

# Estimated Revenue Requirements, Fiscal Years 2016/17 and 2017/18, and Water Rates and Charges, Calendar Years 2017 and 2018 : Workshop #2

Finance & Insurance Committee  
February 23, 2016

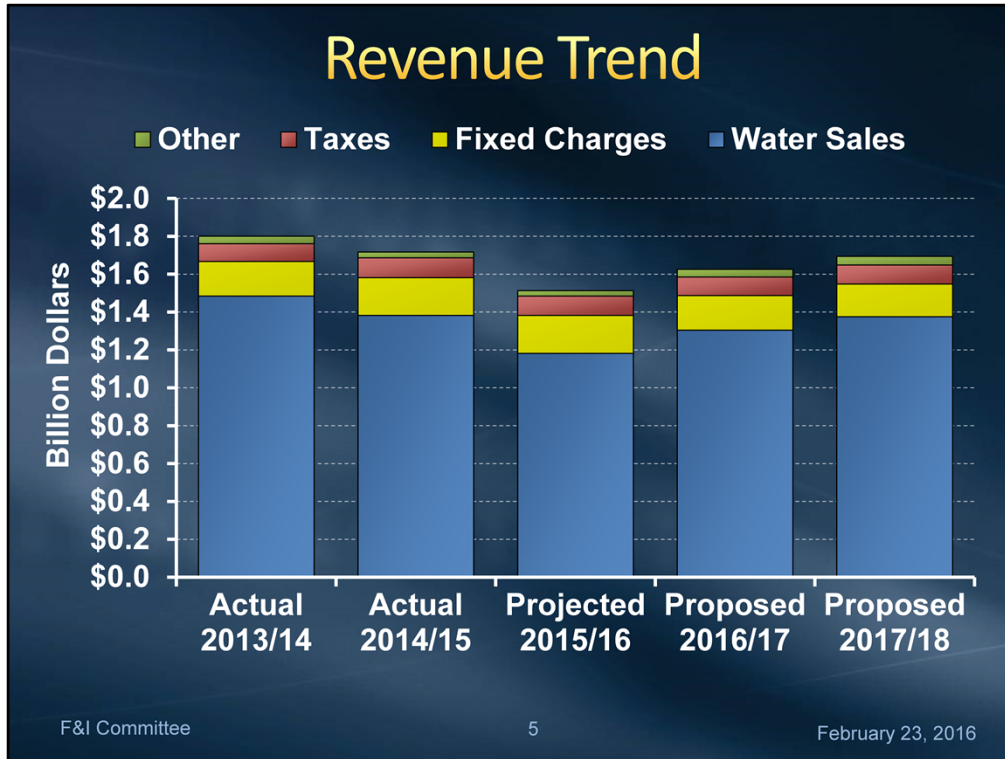


## Estimated Biennial Budget Workshop Presentation Overview

- Follow up from Workshop # 1
- Overview of Rates and Charges
  - Revenue Requirement
  - Estimated Rates and Charges
- Treated Water Cost Recovery
- Next Steps

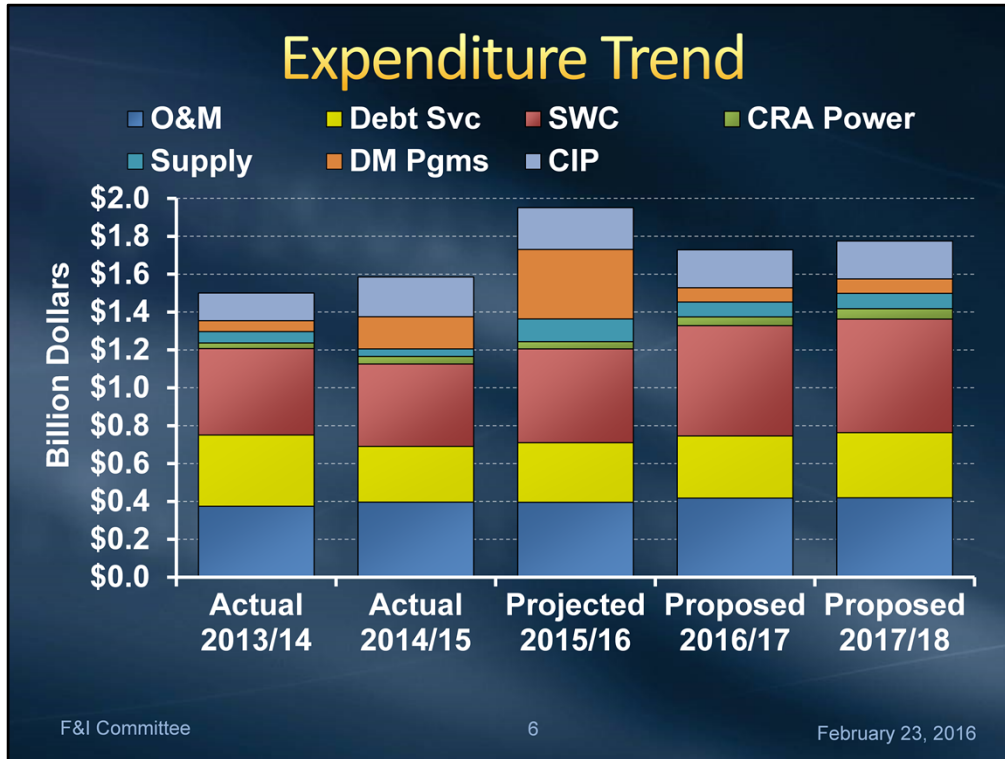
# Follow up from Workshop #1

# Question #1: Actuals and Budget Trends

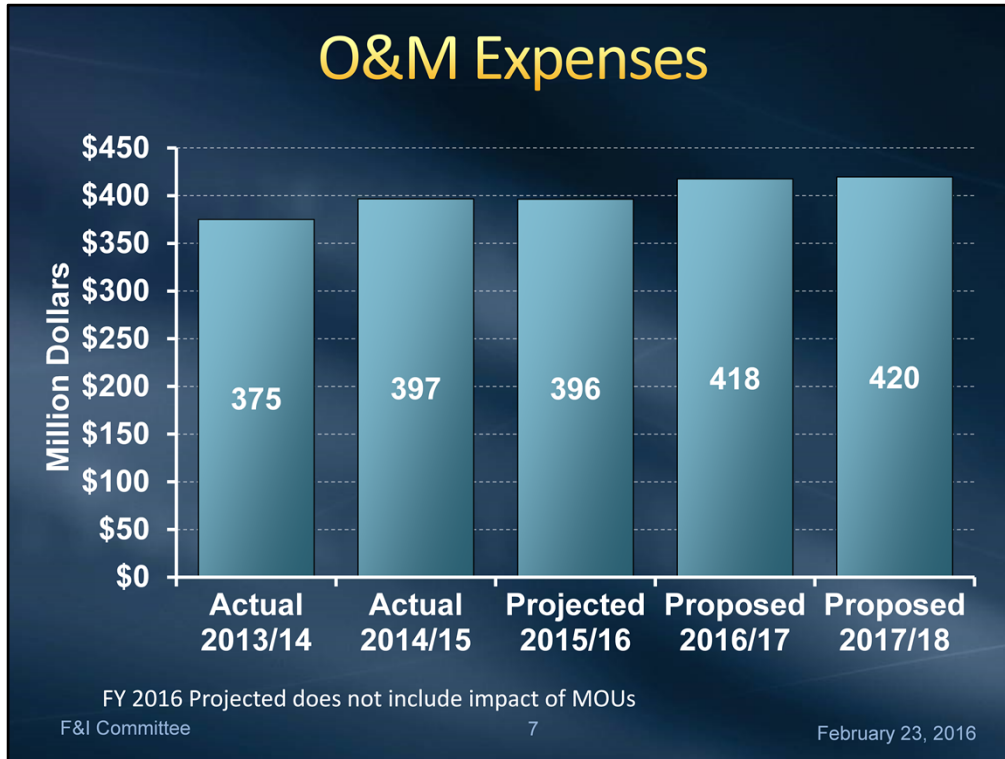


Sales:            2.06 MAF        1.9 MAF        1.63 MAF        1.7 MAF        1.7MAF

