



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551-9486 • PHONE (925) 454-5000

ORIGINATING SECTION: Administration
CONTACT: Osborn Solitei

AGENDA DATE: September 16, 2015

ITEM NO. 10

SUBJECT: Cost of Service Study

SUMMARY:

- Zone 7 is faced with a need to stabilize treated water rate revenue and recover from deep financial losses after four years of drought.
- Therefore on July 15, 2015, the Board authorized the General Manager to negotiate and execute a professional Services Agreement with Raftelis Financial Consultants, Inc. (“RFC”) for a Cost of Service Study.
- RFC is preparing a Cost of Service Study which includes a three-year wholesale water rate proposal and a new rate structure.
- A staff kick-off meeting was held on August 12, 2015 with RFC, Zone 7 staff and Retailer staff to discuss the Cost of Service study approach. This was an opportunity for the Retailers to give input early in the process.
- On August 19, 2015, RFC and Zone 7 staff met with the Retailer staff to review the preliminary Financial Model and key assumptions.
- On August 26, 2015, RFC gave a presentation to the Board of Directors on the Cost of Service Study approach and key assumptions.
- On September 8, 2015, RFC and Zone 7 staff met with Retailer staff to review and discuss the preliminary Financial Model, key assumptions and examples of rate structures and potential impacts to the Retailers using rough numbers in the preliminary model merely to provide those examples.
- At this meeting, RFC will give a presentation on the proposed treated water rates and rate structure. Attached is the Cost of Service Study Executive Summary.

FUNDING:

Treated Water Sales revenue accrues to Fund 100 – Water Enterprise and, through transfers, to Fund 120 – Renewal, Replacement and System-Wide Improvements.

RECOMMENDED ACTION:

Discuss and provide direction to staff.

ATTACHMENT: The Cost of Service Study Executive Summary by RFC

MEMORANDUM REGARDING COST OF SERVICE STUDY

Agency: Zone 7 Water Agency
To: Board of Directors – Zone 7 Water Agency
From: Habib Isaac, Manager at RFC
Re: Cost of Service Rate Study

1 EXECUTIVE SUMMARY

1.1 BACKGROUND OF THE ZONE 7 WATER AGENCY

The Agency was established in 1957 for flood protection and as water agency providing both untreated water to support area agriculture and as a wholesale water agency to provide a reliable supply of high quality water to the Livermore-Amador Valley. In 1961, Zone 7 contracted for State Water Project water to be delivered through the South Bay Aqueduct. Through its four retail water purveyors, the Agency provides wholesale water services to approximately 220,000 residents and business within its service area, which encompasses Dublin, Livermore, Pleasanton, and, by special agreement with the Dublin San Ramon Services District, the Dougherty Valley portion of San Ramon. The Agency’s water resources include imported water from the State Water Project, local groundwater storage, surface water captured in the Del Valle Reservoir and offsite groundwater banking in Kern County. Historically, the majority of the Agency’s water demand has been met by imported water from the State Water Project, with almost 80% of the current total water demand supported by imported water. These supplies have been limited due to the severe drought conditions locally and throughout the State of California.

The Agency’s Water Utility, like other agencies in California, is faced with challenges related to the reduction in water usage as a result of conservation. This is not a situation that is unique to the Agency, as many agencies throughout the State of California are faced with drought concerns while reinvesting in their utility systems to ensure the delivery of safe and reliable water.

1.2 ASSUMPTIONS USED IN THE STUDY

The period for the Study uses Fiscal Year 2015-16 budget as the base year and the model projects through Fiscal Year 2024-25; however, the proposed rates herein are for Calendar Years 2016, 2017 and 2018, as the Agency will continue to periodically review rates and take a measured approach with any potential rate adjustments.¹ Certain cost escalation assumptions and inputs were incorporated into the Study to adequately model expected future costs of the Water Enterprise. These assumptions were based on discussions with and/or direction from Agency management. Assumptions include inflation factors, CPI indexing of rates, projected sales by retailer and other miscellaneous assumptions. These assumptions are presented in **Tables 1-1, 1-2 and 1-3.**

¹ Tables in this report show a five-year period, starting with FY 2015-16 through FY 2019-20.

Table 1-1: Inflation Factor Assumptions

Key Factors	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
General	3%	3%	3%	3%	3%
Salary	3%	3%	3%	3%	3%
Benefits	3%	3%	3%	3%	3%
Utilities	5%	5%	5%	5%	5%
Supplies	3%	3%	3%	3%	3%
CPI Index to Rates	3%	3%	3%	3%	3%
Energy	5%	5%	5%	5%	5%

Table 1-2: Growth & Demand Assumptions

Key Factors	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Water Demand	<i>See Table 1-3</i>				
Miscellaneous Revenue	1%	1%	1%	1%	1%
Proposed Debt			\$43M		
Reserve Interest Rate	0.5%	0.5%	0.5%	0.5%	0.5%
Debt Interest Rate	5%	5%	5%	5%	5%
Debt Term (years)	30	30	30	30	30

Table 1-3: Projected Retailer Usage Assumptions

Retailers	Projected Demand in Acre Feet				
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
City of Pleasanton	9,660	10,890	11,900	11,920	11,950
DSRSD	8,364	9,418	9,742	10,062	10,369
Cal Water	5,228	5,776	5,824	6,239	6,633
Livermore	4,921	5,080	5,160	5,170	5,240
Total	28,173	31,164	32,626	33,391	34,192

1.3 WATER UTILITY

The current water rate structure of the Agency consists of two components: a minor monthly service charge per turnout and a 4-tier variable water rate structure, with over 98% of all water sales falling into Tier 4. **Table 1-4** identifies the Agency’s current rate structure, the variable commodity rate structure is comprised of declining tiers.

