

FY18 & FY19 Budget Workshop #1

Board of Directors

January 24, 2017

Workshop Agenda



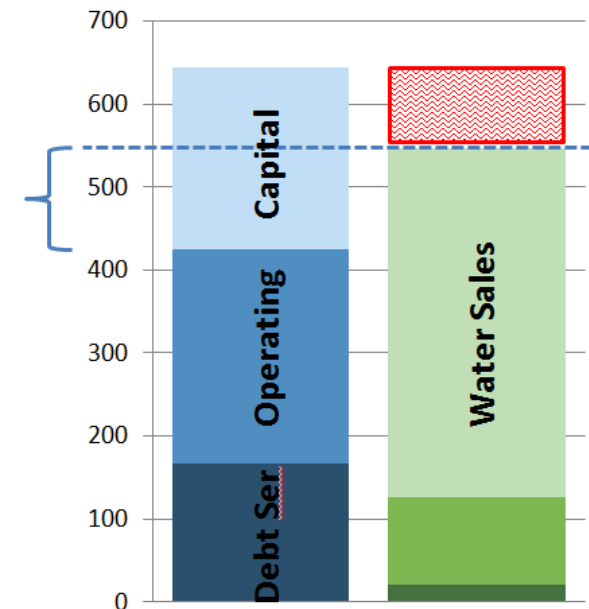
- Review of December 2016 workshop on financial planning
- Trends in California water rates
- FY18 & FY19 budget and rates: What is different from previous projection?
- Non-rate revenue
- Update FY18 & FY19 expense/revenue gap
- Workshop conclusions
- Discussion

Review of December 2016 Financial Planning Workshop & Trends in CA Rates

Review of December 2016 Financial Planning Workshop



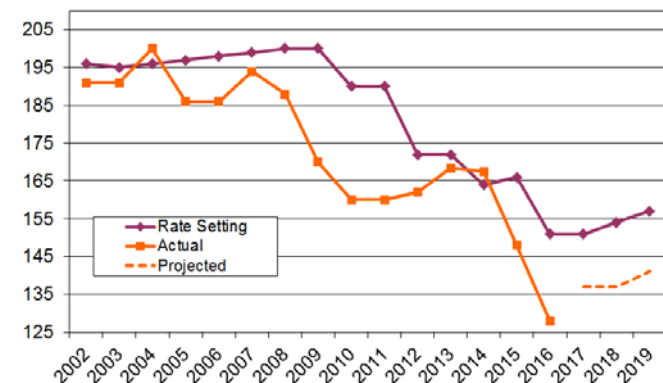
- Expense/revenue gap - annual expenses exceed annual revenues
- Debt and reserves have been used to fund expense/revenue gap
- Moving toward financial goals
 - 50% revenue funding of capital
 - 2.0 debt coverage



Review of December 2016 Financial Planning Workshop (cont.)



- Projected water sales is a major variable in the financial plan
 - Shortfalls in water sales have significant cash and debt coverage implications
 - Important to be conservative with projections of water sales
 - Need to maintain reserves to address unplanned shortfalls



Trends in CA Water Rates



- Average annual rate increase 2003-13 in CA: ~6%
- Some private water utilities in CA have been projecting 1% annual decrease in water sales in CPUC rate filings
- Average annual EBMUD budget revenue increase over past 10 years has been ~4%
- Average annual EBMUD water rate increase (FY04-16) ~6%

FY18 & FY19 Budget and Rates

Previous Projections



- Previous projections for rate forecast from FY16/17 Budget:
 - Water 8/7/**5/5/4**
 - Wastewater 5/5/**5/5/4**
- In light of low water sales resulting from drought, staff prepared an updated forecast in April 2016
 - Water 8/7/**12/12/5**
 - Wastewater 5/5/**5/5/4**

FY18 & FY19 Previous Projection – Water



	FY16* Actual	FY18 Previous Projection	FY19 Previous Projection
Revenues	\$548 M	\$620 M	\$661 M
Water Sales	128 MGD	154 MGD	157 MGD
Expenses	\$644 M	\$765 M	\$804 M
Expense/Revenue Gap	\$96 M	\$145 M	\$143 M
Debt Coverage Ratio	1.65	1.64	1.66
Debt Funding of Capital	43%	53%	47%
Rate Stabilization Balance	\$95 M	\$95 M	\$95 M
Rate Increase	8%	5%	5%

*FY16 includes drought surcharge revenues and expenses

FY18 & FY19 Previous Projection – Water



	FY16 Budget	FY18 Previous Projection	FY19 Previous Projection
Staffing O&M and Capital	1,660 FTE Budget	1,660 FTE	1,660 FTE
New O&M Activities beyond FY16 O&M	-	None	None
CIP Cash Flow	\$225 M	\$296 M	\$310 M
5 Year CIP Priorities	Infrastructure Replacement		
5 Year Major CIP Projects	Pipeline Renewal/Reservoir Rehab/Mokelumne Aqueduct/North Richmond Recycled Water*		

*Assumed Chevron would pay for North Richmond Recycled Water Project

FY18 & FY19 Previous Projection – Wastewater



	FY16 Actual	FY18 Previous Projection	FY19 Previous Projection
Revenues	\$122 M	\$130 M	\$133 M
Expenses	\$131 M	\$144 M	\$139 M
Expense/Revenue Gap	\$9 M	\$14 M	\$6 M
Debt Coverage Ratio	1.98	1.72	1.79
Debt Funding of Capital	0%	43%	29%
Rate Stabilization Balance	\$24 M	\$24 M	\$24 M
Rate Increase	5%	5%	5%

