

ZONE 7 BOARD OF DIRECTORS
FINANCE COMMITTEE

Monday, September 8, 2014
3:30 p.m.

Location: Board Room
 Zone 7 Administration Building
 100 North Canyons Parkway
 Livermore, CA 94551

Director Figuers
Director Palmer
Director Ramirez Holmes

A G E N D A

1. Public Comment on Items Not on Agenda
2. Proposed 2015 Municipal & Industrial Water Connection Fee
3. Water Rates
4. Draft FY 15/16 Capital Improvement Program Development Methodology
5. Verbal Reports
6. Adjournment



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY • LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

ITEM NO. **2**

DATE: September 8, 2014

TO: Finance Committee

FROM: JaVia Green, Staff Analyst

SUBJECT: Proposed 2015 Municipal & Industrial Water Connection Fee

SUMMARY:

- Zone 7 established the Municipal & Industrial (M&I) Connection Fee Program in 1972 to assess water connection fees to new development in order to fund water system expansion projects required to serve additional water demands from new development.
- The Board resolved with the adoption of the 2002 Connection Fee (Resolution No. 02-2450), that the basic fee be updated annually based on the Engineering News Record Construction Cost Index (ENR CCI), or as warranted to keep current with current plans and projections based on periodic reviews.
- The most recent of these periodic reviews was performed in 2011. Zone 7 staff determined that the future funding needs of the program were in-line with the existing connection fees. The review recommended annual increases based on ENR CCI to account for the impact of inflation on future projects.
- For the 2015 fees, staff recommends adjusting the current fees to keep pace with inflation, based on the change in the ENR CCI from September 2013 to September 2014. Note that the August 2013 to August 2014 increase was 3.2%, so we anticipate that the change from September 2013 to September 2014 will be similar. The September index information was not available at the time of this submittal.
- Upon Finance Committee concurrence, this item will be presented at the October Board Meeting for adoption.

FUNDING:

Water connection fee revenue accrues to Fund 130 – Water Expansion.

RECOMMENDED ACTION:

Discuss and provide direction.



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

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ITEM NO. 3

DATE: September 8, 2014

TO: Finance Committee

FROM: Tom Hughes, Assistant General Manager, Administration

SUBJECT: Water Rates

BACKGROUND/DISCUSSION:

On August 28, 2014, the Finance Committee discussed some preliminary concepts and provided additional direction on the water rates process. At the conclusion of the meeting, staff stated they would continue the discussion at the next Finance Committee meeting and would present the final recommendation to the Board in October.

Staff then held a retailer meeting on September 4, 2014. At that meeting the retailers stated that they have a preference for a rate that is increased by the Consumer Price Index (CPI) each year but recognize that there are current revenue shortfalls that may necessitate something more. Staff indicated that they were modeling rates in the 10%-15% range in order to meet revenue needs and to stabilize reserves (i.e., not plan on drawing down reserves beyond this year's approved budget). The retailers commented that they would have an easier time with a rate plan that kept a base rate in the CPI range with a drought recovery surcharge designed to cover the revenue gap created by reduced sales. Note that this proposal (Option 2, below) does not include a long-term plan for financing replenishment of specific reserves used during FY 2014-15 (i.e., the Drought Contingency Reserve and the Rate Stabilization Reserve).

Rate Development Process

In calculating water rates, staff reviews historical actual costs, current budget and current conditions that may impact costs in the future. A 'discounted budget' was used to more accurately estimate actual costs of service. Each cost category was analyzed to determine if cost savings or increased costs were anticipated during the two-year rate period. Included in this cost analysis are the Asset Management Plan (AMP) transfers as previously established by the Board.

The second piece in calculating rates is to determine volumes (i.e., projected quantity of water sales during the calendar year). Staff reviewed the volumes used during the 1991 drought and the recovery period thereafter. The recovery period was only two years with the first year after the drought (or post-drought) being 14% less than normal and the second year at the pre-drought level. This data, in addition to an annual growth factor, was utilized in the development of volumes for both the normal and drought rates.

The following assumptions were used:

- The estimate for Calendar Year 2014 is based on seven months of actuals plus a projection for the remaining five months.
- To calculate a post-drought volume estimate for 2015, staff started with 2013 actual deliveries then added a 1.9% growth factor based on the annual retailer delivery requests and then discounted the 2015 estimate by 14% to estimate post-drought recovery.
- For 2016, the volume estimate is based on the retailer delivery requests with conservation. These amounts are shown in the table below:

	Projected Deliveries (baseline)	Annual % Change with a growth factor	Updated Projections
2013	41,476 (actual)		-
2014	28,911 (7 mos. of actual & projection)	-	28,911
2015	41,476	1.9%	37,038
2016	39,056	-	39,056

Rate Options (see attached tables for additional detail)

Option One - 12% increase for 2015 and 3% CPI for 2016 (no drought recovery surcharge)

Option Two - 3% CPI for two years in conjunction with a 9% (2015) and 9% (2016) drought recovery surcharge (based on input from the retailers)

Impacts under these two options are as follows:

	Option One	Option Two
Addition to (Use of) Reserves - FY14/15	\$(9,925,932)	\$(9,875,930)
Addition to (Use of) Reserves - FY15/16	10,954	124,793
Addition to (Use of) Reserves - FY16/17	1,054,322	57,079
Total Reserves – Fiscal Year Ending (FYE) 14/15	20,708,358	20,758,360
Total Reserves – FYE 15/16	20,719,312	20,883,153
Total Reserves – FYE 16/17	21,773,634	20,940,232

Recommendation

Staff recommends that the Committee review and discuss the information and options and provide staff with further direction on how to proceed.

Option 1 - 12% increase for 2015 and CPI (3%) for 2016

Calendar Year	2013	2014	2015	2016
Water Rate per AF	\$945	\$970	\$1,086	\$1,119
Volume of Water Sales (AF)	41,476	28,911	37,038	39,056

	FY12/13 Audited Actual	FY13/14 Unaudited Actual	FY14/15 Discounted Budget	FY15/16 Forecast Budget	FY16/17 Forecast Budget
Fund 100 - Water Enterprise					
Beginning Fund Balance:	27,289,110	31,495,970	30,634,290	20,708,358	20,719,312
<u>Sources of Funds</u>					
Revenue	39,469,513	36,450,292	34,707,791	43,107,953	45,502,582
Total Sources	39,469,513	36,450,292	34,707,791	43,107,953	45,502,582
<u>Uses of Funds</u>					
Operating Expenses	28,662,653	28,811,973	31,809,799	32,596,999	31,786,500
Transfer to Fund 120	6,600,000	8,500,000	12,823,924	10,500,000	12,661,760
Total Uses	35,262,653	37,311,973	44,633,723	43,096,999	44,448,260
Ending Fund Balance:	31,495,970	30,634,290	20,708,358	20,719,312	21,773,634
Net Additions/(Uses) of Reserves	4,206,860	(861,681)	(9,925,932)	10,954	1,054,322
<u>Reserves Balances(End of Period)</u>					
Operating Reserve	8,308,044	7,182,825	7,634,352	7,823,280	6,357,300
Drought Contingency Reserve	5,861,673	5,861,673	0	2,953,261	3,788,660
Emergency Reserve	4,113,026	4,197,380	4,353,940	4,492,920	4,666,820
Rate Stabilization Reserve	13,213,227	13,392,411	8,720,066	5,449,851	6,960,854
Total	31,495,970	30,634,290	20,708,358	20,719,312	21,773,634
Board Approved Minimum Reserve Levels	9,410,982	9,170,967	9,376,873	10,589,845	10,915,507
Over/(Under) Board Approved Minimum Reserve Levels	22,084,989	21,463,323	11,331,485	10,129,467	10,858,127

Assumptions:

The Board authorized a significant use of reserves in the FY 14/15 budget.
Drought is a one-year event (2014).
Post drought recovery is based on the 1990 drought which was two years, with the first year 14% less than normal and the second year at pre-drought level.

Notes:

Operating Expenses:

All expense categories were reviewed to determine an appropriate discounted budgeted amount.

Option 2 - 3% CPI for two years and 9% (2015) and 9% (2016) Drought Recovery Surcharge

Calendar Year	2013	2014	2015	2016
Water Rate per AF	\$945	\$970	\$999	\$1,029
Proposed Drought Surcharge per AF	n/a	n/a	\$1,089	\$1,122
Volume of Water Sales (AF)	41,476	28,911	37,038	39,056

	FY12/13 Audited Actual	FY13/14 Unaudited Actual	FY14/15 Discounted Budget	FY15/16 Discounted Budget	FY16/17 Discounted Budget
Fund 100 - Water Enterprise					
Beginning Fund Balance:	27,289,110	31,495,970	30,634,290	20,758,360	20,883,153
Sources of Funds					
Revenue	39,469,513	36,450,292	34,757,793	43,221,792	44,505,369
Total Sources	39,469,513	36,450,292	34,757,793	43,221,792	44,505,369
Uses of Funds					
Operating Expenses	28,662,653	28,811,973	31,809,799	32,596,999	31,786,530
Transfer to Fund 120	6,600,000	8,500,000	12,823,924	10,500,000	12,661,760
Total Uses	35,262,653	37,311,973	44,633,723	43,096,999	44,448,290
Ending Fund Balance:	31,495,970	30,634,290	20,758,360	20,883,153	20,940,232
Net Additions/(Uses) of Reserves	4,206,860	(861,681)	(9,875,930)	124,793	57,079
Reserves Balances(End of Period)					0
Operating Reserve	8,308,044	7,182,825	7,634,352	7,497,310	6,516,239
Drought Contingency Reserve	5,861,673	5,861,673	2,378,214	2,961,230	3,050,268
Emergency Reserve	4,113,026	4,197,380	4,353,940	4,492,920	4,666,820
Rate Stabilization Reserve	13,213,227	13,392,411	6,391,853	5,931,693	6,706,905
Total	31,495,970	30,634,290	20,758,360	20,883,153	20,940,232
Board Approved Minimum Reserve Levels	9,410,982	9,170,967	9,383,373	10,604,644	10,785,872
Over/(Under) Board Approved Minimum Reserve Levels	22,084,989	21,463,323	11,374,986	10,278,509	10,154,360

Assumptions:

The Board authorized a significant use of reserves in the FY 14/15 budget.
The drought is an one-year event (2014).
The post-drought recovery is based on the 1990 drought which was two years, with the first year 14% less than normal and the second year at pre-drought year.