Table 1-4: Current Treated Water Rates

Customer Class	Current Allotments	2015 Rates (Jan 1, 2015)	2016 Rates (Jan 1, 2016)
	Units (CCF)	\$	\$
Treated Water			
Tier 1	0-33	\$4.097	\$4.220
Tier 2	34 – 333	\$3.280	\$3.379
Tier 3	334 – 3,333	\$2.615	\$2.694
Tier 4	> 3,333	\$2.294	\$2.363
Fixed Charge (Turn-Outs)	Service Charge	\$144.00	\$148.00

1.4 FINANCIAL HEALTH AND PROPOSED RECOMMENDATIONS

1.4.1 Water Utility Financial Health

The approved Fiscal Year 2015-16 budget, reflected a starting fund balance equal to \$15.4M and projected water sale revenue of \$34.1M. Based on unaudited actuals for Fiscal Year 2014-15, the ending balance for Fund 100 was only \$14.4M, or a reduction of approximately \$1M. During Calendar Year 2015, the Agency's retailers are required to meet mandatory conservation through Executive Order B-29-15, which sets conservation goals to each retail water agency throughout the State to achieve an overall state-wide 25% reduction in water usage. These cutbacks also affect the Agency's revenue stability as nearly 100% of the Agency's revenue is recovered through variable rates and fixed revenue recovery is negligible, even though a majority of the Agency's costs are fixed. Based on the most recent water demand projections provided by the Retailers and confirmed by Agency staff (as shown on Table 1-3), RFC recalculated expected water sale revenues using the Agency's current rates (prices) and the new expected water demand figures (quantities). Recalculating water sales revenue using prices times new quantities, resulted in an amount equal to \$29.4M, which is a reduction of approximately \$4.7M in projected revenues for the current fiscal year. As a result, the new starting fund balance and the calculated water sales together generate an expected shortfall by Fiscal Year End 2015-16. Table 1-5 displays the differences between the adopted Fiscal Year 2015-16 budget and the new revised starting balance and projected ending balance for Fiscal Year 2015-16

Table 1-5: Fiscal Year 2015-16 Budget and Projections (Fund 100 – Water Enterprise)

FY 15-16 Budget	Adopted Budget 2015-16	Revised 2015-16	Difference
Total Water Sales	\$34,191,645	\$29,496,884 ¹	
Other Revenues	\$360,991	\$360,991	
Total Revenues	\$34,552,636	\$29,857,875	(\$4,694,761)
Operation Expenses	\$35,619,302	\$31,884,216 ²	
AMP Transfer	\$7,000,000	\$7,000,000	-
Total Expenses	\$42,619,302	\$38,884,216	\$3,735,086
Net Cash	(\$8,066,666)	(9,026,341)	
Fund 100 Beginning Balance	\$15,404,825	\$14,388,282³	
Projected Ending Fund Balance	\$7,338,159	\$5,361,941	(\$1,976,218)

¹ Calculated Fiscal Year 2015-16 revenue based on Tables 1-3 and 1-4

² Revised Fiscal Year 2015-16 projected expenses

³ Unaudited Fiscal Year 2014-15 Actuals

With the reduction in revenues, the Agency is projected to have a negative net cash flow of (\$9.0M). For Fund 100, the Fiscal Year 2015-16 ending fund balance is projected to be approximately \$5.36M. Fund 100 includes four designated reserves, including Operating Reserve, Drought Contingency Reserve, Emergency Reserve, and Rate Stabilization Reserve. Table 1-6 provides projected ending fund balances for each reserve.

Table 1-6: Fund 100 –Water Enterprise Reserve Balances

Reserves	Unaudited 2014-15 Ending	Adopted Budget 2015-16 Ending	Revised 2015-16 ¹ Ending	Actual Performance	Min Target	Max Target
Fund 100 – Water Enterprise						
Operating	\$6,123,594	\$3,122,788	\$1,551,340	17 days of O&M	32 days of O&M	90 days of O&M
Drought Contingency	\$0.00	\$0.00	\$0.00	0% of Sales	7% of Sales	20% of Sales
Emergency	\$4,353,940	\$1,968,911	\$1,989,152	1% of Assets	1% of Assets	3% of Assets
Rate Stabilization	\$3,910,748	\$2,246,460	\$1,821,449	6% of Sales	Min of 6% of Sales	
Total	\$14,388,282	\$7,338,159	\$5,361,941			

¹Emergency and Rate Stabilization set to minimum balance and difference transferred to operating.

