



**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 #6
(Capstone)**

Tuesday, January 13, 2015

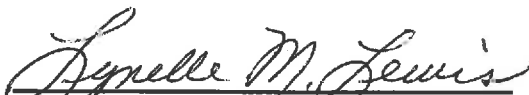
9:00 a.m.

**Training Resource Center
375 Eleventh Street
Oakland, California**

At the call of President Andy Katz, the Board of Directors has scheduled a special meeting for 9:00 a.m. on Tuesday, January 13, 2015, at 375 Eleventh Street, Training Resource Center, Oakland, California.

The Board will meet in a final workshop session to conclude the past year's work related to long-term financial stability. The workshop will bring together key findings from the year-long series and set the stage for the development of the upcoming biennial budget.

Dated: January 8, 2015


Lynelle M. Lewis
Secretary of the District



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**AGENDA
Special Meeting**

**Long-Term
Financial Stability--Workshop #6
(Capstone)
9:00 a.m.
Tuesday, January 13, 2015
Training Resource Center
375 Eleventh Street
Oakland, California**

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. Long-Term Financial Stability--Workshop #6 (Capstone) (Sandler)

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: January 8, 2015

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager 

FROM: Eric L. Sandler, Director of Finance 

SUBJECT: Long-Term Financial Stability - Workshop #6: Long Term Financial Stability Capstone

SUMMARY

One of the District's six Strategic Plan goals is Long-Term Financial Stability. At the Finance/Administration Committee meeting on November 12, 2013 staff identified a series of workshops to support this Strategic Plan goal and to prepare for the development of the subsequent two-year budget. During 2014, staff conducted five workshops addressing how the District can achieve long term financial stability goals. The workshops have resulted in Board direction to staff to revise the strategic plan, use the District's rate stabilization funds to provide a tool for mitigating drought financial impacts, adopt a staged system of drought rates, sunset the seismic improvement surcharge, and accept the findings from water and wastewater cost of service studies conducted in 2014. The workshops also enhanced transparency and understanding of key financial issues.

At the January 13, 2015 workshop, staff will review key topics covered in the workshop series. In addition staff will evaluate the impact of enhancing financial policies in the context of current challenges using a sensitivity analysis that considers key underlying variables—water consumption and capital spending. This past year the Board has made significant progress in addressing key elements of long-term financial stability. All other things being equal, more stringent financial policies have an impact on rates and charges. Given the significant challenges posed by current conditions, staff recommends maintaining existing financial policies while developing financial plans and rates to achieve stronger financial metrics over time. This approach would provide flexibility in balancing other important priorities with enhancing long term financial stability.

An overview of completed and scheduled workshops is provided below.

DISCUSSION

Workshop Topics and Schedule

On November 12, 2013 staff identified certain activities throughout the following year to support long-range financial planning and development of the upcoming biennial budget/rates package. These activities included a series of workshops on key financial policy issues and the completion

of a third-party cost of service (COS) study for the water and wastewater enterprises. The workshops are a public forum for discussing policies impacting the long-term funding needs of the District and the COS study analyzes how to properly allocate those costs to customer classes and establishes a legal basis and administrative record for the District's rates and charges. Continued drought conditions have brought a renewed focus on drought-related financial management issues. In response, the content and schedule of workshop topics was revised as follows:

- Workshop #1 (March 25, 2014): *Introduction*. At this workshop, staff provided a review of workshop topics for the coming year and proposed revisions to the Strategic Plan goal of Long-Term Financial Stability. The revisions focused on three areas including: a) the development of a long range financial plan and assessment of policies, relating to reserves and debt service coverage; b) policies regarding rates and charges; and c) enhancing transparency in financial documents. In addition staff presented the District's financial planning model and a detailed account of how financial policies (e.g. capital financing, debt service coverage, and reserves) drive revenue requirements and rates.
- Workshop #2 (July 22, 2014): *Reserves*. At this workshop, staff reviewed findings from Workshop #1 and provided information regarding the use of reserves to manage financial risk. This workshop focused on drought-related financial risks and assessed the various tools to manage those impacts—e.g. reserves, supplemental supply surcharge and drought rates. In the workshop staff addressed the adequacy of these tools to manage drought related risks in both the short and long-term.
- Workshop #3 (August 12, 2014): *Drought Financial Management/Drought Rates*. At this workshop, staff reviewed some of the findings from Workshop #2, including the financial impact of drought and the various tools used to mitigate these impacts. This workshop focused on the development of a system of drought rates that would be flexible enough to be deployed in stages depending on the severity of drought conditions and could be considered for adoption as part of the Board's FY16-17 budget and rates actions. Staff summarized the history of previous District drought rates, described the existing water rate structure, reviewed the policy objectives of drought rates, compared potential drought rate structure features, and showed the drought responses of other regional water agencies. During the workshop, the Board emphasized the importance of public engagement and outreach as drought rate options are considered. A separate series of four public meetings was conducted throughout the service area during October and November 2014.
- Workshop #4 (September 23, 2014): This workshop provided two presentations. The first discussed capital investment and financing and the second discussed drought financial management and drought rates.
 - a. *Capital Investment/Financing*—Staff provided information for Board consideration and discussion on key capital financing policies—Capital Improvement Program (CIP) funding (cash vs. debt) and debt service coverage ratios. Staff also discussed the District's Seismic Improvement Program (SIP) and

the status of the SIP surcharge. The sunset of the fixed SIP charge reduces the level of fixed water revenues from 26% to 20%. Reducing the level of fixed revenues contributes to revenue instability which is magnified during periods of drought.

- b. *Drought Financial Management/Drought Rates*—Staff provided additional information for discussion of a staged system of drought rates to recover the costs of supplemental supplies and the revenue lost due to customers' reduction in water use during drought and reviewed a plan for public engagement and outreach related to drought response and drought rates.
- Workshop #5 (November 25): *Water and Wastewater Cost of Service (COS) Study*. Raftelis Financial Consultants (RFC) was engaged to perform cost of service (COS) studies for the water and wastewater systems in conformance with state law and District policy. The COS study allocates operating and capital costs to customer classes based on both customer class usage characteristics and facility design and operations. This nexus between usage and cost forms the financial and legal basis for setting utility rates and charges. The study indicates that the District's current rates are generally in line with COS and indicated some recommended adjustments including a decrease in the water private fire charge and adjustment in some wastewater treatment assumptions to reflect current customer strength and flows. COS was also established for the District's recycled water service and for the District's tiers. Lastly alternatives to address the sunset of the District's Seismic Improvement Plan charge were reviewed as was a new methodology for collection of Wet Weather charges.
- Workshop #6 (January 13): *Long Term Financial Stability Capstone*. At this workshop staff will review accomplishments of the workshops series towards Long Term Financial Stability and present rate sensitivity analyses. Using a long-term financial forecast the analysis shows the sensitivity of both rates and charges and financial policy metrics to changes in key underlying variables—water consumption and capital spending. The workshop forms a foundation for understanding some of the dynamics and tradeoffs that will be addressed in the upcoming biennial budget.

ARC:ELS

Long-Term Financial Stability Workshop 6 Capstone

Board of Directors

January 13, 2015

Overview



- Introduction
- Review of key workshop topics
- Policy considerations and the upcoming budget

