EBMUD

BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607
Office of the Secretary: (510) 287-0440

Notice of Special Meeting

Long-Term
Financial Stability Workshop
Tuesday, December 13, 2016
10:00 a.m.
Training Resource Center
375 Eleventh Street
Oakland, California

At the call of President Frank Mellon, the Board of Directors has scheduled a special meeting for 10:00 a.m. on Tuesday, December 13, 2016, at 375 Eleventh Street, Training Resource Center, Oakland, California.

The Board will receive an overview of long-term financial planning concepts in preparation for the upcoming FY18 and FY19 budget and rates process.

Dated: December 8, 2016

Lynelle M. Lewis

Lynelle M. Lewis
Secretary of the District

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AGENDA
Special Meeting

Long-Term Financial Stability Workshop
10:00 a.m.
Tuesday, December 13, 2016
Training Resource Center
375 Eleventh Street
Oakland, California

(Director Lesa McIntosh will participate by telephone from 801 Commodore Drive, Richmond, California 94804)

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DISCUSSION:

1. Board Workshop on Long-Term Financial Stability (Skoda)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this Agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: December 8, 2016

MEMO TO: Board of Directors

FROM: Alexander R. Coate, General Manager ARC

SUBJECT: Board Workshop on Long-Term Financial Stability

SUMMARY

In FY15, staff presented a series of Board workshops on long-term financial stability covering financial planning, reserves, capital spending, drought impacts and rate cost-of-service analysis. As the District prepares for the upcoming FY18 and FY19 budget and rates process, staff will review financial planning concepts and drought impacts from the previous Board workshops, and relevance to the District's current financial outlook.

DISCUSSION

Staff will present two Board workshops prior to a March 28, 2017 review of the proposed FY18/19 budget and rates. The December 13, 2016 Board workshop will review the concepts from the FY15 Long-Term Financial Stability workshops, with a focus on financial planning. The second Board workshop, scheduled for January 24, 2017, will go into specific issues on the upcoming FY18/19 budget and rates.

ARC:SDS:RL

Attachment

I:\Sec\2016 Board Related Items\Committees 2016\12-13-16 Board Workshop 1\FIN - Long-Range Financial Stability Workshop 121316.docx

EAST BAY MUNICIPAL UTILITY DISTRICT

Long-Term Financial Stability Workshop FY17

Board of Directors

December 13, 2016

Workshop Agenda

- Review of Long-Term Financial Stability Goals
- Review of Financial Planning
  - O&M, Capital and Debt Service Expenses
  - Annual Revenues
  - Rate Increases and Debt Issues
- Update on the long-term financial stability goals after recent drought

Long-Term Financial Stability Goals from FY15 Workshops

- Significant growth in future capital spending will require prudent use of debt and cash funding
  - Increase revenue funding of capital from 35% to 50%
  - Increase debt service coverage ratio from 1.6 to 2.0
- Largest financial risk is the volatility in water supply that impacts water sales
  - Maintain high level of cash reserves to help address revenue shortfalls
  - Adopt a system of drought rates as part of regular rate setting process

Where Have We Been the Past Two Years?

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- Achieved the 50% revenue funded capital goal in FY16 & FY17 budget while meeting the debt coverage policy target
- To be conservative in the FY16 & FY17 financial plan, budgeted normal water sales were reduced from 166 to 151 MGD
- Making progress on financial stability goals but will be delayed by the impact of the recent drought

Financial Planning – How Operating and Capital Expenses are Paid

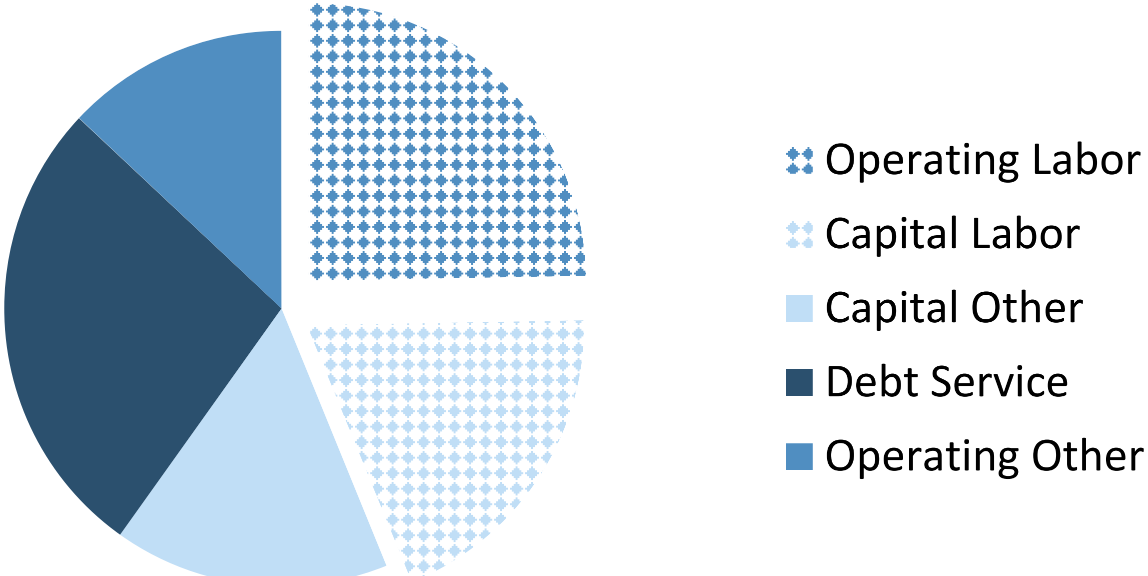
- All expenses must ultimately be paid with cash; when financial plan is created:
  - First look to annual revenues
    - Rate levels and consumption establish annual rate revenue
  - When annual revenues are not sufficient to pay for projected expenses
    - Look to reduce expenses
    - Use cash reserves or fund some capital with cash from debt proceeds
    - Relook at rate increases