	Actual 2013/14	Actual 2014/15	Projected 2015/16	Proposed 2016/17	Proposed 2017/18
Revenue					
Water Sales	1,484,616	1,382,898	1,182,139	1,305,196	1,375,464
Fixed Charges	182,443	199,465	200,233	182,305	172,671
Taxes	94,574	104,432	102,296	98,346	100,540
Other	39,793	30,294	28,586	40,507	45,858
<b>Total</b>	<b>1,801,426</b>	<b>1,717,089</b>	<b>1,513,254</b>	<b>1,626,354</b>	<b>1,694,533</b>



O&M and Debt Service are flat. ~ 50% of costs  
 SWC Costs are increasing  
 Demand Management Programs expenditures reflect one-time increases approved by the board  
 CIP is stable

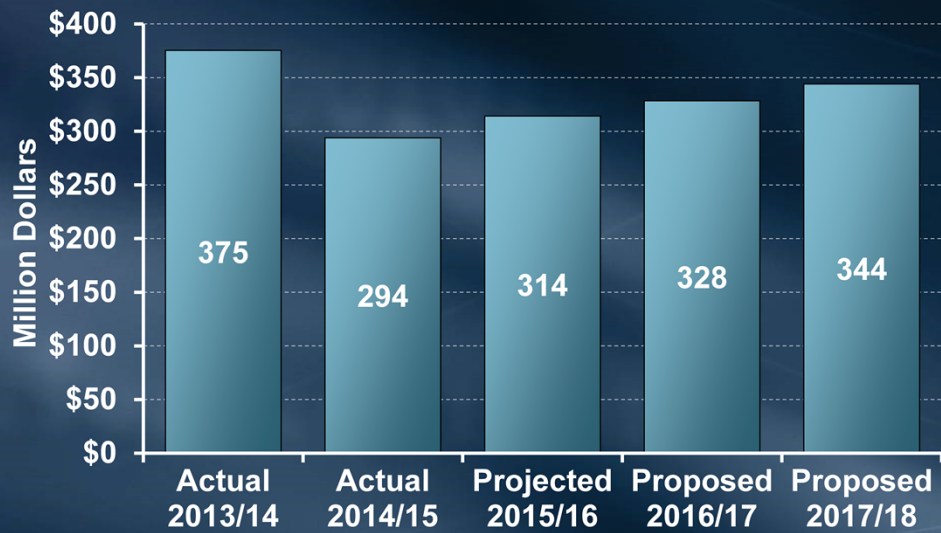


FY 2015/16 is \$400M

Cost increases reflect impact of approved MOUs and fuller staffing at 1,840 FTEs

	Actual 2013/14	Actual 2014/15	Projected 2015/16	Proposed 2016/17	Proposed 2017/18
Expenses					
O&M	375,291	396,684	396,383	417,658	419,760
Debt Service	375,495	294,000	314,301	328,450	344,100
SWP	456,976	436,000	495,620	582,252	599,406
CRA Power Costs	29,622	39,600	37,854	46,605	54,378
Supply Programs	59,965	94,295	119,357	78,688	81,726
Demand Management	57,169	170,273	367,009	75,130	75,943
CIP	146,020	210,071	221,000	200,000	200,000
Total	1,500,538	1,640,923	1,951,524	1,728,783	1,775,314

## Debt Service Expenses\*



\* \$34M shifted from FY2015 to FY2014; early payment as part of refunding.

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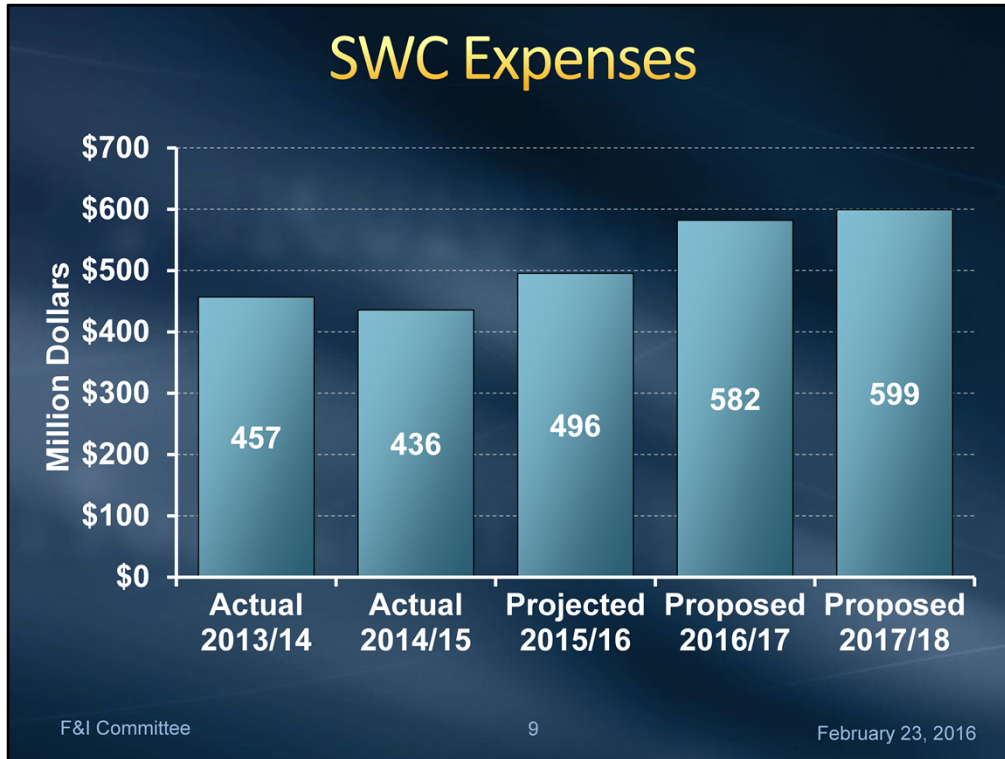
February 23, 2016

**\$34M July 1, 2014 payment made as part of May 2014 refunding**

**Adjusted #s:    \$341M                    \$328M                    \$314M                    \$328M                    \$344M**