Notes:

Operating Expenses:

All expense categories were reviewed to determine an appropriate discounted budgeted amount.



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ITEM NO. **4**

DATE: September 8, 2014

TO: Finance Committee

FROM: JaVia Green, Staff Analyst

SUBJECT: Draft FY 15/16 Capital Improvement Program Development Methodology

SUMMARY:

As part of Zone 7's capital planning and budget processes, staff has begun an update to the Capital Improvement Program (CIP), starting with FY 15/16. A prioritization committee representing all levels of Engineering, Finance, and Integrated Planning staff has been formed. This group's responsibility is to approve and prioritize the list of projects to be presented within the CIP document to the General Manager, Retailers, and Zone 7 Board of Directors based on resources, available funding, and priority. The projects in the first two years of the CIP will serve as the FY 15/16 and FY 16/17 capital budgets.

This group has outlined a CIP Development Methodology to create various portfolios of projects designed to meet Water System goals under various operating conditions, ranging from normal operations to no State Water Project availability. Staff will give a presentation describing this method to the Finance Committee to familiarize the Committee with the process for identifying CIP projects before the actual CIP is presented.

Meeting the established Water System goals requires large up-front capital investments which need funding. Under Zone 7's current pay-as-you-go funding approach, these capital investments would necessitate significant spikes in either water rates/connection fees and/or project deferrals until enough cash reserves are built to fund the projects.

Zone 7 has retained the services of Fieldman, Rolapp & Associates to work on a long-range financial plan, including funding mechanisms for capital improvement projects. Their previous work with Zone 7 includes the interim reserve policy adopted by the Board in April 2013. Attached is a long-range financial plan Fieldman, Rolapp & Associates developed for another client. The plan specifically looked at an implementation plan to fully fund the client's next ten years of capital improvements. While the attached plan has many sections that are irrelevant to Zone 7, it also contains general background information which can inform the committee's discussion on funding options. Staff anticipates that the Zone 7 plan will be completed by late spring 2015.

Staff would like to discuss with the Finance Committee whether to consider debt financing as an option in the CIP funding analysis. Direction on this will help establish a funding framework to shape CIP project recommendations.

Staff met with the Retailers on September 4, 2014 to discuss the CIP Development Methodology and proposed approach. A presentation summarizing the CIP Development Methodology will be presented to the Finance Committee for discussion and direction in advance of further developing the CIP. Staff plans to bring forward the draft CIP to the Finance Committee in early October and to the full Board at the October 15, 2014 meeting.

RECOMMENDED ACTION:

Discussion.

ATTACHMENT

Fieldman, Rolapp & Associates Sample Long Range Financial Plan

Long Range Financial Plan

Prepared by



TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
INTRODUCTION	6
SUMMARY OF TASKS AND MAJOR ASSUMPTIONS	6
CURRENT FINANCIAL CONDITION	8
Revenues	8
Potable Water Sales	8
Base Meter Fees	9
Recycled Water Sales	9
Hydroelectric power sales	10
Investment Income	10
Property Taxes	10
Capacity Fees	10
Expenses	10
Supply Costs	12
Water Treatment Costs	12
Administrative and General	12
Interest Expense	13
Comparative Analysis	13
Reserve Fund Activity	14
Financial Indicators	15
<i>Financial Ratios: Debt Service Coverage</i>	15
<i>Financial Ratios: Unrestricted Days Cash</i>	16
Summary of Current Status	16
ANALYSIS OF C.I.P. FUNDING ALTERNATIVES	16
Evaluation Criteria	17
<i>Cost of Supply – Imported Water</i>	17
<i>Demand</i>	18
<i>Property Taxes</i>	18
<i>Inflation</i>	19
<i>Interest Rates: Impact on Borrowing and on Investments</i>	19
Option One: Pay-go Strategy	19
<i>First Alternative: High Rate Increases</i>	19
<i>Second Alternative: Moderate Rate Increases</i>	21
<i>Third Alternative: Low Rate Increases</i>	22
<i>Comparison of Pay-go Alternatives</i>	22
Option Two: Combination of Debt Issuance and Pay-Go Strategy	23
<i>Alternative One: First rate increase effective January 1, 2010</i>	24
<i>Alternative Two: First rate increase effective July 1, 2010</i>	25
<i>Alternative Three: First rate increase effective January 1, 2011</i>	26
<i>Comparison of Debt/Pay-go Alternatives</i>	26
FINDINGS AND RECOMMENDATIONS	27
Comparative Analysis	27
<i>Pay-go Scenarios</i>	27
<i>Debt/Pay-go Scenarios</i>	28
<i>Recommended Alternative</i>	30

<i>Recycled Water Project</i>	30
CONCLUSION.....	30
APPENDIX A – PAY-GO STRATEGY ALTERNATIVE ONE: HIGH RATE INCREASES.....	32
APPENDIX B – PAY-GO STRATEGY ALTERNATIVE TWO: MODERATE RATE INCREASES.....	33
APPENDIX C – PAY-GO STRATEGY ALTERNATIVE THREE: LOW RATE INCREASES.....	34
APPENDIX D – SUMMARY OF PAY-GO STRATEGY ALTERNATIVES	35
APPENDIX E – DEBT/PAY-GO STRATEGY ALTERNATIVE ONE: FIRST RATE INCREASE EFFECTIVE 1/1/2010.....	36
APPENDIX F – DEBT/PAY-GO STRATEGY ALTERNATIVE TWO: FIRST RATE INCREASE EFFECTIVE 7/1/2010.....	37
APPENDIX G – DEBT/PAY-GO STRATEGY ALTERNATIVE THREE: FIRST RATE INCREASE EFFECTIVE 1/1/2011.....	38
APPENDIX H – SUMMARY OF DEBT/PAY-GO STRATEGY ALTERNATIVES....	39
APPENDIX I - SUMMARY OF ALL ALTERNATIVES.....	40
APPENDIX J - SUMMARY OF TOTAL 10-YEAR FUNDING REQUIREMENTS....	41

EXECUTIVE SUMMARY

Client has asked Fieldman, Rolapp & Associates to provide a recommended implementation strategy to fully fund CLIENT's next 10 years of capital improvements. We have therefore conducted an extensive analysis of CLIENT's possible alternatives to meet this capital funding need. In general, these alternatives encompass two broad funding strategies: 1) using only pay-as-you-go sources, comprised of CLIENT's funds on hand and revenue generated from rate increases and 2) pay-as-you-go sources combined with proceeds generated from debt issuance. Within these two strategies, several specific alternatives were developed and analyzed. These are summarized in the chart below.

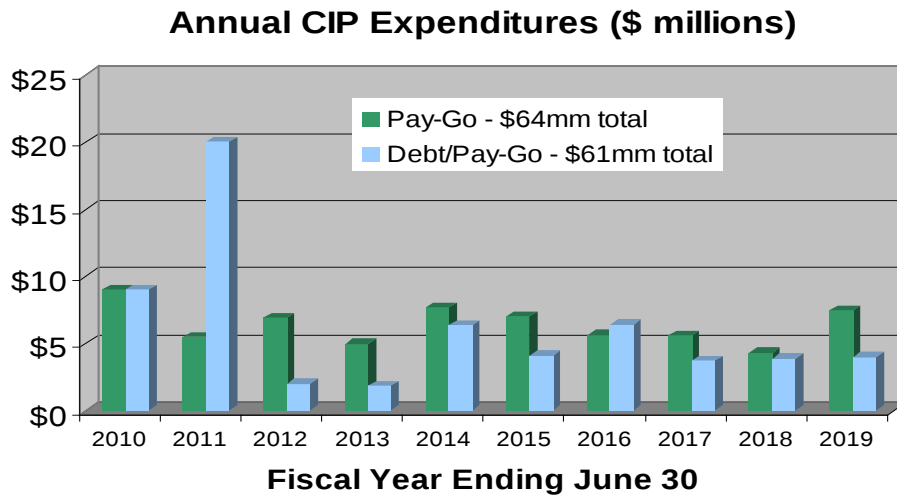
Alternatives	Reserve Fund Policy Compliance	Lowest # Days Cash	Debt Service Coverage	Rate Increases					
				2010*	2011	2012	2013	2014	2015-19
Pay-As-You-Go Scenarios									
1 High	2012	350	3.70 to 11.6	35.0%	30.0%	0.0%	0.0%	0.0%	0.0%
2 Moderate	2014	332	3.70 to 11.6	25.0%	20.0%	10.0%	10.0%	0.0%	0.0%
3 Low	2019	222	3.70 to 13.1	15.0%	9.0%	9.0%	9.0%	9.0%	8-9%
Debt/Pay-As-You-Go Scenarios**									
1 Initial Rate Increase on January 1, 2010	2010	392	1.89 to 4.16	15.0%	7.5%	7.0%	7.0%	7.0%	6-7%
2 Initial Rate Increase on July 1, 2010	2010	335	1.62 to 4.08	0.0%	10.0%	28.0%	5.0%	5.0%	5-7%
3 Initial Rate Increase on January 1, 2011	2010	335	1.62 to 4.08	0.0%	20.0%	10.0%	9.0%	7.4%	6-7%

*Rate increases are in addition to scheduled 15% effective January 2010

**Debt/Pay-Go alternatives include two debt issuances (FY2010 and FY2014)

This report documents our conclusion that the debt/pay-go strategy in general offers several advantages compared to the pay-go only strategy when assessed by the evaluation criteria identified in this report. These advantages include financial benefits of 1) expected cost savings to CLIENT of some \$1.3 million¹ in current dollars due to averted inflation costs on CLIENT's Capital Improvement Program ("C.I.P.") and 2) capacity to immediately fulfill CLIENT's policies for required unrestricted cash reserves on hand. The debt/pay-go strategy also better meets the criteria to both 1) spread the cost of the C.I.P. over the expected use of the projects, to address fairness to CLIENT's ratepayers, and 2) spread such costs by using moderate, consistent water rate increases. Additionally, as shown below, the debt/pay-go strategy (all alternatives) provides an overall accelerated C.I.P. expenditure phasing plan, which best insulates CLIENT from the risk of higher future inflation. The strategy also provides opportunities to achieve advantageous construction project and debt costs given current market conditions.

¹ These \$1.3 million of expected cost savings are a result of \$2.1 million (\$2009) in inflation savings, net of the cost of issuance associated with the debt financings.



