

Operating and Capital Budget

Fiscal Year 2018/19



Napa Sanitation District
Napa, California

NapaSan

Budget Acknowledgements

Board of Directors

Jill Techel, Chair
Ryan Gregory, Vice-Chair
Peter Mott, Director
David Graves, Director
Mary Luros, Director
Doris Gentry, Alternate Director
Alfredo Pedroza, Alternate Director

Executive Officer

Tim Healy, General Manager

Management Team

Operations Services

James Keller, Operations Services Director
Nick Becker, Collection System Manager
Dan Fritz, Treatment Plant Operations Supervisor
Mark Egan, Treatment Plant Maintenance Supervisor
David Martin, Reclamation Systems Manager

Technical Services

Andrew Damron, Technical Services Director / District Engineer
Matt Lemmon, Capital Program Manager
Chris Francis, Regulatory Compliance Manager

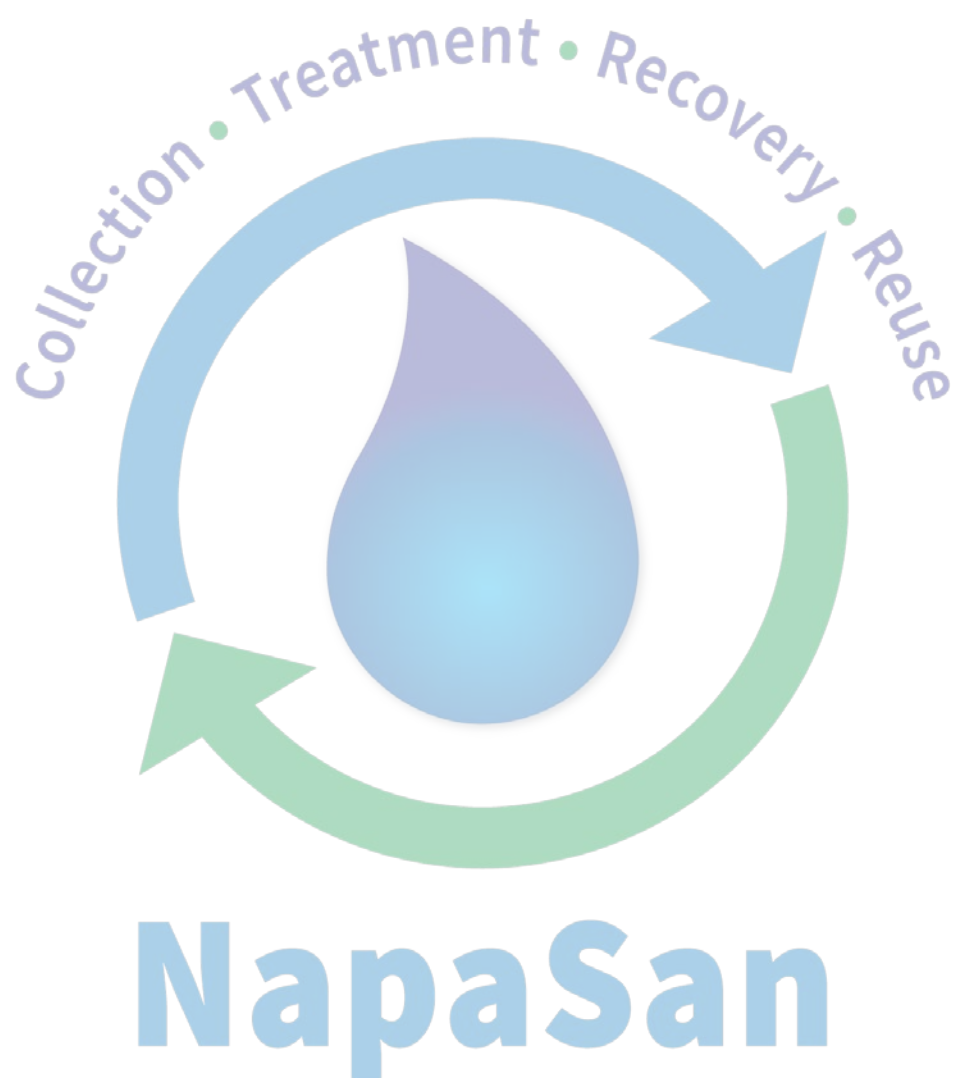
Administrative Services

Jeff Tucker, Administrative Services Director / Chief Financial Officer
Cheryl Schuh, Human Resources Officer / Clerk of the Board
Cyndi Bolden, Senior Accountant

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DATE: June 6, 2018

TO: Honorable Board of Directors and
Customers served by the Napa Sanitation District

FROM: Tim Healy, General Manager
Jeff Tucker, Director of Administrative Services/CFO

SUBJECT: FY 2018/19 Operating and Capital Budget

On behalf of the entire Executive and Management Team, we are pleased to present to you the Proposed FY 2018/19 Napa Sanitation District Operating and Capital Budget. This Budget is the financial plan for the coming year and serves as a source of information about NapaSan and its programs.

Local Economic Condition

Napa County and the City of Napa have seen solid economic growth recently, with no indication that the economy will slow in the short term. The unemployment rate in Napa County was at 3.5% in February 2018, lower than the 4.4% a year ago and 4.8% from two years ago.¹ This compares to the state average of 4.3%.²

Median household incomes increased to \$71,087, a 4.5% increase from prior year.³ About 14.7% of households had an income of under \$25,000, compared with 15.8% in the prior year.³ In the City of Napa, approximately 5.8% of the city population is at or below the poverty line, compared to 11.8% statewide.³ These numbers indicate that the local economy is strong, with employment and household incomes growing.

In FY 2017/18, activity in planning referrals and the review of development plans for building permits remains strong. Several significant projects have been identified through development review activities that are anticipated to be constructed within the next two-to-three years. These projects will have an impact on NapaSan, both in the receipt of capacity charges as well as growing the base of sewer service charges. These projects include new hotels, single and multi-family housing developments, new and expanded restaurants, and other developments.

The FY 2018/19 Napa Sanitation District Operating and Capital Budget was developed with recognition of the strong local economy, incorporating known development projects, but not assuming rapid growth in any specific areas of the economy.

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¹ US Bureau of Labor Statistics - www.bls.gov/eag/eag.ca_napa_msa.htm

² US Bureau of Labor Statistics - www.bls.gov/regions/west/california.htm

³ U. S. Census Bureau's 2016 American Community Survey – 2016 compared to 2015.

Budget Priorities and Direction

The proposed budget represents a focused effort to increase the service levels provided by NapaSan. There are no significant changes in the operating budget, but the 10-year capital program shows a continuation of the increased investment in sewer rehabilitation and inflow & infiltration projects begun in FY 2016/17. The budget also allocates resources toward activities that implement the goals and objectives established by the Board of Directors in its Strategic Plan, including maintaining a focus on quality customer service, preventive maintenance, and investments in staff and infrastructure that improve efficiency, effectiveness and safety.

The proposed budget addresses the following challenges facing NapaSan and the community, with budget priorities and direction developed to address these challenges:

Maintain Assets for Future Generations. The bulk of the community's sewer system was built from the 1950s through 1970s. These assets, along with those already in service prior to the Second World War, are deteriorating and reaching the end of their useful lives. It is NapaSan's responsibility to ensure that these assets are maintained appropriately to keep them in service as long as possible, and to replace those assets when necessary to avoid system failures.

The FY 2018/19 Budget continues efforts to establish an Asset Management program to focus on the maintenance, rehabilitation, and replacement of existing assets – plant, collections and recycled water. The resulting efforts will integrate into the 10-Year Capital Improvement Plan (CIP) and 10-Year Financial Plan, providing much better and more focused attention on the maintenance and longevity of our assets.

NapaSan continues to use predominantly “pay-as-you-go” financing for the renewal and replacement of its sewers and other capital assets. The Collection System portion of the capital plan includes the continuation of annual expenses dedicated to main line sewer rehabilitation and lateral replacements, and identifies specific sewer rehabilitation and replacement projects deemed most critical. During the last sewer service charge rate setting process, NapaSan has increased its commitment to rehabilitate aging sewers, establishing goals that include a minimum replacement of 1.3% of its sewer assets annually through FY 2018/19, with an increased minimum average goal of 2% starting thereafter.

Reduce Inflow & Infiltration (I&I) and Overflows. The sewer overflows experienced by NapaSan in early 2017 were caused by severe rain events, events that are forecast to become more common in the future. The resulting I&I contributed to flows at the treatment plant increasing from around 6 million gallons per day (MGD) to over 50 MGD. This much additional water in the sewer pipes from storm events and high ground water results in increased treatment costs as well as a much higher probability of sewer system overflows. Recent improvements in the sewer system southwest of downtown Napa have demonstrated that focusing sewer rehabilitation on areas of significant I&I can have the positive impacts of both reducing flows

during storms as well as extending the expected useful life of the pipes. The FY 2018/19 capital budget and 10-Year Capital Improvement Plan include several projects, such as annual sewer rehabilitation and annual manhole rehabilitation projects, that are specifically designed to reduce I&I.

Reduce Long-Term Employment-Related Liabilities. CalPERS, the retirement benefit system for NapaSan employees, regularly provides information on the funded status of the program and indications of future costs for both the normal cost and the unfunded actuarial liability. Recent reports show that the costs associated with employee retirement will continue to escalate at rates faster than inflation. The Board identified this issue in its Strategic Plan, and has provided direction to staff to identify sources of revenue or expenditure savings that can be applied toward the outstanding liability to reduce the long-term upward pressure on this payroll cost. The FY 2018/19 budget includes an extra payment to CalPERS of \$135,000, from savings in debt service due to the refinancing of debt in December 2017. Other sources of payment to CalPERS will be identified by staff and brought to the Board for consideration during the fiscal year.

Reduce or Maintain Operating Costs. Over the past several years, the proposed operating budget annual percentage increase has been below the local area Consumer Price Index (CPI), even as service has expanded in recycled water, an energy-intensive operation. This has been possible through improvements in operational efficiencies and by investing in capital projects that have short-term payback from operational savings. The Board has directed staff to continue to find projects with short paybacks and to continue to improve the efficiency of operations. The Capital Improvement Plan includes several projects toward this end, such as the Solar Purchase Buy Out (FY 22/23) and the Fuel Cells (FY 21/22). Other projects incorporate operational savings, such the West Napa Pump Station Replacement, which is estimated to have a 20% energy savings element to the project. The operating budget for FY 18/19 includes a Chemicals Alternative Study that may also provide operational savings and efficiencies to NapaSan.

Fairness in Rate Setting. In March 2016, during the Proposition 218 Rate Setting Hearings, the Board heard the concerns of residents and indicated that it wanted to evaluate the sewer service charge and other fee methodologies, toward an effort to find the best way to collect fees that balanced the need to be both fair and efficient. In the Strategic Plan adopted in May 2017, the Board reiterated its commitment to conduct this evaluation. In the FY 2017/18 budget year, NapaSan has been evaluating different methodologies for calculating and collecting sewer service charges. The proposed FY 2018/19 budget includes the continuation of this project and anticipates efforts to engage the public in developing and considering options and presenting those options to the Board for consideration.

Prepare for the Next Economic Downturn. It is inevitable that the current growth in the local economy will be followed by a period of economic slowdown. NapaSan should plan and make decisions now that will position it for the future. The proposed budget represents both a short-term (one year) plan for spending as well as a 10-year look forward in revenues, operating expenses and capital expenditures and strives to

ensure that the decisions made this year are sustainable into the foreseeable future. When making decisions regarding capital projects, a total cost of ownership approach is employed, whereby the total cost of a decision, including both the initial capital cost and the ongoing operational costs, are considered. Decisions about changing levels of service are also evaluated long-term to determine the ability to sustain those changes. The 10-Year Financial Plan shows that the current year budget, anticipated future operating budgets, Capital Improvement Plan and revenue forecast should still result in NapaSan fully funding its identified reserves.

Financial Overview

NapaSan maintains one fund for accounting and budgeting purposes. Within the fund there are three departments or “subfunds” that track the following: 1) operating revenues and expenses, 2) capacity charge revenue, which is a restricted revenue, and 3) capital project expenses and associated revenues, such as grants.

Operating expenses total \$15,964,450, compared to \$15,735,600 in FY 2017/18, for an increase of 1.45%. Debt service expenses dropped 3.85% to \$4.6 million due to the refinancing of some debt in December 2017. Intrafund transfers from operating to capital are budgeted at \$8.9 million. The proposed capital budget of \$26,385,700 is lower than the \$33,210,500 capital budget in FY 2017/18, as the Browns Valley Trunk project was delayed and the expansion of the MST recycled water pipeline was completed.

The total operating and capital budget for NapaSan (excluding intrafund transfers) of \$46.97 million, is down 13.6% from last year. This decrease is made up from a 4.0% increase in Salaries & Benefits over prior year, 2.5% decrease in Services & Supplies, and 22.0% decrease in Capital.

In the FY 2017/18 budget, it was anticipated that NapaSan would debt finance the Browns Valley Trunk and associated West Napa Pump Station projects. While the project design continues for these projects, NapaSan is working with the State Water Resources Control Board’s Division of Financial Assistance to acquire a State Revolving Fund loan. It is anticipated that the loan will be secured in early 2019. Construction of the project will not begin until the loan has been secured. Once secure, NapaSan can request reimbursement for the design costs incurred to that date.

The operating emergency reserves, debt reserves and cash flow reserves are fully funded, per NapaSan financial policy.

Summary of the FY 2018/19 Budget

Revenues

Sewer Service Charges (SSCs), NapaSan’s largest source of revenues, are collected annually as assessments on the property tax rolls. NapaSan is entering into the third year of a five-year plan established under the Proposition 218 process in March 2016. The FY 2018/19 budget includes an increase in the rate of 6%, from \$638.10

per Equivalent Dwelling Unit to \$676.38. This increase, along with growth from development, will result in about \$2.0 million in additional revenue.

Other revenues were projected conservatively using economic indicators and trend analysis. Economic-based revenues such as capacity charges were projected based on specific evidence of activity and known large projects, and investment earnings rates were assumed to rise slightly through next year. More information on the forecast methods can be found in the “Sources of Funds/Revenues” section of the Budget Summary.

FY 2018/19 revenues from all sources are expected to be \$44,765,400, excluding intrafund transfers. Projected operating revenue, which excludes revenues associated with capital projects (capacity charges, grants, intergovernmental revenue, bond/loan proceeds and sale of capital assets), increased from just over \$28.4 million in FY 2017/18 to almost \$30.7 million this year (8.0% increase). Sewer service charges are anticipated to increase 7.7% due to the increase in rates and recent growth. Recycled water sales revenues are expected to be higher than prior year budget, due to the annual fee increase for CPI and increased water usage from new connections.

Intergovernmental revenues are budgeted at \$375,000, associated with the construction of a recycled water truck fill station in the MST area. Capacity charge revenue is projected higher, at \$4,614,600, compared to \$3,630,000 budgeted in the prior year, based on actual development projects anticipated.

Operating Expenditures

NapaSan operating expenditures are expected to be \$15,964,450 (salary and benefit expenses of \$9,961,350 plus services and supplies expenses of \$6,003,100). This represents an increase in budgeted operating expenditures of \$228,850 or 1.45%.

Salary and benefit expenses are proposed to increase 4.0%. Salaries are set to increase 1.1%, accounting for cost of living increases, step increases and new employees starting lower in the salary range. Changes in benefits and overtime make up the difference. Retirement expenses were to go up approximately 4.8%; however, **an additional \$135,000 has been budgeted to make additional contributions toward the unfunded actuarial liability.** OPEB expenses are up, because of both increases in the actuarial determined contribution and a change in accounting practice (health insurance expenses for current retirees is now in the “Other Post Employment Benefits” account instead of the “Employee Insurance” account). The employee insurance line item is down 27.9%, related to the change in OPEB accounting, while it is assumed that insurance rates will increase next calendar year. Workers compensation insurance expenses are down 20.8% due to a reduction in the experience modification rate.

For FY 2018/19, there is no change in the number FTE proposed.

The budget for services and supplies in total is proposed to decrease 2.5% from the prior year's budget. The budget includes a small increase in chemical expenses (\$7,450, or 0.8%) but \$85,400 less in electricity expenses (down 8.8%), NapaSan's two largest categories.

Included in the budget for services and supplies are the following projects that were either identified in the NapaSan's Strategic Plan for completion this year or are at the request of the Board:

- Continue to study winery waste treatment options
- Study alternative chemicals for use in treatment operations
- Continue to evaluate NapaSan's sewer service and capacity charge methodologies
- Update to NapaSan's Strategic Plan in spring 2019.

Capital Expenditures

NapaSan maintains a 10-Year Capital Improvement Plan (CIP) and includes the acquisition and construction of new facilities and assets as well as the renewal and rehabilitation of existing assets, when that rehabilitation extends the useful life of those assets. NapaSan continues to implement the strategies identified in the Collection System Master Plan, through implementation of stormwater and groundwater inflow & infiltration (I/I) reduction projects. The Wastewater Treatment Plant Master Plan was approved in March 2011, with the capital components included in the capital plan. The CIP focuses increased attention to sewer rehabilitation projects, planning for the replacement of 2% of the sewer system, or about 5.7 miles of pipeline, annually.

The capital expenditure budget for FY 2018/19, the first year of the ten-year plan, is \$26,385,700. One project, the Coombsville Recycled Water Truck Fill Station, is paid for by partners, while the Browns Valley Trunk and the West Napa Pump Station Improvements are debt financed through State Revolving Fund (SRF) loans.

Further details can be found in the Capital Improvement Plan chapter of this budget document.

Debt and Debt Service

NapaSan has four distinct debts for which it pays annual debt service. All of NapaSan's debt has fixed interest rates. Total debt service for FY 2018/19 will be just under \$4.6 million.

It is anticipated that NapaSan will enter into a Clean Water State Revolving Fund (SRF) loan with the State Water Resources Control Board in FY 2018/19 to pay for

the Browns Valley Trunk project and associated West Napa Pump Station Improvements project. The loan is currently anticipated to be a Local Match loan, where NapaSan will request reimbursement for only 83.3% of the loan amount and pay the rest from cash on hand. In exchange, the 30-year loan will be at 0% interest. This equates to a 1.2% “imputed interest” loan. The loan is anticipated to be for \$25 million. Debt service on this loan is anticipated to begin in FY 2021/22, as debt service on this loan does not commence until construction of the project is complete.

Fund Equity and Reserves

The beginning fund equity for FY 2018/19 is estimated to be \$21,116,600. This number assumes that most of the capital budget in FY 2017/18 is spent, or that any underspending is carried forward into FY 2018/19.

As proposed, the ending fund equity for NapaSan is projected to be **\$18,908,900** on June 30, 2019 and is allocated as follows:

\$6,000,000	Operating Reserve – This is at least 15% of NapaSan’s budgeted operating expenditures, excluding transfers.
\$12,500,000	Operating Cash Flow Reserve – This amount is necessary on July 1 to cover NapaSan’s anticipated operating expenses between the start of the fiscal year and December, when NapaSan receives the bulk of its cash receipts from sewer service charges billed on property tax statements.
\$408,900	Available for Use – This is the projected amount of fund equity, including bond proceeds, available to NapaSan for use on capital projects at the end of FY 2018/19. The Ten-Year Financial Forecast anticipates using this fund equity on future capital projects.

Following is a summary table of the revenue, expenditure and intrafund transfer budgets for FY 2018/19, along with information on fund equity and reserves.

Budget Summary

	FY 17/18 <u>Adjusted Budget</u>	FY 18/19 <u>Budget</u>	Percent <u>Change</u>
Beginning Fund Equity	\$22,145,297	\$21,116,600	(4.7%)
Revenue – All funds, excluding transfers			
Sewer Service Charges (incl. delinquencies)	\$26,162,000	28,166,000	7.7%
Capacity Charges	3,630,000	4,614,600	27.1%
Waste Hauler Fees	175,000	180,000	2.9%
Recycled Water Sales	913,000	1,042,000	14.1%
Land Leases	722,000	725,000	0.4%
Intergovernmental / Grants	4,076,000	375,000	(90.8%)
Interest on Invested Funds	174,000	311,000	78.7%
Construction/Building Permit Review Fees	189,100	193,800	2.5%
Bond/Loan Proceeds	10,137,000	9,075,000	(10.5%)
Other Revenues	91,000	83,000	(8.8%)
Total Revenues	\$46,269,100	\$44,765,400	(3.3%)
Expenditures – All funds, excluding transfers			
Salaries & Benefits	\$9,581,300	\$9,961,350	4.0%
Services & Supplies	6,154,300	6,003,100	(2.5%)
Taxes & Other	28,650	29,150	1.7%
Subtotal Operating Expenses	\$15,764,250	\$15,993,600	1.5%
Capital Expenditures	\$33,785,500	\$26,385,700	(22.0%)
Debt Service (incl. debt administration expenses)	4,777,450	4,593,800	(3.9%)
Subtotal Capital Expenses	\$38,562,950	\$30,979,500	(19.7%)
Total Expenditures	\$54,327,200	\$46,973,100	(13.6%)
Ending Fund Equity	\$14,087,197	\$18,908,900	34.2%
Reserves			
Operating Reserve	\$2,314,000	\$6,000,000	159.2%
Debt Reserve	1,990,000	0	(100.0%)
Operating Cash Flow Reserve	10,750,000	12,500,000	16.2%
Total Reserves	\$15,054,000	\$18,500,000	22.8%
Available for Use (Ending Fund Equity minus Reserves)	(\$966,803)	\$408,900	142.3%
	FY 17/18 <u>Adjusted Budget</u>	FY 18/19 <u>Budget</u>	Percent <u>Change</u>
Intrafund Transfers			
Transfer from Operations to Capital Projects	\$8,900,000	\$8,900,000	0.0%
Transfer from Expansion to Capital Projects	3,630,000	7,250,000	99.7%
Total Intrafund Transfers	\$12,530,000	\$16,150,000	28.8%

Ten-Year Budget Projections

NapaSan has increased sewer service charges specifically to double the amount of sewer pipe it rehabilitates, while making significant efforts to keep operating expenses lower to allow for additional investment in infrastructure maintenance.

The cost of employee benefits is expected to rise in future years. Specifically the cost of health and retirement benefits is a major contributor to anticipated increased operating costs over the foreseeable future. The Board has instructed staff to take advantage of salary and other expenditure savings and apply those savings toward retirement liabilities.

The solar project and the stationary storage project have helped to contain and control future electricity costs, with a fuel cell project in FY 21/22 is designed to do the same. Chemical costs will likely rise over the next ten years and require regular monitoring by staff. The costs associated with increased demand for recycled water anticipated for the next few fiscal years will be offset by the additional revenue generation.

The forecast assumes annual increases in sewer service charges for the next three years based on the amounts set during the Proposition 218 process in March 2016, with modest annual increases starting in year four of the forecast. Annual increases in capacity charge rates (by a construction-inflation index) are projected, as are increases in development (particularly hotels), and annual increases for recycled water fees (by CPI). Further detailed information regarding the NapaSan's Ten-Year Financial Plan can be found in the budget document.

Identified Areas of Potential Significant Variability in Forecast

The Ten-Year Financial Forecast includes various assumptions about the rates of increase for revenues and expenditures. There are two assumptions in the forecast that have significant risk or variability associated with them. If these assumptions do not materialize as projected, it will be necessary for NapaSan to reevaluate its operating and capital budgets and make adjustments.

The first major assumption is in the forecast for recycled water usage. As part of the fee setting process in FY 2011/12 to set the recycled water fee for 2016 and beyond, NapaSan assumed that recycled water sales would be 2,400 acre feet. Sales for next year are estimated at approximately 2,123 acre feet. The projected increases for future years assume that Stanly Ranch is developed and takes additional recycled water (150 AF), that the MST and LCWD areas take water as planned, and that the Somky property as part of the development of the Montelcino Resort is completed (300 AF). It is also assumed that if these projects do not take water, that water would be available for other users, such as the Los Carneros Water District. The assumptions seem reasonable given recent and planned conversions to recycled water, but if these use targets are not met, there will be insufficient sales to meet the revenue projections.

The second major assumption is in capacity charge revenues. The current forecast assumes the sale of 599 EDU in capacity charges in FY 2018/19, with additional large developments anticipated in FY 19/20 (855 EDU) and FY 20/21 (545 EDU). If economic development does not proceed by these levels, there will be lower than anticipated revenues to pay for capital projects, and lower than anticipated future sewer service charges to pay for ongoing operations.

Acknowledgments

The General Manager and the staff of the Administrative Services, Technical Services and Operations Services Departments sincerely appreciate the direction offered by the NapaSan's Finance Committee, Long Term Planning Committee and Board of Directors, and the cooperation and assistance of NapaSan staff, in developing a responsible and thoughtful budget for FY 2018/19. Many people throughout the organization have put a great deal of effort and skill into producing this document and the proposed budget.

Finally, as always, we look forward to your comments and suggestions so that we may continue to refine the document and make it as readable and useful as possible to the NapaSan Board, its customers, and the community at large.

Respectfully submitted,



Timothy Healy, P.E.
General Manager



Jeff Tucker
Director of Administrative Services/
Chief Financial Officer

RESOLUTION NO. _____

RESOLUTION OF THE NAPA SANITATION DISTRICT ADOPTING A BUDGET AND CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEAR 2018/19

WHEREAS, the Board of Directors of the Napa Sanitation District (“NapaSan”) is charged with the duty of adopting an annual budget; and,

WHEREAS, the Board of Directors of the NapaSan has studied and considered in detail a Preliminary Operating Budget and Capital Improvement Program for FY 2018/19; and,

WHEREAS, the Final Budget (Operating and Capital Improvement Program Expenditures, Revenues and Reserves) has been submitted to the Board of Directors (copy attached); and,

NOW, THEREFORE BE IT RESOLVED that the Board of Directors, as the NapaSan governing body, has determined that the attached Final Budget, describing:

- Operating Budget Appropriation of \$20,587,400, plus intrafund transfer of \$8,900,000 to support Capital Projects, for a total of \$29,487,400; and,
- Expansion Appropriation of \$7,250,000 in intrafund transfer to support Capital Projects; and,
- Capital Projects Appropriation of \$26,385,700; and,
- Full-Time Equivalent (FTE) Employee authorization of 53 employees, plus 5 Board Directors in accordance with the attached position control roster; and,
- Sewer Service Charge of \$676.38 per EDU, Capacity Charge of \$9,624 per EDU, and other fees as provided;

be hereby adopted as the Final Budget and Sewer Service Charges for FY 2018/19.

I hereby certify that the foregoing Resolution was duly and regularly adopted by the Board of Directors of the Napa Sanitation District, at its regularly scheduled meeting on the 6th day of June, 2018, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Chair, Board of Directors

Secretary, Board of Directors

Fees and Charges

Fee	Unit	Effective Date			
		July 1, 2017	Jan. 1, 2018	July 1, 2018	Jan. 1, 2019
Sewer Service Charges	per EDU	\$638.10		\$676.38	
Capacity Charges	per EDU	\$9,299		\$9,624	
Plan Check Fees					
Residential Subdivision	per subdivision	\$402		\$414	
Residential Lot Review	per lot	\$101		\$104	
Residential Lot without Mains	per lot	\$101		\$104	
Apartment Building	per building	\$803		\$827	
Hotel Building	per building	\$1,204		\$1,240	
Commercial Building	per building	\$402		\$414	
Tental Improvement - Food Service	per tentant unit	\$301		\$310	
Tental Improvement - Non-Food Service	per tentant unit	\$201		\$207	
Mainline Extension - not part of subdivision	per 100 linear feet	\$101		\$104	
Public Easement - not included in recorded map	each	\$101		\$104	
Inspection Fees					
Public Lateral - Residential	per lateral	\$179		\$185	
Private Lateral - New - Residential	per lateral	\$179		\$185	
Private Lateral - R & R - Residential	per lateral	\$179		\$185	
Residentail Clean Out Only	per cleanout	\$90		\$93	
Tenant Improvement w/o outside site improvements	each	\$179		\$185	
Public/Private Lateral-Commercial	per lateral	\$357		\$368	
Grease Interceptor	each	\$179		\$185	
Mainline	per 100 linear feet	\$357		\$368	
Demolition Fee					
Interior Demo Only	per demolition	\$190		\$196	
Public and Private Lateral - failed inspection	per demolition	\$438		\$451	
Public and Private Lateral - passed inspection	per demolition	\$264		\$272	
Annexation Request	per request	\$1,204		\$1,240	
Development Agreement					
Standard Agreement	each	\$301		\$310	
Non-Standard Agreement	each	\$1,202		\$1,238	
Recycled Water					
Peak Period Rates	per 1,000 gallons		\$1.67		Note #1
Monthly Meter Charge	per month (May-Oct only)		\$33.17		Note #1

Note #1: Will increase or decrease by the Consumer Price Index for All Urban Consumers, San Francisco-Oakland-San Jose Metropolitan area (1982-84=100), comparing the December 2018 index to the December 2017 index.

Napa Sanitation District Overview

Mission

It is the mission of the Napa Sanitation District (NapaSan) to collect, treat, beneficially reuse, and dispose of wastewater in an effective and economical manner that respects the environment, maintains the public's health and meets or exceeds all local, state and federal regulations.

History

NapaSan, located in the Napa Valley in Northern California, has been serving the public since it was organized under the California Health and Safety Code in November 1945.



Soscol Water Recycling Facility

NapaSan provides wastewater collection, treatment and disposal services to the residents and businesses in the City of Napa and surrounding unincorporated areas of Napa County. As a special district, the NapaSan is an independent local agency governed by a Board of Directors made up of three elected officials from the City and County and two public appointees.

Until 1998, wastewater was processed at both the Imola Treatment Plant located north of Imola Avenue and west of Soscol Avenue, and the Soscol Water Recycling Facility (SWRF) near Napa County Airport. In 1998, all wastewater treatment activities were shifted to the SWRF. The Imola Avenue treatment facility was demolished in 2002 after completion of the Napa County Flood Control District Project relocating the railroad tracks onto the District's Imola property. NapaSan's Administration, Engineering and Collection System offices were relocated to the SWRF in 2013.

Public Services

There are approximately 36,900 connections within NapaSan's approximately 21 square miles of service area. Through a network of approximately 270 miles of underground sewer mains, assisted by a system of three lift stations, the sewage makes its way to the SWRF for treatment. (Additional demographics are available in Appendix B – Statistics and Economic Data.)

The SWRF is a secondary and tertiary biological physical-chemical treatment facility that treats a mixture of domestic and industrial wastewater. NapaSan wastewater processes include primary treatment, activated sludge facilities, oxidation ponds, clarifiers, sludge digestion and solids de-watering facilities.

The SWRF has a dry weather treatment design capacity of 15.4 million gallons per day (MGD). The wastewater is treated and discharged in various manners, depending on the source of the wastewater and the time of year.

NapaSan's regulating body, the Regional Water Quality Control Board, permits discharge to the Napa River in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. NapaSan provides full secondary treatment and disinfection at its wastewater facility whenever discharging to the Napa River.



Soscol Water Recycling Facility at sunrise

During the summer months, discharge to the Napa River is prohibited and wastewater is either stored in stabilization ponds or treated and beneficially reused for landscape irrigation in industrial parks, golf courses, parks, pasturelands and vineyards. This high quality "Title 22 Unrestricted Use" recycled water is provided to all recycled water users.

The average dry weather flow (May-October) of wastewater into the SWRF was approximately 6.6 MGD, while the average wastewater flow for the entire year was approximately 10.6 MGD in calendar year 2017.

Performance Measurement

NapaSan created and issued its Performance Measurement Report for Calendar Year 2017 in April 2018. The report identifies 63 performance measures that, when taken as a whole, should give the reader a sense of how well the utility is performing and being managed.

The report uses the Effective Utility Management (EUM) framework for presenting the performance information. EUM was developed in 2009 by six major water and wastewater associations and the United States Environmental Protection Agency to help utility managers make practical, systematic changes to achieve excellence in utility performance.

This framework is specific to water and wastewater utilities and provides for the possibility of comparing NapaSan to other wastewater utilities once more providers begin using EUM for measuring and reporting on performance.

The performance measures are organized into EUM's Ten Attributes of Effectively Managed Water Sector Utilities:

1. Product Quality
2. Customer Service
3. Employee and Leadership Development
4. Operational Optimization
5. Financial Viability
6. Infrastructure Stability
7. Operational Resiliency
8. Community Sustainability
9. Water Resource Adequacy
10. Stakeholder Understanding & Support

NapaSan rates “**satisfactory**” in 54 measures (86%). These measures include, among many others, meeting NPDES discharge limits for BOD and total suspended solids, electricity self-generation, no loss time accidents, operational efficiencies, and proactive practices on preventive maintenance.

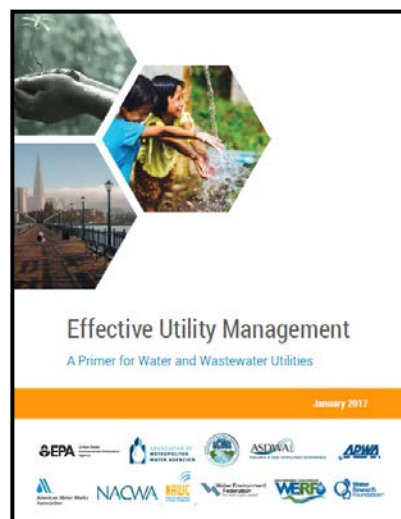
NapaSan rates “**watch**” on five measures (8%). A “watch” designation signifies that NapaSan is in danger of not meeting its goals, that the trend is indeterminate, or that there is insufficient data to make an assessment. Measures in this category include asset inventory, sewer main condition assessment, total recordable incident rate, vehicle accident rate, and insurance claims.

NapaSan rates “**unsatisfactory**” on three measures (5%). “Unsatisfactory” signifies that NapaSan has not met its goals or that the trend is negative. This rating was for the quantity and volume of sanitary sewer overflows and for the experience modification (XMOD) rate.

Several of the performance measures have been identified as “Key Performance Indicators” (KPIs) for determining whether NapaSan is meeting its Strategic Goals. Those KPIs have been identified below in the Strategic Planning Goals and Objectives section.

Most of the performance measures in the Performance Measure Report have also been included in the narratives of the “Expenditure by Department” section of this budget document.

A complete copy of the Performance Measurement Report for Calendar Year 2017 can be found in Appendix E of this budget.



Strategic Planning Goals and Objectives

In April 2017, the Board of Directors updated its Strategic Plan, articulating the long-term goals, objectives and priorities of NapaSan. The following are excerpts from the Strategic Plan.

The Strategic Plan provides detail on these goals and specific objectives, a copy of which can be found in Appendix C of this document. On a quarterly basis, progress on these goals and objectives is reported to the Board of Directors and posted on NapaSan's website.



Mission

The mission of NapaSan is to collect, treat, beneficially reuse and dispose of wastewater in an effective and fiscally responsible manner that respects the environment, maintains the public's health and meets or exceeds all local, state and federal regulations.

Goal 1 - Infrastructure Reliability

The goal is to build, maintain and operate a cost-effective and reliable wastewater treatment system for NapaSan's service area. Systematic replacement of aging infrastructure is priority number one. A long term capital facilities plan is needed, drawing on accurate information about current facility conditions and projects of future service area needs: five, ten or more years from now. NapaSan must ensure that treatment capacity will be in place to address current and projected future needs.

Key Performance Indicators

Indicator	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Target 2018	Target 2019
Renewal & Replacement of Assets	8.8%	10.2%	4.5%	3.8%	2% - 4%	2% - 4%
Sewer Main Renewal & Replacement	1.8%	2.6%	1.1%	2.2%	1.3%	1.3%
Collection System Failures	1	0	1	0	0	0
Treatment Plant Capacity Used	42%	38%	42%	43%	<75%	<75%
Uptime for Cogeneration Engine	96%	98%	79%	81%	> 85%	> 95%

Strategic Objectives:

Completion:

1A:	Strive to replace and rehabilitate at least 2% of sewers annually (2020 target)	Ongoing
1B:	Continue to implement an asset management program	Ongoing
1C:	Design and construct the Browns Valley Road Interceptor	Dec. 2019
1D:	Update the Collection System Master Plan	June 2020
1E:	Study whether to implement a Private Lateral Program	Dec. 2020

Related Department Objectives:

- Rehabilitate 60 public laterals annually (Collection System)
- Work to eliminate higher maintenance sewer mains by replacing or repairing them (Collection System)
- Enhance and organize inventory system to reduce down time (Plant Maintenance)
- Continue design of the Browns Valley Road Sewer Trunk and West Napa Pump Station project (Engineering)
- Continue implementation of a formal asset management plan (Engineering)
- Plan for and complete renewal & replacement capital projects that impact approximately 4% of NapaSan's total assets (Engineering)
- Rehabilitate or replace at least 1.3% of the Collection System sewer mains (Engineering)
- Design and construct I&I sewer rehabilitation projects annually (Capital Improvement Plan)
- Construct the 2018 Treatment Plant Rehabilitation Project (Capital Improvement Plan)

Goal 2: Financial Stability

The goal is to ensure adequate fiscal resources to fulfill NapaSan's mission. The NapaSan Board has a fiduciary responsibility to ensure that adequate financial resources are in place to operate NapaSan and carry out its mission.

Key Performance Indicators

Indicator	Actual FY 13/14	Actual FY 14/15	Actual FY 15/16	Actual FY 16/17	Estimate FY 17/18	Target FY 18/19
Bond Rating	AA-	AA-	AA-	AA	AA	AA
Debt Service Coverage Ratio	276%	226%	284%	344%	381%	400%
Operating Ratio	0.88	0.90	1.02	1.07	1.08	> 1
Sewer Bill Affordability	0.68%	0.66%	0.68%	0.74%	0.84%	< 1%

Strategic Objectives:

Completion:

2A:	Conduct study of sewer service charge and capacity charge methodologies for residential customers	Dec. 2018
2B:	Evaluate long-term liabilities, including pension and OPEB liabilities	Complete
2C:	Conduct comprehensive review of strategies for developing non-rate/non-fee revenues, including land leases	Ongoing

Related Department Objectives:

- Engage with wine industry representatives regarding the study of winery waste treatment options (General Manager's Office)
- Under the direction of the Lands Committee and Board, work to develop options for lease revenue on District-owned property (General Manager's Office)
- Continue a study of NapaSan's sewer service charge and capacity charge methodologies (Administrative Services)
- Review cash flow and emergency reserves for adequacy (Administrative Services)
- Maintain and adjust ten-year plan for fleet sustainment, acquisition, rehabilitation and attrition (Safety, Training and Fleet Maintenance)
- Continue to implement an effective life cycle equipment replacement schedule for better budgetary expense projections (Plant Maintenance)
- Develop and utilize capital program management system to monitor and report progress of active capital projects (Engineering)



Stationary storage batteries used to store energy during the night for use during the day, decreasing energy demand charges

Goal 3: Operational Optimization

The goal is to implement and maintain effective operational practices. The Board wants to operate NapaSan at or above best practices, utilizing proven technology. Customers, ratepayers and internal staff all deserve high quality service.

Key Performance Indicators

Indicator	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Target 2018	Target 2019
Compliance with NPDES Permit	100%	100%	100%	100%	100%	100%
Sanitary Sewer Overflows (Cat. 1) per 100 miles of main	4.81	0.0	1.11	13.64	0.0	0.0
Self-Generated Electricity	32.6%	38.4%	31.5%	40.8%	> 40%	> 45%
Chemical Consumption (gallons hypochlorite per MG treated-summer)	204	211	211	199	< 225	< 225
Plant Planned Maintenance Ratio (Hours)	66%	45.2%	40.5%	61.3%	> 60%	> 60%
Collections Planned Maintenance Ratio (Hours)	87.5%	86.7%	87.1%	88.5%	> 80%	> 80%

Strategic Objectives:

Completion:

3A:	Reengage with winery industry to understand and evaluate options for mutually beneficial alternatives for managing winery waste	Dec. 2018
3B:	Continue to evaluate opportunities for shared services	Ongoing
3C:	Develop Business Continuity Plan as part of disaster mitigation	Dec. 2018
3D:	Evaluate and recommend ways to reduce energy and chemistry consumption in treatment process and collection system (coordinated with Objective 6D)	Complete

Related Department Objectives:

- Continue to respond to the needs of the community in a timely and professional manner within 30 minutes, while trying to reduce the number of emergency service calls (Collection System)
- Continue to maintain efficiency of preventive maintenance operations, cleaning at least 40% of NapaSan sewer mains per year (Collection System)
- Video inspect 10% of the sewer mains in NapaSan's system (Collection System)
- Root foam four miles of sewer main, including related laterals and manholes, to reduce the root intrusion into these facilities (Collection System)
- Continual process optimization of the plant control systems to achieve a reduction in chemical and energy costs (Plant Operations)
- Continue producing an effluent that meets the NPDES permit requirements (Plant Operations)
- Implement the new Environmental Laboratory Accreditation Program (ELAP) certification requirements (Regulatory Compliance)



Sewer repair on Silverado Trail

- Review and update operational data sampling and analysis management for an efficient process control operational strategy (Regulatory Compliance)
- Review and return development plans within 30 days of submittal to NapaSan (Engineering)
- Facilitate additional recycled water conversions in the MST and Los Carneros Water District areas (Water & Biosolids Reclamation)

Goal 4: Employee Development

The goal is to maintain a dynamic and skilled workforce through employee engagement, professional development and opportunities for advancement. The NapaSan Board wants to create a positive and respectful working environment that encourages all employees to do the best job possible for the NapaSan ratepayers.

Key Performance Indicators

Indicator	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Target 2018	Target 2019
Safety Training Completed On-Time	99%	84%	97%	93%	> 90%	> 90%
Employee Survey: "I feel valued by my work unit."	85.7%	na	70.5%	86.8%	> 70%	> 70%
Employee Survey: "I tell others that NapaSan is a great place to work."	73.8%	na	91.0%	77.8%	> 70%	> 70%
Employee Survey: "I will look for work outside NapaSan this next year."	47.6%	na	34.0%	42.1%	< 35%	< 35%
Employee Survey: "Efforts are being made to capture critical institutional knowledge..."	3.56	na	3.45	3.68	> 3.5	> 3.5

Strategic Objectives:

Completion:

4A:	Promote NapaSan as a progressive, professional workplace through engagement and the development and promotion of internships and "in training" programs	Ongoing
4B:	Conduct Employee Survey in Fall 2017	Complete
4C:	Explore a total compensation study	Complete
4D:	Prepare for and begin MOU negotiations	June 2020
4E:	Address succession planning through supervisory/management training and an internal mentorship program	Ongoing

Related Department Objectives:

- Continue to provide direction to all departments, aligning efforts to promote and be consistent with NapaSan's goals and policy directives (General Manager's Office)
- Oversee changes derived from the Fall 2017 Employee Survey (General Manager's Office)
- Provide support to departments through recruitments and internship programs (Administrative Services)
- Continue efforts in succession planning, including training and mentorship programs (Administrative Services)
- Develop a Business Continuity Plan for operations during disasters, and integrate NapaSan in the city and county's emergency response systems (Safety, Training and Fleet Maintenance)
- Gather, store and disseminate asset and work information in an economical way with completeness and accuracy, including sharing with other departments in the District and others as needed (Collection System)
- Continue to develop and implement an analyst educational outreach training program (Regulatory Compliance)



Lab analyst conducting bioassay test

Goal 5: Community Outreach and Communication

The goal is to provide ratepayers with the information they need to understand NapaSan's mission, operations, finances and rate structures. The Board wants to ensure that NapaSan operates in a transparent manner and serves as a resource to all ratepayers of the service area.

