

Operating and Capital Budget

Fiscal Year 2019/20

**NAPA SANITATION DISTRICT
NAPA, CALIFORNIA**



NapaSan

Budget Acknowledgements

Board of Directors

Jill Techel, Chair
Ryan Gregory, Vice-Chair
Mary Luros, Director
David Graves, Director
Peter Mott, 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

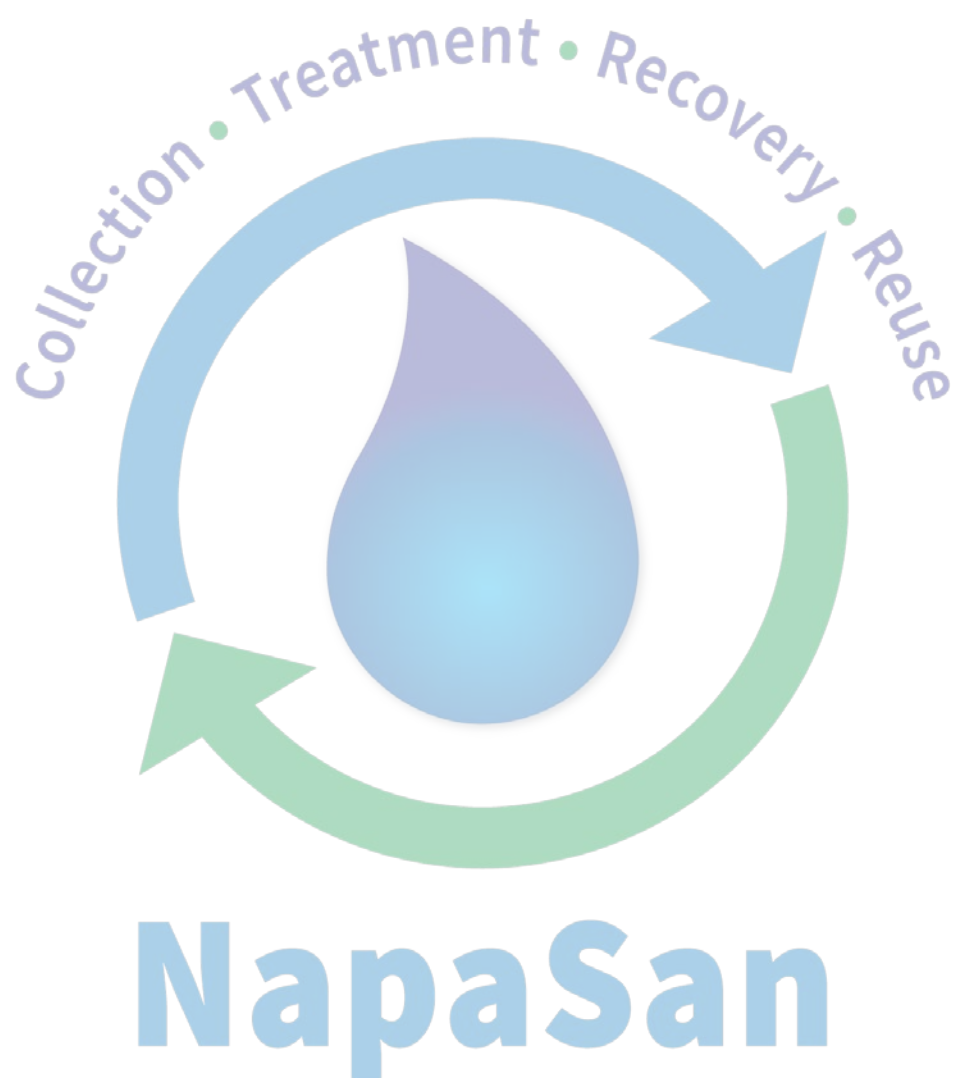
Administrative Services

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 5, 2019

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 2019/20 Operating and Capital Budget

On behalf of the entire Executive and Management Team, we are pleased to present to you the Proposed FY 2019/20 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 3.4% in February 2019, unchanged from a year ago and 0.9% lower than two years ago.¹ This compares to the state average of 4.2% in February.²

In Napa County, median household incomes increased to \$79,637, a 6.7% increase from prior year.³ About 13.5% of households had an income of under \$25,000, compared with 14.7% in the prior year.³ In Napa County, approximately 8.2% of the population is at or below the poverty line, compared to 15.1% statewide.³ These numbers indicate that the local economy is strong, with household incomes growing and employment remaining strong.