Of the debt/pay-go alternatives, Alternative #1 is our recommended alternative. In addition to the benefits outlined above, it provides the strongest financial flexibility and operating position for CLIENT as it starts implementing the C.I.P. As illustrated in the chart above, we view this as highly advantageous given the higher C.I.P. funding requirements in the first two years of its implementation. This report measures financial strength primarily on the metrics of Days Cash, which measures CLIENT's cash compared to annual operating costs, and its debt service coverage ratio, which measures CLIENT's net annual operating position. As a prudent financial management practice, and to preserve CLIENT's high credit rating, maintaining an average days cash ratio of at least 400 days and a debt service coverage ratio of at least 2.00 times is recommended.

These ratios in Alternative #1 are stronger than in the other alternatives due to a larger initial rate increase of 15% on January 1, 2010, which is in addition to the 15% rate increase already approved by the Board to become effective on that date. In terms of spreading the costs of the C.I.P. in the most moderate, consistent manner, Alternative #1 is rated slightly lower than the other two alternatives because of the 15% rate increases occurring earlier. The other two debt alternatives, however, do require higher rate increases in FY2011 and FY2012. By FY2014, all three scenarios have comparable 5-7% rate increases for the balance of the 10-year period. Further, the rate increases of Alternative #1 would be in effect prior to the FY2010 debt issuance, which we believe will be a favorable factor for CLIENT's borrowing credit.

The recommendation is supported by the full content and organization of this report, which is organized as follows: First, we provide a brief introduction of the analysis being performed, including some of the key assumptions and steps we took in conducting our analysis. This is followed by a section summarizing CLIENT's current financial condition, which puts the C.I.P. into context and helps frame the possible funding strategies and alternatives. The next section outlines the two C.I.P. funding strategies in general, followed by a detailed discussion of the evaluation criteria used to assess each strategy. With this background and framework in place, the report then details all six

alternatives, evaluating them based on the discussed criteria and providing additional notes and analysis. This detailed analysis is then summarized and Alternative #1 is presented with a detailed recommendation in the “Findings and Recommendations” and concluding sections.

INTRODUCTION

Client’s (“CLIENT”) ability to ensure a reliable high quality water supply for its service territory is largely dependent, among other things, on CLIENT’s ability to finance on-going operations and maintenance, fund replacements and refurbishments of existing infrastructure and invest in system improvements. In March 2009, CLIENT adopted an Asset Management Master Plan (the “AMMP”). The purpose of the AMMP is twofold: (i) evaluate the ability of CLIENT’s assets to perform according to an established set of criteria and (ii) identify recommended capital improvement projects and their associated costs. CLIENT will use the AMMP as a management tool to forecast its annual replacement and refurbishment needs and determine CLIENT’s annual C.I.P. funding requirements.

According to the AMMP, the replacement value of CLIENT’s assets is estimated at \$288,409,217. The cost (in 2009 dollars) of capital improvement and replacement over the next ten fiscal years is estimated by CLIENT at \$55 million. This includes CLIENT’s share, \$14,713,500 (\$2009) of joint facilities projects that are co-funded by CLIENT and JPA. Given the large capital improvement program (“C.I.P.”), CLIENT commissioned Fieldman, Rolapp & Associates to prepare a capital funding plan (the “C.I.P. Funding Plan”) to analyze how to pay for the implementation of the AMMP. A critical part of the C.I.P. Funding Plan is the analysis and comparison between two main C.I.P. funding strategies, Pay-go and combination of Debt/Pay-go. Various alternatives were examined within each strategy and the impact of several evaluation criteria was discussed to determine the water rate implications of the various funding alternatives and which would be the most beneficial for CLIENT.

SUMMARY OF TASKS AND MAJOR ASSUMPTIONS

As part of the C.I.P. funding analysis, we performed several tasks, which served as the benchmark for developing and evaluating the C.I.P funding options available to CLIENT. First, we examined the water rate model (the “Rate Model”) developed for CLIENT by a firm that specializes in such matters. Next, we enhanced the rate model (the “Enhanced Rate Model”) to include an analysis of certain key credit metrics (“Financial Indicators”) to project credit rating outcomes under the financing scenarios being evaluated. The Enhanced Rate Model was then used to analyze rate increases, revenues, expenses, capital expenditures, reserve fund balances and Financial Indicators through FY2019, and the obtained results under each financing strategy were compared as part of the evaluation of those financing alternatives.

The Enhanced Rate Model first analyzed how CLIENT could implement the C.I.P. as it had done historically, i.e. through a Pay-Go funding strategy, using the original C.I.P. phasing plan that was developed for CLIENT. To analyze potential funding strategies using a combination of Pay-go and borrowed capital (debt), a modified C.I.P. phasing plan, incorporating the acceleration of certain distribution system projects, was developed by staff and incorporated in the subsequent analysis of the alternative Debt/Pay-Go financing options. Next, an updated Operation and Maintenance (O & M) forecast was developed and incorporated into the rate impact analysis. In performing all these tasks, certain assumptions and projections utilized in the Enhanced Rate Model were relied on, as summarized below:

- The C.I.P. was escalated annually at an assumed constant rate of inflation. In determining the appropriate inflation rate, several sources were reviewed, including the United States Bureau of Labor Statistics, the United States Engineering News Record (“ENR”), and the ENR for the Los Angeles Region (the only tracked southern California region). The rate of inflation for the San Diego-Carlsbad-San Marcos region (“SD-CPI”) provided by the United States Bureau of Labor Statistics had the highest increase of the three sources and was 3.8% during calendar year 2008. Thus, the 3.8% rate was determined to be the most appropriate and was thus chosen, since it was both the most conservative rate and reflected the most appropriate geographic area.
- Rate increases in the various funding alternatives go into effect on January 1 of every year (unless noted otherwise).
- Imported water costs are escalated by increases provided by San Diego County Water Authority (the “Water Authority”).
- The cost of operations and maintenance associated with local water is escalated at 3% annually.
- The investment return is assumed to be 1.75% for FY2010 and 3% thereafter, starting in FY2011.
- Annual volumetric potable water sales of approximately 13,422 acre-feet are assumed.
- Recycled water revenues rise by the same percentage as proposed rate increases.
- Medical expenses are inflated at 10% annually.
- The interest rate associated with debt financing (the “cost of capital”) is 5%.
- Energy costs are inflated annually by 4%.

- CLIENT's \$14,713,500 share of joint facilities projects is assumed to be funded by CLIENT on a pay-as-you-go basis and is not included as part of the debt financing portion of the combined Debt/Pay-go strategy.

Another key assumption in developing the various C.I.P. funding strategies was to ensure that reasonable customer water rates were established concurrent with the achievement and maintenance of a prudent balance between revenues, expenses and reserves. In addition, a thorough review and analysis of CLIENT's present financial condition was performed (as discussed in detail in the next section) and new and proposed financial policies were developed to address the need to maintain adequate reserves for liquidity, capital and emergencies under any alternative. Next, various risk factors were identified that impact each of the proposed C.I.P. funding options and discussed as part of the analysis. In addition, an analysis of the impact on customer water rates and CLIENT's financial condition was performed to address the potential to invest in additional local resources, such as recycled water.

The following section presents an overview of CLIENT's current financial condition and analyzes the various components that comprise CLIENT's revenues and expenses, as well as CLIENT's overall performance and compliance with its existing reserve policy and bond covenants.

CURRENT FINANCIAL CONDITION

A detailed analysis of CLIENT's financial condition was performed to examine the various components of its revenues and expenditures and the respective shares they account for to identify trends and potential challenges that need to be factored into the development of the C.I.P. financing strategies and the ultimate impact on customer rates. In addition, the current balances in CLIENT's reserve funds were reviewed for compliance with the existing reserve policy. The findings of CLIENT's current performance are presented below.

Revenues

CLIENT generates operating revenues from three primary sources: potable and recycled water sales, base meter fees, and reimbursements from the JPA. Additionally, CLIENT obtains approximately \$1.9 million of property taxes. It has been CLIENT's recent practice to use property taxes for capital purposes. CLIENT's Budget projects that water sales and base meter fees will account for approximately 75% of CLIENT's total revenues during FY2010.

Potable Water Sales

The level of total water sales is one of the most important variables in determining future water rates. As a result of recent rate increases, water sales revenues increased from approximately \$9.2 million in FY2005 to approximately \$13.9 million in FY2009 (projected fiscal-year-end, "FYE"). CLIENT's Budget projects potable water sales will generate \$16.1 million or about 64% of its gross revenues during FY2010².

CLIENT enacted no water rate increases during the period from FY1999 through FY2004. Further, during the period from FY2003 through FY2007, CLIENT sustained operating losses of nearly \$5.7 million³. In addition, partially as a result of the lack of rate increases, CLIENT used rate stabilization fund (RSF) reserves to balance its budget and further delayed rate increases. Consequently, RSF balances declined from \$10.7 million at the end of FY2005 to approximately \$3.0 million at FYE2009, a decline of approximately 72%. In addition, in order to balance its FY2010 Budget, CLIENT projects a transfer of approximately \$1.0 million from the RSF to revenues. Projections from the Enhanced Rate Model indicate that the RSF will continue to decline unless rates are increased and if CLIENT did not raise rates, it will deplete all of its reserves by 2013.

An examination of CLIENT's historical water demand showed that it has remained relatively flat over time. That is primarily due to the fact that CLIENT's service area has reached build-out and population growth is not a significant factor. Therefore, fluctuations in water sales from year to year are dependent upon hydrologic conditions and existing customers' demand. Future demand is directly affected by availability, customers' response to conservation requests and cost.

Base Meter Fees

CLIENT charges a bi-monthly base meter fee. The base meter fee covers the customer service costs for meter replacement, maintenance, billing and reading. Base meter revenues have risen from approximately \$1.3 million in FY2005 to approximately \$2.5 million in FY2009 (projected FYE). CLIENT's Budget projects base meter fees will generate approximately \$2.8 million, or about 11%, of CLIENT's gross revenues during FY2010.

Recycled Water Sales

CLIENT currently generates approximately 3% (FYE2009 projections) of its annual gross revenues from sales of recycled water. Based on CLIENT's budget, recycled water sales' revenues are projected to be approximately \$622,780 for FY2010, or about 2.46% of gross revenues, and will rise along with proposed rate increases, if they are implemented.

² CLIENT's FY2010 Budget assumes a 15% increase in water commodity rates approved by the Board in October 2007 and effective January 1, 2010.

³ This number includes funding depreciation, which is a non-cash expense.

