

# Water & Sewer Rate Study Workshop

City of Placerville, California  
November 8, 2017

# Overview

- Welcome and introductions
- Mission Statement & primary goal of rate study
- Sewer and water services
- Capital Improvement Program
- Additional service needs
- Cost of providing services

# Overview (Continued)

- Proposed rates
- Next steps
- Questions and answers

# Mission Statement

*Provide clean, safe, and reliable water and wastewater collection and treatment services at a reasonable cost to Placerville Customers 24 hours a day, 7 days a week.*

# Primary Goal of Rate Study

*Establish rates that cover the cost of operating and maintaining the sewer and water systems over the next 5 years.*

# Water Acquisition & Delivery

- Water system is regulated by the State Water Resources Control Board
  - State Water Code Title 17 & 22
  - Transitioning from a D2 to a D3 system
  - Increased regulatory compliance and reporting
- Purchase water from the El Dorado Irrigation District (445 million gallons)

# Water Acquisition & Delivery (Cont.)

- Operate and maintain 45 miles of water line ranging from 3" to 24"
  - 8 Pressure zones
  - Maintain and exercise 400+ valves throughout
  - Operate and maintain 295 hydrants for fire flow
  - Perform periodic flushing of 155 dead end lines
  - Operate and maintain 15 Pressure Reducing Stations

# Water Acquisition & Delivery (Cont.)

- Test and maintain 313 privately owned backflow prevention devices
- Read 2,810 water meters on a bi-monthly basis
- Sample and test water in 13 locations throughout the City on a weekly basis
- Respond to 230 calls for service annually
- Respond to 775 USA tickets annually (water, sewer, & storm drains)

# Water Acquisition & Delivery (Cont.)

- Provide leak checks (audit) upon request
- Maintain leak detection program
- Respond to emergency repairs as necessary
- Shut off water service for extended vacancies and repairs

# Water Acquisition & Delivery (Cont.)



# Sewer Collection

- Regulated by the State Water Resources Control Board
  - Order 2006-003-Amendment No. WQ 2008-0002-Exec
  - California Integrated Water Quality Systems
  - Increased regulatory compliance & reporting

# Sewer Collection (Cont.)

- Sewer System Programs
  - Sanitary Sewer Overflow Reduction Program (SSO)
  - Sewer System Management Plan (SSMP)
  - Overflow Emergency Response Plan
  - Fats, Oils, & Greases (FOG) program
  - Inflow & infiltration reduction program
  - Root intrusion & control program (new)

# Sewer Collection (Cont.)

- Operate and maintain 50 miles of sewer line ranging from 3" to 24"
  - Operate and maintain 4 lift stations
  - Perform periodic flushing and CCTV of sewer lines
  - Perform system inspections
- Respond to emergency repairs as necessary
- Respond to sewer spills as needed

# Sewer Collection (Cont.)



# Public Works Crew



# Sewer Treatment

- Operate and maintain Water Reclamation Facility (tertiary treatment)
- Treat approximately 400 million gallons of sewer annually
- Sample and test effluent (treated water) on an ongoing basis
- Haul 1,600 tons of sludge byproduct off site
- Negotiate and monitor NPDES permit (5-year permit)

# Sewer Treatment (Continued)

- Perform periodic studies as required by State Water Resources Control Board
  - Example: Zinc Water Effect Ratio (WER) study
  - Fresh water muscle study
- Monitor WRF 24/7
- Continually search and implement additional efficiencies and environmental friendly enhancements (e.g., reduction in the use of chemicals and the use of more environmentally friendly chemicals, conversion to solar power, etc.)

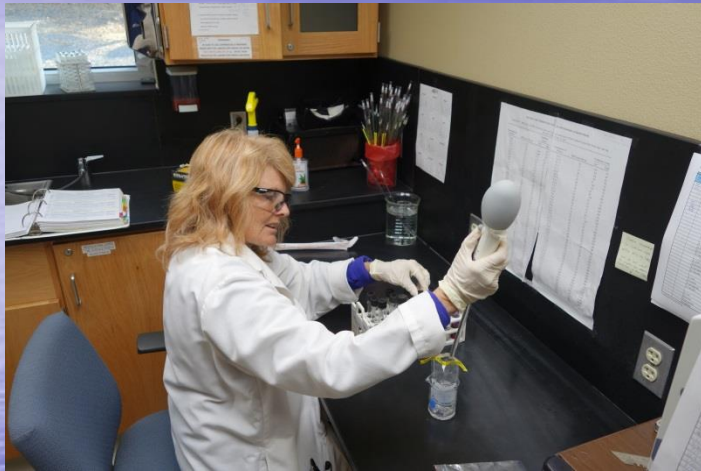
# Sewer Treatment (Continued)



# Sewer Treatment (Continued)



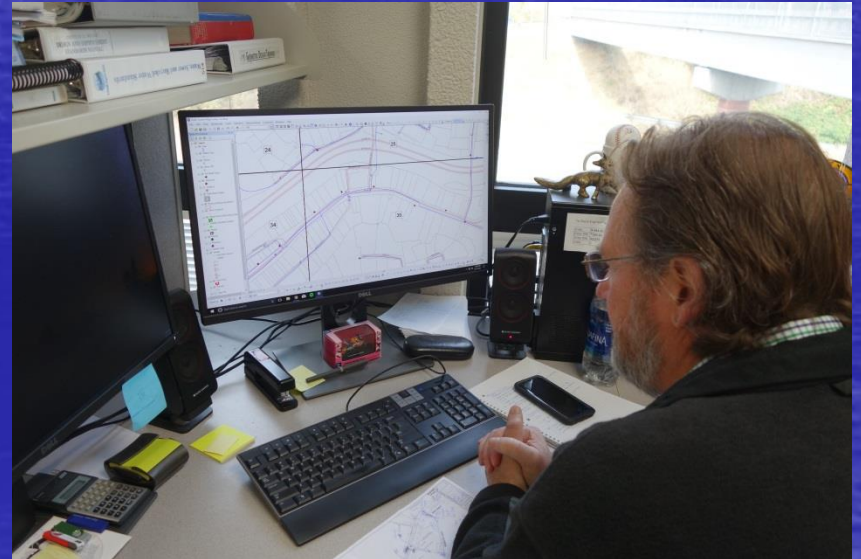
# Sewer Treatment (Continued)



# Engineering

- Operate and maintain Geographical Information System (GIS)
- Design the replacement of sewer and water systems as needed
- Develop budgets for the replacement of sewer and water systems as needed
- Administer sewer and water grants
- Present CIP budgets and analysis to the Measures H and L Sales Tax Committee
- Work with the RWQCB as necessary

# Engineering



# Finance

- Provide customer service
- Prepare 22,630 utility bills annually
- Administer work orders for water leak checks (audits)
- Administer Lifeline application process
- Co-facilitate water efficiency program with EID
- Administer operating budget development
- Provide general accounting services

# Finance (Continued)

- Prepare ongoing disclosure reports for Publicly traded debt (bonds)
- Administer water conservation (Drought) program
- Facilitate water acquisition agreements with EID
- Administer rate studies

# General Administration

- Manage Departments providing sewer and water services
- Monitor and enforce City policies and procedures
- Provide legal services as necessary
- Administer risk programs including general liability insurance, property insurance, and worker's compensation insurance
- Respond and resolve customer comments and complaints

# Capital Improvement Program

- Measure H Sales Tax (annually)
  - \$548,190 for sewer & water projects
  - \$516,070 for sewer charge discounts
- Measure L sales tax (annually)
  - \$2,121,021 for street, sewer, and water system projects

# Unfunded Program Needs

- Fully funding 2006 SRF loan payment and 20% coverage
- Additional Public Works positions
  - Maintenance Worker II/Water Distribution III Operator
    - Additional valve exercising
    - Additional hydrant exercising
    - Additional water flushing
  - Senior Maintenance Worker
    - Additional sewer flushing
    - Shore up FOG Program
    - Additional root foaming

# Unfunded Program Needs (Cont.)

- Additional WRF position
  - NPDES permit compliance
  - Address coverage during staffing shortages
  - Reduce overtime costs
- Equipment replacement program
- Normal inflation