FY18 & FY19 Previous Projection – Wastewater



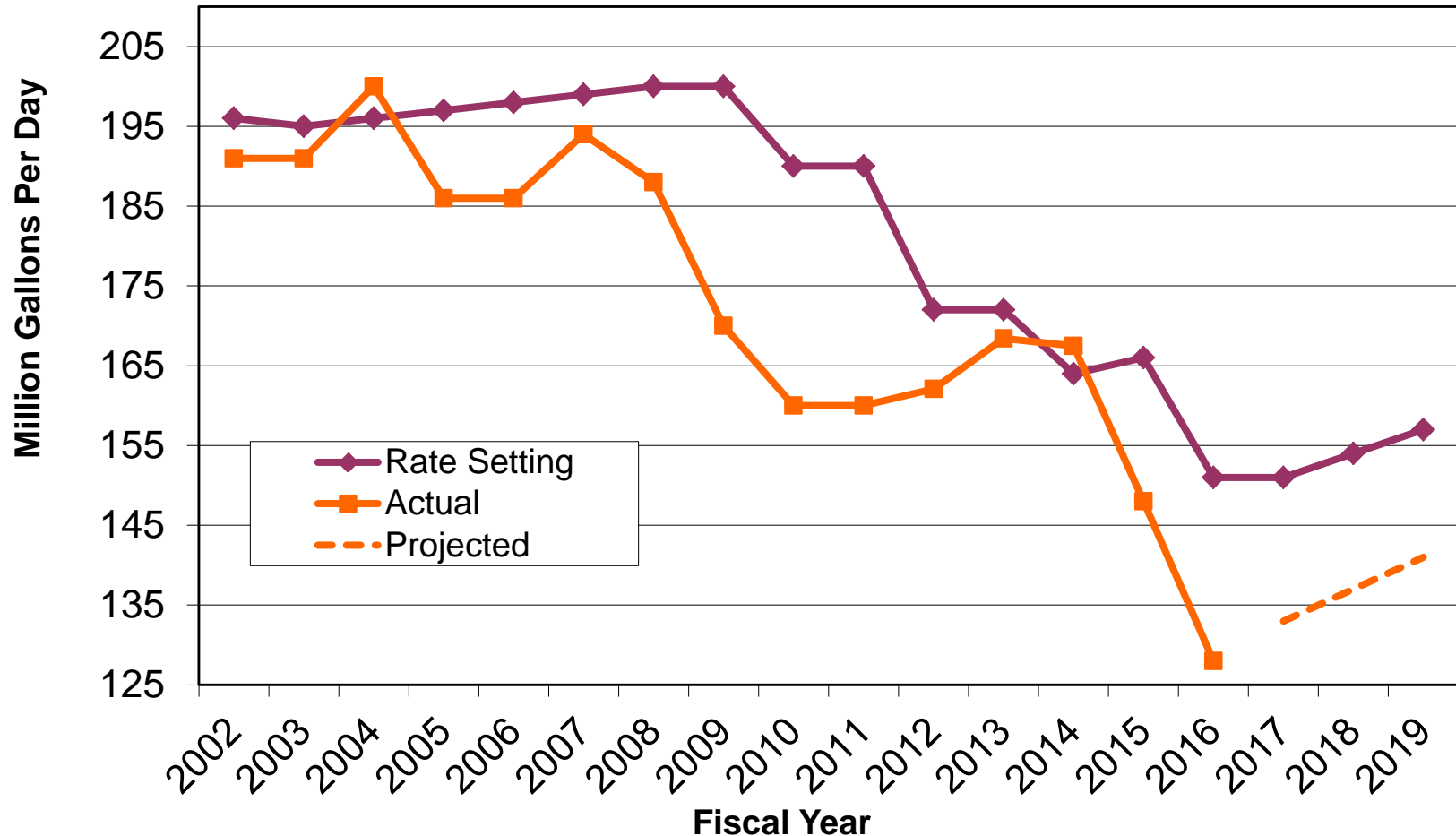
	FY16 Budget	FY18 Previous Projection	FY19 Previous Projection
Staffing O&M and Capital	274 FTE Budget	275 FTE	275 FTE
New O&M Activities beyond FY16 O&M	-	None	None
CIP Cash Flow	\$39 M	\$37 M	\$35 M
5 Year CIP Priorities	Infrastructure Replacement/Consent Decree/Resource Recovery		
5 Year Major CIP Projects	3 rd Street Interceptor Rehab/Digester Rehab/Odor Control/Food Waste		

Key Considerations for FY18 & FY19 Budget and Rates



- Water sales projections
- Updated CIP
- Updated O&M budget
- Non-rate revenues
- Expense/revenue gap and projected rates

Water Sales Projections Drive Financial Planning

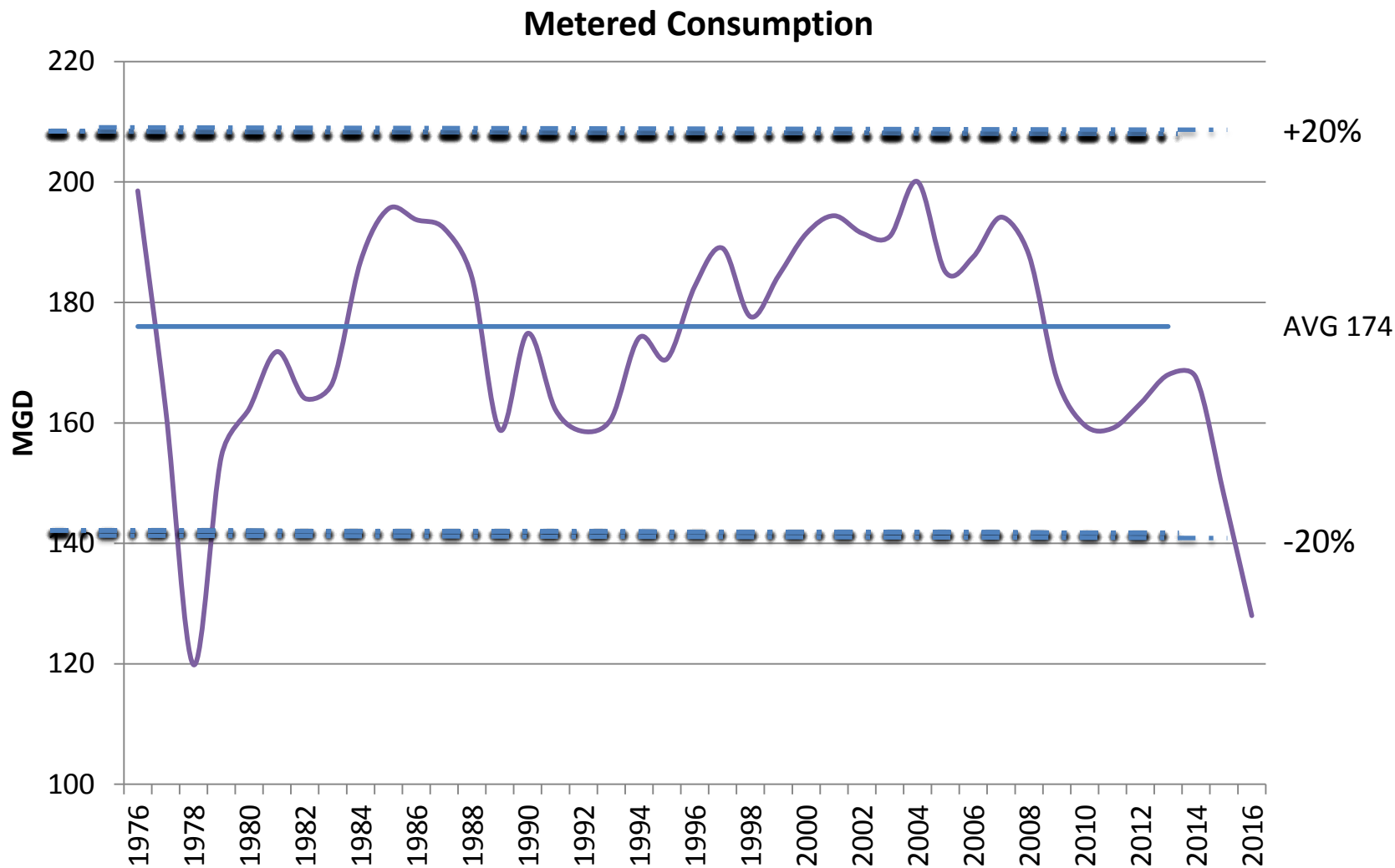


Water Sales Projections



- Previous Projection for FY18 & FY19: 154/157 MGD
- Two major droughts since 2008 have significantly impacted consumption
- We are seeing a slight rebound from FY16 128 MGD, projection for FY17 is 133 MGD
- Water supply is not expected to be an issue for FY18 and likely not an issue for FY19