Hydroelectric power sales

Sales of power from CLIENT's hydroelectric power plant contribute approximately \$190,000 per year to CLIENT's revenues, although CLIENT's share is only 65% or \$123,500. The remaining portion goes to PARTNER and is factored in the Enhanced Rate Model as an offset to CLIENT's expenses. Hydroelectric power revenues have historically averaged approximately \$190,000 per year with very little fluctuation observed, since the amount of water delivered through the system is fairly consistent and CLIENT's contract with SDG&E does not fluctuate. Thus, hydroelectric power revenues are projected to average approximately \$190,000 per year through FY2019.

Investment Income

CLIENT earns interest on its investment portfolio and uses this income to augment its reserve funds. Reserve Funds comprise a significant portion of the investment portfolio. However, over the past four years, as a result of fund balances and lower investment returns, CLIENT's investment income has decreased slightly from \$905,297 to \$901,131. CLIENT's 2010 Budget projects investment income of approximately \$619,000, or 2.4% of total revenues.

Property Taxes

CLIENT receives a portion of the 1% *ad valorem* property taxes levied by San Diego County each year on real property within its jurisdiction. During FY2008 and FY2009, CLIENT received \$1,875,374 and \$1,878,400 in property taxes, respectively. The FY2010 Budget projects property tax receipts of \$1.9 million, or approximately 7.5% of CLIENT's total revenues. CLIENT currently allocates these revenues towards capital replacement/improvements.

Capacity Fees

Capacity fees are designed to make new customers pay an equitable contribution representing their pro-rata cost of building and maintaining the system to the date of the new connection. Revenue from capacity fees has averaged approximately \$109,000 over the past five fiscal years and represents less than one half of one percent of CLIENT's revenues, reflecting the service area's lack of growth. However, as CLIENT proceeds with its C.I.P., it will likely review its capacity fee charge to insure fairness for all customers.

Expenses

Operation and Maintenance ("O&M") expenses of CLIENT are driven by three costs: water supply, water treatment and administrative and general (in the form of salaries and benefits, including medical and dental, as well as retirement benefits in the form of PERS

and OPEB). Of these three, the cost of supply represents approximately 42% of FY2010 budgeted O&M expenses.

Supply Costs

CLIENT currently services approximately 21,350 customers and covers approximately 10,200 acres. Nearly 85% of CLIENT's water demand is residential. Since FY2005, imported water supply costs have increased by a total \$1.29 million and in FY2009 were \$5.81 million. This is an average annual increase of over 10%. During this same period the average annual trend in inflation was about 3%.

CLIENT purchases approximately 72% of its water from the Water Authority and takes approximately 24% of its water from local supplies. Water purchased from the Water Authority is referred to herein as "Imported Water" and water drawn from local supplies is referred to herein as "Local Water". The remaining 4% of the water demand is supplied from recycled water purchased from other local agencies.

At present, the Water Authority is projecting the following increases in the cost of water to CLIENT, which are incorporated in the Enhanced Rate Model:

- 17.8% in 2011.
- 11.3% in 2012.
- 12.1% in 2013.
- 6.6% in 2014.
- 7.1% in 2015.
- 4.6% in 2016.
- 4.6% in 2017.
- 5.9% in 2018.

Water Treatment Costs

Since FY2005, water treatment costs have increased by \$1.8 million to \$3.4 million in FY2009, resulting in an average annual increase of over 25 percent compared to the approximately 3% average annual trend in inflation for the same period.

CLIENT shares ownership of the JPA plant. CLIENT operates the plant and is reimbursed for that in part by PARTNER. Reimbursements from PARTNER for operating expenses at PLANT fluctuate as costs to operate the plant vary. The FY2010 estimate of \$1.6 million of reimbursement from PARTNER represents a 4.0% increase over the reimbursement received in FY2009.

Administrative and General

At FYE2009, CLIENT's administrative expenses are projected at approximately \$1.3 million and salary and benefits are projected at approximately \$5.7 million. The two expenses combined accounted for approximately 36% of CLIENT's FYE2009 operating expenses. The FY2010 budget projects that CLIENT's administrative expenses will be approximately \$1.4 million and salary and benefits will be slightly higher than the

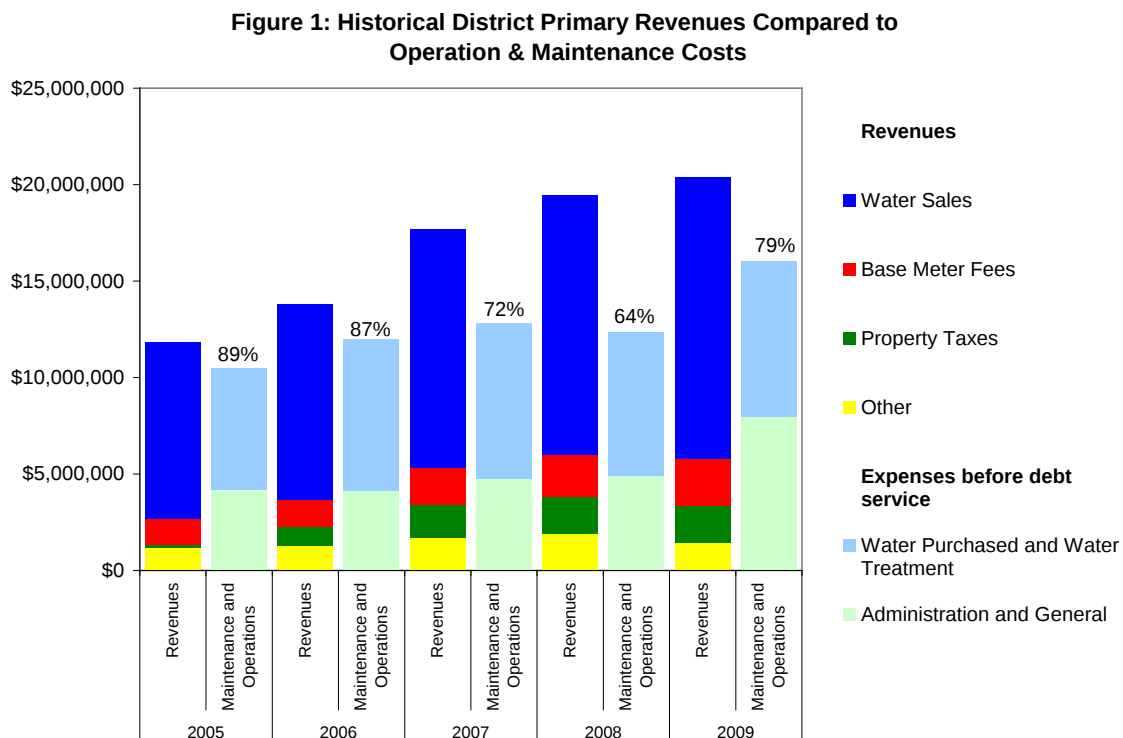
previous year, resulting in these two costs accounting for approximately 33% of CLIENT's operating expenses.

Interest Expense

At present, CLIENT's debt profile consists of only one outstanding long-term debt obligation, the for the JPA Plant with a final maturity date of October 1, 2019. The principal balance of the bonds as of June 30, 2009 was \$12.045 million. Without further debt issuances, CLIENT's annual debt service will be approximately \$1.3 million per year.

Comparative Analysis

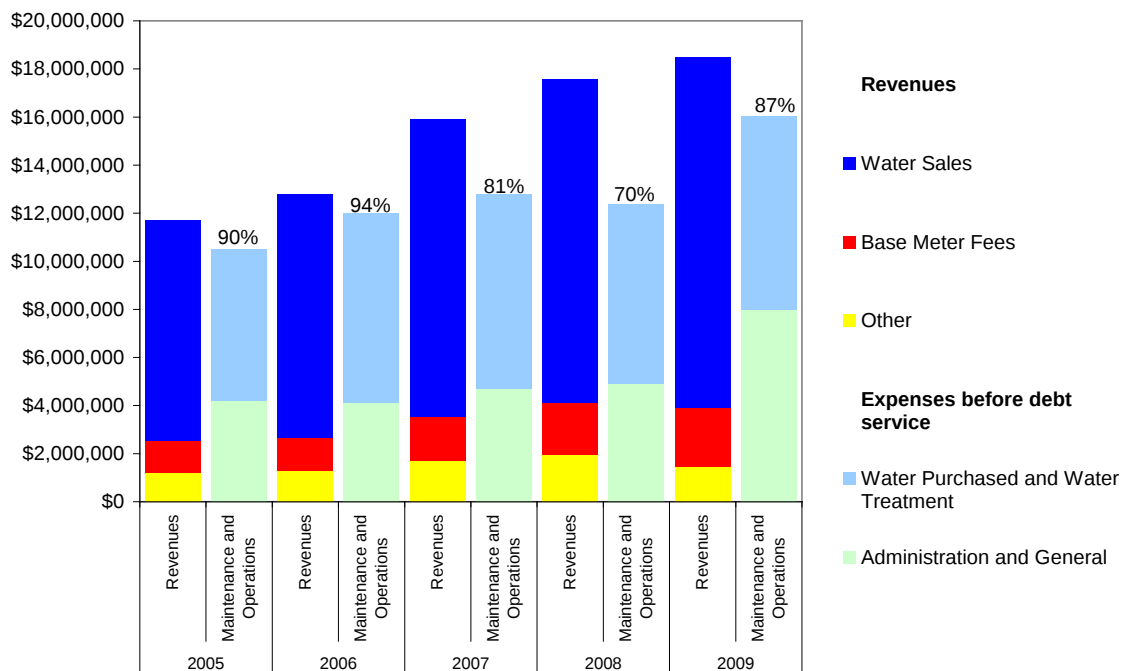
As a next step, we compared CLIENT's historical gross revenues in relation to its historical O&M costs. That analysis revealed that, historically, O&M costs range between 64% and 89% of gross revenues, as illustrated in Figure 1 below. Over the past five years the average is approximately 78%.



However, if property taxes were excluded from the analysis (since historically they have been diverted to capital expenditures), the O&M costs represent between 70% and 94% of CLIENT's operating revenues as illustrated in Figure 2, with the average over

the past five years being approximately 84%. Thus, the management of operations and maintenance costs presents a long-term challenge to CLIENT. With the exception of salaries and benefits, over which CLIENT has some control if new agreements are reached with employees, the rest of the O&M costs are largely externally influenced and are more difficult, if not impossible, for CLIENT to control.