# Water Enterprise Fund

## Adopted Budget Fiscal Year 2017/2018



Personnel  
\$0.36

Supplies  
\$0.34

Overhead  
\$0.12

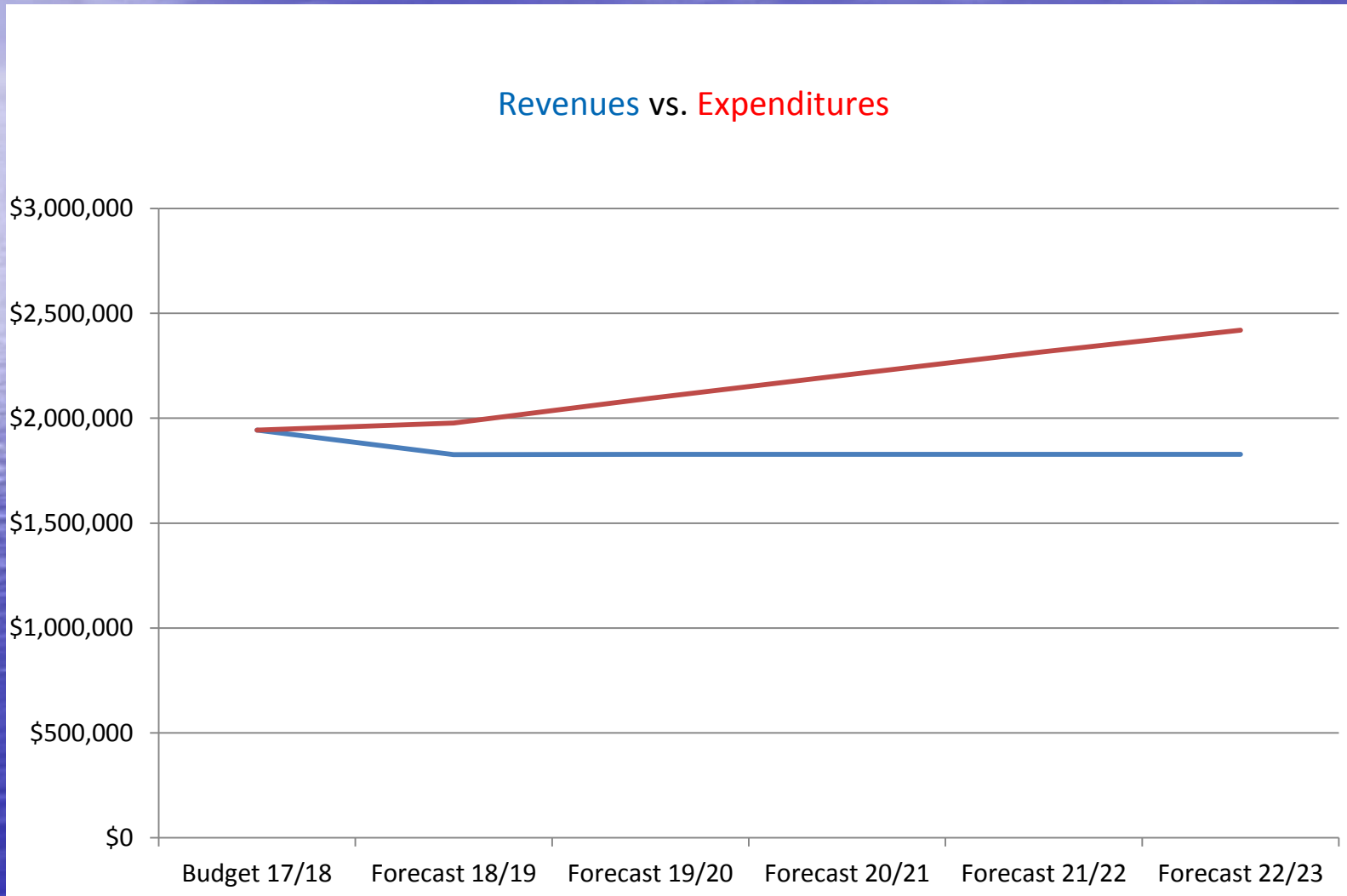
Services  
\$0.04

Equipment,  
Contingency, Debt  
Service,  
& Other Expenses  
\$0.15

# Water Enterprise Fund (Cont.)

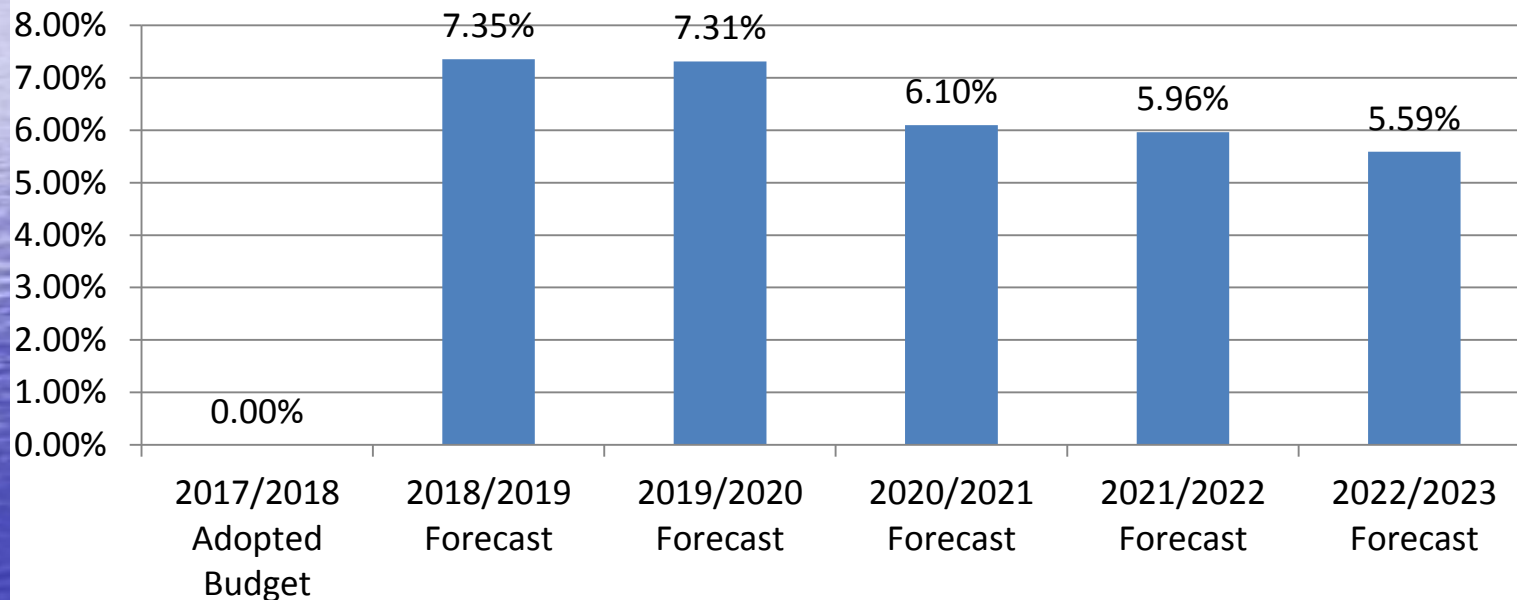
- Cost factors
  - Personnel
  - Supplies
  - Services
  - Debt payments
  - Property and general liability insurance
  - Equipment replacement
  - Contingency
  - Other expenses