Key Performance Indicators

Indicator	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Target 2018	Target 2019
Media Coverage Quantity	31	33	44	21	> 20	> 20
Media Coverage Accuracy	97%	100%	86%	95%	> 85%	> 85%
Customer Satisfaction-Plug Ups (percent "good" or "excellent")	99.5%	99.1%	96.5%	99.1%	> 95%	> 95%
Customer Satisfaction-Cleanouts (percent "good" or "excellent")	100%	98.2%	100%	95.9%	> 95%	> 95%

Strategic Objectives:

Completion:

5A:	Be proactive in communicating with the public, stakeholders and the press for all aspects of NapaSan's activities	Ongoing
5B:	Complete the deliverables identified in the 2016 Communications Plan	June 2019

Related Department Objectives:

- Implement the Communications Plan and meet the identified annual goals (Community Outreach & Pollution Prevention)
- Complete NapaSan's ninth Performance Measurement Report (Administrative Services)
- Respond to requests for information from the general public and other local agencies within three working days of request (Engineering)
- Partner with local agencies for collection of unwanted medications from drop-off sites (Community Outreach & Pollution Prevention)
- Conduct plant tours and make public presentations (Community Outreach & Pollution Prevention)
- Promote and deliver classroom presentations targeting elementary school students (Community Outreach & Pollution Prevention)
- Continue public outreach on proper disposal of fats, oil and grease (FOG) (Community Outreach & Pollution Prevention)
- Develop and disseminate to stakeholders pollution prevention BMPs as necessary (Community Outreach & Pollution Prevention)
- Continue Spanish language outreach for pollution prevention messages (Community Outreach & Pollution Prevention)

Goal 6: Resource Recovery

The goal is to implement policies and technologies to recover resources from wastewater for beneficial reuse. The NapaSan Board wants to recover resources for reuse when economically viable and a market exists for their beneficial reuse. NapaSan must also use the resources available to ensure a reliable energy supply during emergency conditions as well as during normal times.

Key Performance Indicators

Indicator	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Target 2018	Target 2019
Recycled Water Reused on Non-District Property	75%	78%	81%	83%	> 85%	> 85%
Biosolids Beneficially Reused	100%	100%	100%	100%	> 95%	> 95%
Digester Gas Beneficial Reuse	95%	96%	78%	84%	> 80%	> 90%

Strategic Objectives:**Completion:**

6A:	Implement capital projects in partnership with local agencies for the distribution of recycled water	Dec. 2018
6B:	Participate with local partners on long-term opportunities for water reuse	June 2018
6C:	Evaluate current recycled water allocation policy	Complete
6D:	Evaluate energy self-generation with the primary goal of decreasing overall energy costs	Complete
6E:	Improve recycled water quality to increase appeal and acceptability	Ongoing
6F:	Renew or extend the recycled water agreement with City of Napa that permits NapaSan to sell recycled water within the city's water service area	June 2018

Related Department Objectives:

- Represent NapaSan at the North Bay Water Reuse Authority, specifically working to bring federal money to the region for recycled water projects (General Manager's Office)
- Receive fats, oil and grease (FOG) collected from siphon to the receiving station (Plant Operations)
- Optimize production of biogas in digester resulting from FOG receiving program (Plant Operations)
- With the City of Napa, promote the Recycle More Program that provides curbside collection of used cooking oil for use as biofuel (Community Outreach & Pollution Prevention)
- Distribute 2,500 acre feet of recycled water, with 85% sold to customers (Water & Biosolids Reclamation)
- Put 100% of the biosolids applied to NapaSan land to beneficial reuse, through active agricultural practices on the land (growing crops, grazing sheep, etc.) (Water & Biosolids Reclamation)
- Continue planning efforts within the North Bay Water Reuse Project for future development of recycled water programs and EIR/EIS documentation (Capital Improvement Program)
- Complete construction of the Recycled Water Truck Fill Station (Capital Improvement Program)

Financial Policies Summary

NapaSan maintains, and regularly reviews and revises, a comprehensive set of Financial Policies to govern the overall financial management and health of the District.

Policy areas include:

- | | |
|--|-----------------------|
| • Reserves | • Investments |
| • Revenue | • Financial Reporting |
| • Budgeting and Capital Asset Management | • Accounting |
| • Debt Issuance and Management | • Pension and OPEB |

Several of the Financial Policies have direct impact on the construction of the budget:

- **Balanced Budget** – NapaSan maintains a balanced budget and does not use long-term debt to fund short-term or operational expenses.
- **Operating Reserves** – NapaSan maintains an operating reserve at least equal to 15% of budgeted annual operating expenses, excluding transfers.
- **Liquidity** – NapaSan maintains a liquidity reserve to ensure adequate cash is on hand to cover expenses in those months where expenses outpace revenues. The majority of NapaSan's revenues are received in December and in April through property assessments.
- **Revenues** – NapaSan estimates revenues conservatively and does not use one-time or unpredictable revenues to fund ongoing expenses.
- **Maintenance** – NapaSan protects its investment in its capital assets by budgeting for their adequate maintenance as a priority.
- **Debt** – NapaSan will not issue debt unless it can pay the debt service and still meet its other obligations from current revenues.
- **Pension and OPEB** – NapaSan will budget for payments to CalPERS and the OPEB Trust to reduce long-term liabilities.

A complete copy of the Financial Policies can be found in Appendix D of this document.

Compliance with Financial Policies

NapaSan is in full compliance with the Financial Policies, last updated in May 2018, as described above and provided in their entirety in Appendix D.

Specifically, NapaSan has taken the following actions to ensure compliance with the Financial Policies:

- The annual operational expenditures for NapaSan, including debt service, are less than the annual operating revenue forecasted to be received, meeting the requirement for a balanced budget.
- NapaSan has designated an Operating Reserve of at least 15% of budgeted operating revenues and a Cash Flow/Liquidity Reserve of \$12,500,000. These reserves meet the minimum requirements established in the Financial Policies.
- NapaSan has estimated revenues conservatively for the current fiscal year. Additionally, one-time revenue sources have not been used to balance the operating budget, and there are no “unpredictable” revenues forecast in the budget or used to balance the budget.
- NapaSan has adequately budgeted to meet all of its debt service requirements, and has maintained its debt service coverage ratio at a level higher than is required by bond covenants.
- There are adequate revenues available to transfer to the Capital Projects Fund to meet the near-term needs in the Capital Improvement Plan.

Financial Policy Compliance		
NSD Policy	Target	FY 18/19
Balanced Budget	Operating revenues minus operating expenditures & debt service \geq \$0	\$13,692,000
Operating Reserve	\geq 15% of Operating Budget	29.1%
Cash Flow Reserve	As necessary	\$12,500,000
Debt Coverage Ratio	\geq 1.25x coverage	4.21x

Organization

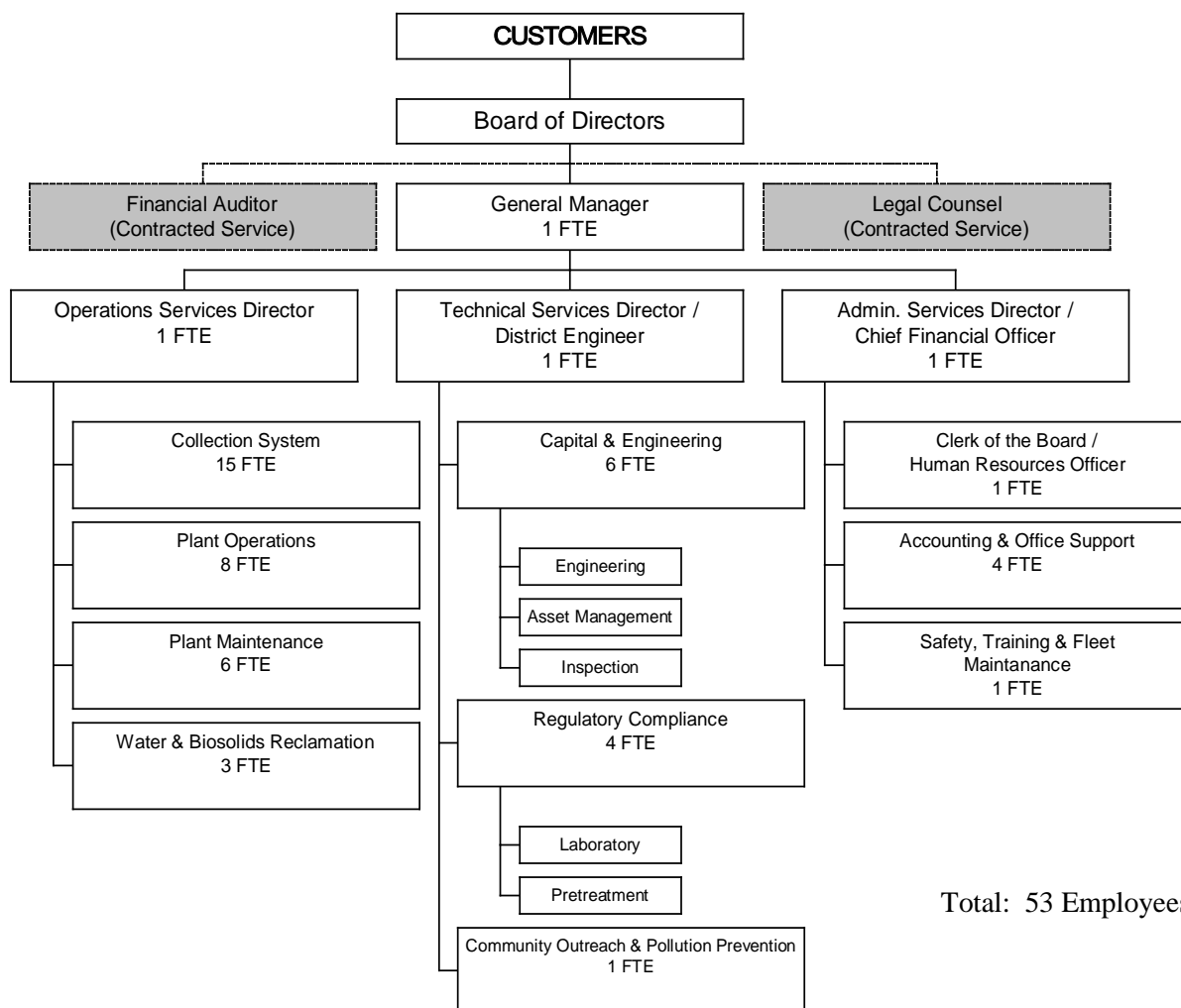
The Napa Sanitation District is governed by a Board of Directors. Two directors are members of the Napa City Council. One director is a member of the Napa County Board of Supervisors. Two directors are citizen appointees, one appointed by the City and one by the County. NapaSan is managed by a General Manager.

The Financial Auditor and the Legal Counsel for NapaSan are contracted services. These functions report directly to the Board. All other functions report to the General Manager. NapaSan is organized into three departments, Operations Services, Technical Services and Administrative Services, each headed by a Director. Under each Director, there are several departments, as described below.

- **Operations Services** includes those divisions associated with operations and maintenance. They include the following functions:
 - **Collection System Maintenance:** includes preventive and corrective maintenance and operation of the sewer system. This Division includes “Collection System Maintenance” in the Expenditure Budgets by Division section of this budget document.
 - **Wastewater Treatment Plant Operations:** includes operation of the wastewater treatment plant and lift stations. This Division includes “Treatment Plant Operations,” in the Expenditure Budgets by Division section of this budget document.
 - **Wastewater Treatment Plant Maintenance:** includes mechanical and electrical maintenance of the wastewater treatment plant and lift stations. This Division includes “Treatment Plant Maintenance” in the Expenditure Budgets by Division section of this budget document.
 - **Water and Biosolids Reclamation:** includes recycled water system management and disposal of biosolids through land application. This Division includes “Water & Biosolids Reclamation” in the Expenditure Budgets by Division section of this budget document.

- Technical Services** includes those divisions associated with planning and implementing capital projects and asset management, construction inspection and overseeing regulatory compliance functions. They include the following functions:
 - Capital & Engineering:** includes development review, capital project management, project design/engineering and inspection. This Division includes “Engineering” in the Expenditure Budgets by Division section of this budget document.
 - Regulatory Compliance:** includes all regulatory compliance and reporting functions, including the laboratory, pretreatment, and regulatory reporting. This Division includes “Treatment Plant Laboratory” and “Pollution Prevention” in the Expenditure Budgets by Division section of this budget document.
 - Community Outreach and Pollution Prevention:** includes media relations, ratepayer communications, stakeholder engagement and educational programming. This Division includes “Community Outreach & Pollution Prevention” in the Expenditure Budgets by Division section of this budget document.
- Administrative Services:** includes finance and accounting services, human resources, risk management, safety and training, fleet management, and general administrative services. This Department includes “Board of Directors,” “General Manager’s Office,” “Administrative Services,” “Safety, Training & Fleet Maintenance,” and “Non-Departmental Expenses” in the Expenditure Budgets by Division section of this budget document.

Organization Chart



Total: 53 Employees

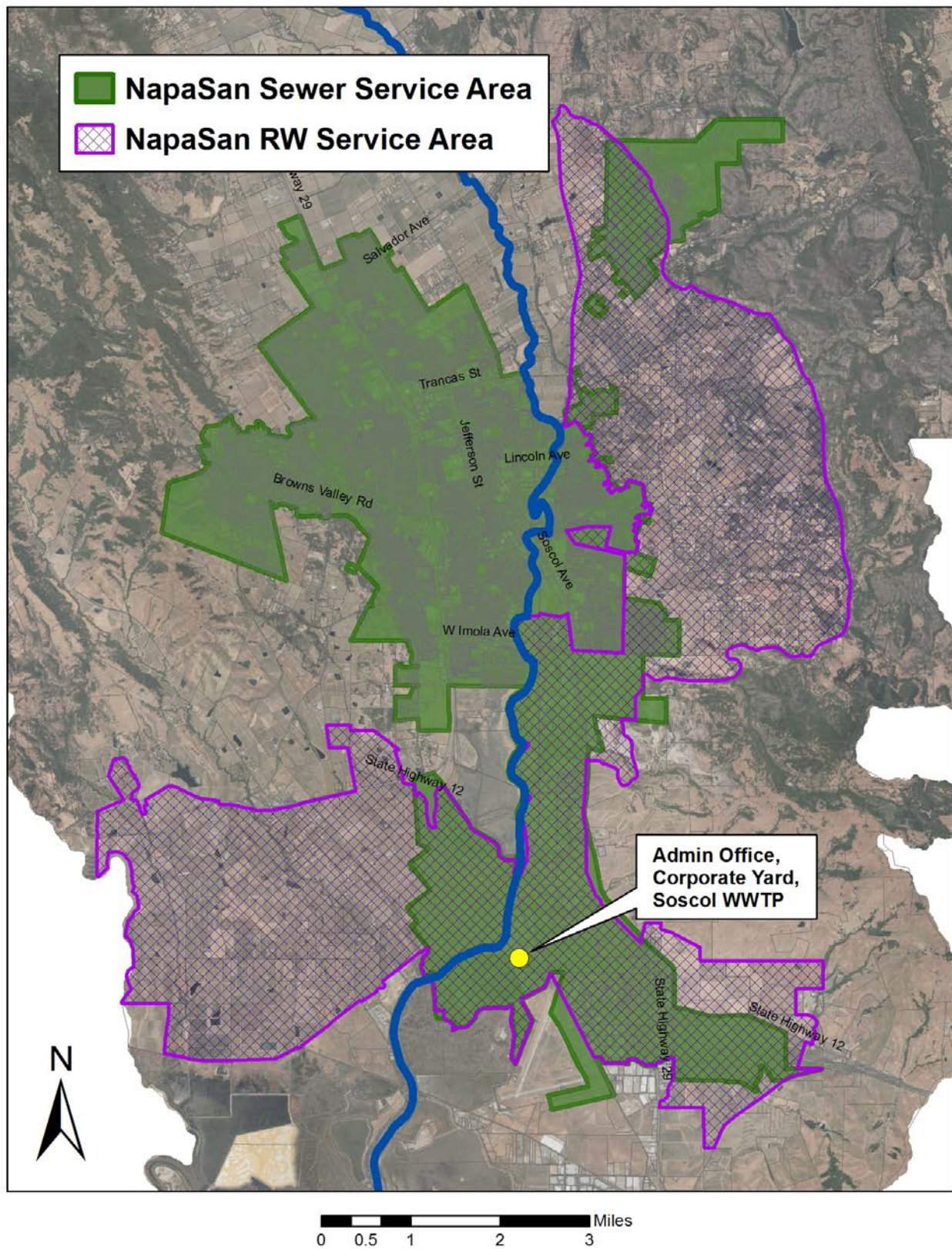
**Napa Sanitation District
Position Control Roster**

As adopted on July 1

Position Series (excluding Board Members)	FY 15/16 Adopted	FY 16/17 Adopted	FY 17/18 Adopted	FY 18/19 Proposed
General Manager's Office				
General Manager	1	1	1	1
Administrative Services				
Director of Administrative Services/CFO	1	1	1	1
Human Resources				
Clerk to the Board/Human Resources Officer	1	1	1	1
Accounting				
Senior Accountant	1	1	1	1
Accountant	1	1	1	1
Administrative Assistant I/II	2	2	2	2
Safety, Training and Fleet Maintenance				
Safety, Training & Fleet Maintenance Officer	1	1	1	1
Operations Services				
Director of Operations Services	1	1	1	1
Collections System Maintenance				
Collection System Manager	1	1	1	1
Collection System Supervisor	1	1	1	1
Collection System Technician	1	1	1	1
Collection System Worker III	2	2	2	2
Collection System Worker IT/I/II	8	10	10	10
Treatment Plant Operations				
Plant Operations Supervisor	1	1	1	1
Operator OIT/I/II/III	7	7	7	7
Treatment Plant Maintenance				
Plant Maintenance Supervisor	1	1	1	1
Equipment Maintenance Specialist I/II	4	4	4	4
Plant Attendant	1	1	1	1
Water & Biosolids Reclamation				
Reclamation Systems Manager	1	1	1	1
Reclamation Maintenance Worker I/II	2	2	2	2
Technical Services				
Director of Technical Services	1	1	1	1
Engineering				
Capital Projects Manager/Senior Civil Engineer	1	1	1	1
Junior/Assistant/Associate Engineer	2	2	2	2
Asset Management Analyst	1	1	1	1
District Inspector I/II	2	2	2	2
Regulatory Compliance				
Regulatory Compliance Manager	1	1	1	1
Laboratory Technician I/II	3	3	3	3
Community Outreach & Pollution Prevention				
Pollution Prevention and Outreach Specialist	1	1	1	1
Totals	51	53	53	53

Napa Sanitation District

Map of NapaSan Service Area



Budget Summary

Fund Structure

NapaSan has one fund. This fund includes all District revenues, including restricted revenues. The fund also includes all District expenditures, including operating expenditures, debt service and capital expenditures. Under this structure, restricted revenues (including associated interest earnings) are still accounted for separately and discretely, as required by state law.

Basis of Accounting

The Basis of Accounting refers to the specific time and method at which revenues and expenses are recognized in the accounts and reported in the financial statements. The Basis of Accounting for NapaSan in its financial statements is full accrual. However, the budget is adopted on a modified accrual basis of accounting consistent with Generally Accepted Accounting Principles (GAAP). Under the modified accrual basis, revenues are recognized when they are susceptible to accrual, i.e., when they become both measurable and available. “Measurable” means the amount can be determined and “available” means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period.

Expenditures are recorded when the related liability is incurred. Capital expenditures and debt principal payments are included in the annual adopted budget and used as a limit on expenditures, but these expenditures are removed when recorded in the financial statements to conform to GAAP.

Basis of Budgeting

NapaSan’s budgetary procedures conform to state regulations and Generally Accepted Accounting Principles. While NapaSan uses full accrual accounting in its annual financial statements, NapaSan uses a modified accrual basis of accounting for budgeting and reporting on budgeted versus actual expenditures in its monthly and quarterly reports. The following are some of the differences between the way NapaSan budgets and the way it accounts for revenues and expenses in its financial statements:

- Grant revenues are budgeted on a modified cash basis rather than an accrual basis;
- Fixed assets are depreciated for some financial reporting, but are fully expensed in the year acquired for budgetary purposes; and
- Capital expenditures and debt principal payments are budgeted as expenses for budget authority and compliance purposes but are removed in annual financial reporting.

NapaSan budgets this way so that it is easier for rate payers and stakeholders to see and track different types of expenses within the budget.

Budget Appropriation

Budgets are adopted for all expenditures. Total operating expenses and total capital expenses are adopted as separate appropriations. The General Manager is authorized to transfer an unlimited amount of appropriation between operating departments so long as the total operating expense appropriation does not increase. The General Manager is also authorized to transfer appropriation between capital projects as long as the total capital appropriation does not increase.

Only the Board of Directors can increase the total allowable operating and capital appropriations. The General Manager is authorized to hire regular employees up to the number approved by the Board of Directors, in accordance with the Position Control Roster.

Budget appropriations lapse at the end of the fiscal year. Unspent amounts on specific capital and operations projects may be carried forward to the following fiscal year only with the authorization of the Board of Directors.

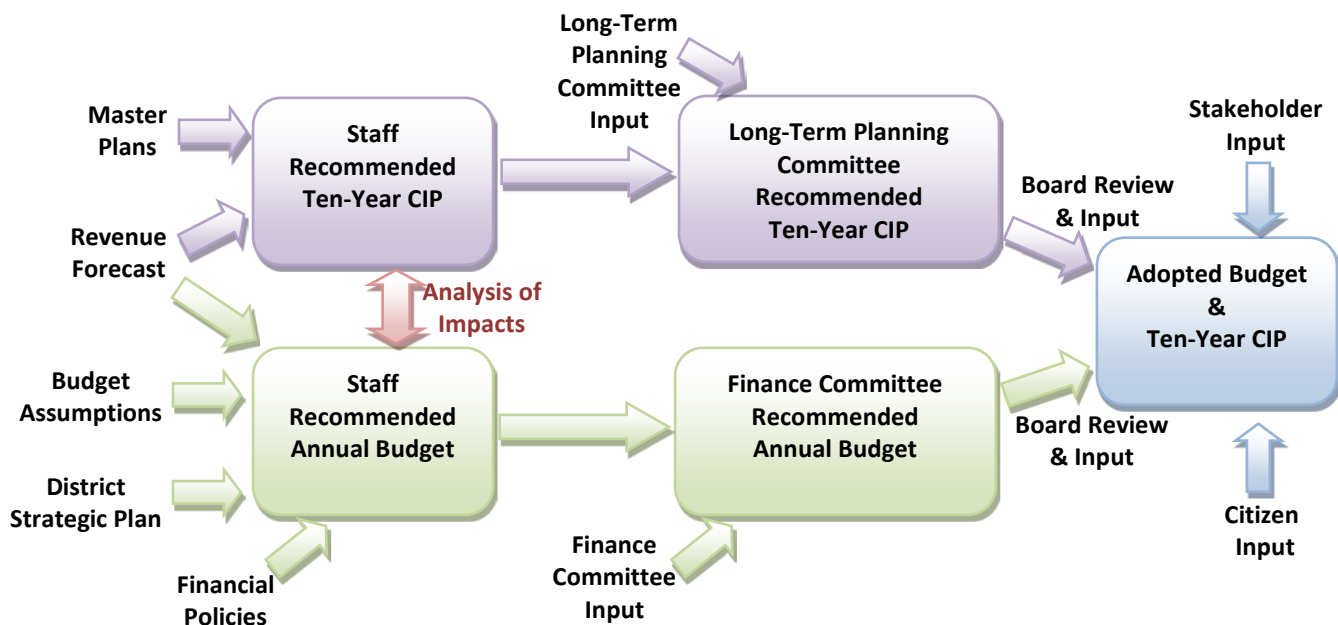
Budget Development Process

The budget process begins each year with a review of current expenditures, to determine how well the budget plan is working. Unanticipated expenses are identified, and revenue and expenditure patterns are analyzed. This information is presented to the Finance Committee, a subcommittee of the full Board of Directors. With this information, the Finance Committee, the General Manager and the Chief Financial Officer develop recommendations on assumptions and policy direction for the next budget year. These recommendations are brought to the full Board of Directors for input and approval.

With this direction, department managers develop line item proposals. At the same time, the Capital Program Manager works with department managers to update the Ten-Year Capital Improvement Plan (CIP). Proposals are made to the Chief Financial Officer and General Manager, who review the proposals and make changes, as appropriate.

The proposed Operating Budget is provided to the Finance Committee, a subcommittee of the Board of Directors, who reviews the budget for consistency with the Board's budget direction and to ensure that there are adequate resources aligned to meet Board priorities. The proposed CIP is provided to the Long Term Planning Committee, a subcommittee of the Board of Directors, to review the CIP. Both committees make reports and recommendations to the full Board of Directors.

The proposed budget and CIP are presented to the Board of Directors, and meetings are held to seek input from interested stakeholders and the general public. The Board can direct staff to make changes to the proposed budget. All of the changes are then compiled and presented to the Board for final adoption of the budget and CIP.



Budget Amendment Process

During the year, the budget can be increased through a budget amendment resolution, voted on and approved by a majority of the Board of Directors during a regular board meeting. There is no legal restriction on the amount or frequency that the budget can be amended.

Budget Calendar for FY 2018/19

Jan. 16, 2018	Finance Committee meeting, to discuss budget development calendar, assumptions for next year, and policy direction.
Feb. 7, 2018	Budget direction and assumptions confirmed with Board of Directors.
Jan. to March	Staff develops proposed budget and Ten-Year CIP.
April 2, 2018	Finance Committee makes recommendations.
April 9, 2018	Long Term Planning Committee reviews Ten-Year CIP and makes recommendations.
May 2, 2018	Board of Directors receives and discusses the Proposed Operating Budget for FY 2018/19.
May 16, 2018	Board of Directors receives and discusses the Ten-Year CIP for FY 2018/19 through FY 2027/28.
June 6, 2018	Board of Directors adopts the FY 2018/19 Operating and Capital Budget and Ten-Year CIP.

Sources of Funds/Revenues

NapaSan has a stable revenue foundation, with 63% of NapaSan's FY 18/19 total revenues coming from sewer service charges collected as assessments on property tax bills (excluding loan proceeds, the number is closer to 80%). Other significant revenue sources include capacity charges, recycled water sales, land leases, and interest earnings.

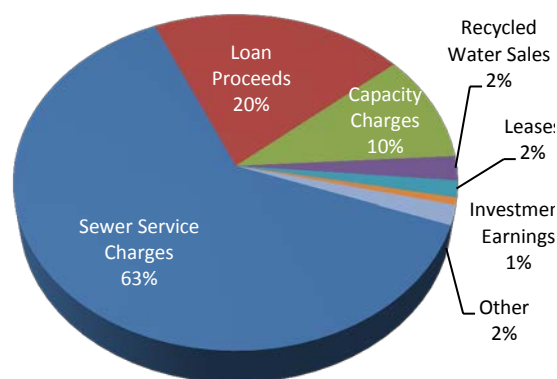
Sewer service charges (SSC's) are the fees charged to residences and businesses for sewer use. For most residences and businesses, these fees are paid annually as assessments on property tax bills. Some industrial and commercial customers are charged monthly, rather than annually, based either on water usage or actual sewer flows.

Sewer service charges are a highly distributed revenue source for NapaSan. The top ten sewer service customers represent only 9.9% of revenue from this category. This lack of concentration equates to a more stable revenue stream and is less susceptible to fluctuations in the economy or local business climate.

Sewer service charges are subject to California's Proposition 218, which requires that increases to the fee be noticed to all property owners, with the opportunity to protest the increase through letters and statements at a public hearing. If there is a majority of the property owners in protest of the fee increase, the increase cannot proceed.

NapaSan followed the Proposition 218 process in 2016, providing the necessary notices and holding public hearings. At that time, the fee was set to increase annually. The fee is set to increase in FY 2018/19 from \$638.10 to \$676.38 per Equivalent Dwelling Unit (EDU). For the following years, the rate can increase up to the maximum amounts shown in the chart to the right, but the actual amounts will be set by the Board annually.

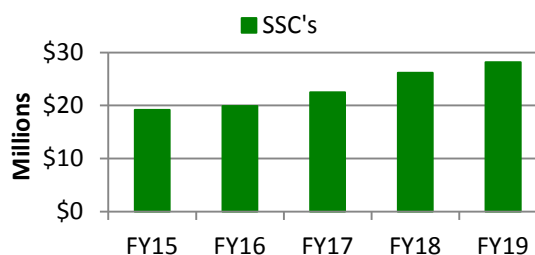
Source of Funds
Total = \$44,765,400
(excluding intrafund transfers)



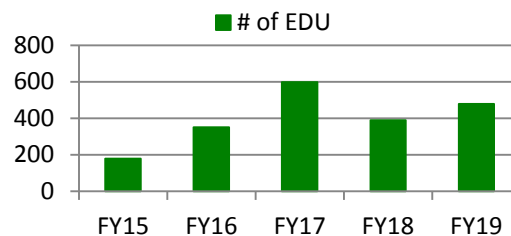
Sewer Service Charges History and Projection

	Charge per EDU	% Increase
FY 11/12	\$435.44	1.5%
FY 12/13	\$448.06	2.9%
FY 13/14	\$457.92	2.2%
FY 14/15	\$469.82	2.6%
FY 15/16	\$482.50	2.7%
FY 16/17	\$554.88	15.0%
FY 17/18	\$638.10	15.0%
FY 18/19	\$676.38	6.0%
FY 19/20	\$710.20	5.0%
FY 20/21	\$738.62	4.0%

Sewer service charges revenue is forecasted for FY 2018/19 based on the estimated number of EDUs and the sewer service charge fee of \$676.38 per EDU. The total budgeted revenue is adjusted by a small percentage to account for delinquencies and non-payments.



Capacity charges, sometimes referred to as “connection fees” or “impact fees,” are fees paid by developers to pay for expanded capacity in the sewer collection and treatment systems to convey and treat wastewater. They are also paid by commercial or industrial customers who expand the use of sewer services at their facilities.



Capacity charges are forecasted for the next year based on the cost per EDU and an assumed growth rate of 479 EDU being developed during the fiscal year. The annual capacity charge fee increase is based on the Engineering News Record Construction Cost Index for San Francisco (February-to-February). For February 2018, there was a 3.4% increase to the index compared to prior year.

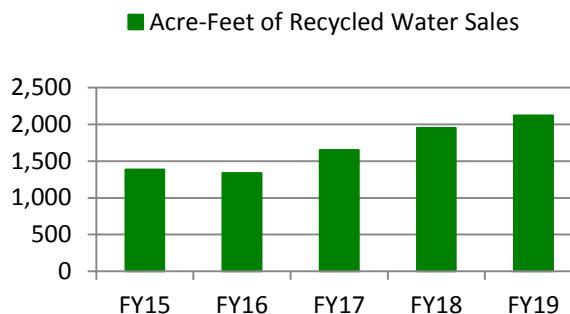
Capacity Charges Fee Schedule

	Charge per EDU	% Increase
FY 15	\$8,723	5.0%
FY 16	\$8,950	2.6%
FY 17	\$8,950	0.0%
FY 18	\$9,299	3.8%
FY 19	\$9,624	3.4%

Recycled Water Sales are collected from customers who purchase recycled water from NapaSan. Most recycled water is used for landscape irrigation or agriculture. The demand for recycled water is almost exclusively during the May to October period.

Recycled water sales are forecast to be about 2,100 acre-feet (690 million gallons), which includes an increase of recycled water usage compared to historical averages due to additional recycled water connections in the MST and Los Carneros Water District Recycled areas.

In January 2018, the rates increased to \$1.67 per 1,000 gallons in the peak demand period, with lower rates for off-peak use and for those customers that enter long-term contracts for significant water use. In January 2019, the rate is estimated to increase to \$1.72 per 1,000 gallons.

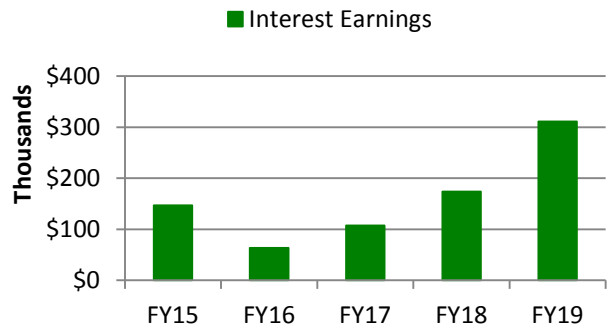


Recycled water sales are affected by the weather. Cooler, wetter spring and summer months result in less need to irrigate and therefore lower volumes of water are sold.

Land Leases generate revenue for the District. NapaSan currently leases a couple of parcels of land. One lease has an inflation factor identified within it, while the other does not. The revenue forecast is set based on these lease contracts.

Interest Earnings is the revenue NapaSan receives on idle cash and reserves that it maintains in its accounts. Cash is invested by the County of Napa Treasurer on NapaSan's behalf and in accordance with state law, and posted to NapaSan's funds quarterly.

With recent increases in the Federal Funds rate and an indication of further rate increases in 2018, the forecast assumes interest earnings to increase from 1.25% in FY 17/18 to 1.50% in FY 18/19. The overall revenue is higher because of the increased rate and additional cash balances at certain times of the year.



REVENUE - ALL SOURCES

Account Description	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Proposed FY 18/19	Percent Change
780 - Operations						
Interest: Invested Funds	62,553	103,686	174,000	174,000	311,000	78.7%
Rent - Building/Land	715,254	718,251	722,000	122,000	725,000	0.4%
Construction/Bldg Permit Review Svcs	161,238	154,607	189,100	189,100	193,800	2.5%
Hauler Fees	182,808	150,757	175,000	175,000	180,000	2.9%
Sewer Usage Fees	19,887,172	22,501,543	26,152,000	26,162,000	28,156,000	7.7%
State - Other Funding	-	13,680	15,000	1,000	-	(100.0%)
Penalties on Delinquent Sewer Fees	32,019	21,167	10,000	10,000	10,000	-
Recycled Water Sales	453,048	735,717	913,000	913,000	1,042,000	14.1%
Miscellaneous	89,989	80,472	51,000	384,000	53,000	3.9%
Total - Operations	21,584,081	24,479,880	28,401,100	28,130,100	30,670,800	8.0%
781 - Capital Improvement Projects						
Interest: Invested Funds	-	-	-	-	-	-
Federal Grants - USBR & FEMA	1,861,364	353,338	1,001,000	1,320,000	-	(100.0%)
Other Government Agencies	17,354,109	2,694,683	3,075,000	3,067,000	375,000	(87.8%)
Miscellaneous	27,925	-	-	8,000	5,000	-
Bond/Loan Proceeds	-	-	10,137,000	-	9,075,000	(10.5%)
Sale of Capital Assets	14,147	20,313	25,000	25,000	25,000	-
Intrafund Transfers In	10,898,000	7,737,000	12,530,000	12,530,000	16,150,000	28.9%
Total - Capital Improvement Projects	30,155,545	10,805,334	26,768,000	16,950,000	25,630,000	(4.3%)
782 - Expansion						
Interest: Invested Funds	1,352	3,405	-	2,500	-	-
Capacity Charges	3,139,503	5,355,828	3,630,000	6,276,000	4,614,600	27.1%
Total - Expansion	3,140,855	5,359,233	3,630,000	6,278,500	4,614,600	27.1%
Total - All Departments	54,880,481	40,644,447	58,799,100	51,358,600	60,915,400	3.6%

Uses of Funds/Expenditures

NapaSan expenses can be described in four major categories: salaries and benefits, services and supplies, capital expenses and debt service.

Salaries and benefits are those expenses related to payroll and staffing. They include salary and wages of employees, overtime, payroll taxes such as Medicare, health insurance benefits, and retirement benefits. This category also includes expenses for funding NapaSan's OPEB ("Other Post-Employment Benefits") liability.

Labor agreements went into effect on July 1, 2014, and will expire on June 30, 2020. Salaries will increase 2.75% in FY 2018/19 for a cost of living adjustment per the agreements. Individual salaries were also adjusted, with some employees moving up steps within their current classification, and vacancies budgeted at the bottom step. There are no new positions in the FY 2018/19 budget. Overall, salaries are budgeted to increase 1.1% over prior year.

Health benefits are known for the first two quarters in FY 2018/19. The budget assumes a 7% increase in employer costs for the last two quarters. In the FY 18/19 budget, health insurance premiums paid for retirees has been reclassified from "Employee Insurance – Premiums" to "Other Post-Employment Benefits" to better account for OPEB expenses, with the result a crease in the Insurance Premium budget of 27.9%.

Retirement benefits are budgeted based on a percentage of budgeted salary. That percentage is determined by CalPERS based on actuarial assumptions regarding retirement rates and investment earnings. Prior to the new MOUs, NapaSan paid both the employer and employee contribution for retirement benefits. In the current MOUs, the employees will pick up 5.5% of the employee contribution for FY 2018/19. The minimum retirement cost contribution to CalPERS increased by 4.8%. The budgeted amount is 11.9% higher than prior year and includes an additional \$135,000 payment toward this liability.

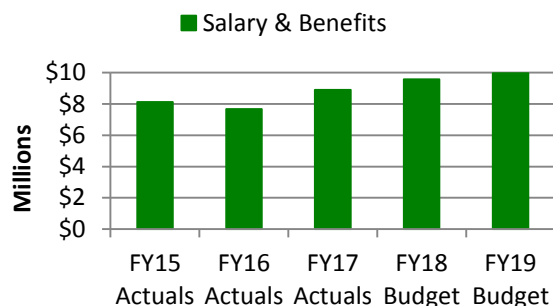
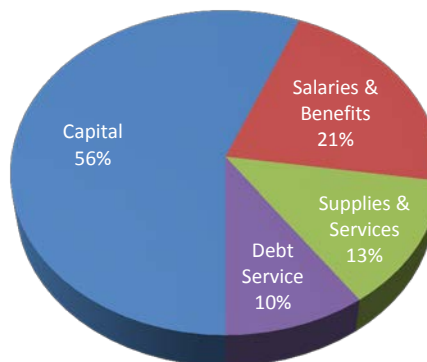
Payments in lieu of health benefits are expected to decrease by 9.1%. A decrease in the per-person eligible is built into the MOUs.

Workers' compensation insurance costs are lower than prior year by 20.8%, based on a decrease in the Experience Modification Rate.

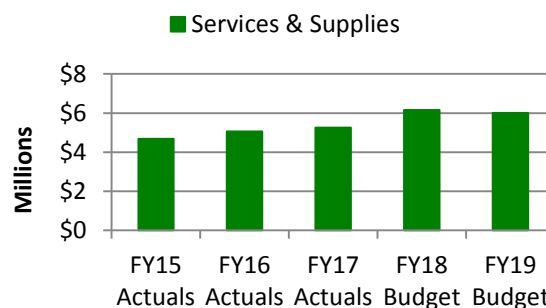
In total, the salaries and benefits budget increases 4.0% over the prior fiscal year.

Services and supplies include the purchase of supplies and equipment to maintain and operate the various systems in NapaSan. It also includes a number of service contracts and professional contracts.

Use of Funds Total = \$46,973,100 (excluding intrafund transfers)



(presented on budgetary basis)



EXPENSES - OPERATING AND CAPITAL

Account Description	Actual FY 15/16	Actual FY 16-17	Adj. Budget FY 17/18	Estimated FY 17/18	Proposed FY 18/19	Percent Change
Salaries & Benefits	\$6,597,459	\$8,907,912	\$9,581,300	\$9,359,421	\$9,961,350	4.0%
Services & Supplies	5,053,311	5,263,274	6,154,300	5,431,533	6,003,100	(2.5%)
Capital Expenses	24,250,109	10,096,002	33,210,500	21,968,750	26,385,700	(20.6%)
Debt Service	4,547,473	4,770,891	4,777,450	4,773,500	4,593,800	(3.8%)
Taxes & Assessments	24,995	26,545	28,650	28,714	29,150	1.7%
Total All Expenses	\$40,473,346	\$29,064,624	\$53,752,200	\$41,561,918	\$46,973,100	(12.6%)

(excluding intrafund transfers)

(presented on budgetary basis – does not conform to GAAP)

Total services and supplies for FY 2018/19 are budgeted to be 2.5% lower than the prior fiscal year adjusted budget. One-time only projects in the prior year were removed, lowering the overall budget. Electricity is down 8.8%, even with expanded recycled water distribution expected in FY 2018/19, because of anticipated savings from the solar and stationary storage projects. The chemicals budget is anticipated to increase about 0.8%, even with increases in unit costs, because of lower anticipated usage.

Capital expenses include expenses to build or acquire any capital asset, or to rehabilitate and extend the useful life of existing assets. Details of these expenses can be found in the Ten-Year Capital Improvement Plan (CIP), later in this budget document. Significant projects in the FY 2018/19 capital plan include the Summer 2018 and Summer 2019 I&I Reduction Projects, the Browns Valley Trunk project and related improvements at West Napa Pump Station, plant rehabilitation projects. The plan also includes the completion of a recycled water filling station in the MST area, which is being paid for by Napa County.

Debt service includes the principal and interest payments for all of NapaSan's outstanding loans. Debt service is approximately \$4.6 million, a decrease of 3.9%. This is due to the refinancing of the 2009B Certificates of Participation at the end of 2017. Debt service is anticipated to increase in FY 2021/22 when the debt service for the Browns Valley Road Truck and West Napa Pump Station project begins. More details on this new debt issuance can be found in the Debt section of this budget document.

Intrafund Transfers Out represent the following intrafund transfers:

- from Operations into the Capital Projects account (\$8,900,000)
- from Expansion into the Capital Projects account (\$7,250,000)

These intrafund transfers are between accounts that are segregated for accounting or legal purposes, and they have no positive or negative impact on the overall financial position of NapaSan.

Fund Equity

Fund equity, for the basis of NapaSan's budgeting and financial planning purposes, is defined as current assets including restricted assets, less current liabilities excluding capital-related liabilities. This number is meant to represent the amount of cash that NapaSan has available to commit to operating or capital expenses now or in the future, and is comparable to Fund Balance in governmental-type funds.

For FY 2018/19, the estimated Ending Fund Equity is \$2,197,700 lower than the Beginning Fund Equity for the fiscal year, with the ending equity available to fund future capital projects. The change in Fund Equity (10.6% reduction) is due to the implementation of planned capital projects.

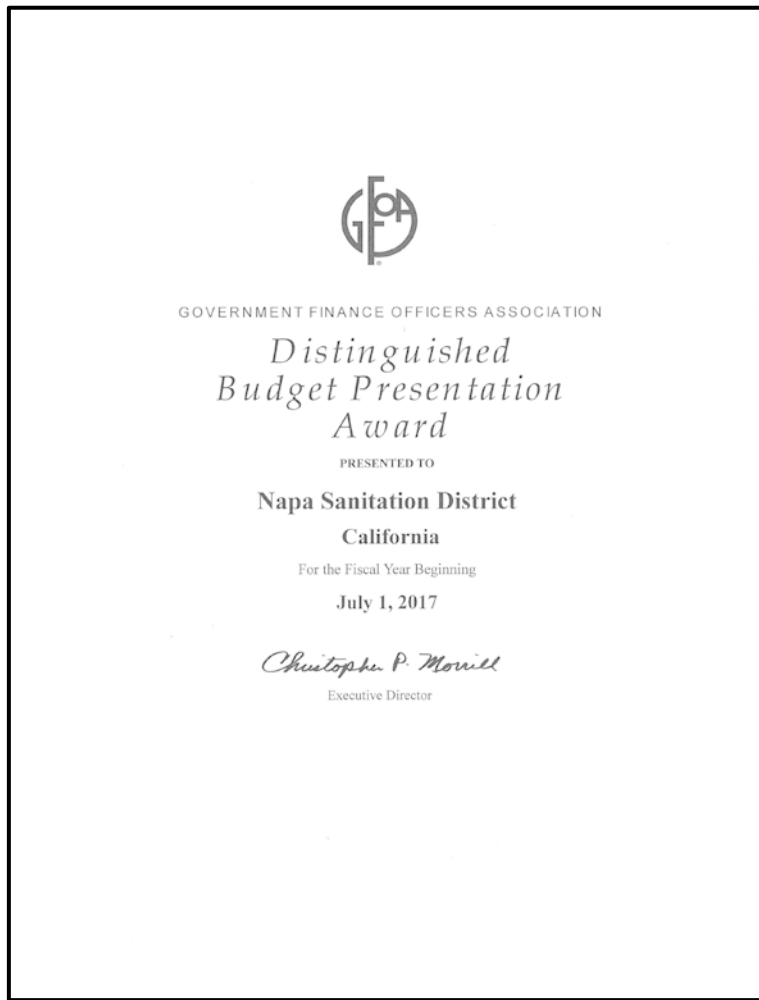
Reserves

NapaSan manages three distinct reserves. The first reserve is an **operating reserve** designed to assist NapaSan during emergencies. This reserve is maintained at least 15% of annual operating expenses, including debt service but excluding transfers. This reserve has increased in FY 18/19 as recommended in the 2016 rate study.