Water System Expenses Capital and Operating

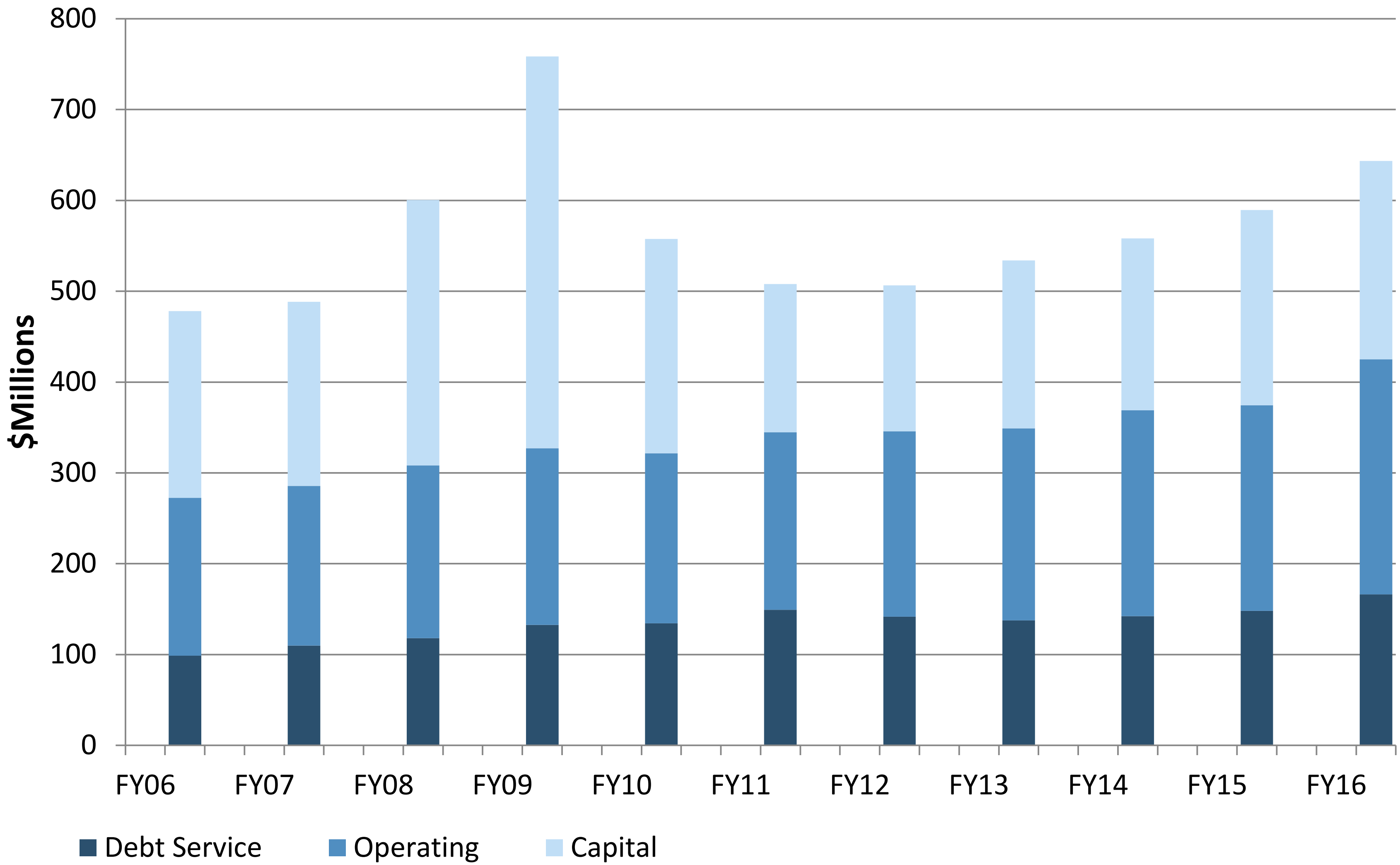
Expense Category	Operating $M	Capital $M	Total $M
Labor	154	119	273
Contracts	15	49	64
Materials	13	10	23
Equipment	14	31	45
Energy/Chemicals/Disposal	21	1	22
Misc	18	9	27
Debt Service	169	-	169
Total Expenses	$404 M	$219 M	$623 M

District Water System Expenses Labor is a Large Portion

Operating Labor	$154 M
Capital Labor	$119 M
Operating Other	$ 81 M
Capital Other	$100 M
Debt Service	$169 M
Total	$623 M