Figure 1-1 illustrates operating position of the Water Utility, where the expenses are shown by stacked bars; and total revenues at current rates are shown by the horizontal green trend line. Figure 1-2 summarizes the projected CIP and its funding sources (currently 100% PAYGO) and Figure 1-3 displays the ending total reserve balance for Fund 100 – Water Enterprise and Figure 1-4 displays the total reserve balance for Fund 120 – Water Renewal, Replacement & System-wide Improvements Capital Reserve (Capital Reserve).

Figure 1-1: Operating Position at Current Rates

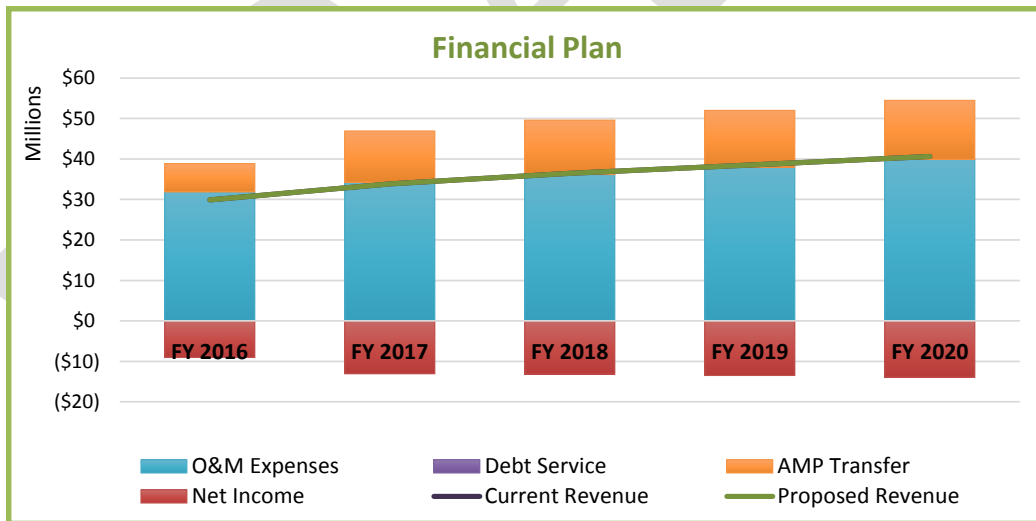


Figure 1-2: Capital Improvement Program and Funding Source

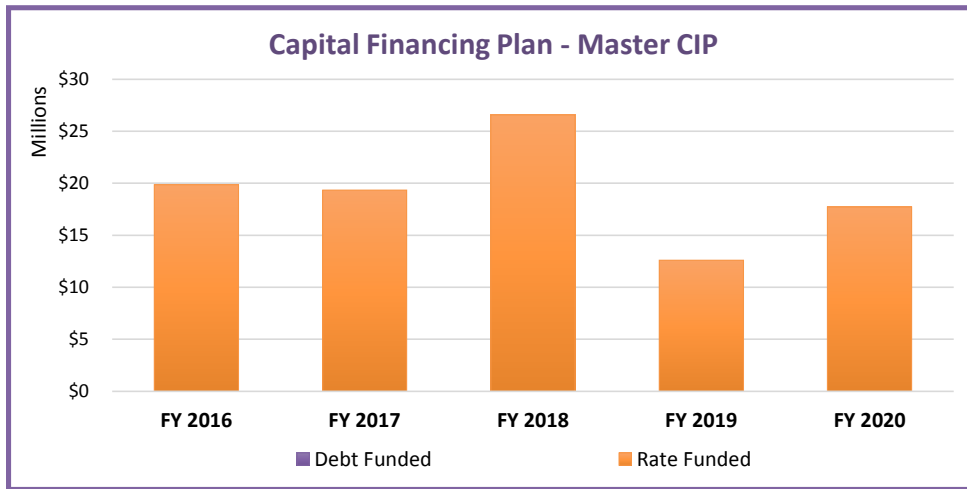


Figure 1-3: Projected Ending Operating Fund (Fund 100) Reserves at Current Rates

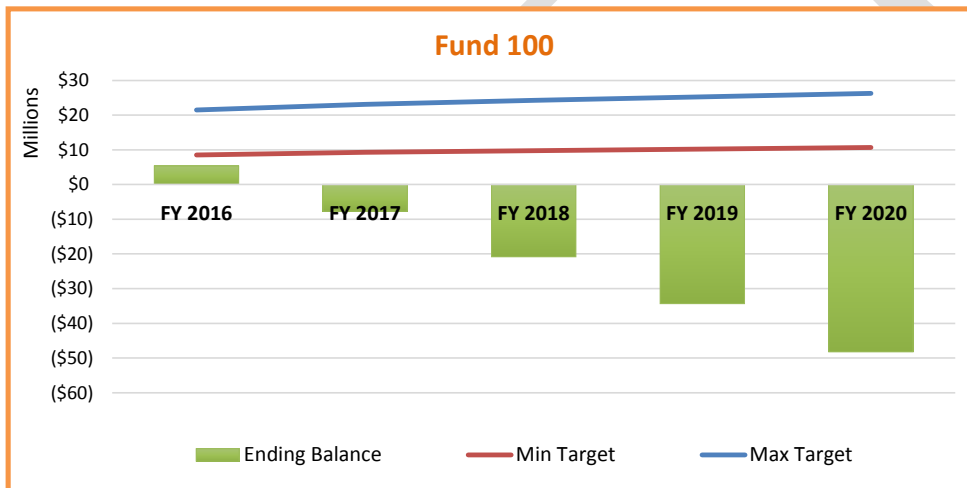
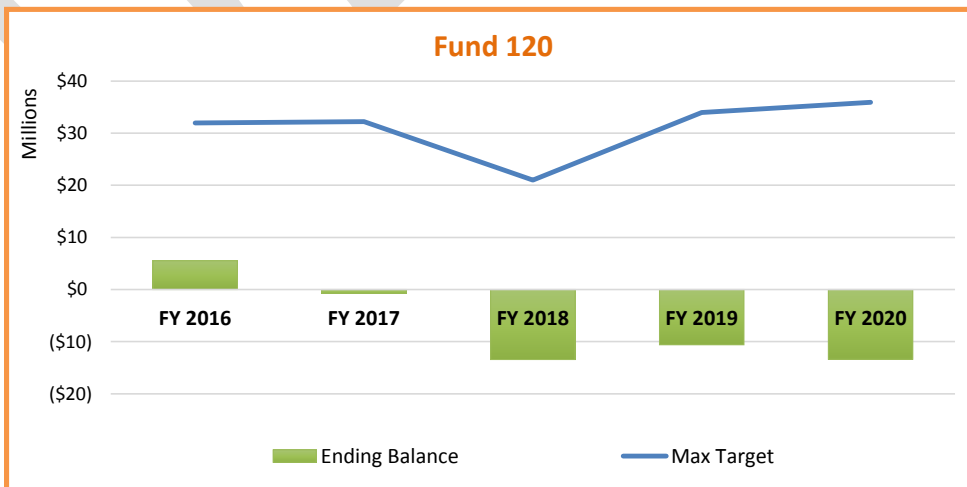


Figure 1-4: Projected Ending Capital Reserve (Fund 120) Reserves – Master CIP



1.4.2 Water Utility Recommendations

Financial Recommendations

As part of our cost of service study and rate model development, we first reviewed the Agency's projected revenue requirements over a 10-year planning horizon to determine how current rates could support the utility's revenue needs in the short-term and long-term.

Based on the the initial review, if the Agency does not increase its rates, it will have negative net cash at Fiscal Year End 2015-16 that will deplete reserves to offset annual shortfalls. The Agency's reserves will be fully depleted by Fiscal Year 2016-17 if rates are not significantly increased. In addition, the Agency's annual planned capital improvement expenditures average approximately \$19.2M over the next five years. The Agency currently has a healthy level of capital reserves for Fiscal Year 2015-16; however, given the necessary reinvestment in the Agency's water utility system, reserves would only cover the scheduled capital projects for Fiscal Year 2015-16, and without revenue adjustments, reserves would be depleted after funding Fiscal Year 2016-17 projects. Therefore, revenue adjustments and capital project deferrals are necessary to ensure positive net operating cash, adequate liquidity to fund ongoing capital, and to build up reserves to meet the Agency's adopted reserve policies.