The second reserve is an **operating cash flow reserve**. This reserve is the amount of cash necessary for NapaSan to have on hand on July 1 to cover its anticipated expenses through the summer and fall until NapaSan receives the bulk of its operating revenues (sewer services charges collected as property assessments) in December.

The third reserve is a **debt reserve** held in trust by a third party. With the refinancing of the 2009B COPs, there is currently no debt reserve requirement. However, it is assumed that future debt issuances will require a reserve.

Financial Overview					
	FY 15/16 Actuals	FY 16/17 Actuals	FY 17/18 Adj Budget	FY 17/18 Estimate	FY 18/19 Budget
Beginning Fund Equity	\$18,820,600	\$17,262,069	\$22,145,297	\$22,145,297	\$21,116,600
Revenues					
Use of Money/Property	\$779,159	\$825,342	\$896,000	\$298,500	\$1,036,000
Charges for Services	23,855,083	28,959,620	31,059,100	33,715,100	34,186,400
Intergovernmental	15,228,939	3,061,702	4,091,000	4,388,000	375,000
Bond Proceeds	0	0	10,137,000	0	9,075,000
Sale of assets	14,147	20,313	25,000	25,000	25,000
Miscellaneous Revenues	104,853	40,473	61,000	402,000	68,000
Total Revenues	\$39,982,181	\$32,907,450	\$46,269,100	\$38,828,600	\$44,765,400
Operating Expenditures					
Salaries and Benefits	\$5,872,455	\$8,179,992	\$9,581,300	\$9,359,421	\$9,961,350
Services and Supplies	5,053,312	5,263,276	6,154,300	5,431,533	6,003,100
Taxes and Assessments	24,995	26,545	28,650	28,714	29,150
Debt Service	4,776,996	4,770,891	4,777,450	4,773,500	4,593,800
Total Operating Expenditures	\$15,727,758	\$18,240,704	\$20,541,700	\$19,593,168	\$20,587,400
Capital Expenditures	\$24,250,109	\$10,096,002	\$33,785,500	\$20,364,085	\$26,385,700
GAAP Adjustments	1,562,845	(312,484)	0	(100,000)	0
Total Expenditures	\$41,540,712	\$28,024,222	\$54,327,200	\$39,857,253	\$46,973,100
Ending Fund Equity	\$17,262,069	\$22,145,297	\$14,087,197	\$21,116,644	\$18,908,900
Operating Reserve	\$2,227,000	\$2,243,000	\$2,314,000	\$2,314,000	\$6,000,000
Debt Reserve	1,990,000	1,990,000	1,990,000	1,990,000	0
Operating Cash Flow Reserve	10,987,000	10,375,000	10,750,000	10,750,000	12,500,000
Total Reseves	\$15,204,000	\$14,608,000	\$15,054,000	\$15,054,000	\$18,500,000
Available for Use	\$2,058,069	\$7,537,297	(\$966,803)	\$6,062,644	\$408,900

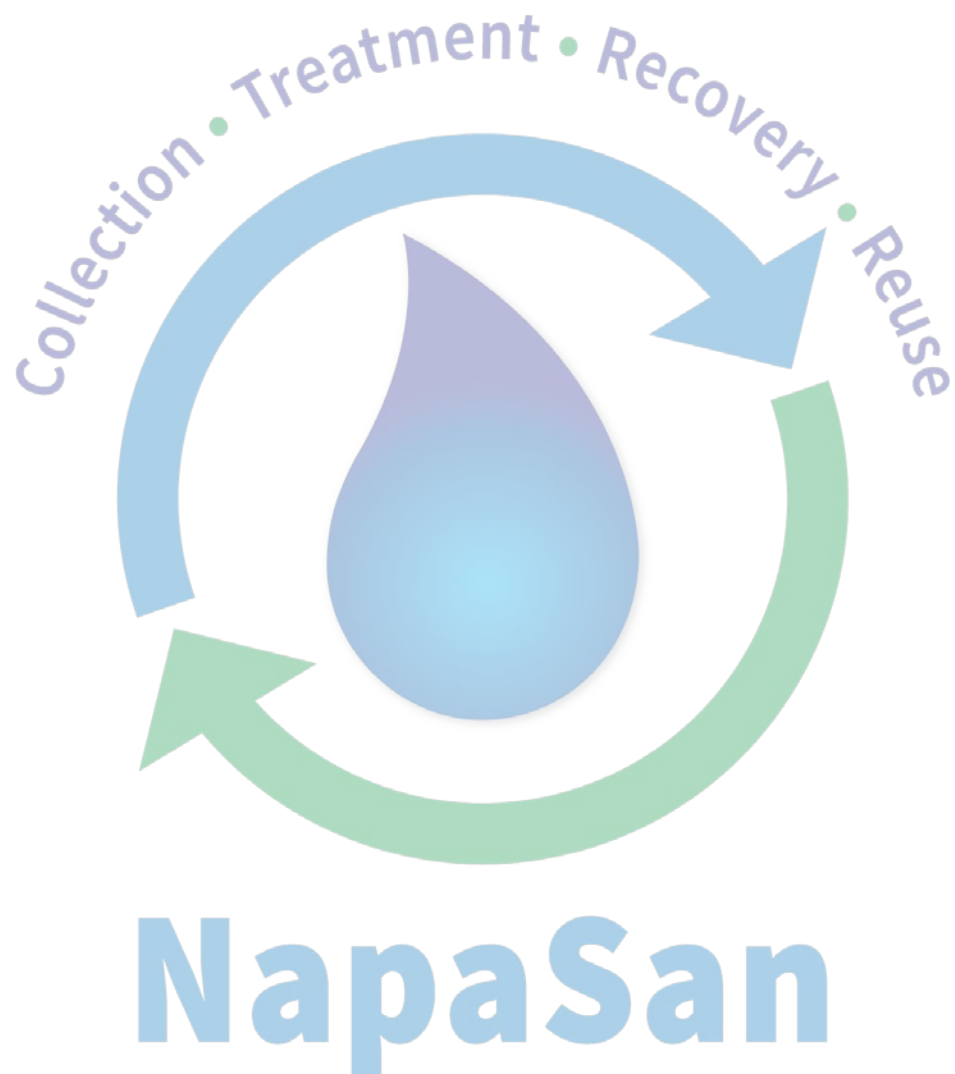


GFOA Budget Award

The Government Finance Officers Association of the United States and Canada (GFOA) presented the Distinguished Budget Presentation Award to Napa Sanitation District, California for its annual budget for the fiscal year beginning July 1, 2017. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. District staff believes that this current FY 2018/19 budget continues to conform to program requirements and will be submitting it to GFOA to determine its eligibility for another award.

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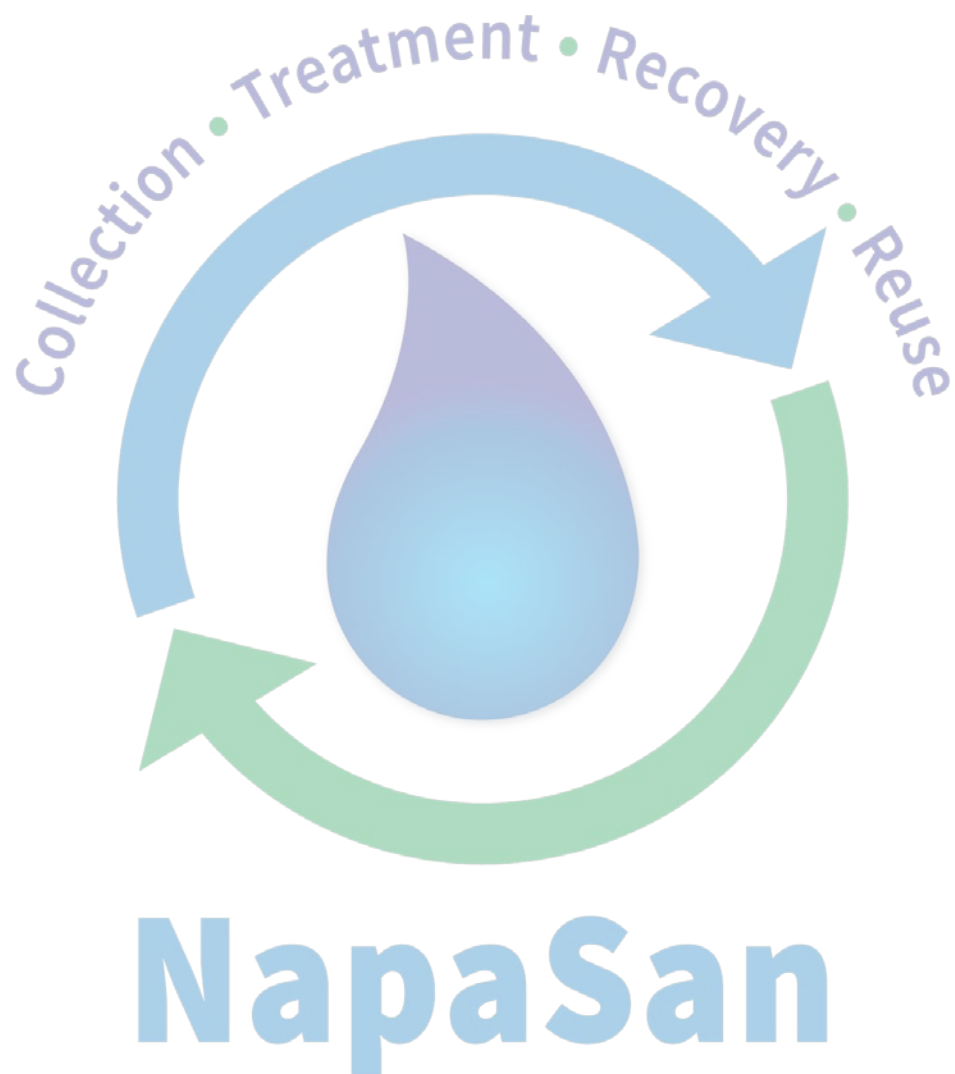


Detailed Tables of Revenues and Operating Expenditures



Installation of the floating covers on the recycled water reservoir at the Soscol Water Recycling Facility.

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**Napa Sanitation District
FY 2018/19 Proposed Budget**

REVENUE - ALL SOURCES

Account Description	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Proposed FY 18/19	Percent Change
<u>780 - Operations</u>						
Interest: Invested Funds	62,553	103,686	174,000	174,000	311,000	78.7%
Rent - Building/Land	715,254	718,251	722,000	122,000	725,000	0.4%
Construction/Bldg Permit Review Svcs	161,238	154,607	189,100	189,100	193,800	2.5%
Hauler Fees	182,808	150,757	175,000	175,000	180,000	2.9%
Sewer Usage Fees	19,887,172	22,501,543	26,152,000	26,162,000	28,156,000	7.7%
State - Other Funding	-	13,680	15,000	1,000	-	(100.0%)
Penalties on Delinquent Sewer Fees	32,019	21,167	10,000	10,000	10,000	-
Recycled Water Sales	453,048	735,717	913,000	913,000	1,042,000	14.1%
Miscellaneous	89,989	80,472	51,000	384,000	53,000	3.9%
Total - Operations	21,584,081	24,479,880	28,401,100	28,130,100	30,670,800	8.0%
<u>781 - Capital Improvement Projects</u>						
Interest: Invested Funds	-	-	-	-	-	-
Federal Grants - USBR & FEMA	1,861,364	353,338	1,001,000	1,320,000	-	(100.0%)
Other Government Agencies	17,354,109	2,694,683	3,075,000	3,067,000	375,000	(87.8%)
Miscellaneous	27,925	-	-	8,000	5,000	-
Bond/Loan Proceeds	-	-	10,137,000	-	9,075,000	(10.5%)
Sale of Capital Assets	14,147	20,313	25,000	25,000	25,000	-
Intrafund Transfers In	10,898,000	7,737,000	12,530,000	12,530,000	16,150,000	28.9%
Total - Capital Improvement Projects	30,155,545	10,805,334	26,768,000	16,950,000	25,630,000	(4.3%)
<u>782 - Expansion</u>						
Interest: Invested Funds	1,352	3,405	-	2,500	-	-
Capacity Charges	3,139,503	5,355,828	3,630,000	6,276,000	4,614,600	27.1%
Total - Expansion	3,140,855	5,359,233	3,630,000	6,278,500	4,614,600	27.1%
Total - All Departments	54,880,481	40,644,447	58,799,100	51,358,600	60,915,400	3.6%

**Napa Sanitation District
FY 2018-19 Budget**

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OPERATING EXPENDITURES - ALL ACCOUNTS

Account	Account Description	Actual FY 15-16	Actual FY 16-17	Adj. Budget FY 17-18	Estimated FY 17-18	Proposed FY 18-19	Percent Change
51100	Salaries and Wages	4,609,028	4,819,100	5,231,800	4,953,500	5,287,750	1.1%
51115	Overtime	198,449	271,537	217,200	198,250	180,100	(17.1%)
51120	Holiday Pay	9,866	13,758	9,350	7,200	10,050	7.5%
51130	Vacation Payout	6,023	36,045	-	9,821	5,000	-
51200	457B Employer Contribution	76,058	74,706	85,200	85,200	85,200	0.0%
51205	Cell Phone Allowance	6,525	7,227	8,100	7,450	8,800	8.6%
51210	Director Pay	30,760	29,452	30,350	24,000	30,350	0.0%
51300	Medicare	72,073	75,565	75,550	74,200	74,900	(0.9%)
51305	F.I.C.A. / Social Security	1,907	1,677	1,900	1,000	1,900	0.0%
51400	Employee Insurance - Premiums	926,729	966,973	1,439,550	1,391,150	1,038,150	(27.9%)
51405	Workers Compensation	79,225	127,625	139,400	139,400	110,450	(20.8%)
51600	Retirement	158,619	2,068,426	1,910,300	1,850,700	2,136,700	11.9%
51605	Other Post Employment Benefits	290,450	302,510	322,300	515,950	891,750	176.7%
51990	Other Employee Benefits	131,746	113,311	110,300	101,600	100,250	(9.1%)
Subtotal Salaries & Benefits		\$6,597,459	\$8,907,912	\$9,581,300	\$9,359,421	\$9,961,350	4.0%
52115	Property Tax/Assessment Admin	12,232	12,297	12,500	12,350	12,500	0.0%
52125	Accounting/Auditing Services	59,409	56,289	58,913	58,900	59,800	1.5%
52130	Information Technology Services	342,096	337,007	290,987	290,987	298,650	2.6%
52140	Legal Services	99,778	134,554	258,700	213,550	266,500	3.0%
52145	Engineer Services	13,889	2,767	-	-	-	-
52150	Temporary/Contract Help	66,208	98,826	137,000	71,405	119,800	(12.6%)
52205	Actuarial Services	4,950	1,950	8,750	6,750	1,100	(87.4%)
52220	Medical/Laboratory Services	34,214	43,390	38,650	33,320	39,100	1.2%
52305	Training Services	8,205	19,358	14,550	8,000	9,750	(33.0%)
52310	Consulting Services	180,415	269,847	728,050	375,850	602,950	(17.2%)
52325	Waste Disposal Services	38,736	51,758	44,550	45,550	45,550	2.2%
52330	Hazardous Waste Disposal Services	178	1,894	5,000	6,000	8,000	60.0%
52335	Security Services	11,830	12,665	13,400	6,701	14,000	4.5%
52340	Landscaping Services	18,099	15,150	53,100	43,075	25,200	(52.5%)
52345	Janitorial Services	59,545	61,389	79,350	77,350	79,250	(0.1%)
52490	Other Professional Services	307,161	90,408	328,500	276,310	309,150	(5.9%)
52500	Maintenance - Equipment	126,000	144,763	175,100	149,839	185,850	6.1%
52505	Maintenance - Bldgs/Improvements	129,810	56,794	101,150	102,000	141,900	40.3%
52515	Maintenance - Software	69,519	93,316	76,400	88,021	96,000	25.7%
52520	Maintenance - Vehicles	136,922	148,500	106,350	66,430	113,300	6.5%
52600	Rents and Leases - Equipment	90,653	123,346	75,000	74,983	66,200	(11.7%)
52605	Rents and Leases - Buildings/Land	1,173	1,202	1,450	1,450	1,450	0.0%
52705	Insurance - Premiums	180,742	176,721	194,000	198,534	210,500	8.5%
52710	Insurance - Claims	8,566	14,650	15,000	10,000	15,000	0.0%
52800	Communications/Telephone	41,914	39,416	41,400	52,705	40,850	(1.3%)
52810	Advertising/Marketing	22,095	32,163	51,000	47,600	45,700	(10.4%)
52820	Printing and Binding	10,788	9,612	3,600	3,600	3,600	0.0%
52825	Bank Charges	1,530	1,260	1,450	1,260	1,450	0.0%
52830	Publications and Legal Notices	2,225	4,198	7,050	4,625	5,900	(16.3%)
52840	Permits/License Fees	104,433	150,588	162,900	134,821	165,000	1.3%
52900	Training/Conference Expenses	65,958	59,233	126,750	100,220	119,750	(5.5%)
52905	Business Travel/Mileage (Meetings)	2,075	1,308	2,600	1,515	2,100	(19.2%)

**Napa Sanitation District
FY 2018-19 Budget**

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OPERATING EXPENDITURES - ALL ACCOUNTS

Account	Account Description	Actual FY 15-16	Actual FY 16-17	Adj. Budget FY 17-18	Estimated FY 17-18	Proposed FY 18-19	Percent Change
53100	Office Supplies	25,997	20,566	18,600	21,100	18,600	0.0%
53105	Office Supplies - Furniture/Fixtures	12,716	1,195	1,300	1,450	1,300	0.0%
53110	Freight/Postage	15,446	11,214	17,600	16,900	17,600	0.0%
53115	Books/Media/Subscriptions	1,744	2,147	4,050	3,853	4,050	0.0%
53120	Memberships/Certifications	65,223	76,852	83,700	77,739	92,750	10.8%
53200	Utilities - Gas	26,096	34,170	19,900	19,900	19,500	(2.0%)
53205	Utilities - Electric	915,609	1,071,341	968,700	1,018,300	883,300	(8.8%)
53215	Utilities - Fire Suppression Systems	2,472	1,480	12,350	17,865	4,350	(64.8%)
53220	Utilities - Water	3,918	4,899	4,650	4,300	4,650	0.0%
53250	Fuel	84,994	101,154	74,700	95,195	96,700	29.5%
53300	Clothing and Personal Supplies	32,955	37,187	45,100	53,338	50,800	12.6%
53315	Medical/Laboratory Supplies	98,666	69,073	75,500	39,200	70,000	(7.3%)
53320	Safety Supplies	31,569	39,505	27,350	26,850	34,350	25.6%
53330	Janitorial Supplies	19,088	19,765	18,100	22,875	19,800	9.4%
53340	Chemicals	956,169	919,966	961,650	909,951	969,100	0.8%
53350	Maintenance Supplies	379,062	433,638	458,300	389,700	451,850	(1.4%)
53360	Infrastructure Repair Supplies	12,550	7,922	14,050	14,050	15,050	7.1%
53400	Minor Equipment/Small Tools	45,060	73,326	57,300	68,700	61,150	6.7%
53410	Computer Equipment/Accessories	3,788	11,683	4,500	1,636	2,600	(42.2%)
53415	Computer Software/Licensing Fees	3,594	5,656	800	795	8,900	1012.5%
53600	Special Department Expense	45,573	40,345	39,200	34,700	35,150	(10.3%)
53635	Service Awards	8,301	5,213	12,300	12,300	12,300	0.0%
53650	Business Related Meals/Supplies	2,483	1,876	1,650	1,130	1,500	(9.1%)
53665	Wellness Reimbursement	6,930	6,483	16,750	12,505	17,900	6.9%
53670	Education Reimbursement	1,960	-	3,000	3,500	4,000	33.3%
Subtotal Services & Supplies		\$5,053,311	\$5,263,274	\$6,154,300	\$5,431,533	\$6,003,100	(2.5%)
54100	Principal on Bonds/COPs	2,731,714	2,834,297	2,936,950	2,936,950	2,819,700	(4.0%)
54310	Interest on Bonds/COPs	1,812,719	1,933,484	1,833,400	1,833,400	1,768,250	(3.6%)
54320	Administration on Bonds/COPs	3,040	3,110	7,100	3,150	5,850	(17.6%)
54500	Taxes and Assessments	24,995	26,545	28,650	28,714	29,150	1.7%
57900	Intrafund Expenditures	7,900,000	2,225,000	8,900,000	8,900,000	8,900,000	-
Subtotal Other		\$12,472,468	\$7,022,436	\$13,706,100	\$13,702,214	\$13,522,950	(1.3%)
TOTALS		\$24,123,237	\$21,193,622	\$29,441,700	\$28,493,168	\$29,487,400	0.2%

**Napa Sanitation District
FY 2018-19 Budget**

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OPERATING EXPENDITURES - BY MAJOR EXPENSE CATEGORY

	Actual FY 15-16	Actual FY 16-17	Adj. Budget FY 17-18	Estimated FY 17-18	Proposed FY 18-19	Percent Change
Salaries & Benefits						
Board of Directors	33,572	31,796	33,500	26,250	33,500	-
General Manager's Office	300,277	387,026	397,800	404,350	320,200	(19.5%)
Administrative Services	863,395	1,124,480	1,161,300	1,186,200	997,450	(14.1%)
Safety, Training & Fleet Maintenance	120,351	152,151	165,300	183,900	143,950	(12.9%)
Collection System	1,603,747	2,081,791	2,444,950	2,340,800	2,021,050	(17.3%)
Treatment Plant Operations	1,211,350	1,662,278	1,697,900	1,667,150	1,406,400	(17.2%)
Treatment Plant Maintenance	709,444	994,246	1,053,600	1,074,800	922,750	(12.4%)
Regulatory Compliance	527,956	640,065	736,500	574,000	619,900	(15.8%)
Engineering	799,630	1,210,787	1,272,700	1,271,721	1,186,400	(6.8%)
Community Outreach & Poll. Prev.	84,433	144,385	132,500	135,550	124,550	(6.0%)
Water & Biosolids Reclamation	343,304	478,906	485,250	494,700	455,350	(6.2%)
Non-Departmental Expenses	-	-	-	-	1,729,850	-
Subtotal Salaries & Benefits	\$6,597,459	\$8,907,912	\$9,581,300	\$9,359,421	\$9,961,350	4.0%
Services & Supplies						
Board of Directors	153,392	228,346	594,500	425,430	594,500	-
General Manager's Office	135,169	71,478	179,750	117,835	179,600	(0.1%)
Administrative Services	561,768	544,375	544,950	538,917	538,100	(1.3%)
Safety, Training & Fleet Maintenance	72,091	91,557	93,350	60,146	90,350	(3.2%)
Collection System	374,369	337,725	411,700	365,854	439,100	6.7%
Treatment Plant Operations	2,305,604	2,301,007	2,249,650	2,236,917	2,305,000	2.5%
Treatment Plant Maintenance	677,391	698,316	926,050	823,818	909,800	(1.8%)
Regulatory Compliance	178,400	227,761	181,050	139,749	170,100	(6.0%)
Engineering	60,787	202,366	321,100	135,565	110,650	(65.5%)
Community Outreach & Poll. Prev.	111,666	76,992	116,850	91,725	101,250	(13.4%)
Water & Biosolids Reclamation	182,723	234,298	267,050	230,689	272,750	2.1%
Non-Departmental Expenses	239,951	249,053	268,300	264,888	291,900	8.8%
Subtotal Services & Supplies	\$5,053,311	\$5,263,274	\$6,154,300	\$5,431,533	\$6,003,100	(2.5%)
Other						
Administrative Services	24	24	50	-	-	(100.0%)
Treatment Plant Operations	190	190	200	-	-	(100.0%)
Water & Biosolids Reclamation	24,781	26,331	28,400	28,714	29,150	2.6%
Non-Departmental Expenses	12,447,473	6,995,891	13,677,450	13,673,500	13,493,800	(1.3%)
Subtotal Other	\$12,472,468	\$7,022,436	\$13,706,100	\$13,702,214	\$13,522,950	(1.3%)
Total	\$24,123,237	\$21,193,622	\$29,441,700	\$28,493,168	\$29,487,400	0.2%

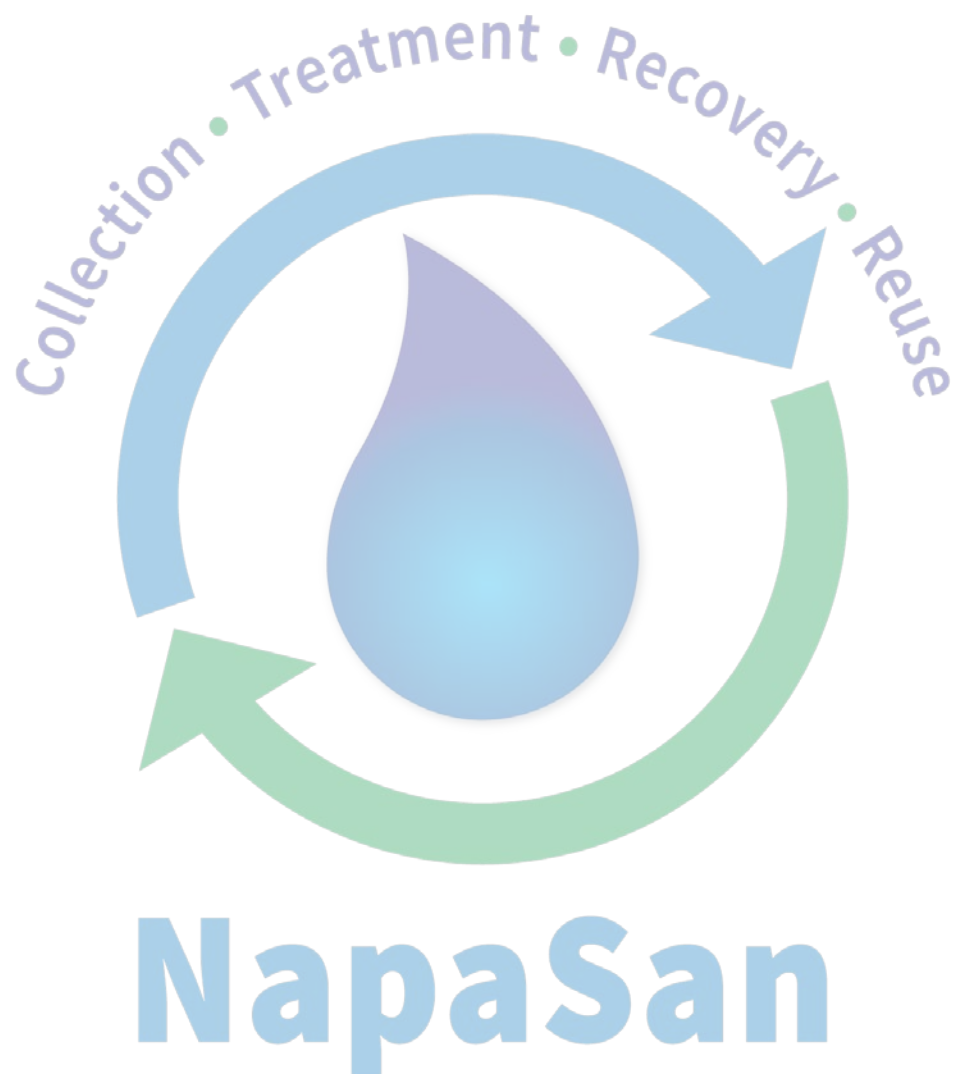
**Napa Sanitation District
FY 2018-19 Budget**

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OPERATING EXPENDITURES - BY DEPARTMENT

Department	Category	Actual FY 15-16	Actual FY 16-17	Adj. Budget FY 17-18	Estimated FY 17-18	Proposed FY 18-19	Percent Change
Board of Directors	Salaries & Benefits	33,572	31,796	33,500	26,250	33,500	-
	Services & Supplies	153,392	228,346	594,500	425,430	594,500	-
	Total	186,964	260,142	628,000	451,680	628,000	-
General Manager's Office	Salaries & Benefits	300,277	387,026	397,800	404,350	320,200	(19.5%)
	Services & Supplies	135,169	71,478	179,750	117,835	179,600	(0.1%)
	Total	435,446	458,503	577,550	522,185	499,800	(13.5%)
Administrative Services	Salaries & Benefits	863,395	1,124,480	1,161,300	1,186,200	997,450	(14.1%)
	Services & Supplies	561,768	544,375	544,950	538,917	538,100	(1.3%)
	Other	24	24	50	-	-	(100.0%)
	Total	1,425,187	1,668,880	1,706,300	1,725,117	1,535,550	(10.0%)
Safety, Training & Fleet Maintenance	Salaries & Benefits	120,351	152,151	165,300	183,900	143,950	(12.9%)
	Services & Supplies	72,091	91,557	93,350	60,146	90,350	(3.2%)
	Total	192,443	243,708	258,650	244,046	234,300	(9.4%)
Community Outreach & Poll. Prev.	Salaries & Benefits	84,433	144,385	132,500	135,550	124,550	(6.0%)
	Services & Supplies	111,666	76,992	116,850	91,725	101,250	(13.4%)
	Total	196,099	221,378	249,350	227,275	225,800	(19.4%)
Non-Departmental Expenses	Salaries & Benefits	-	-	-	-	1,729,850	#DIV/0!
	Services & Supplies	239,951	249,053	268,300	264,888	291,900	8.8%
	Debt Service	4,547,473	4,770,891	4,777,450	4,773,500	4,593,800	(3.8%)
	Transfers	7,900,000	2,225,000	8,900,000	8,900,000	8,900,000	-
	Total	12,687,424	7,244,944	13,945,750	13,938,388	15,515,550	11.3%
Treatment Plant Operations	Salaries & Benefits	1,211,350	1,662,278	1,697,900	1,667,150	1,406,400	(17.2%)
	Services & Supplies	2,305,604	2,301,007	2,249,650	2,236,917	2,305,000	2.5%
	Other	190	190	200	-	-	(100.0%)
	Total	3,517,143	3,963,475	3,947,750	3,904,067	3,711,400	(6.0%)
Treatment Plant Maintenance	Salaries & Benefits	709,444	994,246	1,053,600	1,074,800	922,750	(12.4%)
	Services & Supplies	677,391	698,316	926,050	823,818	909,800	(1.8%)
	Total	1,386,835	1,692,562	1,979,650	1,898,618	1,832,550	(14.2%)
Regulatory Compliance	Salaries & Benefits	527,956	640,065	736,500	574,000	619,900	(15.8%)
	Services & Supplies	178,400	227,761	181,050	139,749	170,100	(6.0%)
	Total	706,356	867,826	917,550	713,749	790,000	(21.9%)
Engineering	Salaries & Benefits	799,630	1,210,787	1,272,700	1,271,721	1,186,400	(6.8%)
	Services & Supplies	60,787	202,366	321,100	135,565	110,650	(65.5%)
	Total	860,417	1,413,153	1,593,800	1,407,286	1,297,050	(72.3%)
Collection System	Salaries & Benefits	1,603,747	2,081,791	2,444,950	2,340,800	2,021,050	(17.3%)
	Services & Supplies	374,369	337,725	411,700	365,854	439,100	6.7%
	Total	1,978,116	2,419,517	2,856,650	2,706,654	2,460,150	(10.7%)
Water & Biosolids Reclamation	Salaries & Benefits	343,304	478,906	485,250	494,700	455,350	(6.2%)
	Services & Supplies	182,723	234,298	267,050	230,689	272,750	2.1%
	Other	24,781	26,331	28,400	28,714	29,150	2.6%
	Total	550,808	739,534	780,700	754,103	757,250	(3.0%)
Total Operating Expenditures		\$24,123,237	\$21,193,622	\$29,441,700	\$28,493,168	\$29,487,400	0.2%

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Expenditure Budgets by Division



Dissolved air floatation (DAF) clarifier, Soscol Water Recycling Facility

Board of Directors

Description

The Board of Directors is the policy making body that determines the overall direction of NapaSan and services provided to the customers. The rules for connecting and discharging to the system, and the rates and charges for services, are set by the Board.

The Board of Directors comprises two directors who are members of the Napa City Council, one director who is a member of the Napa County Board of Supervisors, and two citizen appointees, one appointed by the city and one by the county. The Board of Directors hires the General Manager and contracts for the District Legal Counsel and the annual financial audit.

The Board adopts the annual Operating Budget, Ten-Year Capital Improvement Plan, Ten-Year Financial Plan and sets the priorities for NapaSan.

Link to District Goals in Strategic Plan

The Board of Directors establishes the Strategic Plan's long-term goals, objectives and priorities.

Department Goals

Goal: The Board of Directors Department goal is to articulate the short and long-term policy direction for NapaSan to ensure:

- infrastructure reliability
- financial stability
- operational optimization
- employee development
- community outreach and communication
- resource recovery

Related Department Objectives

- Oversee the policy and strategic direction and set levels of service for its customers.
- Provide policy direction regarding levels of service.
- Work with senior management and consultant to provide direction regarding rates and fees.
- Provide policy guidance regarding alternative methods for treatment of winery waste.
- Adopt, revise and monitor a long-term policy document for prioritizing the delivery of recycled water.
- Provide direction to staff on efforts to increase non-rate revenues and improve NapaSan's operational efficiency and effectiveness.

Changes in Service Levels

- The Board of Directors budget includes NapaSan's expenses for legal services and audit services, as these functions report directly to the Board.
- The FY 18/19 budget includes \$100,000 in Consulting Services to support efforts to evaluate and recommend winery waste treatment options.
- The FY 18/19 budget includes \$20,000 for a Strategic Plan update in Spring 2019.
- The FY 18/19 budget continues support to evaluate the District's sewer service and capacity charge methodologies.

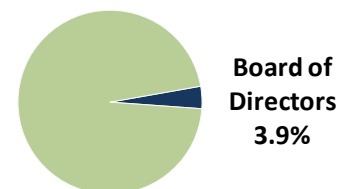


Board of Directors honor 2017 Napa Engineering Society scholarship recipients.



Board of Directors honors Plant Operator Steven Chavis on being named Operator of the Year by the California Water Environment Association.

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adj. Budget FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 33,572	\$ 31,796	\$ 33,500	\$ 26,250	\$ 33,500	-
Services & Supplies	\$ 153,392	\$ 228,346	\$ 594,500	\$ 425,430	\$ 594,500	-
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 186,964	\$ 260,142	\$ 628,000	\$ 451,680	\$ 628,000	-

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Director-Member of Napa City Council (CC)	2	2	2	2
Director-Member of Napa Board of Supervisors (BOS)	1	1	1	1
Director-Public Representative Appointed by BOS	1	1	1	1
Director-Public Representative Appointed by CC	1	1	1	1
Totals	5	5	5	5

General Manager's Office

Description

The General Manager is responsible to the Board of Directors for all aspects of the administration, operation and planning activities of the staff of the District. The General Manager is the hiring authority for all positions.

Link to District Goals in Strategic Plan

The General Manager's Office is responsible to ensure that all of the departments and respective management are performing toward the District's established goals. As part of the Quarterly Report to the Board of Directors, the General Manager reports on the status of each District goal, objective, and the specific projects outlined in the Strategic Plan.

The General Manager's Office and Administrative Services are jointly responsible for conducting the study of sewer service charge and capacity charge methodologies (**Goal Two: Financial Stability, Objective 2A**). General Manager's Office is also overseeing the next employee survey in Fall 2017 (**Goal Four: Employee Development, Objective 4B**), working with the Board to pursue leases on District property (**Goal Two: Financial Stability, Objective 2C**), partnering with winery industry to develop alternative methods for treating winery waste (**Goal Three: Operational Capability, Objective 3A**), promoting NapaSan as a progressive, professional organization as a great place to work (**Goal Four: Employee Development, Objective 4A**), and working with partners to expand recycled water delivery and long-term water reuse opportunities (**Goal Six: Resource Recovery, Objectives 6A, 6B, 6C and 6F**).

Department Goals

Goal: Implement the policy direction of the Board of Directors.

Related Department Objectives

- Oversee the engagement with wine industry representatives regarding the study of winery waste treatment options.
- Represent NapaSan at the North Bay Water Reuse Authority, specifically working to bring federal money to the region for Recycled Water projects.
- Under the direction of the Lands Committee and Board, work to develop options for lease revenue on District-owned property.

Goal: Provide leadership and management throughout NapaSan.

Related Department Objectives

- Provide direction to all departments, aligning efforts to promote and be consistent with NapaSan's goals and policy directives.
- Provide overall direction to the engineering staff regarding significant capital projects, including Browns Valley Road Trunk, West Napa Pump Station Improvements, I&I projects, and other priority projects.
- Oversee the changes derived from the Fall 2017 Employee Survey.



NapaSan Booth at annual Earth Day event

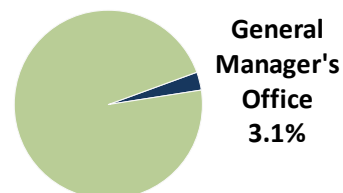
Changes in Service Levels

- There are no significant changes in the General Manager's Office budget.



NapaSan booth at the annual Ag Expo in Napa

Percent of Operating Budget



Proposed Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 300,277	\$ 387,026	\$ 397,800	\$ 404,350	\$ 320,200	(19.5%)
Services & Supplies	\$ 135,169	\$ 71,478	\$ 179,750	\$ 117,835	\$ 179,600	(0.1%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 435,446	\$ 458,503	\$ 577,550	\$ 522,185	\$ 499,800	(13.5%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
General Manager	1	1	1	1
Assistant General Manager/District Engineer	1	-	-	-
Totals	2	1	1	1

Administrative Services

Description

Administrative Services provides administrative and financial support for all other NapaSan departments. The division includes accounting, payroll, budget and financial planning, Information Technology, human resources and risk management. The division also includes duties in support of the Board of Directors, responding to public inquiries, records management, and general administrative support.

Link to District Goals in Strategic Plan

The Administrative Services Department supports NapaSan's "**Goal Two: Financial Stability.**" This Department is jointly responsible with the General Manager's Office to study sewer service charge and capacity charge methodology options (**Objective 2A**). This department will also be responsible for evaluating and presenting options to the Board regarding long term liabilities (**Objective 2B**), evaluating opportunities for shared services (**Goal 3: Operational Optimization, Objective 3B**) and supporting the Board in its total compensation study (**Goal 4: Employee Development, Objective 4C**). The Department will take a leadership role in promoting further succession planning through training and mentorship (**Goal 4: Employee Development, Objective 4E**).

Department Goals

Goal: Provide financial information for managers and Board to maintain NapaSan's financial viability and stability.

Related Department Objectives

- Review cash flow and emergency reserves for adequacy.
- Continue a study of NapaSan's sewer service charge and capacity charge methodologies.
- Complete the ninth year's Performance Measurement Report.
- Continue to provide financial support to managers, supervisors and staff, in support of NapaSan activities.

Goal: Provide time sensitive and necessary Human Resources support throughout NapaSan.

Related Department Objectives

- Provide support to departments through recruitments and internship programs.
- Assist the General Manager in implementing changes derived from the Fall 2017 Employee Survey.
- Continue efforts in succession planning, including training and mentorship programs.
- Continue to provide human resource support to managers, supervisors and staff, in support of NapaSan activities.

Operating Ratio

(above 1.0 is goal)

13/14	14/15	15/16	16/17	17/18	18/19
0.88	0.90	1.02	1.07	1.10	1.10

Debt Service Coverage Ratio

(greater than 125% is required)

13/14	14/15	15/16	16/17	17/18	18/19
277%	227%	284%	344%	417%	421%

Sewer Service Charge Bill Affordability

(goal is to remain under 1.0% per EPA guidance)

13/14	14/15	15/16	16/17	17/18	18/19
0.68%	0.66%	0.68%	0.74%	0.76%	0.76%

Experience Turnover Rate

(Lower is better)

2014	2015	2016	2017	2018	2019
4.3%	0.0%	3.7%	3.9%	4.0%	5.0%

Employee Survey Results – These are the average score of employees who rated the following statement: (1=strongly disagree / 5=strongly agree)

"The forms and process used for annual employee performance evaluations are user friendly."

2014	2015	2016	2017	2018	2019
3.48	na	na	3.49	na	na

Goal: Provide general administrative support to employees and serve the requests of the general public.

Related Department Objectives

- Evaluate opportunities to increase efficiencies in the delivery of support services.
- Continue to provide general administrative support to managers, supervisors and staff, in support of NapaSan activities.

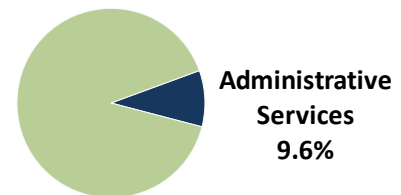
Changes in Service Levels

- FY 18/19 budget decreased \$34,900 to account for one-time projects in the prior fiscal year
- FY 18/19 includes budget for the set-up and licensing of HR recruitment and selection software.
- FY 18/19 budget includes a new contract to provide fiduciary support services for the 457 Deferred Compensation program.
- Budget for accounting services, Information Technology services and Human Resource services through Napa County increased \$2,413 from prior year, for same level of service.



NapaSan Open House

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 863,395	\$ 1,124,480	\$ 1,161,300	\$ 1,186,200	\$ 997,450	(14.1%)
Services & Supplies	\$ 561,768	\$ 544,375	\$ 544,950	\$ 538,917	\$ 538,100	(1.3%)
Other	\$ 24	\$ 24	\$ 50	-	-	(100.0%)
TOTAL EXPENDITURES	\$ 1,425,187	\$ 1,668,880	\$ 1,706,300	\$ 1,725,117	\$ 1,535,550	(10.0%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Director of Admin Services/Chief Financial Officer	1	1	1	1
Clerk to the Board/Human Resources Officer	1	1	1	1
Senior Accountant	1	1	1	1
Accountant	1	1	1	1
Administrative Assistant I/II	2	2	2	2
Totals	6	6	6	6

Safety, Training and Fleet Maintenance

Description

Many of NapaSan's activities are inherently dangerous, as they involve work in heavy traffic, repairs and installations of pipe in deep trenches susceptible to collapse, and entrance into confined spaces that potentially contain toxic gases or other hazardous conditions. This program oversees workplace safety and provides safety training for all staff to ensure safe working practices and compliance with safety regulations. This includes reviews of contractor safety programs to ensure that NapaSan's contractors also work and operate safely.

This program also includes maintenance and management of NapaSan's fleet vehicles, communications management and general safety and security protocols.

Link to District Goals in Strategic Plan

This Department supports NapaSan's value of safety, along with all of the goals of other departments by ensuring that the workplace is safe and employees are adequately trained.

Department Goals

Goal: Implement programs that result in improved safety and lower accidents and incidents rates

Related Department Objectives

- Develop and implement periodic review plan for NapaSan safety policies and programs.
- Develop a Business Continuity Plan for operations during disasters, and integrate NapaSan in the city and county's emergency response systems.
- Continue on five-year plan to fully implement the lockout-tagout Standard Operating Procedures (SOP) development and revision project, in conjunction with plant maintenance staff.

Goal: Facilitate proper management of fleet vehicles to ensure they are safe and reach their intended useful lifespan

Related Department Objectives

- Maintain and adjust ten-year plan for fleet sustainment, acquisition, rehabilitation and attrition.
- Determine right combination of mission essential vehicle types to ensure NapaSan operational effectiveness, while increasing efficiency and reducing overall cost.
- Oversee NapaSan's Fleet Committee to determine proper general purpose fleet sizing to meet the goal of a "common fleet" approach; cross utilization of assets, increasing economy and efficiency while reducing cost.

District's Experience Modification (XMOD) Rate (lower is better; NSD is compared to the CSRMA risk pool member average)

	13/14	14/15	15/16	16/17	17/18	18/19
NSD	66	84	89	104	68	68
Avg	94	94	93	93	na	na

Total Recordable Incidence Rate (Injuries and illnesses per 200,000 hours worked; NSD is compared to the wastewater industry average)

	2014	2015	2016	2017	2018	2019
NSD	0	2.10	8.36	8.23	0	0
Avg	5.5	7.1	8.2	na	na	na

Number of Insurance Claims (number of claims per 200,000 hours of work)

13/14	14/15	15/16	16/17	17/18	18/19
8.60	18.85	6.27	14.41	0	0

Severity of Insurance Claims (cost of claims per 200,000 hours of work)

13/14	14/15	15/16	16/17	17/18	18/19
\$6k	\$104k	\$92	\$33k	\$0	\$0

Changes in Service Levels

- The training budget fluctuates annually to facilitate the different trainings required, on a two or three-year rotational basis.
- There are no significant changes in service levels in this program.

