



Alameda County Water District

Financial Workshop Proposed Rates & Charges

October 25, 2018

Presentation Overview

- Review Financial Workshops Timeline
- Proposed Development Charges
- Financial Plan Review
 - Residential Fireline Policy
 - Financial Planning Model
 - Projected Rate Increases
- Proposed Water Rates & Charges
- Process for Activating Stage Rates
- Public Outreach Plan
- Protest Process
- Next Steps

Board Guidance



- Financial Planning Assumptions & Residential Fireline Policy
- Commodity Rates & Bimonthly Service Charges
 - % Increases
 - Two-Year
 - Uniform or Tiered Rates
 - Stage Rates
- Developer Charges
 - Incremental Component
 - Equity Buy-In Component: Phase-in over 5 years
 - Inflation adjustments
- Public Outreach Plan
- Protest Process

Financial Workshops Timeline



- February 22: Development Charges Overview
- April 26: Development Charges Follow-up and Water Rates Overview
- May 22: Mid-cycle Budget Review and Capital Improvement Program Update
- July 26: Rate Structure Discussion
- August 15: Financial Planning Scenarios
- **October 25: Development Charges and Water Rates Follow-up; Public Outreach Plan**
- December 13: Potentially Set Public Hearing for proposed Development Charges and Water Rates

Financial Workshops Timeline



- February 7, 2019: Rate and Fee Anticipated Adoption

Effective Dates

- March 1, 2019: Water rates are effective
- May 1, 2019: Development charges are effective

Presentation Vocabulary

- SFR = Single Family Residential
- MFR = Multi-family Residential
- EMUs = Equivalent Meter Units
- FCC = Facilities Connection Charge
- CIP = Capital Improvement Plan
- FIF = Facilities Improvement Fund
- OPEB = Other Post-employment Benefits
- CCF = Hundred Cubic Feet
- MSL = Mean Sea Level

PROPOSED DEVELOPMENT CHARGES

Facilities Connection Charges



- Equity Buy-In Component
 - New to District
 - Offsets to General Fund Capital Expenditures
- Comprehensive Approach
 - Incremental
 - Equity Buy-In
- 5 Year Phase-in Period
 - Phase in of proposed increase in FCC compared to existing FCC (20% per year)
 - To Be Adopted with Protocols for Inflation Adjustments (Construction Cost Index)

Equity Buy-In

Equity Buy-In Calculation	Cost Per EMU
Total Assets Value:	\$879,613,636
Total Outstanding Debt Principal:	<u>-\$75,520,000</u>
Value of Existing System:	\$804,093,636
Current Demand (EMUs)	÷141,122
Total	\$5,698

Incremental Cost

Incremental Cost Calculation	Cost per EMU
Total Growth CIP:	\$150,182,407
Less FIF Fund Balance:	<u>-\$55,140,916</u>
Incremental Cost:	\$95,041,491
Growth EMUs (2018 – 2042)	÷19,571
Total	\$4,856

Changes Since April Presentation



- Incremental charge was \$5,693 in April.
Two changes:
 - Recalculated number of connecting EMUs.
 - Counting MFR connections as 0.8 EMUs, all SFR connections continue to be treated as 1 EMU.
 - Total incremental cost decreased by \$54.6 million using new CIP numbers (assumes 50% of water reliability project).

Comprehensive Capacity Fee

Comprehensive Fee Calculation	Single Family Residential (One EMU)
Equity Buy-In Fee (per EMU)	\$5,698
Incremental Cost Fee (per EMU)	\$4,856
Comprehensive Capacity Fee	\$10,554

SFR Phased-In Capacity Fee*

FCC	Current	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
SFR Fee	\$6,862	\$7,600	\$8,339	\$9,077	\$9,816	\$10,554
MFR Fee	\$5,490	\$6,080	\$6,671	\$7,262	\$7,852	\$8,443
Dormitory Fee	\$4,117	\$4,560	\$5,003	\$5,446	\$5,889	\$6,332

SRF = 1.0 EMU

MFR = 0.8 EMU

Dormitory = 0.6 EMU

*Subject to annual inflation adjustments

Non-Residential Capacity Fees

Meter Size	Equivalent Meter Ratio	Equity Buy-In	Incremental Cost	Total Comprehensive Capacity Fee
5/8"	1.0	\$5,698	\$4,856	\$10,554
3/4"	1.5	\$8,547	\$7,284	\$15,831
1"	2.5	\$14,245	\$12,140	\$26,385
1.5"	5	\$28,490	\$24,280	\$52,770
2"	8	\$45,584	\$38,848	\$84,432
3"	17.5	\$99,715	\$84,980	\$184,695
4"	30	\$170,940	\$145,680	\$316,620
6"	67.5	\$384,615	\$327,780	\$712,395
8"	80	\$455,840	\$388,480	\$844,320

Phase-In of Non-Residential Capacity Fees*

Meter Size	Current	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
3/4"	\$10,984	\$11,953	\$12,923	\$13,892	\$14,862	\$15,831
1"	\$18,305	\$19,921	\$21,537	\$23,153	\$24,769	\$26,385
1.5"	\$36,613	\$39,844	\$43,076	\$46,307	\$49,539	\$52,770
2"	\$58,580	\$63,750	\$68,921	\$74,091	\$79,262	\$84,432
3"	\$128,143	\$139,453	\$150,764	\$162,074	\$173,385	\$184,695
4"	\$219,675	\$239,064	\$258,453	\$277,842	\$297,231	\$316,620
6"	\$494,268	\$537,893	\$581,519	\$625,144	\$668,770	\$712,395
8"	\$585,799	\$637,503	\$689,207	\$740,912	\$792,616	\$844,320

*Subject to annual inflation adjustments

EMU Calculations

- Calculated existing MFR units by District estimate of existing MFR units in service area and applied 0.8 factor
- District's future SFR and MFR projections based on 20-year Association of Bay Area Governments and city planning projections over a 25-year period
- All SFR connections (unless > 1.5 " for non-fire purposes) continue to be treated as 1 EMU, regardless of meter size

Remaining Development Fee Items

- Finalize approach to Facility Reimbursement Charge
- Finalize ratio between new MFR and new SFR connections

FINANCIAL PLAN REVIEW

Residential Fireline Policy

Current Policy

Fireline Residential accounts shall be billed based on the smallest meter, but not less than 1", that could provide adequate service absent the fire sprinkler system

Current Application: All 1 ½" meter size fireline residential accounts are billed at the 1" meter rate

Meter Size Counts for Fireline Residential Accounts

1 ½" – 2,085 accounts

1" – 5,680 accounts

Fiscal Impact of Current Policy: \$0.9 million annually

Residential Fireline Policy

Proposed Policy

Fireline Residential accounts shall be billed based on the smallest meter that could provide adequate service absent the fire sprinkler system

Proposed application: All fireline residential accounts will be billed at the rate of the next smallest meter. Additionally, fireline residential accounts with 1 ½” sized meters have been evaluated to be billed at the rate of a meter two sizes smaller based on the number of fixtures and lot size and 1,618 accounts qualify. Staff are developing an appeals process for customers who did not initially qualify for a two meter size adjustment.

Fiscal Impact of Proposed Policy: \$2.1 million annually (\$1.2 million more than the current policy)