Water System Historical Expenses

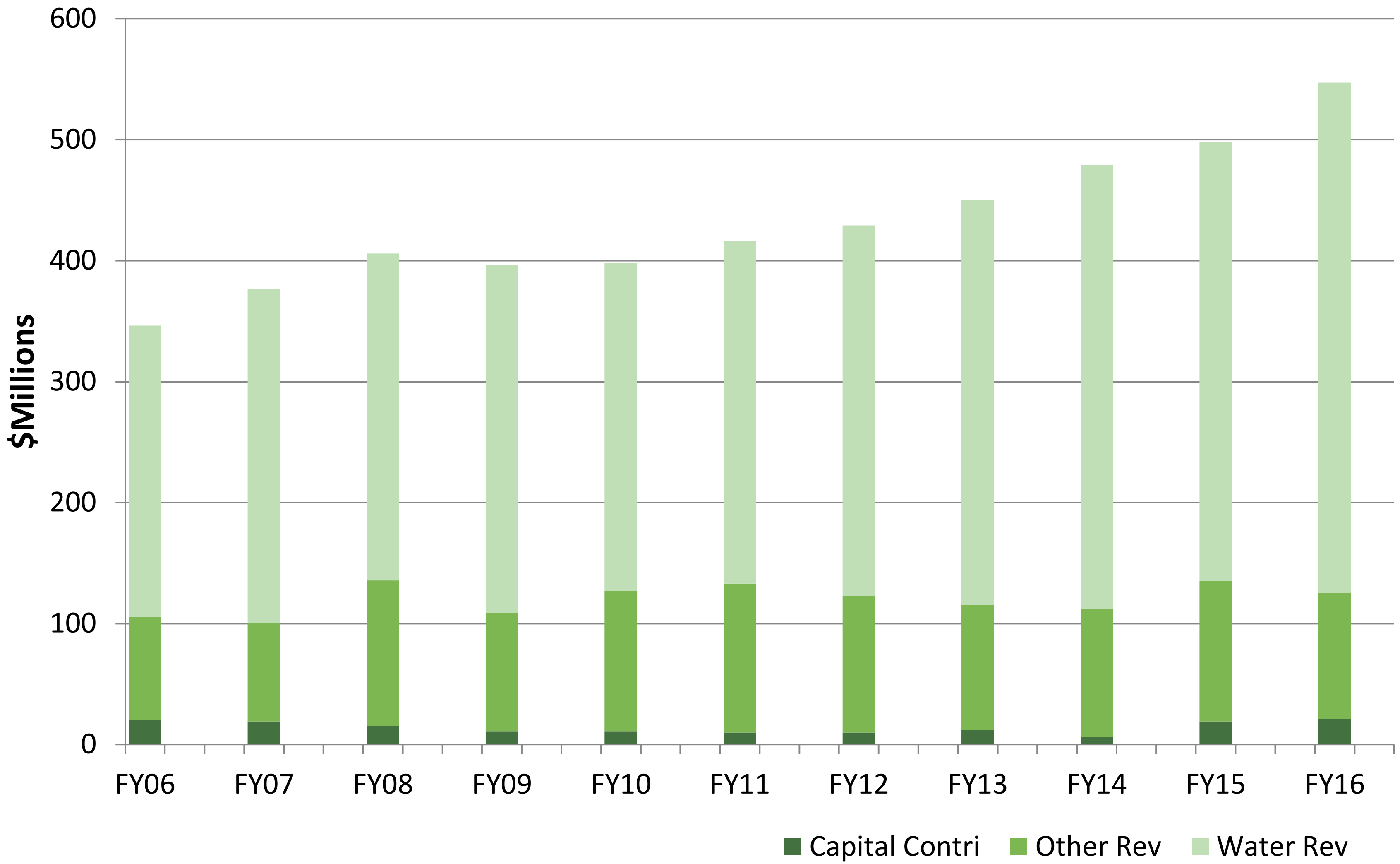


Water System Annual Revenues

80%

	$M	Funds Operating	Funds Capital	Funds Debt Service
Water rates	420	X	X	X
Taxes	25	X	X	
Contributions for Capital	25		X	
Power Sales	4	X	X	X
Reimbursements	11	X		
SCC	25		X	X
Other	17	X	X	X
<u>Interest</u>	<u>3</u>	<u>X</u>	<u>X</u>	<u>X</u>
Total	$530 M			

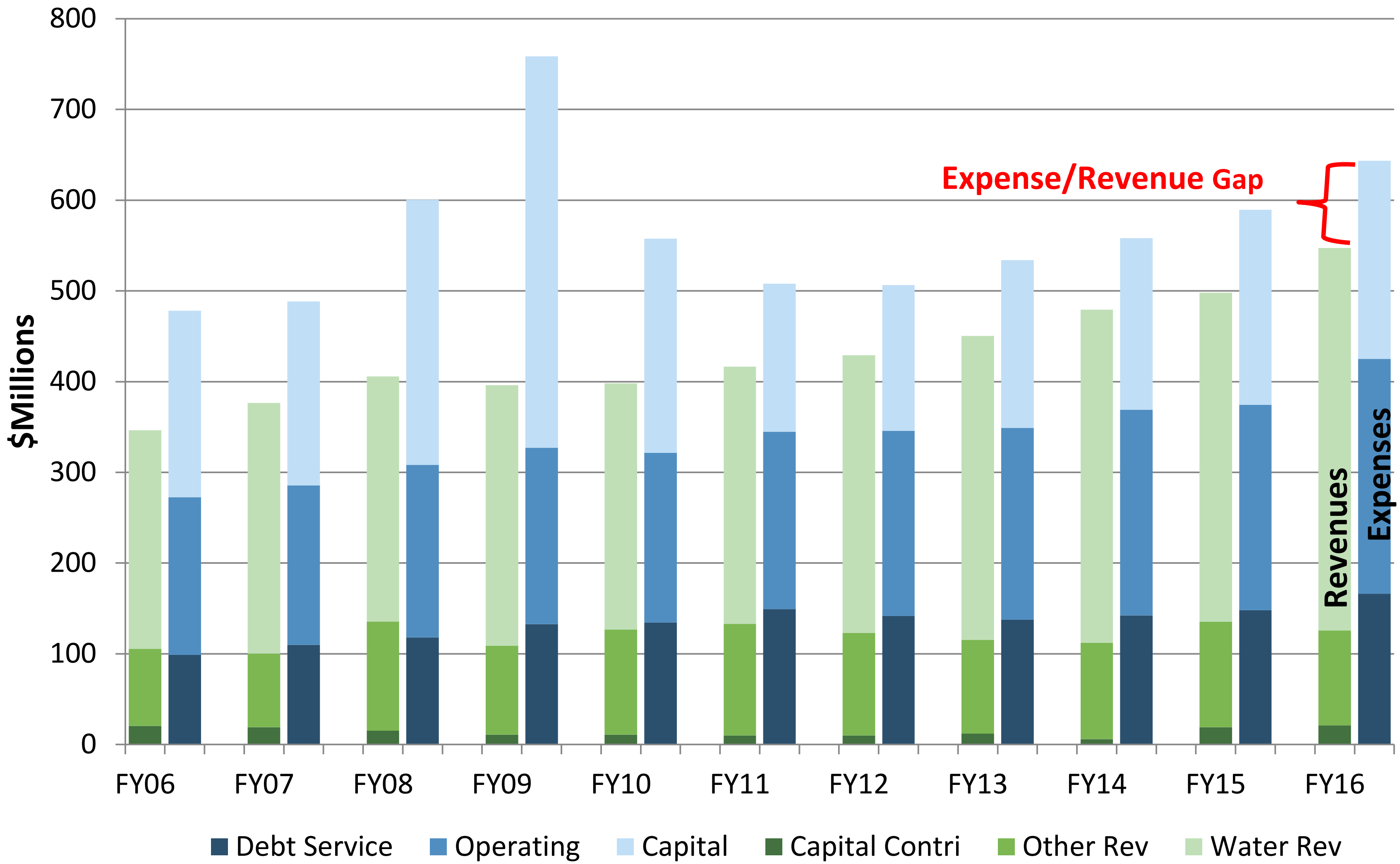
Water System Historical Revenues



Financial Planning: Annual Expenses and Revenues

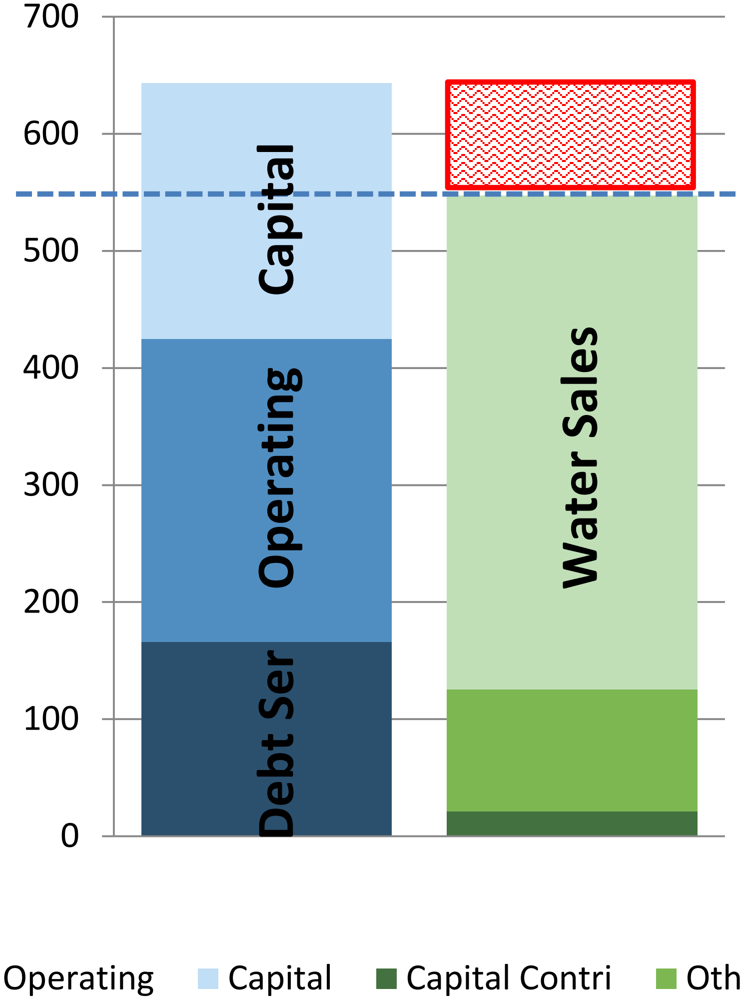
ANNUAL REVENUE $530 M		ANNUAL EXPENSES $623 M	
Water Revenue	$390 M	Operating Labor	$154 M
8% Rate Increase	$30 M	Capital Labor	$119 M
Taxes/Other	$60 M	Operating Other	$ 81 M
SCC	$25 M	Capital Other	$100 M
Contrib. for Capital	$25 M	Debt Service	$169 M
Total	$530 M	Total	$623 M
EXPENSES NOT FUNDED BY ANNUAL REVENUE = $93 M GAP			

