

SACRAMENTO REGIONAL COUNTY SANITATION DISTRICT



Long-Term Financial Plan 2019 Update



Presented to the Board of Directors on November 13, 2019 by:

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Introduction

Since 2011, the Sacramento Regional County Sanitation District's (Regional San) financial condition has been steadily improving, with growing cash balances and improving debt coverage ratios due to rising revenues from increased monthly service rates and operating cost containment.

The National Pollution Discharge Elimination System (NPDES) wastewater discharge permit for the Sacramento Regional Wastewater Treatment Plant (SRWTP) requires Regional San to construct and operate advanced wastewater treatment facilities (EchoWater Project). The EchoWater Project will add a nutrient removal process to remove ammonia and nitrates, and a new filtration and disinfection process, at the SRWTP. The permit requires these new facilities to be constructed and operational beginning in 2021 for ammonia and nitrate removal, and by early 2023 for the filtration process. The total capital cost for the EchoWater Project is currently estimated at \$1.75 billion, with approximately \$1 billion spent to-date. Additional information concerning the District's permit and the EchoWater Project can be found on the Regional San website at the following link: <http://www.regionalsan.com/echowater-project>

This new challenge came immediately following a decade of major capital projects totaling approximately \$1.4 billion that expanded and improved the District's interceptor system. Approximately \$1.058 billion of new bond debt financed these projects between 2004 and 2006.

Since 2011, the Regional San Board of Directors has approved annual rate increases totaling \$17 per month, per equivalent single-family dwelling (ESD), mainly to fund the EchoWater Project. The monthly rate increased from \$20 per ESD in 2011, to \$37 per ESD on July 1, 2018. In April of 2017, the Board approved the final set of rate increases needed to support the EchoWater Project that took the monthly rate per ESD up to \$37. In May of 2019, the Board approved an ordinance amendment that will freeze the monthly service rate per ESD at \$37 through fiscal year 2020-21. A combination of increasing revenue from growth, operating cost containment, reduced capital spending projections, and low cost financing for the EchoWater Project have resulted in no need for increasing monthly service rates beyond the current \$37 level over the next few years.



Highlights

- Regional San is in excellent financial condition and is expected to remain so throughout the 10-year forecast period.
- On April 7, 2015, the EchoWater Project was approved for Clean Water State Revolving Fund (CWSRF) loans of up to \$1.576 billion (subsequent amendments have reduced the total maximum loan total to \$1.39 billion). These 30-year loans have interest rates between 1.6% and 1.7%, which could save over \$500 million when compared with the cost of traditional fixed rate bond financing. An updated debt-financing plan for the EchoWater Project is included in the Debt Management section of this document.
- The Board of Directors has demonstrated their commitment to funding the EchoWater Project while improving the financial position and sustainability of the District by approving timely rate increases. Those rate increases are now complete and monthly service rates are projected to remain level at \$37 per month, per ESD, for the next several years.
- Reserves are increased for asset replacements, emergencies, and general operating cost fluctuations. The District currently has approximately \$199 million in designated reserves and additional unreserved cash is available to build these reserves to higher levels without putting pressure on rates or fees.
- The District has approximately \$1.21 billion in revenue bond debt outstanding as of June 30, 2019. Financing needs for the EchoWater Project will require the District to incur up to approximately \$1.4 billion in new CWSRF debt over the next few years. The improving financial outlook may allow Regional San to retire a portion of higher cost bond debt early. This would reduce the need for rate increases in the future.
- Debt restructuring and replacements have generated over \$100 million in total cash-flow savings since 2010. These restructurings reduced costs, risk, and complexity of the District's existing debt portfolio. In July of 2018, Regional San paid off the remaining outstanding Series 2006 Bonds about 18 years early, saving about \$1 million per year in interest cost.

Purpose of the Long-Term Financial Plan

This Long-Term Financial Plan (LTFP) is designed to help focus resources on the issues influencing the District's financial position over the next 10 years, and better align its financial capacity with its mission. It identifies financial risks and opportunities facing the District over the next 10 years. It also outlines some strategies for meeting those challenges while maximizing opportunities for providing the most value for the District's ratepayers at the lowest possible cost.

The LTFP is a tool to assist policymakers in identifying the financial challenges and opportunities facing the District and determining the impact of various policies and decisions that might be implemented to meet them. It includes a set of well-reasoned assumptions that provide a foundation upon which a variety of policies and decisions can be formulated for the annual operating and capital budgets, debt-management program, reserves-management, and other ongoing financial processes.

The Planning Process – The LTFP process involves gathering information from District staff related to the long-term operating and capital needs of the District. The planning process includes reviews of various planning documents produced by Regional San, the Sacramento Area Sewer District, and other agencies. The LTFP does not repeat or replace other planning processes or documents but works in conjunction with them. The planning documents reviewed include the Regional San Business Plan, the Strategic Action Plan, the Capital Funding Projection, Condition Assessment Report, EchoWater Project plans, the annual budget, and other planning documents. Research and analysis of economic data and trends affecting the District are also included. The process involves discussions and collaborations with management, staff, legal counsel, and outside financial advisors to determine critical issues and



opportunities that the District may face over the next 10 years. Finally, the process culminates in a presentation to the Board of Directors to receive public and board member input and guidance on what additional issues should be considered in the future.

The LTFP will be updated and brought back to the Board of Directors at least once each year. Any action items outlined in the plan will be brought back to the Board of Directors individually for approval at appropriate times in the future, as conditions and opportunities warrant.

Mission, Vision, and Other Guiding Principles

The mission of Regional San is ***“To protect public health and the environment by conveying, treating, and recovering resources from wastewater responsibly and cost-effectively.”*** The vision of Regional San is ***“Being a leader in environmental stewardship and a trusted partner in regional sustainability.”***

The goal of the LTFP is to support the District’s mission and provide a long-term sustainable financial foundation for achieving and sustaining the vision into the future. More specific financial principles, policies, and goals guiding this plan include:

1. Growth pays for growth over the long-term. Sewer impact fees will be set at a level necessary to assure that new connections finance capital costs associated with the additional burden of new customers on the sanitation system.
2. Monthly service rates should be smoothed to avoid spikes and minimize the total burden on ratepayers. Reserves may be used to smooth rates when prudent.
3. Prudent reserves are to be maintained to mitigate the negative effects of emergencies and fluctuations in revenues and expenditure levels. Additional prudent reserve levels will be maintained to fund asset replacements, meet debt management needs, and meet regulatory requirements.
4. Required annual maintenance and scheduled asset replacement should not be deferred to minimize current rates and fees at the expense of higher future rates and fees.
5. The District should maintain strong bond ratings to instill confidence in investors and ratepayers and to facilitate access to the municipal bond market at lower cost.
6. Use and cost of debt should be minimized to the extent possible. Debt service should be strategically planned to be as level as possible to minimize the burden on ratepayers and produce predictable rates that avoid significant spikes.
7. Capital projects should be financed on a pay-go (cash) basis to the extent possible, targeting at least 25 percent cash financing on projects for new facilities, and 100 percent cash financing on rehabilitation and replacement projects.
8. Excess funds due to higher than expected growth, unexpected one-time revenues, and operating surpluses should be used to pay off debt early.

Core Values



Recommended Action Items for 2019-20

Regional San regularly monitors and analyzes its outstanding debt to take advantage of opportunities to reduce costs and risks associated with the debt portfolio. This is of particular importance at this time as Regional San continues with the capital-spending program required for the EchoWater Project. Actions designed to reduce costs and risks in the debt portfolio should help to maintain or improve bond ratings and provide added confidence to investors to ensure successful transactions in the coming years. In addition, any actions that will reduce the cost of the existing debt will provide capacity for new debt or additional expenses without a corresponding increase in rates.

No debt transactions are planned for the next 12 months. As conditions change, specific transactions may be brought forward for consideration by the Board of Directors.

Status of Action Items from 2018

The LTFP update from 2018 included three action items. The table below summarizes the status of these action items:

Table 1

Action Item	Status	Comments
1. Pay off the \$21.3 million outstanding Series 2006 Bonds early.	Completed in July 2018	Regional San was able to pay this debt off about 18 years early reducing debt service by about \$1 million per year.
2. Defeasance the Series 2011 Bonds to 2021 Call Date. (late 2018-19)	Postponed to 2021 call date	It was determined that the cost of setting up a defeasance escrow for only two years was not a prudent use of cash and waiting to the call date has no downside risk if the debt is paid off.
3. Renew or replace the Direct Purchase Agreement for the Series 2013B Bonds. (June 2019)	Completed May 2019	Wells Fargo Bank was willing to renew this agreement for another three-year term allowing Regional San to avoid over \$100,000 in reissuance costs.

Financial Environment

The Economy – Financial Markets & Trends

Regional, state, national, and global economies and financial markets have a significant impact on Regional San operations and, therefore, have a significant effect on financial strategies and decisions. Because Regional San is an integral part of the Sacramento regional economy, conditions and trends here have a significant influence over the District’s financial outlook, particularly in the area of revenue projections.

