

Financial Planning Study

SEWERAGE AGENCY OF SOUTHERN MARIN

CAROLLO ENGINEERS

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1 INTRODUCTION

The Sewerage Agency of Southern Marin (SASM or the Agency) provides wastewater treatment and effluent disposal for SASM's six member agencies. The member agencies include the City of Mill Valley (City), Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and the Kay Park Area of the Tamalpais Community Services District. Each member agency owns, operates, and maintains its respective sanitary sewer collection system. The SASM Joint Powers Authority (JPA) owns and operates the wastewater treatment plant (WWTP), located in Mill Valley, and its associated wastewater collection systems. Revenue is collected primarily through assessments allocated to its six member agencies. The revenue received through these assessments is intended to cover the Agency's budgeted operations and management (O&M) expenses, debt service payments, and capital expenses. The methodology governing this allocation is contractually defined based on both capacity rights and an annually updated share of the previous year's flow.

This report summarizes the findings as presented to the board March 17, 2016. Since that date SASM has continued to review the CIP. However, no substantive changes have been made, therefore, SASM has requested that Carollo submit as final.

1.1 PURPOSE OF STUDY

SASM completed a Wastewater Treatment Master Plan in 2014 that outlines a CIP of \$65.9 million (October 2014 dollars) of capital expenditures over the next 20 years starting in FY 2015/16. Once the timing of design and construction is considered and each project cost is appropriately escalated, the CIP inflates to \$84.8 million in total project costs. In addition to the 20-year CIP, there is a project with \$0.2 million in costs remaining in FY 2015/16. Including this expense, the present value of the CIP is \$66.1 million and \$85.0 in escalated dollars. For the purposes of this study, the total CIP expenditures within the 20-year planning period will be referred to in the escalated CIP value of \$85.0 million. At the December 2014 SASM Board meeting, the Master Plan was accepted and the Board directed moving forward with the Initial Phase CIP Development and a Financial Planning Study. As part of this process, the Board has directed further prioritization of the CIP based on cash flow projections and packaging of projects for efficiency. This Financial Planning Study evaluates available strategies to fund the CIP, forecasts total annual expenditures, and allocates these expenditures to each member agency based on the JPA contract terms.

1.2 SCOPE OF STUDY

This financial study was initiated to advance the CIP presented in the Master Plan by evaluating revenue requirements and cost allocations to the six member agencies so that if necessary, they could each proceed with their own rate studies and Proposition 218 processes to raise rates. The scope of work for this study includes the following tasks:



The delivery of each of these scope elements includes the following and serves as the structure of the report:

- *Task 1 – Project Kickoff and Data Collection.* A collaborative development of an outline of the study’s key objectives and priorities, followed by a review the study data.
- *Task 2 – Revenue Requirement Analysis.* Development of a five- and ten-year revenue requirement forecast. This analysis includes:
 - A policy review of SASM’s reserve and coverage requirements, objectives, and cost allocation methodologies;
 - An analysis of advantages and disadvantages of different funding strategies including the forecasted cost impact on SASM’s member agencies.
 - A financial needs forecast that incorporates identified capital improvements, available funding strategies, and SASM’s fiscal policies. Utilizing the collected data, this analysis projects cash flows and debt service requirements to develop a five- and ten-year forecast of potential revenue shortfalls.
- *Task 3 - Cost Allocation.* Allocation of projected operations and capital costs to each member agency. This allocation will involve a review of the methodology for allocating costs for consistency with Water Environment Federation (WEF) cost allocation methodologies. Based upon the financial projections, the allocation provides each agency with a forecast of annual operating contributions and share of projected capital expenditures and debt payments.
- *Tasks 4 & 5 – Study Report and Meetings.* This report presents the results of the previous tasks.

Conducting these tasks requires development of a financial model incorporating the Agency’s existing revenues and expenses, as well as the master plan CIP. This report details the findings of the financial model and each of the tasks.

1.3 INITIAL FINDINGS

The major findings and recommendations of this study are as follows:

- Existing revenues and planned assessment increases of 3 percent annually, which were recommended in the Agency’s adopted 2010 Comprehensive Long-Term Financial Plan and Rate Study, are inadequate to fund the proposed Master Plan CIP.

- SASM will be required to issue debt to fund the proposed CIP. These projected debt issuances will help to mitigate the upfront financial impact of these projects.
- Annual increases of the assessments allocated to the member agencies will be required in conjunction with the debt issuances. Table 1.1 below projects the Agency's current financial condition assuming the adopted levels of assessment increases.

Table 1.1 Forecast Absent Additional Increases to Planned Agency Assessments					
FY	'15/16	'16/17	'17/18	'18/19	'19/20
Planned Assessment Increases ⁽¹⁾	3%	3%	3%	3%	0%
Projected Revenue	\$4.4	\$4.5	\$4.7	\$4.8	\$4.8
O&M	(3.9)	(4.0)	(4.2)	(4.4)	(4.5)
Debt Service	(0.2)	(1.0)	(1.8)	(1.9)	(2.0)
Cash-Funded Capital ⁽²⁾	(0.0)	(0.0)	(0.0)	(0.0)	(1.3)
Cash Flow	\$0.3	\$(0.5)	\$(1.3)	\$(1.4)	\$(3.0)
DSCR⁽³⁾	2.3x	0.5x	0.3x	0.2x	-0.5x
Contingency Reserve⁽⁴⁾	\$1.1	\$0.6	\$(0.6)	\$(2.0)	\$(5.0)
<u>Note:</u>					
(1) Baseline review: 3% assessment increases recommended in the 2010 Financial Plan and Rate Study.					
(2) Capital expenditures funded by unspent bond proceeds of BAN and the planned \$30 million bond issuance.					
(3) Debt Service Coverage Ratio					
(4) Contingency Reserve and Cash Flow may not foot due to rounding.					

- Additional debt would be required to fund later projects identified in the 20-Year CIP.
- Minimizing the next five years' debt service payments on the Agency's planned \$30 million municipal bond issuance would mitigate some of the rate increases.
- The JPA agreement provides a sound methodology for allocating both operating and capital costs to the member agencies. Moreover, operating costs are allocated based upon annual discharges, while capital costs are allocated based on each member agency's capacity ownership. It is recommended that debt service be allocated based upon capacity as it represents a capital cost.

2 FINANCIAL DATA

The Agency provided background financial information that serves as the basis for the forecasted revenue requirement presented within this report. This information includes operations and maintenance (O&M) expenses, projected capital expenditures, existing debt service, revenues, ending fund balances, equivalent dwelling unit (EDU) counts, member agency assessment methodology, and other miscellaneous financial information.

2.1 EXPENDITURES

2.1.1 Annual Expenditures

The revenue requirement analysis uses the Agency's Fiscal Year (FY) 2014/15 operating budget as the baseline for forecasting future expenditures. O&M expenditures made by the Agency include personnel expenses, special department expenses, supplies, communications, utilities, maintenance, and specialized services.

In FY 2014/15, the Agency's annual O&M expenses were budgeted at \$3.7 million. This total excludes the Agency's current debt service obligations. Combined O&M and debt service expenditures total roughly \$4.0 million in the FY 2014/15 budget. Future O&M expenditures are assumed to increase commensurate with cost inflation and projected cost increases.

Additionally, O&M cost impacts resulting from the recommended capital improvements are also captured. Table 5.7 of SASM's Wastewater Treatment Master Plan indicates new annual O&M expenses of \$384,000 in October 2014 dollars that will begin after the completion of the Nitrifying Trickling Filter (NTF) and NTF Feed/Recirculating Pump Station in FY 2023/24.