*District staff training on fire extinguisher use***Percent of Operating Budget****Department Operating Budget**

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 120,351	\$ 152,151	\$ 165,300	\$ 183,900	\$ 143,950	(12.9%)
Services & Supplies	\$ 72,091	\$ 91,557	\$ 93,350	\$ 60,146	\$ 90,350	(3.2%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 192,443	\$ 243,708	\$ 258,650	\$ 244,046	\$ 234,300	(9.4%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Safety, Training & Fleet Maintenance Officer	1	1	1	1
Totals	1	1	1	1

Collection System

Description

The purpose of the Collection System Department is to clean and maintain, inspect, repair, replace or rehabilitate sanitary sewer lines, manholes and other related facilities to assure the structural integrity of NapaSan's sewer system in a manner that results in the most economical operation while maintaining regulatory compliance.

Link to District Goals in Strategic Plan

The Collection System Department supports the NapaSan's "Goal One: Infrastructure Reliability" by taking both preventive and corrective actions to maintain the infrastructure of the sewer system, and by assisting the Engineering staff in the design of capital projects. Specifically, the Department provides maintenance data and analysis in support of the sewer rehabilitation projects (**Objective 1A**) and in decisions made as part of the Asset Management program (**Objective 1B**). The Department will be significantly involved in the Collection System Master Plan update (**Objective 1D**).

Department Goals

Goal: To prevent sanitary sewer overflows (SSO's). Especially important is to prevent Category 1 overflows that are defined as an SSO that reached a drainage channel and/or surface water or; an SSO that reached a storm drain pipe that was not fully recovered and returned to the sanitary sewer system.

Goal: To insure infrastructure stability by performing preventive maintenance on the Collection System. This includes inspection and cleaning of the sewer system.

Related Department Objectives

- Maintain the sewer lateral preventive maintenance program at current service levels.
- Video inspect 10% of the sewer mains in the District's system
- Clean at least 40% of District sewer mains per year.
- Root foam 4 miles of sewer main, including related laterals and manholes, to reduce the root intrusion into these facilities.
- Work to eliminate higher maintenance sewer mains by replacing or repairing them.
- Replace or rehabilitate 60 public laterals.
- Move forward in gathering, storing and disseminating asset and work information in an economical way with completeness and accuracy, including sharing with other departments in the District and others as needed.

Category 1 Sewer Overflows per 100 miles of main (NSD compared to California and SF Regional averages)

	2014	2015	2016	2017	2018	2019
NSD	4.8	0.0	1.1	13.6	0	0
CA	5.1	3.9	4.9	5.7	na	na
Reg	6.7	6.1	7.0	6.2	na	na

Category 1 Sewer Overflows per 100 miles of laterals (NSD compared to California and SF Regional average)

	2014	2015	2016	2017	2018	2019
NSD	1.4	1.4	2.0	0	0	0
CA	53.1	2.4	3.7	2	na	na
Reg	4.6	1.4	4.3	0	na	na

Sewer Main Condition Assessment (% of sewer mains video inspected) (Goal is 10% per year)

2014	2015	2016	2017	2018	2019
10.3%	8.5%	9.2%	9.4%	10%	10%

Percent of Main Lines Cleaned (Goal is 40%)

2014	2015	2016	2017	2018	2019
47.6%	42.3%	34.2%	42.5%	40%	40%

Planned Maintenance as Ratio of Total Maintenance (Goal is 90%)

2014	2015	2016	2017	2018	2019
87.5%	86.7%	87.1%	88.5%	88%	88%

Number of Public Laterals Replaced or Rehabilitated (Goal is 60 per year)

2014	2015	2016	2017	2018	2019
52	72	36	53	60	60

Goal: To provide quality customer service by responding to customer requests for service and being on site within 30 minutes of receiving the call.

Related Department Objectives

- Continue to respond to the needs of the community in a timely and professional manner within 30 minutes, while trying to reduce the number of emergency service calls.

Average Number of Minutes to Respond

2014	2015	2016	2017	2018	2019
29	32	30	26	30	30

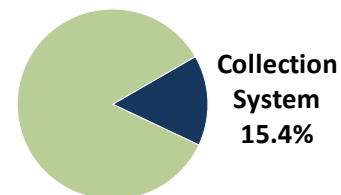
Changes in Service Levels

- FY 18/19 budget adds \$7,600 for “in training” temporary worker program.
- FY 18/19 budget adds \$15,000 in fuel, based on historical usage.
- FY 18/19 budget adds \$1,000 in additional drain rock in anticipation of additional construction and repair workload.



Collection system workers excavate a sewer lateral to make repairs

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 1,603,747	\$ 2,081,791	\$ 2,444,950	\$ 2,340,800	\$ 2,021,050	(17.3%)
Services & Supplies	\$ 374,369	\$ 337,725	\$ 411,700	\$ 365,854	\$ 439,100	6.7%
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 1,978,116	\$ 2,419,517	\$ 2,856,650	\$ 2,706,654	\$ 2,460,150	(13.9%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Collection System Manager	1	1	1	1
Collection System Supervisor	1	1	1	1
Collection System Technician	1	1	1	1
Collection System Worker III	2	2	2	2
Collection System Worker IT/I/II	8	8	10	10
Totals	13	13	15	15

Treatment Plant Operations

Description

The Treatment Plant Operations Department receives, treats and distributes wastewater and solids conveyed to the treatment plant in an environmentally sound and cost effective manner. This is done with a strong ethical foundation of protecting public health and the environment, while meeting our responsibilities to the rate payers.

The department operates the plant, performs some basic preventive maintenance of plant equipment and structures, recommends improvements in plant process, assists with engineering and special studies, and prepares all regulatory reports applicable to the treatment plant.

Link to District Goals in Strategic Plan

The Treatment Plant Operations Department supports the District's "Goal One: Infrastructure Reliability" by providing support to the Engineering Department's work on developing the Treatment Plant Master Plan (Objective 1D) and development of an Asset Management program (Objective 1B).

The Department will be responsible to evaluate ways to reduce energy and chemistry (Goal Three: Operational Optimization, Objective 3D).

To support "Goal Six: Resource Recovery," this Department will provide technical analysis to evaluate energy self-generation projects (Objective 6D) and toward efforts to improve recycled water quality (Objective 6E).

Department Goals

Goal: Effectively and efficiently operate the treatment plant.

Related Department Objectives

- Continuous process optimization of the plant control systems to achieve a reduction in chemical and energy costs, to match or exceed the targets noted in performance measures above.
- Continue installation of additional online instrumentation.
- Continue to receive fats, oil and grease (FOG) collected from siphon to the FOG receiving station.
- Continue to optimize production of biogas in digester resulting from FOG receiving program.



Overseeing plant operations via SCADA interface

Polymer per MG processed – Winter and Summer

	2014	2015	2016	2017	2018	2019
Wnt	33.4	28.8	20.3	10.2	15	15
Smr	50.6	103.5	109.6	39.3	50	50

Hypochlorite per MG processed

	2014	2015	2016	2017	2018	2019
Wnt	102.9	124.3	85.4	55.2	60	60
Smr	203.7	211.9	211.3	198.6	200	200

Percent of Self-Generated Electricity

	2014	2015	2016	2017	2018	2019
	33%	35%	27%	41%	50%	60%

Electricity Consumed per Million Gallons Treated (Megawatt-hours per MG processed)

	2014	2015	2016	2017	2018	2019
Wnt	1.7	2.1	1.6	1.5	1.5	1.5
Smr	5.9	6.3	6.0	6.6	6.0	6.0

Goal: Adhere to all federal, state and local guidelines, permits and regulations in the operation of the treatment plant.

Related Department Objectives

- Continue producing an effluent that meets the NPDES permit requirements.

Changes in Service Levels

- FY 18/19 budget adds \$120,000 for an Alternative Chemicals study.
- FY 18/19 budget subtracts \$83,400 for electricity, due to increased solar production and change in PG&E rates.
- FY 18/19 budget includes \$20,000 for repairs to the pond transfer structures.

Treatment for BOD and TSS Removal

(Must be higher than 85% - monthly average)

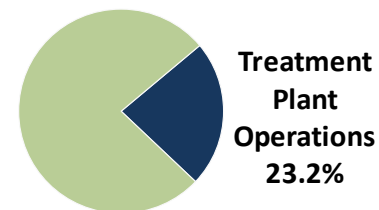
	2014	2015	2016	2017	2018	2019
BOD	97.7%	98.2%	96.7%	97.0%	95%	95%
TSS	96.7%	96.3%	94.6%	95.6%	95%	95%

Total Allowable BOD and TSS

(Must be lower than 30 mg/L - monthly average)

	2014	2015	2016	2017	2018	2019
BOD	4.9	4.6	5.3	4.8	5.0	5.0
TSS	7.4	9.8	10.0	7.7	10.0	10.0

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 1,211,350	\$ 1,662,278	\$ 1,697,900	\$ 1,667,150	\$ 1,406,400	(17.2%)
Services & Supplies	\$ 2,305,604	\$ 2,301,007	\$ 2,249,650	\$ 2,236,917	\$ 2,305,000	2.5%
Other	\$ 190	\$ 190	\$ 200	-	-	(100.0%)
TOTAL EXPENDITURES	\$ 3,517,143	\$ 3,963,475	\$ 3,947,750	\$ 3,904,067	\$ 3,711,400	(6.0%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Director of Operations Services	-	1	1	1
Plant Manager	1	-	-	-
Operations Supervisor	1	1	1	1
Operator OI/I/II/III	7	7	7	7
Totals	9	9	9	9

Treatment Plant Maintenance

Description

The Treatment Plant Maintenance Department provides corrective and preventive maintenance and equipment installation at the wastewater treatment plant and recycled water facilities, lift stations and other assigned areas.

Priorities are set through consultation with Treatment Plant Operations staff to ensure plant reliability and permit compliance.

Link to District Goals in Strategic Plan

The Treatment Plant Maintenance Department supports the District's "Goal One: Infrastructure Reliability" by providing technical assistance and information to support the master planning efforts (**Objective 1D**) and Asset Management implementation (**Objective 1B**).

Department Goals

Goal: Provide corrective and preventive maintenance safely, cost effectively and efficiently.

Related Department Objectives:

- Continue to implement an effective life cycle equipment replacement schedule for better budgetary expense projections.
- Expand equipment data base and associated task of Maintenance Program.
- Implement Infrared Imaging PM program for all electrical switchgear and motor control centers

Planned Maintenance Ratio of Hours Worked

(Planned maintenance as a percentage of total maintenance measures the proactive nature of activity in the department and is more efficient than corrective or emergency maintenance. A higher percentage is better.)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
65.8%	45.2%	40.5%	61.3%	68%	68%

Number of work orders completed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
1,351	1,314	1,482	1,334	1,400	1,400

Goal: Maintain critical operational systems so that there is reliability and operational resiliency.

Related Department Objectives:

- Implement PM program for Telemetry System testing for reliability
- Continue enhancement and organization of the inventory system to reduce down time.

Uptime for Cogeneration Engine

(The Cogeneration Engine is critical for effective management of biogas through the generation of heat and electricity needed by the wastewater treatment plant to operate.)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
96%	98%	79%	81%	95%	95%

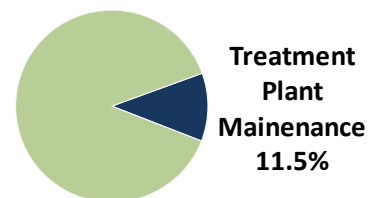
Changes in Service Levels

- FY 18/19 removes \$28,500 for weed abatement requiring special equipment and contracted services in prior year.
- FY 18/19 adds \$25,000 to repair the access gate to the recycled water pump station.
- FY 18/19 budget removes the rental of siloxane filter unit, as one was purchased in prior year.
- Various categories were increased and decreased from prior year, based on specific work plan in this department.



Maintenance technicians installing a valve to the “3-Water” filter.

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 709,444	\$ 994,246	\$ 1,053,600	\$ 1,074,800	\$ 922,750	(12.4%)
Services & Supplies	\$ 677,391	\$ 698,316	\$ 926,050	\$ 823,818	\$ 909,800	(1.8%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 1,386,835	\$ 1,692,562	\$ 1,979,650	\$ 1,898,618	\$ 1,832,550	(7.4%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Plant Maintenance Supervisor	1	1	1	1
Equipment Maintenance Specialist I/II	4	4	4	4
Plant Attendant	1	1	1	1
Totals	6	6	6	6

Water & Biosolids Reclamation

Description

This department is responsible for the effective and efficient distribution of recycled water and management of biosolids in a manner that respects the environment, maintains public health and conforms to local, state and federal regulations.

After the treatment of wastewater, NapaSan generates recycled water to “Title 22 Unrestricted Use” quality, which is permitted under State of California Regulations for almost any use except potable (drinking) water. NapaSan delivers this water to vineyards, golf courses, cemeteries, parks and athletic fields, and for landscape irrigation purposes.

Biosolids are managed by this department through land application. This method avoids expensive off-site hauling and disposal of biosolids, with significant savings to the ratepayers.

Link to District Goals in Strategic Plan

The Water & Biosolids Reclamation Department supports NapaSan’s “**Goal Six: Resource Recovery**” through its support of local partners and the Engineering Department’s projects to construct distribution systems for recycled water (**Objective 6A**) and providing technical assistance regarding recycled water allocation policy (**Objective 6C**).

Department Goals

Goal: Distribute recycled water during the summer months through sales to customers and on District-owned property.

Related Department Objectives

- Maintain recycled water availability at 100% during the non-discharge period.
- Distribute 814 million gallons (2,500 acre feet) recycled water, with 85% sold to customers.
- Complete annual recycled water user site inspections, issuing no Notices of Non-compliance.
- Complete conversion of properties to recycled water in Napa Airport Centre.
- Facilitate additional conversion activities of MST and Los Carneros Water District customers.

Recycled Water Service Availability

(% of time RW is available to customers – May to Oct.)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
100%	100%	100%	100%	100%	100%

Recycled Water Reuse by Customers

(% of recycled water sold to customers – May to Oct.)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
75.2%	78.3%	80.6%	83.1%	85%	85%

Goal: Dispose of 100% of biosolids through land application on District-owned property.

Related Department Objectives

- Apply approximately 1,200 dry tons of dewatered biosolids on District land.
- Put 100% of the biosolids applied to NapaSan land to beneficial reuse, through active agricultural practices on the land (growing crops, grazing sheep, etc.).

Biosolids Put to Beneficial Reuse

(% of biosolids applied to seeded & harvested acres)

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
100%	100%	100%	100%	100%	100%

Changes in Service Levels

- FY 18/19 budget includes \$13,500 in new software maintenance contracts for water management software and recycled water meter reading software.

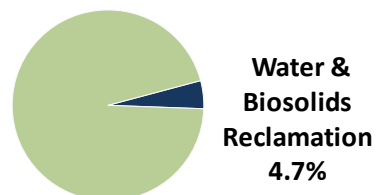


Sheep Grazing at Somky Ranch



Irrigating Jameson Ranch with recycled water

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 343,304	\$ 478,906	\$ 485,250	\$ 494,700	\$ 455,350	(6.2%)
Services & Supplies	\$ 182,723	\$ 234,298	\$ 267,050	\$ 230,689	\$ 272,750	2.1%
Other	\$ 24,781	\$ 26,331	\$ 28,400	\$ 28,714	\$ 29,150	2.6%
TOTAL EXPENDITURES	\$ 550,808	\$ 739,534	\$ 780,700	\$ 754,103	\$ 757,250	(3.0%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Reclamation Systems Director	1	1	1	1
Reclamation Maintenance Worker I/II	2	2	2	2
Totals	3	3	3	3

Engineering

Description

Engineering provides technical assistance to the operational departments within NapaSan. The group is responsible for managing most of NapaSan's capital projects and prepares project charters for projects that are included in the Ten-Year Capital Improvement Plan.

Engineering is responsible for reviewing development plans for conformance with District standards and inspection of sanitary sewer facilities. In some cases, the group prepares the design plans and specifications and provides construction management and inspection for collection system projects.

Link to District Goals in Strategic Plan

The Engineering Department supports NapaSan's "Goal One: Infrastructure Reliability" and "Goal Six: Resource Recovery" by providing project management and leadership on all of the infrastructure projects identified:

- Collection System Master Plan and Treatment Plant Master Plan updates (**Objective 1D**)
- Replace 2% of sewers annually (**Objective 1A**)
- Develop and Asset Management Plan (**Objective 1B**)
- Design and construct Browns Valley Road Trunk (**Objective 1C**)
- Study whether to implement a Private Lateral Program (**Objective 1E**)
- Working with local partners to expand the distribution of recycled water (**Objective 6A**)
- Work with local partners to achieve long-term recycled water goals (**Objective 6B**), evaluate the current recycled water allocation policy (**Objective 6C**) and renew the recycled water agreement with the City of Napa (**Objective 6F**)
- Evaluate energy self-generation to reduce overall energy costs (**Objective 6D**)

Department Goals

Goal: Plan and implement the Ten-Year Capital Improvement Plan.

Related Department Objectives

- Initiate capital projects that are scheduled to begin within the fiscal year and finalize those projects that are scheduled to be completed within the fiscal year.
- Develop and utilize capital program management system to monitor and report progress of active capital projects.
- Continue design of the Browns Valley Road Trunk and West Napa Pump Station projects.
- Complete construction of the Recycled Water Fill Station in the MST area.

Percent of Annual Capital Plan Expended

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
62.8%	83.2%	72.1%	52.7%	85%	85%

Capital Expenses as Percent of Operating Expenses

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
168%	322%	239%	78%	115%	125%

Goal: Plan projects to ensure that the renewal or replacement of existing assets is completed according to condition assessments and estimated useful lives of assets.

Related Department Objectives

- Continue implementation of a formal asset management plan.
- Rehabilitate or replace at least 1.3% of the Collection System mains.
- Plan for and complete renewal & replacement capital projects that impact approximately 4% of NapaSan's total assets annually.

Percent of Sewer Mains Rehabilitated

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
1.82%	2.60%	1.01%	2.18%	2.0%	2.0%

Renewal & Replacement of Assets

(as a % of asset net worth – 2% minimum, 4% goal)

<u>13/14</u>	<u>14/15</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>
8.8%	10.2%	4.5%	3.8%	4%	4%

- Complete the Summer 2018 I&I Sewer Rehabilitation project and complete in-house design of the Summer 2019 I&I project to reduce peak wet-weather flow.
- Construct the 2018 Treatment Plant project.

Goal: Complete the first review of development plans submitted for District approval within 30 calendar days.

Related Department Objectives

- Review and return development plans within 30 days of submittal NapaSan.
- Respond to requests for information from the general public and other local agencies within three working days of request.
- Responded to an estimated 800 phone requests and 225 counter requests for development related information.
- Conduct an estimated 650 activities related to construction inspection of NapaSan collection system facilities, include locating sewers, permit processing, preconstruction meetings, inspections, and updating record drawings.

Development Review Response Time

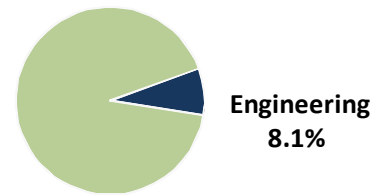
(% of applications where 30-day goal is met)

2014	2015	2016	2017	2018	2019
997.5%	94.4%	93.6%	98.3%	95%	95%

Changes in Service Levels

- FY 18/19 budget subtracts \$195,150 in consulting support for implementation of asset management Phase 1 project in prior year.
- FY18/19 budget removes a one-time \$19,900 training expense from the prior year.
- FY 18/19 budget removes \$5,000 for GIS aerial photo update, a one-time project in the prior year.
- FY 18/19 budget includes \$5,000 for consulting support for Collection System flow modeling

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 799,630	\$ 1,210,787	\$ 1,272,700	\$ 1,271,721	\$ 1,186,400	(6.8%)
Services & Supplies	\$ 60,787	\$ 202,366	\$ 321,100	\$ 135,565	\$ 110,650	(65.5%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 860,417	\$ 1,413,153	\$ 1,593,800	\$ 1,407,286	\$ 1,297,050	(18.6%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Technical Services Director	1	1	1	1
Senior Civil Engineer	1	1	1	1
Junior/Assistant/Associate Engineer	2	2	2	2
Asset Management Analyst I	1	1	1	1
District Inspector I/II	2	2	2	2
Totals	7	7	7	7

Regulatory Compliance

Description

The Regulatory Compliance Department provides support to Technical Services Department with consistently high quality analytical laboratory and Source Control services.

Laboratory analyses fall into one of four categories:

- 1) Required for regulatory compliance within District's operating permits;
- 2) Needed for operational control of the complex treatment processes;
- 3) Requested by staff or contracted consultants in support of special studies; or
- 4) Quality control.

Link to District Goals in Strategic Plan

The Regulatory Compliance Department supports NapaSan's goals in the Strategic Plan through its support of the Plant Operations, Plant Maintenance, and Engineering Departments, and the Community Outreach & Pollution Prevention Program. There are no specific objectives in the Strategic Plan that this department is responsible for completing.

Department Goals

Goal: Provide laboratory services efficiently and reliably, while abiding by the protocols and policies of the Quality Assurance Manual, Standard Operating Procedures and laboratory safety program.

Related Department Objectives

- Implement new Environmental Laboratory Accreditation Program (ELAP) certification requirements.
- Continue to implement a successful and effective Pretreatment Program
- Continue development and implementation of a Method Detection Limit program.
- Continue to characterize NapaSan's collection system raw waste stream.
- Continue to develop and implement an analyst educational outreach training program.
- Continue to review and update operational data sampling and analysis management for an efficient process control operational strategy.

Number of regulatory analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
45,030	4,670	2,699	2276	2300	2400

Number of Process Control analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
15,259	12,827	12,138	13,410	13,000	12,700

Number of special request analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
196	1,885	829	55	100	100

Number of Quality Control/Assurance analyses processed

<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
5,380	2,434	2,457	8,124	9,000	9,000

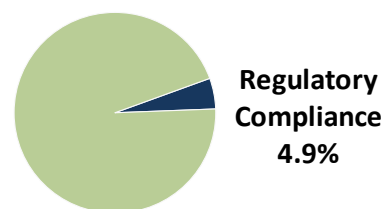
Changes in Service Levels

- FY 18/19 budget removes \$8,000 for temporary assistance in the lab.
- FY 18/19 budget adds \$5,000 in hazardous waste disposal services (moved from Plant Maintenance).
- FY 18/19 budget adds \$2,000 of the one-time purchase of portable colorimeter, and subtracts \$8,000 for the one-time purchases of a turbidity meter and temperature data logger in prior year.



NapaSan Lab Technicians run thousands of regulatory and process control analyses annually

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 527,956	\$ 640,065	\$ 736,500	\$ 574,000	\$ 619,900	(15.8%)
Services & Supplies	\$ 178,400	\$ 227,761	\$ 181,050	\$ 139,749	\$ 170,100	(6.0%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 706,356	\$ 867,826	\$ 917,550	\$ 713,749	\$ 790,000	(13.9%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Regulatory Compliance Manager	-	1	1	1
Lab Supervisor	1	-	-	-
Lab Technician I/II	3	3	3	3
Totals	4	4	4	4

Community Outreach & Pollution Prevention

Description

The Community Outreach & Pollution Prevention Program is a cross-departmental program designed to ensure that NapaSan communicates transparently with ratepayers and stakeholders, and acts proactively to disseminate its pollution prevention message. This is done through school programs, community events and treatment plant tours.

The program also works to ensure that discharges to the collection system and treatment plant are in compliance with NapaSan's Sewer Use Ordinance and will not pose a hazard to the public, NapaSan employees or NapaSan facilities and treatment processes.

NapaSan's Pretreatment Program controls the amount of pollutants that are discharged to the sanitary sewer system through active regulation of numerous industrial and commercial businesses in Napa. Program activities include periodic on-site inspections, permit writing and administration, sampling of various discharges, and enforcement when necessary. The Program supports increased water recycling and reuse, as well as wastewater treatment prior to discharge to the sanitary sewer to reduce pollutant loadings to the treatment facility.

Link to District Goals in Strategic Plan

This program supports the Strategic Plan, specifically “**Goal Three: Operational Optimization**” in the outreach to develop alternative methods for treating winery waste (**Objective 3A**) and “**Goal Five: Community Outreach and Communication**” in the development of proactive communication methods and practices (**Objective 5A**) and the completion of Communications Plan goals and objectives (**Objective 5B**). The program also contributes toward **Goal Six: Resource Recovery, Objective 6E** to improve recycled water quality through its efforts in pollution prevention.

Program Goals

Goal: Decrease Fats, Oil and Grease (FOG) deposited in the Collection System, thus reducing maintenance expenses and reducing the risk of Sanitary Sewer Overflows (SSOs).

Related Department Objectives

- With the City of Napa, promote the Recycle More Program which provides curbside collection of used cooking oil.
- Continue the inspection program for Fats, Oil and Grease (FOG).
- Continue public outreach on proper disposal of FOG.

Restaurant Inspections (Fats, Oil & Grease)

2014	2015	2016	2017	2018	2019
162	155	154	167	165	165

Lateral Overflows or Backups Due to FOG (goal is zero)

2014	2015	2016	2017	2018	2019
3	1	0	1	0	0

Main Line Sanitary Sewer Overflows Due to FOG (goal is zero)

2014	2015	2016	2017	2018	2019
2	1	1	1	0	0

Goal: Prevent pollutants from being discharged into the sewer system through active regulation, promotion of Best Management Practices, and outreach to the public.

Related Department Objectives

- Implement the Communications Plan and meet the identified annual goals
- Partner with local partners for collection of unwanted medications from drop-off sites.
- Conduct plant tours and make public presentations.

Plant Tours Conducted and Presentations Made

2014	2015	2016	2017	2018	2019
31	14	44	51	50	50

Pounds of Unwanted Pharmaceuticals Diverted

2014	2015	2016	2017	2018	2019
2,910	3,126	3,838	1,388	1,500	1,500

- Develop and disseminate to stakeholders pollution prevention BMPs as necessary.
- Promote classroom presentations targeting elementary school students.
- Continue Spanish language outreach for pollution prevention messages.
- Continue monitoring, sampling, reporting, and billing for all categorical dischargers.

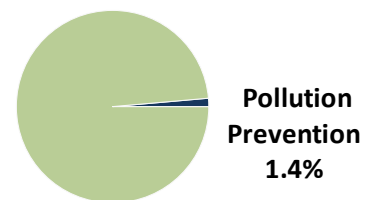


School tour of the Treatment Plant Headworks

Changes in Service Levels

- FY 18/19 budget removes one-time website development expenses from prior year.
- FY 18/19 budget removes one-time marketing development support for implementing messaging on NapaSan vehicles, but adds marketing support for additional outreach related to the upcoming 75th Anniversary of the district.
- FY 18/19 budget removes support for the Residential High-Efficiency clothes water rebate program, as this grant-based program has concluded with PG&E.

Percent of Operating Budget



Department Operating Budget

	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	\$ 84,433	\$ 144,385	\$ 132,500	\$ 135,550	\$ 124,550	(6.0%)
Services & Supplies	\$ 111,666	\$ 76,992	\$ 116,850	\$ 91,725	\$ 101,250	(13.4%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 196,099	\$ 221,378	\$ 249,350	\$ 227,275	\$ 225,800	(9.4%)

Position Authorizations

Position Series	FY 15/16	FY 16/17	FY 17/18	FY 18/19
Pollution Prevention and Outreach Specialist	1	1	1	1
Totals	1	1	1	1

Non-Departmental Expenses

Description

These expenses are not directly attributable to a specific department or program. They include expenses that are allocated at the District level, such as NapaSan memberships in organizations and associations, liability insurance, refunds of sewer service charges, debt service payments, and interfund transfers.

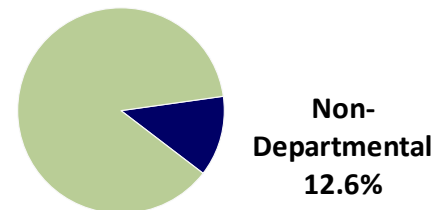
Changes in Service Levels

- Expenses for health benefits for current retirees (OPEBs) are now recorded in this department, rather than allocated to the departmental operating budgets (\$383,500). This change allows for a more transparent reporting of OPEB expenses.
- Expenses for CalPERS Unfunded Actuarial Liability (UAL) is now recorded in this department, rather than being allocated to the departmental operating budgets (\$1,211,350). This change allows for a more transparent reporting of the UAL expenses.
- The FY 18/19 includes an additional \$135,000 payment towards UAL expenses in excess of the minimum CalPERS contribution.
- There is an increase in the FY 18/19 budget of \$16,500 for liability insurance premiums.
- The FY 18/19 budget includes membership in the National Association of Clean Water Agencies (\$7,100).



Treatment plant biogas holder (left) and digester (right)

Percent of Operating Budget



Non-Departmental Operating Budget

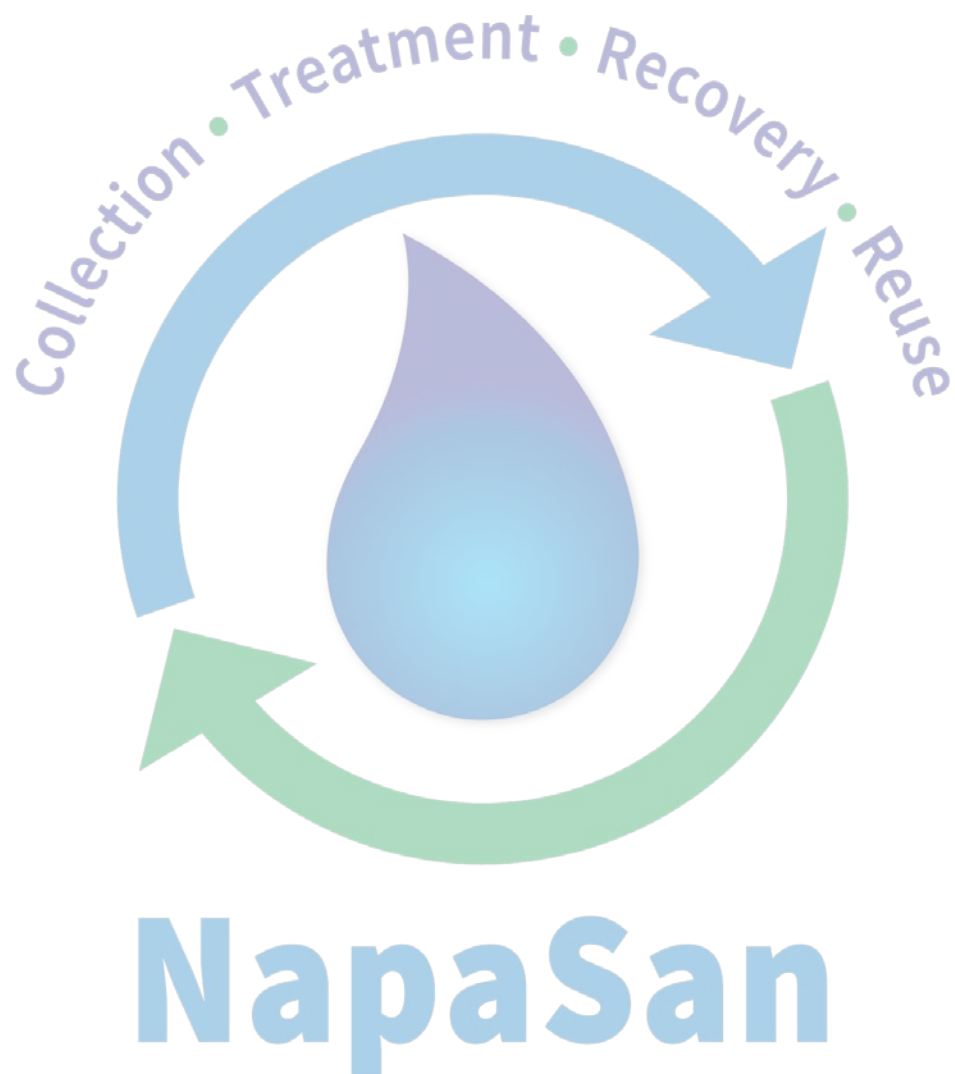
	Actual FY 15/16	Actual FY 16/17	Adjusted FY 17/18	Estimated FY 17/18	Budget FY 18/19	Percent Change
Salaries & Benefits	-	-	-	-	\$ 1,729,850	-
Services & Supplies	\$ 239,951	\$ 249,053	\$ 268,300	\$ 264,888	\$ 291,900	8.8%
Total Operating Expenditures	\$ 239,951	\$ 249,053	\$ 268,300	\$ 264,888	\$ 2,021,750	653.5%
Debt Service, Transfers and Taxes	\$ 12,447,473	\$ 6,995,891	\$ 13,677,450	\$ 13,673,500	\$ 13,493,800	(1.3%)
TOTAL EXPENDITURES	\$ 12,687,424	\$ 7,244,944	\$ 13,945,750	\$ 13,938,388	\$ 15,515,550	11.3%

Capital Improvement Plan



Installation of recycled water pipeline in the Los Carneros Water District area

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Capital Improvement Plan

Program Description

The Capital Improvement Plan (CIP) is designed to identify capital expenditures for the next ten years and to plan appropriately for how to complete those projects within projected revenues and staffing capacity. The plan includes the replacement and rehabilitation of existing capital assets as well as the acquisition or construction of new capital assets.

Definition of Capital Expenditures

Capital expenditures, or capital outlays, are cash outlays by NapaSan that result in the acquisition or construction of a capital asset. A capital asset is any asset of significant value (over \$5,000) that has a useful life of over one year. Examples include land, buildings, machinery, vehicles and equipment. All capital assets acquired or constructed are included in the Capital Improvement Plan. Land is always considered a capital asset, regardless of value.

Capital Plan Development Process

Annually, NapaSan updates its Ten-Year Capital Improvement Plan. The plan undergoes several levels of review and alteration. First, a project is individually evaluated to determine whether it is necessary to do the project, or if a less expensive alternative is available. If the project is still the best alternative, then an evaluation is done to determine when the project should be done, based on the condition of the existing assets or the operational and maintenance needs for the project.

Management and supervisory staff also are provided an opportunity to identify new capital projects through the Project Charter process. New projects are proposed to the Capital Program Manager and the District Engineer who evaluate the projects and determine their need and level of priority. Once vetted through this process, new projects are added to the CIP as funding allows.

Vehicle Replacement Guidelines

NapaSan maintains a fleet of vehicles used solely for purposes related to the direct maintenance and operations of NapaSan. When a vehicle is purchased, it is identified at that time how long that vehicle should continue to serve its intended function, provided that the vehicle is maintained properly. The replacement of that vehicle is then scheduled in the Capital Improvement Plan, to ensure that NapaSan has adequately planned for the replacement costs associated with the vehicle.

Every year, a team of NapaSan staff reviews the list of vehicles owned by NapaSan and the replacement schedule. The team makes the following recommendations:

- Move vehicles back or forward on the replacement schedule based on the maintenance history of the vehicle and any current maintenance problems;
- Move vehicles back or forward on the schedule based on regulatory requirements (such as CARB requirements for diesel engines);
- Move vehicles between organizational units when the use of the vehicle changes;
- Identify whether a vehicle scheduled for replacement should be recommended for surplus, or when it could still be used effectively by another department; and
- Identify when service needs have changed that could necessitate that a vehicle be replaced by a different type of vehicle or not at all.



The combination vacuum truck was replaced in 2018.

Senior management reviews the recommendations of the Fleet Team, accepts or rejects recommendations, and incorporates accepted changes into the Ten-Year Capital Improvement Plan. All decisions to declare a vehicle surplus and replace the vehicle are brought to the NapaSan Board of Directors for approval, in accordance with procurement policy.

The replacement of fleet vehicles represents almost \$6.65 million, or 2.7% of the entire Ten-Year Capital Improvement Plan. All revenues collected from the sale of any vehicles declared surplus is used to offset the cost of new vehicles.

Sources of Capital Expenditure Funding

There are several sources of funding for capital projects. NapaSan collects capacity charges on new development to pay for its share of expanding the collection and treatment systems. NapaSan also collects sewer service charges revenue in excess of operational needs to pay for replacement and rehabilitation projects. The fees collected as part of development plan review are used for capital projects, as well as grant and intergovernmental revenue.

Use of Capacity Charges for Expansion

NapaSan imposes a capacity charge on new development (see the Budget Summary section, page 31, for more information on this revenue source).

In August 2009, NapaSan completed a study of capacity charges. The study determined that from FY 1995/96 to FY 2007/08, there was significantly more money spent to provide new capacity (expansion) than there was capacity charge revenue collected. As of July 1, 2008, the expansion fund (capacity charges) was in deficit to existing ratepayers and the capital projects fund by \$12.6 million.

As new projects are completed, their benefit to existing users and to new development is evaluated, and a split of expenses between the two is assigned. At the end of the fiscal year, the deficit is adjusted based on the amount of revenue received in capacity charges and the amount of capital expenditure for expansion projects. The following represents a summary of this accounting:

Actual

Beginning Deficit (7/1/08)	(\$12,607,167)
FY 2008/09 – Revenues	1,387,193
FY 2008/09 – Expansion Projects	(1,663,801)
FY 2009/10 – Revenues	600,664
FY 2009/10 – Expansion Projects	(2,191,370)
FY 2010/11 – Revenues	2,183,802
FY 2010/11 – Expansion Projects	(2,811,161)
FY 2011/12 – Revenues	3,330,418
FY 2011/12 – Expansion Projects	(4,208,445)
FY 2012/13 – Revenues	2,693,047
FY 2012/13 – Expansion Projects	(2,171,064)
FY 2013/14 – Revenues	3,635,826
FY 2013/14 – Expansion Projects	(7,447,155)
FY 2014/15 – Revenues	3,341,297
FY 2014/15 – Expansion Projects	(10,657,234)
FY 2015/16 – Revenues	3,252,412
FY 2015/16 – Expansion Projects	(1,832,349)
FY 2016/17 – Revenues	5,359,233
FY 2016/17 – Expansion Projects	(703,992)
Ending Deficit (6/30/17)	(\$20,509,844)

Estimated/Projected

Beginning Deficit (7/1/17)	(\$20,509,844)
FY 2017/18 – Revenues	6,276,000
FY 2017/18 – Expansion Projects	(1,954,000)
FY 2018/19 – Revenues	4,614,600
FY 2018/19 – Expansion Projects	(6,463,620)
Projected Ending Deficit (6/30/2019)	(\$18,036,864)



The aeration basin panels were replaced in 2017.

A budget deficit and situation where expenses on expansion projects exceeds revenues means that the current ratepayers in the system are paying more than their allocated share of capital expenses, as the deficit is made up using sewer service charges and other revenues from operational sources.

A copy of the Capacity Charges Report for Fiscal Year 2016/17 can be found in Appendix F of this budget document.

Changes from Prior CIP

The CIP was amended by the Board after initial adoption twice during FY 2017/18, first to carry forward the budgets of unfinished projects from the prior year and then again to move the replacement of the vacuum combination truck forward in the CIP from FY 18/19 into the current year. Other changes were made on the General Manager's approval, moving budget from one project to another. The following is a summary of the significant changes made to the CIP during the last fiscal year, not counting carry forwards of uncompleted capital projects:

- Add the replacement of the vacuum combination truck (vehicle #529) (CIP 18738) with a budget of \$575,000.
- Combined a number of different Treatment-Equipment and Treatment-Structures projects into the 2018 Plant Project (CIP 18736) with a budget of \$1,500,250.
- Established a new project (CIP 18737) to replace a flash mixer in the plant, for \$45,000.
- Purchase a new Permaliner Picote machine for use when lining pipes (CIP #18735) for \$20,000.
- Repair the Pond 1 Electrical Transformer that was unanticipated (CIP #18739), for \$25,000.
- In several projects, either reduced or increased the project budget to meet actual bid or costs. The net impact of the adjustments to the CIP was neutral.

Summary of FY 2018/19 Capital Projects

The following is a summary of FY 2018/19 capital projects. **Dollar amounts noted are the amount budgeted for FY 2018/19, and not the entire amount of the project.** For complete financial information, see the table of projects that follows, starting on page 84.

Collection System – Collection System projects represent significant and routine replacement or rehabilitation of existing pipeline or equipment. These projects are designed to replace or improve assets to extend their useful lives or to improve their function by reducing how rainwater and groundwater can enter the collection system. Major projects beginning or continuing this year include the Browns Valley Trunk project, the Summer 2018 Sewer Rehabilitation project, the Summer 2019 Sewer Rehabilitation project, and the 66" Trunk rehabilitation project. This category also includes the implementation of the collection system asset management software. Collection system projects for the fiscal year total \$13,599,100.

Collection System Equipment – The Collection Department will be replacing one of its trucks used for the "811 Call Before You Dig" locate service. Total equipment cost is \$35,400.

Lift Stations – Lift stations are pump stations within the sewer collection system. In FY 2018/19, the West Napa Pump Station replacement project will begin, and a pump in the Stonecrest Pump Station will be rebuilt. Lift Station capital projects for the year total \$5,245,000.

Treatment – FY 2018/19 includes the first full year of a three year project to design and construct a mechanical dredge in Pond 1. Capital costs in this area total \$600,000 for this fiscal year.

Treatment – Equipment – These projects include a

Ten-Year CIP Summary

	<u>FY 2018/19</u>	<u>10-Year CIP</u>
Collection System	\$13,599,100	\$150,174,600
Collection System Equipment	35,400	4,690,900
Lift Stations	5,245,000	9,713,500
Treatment	600,000	5,800,200
Treatment Equipment	1,513,800	19,159,600
Treatment Structures	4,005,000	30,977,300
SCADA	250,000	1,130,200
Recycling-District	627,600	3,768,900
Recycling-Expansion	150,000	8,971,200
Other	359,800	9,401,600
Total	\$26,385,700	\$243,788,000

number of equipment replacements, most notable of which are projects to replace and improve the plant water (“3W”) system, replace two 10” portable pumps, rehabilitate the primary clarifiers, install a backup 12 kV electrical line to the Influent Pump Station, and complete the rebuild of one of the neuros blowers. The total FY 2018/19 expenditure is \$1,513,800.

Treatment Plant – Structures – There are three projects associated with the structures at the treatment plant. They include the second year of a three-year project to replace headworks equipment, the completion of the 2018 Treatment Plant projects, and the initial design phase of a replacement for the Pond Transfer Structures between Pond 2 and Pond 3. The total FY 2018/19 expenditure is \$4,005,000.

SCADA – SCADA is the hardware and software that is used to operate the treatment plant. In FY 2018/19, there is a network security study and master plan scheduled to begin, with \$250,000 budgeted for FY 2018/19.

Recycling-District – This section includes projects and equipment necessary for NapaSan to maintain its fields, distribute recycled water, and land apply biosolids. FY 2018/19 includes construction of a recycled water truck fill station on the Coombsville line and the replacement of the VFD at the Jameson Pump Station. The total FY 2018/19 expenditure is \$627,600.

Recycling-Expansion – This section includes projects to expand the recycled water distribution system into the community, or expand the treatment capabilities at the plant. Expenses here include continued efforts through the North Bay Water Reuse Project to apply for and manage federal and state grants and the extension of the recycled water system. Total FY 2018/19 budget is \$150,000.

Other – Development technical support is the capitalization of staff time spent reviewing the plans and inspections associated with contributed capital. Other expenses in the category include the replacement of audio-visual equipment in the conference rooms, a District-wide fence repair project, the replacement of the trailer used by the Confined Space Entry Team, and replacement of the fleet passenger vehicle. Total for FY 2018/19 is \$359,800.

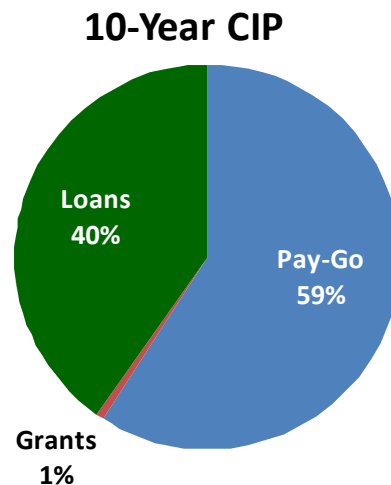
FY 2018/19 Partner-Funded Projects

NapaSan has partnered with Napa County to construct the truck fill station along the Coombsville Road recycled water line. The project is being funded entirely by Napa County from Community Facilities District proceeds.