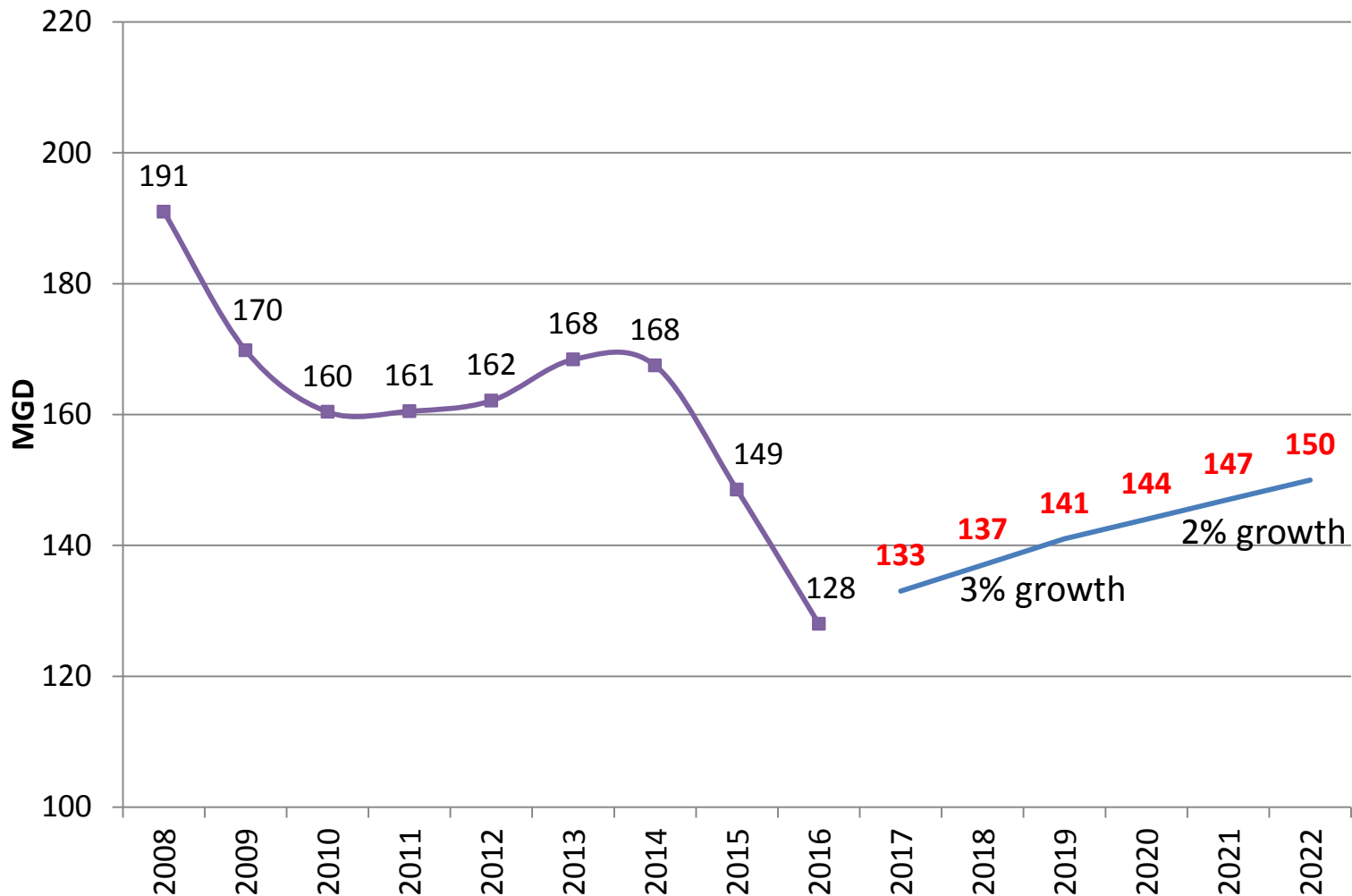
Sales Volume - Historical Volatility



Water Sales Not Projected to Return to Pre Drought Levels



Metered Consumption



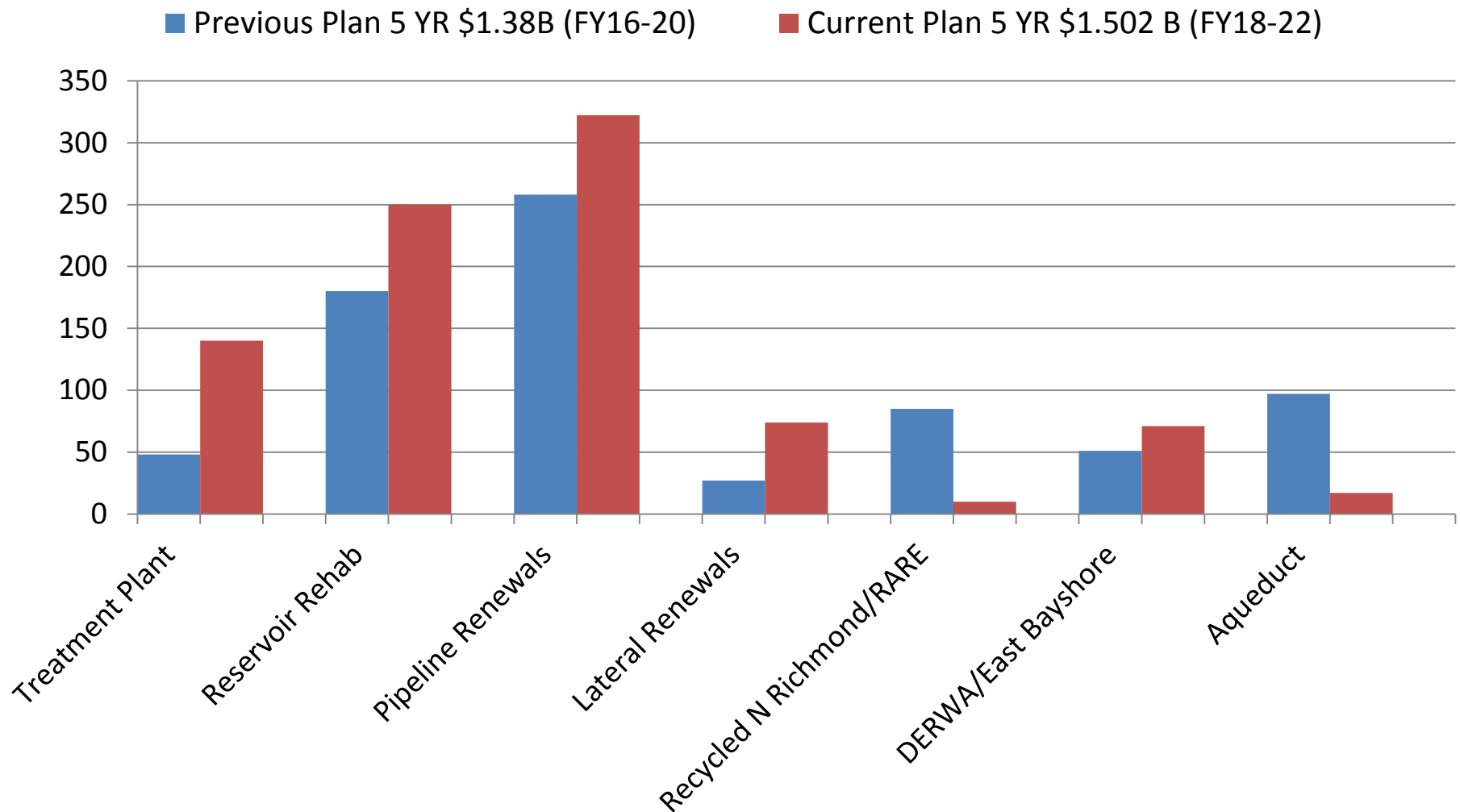
Updated FY18 & FY19 CIP – Water



	FY18	FY19	5 Year
Cash Flow	\$267 M	\$269 M	\$1,502 M
5 Year Priorities	Infrastructure Replacement		
5 Year Major Projects	Pipelines/Treatment Plant Upgrades/Reservoir Rehab/Service Laterals/Recycled Water		

For budgeting purposes, there are no grants or outside funding assumed for recycled water projects.

Updated FY18 & FY19 CIP – Water Compared to Previous Projection



What Water Projects Have Been Deferred or Changed?