Figure 2: Historic District Revenues Compared to Operation & Maintenance Costs



Reserve Fund Activity

As part of the C.I.P. funding analysis, a review of CLIENT’s reserve fund activity was performed as well with the acknowledgement that CLIENT is required to maintain certain restricted reserves per bond covenants and board policies. At the end of each fiscal year transfers are made to or from these funds depending on their required balance.

At present, CLIENT’s unrestricted reserves are comprised of the Operating Reserve Fund (“ORF”), the RSF and the Capital Replacement Fund (“CRF”). As costs rise and the C.I.P. expenditures grow over time, these fund requirements will increase. Since FY2005, the balance in the CRF has increased from \$12.6 million to \$15.7 million at FYE2009, an increase of almost 24%. At the same time, since FY2005, the balance in the ORF has increased from \$2.1 million to \$3.2 million at FYE2009, an increase of almost 54%. However, during that same period, the balance in the RSF has decreased from \$10.7 million to \$3 million at FYE2009, a decrease of 72%, reflecting primarily CLIENT’s past practice of balancing the budget and meeting the required balances in the CRF through transfers from the RSF.

At FYE2009 the projected balances of these funds are as follows:

- ORF \$3,218,200
- RSF \$2,999,091
- CRF \$15,648,920

CLIENT is currently not in compliance with its Board adopted Reserve Policy. The RSF is projected to be approximately \$200,000 less than its required balance and the CRF is projected to be approximately \$5.5 million short of its required balance at FYE2009.

It is estimated, as discussed earlier, that if CLIENT did not raise rates, it will deplete all of its reserves by 2013. Furthermore, if the annual rate of inflation increases more than projected, the impact on CLIENT's ability to add to the reserve fund balances will be questionable considering that it will struggle to continue funding its C.I.P. on a pay-go basis. Consequently, as reserves decrease below the minimum reserve level, CLIENT's ability to mitigate for unforeseen cost increases or decreases in water sales is diminished. That is why, as part of the analysis of the C.I.P. funding alternatives, the impact on the reserve fund balances and CLIENT's compliance with its reserve policy was examined as well.

Financial Indicators

CLIENT regularly monitors various measures of its financial strength and flexibility presented in the form of certain financial ratios commonly used by the rating agencies and the investment community to assess a municipal utility's financial strength. The following discussion summarizes these projected ratios based on estimated revenues and expenditures including assumed changes in rates and charges.

Financial Ratios: Debt Service Coverage

Debt service coverage is the primary indicator of credit quality, and is calculated by dividing net revenues by debt service, measuring the amount that net revenues exceed or "cover" debt service payments over a period of time. Higher coverage levels indicate a low likelihood of default and a greater margin of protection for bondholders. For example, a municipality with 2.00 times debt service coverage has twice the net operating revenues required to meet debt service payments.

CLIENT's current Debt Management Policy states that CLIENT will remain in compliance with debt service covenants, but does not set forth goals of maintaining specific debt service coverage. However, as a prudent financial management practice, and to preserve CLIENT's high credit rating, maintaining debt service coverage of at least 2.00 times debt service is recommended. For FY2009 CLIENT's debt service coverage is 3.69 times debt service.

Financial Ratios: Unrestricted Days Cash

This ratio serves as a benchmark of CLIENT's financial flexibility, namely its ability to cover O&M through current unrestricted cash and investments. The higher the ratio, the greater CLIENT's financial flexibility is. Currently, CLIENT has approximately 400 days cash. This metric is down from the FYE2007 figure of 629 days cash. As a prudent financial management practice, and to preserve CLIENT's high credit rating, maintaining an average days cash ratio of at least 400 days cash is recommended.

Summary of Current Status

In summary, CLIENT's current financial condition is such that CLIENT's C.I.P. is very large in relation to CLIENT's net revenues and/or moneys usually used for capital. CLIENT's reserve funds are well below their policy requirements and O&M expenses are projected to rise irrespective of the C.I.P. Acknowledging these challenges and factoring in various risk factors, we present the analysis of CLIENT's C.I.P. funding alternatives in the next section.

ANALYSIS OF C.I.P. FUNDING ALTERNATIVES

As discussed earlier, the AMMP adopted by CLIENT identifies CLIENT's critical infrastructure that needs to be refurbished or replaced and estimates that cost at about \$55 million in 2009 dollars. Historically, CLIENT has been funding its C.I.P. through a pay-as-you-go approach ("pay-go") and typically pay-go is an appropriate funding source for replacement and refurbishment projects as existing users pay for the replacement and refurbishment of facilities they have used and continue to use. However, at the same time, major system improvements (new capacity and improvements needed to meet regulatory requirements) are debt financed as this source is multi-generational and tends to spread out the per unit costs over longer periods. Moreover, large fluctuations in C.I.P. costs representing big portions of replacement and refurbishment and other capital improvement projects that need to be done at once, even for mature districts such as CLIENT, are typically debt-financed. Further, the debt financing strategy tends to require smaller, though perhaps more frequent, rate increases, and prevents significant single year rate spikes in rates. In addition, this strategy reduces the impact of inflation on the C.I.P., as significant portions may be completed earlier.

In light of all these considerations and its present financial condition, CLIENT is faced with the challenge to fund approximately \$31.8 million (2009 dollars) in capital system improvements, replacements and refurbishments through FY2014 and then an additional \$23.2 million (2009 dollars) in C.I.P. expenditures through FY2019, at the same time maintaining financial indicators within acceptable levels to preserve its high credit ratings.

We analyze two main C.I.P. funding strategies available to CLIENT: 1) Pay-go funding alone and 2) a combined Debt/Pay-go funding strategy that utilizes the strategic issuance of debt to fund portions of the C.I.P. as opportunities present themselves, while funding the remainder of the C.I.P. on a pay-go basis. The Pay-go strategy assumes that the C.I.P. will be implemented as currently planned, according to the AMMP C.I.P. phasing plan and CLIENT's existing reserve policy. The Debt/Pay-go strategy, on the other hand, presents the option of accelerating a portion of CLIENT's C.I.P. and funding that through the issuance of debt. The Debt/Pay-go strategy utilizes the modified C.I.P. phasing plan and a revised reserve policy and provides additional benefits, as discussed earlier, of allowing CLIENT to insulate itself from inflation on a significant portion of its ten-year C.I.P. Presented in the following section is a discussion of the evaluation criteria used for analyzing and comparing each strategy and the alternatives within the two strategies.

Evaluation Criteria

A common requirement between the Pay-go and the Debt-Pay-go strategies is that water rates need to be increased. Thus, the two strategies are compared first based on three primary factors: i) the schedule and magnitude of implemented rate increases, ii) compliance with existing or proposed reserve fund policy minimum thresholds, and iii) the strength of the financial indicators as measured by the debt service coverage and the days cash ratio. These criteria are tested within the Pay-go strategy by applying various levels of rate increases: high, moderate, and low, and within the Debt/Pay-go strategy by varying the time of introducing rate increases and the magnitude of these increases.

Next, each strategy is examined to analyze the potential impact of several operational and other risk factors such as the cost of water supply, water demand, loss of property tax revenues, inflation, and interest rates ("Risk Factors"). A brief discussion of these Risk Factors and their importance is presented below.

Cost of Supply – Imported Water

As was discussed earlier, CLIENT purchases Imported Water from the Water Authority, which receives its supply from two sources: local supplies (local runoff, groundwater, reclamation, and, prospectively, desalination) and water imported by the Metropolitan Water District of Southern California ("MWD"). MWD obtains its water supply from two main sources: the Colorado River via the Colorado River Aqueduct and the State Water Project ("SWP") via the Edmund G. Brown California Aqueduct. Recent drought conditions and court-ordered restrictions have imposed limitations on MWD's ability to transport water supply to its member agencies. As a result, the cost of imported water from MWD has increased. At the same time, the Water Authority has also announced its projected rate increases through FY2018. This will have a direct impact on CLIENT, since it is currently purchasing the bulk of its water supply from the Water Authority. Without another source of water, CLIENT will be faced with these increasing costs, making the purchase of water over time account for a greater portion of its O&M expenditures. This could place a serious burden on CLIENT's operations and may lead to transfers from existing reserves to cover these higher costs and/or increased rates.

Thus, to address the concern of the growing cost and precarious nature of the water supply in Southern California, CLIENT is exploring options to diversify its water supply portfolio. CLIENT has signed an agreement with Poseidon to purchase 2,000 AF of desalinated water when Poseidon's plant becomes operational. CLIENT's capital contribution towards enhancing its recycled water system/supply is currently estimated at approximately \$540,000 in FY2010 and is included in the C.I.P. District staff is currently exploring other options that could further increase the use of recycled water as a greater resource, which are not part of the AMMP's ten-year C.I.P. Some of those include the availability of low interest State funding to expand recycled water resources.

The potential impact of higher supply costs is evaluated under each C.I.P. funding strategy. In addition, the impact of a future State borrowing is discussed under the second funding strategy to which it relates.

Demand

Typically, variations in acre-feet water sales translate into significant variability in water sales revenues. Water districts with growing service areas are dependent upon capacity fees (connection fees) to implement their C.I.P.. Projections of continued growth may result in lower rate increases and a dependence on capacity fees for funding capital expenditures. A declining growth rate can then create budget concerns for districts heavily dependent on capacity fees to fund capital expenditures. Growth can change dramatically as we have seen during the latest economic recession and some districts will see revenues decline and create shortfalls in capital funds.

However, CLIENT's service territory is mature and has experienced little growth over the past five years as evidenced by capacity fees averaging about \$109,000 per year. Further, there is little opportunity or expectation for future growth. Thus, water sales revenues are likely not to fluctuate dramatically unless conservation, whether mandatory, or optional, reduces demand. Should demand decrease significantly, that would result in loss of revenues for CLIENT, which could impact any of the C.I.P. funding strategies analyzed in the next section.

Property Taxes

Currently, property taxes account for nearly 7.52% of CLIENT's FY2010 budget. As part of balancing its budget, the State of California has announced its intent to initiate a borrowing in FY2010 of 8% of the property taxes of each governmental agency under Proposition 1A. Since CLIENT's Board approved the FY2010 budget showing receipt of property taxes in the estimated amount of \$1.9 million, without factoring any loss of property tax revenues to CLIENT, we examine the potential impact of the 8% loss to any of the C.I.P. funding alternatives we analyze. Although the loss is minimal, representing only \$152,000 loss in revenues in FY2010, we analyze whether it necessitates additional increases in water charges or CLIENT could use rate stabilization funds to offset the loss and how that may impact each alternative.