10-Year Capital Project Funding Summary

The following table summarizes the 10-Year Capital Improvement Plan by the type of funding. “Pay-Go” refers to pay-as-you-go financing, meaning that the projects are funded from existing resources, either cash on hand or from annual revenue sources such as sewer service charges or capacity charges. “Grant” refers to funding from

	Pay-Go	Grants	Loans
FY 18/19	66.3%	1.4%	32.3 %
FY 19/20	62.1%	-	37.9%
FY 20/21	79.3%	-	20.7%
FY 21/22	82.2%	-	17.8%
FY 22/23	46.7%	0.1%	53.2%
FY 23/24	21.4%	0.2%	78.4%
FY 24/25	41.9%	4.1%	54.0%
FY 25/26	100%	-	-
FY 26/27	100%	-	-
FY 27/28	100%	-	-



any federal, state or local government that does not have to be repaid. “Loans” refers to any long-term financing, such as revenue bonds, Certificates of Participation, State Revolving Fund loans, or federal loans.

Unfunded or Delayed Projects

The Capital Improvement Plan includes projects that have been clearly identified and programmed. It also includes some “placeholder” projects, where the specific project has not been identified but there is money allocated nonetheless. These placeholders are included in the plan to recognize that there is the need to plan for future replacement and rehabilitation projects, even though the specific projects have not yet been scoped and planned. Providing a placeholder for these future projects will ensure that there are adequate resources to pay for these projects once they are known. As NapaSan further develops its Asset Management Program, these placeholders will be replaced with actual projects.

There are a few projects in this CIP where the start dates have been pushed out to begin in later years, as compared to last year’s CIP:

- **Upper Lateral Rehabilitation – Pilots #4, #5 and #6** – Because there was insufficient rain during the 2017/18 winter, staff was unable to do “pre-construction flow monitoring” for these projects. Without this flow monitoring, it is not possible to determine whether the projects have a cost-effective impact on reducing I&I flow into the collection system. These projects have been delayed one year, with flow monitoring scheduled for winter 2018/19.
- The **Browns Valley Road Trunk** project start of construction has been delayed one year as a result of delays in funding through the SRF program.

Staff believes that these delays will not result in deferred maintenance scenarios, nor will the delays pose an unreasonable risk for system failure or permit violation.

Impact of Projects on Operating Budget

Many of the capital projects planned for FY 2018/19 are replacements and rehabilitations of existing capital assets, so it is not expected that these capital projects will have an impact on future operating budgets. However, some the FY 2018/19 capital projects will have a significant impact on the current and future NapaSan operations and maintenance budgets.

CIP 18702 – Collection System Asset Management Software project in the CIP includes the costs to procure and install the software. Additional future O&M costs include the ongoing software maintenance contracts, estimated at approximately \$60,000 per year. However, this new software replaces two software systems currently in use that have ongoing software maintenance costs – Hansen (\$5,600 per year) and MP2 (\$4,700 per year – for a new impact to the operating budget of \$49,700 annually.

The Rehabilitation projects and I&I projects in the Collection System are designed to decrease the amount of rainwater and groundwater that get into the system. This reduces future costs by reducing the need to build bigger pipes as well as reduces the amount of influent that the plant needs to treat. It also reduces the need for cleaning and root removal maintenance activities. The immediate, short-term savings have not been calculated, but should have a positive effect on the operating budget.

The Browns Valley Trunk project (CIP #14703) will increase the amount of sewer main that will need to be maintained in the Collection System. However, it is not significant enough in size to impact the staffing levels or other direct expenses in the Collection System operating budget.

The West Napa Pump Station Replacement (CIP #17711) is being designed to reduce the current electricity consumption by at least 20%. The estimated annual savings is \$3,600 starting in FY 2020/21.

Net Impacts of Capital Projects on Operating Budget

<u>CIP #</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>
18702	\$0	\$49,700	\$49,700
17711	0	0	(3,600)
17735	0	0	8,000
Total	\$0	\$49,700	\$54,100

The Pond 1 Dredge (CIP 13745) will contribute to increased biosolids that need to be dewatered, trucked to Jameson Ranch, and incorporated into the land. The amount will not be significant, as the materials will be incorporated into existing processes. Impact to the operating budget is predominantly from increased polymer for dewatering, and in electricity to operate the dredge. Estimated operating budget impact is \$8,000 annually.

The Recycled Water Truck Fill Station on Coombsville Road (CIP #18731) will require some periodic maintenance, which is estimated to be minimal in the first three years of operation. There are additional costs associated with the production and distribution of recycled water. However, these costs are offset by the collection of recycled water revenues from the site. As the revenue is estimated to offset the maintenance and operating costs of this facility, there is no estimated net financial impact.



New recycled water reservoir liner installed in 2018.

FY 2018/19
CIP Project Descriptions

COLLECTION SYSTEM

13701	Mainline Sewer Rehabilitation		FY 2018/19:	\$95,000
	<i>Ongoing program to conduct spot repairs to damaged sewer lines using NapaSan crews or an outside contractor, extending the useful life of these assets.</i>			
13702	Manhole Raising / Rehabilitation		FY 2018/19:	\$428,500
	<i>Ongoing program to fund the raising of manhole rims in streets that have been resurfaced. NapaSan replaces or rehabilitates damaged manholes in this program.</i>			
13703	Lateral Replacement / Rehabilitation		FY 2018/19:	\$77,100
	<i>Ongoing program to rehabilitate street laterals as required using NapaSan crews or an outside contractor.</i>			
13704	Cleanout Installation / Rehabilitation		FY 2018/19:	\$93,200
	<i>Ongoing program using NapaSan crews to install lateral clean-outs at the property line where one does not exist.</i>			
13705	Inflow & Infiltration (I&I) Reduction Program		FY 2018/19:	\$214,200
	<i>This program conducts flow monitoring and field reconnaissance for I&I reduction projects. A consultant and NapaSan staff will analyze the effectiveness of the I&I reduction projects.</i>			
18702	Collection System Asset Management Software	Project Total: \$625,000	FY 2018/19:	\$275,000
	<i>This replaces the existing asset management software in the collection system that is inadequate to meet the current data-driven decision making needs for sewer system asset management.</i>			
14703	Browns Valley Truck Interceptor	Project Total: \$20,300,000	FY 2018/19:	\$5,075,000
	<i>The project will intercept sewage from the Browns Valley area and bypass it around the downtown area. The project goal is to convey increased flows in the sewer system and to decrease the potential for overflows.</i>			
	66-inch Trunk Rehabilitation (Kaiser to IPS)	Project Total: \$2,500,000	FY 2018/19:	\$1,400,000
	<i>The project will rehabilitate approximately 1.2 miles of 66-inch trunk main from Kaiser Road to IPS. The unlined concrete pipe is corroding and needs to be rehabilitated to extend the useful life.</i>			
	72-inch Trunk Construction (Kaiser to IPS)	Project Total: \$46,036,700	FY 2018/19:	\$1,000,000
	<i>The project will construct approximately 1.2 miles of 72-inch trunk main from Kaiser Road to IPS. The FY18/19 budget includes preliminary design and environmental review for a project that will be constructed in future years.</i>			
18705	2018 Collection System Rehabilitation	Project Total: \$5,084,000	FY 2018/19:	\$2,600,000
	<i>This collection system rehabilitation project of 2.2% of sewer mainlines will be constructed to reduce I&I in various high priority areas.</i>			
18706	2019 Collection System Rehabilitation	Project Total: \$5,879,200	FY 2018/19:	\$2,321,100
	<i>This collection system rehabilitation project of approximately 2% of sewer mainlines will be designed and constructed to reduce I&I in various high priority areas.</i>			
	2020 Collection System Rehabilitation	Project Total: \$5,999,000	FY 2018/19:	\$20,000
	<i>This collection system rehabilitation project of approximately 2% of sewer mainlines will be designed and constructed to reduce I&I in various high priority areas.</i>			

COLLECTION SYSTEM EQUIPMENT

Vehicle 180 - Ford F150 - USA Truck	Project Total: \$35,400	FY 2018/19:	\$35,400
<i>This project will purchase a new truck to replace an existing truck that is at the end of its useful life.</i>			

FY 2018/19
CIP Project Descriptions

LIFT STATIONS

17711 West Napa PS Replacement **Project Total: \$9,500,000** **FY 2018/19: \$5,200,000**

The project will replace the West Napa Pump Station which is at the end of its useful life and does not have adequate firm capacity to convey peak flows.

Stonecrest PS Pump Rebuild **Project Total: \$45,000** **FY 2018/19: \$45,000**

A pump requires a rebuild to extend its useful life.

TREATMENT

13745 Pond 1 Dredge **Project Total: \$3,600,000** **FY 2018/19: \$600,000**

This project will install a dredge in Oxidation Pond 1 to remove solids.

TREATMENT - EQUIPMENT

17713 Secondary PS VFD Replacement (3) **Project Total: \$57,400** **FY 2018/19: \$57,400**

This equipment is at the end of its useful life and needs to be replaced.

WWTP MP - 3W System Improvements Phase 2 **Project Total: \$1,300,000** **FY 2018/19: \$300,000**

Replace valves and address corrosion in the 3W system at the treatment plant. This is the second phase of a project (Phase 1 will be constructed in 2018).

Portable Pumps 10-inch (2) **Project Total: \$172,100** **FY 2018/19: \$172,100**

Replacement of existing portable pumps that did not meet air quality requirements. The old pumps were surplus.

Main - Rotork Actuator Replacement **Project Total: \$95,000** **FY 2018/19: \$95,000**

This project will replace existing valves actuators in the treatment plant.

Main - Primary Clarifier Mech/Struct Rehab **Project Total: \$797,700** **FY 2018/19: \$150,000**

The project will rehabilitate the primary clarifiers to extend their useful life.

Main - Polymer Tank (3) Replacement **Project Total: \$170,700** **FY 2018/19: \$10,000**

The project will replace existing polymer storage tanks that are nearing the end of their useful life.

Main - 12kV Redundant Line **Project Total: \$120,000** **FY 2018/19: \$120,000**

The project will construct an overhead 12kV line between the generator and the recycled water pump station. This project will provide redundancy in the onsite 12kV system which will provide additional options during utility power outages.

Main - Neuros Blowers Rebuild **Project Total: \$126,400** **FY 2018/19: \$64,300**

Rebuild the existing blowers as part of scheduled maintenance.

Main - CCB Coating - E&W Channels **Project Total: \$216,300** **FY 2018/19: \$50,000**

The project will install concrete coating of the east and west channels of the chlorine contact basins to protect the existing concrete from additional corrosion.

Main - Utility Generator Power Transition **Project Total: \$75,000** **FY 2018/19: \$75,000**

Prepare a power distribution plan that evaluates condition of existing assets, functionality, and redundancy.

Main - Cogen Hot Water to FOG Pad **Project Total: \$50,000** **FY 2018/19: \$50,000**

The project will provide a hot water source to the FOG receiving station to improve maintenance and operation of the system.

FY 2018/19
CIP Project Descriptions

Main - Ventilation System Expansion Boots	Project Total:	\$50,000	FY 2018/19:	\$50,000
<i>The project will replace existing expansion couplings in the ventilation piping system.</i>				

Main - ARV Replacement	Project Total:	\$61,100	FY 2018/19:	\$30,000
<i>The project will replace air release valves on plant piping systems in two phases.</i>				

Main - Chemical Storage Building Piping Repair	Project Total:	\$250,000	FY 2018/19:	\$250,000
<i>The project will repair or replace existing drain piping within and outside the chemical storage building.</i>				

Main - P4PS Pump #3 Rebuild	Project Total:	\$40,000	FY 2018/19:	\$40,000
<i>The pump requires a rebuild to extend its useful life.</i>				

TREATMENT - STRUCTURES

17726 Headworks Equipment Rehab/Replacement	Project Total:	\$3,302,100	FY 2018/19:	\$1,900,000
<i>Purchase and install equipment for the headworks building to replace equipment that is at the end of its useful life.</i>				

WWTP MP - Pond Transfer Structures 2 to 3	Project Total:	\$301,300	FY 2018/19:	\$5,000
<i>Replacement of the existing water transfer structures between Pond 2 and Pond 3.</i>				

18736 2018 Treatment Plant Project	Project Total:	\$3,600,250	FY 2018/19:	\$2,100,000
<i>The project will replace or rehabilitate various assets at the treatment plant.</i>				

SCADA

SCADA MP Phase 5 Security Study	Project Total:	\$250,000	FY 2018/19:	\$250,000
<i>This project will study and evaluate the existing SCADA system and also implement security measures.</i>				

RECYCLING - DISTRICT

18731 Coombsville Truck Fill Station	Project Total:	\$475,000	FY 2018/19:	\$375,000
<i>Install a recycled water truck fill station in the MST area off of Coombsville Road.</i>				

24-inch Valve Replacement - Kirkland Line	Project Total:	\$65,000	FY 2018/19:	\$5,000
<i>Replace an existing 24-inch valve on the Kirkland recycled water pipeline that is inoperable.</i>				

Jameson PS VFD	Project Total:	\$68,900	FY 2018/19:	\$68,900
<i>This equipment is at the end of its useful life and needs to be replaced.</i>				

Soscol RW Pump Replacement/Rehab	Project Total:	\$150,000	FY 2018/19:	\$150,000
<i>The pump requires a rebuild to extend its useful life.</i>				

Vehicle 723/720 - Attachments/Implements	Project Total:	\$28,700	FY 2018/19:	\$28,700
<i>This project will replace tractor attachments/implements.</i>				

RECYCLING - EXPANSION

13727 North Bay Water Reuse Project			FY 2018/19:	\$150,000
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This is the cost of program development , project management, and environmental analysis associated with the expansion of recycled water production and delivery, and seeking federal and state grant revenues in support of recycled water.

FY 2018/19
CIP Project Descriptions

OTHER

13729 Development Technical Support **FY 2018/19: \$248,300**

District staff reviews and comments on development plans involving sewer and recycled water facilities and contributed capital.

AV System Replacement - Conference Rooms **Project Total: \$106,100** **FY 2018/19: \$20,000**

Replace and upgrade existing audio-visual equipment in meeting rooms.

Fence Repair - District Wide **Project Total: \$83,400** **FY 2018/19: \$25,000**

Repair of existing fencing on various NapaSan properties for increased security in three phases.

Vehicle 011 - CSET Trailer **Project Total: \$23,700** **FY 2018/19: \$23,700**

This project will purchase a new trailer to replace the existing trailer that is at the end of its useful life.

Vehicle 607 - Electrical Hybrid Vehicle **Project Total: \$42,800** **FY 2018/19: \$42,800**

This project will purchase a new vehical to replace an existing car that is at the end of its useful life.

FY 2018/19 Capital Project Schedule
Allocation of Capacity Charges

#	Name	FY 18/19	% Funded by Capacity Charges	% Funded by Other Revenue	Total Capacity Charges	Total Other Revenue
<u>COLLECTION SYSTEM</u>						
13701	Main Line Sewer Rehab	95,000		100.0%	-	95,000
13702	Manhole Raising/Rehab	428,500		100.0%	-	428,500
13703	Lateral Replacement/Rehab	77,100		100.0%	-	77,100
13704	Cleanouts Installation/Rehab	93,200		100.0%	-	93,200
13705	I&I Monitoring Program	214,200	40%	60.6%	85,680	128,520
18702	Collection System Asset Management Software	275,000		100.0%	-	275,000
14703	Browns Valley Trunk	5,075,000	82%	100.0%	4,161,500	913,500
	66" Trunk Rehabilitation	1,400,000		100.0%	-	1,400,000
	72" Trunk Construction	1,000,000	24%	100.0%	240,000	760,000
18705	Summer 2018 Sewer I&I	2,600,000	40%	60.6%	1,040,000	1,560,000
18706	Summer 2019 Sewer I&I and Rehab	2,321,100	40%	60.6%	928,440	1,392,660
	Summer 2020 Sewer I&I and Rehab	20,000	40%	60.6%	8,000	12,000
<u>COLLECTION SYSTEM - EQUIPMENT</u>						
	Vehicle 180 - Ford Ranger - USA Truck	35,400		100.0%	-	35,400
<u>LIFT STATIONS</u>						
17711	West Napa PS - Replacement	5,200,000		100.0%	-	5,200,000
	Main - Stonecrest Pump Rebuild	45,000		100.0%	-	45,000
<u>TREATMENT</u>						
13745	Pond 1 Dredge	600,000		100.0%	-	600,000
<u>TREATMENT - EQUIPMENT</u>						
17713	Secondary PS VFD Replacement (3)	57,400		100.0%	-	57,400
	WWTP MP - 3W System Improvements - Ph2	300,000		100.0%	-	300,000
	Portable Pumps 10" (2)	172,100		100.0%	-	172,100
	Main - Rotork Actuator Replacement	95,000		100.0%	-	95,000
16712	Main - Primary Clarifier Mech/Struct Rehab	150,000		100.0%	-	150,000
	Main - Polymer Tanks (3) Replacement	10,000		100.0%	-	10,000
	Main - 12kV Redundant Line (to RW sta)	120,000		100.0%	-	120,000
18720	Main - Neuros Blowers Rebuild	64,300		100.0%	-	64,300
	Main - CCB Coating - E&W Channels	50,000		100.0%	-	50,000
	Main - Utility Generator Power Transition	75,000		100.0%	-	75,000
	Main - Cogen Hot Water to FOG pad	50,000		100.0%	-	50,000
	Main - Ventilation System Expansion Boots	50,000		100.0%	-	50,000
	Main - ARV Replacement	30,000		100.0%	-	30,000
	Main - Chemical Storage Buildings Piping Repair	250,000		100.0%	-	250,000
	Main - P4 PS Pump #3 Rebuild	40,000		100.0%	-	40,000
<u>TREATMENT - STRUCTURES</u>						
17726	Headworks Equipment Rehab/Replacment	1,900,000		100.0%	-	1,900,000
	WWTP MP - Pond Imp - Ph 2 - Trans Struct 2 to 3	5,000		100.0%	-	5,000
18736	Treatment Plant Project 2018	2,100,000		100.0%	-	2,100,000
<u>SCADA</u>						
	SCADA MP Phase 5 / Security Study	250,000		100.0%	-	250,000
<u>RECYCLING - DISTRICT</u>						
18731	Coombsville Truck Fill Station	375,000		100.0%	-	375,000
	24" Valve Replacement on Kirkland Pipeline	5,000		100.0%	-	5,000
	Jameson PS VFD	68,900		100.0%	-	68,900
	Soscol RW Pump Rehab/Replacement	150,000		100.0%	-	150,000
	Vehicle 723/720 - Attachments/Implements	28,700		100.0%	-	28,700
<u>RECYCLING - EXPANSION</u>						
13727	North Bay Wate Reuse Project	150,000		100.0%	-	150,000
<u>OTHER</u>						
13729	Development Technical Support	248,300		100.0%	-	248,300
	AV System Replacement - Conference Rooms	20,000		100.0%	-	20,000
	Fence Repairs - District Wide	25,000		100.0%	-	25,000
	Vehicle 011 - CSET Trailer	23,700		100.0%	-	23,700
14730	Vehicle 607 - Ford Taurus (Replace w/Elect hybrid)	42,800		100.0%	-	42,800
TOTAL		26,385,700			6,463,620	19,922,080

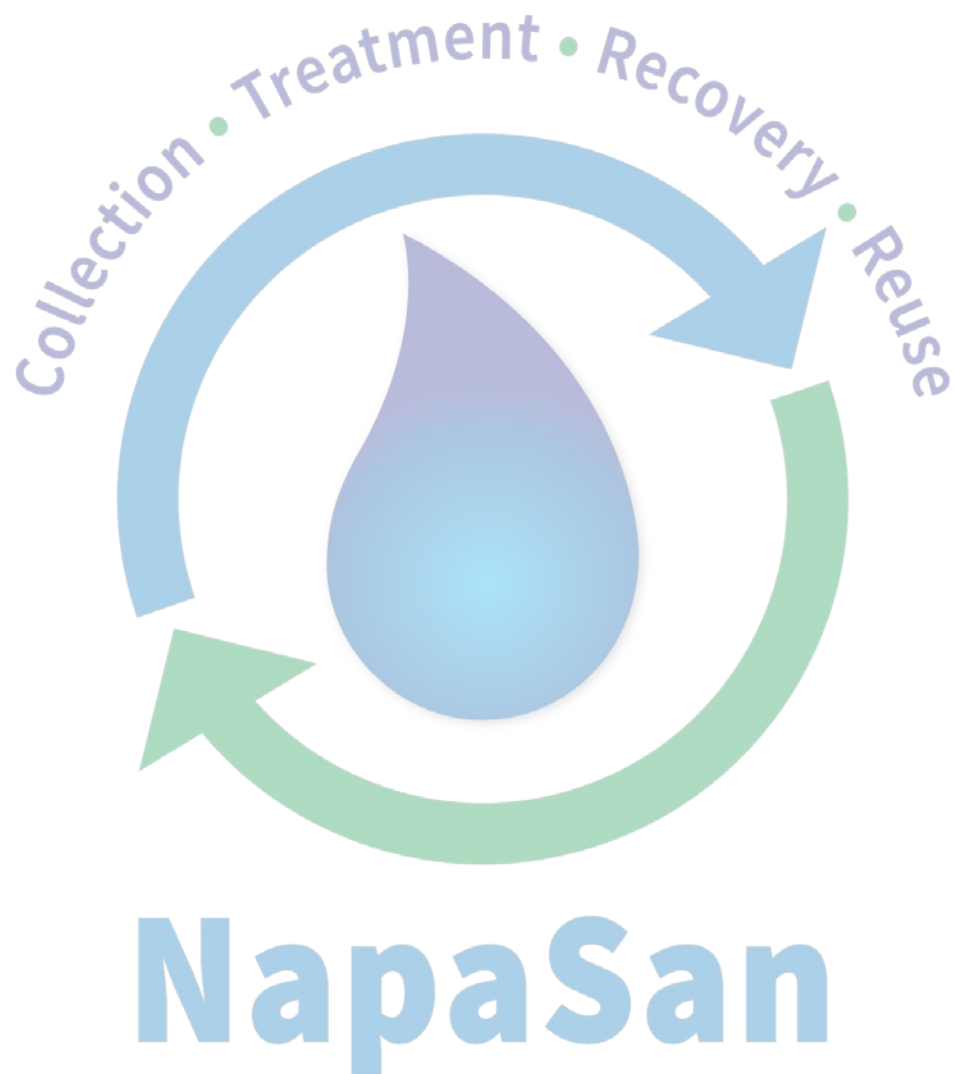
#	Name	FY 18/19 Projected	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected	FY 26/27 Projected	FY 27/28 Projected	Total 10-Year CIP
COLLECTION SYSTEM												
1	13701 Mainline Sewer Rehab	95,000	98,300	101,800	105,300	109,000	112,900	116,800	120,900	125,100	129,500	1,114,600
2	13702 Manhole Raising	428,500	443,500	459,000	475,100	491,700	508,900	526,700	545,200	564,200	584,000	5,026,800
3	13703 Lateral Replacement / Rehab	77,100	79,800	82,600	85,500	88,500	91,600	94,800	98,100	101,600	105,100	904,700
4	13704 Cleanout Installation / Rehab	93,200	96,500	99,800	103,300	106,900	110,700	114,600	118,600	122,700	127,000	1,093,300
5	13705 I&I Monitoring Program	214,200	221,700	229,500	237,500	245,900	254,500	263,400	272,600	282,100	292,000	2,513,400
6	18701 I&I Smoke Testing	-	100,000	-	-	-	-	-	-	-	-	100,000
7	Collection System Master Plan	-	1,071,200	-	-	-	-	-	-	-	-	1,071,200
8	18702 Collection System Asset Management Software	275,000	-	-	-	-	-	-	-	-	-	275,000
9	18703 Upper Lateral Rehab - Pilot #4	-	166,300	-	-	-	-	-	-	-	-	166,300
10	Upper Lateral Rehab - Pilot #5	-	176,800	-	-	-	-	-	-	-	-	176,800
11	Upper Lateral Rehab - Pilot #6	-	5,000	182,900	-	-	-	-	-	-	-	187,900
12	Manhole Rehab - Collection System	-	200,500	207,600	214,800	222,300	230,100	238,200	246,500	255,100	264,100	2,079,200
13	14703 Browns Valley Trunk	5,075,000	10,150,000	5,075,000	-	-	-	-	-	-	-	20,300,000
14	66-inch Trunk Rehabilitation (Kaiser to IPS)	-	1,100,000	-	-	-	-	-	-	-	-	2,500,000
15	72-inch Trunk Construction (Kaiser to IPS)	1,000,000	-	-	2,000,000	10,392,300	21,512,000	11,132,400	-	-	-	46,036,700
16	18705 2018 Collection System Rehabilitation	2,600,000	-	-	-	-	-	-	-	-	-	2,600,000
17	18706 2019 Collection System Rehabilitation	2,321,100	3,538,100	-	-	-	-	-	-	-	-	5,859,200
18	Sewer System Rehab/Replacement 2020	-	1,053,300	1,090,100	-	-	-	-	-	-	-	2,143,400
19	Sewer System Inflow/Infiltration 2020	20,000	1,884,800	1,950,800	-	-	-	-	-	-	-	3,855,600
20	Sewer System Rehab/Replacement 2021	-	-	1,090,100	1,128,300	-	-	-	-	-	-	2,218,400
21	Sewer System Inflow/Infiltration 2021	-	20,000	1,950,800	2,019,100	-	-	-	-	-	-	3,989,900
22	Sewer System Rehab/Replacement 2022	-	-	-	1,128,300	1,167,800	-	-	-	-	-	2,296,100
23	Sewer System Inflow/Infiltration 2022	-	-	20,000	2,019,100	2,089,700	-	-	-	-	-	4,128,800
24	Sewer System Rehab/Replacement 2023	-	-	-	-	1,167,800	1,208,700	-	-	-	-	2,376,500
25	Sewer System Inflow/Infiltration 2023	-	-	-	20,000	2,089,700	2,162,900	-	-	-	-	4,272,600
26	Sewer System Rehab/Replacement 2024	-	-	-	-	1,208,700	1,251,000	-	-	-	-	2,459,700
27	Sewer System Inflow/Infiltration 2024	-	-	-	-	20,000	2,162,900	2,238,600	-	-	-	4,421,500
28	Sewer System Rehab/Replacement 2025	-	-	-	-	-	1,251,000	1,294,800	-	-	-	2,545,800
29	Sewer System Inflow/Infiltration 2025	-	-	-	-	20,000	2,238,600	2,316,900	-	-	-	4,575,500
30	Sewer System Rehab/Replacement 2026	-	-	-	-	-	-	1,294,800	1,340,100	-	-	2,634,900
31	Sewer System Inflow/Infiltration 2026	-	-	-	-	-	20,000	2,316,900	2,398,000	-	-	4,734,900
32	Sewer System Rehab/Replacement 2027	-	-	-	-	-	-	-	1,340,100	1,387,000	-	2,727,100
33	Sewer System Inflow/Infiltration 2027	-	-	-	-	-	-	-	20,000	2,398,000	2,481,900	4,899,900
34	Sewer System Rehab/Replacement 2028	-	-	-	-	-	-	-	-	-	1,387,000	1,387,000
35	Sewer System Inflow/Infiltration 2028	-	-	-	-	-	-	-	-	20,000	2,481,900	2,501,900
COLLECTION SYSTEM - EQUIPMENT												
38	16706 Locatable Mini-Camera #1 Replacement	-	-	-	-	-	13,600	-	-	-	-	13,600
39	18707 Locatable Mini-Camera #2 Replacement	-	-	-	-	-	-	-	14,600	-	-	14,600
40	Locatable Mini-Camera #3 Replacement	-	11,900	-	-	-	-	-	-	-	15,600	27,500
41	Locatable Mini-Camera #4 Replacement	-	-	-	12,700	-	-	-	-	-	-	12,700
42	17709 Eel Replacement #1	-	-	-	-	-	-	7,100	-	-	-	7,100
43	Eel Replacement #2	-	5,900	-	-	-	-	-	-	-	7,800	13,700
44	Eel Replacement #3	-	-	-	-	6,600	-	-	-	-	-	6,600
45	Eel Replacement #4	-	-	-	-	-	-	-	7,300	-	-	7,300
46	13711 Vehicle 711 - Kubota	-	-	-	-	-	53,400	-	-	-	-	53,400
47	13712 Vehicle 173 - Plugup Truck - Secondary	-	-	-	-	-	-	81,800	-	-	-	81,800
48	Vehicle 185 - Plugup Truck - Primary	-	-	-	-	-	-	-	84,700	-	-	84,700
49	Vehicle 180 - Ford Ranger - USA truck	35,400	-	-	-	-	-	-	-	-	-	35,400
50	Vehicle 155 - Ford Ranger	-	-	-	-	-	-	43,500	-	-	-	43,500
51	Vehicle 164 - Ford F-150 - Manager Truck	-	-	-	-	-	-	48,000	-	-	-	48,000
52	Vehicle 15 - Water Trailer	-	-	11,600	-	-	-	-	-	-	-	11,600
53	Vehicle 166 - Ford F-350	-	-	-	29,700	-	-	-	-	-	-	29,700
54	Vehicle 706 - 410 Backhoe	-	-	-	164,200	-	-	-	-	-	-	164,200
55	18709 Vehicle 504 - TV Truck	-	-	-	-	-	614,600	-	-	-	705,300	1,319,900
56	Vehicle 100 - Backhoe Trailer	-	-	25,300	-	-	-	-	-	-	-	25,300
57	Vehicle 512 - Rodder	-	-	-	180,000	-	-	-	-	-	-	180,000
58	Vehicle 18 - Cement Trailer	-	-	-	37,400	-	-	-	-	-	-	37,400
59	Vehicle 16 - 18ft Trailer	-	-	-	-	-	11,200	-	-	-	-	11,200
60	Vehicle 205 - Forklift	-	-	43,200	-	-	-	-	-	-	-	43,200

#	Name	FY 18/19 Projected	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected	FY 26/27 Projected	FY 27/28 Projected	Total 10-Year CIP
61	Vehicle 179 - Mini-Dump	-	-	-	-	-	-	-	72,200	-	-	72,200
62	Vehicle 182 - Mini-Dump	-	-	-	-	-	-	-	72,200	-	-	72,200
63	Vehicle 514 - 10 Yard Dump	-	-	-	-	-	-	-	252,600	-	-	252,600
64	Vehicle 528 - Vacuum Truck	-	-	572,100	-	-	-	-	-	-	727,800	1,299,900
65	Vehicle 529 - Vacuum Truck	-	-	-	-	-	-	656,500	-	-	-	656,500
66	Vehicle 183 - Ford F-550 Repair Truck	-	-	-	-	55,300	-	-	-	-	-	55,300
67	Vehicle 20 - Bypass Trailer	-	-	-	-	-	-	-	-	-	9,800	9,800
68	LIFT STATIONS											
69	17711 West Napa PS - Replacement	5,200,000	4,300,000	-	-	-	-	-	-	-	-	9,500,000
70	Main - Stonecrest Pump Rebuild	45,000	-	-	-	-	-	-	-	-	-	45,000
71	Lift Station Equipment Renewal & Replacement	-	40,000	-	-	-	-	-	-	-	-	40,000
72	Lift Station Equipment Renewal & Replacement	-	-	41,400	-	-	-	-	-	-	-	41,400
73	Lift Station Equipment Renewal & Replacement	-	-	-	42,800	-	-	-	-	-	-	42,800
74	Lift Station Equipment Renewal & Replacement	-	-	-	-	44,300	-	-	-	-	-	44,300
75	TREATMENT											
76	13745 Pond 1 Dredge	600,000	2,000,000	1,000,000	-	-	-	-	-	-	-	3,600,000
77	WWTP Master Plan	-	-	1,843,900	-	-	-	-	-	-	-	1,843,900
78	Siloxane Filter - Venturi	-	-	-	237,500	-	-	-	-	-	-	237,500
79	Headworks - Biofilter	-	-	-	118,800	-	-	-	-	-	-	118,800
80	TREATMENT - EQUIPMENT											
81	Secondary PS Pump Rebuild (3)	-	-	-	-	47,500	49,200	50,900	-	-	-	147,600
82	17713 Secondary PS VFD Replacement (3)	57,400	-	-	-	-	-	-	-	-	-	57,400
83	13743 Residual Analyzers (Deox) Replacements	-	-	-	-	-	-	-	87,600	-	-	87,600
84	15707 DAFT Overflow Pumps (2) Cornell	-	11,900	12,300	-	-	-	-	-	-	-	24,200
85	18710 3W Pipeline - Soscol PS to Plant - Rehab	-	-	-	38,200	-	-	-	-	-	-	38,200
86	WWTP MP - 3W System Improvements - Ph 2	300,000	500,000	500,000	-	-	-	-	-	-	-	1,300,000
87	Turbidimeters (9) Tertiary Replacements	-	-	-	-	-	-	45,800	-	-	-	45,800
88	MLE Recirculation Pumps (2) - Nutrient Opt	-	237,500	-	-	-	-	-	-	-	-	237,500
89	Portable Pumps 10" (2)	172,100	-	-	-	-	-	-	-	-	-	172,100
90	Sodium Bisulfite Tank #2	-	128,500	-	-	-	-	-	-	-	-	128,500
91	Marsh-to-Pond Pump Station Upgrade	-	88,700	-	-	-	-	-	-	-	-	88,700
92	Ops - SBS Flash Mixers	-	88,700	-	-	-	-	-	-	-	-	88,700
93	Ops - Plant Project - Year 9	-	-	-	-	-	-	-	-	2,044,300	-	2,044,300
94	Ops - Plant Project - Year 10	-	-	-	-	-	-	-	-	-	2,115,900	2,115,900
95	Lab - Upgrade Project	-	-	-	477,100	-	-	-	-	-	-	477,100
96	Lab - Lab Grade Dishwasher Replacement #1	-	-	-	-	-	-	29,600	-	-	-	29,600
97	Lab - Refrigerator/Freezer (2)	-	-	-	13,100	-	-	-	-	-	-	13,100
98	15710 Lab - Amperometric Titrator Replacement	-	-	6,100	-	-	-	-	-	-	-	6,100
99	Lab - Microscope Replacement	-	-	-	56,800	-	-	-	-	-	-	56,800
100	14731 Lab - Balance Replacement	-	-	-	-	-	-	-	22,700	-	-	22,700
101	Lab - Autoclave Replacement	-	-	34,400	-	-	-	-	-	-	-	34,400
102	Lab - BOD Incubator Replacement	-	-	-	9,300	-	-	-	-	-	-	9,300
103	Lab - BOD System Replacement	-	-	51,600	-	-	-	-	-	-	-	51,600
104	Lab - Sampler 4700 Replacement	-	-	7,500	-	-	-	-	-	-	-	7,500
105	Lab - Sampler 4700 Replacement	-	-	-	-	8,000	-	-	-	-	-	8,000
106	Lab - Sampler 4700 Replacement	-	-	-	-	8,000	-	-	-	-	-	8,000
107	Lab - Sampler 4700 Replacement	-	-	-	-	-	8,300	-	-	-	-	8,300
108	Lab - Sampler 4700 Replacement	-	-	-	-	-	8,300	-	-	-	-	8,300
109	Lab - Centrifuge Replacement	-	-	-	-	7,500	-	-	-	-	-	7,500
110	Lab - FIA IC Unit	-	-	110,600	-	-	-	-	-	-	-	110,600
111	Lab - LIMS Software Replacement	-	-	-	229,500	-	-	-	-	-	-	229,500
112	Main - Rotork Actuator Replacement	95,000	-	-	-	-	-	-	-	-	-	95,000
113	Main - Rotork Actuator Replacement	-	-	101,800	-	-	-	-	-	-	-	101,800
114	Main - Rotork Actuator Replacement	-	-	-	-	109,000	-	-	-	-	-	109,000
115	Main - Rotork Actuator Replacement	-	-	-	-	-	-	116,800	-	-	-	116,800
116	Main - Septage Pump & Motor Replacement	-	-	-	-	31,800	-	-	-	-	-	31,800
117	16712 Main - Primary Clarifier Mech/Struct Rehabilitation	150,000	647,700	-	-	-	-	-	-	-	-	797,700
118	18718 Main - Secondary Clarifier Mech/Struct Rehabilitation	-	-	83,200	86,100	-	-	-	-	-	-	169,300
119	Main - Flocc Clarifier Rehabilitation	-	-	-	-	-	1,121,100	-	-	-	-	1,121,100
120	Main - Polymer Tanks (3) replacement	10,000	160,700	-	-	-	-	-	-	-	-	170,700
121	16713 Main - Buried Metallic Piping (eval/rehab)	-	75,000	250,000	-	-	-	-	-	-	-	325,000

#	Name	FY 18/19 Projected	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected	FY 26/27 Projected	FY 27/28 Projected	Total 10-Year CIP
122	Main - 12kV Redundant Line (to RW sta)	120,000	-	-	-	-	-	-	-	-	-	120,000
123	Main - Dewatering Polymer Injection Mixers - Relocati	-	-	34,400	-	-	-	-	-	-	-	34,400
124	18720 Main - Neuros Blowers Rebuild	64,300	-	-	-	-	-	-	-	-	-	64,300
125	Main - CCB Coating - E&W Channels	50,000	166,300	-	-	-	-	-	-	-	-	216,300
126	Main - Concrete Pipe Chase Covers	-	53,600	-	-	-	-	-	-	-	-	53,600
127	Main - Utility Generator Power Transition	75,000	-	-	-	-	-	-	-	-	-	75,000
128	Main - Cogen Hot Water to FOG Pad	50,000	-	-	-	-	-	-	-	-	-	50,000
129	Main - Ventilation System Expansion Boots	50,000	-	-	-	-	-	-	-	-	-	50,000
130	Main - ARV Replacement	30,000	31,100	-	-	-	-	-	-	-	-	61,100
131	Main - Digester Roof Grating Replacement	-	-	110,900	-	-	-	-	-	-	-	110,900
132	Main - Chemical Storage Building Piping Repair	250,000	-	-	-	-	-	-	-	-	-	250,000
133	Main - AB Diffuser Disk Replacement	-	-	-	-	-	95,400	-	-	-	-	95,400
134	Main - AB Caustic Pumps & Enclosure	-	85,700	-	-	-	-	-	-	-	-	85,700
135	Main - DAF Recycle Pump Rebuild	-	21,400	22,200	-	-	-	-	-	-	-	43,600
136	Main - P4PS Pump #3 Rebuild	40,000	-	-	-	-	-	-	-	-	-	40,000
137	Main - P4PS Pump Rebuild (3)	-	-	-	-	45,900	47,500	49,200	-	-	-	142,600
138	Main - IPS Pump Rebuild (6)	-	-	-	-	118,800	122,900	127,200	-	-	-	368,900
139	Main - IPS VFD Replacement (6)	-	-	-	-	-	-	254,500	-	-	-	254,500
140	Main - Plant Door Replacement - Phase 1	-	22,200	-	-	-	-	-	-	-	-	22,200
141	Main - Plant Door Replacement - Phase 2	-	-	23,000	-	-	-	-	-	-	-	23,000
142	Main - Plant Door Replacement - Phase 3	-	-	-	23,800	-	-	-	-	-	-	23,800
143	Main - Plant Door Replacement - Phase 4	-	-	-	-	24,600	-	-	-	-	-	24,600
144	Main - Plant Door Replacement - Phase 5	-	-	-	-	-	25,400	-	-	-	-	25,400
145	Main - Plant Project - Year 8	-	-	-	-	-	-	-	1,316,800	-	-	1,316,800
146	Main - Plant Project - Year 9	-	-	-	-	-	-	-	-	2,044,300	-	2,044,300
147	Main - Plant Project - Year 10	-	-	-	-	-	-	-	-	-	2,115,900	2,115,900
148	13722 Vehicle 132 - Ford F-150	-	-	-	-	-	-	35,600	-	-	-	35,600
149	Vehicle 163 - Ford Ranger (Replace w/ F-150)	-	33,300	-	-	-	-	-	-	-	-	33,300
150	Vehicle 162 - Ford F-250 Diesel	-	43,600	-	-	-	-	-	-	-	-	43,600
151	Vehicle 165 - Ford F-350	-	-	-	-	43,900	-	-	-	-	-	43,900
152	Vehicle 178 - Ford F-350 SRW	-	-	-	38,000	-	-	-	-	-	-	38,000
153	Vehicle 158 - Ford F-250 Diesel	-	-	-	40,700	-	-	-	-	-	-	40,700
154	Vehicle 175 - Escape Hybrid	-	25,500	-	-	-	-	-	-	-	-	25,500
155	Vehicle 28-39 - Electric Truck	-	17,100	-	-	-	-	-	-	-	-	17,100
157	Vehicle 513 - 10 Yard Dump	-	-	-	178,100	-	-	-	-	-	-	178,100
158	Vehicle 206 - Forklift TH103	-	-	-	-	-	118,300	-	-	-	-	118,300
159	Vehicle 184 - Ford F-550 EM Truck	-	-	-	-	55,300	-	-	-	-	-	55,300
160	Vehicle 131 - Ford F-250	-	-	-	-	43,600	-	-	-	-	-	43,600
161	Vehicle 302 - Boat	-	-	-	6,400	-	-	-	-	-	-	6,400
162	Vehicle 40 - Cushman 1200X	-	-	-	-	12,700	-	-	-	-	-	12,700
163	Vehicle 41 - Cushman 1200X	-	-	-	-	12,700	-	-	-	-	-	12,700
164	Vehicle 42 - Cushman 1200X	-	-	-	-	12,700	-	-	-	-	-	12,700
165	Vehicle 28-30 - Western Golf Cart	-	-	8,900	-	-	-	-	-	-	-	8,900
166	Vehicle 28-31 - Western Golf Cart	-	-	8,900	-	-	-	-	-	-	-	8,900
167	Vehicle 28-32 - Western Golf Cart	-	-	8,900	-	-	-	-	-	-	-	8,900
168	TREATMENT - STRUCTURES											
169	17726 Headworks Equipment Replacement	1,900,000	1,000,000	-	-	-	-	-	-	-	-	2,900,000
170	WWTP MP - Second Digester	-	-	-	717,800	2,153,300	14,355,200	-	-	-	-	17,226,300
171	WWTP MP - Aeration Basin Expansion	-	-	-	264,400	793,300	5,288,700	-	-	-	-	6,346,400
172	Solids Handling Building - Loading Dock Mod	-	-	55,400	-	-	-	-	-	-	-	55,400
173	WWTP Site Paving	-	-	-	-	-	-	500,000	-	-	-	500,000
174	Pond and River Levee Repair	-	200,000	841,900	-	-	-	-	-	-	-	1,041,900
175	WWTP MP - Pond Imp - Ph 2 - Trans Struct 2 to 3	5,000	296,300	-	-	-	-	-	-	-	-	301,300
176	WWTP MP - Pond Imp - Ph 2 - Trans Struct 3 to 4	-	-	5,000	282,100	-	-	-	-	-	-	287,100
177	Roof Replacement - Filter Support	-	-	66,600	-	-	-	-	-	-	-	66,600
178	Roof Replacement - Chemical Storage	-	-	-	53,400	-	-	-	-	-	-	53,400
179	Roof Replacement - Secondary Effluent PS	-	-	-	-	9,800	-	-	-	-	-	9,800
180	Roof Replacement - Headworks	-	-	-	-	-	89,100	-	-	-	-	89,100
181	18736 Treatment Plant Project 2018	2,100,000	-	-	-	-	-	-	-	-	-	2,100,000
182	SCADA											
183	SCADA MP Phase 5 / Security Study	250,000	-	-	-	-	-	-	-	-	-	250,000