In FY 2018/19, 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 2019/20 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 2017 American Community Survey, 5-year estimates, Napa County

Budget Priorities and Direction

The proposed budget represents a continuation of direction from prior years to focus 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, updated in May 2019, 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 2019/20 Budget continues the implementation of an Asset Management program to focus on the maintenance, rehabilitation, and replacement of existing assets – plant, collections and recycled water. This effort will ensure that assets are maintained and replaced based on their risk profiles – the consequences and likelihood of failure, to ensure the most efficient use of available resources.

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 replacement of 2.0% of its sewer assets annually.

Reduce Inflow & Infiltration (I&I) and Overflows. The sewer overflows experienced by NapaSan in early 2017, and to a lesser extent in early 2019, were caused by severe rain events, events that are forecast to become more common in the future. The resulting I&I from the past year's winter storms 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 with 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 2019/20 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.

Improve Quality of Recycled Water. Due to drought conditions, the amount of chlorides in the NapaSan influent increased significantly. When combined with water from NapaSan's treatment pond system, which also experienced a concentration of chlorides due to drought and evaporation, the resulting recycled water distributed to customers saw concentrations of chlorides that could be harmful to grapevines. In response, NapaSan focused effort on reducing I&I in manholes and pipes in areas with highly saline groundwater. This effort, in combination with the return of rains in the winter months, have lowered the chlorides to acceptable levels. However, NapaSan can still do more to reduce chlorides, to prepare for the next drought and its impacts. The FY 2019/20 budget includes a major sewer rehabilitation project (66-inch sewer main rehabilitation) that is also projected to have significant benefits in lowering chloride levels in the influent waters.

Prepare for Impact of Potential Future Disaster. In the past decade, Napa has experienced many natural disasters, including wildfires, flooding from major storm events, and earthquakes. The FY 2019/20 budget continues efforts to improve NapaSan's resiliency and ability to mitigate the impacts of future disaster, respond to the public need during disaster, and to recover faster from disaster through planning, working with partners, and implementing resiliency projects. These include completing the install of a new radio-based communication system, partnering with Napa County in hazard mitigation planning and disaster response training, working with the City of Napa and others to develop a Drought Contingency Plan, and working with regional partners to plan for the impacts of sea/river level rise and increased winter storm intensity. It also includes projects such as the replacement of the West Napa Pump Station to increase the firm capacity, redundancy and resiliency of this critical infrastructure during major storm events.

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 in 2017, and last year 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 2019/20 budget includes an extra payment to CalPERS of \$135,000, from savings in debt service due to the refinancing of debt in December 2017. The budget also continues to fund OPEB payments to a trust fund at the Actuarially Determine Contribution rate. The Ten-Year Financial Plan includes additional \$550,000 in annual payments to CalPERS once the side fund is paid off in FY 2019/20.

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). Other projects incorporate operational savings, such as the West Napa Pump Station Replacement, which is estimated to have a 20% energy savings element to the project. The FY 2019/20 budget includes efforts to evaluate linear electromagnetic induction as a potential new low-cost energy supply for NapaSan.

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 (salary, benefits, supplies and services) total \$16,325,400, compared to \$16,122,300 in FY 2018/19, for an increase of 1.3%. Debt service expenses increased only \$100, to \$4,593,900. Intrafund transfers from operating to capital are budgeted at \$8.9 million. The proposed capital budget of \$33,873,300 is slightly higher than the \$32,410,100 capital budget in FY 2018/19.

