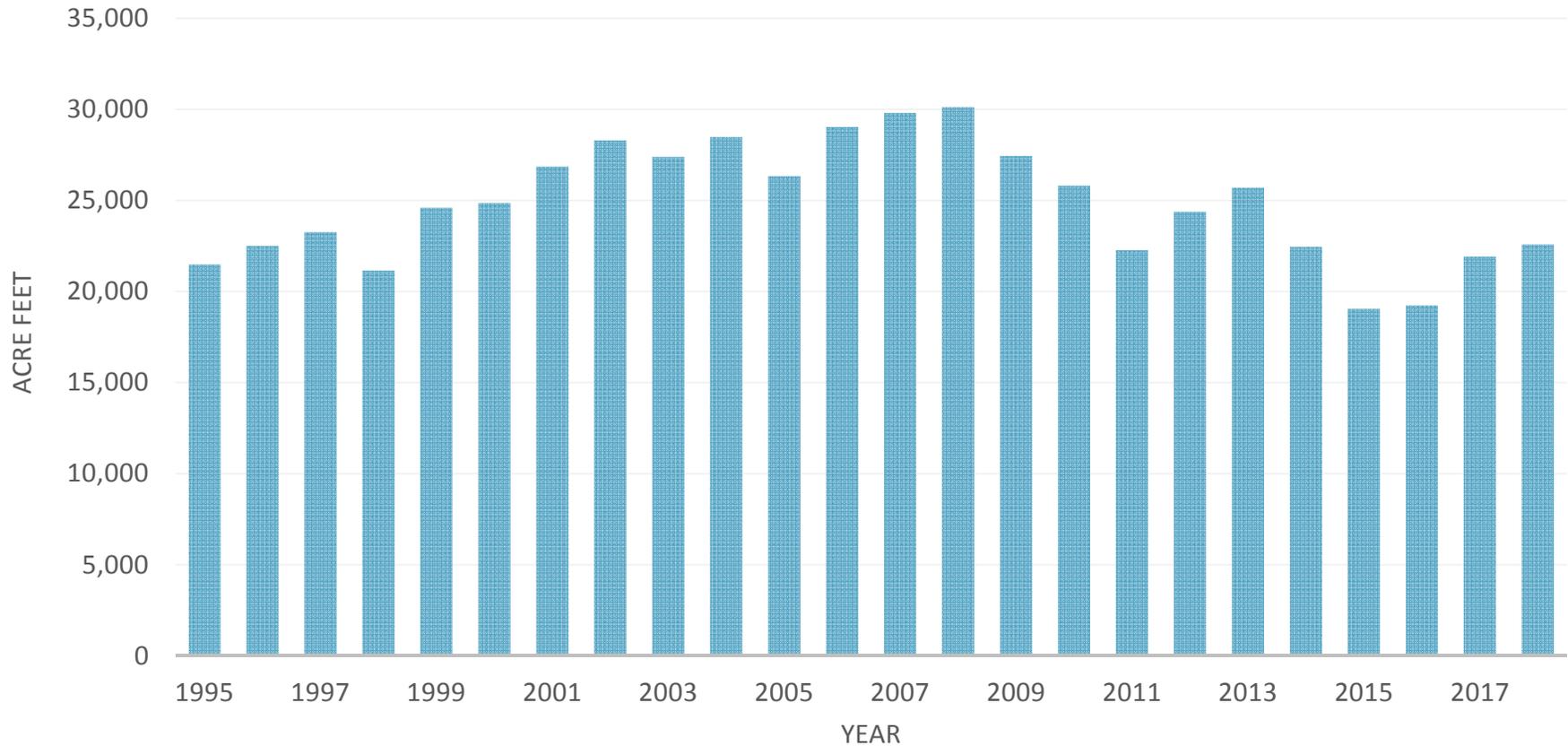




Public Works – Water Utility Rate Update

Water – Historical Demand

TOTAL YEARLY CONSUMPTION



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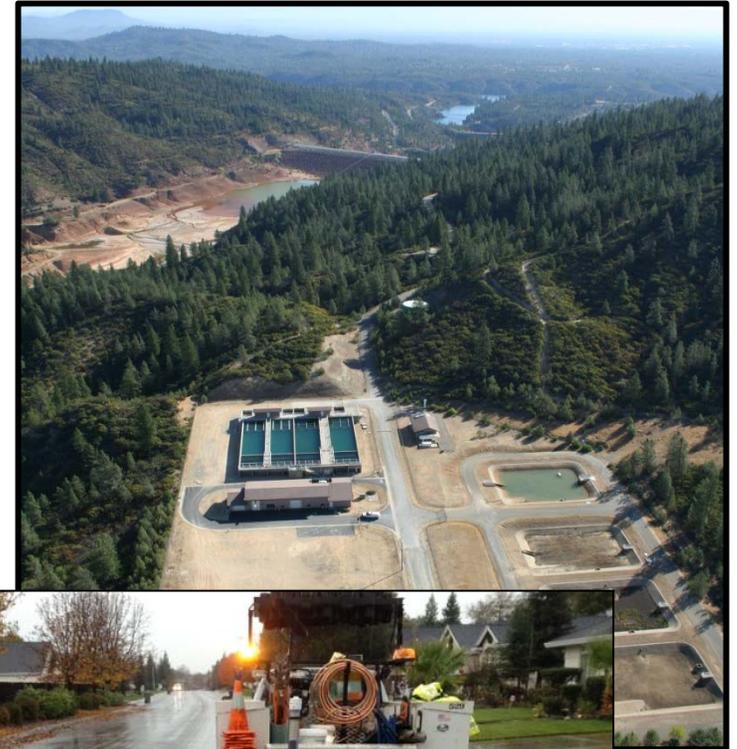


Public Works – Water Utility Rate Update

Treatment and Distribution

- **Treatment**

- Foothill (42%) and Buckeye (27%)
- 17 Wells – (31%)
- 11 Pump Stations and 12 Reservoirs
- **Staffing:** Plant Manager
 - 11 Full-Time Employees
 - Facility Staffed 24/7



- **Distribution:**

- 555 miles of water main
- 29,896 Service Connections
- 4,700 Fire Hydrants, 13,000 Valves
- 2,800 Back Flow Assemblies
- **Staffing** – Supervisor
 - 16 Full-Time Employees



