EAST BAY MUNICIPAL UTILITY DISTRICT

Long-Term Financial Stability Workshop 1

Board of Directors
March 25, 2014

Agenda

- Introduction
- Proposed Strategic Plan goal update
  - Long-Term Financial Stability
- Financial planning model

Introduction

Background

- Supply shortage and recession required a focus on short-term cost containment
- FY 2014 and FY 2015 budget cycle shifted focus back to Long-Term Financial Stability
  - Invest in capital
  - Invest in operations
  - Make conservative assumptions

Why Are We Here?

- Character of our challenges has changed
  - Past Decade
    - Plan for supply diversification and reliability
    - Invest in supplemental supply infrastructure
  - Next decade
    - Invest in replacement and reconstruction of existing assets
    - Integrate, operate, and fund supplemental supplies
- Strategic and financial plans should reflect this change
  - Update strategic plan goal
  - Re-evaluate financial policies
  - Provide long-term visibility into rates and charges
  - Foundation for FY16 and FY17 budget/rates

Schedule

Workshop 1	Today
Workshop 2	July 2014
Workshop 3	September 2014
Workshop 4	November 2014
Budget/Rates Workshops	March 2015
Budget/Rates Adoption	June 2015

Proposed Workshop Topics

Workshop 1 *Introduction*	Workshop 2 *Capital Plan*	Workshop 3 *Reserves*	Workshop 4 *Rates*
• Strategic Plan Update • Review Financial Planning Model • How policies drive revenue requirements	• CIP Projections • Review/evaluate capital investment policies • CIP funding: debt vs. cash • Debt Service Coverage Ratios	• Demand projections and variability • Funding drought costs • Fixed/variable revenues • Review/evaluate reserve policies • Seismic Improvement program	• Develop Financial Forecast based on Workshops 1-3 • Review preliminary results of Cost of Service study

Proposed Strategic Plan Update

District Strategic Plan

Goals
Long-Term Water Supply
Water Quality & Environmental Protection
Long-Term Infrastructure Investment
Long-Term Financial Stability
Customer Service
Workforce Planning & Development

- Originally developed 2004
- Goals, Strategies, Objectives, and KPI's
- Last updated 2012
- Cross-functional teams have developed proposed changes
- Proposed changes to be considered with mid-cycle budget update on May 27, 2014

Consolidate Strategies

	Proposed	Current
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

Strategy 1—Objectives

Strategy 1	***Develop a Long-Range Financing Plan that sets forth the long-term funding needs of the District***
Objectives	• Develop and maintain financial planning models to include long-term forecasts of operating and capital expenditures, revenue requirements and rates and charges
	• Ensure the long-term financial plan is based on reasonable, conservative assumptions and accounts for uncertainties
	• Ensure the long-term plan maintains the District's good standing in the credit markets to provide ready access to cost-effective capital financing
	• Evaluate the District's capital financing and debt service coverage policies to optimize cash funding of capital investments
	• Evaluate the District's cash reserve policies to consider optimal uses and levels of reserves, including alternative strategies for funding drought-related costs

Strategy 2—Objectives

Strategy 2	***Implement water and wastewater rates and charges that are legal, fair and equitable***
Objectives	• Plan for rate increases that are steady and predictable
	• Mitigate increases in rates and charges by optimizing use of non-rate revenue and pursuing opportunities for cost efficiencies and new technologies
	• Establish rates and charges based on cost-of-service principles
	• Periodically conduct third-party cost of service studies

Financial Planning Model

Financial Planning Model

- How the model works
- How financial policies drive revenue requirement
- Model outputs

How The 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

Financial Policies

- Debt/PAYGO funding of capital plan—*no more than 65% over 5-year period*
- Debt Service Coverage Ratio (DSCR)—*at least 1.60x coverage*
- Reserve levels—*various 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	• Issue bonds to pay project costs and repay principal with interest over 30 years	• Pay project costs out of current year revenues
Typical use	• Large, "one-time" projects • Spread cost over current and future customers • Urgent project need	• Replacement and reconstruction costs are regular and predictable
Consider-ations	• Higher total cost; interest doubles 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