The total operating and capital budget for NapaSan (including debt service and taxes, but excluding intrafund transfers) of \$54.8 million, is up 1% from last year’s \$53.2 million. This increase is made up from a 3.0% increase in Salaries & Benefits over prior year, 1.5% decrease in Services & Supplies, and 4.5% increase in Capital.

In the FY 2018/19 budget, it was anticipated that NapaSan would debt finance the Browns Valley Trunk and West Napa Pump Station replacement projects. NapaSan

is continuing to work with the State Water Resources Control Board's Division of Financial Assistance to acquire a State Revolving Fund loan. It is now anticipated that the loan will be secured in late 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 2019/20 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 fourth year of a five-year plan established under the Proposition 218 process in March 2016. The FY 2019/20 budget includes an increase in the rate of 5%, from \$676.38 per Equivalent Dwelling Unit to \$710.20. This increase, along with growth from development, will result in about \$1.7 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 2019/20 revenues from all sources are expected to be \$52,476,100, 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 almost \$30.7 million in FY 2018/19 to over \$31.8 million this year (3.8% increase). Sewer service charges are anticipated to increase 6.0% 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.

Capacity charge revenue is projected higher, at \$5,178,000, compared to \$4,614,600 budgeted in the prior year, based on actual development projects anticipated.

Loan proceeds are expected to increase to \$15,416,600 with the beginning of the Browns Valley Truck and West Napa Pump Station projects, and with the issuance of debt in support of the 66-inch sewer trunk main rehabilitation project.

Operating Expenditures

NapaSan operating expenditures are expected to be \$16,367,200 (salary and benefit expenses of \$10,258,600 plus services and supplies expenses of \$6,066,800 plus taxes & other of \$41,800). This represents an increase in budgeted operating expenditures of \$215,750 or 1.3%.

Salary and benefit expenses are proposed to increase 3.0%. Salaries are set to increase 2.5%, 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 6.6%, which is offset somewhat by increased employee contributions to this cost of 1.25% of salary. OPEB expenses are up 3.0%, while the employee insurance line item is down 0.4%, related to lower than expected insurance premiums in 2019. Workers compensation insurance expenses are down 3.7% due to a reduction in the experience modification rate.

For FY 2019/20, there is no change in the number FTE proposed.

The budget for services and supplies in total is proposed to decrease 1.5% from the prior year's budget. The budget includes a large increase in chemical expenses (\$93,900, or 9.6%) due to increases in chemical unit costs, but only \$8,450 more in electricity expenses (up 1.0%), NapaSan's two largest categories. Savings were achieved in other expense categories, most notably in consulting services.

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:

- Drought Contingency Plan (partnership with City of Napa)
- Ultra-filtration/Reverse Osmosis study
- Continuation of asset management implementation
- MOU negotiations

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, and also on replacing aging equipment in the treatment plant.

The capital expenditure budget for FY 2019/20, the first year of the ten-year plan, is \$33,873,300. The Browns Valley Trunk and the West Napa Pump Station Replacement projects are debt financed through State Revolving Fund (SRF) loans. The 66-inch sewer trunk rehabilitation project will be financed through the issuance of debt. All other projects in the capital plan for FY 2019/20 are financed from ongoing revenue (“pay-as-you-go”).

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 2019/20 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 2019/20 to pay for the Browns Valley Trunk project and West Napa Pump Station Replacement 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 \$39 million. Debt service on this loan is anticipated to begin in FY 2022/23, 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 2019/20 is estimated to be \$22,447,700. This number assumes that most of the capital budget in FY 2018/19 is spent, or that any underspending is carried forward into FY 2019/20.

As proposed, the ending fund equity for NapaSan is projected to be **\$20,089,400** on June 30, 2020 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.