Inflation

Inflation is a risk factor that is neither avoidable, nor manageable, and since it cannot be accurately predicted, conservative estimates are necessary to prevent over-exposure to inflation risk. Once such conservative estimates are factored in the analysis, inflation can be mitigated by taking advantage of opportunities to borrow moneys at rates near or below inflationary trends, when such appear. That strategy is evaluated for each of the relevant C.I.P. funding alternatives. If borrowing is not part of the funding strategy, a discussion of the inflation risk is presented as part of the analysis.

Interest Rates: Impact on Borrowing and on Investments

Fluctuation in interest rates present risks that cannot be fully managed, but can be mitigated. Effective mitigation requires an approach to be able to borrow at the lowest possible costs and an ability to maximize investment returns. Our analysis assumes that CLIENT could borrow at about a 5% cost for a thirty year financing, while at the same time it has a 3% return on investments. We examine the impact of a potential increase in the borrowing cost, as well as CLIENT's potential exposure to falling interest rates for each relevant C.I.P. funding alternative.

The two main C.I.P. funding strategies and the several different alternatives analyzed within each of them, as well as the potential impacts of the various evaluation criteria on these alternatives, are discussed in detail in the following section.

Option One: Pay-go Strategy

As was alluded to earlier in this report, the Pay-go strategy assumes that the existing reserve fund policy will remain in place. Any Pay-go alternative requires that rates be raised to meet operating expenses and capital expenditures. Further, all Pay-go alternatives also assume that reserve balances will be able to be invested at nearly the same rate as inflation escalates the cost of capital expenditures; if this assumption is not met, each alternative assumes that rates will be increased to offset the difference.

The basic framework for all Pay-go alternatives is to meet CLIENT's C.I.P. phasing plan and become compliant with the Reserve Fund Policy. That is why, as demonstrated by the analysis that follows, these options result in high initial water rate increases followed by either low or no other rate increases in the later years.

First Alternative: High Rate Increases

The first scenario requires an additional rate increase of 35% (in addition to the 15% previously adopted) to go into effect on January 1, 2010 and a rate increase of 30% to become effective on January 1, 2011. Thereafter, annual rate increases are not necessary through FY2019, assuming that the assumptions pertaining to the Risk Factors remain valid for the next ten fiscal years. Thus, the rate increases required under this scenario are as follows:

1/1/2010 – 35%
1/1/2011 – 30%
1/1/2012 through 1/1/2019 – 0%

Under this alternative, CLIENT's projected financial indicators are strong. The debt service coverage ratio averages 819%, with the lowest level over the next ten fiscal years being 525%. At the same time, CLIENT's days' cash balance averages 560 days, with the lowest balance over the next ten fiscal years being 350 days. Further, the projected total revenues raised by the rate increases are estimated at \$127.4 million, potentially yielding surplus cash of nearly \$11.6 million at FYE2019, which could help CLIENT fund its C.I.P. in fiscal years subsequent to FY2019.

However, in spite of the strong financial indicators achieved under this alternative, CLIENT's Reserve Fund balances are projected to still be deficient by approximately 32% at FYE2010, or nearly \$9.1 million, and compliance with the existing Reserve Fund Policy will not be achieved until FYE2012. The detailed analysis of this alternative and its results is presented in Appendix A.

Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted as discussed below.

The Risk Factors can have a positive and a negative impact on CLIENT. If drought conditions and the supply of water from the Delta and the Colorado River were to improve and the snowpack in the Sierras were to increase, that would result in higher regional, as well as local water supply. The increased local water supply would decrease CLIENT's reliance on imported water, hence decreasing its cost of water and increasing its operating margin. The opposite would be true should drought conditions worsen, and the supply of water declines. In that case, CLIENT would have to raise rates further to meet those challenges and/or rely on transfers from its reserve funds. The need to raise rates further will place additional burden on CLIENT's customers who are already subject to very high rate increases under the Pay-go strategy. The reliance on reserve funds will also pose a problem in light of CLIENT's declining reserve fund balances and its lack of compliance with its reserve fund policy.

At the same time, if inflation were to increase by more than the assumption in the Enhanced Rate Model, that may further impact CLIENT. The total cost of CLIENT's 10-year C.I.P. is nearly \$55 million (\$2009) and assuming a 100% Pay-go strategy, CLIENT has developed a 10-year phasing plan of expenditures to meet this C.I.P. Based upon this plan and assuming an annual inflation rate of 3.8%, CLIENT's total required expenditure is approximately \$64 million in future dollars, representing an approximately \$9 million of additional future cost due to inflation. Should inflation grow by significantly more than this, however, it will impact negatively CLIENT's financial performance. The higher inflation will result in higher C.I.P. cost that CLIENT will be challenged to fund and CLIENT will ultimately have to raise rates more to absorb that inflation cost.

In general, with the changes in inflation it is reasonable to assume similar changes in interest rates. Those will be important in light of the potential investment return on CLIENT's portfolio. Higher interest rates will result in higher investment earnings supplementing CLIENT's revenues. Lower interest rates, on the other hand, will lead to lower returns. Furthermore, falling interest rates will impact the balances in CLIENT's reserve funds, potentially resulting in an even more delayed achievement of compliance with CLIENT's existing Reserve Fund Policy, which may be another issue CLIENT will need to address. All of this may lead to even higher rate increases, again burdening CLIENT's customers even more.

Similar may be the effect of the 8% loss in property taxes. Even though the impact of that loss is currently very small, approximately \$152,000, and does not directly result in additional rate increases, other than the ones recommended in this funding alternative, CLIENT will most likely use rate stabilization funds to offset such loss. That will further distance CLIENT from compliance with its Reserve Fund Policy, so ultimately CLIENT will need to raise rates more to ensure compliance.

Second Alternative: Moderate Rate Increases

The second scenario requires an additional rate increase of 25% (in addition to the 15% previously adopted) to go into effect on January 1, 2010; 20% on January 1, 2011, 10% on January 1, 2012 and 2013 and no rate increases thereafter through FY2019, provided that the assumptions regarding the Risk Factors remain valid for the next ten fiscal years. The rate increases are summarized below:

1/1/2010 – 25%
1/1/2011 – 20%
1/1/2012 – 10%
1/1/2013 – 10%
1/1/2014 through 1/1/2019 – 0%

Under this alternative, CLIENT's projected financial indicators are strong. The debt service coverage ratio averages 798%, with the lowest level over the next ten fiscal years being 487%. At the same time, CLIENT's days' cash balance averages 487 days, with the lowest balance over the next ten fiscal years being 332 days. Further, the projected total revenues raised by the rate increases are estimated at \$126.1 million, potentially yielding surplus cash of nearly \$8.2 million at FYE2019, which could help CLIENT fund its C.I.P. needs beyond FY2019.

However, in spite of the strong financial indicators achieved under this alternative, CLIENT's Reserve Fund balances are projected to still be deficient by approximately 35% at FYE2010, or nearly \$9.9 million, and compliance with the existing Reserve Fund Policy will not be achieved until FYE2014. A detailed analysis of this alternative and its results is presented in Appendix B.

Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted with the impacts being similar to those discussed under the previous financing option.

Third Alternative: Low Rate Increases

The third scenario requires an additional rate increase of 15% to go into effect on January 1, 2010, and an increase of 9% on January 1, 2011. Thereafter, annual rate increases are projected to be approximately 9% through FY2019, assuming that the assumptions pertaining to the Risk Factors remain valid for the next ten fiscal years. A summary of the rate increases under this strategy is presented below:

1/1/2010 – 15%

1/1/2011 through 1/1/2014 – 9%

1/1-2015 – 8%

1/1/2016 through 1/1/2019 – 9%

Under this alternative, CLIENT's projected financial indicators are strong. The debt service coverage ratio averages 761%, with the lowest level over the next ten fiscal years being 416%. At the same time, CLIENT's days' cash balance averages 305 days, with the lowest balance over the next ten fiscal years being 222 days. Further, the projected total revenues raised by the rate increases are estimated at \$125.9 million, potentially yielding surplus cash of nearly \$500,000 at FYE2019, which could somewhat help CLIENT fund its C.I.P. needs beyond FY2019.

However, in spite of the strong financial indicators achieved under this alternative, CLIENT's reserve fund balances under its existing Reserve Fund Policy are projected to still be deficient by approximately 39% at FYE2010, or nearly \$10.7 million, and compliance with the existing Reserve Fund Policy will not be achieved until FYE2019. A detailed analysis of this alternative and its results is presented in Appendix C.

Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted similarly to the previous two financing options.

Comparison of Pay-go Alternatives

All of the Pay-go funding alternatives achieve the C.I.P. and CLIENT's financial goals. However, none of the pay-go alternatives allows CLIENT to immediately achieve compliance with its existing Reserve Fund Policy. The High and Moderate alternatives produce large surplus reserve balances that may be unneeded, subject to the additional C.I.P. requirements beyond FY2019. This is partially the case because inflation is assumed to remain at 3.8% for the ten year period of the analysis and the C.I.P. cost beyond FY2019 is outside the scope of the AMMP. Nevertheless, the primary factors in generating large and potentially unnecessary fund surpluses are the large rate increases needed in FY2010 and FY2011 to fully fund the C.I.P. by FYE2019. The Low Rate Increase alternative potentially produces the smallest excess surplus funds and is the most

cost effective to customers in comparison to the other alternatives analyzed. However, it does not allow CLIENT to achieve compliance with its existing reserve policy until FYE2019.

Further, if any of the assumptions pertaining to the risk factors change, that will have an adverse effect on CLIENT's financial condition and CLIENT will need to raise rates even more and/or rely on transfers from its RSF, delaying further the achievement of Reserve Fund Policy compliance.

Please refer to Appendix D for a Summary Table describing rate increases, reserve fund balances, C.I.P. costs and Financial Indicators for the Pay-go alternatives.

Option Two: Combination of Debt Issuance and Pay-Go Strategy

This strategy calls for CLIENT to adopt a new reserve fund policy with different reserve funding levels for operating and capital needs to allow for debt proceeds to be tactically used in-lieu of generating large reserve balances, especially for capital expenditures, to annually meet capital needs. It also assumes the sale of tax-exempt debt in the current fiscal year at a cost of approximately 5%, to generate approximately \$23 million in construction proceeds. The debt is structured to produce level debt service over thirty years for each recommended borrowing. This strategy accelerates to FY2010 portions of CLIENT's C.I.P. and funds certain distribution system projects currently scheduled for FY2018 and FY2019, thereby potentially saving CLIENT approximately a net of \$1.3 million in inflation costs. Further, this option permits a Pay-go funding strategy to fund the C.I.P. through FY2014 when a second debt issuance can be sold to fund approximately \$12 million of C.I.P. requirements currently scheduled for FY2014 and FY2015. Thereafter, it is assumed that internally generated funds will adequately fund the remainder of the C.I.P. Option Two, just like Option One, uses assumptions that are incorporated in the Enhanced Rate Model.