Regional economic outlook has the most profound effect on the District’s growth. Customer growth fuels revenue growth from rates by adding permanent ratepayers. In addition, new customers also pay impact fees to cover the cost of added infrastructure necessary to support growth. The table below shows the growth that the District has experienced over the past seven years as measured by average billed and collected ESD equivalents:

Table 2
Sacramento Regional County Sanitation District
Growth in Connected Equivalent Single-Family Dwellings (ESDs)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19 Estimated
Average ESDs	592,886	596,161	597,780	598,332	600,721	604,587	611,070
New ESDs	2,582	3,275	1,619	552	2,389	3,866	6,483
% Change	0.44%	0.55%	0.27%	0.09%	0.40%	0.64%	1.06%

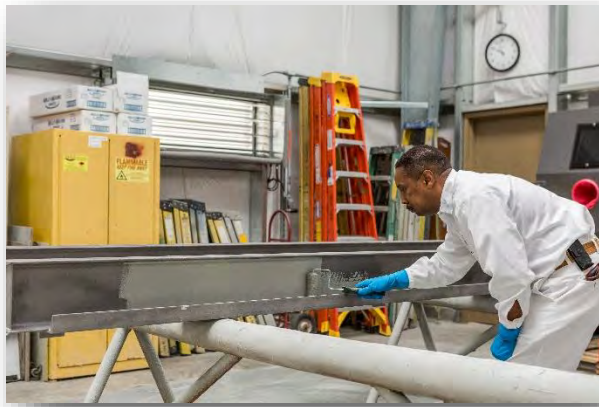
Regional San management does not believe the fundamentals are in place for customer growth rates experienced in the past decade to continue into the next decade. The real estate market and construction activities in the Sacramento area are continuing to improve. Even with the improvement, the District’s current ESD growth is well below the average annual growth rate of 1.6% experienced between 2004 and 2013.

An economic forecast for the Sacramento region produced by University of the Pacific (UOP), Eberhardt School of Business projects an increase in residential construction activity (total housing starts) from 9,519 units in 2018, to 13,099 units in 2022; an average growth rate of about 8% each year over the next four years¹. The Regional San service area is only a portion of the Sacramento region used in the UOP forecast.

¹ California & Metro Forecast-October 2018; University of the Pacific Eberhardt School of Business

Regional San takes a more conservative approach to forecasting growth in the regional construction market as uncertainty driven by slow wage growth and continuing challenges in the local economy does not appear to support growth assumptions above 1% per year. Eleven of the region's top 25 employers are government entities, including the top employer, the State of California with over 69,000 full-time employees in Sacramento County². The fiscal constraints facing these governments will continue to weigh on the region's economic growth rate. Regional San assumes lack of robust employment growth, moderate wage growth, and tight lending will prevent a return to high growth rates for new construction in the service area over the next few years.

Interest Rates – Market interest rates have gone from all-time highs in the 1980s to all-time lows in early 2013 and stayed near this level. Global economic influence, coupled with recent inflation trends and government monetary policy, suggest low interest rates may continue throughout the ten-year forecast period.



Low interest rates have both good and bad effects on Regional San's financial outlook. On the positive side, low interest rates reflect the low inflation rates in the economy, which help control operating costs. Low interest rates also mean Regional San can refund (refinance) debt at a lower cost. This in turn reduces the cost of capital projects and reduces the impact of the capital program on Regional San rates and fees.

On the negative side, Regional San is unable to earn a good return on invested cash balances. Regional San is limited by State law and local policy to investing in securities with maturities of five years or less. Most of Regional San cash is invested in the Sacramento County Pooled Investment Fund that had a return rate of 2.263%, with a weighted average maturity of 336 days, for the quarter ended December 31, 2018. Although these rates have increased significantly over the past few years as the Federal Reserve has raised short-term rates, returns are historically low and still below the rate of inflation experienced by the District, which may result in a loss of value over time for cash balances held by Regional San. Rates are starting to trend lower again in 2019.

² Sacramento Business Journal, May 31, 2019.

Critical Issues – Risks and Opportunities

Regional San has developed and implemented a rate and fee structure that provides long-term financial stability. In the early 2000's, Regional San invested in the expansion of the interceptor system to accommodate expected growth and relieve capacity deficiencies in interceptors built in the 1970's and 1980's. The expanded interceptor system was financed with bond debt, which resulted in higher annual debt service costs. Rates and fees were adjusted to recover these costs from new customers. Regional San is incurring additional capital costs to construct the EchoWater Project. On-going operating costs will be needed to operate and maintain the new treatment facilities. Rates and fees have been adjusted to cover these new costs. The District maintains cash reserves to mitigate the potential negative impacts of these risks. Issues and risks that could have a significant impact on the financial position of Regional San and have the potential to occur in the next 10 years are as follows:

- 1. EchoWater Project** – The EchoWater Project involves the implementation of over twenty interrelated construction projects. Several projects have been completed and several are currently under construction with areas that interface and overlap with each other requiring close coordination to minimize conflicts and contain costs. The Nitrifying Sidestream Treatment Project is in commissioning and is expected to be substantially complete by August 2019. The Flow Equalization Project is delayed due to problems with the basin wash-down system and is expected to be completed by the end of 2019. Construction of the Biological Nutrient Removal Project is progressing and concrete placement of the basins is complete. Work has accelerated for mechanical and electrical systems. The contractor is behind schedule for the intermediate milestones; however, his schedule still indicates that the system will be operational by the contractual end date. The Tertiary Treatment Facilities Project is on schedule.

The current estimate of EchoWater Project capital costs is \$1.75 billion. Additional ongoing operation and maintenance costs for the new facilities are estimated to be \$42 million per year when fully operational by fiscal year 2022-23. These cost estimates will continue to be refined throughout the construction and commissioning phases over the next several years.

- 2. Other regulatory requirement changes** – Regional San conducted a study to evaluate temperature effects of the Regional San effluent on the aquatic ecosystem of the Sacramento River as required by its 2010 NPDES permit. The 2016 NPDES permit retains thermal exceptions under which Regional San has operated for decades but included a requirement to evaluate compliance methodology used to determine temperature differentials in the river. The Regional Water Board approved Regional San's compliance methodology in a letter dated September 21, 2018. The EchoWater Flow Equalization Project includes provisions to cool effluent. The Regional and State Water Boards reconsider thermal exceptions with each 5-year NPDES permit, and renewal of each thermal exception is uncertain. The next permit renewal is due in April 2021. If Regional

San were required to further cool effluent, significant additional capital and operating costs would be incurred in the future.

3. **Legal challenges** – There have been several bid protests and legal challenges related to the EchoWater Project contract bidding. While all of these have been resolved in the District’s favor, future protests and legal challenges could potentially cause project delays, and could result in additional regulatory, construction, and legal costs.
4. **Investment markets** – Rising interest rates can benefit the District by providing additional non-operating income from higher returns on invested cash balances. In addition to offsetting rising operational and capital costs for the benefit of all ratepayers, this type of income can provide resources for maintaining or expanding programs such as Sewer Lifeline Rate Assistance Program for low-income ratepayers that rely on non-rate/fee income for support. Rising interest rates can also have a negative impact on the District by increasing the cost of financing for capital projects or debt restructuring. Regional San would benefit from declining interest rates in the future by allowing restructuring of some existing debt to a lower interest cost. On the other hand, declining interest rates cause swap termination costs to rise making it more difficult to restructure variable rate debt to a lower cost.
5. **Water Recycling** – Water resource protection and sustainability in the Sacramento region and the Sacramento-San Joaquin Delta continue to be critical economic and environmental concerns. Regional San continues to promote its environmental stewardship value through better use of the regional water resources by its commitment to expanding water recycling programs. With completion of the EchoWater Project, Regional San will be able to produce more high quality tertiary treated recycled water that can be used for regional benefits such as agriculture and landscape irrigation, industrial uses, and in-lieu groundwater recharge.

Regional San recently completed construction of a \$16.2 million capital project with the Sacramento Power Authority (SPA) and the City of Sacramento to provide recycled water for cooling of the SPA cogeneration plant in South Sacramento. The project is funded with State grants (Prop 50 and Prop 84) and a grant/low interest loan under the Prop 1 Water Bond 2014. The project will begin delivery of recycled water in 2020. The SPA project is sized to provide for future recycled water opportunities in the City of Sacramento when the EchoWater Project makes substantially more recycled water available. Future costs to expand the SPA project, as well as future revenues from the sale of recycled water, are unknown at this time.

Regional San is moving into the design phase of the South County Ag Project to provide recycled water on a large scale to agricultural water users and conservation lands in southern Sacramento County. In 2013, using grant funds, Regional San completed a feasibility study that showed water-recycling projects can improve regional groundwater resource sustainability and provide environmental benefits to the Sacramento region. In July of 2018, Regional San was awarded \$280.5 million in grant

funding through the Water Storage Investment Program that is being administered by the California Water Commission. The funding is based on the value of public benefits such as ecosystem and water quality improvements that the project will provide. It is anticipated that this grant funding will cover most of Regional San's capital costs for this recycling project.

6. **Natural Disaster and Other Emergencies** – The potential for natural disasters such as earthquake or flood are issues the District considers in its emergency planning. The risk for earthquakes in the Sacramento Region is relatively small. However, the risk for flood in the region is significant. The District has taken, and will continue to take, measures to protect its critical infrastructure from flood damage. For example, the treatment plant in Elk Grove is surrounded by levees designed to protect infrastructure from major flood events. Regional San staff inspect these levees periodically and a report is submitted to the Army Corps of Engineers confirming their integrity. These levees protect the entire process area and critical infrastructure at the treatment plant. To mitigate impacts from natural disasters and other emergencies, the District maintains insurance coverage and cash reserves to cover additional costs that could be incurred to preserve or repair essential infrastructure in an emergency. Additionally, the Continuity of Operation Plan and Flood Response Manual were updated in 2017 and 2019, respectively. These documents provide response plans for natural disasters and other emergencies.
7. **Aging Infrastructure** – Regional San is implementing programs to address the condition of the treatment plant and conveyance system assets through condition assessment inspections, repairs, rehabilitations, and replacements to ensure reliable and sustainable wastewater treatment systems are maintained. These programs identify and prioritize projects and assign resources to cost effectively address aging facilities and improve the reliability, efficiency, and effectiveness of operations. There is also a need to improve existing plant assets and systems to support the EchoWater Project. The current plan includes approximately \$200 million of capital expenditures over the next ten years to repair and rehabilitate existing assets. Ongoing condition assessments may require additional expenditures.