\$1,032,000	Debt Reserve – This is the amount required by the State Revolving Fund program to keep in reserve for future debt service for the Browns Valley Trunk and West Napa Pump Station Replacement projects.
\$106,000	Recycled Water Repair & Replacement Reserve – Beginning in calendar year 2019, the recycled water rate includes a component dedicated to the future repair and replacement of recycled water pipeline.
\$451,400	Available for Use – This is the projected amount of fund equity, including any bond proceeds, available to NapaSan for use on capital projects at the end of FY 2019/20. The Ten-Year Financial Forecast anticipates using this fund equity on future capital projects.

On the next page is a summary table of the revenue, expenditure and intrafund transfer budgets for FY 2019/20, along with information on fund equity and reserves.

Budget Summary

	FY 18/19 <u>Adjusted Budget</u>	FY 19/20 <u>Budget</u>	Percent <u>Change</u>
Beginning Fund Equity	\$27,298,850	\$22,447,700	(17.8%)
Revenue – All funds, excluding transfers			
Sewer Service Charges (incl. delinquencies)	\$28,166,000	\$29,866,000	6.0%
Capacity Charges	4,614,600	5,178,000	12.2%
Waste Hauler Fees	180,000	191,000	6.1%
Recycled Water Sales	1,042,000	1,064,000	2.1%
Land Leases	725,000	126,000	(82.6%)
Intergovernmental / Grants	375,000	0	(100.0%)
Interest on Invested Funds	311,000	452,000	45.3%
Construction/Building Permit Review Fees	193,800	102,500	(47.1%)
Bond/Loan Proceeds	9,075,000	15,416,600	69.9%
Other Revenues	83,000	80,000	(3.6%)
Total Revenues	\$44,765,400	\$52,476,100	17.2%
Expenditures – All funds, excluding transfers			
Salaries & Benefits	\$9,961,350	\$10,258,600	3.0%
Services & Supplies	6,160,950	6,066,800	(1.5%)
Taxes & Other	29,150	41,800	43.4%
Subtotal Operating Expenses	\$16,151,450	\$16,367,200	1.3%
Capital Expenditures	\$32,410,100	\$33,873,300	4.5%
Debt Service (incl. debt administration expenses)	4,593,800	4,593,900	0.0%
Subtotal Capital Expenses	\$37,003,900	\$38,467,200	4.0%
Total Expenditures	\$53,155,350	\$54,834,400	3.2%
Ending Fund Equity	\$18,908,900	20,089,400	6.2%
Reserves			
RW Repair & Replacement Reserve	0	106,000	-
Operating Reserve	\$6,000,000	\$6,000,000	0%
Debt Reserve	0	1,032,000	-
Operating Cash Flow Reserve	12,500,000	12,500,000	0%
Total Reserves	\$18,500,000	\$19,638,000	6.2%
Available for Use (Ending Fund Equity minus Reserves)	\$408,900	\$451,400	10.4%
	FY 18/19 <u>Adjusted Budget</u>	FY 19/20 <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	7,250,000	5,178,000	(28.6%)
Total Intrafund Transfers	\$16,150,000	\$14,078,000	(12.8%)

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 more options for energy self-generation being studied. Chemical costs rose in FY 2019/20 and will likely rise again over the next ten years. 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 FY 2019/20 and 2020/21 based on the amounts set during the Proposition 218 process in March 2016, with modest annual increases (3%) assumed for the following years of the forecast. Annual increases in capacity charge rates (by a construction-inflation index) are projected, as are increases in development, 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.

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 2019/20. 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 2019/20

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 2019/20; 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 \$20,961,100, plus intrafund transfer of \$8,900,000 to support Capital Projects, for a total of \$29,861,100; and,
- Expansion Appropriation of \$5,178,000 in intrafund transfer to support Capital Projects; and,
- Capital Projects Appropriation of \$33,873,300; 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 \$710.20 per EDU, Capacity Charge of \$9,803 per EDU, and other fees as provided;

be hereby adopted as the Final Budget and Sewer Service Charges for FY 2019/20.

