



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Stufflebean
Katy Allen
Jim Helmer
Scott Johnson

SUBJECT: SEE BELOW

DATE: 10-22-07

Approved

Date

11/4/07

COUNCIL DISTRICT: City-Wide

**SUBJECT: SEWER SERVICE AND USE CHARGE FUND FINANCING
ALTERNATIVES TO ADDRESS CRITICAL INFRASTRUCTURE NEEDS**

RECOMMENDATION

1. Accept this staff report analyzing financing alternatives to fund the short-term critical infrastructure needs of the City's sewer collection and treatment system.
2. Recommend that the City Council conceptually approve the following Sewer Service and Use Charge five-year rate strategy (Option #3) and prepare for Council approval in spring 2008 the following rate increase for 2008-09:

2007-2008 = 9%
2008-2009 = 15%
2009-2010 = 15%
2010-2011 = 8%
2011-2012 = 8%

3. Recommend that the Council direct staff to:
 - a. Plan for the Five-Year Sanitary Sewer and Treatment Plant Capital Improvement Programs using the above rate strategy; and
 - b. Seek assistance of a financial consultant to provide outside expertise on the rate strategy.

OUTCOME

Accepting this report will inform the Council of various financing alternatives for addressing

critical infrastructure rehabilitation, maintenance, and planning needs of the City's sewage collection and treatment system to ensure continued economic development along with protection of public health and the local ecosystem.

Council's conceptual approval of the recommended five-year rate strategy provides an infusion of funds to address the most critical infrastructure needs in the Five-Year Capital Improvement Program. While this rate strategy does not fully fund the infrastructure recommendations resulting from the Plant Master Plan, it positions the Sewer Service and Use Charge Fund to be in a strong financial position upon completion of the Plan. This will enable the City to consider a wide range of options to finance the Master Plan recommendations.

EXECUTIVE SUMMARY

The City's wastewater collection and treatment systems consists of two separate elements: the collection system, which includes approximately 2,200 miles of sanitary sewer pipeline and pumping stations and is operated and maintained by the Departments of Transportation and Public Works; and the San José/Santa Clara Water Pollution Control Plant (Plant), which serves the cities of San José, Santa Clara and Milpitas and five county sanitation districts and is operated by the City through the Department of Environmental Service under a joint powers authority between the San José and the Santa Clara.

The Plant facilities range from 30 to over 50 years old and are in need of significant repair or replacement. A recent consultant assessment identified \$1 billion in infrastructure needs at the Plant over the next ten years. Under the agreements governing the operation and maintenance of the Plant, San José will be responsible for approximately 67% of the costs of the Plant rehabilitation.

A Plant Master Plan and a Sanitary Sewer Capacity Master Plan are currently being developed and scheduled to be completed by 2010. Included in these Master Plans will be recommendations on long-term financing alternatives covering a 30-year horizon.

This report presents five financing alternatives, and their implications, for short-term funding of immediate and critical capital needs over the next five years. Four pay-as-you-go options are discussed, each incorporating a different rate strategy, and one option evaluating revenue bond financing for the Plant are separately presented.

BACKGROUND

On March 5, 2007, staff presented a report on the Water Pollution Control System Infrastructure Condition and Master Planning Process to the Transportation and Environment Committee. This report also addressed needs of the sanitary sewer collection system. The report was presented to the Treatment Plant Advisory Committee on March 8, 2007 and to the Council on March 27,

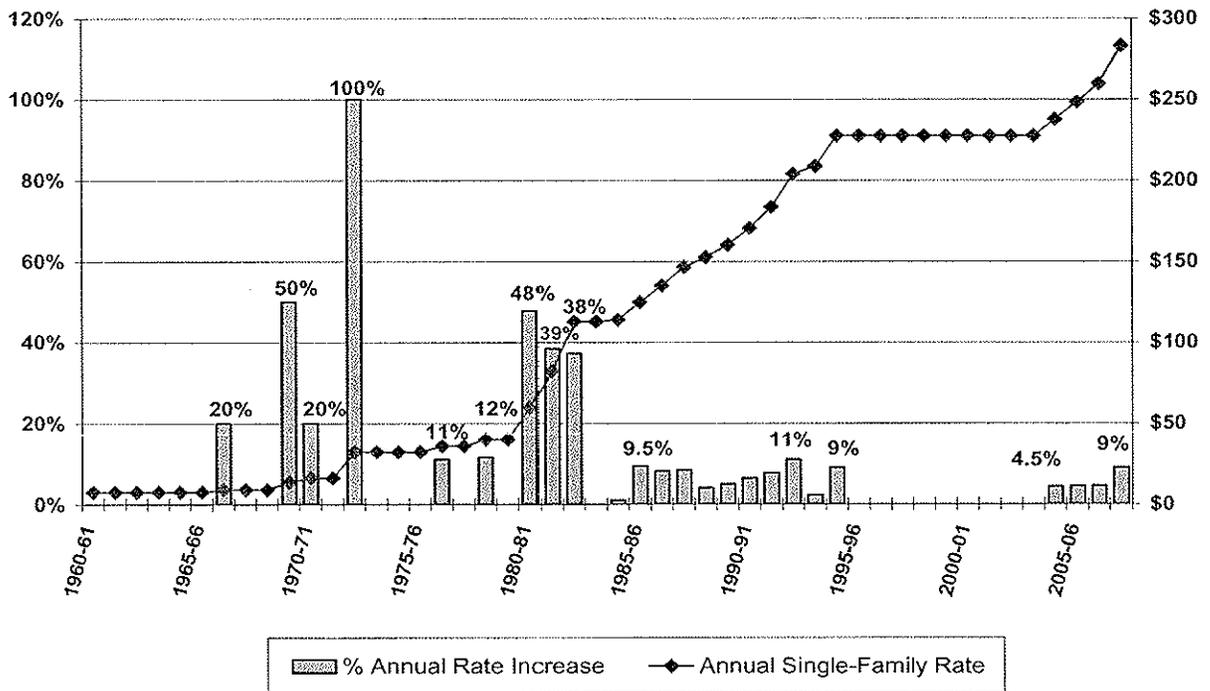
2007 (Item 7.1). The Transportation and Environment Committee recommended that staff be directed to return with financing alternatives to address the critical infrastructure needs identified in the March report.

As discussed in the March infrastructure condition memo, the City collects a Sewer Service and Use Charge (SSUC) to provide revenue for the acquisition, maintenance, replacement, and operation of the City’s sanitary sewer system. The SSUC is a property related fee, imposed on all properties connected to the sanitary sewer system, including payment of debt service on outstanding bonds. The SSUC Fund is the primary source of revenue for the San José-Santa Clara Treatment Plant Capital and Operating Funds, the Sewer Service and Use Charge Capital Fund, Treatment Plant Debt Service Funds and the appropriation within the SSUC Fund for the Department of Transportation’s maintenance and operation of the collection system.

Rate History

Since the inception of the Sewer Service and Use Charge in 1960, rate increases have been erratic, ranging from 0% to 100% over the course of the last 47 years. This pattern is reflected in Chart A, below.

Chart A:
 History of Annual Sewer Rate Increases:
 1960 - 2006



When viewing the entire history of the sewer rates, a distinct pattern emerges: periods of low or no rate increases which are followed by successive years of very high increases, clustered around periods of significant capital investment. Between 1969 and 1972, rates were increased

significantly to fund the expansion to an Advanced Wastewater Treatment Plant and provide tertiary sewage treatment. During that time, successive rate increases of 50%, 20%, and 100% were implemented with a cumulative impact of 360% over the four years.

The next major rate spike occurred between 1980 and 1982, after a major sewage spill at the Plant in 1979. In 1979, following completion of the Nitrification and Filtration facilities, which brought the Plant to an advanced level of treatment, the facility suffered a process failure which allowed partially treated sewage to be discharged to the Bay. Beginning in 1980, with the Emergency Improvements project, and 1982 with the Intermediate-Term Improvements project, the Plant addressed what was determined to be the root cause of the 1979 discharge, lack of sufficient aeration capacity. To address the aeration bottleneck, these projects provided more clarifiers, three new electric air blowers, and construction of Building 40 to house the blowers. This put the Plant in a position to take full advantage of its 167 million gallons per day (MGD) design capacity. During this period, 1980 through 1982, rates increased 47.8%, 38.4% and 37.2%, respectively. With compounding, the effect was a 280% cumulative rate increase.

From 1985 through 1994, annual rate increases ranging from 2.3% to 11.1%, averaging 7.2% per year, were approved in order to re-build reserves after the significant capital expenses associated with the spill and expansion projects.

In 1995, the Plant, under new management, adopted a strategy to hold rates flat while it drew down accumulated reserves and implemented organizational and operational efficiencies. As a result, the last rate increase in the 1990's occurred in 1994-95 at 9% and was followed by nine years without a SSUC rate increase.

Efficiencies implemented in the operating funds resulted in \$110 million in cumulative expenditure savings between 1996-97 and 2005-06. These efficiencies included the elimination of 52 positions, reductions in supplies and chemicals, operational changes and equipment upgrades, reductions in contractual services, and departmental reorganizations. Despite these cost savings, revenues were inadequate to cover escalating cost-of-living and operational and maintenance expenses. As a result, beginning in 1999-2000, ending fund balance was used to cover the revenue shortfall.

Most recently, a three-year rate strategy of 4.5% annual increases was approved and implemented for fiscal years 2004-05 through 2006-07. In June 2007, Council approved a 9% rate increase for FY2007-08. The current rate for single-family households is \$282.72 per year, or \$23.56 monthly.