#	Name	FY 18/19 Projected	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected	FY 26/27 Projected	FY 27/28 Projected	Total 10-Year CIP
184	18729 SCADA MP Project #1 - Network Monitoring	-	166,300	-	-	-	-	-	-	-	-	166,300
185	SCADA MP Project #2	-	-	200,000	-	-	-	-	-	-	-	200,000
186	SCADA MP Project #3	-	-	-	200,000	-	-	-	-	-	-	200,000
187	SCADA Backup System	-	-	-	-	141,700	-	-	-	-	-	141,700
188	SCADA Server Replacement	-	-	114,800	-	-	-	-	-	-	-	114,800
189	Plant Panel - Upgrade	-	-	57,400	-	-	-	-	-	-	-	57,400
190	RECYCLING - DISTRICT											
191	Kirkland Recycled Water Pipeline Rehabilitaton	-	-	737,600	-	-	-	-	-	-	-	737,600
192	18731 Coombsville Truck Fill Station	375,000	-	-	-	-	-	-	-	-	-	375,000
193	24" Valve Replacement on Kirkland Pipeline	5,000	60,000	-	-	-	-	-	-	-	-	65,000
194	Jameson Solids Pad Rehabilitation	-	-	36,900	-	-	-	-	-	-	-	36,900
195	Jameson PS VFD	68,900	-	-	-	-	-	-	-	-	-	68,900
196	Jameson Sprinkler Replacement - Field A	-	88,700	-	-	-	-	-	-	-	-	88,700
197	Jameson Sprinkler Replacement - Field B	-	-	91,800	-	-	-	-	-	-	-	91,800
198	Jameson Sprinkler Replacement - Field C	-	-	-	95,000	-	-	-	-	-	-	95,000
199	Jameson Sprinkler Replacement - Field D	-	-	-	-	98,300	-	-	-	-	-	98,300
200	Jameson Sprinkler Replacement - Field E	-	-	-	-	-	101,800	-	-	-	-	101,800
201	Soscol RW Pump Replacement/Rehab	150,000	-	-	-	-	-	-	-	-	-	150,000
202	Soscol RW Pump Replacement/Rehab	-	-	150,000	-	-	-	-	-	-	-	150,000
203	Soscol RW Pump Replacement/Rehab	-	-	-	-	150,000	-	-	-	-	-	150,000
204	MST Pump Station Pump Rebuild (3)	-	-	-	-	-	73,800	76,300	79,000	-	-	229,100
205	MST Pump Station VFD Replacement (3)	-	-	-	-	-	-	-	-	-	211,600	211,600
206	Pull Flail Chopper Replacement	-	34,300	-	-	-	-	-	-	-	-	34,300
207	17733 Vehicle 172 - Ford F-150	-	-	-	-	-	-	43,500	-	-	-	43,500
208	14725 Vehicle 713 - Yanmar Tractor	-	-	-	-	-	104,400	-	-	-	-	104,400
209	Vehicle 723/720 - Attachments/Implements	28,700	-	-	-	-	-	-	-	-	-	28,700
210	Vehicle 171 - Ford F-350	-	-	44,900	-	-	-	-	-	-	-	44,900
211	Vehicle 174 - Ford F-350 SB	-	73,200	-	-	-	-	-	-	-	-	73,200
212	Vehicle 311 - Kubota	-	-	23,900	-	-	-	-	-	-	-	23,900
213	Vehicle 312 - Kubota	-	-	23,900	-	-	-	-	-	-	-	23,900
214	Vehicle 721 - John Deer 8430T Tractor	-	-	-	-	357,800	-	-	-	-	-	357,800
215	Vehicle 17 - 18ft Trailer	-	-	-	-	-	-	-	11,000	-	-	11,000
216	Vehicle 722 - John Deer 444K Loader	-	-	-	-	-	-	-	-	238,500	-	238,500
217	Vehicle 720 - KubotaTractor Loader	-	-	-	-	-	-	74,500	-	-	-	74,500
218	Vehicle 013 - Pipe Dolly	-	-	-	16,300	-	-	-	-	-	-	16,300
219	Vehicle xxx - Water Trailer	-	-	-	44,300	-	-	-	-	-	-	44,300
220	RECYCLING - EXPANSION											
221	13727 North Bay Water Reuse Project	150,000	150,000	150,000	150,000	150,000	150,000	150,000	-	-	-	1,050,000
222	NBWRA - 3rd Reservoir	-	-	-	-	58,000	290,000	2,552,000	-	-	-	2,900,000
223	NBWRA - RW Expansion Ph 2	-	-	-	-	44,000	220,000	1,936,000	-	-	-	2,200,000
224	RW Soscol Pump Station Upgrade	-	-	-	-	-	-	-	2,821,200	-	-	2,821,200
225	OTHER											
226	13729 Development Technical Support	248,300	257,000	266,000	275,300	284,900	294,900	305,200	315,900	327,000	-	2,574,500
227	Solar Purchase Buy Out	-	-	-	-	1,950,000	-	-	-	-	-	1,950,000
228	Fuel Cells	-	-	-	3,000,000	-	-	-	-	-	-	3,000,000
229	18732 Box Culvert - Fugundes Emergency Access	-	-	-	-	-	-	100,000	1,185,100	-	-	1,285,100
230	Carpet Replacement - Admin/Collection Bldgs	-	-	-	-	-	35,600	-	-	-	-	35,600
231	HVAC Replacement - Admin/Collection Bldgs	-	-	-	-	-	-	-	-	-	102,200	102,200
232	AV System Replacement - Conference Rooms	20,000	-	-	-	86,100	-	-	-	-	-	106,100
233	Fence Repair - District Wide	25,000	-	-	27,700	-	-	30,700	-	-	34,100	117,500
234	14728 Vehicle 161 - Ford C-Max	-	-	-	-	-	30,500	-	-	-	-	30,500
235	Vehicle 176 - Ford Escape Hybrid	-	25,500	-	-	-	-	-	-	-	-	25,500
236	Vehicle 177 - Ford Escape Hybrid	-	25,500	-	-	-	-	-	-	-	-	25,500
237	14729 Vehicle 133 - Ford F-150	-	-	-	-	-	42,000	-	-	-	-	42,000
238	Vehicle 011 - CSET Trailer	23,700	-	-	-	-	-	-	-	-	-	23,700
239	14730 Vehicle 607 - Ford Taurus (Replace w/ Elec)	42,800	-	-	-	-	-	-	-	-	-	42,800
240	Vehicle 130 - Ford F150	-	-	-	-	40,600	-	-	-	-	-	40,600
241	PROJECT TOTALS	\$26,385,700	\$31,578,900	\$20,318,300	\$16,682,800	\$25,197,600	\$52,949,100	\$26,800,800	\$14,988,200	\$13,601,100	\$15,285,500	\$243,788,000

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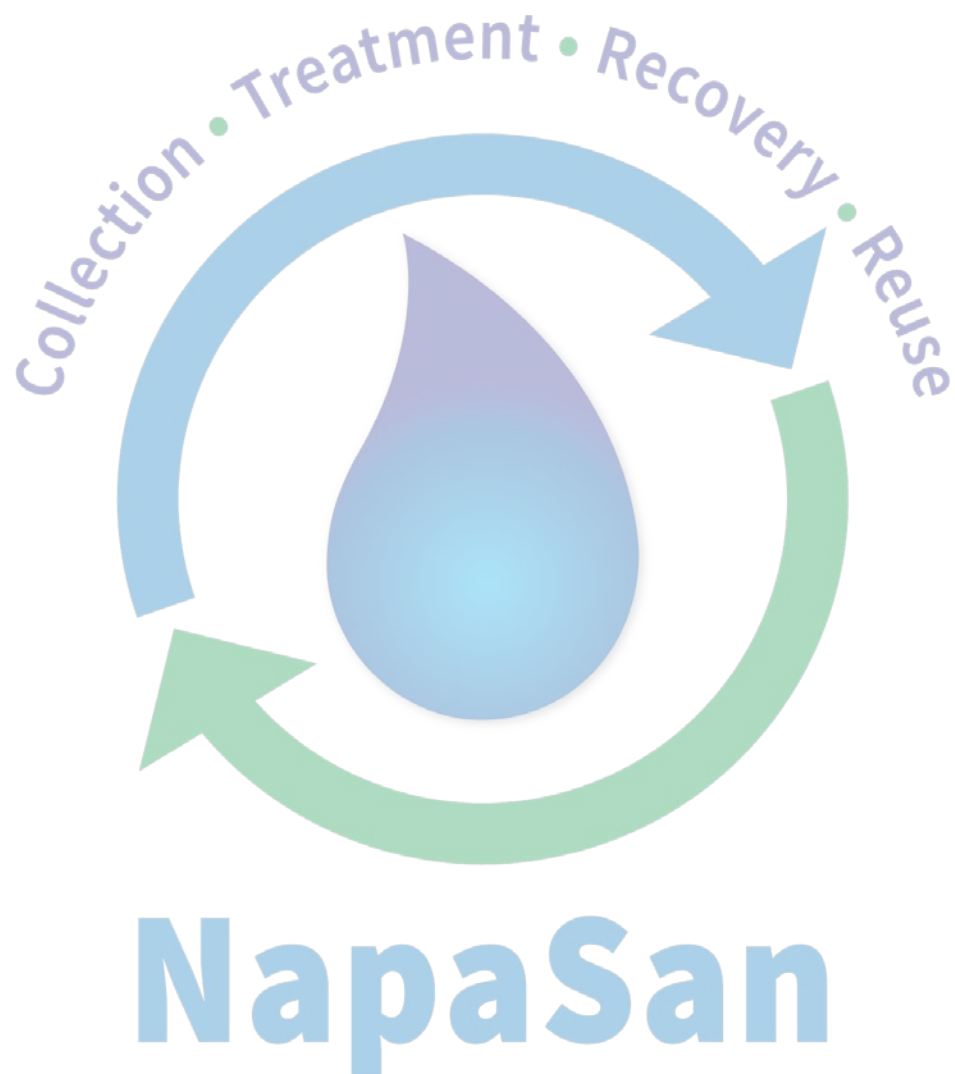


Ten-Year Financial Plan



Visitors check out microorganisms in the Plant Laboratory during an Open House event.

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Ten-Year Financial Plan

Plan Description

Also called a Financial Master Plan or a Ten-Year Financial Forecast, the Ten-Year Financial Plan is a projection of operating and capital expenditures, along with projections of rates and the revenues they are anticipated to generate over that time. The Ten-Year Financial Plan evaluates whether the revenues are adequate to cover the projected costs.

This Plan addresses the following questions. Over the next 10 years...

- What are NapaSan's projected revenues, and what assumptions are used?
- What are NapaSan's projected operating costs, and what assumptions are used?
- What are the projected capital costs for NapaSan?
- Will NapaSan use pay-as-you-go financing or debt financing for its capital projects?
- Are sewer service charge rates sufficient?

Link to Strategic Plan

NapaSan's Strategic Plan (discussed in Budget Overview on pages 19-24 and included in the Appendix of this budget) includes numerous objectives and a timeframe for completion of those projects. This Ten-Year Financial Plan makes assumption that all of the objectives in that plan are completed on time, and that any one-time or ongoing financial impact resulting from implementing the Strategic Plan are included in the Ten-Year Financial Forecast.

Revenue Forecast

Sewer Service Charges

In March 2016, NapaSan went through the Proposition 218 process, thereby setting the maximum that the sewer service charge could increase through Fiscal Year 2020/21. The forecast assumes the maximum allowable SSC for the year, through FY 2020/21. Thereafter, the rate is assumed to increase 3.0% annually.

Fiscal Year	Residential SSC Rate
FY 17/18	\$638.10 per EDU
FY 18/19	\$676.38 per EDU
FY 19/20	\$710.20 per EDU
FY 20/21	\$738.62 per EDU
FY 21/22	\$760.48 per EDU
FY 22/23	\$783.30 per EDU

Recycled Water Fees

Recycled water fees are becoming a more significant source of revenue for NapaSan. Fees are set by the Board of Directors through ordinance. The rates have been set for calendar year 2018.

The forecast assumes that NapaSan will increase recycled water sales from 1,888 acre feet in FY 2017/18 to 2,123 acre feet in FY 2018/19, with increasing sales in subsequent years until a total of 2,500 acre feet is sold annually. Future customers include land owners in the MST area, the Napa State Hospital, St. Regis Resort, Los Carneros Water District and Montelcino Resort. The forecast assumes a rate increase of 3.0% in 2019, and 4.3% annually starting in 2020, which includes a 2.3% increases for operating expenses and a 2.0% increase for funding the recycled water renewal and replacement reserve.

Calendar Year	Peak RW Rate
2018	\$1.67 per 1,000 gallons
2019	\$1.72 per 1,000 gallons
2020	\$1.79 per 1,000 gallons
2021	\$1.84 per 1,000 gallons
2022	\$1.92 per 1,000 gallons
2023	\$2.00 per 1,000 gallons

Capacity Charges

Annually, the capacity charge rate increases with the Engineering News Record's Construction Cost Index (ENR-CCI) for San Francisco (February-to-February), an inflation measure for capital infrastructure costs. Capacity charges increased 3.5% for FY 2018/19 to \$9,624 per Equivalent Dwelling Unit (EDU). Future year rates are estimated to increase 3.5% annually.

Capacity charges are forecasted based on known and planned development projects. NapaSan staff tracks planning referrals and other information to forecast hotels, other commercial developments and housing projects that are anticipated to begin construction in the next four years. A baseline number is then assumes for the remaining ten-year forecast.

Fiscal Year	Forecasted EDU
FY 18/19	479 EDU
FY 19/20	855 EDU
FY 20/21	545 EDU
FY 21/22	250 EDU
FY 22/23	250 EDU

Leases and Rents

Lease revenues include the existing lease with Eagle Vines Golf Club and the continuation of the Somky lease with new tenants. While there is still opportunity for NapaSan to receive lease payments from other properties, the Ten-Year Financial Plan only includes revenues for leases that have already been negotiated and executed.

Other Revenues

There are a number of other smaller revenues collected by NapaSan. They have been forecasted based on historical collection and any anticipated increases in rates due to CPI or other factors.

Operating Cost Forecast

Operating expenses for the District includes salaries and benefits, maintenance and operations of the collection and treatment systems, and the purchase of materials and supplies. NapaSan must also fund its annual debt service.

Salaries are controlled by three Memoranda of Understanding (MOU) with employees. The MOUs were renegotiated in 2014 and are set to expire in June 2020. Salaries have been projected based on the contracted increases (2.75% through FY 2019/20), then at 2.5% annually thereafter.

Some benefits, such as OPEB and retirement expenses, are calculated as a percentage of salary, while other benefits, such as health care, increase based on joint purchase agreements. Health care costs are assumed to increase at a 7% rate, and retirement expenses as a percentage of salary are expected to increase an additional 4-6% over the next five years, including increased employee retirement contributions over the same period. Medical in lieu payments are projected to continue per the MOU, and continue unchanged after FY 19/20. Workers compensation insurance is projected to remain flat for future years. For the Ten-Year Financial Plan, salaries and benefits combined are projected to increase 2.5% to 3.5% annually.

In an effort to address the unfunded actuarial liability (UAL) of pension benefits, the forecast includes the payment of an additional \$135,000 toward this liability annually. It also assumes that while there is an expected \$500,000 decrease in annual payments in FY 20/21 and FY 21/22 due to the expiration of a side fund amortization basis, NapaSan will continue to make these payments to CalPERS. It is not assumed, however, that these additional payments will reduce the annually determined contributions to CalPERS for the UAL, as the impact from these payments will not be realized until the time period beyond the current forecast.

Services and supplies are forecasted to increase 2.0% annually to account for increases in inflation. It is assumed that there is no change in current service levels, except those anticipated as part of capital project implementation and expanded recycled water delivery. The anticipated operating expenditure impact of planned capital projects has been included in the forecast.

Capital Costs

There are several plans that influence the overall Ten-Year Capital Improvement Plan, including the NapaSan Strategic Plan, the Treatment Plant Master Plan, the Collection System Master Plan and the Recycled Water Strategic Plan. These plans serve to identify the capital improvements that should be made within each area over the next 20 years.

When all of the recommendations from the master plans are combined, there is sufficient projected revenue to pay for all of the projects within the next ten years. This assumes that the sewer service charges are implemented as projected from the Proposition 218 process in March 2016, that in future years the SSC increase at 3% annually, and that development occurs as projected for capacity charges.

The budget and Ten-Year Capital Improvement Plan, described in detail in the previous sections of this budget document, represent the priority projects from these plans. The Ten-Year Financial Plan incorporates the Ten-Year Capital Improvement Plan.

Pay-Go vs. Debt Financing

Debt financing means that NapaSan would either sell bonds or enter into a loan (such as a State Revolving Fund loan) to get money to pay for capital projects, then pay back that money over time with interest. **Pay-as-you-go financing**, also called “pay-go” means that NapaSan needs to accumulate the money for the project and already have it prior to the work being completed.

NapaSan Financial Policy states that NapaSan shall have a preference to finance capital improvements using pay-go financing and shall issue long-term debt only to finance capital improvements that cannot be readily financed from current revenues. Debt financed projects must be major, non-recurring improvements with a minimum of five years of useful life.

The Ten-Year Financial plan assumes that debt would be issued for specific projects, with all other projects in the CIP being financed as pay-go.

In FY 2018/19, NapaSan intends to enter into a loan agreement with the State Water Resources Control Board for a Clean Water State Revolving Fund loan of approximately \$29 million for the Browns Valley Trunk and West Napa Pump Station Improvements project. The Ten-Year Forecast shows the proceeds from the loans in years corresponding to expenditures for this project, as this state program is a reimbursement program. Debt service for this loan is schedule to begin in FY 2021/22, at the end of the construction for the project, in accordance with current program rules.

The plan shows that in FY 2021/22, it will be necessary to issue debt to pay for the construction of the second digester and a third aeration basin and secondary clarifier for treatment plant expansion. Also in this same year, NapaSan plans to begin a significant 4-year replacement project of the main sewer truck, currently estimated at \$45 million, that will be debt financed either from a Clean Water State Revolving Fund loan or from the issuance of Certificates of Participation.

The plan also anticipates that in FY 2022/23, NapaSan will seek a Federal loan for the implementation of recycled water expansion projects.

Ten-Year Cash Flow

The table that follows shows the Ten-Year Financial/Cash Flow Forecast. The table includes starting fund equity and ending fund equity on an annual basis, forecasts for operating and non-operating revenue and operating expenses. Because it is a cash flow model, the forecast includes expenses for capital outlay for the year it is expensed, as well as proceeds from issuing debt. Also, at the end of each year, there is an adjustment made to the ending fund equity numbers to account for necessary reserves to come up with an amount of equity that is available for use.

This model assumes that all fund equity available at the end of one year is rolled over for use in the following year. The model also assumes that there is no underspending of operating expenses, although traditionally there is a small percentage of operating budget that is not spent each year.

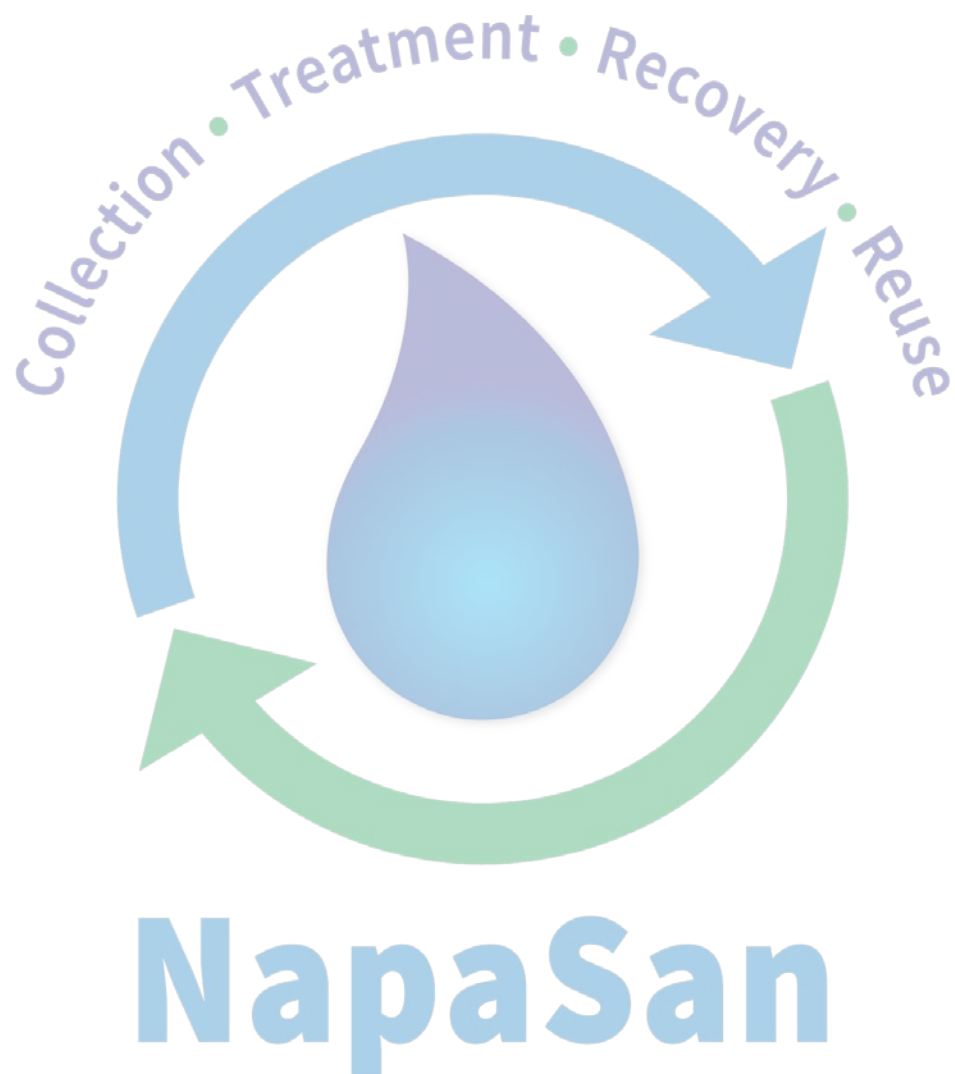
10-Year Financial/Cash Flow Forecast

	Projected 2018/19	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23
Beginning Fund Equity	\$21,116,600	\$18,908,900	\$19,314,400	\$21,493,200	\$23,951,100
Operating revenue					
Sewer service charges	28,156,000	29,989,000	31,820,000	33,190,000	34,381,000
Capacity Charges	4,614,600	8,525,200	5,624,400	2,670,200	2,764,000
Recycled Water Sales	1,042,000	1,123,000	1,215,000	1,367,000	1,425,000
Hauler Fees	180,000	185,000	191,000	197,000	203,000
Development Fees	193,800	198,600	203,600	208,700	213,900
Miscellaneous Revenue	93,000	95,000	97,000	99,000	101,000
Total Operating Revenue	34,279,400	40,115,800	39,151,000	37,731,900	39,087,900
Non-Operating Revenue					
Interest	311,000	331,000	386,000	430,000	479,000
Rents and leases	725,000	728,000	731,000	734,000	738,000
From Other Governments	375,000	0	0	0	25,500
Loan / Bond Proceeds	9,075,000	12,050,000	3,875,000	2,982,200	13,415,400
Total - Non-Operating Revenue	10,486,000	13,109,000	4,992,000	4,146,200	14,657,900
Total Revenue	44,765,400	53,224,800	44,143,000	41,878,100	53,745,800
Operating Expense					
Salaries and benefits	9,961,350	10,280,200	10,532,600	10,894,800	11,267,100
Services and supplies	6,003,100	6,341,000	6,495,000	6,370,000	6,547,000
Taxes and Other	29,150	29,700	30,300	30,900	31,500
Debt Service - Existing	4,593,800	4,589,550	4,588,050	4,591,750	4,580,650
Debt Service - New/Projected	0	0	0	850,000	5,940,000
Total Operating Expense	20,587,400	21,240,450	21,645,950	22,737,450	28,366,250
Capital Projects	26,385,700	31,578,900	20,318,300	16,682,800	25,197,600
Total - All Expenses	46,973,100	52,819,350	41,964,250	39,420,250	53,563,850
Net revenue (deficit)	(2,207,700)	405,450	2,178,750	2,457,850	181,950
Ending combined fund equity	\$18,908,900	\$19,314,350	\$21,493,150	\$23,951,050	\$24,133,050
RW Repair & Replacement Reserv	0	112,000	234,000	371,000	514,000
Bond Reserve	0	0	0	850,000	2,740,000
Operating Reserve	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Cash Flow Reserve	12,500,000	12,500,000	13,000,000	14,000,000	14,800,000
Fund Equity Available for Use	\$408,900	\$702,350	\$2,259,150	\$2,730,050	\$79,050

10-Year Financial/Cash Flow Forecast

	Projected 2023/24	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28
Beginning Fund Equity	\$24,133,100	\$25,409,800	\$27,799,300	\$27,426,600	\$29,462,500
Operating revenue					
Sewer service charges	35,615,000	36,891,000	38,211,000	39,578,000	40,993,000
Capacity Charges	2,861,000	2,961,000	3,065,000	3,172,000	3,283,000
Recycled Water Sales	1,483,000	1,548,000	1,613,000	1,685,000	1,758,000
Hauler Fees	209,000	215,000	221,000	228,000	235,000
Development Fees	219,200	224,700	230,300	236,100	242,000
Miscellaneous Revenue	<u>104,000</u>	<u>107,000</u>	<u>110,000</u>	<u>113,000</u>	<u>116,000</u>
Total Operating Revenue	40,491,200	41,946,700	43,450,300	45,012,100	46,627,000
Non-Operating Revenue					
Interest	483,000	508,000	556,000	549,000	589,000
Rents and leases	741,000	745,000	748,000	752,000	756,000
From Other Governments	127,500	1,122,000	0	0	0
Loan / Bond Proceeds	<u>41,538,400</u>	<u>14,498,400</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total - Non-Operating Revenue	42,889,900	16,873,400	1,304,000	1,301,000	1,345,000
Total Revenue	83,381,100	58,820,100	44,754,300	46,313,100	47,972,000
Operating Expense					
Salaries and benefits	11,650,200	12,019,400	12,402,700	12,800,600	13,213,900
Services and supplies	7,008,700	6,760,000	6,895,000	7,033,000	7,174,000
Taxes and Other	32,100	32,700	33,400	34,100	34,800
Debt Service - Existing	4,524,350	4,527,750	4,517,750	4,518,450	4,513,150
Debt Service - New/Projected	<u>5,940,000</u>	<u>6,290,000</u>	<u>6,290,000</u>	<u>6,290,000</u>	<u>6,290,000</u>
Total Operating Expense	29,155,350	29,629,850	30,138,850	30,676,150	31,225,850
Capital Projects	52,949,100	26,800,800	14,988,200	13,601,100	15,285,500
Total - All Expenses	82,104,450	56,430,650	45,127,050	44,277,250	46,511,350
Net revenue (deficit)	1,276,650	2,389,450	(372,750)	2,035,850	1,460,650
Ending combined fund equity	\$25,409,750	\$27,799,250	\$27,426,550	\$29,462,450	\$30,923,150
RW Repair & Replacement Reserv	662,000	817,000	978,000	1,147,000	1,323,000
Bond Reserve	2,740,000	3,090,000	3,090,000	3,090,000	3,090,000
Operating Reserve	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Cash Flow Reserve	15,700,000	16,000,000	16,500,000	17,000,000	17,500,000
Fund Equity Available for Use	\$307,750	\$1,892,250	\$858,550	\$2,225,450	\$3,010,150

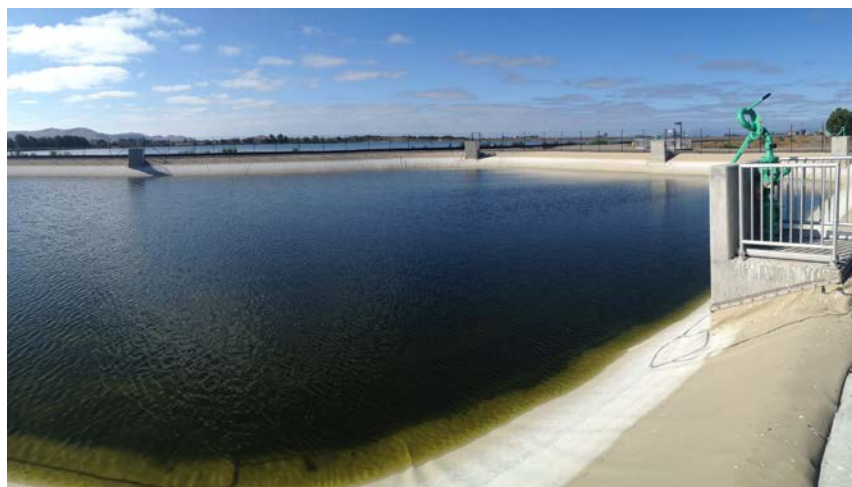
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Debt

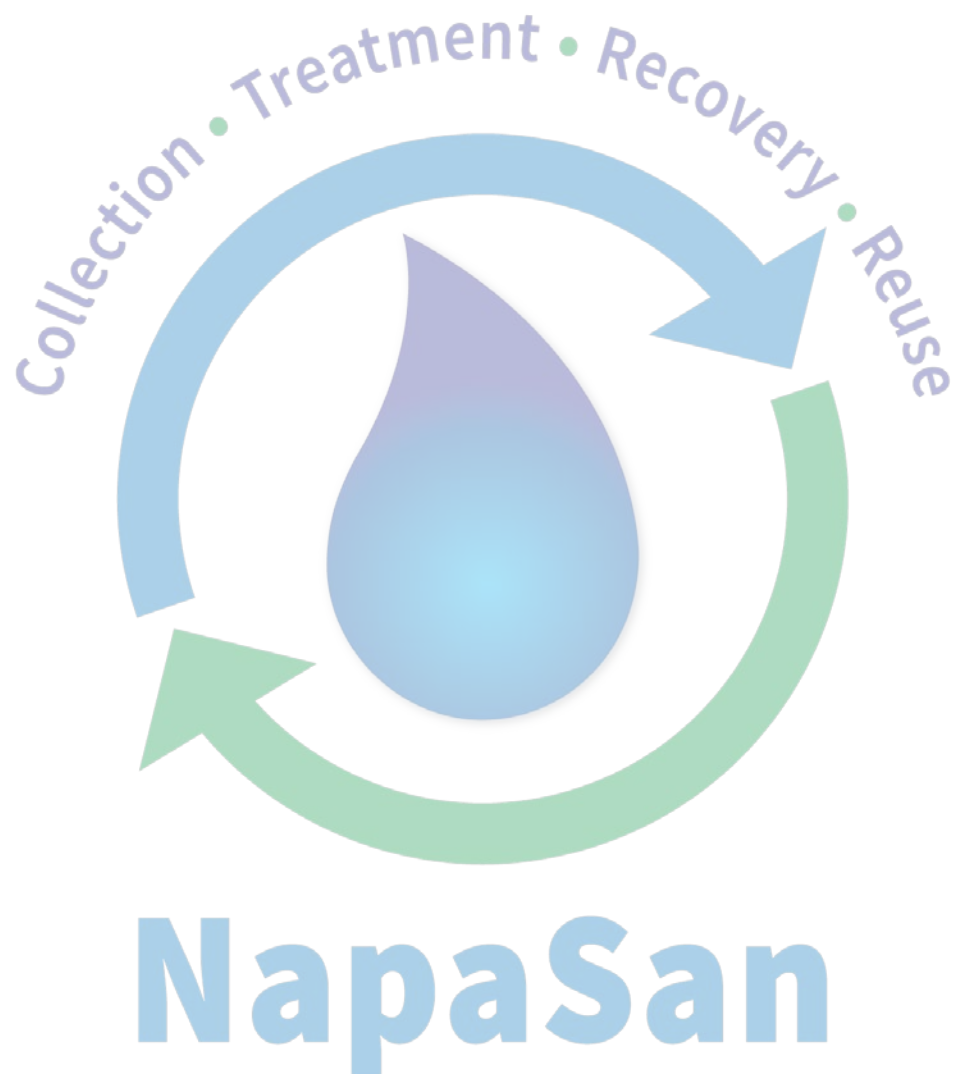


Construction of the secondary effluent equalization basin in 2014



Completed secondary effluent equalization basin

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Debt

The Napa Sanitation District issues long term debt for the construction of significant capital assets. Debt service is the annual or semi-annual payments NapaSan makes to repay the principal and interest on its debt.

Debt Policy

As a matter of policy, NapaSan has a preference to use pay-as-you-go financing for its capital projects and only uses debt financing for improvements that it cannot readily finance from current revenues. Exceptions can be made on a case-by-case basis for no-interest and extremely-low-interest loan programs to pay for capital projects.

Debt can only be used for major, non-recurring capital items, and the debt repayment timeline cannot exceed the expected useful life of the asset being financed.

Debt can only be issued when it has been shown that NapaSan has the ability to pay all of its current obligations from current revenues and still have available 125% of the expected debt service amount to pay the debt service.

NapaSan's complete debt policy can be found in Appendix D, Section 5.

Current Debt Obligations

2003 SRF – In 2003, NapaSan entered into a 20-year loan with the State of California's State Water Resource Control Board Revolving Fund (SRF). The proceeds from this loan, \$901,376, were used for replacement of pipes in the collection system. The interest rate on this loan is 2.5%, with annual debt service of \$60,247. (See Debt Service Table 1.) Outstanding principal on this debt obligation is \$279,895 as of July 1, 2018.

2008 SRF – In 2008, NapaSan entered into a 20-year loan with the State Water Resources Control Board. This loan, which came in two phases, was for a total of \$1,559,673 and was used to replace aging infrastructure in the collection system. This is a zero-percent interest loan; however, the annual debt service payment of \$93,581 includes a 16.667% state match and is recorded as imputed interest. (See Debt Service Tables 2 and 3.) Outstanding principal on this debt obligation is \$923,024 as of July 1, 2018.

Series 2012A – These 20-year Certificates of Participation were delivered and executed to provide funds to repay the outstanding Adjustable Rate Refunding Revenue Certificates of Participation, Series 2009A and to finance \$33 million in new capital projects. Annual debt service for this bond in FY 2018/19 is \$2,658,775. (See Debt Service Table 4.) Outstanding principal on this debt obligation is \$31,050,000 as of July 1, 2018.

Series 2017 – These 10 year Refunding Revenue Bonds were sold in December 2017 to advance refund the 2009B Certificates of Participation. The \$14,185,000 advance refunding will save NapaSan ratepayers almost \$1.27 million over the life of the bonds. Annual debt service for this bond in FY 2018/19 is \$1,775,225. (See Debt Service Table 5.) Outstanding principal on this debt obligation is \$14,185,000 as of July 1, 2018.

Debt Covenants

A debt covenant is a requirement imposed on NapaSan by a debt holder. These requirements range from requirements to pay the principal and interest payments on particular days of the year, to preparing and filing audited financial statements, to very specific financial performance requirements.

There is one significant debt covenant that has a financial impact to NapaSan. This covenant applies to all of NapaSan's debt, and is a debt service coverage requirement. Debt service coverage is the ratio of net revenues (revenues minus operating expenses) to annual debt service requirements. NapaSan is required by its bond covenants to maintain a debt service coverage ratio of at least 1.25. For FY 2018/19, the District's coverage ratio is budgeted to be 4.21.

Debt Capacity & Debt Limitations

Debt Capacity is the difference between the amount of debt NapaSan has outstanding (sold and authorized) and the maximum amount of debt NapaSan can incur within its legal, public policy and financial limitations.

NapaSan does not issue general obligation debt, and as such, there is no legal limitation on the amount of debt it can issue. NapaSan is limited by the debt policies that it sets for itself (described above and in Appendix D) and by financial limitations. Financial limitations include two factors: 1) willingness of the bond market to loan NapaSan money, and 2) limitations on future debt placed on NapaSan by current debt.

First, the amount of debt NapaSan can issue is limited by whether there are financial and other institutions and other buyers in the market willing to purchase the bonds that NapaSan wants to issue. In tight capital markets, or if the financial health of NapaSan is in question, the amount of debt NapaSan can issue under favorable terms can be limited.

Second, the debt coverage ratio imposed by existing debt holders also applies to any future debt NapaSan may want to issue. By forecasting operating revenues and expenditures and applying the 1.25 debt coverage ratio, a debt capacity can be calculated.

Currently, NapaSan has the capacity to issue approximately \$155 million in additional debt (3.5% TIC, 20 year term), assuming that there was a buyer for that debt in the bond market, NapaSan could pay the debt service, and other financial policies are maintained.

Future Debt Issues

The Ten-Year Capital Improvement Plan and the Ten-Year Financial Plan includes debt financing for four future capital projects:

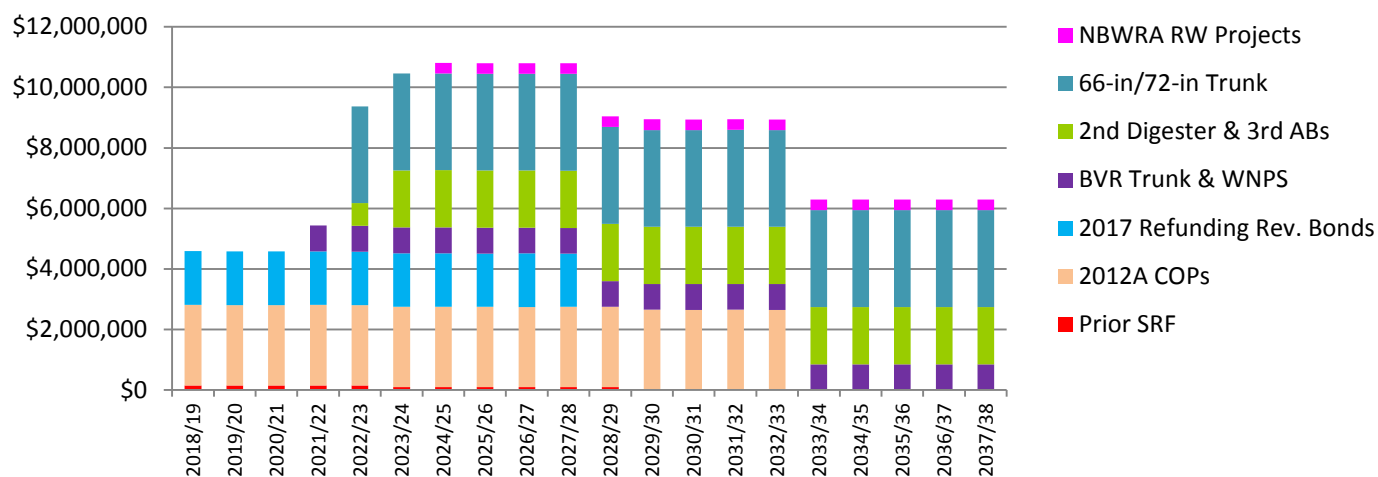
- 1) **Browns Valley Road and West Napa Pump Station Improvements** – it is projected that the Clean Water State Revolving Fund (SRF) loan proceeds (\$25 million) will be received as reimbursements during the same year the expenses are incurred, starting in FY 2018/19, with debt service payments not beginning until after the completion of construction in FY 21/22. NapaSan will apply for a Green Project Reserve grant for 50% reimbursement of expenses associated with increased energy efficiency. NapaSan will also utilize the “Local Share Match” program with the state to lower the initial financing amount in exchange for lower interest rates.
- 2) **Second Digester / Third Aeration Basin** – it is assumed that this project will be financed through the issuance of Certificates of Participation (\$23.6 million), with debt service beginning in FY 2022/23. The forecast assumes a 25-year loan at 5% True Interest Cost (TIC).

Debt Coverage Ratio Calculation

	Estimated FY 17/18	Budget FY 18/19
Revenue		
Sewer Service Charges	\$26,162,000	\$28,156,000
Capacity Charges	\$6,276,000	\$4,614,600
Recycled Water	\$913,000	\$1,042,000
Interest	\$174,000	\$311,000
Rents & Leases	\$722,000	\$725,000
Other Revenue	455,100	466,800
(excl. sale of property and grant revenue)		
Operating Expenses	(\$14,819,668)	(\$15,993,600)
Net Revenue	\$19,882,432	\$19,321,800
Parity Debt Service		
2003 SRF	\$60,250	\$60,250
2008 SRF	93,580	93,580
2009B COPs	1,958,250	0
2012A COPs	2,661,420	2,662,670
2017 RBBs	0	1,777,300
Total Debt Service	\$4,773,500	\$4,593,800
Parity Debt Coverage Ratio	4.17	4.21
(net revenue ÷ total debt service)		
(must be greater than 1.25)		

- 3) **New 66"/72" Sewer Trunk** – this project, to replace the existing 66" sewer trunk, with either a new 66" or new 72" trunk, is expected to cost \$45 million, with debt service beginning in FY 2022/23. This project will either be financed through the Clean Water State Revolving Fund program, or through the issuance of Certificates of Participation (COPs). To be conservative, it is assumed the debt will be financed through the issuance of 30-Year COPs at 5% TIC.
- 4) **NBWRA Recycled Water Projects** – these projects will be financed through 25% federal grants and federal low-interest water infrastructure loans. Estimated project cost is \$5.1 million, with debt service beginning in FY 24/25.