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 5th day of June 2019, 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, 2018	Jan. 1, 2019	July 1, 2019	Jan. 1, 2020
Sewer Service Charges	per EDU	\$676.38		\$710.20	
Capacity Charges (note #2)	per EDU	\$9,520		\$9,803	
Plan Check Fees					
Residential Subdivision	per subdivision	\$414		\$433	
Residential Lot Review	per lot	\$104		\$109	
Residential Lot without Mains	per lot	\$104		\$109	
Apartment Building	per building	\$827		\$865	
Hotel Building	per building	\$1,240		\$1,296	
Commercial Building	per building	\$414		\$433	
Tental Improvement - Food Service	per tentant unit	\$310		\$324	
Tental Improvement - Non-Food Service	per tentant unit	\$207		\$217	
Mainline Extension - not part of subdivision	per 100 linear feet	\$104		\$109	
Public Easement - not included in recorded map	each	\$104		\$109	
Inspection Fees					
Public Lateral - Residential	per lateral	\$185		\$194	
Private Lateral - New - Residential	per lateral	\$185		\$194	
Private Lateral - R & R - Residential	per lateral	\$185		\$194	
Residentail Clean Out Only	per cleanout	\$93		\$98	
Tenant Improvement w/o outside site improvements	each	\$185		\$194	
Public/Private Lateral- Commercial	per lateral	\$368		\$385	
Grease Interceptor	each	\$185		\$194	
Mainline	per 100 linear feet	\$368		\$385	
Demolition Fee					
Interior Demo Only	per demolition	\$196		\$205	
Public and Private Lateral - failed inspection	per demolition	\$451		\$472	
Public and Private Lateral - passed inspection	per demolition	\$272		\$285	
Annexation Request	per request	\$1,240		\$1,296	
Development Agreement				\$0	
Standard Agreement	each	\$310		\$324	
Non-Standard Agreement	each	\$1,238		\$1,294	
Recycled Water					
Peak Period Rates	per 1,000 gallons		\$1.78		Note #1
Monthly Meter Charge	per month (May-Oct only)		\$34.66		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 2019 index to the December 2018 index.

Note #2: Capacity Charge was \$9,624 on July 1, 2018, but was reduced to \$9,520 on October 17, 2018 by Ordinance #109.

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 37,500 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 6.2 MGD, while the average wastewater flow for the entire year was approximately 7.4 MGD in calendar year 2018.

Performance Measurement

NapaSan created and issued its Performance Measurement Report for Calendar Year 2018 in February 2019. The report identifies 62 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 58 measures (93%). 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.

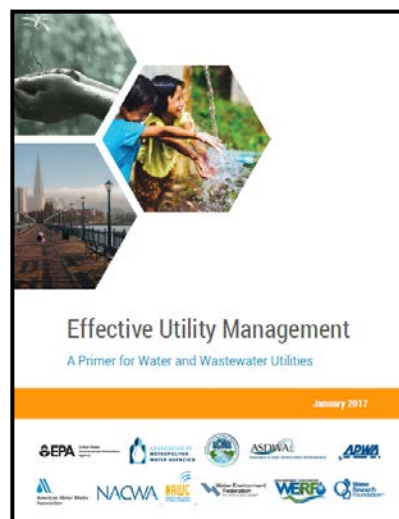
NapaSan rates “**watch**” on four measures (7%). A “watch” designation signifies that NapaSan is in danger of not meeting its goals, that the trend is indeterminate, or that there is insufficient data to make an assessment. Measures in this category include asset inventory, recycled water quality, total recordable incident rate, and insurance claims.

NapaSan rates “**unsatisfactory**” on none of the measures. “Unsatisfactory” signifies that NapaSan has not met its goals or that the trend is negative.

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 2018 can be found in Appendix E of this budget.