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

\+ Operating Revenues

\- Operating Expenditures

= Net Revenues

\- Debt Service

\- Rate-Funded Capital*

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

Debt Service Coverage Ratio (DSCR)

+	Operating Revenues	$200 MM
-	Operating Expenditures	$50 MM
=	Net Revenues	$150 MM
-	Debt Service	- $100 MM

DSCR

$$\frac{\$150\ MM}{\$100\ MM} = 1.50x$$

- Meeting a higher DSCR would require higher operating revenues (e.g. rates)

Debt Service Coverage Ratio (DSCR)

+	Operating Revenues		$200 MM
-	Operating Expenditures		$50 MM
=	Net Revenues		$150 MM
-	Debt Service	-	$100 MM
=	Net Revenues After D/S		$50 MM

- Net Revenue After Debt Service is used for PAYGO capital
- While higher DSCR means higher rates, it also means more money for PAYGO capital
- DSCR and CIP funding policies go hand in hand

Model Output

- Five-year forecast used in biennial budget
- Rates, DSCR
- Sources & uses of funds
  - Operating activities
  - Capital investment activities
- Reserves

Assumptions/Metrics

WATER SYSTEM FUND – KEY ASSUMPTIONS FIVE-YEAR FINANCIAL FORECAST ($ Millions)					
	Forecast				
	FY14	FY15	FY16	FY17	FY18
Projected Sales Volume (mgd)	164.0	166.0	169.0	172.0	175.0
% Rate Increase	9.75%	9.50%	8.00%	7.00%	5.00%
Debt Service Coverage	1.62	1.67	1.65	1.79	1.79
Average Monthly Single Family Residential Bill ($) Based on 10 ccf/month	$44.41	$48.60	$52.49	$56.16	$58.97

Sources & Uses—Operating

WATER SYSTEM FUND – OPERATING BUDGET FIVE-YEAR FINANCIAL FORECAST ($ Millions)					
	Forecast				
	FY14	FY15	FY16	FY17	FY18
Beginning Balance	**240.2**	**244.8**	**249.3**	**254.6**	**260.4**
Water Charges	354.0	391.8	429.7	466.9	498.7
Seismic Surcharges	22.4	24.6	26.8	28.8	30.4
Property Taxes	23.4	23.8	24.3	24.8	25.3
Power Sales	5.7	5.7	5.7	5.7	5.7
Interest Income	2.3	4.0	7.0	6.4	7.3
SCC Revenue	23.7	23.3	24.6	25.9	27.3
Reimbursements	10.5	10.5	10.5	10.5	10.5
All Other Revenue	16.3	16.5	16.6	16.7	16.9
Operating Revenues Total	**458.3**	**500.2**	**545.2**	**585.7**	**622.1**
Operations & Maintenance Expenses	236.9	246.9	259.9	273.5	288.0
Debt Service	147.4	163.2	184.0	184.7	198.9
Revenue Funded Capital	69.4	85.6	96.0	121.7	128.8
Expenses Total	**453.7**	**495.7**	**539.9**	**579.9**	**615.7**
Ending Balance	**244.8**	**249.3**	**254.6**	**260.4**	**266.8**

FY14—DSCR Calculation

		FY 2014 Budget
+	Operating Revenues	$458 MM
-	Operating Expenditures	$237 MM
=	Net Revenues	$221 MM
-	Senior Debt Service	$136 MM
	DSCR	1.62 x