After reviewing the Agency's current financials, revenue requirements, reserve policies, and expected reduced water sale revenues, the proposed financial plan was developed to meet the following criteria:

- Recover lost revenue due to a reduction in sales through a Temporary Conservation Surcharge
 - The Temporary Conservation Surcharge would be in place while revenue adjustments are made to permanently replace revenue generated from the Temporary Conservation Surcharge
 - **Temporary Conservation Surcharge would sunset June 30, 2018.**
- Fund capital through a combination of Pay-As-You-Go (PAYGO) (cash on hand) and Debt financing
 - Proposed a bond issue in Fiscal Year 2017-18, equal to \$43M (See Appendix B)
- Build up reserves to meet minimum target level over the three year planning period
- Provide rate stability for future years outside the 3-year planning period

Given the severity of the drought and the financial impact on the Agency, staff revisited the master capital improvement program to determine whether certain capital projects could be deferred. As a result, the proposed financial plan and recommended rates incorporate the Capital Improvement Program with a revised schedule reflecting such deferrals (Revised CIP).

In conjunction with meeting the criteria referenced above and the schedule adjustments to the capital improvement plan, it is recommended that the Agency adjust revenue by 10% above CPI for each of the Calendar Years 2016, 2017 and 2018. Each revenue adjustment would occur in January, with the first adjustment taking place on January 1, 2016. Implementing these revenue adjustments would enable the Agency to eliminate the Temporary Conservation Surcharge on June 30, 2018.

Figure 1-5 illustrates the operating position of the Water Utility under the proposed necessary revenue requirements where the expenses are shown by stacked bars; and total revenues at current rates and proposed rates are shown by the horizontal trend lines. **Figure 1-6** summarizes the projected Revised CIP and its funding sources, either PAYGO or debt financed. **Figure 1-7** through **Figure 1-9** display the ending total reserve balances for Fund 100, Fund 120, and both funds combined, where the horizontal trend line indicates the target reserve balance (as defined within the Agency's reserve policies) and the bars indicate ending reserve balance.