# Water Enterprise Fund (Cont.)

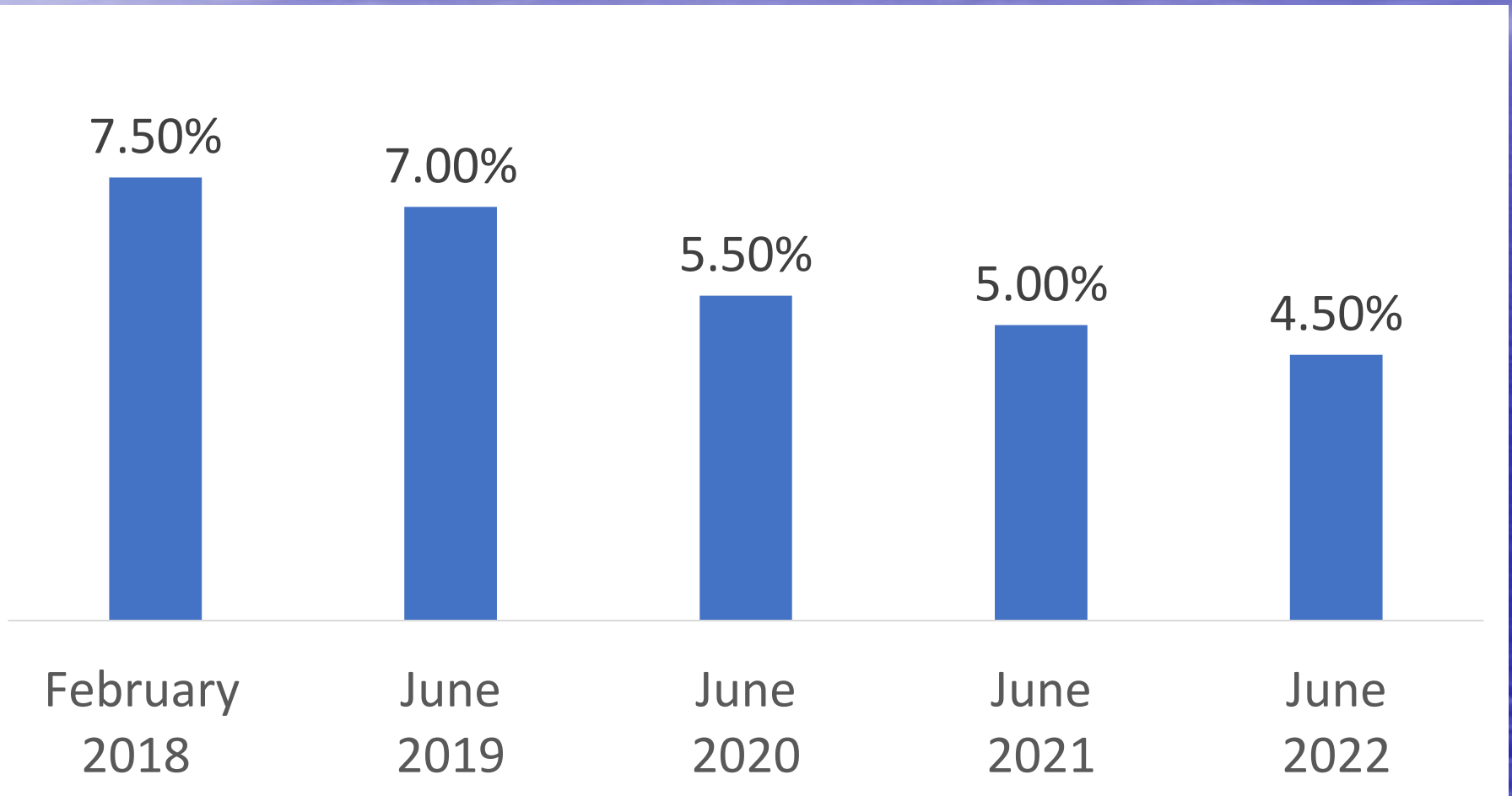


# Water Enterprise Fund (Cont.)

**Projected Deficit Growth**



# Proposed Rate Revenue Increases



# Proposed Water Rate Structure

(Recovering the same total rate revenue)

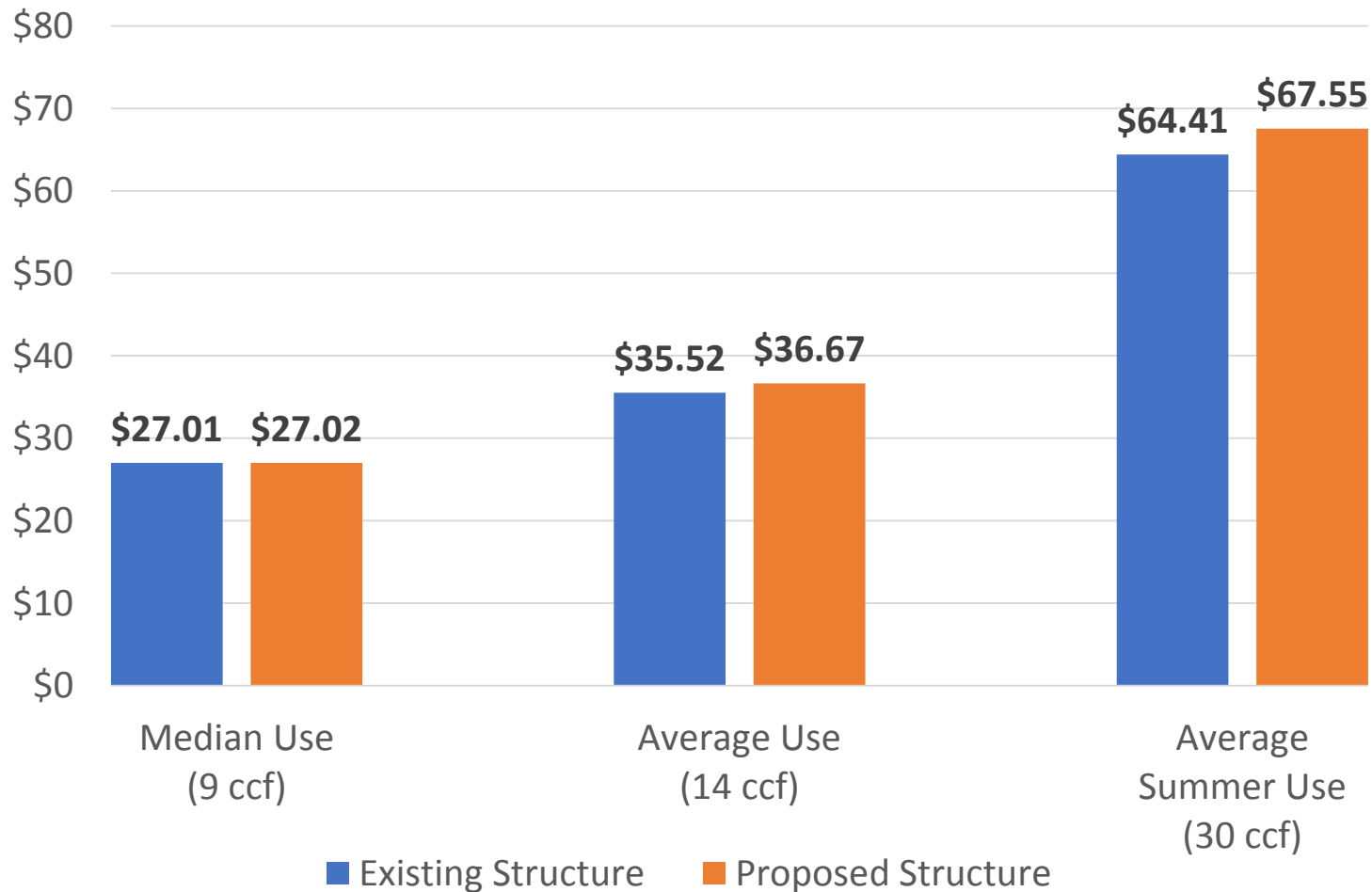
## Current Rate Structure

Base Charge	\$27.56
0 to 1,000 Cubic Feet	\$2.94
1,001 to 2,500 Cubic Feet	\$3.52
Over 2,500 Cubic Feet	\$3.81

## Proposed Rate Structure

Base Charge	\$19.30
All Cubic Feet	\$3.86

# Monthly Structure Change Bill Impacts



# Proposed Water Rates

## City of Placerville Proposed Single-Family Residential Water Rates

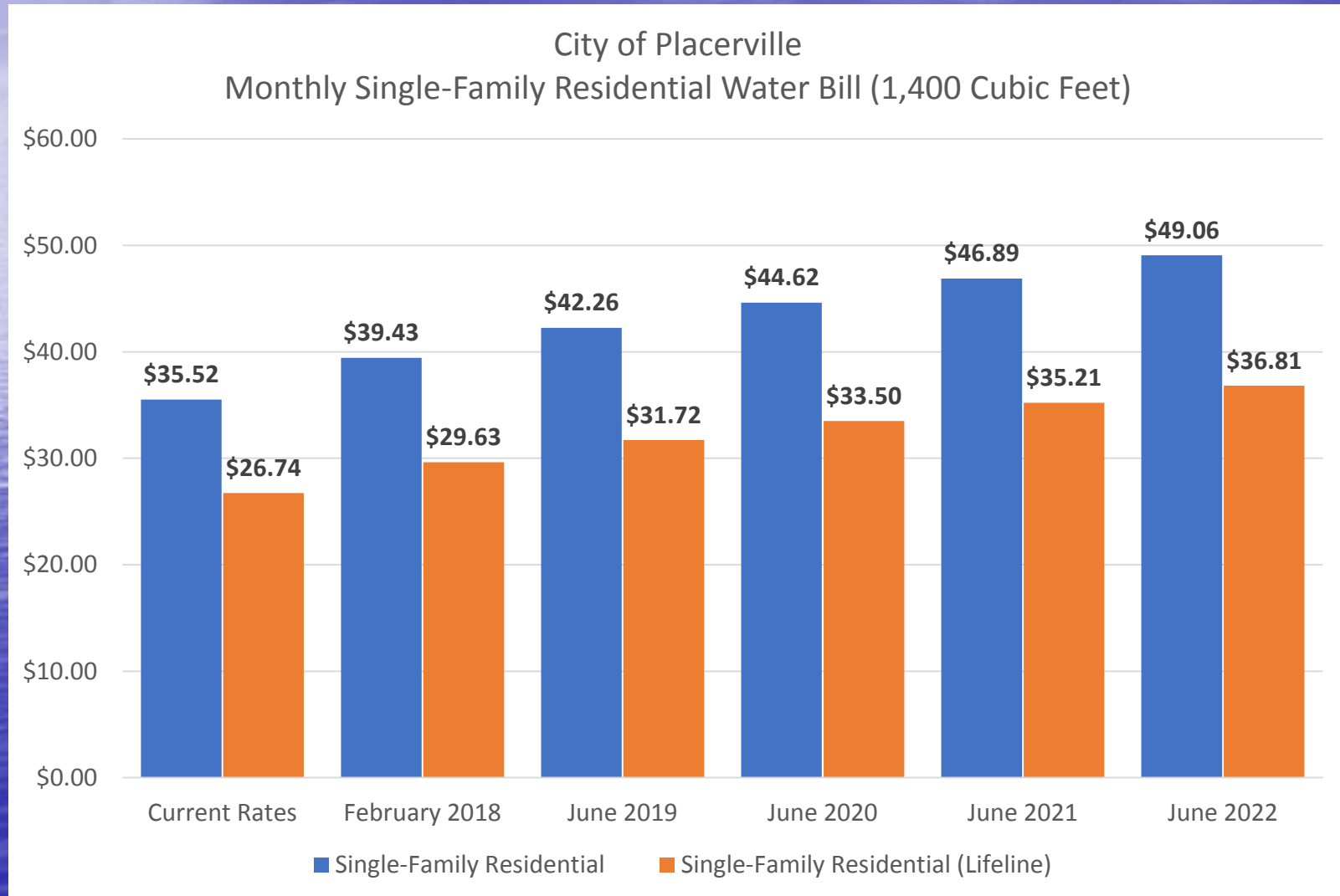
Rate Category	Current Rates	February 2018	June 2019	June 2020	June 2021	June 2022
Rate Increase		7.50%	7.00%	5.50%	5.00%	4.50%
Base Charge	\$27.56	\$20.75	\$22.21	\$23.44	\$24.62	\$25.73
All Cubic Feet		\$4.15	\$4.45	\$4.70	\$4.94	\$5.17
0 to 1,000 Cubic Feet	\$2.94					
1,001 to 2,500 Cubic Feet	\$3.52					
Over 2,500 Cubic Feet	\$3.81					