Financial Planning Model

August 15, 2018 Assumptions

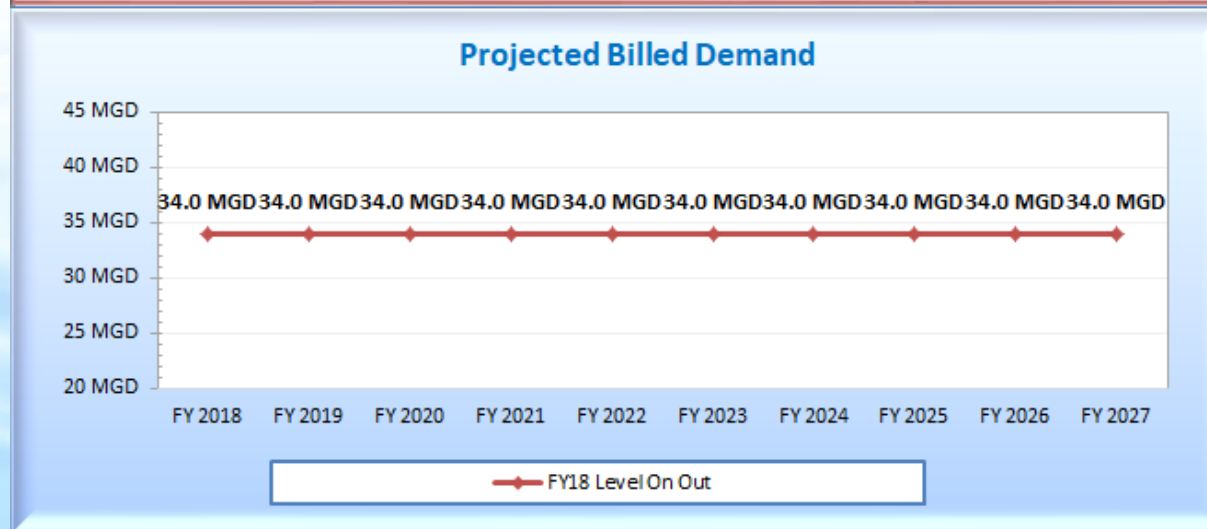
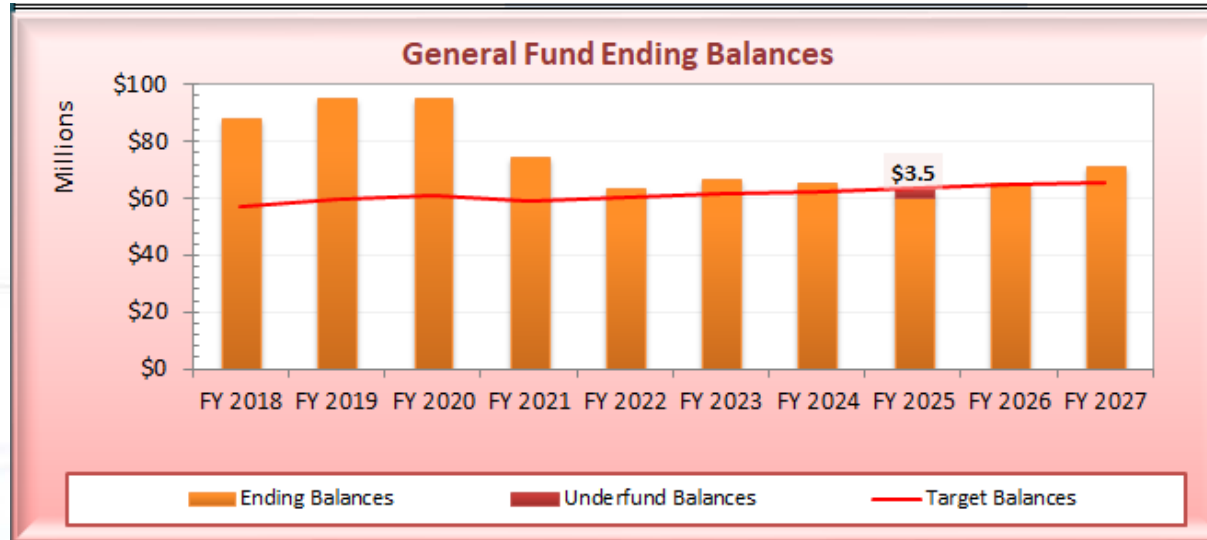
- Billed Demand
 - Assume flat demand of 34 mgd for FY18 +.
 - 8% non-revenue water
- June 2018 Board Adopted CIP
- Amended FY 2018/19 Budget
- General inflation rate of +3.0%. No CIP inflation.
- Advanced Metering Infrastructure \$1.49 million in FY19. \$25.4 million total in CIP. 50% debt funded.
- State Water Project Override Tax: current policy.

Financial Planning Model

August 15, 2018 Additional Assumptions

- Los Vaqueros included \$0.23M for FY19, \$1M for FY20, \$2M for FY21 and 22, \$3M for FY 23 and 24, and then \$4M for FY25+.
- CA Water Fix included ramping from ~\$1M in FY20 to ~\$9.5M in FY32. All rates funded.
- Pension/OPEB: Unfunded Accrued Actuarial Liability (UAAL) amortized 15 years @ 6.5% with level \$ prefunding. 14 of 15 years to go; ending FY32.
- Commodity Rates & Service Charges: +5.0% in FY19, +4.0% in FY20, +4.0% in FY21, +3% in FY22+

FPM Charts from August 15, 2018 Board Workshop



Updates Since August 15, 2018



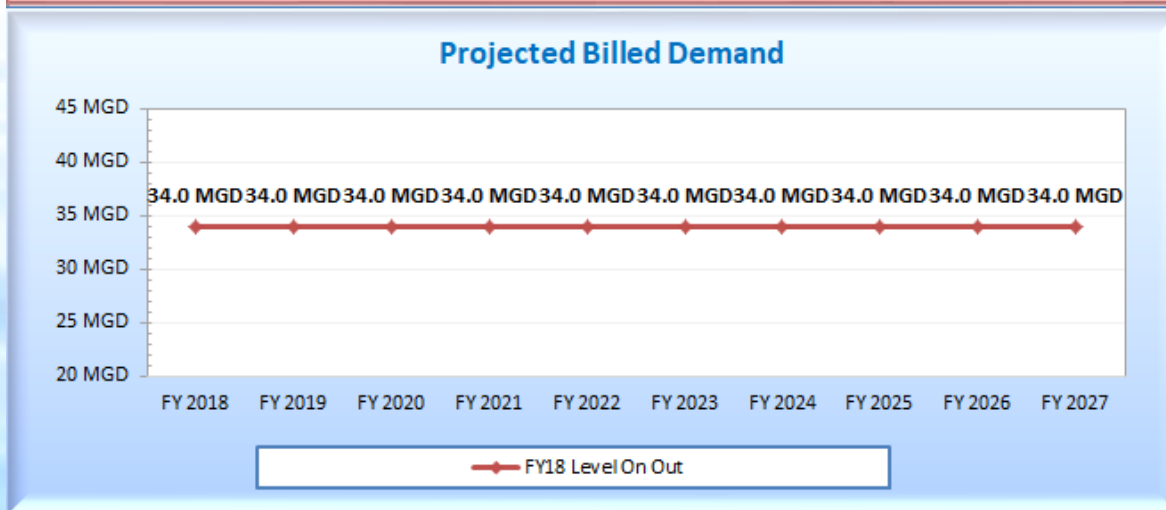
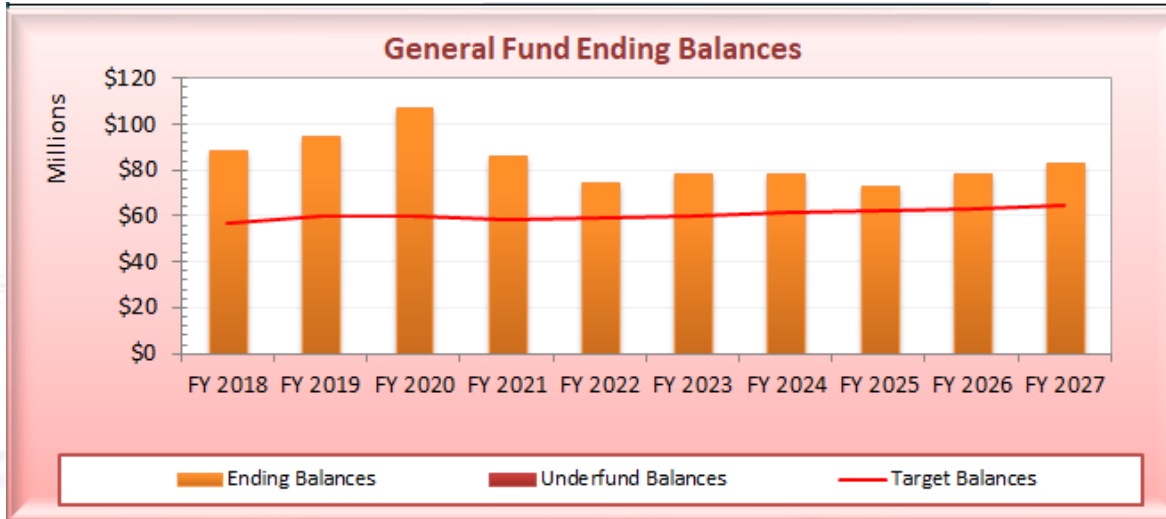
- Department of Water Resources State Water Project Appendix B Tables for 2018
- Union Negotiations and MCP Adjustments
- Residential Fireline Policy Scenario
- AMI: \$29 million (Scenario 2) project cost. 100% Debt Issuance funded. Enhanced revenues and operational savings included.
- Medical inflation factor updated per actuary's OPEB report
- Equity Buy-in developer charge implementation to help offset General Fund capital
- 3% Staffing Vacancy Factor
- Commodity Rates & Service Charges: +3.0% in FY19+

