


EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: September 18, 2014

MEMO TO: Board of Directors

THROUGH: Alexander R. Coate, General Manager *ARC*

FROM: Eric L. Sandler, Director of Finance 

SUBJECT: Long-Term Financial Stability—Workshop #4:
Capital Investment/Financing and Drought Financial Management/Drought Rates

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. This memo provides an overview of completed and scheduled workshops. As requested by the Board, this memo also details an engagement/outreach plan related to drought rates.

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, proposed revisions to the Strategic Plan goal of Long-Term Financial Stability, and 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.
- Workshop #4 (September 23, 2014): This workshop will provide two presentations. The first will discuss capital investment and financing and the second will discuss drought financial management and drought rates.
 - a. *Capital Investment/Financing*—In the first part of the workshop, staff will provide information for Board consideration and discussion on key capital financing policies—Capital Improvement Program (CIP) funding (cash vs. debt) and debt service coverage ratios. This information will include an overview of capital project accounting, budgeting and financing and debt-related financial metrics. Staff will also discuss the District's success with the Seismic Improvement Program (SIP), and the status of the SIP surcharge.
 - b. *Drought Financial Management/Drought Rates*—The second part of this workshop will provide additional information for discussion of a staged system of drought rates to recover the costs of supplemental supplies and the revenue loss due to customers' reduction in water use during drought. Based on feedback from the prior workshop, staff will present several options relating to stages 3 and 4. The presentation will also provide information on excessive drought water use penalties and include a discussion of the various drivers (price and non-price) of water conservation at the levels being considered by the District. Lastly, staff will review the plan for public engagement and outreach related to drought response and drought rates.
- Workshop #5 and #6 (November 12 and 25): *Cost of Service (COS) Study Findings and Financial Forecast*. Over a series of two November workshops, staff will review findings from the COS study. In addition, staff will present a long-term financial forecast

including a number of alternatives reflecting the rate impact of policy options that were discussed in previous workshops. Please note that the first November workshop and Board meeting will occur on Wednesday, November 12 due to the Veteran's Day holiday.

Engagement/Outreach Regarding Drought Response and Drought Rates

Staff proposes and will coordinate a series of three special meetings between October 20 and November 7, 2014 to seek public input on drought and drought rates. These evening public forums will enable customers to:

- Hear about EBMUD's current water supply status and projections for water supplies if the drought continues,
- Understand the costs associated with acquiring additional supplies and funding fixed costs with shorter revenues, and the District's intent to impose the Freeport surcharge in early 2015 if supplemental supplies are required,
- Comment on drought rationing, supplemental supply and drought rate approach, and
- Get information from EBMUD on what EBMUD has been doing to help customers conserve and tips on what customers can do to conserve water.

The proposed Special Board Meetings on Drought Response/Drought Rates locations are:

- Thursday, Oct 23 - Walnut Creek Civic Park Community Center
- Wednesday, Oct 29 - City of Richmond Council Chamber
- Wednesday, Nov 5 - Castro Valley Library

All meetings will be scheduled from 6:30 - 8:30 p.m. The proposed agenda will be covered in the presentation and in addition to the meeting agenda and copies of presentation slides, staff will have available drought fact sheets, WaterSmart Home Water Survey kits, reusable bags with a conservation message, sponges, shower stickers and bumper stickers.

If the Board concurs with these meeting dates and locations, staff will promote via a direct mail postcard to 1,000 stakeholder organizations, display ads in local papers (two times, consecutive weeks), media outreach, web notifications, and by posting public notices of these special meetings in compliance with the Brown Act.

NEXT STEPS

Staff is preparing materials for the Board's consideration at the three upcoming workshops on September 23, November 12, and November 25, and is preparing to start public notification of the upcoming Special Board Meetings.

Attachment

Long-Term Financial Stability Workshop #4

Capital Investment & Financing

Board of Directors
September 23, 2014

Agenda



- Introduction
- Capital Investment & Financing
- Seismic Surcharge

Workshop Topics



Workshop 1 <i>Introduction</i>	Workshop 2 <i>Reserves</i>	Workshop 3 <i>Drought Rates</i>	Workshop 4 <i>Capital Plan/Drought Rates</i>	Workshop 5 <i>Rates</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"> • Review results of Cost of Service study • Develop Financial Forecast based on Workshops 1-3

Workshop #1—How The Financial Model Works



$$\begin{aligned} &+ \text{ Operating Expenditures} \\ &+ \text{ Debt Service Payments} \\ &+ \text{ PAYGO Capital Expenditures} \end{aligned} \left. \vphantom{\begin{aligned} &+ \text{ Operating Expenditures} \\ &+ \text{ Debt Service Payments} \\ &+ \text{ PAYGO Capital Expenditures} \end{aligned}} \right\} \text{ Annual capital expenses paid from revenues}$$
$$- \text{ Non-Rate Revenues}$$
$$= \text{ Revenue Requirement from Rates \& Charges}$$

Workshop #1—Financial 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

Workshop #1—PAYGO and DSCR Policies Aligned



	Budget	
+ Operating Revenues	\$500 MM	
- <u>Operating Expenditures</u>	<u>\$247 MM</u>	
= Net Revenues	\$253 MM	} \$100 MM Available for PAYGO
- Senior Debt Service	\$153 MM	
DSCR = \$253MM/\$153MM =	1.65 x	Capital Expenses

Three Perspectives on Capital



Accounting	Budgeting	Financing
<ul style="list-style-type: none">• Financial reporting<ul style="list-style-type: none">— Net income—fiscal health of basic operations— Capital assets—status of asset base• Credit analysts and investors	<ul style="list-style-type: none">• Managerial reporting• Control expenditures• Communicate about resource allocation• Staff, Board and customers	<ul style="list-style-type: none">• PAYGO vs. debt funding• Drives rates and charges• IRS compliance—may <u>not</u> use tax-exempt bond proceeds to pay operating expenses

Accounting Perspective



- Distinguish between operating expense and capital expenditure
- Capital asset has a useful life beyond one reporting period
- Capitalization and depreciation match the cost of the asset with revenues generated by the asset:
 - Transfer expenditures to the balance sheet as capital asset
 - Depreciate over useful life (operating expense)

Capitalization Process



- Costs including direct & indirect costs incurred to place an asset into service can be capitalized.
 - Costs are transferred to “Capital Assets” when asset is placed into service
 - During construction, costs are accumulated in “Construction Work in Progress” (CWIP)

Capitalized Costs Include

- Direct District labor/benefits and contractor payments for:
 - Planning
 - Environmental
 - Design
 - Construction
 - Testing
- Materials purchased by the District
- Indirect District A&G
- Interest during construction

Budgeting Perspective



Operations & Maintenance Budget

Capital Budget



Budgeting Considerations

- Treatment plant ops
- Chemicals
- Energy
- Water purchases
- Biosolids disposal
- Repair costs

- Expenditures that have a useful life over one year or increase the useful life, capacity or serviceability of an asset may be capitalized
- Characterizing an expenditure as Operating vs Capital has differing rate impacts:
 - O&M budget funded with rates
 - Capital budget funded with rates and debt
- Budgeting requires judgment
 - Short-lived capital assets like desktop computers
 - Conservation expenditures yielding long-term supply
 - Endowments for ongoing environmental mitigation/monitoring