ANALYSIS

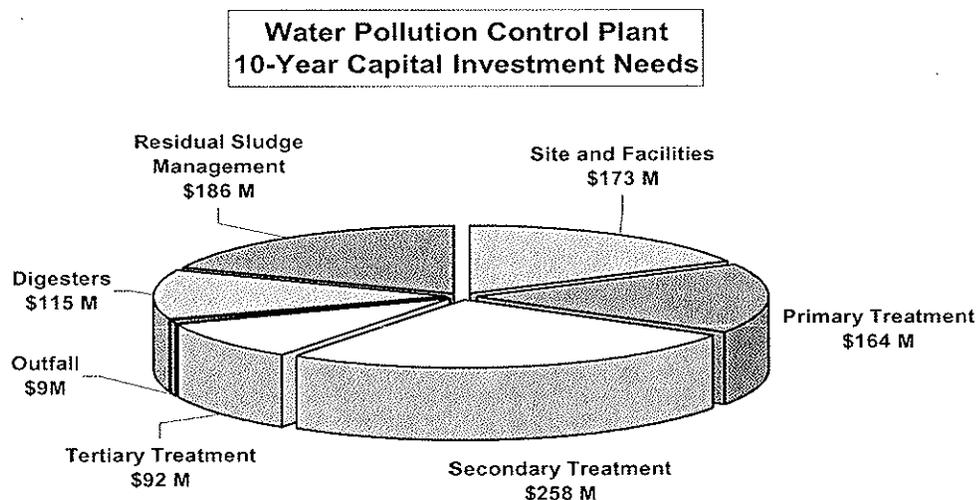
In November 2006 the Plant turned 50 years old. As such, its infrastructure and equipment is all between 30 and 50 years old and is at or nearing the end of its expected life. Similarly, the sewage collection system is 50 years old or older in many parts of the City and is in need of repair and replacement.

As was discussed in the March infrastructure condition assessment memorandum, both the Sewage Collection System and the Treatment Plant have significant rehabilitation and replacement needs over the next ten years.

The Sanitary Sewer System is in need of substantial repair and has identified an immediate annual funding shortfall for capital projects of approximately \$7.5 million. The initial phase of the Capacity Master Plan identified over \$100M in future projects to ensure adequate capacity is provided in the collection system.

In recent years the City has committed a fixed amount of \$14-\$16 million per year from the Sanitary Sewer CIP for system rehabilitations and upgrades. This investment has kept the system in good operational condition for 20 years. As the system has aged and construction costs have risen, this funding allocation has not kept pace with maintenance demands. The proposed recommendation includes an increase to \$22.5 million per year to continue maintenance and capacity upgrades to support economic development and sewer services to the community.

A recent consultant report identified approximately \$1 billion in infrastructure needs at the Plant over the next ten years, of which, \$250 million are critical and need to be addressed within the next five years. The chart below summarizes the key categories of needed rehabilitation or replacement at the Plant and their associated costs.



There is no designated equipment replacement reserve available to pay for these capital needs so funding must come from rate increases or debt financing.

This report focuses on short-term financing options to cover the most critical needs for the next five years. Long-term financing strategies will be included in the Plant Master Plan which will be completed within the next three years. A ten-year rate analysis is presented to demonstrate how the short term rate strategies would impact the SSUC Fund's long-term fiscal integrity.

Financing Options

While a number of financing options are available, ultimately the ratepayers must eventually pay for the services and infrastructure maintenance and rehabilitation, with the exception of grant-funded projects. Different financing alternatives influence the period during which the ratepayers pay for the improvements and the magnitude of rate increases.

When identifying financing options, the following factors must be taken into consideration: Ending Fund Balance and Reserves, Debt-service requirements and Debt-coverage ratio, and both short- and long-term rate implications.

In order to maintain sufficient operating revenues and provide adequate reserves, an ending fund balance (EFB) goal of two months of operating expenses has been established for the SSUC Fund. In recent years, that amount has ranged from \$12 million to \$18 million. These reserves could be needed if an unexpected emergency occurs, such as a major pipe break, critical equipment failure, or a natural disaster such as an earthquake or flood. Maintaining a prudent level of reserves ensures the City's ability to respond quickly to emergencies.

The City is also required to comply with bond covenants in connection with bonds issued by the San José-Santa Clara Clean Water Financing Authority for the South Bay Water Recycling Project (SBWR). The bonds were refinanced in 2005, saving the City approximately \$11 million over the life of the Bonds; however, the debt service currently requires annual payments of approximately \$5.5 million for San José's portion.

In the SSUC Fund, an additional \$6 million annually is earmarked as a reserve to cover unforeseen shortfalls in revenue necessary to make bond debt service payments. As part of the City's SBWR bond covenants, the City is required to maintain a Debt Coverage Ratio of at least 1.15%. The Debt Coverage Ratio is the ratio of net operating revenues to annual debt service payments and is expressed as a minimum ratio. Because the ratio is a function of net operating revenues, the actual Debt Coverage Ratio changes annually. For fiscal year 2006, the ratio was 1.62%, enabling the City to meet its minimum ratio requirements. Rates must set annually at a level that will generate adequate revenue to ensure the minimum coverage requirement of 1.15% is met.

In addition to the SBWR Bonds, the Plant also has a State Revolving Fund (SRF) Loan Debt for the \$88 million it borrowed in 1998 to construct the SBWR system. San José's portion of the

payment on this loan is \$3 million annually. The term of the loan is twenty years, thus the City is obligated to pay the SRF debt service until the loan is fully repaid in FY 2018-19.

Due to the expanse and complexity of the sanitary sewer and Treatment Plant infrastructure, a ten to fifteen year planning horizon is needed to address the repair, maintenance, and replacement needs of the systems and provide accurate cost estimates for long-term financial and capital planning purposes. While it may be possible to maintain lower rates in the short-term, that strategy will result in significantly higher rate increases in the long-term in order to fund the volume of capital projects needed to address critical infrastructure needs. Preparing ten year expenditure projections allows for a longer-term capital program strategy and reduces the likelihood of significant rate increase spikes in the future.

The discussion below includes four sources of funding for interim capital expenditures. These include grant funding, state revolving fund loans, connection fees, and rate increases. The first three options are not included in the more detailed analysis of funding alternatives for the reasons discussed below. The majority of the funding alternatives discussion focuses on various levels of rate increases and how the funds can be leveraged and used to finance the capital projects identified over the next five years.

Grants

A recent survey of available grants yielded no feasible options. Most grants for wastewater treatment facilities are for new technologies, pilot programs, and energy conservation equipment and not for repair and replacement of existing facilities and equipment. Grants are pursued by the City when qualifying projects have been identified, such as the pending Fuel Cell Generator at the Plant. The grant application process carries no guarantee of receiving the funding. Although grants are a viable option for funding new and emerging technologies, they are not generally available for facility and equipment replacement. Staff will continue to monitor and pursue grant opportunities where appropriate.

Loans

State Revolving Fund Loans (SRF) are available through the State Water Resources Control Board at competitive interest rates, however, they require a much more onerous and restrictive process than bond financing. In addition to reporting requirements prior to and during construction, the maximum loan amount is \$25 million (multiple years are possible) and qualifying projects must perform water conservation are subject to (National Environmental Policy Act (NEPA) environmental review requirements in addition to the normal California (CEQA) requirements. It takes 12 to 18 months to apply for and receive the loan proceeds, and funds are frequently not received until after the project is built.

SRF loans are available to wastewater treatment facilities and are highly competitive. Research indicates that most loans are currently being awarded to agencies in the Central Valley and those projects focusing on water conservation, supply, and flow reduction. As noted above, San José

received a SRF Loan in 1998 for the South Bay Water Recycling System which was a flow reduction project. Due to the uncertainty and unlikelihood of receiving financing through an SRF Loan, this option is not included in the financing alternatives presented in this memorandum.

Connection Fees

The Sanitary Sewer (SS) Connection Fee and the Sewage Treatment Plant (STP) Connection Fee are collected from developers when they connect to the sewage collection and treatment system. The funds are restricted to use on capital projects which expand the capacity of the respective systems or which rehabilitate the excess capacity of the Plant. A small number of rehabilitation and replacement projects qualify for funding through connection fees to the extent the projects provide some capacity enhancement. Currently, annual revenues collected total \$1.1 million for the SS Fee and \$3 million for the STP Fee and are budgeted for qualifying projects. The City has just issued an RFQ for a consultant to assess increasing these fees and staff will bring forward a recommendation to Council in Fall 2008.

Rate Increases

Even with Council's approval of a 9% rate increase for 2007-08, if appropriate future rate increases are not approved, the capital program would have to be drastically reduced in order to provide sufficient funding for the operating and maintenance costs of the sewage collection and treatment system. Given the magnitude of the existing repair and replacement needs for the Plant and the sanitary sewer system, even returning to the prior annual rate increase level of 4.5% (from 2004-05 to 2006-07) would provide insufficient funding for the capital program, resulting in a ten-year CIP totaling \$220 million, which is less than half of the identified needed level of funding. This scenario is illustrated in Attachment A.

Five rate strategy options are discussed below. All options hold annual rate increases at or below 15% and maintain the Debt Coverage Ratio at or above the minimum ratio of 1.15%. Options one through four reflect a pay-as-you-go strategy while option five models the issuance of \$100 million in revenue bonds received in FY2009-10. A brief summary of the five options is presented below. The full analysis, including tables and charts, can be found in Attachment B.