Estimated 3% Increase Breakdown

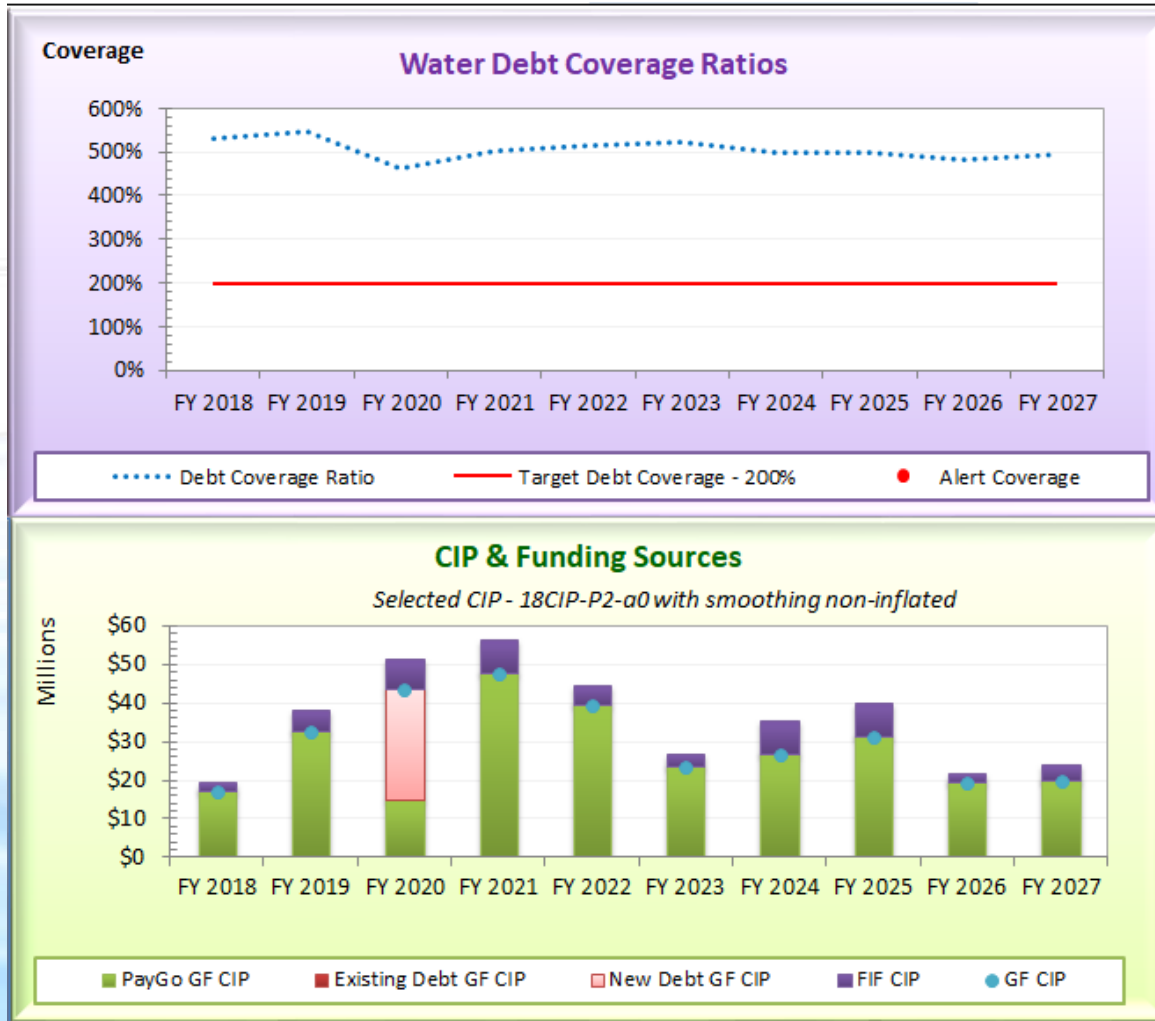
	% of Total Cost Increase	Distribution of the 3% Increase
Labor	2.0%	0.06
Staffing Vacancy ¹	-2.9%	-0.09
AMI Ops Savings	-1.0%	-0.03
Employee Benefits ²	5.8%	0.17
Purchased Water	5.4%	0.16
Other Expenses	6.5%	0.19
Capital & Reserves	84.2%	2.54

1. Reflects adjustment to labor costs based on three-year average staff vacancy rate.
2. Includes accelerated paydown of pension and OPEB liabilities (down to 15 year schedule from 20 years)

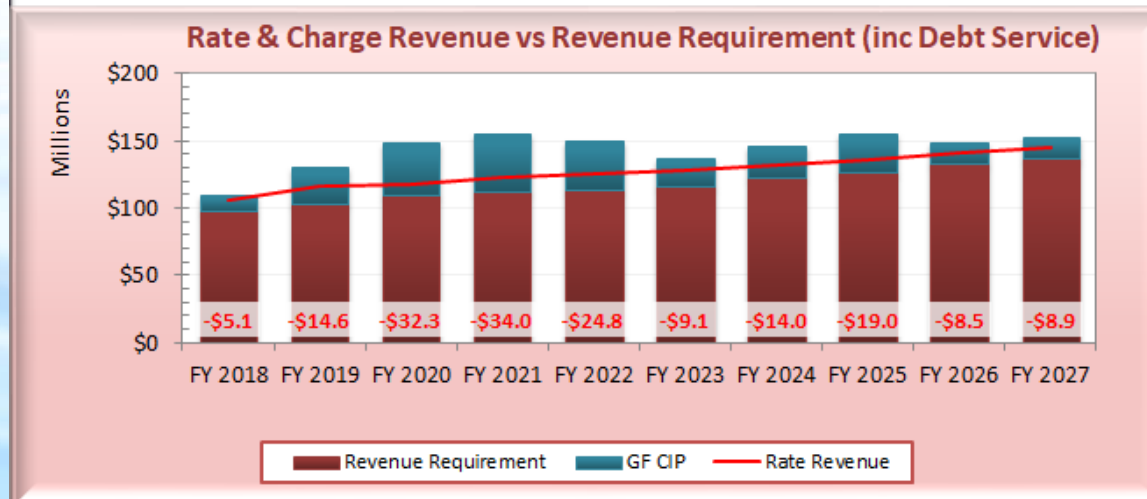
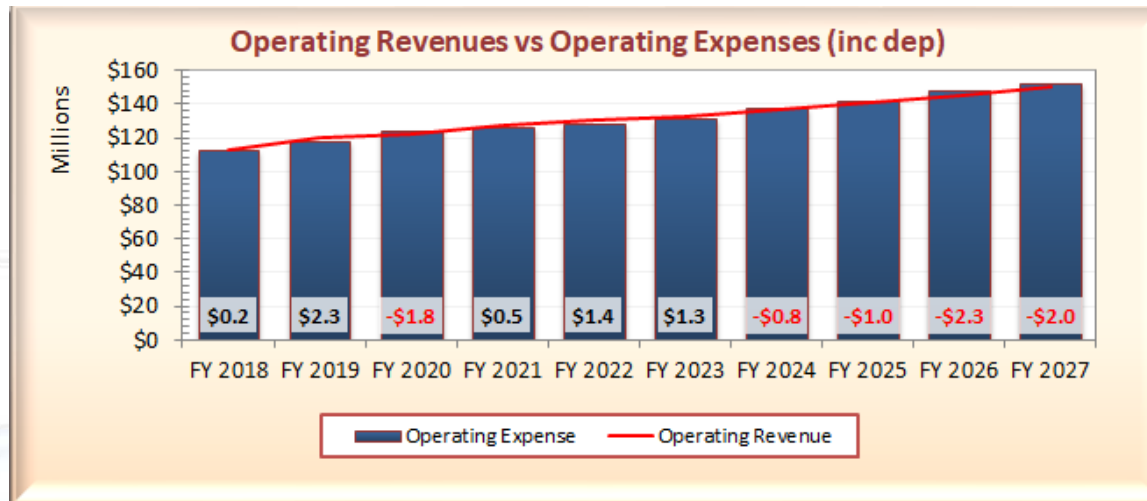
Charts from FPM with Updated Assumptions 3.0% in FY 2019+