Introduction

Background



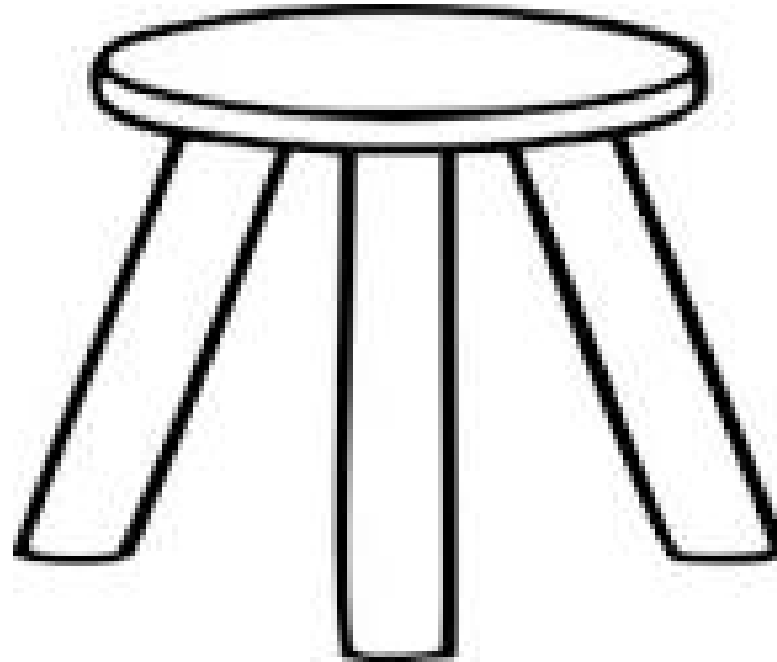
- Since 2007, supply conditions compounded by historic recession drove a focus on short-term cost containment
- FY14 & FY15 budget shifted focus to long-term needs
 - Invest in capital, restore O&M, base on more conservative assumptions
- Changing organizational focus
 - Prior two decades—investments in seismic reliability, supply diversification, and supplemental supply infrastructure
 - Next decade—investments in renewal/replacement of existing assets, and the integration, operation, and funding of supplemental supplies
- Re-evaluate strategic financial plans in light of changed conditions

Long-Term Financial Stability Workshop Objectives



- Update strategic plan goal—Long-Term Financial Stability
- Provide education and enhance transparency of financial issues
- Re-evaluate key financial policies
- Provide longer-term visibility into rates and charges
- Serve as a foundation for upcoming biennial budget

Long-Term Financial Stability



Revenue Requirement

- O&M costs
- Capital costs
- Debt service
- Financial policies

Cost of Service

- Allocate costs to customer classes based on usage characteristics

Rate Design

- Recovering costs from customers

Long Term Financial Stability Workshop Series



Workshop 1 <i>Introduction</i>	Workshop 2 <i>Reserves</i>	Workshop 3 <i>Drought Rates</i>	Workshop 4 <i>Capital Plan</i>	Workshop 5 <i>Rates</i>	Workshop 6 <i>Capstone</i>
<ul style="list-style-type: none"> • Strategic Plan Update • Review Financial Planning Model • How policies drive revenue requirements 	<ul style="list-style-type: none"> • Demand projections and variability • Funding drought costs • Fixed/variable revenues • Review/evaluate reserve policies 	<ul style="list-style-type: none"> • EBMUD drought rate history • Alternative drought rate structures • Pros/cons of alternative drought rate structures 	<ul style="list-style-type: none"> • CIP Projections • Review/evaluate capital investment policies • CIP funding: debt vs. cash • Debt Service Coverage Ratios • Seismic Improvement program 	<ul style="list-style-type: none"> • Develop Financial Forecast based on Workshops 1-3 • Review preliminary results of Cost of Service study 	<ul style="list-style-type: none"> • Review key workshop topics • Sensitivity analyses – balancing policies and rates.

Review of key workshop topics

Strategic Plan



Goals

Long-Term Water Supply

Water Quality & Environmental Protection

Long-Term Infrastructure Investment

Long-Term Financial Stability

Customer Service

Workforce Planning & Development

- Initiated 2004
- Last updated 2014
- Next update 2017

Clarified and Consolidated Strategies



	Adopted	Former
Strategy 1	Develop a Long-Range Financing Plan that sets forth the long-term funding needs of the District	Ensure Sufficient Revenues to cover the District's needs
Strategy 2	Implement water and wastewater rates and charges that are legal, fair, and equitable	Maintain a strong financial position to meet short and long-term needs
Strategy 3	Ensure Integrity, accountability and transparency in financial management	Maintain the integrity of District financial systems
Strategy 4	Implement new technologies that improve the efficiency and effectiveness of business processes	Make the best use of every dollar spent
Strategy 5	N/A	Evaluate and implement technologies that lower cost and/or improve service

How the Financial Model Works



- Revenue Requirement from Rates & Charges based on assumptions and financial policies

- + Operating Expenditures
- + Debt Service Payments
- + PAYGO Capital Expenditures
- Non-Rate Revenues
- = Revenue Requirement from Rates & Charges

Policies Drive Revenue Requirements



- Debt/PAYGO funding of capital plan
 - no more than 65% debt funding over 5-year period
- Debt Service Coverage Ratio (DSCR)
 - at least 1.60 x coverage
- Reserve level targets for each reserve type
 - working capital,
 - self-insurance,
 - workers compensation,
 - contingency/rate stabilization

Capital Financing Mix



	Debt Funding	“Pay-As You Go” or Cash Funding
Description	<ul style="list-style-type: none">• Issue bonds to pay project costs and repay principal with interest over 30 years	<ul style="list-style-type: none">• Pay project costs out of current year revenues
Typical use	<ul style="list-style-type: none">• Large, “one-time” projects• Spread cost over current and future customers• Urgent project need	<ul style="list-style-type: none">• Replacement and reconstruction costs are regular and predictable
Considerations	<ul style="list-style-type: none">• Higher total cost; interest doubles the cost; mitigates near-term rate impact• Leverage reduces future financial flexibility	<ul style="list-style-type: none">• Lower total cost; more funding for capital projects; near-term rate impact• PAYGO increases future financial flexibility

Revenue Requirement Impact



- Capital project costs increase Revenue Requirement differently, depending on funding—Debt (over time), PAYGO (current year)

\$10 million Capital Project

	Total Cost	Recoverd Over	Annual Cost
PAYGO	\$10 MM	1 year	\$10 MM
Debt	\$19 MM	30 years	\$632,000

+ Operating Expenditures

+ Debt Service Payments

← \$632,000

+ PAYGO Capital Expenditures

← \$10 million

- Non-Rate Revenues

= Revenue Requirement from Rates & Charges

Debt Service Coverage Ratio (DSCR)



- Bond Indenture establishes a pledge of “Net Revenues” as security to bondholders and sets forth a priority of payments

$$\begin{aligned} &+ \text{ Operating Revenues} \\ &- \text{ Operating Expenditures} \\ &= \text{ Net Revenues} \\ &- \text{ Debt Service} \\ &- \text{ Rate-Funded Capital*} \end{aligned}$$

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

*Or other legal use such as reserves

Reserves



- Unrestricted District cash is pooled by system
- Policy 4.02 allocates unrestricted cash to reserves
 - Established in 1984 revised in 1994, 2000, 2004
- Remainder is reserve for capital projects

Reserve	Definition
Working Capital	3 month's O&M
Self Insurance	125% estimated claims
Workers Compensation	Estimated annual claims
Contingency & Rate Stabilization <ul style="list-style-type: none">• Water• Wastewater	20% volume revenues 5% O&M expense
Capital Projects	Remaining Amount

Looked at Sizing Reserves based on Major Risk—Drought



Drought Management Tools

Supply/Demand Tools	Financial Tools
<ul style="list-style-type: none">• Voluntary conservation• Supplemental supplies (CVP, Placer, other)• Mandatory conservation	<ul style="list-style-type: none">• Rate Stabilization Fund (RSF)• Rates<ul style="list-style-type: none">-Supplemental Supply Surcharge-Drought rates