- Security improvements at distribution facilities
- Lafayette Aqueduct No. 2 repair
- Mokelumne Aqueduct temperature anchor retrofit
- Rehab Fontaine Pumping Plant in Oakland
- Upcountry WW collection system improvements
- Briones Reservoir tower upgrade
- San Pablo Reservoir water quality improvements

Updated FY18 & FY19 CIP – Wastewater



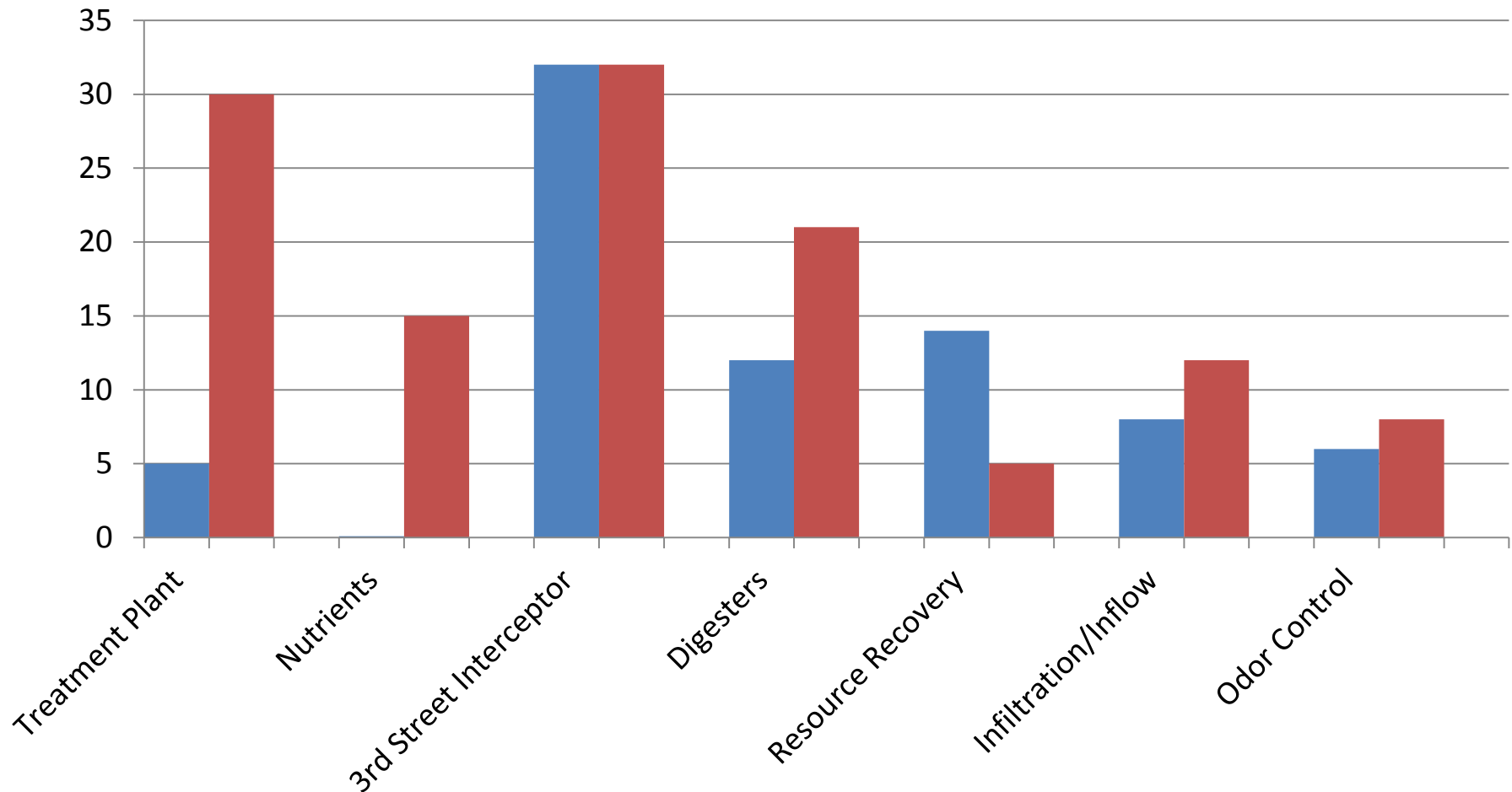
	FY18	FY19	5 Year
Cash Flow	\$42 M	\$40 M	\$188 M
5 Year Priorities	Infrastructure Replacement/Nutrients		
5 Year Major Projects	Treatment Plant Infrastructure/3 rd Street Interceptor/Nutrients/Odor Control/Digesters		

Large scale food waste is not included in updated CIP.