One of the benefits of debt issuance is the flexibility to smooth out rate increases over a period of years. This is true because in comparison to pay-go funding, debt repayment for a large capital expenditure can be structured over the useful life of the capital expenditure being financed, rather than in a single year. This fact in conjunction with the large capital expenditures facing CLIENT over the next three fiscal years is taken into account when developing the funding alternatives for Option Two. As discussed earlier, all of these alternatives recommend a combination of pay-go and the use of two borrowings and require the adoption of rate increases in equitable and adequate amounts, with the primary difference among the alternatives being in the time of implementation of the first rate increase. Presented in the following section is the discussion of the three alternatives that were developed within the Debt/Pay-go strategy.

Alternative One: First rate increase effective January 1, 2010

This alternative requires an additional rate increase of 15% (in addition to the 15% previously adopted) to go into effect on January 1, 2010; 7.48% on January 1, 2011, 7% on January 1, 2012, 2013, and 2014, 6% on January 1, 2015, 2016, 2017, and 7% on January 1, 2018 and 2019. These rate adjustments assume the validity of the assumptions regarding the Risk Factors for the next ten fiscal years and are summarized below.

1/1/2010 – 15%
1/1/2011 – 7.48%
1/1/2012 through 1/1/2014 – 7%
1/1/2015 through 1/1/2017 – 6%
1/1/2018 and 1/1/2019 – 7%

Under this alternative, CLIENT's projected financial indicators are strong. The debt service coverage ratio averages 243%, with the lowest level over the next ten fiscal years being 189%. At the same time, CLIENT's days' cash balance averages 409 days, with the lowest balance over the next ten fiscal years being 392 days. Further, the projected total revenues raised by the rate increases are estimated at \$98.1 million, potentially yielding very small surplus cash of nearly \$16,100 at FY2019. Under this alternative, Reserve Fund balances are projected to be sufficient at FY2010.

A detailed analysis of this alternative and its results is presented in Appendix E.

Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted with the impacts of the supply costs and demand being similar to those discussed under the Pay-Go strategy alternatives. However, under this alternative, CLIENT is in compliance with its revised Reserve Policy and can thus rely on some transfers from its RSF, should such need arise. The same holds true when the 8% loss in property tax revenue is factored in. In addition, if CLIENT were to increase rates to account for that, the increases will be very minimal, if at all necessary (potentially an increase in rates of approximately 0.07%).

Further, this alternative allows CLIENT to realize savings on expected inflation cost on the C.I.P. By issuing bonds in FY2010 (as reflected in the modified 10-year C.I.P. phasing plan developed by staff), CLIENT will avoid the inflation cost on a significant portion of its C.I.P. Based on this expenditure plan, and assuming the same 3.8% annual inflation rate, the total required expenditure on the C.I.P. is approximately \$61.3 million in future dollars. The increase from \$55 million reflects \$6.3 million of additional future cost due to inflation.

Based on the foregoing analysis, this funding alternative provides a gross benefit of approximately \$2.1 million (\$2009), due to savings on future expected inflation. After the associated debt costs of about \$825,000 in \$2009 are factored in, however, the potential net benefit is approximately \$1.3 million. Further, in addition to these expected savings, the risk of higher inflation rates on the C.I.P. is mitigated. For instance, if the

C.I.P. experiences inflation 0.25% higher than 3.8% each year, the savings in \$2009 increase by about \$150,000. In another example, if the inflation rate rises to 7% in FY2011 for that one year only, this financing alternative provides increased inflation savings of approximately \$400,000.

These savings could be reduced if interest rates were to rise, resulting in higher borrowing cost for CLIENT. However, rates are currently at historical lows, which, together with CLIENT's rating, should provide for a favorable borrowing cost for CLIENT. Should borrowing rates increase by 1% from the currently contemplated 5%, the impact will be very minimal, resulting in additional rate increase of approximately 0.17% per year. However, that increase will be somewhat offset by the increase in the investment return on CLIENT's portfolio. On the contrary, a drop in interest rates will result in lower interest costs associated with CLIENT's two borrowings, a gain that will be somewhat offset by a lower investment return on CLIENT's portfolio. However, because of the use of debt to fund the C.I.P. and the rate increases under this alternative, investment income becomes a small part of the funding sources for CLIENT. Thus, this alternative effectively mitigates CLIENT's exposure to falling interest rates by limiting the necessary balances in CLIENT's reserve funds and thus the dependence on interest rates.

Alternative Two: First rate increase effective July 1, 2010

This alternative requires no additional rate increase (in addition to the 15% previously adopted) to go into effect on January 1, 2010 and assumes that the first rate increase will become effective on July 1, 2010, with the subsequent rate increases effective on January 1 of each year as follows: 28% in FY2012, 5% in FY2013, 2014, and 2015, 5.1% in FY2016, 6% in FY2017, and 7% in FY2018 and 2019. i.e. in FY 2011; 7.48% on January 1, 2011, 7% on January 1, 2012, 2013, and 2014, 6% on January 1, 2015, 2016, 2017, and 7% on January 1, 2018 and 2019. The rate increases under this strategy are summarized below.

7/1/2010 – 10%
1/1/2012 – 28%
1/1/2013 through 1/1/2015 – 5%
1/1/2016 – 5.10%
1/1/2017 – 6%
1/1/2018 and 1/1/2019 – 7%

Under this alternative, CLIENT's projected financial indicators are relatively strong but weak compared to Alternative One. The debt service coverage ratio averages 236%, with the lowest level over the next ten fiscal years being 162%. At the same time, CLIENT's days' cash balance averages 386 days, with the lowest balance over the next ten fiscal years being 335 days. Further, the projected total revenues raised by the rate increases are estimated at \$98.5 million, potentially yielding almost no surplus cash at FYE2019. Under this alternative, Reserve Fund balances are projected to be sufficient at FYE2010.

A detailed analysis of this alternative and its results is presented in Appendix F. Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted with the impacts being the same as those discussed under the previous financing option. A 1% increase in the borrowing rate under this strategy will result in additional rate increase of approximately 0.16%, instead of the approximately 0.17% additional increase under the previous alternative.

Alternative Three: First rate increase effective January 1, 2011

This alternative requires no additional rate increase (in addition to the 15% previously adopted) to go into effect on January 1, 2010 and assumes that the first rate increase of 20% will become effective on January 1, 2011, with the subsequent rate increases effective on January 1 of each year as follows: 10% in FY2012, 9% in FY2013, 7.41% in FY2014, 6% in FY2015, 2016 and 2017, and 7% in FY2018 and 2019. These increases are summarized below as follows:

1/1/2011 – 20%
1/1/2012 – 10%
1/1/2013 – 9%
1/1/2014 – 7.41%
1/1/2015 through 1/1/2017 – 6%
1/1/2018 and 1/1/2019 – 7%

Under this alternative, CLIENT's projected financial indicators are similar to those under the prior alternative and are weak compared to Alternative One. The debt service coverage ratio averages 235%, with the lowest level over the next ten fiscal years being 162%. At the same time, CLIENT's days' cash balance averages 377 days, with the lowest balance over the next ten fiscal years being 335 days. Further, the projected total revenues raised by the rate increases are estimated at \$98.7 million, potentially yielding a small deficit of nearly \$5,000 at FYE2019. Under this alternative, Reserve Fund balances are projected to be sufficient at FYE2010.

A detailed analysis of this alternative and its results is presented in Appendix G.

Should some of the assumptions pertaining to the Risk Factors change, this financing option may be impacted with the impacts being very similar as those discussed under the previous financing option.

Comparison of Debt/Pay-go Alternatives

All of the Debt/Pay-go funding alternatives achieve the C.I.P. and CLIENT's financial goals. Further, under all of them CLIENT immediately achieves compliance with its revised Reserve Fund Policy. The alternatives don't produce any surplus reserve balances that may be unneeded, subject to the additional C.I.P. requirements beyond FY2019. However, the magnitude of the rate increases implemented in the first few years differs significantly depending on how long CLIENT waits before it introduces the first rate

increase. The later that is, the greater the rate increases are in the years immediately following. The January 1, 2010 First Rate Increase Alternative is the most cost effective to customers in comparison to the other alternatives analyzed and results in potentially yielding a very small positive surplus cash at FYE2019, while at the same time allowing CLIENT to achieve compliance with its existing reserve policy at FYE2010.

Please refer to Appendix H for a Summary Table describing rate increases, reserve fund balances, C.I.P. costs and Financial Indicators for the combined debt/pay-go alternatives.

FINDINGS AND RECOMMENDATIONS

Comparative Analysis

Appendix I compares all six alternatives side by side, illustrating the timing and magnitude of the rate increases required under each alternative and when Reserve Fund Policy compliance is achieved. The following sections discuss our findings and recommendations related to that comparison.

Pay-go Scenarios

As can be seen from Appendix I, as well as Appendix D, despite the large rate increases in the early years, none of the Pay-go alternatives generates sufficient operating revenues to ensure immediate compliance with the existing Reserve Fund requirements. Any effort to comply with the existing Reserve Policy earlier would require excessive rate increases. It takes two and four years to reach Reserve Fund Policy compliance under the High and Moderate Rate Increase Pay-go alternatives, respectively, while the most cost effective Pay-go alternative, the Low Rate Increase one, does not reach compliance until FY2019. Further, the Pay-go alternatives potentially could expose CLIENT to the risk of increases in inflation, which would result in growing C.I.P. costs that CLIENT may be unable to meet without additional rate increases. Rates will have to be increased further, increasing the burden on CLIENT's customers, and CLIENT may rely more heavily on transfers from its reserves, making it fall out of compliance with its Reserve Policy even more.

Thus, in addition to the very high rate increases, another shortcoming of the Pay-go alternatives is the lack of compliance with the Reserve Fund Policy, which could be viewed as indifference to best financial management practices and could damage the credibility of CLIENT's Board and staff with rating analysts if such condition is not addressed within a much shorter time period.