# Proposed Water Rates (Cont.)

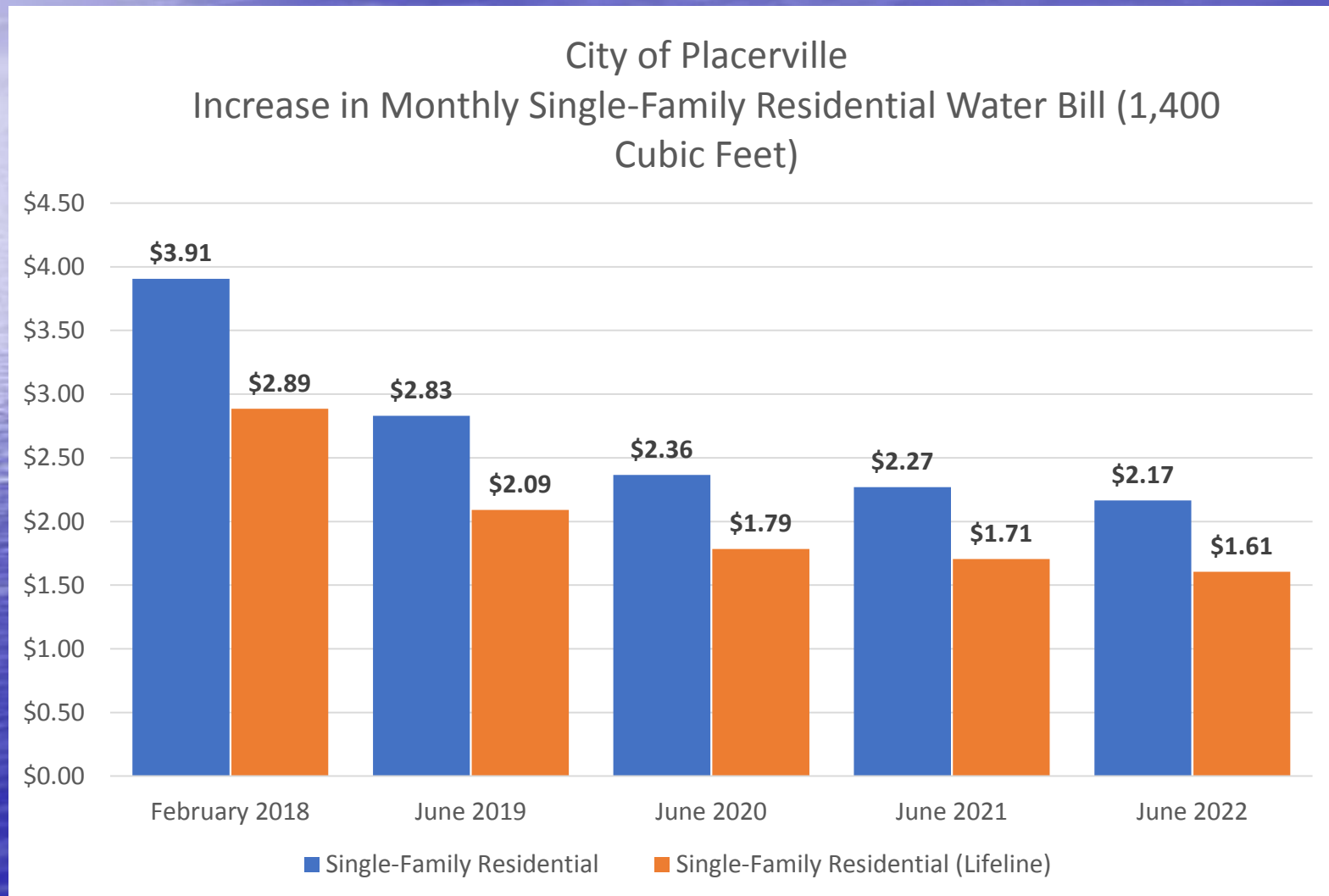
**City of Placerville  
Proposed Single-Family Residential-Lifeline Water Rates**

<b>Rate Category</b>	<b>Current Rates</b>	<b>February 2018</b>	<b>June 2019</b>	<b>June 2020</b>	<b>June 2021</b>	<b>June 2022</b>
Rate Increase		7.50%	7.00%	5.50%	5.00%	4.50%
Base Charge	\$20.68	\$15.57	\$16.67	\$17.58	\$18.47	\$19.30
All Cubic Feet		\$3.12	\$3.34	\$3.53	\$3.71	\$3.88
0 to 1,000 Cubic Feet	\$2.22					
1,001 to 2,500 Cubic Feet	\$2.65					
Over 2,500 Cubic Feet	\$2.87					

# Proposed Water Rates (Cont.)

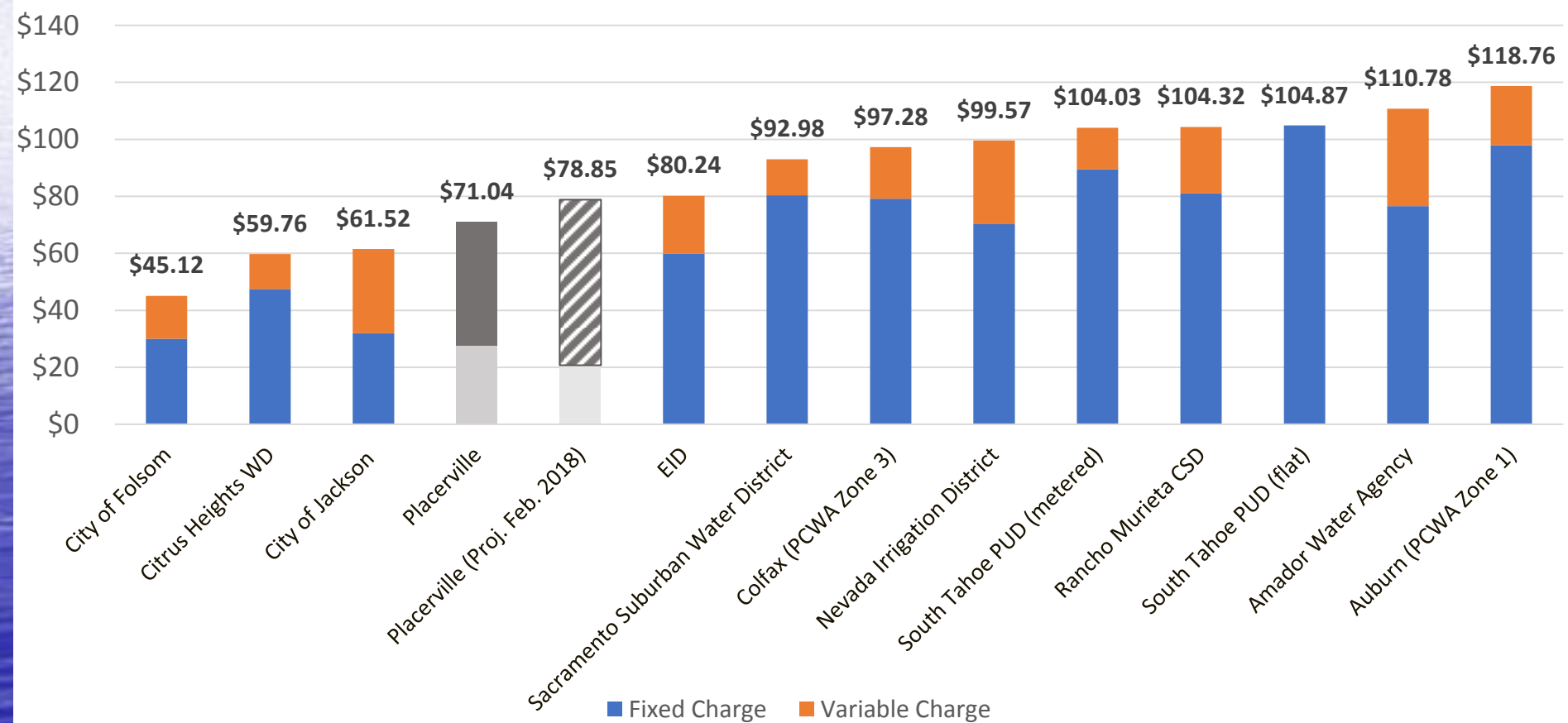


# Proposed Water Rates (Cont.)



# Proposed Water Rates (Cont.)

Regional Water Bill Comparison November 2017  
For Two Months of Service - 14 ccf (average use)