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Public Works – Water Utility Rate Update

Production Needs

- **Water Treatment** - \$6.2 Million
- **Wells – Enterprise and Cascade**
 - **2020-2025:**
 - One New Well - \$2.1 million
 - Well Head Treatment - \$10 million
- **Pump House 1**
 - Begin Construction 2025(?) ~ **\$23,500,000**
- **Storage**
 - **2020 to 2030 – \$10.2 million**
 - Replace Buckeye Older Reservoir (circa 1949)
 - Replace Hill 900 Reservoirs (circa 1959)
- **Pressure Management – Booster Pumps/PRV**
 - East/West Water Management - Cypress PS (\$1 Million)





Distribution System Needs

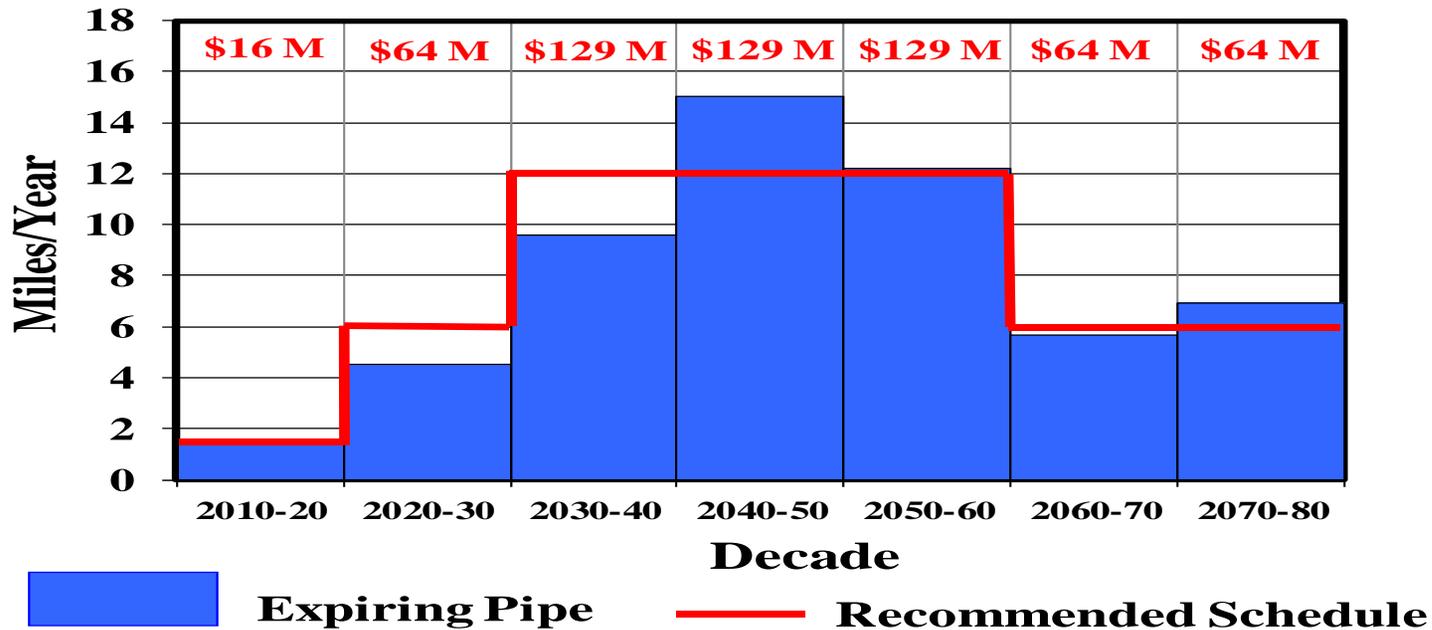
- **Key Pipe Replacement Projects:**
 - **Current Age Related Replacements**
 - Bechelli Lane - \$2 million
 - **Current Growth/Capacity Projects**
 - Lake Blvd. (2) - \$7 million
 - **Projected Costs**
 - 2020 to 2025 Current Needs
 - \$18 million total
 - \$13 million for aging pipe replacement
 - 2025 to 2035
 - \$60 million total
 - \$50 million for aging pipe replacement