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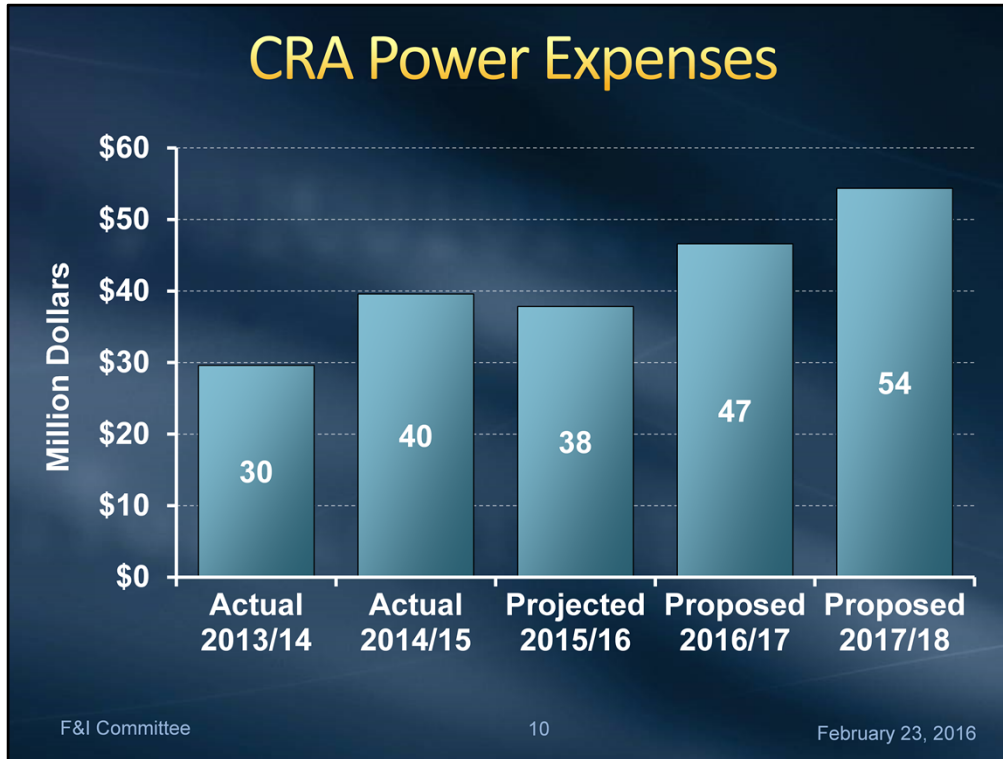
Credits:        \$35.4M        \$34.5M        \$24.6M  
                      \$492M        \$471M        \$520M

Due to:        2013/14: Rate Management credits, which were unbudgeted  
                      prior year adjustments

                     2014/15: Prior year's variable costs

                     2015/16: Permanent Table A transfers, 1998-2014, \$27.4M

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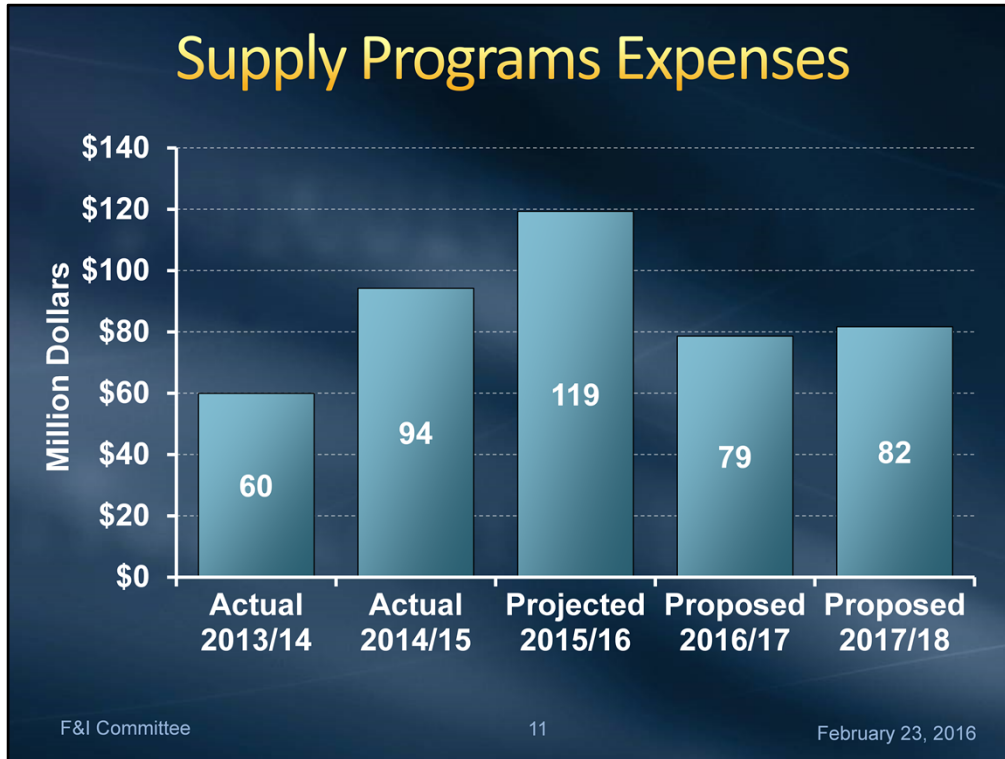


Diversions 1.1 MAF 1.19 MAF 1.1 MAF 0.9 MAF 0.9MAF

C&T costs in CRA forecast: \$5.6M \$7.3M  
 C&T costs in SWP forecast: \$22.9M \$22.8M

Changes in energy resource portfolio resulting in higher supplemental power purchases

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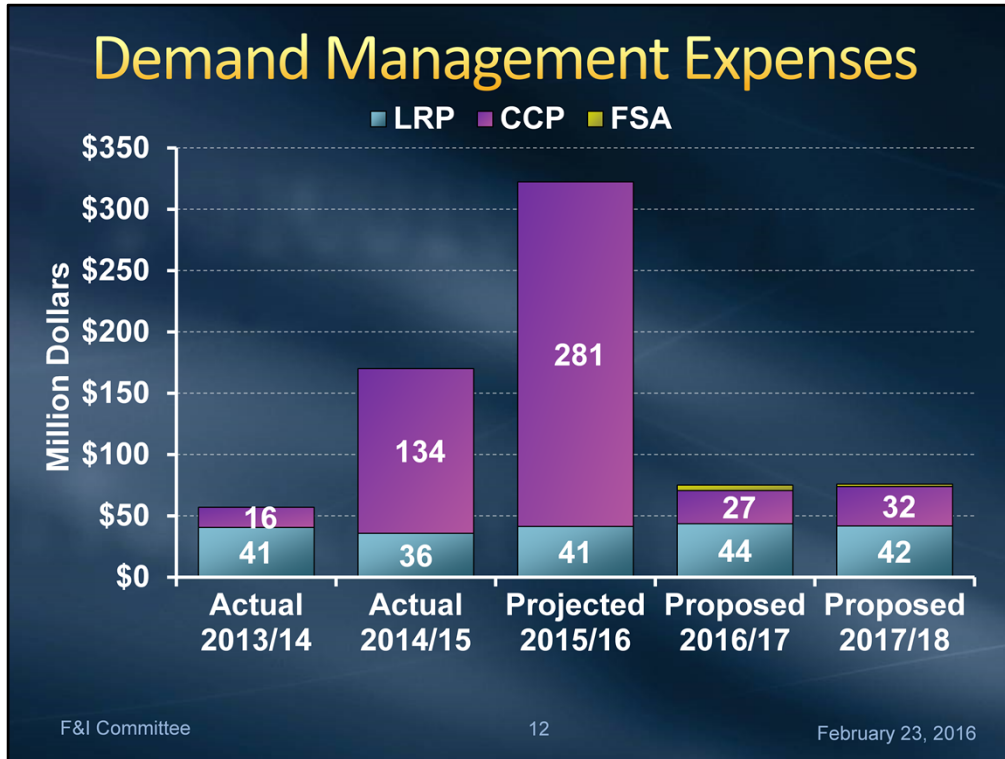


FY 2015 and 2016 Supply Programs higher due to dry year program executions:

FY 2015: Central Valley Storage programs, SWC dry year program

FY 2016: PVID full call, SNWA \$44.4M

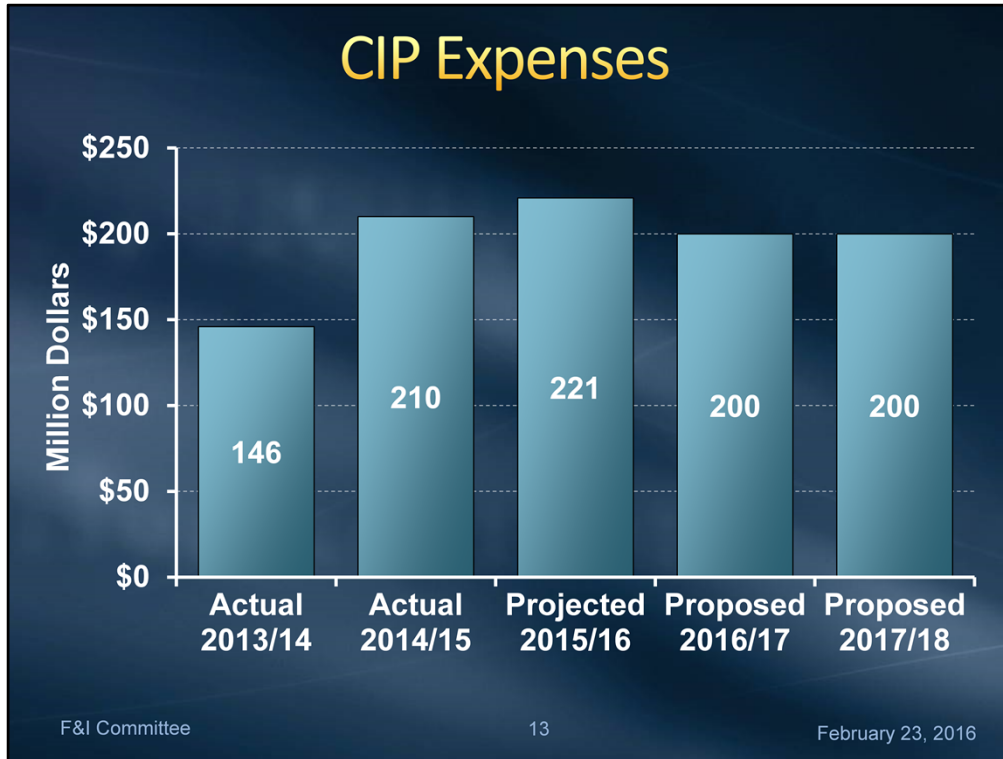
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Additional funding of CCP due to historic drought conditions and Governor’s Executive Order to cut per capita water use 25%

Projection for FY 2015/16 reflects recent adjustments by WRM. DU will address.

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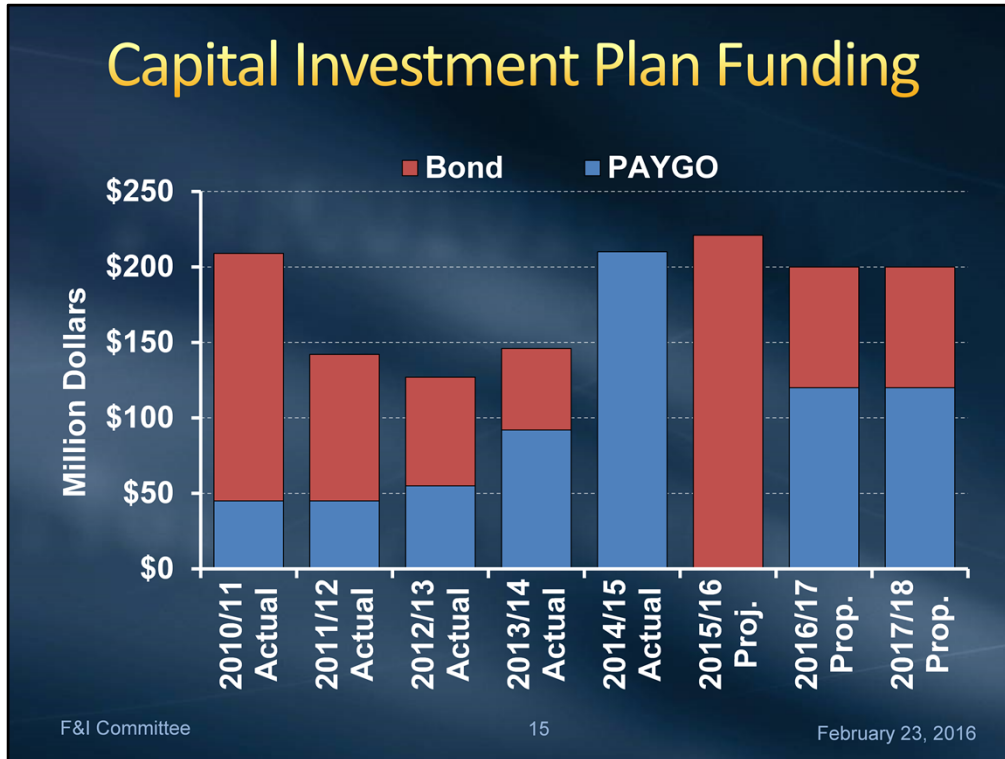


Budget:   \$295M    \$245M    \$268M    \$246M    \$240M  
 Delta     \$150M    \$ 35M    \$ 47M  
 Approximately 30% lower than budget

Modifications to project strategies, permitting timelines, lower competitive bids, lower progress payments  
 For financial planning and rate setting purposes, using about 80% of the Proposed CIP

	Actual	Actual	Projected	Proposed	Proposed
	2013/14	2014/15	2015/16	2016/17	2017/18
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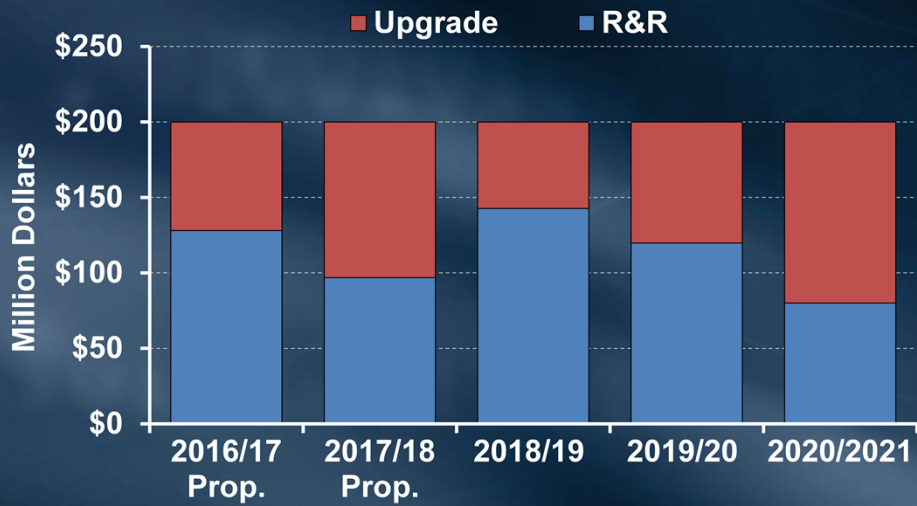
## Question #2: PAYGo



Through 2016, about 43% funded with revenues  
 2016 CIP funding impacted by decision to purchase PVID land.