Projected Debt Service Summary



Napa Sanitation District
Debt Service

Table 1

Napa Sanitation District
 2003 SWRCB Revolving Fund Loan

2.5%, 20 year term
 \$901,376

Fiscal Year Jul 1	Annual Interest	Principal Payment	Ending Principal	Total Payment
2017/18	8,296	51,950	279,895	60,247
2018/19	6,997	53,249	226,646	60,247
2019/20	5,666	54,580	172,065	60,247
2020/21	4,302	55,945	116,121	60,247
2021/22	2,903	57,343	58,777	60,247
2022/23	1,469	58,777	-	60,247
2023/24	-	-	-	-
2024/25	-	-	-	-
2025/26	-	-	-	-
2026/27	-	-	-	-
2027/28	-	-	-	-
2028/29	-	-	-	-
2029/30	-	-	-	-
2030/31	-	-	-	-
2031/32	-	-	-	-
2032/33	-	-	-	-

Source: District Documents

**Napa Sanitation District
Debt Service**

Table 2

Napa Sanitation District

2008 SWRCB Revolving Fund Loan

E. Spring St. Sewer Rehabilitation Phase I

20 year term

\$1,376,804

Fiscal Year Jul 1	Imputed Interest	Principal Payment	Ending Principal	Total Payment
2017/18	16,433	66,176	814,697	82,609
2018/19	15,198	67,410	747,287	82,609
2019/20	13,941	68,668	678,619	82,609
2020/21	12,660	69,949	608,670	82,609
2021/22	11,355	71,254	537,417	82,609
2022/23	10,026	72,583	464,834	82,609
2023/24	8,672	73,937	390,897	82,609
2024/25	7,292	75,316	315,580	82,609
2025/26	5,887	76,721	238,859	82,609
2026/27	4,456	78,153	160,706	82,609
2027/28	2,998	79,611	81,096	82,609
2028/29	1,513	81,096	-	82,609
2029/30	-	-	-	-
2030/31	-	-	-	-
2031/32	-	-	-	-
2032/33	-	-	-	-

Source: District Documents

**Napa Sanitation District
Debt Service**

Table 3

Napa Sanitation District

2008 SWRCB Revolving Fund Loan

E. Spring St. Sewer Rehabilitation Phase II

20 year term

\$182,869

Fiscal Year Jul 1	Imputed Interest	Principal Payment	Ending Principal	Total Payment
2017/18	2,163	8,809	108,327	10,972
2018/19	2,000	8,972	99,355	10,972
2019/20	1,835	9,138	90,217	10,972
2020/21	1,666	9,306	80,911	10,972
2021/22	1,494	9,478	71,433	10,972
2022/23	1,319	9,653	61,780	10,972
2023/24	1,141	9,831	51,948	10,972
2024/25	959	10,013	41,935	10,972
2025/26	774	10,198	31,737	10,972
2026/27	586	10,386	21,351	10,972
2027/28	394	10,578	10,773	10,972
2028/29	199	10,773	-	10,972
2029/30	-	-	-	-
2030/31	-	-	-	-
2031/32	-	-	-	-
2032/33	-	-	-	-

Source: District Documents

**Napa Sanitation District
Debt Service**

Table 4

Napa Sanitation District

Revenue Certificates of Participation, Series 2012A

2.86% True Interest Cost (TIC), 20 year term
\$37,845,000

Fiscal Year Jul 1	Annual Interest	Principal Payment	Ending Principal	Total Payment
2017/18	1,153,175	1,505,000	31,050,000	2,658,175
2018/19	1,091,775	1,565,000	29,485,000	2,656,775
2019/20	1,027,975	1,625,000	27,860,000	2,652,975
2020/21	961,675	1,690,000	26,170,000	2,651,675
2021/22	892,575	1,765,000	24,405,000	2,657,575
2022/23	820,675	1,830,000	22,575,000	2,650,675
2023/24	745,875	1,910,000	20,665,000	2,655,875
2024/25	667,875	1,990,000	18,675,000	2,657,875
2025/26	586,675	2,070,000	16,605,000	2,656,675
2026/27	502,275	2,150,000	14,455,000	2,652,275
2027/28	425,825	2,230,000	12,225,000	2,655,825
2028/29	357,875	2,300,000	9,925,000	2,657,875
2029/30	287,900	2,365,000	7,560,000	2,652,900
2030/31	215,900	2,435,000	5,125,000	2,650,900
2031/32	135,275	2,520,000	2,605,000	2,655,275
2032/33	45,588	2,605,000	-	2,650,588

Source: 2012A Official Statement

**Napa Sanitation District
Debt Service**

Table 5

Napa Sanitation District
2017 Refunding Revenue Bonds

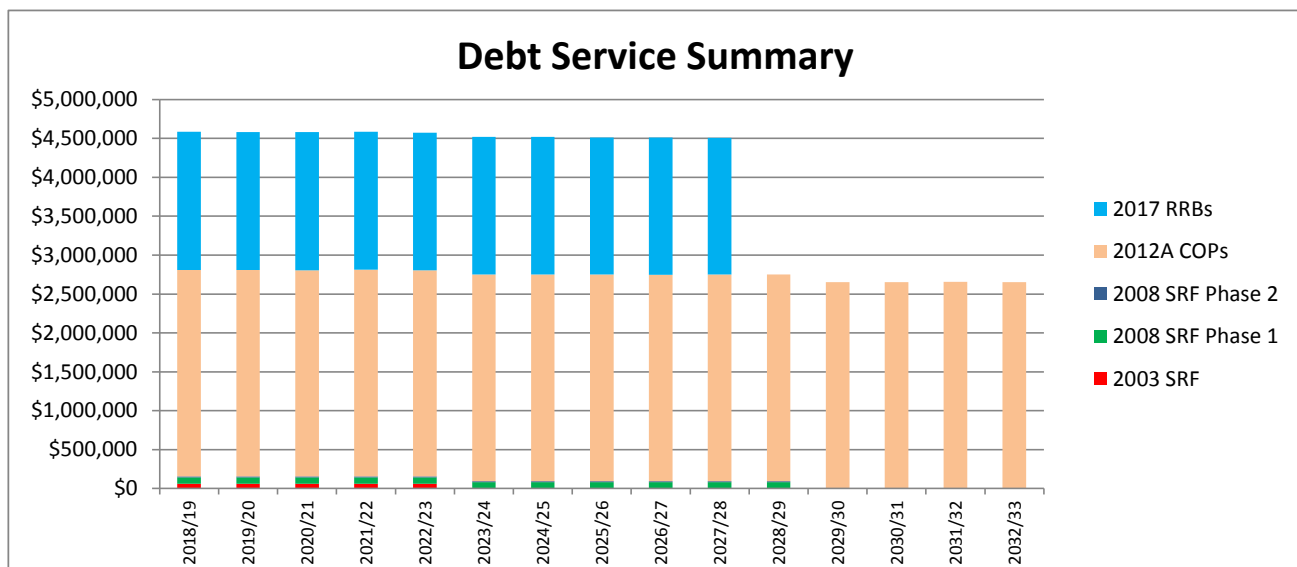
1.75% True Interest Cost (TIC), 11 year term
\$14,185,000

Fiscal Year Jul 1	Annual Interest	Principal Payment	Ending Principal	Total Payment
2017/18	-	-	14,185,000	-
2018/19	652,225	1,125,000	13,060,000	1,777,225
2019/20	546,900	1,230,000	11,830,000	1,776,900
2020/21	496,700	1,280,000	10,550,000	1,776,700
2021/22	444,500	1,330,000	9,220,000	1,774,500
2022/23	390,300	1,380,000	7,840,000	1,770,300
2023/24	334,000	1,435,000	6,405,000	1,769,000
2024/25	275,400	1,495,000	4,910,000	1,770,400
2025/26	206,625	1,555,000	3,355,000	1,761,625
2026/27	126,750	1,640,000	1,715,000	1,766,750
2027/28	42,875	1,715,000	-	1,757,875
2028/29	-	-	-	-
2029/30	-	-	-	-
2030/31	-	-	-	-
2031/32	-	-	-	-
2032/33	-	-	-	-

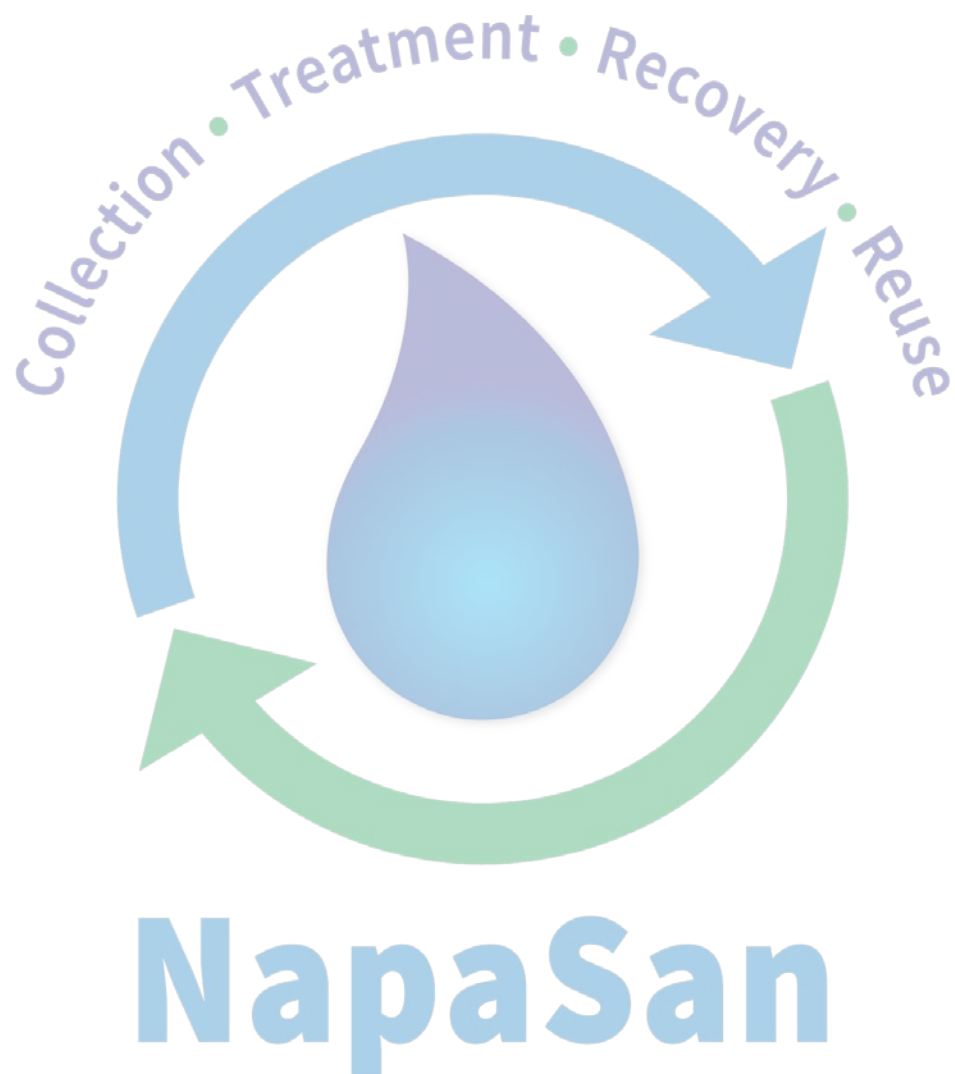
Source: 2009B Official Statement

Napa Sanitation District
Debt Service Summary
Tables 1 - 5

	Table 1 2003 SRF \$901,376	Table 2 2008 SRF Phase I \$1,652,171	Table 3 2008 SRF Phase II \$219,444	Table 4 Series 2012A COPs \$37,845,000	Table 5 Series 2017 RRBs \$14,185,000	
Fiscal Year Jul 1	Total	Total	Total	Total	Total	FY Total All Debt Service
2018/19	60,247	82,609	10,972	2,656,775	1,777,225	4,587,827
2019/20	60,247	82,609	10,972	2,652,975	1,776,900	4,583,702
2020/21	60,247	82,609	10,972	2,651,675	1,776,700	4,582,202
2021/22	60,247	82,609	10,972	2,657,575	1,774,500	4,585,902
2022/23	60,247	82,609	10,972	2,650,675	1,770,300	4,574,802
2023/24	-	82,609	10,972	2,655,875	1,769,000	4,518,456
2024/25	-	82,609	10,972	2,657,875	1,770,400	4,521,856
2025/26	-	82,609	10,972	2,656,675	1,761,625	4,511,881
2026/27	-	82,609	10,972	2,652,275	1,766,750	4,512,606
2027/28	-	82,609	10,972	2,655,825	1,757,875	4,507,281
2028/29	-	82,609	10,972	2,657,875	-	2,751,456
2029/30	-	-	-	2,652,900	-	2,652,900
2030/31	-	-	-	2,650,900	-	2,650,900
2031/32	-	-	-	2,655,275	-	2,655,275
2032/33	-	-	-	2,650,588	-	2,650,588
2033/34	-	-	-	-	-	-



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Appendix A

Glossary of Terms

Glossary of Terms

BMPs	Best Management Practices	POTW	Publically Owned Treatment Works
BOD	Biochemical Oxygen Demand	RAS	Return Activated Sludge
CalPERS	California Public Employee Retirement System	RRB	Refunding Revenue Bond
CARB	California Air Resources Board	SCADA	Supervisory Control and Data Acquisition
CASA	California Association of Sanitation Agencies	SRF	State Revolving Fund
COPs	Certificates of Participation	SWRF	Soscol Water Recycling Facility
DAF	Dissolved Air Flootation	TSS	Total Suspended Solids
CIP	Capital Improvement Plan or Capital Improvement Program	TIC	True Interest Cost
CPI	Consumer Price Index	USBR	United States Bureau of Reclamation
DAF	Dissolved Air Flotation		
EDU	Equivalent Dwelling Units		
EIR	Environmental Impact Report		
EIS	Environmental Impact Statement		
ELAP	Environmental Laboratory Accreditation Program		
FOG	Fats, Oils and Grease		
FTE	Full-Time Equivalent		
FY	Fiscal Year		
GAAP	Generally Accepted Accounting Principles		
GFOA	Government Finance Officers Association		
I & I	Inflow & Infiltration		
LIMS	Laboratory Information Management System		
MGD	Million Gallons per Day		
MST	Milliken/Sarco/Tulocay Creeks area		
MOU	Memorandum of Understanding		
NBWRA	North Bay Water Reuse Authority		
NPDES	National Pollutant Discharge Elimination System		
NSH	Napa State Hospital		
ORP	Oxygen Reduction Potential		
OPEB	Other Post Employment Benefits		

Acre Foot – The volume of water required to cover one acre of land to a depth of one foot. One acre foot of water equals 43,460 cubic feet, or 325,851 gallons.

Adjusted Budget – The adopted budget, with any changes adopted by the Board of Directors during the fiscal year.

Adopted Budget – Financial plan and policy statement on the operating and capital programs of the District, approved by the Board of Directors in June for the subsequent fiscal year.

Appropriation – An authorization made by the Board of Directors which permits officials to incur obligations against and to make expenditures of governmental resources.

Biochemical Oxygen Demand (BOD) - A measure of the oxygen used by microorganisms to decompose waste. If there is a large quantity of organic waste in the wastewater supply, there will also be a lot of bacteria present working to decompose this waste. In this case, the demand for oxygen will be high (due to all the bacteria) so the BOD level will be high. As the waste is consumed or dispersed through the water, BOD levels will begin to decline.

Board of Directors – The five public officials appointed by the City of Napa and County of Napa to set policy direction for the District.

Bond Covenant – A requirement placed on the District as part of a financing agreement, such as bonds.

Bonds – Borrowed monies allocated to pay for specific capital programs. Debt service payments are made to repay the bond holders.

Budget Calendar – The schedule of key dates that the District follows in preparing and adopting the budget.

Budget Document – The official financial spending and resource plan, adopted by the Board of Directors and made available to the public and other interested parties.

Budget Transfer – An appropriation for the transfer of resources from one account, department or fund to another. See also *Interfund Transfer* and *Intrafund Transfer*.

California Air Resources Board (CARB) – Part of the California Environmental Protection Agency, their mission is to promote public health, welfare and ecological resources through the efficient and effective reduction of air pollutants.

California Public Employees' Retirement System (CalPERS) – A state-wide pooled trust used by local government and state agencies to fund employee retirement benefits.

Consumer Price Index (CPI) – A measure of inflation maintained by the U.S. Bureau of Labor Statistics.

Capacity Charge – One-time fee charged to new connections, or to existing connections where a change or expansion in use will result in increased discharge, to pay for the sewer and treatment plant capacity allocated to them.

Capacity Fee – See *Capacity Charge*.

Capital Assets – Assets of significant value (over \$5,000 at the time of acquisition) that have a useful life of over one year. Examples are land, buildings, other improvements, machinery, vehicles and equipment.

Capital Improvement Plan – The listing of capital projects by cost and fiscal year. This is the documentation of decisions made within the Capital

Improvement Program. Capital project costs include all expenditures required to purchase, design, construct and/or repair new or existing capital assets.

Capital Improvement Program – The District's program for the acquisition, construction, or rehabilitation of its capital infrastructure. The program includes the board-approved set of projects that will result in the construction of new capital facilities, or the modification, upgrade or rehabilitation of existing facilities over a ten-year period.

Capital Outlay – Cash outlays that result in the acquisition of or additions to capital assets.

Cash Flow – Projected cash disbursements for a given period of time.

Cash Flow Reserve – The amount of cash necessary at the beginning of the fiscal year to ensure coverage of projected cash inflows and disbursements during the fiscal year.

Certificates of Participation (COPs) – A type of debt financing in which certificates are issued which represent an investor's participation in the stream of lease payments paid by the issuer. Certificates of Participation are secured by the lease payments. Voter approval is not required prior to issuance.

Cogeneration – The use of a heat engine or a power station to generate electricity and useful heat simultaneously.

Connection Fee – See *Capacity Charge*

Contributed Capital – Capital assets that are acquired or constructed by a third party and turned over to the District for operations, maintenance and eventual rehabilitation and replacement once completed. Most often, contributed capital is the lower lateral and sewer main infrastructure built by a developer as part of a development project.

Debt Capacity – The difference between the amount of debt the District has outstanding (sold and authorized) and the maximum amount of debt the District can incur within its legal, public policy and financial limitations.

Debt Service – Payment of interest and repayment of principal to holders of the District's bonds and other debt instruments.

Debt Service Coverage – The ratio of net revenues to debt service requirements. The District is required by bond covenants to maintain a debt service coverage ratio of at least 1.25.

Department – A major organizational unit with overall managerial responsibility for functional programs of the District.

Depreciation – An expense based on the expectation that an asset will gradually decline in value or have to be replaced. The cost of the asset is therefore spread out (depreciated) over the asset's useful life. The intent is to charge the Operation over the real time of its useful life.

Digester – an apparatus in which substances are softened or disintegrated by moisture, heat, chemical action, or the like. The District uses an anaerobic digester to treat and process biosolids.

Dissolved Air Floatation (DAF) – A method of removing solids from wastewater by attaching a minute air bubble to suspended solids and causing the solids to separate from the water in an upward direction.

Effluent – This is the outflow of water from the wastewater treatment plant after treatment.

Environmental Impact Report/Environmental Impact Statement (EIR/EIS) – A detailed report or statement describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects.

Equivalent Dwelling Units (EDU) – A proxy for the amount of suspended solids, biochemical oxygen demand and flow that the typical residential dwelling disposes into the sewer system in a day. This is used to determine the capacity charge and annual sewer service charge for non-residential customers of the District.

Expenditure – The payment of an obligation from the District's cash amounts.

Fats, Oils and Grease (FOG) – FOG is a problem in the sewer systems, as it can cause blockages that result in sewer overflows. FOG, when collected from its source (such as a restaurant), can be used by a wastewater treatment plant to increase the volatile organic material in its digester, resulting in more methane gas used for electricity production.

Fiscal Year – The 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and results of its operations. The District's fiscal year runs from July 1 to June 30 of the following year.

Full-Time Equivalent (FTE) – The amount of time a regular, full-time employee normally works in a year. For example, a full-time employee (1 FTE) is budgeted to work 2,080 hours per year, while a 0.5 FTE is budgeted to work 1,040 hours per year.

Fund – An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves and equities.

Fund Accounting – System of accounting popular with governments and nonprofit organizations that utilizes funds to segregate accounts and activities. There is a focus on stewardship of financial resources received and expended in compliance with legal requirements.

Fund Equity – Fund equity, for the basis of the District's budgeting and financial planning purposes, is defined as current assets, including restricted assets, less current liabilities, excluding capital-related liabilities. This number is meant to represent the amount of cash that the District has available to commit to operating or capital expenses now or in the future, and is comparable to Fund Balance in governmental-type funds.

Generally Accepted Accounting Principles (GAAP) – Uniform standards for financial accounting and reporting. They govern the form and content of the basic financial statements of an entity.

General Manager – The chief executive officer of the District hired by the Board of Directors.

Government Finance Officers Association (GFOA) – A nonprofit professional association, serving 18,000 government finance professionals through the United States and Canada. The purpose of the GFOA is to enhance and promote the professional management of governments for the public benefit by identifying and developing financial policies and practices and promoting them through education, training and leadership.
www.gfoa.org.

Inflow & Infiltration (I&I) – This refers to unintended sources of water that enter the sewer system, either through unauthorized connections (such as a downspout or a sump pump) or from groundwater intrusion through cracks or gaps in the sewer line.

Influent – Water or wastewater entering the wastewater treatment plant, or a particular stage of the treatment process.

Infrastructure – The components that ensure delivery of reliable, high quality services. Typical components include pipelines, pumps, basins, filtration facilities and the like.

Interest – Revenues derived from the investment of idle cash and/or reserves.

Interfund Transfer – The transfer of resources from one fund to another. See also **Budget Transfer** and **Intrafund Transfer**.

Intrafund Transfer – The transfer of resources from one department or account to another within a fund. See also **Budget Transfer** and **Interfund Transfer**.

Laboratory Information Management System (LIMS) – A software-based laboratory and information management system that offers a set of key features, including workflow and data tracking support, flexible architecture, and smart data exchange interfaces that fully support its use in a regulated environment.

Lost Time – The time an employee spends not working as a result of a workplace accident.

Memorandum of Understanding (MOU) – A document outlining the terms and details of an agreement between parties, including the responsibilities of each party. This term is often used to describe agreements with labor groups and unions.

Milliken/Sarco/Tulocay Creeks (MST) – The area just to the east of the City of Napa, in unincorporated Napa County, that includes Milliken Creek, Sarco Creek and Tulocay Creek. This is an area where there is a problem with groundwater overdraft. The County of Napa and the District are working together to deliver recycled water to this area.

Million Gallons per Day (MGD) – One million gallons per day equals 3.07 acre feet, or about 700 gallons per minute.

Napa State Hospital (NSH) – The District is constructing a recycled water pipeline through the NSH property.

National Pollutant Discharge Elimination System (NPDES) – Permit system established by the U.S. Environmental Protection Agency to regulate discharge of treated sewage, stormwater and urban runoff. The Regional Water Quality Control Board issues the District an NPDES permit that regulates the District's discharge of treated wastewater into the Napa River.

North Bay Water Reuse Authority (NBWRA) – This is an organization of wastewater agencies in Napa, Sonoma and Marin Counties that have joined together to develop a regional approach to funding, producing and delivering recycled water.

Other Post Employment Benefits (OPEB) – These are the benefits, other than retirement pensions, that are provided to retirees of the District. Governmental Accounting Standards require that benefits that accrue to employees should be expensed when they are earned, not when they are paid out to employees. The District pays into a trust account to pay for OPEB liabilities.

Oxygen Reduction Potential (ORP) – In wastewater, this is the measure of how much oxygen is needed to provide adequate disinfection (disinfection is provided through the application of sodium hypochlorite). The ORP analyzers are used to determine the precise amount of chemicals needed, based on changes in oxygen demand levels. This process reduces the amount of sodium hypochlorite applied during treatment to only that which is needed and reduces the amount of sodium bisulfite used to remove excess hypochlorite in the water.

Performance Measure – An objective measure of efficiency or effectiveness.

Publically Owned Treatment Works (POTW) – For the District, this is the Soscil Water Recycling Facility (SWRF).

Rates – Charges for services to District customers that cover the costs of such services.

Reserve – A term used to indicate that a portion of fund equity is designated for a specific purpose.

Resources – Total dollars available for appropriations including estimated revenues and beginning fund equity.

Return Activated Sludge (RAS) – In the aeration process in wastewater treatment, part of the settled material, the sludge, is returned to the beginning of the aeration system to re-seed the new wastewater entering the aeration basin. The RAS Rate refers to the percentage of sludge that is returned.

Revenues – Monies received or earned by the District.

Service Level – The kind and amount of service that the District provides to its customers at a given time.

Sewer Service Charges – Annual or monthly fees charged to users of the District sewer works for discharges into the system.

Soscol Water Recycling Facility (SWRF) – This is the District's wastewater treatment plant and recycled water production facility located on Soscol Ferry Road, just north of the Napa Airport.

Special District – Independent unit of local government generally organized to perform a single function.

State Revolving Fund (SRF) – A fund administered by the state for the purpose of providing low-interest loans for investments in water and sanitation infrastructure.

Struvite – Ammonium magnesium phosphate ($\text{NH}_4\text{MgPO}_4 \cdot 6\text{H}_2\text{O}$). Struvite is a problem in sewage and wastewater treatment, particularly after anaerobic digesters release ammonium and phosphate from waste material, as it forms a scale on lines and clogs system pipes.

Supervisory Control and Data Acquisition (SCADA) – The SCADA system is used at the Treatment Plant for the measurement and control of various processes of wastewater treatment. The system allows for some automation of processes and for the remote monitoring and control of these processes.

Suspended Solids – particulates dissolved in liquid. See also **Total Suspended Solids**.

Taxes – Compulsory charges levied by a government for the purpose of financing services performed for the common benefit.

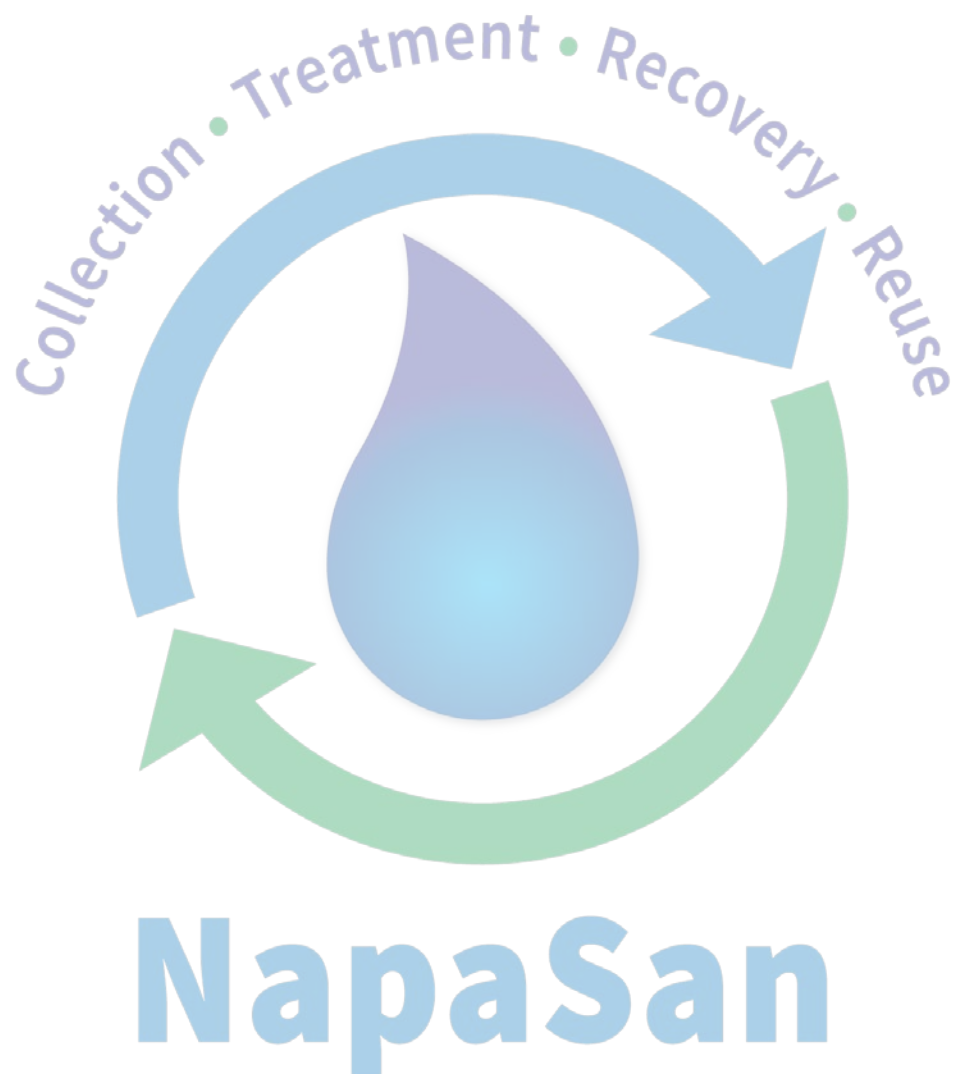
Total Suspended Solids (TSS) – particulate weight obtained by separating particles from a water sample using a filter, usually measured as milligrams per liter (mg/l).

True Interest Cost (TIC) – This is the real cost of issuing a bond. It includes all ancillary fees (underwriter fees, etc.) and takes into consideration any premium payments and different interest rates paid on different bonds within a series. This number can be used to compare quotes or bids for bond issues to determine the lowest bidder.

Appendix B

Statistics and Economic Data

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Demographics for City of Napa⁽¹⁾

	2010	2016
Population:	76,915	79,567
Median Age:	37.4	38.1
Median Household Income:	\$62,767	\$71,087
Persons Below Poverty Level	7.7%	6.4%
Median Housing Value:	\$397,100	\$579,300
Housing Units		
Owner-Occupied	16,148	15,721
Renter-Occupied	12,018	12,727
Not Computed ⁽²⁾	-	-
Vacant ⁽²⁾	1,983	1,767
	30,149	30,215

Source: US Census Bureau Census Data; 2012-2016 American Community Survey 5-Year Estimates

General Information for Napa Sanitation District

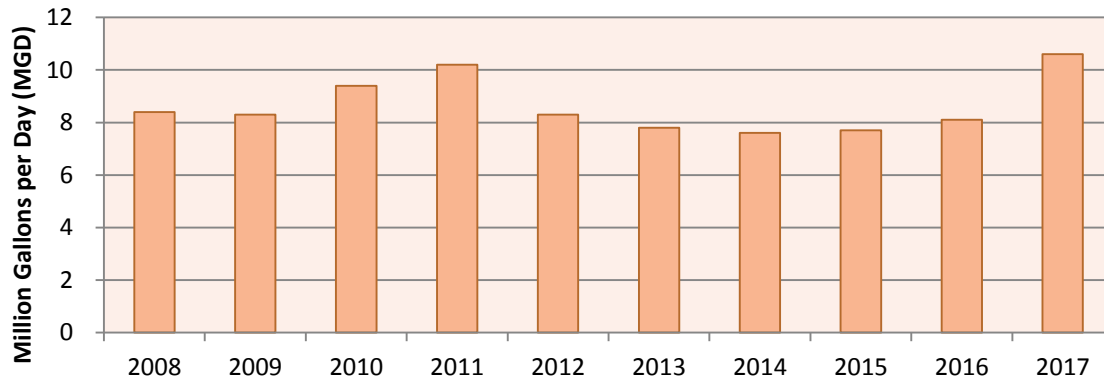
Year of Formation:	1945
Service Area (jurisdictional):	13,292 Acres
Service Population (est.):	81,500
Plant Design Capacity:	15.4 mgd ⁽²⁾
Connections:	37,369
Miles of Sewer:	270 miles
Street Laterals:	33,000
Sewer Manholes:	5,565
On-plant pump stations:	1
Off-plant pump stations:	3
NPDES Permit Number:	CA0037575

Source: Napa Sanitation District

(1) Demographics are provided for the City of Napa because about 93% of the District's population resides in the City of Napa, and this data is not available specific to the District's service area.

(2) MGD = Million Gallons per Day

Historic Average Daily Influent Flow at Wastewater Treatment Plant



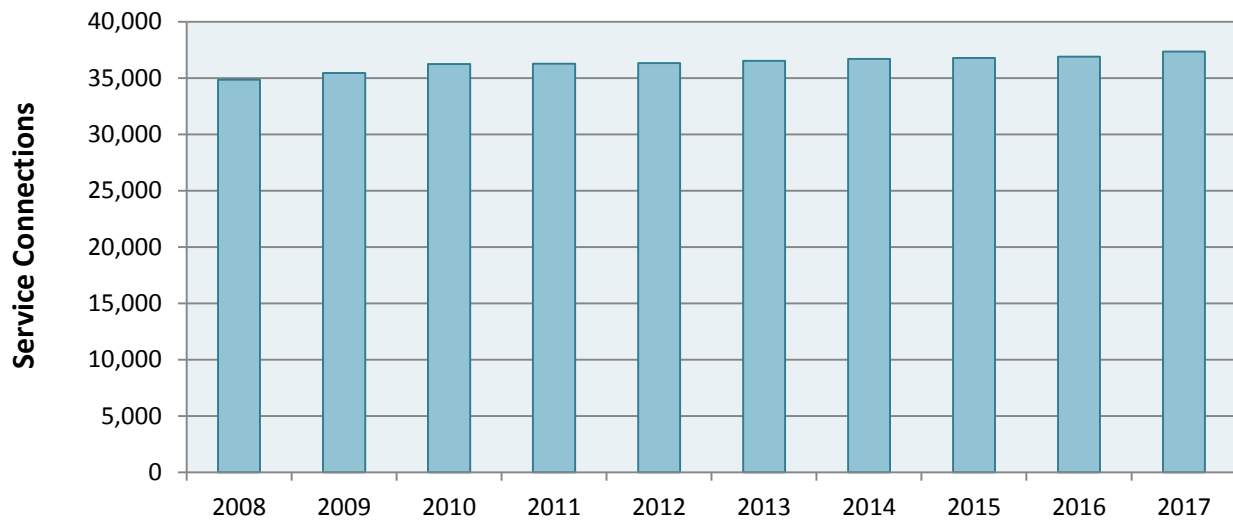
Historic Average Daily Influent Flow at Wastewater Treatment Plant

Fiscal Year Ended June 30	Daily Average Flow (MGD)	Increase/ (Decrease)
2008	8.4	-
2009	8.3	(1.2%)
2010	9.4	11.7%
2011	10.2	7.8%
2012	8.3	(22.9%)
2013	7.8	(6.4%)
2014	7.6	(2.6%)
2015	7.7	1.3%
2016	8.1	4.9%
2017	10.6	23.6%

Source: Napa Sanitation District

MGD = Million Gallons per Day

Historic Sewer System Service Connections and Equivalent Dwelling Units (EDUs)

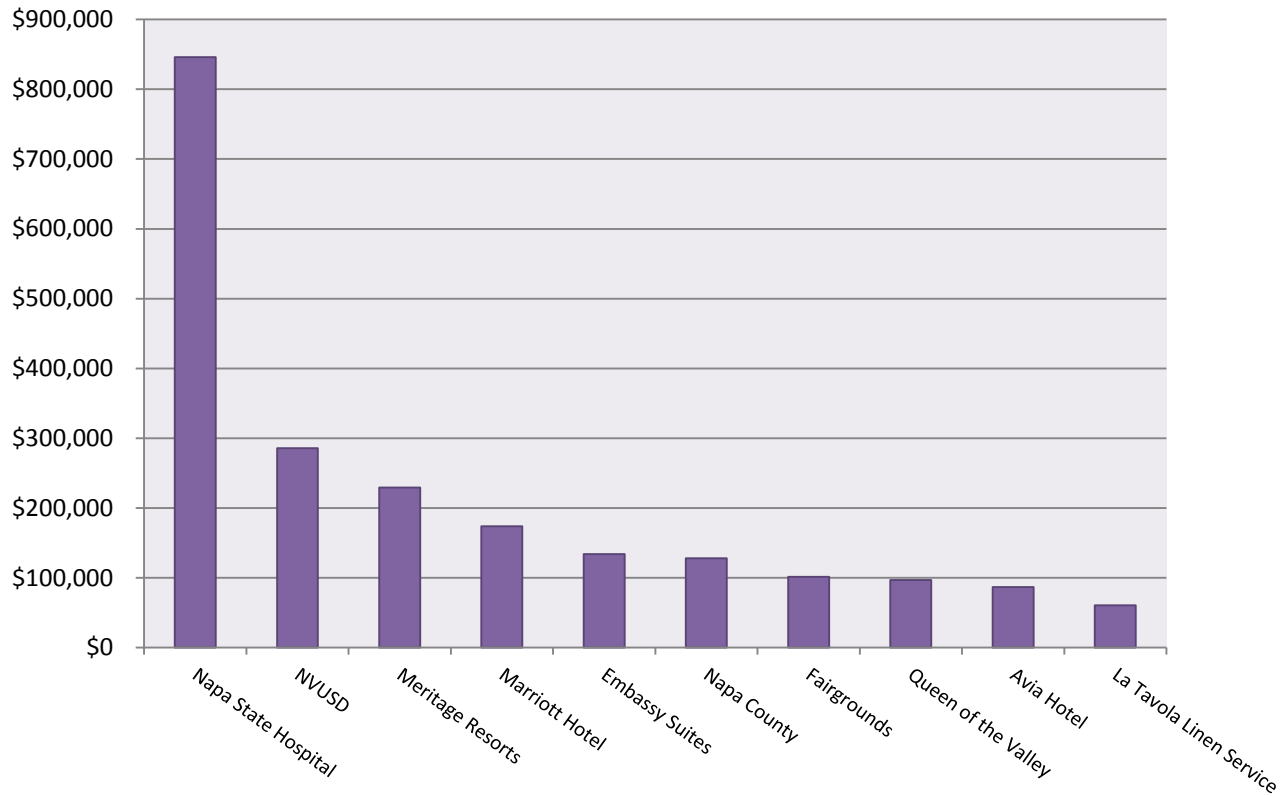


Historic Sewer System Service Connections and Equivalent Dwelling Units (EDU's)

Fiscal Year Ended June 30	Single Family	Multifamily	Commercial/ Industrial	Total Service Connections	Total EDU's
2008	22,721	8,106	4,021	34,848	39,336
2009	23,085	8,193	4,183	35,461	40,705
2010	23,304	8,526	4,421	36,251	40,801
2011	23,368	8,482	4,439	36,289	40,254
2012	23,412	8,478	4,436	36,326	40,142
2013	23,486	8,539	4,527	36,552	40,320
2014	23,519	8,673	4,530	36,722	40,955
2015	23,573	8,668	4,550	36,791	41,178
2016	23,612	8,715	4,574	36,901	41,378
2017	23,788	8,697	4,884	37,369	40,707

Source: Napa Sanitation District

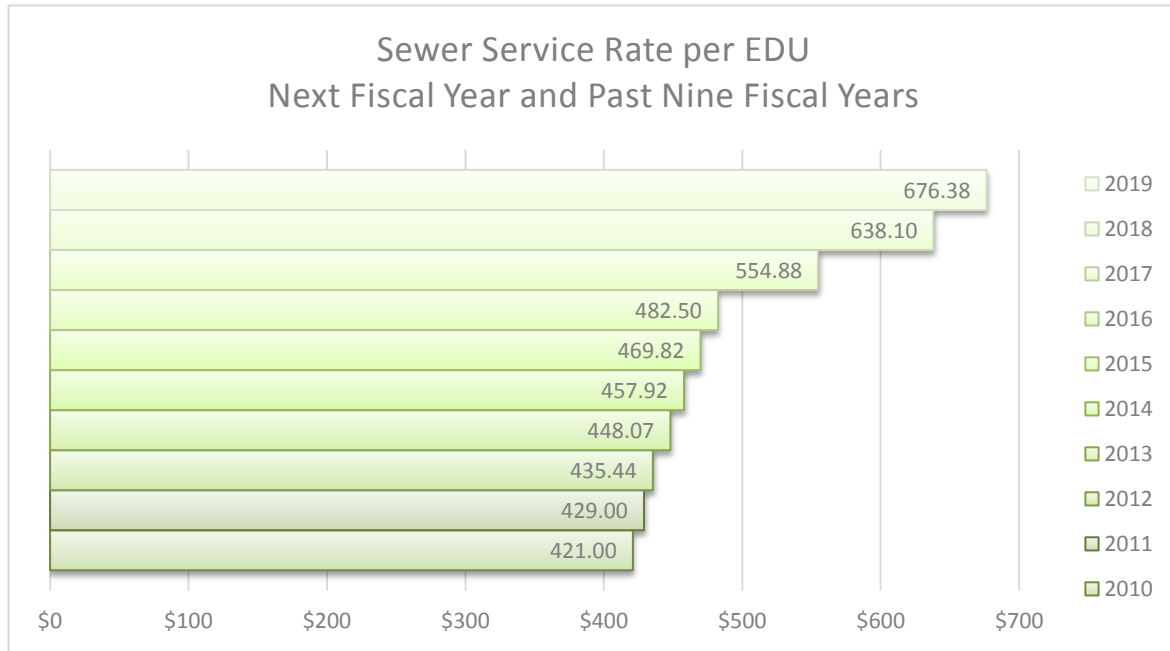
Ten Largest Sewer Users



FY 2016/17

	Sewer Service Charges	% of Total ⁽¹⁾
Napa State Hospital	\$846,072	3.8%
NVUSD	285,763	1.3%
Meritage Resorts	229,609	1.0%
Marriott Hotel	173,733	0.8%
Embassy Suites	133,948	0.6%
Napa County	128,233	0.6%
Fairgrounds	101,710	0.5%
Queen of the Valley	96,827	0.4%
Avia Hotel	86,728	0.4%
La Tavola Linen Service	60,593	0.3%
Total	\$2,143,215	9.5%

(1) Sewer service charges total: \$22,501,544



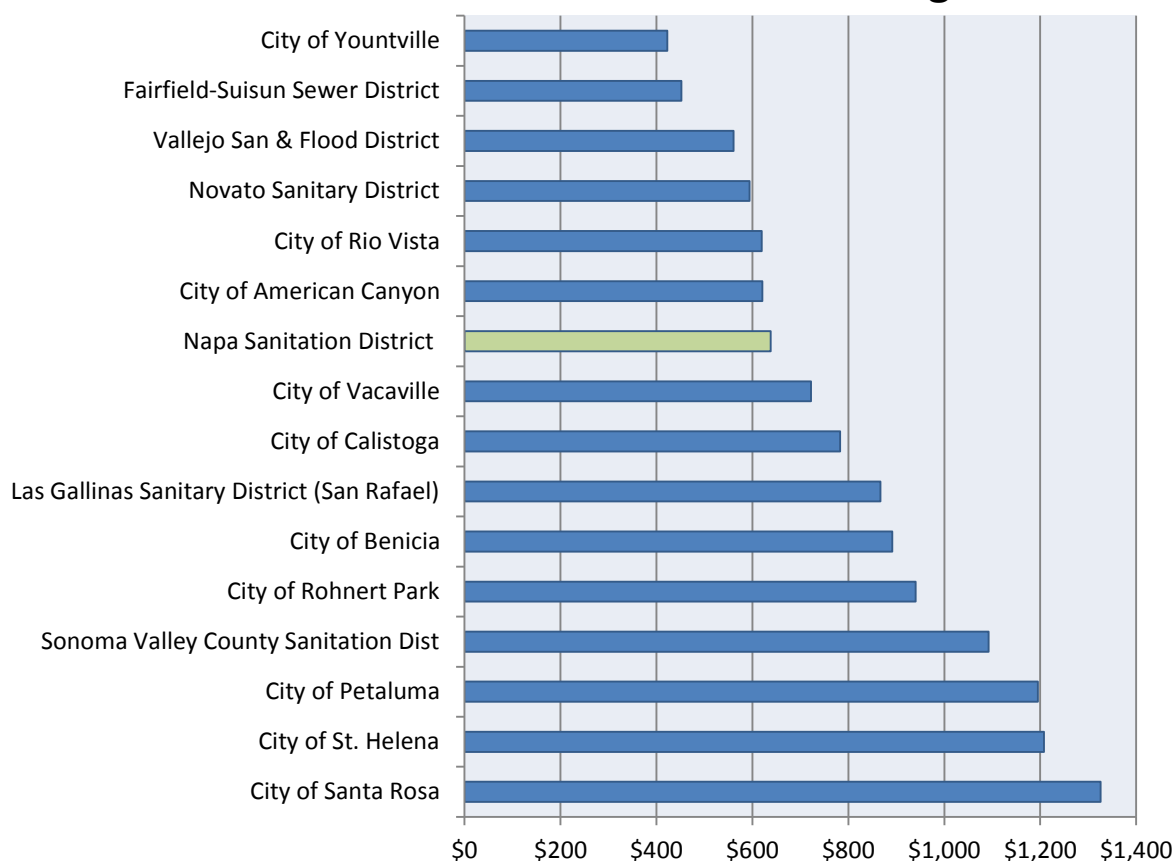
Historic Sewer Service Rates

Fiscal Year Ended		Sewer Service Rates	% Increase
June 30			
2010		421.00	1.2%
2011		429.00	1.9%
2012		435.44	1.5%
2013		448.07	2.9%
2014		457.92	2.2%
2015		469.82	2.6%
2016		482.50	2.7%
2017		554.88	15.0%
2018		638.10	15.0%
2019		676.38	6.0%

In 2006, the NSD Board of Directors approved a three year phased-in increase to the sewer service rates. For FY 2007, 2008, and 2009, the District increased rates 15% per year. The rate thereafter increases with inflation.

In 2016, the Board of Directors set the maximum rate increases for the following five years. Starting in FY 2017, the approved maximum rate increases will be 15%, 15%, 6%, 5%, and 4% each year. During the preparation of the budget each fiscal year, the Board will determine the rate increase based on an evaluation of the revenue requirements for that year (up to the maximum approved rate increase).