Ten Year Financial Forecasts

Financial Performance Targets

One of the primary objectives of the Regional San Board and management is to maintain a financially sound and sustainable wastewater utility capable of delivering the highest quality service at the lowest long-term cost. Some financial benchmarks and performance targets are used to determine and maintain financial health. Those targets include cash balances, annual cash flow needs, and debt coverage ratios. The forecast model is designed to maintain total cash on hand of at least \$300 million. Regional San had approximately 1,224 days of operating cash on hand at June 30, 2019, which is significantly above the industry median of 367 days³. Regional San maintains higher cash balances than the industry median because the District maintains higher debt loads than most of the industry, and a high percentage of that debt load is in a variable rate mode. In addition, the forecast model assumes designated reserve levels for specific types of reserves and that Regional San will maintain a positive unreserved cash balance. Another target of the forecast model is a senior debt coverage ratio of at least 1.30x, and total debt coverage of at least 1.20x. This is above the bond covenant requirements of 1.20x for senior coverage, and 1.10x for total debt coverage. Projected coverage is much higher than the covenant requirements and the targets.

Under the baseline forecast, that has an annual growth assumption that does not exceed 0.4% per year, Regional San can maintain monthly service rates at the current level of \$37 per ESD throughout the forecast period. This forecast is dependent on the early retirement of some existing bonds and debt restructuring.

³ Fitch Ratings 2019 Water and Sewer Medians, for large size districts with over 500,000 customers.

Forecast Tables

The following two pages contain the ten-year financial forecast tables for Regional San as of June 2019. The forecast includes two tables showing two prior actual years, the last budget year 2018-19, and ten years of projections to fiscal year 2028-29. Table 3 is a pro-forma statement of operations showing projected total revenues, operating expenditures, and debt coverage ratios. Table 4 shows all projected cash flows, including capital expenditures not included in the pro-forma statement. Table 4 also shows reserve projections.

These tables represent the District's financial forecast assuming the EchoWater Project facilities will be constructed and operational within the next few years. The latest estimates indicate that the total cost of the EchoWater Project will be about \$1.75 billion, and includes approximately \$1.5 billion in new CWSRF loans and bond financing. This has resulted in a monthly service rate of \$37 per ESD for fiscal year 2018-19 and beyond. The forecast assumptions for both tables begin on page 19.



Table 3: Regional San Pro Forma - as of August 9, 2019

(\$000s unless noted otherwise)	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
			Unaudited										
Operating Revenues	Actual	Actual	Actual	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Total ESDs (adjusted for partials)	600,721	604,587	611,070	613,514	615,968	618,432	620,906	623,390	625,883	628,387	630,900	633,424	635,957
Monthly rate per ESD (\$)	\$ 35.00	\$ 36.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00	\$ 37.00
Residential/commercial revenue	\$ 252,303	\$ 261,182	\$ 271,316	\$ 272,400	\$ 273,490	\$ 274,584	\$ 275,682	\$ 276,785	\$ 277,892	\$ 279,004	\$ 280,120	\$ 281,240	\$ 282,365
Industrial revenue	8,770	10,436	11,022	11,022	11,022	11,022	11,022	11,022	11,022	11,022	11,022	11,022	11,022
Total revenue from service charges	261,073	271,617	282,338	283,423	284,512	285,606	286,704	287,807	288,914	290,026	291,142	292,262	293,387
Net New ESDs	2,389	3,866	6,483	2,444	2,454	2,464	2,474	2,484	2,494	2,504	2,514	2,524	2,534
ESD Growth Rate	0.40%	0.64%	1.06%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Total Impact fee revenue	21,936	25,385	29,510	23,010	23,585	24,175	24,779	25,399	26,034	26,685	27,352	28,036	28,737
Subtotal operating revenue	283,009	297,002	311,848	306,433	308,098	309,781	311,484	313,206	314,948	316,711	318,494	320,298	322,124
Non-operating revenue (interest, misc rev)	19,604	22,373	26,901	24,211	21,790	22,225	22,670	23,123	23,586	24,057	24,539	25,029	25,530
Total revenue	<u>302,613</u>	<u>319,376</u>	<u>338,749</u>	<u>330,643</u>	<u>329,887</u>	<u>332,007</u>	<u>334,154</u>	<u>336,329</u>	<u>338,534</u>	<u>340,768</u>	<u>343,032</u>	<u>345,327</u>	<u>347,654</u>
Operating expense													
Salaries & Benefits	62,772	66,015	68,754	69,055	70,098	72,922	75,109	77,470	79,794	82,188	84,654	87,193	89,809
Services & Supplies	48,812	53,850	62,195	65,655	67,897	78,211	79,775	82,534	90,551	92,814	95,135	97,513	99,951
Depreciaton/Amortization	49,212	50,021	50,855	53,906	60,375	75,469	90,563	93,279	94,445	95,390	96,344	97,307	98,280
Less BRF Savings	(438)	(588)	(588)										
EchoWater incremental new operating costs				3,525	9,771		1,605	6,105					
Less depreciation/amortization/landfill	(49,212)	(50,021)	(50,855)	(53,906)	(60,375)	(75,469)	(90,563)	(93,279)	(94,445)	(95,390)	(96,344)	(97,307)	(98,280)
Total expense, net of depr. & amort.	<u>111,146</u>	<u>119,277</u>	<u>130,361</u>	<u>138,235</u>	<u>147,766</u>	<u>151,133</u>	<u>156,490</u>	<u>166,109</u>	<u>170,345</u>	<u>175,003</u>	<u>179,789</u>	<u>184,707</u>	<u>189,760</u>
Net revenue for coverage test	<u>191,467</u>	<u>200,099</u>	<u>208,388</u>	<u>192,408</u>	<u>182,122</u>	<u>180,874</u>	<u>177,664</u>	<u>170,221</u>	<u>168,189</u>	<u>165,766</u>	<u>163,244</u>	<u>160,621</u>	<u>157,894</u>
Debt Coverage													
Senior debt service	76,114	77,787	79,473	88,237	89,261	108,244	101,175	107,790	98,350	106,377	99,140	98,310	96,813
Total debt service	83,770	90,444	88,848	99,221	100,245	119,228	112,159	115,034	105,595	113,621	106,384	105,554	104,058
Senior revenue coverage (must be at least 1.20x)	2.52 x	2.57 x	2.62 x	2.18 x	2.04 x	1.67 x	1.76 x	1.58 x	1.71 x	1.56 x	1.65 x	1.63 x	1.63 x
Total revenue coverage (must be at least 1.10x)	2.29 x	2.21 x	2.35 x	1.94 x	1.82 x	1.52 x	1.58 x	1.48 x	1.59 x	1.46 x	1.53 x	1.52 x	1.52 x