FY2016 PAYGO	CIP	PVID	Total
PAYGO - General Fund	20		20
PVID Land Purchase		264	264
R&R Fund		(160)	(160)
Resolution for Reimbursement	(25)		(25)
<b>Total PAYGO</b>	<b>(5)</b>	<b>104</b>	<b>99</b>

# Capital Investment Plan



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February 23, 2016

Significant amount of R&R: Rehabilitation & Refurbishment projects facilities are wearing out and at the end of their useful life

Upgrades are projects not at the end of the useful life, but making improvements and corrections: PCCP, ROW security

ES

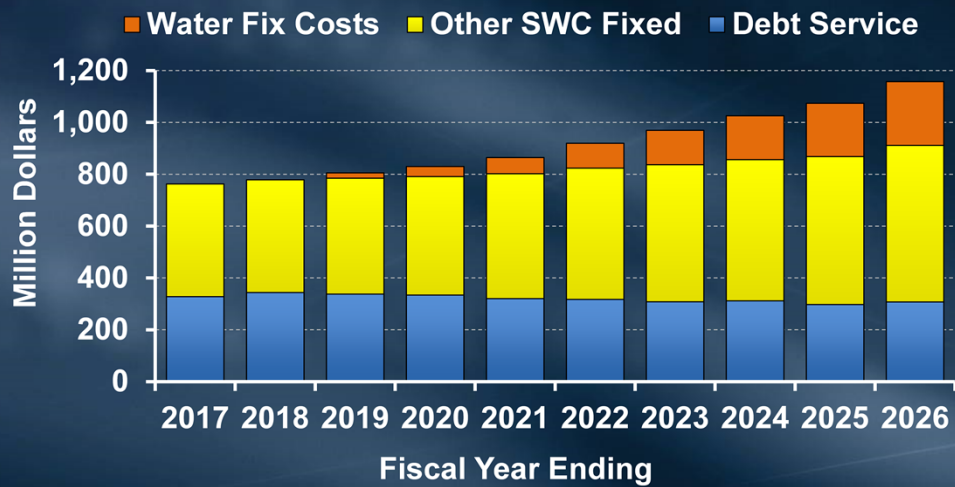
	2016-17	2017-18	2018-19	2019-20	2020-21
R&R	128	97	143	120	80
Upgrade	118	143	226	160	140
<b>Total</b>	<b>246</b>	<b>240</b>	<b>369</b>	<b>279</b>	<b>220</b>
% R&R	52%	40%	39%	43%	36%

Finance limited to \$200M

	2016-17	2017-18	2018-19	2019-20	2020-21
R&R	128	97	143	120	80
Upgrade	72	103	57	80	120
<b>Total</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>
% R&R	64%	48%	71%	60%	40%



## Fixed Costs will Increase with California Water Fix



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February 23, 2016

SWP Fixed costs = Capital Charges, OMP&R and Off-Aq Power

SWP becomes a significant portion of fixed costs

SWP is 47% of total expenditures in fy 2025/26

Important to lay the foundation now for future higher fixed costs by using PAYGo to manage future debt service commitments

## Question #3: RTS Charge and Capacity Charge

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Why is RTS decreasing , then increasing?  
Same for Capacity Charge?

The RTS and CC only recover capital financing costs: debt service and revenues for CIP. There is no O&M costs in either of these charges. As such, they are both highly sensitive to the level of PAYGo that is recovered through rates. In our last rate setting, the CIP was 100 percent funded from revenues. Our current proposal is to set PAYGo at 60 percent of the CIP, which has been scaled down. So much less revenues need to be generated to pay for the CIP, and that translates to lower costs to be recovered through the RTS and the CC.

In the first year, using reserves to mitigate rate increases; by second year, the RTS and CC are increasing to cover costs.

## Readiness-to-Serve Charge

- Recovers the capital costs of providing emergency service and available capacity
  - includes the costs of emergency storage, and available capacity on the conveyance and distribution systems to reliably deliver supplies during emergencies and major outages
  - decreasing by \$18M in 2017 due to lower PAYGo, which outweighs the increase in SWC Transportation costs
- Increasing by \$5M in 2018 due to lower draws from Reserves

PAYGo is decreasing from \$221M generated by revenues to \$120M generated by revenues

The reduction in PAYGo is spread among all rates and charges that recover capital financing costs.

RTS and CC only recover capital financing costs, so the revenues recovered by both charges will be sensitive to the overall PAYGo levels.

RTS and CC portion of revenues:

## Capacity Charge

- Recovers the capital costs of the system necessary to meet peak demands on Metropolitan's Distribution system
- Decreasing by \$9M in 2017 due to lower PAYGo, and lower peak demands
- Increasing by \$3M in 2018 due to lower draws from Reserves

## Question #4: Unrestricted Reserves Policy

## Unrestricted Reserves Policy: Water Rate Stabilization Fund

Section 5202(e) Amounts in the Water Rate Stabilization Fund shall be held for the principal **purpose of maintaining stable and predictable water rates and charges**. The amount to be held in the Water Rate Stabilization fund shall be **targeted** to be equal to the **portion of the fixed costs** of the District estimated to be recovered by water sales revenues **during the two years immediately following the eighteen-month period** referenced in Section 5202(a). **Funds in excess of such targeted amount shall be utilized** for capital expenditures of the District **in lieu of the issuance of additional debt**, or for the redemption, **defeasance or purchase of outstanding bonds** or commercial paper of the District as determined by the Board. Provided that the District's **fixed charge coverage ratio is at or above 1.2 amounts** in the Water Rate Stabilization Fund **may be expended for any lawful purpose** of the District, as determined by the Board of Directors, provided that any funds distributed to member agencies shall be allocated on the basis of all water sales during the previous fiscal year, such sales to include sales under the Interim Agricultural Water Program, Replenishment Service Program and all Full Service water sales.

### Questions regarding use of “Target”

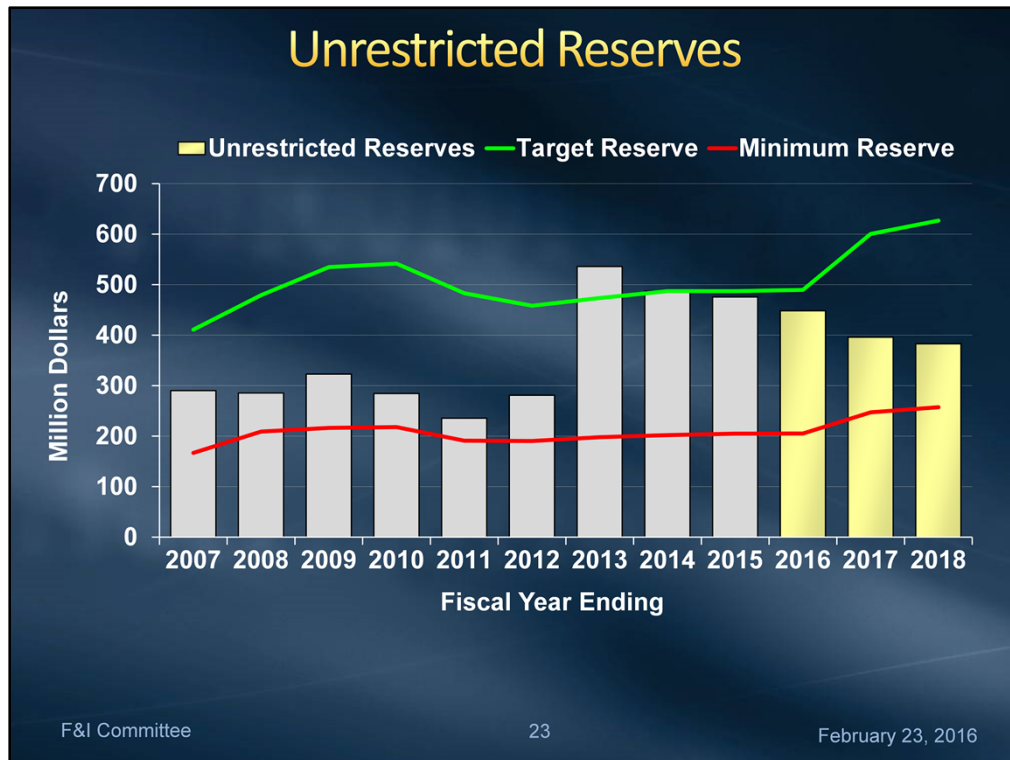
Two parts to unrestricted reserves: the minimum, which is 18 months of protection for fixed costs recovered through volumetric rates (Revenue Remainder fund)