Water System Historical Expenses/Revenues



Planned Annual Revenues Fund About 1/2 of Current CIP

Goal is to fund 50% of Annual Capital Expenses from Annual Revenues



$93 M gap can be funded with Debt or with Reserves/Additional Rate Increases

Use of Debt to Fill Planned $93 M Gap

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- Plan to issue $93 M debt to cover gap
  - Legally restricted to capital expenditures
  - Guided by policies and practices
  - Consider the type of capital projects: replacement/rehabilitation or expansion
  - Dependent on financial metrics
- Consider long-term financial stability goals on funding of capital

Issuing Debt for Expense/Revenue Gap: Policies

- Cash proceeds from debt can only be used for capital expenses
- Policy 4.02 calls for conservative use of debt to fund capital projects

Policy	Target
Debt Coverage	Minimum Target of 1.60
Percent debt funded capital	Maximum Target of 65%
Variable rate debt	Maximum Target of 25%

Debt Service Coverage Ratio (DSCR)

- Bond Indenture establishes a pledge of "Net Revenues" as security to bondholders

+	Operating Revenues
-	Operating Expenditures
=	Net Revenues

DSCR Definition

$$\frac{\text{Net Revenues}}{\text{Debt Service*}}$$

- Measures ability to meet debt service payments from current year revenues
- Primary financial metric and indicator of financial sustainability

*District policy target of 1.60 applies to Parity Debt only – does not include commercial paper or other non parity debt service

Financial Planning: Debt Service Coverage Ratio

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Operating Revenue = $505 M Operating Expenditures = $235 M

Net Revenue = 505 – 235 = $270 M

Debt Service Coverage Ratio = 270/169 = 1.60

ANNUAL REVENUE $530 M		ANNUAL EXPENSES $623 M	
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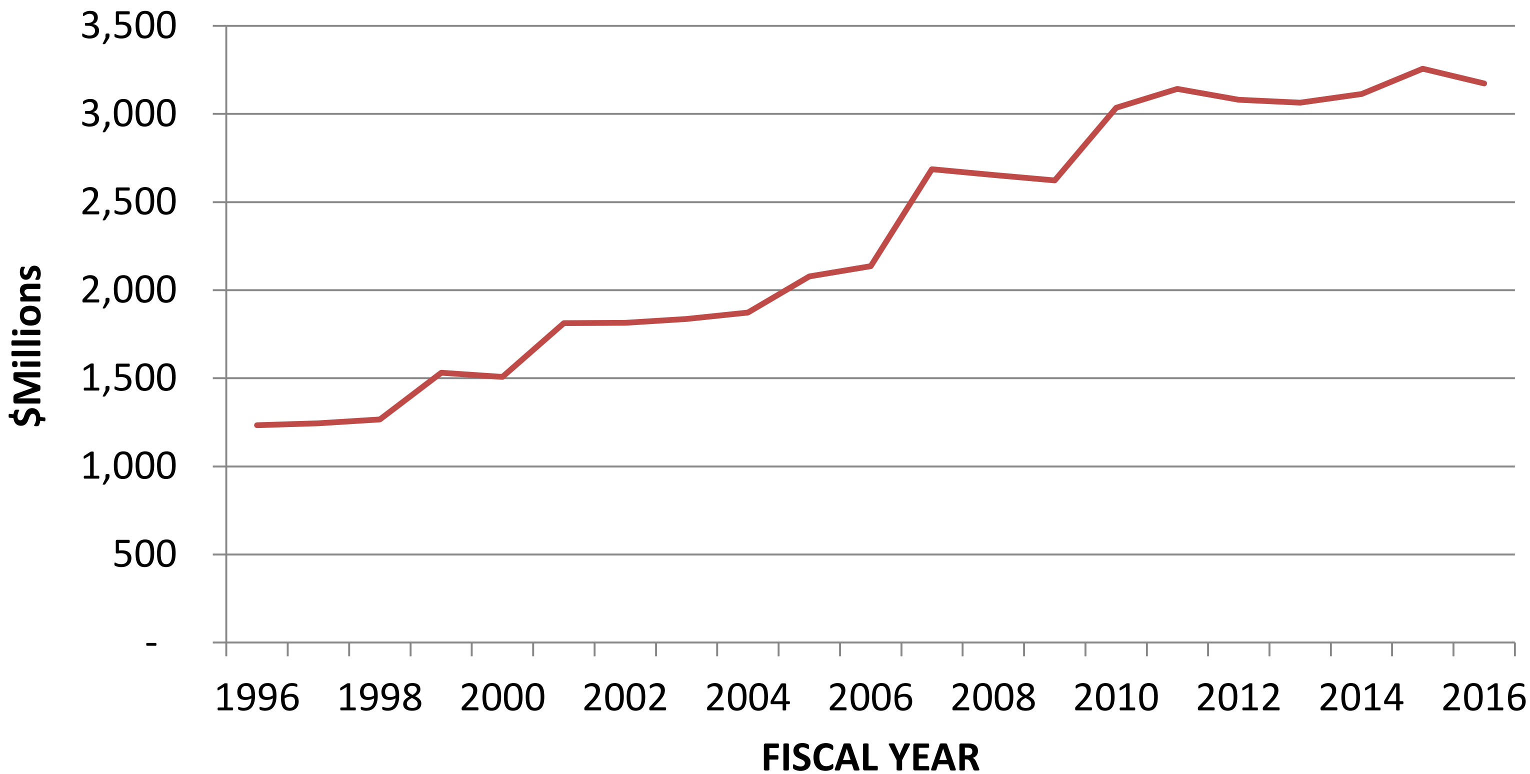
Total	$530 M	Total	$623 M
EXPENSES NOT FUNDED BY ANNUAL REVENUE = $93 M Gap			