Financial Impact of Drought

Impact by Year



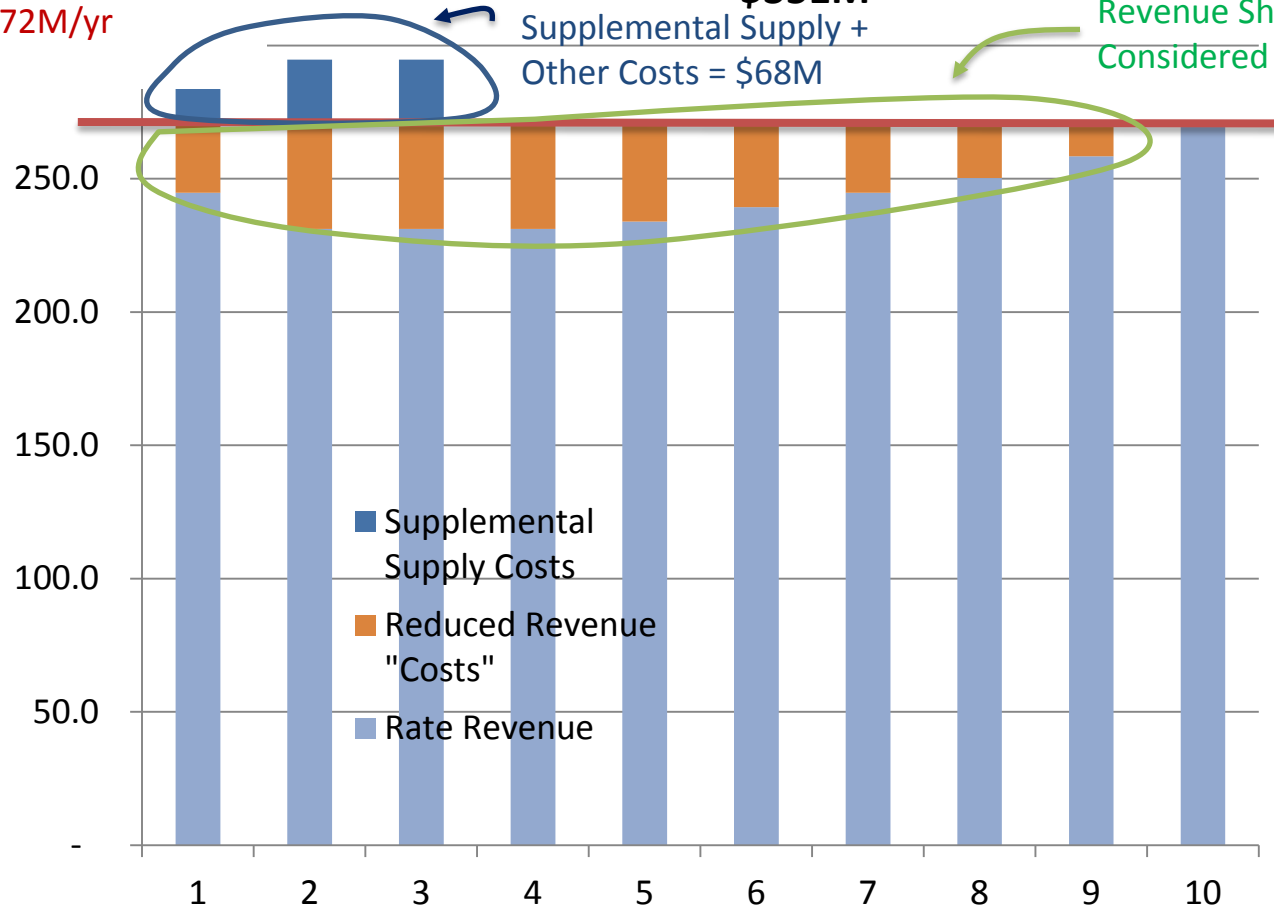
Normal Expenses
Continue @
\$272M/yr

Costs During Drought and Drought Recovery

\$351M

Supplemental Supply +
Other Costs = \$68M

Revenue Shortfall
Considered a Cost = \$283M



- 100% RSF funding would require \$351M over 10 years
- Half of costs are post-drought loss of sales due to 'drought tail'

Financial Tools

Short-Term and Long-Term Considerations



Short-Term

- Depending on severity and duration of drought, current RSF may not be sufficient to meet needs
- Deploy additional tools
 - Supplemental Supply Surcharge in FY15
 - Develop drought rates for FY16 and FY17

Long-Term

- RSF not sized to handle a multi-year drought event
- Supplemental Supply Surcharge may inhibit optimal water supply decisions
- A larger RSF could
 - Help manage through a multi-year event
 - Support optimal water supply decisions
 - Mitigate volatility in drought rates

Looked at Debt-Related Policies

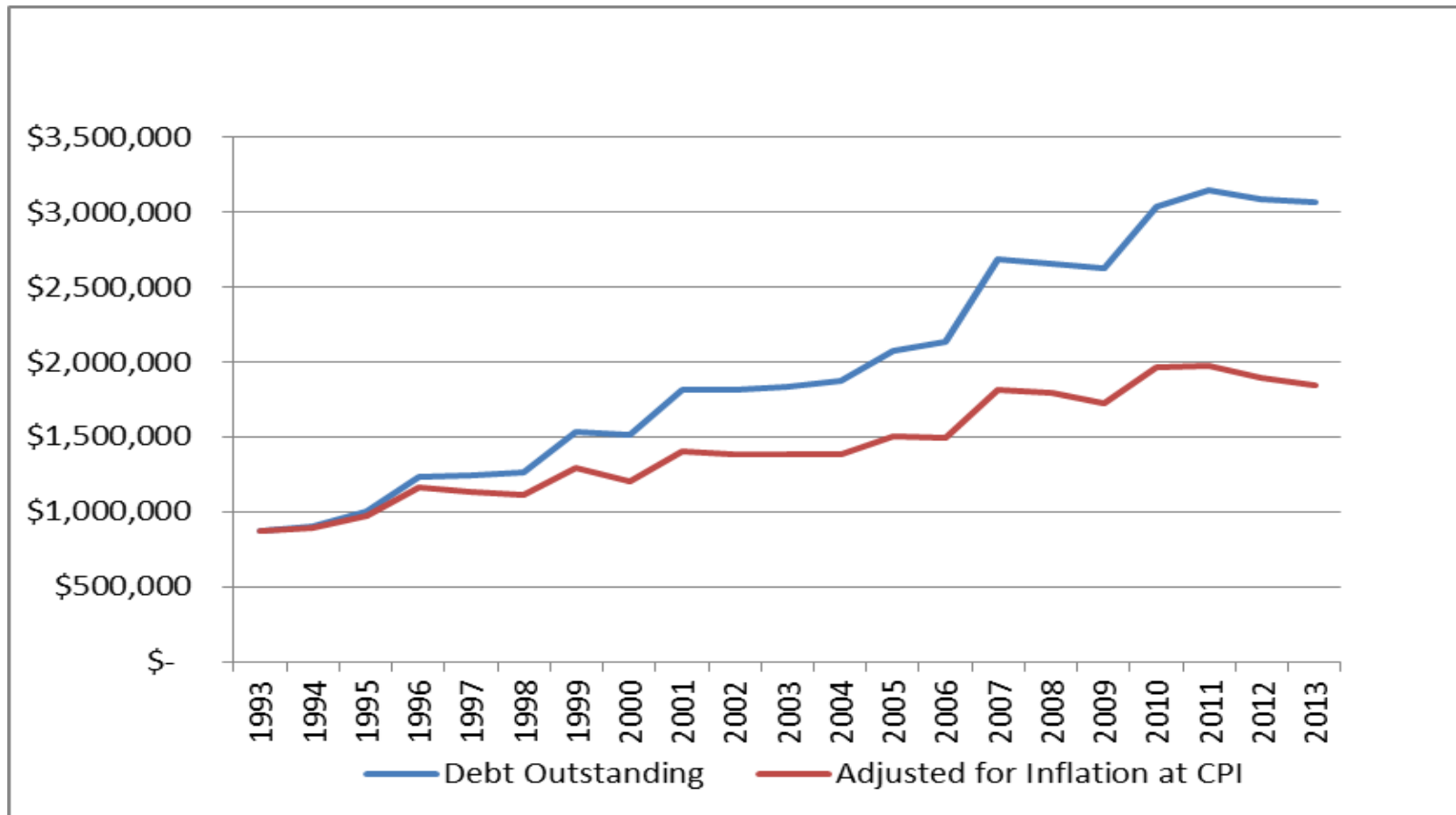


- Debt/PAYGO funding of capital plan
 - No more than 65% debt funding over 5-year period
- Debt Service Coverage Ratio (DSCR)
 - At least 1.60 x coverage

History of EBMUD Outstanding Debt



**Total District debt has grown over the past 20 years
from \$0.8 billion to \$3.1 billion**



Debt-Related Financial Ratios



	Debt Ratio	Debt Service Coverage Ratio	Debt Per Capita
Definition	<u>Outstanding Debt</u> Net Capital Assets	<u>Net Revenue</u> Senior Debt Service	<u>Outstanding Debt</u> Service Area Population
Indicates	Degree of leverage	Revenue available to pay debt service	Debt affordability
AAA Median*	25%	2.75	\$393
EBMUD Water	69%	1.71	\$1,907**
EBMUD Wastewater	61%	1.59	\$743**