Table 4: as of 8-9-2019

Regional San Cash Flow Projection (Baseline Growth, 0.4%)	Audited	Audited	Unaudited	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	Actuals	Actuals	Actuals	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	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
Beginning Unrestricted Cash	\$306,957,396	\$391,098,217	\$428,641,975	\$439,301,080	\$526,927,917	\$570,387,117	\$520,291,771	\$497,896,721	\$401,699,078	\$361,174,028	\$370,914,179	\$395,849,053	\$433,751,124
Cash Inflow													
Impact Fees	21,935,800	25,385,073	29,510,201	23,010,201	23,585,456	24,175,092	24,779,470	25,398,956	26,033,930	26,684,779	27,351,898	28,035,696	28,736,588
Monthly Service Charges	261,072,896	271,617,409	282,337,704	283,422,532	284,512,134	285,606,093	286,704,429	287,807,158	288,914,298	290,025,866	291,141,881	292,262,360	293,387,320
Interest/Other	19,604,133	22,373,449	26,900,759	24,210,683	21,789,615	22,225,407	22,669,915	23,123,314	23,585,780	24,057,495	24,538,645	25,029,418	25,530,007
Water Recycling Grant/Loan Proceeds	1,521,234	7,243,875	953,773	500,000	64,000,000	65,000,000	85,000,000	58,000,000	8,000,000				
Bond/CWSRF Loan Proceeds	213,172,234	214,397,559	170,817,787	255,000,000	250,000,000	127,000,000	80,000,000	41,000,000	16,245,000				
Subtotal Cash In	\$517,306,297	\$541,017,365	\$510,520,224	\$586,143,416	\$643,887,204	\$524,006,593	\$499,153,814	\$435,329,428	\$362,779,008	\$340,768,140	\$343,032,424	\$345,327,474	\$347,653,915
Cash Outflow													
Operating Expenses	111,146,042	119,276,686	130,361,015	138,235,423	147,765,660	151,132,922	156,490,022	166,108,757	170,344,945	175,002,540	179,788,544	184,706,526	189,760,156
Capital Costs (excludes EchoWater/SoCoAg)	24,034,223	25,942,187	22,855,153	40,336,036	33,256,273	19,725,667	20,874,667	28,836,110	45,668,000	42,404,000	31,925,000	17,165,000	8,960,000
Capital, EchoWater Project	214,215,211	267,810,734	247,585,246	216,588,000	252,161,240	136,815,464	82,024,973	48,748,022	21,696,559				
Capital, South County Ag Water Recycling				4,136,000	67,000,000	70,000,000	90,000,000	60,000,000	10,000,000				
Debt Service Costs (EchoWater Bonds)	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600	6,729,600
Debt Service Costs (EchoWater CWSRF Loans)		1,817,811	2,796,709	11,546,042	12,591,781	35,425,886	35,425,886	59,609,685	59,609,685	59,609,685	59,609,685	59,609,685	59,609,685
Debt Service Costs (SPA \Recycle Loan)			382,312	403,327	403,327	403,327	403,327	403,327	403,327	403,327	403,327	403,327	403,327
Debt Service Costs (Existing Bond Debt)	77,040,400	81,896,589	78,939,865	80,542,151	80,520,123	76,669,073	69,600,389	48,291,570	38,851,942	46,878,837	39,641,395	38,811,264	37,314,932
Early Pay-off of Bond Debt			10,211,219			77,200,000	60,000,000	112,800,000	50,000,000				
Subtotal Cash Out	\$433,165,476	\$503,473,607	\$499,861,119	\$498,516,579	\$600,428,004	\$574,101,939	\$521,548,864	\$531,527,071	\$403,304,058	\$331,027,989	\$318,097,551	\$307,425,402	\$302,777,700
Ending Unrestricted Cash	\$391,098,217	\$428,641,975	\$439,301,080	\$526,927,917	\$570,387,117	\$520,291,771	\$497,896,721	\$401,699,078	\$361,174,028	\$370,914,179	\$395,849,053	\$433,751,124	\$478,627,340
Unreserved Cash	\$210,397,176	\$244,931,925	\$252,406,389	\$327,499,329	\$365,182,520	\$288,081,353	\$260,933,879	\$135,749,276	\$91,706,739	\$97,762,591	\$118,918,065	\$152,943,171	\$193,842,322
Designated Reserves													
General	28,200,000	29,248,256	29,792,557	34,558,856	36,941,415	37,783,231	39,122,505	41,527,189	42,586,236	43,750,635	44,947,136	46,176,631	47,440,039
Rate Stabilization	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000	23,200,000
CWSRF & SPA Loan Reserve	-	2,011,632	3,179,021	8,850,343	12,995,108	35,829,213	35,829,213	60,013,012	60,013,012	60,013,012	60,013,012	60,013,012	60,013,012
Bufferlands Reserve	1,000,000	1,000,000											
Facilities Closure	11,224,882	11,531,095	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897	11,963,897
Equipment Replacement	1,050,625	1,076,891	1,103,813	1,131,408	1,159,693	1,188,686	1,218,403	1,248,863	1,280,085	1,312,087	1,344,889	1,378,511	1,412,974
Confluence Program			10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Economic Incentive	3,500,000	3,500,000											
Rate Assistant Program	6,505,000	6,505,000											
Expansion	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124	20,908,124
Replacement & Rehabilitation	79,247,856	80,729,052	82,747,278	84,815,960	88,036,359	91,337,268	94,720,700	97,088,717	99,515,935	102,003,834	104,553,930	107,167,778	109,846,972
Debt Service Stabilization	5,864,554	4,000,000	4,000,000	4,000,000									
Total Designated Reserves	\$180,701,041	\$183,710,050	\$186,894,690	\$199,428,588	\$205,204,597	\$232,210,419	\$236,962,842	\$265,949,803	\$269,467,289	\$273,151,588	\$276,930,987	\$280,807,953	\$284,785,018

Forecast Assumptions

The financial forecasts are designed to meet performance targets for debt coverage and total cash balances necessary to remain financially sound and maintain strong credit ratings. The target minimum levels for the debt coverage ratios are 1.30x for senior debt and 1.20x for subordinate debt. The target minimum level for total cash balances, excluding restricted bond proceeds, is \$300 million. The \$300 million cash level will include both reserved and unreserved cash, and the unreserved cash balance must remain positive. In addition, the forecasts include the following assumptions for each line item:

- 1. Rate Revenue** – The monthly rates per ESD are projected to remain steady at \$37/ESD/month throughout the forecast period. Rate revenues are based on ESD growth estimated to remain well below historical levels throughout the 10-year forecast period. New connection growth for fiscal year 2019-20 is estimated at 2,444 ESDs, or about 0.40%, and the growth rate is assumed to stay at this level throughout the forecast period.
- 2. Impact-fee Revenue** – In 2013, impact-fees were restructured which resulted in decreases from \$2,800 to \$2,396 per ESD for infill, and from \$7,450 to \$4,032 per ESD for new communities. Under the new structure, impact fee levels will adjust each year by an inflation factor and estimated changes in capital spending. The impact fees in effect as of July 1, 2019, are \$3,602 per ESD for infill areas, and \$6,479 per ESD for new communities. Impact fees are assumed to increase at an inflationary rate of 2.5% per year. The level of impact fee revenue is difficult to predict because it can vary significantly even when net growth is estimated to be constant at 0.40%. Factors that can affect impact fee revenues include; fee increases, proportion of growth in infill versus new communities, new construction levels, level of impact fee credits used, proportion of commercial development versus residential development, and levels of redevelopment.
- 3. Non-operating Revenue** – The main variable in this revenue category is interest income on invested cash balances. This revenue category has increased by about 14% in fiscal year 2017-18, and another 20% in fiscal year 2018-19, due to increases in market interest rates for short-term securities. In fiscal years 2019-20 and 2020-21, this category is expected to decline 10% each year due to expected declining interest rates. After fiscal year 2020-21, this revenue category is projected to increase by 2% each year.
- 4. Salaries & Benefits** – This cost category is projected to increase between 3% and 4% annually throughout the forecast period. These increases reflect expected cost-of-living adjustments negotiated in labor agreements, and rising retirement and health benefit costs as well as a few additional staff in the early years of the forecast to operate the new EchoWater facilities.
- 5. Services & Supplies** – This expenditure category experienced an increase of about 15% in fiscal year 2017-18, primarily due to the cost of converting from gaseous chlorine to liquid chlorine for the disinfection process. The rise in unit cost for chemicals and electricity has

continued to increase costs in this category through fiscal year 2018-19. In addition, about \$3 million in new annual costs have been added for the Confluence Program beginning in fiscal year 2018-19. After fiscal year 2019-20, this expense category is assumed to increase by an inflation rate of 2% to 2.5% annually through the end of the forecast period.

Additional new operating costs for Echo Water facilities are included in a separate line of the projections for both new employees and additional services and supplies incrementally beginning in fiscal year 2019-20 and concluding in fiscal year 2023-24 when all of the new processes are fully operational. Each subsequent year's services and supplies cost line includes the previous year's incremental increase from the EchoWater cost line.

6. **Capital Costs** – The cost estimates for capital-project expenditures are from the District's Capital Funding Projection detailed in Table 5. In the Cash Flow Forecast (Table 4), capital costs are shown on three separate lines, one for costs related to existing infrastructure, another for water recycling projects, and a third line for the EchoWater Project.
7. **Debt Service** – Debt service is based on current total outstanding bonded debt of approximately \$1.21 billion as well as projected new CWSRF loan debt of up to approximately \$1.4 billion by fiscal year 2023-24 for the EchoWater Project. Annual level debt service for existing bond debt is about \$87 million per year through 2036, at which point it begins to decline rapidly. The projection assumes that up to \$300 million of cash reserves would be used to pay off existing bond debt early; which would result in significantly less annual debt service after 2022 than the \$87 million noted above for the bond debt. The CWSRF loan debt is projected to increase annual debt service by approximately \$60 million annually by fiscal year 2023-24 (which could be partially offset by the early repayment of some of the old debt). Fixed interest rate cost for the new debt to support the EchoWater Project range from 1.6% to 1.7%. The loan for the SPA Water Recycling project began annual amortization of a \$7.2 million, 20-year loan, beginning in fiscal year 2018-19, at an annual fixed interest rate of 1%.
8. **Designated Reserves** – in 2005, the Board of Directors approved a reserve policy that established the current reserves and the basis for their levels. New reserves have subsequently been added for Bufferlands Facilities and CWSRF Loan Reserves. For fiscal year 2019-20 these reserves were designated at a total of \$199,428,588 and are projected into the future based on the following needs and assumptions:
 - **General Reserve (\$34,558,856)** – Covers emergency costs and other unexpected expenditures or to offset temporary fluctuations in revenues. This reserve is currently at its designated target level of 25% of operating expenses net of depreciation. Prior to fiscal year 2013-14, this reserve was targeted at 10% of operating expenses. The new higher level provides more protection from rate increases that might otherwise result from short-term cost spikes from emergencies, regulatory changes, or legal settlements.
 - **Facilities Closure Reserve (\$11,963,897)** – is mandated by the State of California to finance closure and post-closure costs of the solids storage basins and the dedicated

lined disposal sites at the Sacramento Regional Wastewater Treatment Plant. This reserve is increased as needed to ensure sufficient funding will be available at the time of closure of the facilities as mandated by State law.