Figure 1-5: Proposed Operating Financial Plan

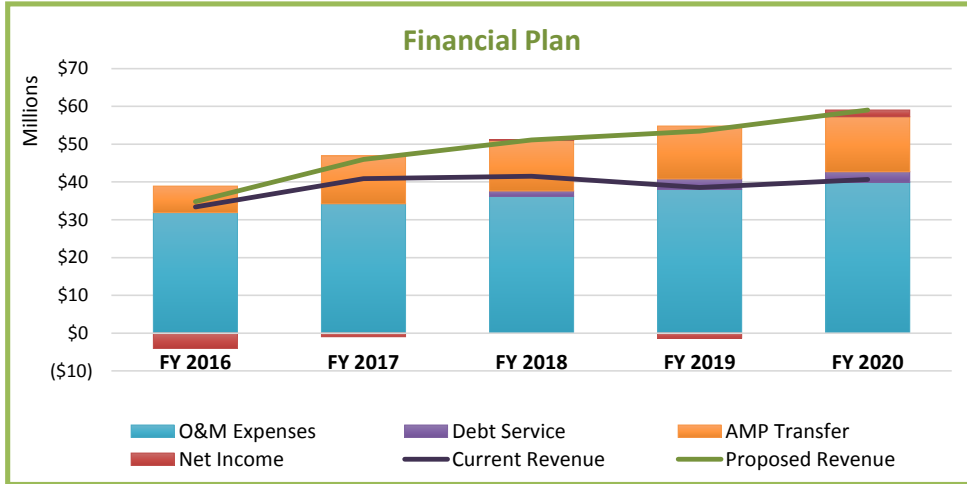


Figure 1-6: Projected Revised CIP and Funding Source

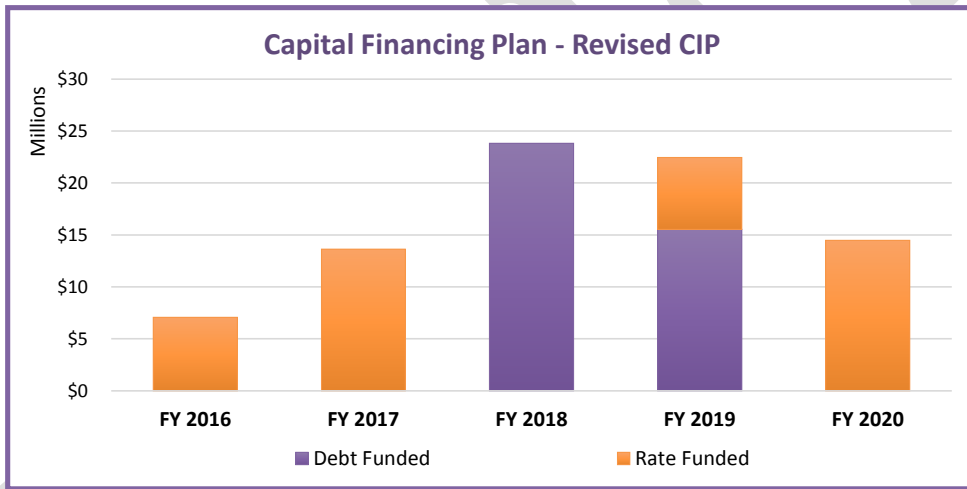


Figure 1-7: Projected Ending Reserves (Fund 100)

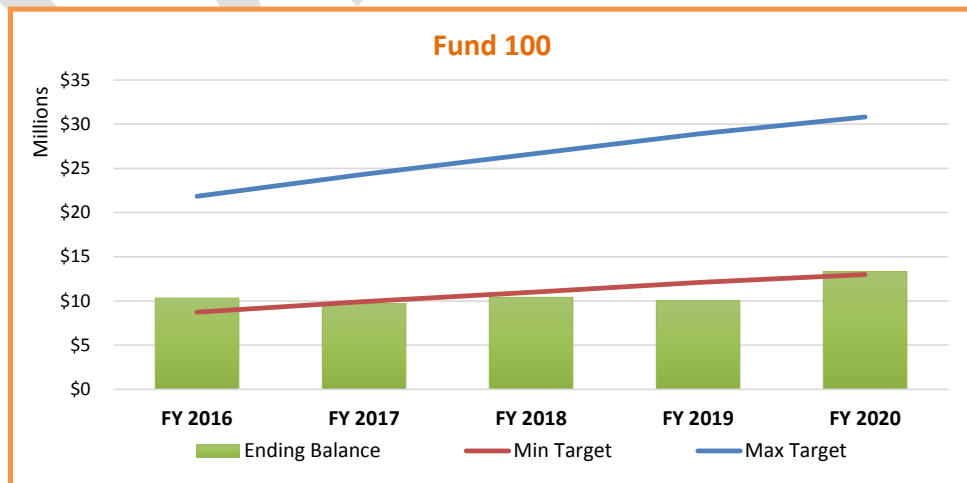


Figure 1-8: Projected Ending Reserves (Fund 120)