*Median Debt Ratio and DSCR, Moody's FY13, Median Debt per Capita FY12 Fitch

**EBMUD Debt per Capita from Fitch FY12 report

Debt-Related Financial Ratios— Water Agencies



	Debt Ratio	Debt Service Coverage Ratio	Debt Per Capita
EBMUD—Water	69%	1.71	\$1,907
SFPUC Water Enterprise	82%	2.14	\$1,780
San Diego Co Water	62%	1.69	\$770
LADWP	61%	2.11	\$852
Metropolitan Water District	44%	2.71	\$249
CCWD	37%	1.34	\$1,229
Santa Clara Valley Water	22%	3.68	\$202
ACWD	14%	4.19	\$187
Median – Aaa	25%	2.75	\$393
Median – Aa1	33%	1.99	\$691

Source - Median Debt Ratio and DSCR, Moody's FY13, Median Debt per Capita FY12 Fitch or Agency CAFR

Debt-Related Policy Considerations



- Financial metrics require context
 - District ratings higher than metrics would indicate
 - Not unlike other large urban agencies
- No “right answer” for debt policies
- Future CIP suggests higher PAYGO funding and higher DSCR
 - Focus on replacement and rehabilitation
 - District costs are a large share of capital spending
- Phase in policy targets over time

Sunset of Seismic Improvement Program Charge



- 1994 SIP charge will collect sufficient revenue and ahead of schedule - FY16
- Sunset of fixed SIP charge (\$25M/yr) impacts fixed/variable water revenue mix

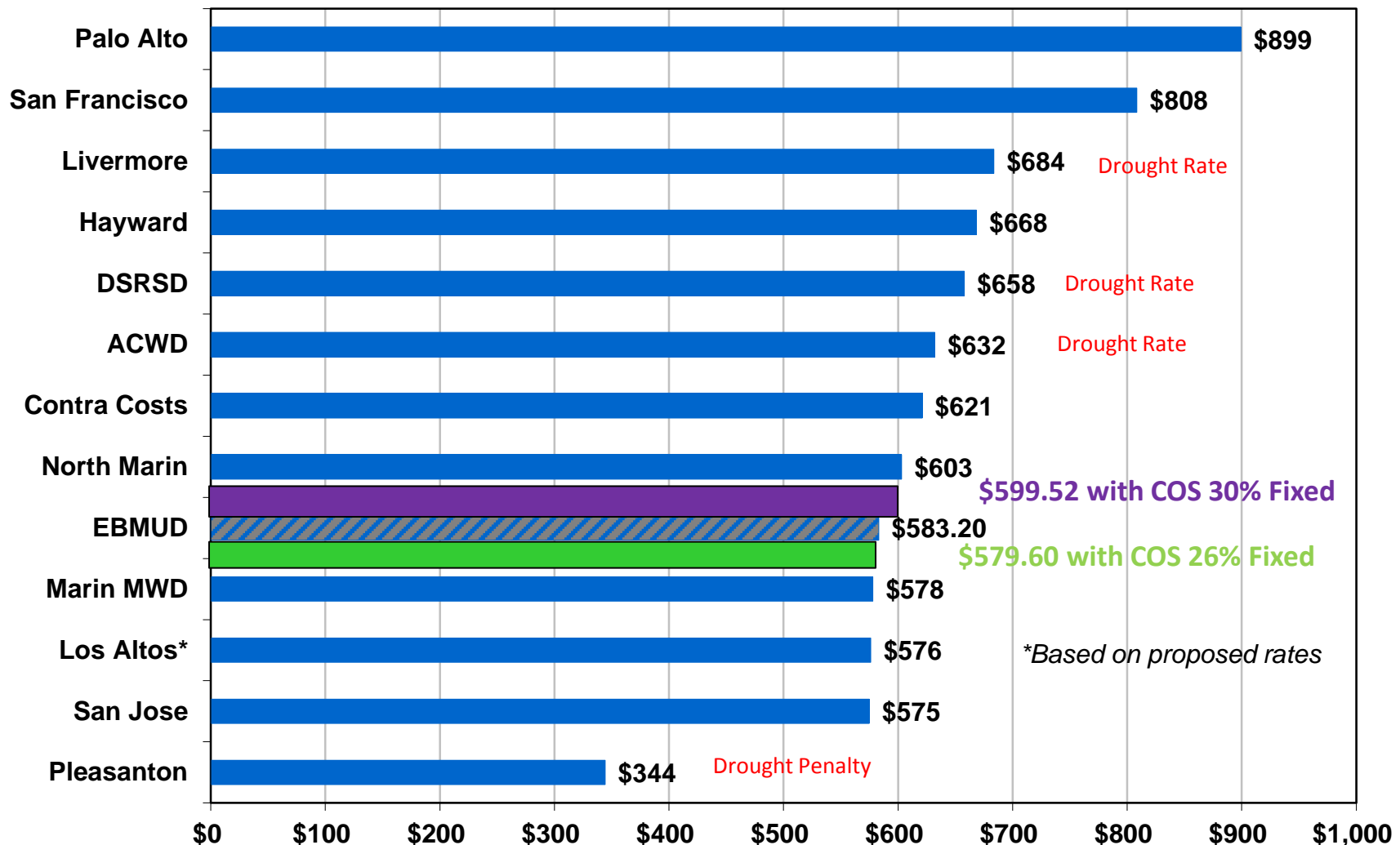
Alternative	Description/Impacts
Continue SIP surcharge	<ul style="list-style-type: none">• Add more projects to SIP• Continue to collect SIP surcharge until cost of additional projects is recovered
Replace SIP surcharge	<ul style="list-style-type: none">• Sunset SIP surcharge• As part of FY16 COS update propose a fixed Infrastructure Renewal Charge to fund increased infrastructure rehab spending• Maintain or increase level of fixed revenues
Build revenues into future rates	<ul style="list-style-type: none">• SIP discontinued and revenue loss replaced in future rates• Percent of revenue collected on fixed/variable is significant

Water Cost of Service Study



- Modified private fire cost allocation
- Confirmed elevation charge
- Established recycled water cost allocation
- Confirmed SFR tier break points
- Established cost of service basis for SFR tiered rates
- Sunset of SIP - reviewed three fixed revenue alternatives
 - 20%
 - 26% - current
 - 30%

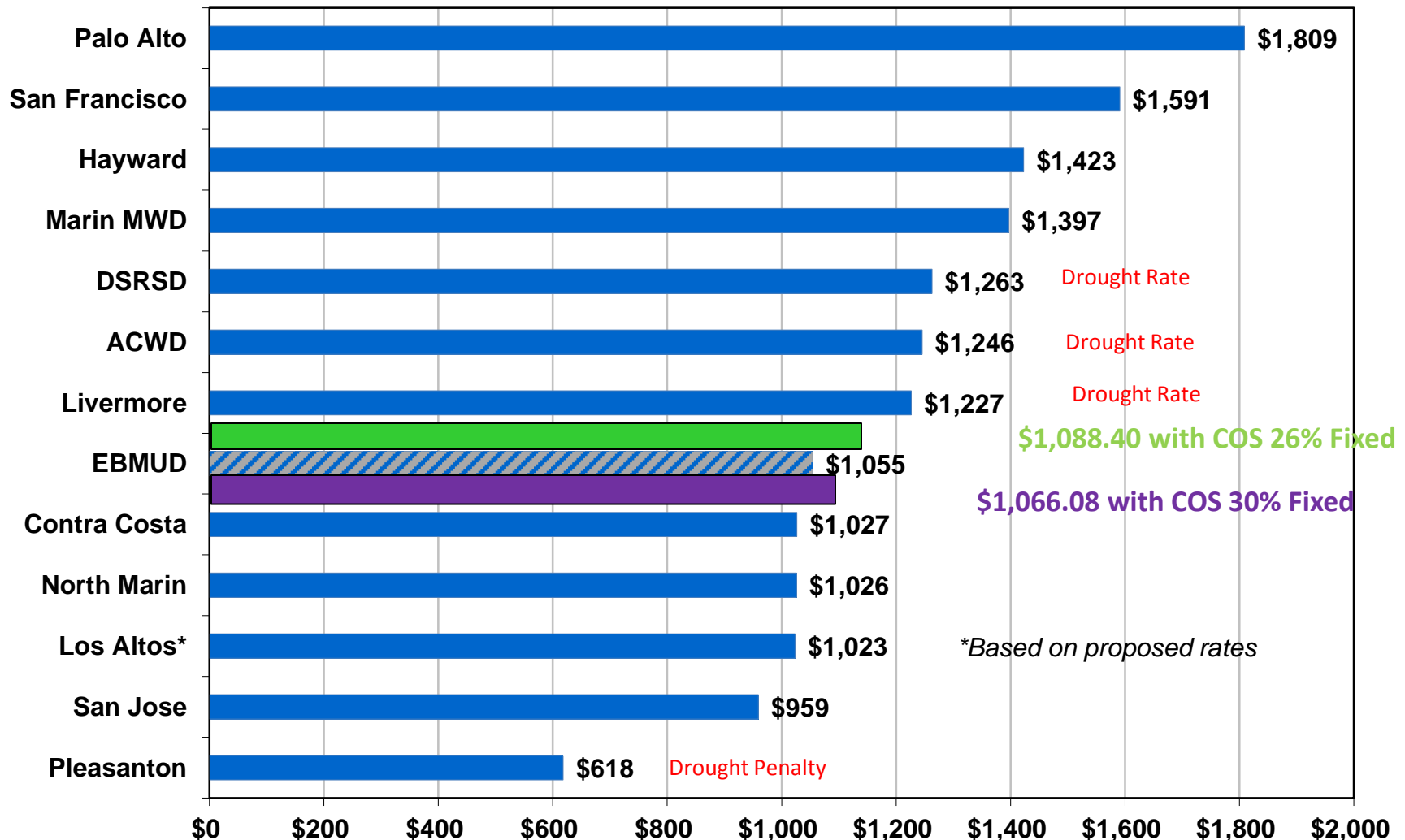
Comparative Residential Water Charges: Current, COS 26% Fixed, COS 30% Fixed *Annual Charges for 10CCF/Mo – Effective 12/1/14*