- **Equipment Replacement (\$1,131,408)** – This reserve was created to replace existing heavy equipment (i.e., tractors, cranes) thereby eliminating the need for debt financing in years when heavy equipment is replaced. This reserve is increased by 2.5% each year to reflect inflation.
- **Economic Incentive Reserve (\$0)** – The economic incentive program that provided a rate subsidy to the industrial community was phased out in fiscal year 2017-18. The \$3.5 million that made up this reserve was combined with the Rate Assistance Program Reserve to fund the new Confluence Program Reserve.
- **Rate Assistance Program Reserve (\$0)** – This reserve was created to support the Sewer Lifeline Rate Assistance Program. In fiscal year 2018-19, the \$6.5 million remaining in this reserve was combined with the Economic Incentive Reserve to fund the new \$10 million Confluence Program Reserve.
- **Confluence Program Reserve (\$10,000,000)** – The Board of Directors established this reserve in fiscal year 2017-18 by combining the Economic Incentive Reserve and the Rate Assistance Program Reserve. This reserve supports programs for economic incentives, educational programs, the Sewer Lifeline Rate Assistance Program, and other community partnership programs. These programs are supported by non-rate/non-fee revenues and are now combined under one umbrella known as the Confluence Program.
- **Expansion Reserve (\$20,908,124)** – This reserve was created to fund facility expansions required by customer growth. It is designed to be used when expansion projects are under construction but impact fees decline due to a sudden slowdown in growth. No changes to this reserve are envisioned for the forecast period.
- **Replacement Reserve (\$84,815,960)** – This reserve funds future rehabilitation and replacement of existing facilities and major components when they reach the end of their useful lives. This reserve will be increased by 2.5% each year during the forecast period to offset the impacts of inflation. In addition, this reserve will increase by an additional \$1.1 million each fiscal year from 2020-21 through 2023-24 for the added components of the EchoWater Project that will need to be replaced in the future. This reserve helps avoid issuing debt to replace existing assets.
- **Debt Service Stabilization Reserve (\$4,000,000)** – This reserve is available to cover fluctuations in debt service for the District’s variable rate bonds. This reserve would only be used to pay interest expense if a failed remarketing occurred causing a temporary spike in interest expense. Using this reserve at that time would give the

District time to restructure the debt. The need for this reserve is mitigated by the recent and continuing diversification of the types and tenor of variable rate debt in the portfolio to reduce remarketing and bank/credit provider risk. This reserve may not be needed after fiscal year 2023-24 if the Series 2000C variable rate debt that requires remarketing is paid off early as indicated in the debt retirement plan.

- **Rate Stabilization Reserve (\$23,200,000)** – This reserve is available to ensure minimum debt coverage ratios as required by bond agreements are met when revenues decline or operating expenses increase unexpectedly, without requiring an immediate increase in rates. There is no projected need to change the level of this reserve throughout the forecast period.
- **CWSRF & SPA Loan Reserve (\$8,850,343)** – This is a new reserve that began in fiscal year 2017-18 as required by the terms of the CWSRF loan that will finance the EchoWater Project and the Prop. 1 loan that financed a portion of the SPA water-recycling project. The reserve will be equal to the annual debt service required under the loan agreements beginning at \$2,011,632 in 2017-18, and reaching an estimated maximum of approximately \$60 million in fiscal year 2024-25.
- **Bufferland Reserve (\$0)** – This reserve was established by the Board of Directors in fiscal year 2015-16 to fund the rehabilitation of historical properties located in the Bufferlands that surround the treatment plant in Elk Grove. The reserve will be consumed in 2018 and 2019 by expenditures for capital improvement to the historical buildings on Bufferlands property.
- **Unreserved Cash** – This is defined as all of the cash reserves not specifically designated by the Board of Directors, loan agreements, or laws and regulations. Unreserved cash provides a flexible source of funding to take advantage of opportunities to maximize long-term economic benefits for ratepayers, provide an additional cushion for unexpected expenses or revenue loss, and mitigate any negatives that might be noted by rating agencies. Unreserved cash also provides policymakers with the opportunity to consider the early repayment or restructuring of debt for savings, or financing of future capital project expenditures without the need for additional debt. In this long-term plan unreserved cash is built up by incremental rate increases and used to fund a portion of the capital cost of the EchoWater Project and pay off older high cost debt early.

Capital Funding Projection

Table 5, on the next page, lists all of the Regional San capital projects already in progress or projects that are expected to begin within the ten-year timeframe. The projects are shown in a summary format and have been updated to reflect the most current cost and timing information available. Approximately \$1.348 billion in capital project costs are anticipated between Fiscal Years 2019-20 and 2028-29. At approximately \$758 million, the EchoWater Project represents about 56% of all capital costs projected over this ten-year period.

The CWSRF loan program will finance approximately \$1.4 billion of EchoWater capital costs. The Series 2014A Bonds that were issued in July of 2014 financed another \$150 million of the project planning and design costs.

Most of the South County Agricultural Program's \$301 million capital costs will be funded by a \$280.5 million Water Storage Investment Program grant from the California Water Commission. In the future, water-recycling projects have the potential to generate revenue from water sales to recover some of the operating costs, but the current projections do not include any estimates for these revenue sources or operating expenses. All other projects will be funded with on-going rate and impact fee revenues and cash reserves.



Table 5: Regional San Ten-Year Capital Funding Projection 2019-20 to 2028-29

<u>Project # / Project Name</u>	<u>10-Year Totals</u>	<u>19-20</u>	<u>20-21</u>	<u>21-22</u>	<u>22-23</u>	<u>23-24</u>	<u>24-25</u>	<u>25-26</u>	<u>26-27</u>	<u>27-28</u>	<u>28-29</u>
1-EchoWater Program	758,034,258	216,588,000	252,161,240	136,815,464	82,024,973	48,748,022	21,696,559				
2-South County Ag Water Recycling	301,136,000	4,136,000	67,000,000	70,000,000	90,000,000	60,000,000	10,000,000				
3-Solids Storage Basin Battery IV	75,000,000			750,000	3,000,000	3,750,000	26,250,000	26,250,000	15,000,000		
4-RTP I/O Bus Controller Replacement	40,175,000	925,000	2,750,000	4,000,000	5,000,000	5,250,000	5,250,000	6,000,000	5,500,000	5,500,000	
5-ESB-D Liner Replacement	30,950,000	12,180,000	18,770,000								
6-Lined Dedicated Land Disposal Unit 1	26,825,000							1,850,000	8,325,000	8,325,000	8,325,000
7-Secondary Sediment Tanks Rehab	22,275,000		1,188,000	4,752,000	1,188,000	5,940,000	5,643,000	3,564,000			
8-SPA Water Recycling Phase 2	9,500,000			1,000,000	1,000,000	4,700,000	2,800,000				
9-Treatment Plant Small Projects	9,250,000	650,000	650,000	650,000	650,000	650,000	1,500,000	1,500,000	1,500,000	1,500,000	
10-Digester Rehabilitation	7,490,000	2,990,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
11-DAFT Rehab (1 thru 4)	6,750,000	250,000	2,000,000	1,500,000	1,500,000	1,500,000					
12-N19 Arden Pump St. Wet Well Rehab	6,355,000	5,185,000	1,170,000								
13-Small Interceptor Projects	5,750,000	350,000	350,000	350,000	350,000	350,000	1,000,000	1,000,000	1,000,000	1,000,000	
14-Boiler Room Rehab	5,202,000	210,000	312,000	2,080,000	2,600,000						
15-I/E Pump Rehab	5,200,000		52,000	208,000	260,000	1,820,000	1,820,000	1,040,000			
16-Folsom Interceptor Rehab	5,000,001		1,666,667	1,666,667	1,666,667						
17-Gas Management System	4,300,000	4,200,000	100,000								
18-Primary Deck Structural Rehab	4,261,000	2,961,000	1,300,000								
19-Heavy Equipment Purchases	4,055,000	1,575,000	250,000	500,000	270,000	240,000	145,000	500,000	100,000	340,000	135,000
20-IT Capital Projects	3,204,540	1,123,430	150,000		250,000	1,681,110					
21-Odor Control System Modifications	3,150,000		126,000	189,000	1,260,000	1,575,000					
22-Pavement Restoration Projects	2,600,000	100,000	500,000	500,000	500,000	500,000	500,000				
23-Gravity Belt Thickener #3	2,000,000	2,000,000									
24-SSB Mixer Replacements	1,300,000	100,000	200,000	200,000	200,000	200,000	200,000	200,000			
25-Bufferlands Historical Improvements	1,300,000	1,300,000									
26-Pump Station VFD Replacements	1,280,000	440,000	240,000	180,000	180,000	180,000	60,000				
27-MSG Compressor Improvements	1,200,000		200,000	500,000	500,000						
28-Sump 2/2A Replacement Agreement	1,163,212	581,606	581,606								
29-Service Air System Split	750,000	750,000									
30-Influent Junction Structure Rehab	650,000	650,000									
31-SRWTP Landscape Conversion	460,000	460,000									
32-Water Storage Tank Interior Recoat	455,000	455,000									
33-Bar Screen Room Crane Replacement	450,000	450,000									
34-Gas Mgmt. Valve Replacement	400,000		200,000	200,000							
35-Bio-Assay Lab Renovation	310,000	310,000									
36-Utility Air Compressor Replacement	140,000	140,000									
Totals	1,348,321,011	261,060,036	352,417,513	226,541,131	192,899,640	137,584,132	77,364,559	42,404,000	31,925,000	17,165,000	8,960,000

Forecast Sensitivity Analysis

In prior updates, we compared various customer growth assumptions for impacts on Regional San financial conditions and monthly service rates. In these updates we found that customer growth rates of about 1% annually would delay the need for rate increases by one or two years. If the growth rate was less than forecast for two years due to recession rate increase would need to be accelerated by one or two years to maintain financial health targets.

Since rates are new forecasted to remain steady for many years, this year we decided to measure the impact of an operating cost increase of 10%. The likelihood of this scenario may be remote, but it is possible due to regulatory changes, legal settlements, or other unforeseen events. For this analysis, we assume that operating costs increase by 10% in fiscal year 24-25 and becomes part of the base for projecting cost growth in the remaining years of the forecast.

Table 6 below summarizes the results from the baseline forecast from Tables 3 and 4 above. Table 7, on the next page, shows the same metrics that could result if Regional San experienced a 10% increase in operating costs beginning in fiscal year 2024-25.