Distribution System Needs

Aging pipe replacement program recommendation per Master Plan

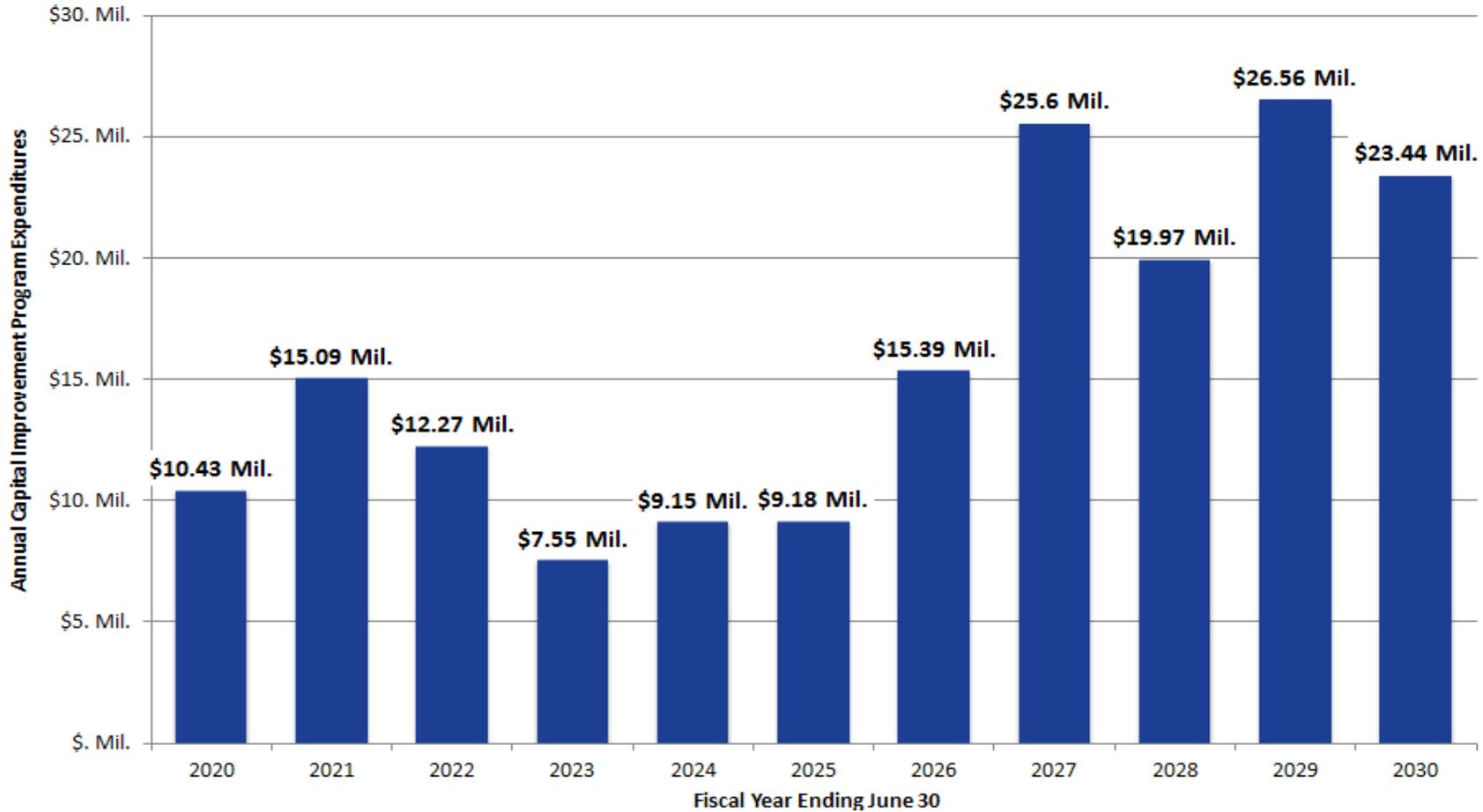




Public Works – Water Utility Rate Update

Capital Pressure

Annual Capital Improvement Program Expenditures
Fiscal Years 2019/20 - 2029/30



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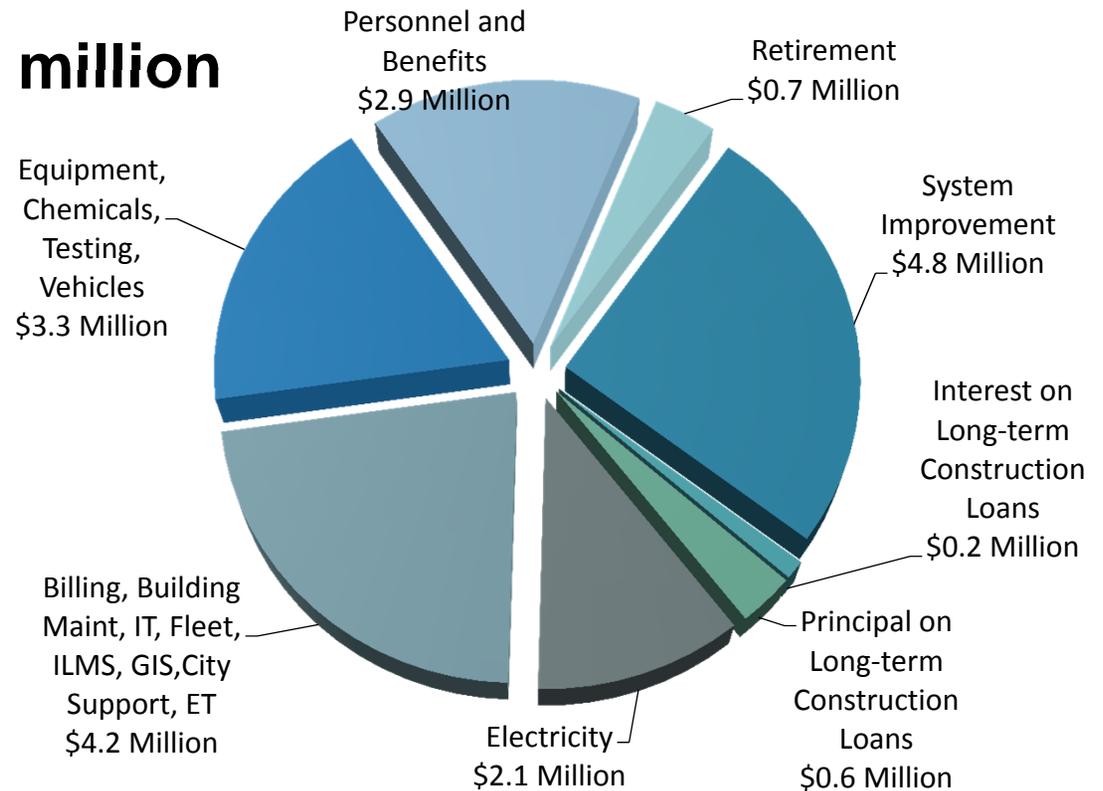
Public Works – Water Rate Update

Financial Overview 2019-20

Revenue - \$23.5 million

- Rate Revenue - \$16.4 million
- Fee Revenue - \$1.0 million

Expenditures - \$24.2 million



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Public Works – Water Utility Rate Update

Financial Plan Overview

- 10-Year Financial Plan was Developed:
 - FY 2018/19 Actuals & FY 2019/20 Budget used

Summary of Sources and Uses of Funds and Net	Budget		Projected		
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Revenue Requirements					
Sources of Water Funds					
Rate Revenue Under Prevailing Rates	\$ 22,557,780	\$ 22,631,854	\$ 22,708,121	\$ 22,786,581	\$ 22,866,991
Other Operating Revenue	508,490	520,798	535,291	550,282	565,793
Interest Earnings	118,530	542,063	510,160	440,566	415,435
Total Sources of Funds	\$ 23,184,800	\$ 23,694,715	\$ 23,753,572	\$ 23,777,430	\$ 23,848,219
Uses of Water Funds					
Operating Expenses	\$ 15,095,122	\$ 15,909,610	\$ 16,346,700	\$ 16,764,519	\$ 17,203,674
Debt Service	342,061	354,924	354,924	354,439	355,895
Rate-Funded Capital Expenses	-	-	190,974	3,717,372	2,546,505
Total Use of Funds	\$ 15,437,183	\$ 16,264,534	\$ 16,892,598	\$ 20,836,331	\$ 20,106,074
Surplus (Deficiency) before Rate Increase	\$ 7,747,617	\$ 7,430,181	\$ 6,860,974	\$ 2,941,099	\$ 3,742,144
Additional Revenue from Rate Increases	-	452,637	1,852,983	2,845,224	3,884,154
Surplus (Deficiency) after Rate Increase	\$ 7,747,617	\$ 7,882,818	\$ 8,713,957	\$ 5,786,323	\$ 7,626,299
Projected Annual Rate Increase	0.00%	4.00%	4.00%	4.00%	4.00%
Cumulative Rate Increases	0.00%	4.00%	8.16%	12.49%	16.99%
Net Revenue Requirement ¹	\$ 14,810,163	\$ 15,201,673	\$ 15,847,147	\$ 19,845,482	\$ 19,124,847
Total Rate Revenue (Current & Add'l.)	\$ 22,557,780	\$ 23,084,491	\$ 24,561,104	\$ 25,631,805	\$ 26,751,145
Debt Coverage With Rate Increase	23.6	23.2	26.1	27.8	29.6

1. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from water rates





Public Works – Water Utility Rate Update

Water Utility – Key AG Input

- Financial Plan
 - Capital Program
 - Source Capacity – Increase
 - Pipe Replacement – Continue
 - Pump House 1 Replacement – Continue
 - Foothill Water Treatment Plant – Continue
 - Operations
 - Staffing – maintain Proforma – evaluate biennially
 - Reserve Levels
 - Operational Reserve – 120 Days
 - Capital Reserve – 5% of expenses
 - Pump House 1 – 6% of revenue
 - Rolling Stock - \$500K min
- Rate Design
 - Fixed vs. Variable – Adjust to Actual? – Not Now
 - Drought Rate – Use Reserves



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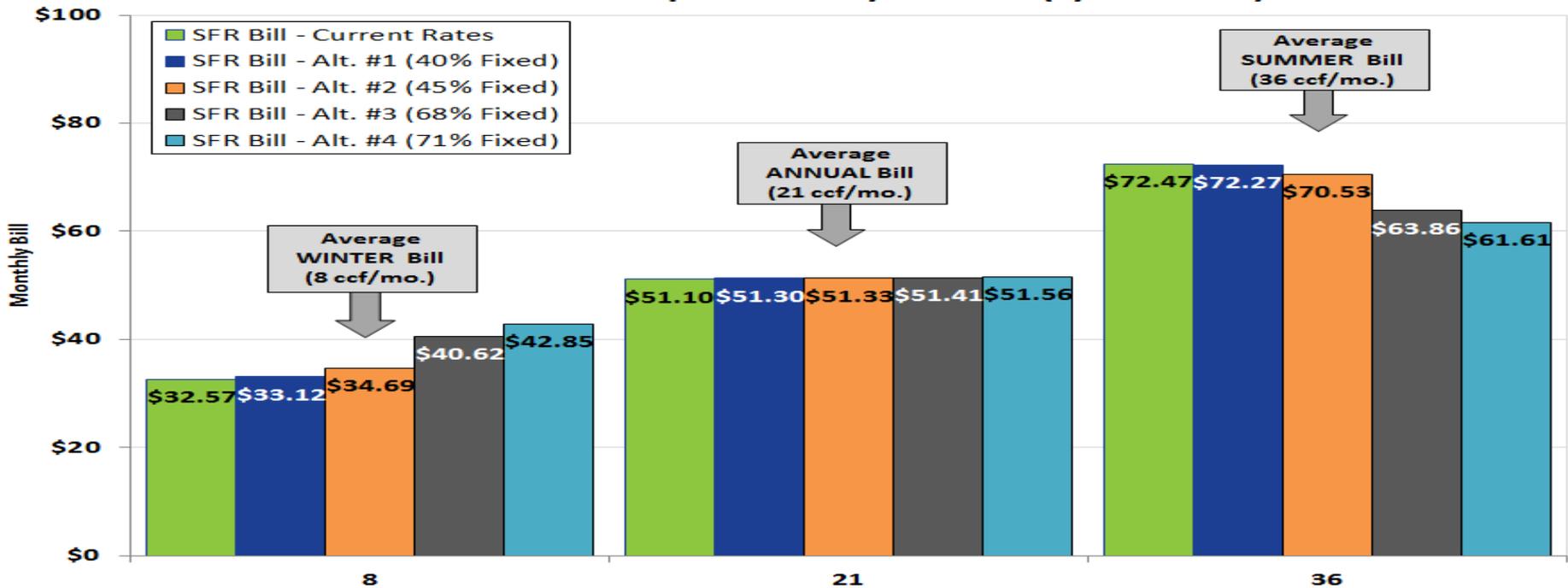


Public Works – Water Utility Rate Update

Cost of Service

Classification Component's	Fixed and Variable Cost Allocations	Alternative #1 - Current Rate Design (40% Fixed / 60% Variable)		Alternative #2 - Net Revenue Requirements (45% Fixed / 55% Variable)		Alternative #3 - Net Revenue Requirements (64% Fixed / 36% Variable)		Alternative #4 - Net Revenue Requirements (71% Fixed / 29% Variable)	
		Adjusted Net Revenue Requirements (2019/20) ¹		Adjusted Net Revenue Requirements (2019/20)		Unadjusted Net Revenue Requirements (2019/20)		Unadjusted Net Revenue Requirements (2019/20)	
Commodity-Related Costs	Variable	\$ 13,986,486	60.0%	\$ 12,820,945	55.0%	\$ 8,391,892	36.0%	\$ 6,760,135	29.0%
Capacity-Related Costs	Fixed	6,859,894	29.4%	8,025,434	34.4%	12,454,488	53.4%	14,086,245	60.4%
Customer-Related Costs	Fixed	2,464,430	10.6%	2,464,430	10.6%	2,464,430	10.6%	2,464,430	10.6%
Net Revenue Requirement		\$ 23,310,810	100%	\$ 23,310,810	100%	\$ 23,310,810	100%	\$ 23,310,810	100%

Residential Water Bill Comparison
Current vs. Proposed 2019/20 Rates (5/8" Meter)