Updated FY18 & FY19 CIP – Wastewater Compared to Previous Projection



■ Previous Plan 5 YR \$169M ■ Current Plan 5 YR \$188 M



Wastewater CIP Changes



- New nutrients program is in development
- Large-scale food waste project removed
- Major Treatment Plant Infrastructure rehab

FY18 & FY19 Budget Considerations – Water



- Staffing changes under consideration:
 - Replacement of FM&O equipment contracts with District staff
 - Increase infrastructure maintenance
 - Reduction of overtime
 - Delivery of CIP (design and construction)
 - Replacement of outdated financial & payroll systems
- Other budget items:
 - Lead sampling in schools
 - Self-insured liability claims
 - State drinking water fee
 - Expand system water quality programs due to reduced flow

FY18 & FY19 Budget Considerations – Wastewater



- Staffing changes under consideration:
 - Replacement of Laboratory Information Management System
 - Electrical Integrity Program
 - Delivery of CIP (design and construction)
- Other budget items:
 - Regional Technical Support Program (RTSP)
 - Electrical Integrity Program contract services

FY18 & FY19 Operating Budget Offsets



- Water – Eliminated or reduced operating activities
 - Lower energy, chemical and disposal costs due to reduce water production
 - Reduced overtime
- Wastewater – Eliminated or reduced operating activities
 - Lower operating costs due to removal of large-scale food waste

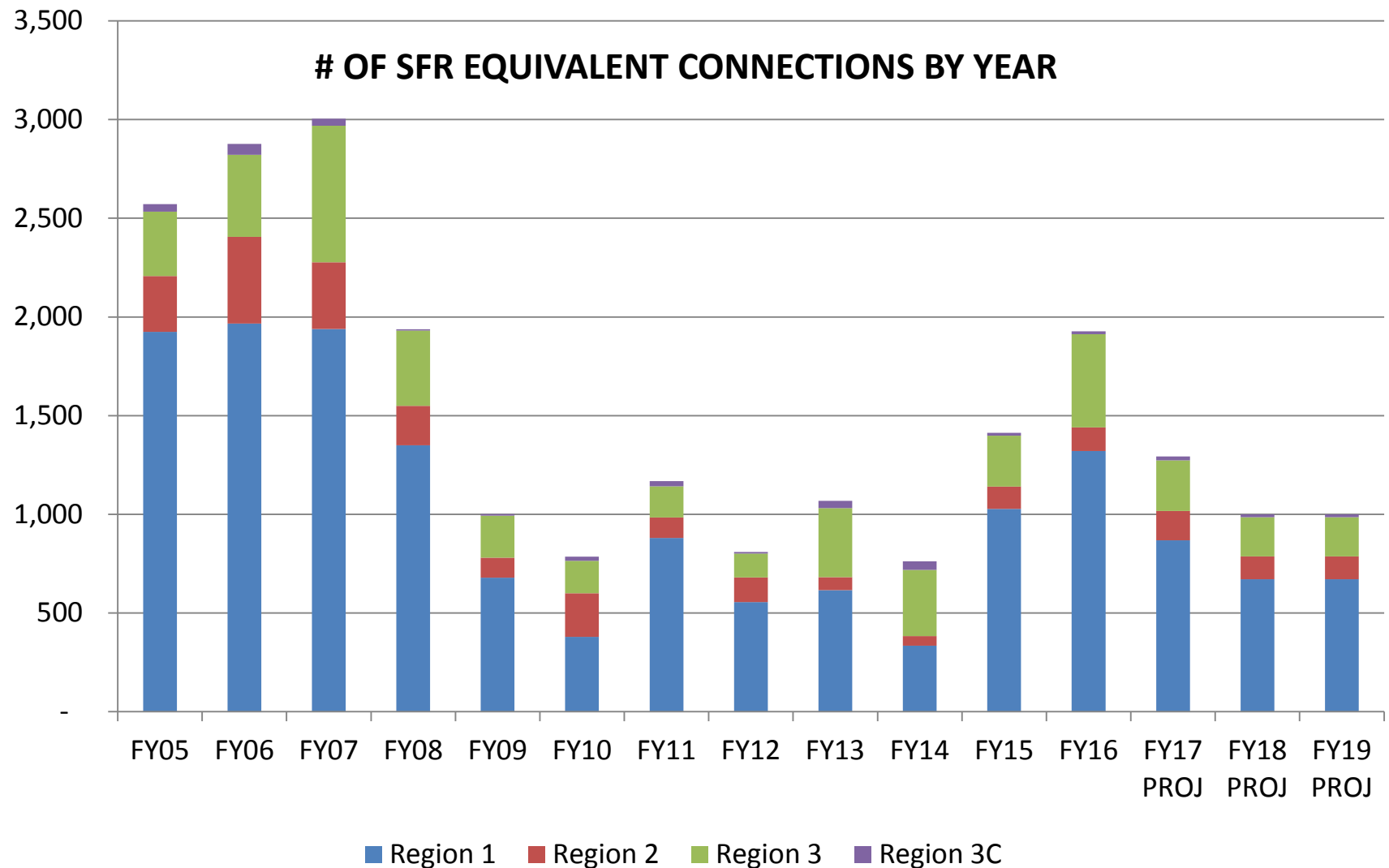
Non-rate Revenue

Non-rate Revenue – Water



	Budgeted FY16 \$M	Actual FY16 \$M	Updated FY18 Budget \$M
Property Taxes	25	29	29
Contributions for Capital	25	22	20
SCC	25	39	27
Other	16	19	18
Reimbursements	11	11	12
Power Sales	3	3	4
Interest	2	2	7

Non-rate Revenue – Water SCC Connections



Non-rate Revenue – Wastewater



	Budgeted FY16 \$M	Actual FY16 \$M	Updated FY18 Budget \$M
Resource Recovery	8.0	11.6	8.0
Other	6.7	6.7	6.8
Taxes	4.3	4.6	4.6
Lab	3.9	4.3	4.3
Capacity Fee	1.5	3.1	1.7
Interest	0.4	0.3	1.8

Non-rate Revenue Opportunities

– Water/Wastewater



- Cost efficiencies are the District's best opportunity to offset need for rate increases
 - Power use management: staff work to procure the lowest cost of power and also work to manage time of use power to minimize costs while doing the work of the District
 - Asset management: staff works to model which pipes should be replaced first and how to manage the replacements most efficiently
 - Minimize treatment costs: maximize water production at lowest cost plants (WC, Orinda) and minimize use of expensive plants (USL, Sobrante)

EBMUD Cost Efficient With Your Money



customer

Pipeline

January • February 2017





Innovating with your dollars

Every day, EBMUD uses your dollars to reinvest in the water and wastewater systems that serve the East Bay. We use your money to make smart, sustainable investments for you and future generations. We find ways to save energy and money, reduce greenhouse gasses and ensure our skilled workforce remains safe and on the job. Just as you stretch your dollars at home, we work hard to make every dollar work for you.

Looking ahead

EBMUD continues to improve energy efficiency in our water and wastewater operations. In addition to selling clean hydroelectric power to Marin Clean Energy for \$4.3 million annually, investments in solar installations could add up to 7 megawatts in the next few years.

We'll explore more ways to maximize preservation of our watershed lands. We improve salmon populations while preserving our high quality water for drinking. By recovering energy from wastewater, we gain revenue and maximize the efficiency of our wastewater plant.

More upgrades and continued maintenance of pipes, facilities, and treatment plants prepare us for earthquakes and reduce expensive emergency repairs. We continue to evaluate new work methods and materials to reduce impacts to the environment and the communities we work in.