Type of Capital Project: Financing Mix

	Debt Funding	Cash/PAYGO Funding
Description	• Issue bonds to pay project costs and repay principal with interest over 30 years	• Pay project costs out of current year revenues or cash reserves
Typical use	• Large, long-lived, “one-time” projects or projects for growth • Spread cost over current and future customers • Urgent project need	• Replacement and reconstruction costs which are regular and predictable • Covers District capital labor
Consider-ations	– Higher total cost; interest can double the cost + Mitigates near-term rate impact – Leverage reduces future financial flexibility	+ Lower total cost; more funding for capital projects – Near-term rate impact + PAYGO increases future financial flexibility

Financial Metrics: History of EBMUD Outstanding Debt

Total District debt has grown over the past 20 years from $1.2 billion to $3.2 billion



Financial Metrics: Debt-Related Financial Ratios

	Debt Ratio	Debt Service Coverage Ratio	Debt Per Capita
Definition	Outstanding Debt / Net Capital Assets	Net Revenue / Senior Debt Service	Outstanding Debt / Service Area Population
Indicates	Degree of leverage	Revenue available to pay debt service	Debt affordability
Aaa Median*	24.6%	3.0x	$349
Aa1 Median*	33.7%	2.6x	$521
EBMUD Water**	63.4%	1.66x	$1,668**
EBMUD Wastewater**	60.0%	1.75x	$601**

**Median Debt Ratio and DSCR from Moody's MFRA FY15, Median Debt per Capita from FY15 Fitch Report*
***EBMUD metrics calculated from FY15 CAFR*

Financial Metrics: Debt-Related Financial Ratios

	Highest Rating**	Debt Ratio	Debt Service Coverage Ratio	Debt Per Capita
EBMUD—Water	AAA	**63.4%**	**1.66x**	**$1,668**
SFPUC Water Enterprise	Aa3	88.2%	1.04x	$1,579
San Diego Co Water	AAA	37.4%	1.50x	$377
LADWP	AA+	70.2%	1.93x	$1,155
Metropolitan Water District	AAA	61.5%	2.71x	$240
CCWD	AA+	38.4%	1.72x	$957
Santa Clara Valley Water	Aa1	23.8%	1.59x	$256
ACWD	AAA	23.0%	3.64x	$256
Median – Aaa*		**24.6%**	**3.00x**	**$349**
Median – Aa1*		**33.7%**	**2.60x**	**$521**

**Median Debt Ratio and DSCR from Moody's MFRA FY15, Median Debt per Capita from FY15 Fitch Report for AAA ratings, Agency metrics calculated from FY15 CAFRs*

***Ratings represent the highest of each entities ratings from the three rating agencies.*

Debt-Related Considerations

- Financial metrics require context
  - District ratings higher than metrics would indicate
  - Not unlike other large urban agencies
- No “right answer” for debt metrics

Decision Factors in Issuing $93 M to Fund Expense/Revenue Gap

- Issuing $93 M will address the gap**, but:**
  - Annual debt service will increase
  - Debt service coverage ratio will decrease
  - May have to increase rates to meet coverage policy

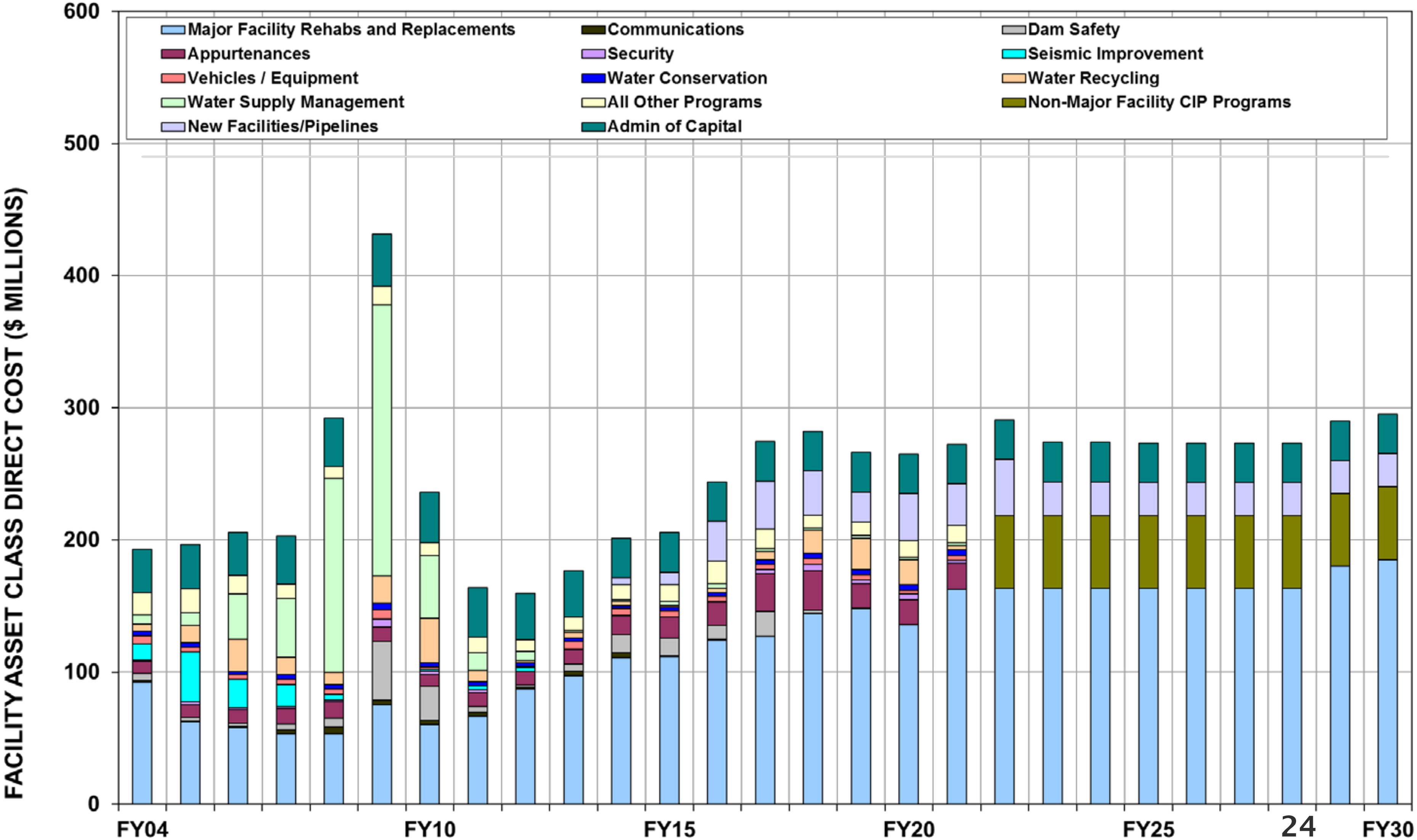
- Progress on long-term financial stability goals
  - Planned revenue funding of capital 50%
  - Planned debt coverage 1.60 increasing to 1.69 FY20 and 2.0 FY25
  - Maintained our cash balances and Rate Stabilization Fund Reserves