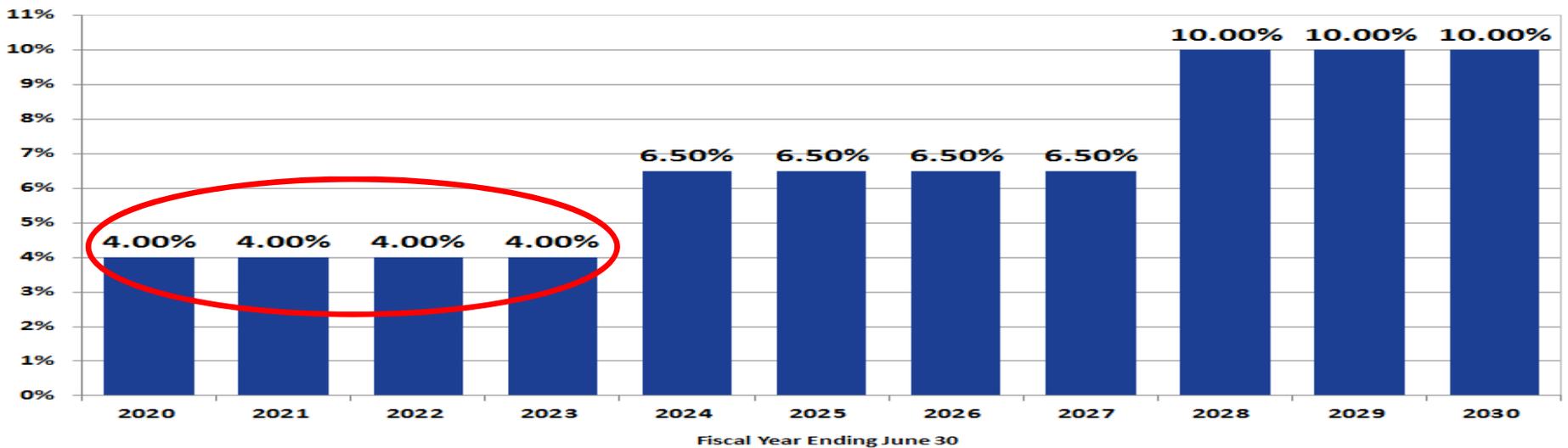




Public Works – Water Utility Rate Update Proposed Rates

Water Rate Schedule	Current Rates	Recommended Rates			
		FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		4.00%	4.00%	4.00%	4.00%
Fixed Service Charge					
Monthly Fixed Service Charge - Standard Meters:					
5/8 inch	\$21.17	\$22.15	\$23.04	\$23.96	\$24.92
3/4 inch	\$28.04	\$29.61	\$30.79	\$32.02	\$33.30
1 inch	\$41.77	\$44.52	\$46.30	\$48.15	\$50.08
1.5 inch	\$76.09	\$81.79	\$85.06	\$88.47	\$92.01
2 inch	\$117.27	\$126.52	\$131.59	\$136.85	\$142.32
3 inch	\$227.10	\$245.81	\$255.64	\$265.87	\$276.50
4 inch	\$350.66	\$380.00	\$395.20	\$411.01	\$427.45
6 inch	\$693.88	\$752.77	\$782.88	\$814.19	\$846.76
8 inch	\$1,105.75	\$1,200.08	\$1,248.08	\$1,298.01	\$1,349.93
Commodity Charges for All Water Consumed					
Uniform Rate	\$1.43	\$1.41	\$1.47	\$1.53	\$1.59

Projected Increases to Rate Revenue





Public Works – Water Rate Update

Key Drivers to Increase

- Quality/Reliability
- Keep up with Inflation - Operations
- Add Source Capacity - Wells
- Maintaining Pipe Replacement Program
- Maintaining PH1 and Foothill Upgrades
- Regulatory
 - SB 606 & AB 1668 – Urban Water Use Targets/Conservation
 - PFAS & UCMR 4 Testing – Unregulated Contaminates



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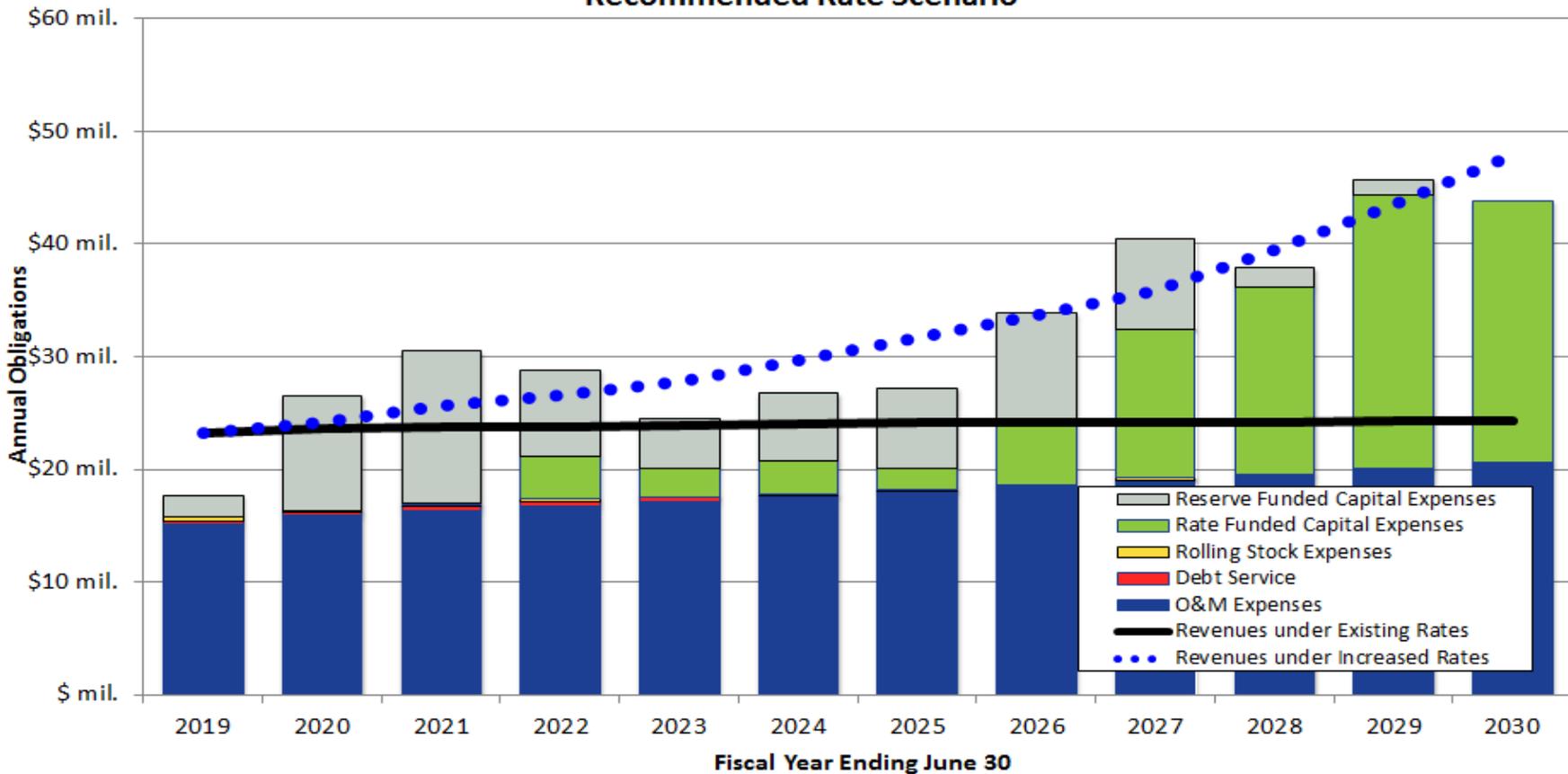