# Sewer Enterprise Fund

Adopted Budget  
Fiscal Year 2017/2018



Personnel  
\$0.28

Services  
\$0.13

Supplies  
\$0.06

Overhead  
\$0.05

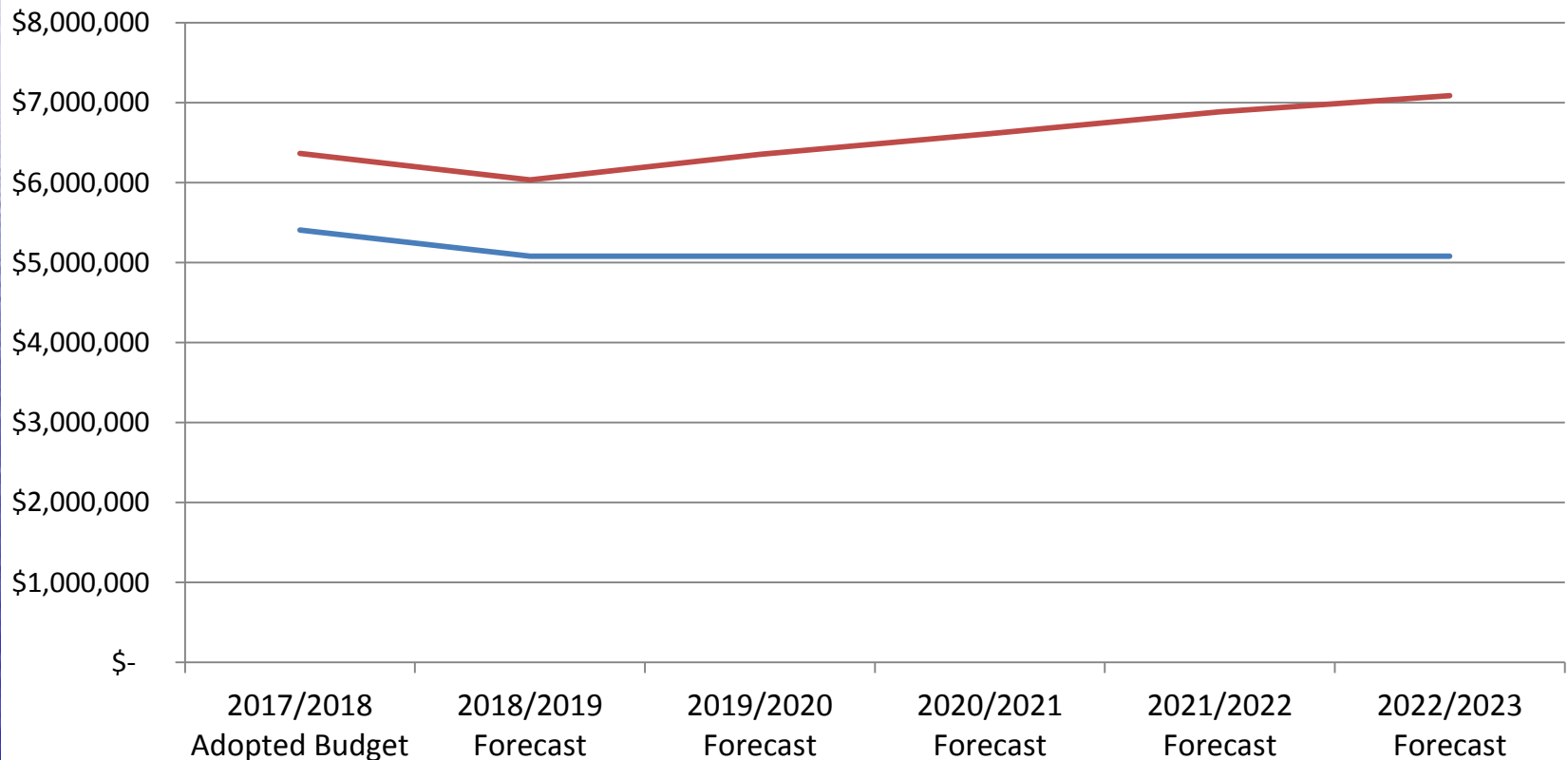
Contingency, Debt  
Payments &  
Coverage,  
Equipment,  
Transfers,  
Contingency, Other  
Expenses  
\$0.47

# Sewer Enterprise Fund (Cont.)

- Cost factors
  - Personnel
  - Supplies
  - Services
  - Debt payments
  - Property and general liability insurance
  - Equipment replacement
  - Contingency
  - Other expenses

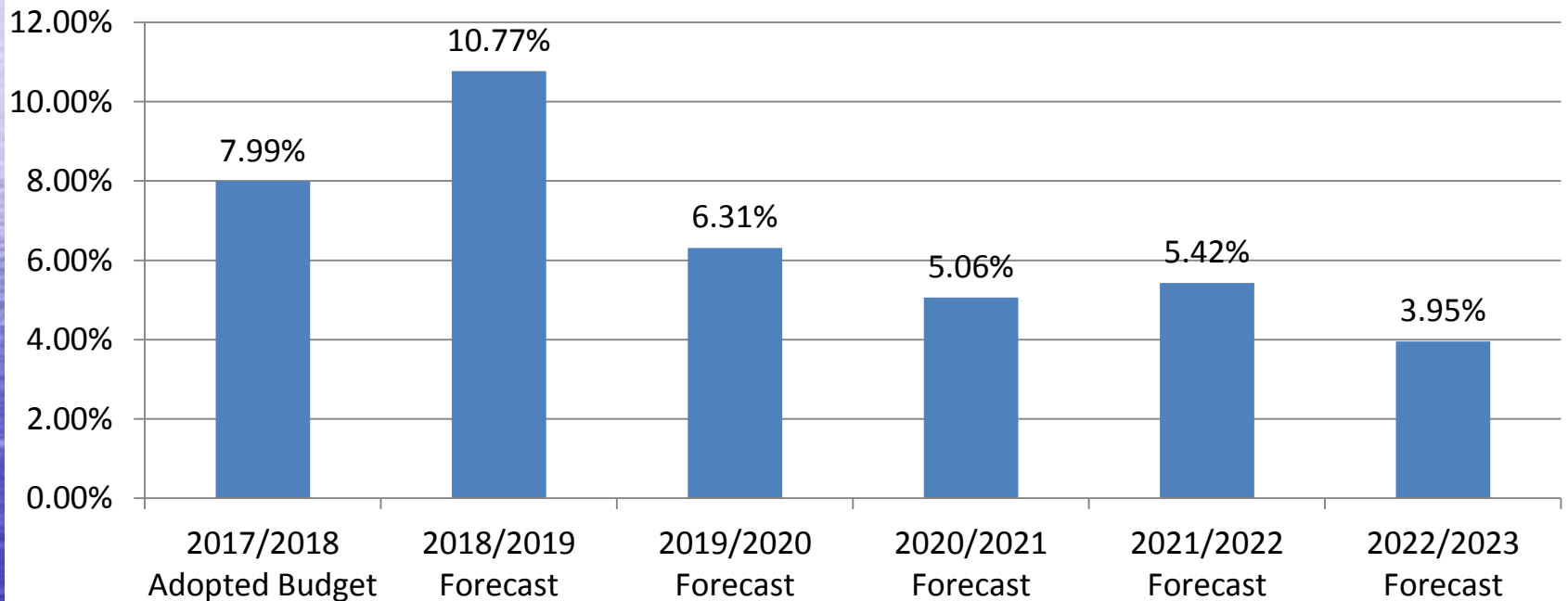
# Sewer Enterprise Fund (Cont.)