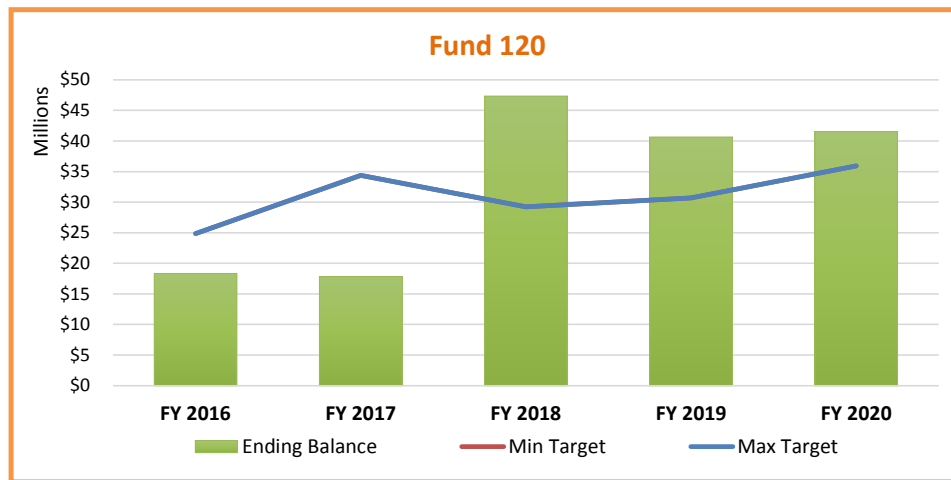
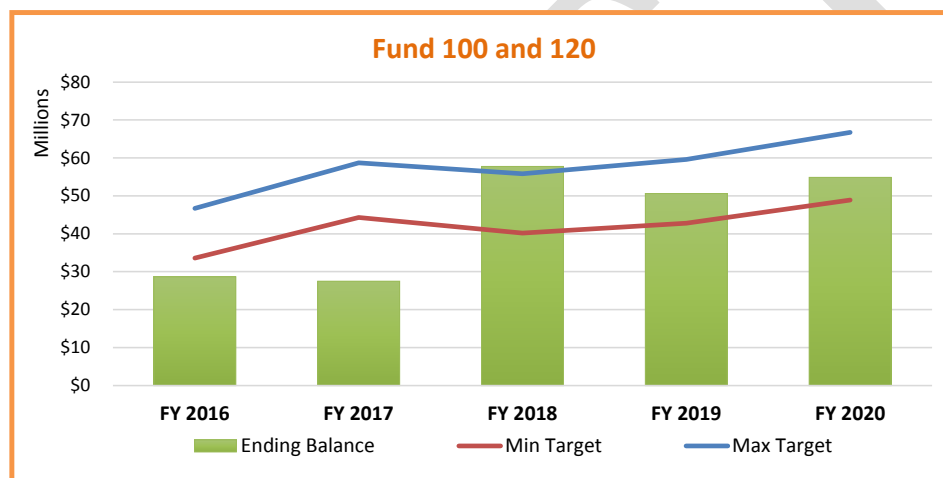


Figure 1-9: Projected Ending Reserves (Fund 100 and 120)



Rate Structure Recommendations

RFC also reviewed the current rate structure and consumption data as part of updating the Agency’s rate structure. As such, RFC also recommends the following proposed adjustments to the current rate structure:

- RFC recommends adjusting the current 4-tiered variable rate structure and increase the amount of revenue recovery from a fixed charge. **Currently, the monthly service charge only recovers approximately \$65,000** (less than 1%). RFC recommends establishing a fixed charge to recover approximately 35% of required revenue. Moving forward, the new fixed charge will provide increased revenue stability to the Agency and will provide its retailers rate stability in subsequent years after the temporary conservation surcharge sunsets. In order to equitably recover the new fixed charge, RFC recommends using historical water sales for allocating the 35% of revenue recovery to each retailer.
- RFC recommends that the fixed charge be allocated using the historical 5-year rolling average of demand and 3-year rolling average of peak usage for each retailer. To determine the percentage of fixed costs to recover from 5-yr rolling average demand versus 3-yr rolling average peak month, The Agency’s CIP was allocated between average flow demand and peak demand.
- For the variable rate component, RFC recommends eliminating the use of tiers and establishing a uniform rate per hundred cubic feet for the retailers. As previously mentioned, more than

98% of total usage and charges occur in Tier 4; therefore, the current rate structure substantially reflects a uniform rate.

- RFC recommends implementing a Temporary Conservation Surcharge to recover the projected revenue shortfall over the next 3-years. The Temporary Conservation Surcharge should be recovered as a fixed component to ensure stable revenue recovery and it is recommended to recover this surcharge using the 5-year rolling average of historical water sales.

The proposed rate structure is set forth in Table 1-7 below. The proposed rates for the monthly fixed charges and the commodity charge of the Agency’s treated water service fees are set forth in Tables 1-6 through 1-8 below.

Table 1-7: Proposed Rate Structure

Customer Class	Proposed (Commencing 1-1-16)
Fixed Charge Unit Cost (\$/CCF)	
Base	5-year rolling average
Peaking	3-year rolling average
Temporary Conservation Surcharge (\$/CCF) ¹	5-year rolling average
Variable Rate (\$/CCF)	Uniform

Table 1-8 through Table 1-9 summarizes the proposed water rates.