Public Works – Water Utility Rate Update

Required Revenue

Water Revenue Requirements vs.
Revenue Under Existing and Increased Rates
Recommended Rate Scenario



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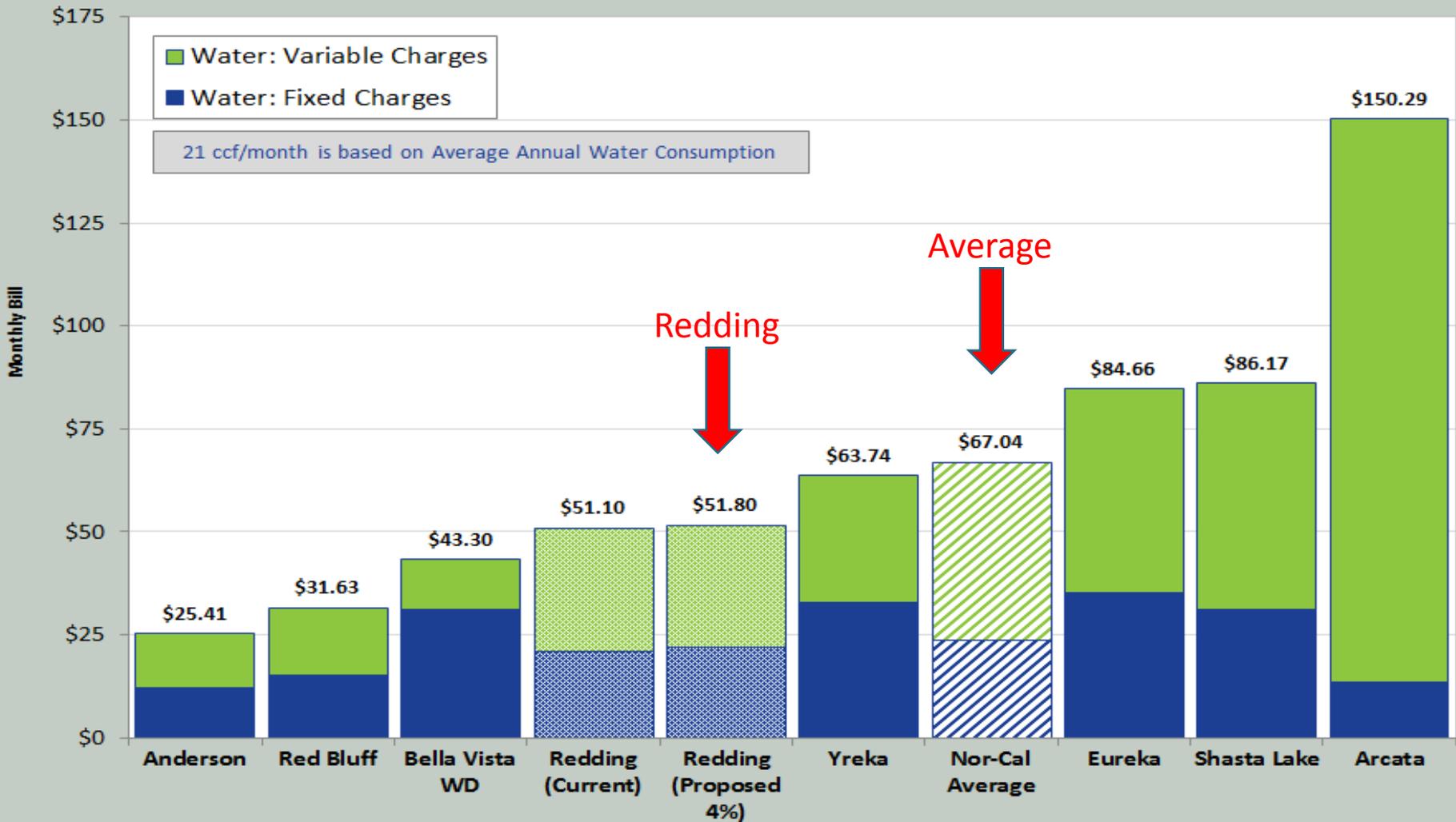