Comparative Residential Water Charges:

Current, COS 26% Fixed, COS 30% Fixed

Annual Charges for 20CCF/Mo – Effective 12/1/14



Wastewater Cost of Service Study



- Treatment Charge
 - Modified domestic strength (residential and commercial) concentrations and average SFR wastewater flow to reflect reductions in flow seen at the plant
- Wet Weather Charge
 - Modified allocation of wet weather charge given program has shifted towards Infiltration/Inflow

Long Term Financial Stability Accomplishments



- Enhanced transparency and understanding of key financial issues
- Revised strategic plan to include (LRFP, COS, Transparency)
- Improved RSF mechanics to mitigate drought financial impact
- Developed a staged system of drought rates
- Decision regarding sunset of seismic charge
- Conducted and reviewed findings of two COS studies

Long Term Financial Stability— Open Issues



- Policy 4.02

- Maximum 65% debt funding of capital plan
- Minimum DSCR of 1.6x
- Minimum reserve levels

Rate Stabilization Funds

- Water – 20% of annual volumetric revenue
- Wastewater – 5% of annual O&M

Policy considerations and the upcoming budget

Where We Were—Prior Budget Financial Projections



	Adopted		Projected		
	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Water	9.75%	9.5%	8.0%	7.0%	5.0%
Wastewater	9.0%	8.5%	5.0%	5.0%	5.0%

- Reduced water sales forecast
- Funded 47 additional positions in FY14
- Increased capital funding by \$150M over 5 years
- Reduced debt funding of capital to 40% over 5 years
- Achieved 1.8 x DSCR by 2018

Where We Are Now—Balancing Changed Conditions

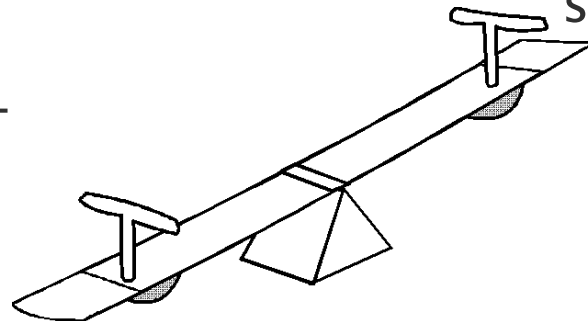


Upward Pressure

- Drought impacts
 - Reduced consumption
 - Supplemental supplies
- More information on infrastructure replacement
 - Distribution pipeline (10 to 40)
 - Other asset classes
- Address wastewater program requirements
 - Consent decree
 - Food waste
 - Nutrient regulation
- Address deferred IT investments

Downward Pressure

- Rate increases of past two years
- Debt refinancing has reduced out-year debt service
- Increased R2 revenues
- Economic growth in the service area
- Benefit cost increases slower than projected



Adopting more conservative policies such as:

- Increased levels of cash funding of capital
- Higher DSCR
- Higher reserve levels

can have significant rate impacts.

Understanding the Balancing Act



- In context of a significant reduction in water consumption from drought response
 - Continue to address operational needs and increased infrastructure investment; and
 - Make progress on financial policy goals

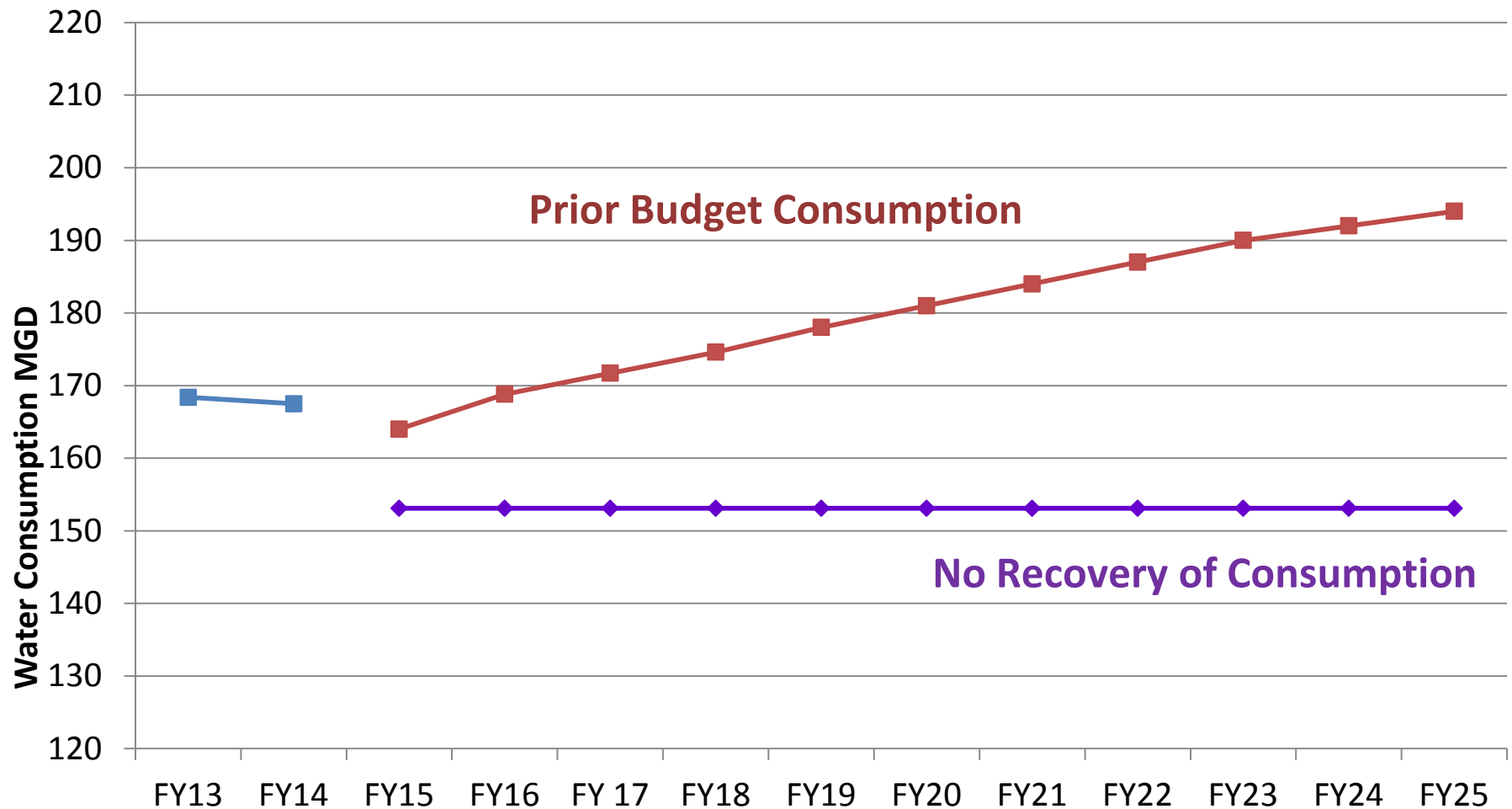
Sensitivity Analysis



- Start with FY14/15 budget projections and extend to 10-years
- Review how rates and policy objectives are impacted by changing two key assumptions:
 - Water consumption
 - Increased capital spending