Year	1 2007- 2008	2 2008- 2009	3 2009- 2010	4 2010- 2011	5 2011- 2012	6 2012- 2013	7 2013- 2014	8 2014- 2015	9 2015- 2016	10 2016- 2017
Option 1: Current Rate Strategy	9.0%	9.0%	9.0%	8.0%	8.0%	15.0%	15.0%	8.0%	5.0%	3.5%
Option 2: Accelerated 10-Year Capital Program	9.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	12.0%	10.0%
Option 3: Up-Front Cash Infusion	9.0%	15.0%	15.0%	8.0%	8.0%	8.0%	5.0%	5.0%	4.0%	3.5%
Option 4: Tapering Rate Increases	9.0%	12.0%	11.0%	10.0%	9.0%	9.0%	9.0%	8.0%	4.0%	3.0%
Option 5: \$100 Million Bond Financing	9.0%	9.5%	9.0%	9.0%	8.0%	8.0%	8.0%	8.0%	8.5%	8.0%

Except for Option #2, the options above reflect a \$181.4 million sanitary sewer capital program and a \$324.5 million Plant capital program over the ten year period. Ideally, the 2007-12 Five-Year Plant Capital Improvement Program (CIP) would total \$250 million in order to address the short-term critical infrastructure needs identified by a consultant and discussed in the March 5, 2007, Water Pollution Control System Infrastructure Condition and Master Planning Process report. However, unless rate increases in excess of 15% are implemented, full funding of the \$250 million in infrastructure repairs at the Plant is not possible in the next five years. As noted above, the Sanitary Sewer Capital Program five year infrastructure needs are approximately \$22 million annually, totaling \$110 million. However, in an effort to maintain rate increases at or below 15%, both of these programs have been scaled back. The consequence is many of the needed capital projects are pushed out into years six through ten. For the Plant, these estimates are based on the consultant's estimate of \$1 billion in infrastructure rehabilitation over the next 10 years and for the Sanitary Sewer System, estimates are based on an estimated \$18 to \$22 million annual need for capital improvements.

Option two reflects the rate increases required to fully fund the \$890 million in identified infrastructure repair and rehabilitation needs of the sewage collection and treatment system over a ten-year period. This model provides \$220 million for the sanitary sewer capital program and \$670 million for the Plant, which is San José's share of the \$1 billion in estimated costs.

Pay-As-You-Go Financing

The Pay-As-You-Go financing options would fund the collection system and Plant operating and capital programs exclusively through annual rate increases to residential, commercial, and industrial ratepayers over the next five years. Due to the lack of rate increases from FY1995-96 to FY2003-04, several years of double-digit rate increases are necessary to address the backlog in the capital repair and replacement program. The modest 4.5% rate increases in the past three years have not kept pace with increases in operating and maintenance costs and the cost escalation experienced in the procurement of concrete and steel needed for construction projects. As a result, the gap between revenues and expenditures increases annually, creating a "structural deficit." In order to eliminate the structural deficit created under the pay-as-you-go-options, and fund a capital program that adequately addresses critical infrastructure needs, several years of double-digit rate increases will be needed to bring revenues to cost-recovery.

Option 1: Current Rate Strategy

This option keeps rate increases below 10% for the next five years and funds a \$506 million ten-year capital program. However, in order to fund the infrastructure needs of the sanitary sewer system and Treatment Plant throughout the 10-year CIP, rate increases of 15% will be needed in years six and seven. Additionally, the SSUC ending fund balance is well below targeted levels for the next four years.

Option 2: Accelerated 10-Year Capital Program

This option increases rates by 15% annually for five years, from FY2008-09 to FY2012-13, and in the subsequent years, rate increases are decreased successively each year. Under this rate strategy, the \$220 million in sewer collection system needs and \$1 billion in identified Plant infrastructure needs are fully funded during the ten-year period (of the \$1 billion in Plant needs, San José is responsible for 67% or \$670 million). This option accelerates implementation of capital projects identified and enables the Five-Year CIP to be increased by \$54.3 million over the current rate strategy presented in Option #1, to a total of \$162.8 million.

Option 3: Up-Front Cash Infusion

This option funds a \$506 million ten-year capital program and increases rates by 15% in FY2008-09 and FY2009-10 and in the subsequent years, rate increases are successively lower each year. By implementing higher rate increases over the next two years, revenues over the ten year period are increased substantially due to the compounding effect of early rate increases. This allows the annual rate increase to drop from 15% to 8% between years three and four. The SSUC ending fund balance is well below targeted levels for FY2008-09 and FY2009-10. This is the recommended option.

Option 4: Tapering Rate Increases

This option has double digit rate increases for the next three years; however, the maximum rate increase is only 12%, rather than 15%. This option funds a \$506 million ten year capital program and the SSUC ending fund balance and reserves experience insignificant shortfalls.

Supplemental Revenue Bond Financing

In an effort to smooth out the rate increases over the next five years, staff was directed to explore the possibility of revenue bond financing for the Plant capital improvements. Assuming all of the environmental review is completed for the projects, the timeline for issuance of revenue bonds for the capital improvement projects is approximately six months. The issuance of revenue bonds by the San José – Santa Clara Clean Water Financing Authority (CWFA) for Plant improvements requires the approval of the both the San José and Santa Clara city councils, in addition to approval by the CWFA Board. This approval process is required even if one of the cities elects to pay their portion of the capital improvements with cash.

Option 5: \$100 Million Bond Financing

This option assumes \$100 million in revenue bonds are issued by CWFA at a fixed rate of 7.25% for a 30-year term, which is the average fixed rate interest rate of the Revenue Bond Index over the last 28 years. This is a conservative interest rate assumption, but given the unpredictability of interest rates, a conservative assumption is prudent. San José's share of the debt would be 67%, or \$67 million. The Tributary Agencies would be responsible for the remaining 33% and each agency would have the option of making annual payments equivalent to its prorated share of the debt service for the bonds or making an upfront cash payment. The estimated debt service for San José's share would be approximately \$6.4 million annually for 30 years, for a total cost to the City of \$192 million over the life of the bonds. Although bond financing reduces the

short-term rate increases, in the long-term, rate increases may be higher in order to cover the annual debt service and rate decreases would likely not be possible (as discussed in Option 3 above). This scenario maintains annual rate increases below 10%. However, annual rate increases during the ten year period, never fall below 8%. The SSUC ending fund balance experiences a shortfall only in FY2008-09.

Five-Year CIP Comparisons

The table below compares the funding level of the Five-Year CIP under the various options described above.

	Total 5-Year CIP Needs	Sewer 5- Year CIP	Plant 5-Year CIP*	Total Sewer+Plant 5-Year CIP
Option 1 - Current Rate Strategy	\$360.0	\$72.4	\$108.5	\$180.9
Option 2 - Accelerated CIP	\$360.0	\$82.4	\$162.8	\$245.2
Option 3 - Up-Front Cash Infusion	\$360.0	\$72.4	\$148.8	\$221.2
Option 4 - Tapering Rate Increases	\$360.0	\$72.4	\$128.5	\$200.9
Option 5 - \$100 Million Bonds	\$360.0	\$78.4	\$167.0	\$245.4

* Plant 5-Year CIP includes and additional \$40M in reserves for Electrical Reliability Project

Conclusions and Recommendations

Conceptual approval of a five year rate strategy is recommended in order to facilitate development of the five year capital improvement programs for the sanitary sewer system and the Plant. This will enable staff to more efficiently and effectively plan both the operating and capital budgets during the upcoming budget processes. Although a five-year strategy is recommended for conceptual approval, the rates would not be locked in and could be adjusted annually, if needed. The sewer and Plant budget needs are reviewed annually and any updated recommendations will be brought to Council for approval during the annual budget process. As the Plant Master Plan progresses, additional needs may be identified and would be included in future rate recommendations.

Based on the analysis of the options described above, Rate Strategy Option #3 is recommended because it provides immediate financial resources to support the capital program while providing the highest level of future flexibility to explore future funding alternatives that may be recommended as part of the Plant Master Plan. This option enables the SSUC ending fund balance to be maintained at prudent levels during the ten year period and funds the identified infrastructure needs of \$506 million.

Although Option #5 maintains annual rate increases below 10% through bond financing, the use of bonds to address funding deficiencies in addressing critical infrastructure needs over the next five years may limit the City's ability to secure future debt financing to address long-term major projects anticipated to be identified as part of the Plant Master Plan, which is scheduled for completion in FY 2009-10. As noted earlier, the Plant Master Plan will address capital planning and infrastructure needs over the next 30 years. As a result of this long planning horizon, it is likely that there will be significant costs associated with the recommended capital investments and bond financing is likely to play a significant role in the various funding/financing options considered in the Plant Master Plan. If the bond financing alternative is pursued to address the short-term critical infrastructure needs over the next five years, the SSUC Fund will have annual debt service payments obligations totaling approximately \$12 million in addition to a State Revolving Fund Loan obligation of \$3 million per year. This existing debt could make it more difficult to borrow funds in order to finance the Plant Master Plan recommendations.

While Option #4 is also appealing because annual rate increases do not exceed 12%, this option reduces the five-year capital program by \$20 million from Option #3, delaying critical capital projects. In addition, it requires annual rate increases of 8% or greater until year nine.

Once the SSUC Fund's revenues have been increased to cost-recovery, it is recommended that small rate increases be implemented annually in order to keep pace with inflation and cost-of-living increases. Adopting this strategy of small annual rate increases will enable the City to avoid the significant rate increase spikes that have characterized this fund's history.

Although the recommended strategy proposes two consecutive years of annual 15% rate increases, San José's sewer rates are still below those of most neighboring agencies and jurisdictions. Attachment C provides a comparison of San José sewer rates to other agencies.

It is recommended that Council direct staff to hire a financial consultant to verify the assumptions and validity of the recommended rate strategy to ensure accurate forecasting of a highly complex revenue stream. This will assure a feasible and realistic rate strategy on which to base the 2008-13 Proposed Capital Improvement Program.

EVALUATION AND FOLLOW-UP

As part of the annual budget process, staff will return to the Council with a detailed five-year capital improvement program. Additionally, staff will formally recommend annual SSUC rate increases each year and will schedule public hearings.

PUBLIC OUTREACH

Proposition 218 rate notices were mailed to affected rate payers and were received on or before May 4, 2007. These notices informed the recipients of the City's intent to raise sewer rates up to 9% in FY2007-08 and up to 15% in FY2008-09 and FY 2009-10. Ratepayers had a 45-day period during which they could submit a written protest to the proposed rate increases. Less

than one percent of ratepayers filed a written protest opposing the rate increase. Information regarding the infrastructure condition and operational needs of the sanitary sewer system and the Treatment Plant were explained in the notice.

This memorandum is posted on the City's Council Agenda Website for the November 20, 2007 City Council Meeting.