2.1.2 Debt Service

The Agency is currently paying debt service on one outstanding bond. The bond, issued in 2012, provided \$4.3 million for capital projects and will be retired in FY 2042/43. FY 2014/15 debt service totaled \$0.2 million.

2.1.3 Capital Improvement Program (20-year and 5-year CIP)

The Master Plan identified a 20-year CIP that runs through FY 2034/35 and includes projects to address the required rehabilitation and improvements in SASM's collection system, treatment plant and outfall. Including the \$0.2 million of remaining costs of the Replacement of Sutter Manor Pump Station, the CIP totals \$85.0 million. The CIP can be broken down between three general project groups and approximate timelines for implementation:

- Near-Term (FY 2015-2020): Wastewater Treatment Plant and Collection System Improvements
- Mid-Term (FY 2021-2025): Wet Weather and Flood Mitigation Improvements and Recycled Water

- Long-Term (FY 2026-2035): Long Term Reinvestment

As the financial plan was developed, the 5-year CIP was revised from the Master Plan to package projects to simplify the management, design, and construction of the projects. It is not desirable, from an owner's perspective, to have multiple construction projects in progress simultaneously in the same limited site (e.g., the WWTP) as this increases risk of conflicts and potential delay claims. The revised 5-year CIP is shown in Appendix A.

2.2 REVENUES

2.2.1 Assessment Revenue

Revenue collected through assessments levied upon SASM's member agencies is the primary revenue source of the Agency. These assessments were adjusted in previous years to generate cash flows to fund operating expenses and for additional capital improvements. The Agency last performed a financial planning study in 2010. In it were recommendations for assessment increases. However, collected revenues have not generated sufficient revenues to maintain fiscal policy targets, as reserves were utilized to fund necessary capital improvements. Due to the high amount of capital expenditures required to rehabilitate the system (included in the CIP), future assessment revenue increases in excess of those projected in the 2010 analysis are anticipated.

The 2010 analysis projected annual increases of 3 percent to assessments. As those increases are now insufficient to cover expenditures and maintain reserves, this analysis will forecast revenue needs based on existing baseline revenues. Currently, the Agency's annual assessment revenue in the FY 2014/15 budget is an estimated \$4.2 million.

2.2.2 Other Revenue

Other revenues collected by the Agency include accrued interest, septage disposal fees, reclaimed water sales, and lab revenue. The FY 2014/15 budgeted revenues from these sources totaled \$0.1 million.

3 REVENUE REQUIREMENT ANALYSIS

As noted, SASM funds expenditures primarily through annual assessments to the member agencies. The revenue requirement analysis presented in this summary level report determines the amount of assessment revenue needed in a given year to meet the Agency's expected financial obligations. At least two separate tests must be met in order for assessments to be sufficient:

- Cash Flow Test: The Agency must generate annual utility revenues adequate to meet general cash needs.

- **Bond Coverage Test:** Annual assessment revenues must satisfy debt coverage obligations on the Agency's outstanding debt.

The cash-flow test identifies projected cash requirements in each given year. Cash requirements include operation and maintenance expenses, debt service payments, policy-driven additions to working capital, miscellaneous capital outlays, replacement funding, and cash-funded capital expenditures. These expenses are compared to total annual projected revenues. Shortfalls are then used to estimate needed assessment increases. The bond coverage test measures the ability of a utility to meet legal and policy-driven revenue obligations. Bond coverage requirements include the maintenance of minimum coverage surpluses over net operating revenues.

Revenues must be sufficient to satisfy both the cash flow and bond coverage tests. If revenues are found to be deficient through one or both of the tests, then the greater deficiency (shortfall) drives the assessment increase. Due to the relative large quantity of planned debt funded CIP expenditures relative to the Agency's annual revenues, bond coverage requirements become a factor for increases to the annual assessments in the later years of the forecast.

3.1 POLICY REVIEW

The determination of fiscal policies is an essential building block for any effective utility financial plan and rate study. Moreover, in presenting the capital funding strategy, it is important to provide context for cost allocation to the member agencies based on sound fiscal policies and objectives. Pertinent policies reviewed as part of this study include reserve requirements, debt coverage requirements, and the methodology for allocating costs to SASM's member agencies.

3.1.1 Reserve Policies, Requirements, and Balances

For the purposes of the analysis, Carollo accounted for four reserve funds: an operating reserve, a contingency reserve, unused debt proceeds, and a debt service reserve fund.

The Agency, by Resolution 87-4, is required to maintain an operating cash balance of \$1.1 million at June 30 of each year to fund repairs, replacement costs, or unanticipated emergency expenses of the treatment plant. However, operating fund balances are often expressed as days of O&M costs in order to keep reserve targets on pace with inflation. A fund balance of \$1.1 million equates to approximately 110 days' worth of SASM's FY 2014/15 operating expenditures. For the purposes of the financial analysis, 110 days worth of operating expenditures is the ongoing required minimum number of days in the operating fund reserve. Additionally, operating funds in excess of 110 days are then transferred to and included in the contingency reserve fund

The Agency established a contingency reserve fund for the purpose of balancing revenues and expenses in a given year, providing funds for major repairs and replacements of the plant, providing a source of emergency operating funds, providing funds for major capital improvements and a risk management reserve. A combined reserve policy of \$3.4 million was

established. Use of the \$3.4 million requires specific approval of the Board of Commissioners. Similar to the operating reserve, the targeted \$3.4 million is converted to approximately 340 days worth of SASM's FY 2014/15 operating expenditures.

The Agency's projected beginning contingency reserve balance for FY 2015/16 is \$0.8 million, well under the targeted \$3.4 million. For the purposes of the financial analysis, increases in assessments are driven by the need to build the contingency reserve up to 340 days worth of operating expenditures. For both of the options presented below, this build-up occurs over the course of five years in order to mitigate the required increases in assessments.

Unused debt proceeds are the first source of funds to be utilized to fund capital expenses. This allows assessment revenue to accumulate during years in which the Agency has a positive balance of unused debt proceeds. At the start of FY 2014/15, the Agency had \$3.2 million in unused bond proceeds. Due to \$2.2 million in capital expenditures in FY 2014/15, the balance is assumed to be drawn down to \$1.0 million by the start of FY 2015/16. In FY 2015/16 SASM issued a Bond Anticipation Note (BAN) to finance capital expenditures in that year. Additionally, the Agency is intending to issue \$30 million in municipal bonds in the next fiscal year, FY 2016/17 for further near term capital expenditures. The \$2.2 million in BAN proceeds and remaining BAN interest expenses will be paid off by the proceeds of the \$30 million bond issuance.

In the past when the Agency issued debt through bonds, it was required to allocate a portion of the proceeds as a reserve. Currently, the Agency has nearly \$0.2 million in a bond reserve established as part of the 2012 Bond Series. Based on current market conditions, the Agency's financial advisor indicated to Agency staff that a bond reserve will not be required as part of future bond issuances. Based on this direction, this study assumes that the Agency will not be required to make future allocations to the debt service reserve requirement fund.

Table 3.1 presents a summary of the projected balances of the reserve funds involved in this study. The FY 2015/16 beginning balances are the assumed reserves at the outset of the revenue requirement forecast.

Table 3.1 Projected Beginning Fund Balances		
Fund⁽¹⁾	FY 2014/15 (\$M)	FY 2015/16 (\$M)
Operating Reserve	\$1.1	\$1.1
Contingency Reserve	0.5	0.8
Unspent Debt Proceeds	3.2	1.0
Debt Service Reserve	0.2	0.2
Total	\$5.0	\$2.8
Notes:		
(1) All funds are referenced from the 2014 SASM Annual Finance Report Draft.		