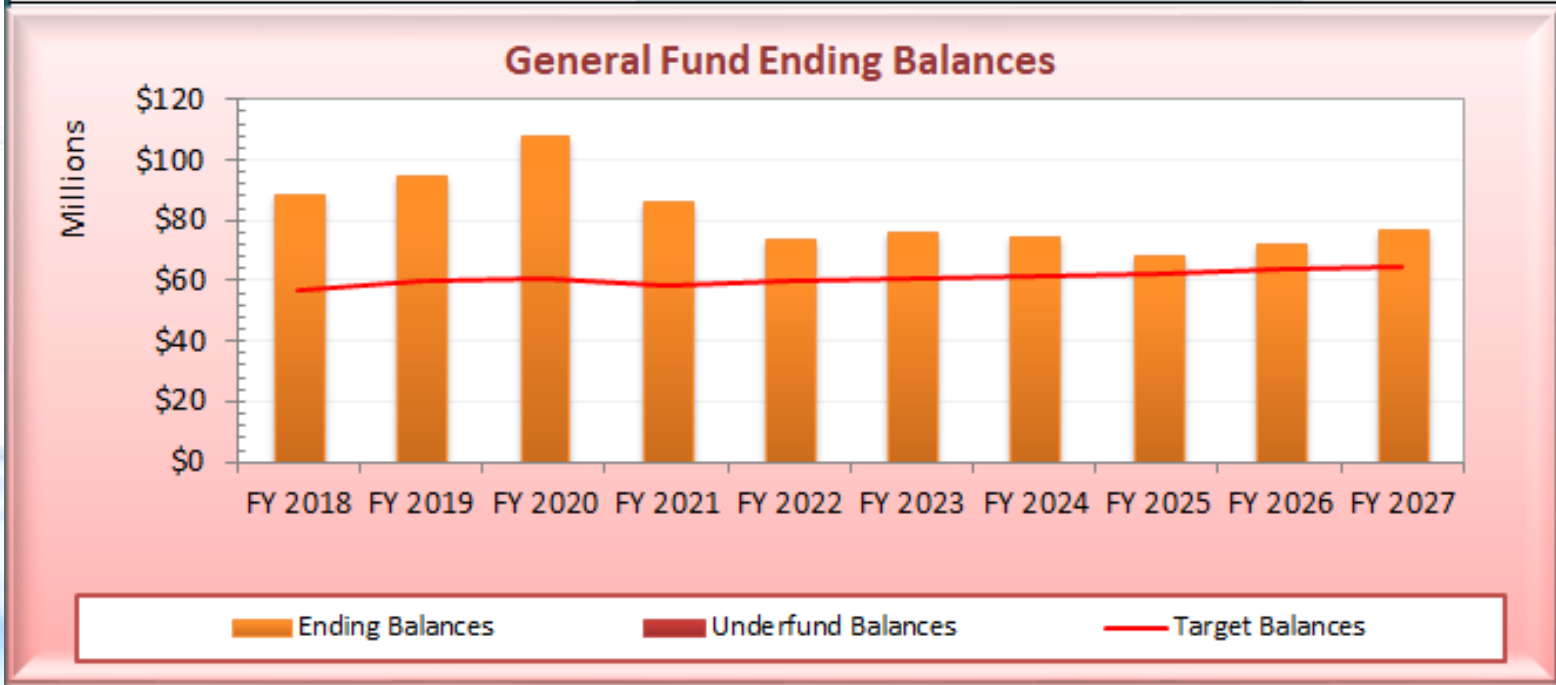
Charts from FPM with Updated Assumptions



Charts from FPM with Updated Assumptions

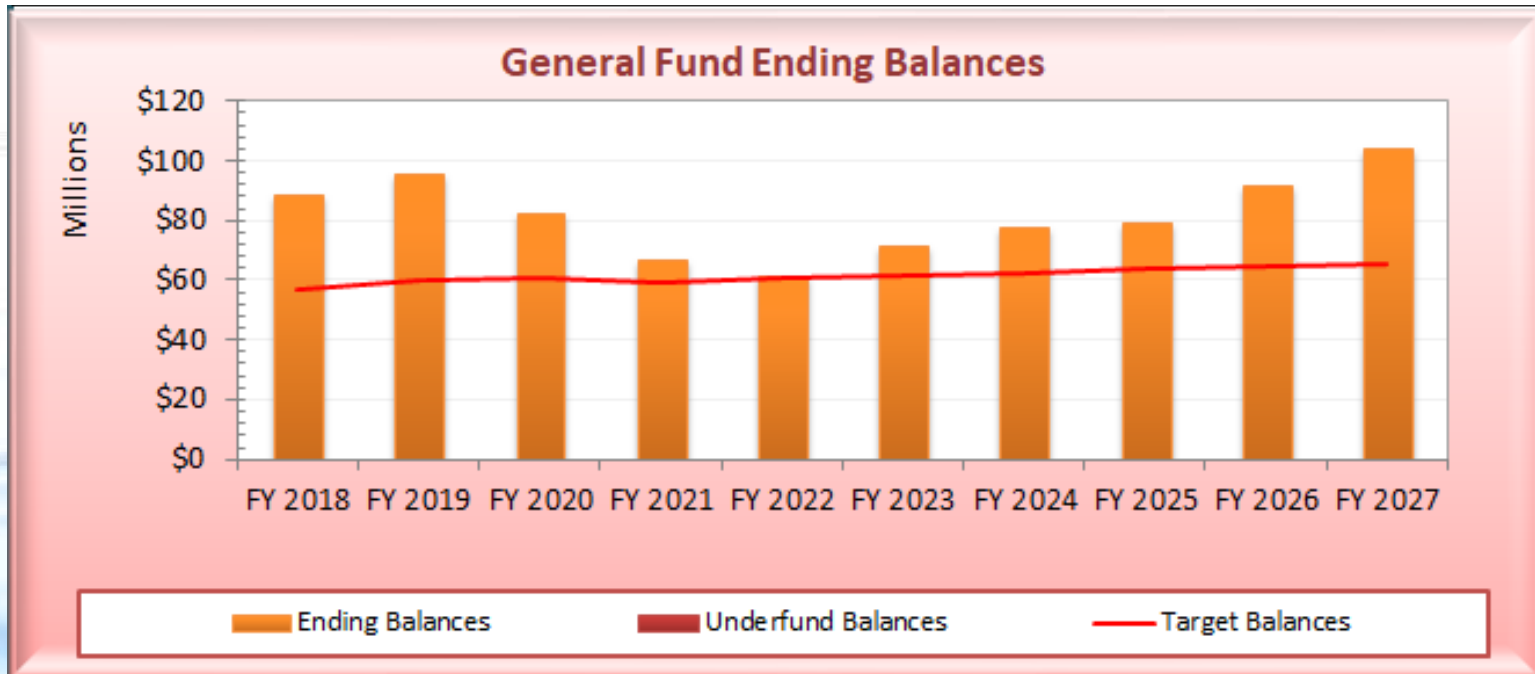


No AMI Add'l Revenue or Savings 4.0% in FY 2019, 3.0% in FY 2020+



AMI No Debt Financing

5.0% in FY19, 4.0% in FY20, 4.0% in FY21, 3.0% in FY22+



Examples of Non-Financial AMI Benefits

Revenue Continuity

Better data for future rate development

Tamper detection

Customer Engagement

Generation of goodwill with the District's customer base

Billing transparency

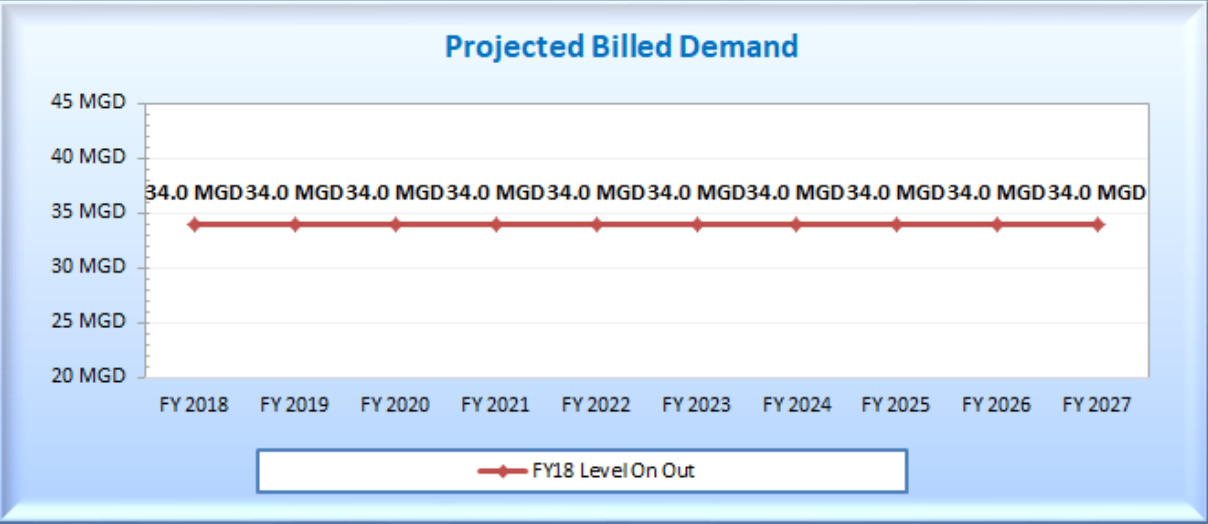
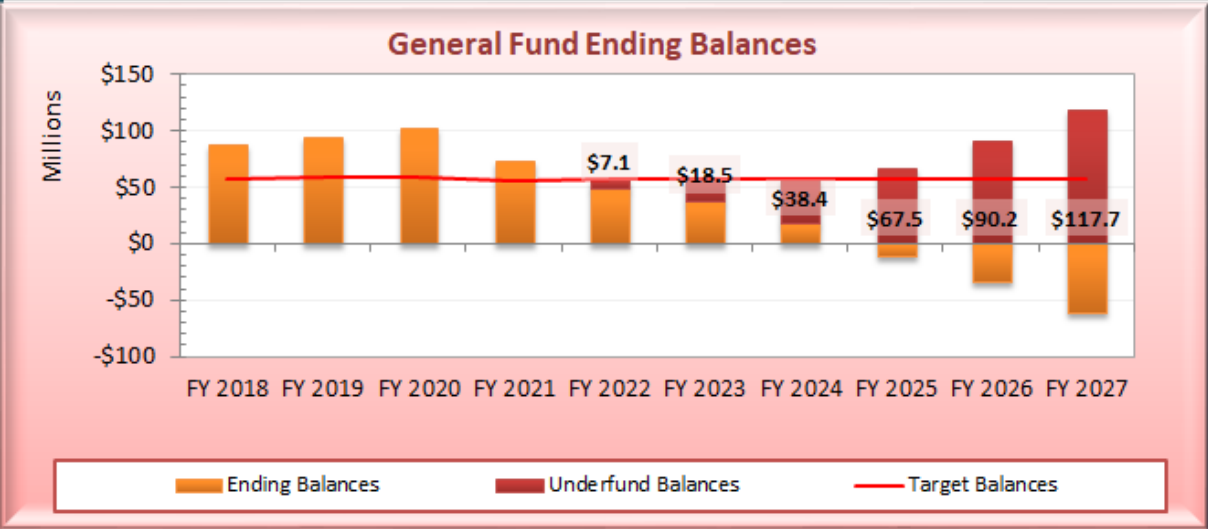
Proactive use of leak detection