Projected Revenues vs. Expenditures



# Sewer Enterprise Fund (Cont.)

**Projected Deficit Growth**



# Sewer Rate/Discount Options

Sewer Rate/Discount Options - Single-Family Residential

Option	Current Bi-Monthly Discount	Current Monthly Discount	Effective February 2018	Effective June 2019	Effective June 2020	Effective June 2021	Effective June 2022
Option #1: Maintain existing discounts	\$15.00	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50
Sewer Rate Increase			13.00%	9.00%	3.75%	3.75%	2.75%
Option #2: Reduce the discounts 1/5 each year for the next 5 years	\$15.00	\$7.50	\$6.00	\$4.50	\$3.00	\$1.50	\$0.00
Sewer Rate Increase			12.00%	6.50%	2.50%	2.50%	2.50%
Option #3: Reduce the discounts by 50% in 2018	\$15.00	\$7.50	\$3.75	\$3.75	\$3.75	\$3.75	\$3.75
Sewer Rate Increase			9.00%	9.00%	4.00%	3.50%	3.00%
Option #4: Eliminate the discounts in 2018	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sewer Rate Increase			5.75%	7.25%	4.50%	4.00%	3.00%

# Proposed Sewer Rates (Option #1)

## Proposed Sewer Rates and Discounts - Single-Family Residential (Option #1)

Rate Category	Current Bi-Monthly Amount	Effective February 2018	Effective June 2019	Effective June 2020	Effective June 2021	Effective June 2022
<i>Single-Family Residential</i>						
Sewer Rate Increase		13.00%	9.00%	3.75%	3.75%	2.75%
Base Charge	\$162.11	\$183.18	\$199.67	\$207.16	\$214.93	\$220.84
Per 100 Cubic Feet Over 750 cf	\$7.51	\$8.49	\$9.25	\$9.60	\$9.96	\$10.23
<i>Single-Family Residential - Lifeline</i>						
Base Charge	\$121.58	\$137.39	\$149.75	\$155.37	\$161.19	\$165.62
Per 100 Cubic Feet Over 750 cf	\$5.63	\$6.36	\$6.93	\$7.19	\$7.46	\$7.67
<i>Single-Family Residential - All</i>						
Sewer Charge Discount	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00

# Proposed Sewer Rates (Option #2)

## Proposed Sewer Rates and Discounts - Single-Family Residential (Option #2)

Rate Category	Current Bi-Monthly Amount	Effective February 2018	Effective June 2019	Effective June 2020	Effective June 2021	Effective June 2022
<i>Single-Family Residential</i>						
Sewer Rate Increase		12.00%	6.50%	2.50%	2.50%	2.50%
Base Charge	\$162.11	\$181.56	\$193.36	\$198.20	\$203.15	\$208.23
Per 100 Cubic Feet Over 750 cf	\$7.51	\$8.41	\$8.96	\$9.18	\$9.41	\$9.65
<i>Single-Family Residential - Lifeline</i>						
Base Charge	\$121.58	\$136.17	\$145.02	\$148.65	\$152.36	\$156.17
Per 100 Cubic Feet Over 750 cf	\$5.63	\$6.31	\$6.72	\$6.88	\$7.06	\$7.23
<i>Single-Family Residential - All</i>						
Sewer Charge Discount	\$15.00	\$12.00	\$9.00	\$6.00	\$3.00	\$0.00

# Proposed Sewer Rates (Option #3)

## Proposed Sewer Rates and Discounts - Single-Family Residential (Option #3)

Rate Category	Current Bi-Monthly Amount	Effective February 2018	Effective June 2019	Effective June 2020	Effective June 2021	Effective June 2022
<i>Single-Family Residential</i>						
Sewer Rate Increase		9.00%	9.00%	4.00%	3.50%	3.00%
Base Charge	\$162.11	\$176.70	\$192.60	\$200.31	\$207.32	\$213.54
Per 100 Cubic Feet Over 750 cf	\$7.51	\$8.19	\$8.92	\$9.28	\$9.60	\$9.89
<i>Single-Family Residential - Lifeline</i>						
Base Charge	\$121.58	\$132.52	\$144.45	\$150.23	\$155.49	\$160.15
Per 100 Cubic Feet Over 750 cf	\$5.63	\$6.14	\$6.69	\$6.96	\$7.20	\$7.42
<i>Single-Family Residential - All</i>						
Sewer Charge Discount	\$15.00	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50

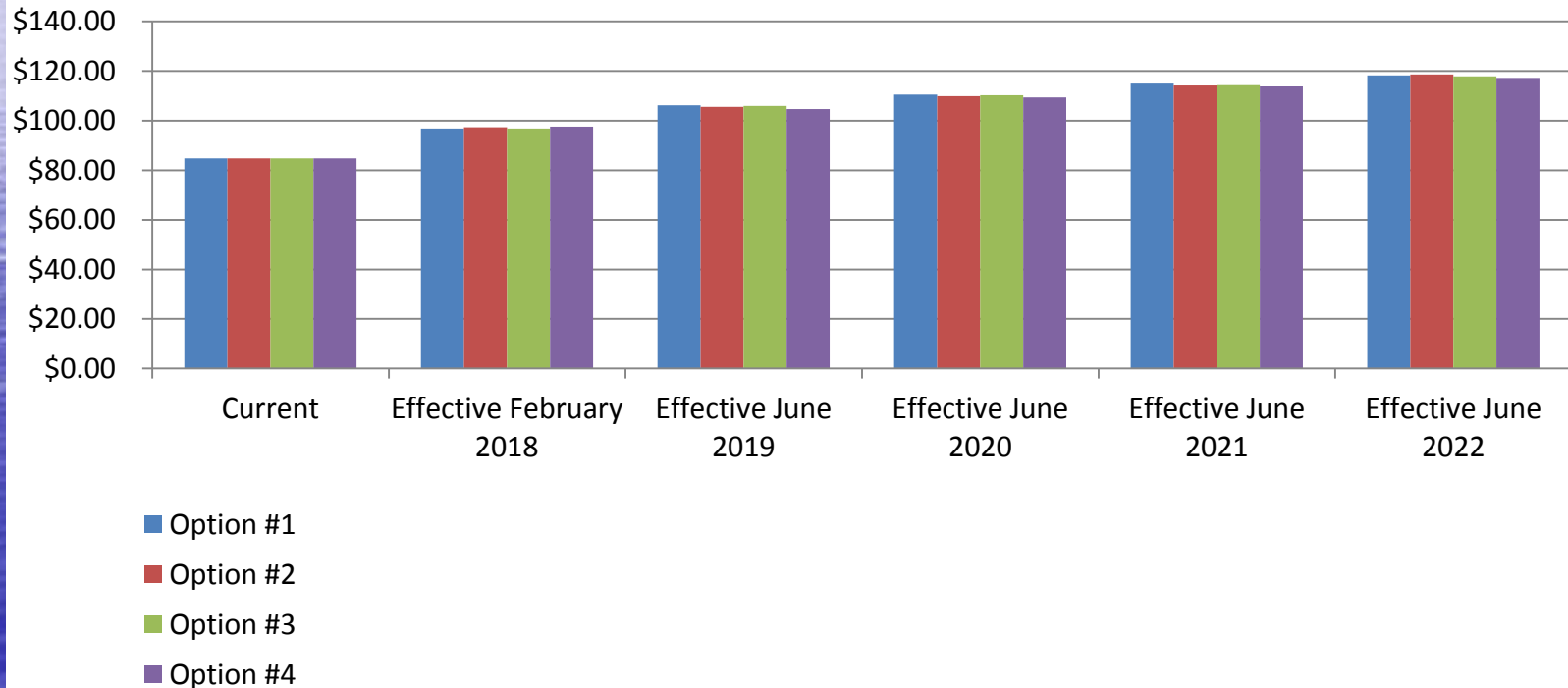
# Proposed Sewer Rates (Option #4)

## Proposed Sewer Rates and Discounts - Single-Family Residential (Option #4)

Rate Category	Current Bi-Monthly Amount	Effective February 2018	Effective June 2019	Effective June 2020	Effective June 2021	Effective June 2022
<i>Single-Family Residential</i>						
Sewer Rate Increase		5.75%	7.25%	4.50%	4.00%	3.00%
Base Charge	\$162.11	\$171.43	\$183.86	\$192.13	\$199.82	\$205.81
Per 100 Cubic Feet Over 750 cf	\$7.51	\$7.94	\$8.52	\$8.90	\$9.26	\$9.53
<i>Single-Family Residential - Lifeline</i>						
Base Charge	\$121.58	\$128.57	\$137.89	\$144.10	\$149.86	\$154.36
Per 100 Cubic Feet Over 750 cf	\$5.63	\$5.95	\$6.39	\$6.67	\$6.94	\$7.15
<i>Single-Family Residential - All</i>						
Sewer Charge Discount	\$15.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