3.1.2 Debt Coverage Requirements

The existing bond covenants require that revenue be available for debt service, operating and non-operating revenues less expenses, must exceed the annual debt payment by a ratio of 1.2x. This means that the Agency is legally obligated to collect assessment revenues sufficient to fund annual operation and maintenance expenditures and 120 percent of its annual debt service payments. As the legal coverage requirement is adjusted for future debt issuances, the Agency will need to revisit the financial model and modify the capital funding strategy as appropriate.

For the purpose of developing the financial forecast, a coverage factor of 1.5x is assumed in order to reliably meet the legal coverage requirement in the case of short-term fluctuations in revenues or expenditures. The coverage factor should be revisited at the time when new debt is issued. The application of the 1.5x coverage factor also improves the Agency’s chance to secure a higher rating.

3.1.3 Cost Allocation Methodology

The cost allocation structure that is incorporated with the regional contract provides a reasonable basis for collecting revenue from the member agencies and adheres to WEF methodologies. This allocation is discussed in more detail in Section **Error! Reference source not found.** of this report.

3.2 FINANCIAL NEEDS FORECAST

A financial model was prepared to evaluate the current financial condition of the Agency and projected impacts from the planned CIP. In addition to the CIP expenditures presented above, the Agency will fund the ongoing operation and maintenance of the wastewater treatment plant and conveyance system. Operating costs are comprised of labor, supplies, utilities, power, chemicals, and others. As the cost of operating expenses increases during the planning period, the model assumes various escalation factors in order to account for price inflation.

Table 3.2 presents the assumed escalation factors utilized for forecasting the financial needs.

Table 3.2 Escalation Factors	
Factor	Assumed Rate of Escalation
General Inflation	3%
Labor	4%
Utilities	5%
Chemicals	5%
CIP Planning and Construction Costs	3%

As previously noted, the FY 2014/15 budget serves as the basis of the operating forecast with costs increasing according to the escalation factors. Table 3.3 below presents the projected operating costs for the five-year forecast period.

Table 3.3 Forecast of O&M Expenditures					
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Personnel	\$1,988,410	\$2,073,839	\$2,162,982	\$2,256,002	\$2,353,070
Special Department Expense	120,940	126,101	131,494	137,129	143,017
Clothing and Personal Supplies	18,540	19,096	19,669	20,259	20,867
Communications	13,390	13,792	14,205	14,632	15,071
Utilities	295,050	309,803	325,293	341,557	358,635
Building and Grounds Maintenance	42,860	44,146	45,471	46,835	48,240
Equipment Maintenance	234,910	242,890	251,148	259,696	268,544
Specialized Services	835,805	861,630	888,388	916,115	944,847
Other	329,260	344,948	361,396	378,641	396,721
CIP Impacts	0	0	0	0	0
Total	\$3,879,165	\$4,036,244	\$4,200,046	\$4,370,866	\$4,549,012
<u>Notes:</u>					
(1) CIP Impacts are assumed to not begin until FY 2023/24 upon completion of the NTF and Denite Filters project.					

3.3 CAPITAL FUNDING ALTERNATIVES

The 20-year CIP program totals over \$85.0 million in future (escalated) dollars, or \$66.1 million in October 2014 dollars, with approximately 38% of the identified projects in the first five years (FY 2015/16 - 2019/20). Although, SASM may issue debt through traditional municipal bonds or State Revolving Funds (SRF) loans, the Agency decided to proceed with municipal bond financing as the Agency lacks sufficient on-hand reserves to begin construction and make SRF funding viable. In each fiscal year, unspent debt proceeds are the first source of revenue used to fund capital expenditures. Assessment revenue and existing funds within the Contingency Reserve Funds remaining after O&M and debt expenditures are the next source of revenue used. In years in which these sources are insufficient, the model assumes the issuance of additional debt to fund the CIP.

3.3.1 Debt Financing

The Agency has significant upcoming CIP expenditures, which, if solely cash funded, would require large and abrupt assessment increases. Consequently, the Agency has begun to proceed with the issuance of additional municipal bond debt to fund CIP projects. It is assumed that municipal bond financing will continue to be the utilized form of debt throughout the 20-year planning period.

Table 3.4 presents the assumptions incorporated in the financial model that are associated with municipal bonds.

Table 3.4 Characteristics of Debt Instruments	
Municipal Bond	
Issuance Cost:	2% of bond principal
Interest Rate:	4-5%
Interest Capitalization:	2 years
Repayment Period:	After interest capitalization, 28-year repayment period

The funding costs elements as shown above are based on conservative funding assumptions and are subject to change at the time of each issuance. Issuance costs may vary; however, the estimates would potentially account for direct and indirect costs related to engineering, legal, accounting, and staffing efforts.

3.3.2 CIP Summary

Table 3.5 summarizes the cost associated with each project package that is planned for the Agency's wastewater system through FY 2034/35.

Table 3.5 Point in Time Value of Total Project Costs			
CIP Category⁽¹⁾	Present Value of Package Cost⁽²⁾	Project Period, FYs	Escalated Package Costs⁽³⁾
Collection System Improvements	\$9,478,000	2015/16 - 2019/20	\$10,592,866
R&R Project Costs remaining from FY 2015 CIP	\$204,000	2015/16	\$210,120
WWTP Improvements	18,641,750	2015/16 - 2019/20	20,508,009
Outfall Improvements	760,000	2017/18 - 2018/19	852,895
Wet Weather and Flood Mitigation Projects	4,216,000	2020/21	5,034,124
Nitrifying Filters and Feed/Recirculating PS	10,317,000	2021/22 - 2023/24	13,073,074
Nitrifying Filters and Carbon System Projects	10,468,000	2025/26 - 2027/28	14,929,212
Replace Primary Clarifiers and Digesters	11,979,000	2030/31 - 2032/33	19,805,229
Total⁽⁴⁾⁽⁵⁾	\$66,063,750		\$85,005,529
Notes:			
(1) CIP Category provides a means to group projects according to project type. However, this categorization does not influence the prioritization or availability of funding sources within the financial analysis.			
(2) Present Value presented in 2014 dollars as originally calculated.			
(3) Escalated by the Annual CIP rate of 3% to capture expected increase in construction costs.			
(4) Does not include the costs associated with the recycled water project (\$2.8 million) as this project will likely only move forward with grant or outside funding.			
(5) Does not include the costs associated with the Private Lateral Replacement Project as this will be separately funded.			

While O&M expenses in recent years have typically been the primary driver of assessments, the new CIP will be the most significant driver of the Agency's financial planning for the next twenty years. Critical, near-term capital improvement needs make member agency assessment increases unavoidable. These needs also exceed the projections developed during the last financial review. In order to address the revenue deficiency, the Agency must develop a funding strategy to finance the CIP combining debt issuances and/or assessment increases over the course of the 20-year planning period.

3.3.3 Scenarios

In this study, two debt repayment scenarios were considered that provide sufficient funding for operations and capital improvements while minimizing the impact to Agency customers. SASM has already initiated the process to issue \$30 million in municipal bonds to fund capital

expenditures during FY 2016/17 and beyond. There are potentially different schedules through which this debt can be repaid. The first scenario includes the utilization of a debt service schedule through which the Agency can "ramp-up" its debt service on this bond thereby delaying the repayment of some debt and minimizing the revenue requirement during the first few years of repayment. The second funding scenario includes the repayment of this issuance with a standard, level debt service schedule accompanied by assessment increases. The first scenario, with a ramp-up of debt service, provides benefit to the Agency and its member agencies by reducing the need to increase assessments to meet the debt coverage factor on larger debt service payments in the near term.