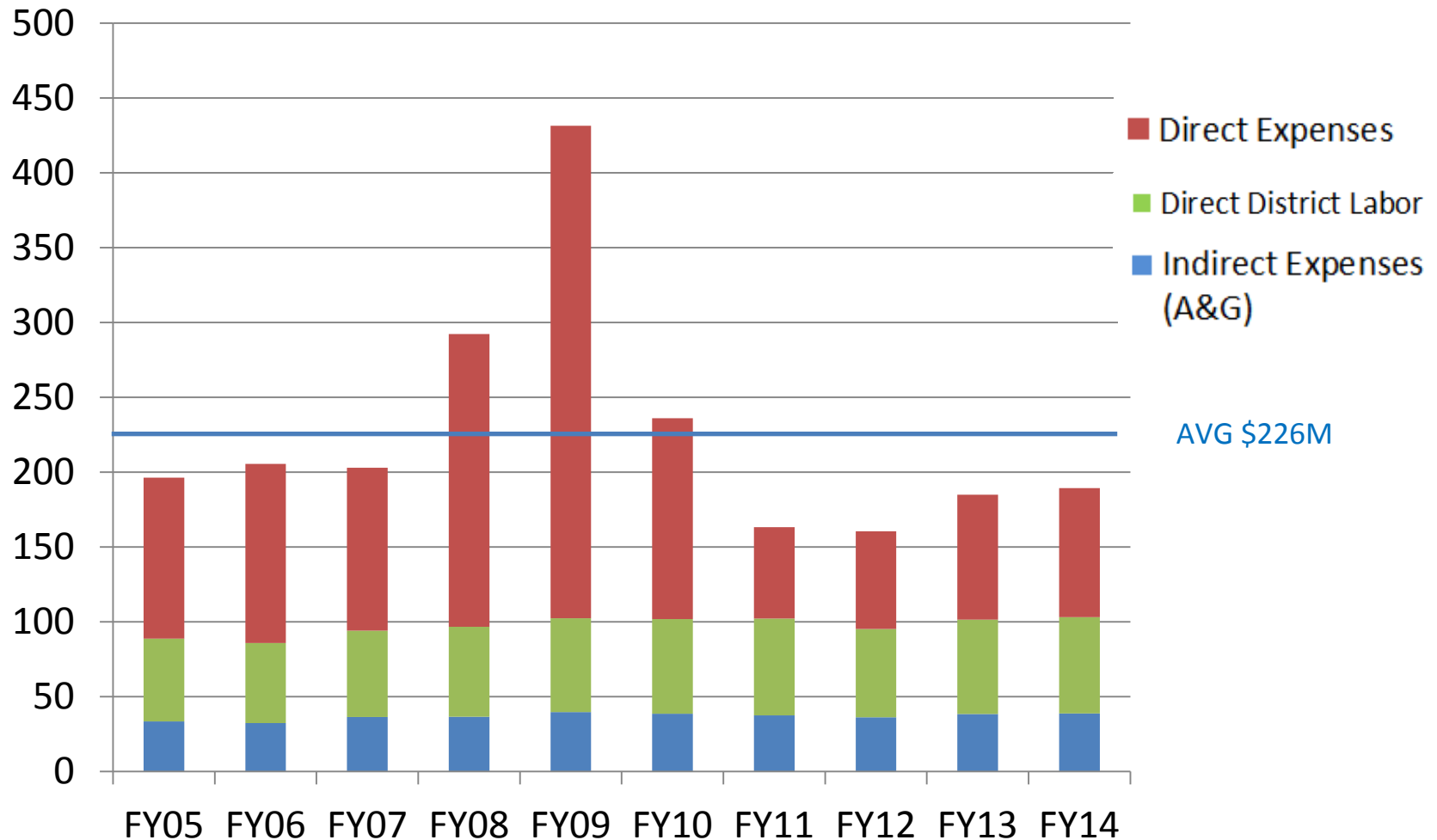
- Pipeline replacement
- Reservoir rehab
- New turbines
- Digester upgrades
- Land purchases

Developing Capital Plans

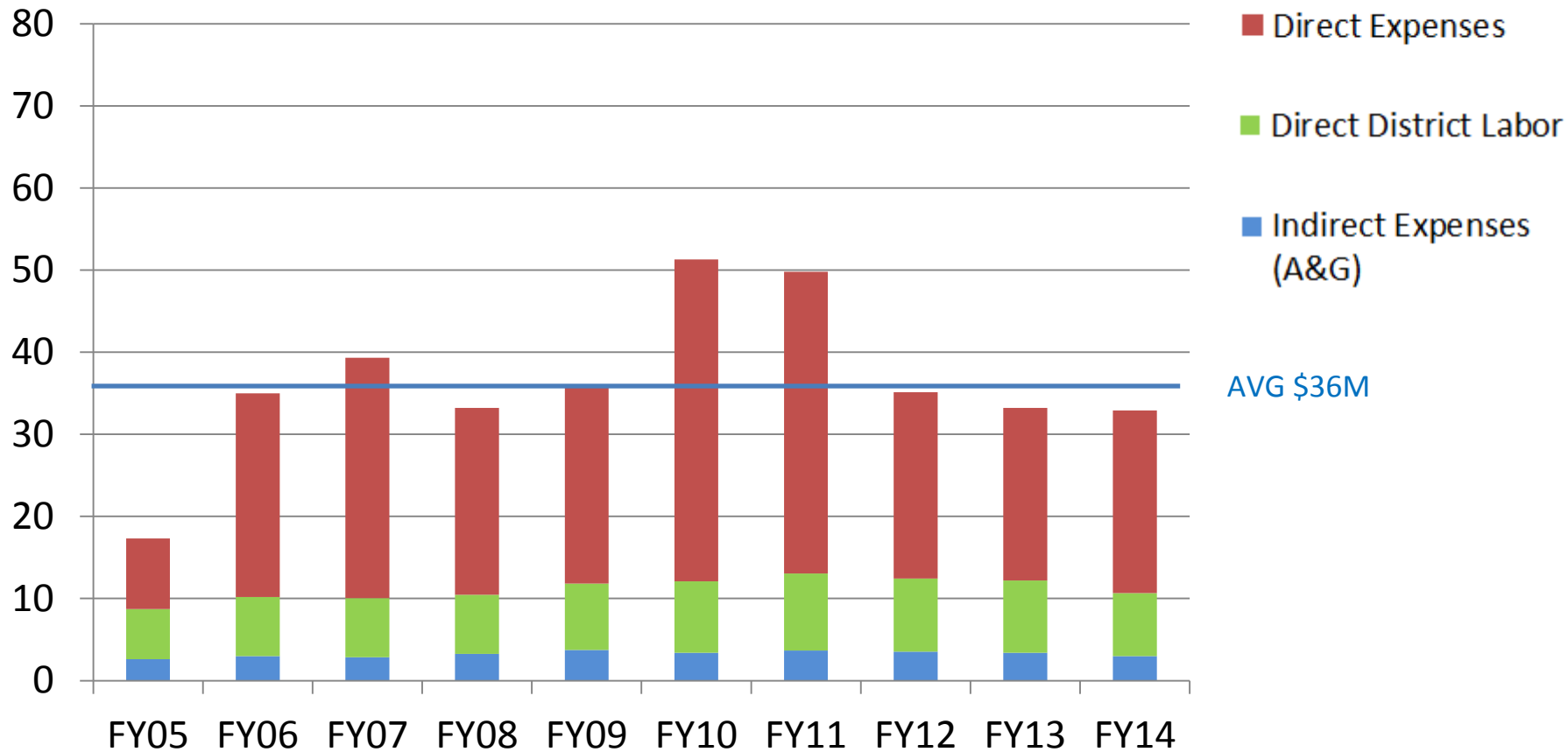


- Capital Steering Committee
 - Senior District staff
 - Meets during the biennial year fiscal budget development process.
 - Approves projects for the proposed CIP while balancing capital needs and available resources.
- Master plans for all major District facilities
 - Considers current facility condition and performance and addresses future service needs as well as potential threats, challenges, and opportunities.
 - Generally look out over a 30 year horizon.