Future Capital Expense Increases Requires Prudent Use of Debt

- Significant growth in capital improvement plan
  - Rehabilitating aging infrastructure will be expensive and labor intensive
  - Evaluate funding approaches that can deliver the projects and meet our financial goals
- Develop long-range financial plans that look beyond the 5-10 year window
  - Debt levels will grow even higher if we don’t maintain the 50% revenue funding and move towards the 2.0 coverage long-term financial stability goals

Projected CIP Expenditures – Water

No Inflation



Debt Financing of Capital at Policy Maximum is Not Sustainable in the Long Term

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- Significant growth in capital improvement plan with focus on rehabilitating aging infrastructure
- Debt levels are high now and will increase
  - Currently over 30% of annual revenue goes to pay debt service
  - If we fund 65% of future capital with debt, debt service will grow to 45% or more of all annual revenue
  - Higher debt service will make it difficult to meet debt coverage requirements

Concerns of Growing Future Debt Service

- Debt and debt service include costs above capital itself
  - Include costs of issuing debt plus interest cost
  - Rates must be raised to cover these “extras”
  - Funds are paid to investors which might otherwise be used for capital or operating costs
- Limited financial flexibility
  - Debt service is a fixed expense
  - Must be paid every year regardless of revenue or expenditure challenges
  - Can “crowd out” other expenditures

50/50 CIP Funding Supports Financial Stability

- Targeting 50% Revenue funded CIP will keep annual expense/revenue gap smaller *but will require higher rate increases in near term*

Long-Term Financial Stability Goals from FY15 Workshops

- Significant growth in future capital spending will require prudent use of debt and cash funding
  - Increase revenue funding of capital from 35% to 50%
  - Increase debt service coverage ratio from 1.6 to 2.0
- *Increasing volatility in water supply will impact water sales*
  - *Maintain high level of cash reserves to address revenue shortfalls*
  - *Adopt a system of drought rates as part of regular rate setting process*

Sales Volume - Historical Volatility

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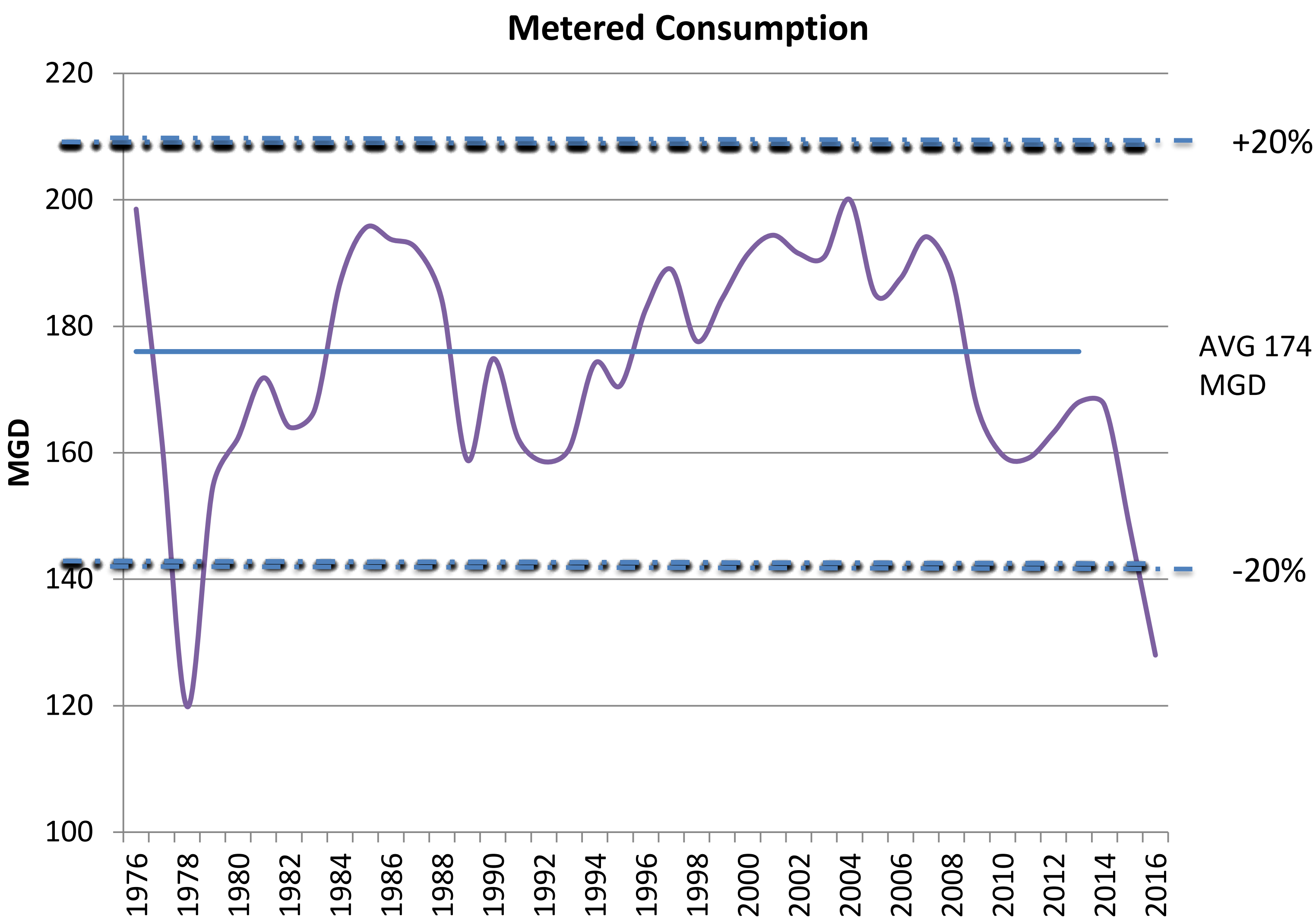

Volatility in Water Sales Disrupts Financial Plan

- Drought can reduce water sales revenue by 10% or more
  - Debt coverage may drop
  - Could have additional costs for supplemental supplies
  - Expense/revenue gap could increase above planned amount
  - Drought recovery: continued depressed demand

Volatility in Water Sales – Adopted Strategies to Address Impacts

- Drought Rates
  - Address supplemental supply costs
  - Recover some of the lost revenue during drought
  - Rapidly implemented
- Rate Stabilization Fund
  - Helps maintain debt coverage during drought and slow drought recovery
  - Must be replenished after use
- Additional rate increases during drought recovery to address lower consumption