4 RESULTS OF ANALYSIS

The financial model is built upon cash needs, such as the CIP expenditures, O&M expenditures, a minimum Contingency reserve balance, and revenue to meet debt coverage requirements. Dependent upon whether there is either a cash flow deficit (expenditures less revenues) or debt coverage or reserve requirement shortfalls, SASM must increase the assessments to fund its ongoing needs.

4.1 FUNDING

In order to fund the upcoming capital projects, the first scenario calculates the assessment impacts of funding the CIP by issuing municipal bonds. The near-term bond issuances alleviate the burden of increasing assessment to cash fund the capital expenditures, which would otherwise be unachievable. Increases to the total assessments, particularly in the short-term followed by relatively smaller increases in subsequent years, will allow the Agency to avoid building up required debt service in the long term. Table 4.1 presents a projection of revenues and revenue requirements before and after bond issuances and assessment increases of this scenario.

The use of bond proceeds in the short-term defers some of the financial burden imposed on assessment revenues into the future through debt service payments. This strategy relies on increased assessment revenue to fund annual expenses and future debt service payments. Given the need to meet required debt coverage ratios, the proposed strategy also builds cash reserves that can be used in future years to partially fund capital needs.

4.1.1 Debt Funding Scenarios

In this study, two separate financial scenarios were considered that provide sufficient funding for operations and capital improvements while minimizing the impact to Agency customers. Both scenarios assume the issuance of municipal bonds accompanied by assessment increases. The first scenario assumes that the Agency will be able to ramp-up the debt service on the upcoming \$30 million bond issuance over the course of five years, thereby delaying some debt service into the outer years of the repayment period. The second scenario assumes that debt

service on the upcoming \$30 million bond issuance will be level throughout the repayment period. The Agency should adopt the assessment increases and pursue the bond issuances as listed within the first scenario if and only if it is able to secure a bond repayment schedule in line with the ramp-up utilized in the development of this financial analysis.

4.1.2 Preferred Alternative - Ramp-Up Debt Service

Given bond financing and a ramp-up of debt service on the \$30 million bond issuance, the annual assessment increases that will likely be necessary to fund the CIP and O&M are shown in Table 2 below. Table 2 presents the funding sources of this scenario and the resulting accumulated fund balances. The rates increases presented are meant as replacements of the currently adopted schedule of rate increases if this preferred alternative is selected.

Table 4.1 Forecast with Required Assessment Increases (Ramp-Up Debt Service)					
FY	'15/16	'16/17	'17/18	'18/19	'19/20
Planned Assessment Increases ⁽¹⁾	3%	25%	25%	8%	8%
Projected Revenue	\$4.4	\$5.5	\$6.9	\$7.4	\$8.0
O&M	(3.9)	(4.0)	(4.2)	(4.4)	(4.5)
Debt Service	(0.2)	(1.0)	(1.8)	(1.9)	(2.0)
Cash-Funded Capital ⁽²⁾	(0.0)	(0.0)	(0.0)	(0.0)	(1.3)
Cash Flow	\$0.3	\$0.5	\$0.9	\$1.1	\$0.2
DSCR	2.3x	1.5x	1.5x	1.6x	1.8x
Contingency Reserve⁽³⁾	\$1.1	\$1.5	\$2.4	\$3.4	\$3.6
<u>Note:</u>					
(1) FY 2015/16 increase of 3% was adopted.					
(2) Capital expenditures funded by unspent bond proceeds of BAN and the planned \$30 million bond issuance.					
(3) Contingency Reserve and Cash Flow may not foot due to rounding.					

Table 4.2 summarizes the projected issuances and uses of the bond proceeds and the resulting fund balances assuming that the above recommended assessment increases are adopted.

Table 4.2 Bond Issuances: Funding Sources (Ramp-Up Debt Service)					
FY	'15/16	'16/17	'17/18	'18/19	'19/20
New Bond Proceeds, \$M ⁽¹⁾	\$2.0	\$30.0	\$-	\$-	\$-
Source of Funds, \$M					
Use of Proceeds on Capital ⁽²⁾	\$3.0	\$4.0	\$10.4	\$5.9	\$7.6
Cash Funded Capital ⁽³⁾	-	-	-	-	1.3
Total Capital Funding	\$3.0	\$4.0	\$10.4	\$5.9	\$8.9
Accumulated Funds, \$M (Ending Balances including Interest Accumulation)					
Unspent Debt Proceeds	\$0.2	\$24.0	\$13.6	\$7.7	\$0.1
Debt Service Reserve	0.2	0.2	0.2	0.2	0.2
Contingency Reserve	1.1	1.5	2.4	3.4	3.6
Operating Fund	1.2	1.2	1.3	1.3	1.4
Total Cash Reserves⁽⁴⁾	\$2.2	\$2.7	\$3.6	\$4.8	\$5.0
Notes:					
(1) Includes proceeds of BAN loan utilized in FY 2015/16 to fund design expenses of CIP. Does not include unused proceeds remaining at FYE 2014/15.					
(2) Includes use of remaining unspent 2012 Bond proceeds in FY 2015/16. This row shows only the proceeds spent on capital expenditures. There is additional Use of Proceeds for the purposes of retiring BAN interest and principal totaling \$2.2 million.					
(3) Cash Funded sources include use of Contingency Reserve funds and incoming revenue.					
(4) Total Cash Reserves does not include unspent debt proceeds or debt service reserve.					
(5) Totals may not always foot due to rounding.					

4.1.3 Second Alternative - Level Debt Service

Given bond financing and a constant, or level, annual payment of debt service on the \$30 million bond issuance, the annual assessment increases that will likely be necessary to fund the CIP and O&M are shown in Table 4.3 below. Table 4.3 presents the funding sources of this scenario and the resulting accumulated fund balances. The rates increases presented are meant as replacements of the currently adopted schedule of rate increases if this second alternative is selected.

Table 4.3 Forecast with Required Assessment Increases (Level Debt Service)					
FY	'15/16	'16/17	'17/18	'18/19	'19/20
Planned Assessment Increases ⁽¹⁾	3%	28%	28%	8%	8%
Projected Revenue	\$4.4	\$5.6	\$7.2	\$7.8	\$8.4
O&M	(3.9)	(4.0)	(4.2)	(4.4)	(4.5)
Debt Service	(0.2)	(1.0)	(2.0)	(2.1)	(2.1)
Cash-Funded Capital ⁽²⁾	(0.0)	(0.0)	(0.0)	(0.0)	(2.1)
Cash Flow	\$0.3	\$0.6	\$1.0	\$1.3	(\$0.3)
DSCR	2.3x	1.6x	1.5x	1.7x	1.9x
Contingency Reserve⁽³⁾	\$1.1	\$1.6	\$2.6	\$3.9	\$3.6
Note:					
(1) FY 2015/16 increase of 3% was adopted.					
(2) Capital expenditures funded by unspent bond proceeds of BAN and the planned \$30 million bond issuance.					
(3) Contingency Reserve and Cash Flow may not foot due to rounding.					

Table 4.4 summarizes the projected issuances and uses of the bond proceeds and the resulting fund balances assuming that the above recommended assessment increases are adopted.