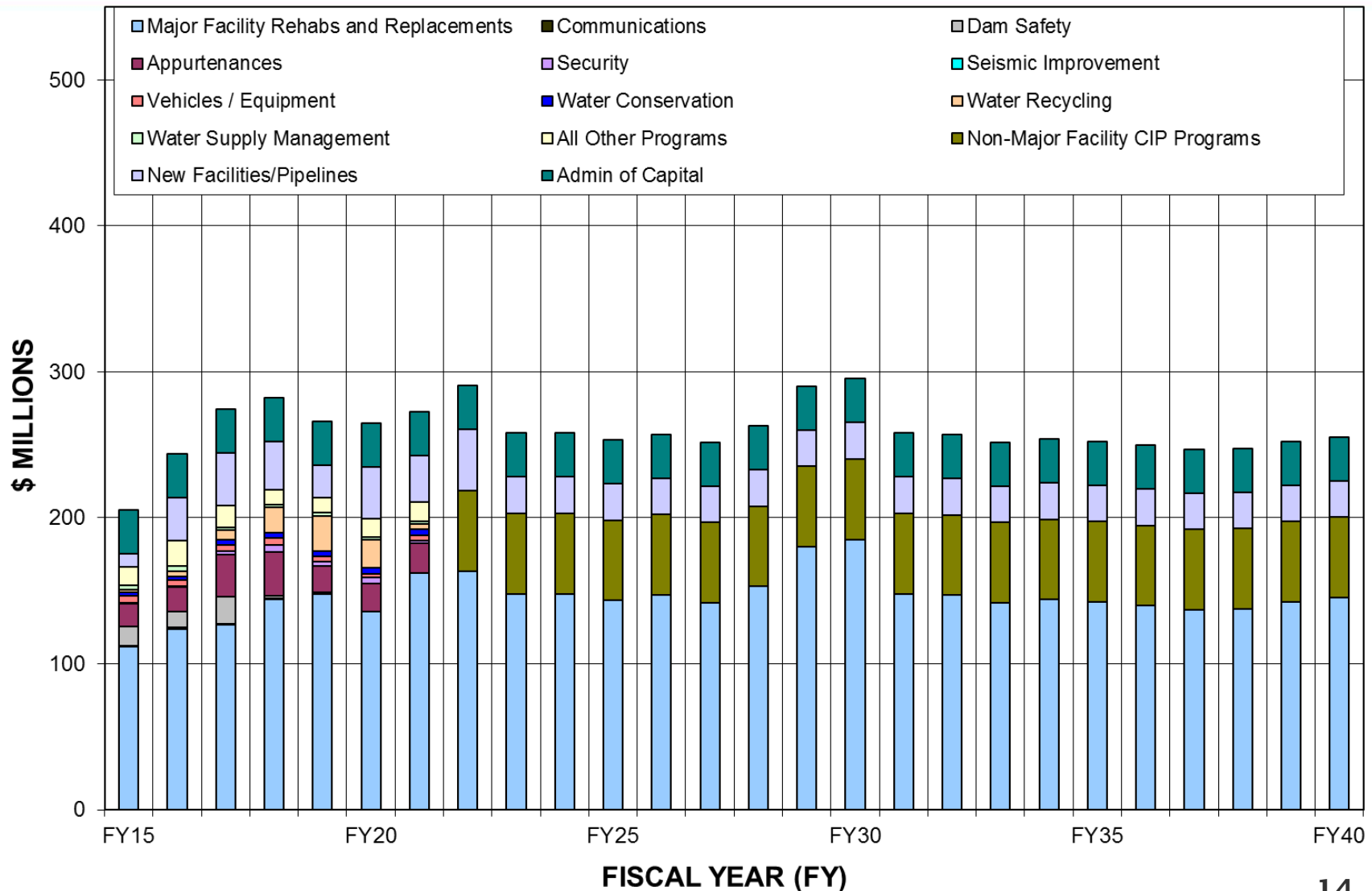
Historical CIP Expenditures— Water



Historical CIP Expenditures— Wastewater



Projected CIP Expenditures – Water



- **PAYGO Funding**
 - Pay for capital project out of rate revenue (current year or reserves for capital projects)
- **Debt Funding**
 - Pay for capital project out of bond proceeds

Capital Financing Considerations



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

Revenue Requirement Impact



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

\$20 million Capital Project

	Total Cost	Recoverd Over	Annual Cost
PAYGO	\$20 MM	1 year	\$20 MM
Debt	\$38 MM	30 years	\$1.2 MM

- + Operating Expenditures
- + Debt Service Payments
- + PAYGO Capital Expenditures
- Non-Rate Revenues

← \$1.2 million
or
← \$20 million

= Revenue Requirement from Rates & Charges

Policy 4.02—Cash Reserves & Debt Management



- 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	25%	2.75	\$393
Median*			
EBMUD Water	69%	1.71	\$1,907**
EBMUD Wastewater	79%	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
Santa Clara Valley Water	22%	3.68	\$202
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

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

Debt-Related Financial Ratios— Wastewater Agencies



	Debt Ratio	Debt Service Coverage Ratio	Debt Per Capita
EBMUD—Wastewater	61%	1.59x	\$743
Sacramento Regional County Sanitation District	71%	2.19	\$942
SFPUC Sewer Enterprise	45%	2.99x	\$869
LA County Sanitation District	26%	2.48x	\$102
Central Contra Costa Sanitary District	6%	4.49x	\$270
Union Sanitary District	N/A	N/A	\$430
Median - Aaa	37%	1.21x	\$393
Median – Aa1	32%	2.00x	\$691

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

Debt-Related Policies



- 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
- Phase in policy targets over time

Seismic Improvement Program



- 1994 seismic study following Loma Prieta identified a critical seismic upgrade program:
 - Seismic upgrades to 70 reservoirs, 130 pumping plants, six treatment plants
 - Southern Loop
 - Claremont Tunnel fault bypass

- Fixed surcharge was developed based on estimates of:
 - Capital cost of \$189 MM (NPV)
 - 100% financing
 - No customer growth
- Surcharge history
 - Initially was funded via both parcel charge and seismic surcharge (1994)
 - 1995 California Supreme Court decision led to move of entire charge to seismic surcharge (1996)

SIP Ahead of Schedule



	Plan	Estimated Through FY15	Difference
Construction Cost	\$241 MM	\$266 MM	\$25 MM
Net Interest Cost	<u>\$136 MM</u>	<u>\$43 MM</u>	<u>-\$93 MM</u>
Total Cost	\$377 MM	\$309 MM	-\$68 MM

- By 2016 all initial SIP costs will have been fully recovered
- Lower costs
 - Longer construction period—15 years vs. 10 years
 - Lower net interest cost
 - More PAYGO/less debt
 - Lower interest rates
- Higher revenues
 - Increase in new connections
 - Increase in charge since 2008

SIP Surcharge



- SIP surcharge represents \$20 million in fixed revenues
- Without action, anticipated to sunset in 2016
- District revenue requirement does not change:
 - Revenue requirement is based on level debt service to create predictable bills for ratepayers
 - Current COS would recover the \$20 million on volume charge
 - Fixed revenues would drop from ~30% to ~25%

SIP Surcharge Alternatives



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

Next Steps



- November workshops
 - Review cost of service study findings
 - Review updated financial forecast
- Evaluate impacts of policy alternatives
 - Rate Stabilization Fund levels
 - PAYGO and DSCR Policy target
 - SIP Surcharge alternatives

Discussion



Long Term Financial Stability Workshop 4 –

**Drought Financial Management
Drought Rates
(continued)**

Board of Directors
September 23, 2014

Agenda



- Re-cap of Workshop #3
- Drought Rate Alternatives
- Water Conservation Drivers and Drought
- Calendar
- Discussion

Recap of Workshop #3



- Reviewed history of drought rates – drought and regular rates have converged over time
- Proposed a staged system of drought rates
- Evaluated building blocks for staged system
 - Reserves for Stage 1
 - Reserves and Supplemental Supply Surcharge for Stage 2
 - Various options for Stages 3/4

Recap of Workshop #3 cont..