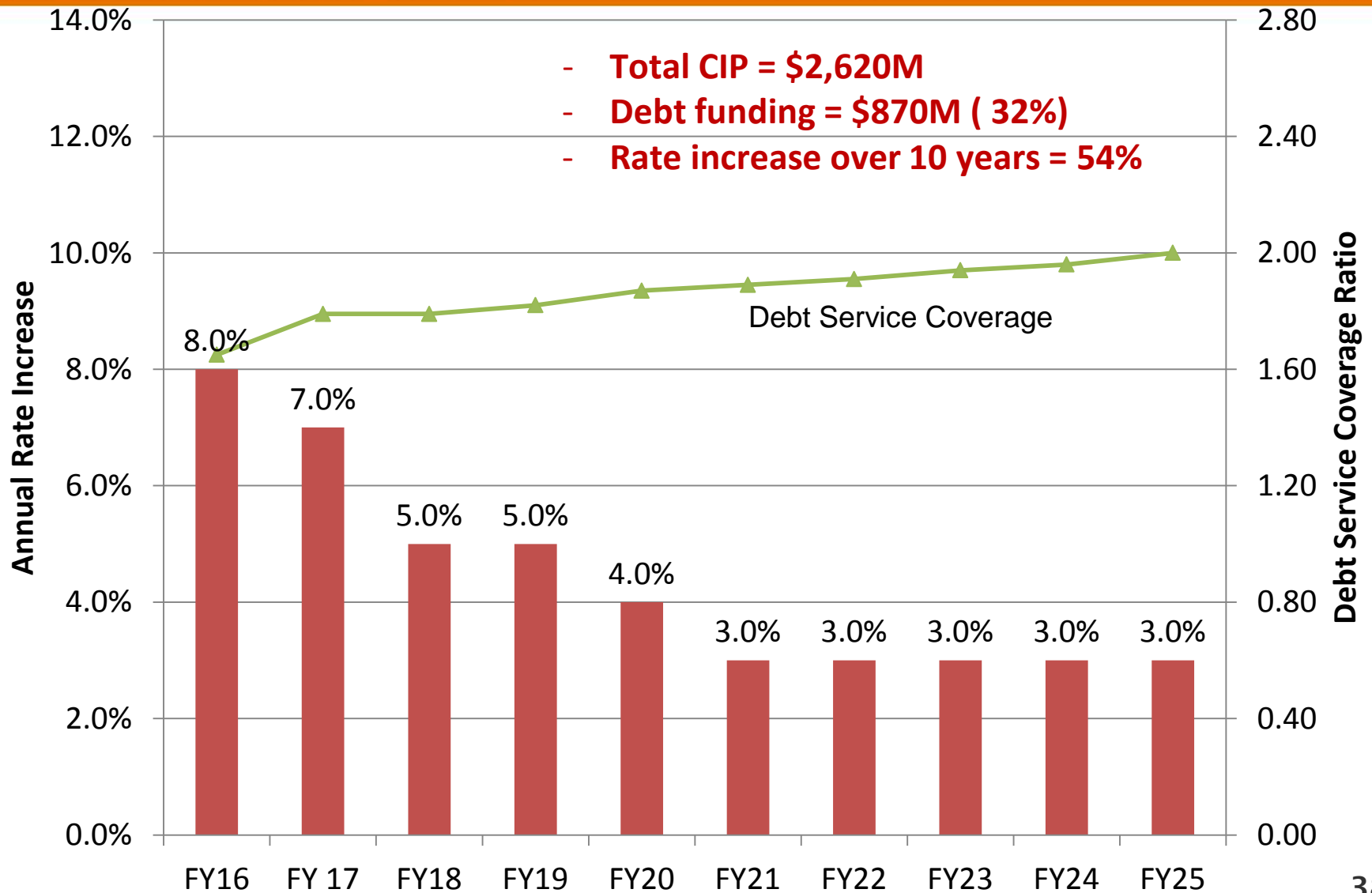
Note: Assumptions other than water consumption and capital spending remain the same as prior budget forecast.

Water Consumption – Most Significant Budget Variable



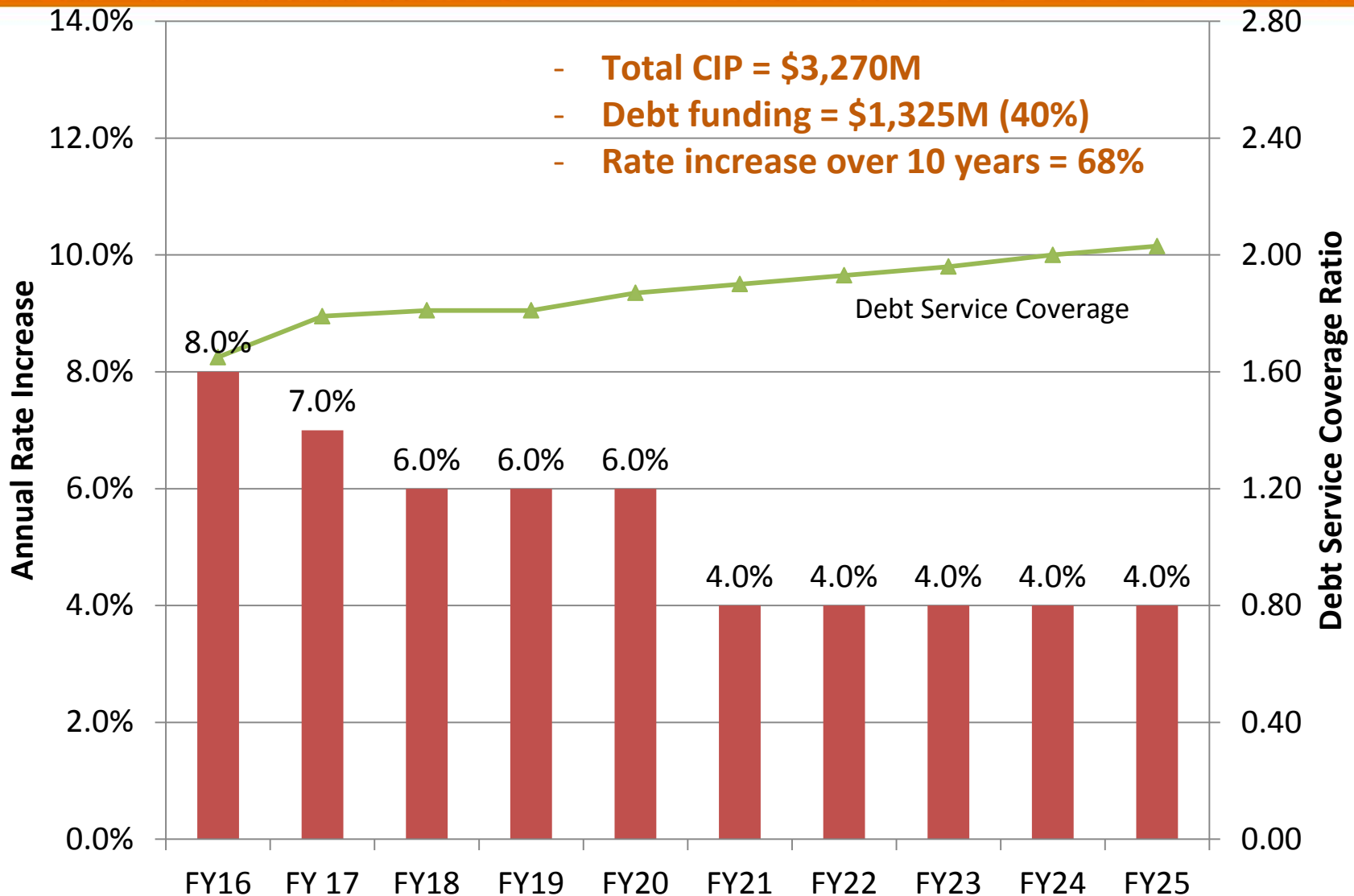
FY14/15 Budget Projections (Water)