Table 4.4 Bond Issuances: Funding Sources (Level Debt Service)					
FY	'15/16	'16/17	'17/18	'18/19	'19/20
New Bond Proceeds, \$M ⁽¹⁾	\$2.0	\$30.0	\$-	\$-	\$-
Source of Funds, \$M					
Use of Proceeds on Capital ⁽²⁾	\$3.0	\$4.0	\$10.4	\$5.9	\$6.9
Cash Funded Capital ⁽³⁾	-	-	-	-	2.1
Total Capital Funding	\$3.0	\$4.0	\$10.4	\$5.9	\$8.9
Accumulated Funds, \$M (Ending Balances including Interest Accumulation)					
Unspent Debt Proceeds	\$0.2	\$24.0	\$13.6	\$7.7	\$0.9
Debt Service Reserve	0.2	0.2	0.2	0.2	0.2
Contingency Reserve	1.1	1.6	2.6	3.9	3.6
Operating Fund	1.2	1.2	1.3	1.3	1.4
Total Cash Reserves⁽⁴⁾	\$2.2	\$2.9	\$3.9	\$5.2	\$4.9
Notes:					
(1) Includes proceeds of BAN loan utilized in FY 2015/16 to fund design expenses of CIP. Does not include unused proceeds remaining at FYE 2014/15.					
(2) Includes use of remaining unspent 2012 Bond proceeds in FY 2015/16. This row shows only the proceeds spent on capital expenditures. There is additional Use of Proceeds for the purposes of retiring BAN interest and principal totaling \$2.2 million.					
(3) Cash Funded sources include use of Contingency Reserve funds and incoming revenue.					
(4) Total Cash Reserves does not include unspent debt proceeds or debt service reserve.					
(5) Totals may not always foot due to rounding.					

4.1.4 Summary of CIP Implementation Impact

Based on the previously described set of assumptions, the implementation of the 20-year CIP could result in a requirement of assessment increases in the level debt service scenario as presented in the first row of Table 4.5. Alternatively, if the Agency is able to schedule a ramp-up of debt service payments, the CIP implementation could require assessment increases as presented in the second row of Table 4.5.

Table 4.5 Potential Required Percent Assessment Increases					
FY	2015/16	2016/17	2017/18	2018/19	2019/20
Level Debt Service	3.0%	28.0%	28.0%	8.0%	8.0%
Ramp-up Debt Service	3.0%	25.0%	25.0%	8.0%	8.0%

5 COST ALLOCATION

5.1 PROJECTED ASSESSMENTS

If implemented as planned, the Agency's CIP expenditures would represent larger increases in expenditures than those in previous years. The issuance of debt will defer and smooth a majority of the capital costs into the future.

5.1.1 JPA Agreement

In either funding scenario, the total amount of assessment revenue required by SASM is linked directly to the costs associated with expanding and operating the system. As these costs are either increased or escalated in each year's budget, the total revenue required by the Agency and assessed to the member agencies will increase at the same rate. The budgeted costs recovered through the assessments include O&M expenses, debt service payments, and cash funded capital. In some years future capital costs are assumed to be funded through debt proceeds, capital expenses funded this way will not be included in that year's total assessment. Instead, the Agency recovers the value of debt proceeds used to fund capital through the allocation of debt service payments to its member agencies.

Prior agreements between SASM and its member agencies dictate that each member agency's measured consumption from the prior year determines its share of SASM's O&M and debt service payments in the current year. The agreements also dictate that cash funded capital expenditures are allocated based on each member agency's capacity rights purchased as of FY 2000/01. However, this allocation methodology is adjusted within the Financial Planning Study to allocate debt service payments as capital expenses. As funding of the proposed capital program necessitates the issuance of debt, all future debt service will be allocated as capital expenses.

The allocation of debt service as a capital expense is justified by the fact that the debt proceeds that necessitated the debt service payments were originally spent on capital. Additionally, this adjustment to the allocation of debt service conforms with the Water Environment Federation standards for the allocation of costs of service. This adjustment in the allocation methodology implies that as the customer base and consumption of each member agency increases or decreases, the member agency's proportional share of O&M is adjusted while its share of capital and debt expenditures remains constant. The O&M expense allocation is calculated based on each member agency's equivalent dwelling units (EDUs) worth of measured consumption. The cash funded capital and debt service allocation is calculated based on the purchased number of EDUs worth of capacity owned by the member agency.

Table 5.1 presents the recommended methodology regarding the allocation of costs to each member agency.

Table 5.1 EDU Count and Recommended Cost Allocation				
	Cash Funded Capital and Debt: FY 2000/01 EDUs		O&M: FY 2014/15 EDUs	
Member Agency	Count	Allocation	Count	Allocation
Almonte SD	936	5.2%	833	5.6%
Alto SD	612	3.4%	538	3.6%
HVSD	1,314	7.3%	1,054	7.0%
Mill Valley	8,856	49.2%	7,345	49.1%
RBSD	6,030	33.5%	5,021	33.6%
TCSD	252	1.4%	165	1.1%
Total	18,000	100.0%	14,956	100.0%
<u>Notes:</u>				
(1) The allocation of debt service payments as capital expenditures represents a departure from the existing allocation methodology. However, the EDU counts and corresponding % allocations match the historical agreement.				

Table 5.2 presents the results of the allocation of assessments required to cover all Agency costs in two select fiscal years while issuing bonds. The costs of FY 2015/16 and of FY 2020/21 are allocated with the new allocation methodology. FY 2020/21 capital and O&M costs are representative of projections assuming that debt service on SASM's planned FY 2016/17 \$30 million bond issuance is ramped up over five years as discussed in Section 3.3.3.

Table 5.2 Allocation of Member Agency Assessments (Ramp-Up Debt Service)						
FY 2015/16	Capital = \$509,902		O&M = \$3,805,087⁽¹⁾⁽²⁾		Total	
Member Agency	Allocation	Assessment	Allocation	Assessment	% Share of Total	Assessment
Almonte SD	5.2%	\$26,515	5.6%	\$211,934	5.5%	\$238,449
Alto SD	3.4%	17,337	3.6%	136,828	3.6%	154,165
HVSD	7.3%	37,223	7.0%	268,059	7.1%	305,282
Mill Valley	49.2%	250,872	49.1%	1,868,731	49.1%	2,119,603
RBSD	33.5%	170,817	33.6%	1,277,454	33.6%	1,448,271
TCSD	1.4%	7,139	1.1%	42,081	1.2%	49,220
Total	100.0%	\$509,902	100.0%	\$3,805,087	100.0%	\$4,314,989
FY 2020/21	Capital = \$3,832,463		O&M = \$4,660,730⁽¹⁾⁽²⁾⁽³⁾		Total	
Member Agency	Allocation	Assessment	Allocation	Assessment	% Share of Total	Assessment
Almonte SD	5.2%	\$199,288	5.6%	\$259,591	5.4%	\$458,879
Alto SD	3.4%	130,304	3.6%	167,597	3.5%	297,900
HVSD	7.3%	279,770	7.0%	328,337	7.2%	608,107
Mill Valley	49.2%	1,885,572	49.1%	2,288,949	49.2%	4,174,521
RBSD	33.5%	1,283,875	33.6%	1,564,712	33.5%	2,848,588
TCSD	1.4%	53,654	1.1%	51,544	1.2%	105,199
Total	100.0%	\$3,832,463	100.0%	\$4,660,730	100.0%	\$8,493,193
Notes:						
(1) New methodology: Capital = Cash Funded Capital + Debt Service - Revenue from Water Sales						
(2) New methodology: O&M = O&M Expenses - Revenue from Fees - Revenue from the MV Station O&M						
(3) Allocation based on FY 2014/15 EDU counts, not on projected EDU counts.						

FY 2020/21 was selected to show that despite the relatively large increases in debt service expenses compared to FY 2015/16 incurred as a result of issuing significantly more debt during the period between FY 2015/16 and FY 2020/21, the percent share of the total allocated to each member agency remains almost unchanged. This methodology was utilized to calculate the 5-year projection of assessments presented in Table 5.3.