The target, which provides an additional 24 months of protection for fixed costs recovered through volumetric rates (Water Rate Stabilization fund)

5202(e) sets out use of reserves

If over minimum but under target, use reserves to provide stable, predictable water rates and charges, as we are proposing in this biennial budget

If over target, 5202(e) explains how amounts over the target can be used



Demonstrates how policy has functioned

FY2011 and FY2012 **Reduction** in Target Reserves due to:

- Lower water sales forecast
  - Reduced supply programs ← this is most of it
  - Reduced PAYGO
- Also lower forecasted debt service
  - Lower forecasted rates

FY2017 **Increase** in Target Reserves due to:

- Increase in SWC fixed costs (OMP&R costs - Transportation Minimum, Delta Minimum)
- Lower fixed charges (RTS CC)

FY 2013: \$75M over target: \$25M to PAYGo, OPEB, and Water Transfer Fund

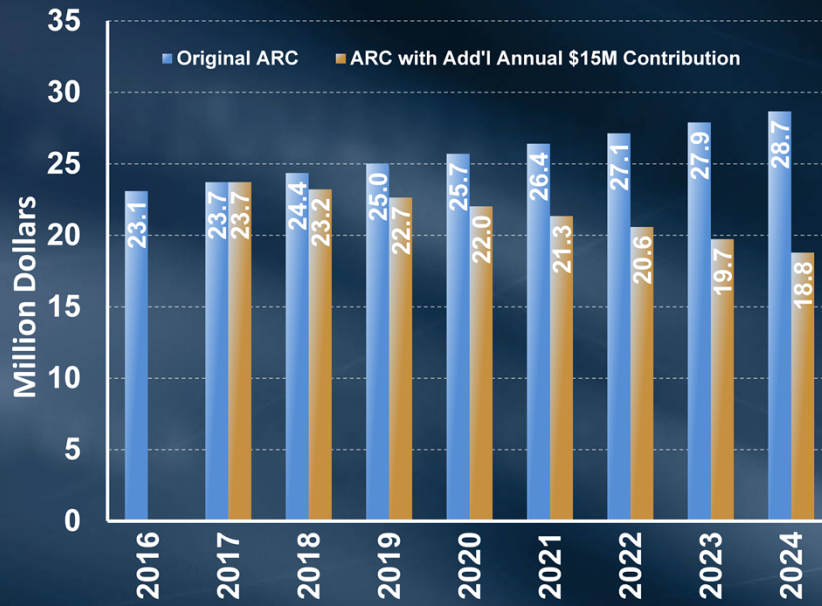
FY 2014: \$100M R&R fund & OPEB, \$232M to Water Management Fund

FY 2015: \$487M within minimum and target

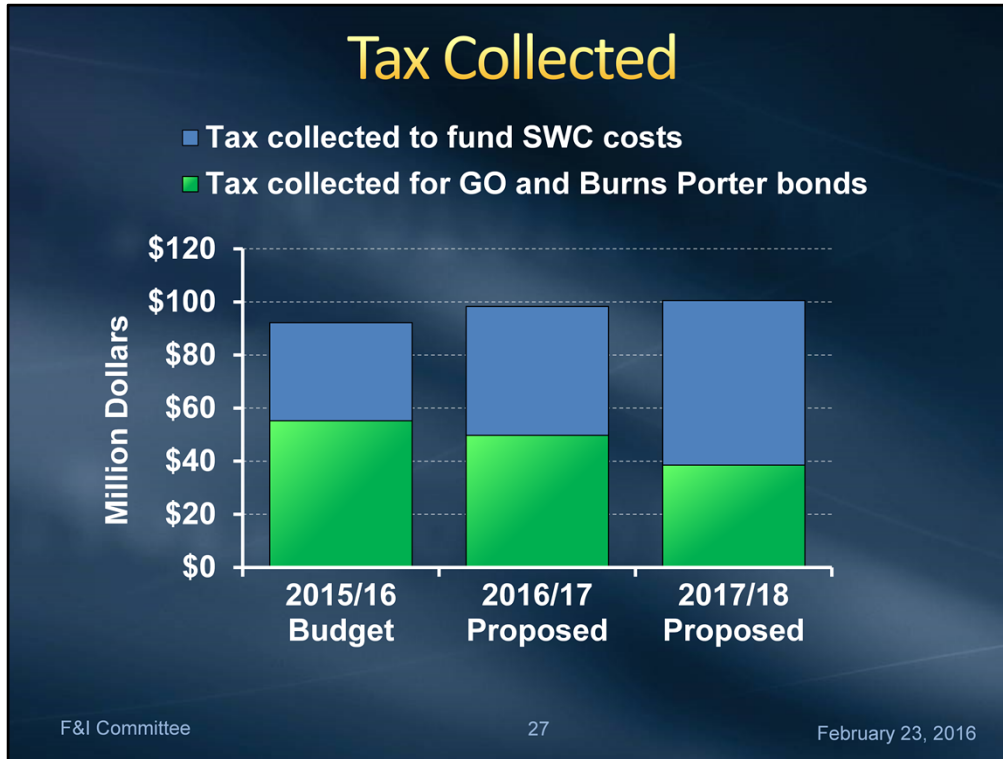
## Question #5: OPEB Prefunding



# OPEB Annual Required Contribution (ARC)



## Question #6: Ad Valorem Tax



Suspension provides \$49 million in FY 2016/17 and \$62 million in FY 2017/18 to offset SWC costs

AV tax: Essential to fiscal integrity as it :

- balances the mechanisms for funding the immediate and anticipated obligations of the SWC; helps pay for growing state water contract costs
- Helps to maintain a balance between fixed and variable revenues by providing a diverse, fixed revenue source
- provides the Board with flexibility as it funds Metropolitan's SWC obligations and other obligations
- helps to maintain Metropolitan's creditworthiness
- important to fiscal health because the AV tax helps Metropolitan equitably distribute the costs of Metropolitan's services; All property owners within Metropolitan's service area benefit from the water system that allows water to be sold and delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system

Reverting to \$124.5 limit results in rate increases in each fiscal year of 7 percent 3 percent higher in each budget year

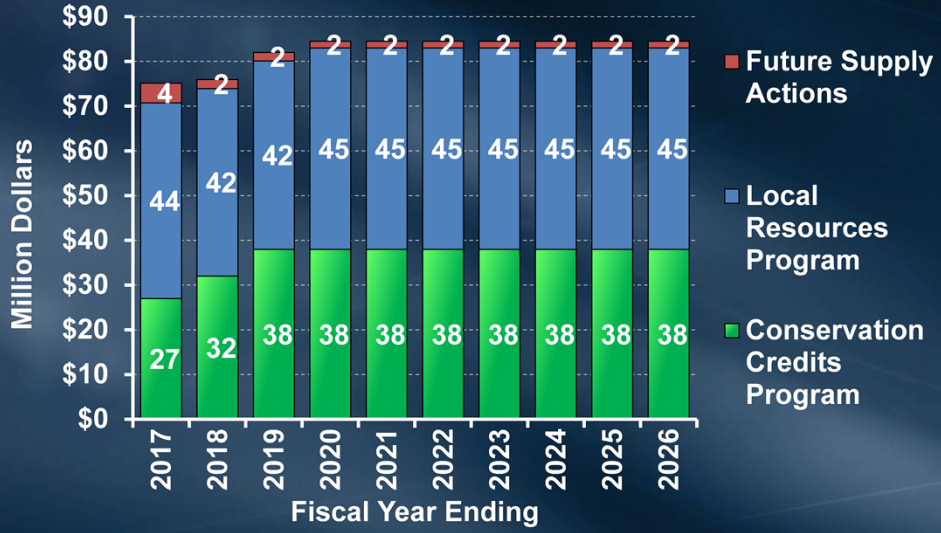
Another 1 percent needed over the 10-year forecast