Public Works – Water Utility Rate Update

Nor Cal Comparisons

**Nor-Cal Regional Water Bill Comparisons (Monthly)
Single Family Residential (5/8" Meter & 21 ccf/month)**

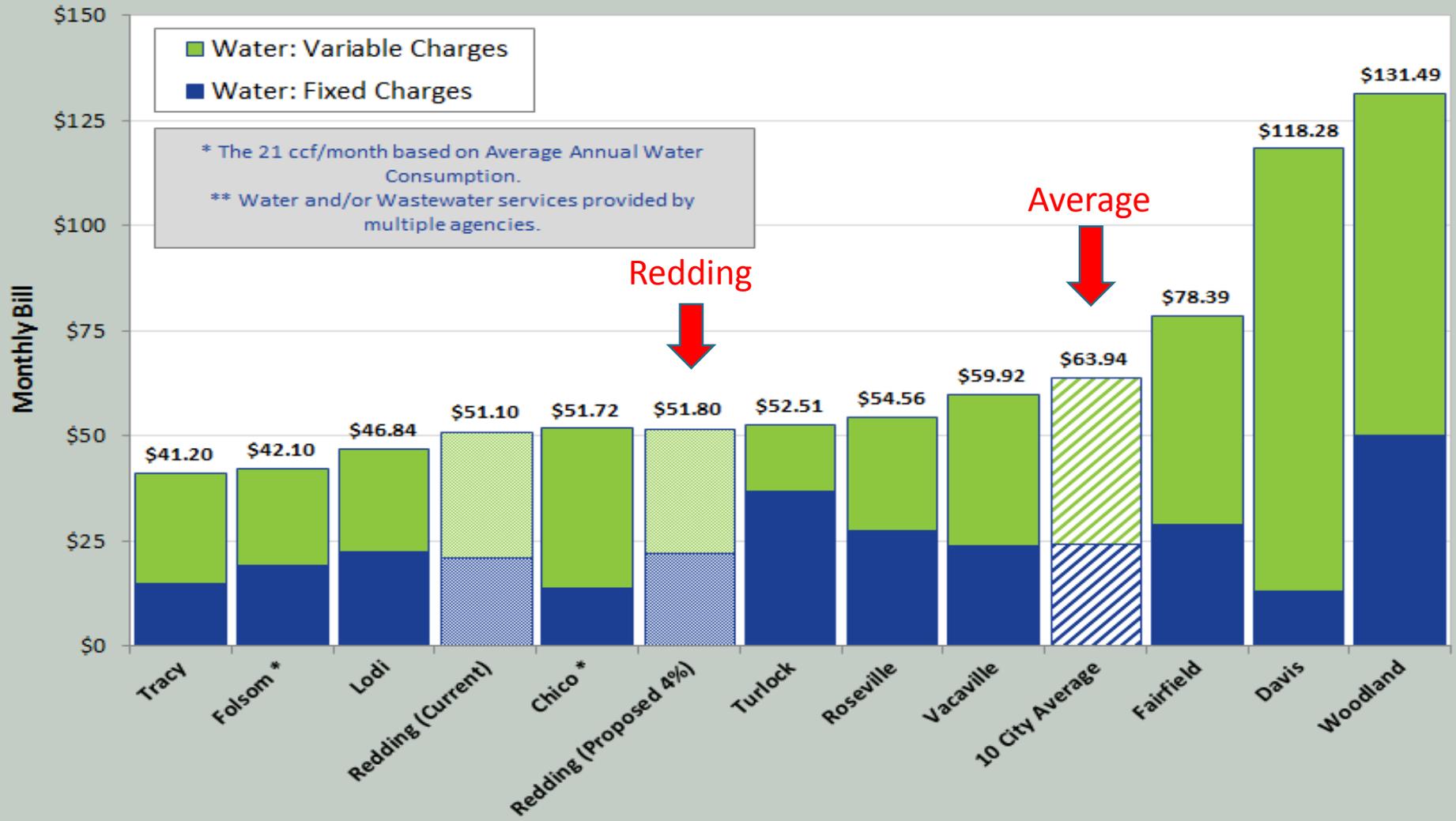




Public Works – Water Utility Rate Update

10 City Comparisons

**10-City Regional Water Bill Comparisons (Monthly)
Single Family Residential (3/4" Meter & 21 ccf/month)***





Solid Waste, Wastewater, Water

Combined Utility Comparisons

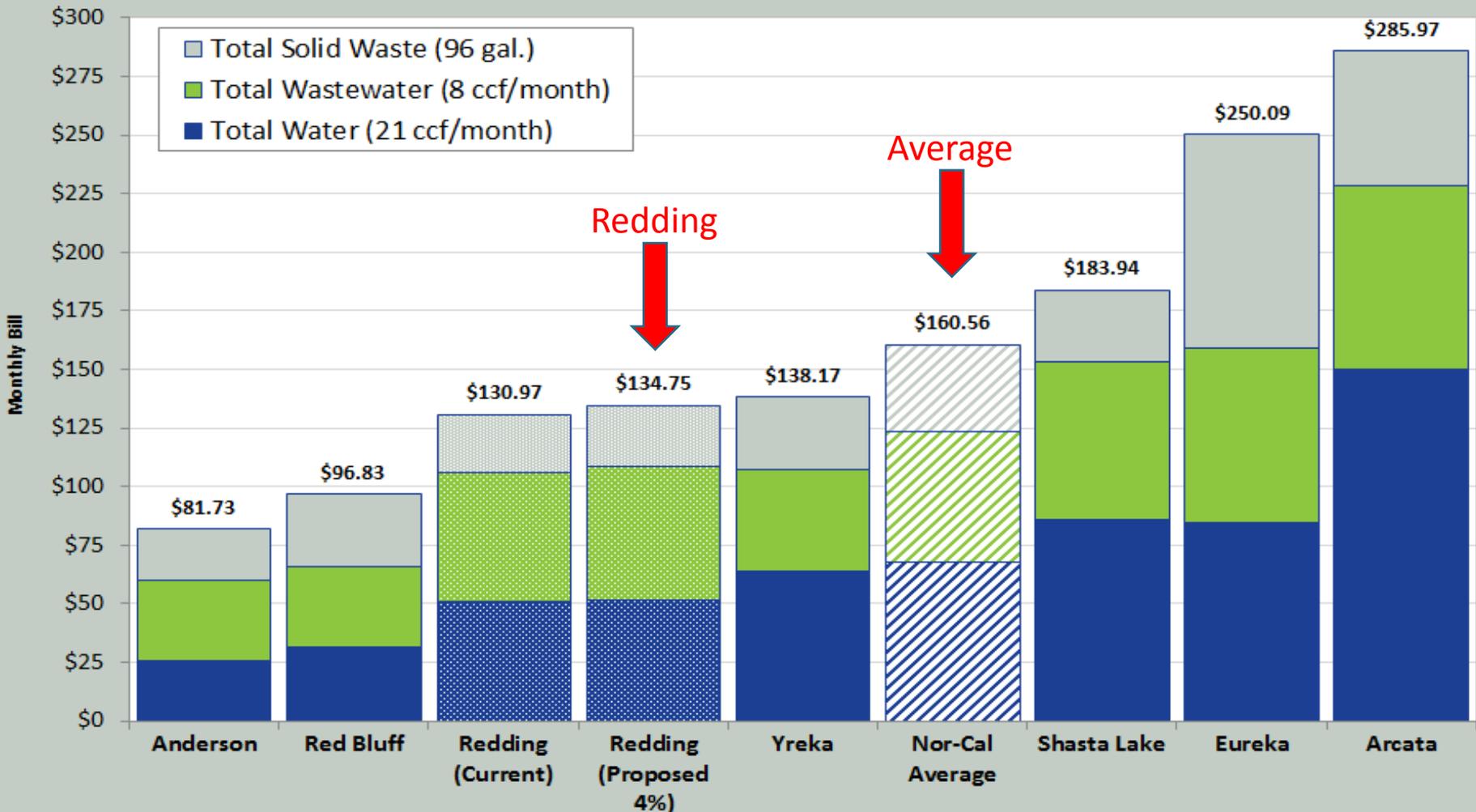
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Nor Cal Comparisons