- Interest expressed in:
 - Wider public engagement on drought rates
 - Moving to a higher percentage of fixed revenues over time
 - Future consideration of an allocation approach as a drought rate structure if part of a future regular rate structure
 - Inclusion of a 'fourth stage' as long as no conflict with existing adopted water supply planning documents
 - More interest in uniform commodity approach than for other options

Staged System of Drought Rates



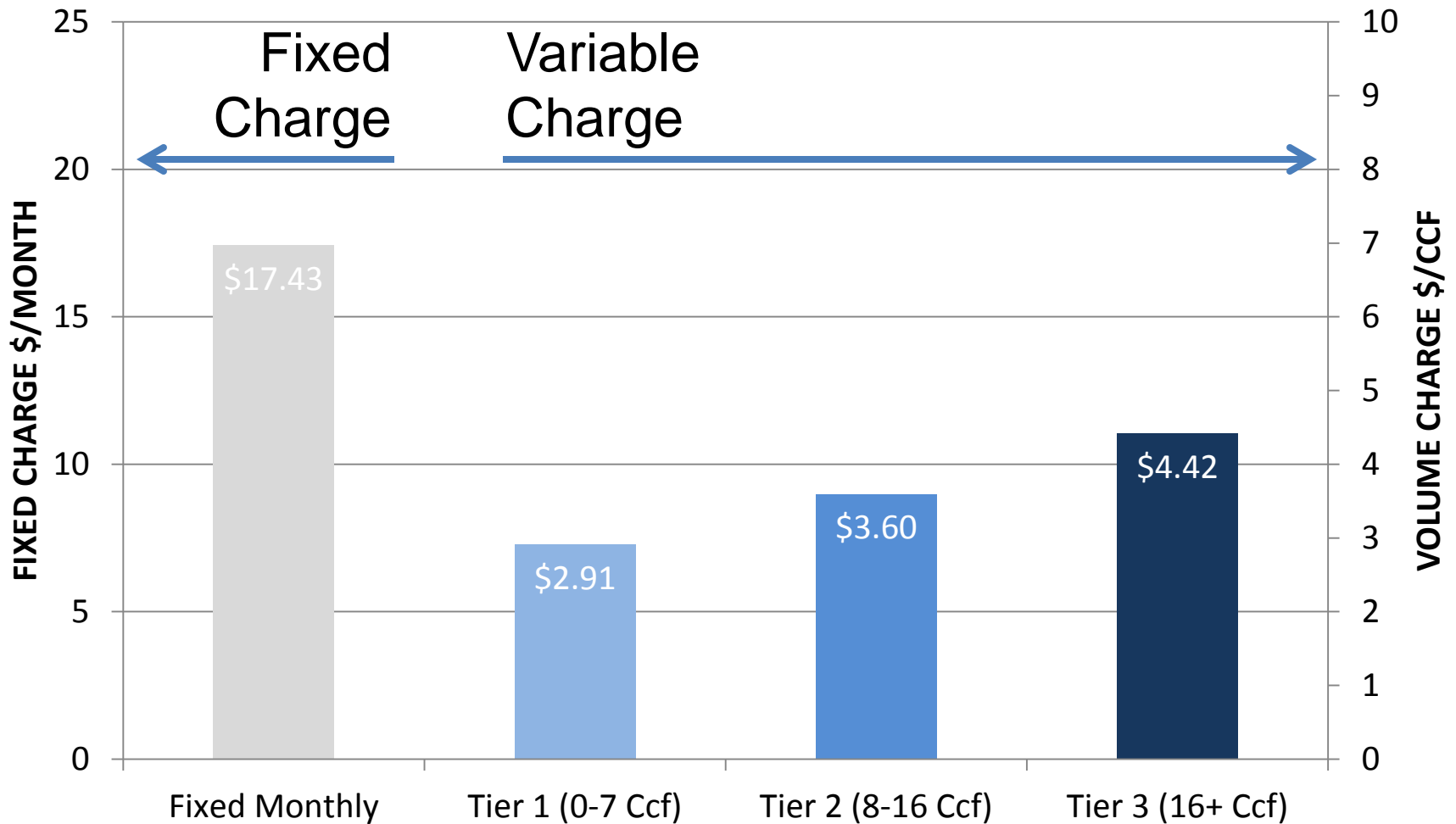
Stage	0	1	2	3	4
Demand Reduction		Voluntary 0-15%	Voluntary 0-15%	Mandatory up to 15%	Mandatory 15%
Supplemental Supplies			Up to 35 TAF	35 to 65 TAF	> 65 TAF
Rates and Charges	Normal rates	Normal rates	Normal rates; and Supplemental supply surcharge	Normal rates; and TBD	Normal rates; and TBD

- Moves through stages as severity of drought conditions increase
- Recovers growing drought costs with a progressive series of surcharges

Current District SFR Rates



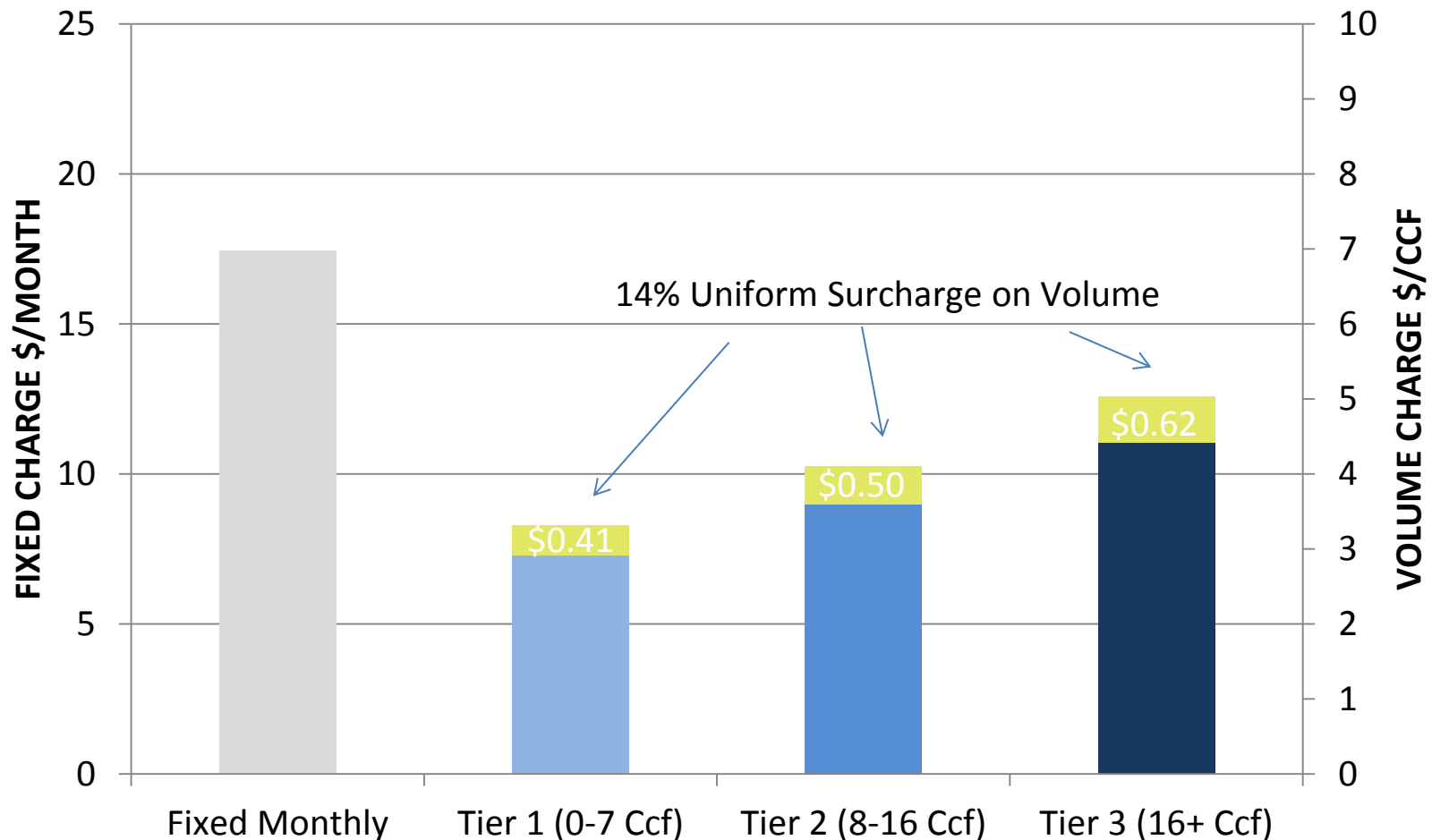
CURRENT FY15 RATES



Stage 2 – Supplemental Supply Surcharge (SSS)