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criteria 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criteria 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

COORDINATION

This report has been coordinated with the Departments of Environmental Services, Transportation, Public Works, Finance, the City Manager's Office, and the City Attorney's Office.



JOHN STUFFLEBEAN
Director
Environmental Services Department



KATY ALLEN
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Public Works Department



JAMES R. HELMER
Director
Department of Transportation



SCOTT P. JOHNSON
Director
Finance Department

For questions, please contact Kate Drayson, Administrative Officer, Environmental Services, at (408) 535-8553.

Attachments

ATTACHMENT A

Maintain Previous Level of Rate Increases

The table below reflects the impact on the capital program and the SSUC ending fund balance if future rate increases are limited to 4.5% as they were from 2004-05 through 2006-07.

Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Program	\$32.5 M	\$18.5 M	\$15.5 M	\$16.0 M	\$15.5	\$17	\$22	\$24	\$28	\$30.5
SSUC Ending Fund Balance	\$16.7 M	\$12.6 M	\$12.4 M	\$13.6 M	\$14.8 M	\$17.4 M	\$18.4 M	\$19.1 M	\$19.8 M	\$20.1 M
SSUC Ending Fund Balance Goal	\$15.7 M	\$15.3 M	\$16.3 M	\$16.8 M	\$17.3 M	\$17.8 M	\$18.2 M	\$19.2 M	\$19.7 M	\$20.1 M
Variance	\$1.1 M	(\$2.7 M)	(\$3.9 M)	(\$3.2 M)	(\$2.5 M)	(\$0.4 M)	\$0.2 M	(\$0.1 M)	\$0.1 M	\$0.0 M

Pros: This strategy maintains rate increases below 5% for years two through ten.

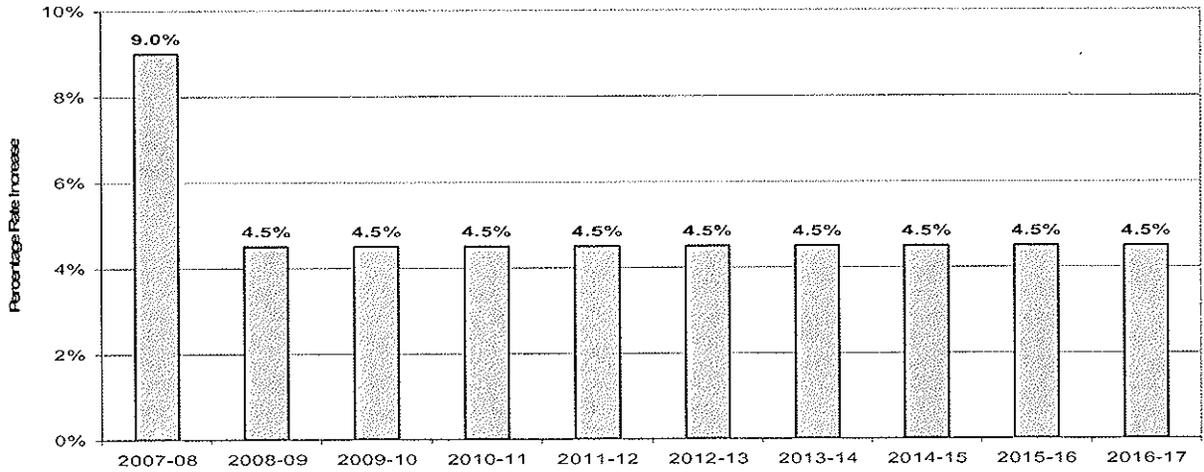
Cons: After nearly ten years without any rate increases, the Sewer Service and Use Charges were increased by 4.5% annually from 2004-05 through 2006-07. For 2007-08, Council approved a 9% rate increase. If the annual rate increase is reduced to its former level of 4.5%, the capital program would have to be severely curtailed, severely compromising the infrastructure condition and reliability of the sewage collection and treatment system.

The capital program would fall to its lowest point of \$15.5 million in FY2009-10, less than half its current annual level of funding. By the end of the ten year period, the capital program would total only \$220 million, which is only 25% of the total program needs of \$890 million.

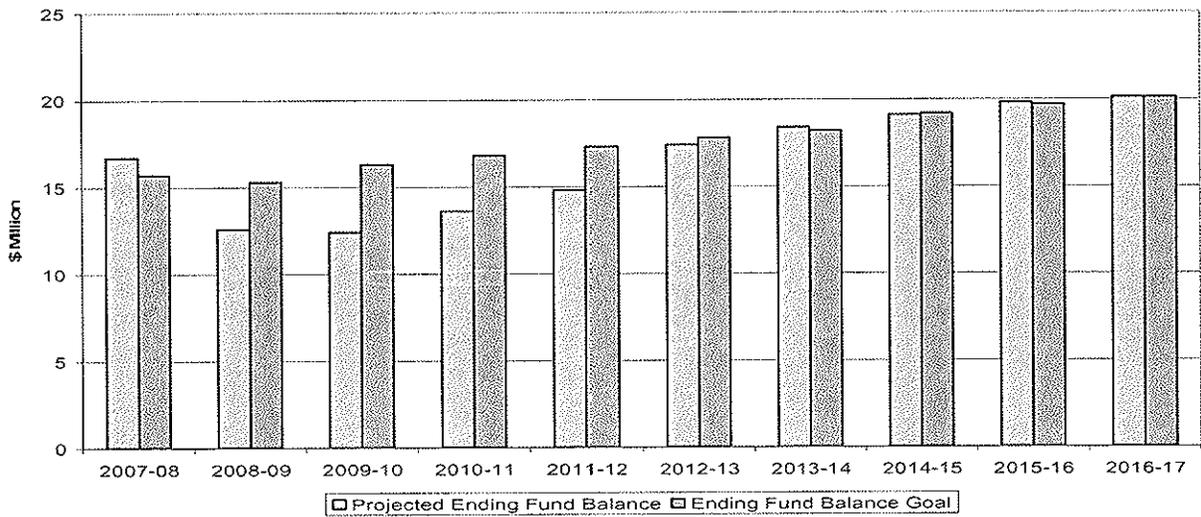
Due to the stringent requirements imposed by the City's National Pollution Discharge Elimination System (NPDES) permit from the Environmental Protection Agency, reductions to the operating budget are not recommended. Through the operating budget, the City provides operations and maintenance services for the sewage collection and treatment system, conducts inspections, provides laboratory services, and operates the recycled water system. Without these activities, the City would be in violation of its NPDES permit and would face significant fines and legal ramifications.

ATTACHMENT A: Maintain Previous Level of Rate Increases (Cont'd)

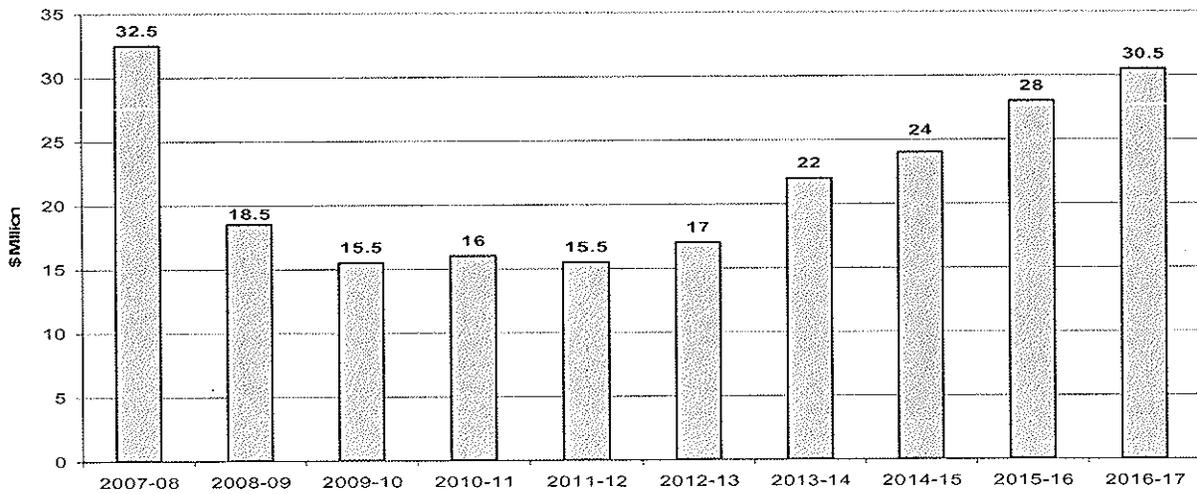
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT B

Rate Increase Strategy Options

Option 1: Current Rate Strategy

This option reflects the current Adopted Budget, Five-Year Capital Improvement Program, and corresponding rate increases. Rate increases remain below 10% for the next five years, however, in order to fund the infrastructure needs of the sanitary sewer system and Treatment Plant throughout the 10-year CIP, rate increases of 15% will be needed in years six and seven.