Recent Drought Has Impacted Financial Plan

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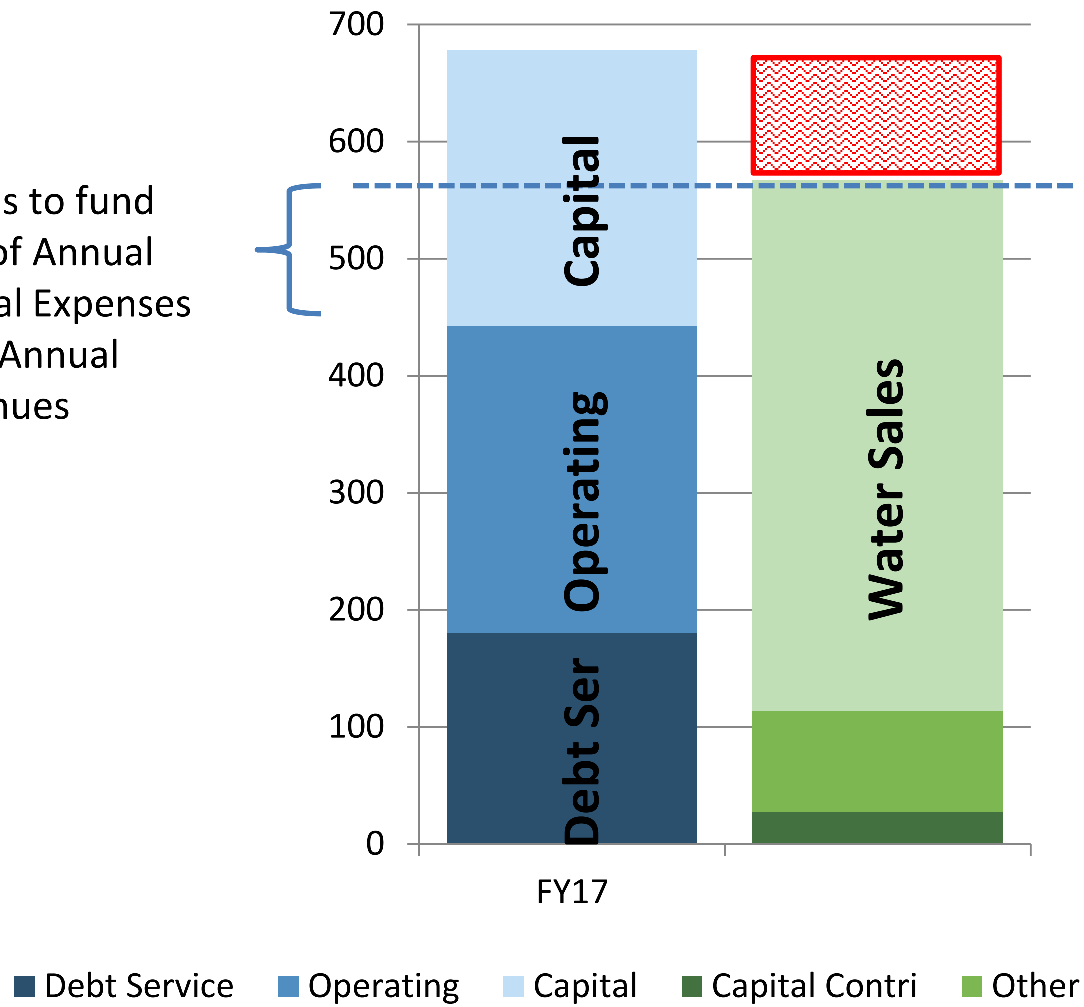
- Drought rates and reduced spending eased impact for FY16
  - Did not exceed the planned expense/revenue gap due to higher than planned SCC revenue
  - Achieved debt coverage ratio of 1.65 and 50% revenue funding
- FY17 financial plan will suffer due to lower than planned water sales
  - Planned consumption was 151 MGD, $112 M gap, 1.63 debt coverage
  - Even with potential O&M expense savings, gap may grow by $20 M to $132 M with debt coverage dropping to 1.50