Table 1-8: Proposed Fixed Charges

Fixed Charge	FY¹ 2015-16	FY¹ 2016-17	FY¹ 2017-18
Total Fixed Charge	\$11,067,688	\$13,870,928	\$16,487,141
Base	\$7,658,907	\$9,598,767	\$11,409,202
Peaking	\$3,408,780	\$4,272,161	\$5,077,939
5-year rolling average demand (CCF)	15,479,594	14,862,695	14,244,616
3-year rolling average peak month (CCF)	1,901,801	1,805,460	1,706,764
Fixed Charge Unit Cost (\$/CCF)			
Base	\$0.50	\$0.65	\$0.81
Peaking	\$1.80	\$2.37	\$2.98

¹ The Agency’s proposed rates are adjusted each January with the first adjustment occurring on January 1, 2016.

Table 1-9: Proposed Temporary Conservation Surcharge

Temporary Conservation Surcharge Calculation	FY¹ 2015-16	FY¹ 2016-17	FY¹ 2017-18
Temporary Conservation Surcharge Revenues	\$3,500,000	\$7,000,000	\$5,000,000
5-year rolling average demand (CCF)	7,739,797 ²	14,862,695	14,244,616
Temporary Conservation Surcharge (\$/CCF)	\$0.46	\$0.48	\$0.36

¹ The Agency’s proposed rates are adjusted each January with the first adjustment occurring on January 1, 2016.

² In Fiscal Year 2015-16, Temporary Conservation Surcharge is recovered over 6 months of water sales.

Table 1-10: Proposed Variable Commodity Rate

Variable Rate Calculation	FY¹ 2015-16	FY¹ 2016-17	FY¹ 2017-18
Variable Revenue	\$20,735,384	\$25,987,273	\$30,888,764
Projected Water Sales (CCF)	12,362,340	13,665,220	14,302,067
Variable Rate (\$/CCF)	\$1.68	\$1.91	\$2.16
<i>Variable Rate (\$/AF)</i>	<i>\$732</i>	<i>\$832</i>	<i>\$941</i>

¹The Agency’s proposed rates are set for each calendar year and adjusted each January with the first adjustment occurring on January 1, 2016.

Given the multiple components that make up the cost of service study and related water rate model as well as the recommended changes to the rate structure, it is important to identify how the change in the proposed rate structure would impact retailers. **Table 1-12** identifies how the change in the rate structure would affect each retailer based on RFC’s recommendation to recover 35% of the Agency’s required revenue through fixed charges based on historical usage. Note that this 35% allows the agency to recover only a portion of its fixed costs.

However, it is first worthy to note the difference in percentage share of responsibility between retailers when charging based on current usage, usage over the last five years, and peak usage over the last 3 years. Table 1-11 provides a summary of each retailers’ percentage share allocation. As an example, if all costs were recovered through a variable rate based on usage, the City of Pleasanton would be responsible for 34% of the total cost. Similarly, instead of current usage, if all costs were recovered based on the last five years of historical usage, the City of Pleasanton would be responsible for 1% more of total costs, or 35%. Lastly, using the last 3 years of peak usage, the City of Pleasanton would be responsible for 2% more of costs when compared to expected Fiscal Year 2015-16 usage, or 36% instead of 34%. Given that RFC’s recommendation uses all three components - with 65% of total revenue requirements recovered based on Fiscal Year 2015-16 usage and 35% based on the historical usage, the actual impact to the City of Pleasanton from changing the rate structure generates a very slight difference of 1.4%, as shown in **Table 1-12**. As such, the rate structure change has minimal impact to each retailer, but provides a significant amount of increased revenue stability to the Agency. In addition, the new proposed rate structure would also provide rate stability to Retailers since drastic rate spikes would be minimized when a significant reduction in sales occurs in one particular year.

Table 1-11: Rate Impact – Rate Structure Change

Retailers	FY 2015-16 Usage	5-Year Average	3-Year Peak Avg
City of Pleasanton	34%	35%	36%
DSRSD	30%	27%	26%
Cal Water	19%	20%	21%
Livermore	17%	17%	18%
Total	100%	100%	100%

Table 1-12: Rate Impact – Rate Structure Change

Retailers	Current Rate Revenue	New Rate Structure	Total Δ	Percentage Δ
City of Pleasanton	\$9.82M	\$9.96M	+\$142k	1.4%
DSRSD	\$8.50M	\$8.25M	-\$250k	(2.9%)
Cal Water	\$5.35M	\$5.50M	+\$165k	3.1%
Livermore	\$5.02M	\$4.99M	-\$23k	(0.4%)

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APPENDIX A – PROJECTED PRO FORMA – NO CHANGES