Extended to 10 Years



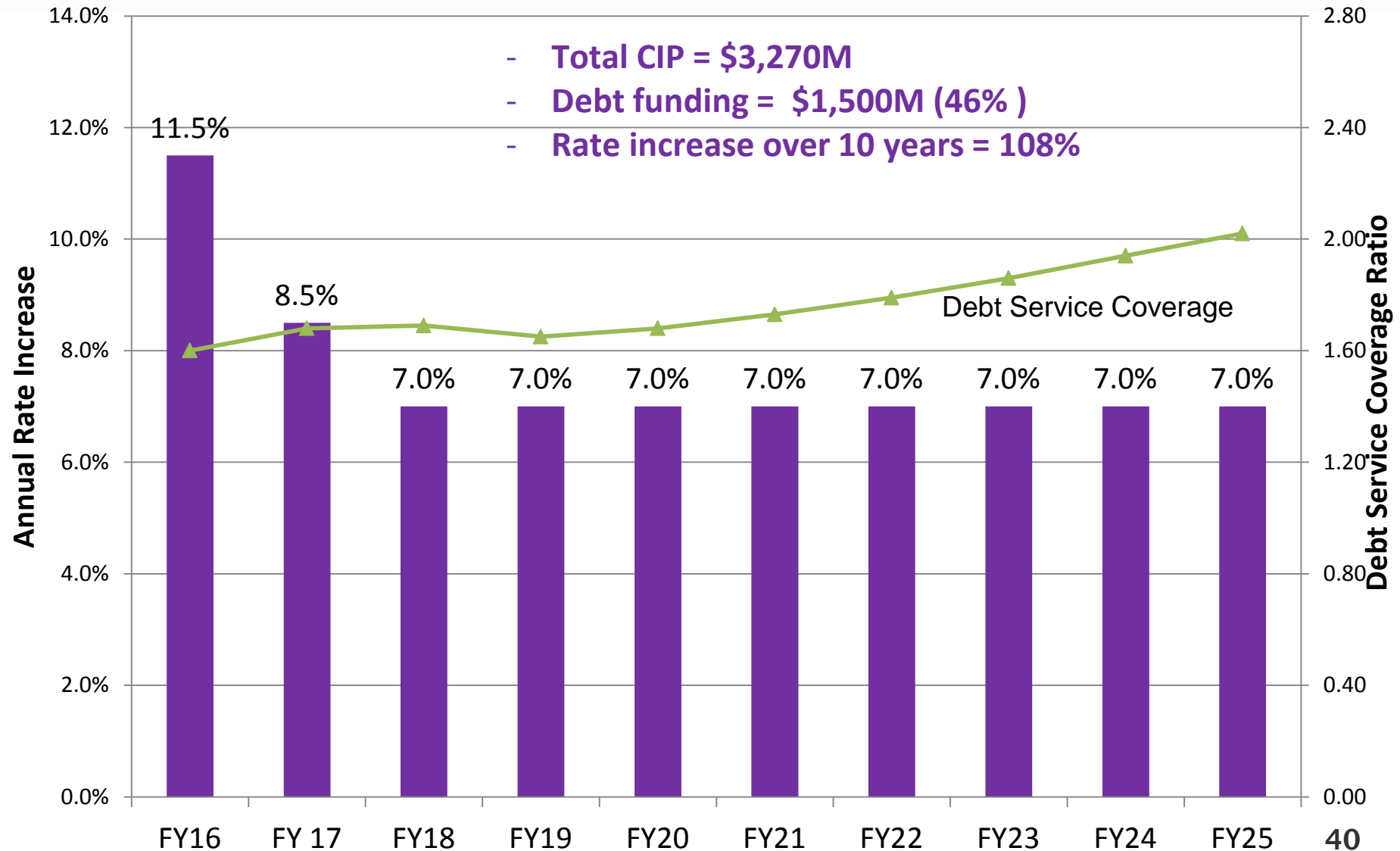
FY14/15 Budget Projections (Water)

+ 25% Higher CIP

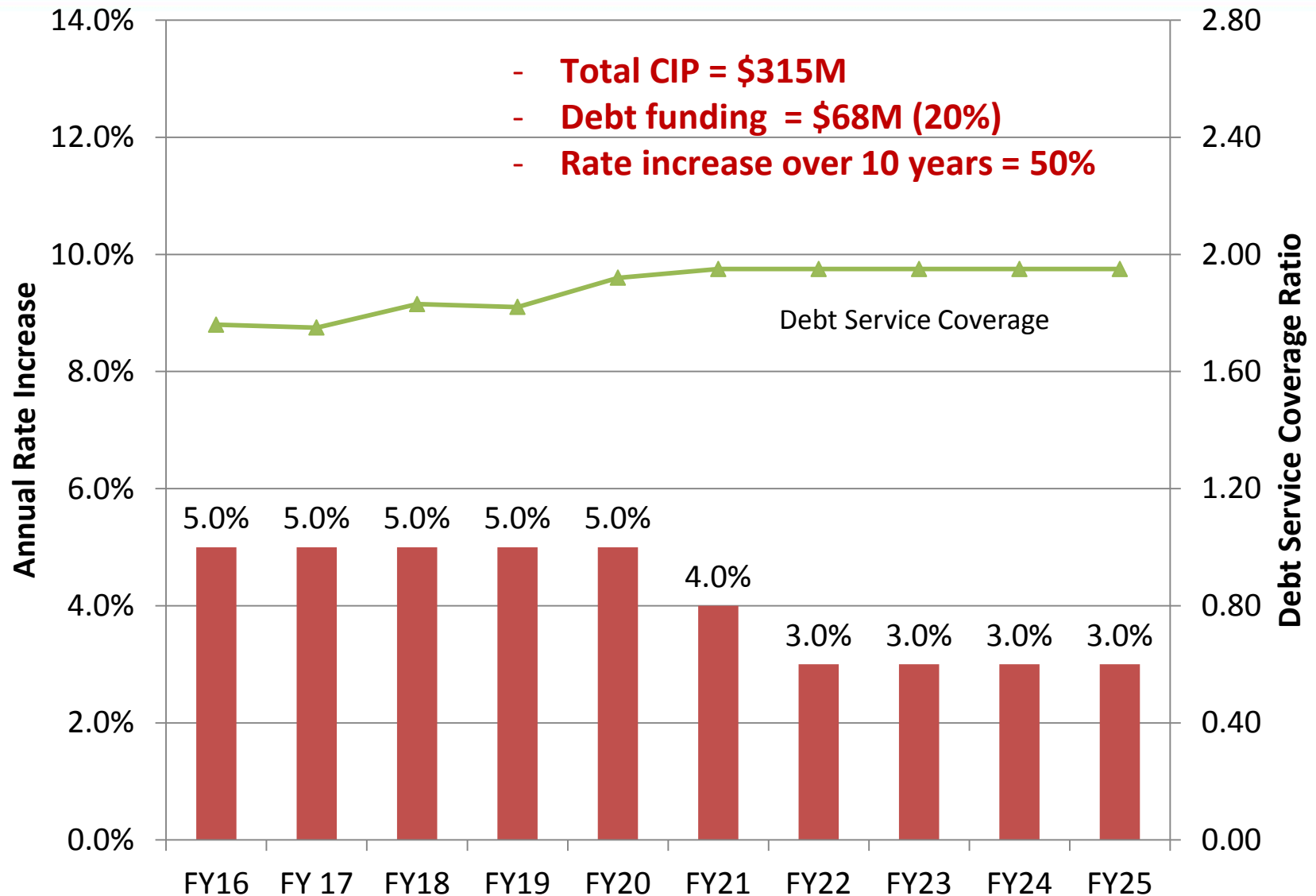


FY14/15 Budget Projections (Water)