Planned FY17 Expense/Revenue Gap of $112 M

Goal is to fund 50% of Annual Capital Expenses from Annual Revenues

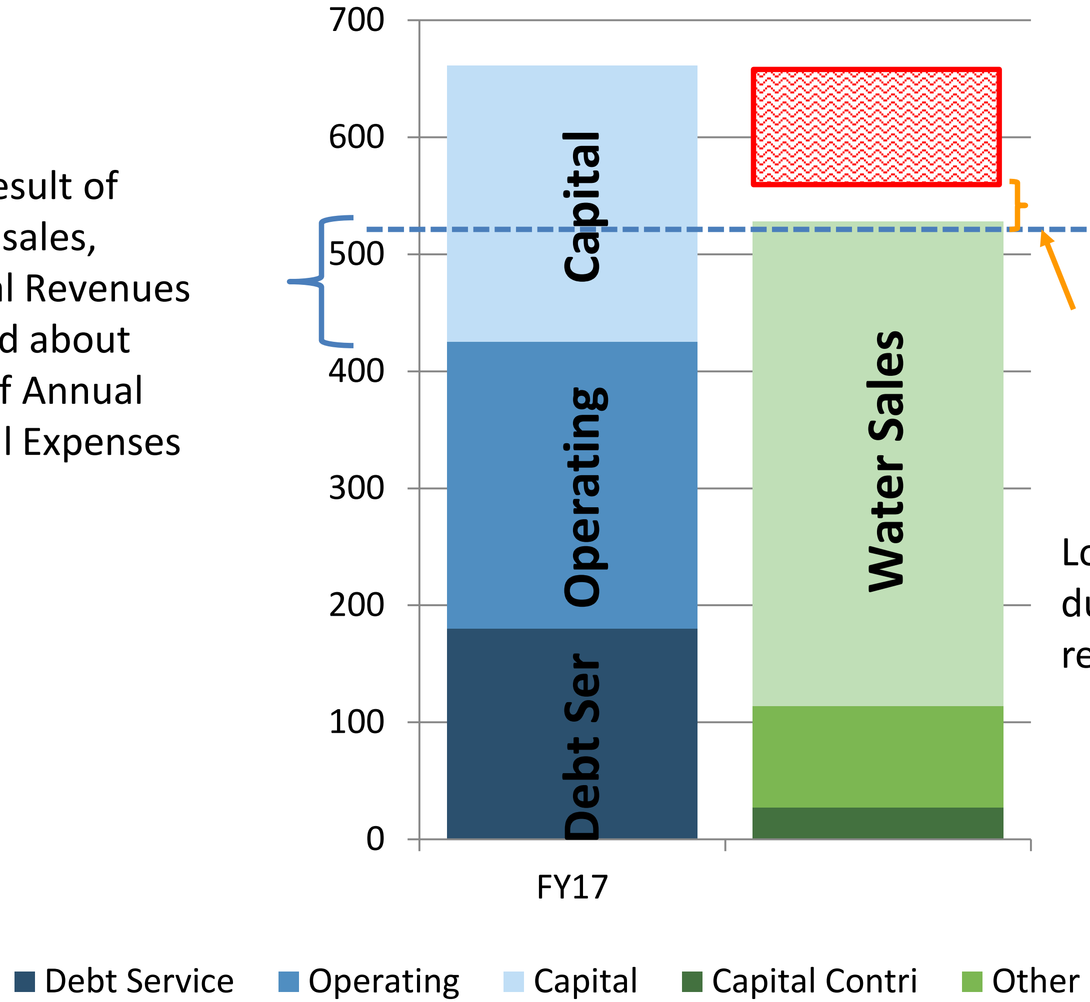


$112 M gap planned to be funded with Debt

Planned water sales 151 MGD

FY17 Expense/Revenue Gap Grows to $132 M Due to Slow Drought Recovery

As a result of lower sales, Annual Revenues to fund about 40% of Annual Capital Expenses



$112 M gap planned to be funded with Debt

Additional $20 M gap requires withdrawal from Rate Stabilization Fund

Lower water sales due to drought recovery

Financial Planning Typically Focuses on Rate Increases

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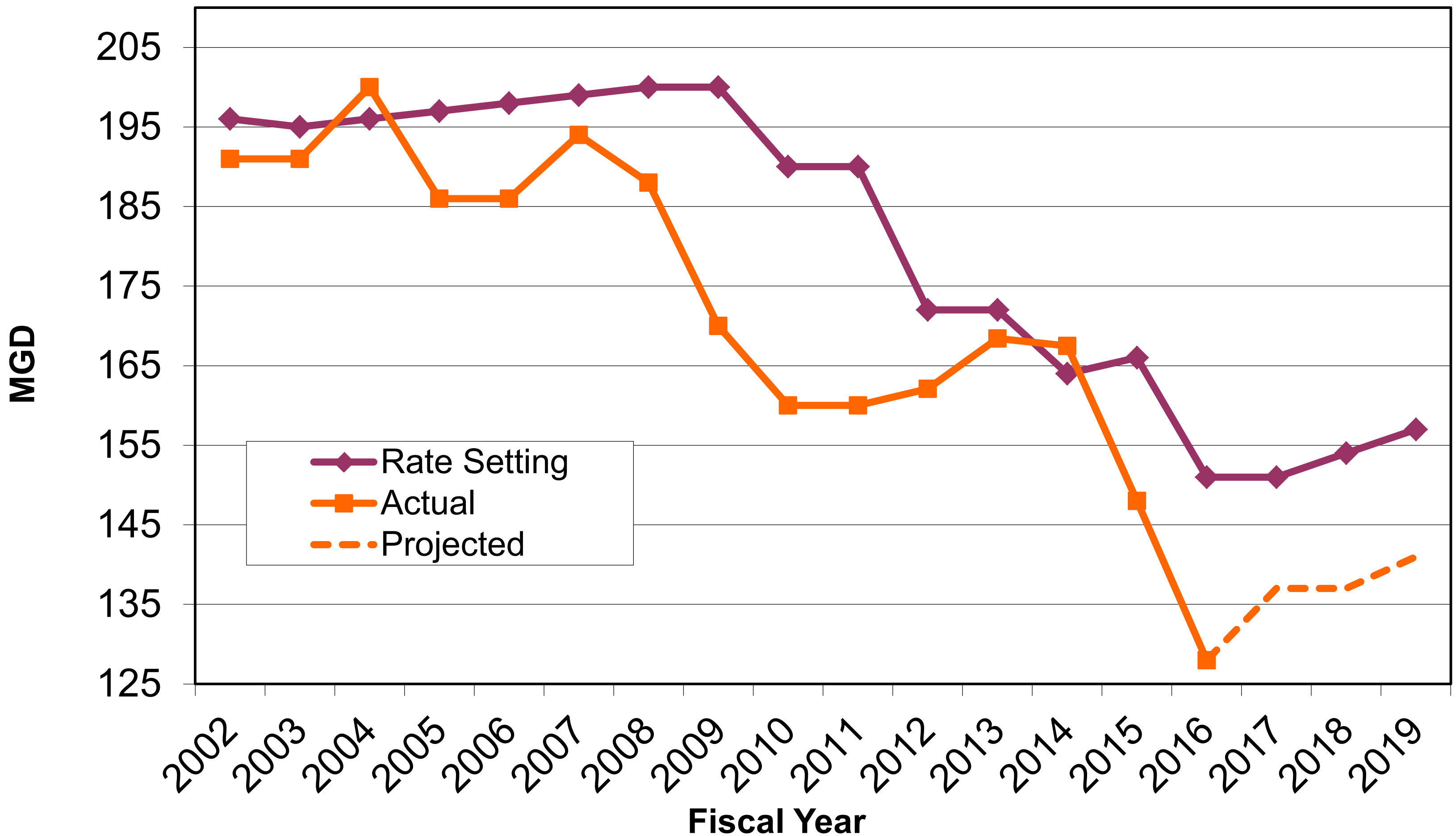
- Tendency to focus on the level of rate increase when developing the Financial Plan
  - Puts pressure to be optimistic on future water sales assumptions
  - Encourages full use of 65% debt funded CIP policy maximum
  - Pressure to stay at minimum 1.60 debt service coverage ratio (DSCR)
- Financial Plan assumes any water sales disruptions will be addressed by drought rates and Rate Stabilization Fund (RSF)

Water Sales Projections Drive Financial Planning

Past water sales projections have not been realized, resulting in revenue shortfalls



Continued Volatility in Water Sales – Expense/Revenue Gap Perspective

- The expense/revenue gap will be an ongoing component of the financial plan
- Using conservative water sales (mgd) assumptions supports the long-term financial stability goals
  - If actual water sales are greater, expense/revenue gap is further reduced – less debt funding/more revenue funding
  - If drought occurs, lost revenue impacts are reduced – less use of rate stabilization fund

Workshop Conclusions

- Financial planning – expense/revenue gap
- Long-term financial stability goals affirmed
  - 50% revenue funding of capital
  - Move to 2.0 debt coverage
  - Maintain high levels of reserves to help address unplanned shortfall
- Volatility in water sales informs financial planning
  - Impact of drought on financial plan
  - Benefits of conservative water sales assumption

January Board Workshop

- FY18 & FY19 budget and rates: What has changed
- Other topics
  - Revenue Opportunities
  - Grants and SFR Loans
  - SCC Fees