Operational Enhancement & District Absorption

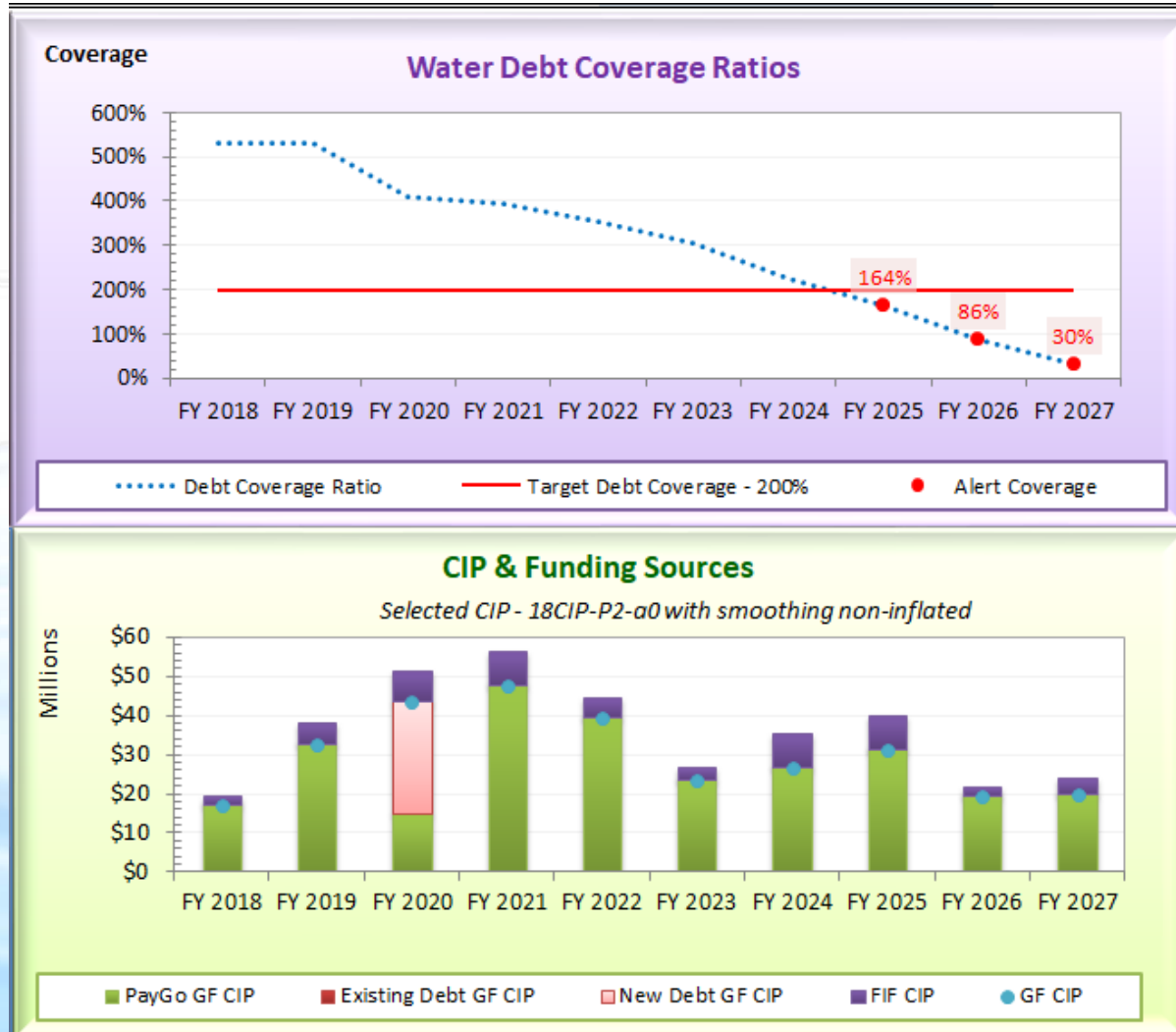
Improve meter reading safety & vehicle footprint

Enhanced customer service tools

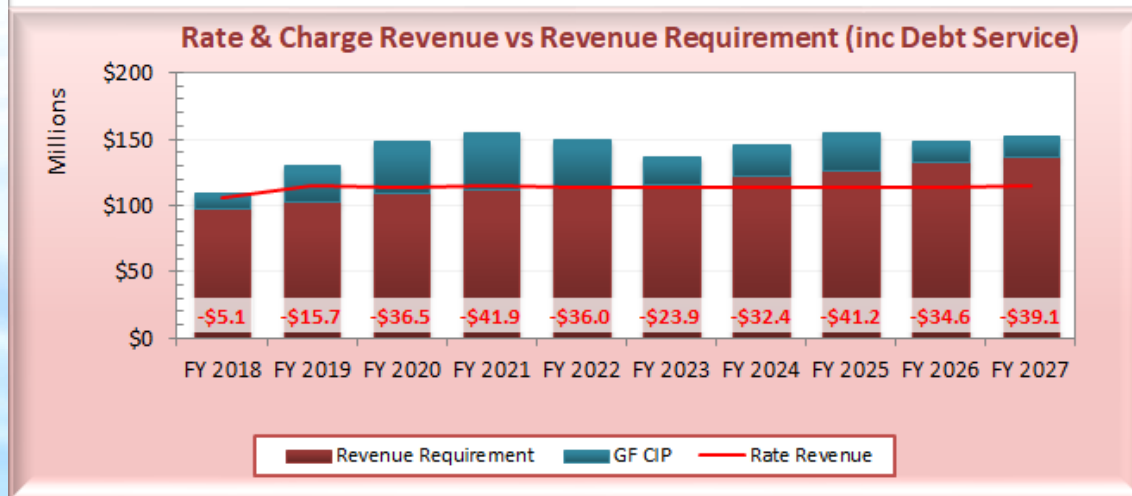
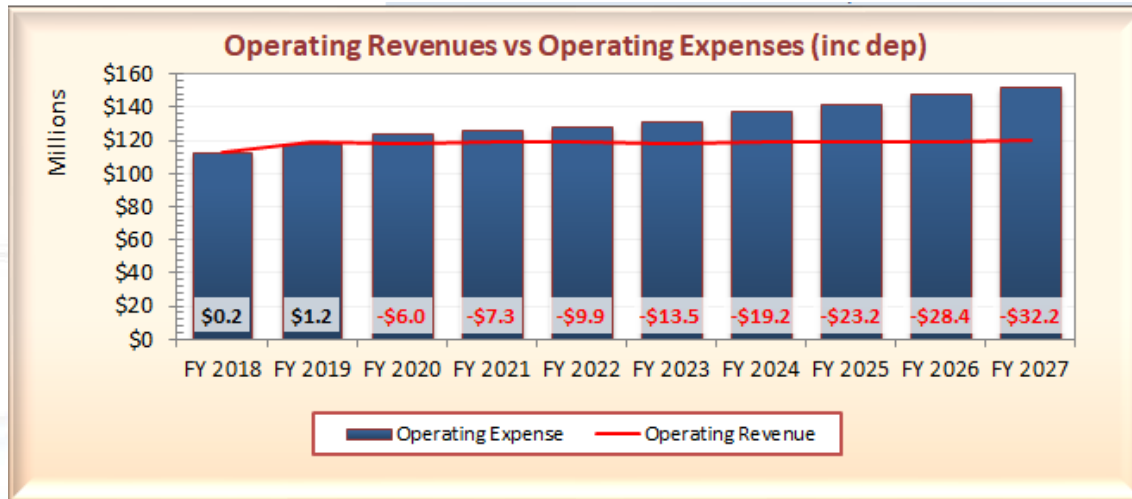
Charts from FPM: Status Quo with no Revenue Adjustments