Table 6: Baseline 0.4% Growth Metrics Summary

Fiscal Year	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29
ESD Growth Rate	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Service Rate Revenue	\$283m	\$285m	\$286m	\$287m	\$288m	\$289m	\$290m	\$291m	\$292m	\$293m
Impact Fees	\$23m	\$24m	\$24m	\$25m	\$25m	\$26m	\$27m	\$27m	\$28m	\$29m
Net Operating Costs	\$138m	\$148m	\$151m	\$156m	\$166m	\$170m	\$175m	\$180m	\$185m	\$190m
Total Debt Coverage	1.94x	1.82x	1.52x	1.58x	1.48x	1.59x	1.46x	1.53x	1.52x	1.52x
Monthly Rate/ESD	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37
Unreserved Cash Balance	\$327m	\$365m	\$288m	\$261m	\$136m	\$92m	\$98m	\$119m	\$153m	\$194m
Potential Early Debt Repayment			77.2m	\$60m	\$112.8m	\$50m				

Table 7: Growth Metrics Summary with 10% Cost Increase in 2024-25

Fiscal Year	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29
ESD Growth Rate	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Service Rate Revenue	\$283m	\$285m	\$286m	\$287m	\$288m	\$289m	\$290m	\$291m	\$292m	\$293m
Impact Fees	\$23m	\$24m	\$24m	\$25m	\$25m	\$26m	\$27m	\$27m	\$28m	\$29m
Net Operating Costs	\$138m	\$148m	\$151m	\$156m	\$166m	\$187m	\$193m	\$198m	\$203m	\$209m
Total Debt Coverage	1.94x	1.82x	1.52x	1.58x	1.48x	1.43x	1.30x	1.37x	1.35x	1.34x
Monthly Rate/ESD	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37	\$37
Unreserved Cash Balance	\$327m	\$365m	\$288m	\$261m	\$136m	\$70m	\$59m	\$61m	\$77m	\$99m
Potential Early Debt Repayment			77.2m	\$60m	\$112.8m	\$50m				

This table shows that a 10% increase in operating cost in fiscal year 2024-25, would result in lower debt coverage ratios and lower unreserved cash balances, but targets could still be met and monthly service rates would not need to increase. In addition, the early debt retirement plan would still be feasible. If cost increases were greater and occurred earlier in the forecast period then rates may need to be increased and/or the debt retirement plan might need to be scaled back.



Debt Management Plan

Debt Policies and Goals

The primary objectives of the debt management plan are to minimize financial risk, minimize debt service costs, maintain or improve credit ratings, and reduce the complexity and administrative cost associated with maintaining the portfolio. These policies and goals are designed to help the District maintain a sound and sustainable financial position.

Regional San has two main policy documents covering debt issuance, management, and administration. They are the debt policy and the master derivative policy. Key provisions of the debt management plan include:

- Debt will only be issued for projects included in the Board approved Capital Funding Projection. No activities that are operational in nature will be funded with debt.
- For major new capital projects, the District will target financing 75% or less, of the total costs with debt proceeds. The remaining 25%, or more, will be financed with cash from reserves and/or on-going revenues. Due to the low cost of financing for the EchoWater project the District plans to finance about 90% of EchoWater project capital costs. A portion of older higher cost debt may be retired early to offset the higher financing percentage for EchoWater to achieve an overall lower cost of debt for the District's portfolio. For capital projects that replace existing assets the District will aim to finance 100% with cash in the ten-year planning horizon.
- Assets financed by a debt issue will have an average useful life at least equal to the last maturity of a proposed debt issue.
- Outstanding debt issues should be fully amortized in 40 years or less.
- No more than 20% of outstanding debt, or \$200,000,000, whichever is less, can be in a variable rate mode without a hedge or cap to mitigate interest-rate risk. Any variable rate debt above this limit must be hedged with derivatives (swaps) to synthetic fixed rates, or capped with interest rate caps.
- The total notional amount per swap counterparty is limited to \$350 million or 25% of Regional San total outstanding bonds, whichever is greater.
- Excess revenues from higher than projected growth and operating surpluses will be dedicated to the early retirement of debt.

Existing Debt

Regional San has approximately \$1.21 billion of bond debt outstanding as of June 2019. Approximately 46% of this debt is fixed rate, and 54% is in a variable rate mode. About 85% of the variable rate debt is hedged by derivatives (interest rate swaps) to create synthetic fixed rate debt. Senior lien debt totals \$914 million, or 75%, while the remaining subordinate debt totals \$300 million, or 25%. All of the fixed rate debt and the Series 2007B variable rate bonds are senior lien. The following two tables show the District's current outstanding bond debt distinguished as either fixed or variable:

<u>Series</u>	<u>Updated Termination /Call Feature*</u>	<u>6-30-19 Balance Outstanding</u>	<u>(19-20 Estimate) Current Annual Interest Costs</u>	<u>Average Interest Rate **</u>	<u>Final Maturity*</u>
2001	None	19,605,000	908,325	5.5%	12-1-2021
2007A	None	59,390,000	2,838,019	5.25%	12-1-2023
2011	12-1-21 at par	77,180,000	3,840,650	5.0%	12-1-2027
2014A	12-1-24 at par	355,350,000	17,474,900	4.9%	12-1-2044
2014B	None	48,635,000	1,220,413	2.51%	12-1-2023
Total Fixed Rate Debt		560,160,000	26,282,307	4.69%	

* Call feature and final maturity relate to remaining outstanding bonds, which may differ from original issue.
 ** Average interest rates represent average coupon rates on outstanding bonds. Total average rate of 4.69% is calculated based on the 2019-20 interest as it relates to the bonds outstanding on 12-31-18.

<u>Series</u>	<u>Updated Termination/Call Feature</u>	<u>6-30-19 Balance Outstanding</u>	<u>(19-20 Estimate) Current Annual Interest Costs</u>	<u>Average Interest Rate</u>	<u>Final Maturity</u>	<u>Related Swap Rate</u>	<u>Swap Termination Date</u>
2000C	any business day at par	100,000,000	4,190,000	4.19%	12-1-2030	3.740%	12-1-2030
2007B	6-1-2017 at par	353,450,000	14,675,244	4.15%	12-1-2035	4.152%	12-1-2035
2013B(2008A)	Bank owned to 5-22-22	50,000,000	2,093,000	4.19%	12-1-2036	3.750%	12-1-2036
2013C(2008B)	Bank owned to 4-4-22	50,000,000	1,089,300	2.18%	12-1-2037		12-1-2017
2012A(2008C)	Bank owned to 7-2-21	50,000,000	2,093,000	4.19%	12-1-2038	3.750%	12-1-2036
2013D(2008D)	Bank owned to 4-4-22	50,000,000	1,089,300	2.18%	12-1-2039		12-1-2017
Total Variable Rate Debt		653,450,000	25,229,844	3.86%			

In addition to the bond debt, the District has long-term capital leases and interagency debt of about \$8.5 million as of June 30, 2019. Regional San also has Clean Water State Revolving Fund Loans outstanding of approximately \$617 million, and total loan commitments of \$1.392 billion as of June 30, 2019, which are detailed on pages 33-34.

Swaps

The District uses derivatives (swaps) to mitigate the interest rate risk associated with the variable-rate portion of the debt portfolio. Swaps effectively convert most of the variable-rate debt into synthetic fixed rates designed to provide an overall lower cost of financing than fixed-rate debt at original issuance. The following swaps are outstanding as of June 28, 2019:

Table 10

Related Bonds	Amount (\$)	Type	Final Maturity	Counterparty
Series 2000C	100,000,000	65% 1 month LIBOR /3.74% fixed (variable to fixed)	12-1-2030	JP Morgan
Series 2007B	353,450,000	67% 3 month LIBOR+53 bps /4.152% fixed (variable to fixed)	12-1-2035	Bank of America
Series 2013B (formerly 2008A)	50,000,000	63.61% 5 year CMS /3.75% fixed (variable to fixed)	12-1-2036	BNP Paribas
Series 2012A (formerly 2008C)	50,000,000	63.61% 5 year CMS /3.75% fixed (variable to fixed)	12-1-2036	BNP Paribas
Total	553,450,000			

The Series 2013C (\$50 million) and Series 2013D&A (\$100 million) swaps expired on December 1, 2017. The \$50 million 2013A bonds were paid off in 2016, but the other two bonds related to these expired swaps (2013C&D totaling \$100 million) are not scheduled to mature before 2036. Therefore, \$100 million of Regional San’s outstanding variable rate debt is no longer hedged by swaps. This is within the limits of the District’s debt policy. These variable rate bonds are indirectly hedged by the District’s own cash balances, which are invested at similar short-term interest rates.



Strategies for Existing Bond Issues and Swaps

Series 2000C – This \$100 million issue is subordinate variable rate debt converted to a synthetic fixed rate by an interest rate swap. These bonds, along with the Series 2000A&B bonds, were issued in 2000 to finance a portion of the District’s interceptor system, and to expand the lab and land disposal sites at the treatment plant in Elk Grove. Costs for this debt include the 3.74% paid to the swap counterparty, JPMorgan, 0.375% paid to Bank of America for Letter of Credit (LOC) fees, and 0.075% paid to Merrill Lynch for remarketing. Thus, the current cost of servicing this debt is approximately 4.19% per year. The final maturity on the debt and the related swap is December 1, 2030. The LOC with Bank of America was renewed in February 2015 reducing the annual cost by \$125,000. In January of 2018, this LOC was renewed again with the same bank at similar terms for another three years. As of June 28, 2019, the mark-to-market on the swap was negative \$23.3 million. This means the District would have to pay an estimated \$23.3 to the counterparty bank to terminate the swap now. In the 2015 LTFP, these bonds were identified as a candidate for early retirement based on the assumption that interest rates would rise and the swap termination cost would decline. In the past few years, the swap termination costs have not declined because interest rate continue to trend lower; therefore, the early termination of this debt has been moved to fiscal year 2022-23.