Finally, like paying off a mortgage, EBMUD aims to never over borrow. We lock in low interest rates and keep our bond ratings high. Visit ebmud.com/stewardship to learn more.



In 2016, onsite power generation at EBMUD's Wastewater Plant provided 135% of the plant's energy needs, and we sold the surplus for \$1.2 million. At Pardee and Camanche Reservoirs, EBMUD generated more than 120,000 megawatt hours of clean hydropower, which we sold for \$4.3 million. And we're generating more than 1,800 megawatt hours of photovoltaic power a year.



We created a 430-acre conservation bank at Oursan Ridge. The sale of conservation bank credits will generate up to \$9 million and pay for the \$5 million purchase of the 605-acre Carr Ranch. That preserves more than 1,000 acres of pristine watershed land forever.



In Berkeley, we saved almost ten times as much time and money while reducing community impacts by helicoptering pipes to the top of Panoramic Hill.



We've saved your money for a not-so-rainy-day — EBMUD's \$95 million rate stabilization fund offset the costs of drought.

Non-rate Revenue Opportunities

– Water/Wastewater



- Power Generation

- In FY16 the District generated \$4.3 M in green power sales above internal uses
- Some growth in power sales is anticipated in FY18 & FY19 as a result of higher water storage
- Future solar projects are under review; while cost effective they are not expected to generate net revenue

Non-rate Revenue Opportunities

– Water/Wastewater



- Property Management
 - Current leases generated \$3.3 M (FY16)
 - Expanding lease of McMillan property could generate up to \$100,000 annually
 - Cell tower leases are in negotiations and could generate significant additional revenue
 - Lease of 15 acres at Oakport is under consideration
 - Sales of surplus property opportunities are reviewed on regular basis

Non-rate Revenue Opportunities

– Water/Wastewater



- Environmental Credits
 - Revenue from Oursan Ridge Conservation Bank credits will go towards future watershed land purchases
- Freeport Capacity
 - Exploring use by other agencies

Non-rate Revenue Opportunities

– Water/Wastewater



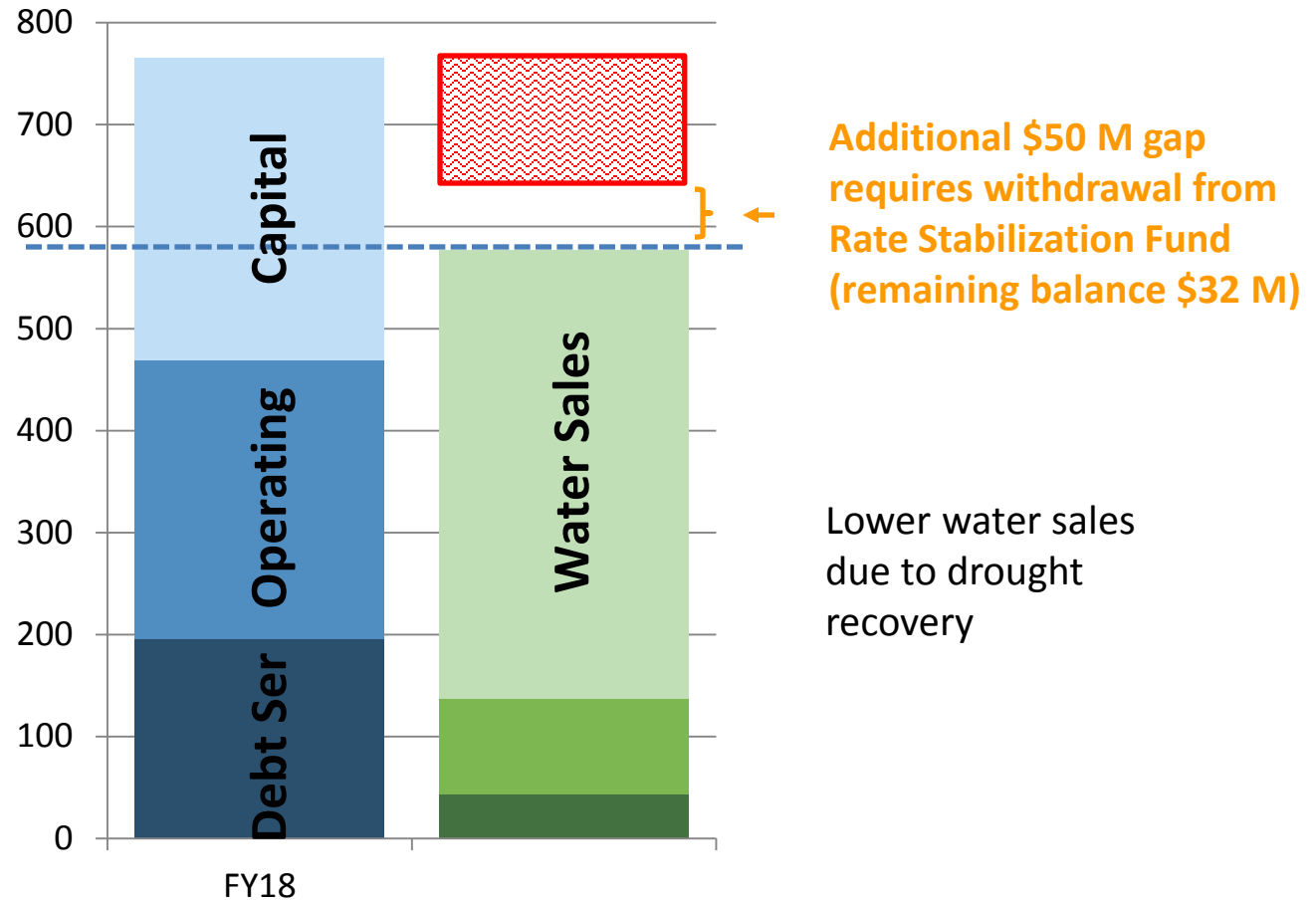
- Lab Services
 - Currently provide limited lab services to outside agencies (~\$200,000)
 - Lab generally runs at capacity under existing staffing, so expanding outside services has limited net revenue potential
- Grants and low cost loans
 - Staff continually seeks grant funding that aligns with our CIP priorities and timing; SRF application in for MacArthur/Davenport and South (\$30M)
 - Recent grant examples: Chabot dam seismic (\$5M), DERWA recycled water (\$2M)