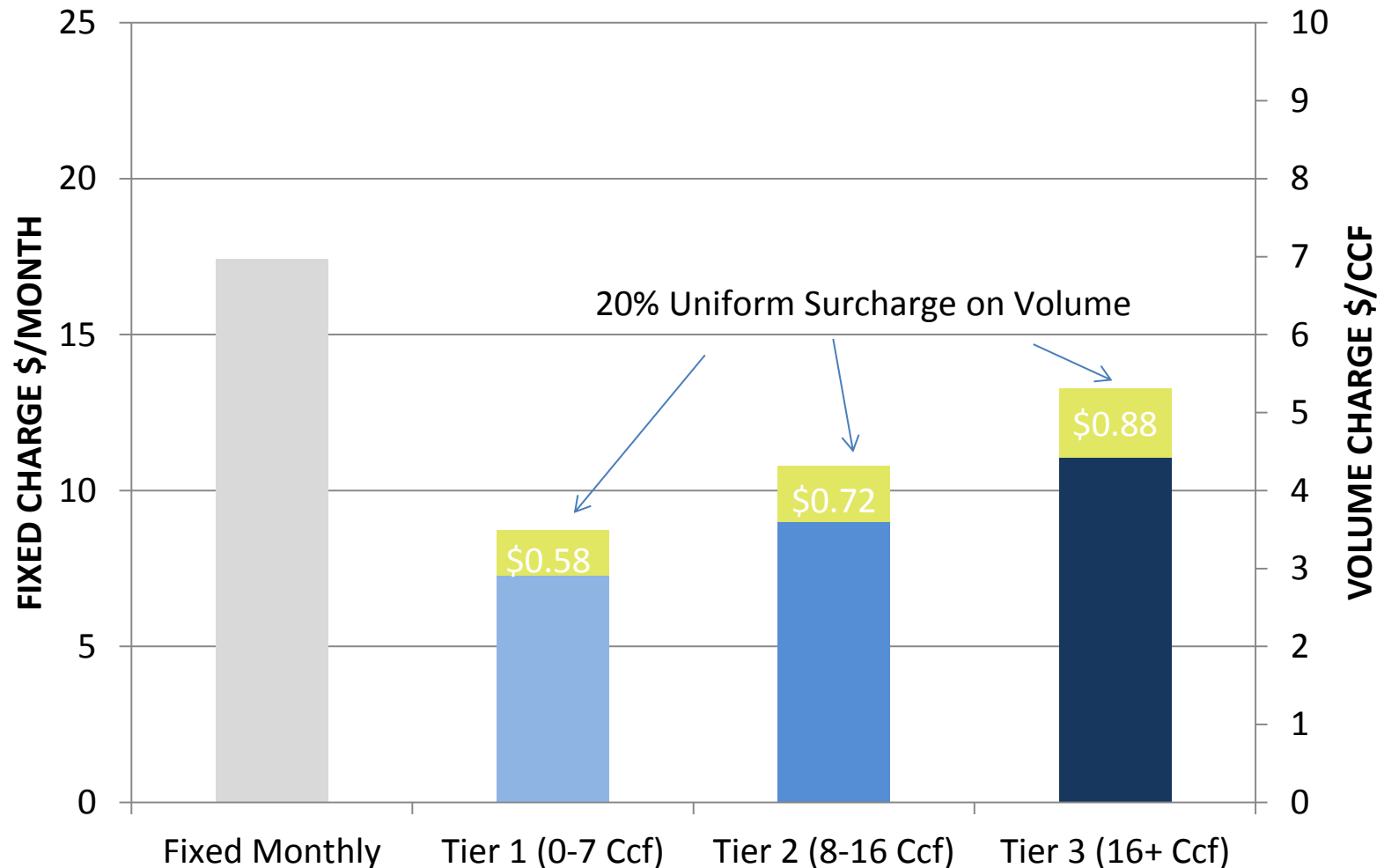
UNIFORM SURCHARGE ON VOLUME



Stage 3A – Uniform Commodity Surcharge



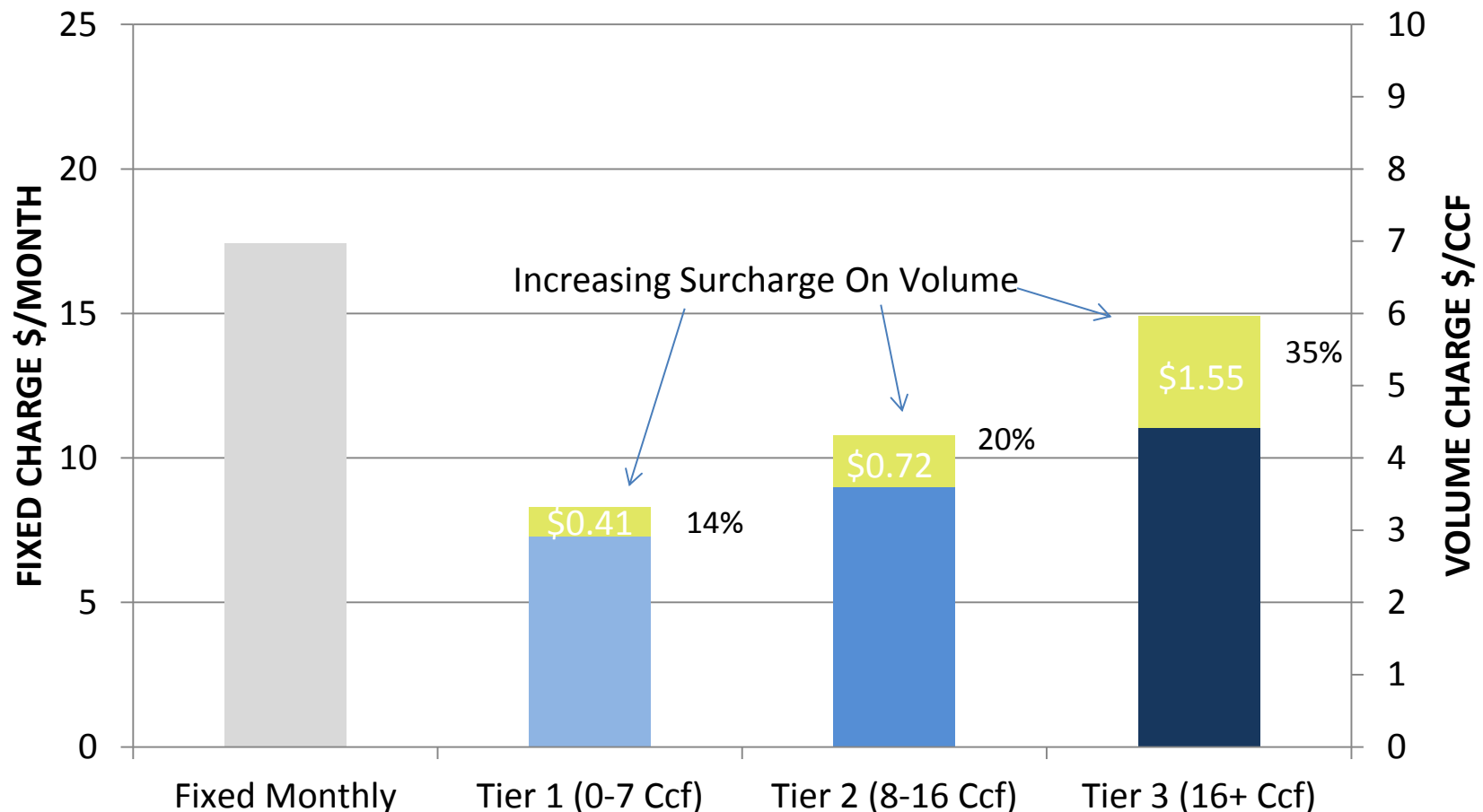
UNIFORM SURCHARGE ON VOLUME



Stage 3B – Inclining Commodity Surcharge



STEEPENS TIERS

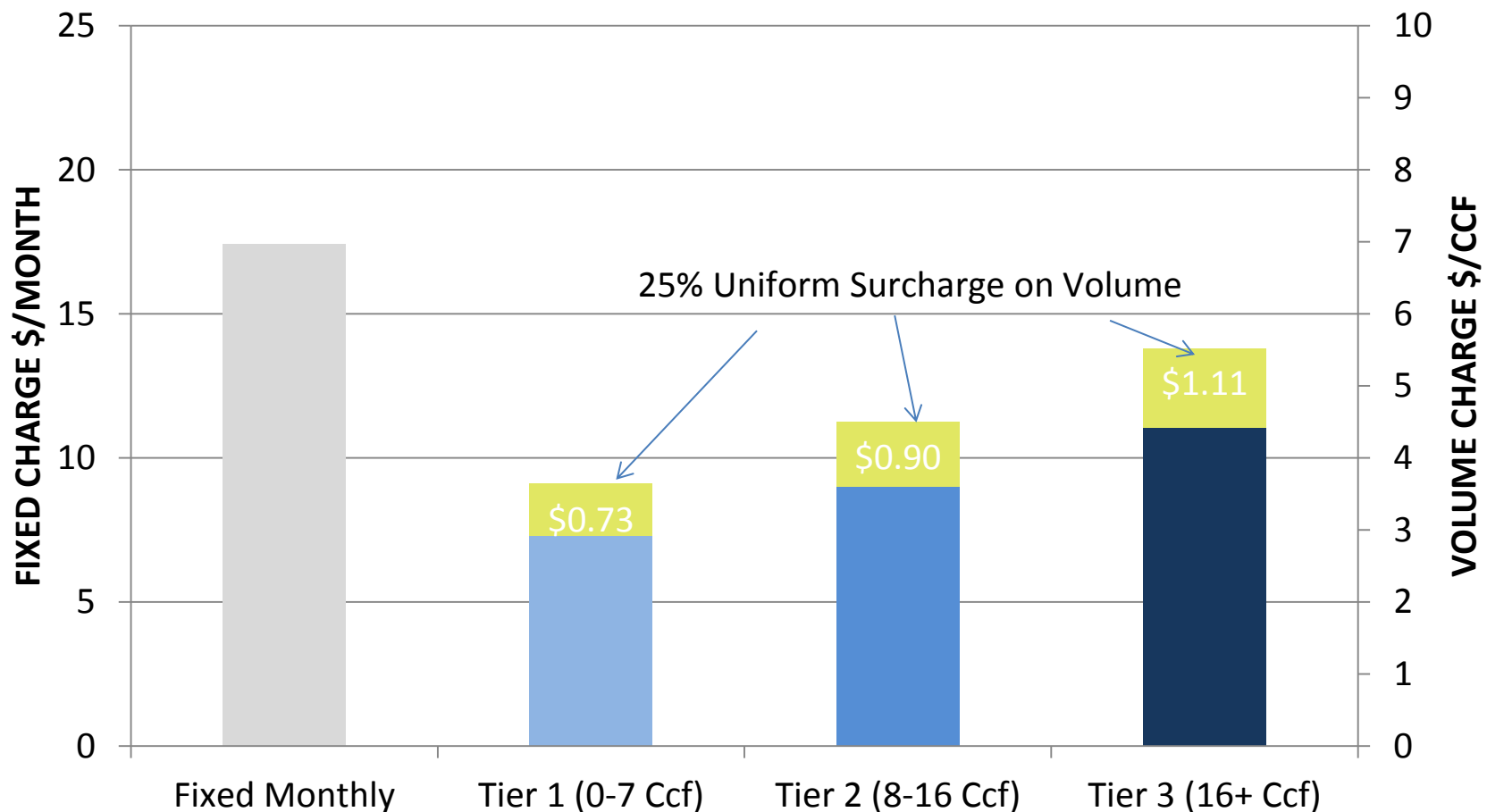


Stage 4A - Uniform Commodity Surcharge



Larger Surcharge Reflects Increased Drought Costs

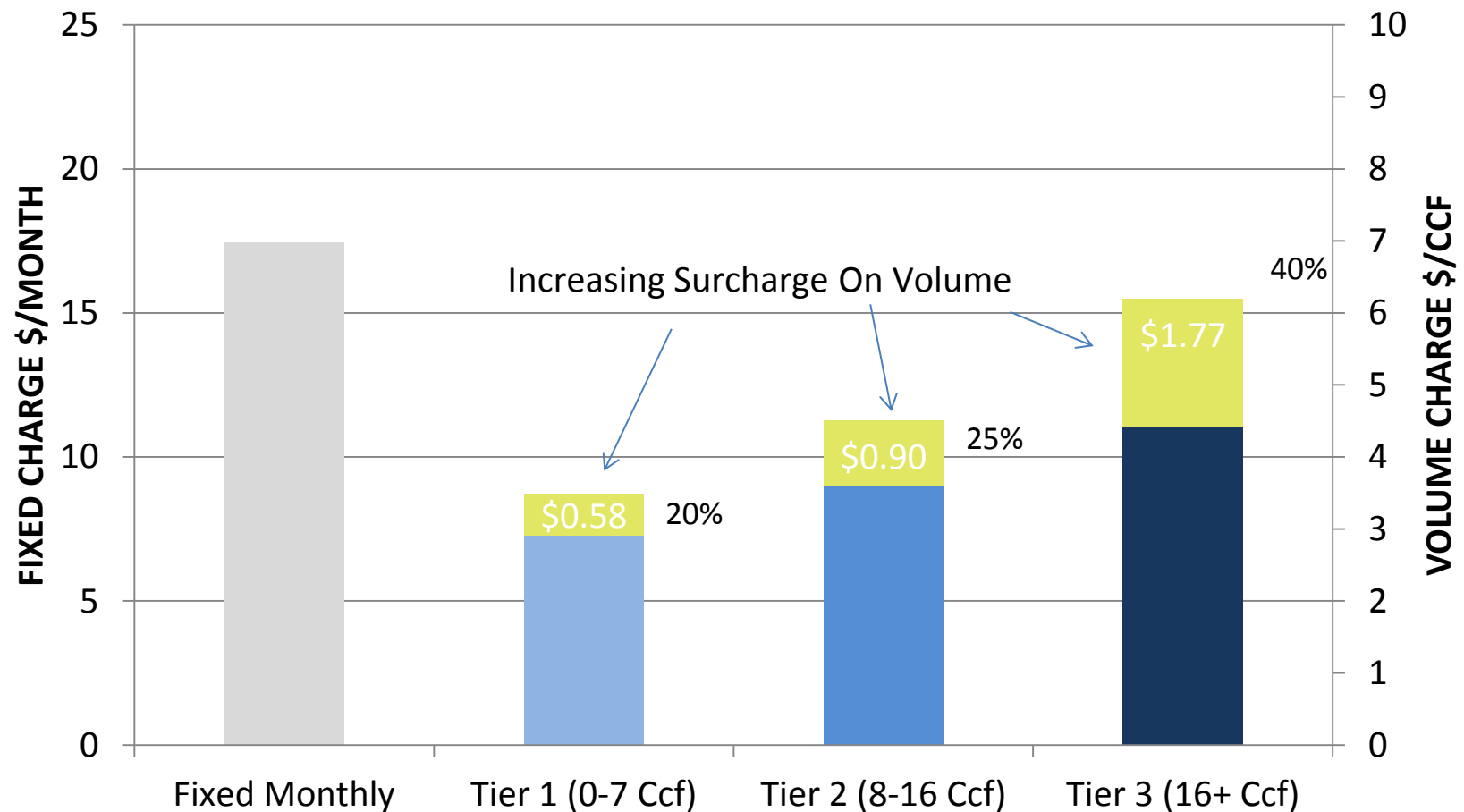
UNIFORM SURCHARGE ON VOLUME



Stage 4B – Inclining Commodity Surcharge



STEEPENS TIERS



Excess Use Penalty Considerations

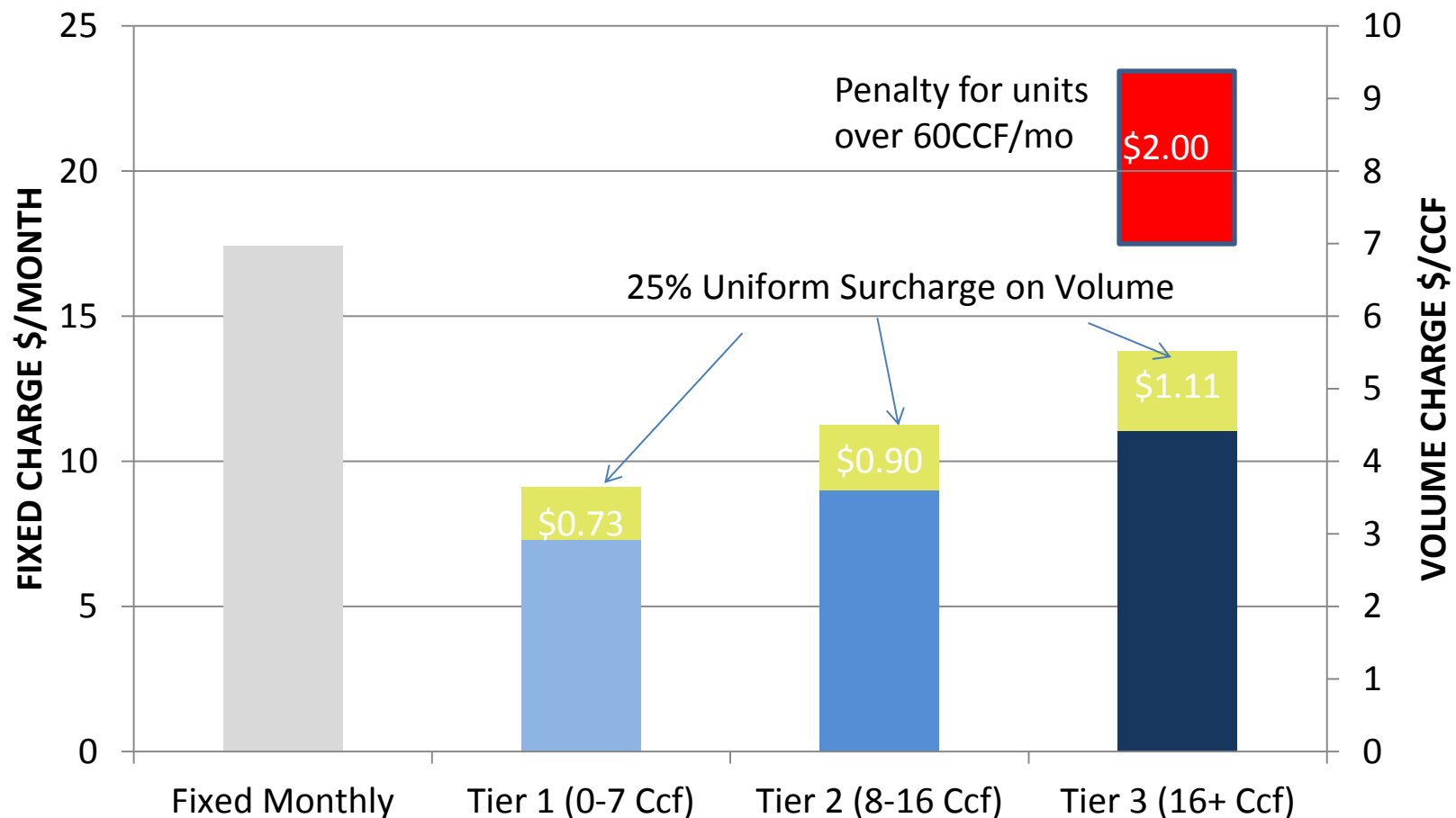
- Setting an appropriate penalty level:
 - Not so high that it is meaningless
 - Not so low that it recovers significant revenue at which point it ceases to be a penalty and becomes a charge requiring Cost of Service analysis
- Recommend excess use level at 60HCF
 - 6x Ave Household Use
 - Top 1% of bills
 - Represents ~9% of SFR water usage

Stage 4C - Uniform Commodity Surcharge



Defines Excess Use Level and Creates Penalty Above this Level

UNIFORM SURCHARGE ON VOLUME



Stage 2 -SSS Bill Impacts



	FY15		STAGE 2 - 14% SSS		