Table 5.3 Recommended Increase of Assessments while Issuing Bonds (Ramp-Up)						
FY	2014/ 15	2015/16	2016/17	2017/18	2018/19	2019/20
Recommended Increases ⁽¹⁾	n/a	3%	25%	25%	8%	8%
Resulting Assessments⁽²⁾						
Almonte SD	\$232,051	\$238,449	\$295,124	\$365,848	\$394,527	\$425,477
Alto SD	150,085	154,165	191,150	237,318	255,991	276,146
Homestead Valley SD	295,857	305,282	383,630	481,647	520,586	562,655
City of Mill Valley	2,057,912	2,119,603	2,650,207	3,313,492	3,578,712	3,865,156
Richardson Bay SD	1,406,242	1,448,271	1,809,765	2,261,609	2,442,422	2,637,696
Tamalpais CSD	47,163	49,220	63,861	82,257	89,306	96,937
Total	\$4,189,310	\$4,314,989	\$5,393,737	\$6,742,171	\$7,281,544	\$7,864,068
Notes:						
(1) Includes already adopted 3% increase in FY 2015/16. Otherwise, recommended increases are calculated in lieu of the Planned Increases.						
(2) Assessments are increased according to the total Recommended Increases.						

A 20-year allocation of projected annual assessments under both scenarios is included in Appendix B.

Appendix A - SASM Master Plan - Capital Improvements Plan (CIP)

#	Project	Project Cost ⁽¹⁾	Already Funded	5 yr CIP						2021	2025	2030	2035
			2015	2016	2017	2018	2019	2020					
			FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20					
R&R Projects included in FY 2015 CIP - FY 2014/15 Costs already funded													
1.1	Upgrade MCC-1 and MCC-1A (TF Feed/Recirc PS and Effluent PS)	\$1,037,000	\$1,037,000										
1.4	SCADA/PLC Upgrade Project Phase 3	\$50,000	\$50,000										
1.5	Rehabilitate Effluent Conveyance Pipeline Rectifiers and ARVs	\$250,000	\$250,000										
1.6	Replace Isolation Gates at Secondary Clarifiers	\$29,000	\$29,000										
8.1	Replace Sutter Manor Pump Station	\$884,000	\$680,000	\$204,000	Total Escalated								
Subtotal	\$2,250,000					\$210,120							
WWTP R&R Projects Recommended for Near Term Implementation													
				Design			Construction						
1.2	Replace Cover of Digester No. 1	\$1,140,000	\$40,000	\$330,000	\$770,000								
1.3	Rehabilitate Headworks	\$3,542,000	\$175,000	\$1,010,100	\$2,356,900								
1.7	Primary Clarifier Rehabilitation Project	\$985,000	\$98,500	\$380,520	\$620,550	\$265,950							
1.8	Trickling Filter Project Phase 1	\$804,000	\$80,400	\$163,080									
1.9	Trickling Filter Project Phase 2	\$3,015,000	\$301,500					\$2,713,500					
1.10	Effluent Pump Station Upgrade Project	\$517,000	\$51,700	\$325,710	\$139,590								
1.11	Secondary Clarifier Upgrade Project	\$632,000	\$63,200					\$568,800					
1.12	Effluent Conveyance Pipeline Improvements	\$233,000	\$23,300				\$209,700						
1.13	Emergency Outfall Improvements	\$265,000	\$26,500	\$166,950	\$71,550								
1.14	Digester Upgrade Project	\$1,523,000	\$152,300		\$1,370,700								
1.15	Dewatering Storage Improvements	\$63,000	\$6,300	\$39,690	\$17,010								
1.16	Electrical System Upgrades	\$2,127,000	\$212,700		\$1,340,010	\$574,290							
1.17	Miscellaneous Plantwide Improvements	\$401,000	\$40,100		\$252,630	\$108,270							
1.18	Replace Influent Pumps	\$1,369,000	\$136,900			\$862,470		\$369,630					
2.2	Add Second Effluent Magnetic Flow Meter	\$652,000	\$65,200		\$410,760	\$176,040							
3.2	Sustainability & Energy Efficiency Projects (e.g. HE Lighting)	\$73,750	\$7,375	\$46,463	\$19,913								
9.1	Laboratory, Safety, and Security Improvements to Admin Bldg.	\$1,500,000	\$200,000		\$1,300,000								
Subtotal	\$18,641,750							Total Escalated	\$20,508,009				
R&R Projects Recommended for Long Term Implementation													
1.19	Replace Primary Clarifiers	\$7,560,000											\$7,560,000
1.20	Rehabilitate Trickling Filter Walls and Replace Distributors	\$568,000									\$568,000		
1.21	Replace Secondary Clarifier Mechanisms	\$1,426,000							\$1,426,000				
1.22	Replace Sludge Thickener Mechanism and Pumps	\$548,000							\$548,000				
1.23	Replace Digesters	\$4,419,000											\$4,419,000
1.24	Replace Instruments and Analyzers	\$343,000							\$343,000				Total Escalate
													\$19,805,229
Improvements Required if Ammonia Removal is required by RWQCB													
4.1	Construct Nitrifying Trickling Filter (NTF) and NTF Feed/Recirc PS	\$8,000,000								\$8,000,000			
Improvements Required if Nitrogen Removal is Required by RWQCB													
5.1	Construct Denitrifying Filters and Supplemental Carbon System	\$9,900,000								Total Escalated	\$13,073,074	\$9,900,000	
Subtotal	\$32,764,000												Total Escalated
													\$14,929,212
Improvements Required to Treat Existing and Future Flows/Loads													
2.1	Replace Outfall Diffusers	\$760,000			Design		Construction						
					\$76,000	\$684,000							
								Total Escalated	\$852,895				
Mid term projects Projects													
Flood Mitigation and Sustainability Projects													
3.1	Flood Projection Berms for 100-year Floods	\$566,000								Total Escalated	\$566,000	\$5,034,124	
Improvements Required if Blending is Prohibited by the RWQCB													
6.1	Expand EQ Basins by 1.5 to 2.0 MG	\$3,650,000								\$3,650,000			
Subtotal	\$4,216,000												
Collection/Conveyance System Improvements⁽²⁾													
Pump Station Projects													
8.2	Reliability Upgrades to Four Pump Stations	\$340,000		Design		Construction				Total Escalated	\$4,037,093		
				\$34,000	\$306,000								
8.3	Upgrade MCCs at Three Pump Stations	\$1,535,000				\$153,500	\$1,381,500						
8.4	Raise Motors at Salt Works Pump Station	\$279,000				\$27,900	\$251,100						
8.5	Convert Camino Alto PS to Submersible Type	\$1,256,000											
8.6	Miscellaneous Pump Station Improvements	\$279,000	\$125,600	\$1,130,400		\$27,900	\$251,100						
Sewer Rehab Projects													
8.7	Almonte Blvd Sewer Lining	\$150,000			Design		Construction			Total Escalated	\$1,353,078		
				\$15,000	\$135,000								
8.8	Camino Alto Sewer Lining	\$263,000			\$26,300	\$236,700							
8.9	Sycamore Ave Sewer Lining	\$31,000			\$3,100	\$27,900							
8.10	Miller Ave Sewer Lining	\$844,000			\$84,400								
8.11	Sycamore Trunk Sewer Replacement	\$3,750,000					Design		Construction		Total Escalated		
							\$375,000	\$3,375,000	\$5,202,695				
8.12	Camino Alto Force Main Extension	\$438,000					\$43,800	\$394,200					
8.13	Trestle Glen, Salt Works, Ricardo Rd Force Main Improvements	\$313,000					\$31,300	\$281,700					
Subtotal	\$9,478,000												
Total 5-Year CIP (FY 15/16-19/20) Unescalated Project Costs													\$29,083,750
Total (FY 15/16-34/35) Unescalated Future Project Costs													\$66,063,750
Total (FY 15/16-34/35) Escalated Future Project Costs													\$85,005,529
Separately Funded Projects													
Recycled Water Expansion Project⁽²⁾													
7.1	Construct New Treatment System - Separately Funded	\$2,800,000										\$2,800,000	
Collection/Conveyance System Improvements⁽²⁾													
8.14	Private Lateral Replacement Project - Separately Funded	\$455,000	\$130,000	\$100,000	\$75,000	\$50,000	\$50,000	\$50,000					
Notes													
	1. 2014 Dollars (not escalated)												
	2. Assumes MMWD is responsible for project costs related to the Recycled Water Project Cost.												
	3. Based on cost estimates by Nute Engineers. Escalated to 2014 costs. Includes 25% adder for engineering and administrative costs.												