Updated FY18 & FY19 Expense/Revenue Gap – Water



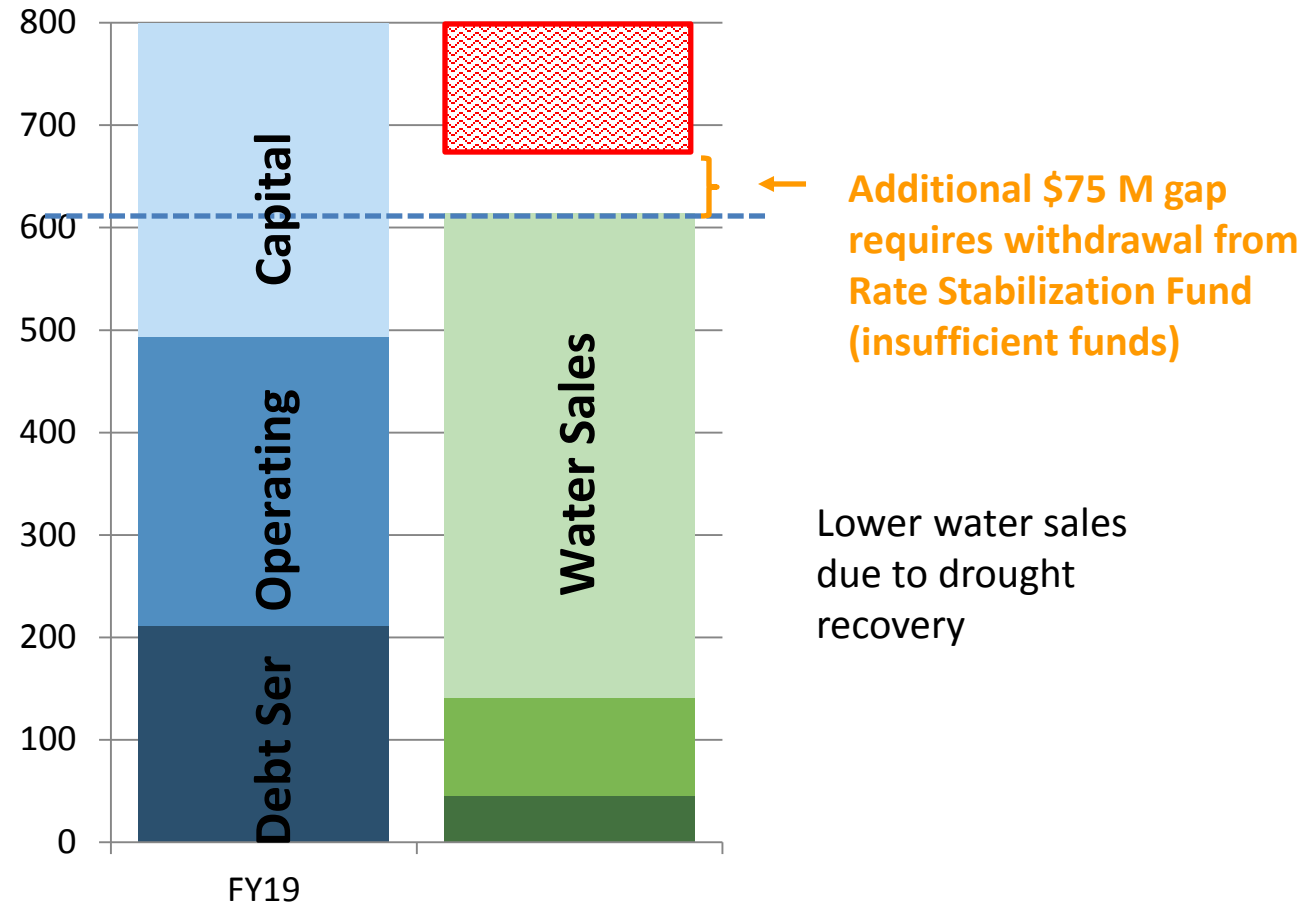
- Expense/Revenue Gap has increased from previous projections
 - Water sales down from 154/157 MGD to 137/141 MGD
 - CIP reduced from \$296M/\$310M to \$267M/\$269M higher assumed borrowing and interest rates
 - Increase to updated O&M budget proposal including additional staff and lead sampling program