gpd	Monthly Consump CCF	Bill	Surcharge	Total Bill	%
24.6					
98.3	4	\$29.07	\$1.64	\$30.71	5.6%
172	7	\$37.80	\$2.87	\$40.67	7.6%
246	10	\$48.60	\$4.37	\$52.97	9.0%
491	20	\$87.88	\$9.85	\$97.73	11.2%
737	30	\$132.08	\$16.05	\$148.13	12.2%
1229	50	\$220.48	\$28.45	\$248.93	12.9%
1474	60	\$264.68	\$34.65	\$299.33	13.1%
1720	70	\$308.88	\$40.85	\$349.73	13.2%
1966	80	\$353.08	\$47.05	\$400.13	13.3%
2211	90	\$397.28	\$53.25	\$450.53	13.4%
2457	100	\$441.48	\$59.45	\$500.93	13.5%

Stage 3 – Bill Impacts



		SFR Bill Impacts - Stage 3						
		FY15	3A-Uniform 20%			3B-Inclining 14% 20% 35%		
gpd	Monthly Consump CCF	Bill	Surcharge	Total Bill	%	Surcharge	Total Bill	%
24.6								
98.3	4	\$29.07	\$2.32	\$31.39	8.0%	\$1.64	\$30.71	5.6%
172	7	\$37.80	\$4.06	\$41.86	10.7%	\$2.87	\$40.67	7.6%
246	10	\$48.60	\$6.22	\$54.82	12.8%	\$5.03	\$53.63	10.3%
491	20	\$87.88	\$14.06	\$101.94	16.0%	\$15.55	\$103.43	17.7%
737	30	\$132.08	\$22.86	\$154.94	17.3%	\$31.05	\$163.13	23.5%
1229	50	\$220.48	\$40.46	\$260.94	18.4%	\$62.05	\$282.53	28.1%
1474	60	\$264.68	\$49.26	\$313.94	18.6%	\$77.55	\$342.23	29.3%
1720	70	\$308.88	\$58.06	\$366.94	18.8%	\$93.05	\$401.93	30.1%