Series 2001 – The outstanding par amount of these fixed-rate senior lien revenue bonds is \$25,445,000 with an average interest rate of 5.5%. These bonds were originally issued in 2001 at a total par amount of \$124,010,000 to advance refund the Series 2000A bonds for savings. A portion of these bonds was subsequently refunded in 2011, again for ongoing debt service savings. The remaining Series 2001 bonds mature on December 1, 2021 and are not callable; therefore, no change is contemplated for this issue prior to its maturity.

Series 2007A – These fixed rate senior lien revenue bonds have an outstanding par of \$59,390,000 and an effective interest cost of 4.9%. The Series 2007A&B bonds were issued in 2007 to advance refund and lower the cost of the Series 2004A bonds. The proceeds of the Series 2004A bonds were used to build various sanitation system infrastructure, including the District’s interceptor system. The 2007A bonds have a final maturity of December 1, 2023, and are not callable. The early debt retirement plan is currently targeting the 2023 maturity of this debt issue for defeasance (because the debt is not callable) in fiscal year 2022-23. This would provide debt service savings in fiscal year 2023-24, when the first loan payment for the Tertiary Treatment Facility portion of the EchoWater Project financing becomes due.

Series 2007B – This series has an outstanding par value of \$353,450,000. It is a senior-lien indexed-rate (variable-rate) issue that is perfectly matched with a swap using the same index (67% of 3 month LIBOR + 53 basis points) versus a fixed-rate of 4.152%. There are no LOC or remarketing fees with this series. Therefore, the effective cost of this debt is synthetically fixed at 4.152%. Investors do not have any rights to “put” these bonds back to the District prior to maturity as they do on the District’s other variable rate debt. The final maturity on the bonds and the related swap is December 1, 2035. As of June 28, 2019, the termination cost of the swap was about \$90 million. The early debt retirement plan calls for some earlier maturities of

this issue to be retired early and the later maturities to be restructured to provide lower level debt service in fiscal years 2024-25 through 2035-36. The 2007B bonds are strategically important for Regional San. They are the District's second largest bond issue with significant principal amortizations occurring in fiscal years 2024-25 through 2035-36, with almost \$250 million in principal amortization in the last five years of that timeframe. They are the largest variable rate debt of Regional San and could be significantly affected by the transition away from LIBOR, anticipated to occur at the end of 2021.

Series 2008 (now 2012A and 2013A-D) – These bonds were variable rate subordinate lien bonds issued in five tranches, one for \$51.305 million and four others for \$50 million each, for a total par of \$251,305,000. The Series 2008 bonds were issued in 2008 to refund all of the \$250 million Series 2004B auction rate bonds that had to be replaced due to the collapse of that segment of the market in 2008. The Series 2004B bonds were issued to finance a portion of the District's interceptor system. The Series 2008 bonds were all refunded in 2012 and 2013 by variable rate bonds placed directly with three commercial banks.

- **Series 2013B (formerly 2008A)** – The Series 2008A bonds were refunded by the Series 2013B bonds that were directly purchased by Wells Fargo Bank (WFB) for three years to June 1, 2016, and have subsequently been extended twice to May 22, 2022. This \$50 million issue is a subordinate lien variable rate debt converted to a synthetic fixed rate by a swap. Cost for this debt include the 3.75% paid to the swap counterparty, BNP Paribas, and the 0.42% spread paid to WFB, for a total effective cost of 4.17%. As of June 28, 2019, the termination cost of the swap was about \$16.6 million making any change to the swap uneconomical at this time. No changes are planned for this issue until the current amended direct purchase agreement with WFB expires in 2022.
- **Series 2013C (formerly 2008B)** – The Series 2008B bonds were refunded by the 2013C bonds that were directly purchased by Bank of America for three years to November 14, 2016, and now extended to April 4, 2022. The final maturity on this \$50 million subordinate lien debt is December 1, 2037. The swap that hedged this variable rate debt cost the District 2.919%, but this swap expired on December 1, 2017, therefore the district no longer incurs this cost. Regional San pays Bank of America a 0.45% spread over the index rate (variable rate) on the bonds. The total effective interest cost for this debt is currently about 2%, with an assumed long-term rate of 2.92% (which was the associated swap rate before it expired). Regional San plans to leave this variable rate debt in place without a hedging swap. The District will use its own cash to provide the hedge because the unreserved cash balance is large enough and earns a comparable short-term variable rate (if interest costs rise for this debt the District's interest earnings on cash balances will also rise, approximately offsetting this cost). At this time, no changes are contemplated for this issue in the near future.
- **Series 2012A (formerly 2008C)** – The 2008C bonds were refunded by the 2012A bonds that were purchased directly by WFB for three years to August 1, 2015. In May of 2015, WFB extended this direct purchase for three more years to July 12, 2018 and reduced the cost spread from 0.60% to 0.45% over the index rate for these bonds. The index rate

is 70% of 1-month LIBOR. This saved Regional San \$75,000 per year over those three years. The bank has agreed to extend this agreement for another three years to July 2021 with similar terms. This \$50 million issue is a subordinate lien variable rate debt with a final maturity date of December 1, 2038. This series also has a hedging swap, with BNP Paribas as the counterparty, which costs the District a fixed rate of 3.75%. As of June 28, 2019, the swap had a termination cost of about \$16.6. The total current effective cost of this debt is approximately 4.20%. The related swap has a maturity date of December 1, 2036. At this time, no changes are contemplated for this issue in the near future.

- **Series 2013D (formerly Series 2008D)** – The Series 2008D bonds were refunded by the 2013D bonds that were directly purchased by Bank of America for three years to November 14, 2016, and now extended until April 4, 2022. The final maturity on this \$50 million subordinate lien debt is December 1, 2039. The swap that hedged this variable rate debt cost the District 2.919%, but this swap expired on December 1, 2017, therefore the district no longer incurs this cost. Regional San pays Bank of America a 0.45% spread over the index rate (variable rate) on the bonds. The total effective interest cost for this debt is currently about 2%, with an assumed long-term cost of 2.92%. Regional San plans to leave this variable rate debt in place without a hedging swap. The District will use its own cash to provide the hedge as it does with the 2013B series. At this time, no changes are contemplated for this issue in the near future.

Series 2011 – These bonds were issued in 2011 to refund a portion of the Series 2001 bonds for savings. The refunding produced \$14.4 million in total cash savings and produces average annual debt service savings of \$847,400 for 17 years. These fixed-rate senior-lien revenue-refunding bonds have an outstanding par of \$77,180,000, an average fixed rate of 5% with a final maturity of December 1, 2027. These bonds are callable on December 1, 2021. These bonds are included in the early debt retirement plan for fiscal year 2021-22 at the call date. This early retirement would provide debt service savings from fiscal year 2022-23 through 2026-27.

Series 2014A – This debt series was issued in July 2014 to finance \$150 million of the EchoWater Project costs and refund most of the Series 2006 Bonds for savings. The refunding produced about \$21 million in net present value savings and average annual cost savings of approximately \$1.5 million for 20 years. These fixed-rate senior-lien bonds have an outstanding par of \$355,350,000, an average fixed rate of 4.9%, a final maturity of December 1, 2044, and a par call date of December 1, 2024. The early debt retirement plan calls for the 2025 through 2029 maturities of this issue to be paid off early in fiscal year 2024-25 on the call date. The forecast includes \$50 million cash payment that can be used for this transaction.

Series 2014B – In November 2014, Regional San issued this debt to refund all of the Series 2005 outstanding bonds with the taxable Series 2014B Bonds for cash flow savings of \$4.33 million and to allow for the liquidation of a portion of the Series 1993 Escrow to generate additional savings of \$3.9 million. These fixed-rate senior-lien bonds have an outstanding par of \$48,635,000, an average fixed rate of 2.43%, and a final maturity of December 1, 2023. Since these bonds are not callable, no change is planned for this issue in the near future.

Capital Lease – The District has a long-term capital lease with Synagro Inc. that finances the bio-solids recycling facility at the treatment plant in Elk Grove. The original agreement required Regional San to make an annual capital payment of \$1.7 million through the year 2024. This payment represented debt service on long-term debt with a beginning principal amount of \$20 million and an interest rate of 5.71%. In 2014, at the District’s request, Synagro refinanced their bonds associated with this lease and lowered the District’s capital payment to approximately \$1.5 million per year. This lowered the interest rate to 4% and will save the District about \$2 million over the remaining 10-year life of the lease. The principal balance of this lease was \$7,391,076, as of June 30, 2019.

Sump 2A Loan from City of Sacramento – Pursuant to a 1999 agreement, in 2002 the City of Sacramento constructed Sump 2A for the District to convey sewage from the City of Sacramento into the District’s interceptor system. The District agreed to reimburse the City for the financing costs related to its share of a State Revolving Fund loan that the City obtained to complete this and other related City projects. Regional San entered into this loan agreement based on an original principal share of \$9,093,532, and an interest rate of 2.6% for twenty years. The District makes annual fixed payments of \$581,606, and the final payment will be made in fiscal year 2020-21. The balance of the loan was \$1,125,920 on June 30, 2019.

Recommended Debt Portfolio Action Items for 2019-20

There are no recommended action items related to the Regional San debt portfolio for fiscal year 2019-20. None of the direct purchase agreements with the banks for the variable rate bonds matures in the next year and the current bond market does not offer any compelling refunding transaction for any of the currently callable debt. None of Regional San’s fixed rate bonds are callable before 2021.