Increases to Tier 1 Supply Rate, System Access Rate, and Readiness-to-Serve Charge

Important area to get direction from the F&I Committee

# Question #7: Demand Management Program

# Demand Management



# Conservation Budget

	<b>Paid*</b> FY 14/15 – 15/16	<b>Approved*</b>	<b>Outstanding Requests*</b>
<b>Devices</b>	\$57.0M	\$14.9M	N/A
<b>Member Agency</b>	\$44.2M	\$25.0M	N/A
<b>Turf Removal</b>	\$198.8M	\$43.9M	\$3.8M
<b>Other</b>	\$6.3M	\$1.2M	N/A
<b>TOTAL</b>	<b>\$306.3M</b>	<b>\$85.0M</b>	<b>\$3.8M</b>

\*As of February 1, 2016 and includes admin fees

Approved:  
Applications and member agency requests approved to proceed

Outstanding Requests:  
Applications requesting funds submitted by customers

W&S Committee

Item 6b

February 8, 2016  
February 23, 2016

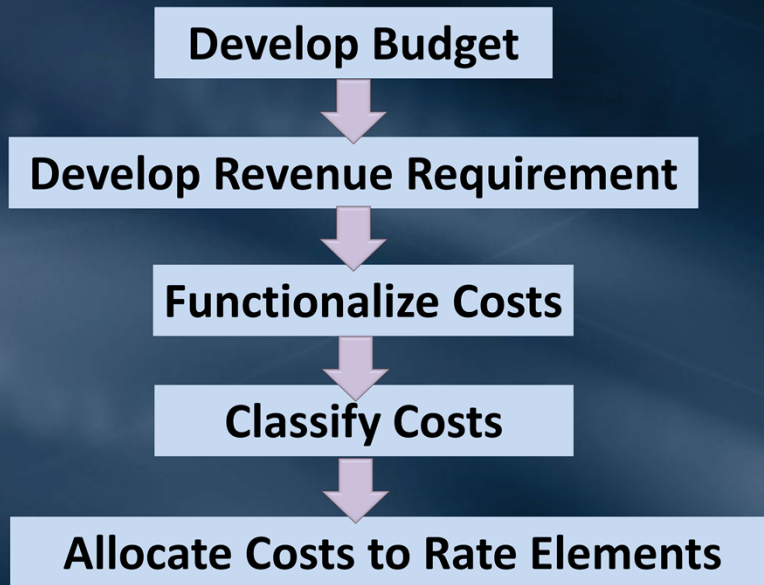
# Overview of Rates and Charges

## Estimated Water Rates and Charges

- Estimated water rates and charges support estimated revenue requirements
  - Based on Proposed Biennial Budget
- Developed using the current Cost of Service methodology for functionalizing, classifying and allocating costs to rate elements
- Once board feedback is received on Proposed Biennial Budget expenditures and revenues, a Cost of Service Report will be prepared



# The Cost of Service Process



## FY2016/17 and FY2017/18 Proposed Budget Appropriations (\$M)

	2015/16 Adopted	2016/17 Proposed Budget	2017/18 Proposed Budget
Dept. & Other O&M	391	393	395
Variable Treatment	28	24	25
SWC (w/o Variable Power)	328	435	447
SWC Variable Power	187	147	153
CRA Power	37	47	54
Supply Programs	66	79	82
Demand Management	62	75	76
Debt Service	325	328	344
PAYGO	221	120	120
<b>Total</b>	<b>1,644</b>	<b>1,649</b>	<b>1,695</b>

Totals may not foot due to rounding.

## 2016/17 and 2017/18 Estimated Revenue Requirements (\$M)

	2015/16 Adopted	2016/17 Proposed Budget	2017/18 Proposed Budget
Total O&M	\$ 419	\$ 418	\$ 420
State Water Contract	515	582	600
Colorado River Power	37	47	54
Supply Programs	66	79	82
Demand Management	62	75	76
Debt Service	325	328	344
PAYGO	221	120	120
Incr. in Required Reserves	18	65	25
<b>Sub-total expenditures</b>	<b>1,661</b>	<b>1,714</b>	<b>1,721</b>
Revenue Offsets	150	139	146
<b>Total Revenue Requirement</b>	<b>1,511</b>	<b>1,575</b>	<b>1,574</b>

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# 2016/17 and 2017/18 Estimated Revenue

Lower salaries/benefits and lower variable treatment

Merit increases, increased labor additives

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Lower salaries/benefits and VTC, offset by higher property taxes and MOU contingency.

# 2016/17 and 2017/18 Revenue Requirements

Increased Delta Charges, Increased Transportation Charges, and increased Variable Power

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Increased supplemental purchases

Increased supplemental power purchases

Totals may not foot due to rounding.

876TAF diversions in FY16

1MAF diversions in FY17 and FY18

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Full call on  
transfer

Full call on PVID, AVEK  
transfer exchange,  
AVEK storage

Totals may not foot due to rounding.

# 2016/17 and 2017/18 Estimated Revenue Requirements

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Total O&M	\$ 419	418	\$ 420
State Water Contract	515	582	600
Colorado River Power	37	47	54
Supply Programs	66	79	82
Demand Management	62	75	76
Debt Service	325	328	344
PAYGO	221	120	120
Incr. in Required Reserves	18	65	25
<b>Sub-total expenditures</b>	<b>1,661</b>	<b>1,714</b>	<b>1,721</b>
Revenue Offsets	150	139	146
<b>Total Revenue Requirement</b>	<b>1,511</b>	<b>1,575</b>	<b>1,574</b>

Increased Conservation, and Future Supply Actions

Increased Conservation, and Future Supply Actions

Totals may not foot due to rounding.

FY16 adopted budget \$20M CCP + \$42M LRP  
 FY17 prop budget \$27M CCP + 44M LRP + \$4M FSA



# 2016/17 and 2017/18 Estimated Revenue Requirements

	2015/16 Adopted	2016/17 Estimated	2017/18 Estimated
Total O&M	\$ 419	\$ 418	\$ 420
State Water Contract	515	582	600
Colorado River Power	37	47	54
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Totals may not foot due to rounding.

# 2016/17 and 2017/18 Estimated Revenue Requirements (\$M)

	2016/17	2017/18	2018/19
Total O&M			
State Water Contract	515		
Colorado River Power	37	47	54
Supply Programs	66	79	82
Demand Management	62	75	76
Debt Service	325	328	344
PAYGO	221	120	120
Incr. in Required Reserves	18	65	25
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Revenue Offsets	150	139	146
<b>Total Revenue Requirement</b>	<b>1,511</b>	<b>1,575</b>	<b>1,574</b>

Lower Fund balances

and Hydro generation offset by higher ad valorem taxes

Higher Hydro generation, and higher ad valorem taxes

Totals may not foot due to rounding.

# Estimated Water Rates and Charges

# Estimated Rate Elements

Rates and Charges Effective January 1			
	2016 Approved	2017 Proposed	2018 Proposed
Tier 1 Supply Rate (\$/AF)	\$156	\$201	\$209
Tier 2 Supply Rate (\$/AF)	\$290	\$295	\$295
System Access Rate (\$/AF)	\$259	\$289	\$299
Water Stewardship Rate (\$/AF)	\$41	\$52	\$55
System Power Rate (\$/AF)	\$138	\$124	\$132
Treatment Surcharge (\$/AF)*	\$348	\$313	\$320
Readiness-to-Serve Charge (\$M)	\$153	\$135	\$140
Capacity Charge (\$M revenues)	\$43	\$34	\$37

\*A proposal will be presented to the Board for consideration to address fixed cost recovery of Treatment costs which are currently only recovered through a volumetric rate.