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35	
Appendix B: Twenty Year Allocation of SASM's Costs of Service, Ramp-Up Debt Service																					
Capital Expenditures⁽¹⁾	Allocate all debt service as a capital expenditure																				
Almonte SD	5.2%	\$ 26,515	\$ 74,442	\$ 136,043	\$ 155,207	\$ 176,235	\$ 199,288	\$ 220,127	\$ 237,970	\$ 226,085	\$ 244,959	\$ 265,172	\$ 274,884	\$ 284,926	\$ 295,308	\$ 306,042	\$ 317,137	\$ 328,605	\$ 332,907	\$ 337,075	\$ 341,092
Alto SD	3.4%	17,337	48,673	88,951	101,482	115,231	130,304	143,929	155,596	147,825	160,165	173,382	179,732	186,297	193,086	200,104	207,359	214,857	217,670	220,395	223,022
Homestead Valley SD	7.3%	37,223	104,505	190,983	217,887	247,407	279,770	309,024	334,073	317,389	343,884	372,261	385,894	399,992	414,567	429,636	445,212	461,311	467,350	473,201	478,841
City of Mill Valley	49.2%	250,872	704,333	1,287,172	1,468,500	1,667,454	1,885,572	2,082,737	2,251,563	2,139,112	2,317,684	2,508,939	2,600,822	2,695,834	2,794,071	2,895,629	3,000,608	3,109,109	3,149,811	3,189,245	3,227,254
Richardson Bay SD	33.5%	170,817	479,576	876,428	999,893	1,135,360	1,283,875	1,418,124	1,533,076	1,456,509	1,578,098	1,708,322	1,770,885	1,835,578	1,902,467	1,971,617	2,043,097	2,116,974	2,144,688	2,171,539	2,197,419
Tamalpais CSD	1.4%	7,139	20,042	36,627	41,787	47,448	53,654	59,265	64,069	60,869	65,950	71,393	74,007	76,711	79,506	82,396	85,383	88,471	89,629	90,751	91,832
		\$ 509,902	\$ 1,431,570	\$ 2,616,202	\$ 2,984,756	\$ 3,389,134	\$ 3,832,463	\$ 4,233,205	\$ 4,576,347	\$ 4,347,788	\$ 4,710,740	\$ 5,099,469	\$ 5,286,223	\$ 5,479,338	\$ 5,679,006	\$ 5,885,425	\$ 6,098,797	\$ 6,319,327	\$ 6,402,055	\$ 6,482,206	\$ 6,559,460
O&M Expenditures⁽²⁾		\$ 1.81	\$ 0.83	\$ 0.14	\$ 0.14	\$ 0.13	\$ 0.10	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.08	\$ 0.04
Almonte SD	5.6%	\$ 211,934	\$ 220,683	\$ 229,806	\$ 239,320	\$ 249,242	\$ 259,591	\$ 270,384	\$ 281,642	\$ 326,564	\$ 340,472	\$ 354,991	\$ 370,150	\$ 385,978	\$ 402,503	\$ 419,758	\$ 437,777	\$ 456,592	\$ 476,241	\$ 496,762	\$ 518,193
Alto SD	3.6%	136,828	142,477	148,367	154,509	160,915	167,597	174,565	181,833	210,835	219,815	229,189	238,976	249,194	259,863	271,004	282,637	294,784	307,470	320,718	334,555
Homestead Valley SD	7.0%	268,059	279,125	290,665	302,698	315,248	328,337	341,989	356,228	413,046	430,637	449,002	468,176	488,194	509,096	530,921	553,711	577,510	602,362	628,317	655,424
City of Mill Valley	49.1%	1,868,731	1,945,875	2,026,320	2,110,212	2,197,702	2,288,949	2,384,118	2,483,382	2,879,484	3,002,118	3,130,146	3,263,811	3,403,367	3,549,081	3,701,231	3,860,107	4,026,014	4,199,270	4,380,210	4,569,180
Richardson Bay SD	33.6%	1,277,454	1,330,189	1,385,181	1,442,529	1,502,337	1,564,712	1,629,769	1,697,626	1,968,399	2,052,231	2,139,750	2,231,122	2,326,522	2,426,132	2,530,140	2,638,747	2,752,160	2,870,597	2,994,286	3,123,465
Tamalpais CSD	1.1%	42,081	43,819	45,630	47,519	49,489	51,544	53,687	55,923	64,842	67,604	70,487	73,497	76,639	79,921	83,347	86,925	90,661	94,562	98,637	102,892
		\$ 3,805,087	\$ 3,962,166	\$ 4,125,968	\$ 4,296,788	\$ 4,474,934	\$ 4,660,730	\$ 4,854,512	\$ 5,056,633	\$ 5,863,171	\$ 6,112,876	\$ 6,373,565	\$ 6,645,732	\$ 6,929,895	\$ 7,226,596	\$ 7,536,401	\$ 7,859,903	\$ 8,197,721	\$ 8,550,504	\$ 8,918,930	\$ 9,303,709
Total Assessment		\$ 238,449	\$ 295,124	\$ 365,848	\$ 394,527	\$ 425,477	\$ 458,879	\$ 490,511	\$ 519,612	\$ 552,649	\$ 585,430	\$ 620,164	\$ 645,034	\$ 670,903	\$ 697,811	\$ 725,800	\$ 754,914	\$ 785,197	\$ 809,148	\$ 833,836	\$ 859,285
Alto SD		154,165	191,150	237,318	255,991	276,146	297,900	318,494	337,429	358,660	379,980	402,571	418,707	435,492	452,949	471,108	489,996	509,641	525,140	541,113	557,576
Homestead Valley SD		305,282	383,630	481,647	520,586	562,655	608,107	651,013	690,301	730,435	774,521	821,263	854,070	888,186	923,664	960,557	998,923	1,038,820	1,069,712	1,101,518	1,134,264
City of Mill Valley		2,119,603	2,650,207	3,313,492	3,578,712	3,865,156	4,174,521	4,466,855	4,734,945	5,018,596	5,319,802	5,639,084	5,864,632	6,099,201	6,343,152	6,596,860	6,860,715	7,135,123	7,349,082	7,569,455	7,796,435
Richardson Bay SD		1,448,271	1,809,765	2,261,609	2,442,422	2,637,696	2,848,588	3,047,893	3,230,702	3,424,908	3,630,329	3,848,072	4,002,007	4,162,101	4,328,599	4,501,758	4,681,844	4,869,134	5,015,286	5,165,825	5,320,885
Tamalpais CSD		49,220	63,861	82,257	89,306	96,937	105,199	112,952	119,991	125,711	133,554	141,879	147,504	153,350	159,427	165,743	172,308	179,131	184,191	189,388	194,725
		\$ 4,314,989	\$ 5,393,737	\$ 6,742,171	\$ 7,281,544	\$ 7,864,068	\$ 8,493,193	\$ 9,087,717	\$ 9,632,980	\$ 10,210,959	\$ 10,823,616	\$ 11,473,033	\$ 11,931,955	\$ 12,409,233	\$ 12,905,602	\$ 13,421,826	\$ 13,958,699	\$ 14,517,047	\$ 14,952,559	\$ 15,401,135	\$ 15,863,169

(1) Total purchased/allocated capacity, based on EDU count from 2000. Item 6 attachment to 2014/15 SASM Budget.