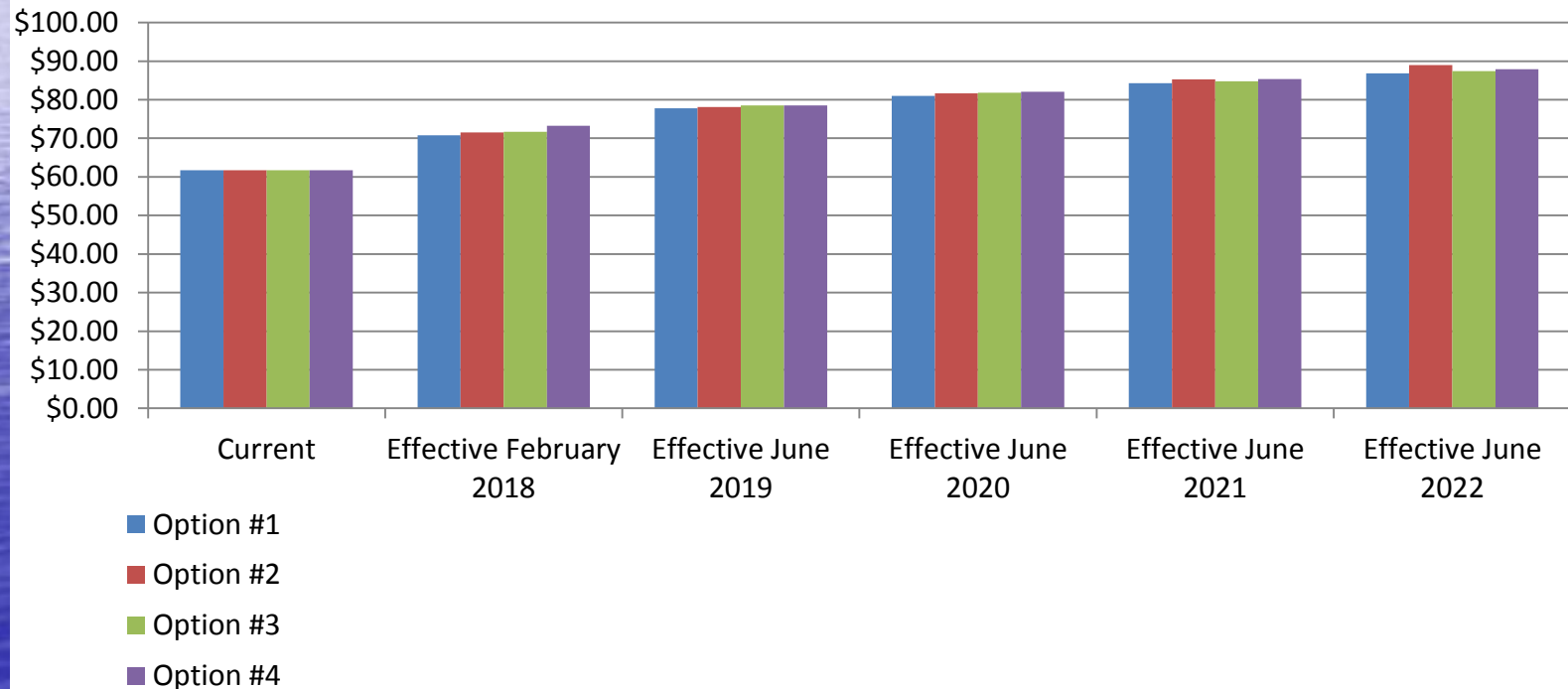
# Proposed Sewer Rates (Continued)

Monthly Sewer Bill - Single-Family Residential (1,050 cf)



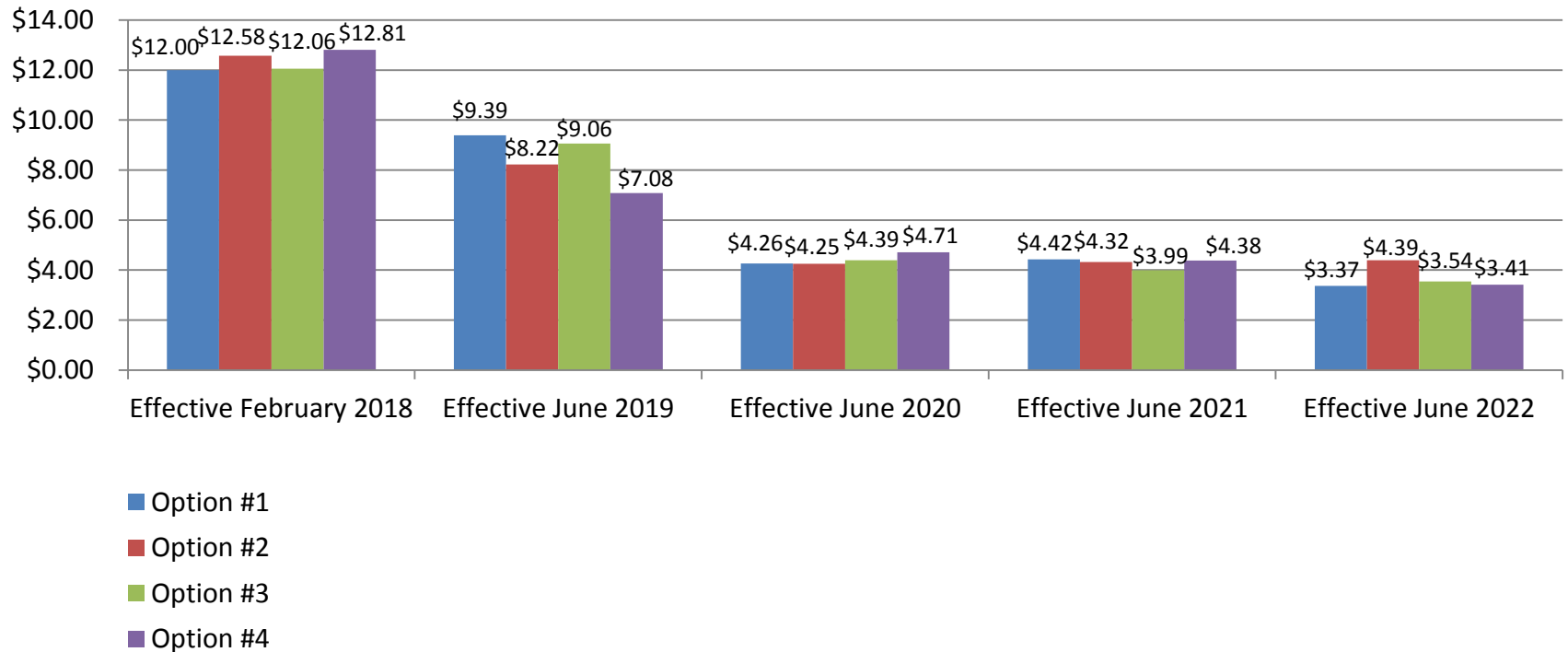
# Proposed Sewer Rates (Continued)

Monthly Sewer Bill - Single-Family Residential Lifeline (1,050 cf)



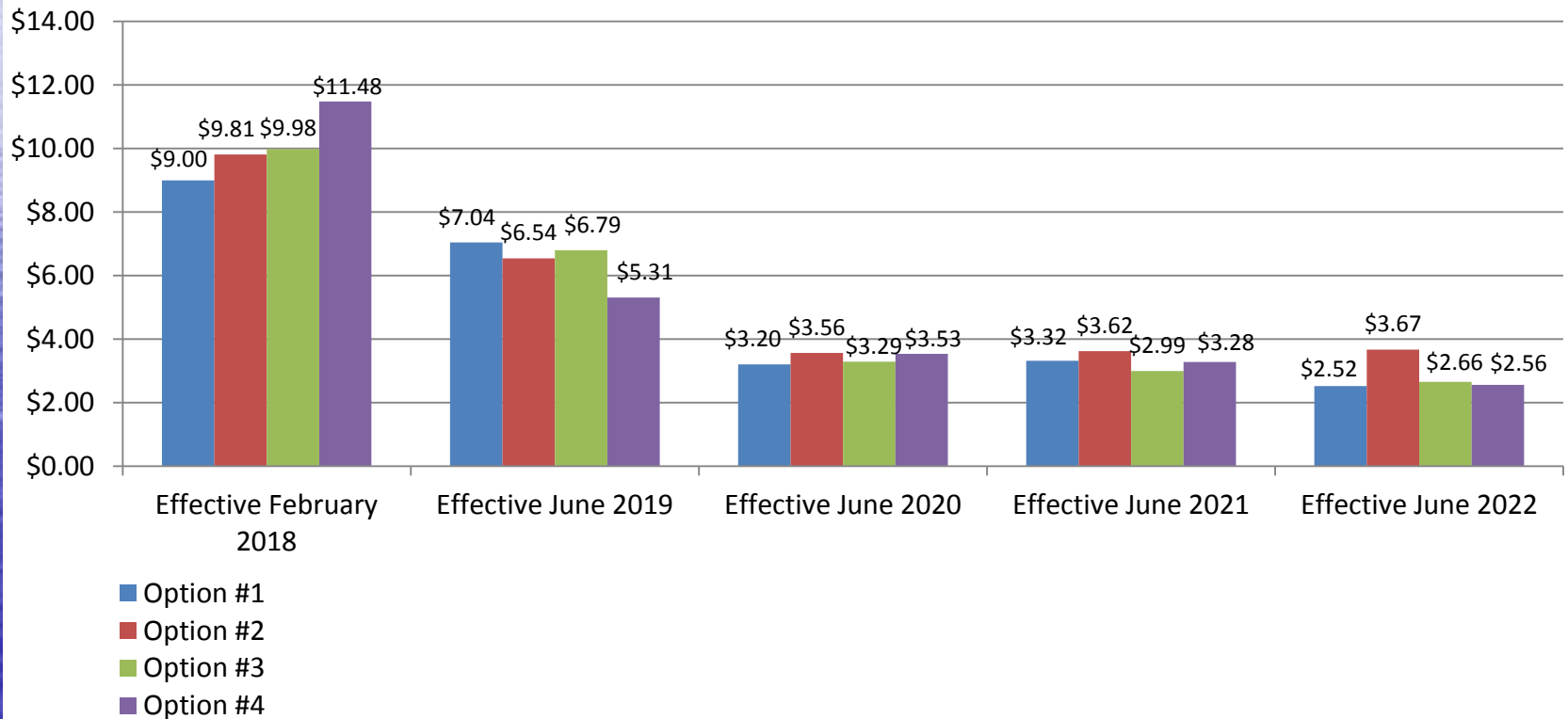
# Proposed Sewer Rates (Continued)