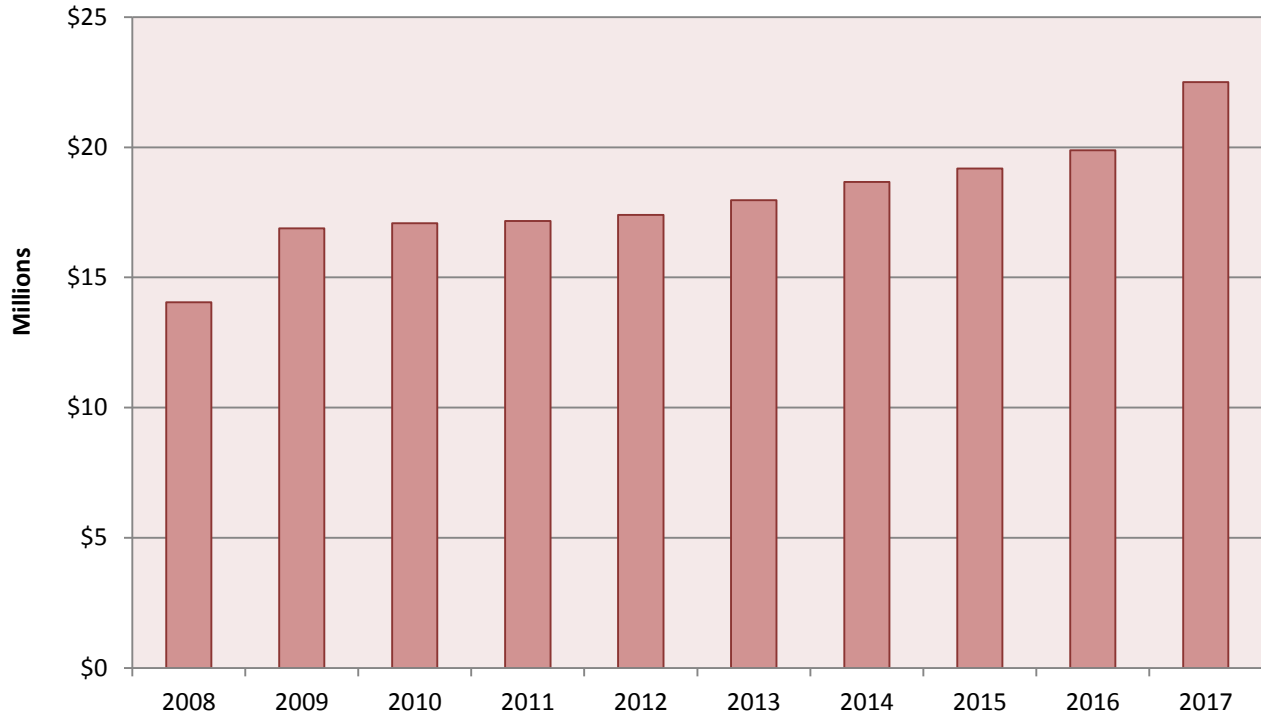
Sewer Service Rate for Surrounding Areas



FY 2017/18

Agency	Sewer Service Rate ⁽¹⁾
City of Yountville	\$423
Fairfield-Suisun Sewer District	452
Vallejo San & Flood District	560
Novato Sanitary District	594
City of Rio Vista	619
City of American Canyon	621
Napa Sanitation District	638
City of Vacaville	722
City of Calistoga	783
Las Gallinas Sanitary District (San Rafael)	867
City of Benicia	892
City of Rohnert Park	940
Sonoma Valley County Sanitation Dist	1,092
City of Petaluma	1,195
City of St. Helena	1,208
City of Santa Rosa	1,326

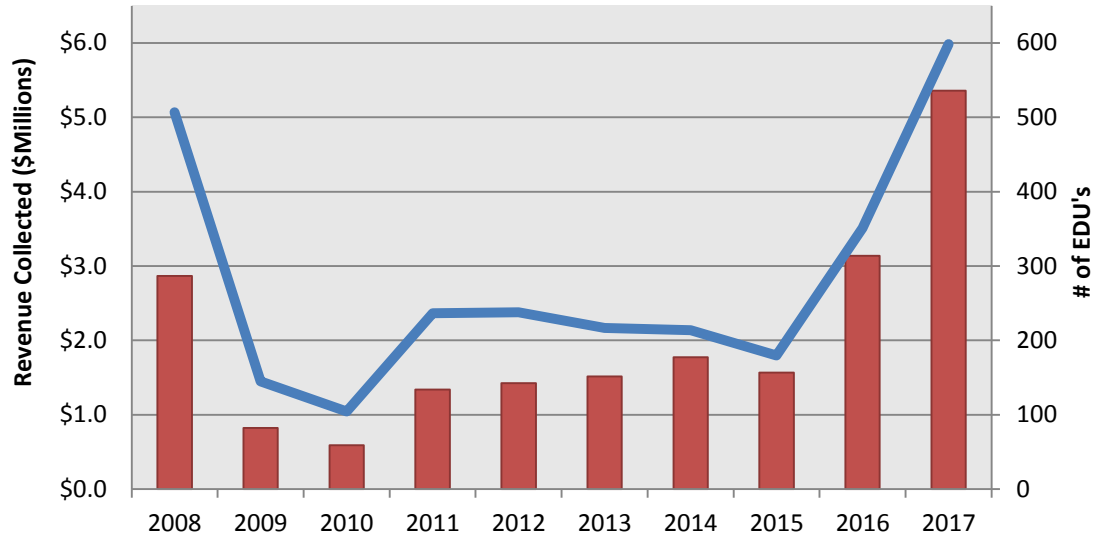
Sewer Service Revenue



Historic Sewer Service Revenues

Fiscal Year Ended June 30	Sewer Service Revenues	Percentage Change
2008	14,051,455	-
2009	16,880,763	20.1%
2010	17,089,263	1.2%
2011	17,173,259	0.5%
2012	17,400,473	1.3%
2013	17,965,150	3.2%
2014	18,665,200	3.9%
2015	19,190,535	2.8%
2016	19,887,172	3.6%
2017	22,501,544	13.1%

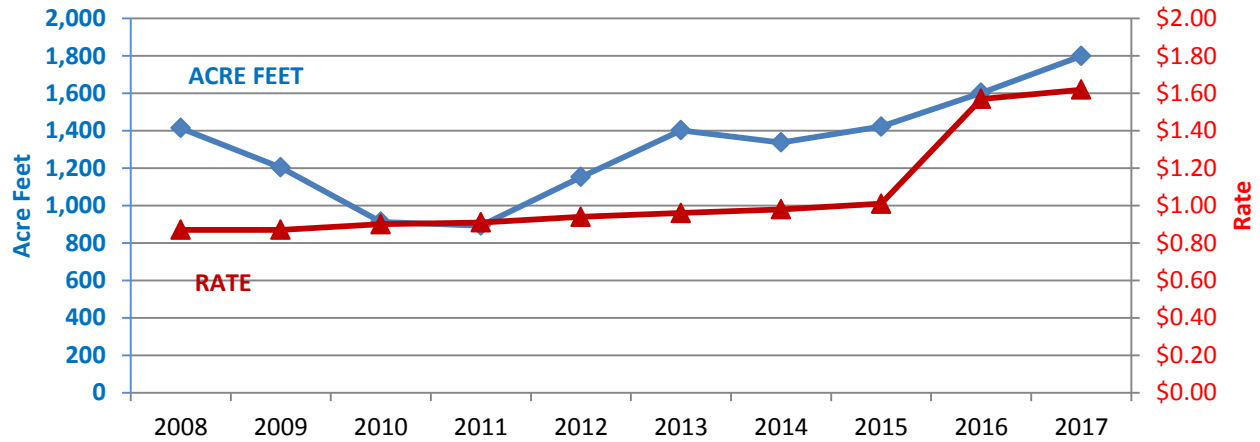
Capacity Charges Past Ten Fiscal Years



Historic Capacity Charges

FY Ended June 30	Capacity Charges (per EDU)	Total Collected	Number of EDU's
2008	5,660	2,867,637	506.6
2009	5,660	820,914	145.0
2010	5,660	591,859	104.6
2011	5,660	1,339,102	236.6
2012	6,000	1,425,486	237.6
2013	7,000	1,516,677	216.7
2014	8,300	1,774,081	213.7
2015	8,723	1,568,328	179.8
2016	8,950	3,139,503	350.8
2017	8,950	5,355,828	598.4

Recycled Water Sales in Acre Feet



Historic Annual Recycled Water Sales

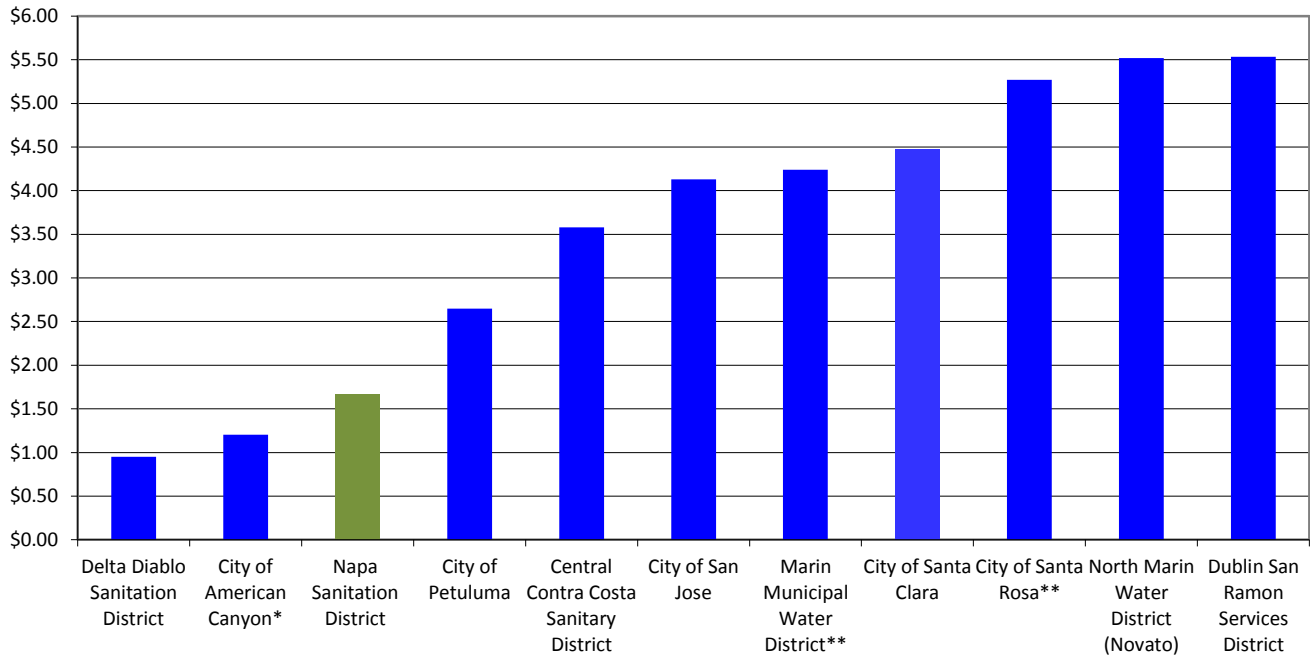
Calendar Year Ending December 31	QUANTITY		RATES
	Total Acre Feet	Total Million Gallons	Rate per 1,000 Gallons
2008	1,415	461	0.87
2009	1,204	392	0.87
2010	913	298	0.90
2011	893	291	0.91
2012	1,153	376	0.94
2013	1,402	457	0.96
2014	1,337	436	0.98
2015	1,422	463	1.01
2016 ⁽¹⁾	1,603	522	1.57
2017	1,799	586	1.62

Source: Napa Sanitation District

Note: 1 Acre Feet = .325851 Million Gallons

(1) Board of Directors approved an increase to the Recycled Water Rates starting in 2016. Increases will be done by CPI every year thereafter.

Recycled Water Rate for Surrounding Areas



Recycled Water Rates FY 2017/18

Agency	Rate per 1,000 gallons
Delta Diablo Sanitation District	\$0.95
City of American Canyon*	1.20
Napa Sanitation District	1.67
City of Petaluma	2.65
Central Contra Costa Sanitary District	3.58
City of San Jose	4.13
Marin Municipal Water District**	4.24
City of Santa Clara	4.48
City of Santa Rosa**	5.27
North Marin Water District (Novato)	5.52
Dublin San Ramon Services District	5.53

*Most customers are being charged this rate

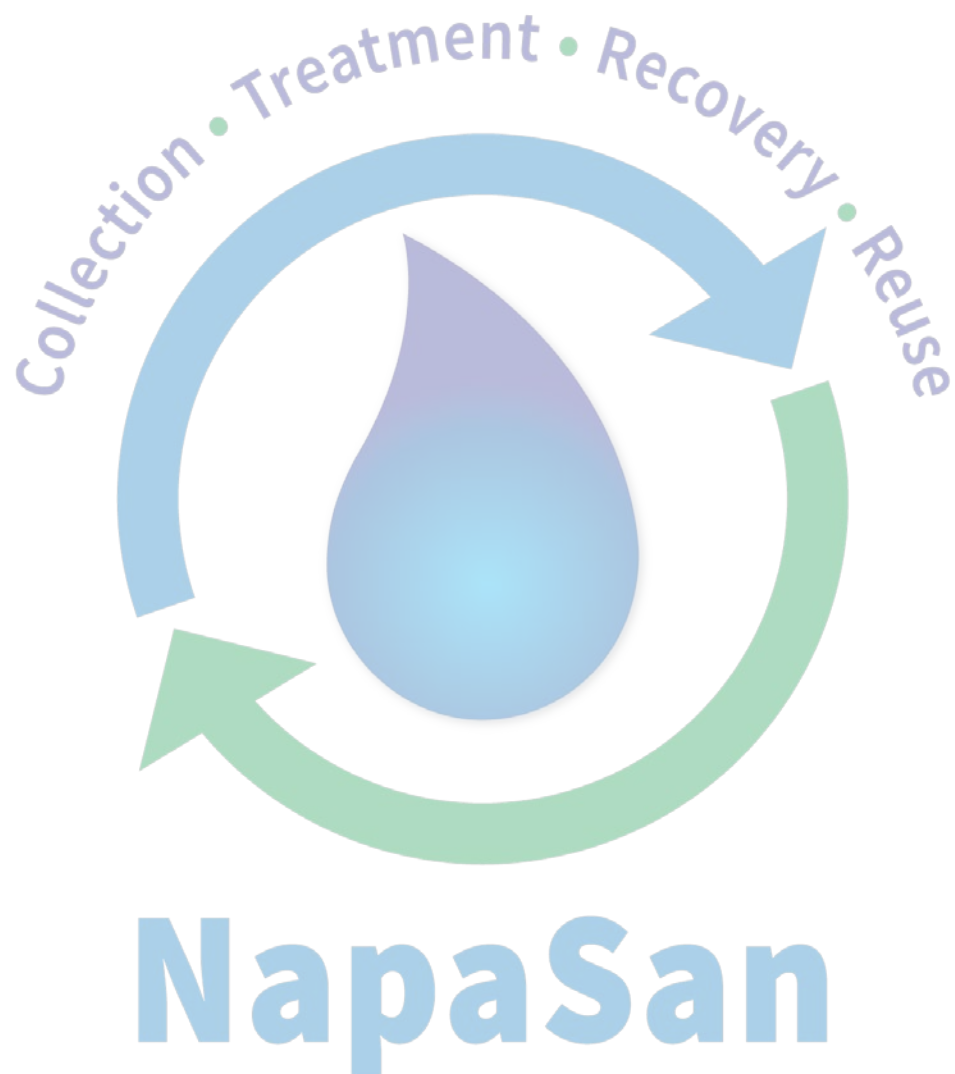
**Tier 1 Rate

Please note that the rates reflected are based on consumption. Some agencies charge a fixed monthly charge in addition to the consumption charge.

Appendix C

NSD Strategic Plan

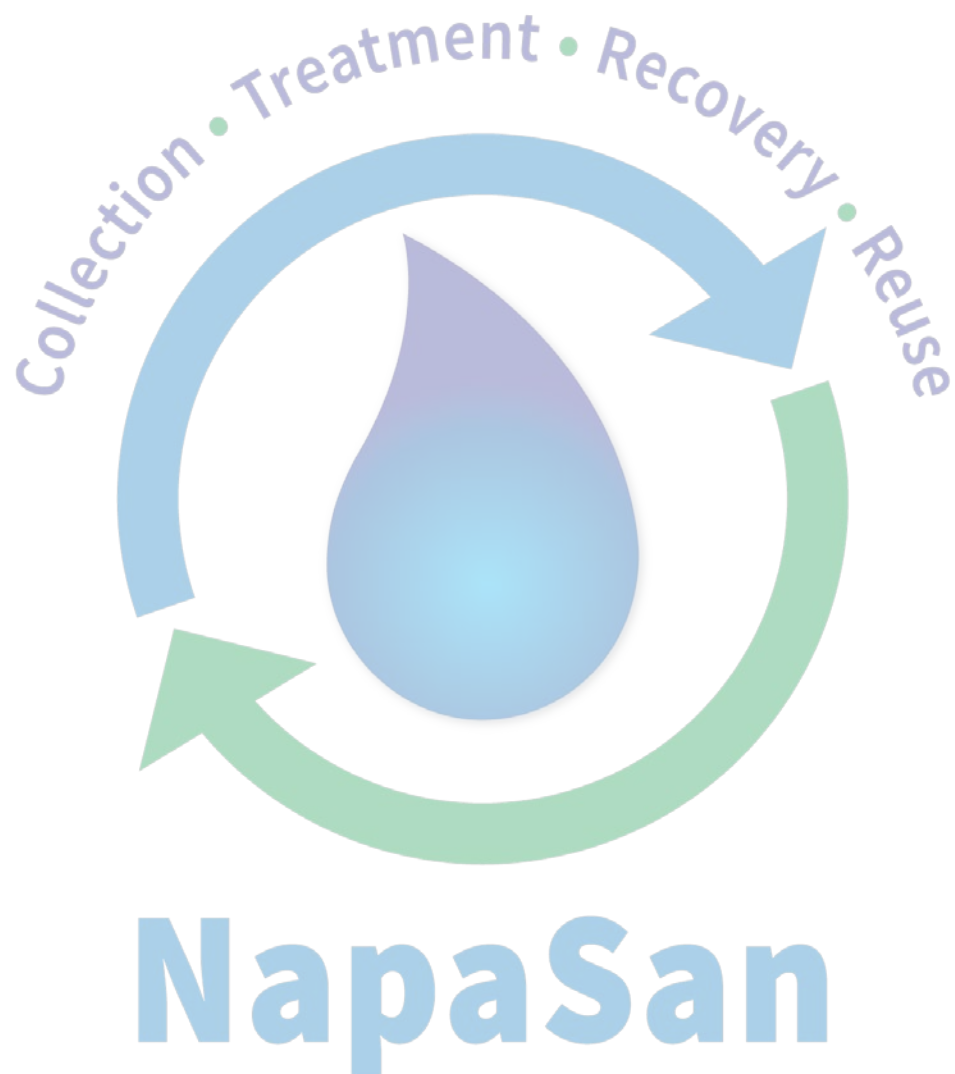
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Appendix D

Financial Policies

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FINANCIAL POLICIES

Approved by the Board of Directors
Last Update: May 16, 2018

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1.0 GENERAL POLICIES

1.1 Review annually

Napa Sanitation District's financial policies shall be reviewed annually by the Board and shall be published in the adopted budget.

1.2 Comply with applicable laws

The District shall comply with all applicable state and federal laws and regulations concerning financial management and reporting, budgeting, investing and debt administration.

1.3 Administrative procedures

The Chief Financial Officer shall establish and maintain appropriate financial and internal control procedures to assure the integrity of the District's finances.

2.0 RESERVE POLICIES

2.1 Reviewed annually

Napa Sanitation District shall maintain reserves that are appropriate to the needs of the District. Targeted reserve levels shall be established and reviewed annually as part of the budget process. The use of fund balance or reserves for operational activities shall be explained in the annual budget document; such explanation shall describe the circumstances for such action and its expected future impact.

2.2 Operating reserves

Napa Sanitation District shall maintain an operating reserve for use during operational or financial emergencies. Emergencies shall constitute significant, unforeseen events that have a dramatic and immediate impact on the operations, assets or financial condition of the District. A plan to replenish this reserve used during a fiscal year shall be developed and approved through the budgeting process in the following fiscal year. The amount of the reserve shall be at least equal to 15% of the budgeted annual operating expenses, excluding debt service, in the General Operations and Maintenance Fund.

2.3 Liquidity

Napa Sanitation District shall maintain cash and investments necessary to meet the liquidity needs for the District. Furthermore, the District shall maintain unrestricted cash and investments as required by any debt covenants.

Liquidity needs shall be calculated as follows: on June 30th of each year the District shall maintain a level of cash and investments, less those amounts held in reserve by a fiscal agent, in an amount at least equal to anticipated operating expenditures between July 1 and November 30, plus the amount held in Operating Reserve.

3.0 REVENUE

3.1 Fees and Charges

3.1.1 Setting of Fee and Charge Amounts

Fees and charges shall be set to recover the current operational needs of the District, including the financing of capital improvements in accordance with the Capital Improvement Program.

3.1.2 Collection of Fees and Charges

The District shall strive to collect all fees and charges imposed, and shall actively pursue and settle delinquent accounts.

3.1.3 Review of Fees

The District shall review fees and charges annually to ensure they are set at appropriate amounts.

3.2 Revenue Forecasting

The District shall estimate revenues conservatively, through an objective, analytical process. The District shall regularly report on forecasted vs. actual revenues, and provide explanation for significant variances.

3.3 Use of one-time and unpredictable revenues

One-time revenues shall be used to support one-time expenditures or increase fund balance. Unpredictable revenues shall not be used to support ongoing operational expenses for a period longer than the revenue can reasonably be expected to support them.

4. BUDGETING AND CAPITAL ASSET MANAGEMENT

4.1 Basis of budgeting

All budgetary procedures will conform to state regulations and generally accepted accounting principles. As such, the District shall use a modified accrual basis of accounting for reporting on budgeted versus actual expenditures, with the following exceptions:

- Grant revenues are budgeted on a modified cash basis rather than an accrual basis;
- Fixed assets are depreciated for some financial reporting, but are fully expensed in the year acquired for budgetary purposes;

4.2 Balanced budget

The District shall maintain a balanced budget, defined as total resources (operating revenue, non-operating revenue, intrafund transfers and beginning fund equity) shall equal total requirements (operating expenses, capital expenses, intrafund transfers and ending fund equity) including contingencies. Furthermore, the District considers the budget to be balanced whenever annual operating and non-operating revenues meet or exceed annual operational expenditures. The District is committed to maintaining a balanced budget under normal circumstances and will disclose deviations from a balanced operating budget when it occurs.

4.3 Budget control

The Board of Directors retains the exclusive authority to increase annual budget authority for Operational Expenditures. In no case may total operating expenditures exceed that which is appropriated by the Board without a budget amendment duly approved by the Board.

The Board of Directors also retains the exclusive authority to increase the annual budget authority for Capital Expenditures. In no case may total capital expenditures exceed that which is appropriated by the Board without a budget amendment duly approved by the Board.

Only the Board may authorize transfer of budget authority between Operational Expenditures and Capital Expenditures. Only the Board may increase the number of authorized positions in the Position Control Roster.

The General Manager has the authority to approve budget transfers between operating departments. The General Manager has the authority to approve budget

transfers between capital projects. The General Manager has the authority to hire employees in accordance with the Position Control Roster.

The Director of Administrative Services / Chief Financial Officer shall be responsible for establishing a budgetary control system to ensure compliance with this policy.

4.4 Capital asset acquisition, maintenance, replacement and retirement

4.4.1 Budget for maintenance

The District shall budget for the adequate maintenance of capital equipment and facilities to protect the public investment and ensure achievement of their maximum useful life.

4.4.2 Use of operational fund balance for capital

Operational fund balances in excess of established reserves and liquidity requirements shall be used for the development, rehabilitation or replacement of capital assets.

4.4.3 Capitalization threshold

An asset shall be considered a capital asset when the initial cost of the asset is \$5,000 or more and has a useful life of more than one year. The initial cost shall include any costs necessary to put the asset into its intended use. Interest in real property shall always be considered a capital asset, regardless of its initial cost.

4.4.4 Ten-year Capital Improvement Plan

The District shall prepare, adopt and update annually a ten-year Capital Improvement Plan that identifies and sets priorities for all major capital assets to be acquired, constructed or replaced by the District. The Capital Improvement Plan shall be included in the Adopted Budget. Major capital assets are those which result in a capitalized asset costing more than \$50,000. Capital assets costing less than \$50,000 may be combined into a single major capital project for Ten-year Capital Improvement Plan purposes, with the individual capital assets identified.

4.4.5 Funding requirement

The Capital Improvement Plan shall identify adequate funding to support the acquisition, construction and replacement of assets identified in the plan, and shall identify projects that the District believes beneficial to the system but funding has not yet been identified. The Capital Improvement Plan shall include and indicate when and for what projects the District intends to finance through the issuance of debt. Additionally, the District shall strive to develop a comprehensive strategy and funding plan for the renewal and replacement of existing capital assets.

5. DEBT ISSUANCE AND MANAGEMENT

5.1 Use of long-term debt

The District shall have a preference to finance capital improvements using pay-as-you-go financing and shall issue long-term debt only to finance capital improvements that cannot be readily financed from current revenues. Some exceptions to this may be made on a case-by-case basis for no-interest and extremely-low-interest loan programs for capital projects.

Debt financing shall be used only for major, non-recurring items or improvements with a minimum of five years of useful life; assets with a shorter useful life shall be financed using pay-as-you-go financing. The intended use of debt shall be described in and integrated into the District's Capital Improvement Plan and any long range financial forecasts.

5.2 Types of debt

The District, either on its own or through a public benefit corporation, may issue general obligation bonds, certificates of participation, revenue bonds, borrow from a bank, borrow from the State of California through the use of state revolving fund loans, borrow from the Federal Government, or issue any other long or short-term instrument approved by and deemed appropriate by the Board of Directors to meet the capital financing needs of the District. Debt may be fixed rate or variable rate.

5.3 Length of debt obligations

The District shall repay all debt issued within a period not to exceed the expected useful life of the improvements financed by the debt.

5.4 Debt service limitation

The District shall not issue debt where the debt service amounts exceed its ability to pay current obligations from current revenues. This shall be calculated as follows: current operating revenues, less current operating expenditures, shall be at least 125% of anticipated total annual debt service for all outstanding long-term debt.

5.5 Use of credit enhancements

When issuing long-term debt, credit enhancements (letters of credit, bond insurance, etc.) may be used, but only when net debt service on the debt is reduced

by more than the cost of the enhancement, or the enhancement is a requirement for the loan or debt issuance.

5.6 Bond rating

The District shall seek to maintain and, if possible, improve its current bond rating in order to minimize borrowing costs and preserve access to credit.

5.7 Financial disclosure

The District shall fully disclose financial and pertinent credit information as it relates to the District's outstanding securities.

5.8 Internal controls

To ensure debt proceeds are used as intended, the District shall implement internal control procedures that include at least the following:

- Debt proceeds shall be deposited in an account separate from other District accounts, with only revenues and expenditures directly associated with the debt proceeds included in the account.
- At least two approvals from different reviewers will be required on all expenditures of debt proceeds, to review and ensure the expenditure is appropriate to be paid from debt proceeds.
- District accounting staff shall prepare periodic reports on the use of debt proceeds for management review.

6. INVESTMENTS

6.1 Investment policy

The District shall maintain the same investment policy as the County of Napa and shall invest its cash reserves in the County's investment pool.

6.2 Annual review

The District shall review this policy annually and advise the Board when, in the professional opinion of the staff, it would be prudent to consider alternatives to investing its cash reserves.

7. FINANCIAL REPORTING

7.1 Quarterly financial reporting to Board of Directors

The District shall prepare and provide to the Board of Directors a quarterly summary report that compares actual revenues and expenditures to budgeted amounts, including relevant information on debt proceeds and debt service payments. The report shall explain significant variances and provide analysis and interpretation of financial information.

7.2 Monthly financial reporting to Board of Directors

On a monthly basis, the Board of Directors shall be provided a financial report that includes budget-to-actual financial reporting and calculation of existing cash balances. The Board shall also receive regularly a report listing payments made to vendors during the reporting period.

7.3 Monthly management report review

The District shall prepare a monthly report for review and use by District management staff that compares actual revenues and expenditures to budgeted amounts, as well as additional reports as requested to assist in managing the day-to-day operations of the District.

8. ACCOUNTING

8.1 Financial statements

The District shall prepare financial statements annually, in accordance with generally accepted accounting principals for governments in the United States.

8.2 Annual financial audit

The District's financial statements shall be audited annually by an independent, qualified third party in accordance with generally accepted auditing standards, and shall complete the audit within eight months of the end of the fiscal year. The audit results and any associated management response shall be presented to the Board of Directors.

8.3 Accounting policies and procedures

Management shall develop internal accounting policies and procedures necessary to implement these Financial Policies and to ensure that internal controls, processes and procedures are adequate to protect the finances of the District.

9. PENSION AND OPEB

9.1 Pension Funding, Generally

NapaSan shall be a member of the California Public Employees' Retirement System (CalPERS). NapaSan shall budget for and make at least the minimum payments required by CalPERS to fund the normal cost and the annually determined contribution to any unfunded actuarial liability.

9.2 Additional Payments Toward Pension UAL

NapaSan shall make additional contributions toward the Unfunded Actuarial Liability (UAL) if the most recent Annual Valuation Report identifies a UAL. The source and amount of funding shall be determined and approved by the Board and may include the following sources:

- Annual savings from the refinancing of long-term debt;
- Savings derived from the expiration of payments for a retirement plan's side fund or other amortization bases; and/or
- Salary and benefit savings realized by NapaSan through short-term position vacancies.

9.3 Additional UAL Payments to CalPERS

NapaSan shall pay any additional contributions toward the UAL to CalPERS. Payments shall be applied against any retirement plan's underfunded amortization base specifically, or to the UAL generally, as deemed in NapaSan's best interest.

9.4 Other Post-Employment Benefits (OPEBs)

NapaSan shall provide Other Post-Employment Benefits (OPEBs) in accordance with any negotiated employment contracts or agreements. As a minimum, NapaSan shall budget for and make at least the annually determined contribution necessary to pay for OPEBs provided to current retirees.

9.5 OPEB Trust Payments

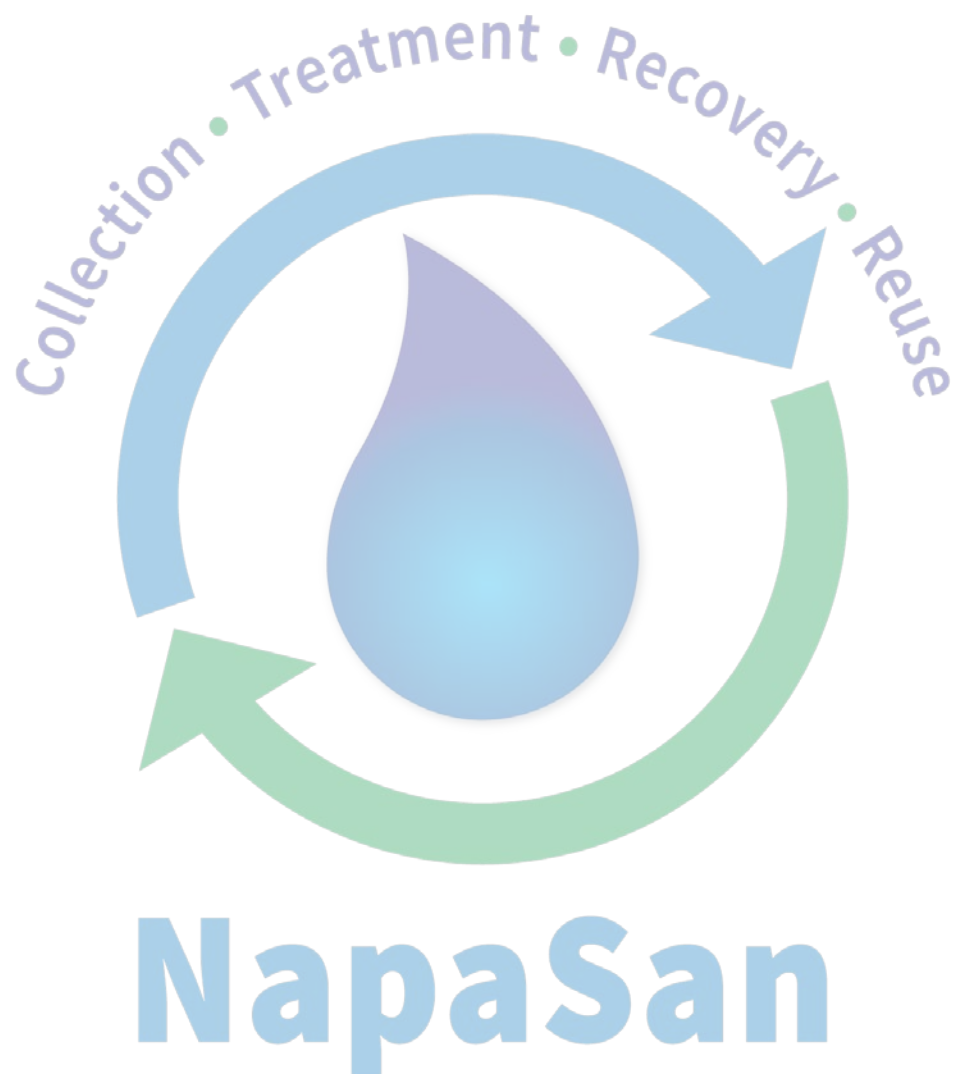
NapaSan shall establish an OPEB Trust account under Section 115 of the Internal Revenue Code, and shall prepare an actuarial report for the plan every two years. If the actuarial report identifies a Net OPEB Liability, then NapaSan staff will include payments to the OPEB Trust in the proposed annual budget. The amount proposed

in the budget will be adequate to meet the Actuarially Determined Contribution for that year. The annual OPEB contribution shall be determined and approved by the Board through the budget approval process.

9.6 Use of OPEB Trust Assets

NapaSan may use the assets in the OPEB trust only to pay for OPEB-related expenses.

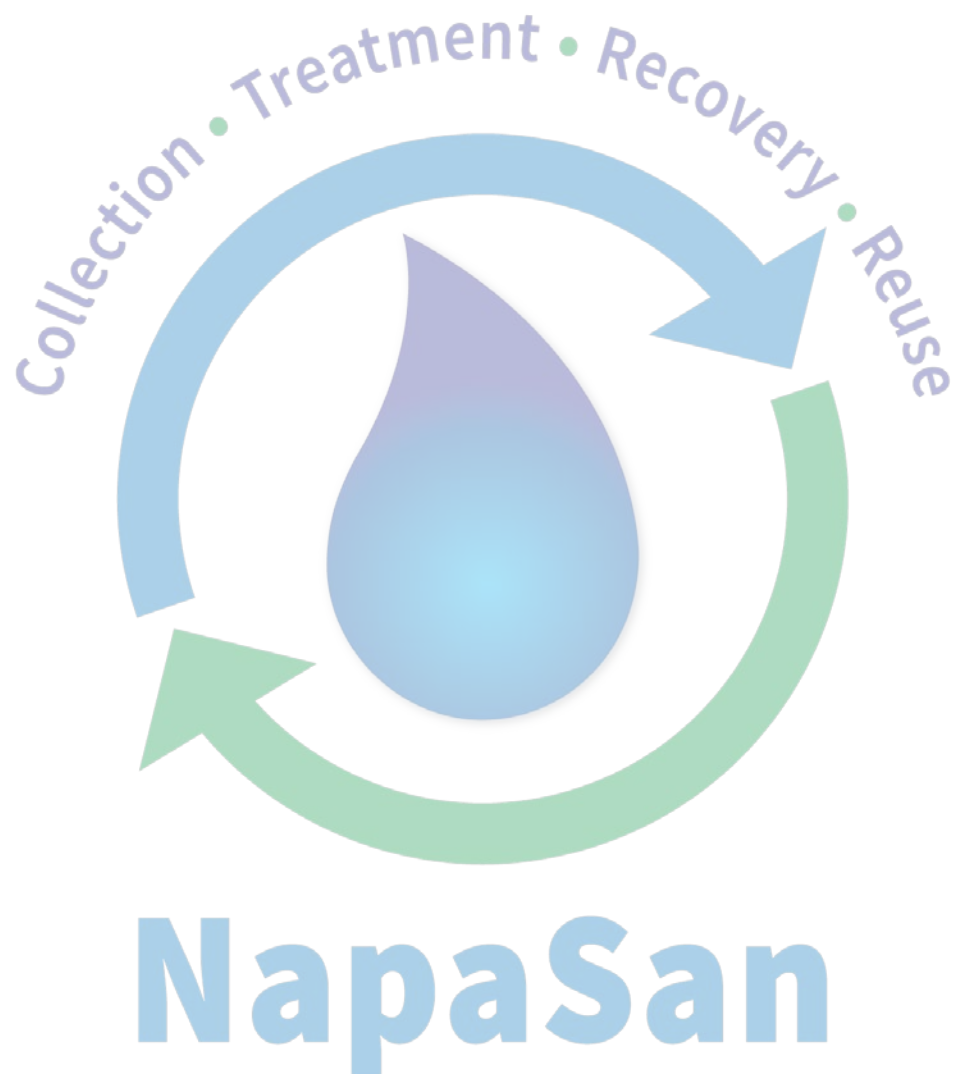
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Appendix E

2017 Performance Measurement Report

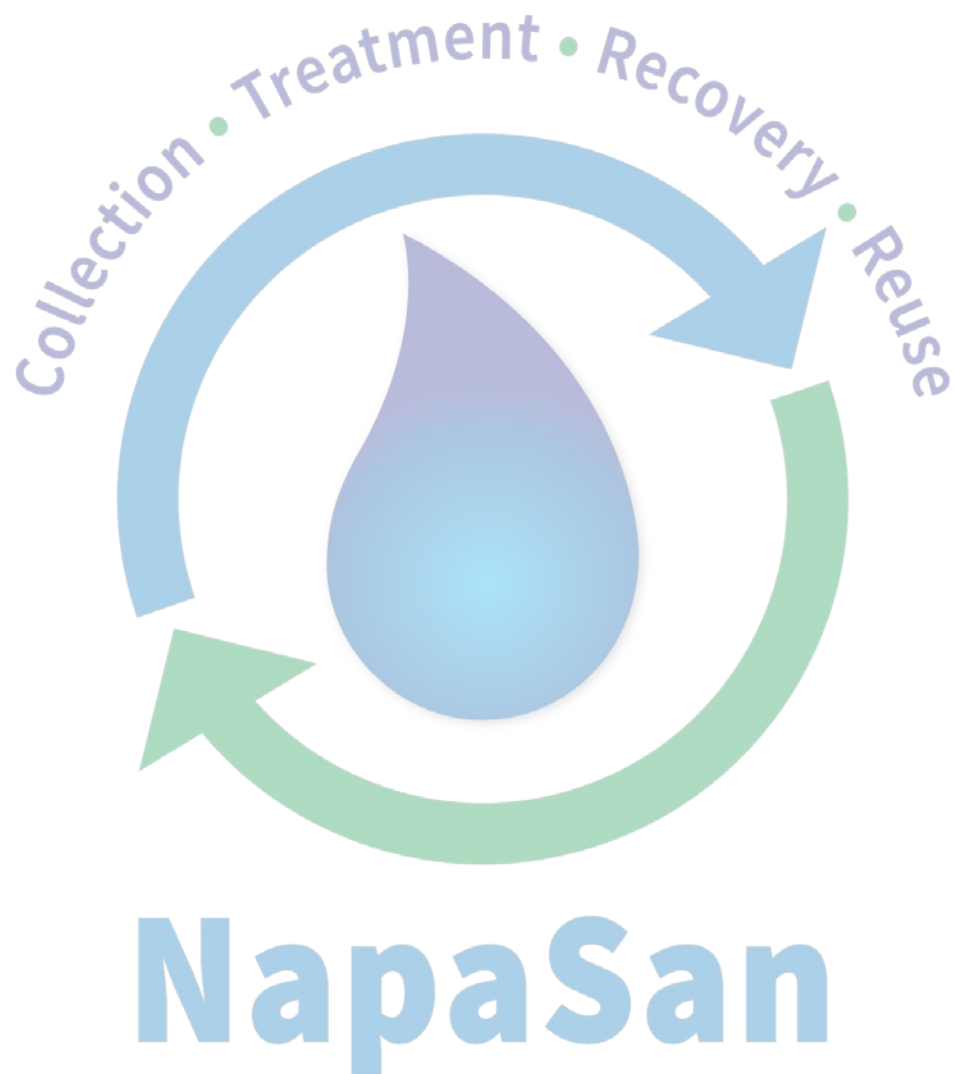
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Appendix F

Capacity Charges Report for Fiscal Year 2016/17

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Capacity Charges Report for Fiscal Year 2016-17

Purpose of the Report

This report is prepared to comply with California Government Code 66013, detailing the amount of capacity charges were received by the District and on what capital projects those charges were expended.

Capacity Charges Defined

Capacity charges are a charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities. The Napa Sanitation District charges a capacity charge on all new development and all expansions or changes of existing development to pay for current and future capital improvement projects in the wastewater treatment plant, reclamation system or collection system that are designed to accommodate growth or expanded use.

The Fiscal Year 2016-17, the fee for capacity charges was \$8,950 per Equivalent Dwelling Unit.

Reporting Requirements

The District is required to report to the public expenditures of capacity charges. As outlined in California Government Code 66013, the public reporting must be done within 180 days after the last day of each fiscal year and must include the following information for that fiscal year:

1. A description of the capacity charges deposited into the fund.
2. The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.
3. The amount of capacity charges collected in that fiscal year.
4. An identification of all of the following:
 - a. Each public improvement on which charges were expended and the amount of the expenditures for each improvement, including the percentage of the total cost of the public improvement that was funded with those capacity charges if more than one source of funding was used.
 - b. Each public improvement on which charges were expended that was completed during that fiscal year.
 - c. Each public improvement that is anticipated to be undertaken in the following fiscal year.
5. A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.

Activity Prior to Reporting Period

In August 2009, the District completed a study conducted by Bartle Wells Associates that evaluated the allocation of capacity charges to capital projects from Fiscal Year 1995-96 to 2007-08. The study looked at projects completed on a pay-as-you-go basis, as well as those that were debt financed. The study

evaluated which projects should be allocated to user fees (operating revenue), which to capacity charges (expansion fees), and which had “mixed benefit.” For those with mixed benefit, the study evaluated what the percentage split should be for those expenses.

The study concluded that the expansion fund (capacity charges) was overspent by \$19.4 million, with that difference being picked up by the capital projects fund (user fees). And after applying the existing fund balance for the expansion fund at the end of Fiscal Year 2007-08, there was still a capacity charge deficit of \$12,607,167.

In FY 2008-09, that deficit grew by \$276,607.67 to \$12,883,774.67.

In FY 2009-10, that deficit grew by \$1,590,705.81 to \$14,474,480.48.

In FY 2010-11, that deficit grew by \$627,358.75 to \$15,101,839.23.

In FY 2011-12, that deficit grew by \$878,026.91 to \$15,979,866.14.

In FY 2012-13, that deficit shrunk by \$521,983.77 to \$15,457,882.37.

In FY 2013-14, that deficit grew by \$3,811,328.73 to \$19,269,211.10.

In FY 2014-15, that deficit grew by \$7,315,937.78 to \$26,585,148.88.

In FY 2015-16, that deficit shrunk by \$1,420,063.15 to \$25,165,085.73.

Activity for Current Reporting Period (FY 2016-17)

Beginning Balance (deficit) **(\$25,165,085.73)**

Revenue

Capacity Charges Collected	\$4,733,911.66
Mitigation Fees*	621,916.28
Interest	3,405.16
Other Associated Revenues**	
USBR – WaterSMART Grant	0.00
Total Revenue	\$5,359,233.10

	FY 16-17 Total Expended	% of project allocated to Cap Charges	Total Cap Charges	Status as of 6-30-17
<u>Expenditures - Capital Projects</u>				
13705 – I&I Reduction Program	\$194,970.23	39.4%	\$76,818.27	Ongoing
16701 – Basin L - I&I Reduction Project 5	715,956.43	39.4%	282,086.83	Complete
17708 – Basin G - I&I Reduction Project #1	875,854.51	39.4%	345,086.68	Ongoing
Total Expansion Capital Expenditures			\$703,991.78	
Ending Balance (deficit)			(\$20,509,844.41)	

Budgeted Capacity Charge Expenses for Next Reporting Period (as of 9-30-2017)

<u>CIP# - Name</u>	<u>FY 17-18</u>	<u>% Funded by Capacity Charges</u>	<u>% Funded by Other Revenue</u>	<u>Total Capacity Charges</u>	<u>Total Other Revenue</u>
13705 – I&I Reduction Program	\$236,000	39.4%	60.6%	\$92,984	\$143,016
17708 – Basin G - I&I Reduction Project #1	4,446,100	39.4%	60.6%	1,751,763	2,694,337
18701 – I&I Smoke Testing	100,000	39.4%	60.6%	39,400	60,600
18705 – Summer 2018 Sewer I&I	2,484,000	39.4%	60.6%	978,696	1,505,304
18706 – Summer 2019 Sewer I&I	20,000	39.4%	60.6%	7,880	12,120
Total Capacity Charge Expenses	\$7,286,100			\$2,870,723	\$4,415,377

Note:

* Mitigation Fees were allocated to I&I Reduction Projects.

**Any grant revenue or reimbursements received for these projects will be recorded as “Other Associated Revenue” and credited against the capacity charges.

Additional information on capital expenditures can be found in the NSD Adopted Operating and Capital Budget at www.NapaSan.com.

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