1966	80	\$353.08	\$66.86	\$419.94	18.9%	\$108.55	\$461.63	30.7%
2211	90	\$397.28	\$75.66	\$472.94	19.0%	\$124.05	\$521.33	31.2%
2457	100	\$441.48	\$84.46	\$525.94	19.1%	\$139.55	\$581.03	31.6%

Stage 4 – Bill Impacts

No Excess Use Penalty



		SFR Bill Impacts - Stage 4 - No Excess Use Penalties						
		FY15	4A-Uniform 25%			4B-Inclining 20% 25% 40%		
gpd	Monthly Consump CCF	Bill	Surcharge	Total Bill	%	Surcharge	Total Bill	%
24.6								
98.3	4	\$29.07	\$2.92	\$31.99	10.0%	\$2.32	\$31.39	8.0%
172	7	\$37.80	\$5.11	\$42.91	13.5%	\$4.06	\$41.86	10.7%
246	10	\$48.60	\$7.81	\$56.41	16.1%	\$6.76	\$55.36	13.9%
491	20	\$87.88	\$17.65	\$105.53	20.1%	\$19.24	\$107.12	21.9%
737	30	\$132.08	\$28.75	\$160.83	21.8%	\$36.94	\$169.02	28.0%
1229	50	\$220.48	\$50.95	\$271.43	23.1%	\$72.34	\$292.82	32.8%
1474	60	\$264.68	\$62.05	\$326.73	23.4%	\$90.04	\$354.72	34.0%
1720	70	\$308.88	\$73.15	\$382.03	23.7%	\$107.74	\$416.62	34.9%
1966	80	\$353.08	\$84.25	\$437.33	23.9%	\$125.44	\$478.52	35.5%
2211	90	\$397.28	\$95.35	\$492.63	24.0%	\$143.14	\$540.42	36.0%
2457	100	\$441.48	\$106.45	\$547.93	24.1%	\$160.84	\$602.32	36.4%