## Increase in Monthly Sewer Bill - Single-Family Residential (1,050 cf)



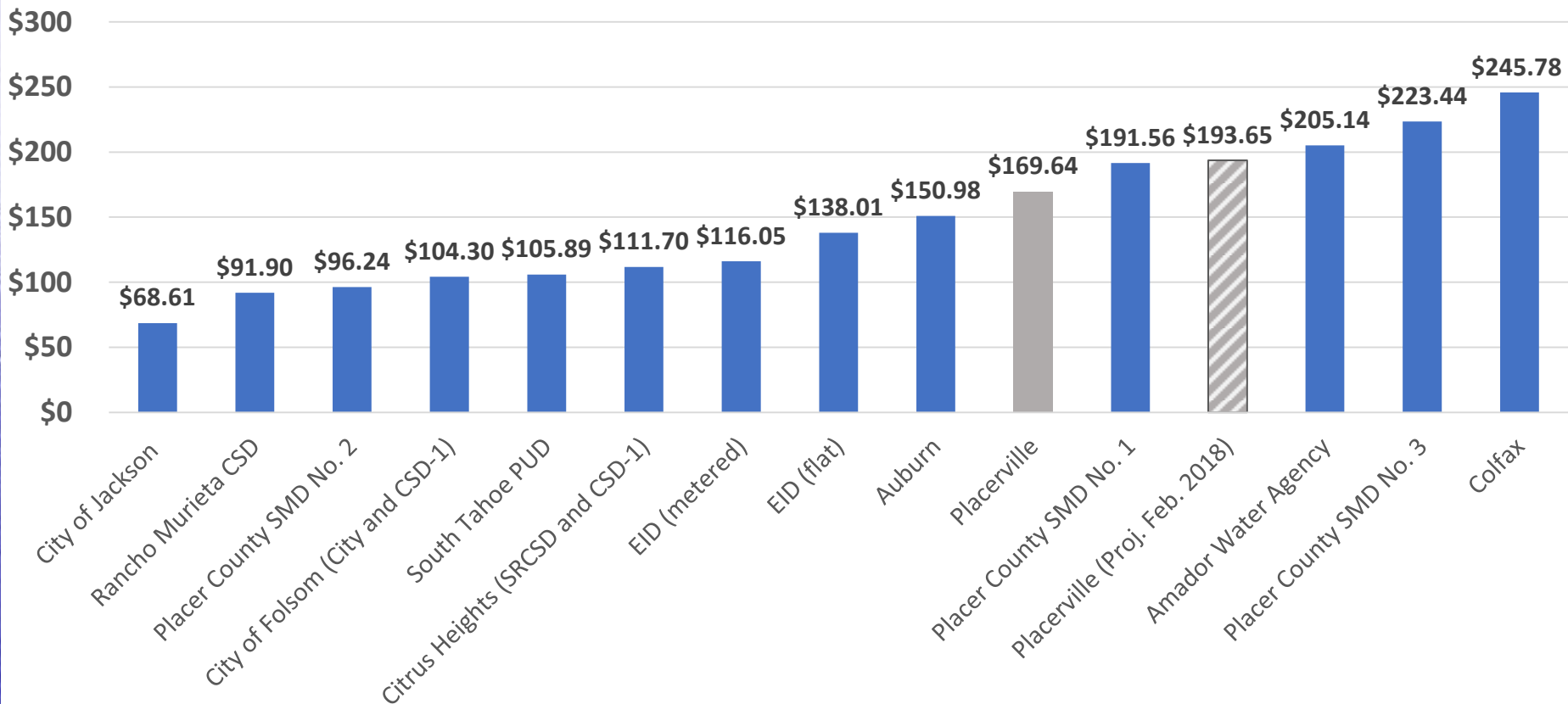
# Proposed Sewer Rates (Continued)

**Increase in Monthly Sewer Bill - Single-Family Residential Lifeline (1,050 cf)**



# Proposed Sewer Rates (Continued)

Regional Sewer Bill Comparison November 2017  
For Two Months of Service - 10.5 ccf (average winter use)



# Questions and Answers

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# Next Steps

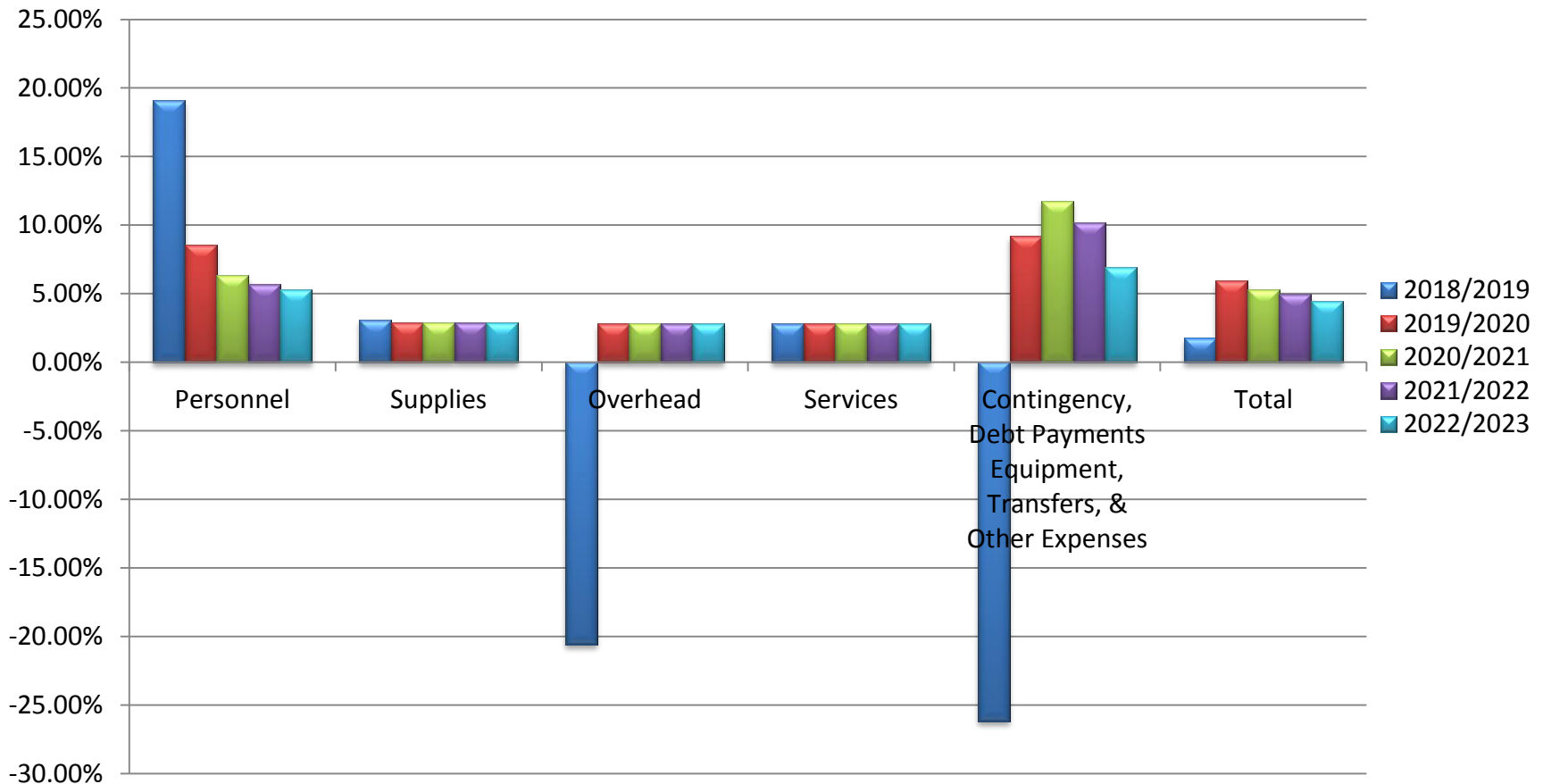
- City Council authorizes Proposition 218 (November 28, 2017)
- Proposition 218 Notice to customers (December 2017)
- Public Hearing/Rate Adoption (February 2018)
- Additional informational notices to customers (March and May 2018)
- Implementation (April and May 2018)
- First Utility bill with new rates (May 2018)

# Conclusion

- Thank you for your attendance and input!

# Water Enterprise Fund (Cont.)

Projected Growth in Expenditures



# Sewer Enterprise Fund (Cont.)

Projected Growth in Expenditures