+25% Higher CIP, No Consumption Recovery

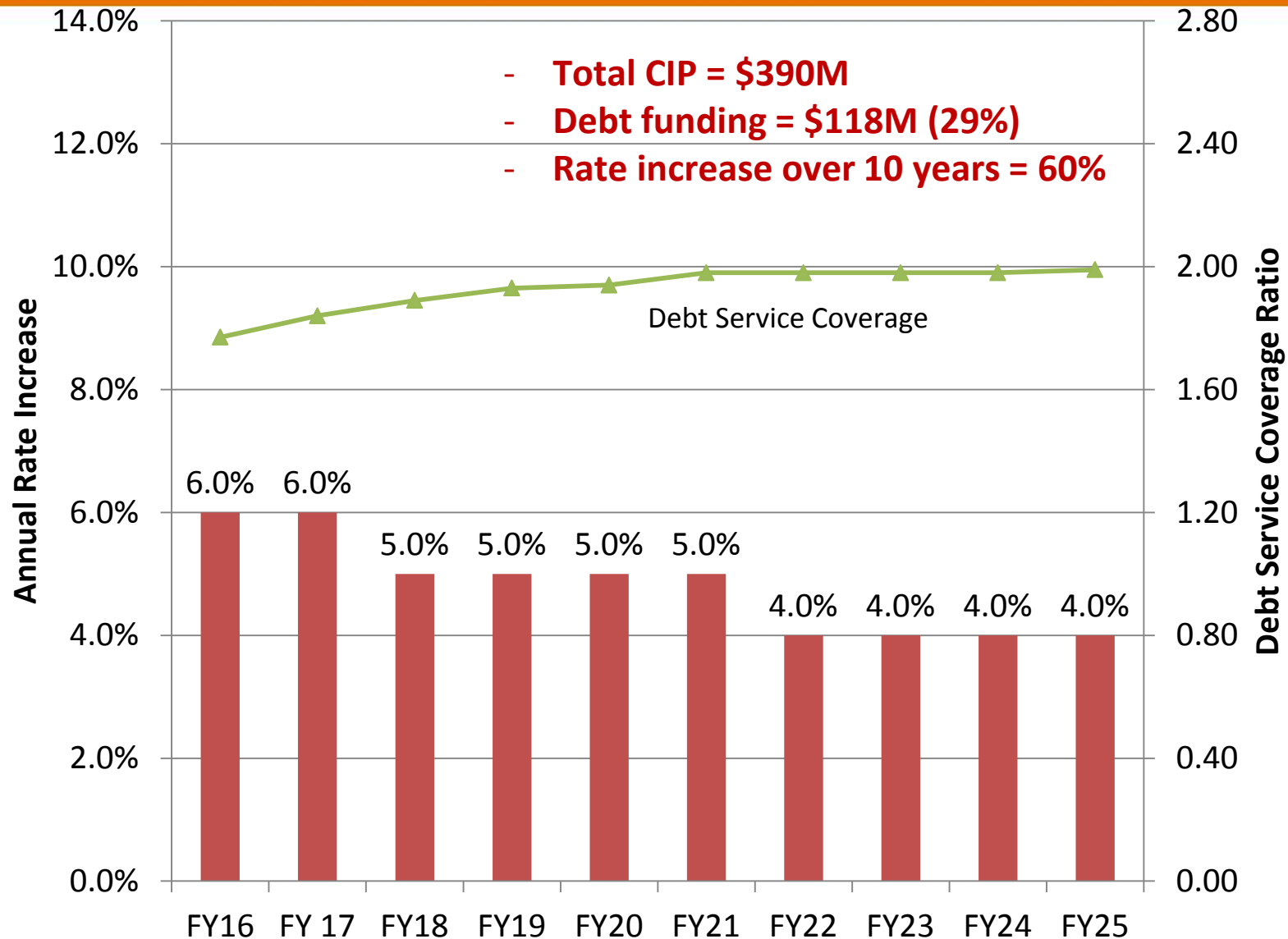


FY14/15 Budget Projections (Wastewater)*Extended to 10 Years*



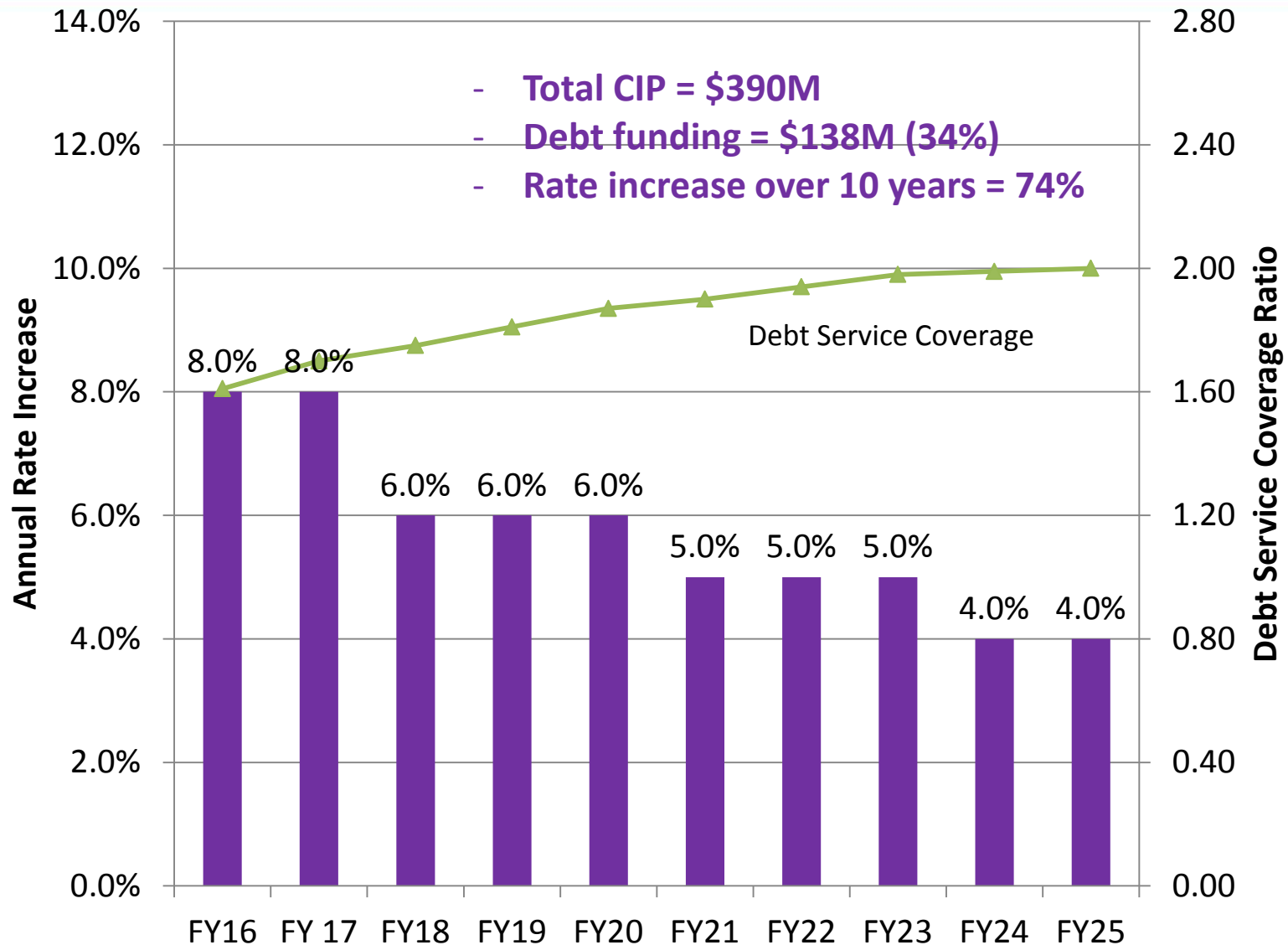
FY14/15 Budget Projections (Wastewater)

+ 25% Higher CIP



FY14/15 Budget Projections (Wastewater)

+25% Higher CIP, No Consumption Recovery



Sensitivity Analysis Conclusions



- Water consumption significantly impacts long term rates and charges
- Impact of capital spending can be mitigated by debt, but:
 - Requires higher long term rate increases
 - Leverage is an on-going credit consideration
- It is possible to achieve stronger financial metrics over time, but at a slower pace

Capstone Conclusions



- Have made significant progress on Long Term Financial Stability goals
- Existing financial policies allow for flexibility in addressing uncertainty
- Continue to plan for improving financial policy metrics over 10-year period
 - 2.0x coverage
 - 50% debt funding
 - Opportunistic deposits to RSF

Discussion