FY18 Water Gap Increases to \$200M with Updated Sales – 5% Rate Increase



■ Debt Service ■ Operating ■ Capital ■ Capital Contr ■ Other Rev ■ Water Rev

FY19 Water Gap Increases to \$220M with Updated Sales – 5% Rate Increase

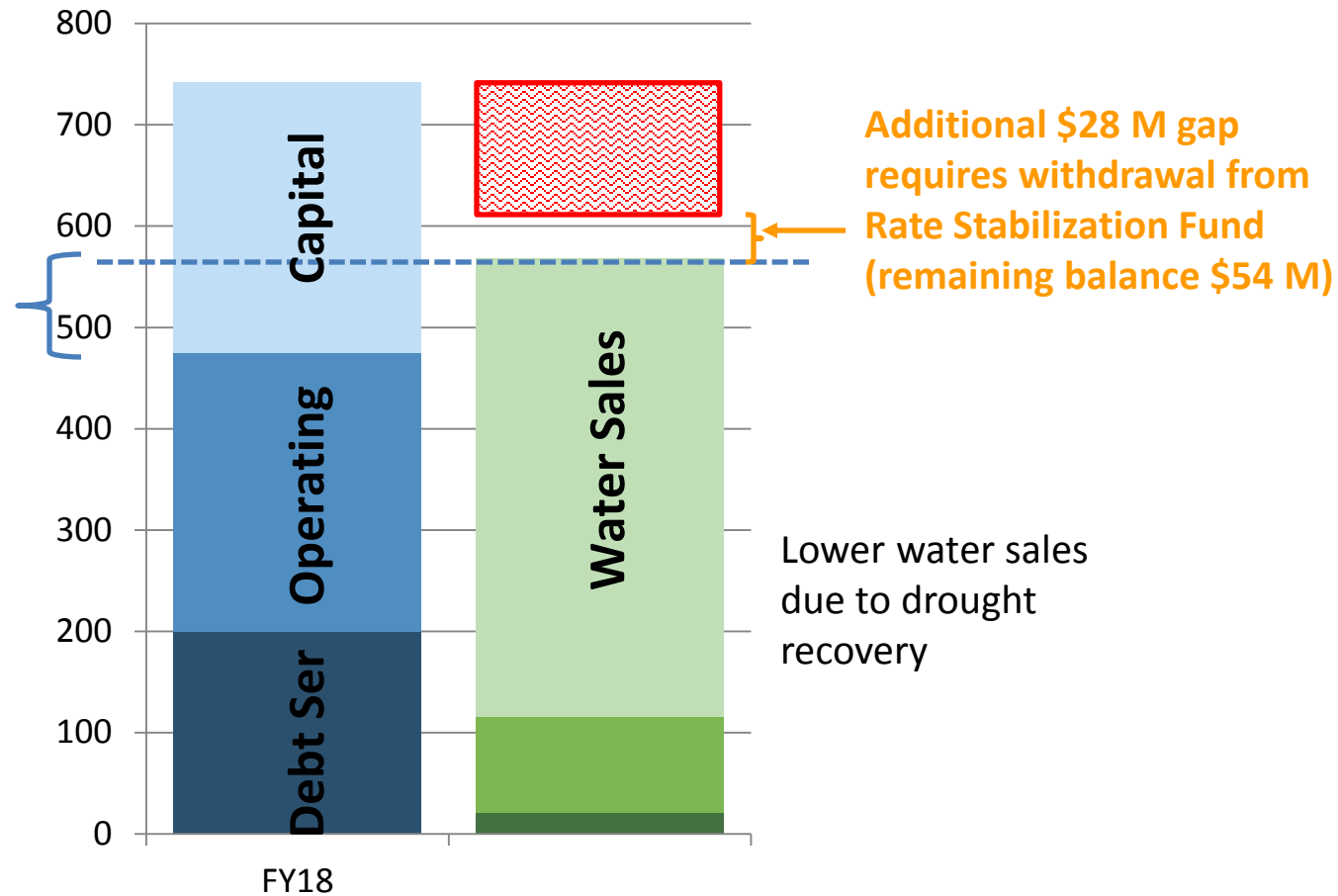


■ Debt Service ■ Operating ■ Capital ■ Capital Contr ■ Other Rev ■ Water Rev

FY18 Water Gap Increases to \$175 M with Updated Sales – 9% Rate Increase

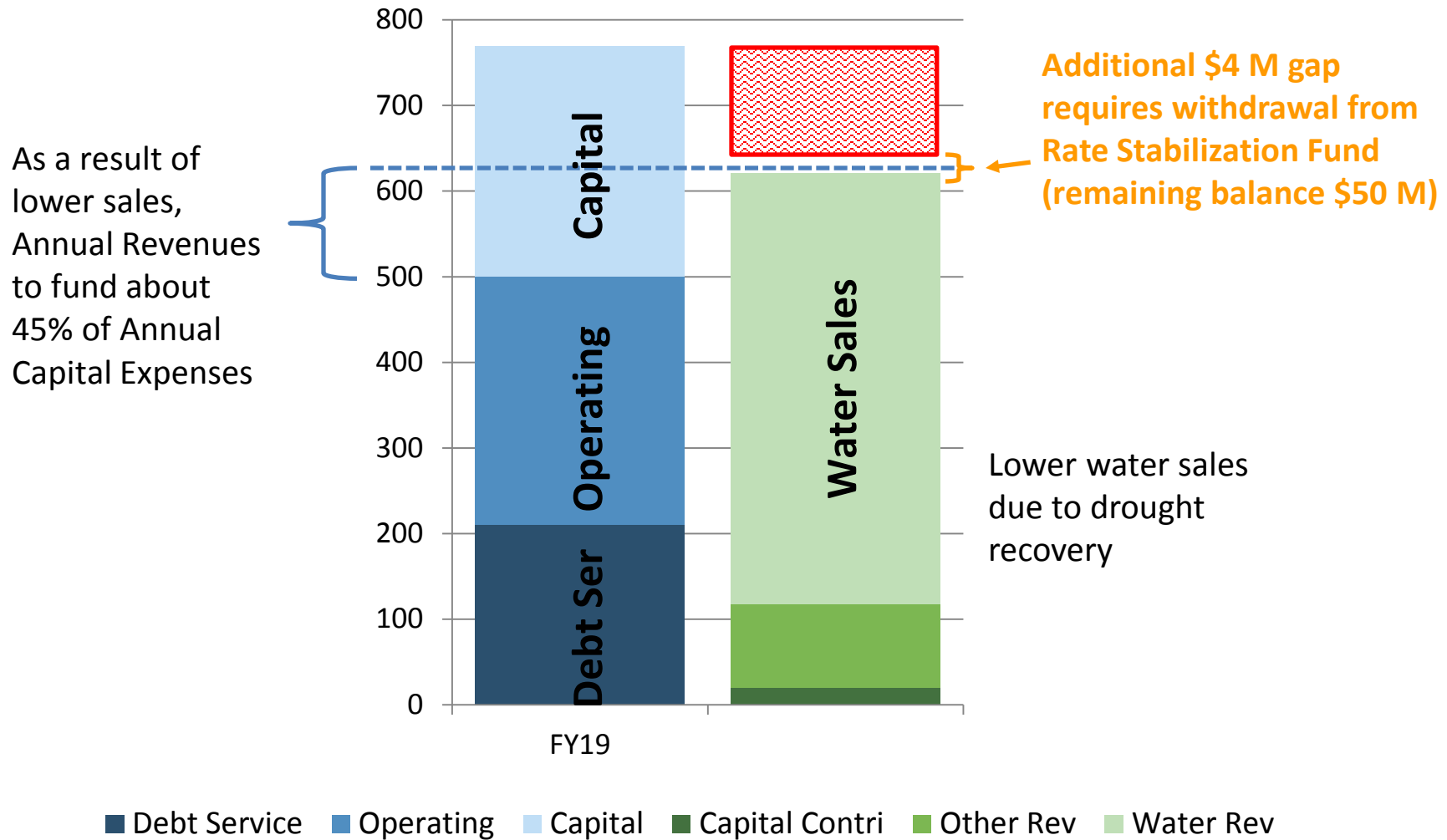


As a result of lower sales, Annual Revenues to fund about 34% of Annual Capital Expenses



■ Debt Service ■ Operating ■ Capital ■ Capital Contr ■ Other Rev ■ Water Rev

FY19 Water Gap Increases to \$150 M with Updated Sales – 9% Rate Increase



Additional Items for Consideration in Proposed FY18 & FY19 Budget – Water



- Utility laborers to further reduce overtime and increase preventative maintenance
- Accelerate addressing identified IT security risks
- Incorporate geospatial data in IT upgrades
- Expand diversity/inclusion outreach
- Staff for water control systems management
- Engineering aides to further diversity

Options to Reduce Proposed FY18 & FY19 Budget – Water



- Eliminate capital project start up support
- Reduce inspection of materials/construction
- Defer work design of upcountry WW improvements, raw water studies and vulnerability assessments
- Eliminate IT intern positions
- Reduce HR support for recruitment

Updated FY18 & FY19 Expense/Revenue Gap – Wastewater



- Expense/Revenue Gap only slightly impacted by drought
 - Preliminary CIP cash flow increased from \$37M/\$35M to \$42M/\$40M
 - Higher assumed borrowing and interest rates
 - Slight decrease to updated O&M budget proposal due to removal of food waste operating costs; includes additional staff requests.

Workshop Conclusions

Workshop Conclusions



- Low projected water sales will drive rate increase
 - 10% lower than previous projections
 - Slow growth towards 150 MGD water sales (back to FY15 actual)
- CIP only slightly changed
 - Rebuild continues as planned
 - Increases in water treatment plant upgrades
 - Continue to make progress on recycled water goals: DERWA and East Bayshore
 - Additional WW projects

Workshop Conclusions (cont.)



- Operating budget increases
 - Additional staff for operating and capital
 - Lead sampling
- FY18 & FY19 will require use of RSF
 - Current balance \$95M, likely use up to \$13M in FY17
 - Preliminary FY18 & FY19 rate increases:
 - 9%/9% rate increase water requires drawing RSF down to an additional \$32M leaving \$50M balance for FY20
 - 5%/5% rate increase wastewater
- Proposed budget and rates presented in March

Discussion