Charts from FPM: Status Quo with no Revenue Adjustments



Charts from FPM: Status Quo with no Revenue Adjustments



PROPOSED WATER RATES

Rate Design Options

- Two Rate Options:
 - 1) Uniform commodity rate with same fixed/variable revenue split
 - 33% Fixed
 - 67% Variable
 - 2) Two tier single-family commodity rates
 - Uniform commodity rate for all other customers
 - Same fixed/variable revenue split

Comparison of Rate Options

- **Uniform**
 - Minimal customer impacts
 - Ease of implementation
 - Simple to understand
 - Revenue stability
- **Tiered**
 - Affordability for essential use
 - Promotes conservation

Two Tier Single-Family Commodity Rates

- Tier 1: 0-18 ccf bimonthly usage
- Tier 2: 19+ ccf bimonthly usage

- Tier justification:
 - Cost differentiation based on peaking characteristics
 - Results in increase in non-residential commodity rate

Comparison of Commodity Rates (FY19) with 3% increase in revenue

- Current FY18 uniform commodity rate: \$4.249/ccf

- Uniform Rates
 - All customers:
 - \$4.376/ccf

- Tiered Rates
 - Single-Family:
 - Tier 1: \$3.902/ccf
 - Tier 2: \$5.615/ccf
 - Non-Residential:
 - \$4.436/ccf

Bimonthly Meter Service Charges (FY19 & FY 20)



Meter Size	Current FY18	Proposed FY19 3% increase	Proposed FY20 3% increase
5/8" or 3/4"	\$52.33	\$53.89	\$55.50
1"	\$80.70	\$83.12	\$85.61
1 1/2"	\$151.59	\$156.13	\$160.81
2"	\$236.67	\$243.77	\$251.08
3"	\$506.08	\$521.26	\$536.89
4"	\$903.11	\$930.20	\$958.10
6"	\$2,278.54	\$2,346.89	\$2,417.29
8"	\$3,980.09	\$4,099.49	\$4,222.47
10"	\$5,965.22	\$6,144.17	\$6,328.49

Commodity Rates (FY19 & FY 20)



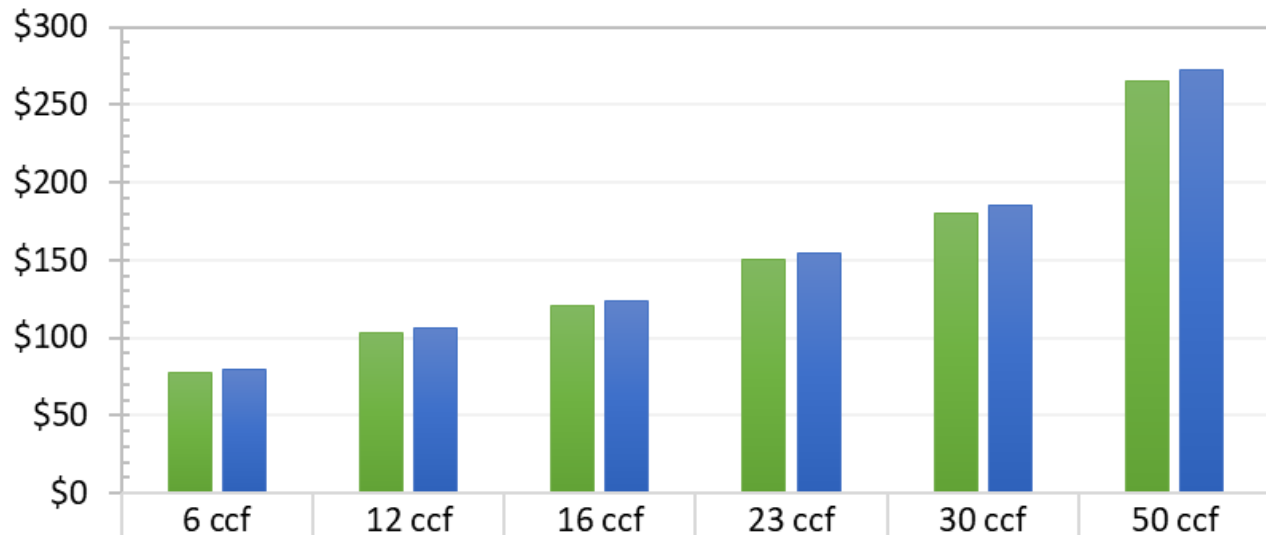
Uniform Option	Current FY18	Proposed FY19	Proposed FY20
All Customers	\$4.249/ccf	\$4.376/ccf	\$4.507/ccf

Tiered Option	Current FY18	Proposed FY19	Proposed FY20
Single-Family			
Tier 1	\$4.249/ccf	\$3.902/ccf	\$4.020/ccf
Tier 2	\$4.249/ccf	\$5.615/ccf	\$5.784/ccf
Non-Residential	\$4.249/ccf	\$4.436/ccf	\$4.569/ccf

FY19 Residential Bill Impacts: Uniform

Sample SFR Bills

Proposed w/ 3% Rev Adj & Tiered Rates for 3/4-in meters & no DSC in Bills

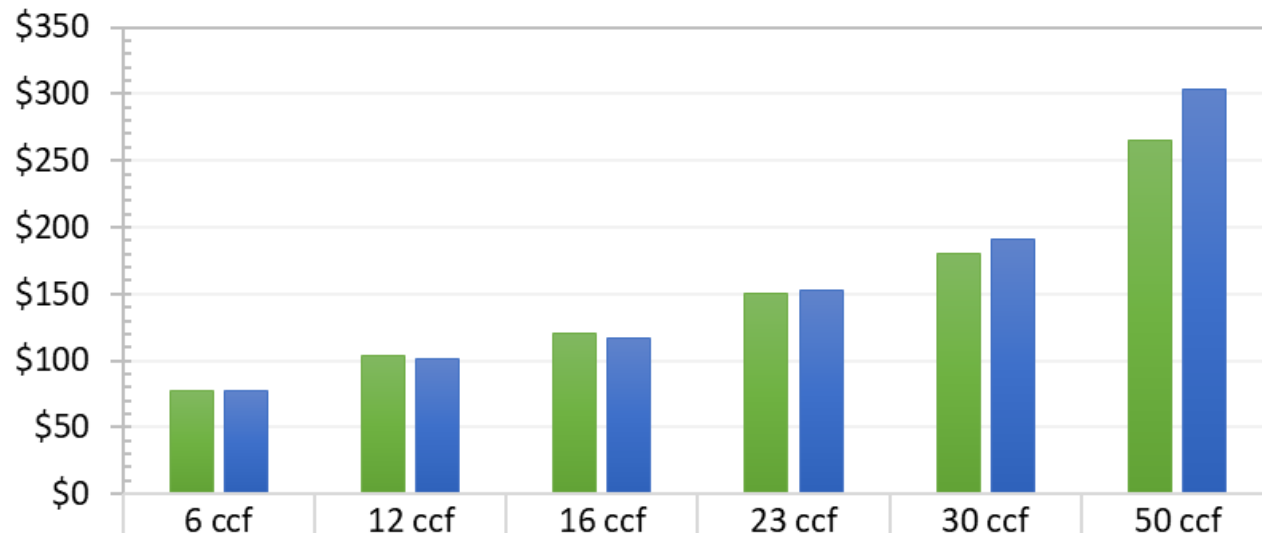


■ Current Bills no DSC	\$77.82	\$103.32	\$120.31	\$150.06	\$179.80	\$264.78
■ Proposed Bills w/ no DSC	\$80.15	\$106.40	\$123.91	\$154.54	\$185.17	\$272.69
Total Impact	\$2.32	\$3.08	\$3.59	\$4.48	\$5.37	\$7.91
% Impact	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