As a result, a downgrade of CLIENT's credit rating could occur, which would make it more expensive to finance projects through debt, should the need arise. However, considering the large size of the C.I.P. and CLIENT's current financial condition, it seems very likely that at some point CLIENT would need to raise funds through the issuance of debt. Therefore, it is very important that CLIENT preserve its credit rating as it would allow it to borrow at a lower interest rate, thus taking advantage of an

achievement that few agencies ever attain. Moreover, a downgrade would be detrimental to maintaining CLIENT's sound financial management.

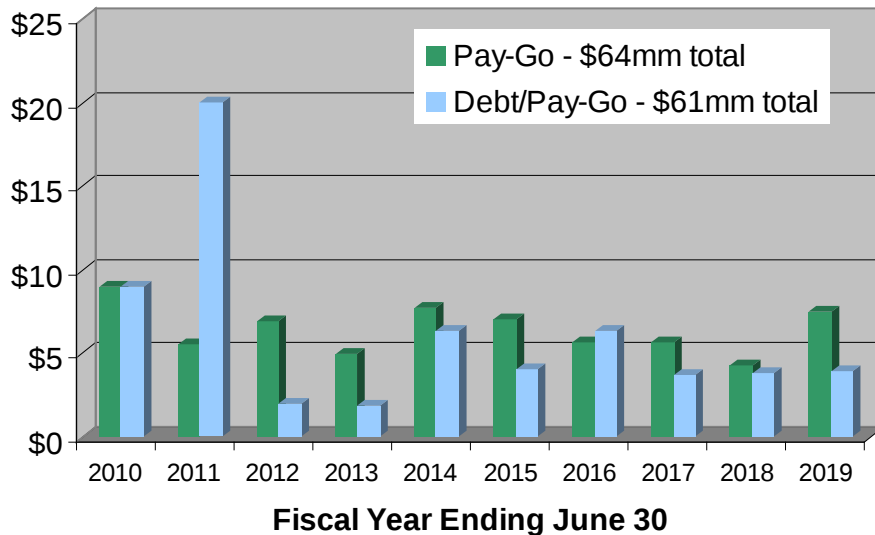
Another factor in evaluating the Pay-go strategies is the concept of ratepayer equity. As was discussed earlier in this report, pay-go is typically appropriate for funding replacement and refurbishment projects, whereas major system improvements are typically debt financed. The more aggressive a pay-go strategy is, the greater the burden becomes for current rate payers, since the investment in water infrastructure is expensive, and the service life, in general, ranges between 50 and 100 years. Thus, the Pay-go alternatives clearly support the intergenerational equity argument in favor of a Debt/Pay-go alternative, where both future and current rate payers share the burden of paying for CLIENT's long-term assets and the cost of financing infrastructure is spread over a longer period of time. Further, rate increases, as well as C.I.P. expenditures, under a Debt/Pay-go strategy are typically more moderate and predictable.

Debt/Pay-go Scenarios

Appendix H illustrates the rate increases associated with the three Debt/Pay-go scenarios. As discussed previously, each of these alternatives brings CLIENT into compliance with a newly formulated reserve fund policy immediately in FY2010 and the scenarios vary depending on when the first rate increase is introduced. However, all three scenarios assume that CLIENT will approve the necessary rate increases prior to issuing debt.

Unlike the Pay-go alternatives which generate excess cash because rates must be increased at the beginning of the ten-year C.I.P. horizon and which thus rely in part on interest earnings generated by the excess cash, the Debt/Pay-go scenarios do not build up excess cash. The Pay-go alternatives are therefore more exposed to the risk of lower interest earnings due to changing market conditions, which may lead to even higher rate increases. In contrast, the Debt/Pay-go scenarios mitigate this risk. Furthermore, under the entirely Pay-go strategy, fluctuations in C.I.P. expenditures will make it difficult to maintain reserve fund balances at levels that may allow CLIENT to manage investments to take advantage of longer term, higher interest rate securities. Conversely, the Debt/Pay-go alternatives provide financial flexibility and allow CLIENT to lower its commitment of internally generated funds to sustain the C.I.P. reserves. Also, under these alternatives, CLIENT's investment strategy can take on a two-pronged approach, with longer-term investments to take advantage of higher interest returns. Furthermore, the Debt/Pay-go alternatives allow CLIENT to accelerate a portion of its C.I.P. (as illustrated in Figure 3 below), which provides several financial benefits. First, CLIENT could potentially lock in prices for large projects early on and thus hedge its inflation risk, potentially saving approximately \$1.3 million. Further, by accelerating parts of its C.I.P., CLIENT may also receive more competitive construction contracts due to economies of scale.

Figure 3: Annual CIP Expenditures



Lastly, the Debt/Pay-go alternatives are better suited to address the shortage of water from drought and regulatory/judicial restrictions that have resulted in rising costs of water and an expectation of falling demand that could lead to fluctuations in revenues. These fluctuations are typically offset by transfers from liquidity reserves with CLIENT having the ability to continue to use funds from the RSF to offset further rate increases. As our analysis showed earlier, as of FYE2009, the RSF is below the requirements of CLIENT's existing Reserve Policy. Use of the Pay-go alternatives would exacerbate this lack of compliance, since an already underfunded liquidity position would be required to supplement the loss of revenues. The Debt/Pay-go alternatives, on the other hand, ensure compliance with the proposed reserve policy, resulting in strong liquidity position available to supplement the loss of revenues, if such need arises. Under these alternatives, the existing Reserve Policy is modified in the following manner: i) The minimum threshold amount in the CRF is reduced to 100% of current fiscal year, 50% of the following fiscal year and 25% of the succeeding fiscal year, and the current maximum amount is preserved; ii) The minimum ORF is increased to 60 days of current fiscal year operating budget but the current balance is funded to the maximum of 90 days; iii) the RSF minimum threshold is amended to 45% of operating expenses; and iv) an Emergency Reserve is added with a minimum threshold amount at 1% of the net value of CLIENT's capital assets and a maximum at 2% of the net value of CLIENT's capital assets.

Please refer to Appendix I for a Summary Table comparing rate increases, reserve fund compliance, and Financial Indicators for the two funding strategy options. Further, Appendix J presents a summary of the respective portions of CLIENT's total 10-year funding requirements, allocable to O&M, C.I.P., Reserve Funds, and Surplus Cash, generated as a result of the rate increases required within each alternative, as well as all

other assumptions utilized in the Enhanced Rate Model such as inflation, investment earnings, cost of capital, etc.

Recommended Alternative

In light of the discussion above, we examined the three Debt/Pay-go alternatives to determine the most beneficial C.I.P. funding strategy for CLIENT. All of those alternatives assume that CLIENT will adopt the necessary rate increases prior to the issuance of debt. Based on our analysis, the optimal option for CLIENT is the Debt/Pay-go – First Rate Increase Effective January 1, 2010 alternative. This alternative results in overall smaller rate increases over the 10-year period and is the most cost effective to CLIENT's customers. In addition, this scenario produces the strongest financial indicators, resulting in minimum days cash and debt service coverage ratios of 392 and nearly 1.9 times, respectively, which are significantly higher than the 335 and 1.6 times minimum days cash and debt service coverage, respectively, under the other two Debt/Pay-go scenarios. Thus, this alternative offers the strongest financial flexibility and operating position for CLIENT as it moves forward the implementation of the C.I.P. The assumed debt structure under this alternative is consistent with the current policy of maintaining debt to net capitalized assets at no more than 40%. After the two recommended debt issuances, CLIENT's interest expense is projected to be approximately 12% of total O&M and approximately \$4 million annually.

Recycled Water Project

Should CLIENT pursue an additional borrowing for its recycled water, there will be no significant impact on this recommendation. Typically, such borrowing will be done through a state loan, which is traditionally amortized over 20 years, beginning upon completion of the project and interest is paid at a rate equal to one-half the recent pricing of the State's general obligation bonds. Thus, a \$10 million borrowing at an interest rate of 2.5%, amortizing over twenty years, would require an additional debt service payment of approximately \$641,500 annually. This translates into a one-time only additional rate increase, added to any of the alternatives, of approximately 2.1% to go into effect when the project is completed.

CONCLUSION

Based upon the detailed analysis and evaluation of the six possible alternatives CLIENT has for funding its C.I.P., it is our belief that the Debt/Pay-go – First Rate Increase Effective January 1, 2010 alternative will best meet CLIENT's needs. When compared to the other Debt/Pay-go funding options, this alternative is the most cost effective and results in potentially yielding very small positive surplus cash at FYE2019. Further, it ensures that CLIENT can fully fund its 10-year C.I.P., insulating at the same time CLIENT from inflation risk on a big portion of this C.I.P. by allowing CLIENT to accelerate its C.I.P. and capitalize on existing opportunities in the capital markets and the construction industry (which none of the Pay-go alternatives does). Further, this alternative incurs less expense and overall provides the following benefits compared to the Pay-go strategy: i) overall smaller rate increases to fund the C.I.P., ii) insulation from

inflation risk on a portion of the C.I.P., iii) lower reserve fund requirement in the CRF, iv) flexibility to spread out rate increases over a longer period of time than a pay-go strategy to support a policy of spreading costs of long-term assets over multiple generations, and v) maintenance of a high credit rating without sacrificing sound management practices. In summary, we recommend that CLIENT consider this alternative in funding the implementation of its AMMP.

APPENDIX A – PAY-GO STRATEGY ALTERNATIVE ONE: HIGH RATE INCREASES

**APPENDIX B – PAY-GO STRATEGY ALTERNATIVE TWO:
MODERATE RATE INCREASES**

**APPENDIX C – PAY-GO STRATEGY ALTERNATIVE THREE:
LOW RATE INCREASES**

**APPENDIX D – SUMMARY OF PAY-GO STRATEGY
ALTERNATIVES**

**APPENDIX E – DEBT/PAY-GO STRATEGY ALTERNATIVE ONE:
FIRST RATE INCREASE EFFECTIVE 1/1/2010**

**APPENDIX F – DEBT/PAY-GO STRATEGY ALTERNATIVE TWO:
FIRST RATE INCREASE EFFECTIVE 7/1/2010**

**APPENDIX G – DEBT/PAY-GO STRATEGY ALTERNATIVE
THREE: FIRST RATE INCREASE EFFECTIVE 1/1/2011**

APPENDIX H – SUMMARY OF DEBT/PAY-GO STRATEGY ALTERNATIVES

APPENDIX I - SUMMARY OF ALL ALTERNATIVES

APPENDIX J - SUMMARY OF TOTAL 10-YEAR FUNDING REQUIREMENTS