## Overall Observations

- Lower projected sales in both fiscal years will result in higher volumetric rates
- Draw on Reserves in FY 2016/17 lowers rates
  - Using Reserves to mitigate rate increase in the first year
  - Consistent with Reserve policy
  - Results in higher rates in the second year even if costs and sales volumes are unchanged as the use of Reserves is reduced

## Tier 1 Supply Rate

- Recovers the costs of maintaining and developing supplies to meet member agency demands
  - Includes the costs of water facilities and programs on the SWP, the CRA, and in-basin programs
- Increasing by \$45/AF in 2017 and \$8/AF in 2018 due to increasing SWC Delta Charges and increasing supply programs costs



## Tier 2 Supply Rate

- Reflects the cost of purchasing water transfers north of the Delta
- Increasing by \$5/AF in calendar year 2017 to reflect the costs of the Yuba Accord agreement; rate unchanged for calendar year 2018
  - Water delivered in all water-year types
  - Prices established in the agreement

## System Access Rate

- Recovers the costs of Conveyance and Distribution systems, including capital costs associated with average demands, and departmental O&M
  - Includes costs of the applicable facilities on the CRA and SWP, Distribution, and Storage.
- Increasing by \$14/AF in 2017 because of higher SWC Transportation costs, which outweighs PAYGo decrease
- Increasing by \$10/AF in 2018 due to lower draws from Reserves

## Water Stewardship Rate

- Recovers the costs of the Conservation Credits Program and the Local Resource Programs, including the departmental labor, and vendor administration costs for these programs
- Increasing by \$11/AF in 2017 because of additional CCP expenditures, Future Supply Actions expenditures, and allocated A&G
- Increasing by \$3/AF in 2018 due to lower draws from Reserves

LRP+CCP+FSA increase by \$13M vs FY16 budget, or \$8/AF  
Allocated A&G adds another \$3/AF

## System Power Rate

- Recovers the costs of power to pump the water on the CRA and the SWP
  - Includes CRA power and dept. O&M, SWC variable power and Off-Aqueduct Power Facilities
- Decreasing by \$14/AF in 2017 due to:
  - lower SWC variable power costs
    - favorable markets for natural gas and renewable energy
  - partially offset by higher supplemental costs on the CRA
- Increasing by \$8/AF in 2018 due to:
  - higher SWC Variable power
  - higher CRA supplemental power purchases

## Treatment Surcharge

- Recovers the costs of the five water treatment plants, capital and departmental O&M
  - Users of treated water pay the TS
- Decreasing by \$35/AF in 2017 due to:
  - Lower PAYGo
  - Lower capital and O&M costs attributed to treatment through more accurate functionalization
- Increasing by \$7/AF in 2018 due to lower draws from Reserves
- A proposal to address recovery of fixed Treatment costs is being provided

## Readiness-to-Serve Charge

- Recovers the capital costs of providing emergency service and available capacity
  - includes the costs of emergency storage and available capacity on the conveyance and distribution systems to reliably deliver supplies during emergencies and major outages
  - decreasing by \$18M in 2017 due to lower PAYGo, which outweighs the increase in SWC Transportation costs
- Increasing by \$5M in 2018 due to lower draws from Reserves

## Capacity Charge

- Recovers the capital costs of the system necessary to meet peak demands on Metropolitan's Distribution system
- Decreasing by \$12M in 2017 due to lower PAYGo, and lower peak demands
- Increasing by \$3M in 2018 due to lower draws from Reserves

## Estimated Full Service Rates and Charges

Rate Type	2016 Approved	2017 Estimated	% Increase (Decrease)	2018 Estimated	% Increase (Decrease)
<b>Full Service Untreated Volumetric Cost (\$/AF)</b>					
Tier 1	\$594	\$666	12.1%	\$695	4.4%
Tier 2	\$728	\$760	4.4%	\$781	2.8%
<b>Treatment Surcharge*</b>	<b>\$348</b>	<b>\$313</b>	<b>(10.1%)</b>	<b>\$320</b>	<b>2.2%</b>
<b>Full Service Treated Volumetric Cost (\$/AF)*</b>					
Tier 1	\$942	\$979	3.9%	\$1,015	3.7%
Tier 2	\$1,076	\$1,073	(0.3%)	\$1,101	2.6%
<b>RTS Charge (\$M)</b>	<b>\$153</b>	<b>\$135</b>	<b>(11.8%)</b>	<b>\$140</b>	<b>3.7%</b>
<b>Capacity Charge (\$M)</b>	<b>\$43</b>	<b>\$34</b>	<b>(21.5%)</b>	<b>\$37</b>	<b>8.8%</b>

\*A proposal will be presented to the Board for consideration to address fixed cost recovery of Treatment costs which are currently only recovered through a volumetric rate.



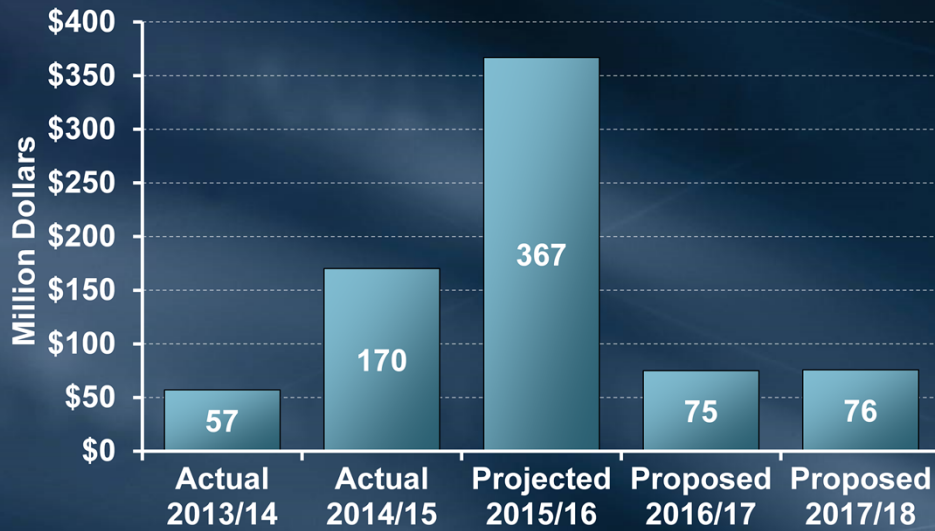
# Treated Water Cost Recovery

## Next Steps

March 7, 2016	F&I Committee, Workshop #3
March 8, 2016	Public Hearing
March 22, 2016	F&I Committee, Workshop #4
April 11, 2016	F&I Committee, Recommend Biennial Budget and calendar year rates and charges Workshop #5, if needed
April 12, 2016	Board Action, Approve Biennial Budget and Water Rates and Charges



# Demand Management Expenses



F&I Committee

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February 23, 2016

	Actual 2013/14	Actual 2014/15	Projected 2015/16	Proposed 2016/17	Proposed 2017/18
Expenses					
O&M	375,291	396,684	396,383	417,658	419,760
Debt Service	375,495	294,000	314,301	328,450	344,100
SWP	456,976	436,000	495,620	582,252	599,406
CRA Power Costs	29,622	39,600	37,854	46,605	54,378
Supply Programs	59,965	94,295	119,357	78,688	81,726
Demand Management	57,169	170,273	367,009	75,130	75,943
CIP	146,020	210,071	221,000	200,000	200,000
Total	1,500,538	1,640,923	1,951,524	1,728,783	1,775,314

# Ad Valorem Tax