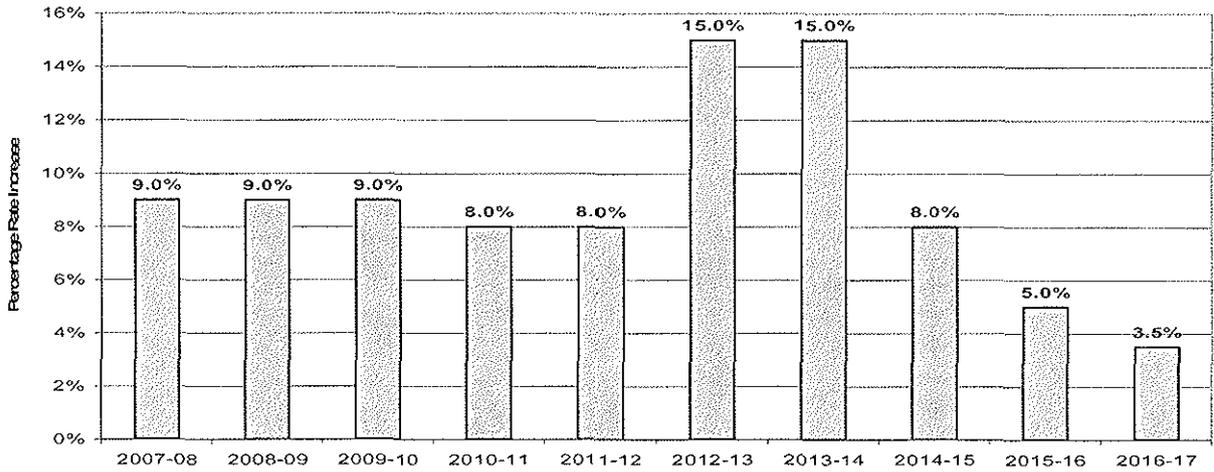
Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	9.0%	9.0%	8.0%	8.0%	15.0%	15.0%	8.0%	5.0%	3.5%
Capital Program	\$32.5 M	\$23.5 M	\$24.5 M	\$27.0 M	\$33.5 M	\$45.5 M	\$68.0 M	\$78.0 M	\$85.0 M	\$88.5 M
SSUC Ending Fund Balance	\$16.7	\$11.5	\$10.6	\$12.9	\$12.8	\$17.0	\$18.2	\$19.0	\$20.1	\$20.7
SSUC Ending Fund Balance Goal	\$15.7	\$15.3	\$16.3	\$16.8	\$17.3	\$17.8	\$18.3	\$19.2	\$19.8	\$20.1
Variance	\$1.1	(\$3.8)	(\$5.7)	(\$3.9)	(\$4.5)	(\$0.8)	(\$0.1)	(\$0.2)	\$0.3	\$0.6

Pros: This option keeps rate increases at or below 9% for the first five years and at or below 15% for years six through ten.

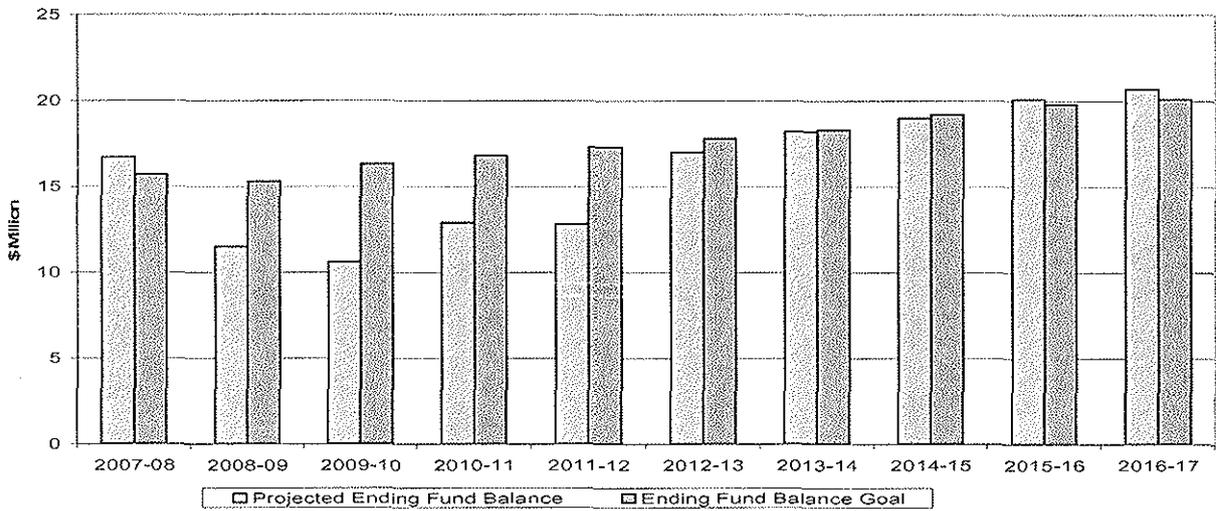
Cons: Years six and seven require consecutive 15% rate increases in order to provide funding for critical capital projects. Ending fund balance and reserves are well below the fund balance goal for the majority of the years, potentially putting the sewage collection and treatment systems at risk should unforeseen infrastructure or equipment failures or natural disasters occur. This scenario limits the 2007-12 Five-Year CIP to \$141 million for years one through five and \$365 million for years six through ten. The total combined ten-year Sanitary Sewer and Treatment Plant CIP is \$506 million compared to \$890 million in identified infrastructure rehabilitation and replacement needs.

ATTACHMENT B - Option 1: Current Rate Strategy (Cont'd)

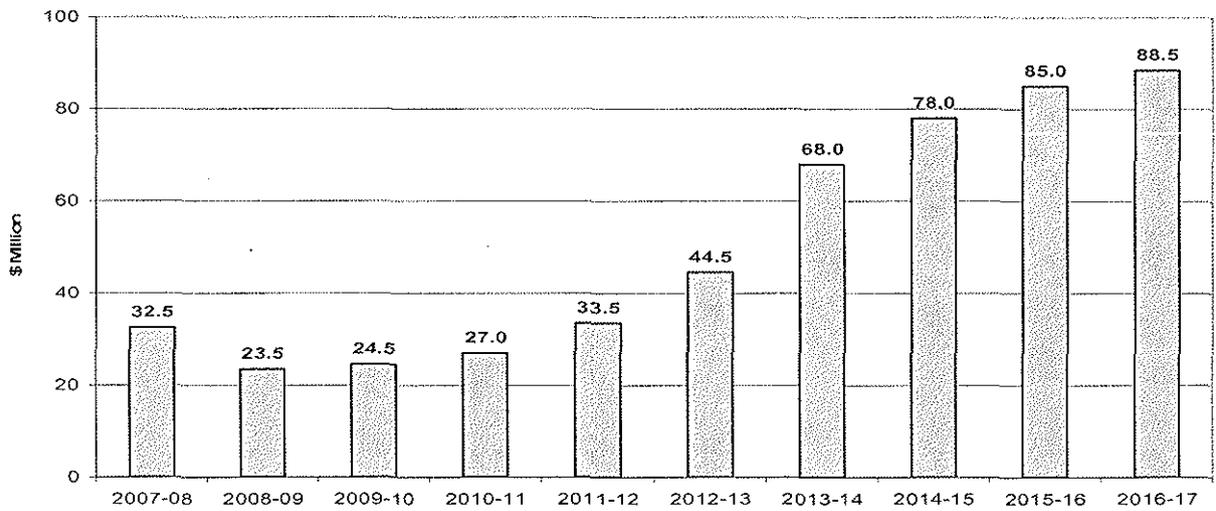
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT B

Rate Increase Strategy Options (Cont'd)

Option 2: Accelerated 10-Year Capital Program

This option fully funds both the Sanitary Sewer and Treatment Plant ten-year capital program needs through pay-as-you-go financing. In this model, rates are increased by 15% annually for seven years, from FY2008-09 and FY2014-15, and in the following years, rate increases are successively lower each year. Under this rate strategy, the \$1 billion, of which San José is responsible for 67% or \$670 million, in identified Plant infrastructure needs and the \$220 million in Sanitary Sewer infrastructure needs are fully funded.

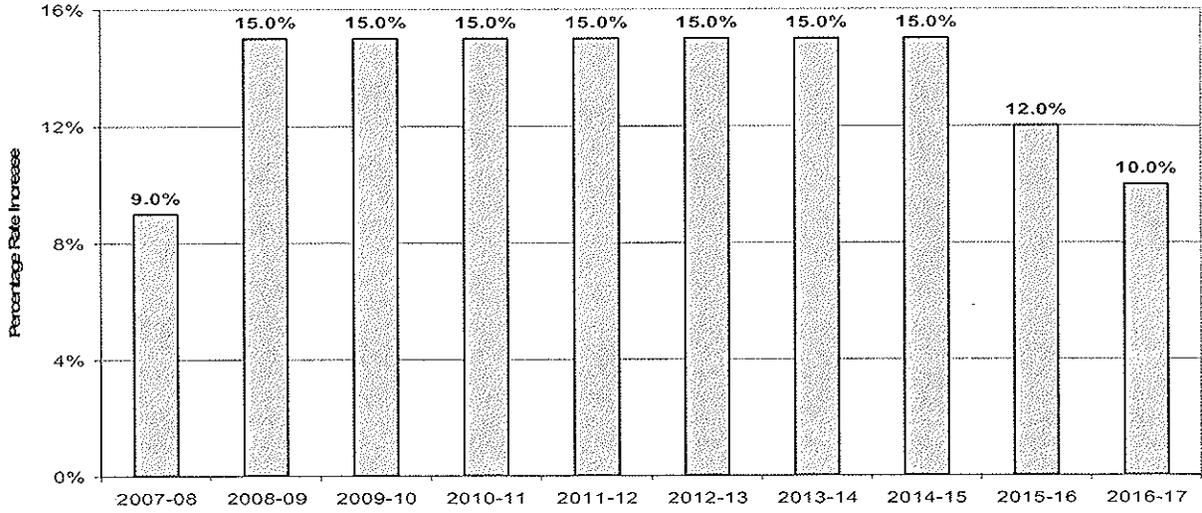
Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	12.0%	10.0%
Capital Program	\$32.5 M	\$28.5 M	\$34.5 M	\$45.4 M	\$64.4 M	\$85 M	\$111 M	\$137 M	\$164.5 M	\$187.3 M
SSUC Ending Fund Balance	\$16.7	\$11.6	\$12.3	\$16.9	\$17.6	\$18.2	\$18.3	\$19.5	\$19.9	\$20.7
SSUC Ending Fund Balance Goal	\$15.7	\$15.4	\$16.3	\$16.8	\$17.4	\$17.8	\$18.3	\$19.5	\$19.9	\$20.7
Variance	\$1.1	(\$3.8)	(\$4.0)	\$0.1	\$0.2	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0

Pros: This option fully funds the identified infrastructure repair and replacement needs of \$890 million for the sewage collection and treatment systems for the next ten years. This strategy enables the 2007-12 Five-Year CIP to be increased to \$205.3 million; enabling infrastructure needs to be addressed sooner.