Nor-Cal Regional Bill Comparisons (Monthly)
Single Family Residential (Water, Wastewater & Solid Waste)

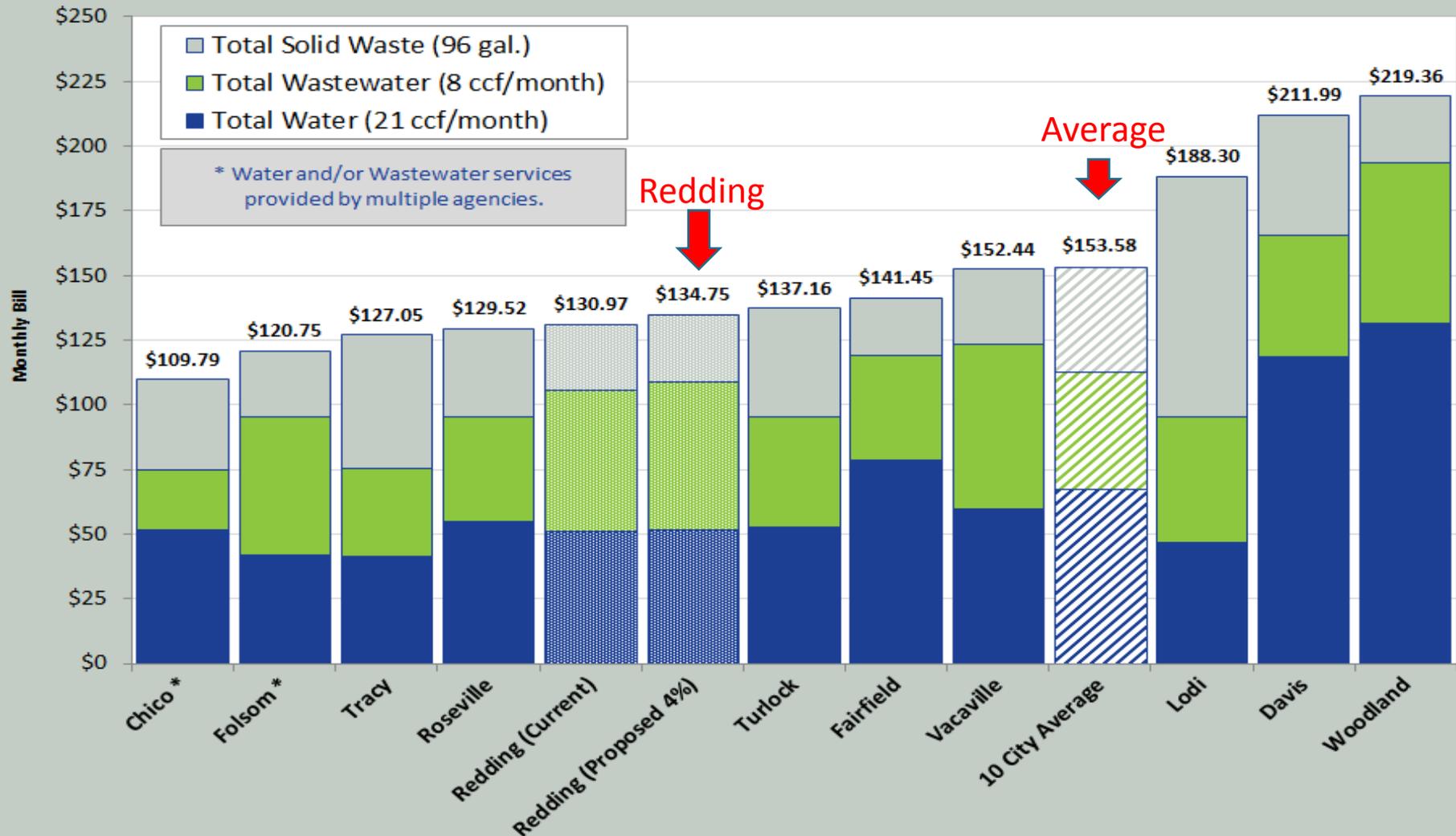




Public Works – Solid Waste, Wastewater, and Water Utility Rate Update

10 City Comparison

10-City Regional Bill Comparisons (Monthly)
Single Family Residential (Water, Wastewater & Solid Waste)





Public Works – Wastewater Rate Update

Alternatives to Increases...?

- CIP – Slow Down on Pipe Replacement – Risky...
 - Water Main Breaks and Sanitary Sewer Overflows
 - Source Water – PH 1 and Wells
 - No CIP in Solid Waste



- Level of Service
 - Regulatory Induced Maintenance Levels
 - Improved Distribution and Treatment Levels of Service
 - MSW (Gray) – Code Requires Weekly Pickup
 - Green/Blue Alternate Weeks – Diversion Goals, Etc.



- Contract Services to Private Sector
 - Privatization Study - City Services Compare Favorably
 - Other Related Costs Covered – Street Sweeping, Litter Abatement, Pavement Impact Mitigation, Water Quality
- More Risk with Using Reserves – Future Rate Shock...





Public Works – Rate Update

Next Steps

- **Council Action Tonight**
 - Approve Prop 218 Notice of Proposed Rate Increase
 - Set a Public Hearing for February 4, 2020
 - Mail Protest Notices to property owners and tenants
- **February 4, 2020 - Hold Public Hearing and Tally Protests**



Redding Public Works Department