(2) Flow share, based on annually updated (in this ca

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35	
Appendix B: Twenty Year Allocation of SASM's Costs of Service, Level Debt Service																					
Capital Expenditures⁽¹⁾	Allocate all debt service as a capital expenditure																				
Almonte SD	5.2%	\$ 26,515	\$ 81,173	\$ 153,073	\$ 173,600	\$ 196,099	\$ 212,166	\$ 224,815	\$ 238,167	\$ 221,283	\$ 234,607	\$ 248,675	\$ 257,726	\$ 267,082	\$ 276,751	\$ 286,742	\$ 297,065	\$ 307,730	\$ 311,406	\$ 314,929	\$ 318,281
Alto SD	3.4%	17,337	53,075	100,086	113,508	128,219	138,724	146,994	155,725	144,685	153,397	162,595	168,513	174,630	180,952	187,485	194,235	201,208	203,611	205,915	208,107
Homestead Valley SD	7.3%	37,223	113,954	214,891	243,708	275,293	297,848	315,606	334,350	310,647	329,352	349,101	361,808	374,942	388,515	402,542	417,034	432,006	437,166	442,111	446,818
City of Mill Valley	49.2%	250,872	768,022	1,448,305	1,642,525	1,855,400	2,007,413	2,127,097	2,253,429	2,093,677	2,219,740	2,352,845	2,438,484	2,527,003	2,618,487	2,713,022	2,810,696	2,911,600	2,946,377	2,979,708	3,011,432
Richardson Bay SD	33.5%	170,817	522,942	986,143	1,118,386	1,263,331	1,366,836	1,448,328	1,534,347	1,425,573	1,511,408	1,602,039	1,660,350	1,720,622	1,782,913	1,847,281	1,913,787	1,982,492	2,006,172	2,028,867	2,050,467
Tamalpais CSD	1.4%	7,139	21,854	41,212	46,739	52,796	57,122	60,527	64,122	59,576	63,163	66,951	69,388	71,907	74,510	77,200	79,979	82,850	83,840	84,788	85,691
		\$ 509,902	\$ 1,561,020	\$ 2,943,710	\$ 3,338,465	\$ 3,771,138	\$ 4,080,107	\$ 4,323,367	\$ 4,580,140	\$ 4,255,441	\$ 4,511,667	\$ 4,782,205	\$ 4,956,268	\$ 5,136,185	\$ 5,322,127	\$ 5,514,271	\$ 5,712,797	\$ 5,917,887	\$ 5,988,572	\$ 6,056,318	\$ 6,120,796
O&M Expenditures⁽²⁾																					
Almonte SD	5.6%	\$ 211,934	\$ 220,683	\$ 229,806	\$ 239,320	\$ 249,242	\$ 259,591	\$ 270,384	\$ 281,642	\$ 326,564	\$ 340,472	\$ 354,991	\$ 370,150	\$ 385,978	\$ 402,503	\$ 419,758	\$ 437,777	\$ 456,592	\$ 476,241	\$ 496,762	\$ 518,193
Alto SD	3.6%	136,828	142,477	148,367	154,509	160,915	167,597	174,565	181,833	210,835	219,815	229,189	238,976	249,194	259,863	271,004	282,637	294,784	307,470	320,718	334,555
Homestead Valley SD	7.0%	268,059	279,125	290,665	302,698	315,248	328,337	341,989	356,228	413,046	430,637	449,002	468,176	488,194	509,096	530,921	553,711	577,510	602,362	628,317	655,424
City of Mill Valley	49.1%	1,868,731	1,945,875	2,026,320	2,110,212	2,197,702	2,288,949	2,384,118	2,483,382	2,879,484	3,002,118	3,130,146	3,263,811	3,403,367	3,549,081	3,701,231	3,860,107	4,026,014	4,199,270	4,380,210	4,569,180
Richardson Bay SD	33.6%	1,277,454	1,330,189	1,385,181	1,442,529	1,502,337	1,564,712	1,629,769	1,697,626	1,968,399	2,052,231	2,139,750	2,231,122	2,326,522	2,426,132	2,530,140	2,638,747	2,752,160	2,870,597	2,994,286	3,123,465
Tamalpais CSD	1.1%	42,081	43,819	45,630	47,519	49,489	51,544	53,687	55,923	64,842	67,604	70,487	73,497	76,639	79,921	83,347	86,925	90,661	94,562	98,637	102,892
		\$ 3,805,087	\$ 3,962,166	\$ 4,125,968	\$ 4,296,788	\$ 4,474,934	\$ 4,660,730	\$ 4,854,512	\$ 5,056,633	\$ 5,863,171	\$ 6,112,876	\$ 6,373,565	\$ 6,645,732	\$ 6,929,895	\$ 7,226,596	\$ 7,536,401	\$ 7,859,903	\$ 8,197,721	\$ 8,550,504	\$ 8,918,930	\$ 9,303,709
Total Assessment																					
Almonte SD		\$ 238,449	\$ 301,856	\$ 382,879	\$ 412,920	\$ 445,342	\$ 471,756	\$ 495,199	\$ 519,809	\$ 547,847	\$ 575,078	\$ 603,666	\$ 627,876	\$ 653,059	\$ 679,254	\$ 706,500	\$ 734,842	\$ 764,322	\$ 787,647	\$ 811,690	\$ 836,474
Alto SD		154,165	195,551	248,453	268,017	289,134	306,320	321,559	337,558	355,520	373,211	391,784	407,489	423,824	440,816	458,489	476,872	495,992	511,082	526,633	542,662
Homestead Valley SD		305,282	393,080	505,555	546,406	590,541	626,185	657,594	690,578	723,693	759,989	798,103	829,983	863,136	897,612	933,463	970,745	1,009,515	1,039,528	1,070,428	1,102,242
City of Mill Valley		2,119,603	2,713,896	3,474,625	3,752,737	4,053,102	4,296,362	4,511,215	4,736,811	4,973,161	5,221,858	5,482,990	5,702,295	5,930,370	6,167,568	6,414,252	6,670,803	6,937,614	7,145,648	7,359,918	7,580,612
Richardson Bay SD		1,448,271	1,853,130	2,371,324	2,560,915	2,765,668	2,931,548	3,078,097	3,231,973	3,393,972	3,563,639	3,741,788	3,891,472	4,047,144	4,209,044	4,377,421	4,552,534	4,734,652	4,876,769	5,023,153	5,173,932
Tamalpais CSD		49,220	65,673	86,842	94,258	102,285	108,666	114,214	120,045	124,418	130,767	137,438	142,885	148,546	154,431	160,547	166,904	173,511	178,402	183,425	188,583
		\$ 4,314,989	\$ 5,523,186	\$ 7,069,678	\$ 7,635,253	\$ 8,246,073	\$ 8,740,837	\$ 9,177,879	\$ 9,636,773	\$ 10,118,612	\$ 10,624,542	\$ 11,155,770	\$ 11,602,000	\$ 12,066,080	\$ 12,548,724	\$ 13,050,672	\$ 13,572,699	\$ 14,115,607	\$ 14,539,076	\$ 14,975,248	\$ 15,424,505

(1) Total purchased/allocated capacity, based on EDU count from 2000. Item 6 attachment to 2014/15 SASM Budget.
(2) Flow share, based on annually updated (in this case 2014/15) EDU counts. Item 6 attachment to 2014/15 SASM Budget.