FY19 Residential Bill Impacts: Tiered

Sample SFR Bills

Proposed w/ 3% Rev Adj & Tiered Rates for 3/4-in meters & no DSC in Bills

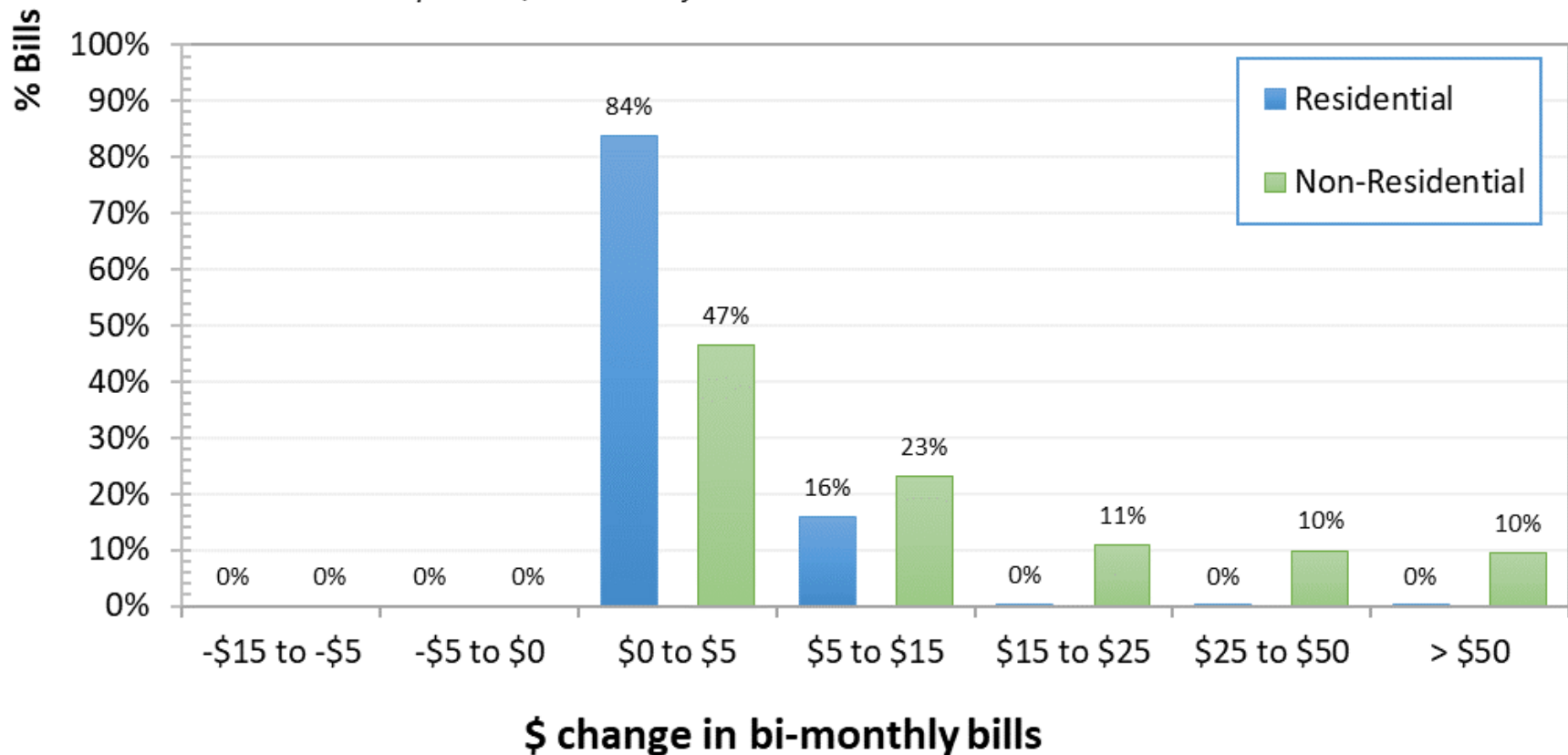


	6 ccf	12 ccf	16 ccf	23 ccf	30 ccf	50 ccf
Current Bills no DSC	\$77.82	\$103.32	\$120.31	\$150.06	\$179.80	\$264.78
Proposed Bills w/ no DSC	\$77.30	\$100.71	\$116.32	\$152.20	\$191.51	\$303.81
Total Impact	-\$0.52	-\$2.60	-\$3.99	\$2.14	\$11.71	\$39.03
% Impact	-0.7%	-2.5%	-3.3%	1.4%	6.5%	14.7%

FY19 Customer Impacts: Uniform

Customer Impacts

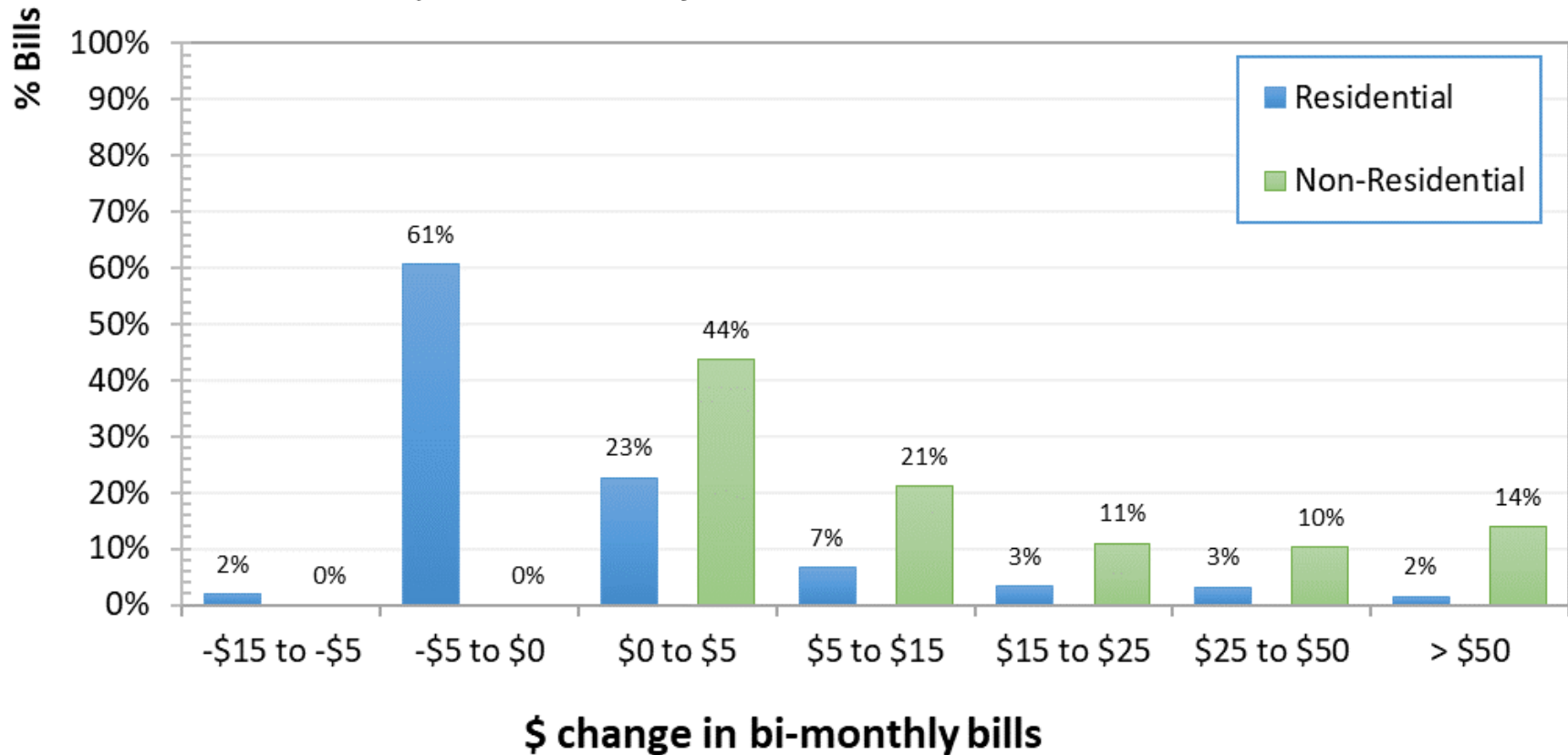
Proposed w/ 3% Rev Adj & Tiered Rates & No DSC & No DSC in Current Bills



FY19 Customer Impacts: Tiered

Customer Impacts

Proposed w/ 3% Rev Adj & Tiered Rates & No DSC & No DSC in Current Bills



WATER SHORTAGE EMERGENCY STAGE RATES

Water Shortage Emergency Stage Rates Discussion

■ Stage Rates

- Recovers the financial cost of an emergency, such as a drought
- Revenue generating mechanism
- There is a nexus between the cost of providing service and the associated rates

■ Drought Penalties

- Utilizes price to enforce water rationing
- Non-revenue generating, strictly punitive
- A violation not based on cost of service
- Example: City of Santa Cruz excessive water use penalties applied to residential accounts
 - \$25 per ccf above 10 units
 - \$50 per ccf above 11 units

Water Shortage Emergency Stage Rates Options

1. Monthly Fixed Charge
 - Example: \$15 flat charge for 3/4 in. meter
2. Uniform Commodity Charge
 - Example: \$0.70 per ccf
3. Uniform Percentage applied to each Tier/Class
 - Example: 20% increase applied to each tier
4. Inclining Commodity Charge
 - Example:
 - Tier 1 (0 to 10 ccf): no surcharge
 - Tier 2 (10 to 50 ccf): \$1.50 per ccf
 - Tier 3 (> 50 ccf): \$2.50 per ccf