Regional San believes that conserving cash is the most prudent strategy at this time. Cash provides flexibility to address potential debt defeasement, swap terminations, and restructuring. These transactions may be necessary to handle challenges and opportunities that may arise with the transition away from LIBOR, as an index for variable rate debt and swaps. The LIBOR index is expected to end on December 31, 2021. All of Regional San variable rate debt and related swaps are indexed to LIBOR. Developments related to the LIBOR phase out will continue to be monitored, but at this time Regional San does not expect any transition away from LIBOR to have a material adverse impact on financial condition.

EchoWater Project Financing Plan

The District issued \$150 million of new revenue bond debt in July of 2014 to finance a portion of the EchoWater Project planning and design costs to be incurred through 2018. In 2015, the State Water Resources Control Board approved the District's EchoWater Project for up to \$1.576 billion of CWSRF financing. The CWSRF financing will consist of eight separate loan agreements based on EchoWater Project construction components. As of February 2017, the District has entered into all eight loan agreements totaling about \$1.394 billion. Subsequent amendments to these agreements has reduced the total loans to an estimated \$1.392 billion as of June 30, 2019. The first five agreements totaling \$259 million are at a fixed rate of 1.6% for thirty years, and the last three agreements totaling \$1.133 billion are at 1.7% for thirty years.

Each of the loan agreements will provide for level annual payments. The loan agreements will be fully amortized in thirty years beginning one year after completion of construction. Because the District is not required to begin amortization of the CWSRF loans until construction is complete, and capital costs are reimbursed from loan proceeds on a monthly basis, there is no need for short-term financing during construction as would be typical in a bond-financed project of this size and duration.

Table 11 on the next page details the estimated debt issuance and status of the EchoWater Financing as of June 30, 2019.



Table 11
EchoWater Project Financing Plan

	Loan Start Fiscal Year	Loan / Bond Amount	Proceeds used as of 6-30-19	Annual Debt Service	Impact on Monthly Rate/ESD
Series 2014A Bonds Planning, Design, and Administration	14-15	\$150,000,000	\$150,000,000	\$6,729,600	\$1.10
CWSRF Loan 1 – Site Preparation (Final)	17-18	\$41,828,976	\$41,828,976	\$1,773,695	\$0.29
CWSRF Loan 2 – Flow Equalization	19-20	\$139,557,612	\$124,741,016	\$5,960,321	\$0.97
CWSRF Loan 3 – Main Electric Substation Expansion (Final)	17-18	\$2,868,527	\$2,868,527	\$121,051	\$0.02
CWSRF Loan 4 – Disinfection Chemical Storage (Final)	18-19	\$21,468,655	\$21,468,655	\$919,145	\$0.15
CWSRF Loan 5 – Nitrifying Side Stream Treatment	19-20	\$53,490,845	\$50,863,264	\$2,288,696	\$0.38
CWSRF Loan 6 – Biological Nutrient Removal Facility	21-22	\$533,142,603	\$319,829,769	\$22,834,105	\$3.71
CWSRF Loan 7 – Return Activated Sludge Pumping Station	19-20	\$35,696,952	\$27,375,956	\$1,528,874	\$0.25
CWSRF Loan 8 – Tertiary Treatment Facility	23-24	\$564,657,506	\$27,911,581	\$24,183,799	\$3.92
Totals		\$1,542,711,676	\$766,887,744	\$66,339,286	\$10.79

Early Debt Retirement Plan

Due to the prudent early rate increases implemented by the Board of Directors since 2011, and the CWSRF loan financing for the EchoWater Project, the District's unreserved cash balances are growing. Cash balance growth is expected to stop by 2024 when all of the repayments commence on the CWSRF loans. Regional San's accumulated unreserved cash can be used to retire a portion of the existing debt that is higher cost and/or higher risk. Regional San is using less pay-go financing for the EchoWater Project than the debt policy calls for because the low cost CWSRF financing was approved for most of the project's cost. Paying off some of the outstanding bond debt can mitigate the effect of the higher financing percentage for EchoWater and reduce the level and cost of all debt that the District will have at the end of the project compared with previous financing plans. By paying off some of the outstanding bond debt, and restructuring the remaining bond debt Regional San may be able to avoid rate increases for several years after the EchoWater project is completed and operational.

The following debt issues have already been retired early:

- **Series 2013A** – This \$50 million variable rate debt that was scheduled to mature in 2041 was paid off in May of 2015. This eliminated a little over \$1.7 million per year in debt service costs through fiscal year 2039-40 as well as a principal and interest payment of about \$51 million in fiscal year 2040-41.
- **Series 2006** – This \$21.1 million fixed rate debt that was scheduled to mature in 2037 was paid off in July of 2018. This eliminated a little over \$1 million per year in interest payments through fiscal year 2035-36 as well as a principal and interest payment of about \$22 million in fiscal year 2036-37.

Paying off these debts early has created valleys in the Regional San annual debt service profile. These valleys provide opportunities to restructure the principal repayment schedule of other debt to create lower overall level debt service. This can help keep monthly sewer service rates from rising in the future. The forecast for the next ten years includes \$300 million in cash that can be used to pay off debt early and restructure remaining bond debt. The debt issues which are being considered for early retirement or restructuring in the future are as follows:

- **Series 2011** – This \$77.18 million fixed rate debt can be called in 2021 at par. Paying this debt series off early, on or after the call date, can reduce principal payments in fiscal year 2021-22 through 2027-28 by about \$96.5 million, as well as eliminating about \$19.3 million in interest cost during those years.
- **Series 2007A** – The forecast makes \$60 million in cash available in fiscal year 2022-23, a portion of which can be used to defease the last maturity of this issue totaling approximately \$13.5 million one year early. This would provide annual debt service relief in fiscal year 2023-24, when Regional San begins making \$24 million per year loan repayments on the final EchoWater loan component. If this component of the

EchoWater Project has its formal closing delayed this defeasement may become unnecessary.

- **Series 2007B** – The portion of the \$60 million in cash allocated in the forecast for early debt repayment in fiscal year 2022-23 that is not used to defease a portion of the 2007A bonds can be used to pay off a portion of this series. The forecast relies on the first principal payment of this series totaling \$13,785,000 to be paid off early. The remaining \$32+ million in cash remaining can be used in a restructuring transaction to payoff other maturities of this series to provide additional debt service saving in fiscal years 2025-26 through 2036-37. The forecast does not include any debt service cost savings from the restructuring, other than the first principal payment noted above, because the amount of savings is unknown at this time.

Since the Series 2007B is LIBOR-based variable rate debt with a hedging swap it may be significantly impacted by the upcoming transition away from LIBOR discussed earlier on pages 30-31. This may create opportunities to reduce debt service costs and eliminate variable rate exposure. Over the next two years, Regional San should preserve cash reserves and continue to monitor markets looking for restructuring transactions and strategies to maximize long-term benefit to ratepayers. Any restructuring of the 2007B series needs to be coordinated with restructuring of the 2014A series since many of their principal maturities overlap in fiscal years 2024-25 through 2035-36.

- **Series 2000C** – This \$100 million variable rate debt matures in 2030, and is included in the projection for early retirement in fiscal year 2023-24. This series could be retired early with an estimated cash payment of \$112.8 million assuming \$12.8 million for the termination cost of the related swap. This transaction could reduce annual debt service by about \$3.74 million annually from fiscal year 2023-24 through 2026-27, and between \$24 and \$28 million per year from fiscal year 2027-28 through 2030-31.
- **Series 2014A** – These fixed rate bonds are callable in 2024 and the forecast allocates \$50 million of cash in fiscal year 2024-25 to be used to retire the 2025 through 2029 maturities of this issue totaling \$63.14 million. A refunding transaction can be done at this time to restructure other maturities of this issue to provide lower debt service in fiscal years 2030-31 through 2035-36. Any restructuring of the 2014A series needs to be coordinated with restructuring of the 2007B series since many of their principal maturities overlap in fiscal years 2024-25 through 2035-36.

Portions of this debt retirement plan may only become viable with the passage of time and favorable market conditions. The specific debt issues and timing of debt pay-off, defeasance, and restructuring transactions will change and evolve over the next few years.

Investment Management

Regional San currently has about \$439 million in cash and invested reserve balances as of June 30, 2019. Interest income earned on these balances is non-rate/fee income that can be used to support incentive and assistance programs. Interest income can also supplement rate and fee income to cover operating and capital costs, and offset debt service costs. The District's cash is deposited in the Sacramento County Treasury and is part of the Sacramento County Pooled Investment Fund (Pool). Annually the Regional San Board of Directors approves an investment policy. That policy mirrors the investment policy approved by the County Board of Supervisors for the Pool.

Regional San earned 2.48% on its reserve balances for the fiscal year ended June 30, 2019. This is the highest rate earned by the Pool over the past ten years, but rates are beginning to trend downward again. State law and the County Investment Policy limit the Pool to investments in securities with maturities of five years or less. Due to its need to preserve invested principal and provide liquidity for all participants in the Pool, it has a weighted average maturity of less than one year. As of June 2019, the weighted average maturity of the Pool was 320 days, which reflects the Pool's need for liquidity. Because the District's cash flow is relatively constant throughout the year, the need for liquidity is less important for the District than for the Pool as a whole. If Regional San invested in securities with an average maturity longer than the Pool, it could potentially earn higher interest income to help achieve its strategic objectives.

Regional San will continue to explore alternatives for managing cash reserves to earn higher interest income than can be achieved from the Pool.