$$\text{DSCR} = \frac{\text{Net Revenues}}{\text{Senior Debt Service}}$$

Sources & Uses—Capital

FIVE-YEAR FINANCIAL FORECAST ($ Millions)	FY14	FY15	FY16	FY17	FY18	Totals
Beginning Balance	**18.4**	**94.0**	**0.1**	**85.8**	**2.0**	-
Resources:						
Commercial Paper Issues	0	0	0	0	0	0
New Bond Issues	175.0	0	180.0	0	170.0	525.0
Grants and Loans Proceeds	0.9	0.9	0.5	0.3	0.3	2.9
Reimbursements	16.4	15.5	19.7	18.9	20.9	91.4
Transfer from Operating Revenue	69.4	85.6	96.0	121.7	128.8	501.5
Total Resources	**261.7**	**102.0**	**296.2**	**140.9**	**320.0**	**1,120.8**
Expenditures:						
Capital Improvements (discounted)	151.1	160.9	175.5	189.7	184.1	861.3
A & G Expenses	35.0	35.0	35.0	35.0	35.0	175.0
Total Expenditures	**186.1**	**195.9**	**210.5**	**224.7**	**219.1**	**1,036.3**
Ending Balance	**94.0**	**0.1**	**85.8**	**2.0**	**102.9**	**-**
Debt Percentage of Funding	**53.4%**	**47.9%**	**44.8%**	**37.3%**	**31.5%**	**42.5%**

Reserves—Background

- 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 • Water • Wastewater	 20% volume revenues 5% O&M expense
Capital Projects	Remaining Amount

Reserves—Five-Year Forecast

WATER SYSTEM RESERVE COMPONENTS ($ Millions)					
	Projected				
RESERVE COMPONENTS	**FY14**	**FY15**	**FY16**	**FY17**	**FY18**
Projected Operating Budget Reserves	244.8	249.3	254.6	260.4	266.8
Working capital	59.2	61.7	65.0	68.4	72.0
Self Insurance Reserve	5.0	5.0	5.2	5.3	5.5
Workers' Compensation Reserves	3.2	3.2	3.3	3.4	3.5
Contingency and Rate Stabilization	51.0	56.4	62.1	67.7	72.3
Total of Reserves	118.4	126.3	135.6	144.8	153.3
Reserves Available for Capital Projects	126.4	123.0	119.0	115.6	113.5

Use of Reserves

- Reserves can be used in event of budget shortfall
- Use of reserves is a reduction in unrestricted cash; however
- Use of reserves does not help with DSCR calculation

FY15—Drought Impacts to DSCR

		Budget	Drought	Net
+	Operating Revenues	$500 MM	-$30 MM	$470 MM
-	Operating Expenditures	$247 MM	$23 MM	$270 MM
=	Net Revenues	$253 MM	- $53 MM	$200 MM
-	Senior Debt Service	$152 MM		$152 MM
	DSCR	1.67 x		1.32 x

- Drought assumes 10% drop in sales volume, and purchase of 65 taf of supplemental supplies—$53 million variance
- DSCR drops from 1.67x to 1.32x

FY15—Drought Impacts to DSCR w/ Supplemental Supply Charge

		Budget	Drought	Net
+	Operating Revenues	$500 MM	-$30 MM	$470 MM
+	Supp. Supply Charge		$23 MM	$23 MM
-	Operating Expenditures	$247 MM	$23 MM	$270 MM
=	Net Revenues	$253 MM	- $30 MM	$223 MM
-	Senior Debt Service	$152 MM		$152 MM
	DSCR	1.67 x		1.47 x

- Drought assumes 10% drop in sales volume, purchase of 65 taf of supplemental supplies and supplemental supply charge—$30 million variance
- DSCR drops from 1.67x to 1.47x

Workshop 1 Recap

- Changing nature of District challenges
- Strategic plan goal update
  - Long-Term Financial Stability
- Revenue requirement (rates) driven by expenditure projections and financial policies
- Financial planning model dynamics

Next Steps

Workshop 1 *Introduction*	Workshop 2 *Capital Plan (July)*	Workshop 3 *Reserves (September)*	Workshop 4 *Rates (November)*
• Strategic Plan Update • Review Financial Planning Model • How policies drive revenue requirements	• CIP Projections • Review/evaluate capital investment policies • CIP funding: debt vs. cash • Debt Service Coverage Ratios	• Demand projections and variability • Funding drought costs • Fixed/variable revenues • Review/evaluate reserve policies • Seismic Improvement program	• Develop Financial Forecast based on Workshops 1-3 • Review preliminary results of Cost of Service study

Questions