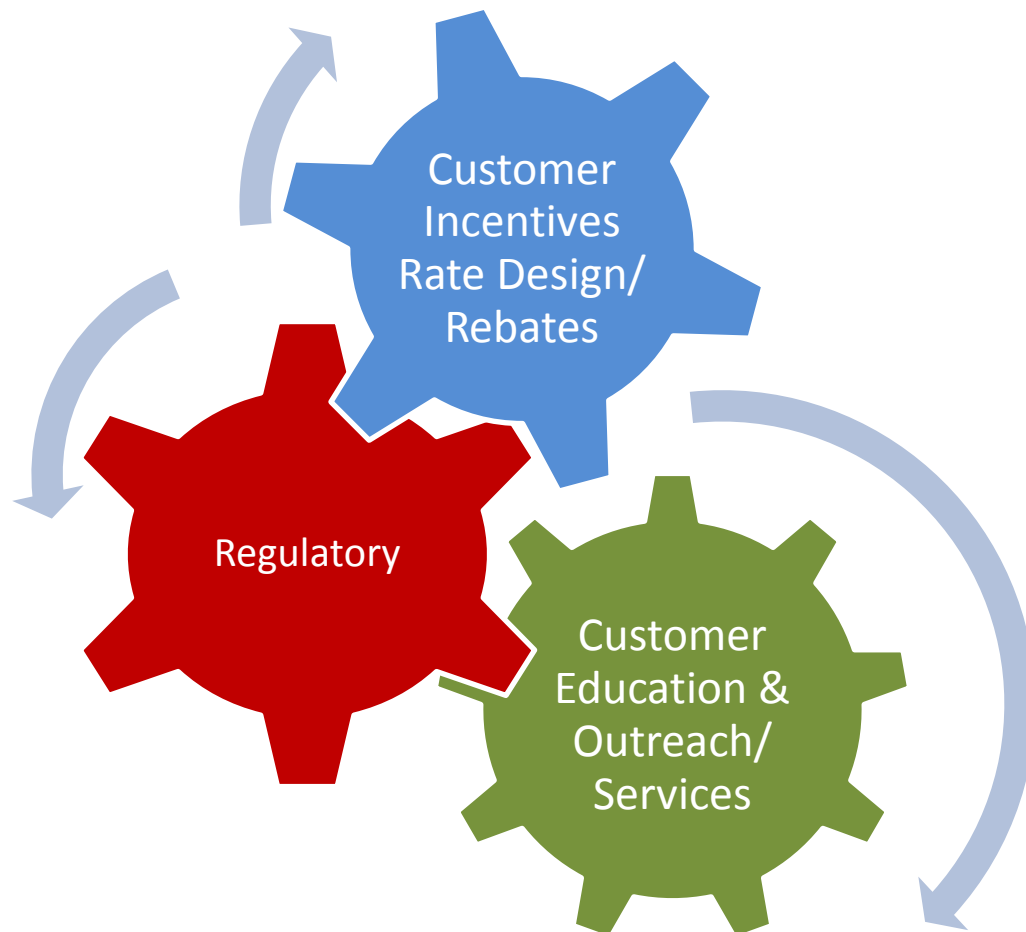
Stage 4 – Bill Impacts

With Excess Use Penalty



		SFR Bill Impacts - Stage 4 - With Excess Use Penalties						
		FY15	4A-Uniform 25%+\$2			4B-Steepens 20%-25%-40% +\$2		
gpd	Monthly Consump CCF	Bill	Surcharge	Total Bill	%	Surcharge	Total Bill	%
24.6								
98.3	4	\$29.07	\$2.92	\$31.99	10.0%	\$2.32	\$31.39	8.0%
172	7	\$37.80	\$5.11	\$42.91	13.5%	\$4.06	\$41.86	10.7%
246	10	\$48.60	\$7.81	\$56.41	16.1%	\$6.76	\$55.36	13.9%
491	20	\$87.88	\$17.65	\$105.53	20.1%	\$19.24	\$107.12	21.9%
737	30	\$132.08	\$28.75	\$160.83	21.8%	\$36.94	\$169.02	28.0%
1229	50	\$220.48	\$50.95	\$271.43	23.1%	\$72.34	\$292.82	32.8%
1474	60	\$264.68	\$62.05	\$326.73	23.4%	\$90.04	\$354.72	34.0%
1720	70	\$308.88	\$93.15	\$402.03	30.2%	\$127.74	\$436.62	41.4%
1966	80	\$353.08	\$124.25	\$477.33	35.2%	\$165.44	\$518.52	46.9%
2211	90	\$397.28	\$155.35	\$552.63	39.1%	\$203.14	\$600.42	51.1%
2457	100	\$441.48	\$186.45	\$627.93	42.2%	\$240.84	\$682.32	54.6%

Water Conservation Drivers and Drought



- District's water supply plan is to call for no more than 15% mandatory conservation
- To date customers have cut-back 11% in response to our 10% requested cut-back w/out rate incentive

Water Conservation Master Plan: Initiatives



Public
education

Marketing

Community
events

Conservation
workshops

Training &
certifications



Plumbing
Fixtures

Appliances

Landscape

Irrigation
Systems

Process
Equipment

Customized



Leak
Detection

Meter
Accuracy

Water Facility
Audits

Pressure
Management

Distribution
Monitoring



Web
services

Water
surveys &
budgets

Customer
engagement

Leak
notification

How to
instructions



Local &
State
Ordinances

Plumbing
Code

Water Code

National
Standards

Research on Customer Behavior & Water Pricing



- 5-15% reductions in water use are achieved through modest price increases and voluntary policy tools such as public information campaigns*.
- ✓ District is in a good position to achieve up to 15% reductions in water use:
 - ✓ Considering staged system of drought rate increases
 - ✓ An active water conservation public outreach campaign

**“Do Residential Water Demand Side Management Policies Measure Up? An Analysis of Eight California Water Agencies”, Renwick and Green, 1999*

Staged System of Drought Rates



Stage	0	1	2	3	4
Demand Reduction		Voluntary 0-15%	Voluntary 0-15%	Mandatory up to 15%	Mandatory 15%
Supplemental Supplies			Up to 35 TAF	35 to 65 TAF	> 65 TAF
Rates and Charges	Normal rates	Normal rates	Normal rates; and Supplemental supply surcharge (SSS)	Normal rates; and Uniform Percent Increase Drought Surcharge*	Normal rates; and Higher Uniform Percent Increase Drought Surcharge*

- Moves through stages as severity of drought conditions increase
- Recovers growing drought costs with a progressive series of surcharges

*Drought surcharge supersedes those of the prior Stage.

Additional Outstanding Items from Last Workshop



- Interest in additional public outreach
- Interest in additional information on historical water use

Proposed Drought Rate Outreach



- Three evening outreach events between October 20 and November 7 (6:30pm-8:30pm):
 - Richmond
 - Walnut Creek
 - Castro Valley
- Additional events to be scheduled as interest warrants

Proposed Agenda for Outreach Events



- Welcome and Opening Remarks
- Agenda Review
- Status of EBMUD's Water Supply & 2015 Forecast
- Drought Budget Impacts, Rate Approach Being Considered and Proposed Direction
- Conservation Tips
- Next Steps for Board actions
- Closing Remarks

Next Steps



2014

- Sept-Oct

- Drought rate COS

- Nov-Dec

- Review COS
- Consider adopting staged system
- Review water supply; if warranted declare Stage 2
- If Stage 2 declared and supplemental supplies taken; authorize Supplemental Supply Surcharge

2015

- Jan-Mar

- If in Stage 2, expand public outreach
- If SSS authorized, implement
- Board workshops on rates and charges

- April-May

- Prop 218 notice
- Review water supply; if warranted declare Stage 3

- June – July

- Hold rate hearings
- If Stage 3 declared implement Stage 3 charges

Discussion