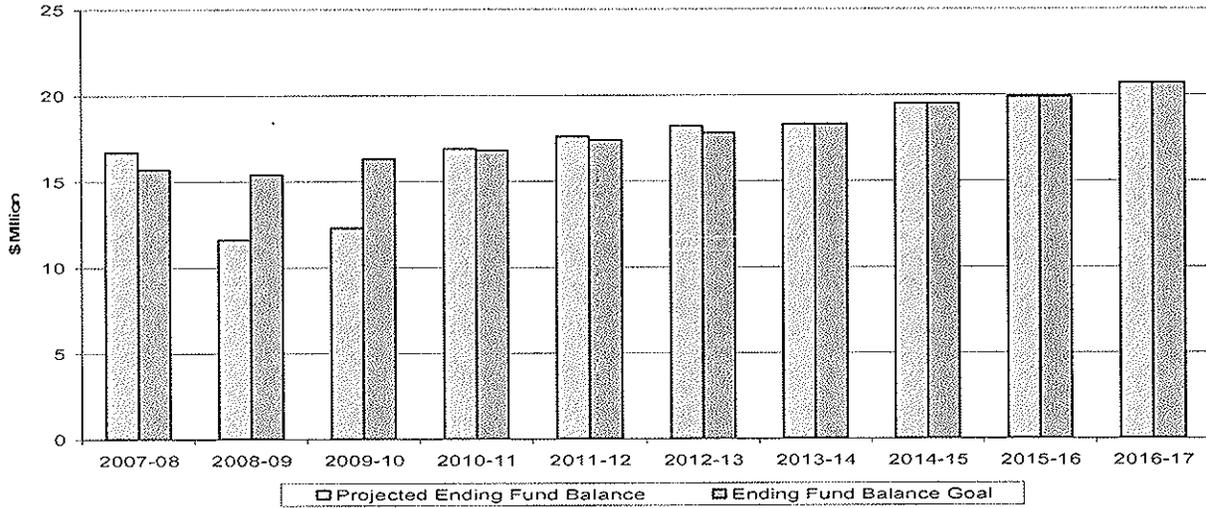
Cons: Consecutive 15% rate increases are required for seven years in order to provide the resources needed to fully fund the infrastructure rehabilitation needs of the sewage collection and treatment system. Although the rate increases decrease in magnitude, they remain in the double-digits for the ten-year period. Ending fund balance experiences a shortfall in years two and three in the magnitude of \$4 million annually.

ATTACHMENT B - Option 2: Accelerated 10-Year Capital Program (Cont'd)

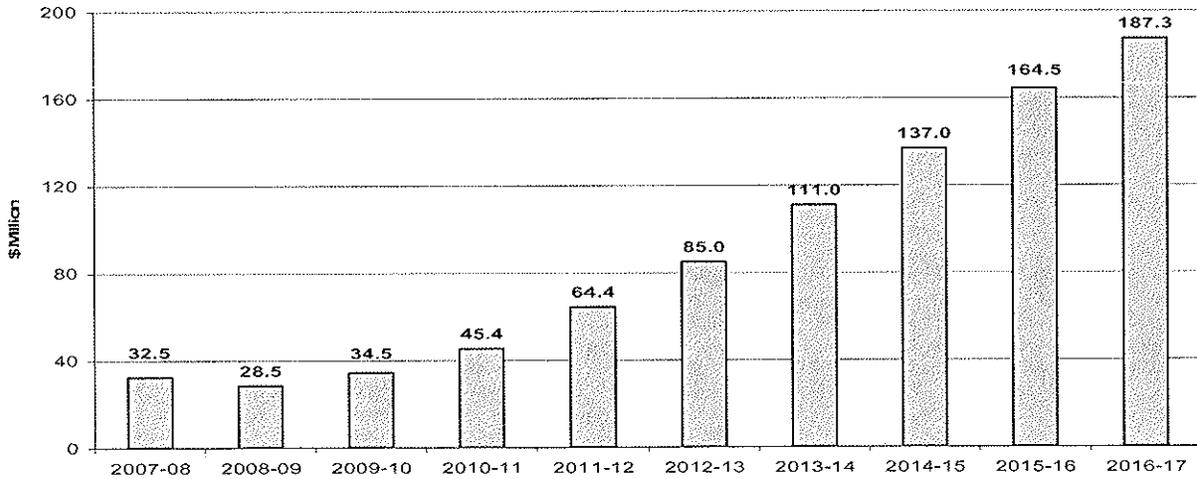
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT B

Rate Increase Strategy Options (Cont'd)

Option 3: Up-Front Cash Infusion

This option increases rates by 15% in FY2008-09 and FY2009-10, and in the following years, rate increases are successively lower each year. This option funds a \$506 million ten-year capital program for the sewage collection and treatment system.

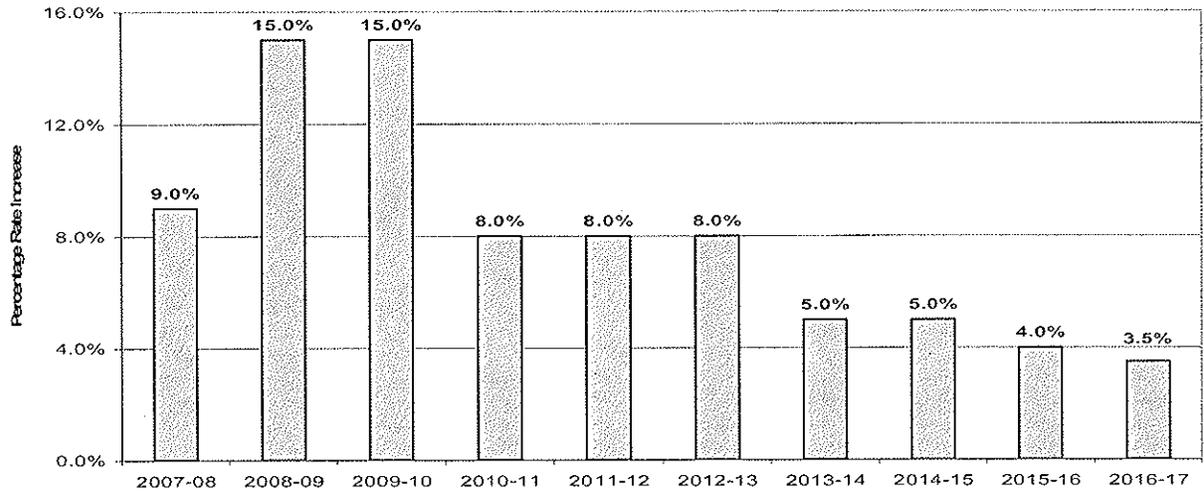
Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	15.0%	15.0%	8.0%	8.0%	8.0%	5.0%	5.0%	4.0%	3.5%
Capital Program	\$32.5 M	\$28.5 M	\$34.5 M	\$39.4 M	\$46.4 M	\$53 M	\$62 M	\$65 M	\$68 M	\$76.6 M
SSUC Ending Fund Balance	\$16.7 M	\$11.6 M	\$12.3 M	\$14.9 M	\$15.6 M	\$18.1 M	\$18.1 M	\$19.3 M	\$22.7 M	\$20.1 M
SSUC Ending Fund Balance Goal	\$15.7 M	\$15.4 M	\$16.3 M	\$16.8 M	\$17.3 M	\$17.8 M	\$18.3 M	\$19.2 M	\$19.7 M	\$20.1 M
Variance	\$1.0 M	(\$3.8 M)	(\$4.0 M)	(\$1.9 M)	(\$1.7 M)	\$0.3 M	(\$0.2 M)	\$0.1 M	\$3.0 M	\$0.0 M

Pros: In this option, smaller magnitude rate increases are needed in years six through ten due to the compounding effect of the 15% rate increases in years two and three. Annual rate increases drop to 5% or below in year seven. This scenario increases the 2007-2012 Five-Year CIP by \$40 million over the current rate strategy illustrated in Option #1, enabling critical infrastructure needs to be addressed sooner.

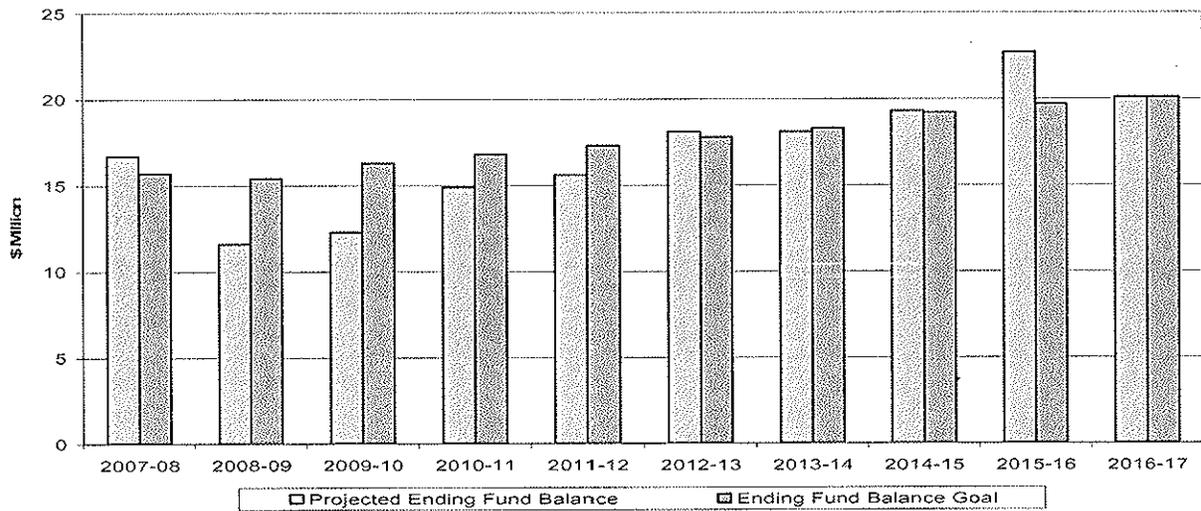
Cons: Years two and three require consecutive 15% rate increases. The SSUC ending fund balance experiences annual shortfalls ranging from almost \$1.7 million to \$4 million in years two through five.