	FY 2015 - 16	FY 2016 - 17	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
Revenue					
Total Rate Revenue	\$28,911,884	\$32,940,662	\$35,594,219	\$37,595,390	\$39,691,412
Conservation Surcharge	\$0	\$0	\$0	\$0	\$0
Investment Earnings	\$90,000	\$19,053	\$19,053	\$19,053	\$19,053
Other Revenue	\$855,991	\$864,551	\$873,196	\$881,928	\$890,748
Total Revenue	\$29,857,875	\$33,824,266	\$36,486,468	\$38,496,371	\$40,601,213
Expenses					
O&M Expenses	\$31,884,216	\$33,946,534	\$35,617,340	\$37,130,377	\$38,726,781
Existing Debt Service	\$0	\$0	\$0	\$0	\$0
Proposed Debt Service	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$31,884,216	\$33,946,534	\$35,617,340	\$37,130,377	\$38,726,781
Net Cash Flow before Transfers	(\$2,026,341)	(\$122,268)	\$869,128	\$1,365,994	\$1,874,432
AMP Transfer to Fund 120	\$7,000,000	\$12,661,760	\$13,399,000	\$13,950,000	\$14,530,000
Net Cash Flow	(\$9,026,341)	(\$12,784,028)	(\$12,529,872)	(\$12,584,006)	(\$12,655,568)
Fund 100 Beginning Balances	\$14,388,282	\$5,361,941	(\$7,422,087)	(\$19,951,958)	(\$32,535,965)
Fund 100 Ending Balances	\$5,361,941	(\$7,422,087)	(\$19,951,958)	(\$32,535,965)	(\$45,191,533)
Fund 120 Beginning Balances	\$24,725,199				
Sinking Fund	(\$3,884,630)				
Encumbrances/Carryovers	(\$2,876,245)				
Fund 120 Available Balances	\$17,964,324	\$5,529,784	(\$712,381)	(\$13,427,744)	(\$10,613,168)
Revenues	\$7,433,460	\$13,098,835	\$13,845,637	\$15,422,576	\$14,952,602
Expenses	(\$19,868,000)	(\$19,341,000)	(\$26,561,000)	(\$12,608,000)	(\$17,728,000)
Fund 120 Ending Balances	\$5,529,784	(\$712,381)	(\$13,427,744)	(\$10,613,168)	(\$13,388,566)
TOTAL BEGINNING BALANCE	\$32,352,606	\$10,891,725	(\$8,134,468)	(\$33,379,702)	(\$43,149,133)
TOTAL ENDING BALANCE	\$10,891,725	(\$8,134,468)	(\$33,379,702)	(\$43,149,133)	(\$58,580,099)

APPENDIX B – CIP SUMMARY

CIP Options	Capital Improvement Plan				
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Master CIP	\$19.9M	\$19.3M	\$26.6M	\$12.6M	\$17.7M
Revised CIP	\$7.1M	\$13.6M	\$23.8M	\$22.5M	\$14.5M
Difference	(\$12.8M)	(\$5.7M)	(\$2.8M)	\$9.9M	(\$3.2M)
Proposed Debt Issue			\$43M		
Debt Payments			\$1,398,606	\$2,797,212	\$2,797,212

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APPENDIX C – PROPOSED FINANCIAL PLAN PRO-FORMA

	FY 2015 - 16	FY 2016 - 17	FY 2017 - 18	FY 2018 - 19	FY 2019 - 20
Revenue					
Water Sales - Existing Rate	\$28,911,884	\$32,940,662	\$35,594,219	\$37,595,390	\$39,691,412
Additional Revenue Needs:					
Fiscal Year	Revenue Adjustment	Month Effective			
FY 2015 - 16	10%	January	\$1,445,594	\$3,294,066	\$3,559,422
FY 2016 - 17	10%	January		\$1,811,736	\$3,915,364
FY 2017 - 18	10%	January			\$2,153,450
FY 2018 - 19	10%	January			\$2,501,973
FY 2019 - 20	1%	January			
FY 2020 - 21	1%	January			
FY 2021 - 22	0%	January			
FY 2022 - 23	0%	January			
FY 2023 - 24	0%	January			
FY 2024 - 25	0%	January			
Total Additional Revenue			\$1,445,594	\$5,105,803	\$9,628,236
Total Rate Revenue			\$30,357,478	\$38,046,465	\$45,222,455
Conservation Surcharge			\$3,500,000	\$7,000,000	\$5,000,000
Investment Earnings			\$90,000	\$49,794	\$56,995
Other Revenue			\$855,991	\$864,551	\$873,196
Total Revenue			\$34,803,469	\$45,960,810	\$51,152,646
Expenses					
O&M Expenses			\$31,884,216	\$33,946,534	\$35,617,340
Existing Debt Service			\$0	\$0	\$0
Proposed Debt Service			\$0	\$0	\$1,398,606
Total Expenses			\$31,884,216	\$33,946,534	\$37,015,946
Net Cash Flow before Transfers			\$2,919,253	\$12,014,276	\$14,136,701
AMP Transfer to Fund 120			\$7,000,000	\$12,661,760	\$13,399,000
Net Cash Flow			(\$4,080,747)	(\$647,484)	\$737,701
Fund 100 Beginning Balances			\$14,388,282	\$10,307,535	\$9,660,052
Fund 100 Ending Balances			\$10,307,535	\$9,660,052	\$10,397,752
Fund 120 Beginning Balances			\$24,725,199		
Sinking Fund			(\$3,884,630)		
Encumbrances/Carryovers			(\$2,876,245)		
Fund 120 Available Balances			\$17,964,324	\$18,327,784	\$17,806,619
Revenues			\$7,433,460	\$13,098,835	\$53,345,011
Expenses			(\$7,070,000)	(\$13,620,000)	(\$23,810,000)
Fund 120 Ending Balances			\$18,327,784	\$17,806,619	\$47,341,630
TOTAL BEGINNING BALANCE			\$32,352,606	\$28,635,319	\$27,466,671
TOTAL ENDING BALANCE			\$28,635,319	\$27,466,671	\$57,739,382