FY19 Stage Rates – Uniform Commodity Rates

- Takes into account 3% revenue adjustment in FY19

Description	Base Demand	Stage 1	Stage 2	Stage 3	Stage 4
Reduction in Water Demand	0%	10%	20%	30%	Up to 50%
Projected Water Sales	38,080 AF	34,272 AF	30,464 AF	26,656 AF	19,040 AF
Unit Stage Rate (\$/ccf)	\$0.000	\$0.469	\$1.056	\$1.823	\$4.214
Uniform Commodity Rates by Stage (\$/ccf)	\$4.376	\$4.845	\$5.432	\$6.199	\$8.590

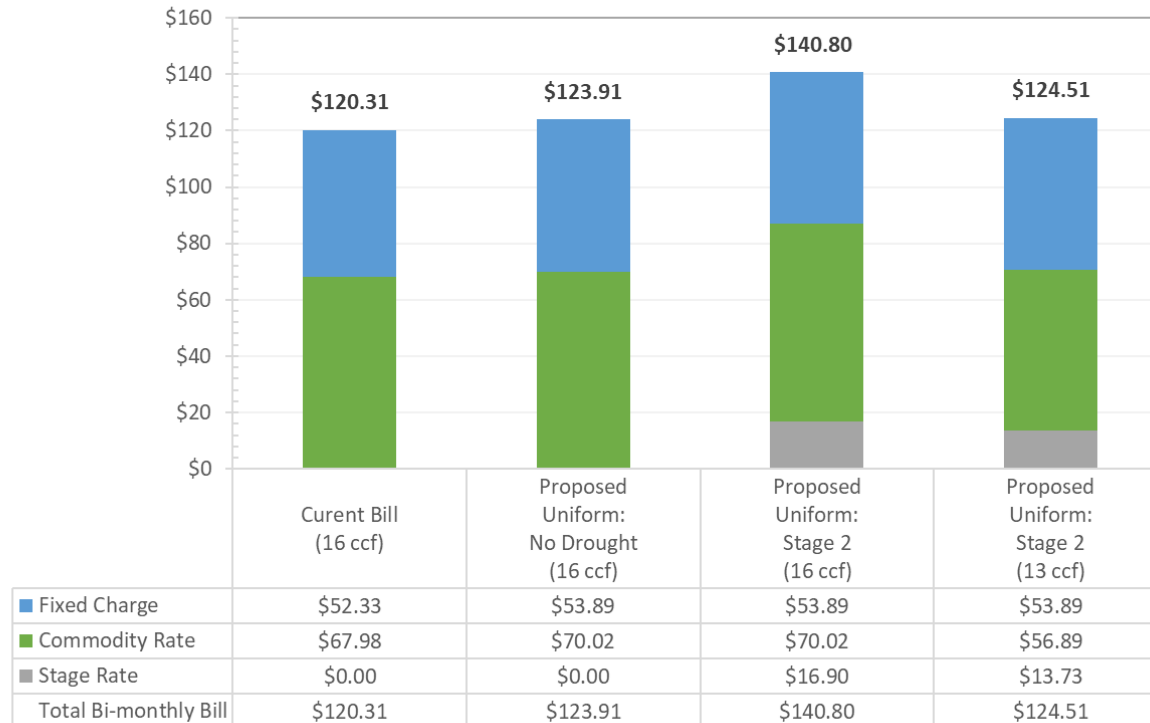
FY19 Stage Rates – Tiered Commodity Rates

- Takes into account 3% revenue adjustment in FY19

Description	Base Demand	Stage 1	Stage 2	Stage 3	Stage 4
Reduction in Water Demand	0%	10%	20%	30%	Up to 50%
Projected Water Sales	38,080 AF	34,272 AF	30,464 AF	26,656 AF	19,040 AF
Unit Stage Rate (\$/ccf)	\$0.000	\$0.536	\$1.205	\$2.005	\$4.396
Commodity Rates by Stage (\$/ccf)					
Single-Family Tier 1	\$3.902	\$4.438	\$5.107	\$5.907	\$8.298
Single-Family Tier 2	\$5.615	\$6.151	\$6.820	\$7.620	\$10.011
Non-Residential	\$4.436	\$4.972	\$5.641	\$6.441	\$8.832

FY19 Stage Rates Bill Impacts: Uniform Commodity Rates

Sample SFR Bills: Current vs. Proposed FY19 Uniform Rates



FY19 Stage Rates Bill Impacts: Tiered Commodity Rates

Sample SFR Bills: Current vs. Proposed FY19 Tiered Rates



PROCESS FOR ACTIVATING WATER SHORTAGE EMERGENCY STAGE RATES

Water Shortage Emergency Stage Rates



- Water Code Section 350 and Section 31026 authorizes the Board to declare a water shortage emergency when water demands cannot be met without depleting water supplies to insufficient levels
 - Each year staff assess imported and local water supplies, current and forecasted demand, and production constraints
 - If supplies are insufficient, staff evaluate options to utilize water stored in Semitropic water bank or, if necessary, local groundwater storage
 - District Planning limits use of local dry-year groundwater reserves to no more than 10,000 acre-feet. Minimum operating levels for the groundwater basin are +15 feet MSL for the Above Hayward Fault subbasin and 0 feet MSL for the Below Hayward Fault subbasin. However, a short-term level of -5 feet MSL at the BHF indicator well is the expected worst case for a multi-year critical drought.
 - If demands cannot be met within this framework, the Board would consider declaring a water shortage emergency (can only be declared by the Board at a properly noticed public hearing)
 - The Ordinance that declares a water shortage emergency would include the emergency stage, authorize specified water use restrictions and the appropriate stage rate, and take any other necessary actions

Water Shortage Emergency Stage Rates

- Following Board adoption of a water shortage emergency stage rate, the District would provide 30 days advance notice of stage rate implementation
- Stage rates have been developed based on the water shortage emergency stages defined in the District's Urban Water Management plan as follows:
 - Stage 1: Up to 10% conservation
 - Stage 2: Up to 20% conservation
 - Stage 3: Up to 30% conservation
 - Stage 4: Up to 50% conservation
- The proposed stage rates were calculated to recover the lost revenue from conservation during a water shortage emergency
- District operating costs could increase or decrease depending on the cause of the water shortage emergency

Water Shortage Emergency Stage Rates

- The Urban Water Management Plan (Plan) identifies four water shortage emergency stages with increasingly strict actions to achieve necessary conservation
- Stages 2-4 include mandatory water use restrictions and staff recommends these levels include stage rates to maintain financial sufficiency despite reduced water demand
- Stage 1 calls for extensive public outreach, but requests voluntary conservation. A Stage 1 rate would maintain financial sufficiency; however:
 - Stage 1 conservation is less certain than Stages 2-4 due to its voluntary nature
 - The District's Rate Stabilization Reserve could be used to help cover revenue shortfalls during a Stage 1, but the District may want to increase this reserve if it would be used in this manner
 - It's unclear how long a Stage 1 emergency would last without escalating or ending

OUTREACH PLAN

Outreach Plan

- Community Information Meetings
 - One or two meetings in mid-January
 - Open house format
- Presentations – Fall/Winter
 - City Councils
 - Community Organizations
 - Additional Stakeholders
- Public Notifications & Information
 - More comprehensive Proposition 218 mailer
 - Bill message
 - Tri City Voice information piece
 - Website, Social Media

PROTEST PROCESS

Protest Process

- Accept protests in the following forms:
 - Electronically (via a form on the District website)
 - Written protests submitted either before or during the public hearing
- 6,409 electronic protests submitted in 2017
 - Protests were not required to identify the property or confirm property interest, but most did
 - About 1,500 were potentially invalid (duplicate address or outside the District)
- Should protests be required to identify the property and confirm property interest?
- Should staff validate submitted protests?

NEXT STEPS

- Financial Planning Assumptions & Residential Fireline Policy
- Commodity Rates & Bimonthly Service Charges
 - % Increases
 - Two-Year
 - Uniform or Tiered Rates
 - Stage Rates
- Developer Charges
 - Incremental Component
 - Equity Buy-In Component: Phase-in over 5 years
 - Inflation adjustments
- Public Outreach Plan
- Protest Process

Next Steps



- Develop Public Outreach and Prop. 218 Mailings
- November 13: Finance Committee
 - Review all other miscellaneous rates and charges
- December 13: Board meeting
 - Set Public Hearing for Commodity Rates & Service Charges and Approve Prop. 218 Mailings
 - Set Public Hearing for Developer Charges
 - Review Miscellaneous rates and charges
- December 21: Deadline to Mail Prop. 218 Notices

Next Steps (cont.)

- January 1, 2019: Developer Notification Letter Mailed Out
- Mid-January 2019: Community Meeting(s)
- February 7, 2019: Board Meeting
 - Public Hearing for Commodity Rates & Service Charges
 - Public Hearing for Developer Charges
 - Consider Adoption of Amendments to the Rate & Fee Schedule
- March 1, 2019: Effective Date for Commodity Rates, Service Charges and Miscellaneous Charges
- May 1, 2019: Effective Date for Developer and New Water Service-Related Charges

QUESTIONS