ATTACHMENT B - Option 3: Up-Front Cash Infusion (Cont'd)

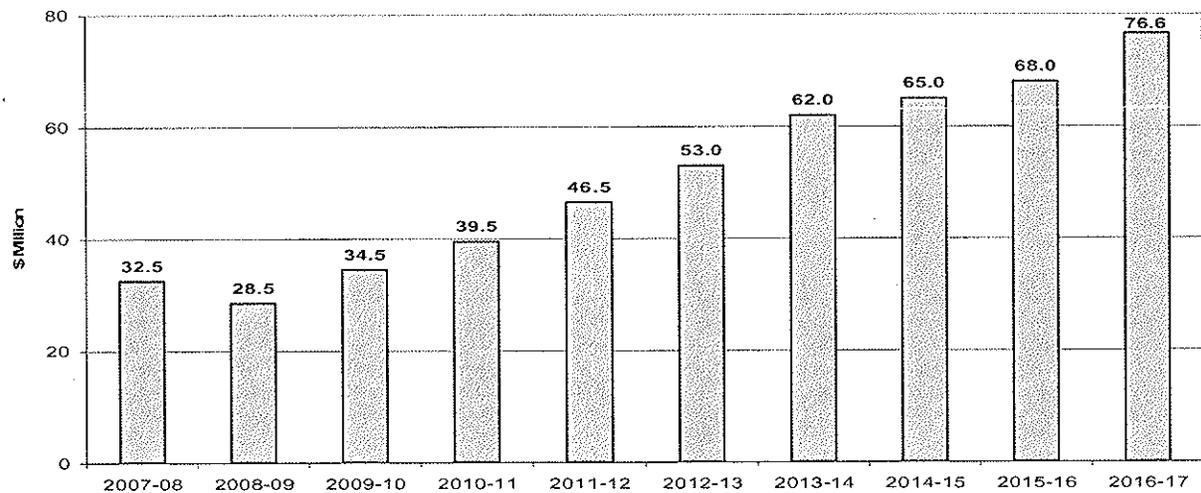
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT B

Rate Increase Strategy Options (Cont'd)

Option 4: Tapering Rate Increases

This option has double digit rate increases for three years; however, the maximum rate increase is only 12%, rather than 15%. This option funds a \$506 million ten-year capital program for the sewage collection and treatment system.

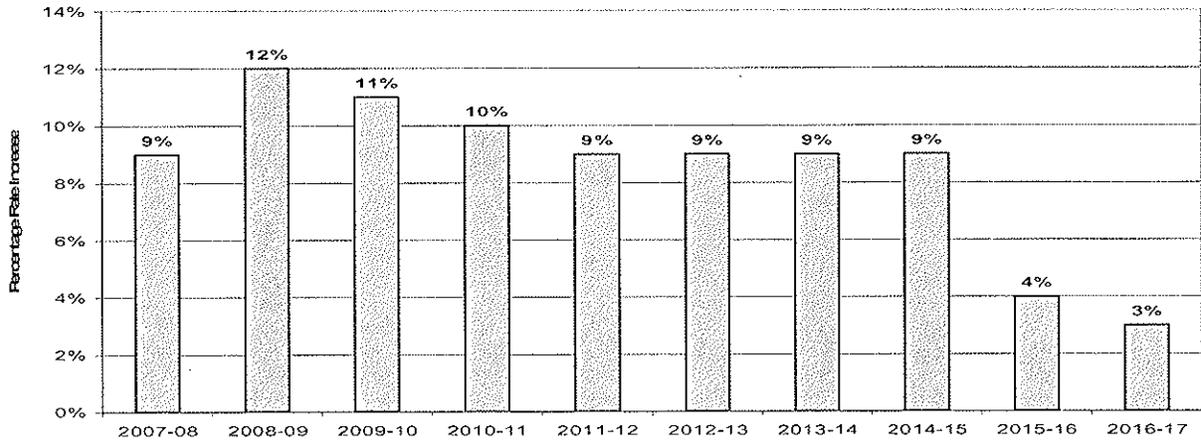
Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	12.0%	11.0%	10.0%	9.0%	9.0%	9.0%	8.0%	4.0%	3.0%
Capital Program	\$32.5 M	\$23.5 M	\$24.5 M	\$37 M	\$43.5 M	\$51.5 M	\$64 M	\$72 M	\$75 M	\$82.5 M
SSUC Ending Fund Balance	\$16.7 M	\$14.1 M	\$18.0 M	\$18.0 M	\$17.2 M	\$18.3 M	\$18.2 M	\$19.1 M	\$22.4 M	\$20.2 M
SSUC Ending Fund Balance Goal	\$15.7 M	\$15.4 M	\$16.3 M	\$16.8 M	\$17.3 M	\$17.8 M	\$18.3 M	\$19.2 M	\$19.7 M	\$20.0 M
Variance	\$1.0 M	(\$1.3 M)	\$1.7 M	\$1.2 M	(\$0.1 M)	\$0.5 M	(\$0.1 M)	(\$0.1 M)	\$2.7 M	\$0.2 M

Pros: This option keeps rate increases at or below 12% and the annual rate increases are more evenly distributed over the first eight years, with no significant rate increase spikes. Except for year two, ending fund balance and reserves experience insignificant shortfalls.

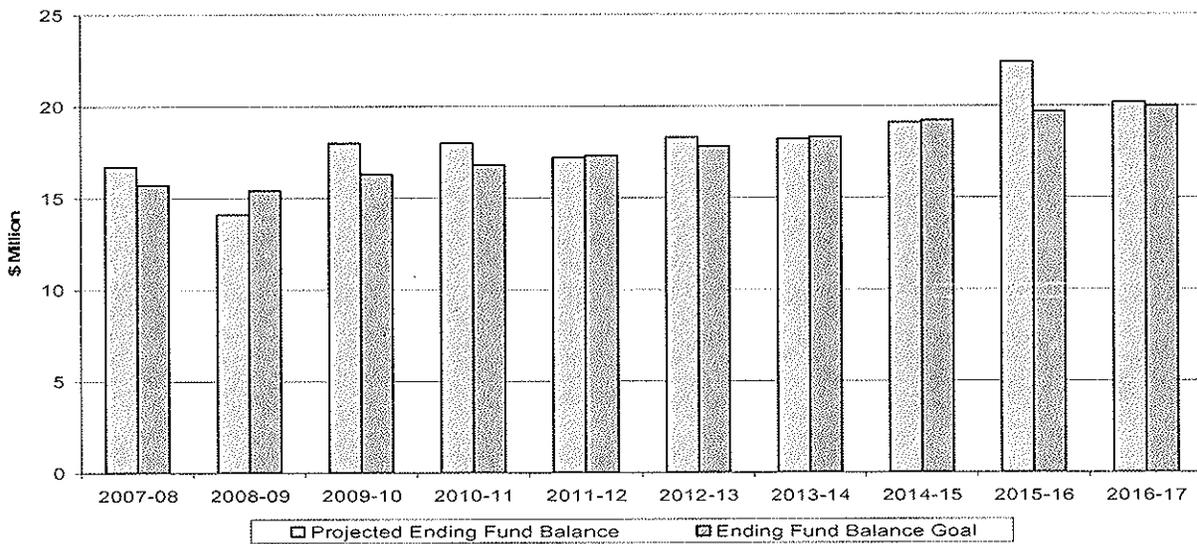
Cons: This scenario requires three consecutive years of double digit rate increases and annual rate increases do not fall to 5% or below until year nine. The 2007-12 Five-Year CIP is \$20 million higher than the current rate strategy (Option #1) but \$20 million lower than the strategy outlined in Option #3.

ATTACHMENT B - Option 4: Tapering Rate Increases (Cont'd)

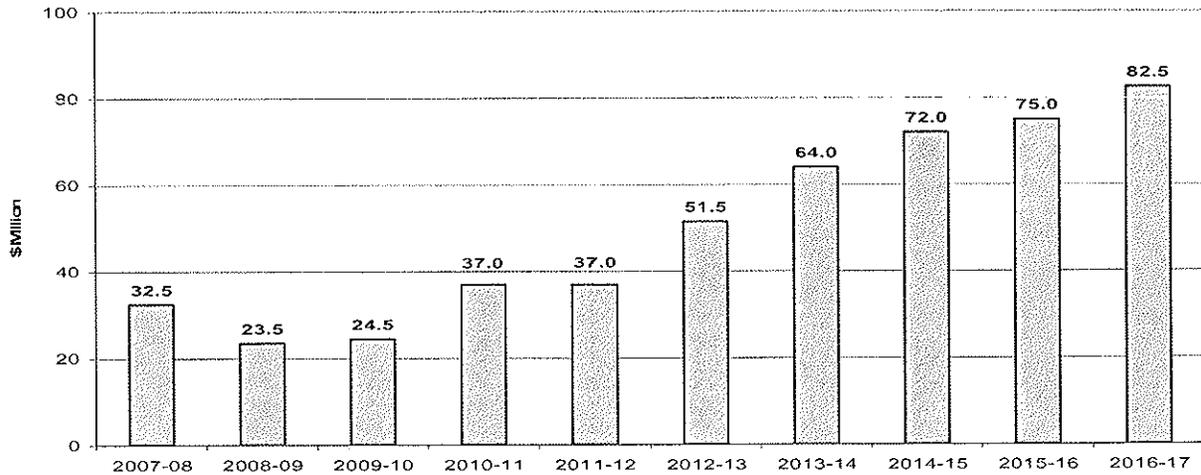
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT B

Rate Increase Strategy Options (Cont'd)

Option 5: \$100 Million Bond Financing

This scenario assumes that the CWFA issues \$100 million in revenue bonds (San José's share of the debt would be \$67 million) at a rate of 7.25% in FY2009-10. San José maintains annual rate increases below 10%. A capital program of \$506 million is funded. The City must have a reasonable expectation when issuing the bonds that the bond proceeds will be spent within three years of issuance of the bonds. The CIP would be developed assuming that the \$100 million issued in FY2009-10 would be expended during the three years FY2009-10, FY2010-11, and FY2011-12.

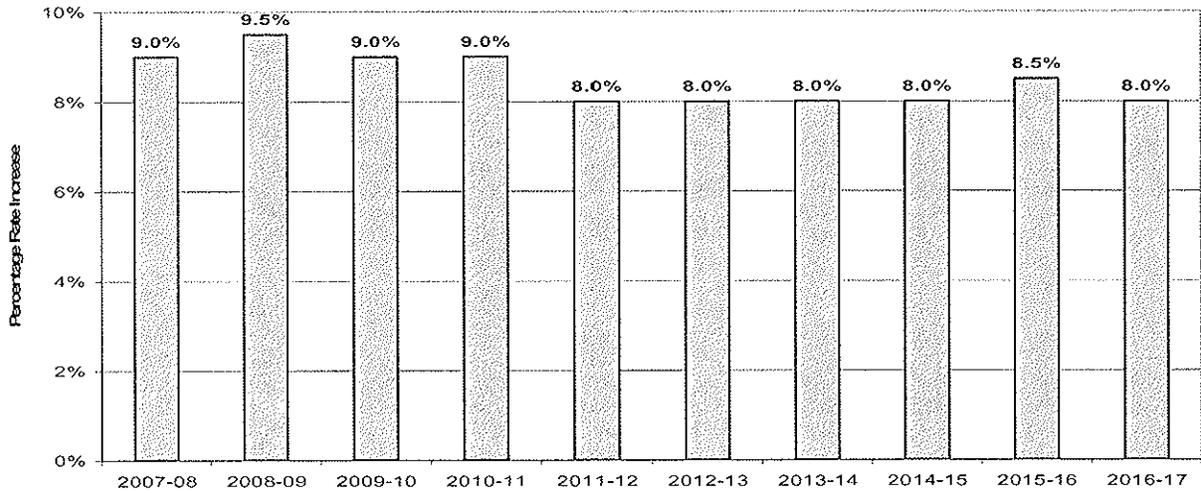
Year	1	2	3	4	5	6	7	8	9	10
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
SSUC Rate Increase	9.0%	9.5%	9.0%	9.0%	8.0%	8.0%	8.0%	8.0%	8.5%	8.0%
Capital Program	\$32.5 M	\$23.5 M	\$116.5 M	\$16.5 M	\$16.5 M	\$47.5 M	\$51.0 M	\$62.0 M	\$66.0 M	\$74.0 M
SSUC Ending Fund Balance	\$16.7 M	\$11.9 M	\$19.5 M	\$27.9 M	\$40.7 M	\$31.2 M	\$26.8 M	\$19.2 M	\$19.7 M	\$21.2 M
SSUC Ending Fund Balance Goal	\$15.7 M	\$15.3 M	\$16.3 M	\$16.8 M	\$17.3 M	\$17.8 M	\$18.3 M	\$19.2 M	\$19.7 M	\$20.0 M
Variance	\$1.0 M	(\$3.4 M)	\$0.6 M	\$5.9 M	\$14.8 M	\$6.4 M	\$4.2 M	(\$0.1 M)	\$1.7 M	\$0.1 M

Pros: This option would keep rate increases below 10% over the next ten years. The SSUC ending fund balance experiences a significant shortfall only in FY 2008-09. This scenario programs \$200 million in capital programs in years one through five and \$306 million in years six through ten.

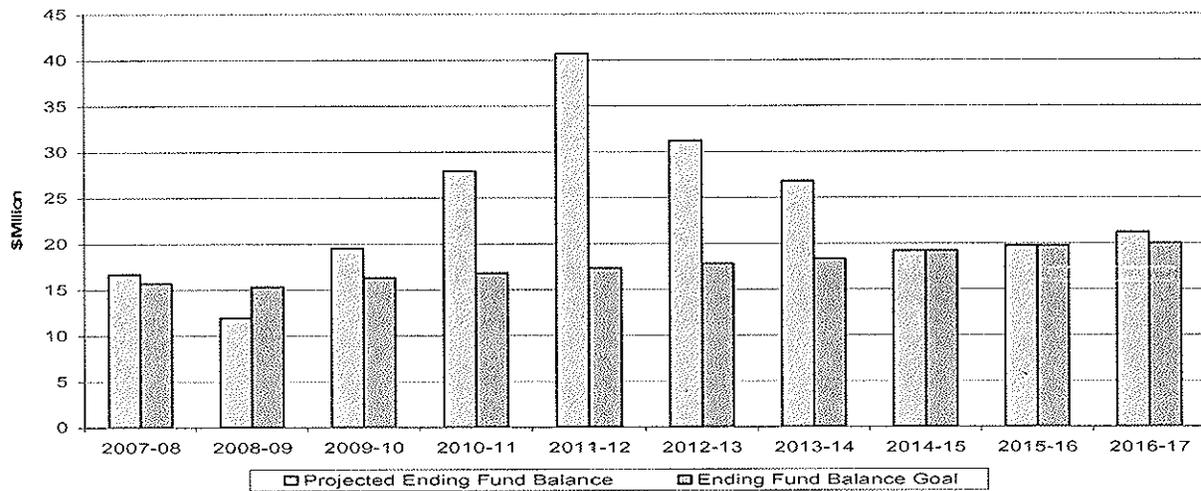
Cons: This option obligates the City to debt service for 30 years. Consequently, rate increases would be higher for the next 30 years in order to generate the revenue needed to pay the annual debt service of \$6.4 million. Additionally, financing through debt service increases costs by 92% over the original \$67 million borrowed. Although the ending fund balance is well over the goal for four years, from FY2010-11 to FY2013-14, it is necessary in order to avoid significant spikes in rates in years six through ten. If ending fund balance is maintained at the level of the annual goal, the rate increase would drop to five percent in FY2010-11, however, an increase of 24% would be needed in FY2012-13 in order to compensate for the loss in revenue and maintain the fund's solvency.

ATTACHMENT B – Option 5: \$100 Million Bond Financing (Cont'd)

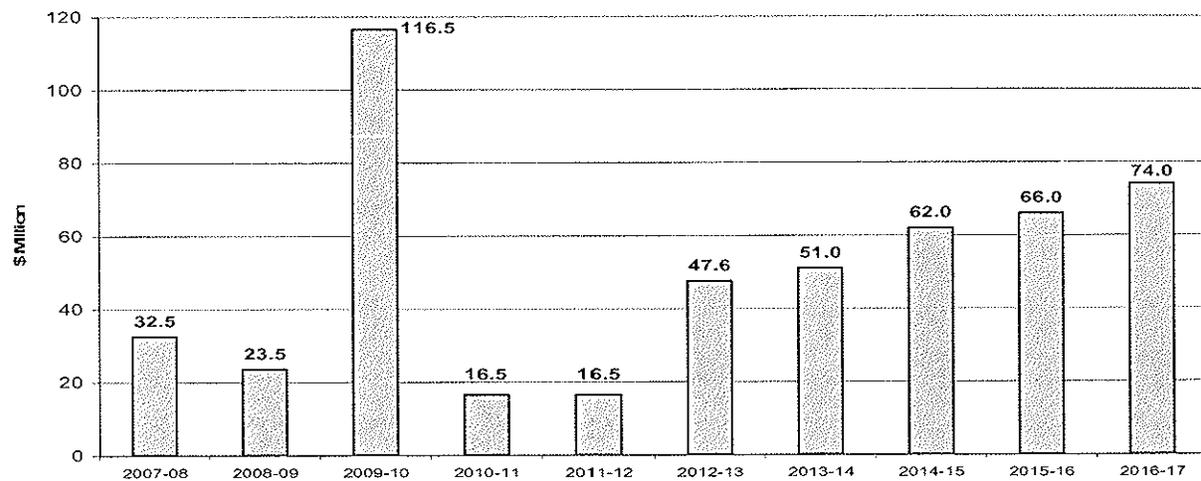
% Annual Rate Increase



Ending Fund Balance vs. Goal



Capital Program Funding



ATTACHMENT C

**Single-Family Dwelling
Sewer Service and Use Charge Rate Comparisons**

The table below compares typical single-family dwelling Sewer Service and Use Charge rates with other municipalities and agencies in the San Francisco Bay Area. The rate surveys were taken in October 2007.

San Francisco Bay Area Agencies	Monthly Rate
Dublin-San Ramon	\$51.10
San Rafael Sanitation District	\$39.54
Livermore	\$38.75
Foster City/Estero Maintenance Improvement District	\$37.94
San Carlos	\$36.51
Daly City	\$36.15
Mountain View Sanitation District	\$35.87
Redwood City	\$35.66
Vallejo	\$34.75
San Mateo	\$33.44
San Francisco	\$32.27
Novato Sanitation District	\$31.83
Marin Sanitation District	\$31.17
Milpitas	\$29.85 *
Gilroy	\$29.74
Marin City	\$29.06
Burbank Sanitation District	\$27.34
San José - Proposed 2008-09	\$27.09
Millbrae	\$27.00 **
Santa Clara County Sanitation District 2-3	\$26.25
Brisbane	\$26.18
Central Contra Costa Sanitation District	\$25.00
Mill Valley	\$24.75
Concord	\$24.50
Sunnyvale	\$23.98
Los Altos	\$23.75
San José - Current	\$23.56
Palo Alto	\$23.48
West Valley Sanitation District	\$23.35
Hayward	\$23.31
Berkeley	\$23.17
Cupertino Sanitation District	\$21.00
Union Sanitation District	\$20.28
Oakland	\$18.05
Sunol Sanitation District	\$13.42
Santa Clara	\$11.60

* Will increase to \$31.05 if approved by Milpitas City Council on November 6, 2007.

** Plus variable charge