Strategic Planning Goals and Objectives

In May 2019, 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 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Renewal & Replacement of Assets	10.2%	4.5%	3.8%	3.9%	2% - 4%	2% - 4%
Sewer Main Renewal & Replacement	2.6%	1.1%	2.2%	2.5%	1.3%	2.0%
Collection System Failures	0	1	0	0	0	0
Treatment Plant Capacity Used (flow-based)	50%	53%	69%	48%	<75%	<75%
Uptime for Cogeneration Engine	98%	79%	81%	98%	> 95%	> 95%

Strategic Objectives:

Strategic Objectives:		Completion:
1A:	Strive to replace and rehabilitate at least 2% of sewers annually	Ongoing
1B:	Continue to implement an asset management program	June 2020
1C:	Design and construct the Browns Valley Road Trunk and WNPS	Spring 2022
1D:	Update the Collection System Master Plan, Treatment Plant Master Plan and SCADA System Master Plan	June 2020
1E:	Study whether to implement a Private Lateral Program	Dec. 2021

Related Department Objectives:

- Rehabilitate 60 public laterals annually (Collection System)
- Work to eliminate higher maintenance sewer mains by replacing or repairing them (Collection System)
- Continue enhance and organize inventory system to reduce down time (Plant Maintenance)
- Begin construction of the Browns Valley Road 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 2.0% of the Collection System sewer mains (Engineering)
- Design and construct I&I sewer rehabilitation projects annually (Capital Improvement Plan)
- Construct the 2019 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 14/15	Actual FY 15/16	Actual FY 16/17	Actual FY 17/18	Estimate FY 18/19	Target FY 19/20
Bond Rating	AA-	AA-	AA	AA	AA	AA
Debt Service Coverage Ratio	226%	284%	344%	534%	421%	445%
Operating Ratio	0.90	1.02	1.07	1.36	1.4	> 1
Sewer Bill Affordability	0.66%	0.68%	0.74%	0.80%	0.84%	< 1%

Strategic Objectives:

Completion:

2A:	Update the sewer service charge rate study for Prop. 218 process	March 2021
2B:	Continue efforts to develop non-rate/non-fee revenues through land leases	Ongoing

Related Department Objectives:

- Under the direction of the Lands Committee and Board, work to develop options for lease revenue on District-owned property (General Manager's Office)



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

- Prepare to update the sewer service charge rate study (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)

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 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Self-Generated Electricity	38.4%	31.5%	40.8%	55.8%	> 50%	> 50%
Chemical Consumption (gallons hypochlorite per MG treated-summer)	211	211	199	191	< 220	< 215
Plant Planned Maintenance Ratio (Hours)	45.2%	40.5%	61.3%	67.9%	> 60%	> 60%
Collections Planned Maintenance Ratio (Hours)	86.7%	87.1%	88.5%	99.2%	> 80%	> 80%

Strategic Objectives:**Completion:**

3A:	Continue to work with partners o projects and programs that result in efficiencies and cost savings	Ongoing
3B:	Evaluate and recommend ways to reduce energy and chemistry consumption in treatment process and collection system	Dec. 2019
3C:	Enhance plans and training associated with resiliency, disaster mitigation and disaster recovery	Sept. 2019
3D:	Evaluate and plan for potential impacts of river level rise, prolonged drought, and increased winter storm intensity	Ongoing
3E:	Study effects of accepting and treating winery waste through alternative methods	Ongoing

Related Department Objectives:

- Complete NapaSan's tenth annual Performance Measurement Report (Administrative Services)
- 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)
- Continuous 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)



Sewer repair on Silverado Trail

- Implement the new Environmental Laboratory Accreditation Program (ELAP) certification requirements (Regulatory Compliance)
- 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)

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 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Safety Training Completed On-Time	84%	97%	93%	94%	> 90%	> 90%
Employee Survey: "I feel valued by my work unit."	na	70.5%	86.8%	79.5%	> 70%	> 70%
Employee Survey: "I tell others that NapaSan is a great place to work."	na	91.0%	77.8%	87.2%	> 70%	> 70%
Employee Survey: "I will look for work outside NapaSan this next year."	na	34.0%	42.1%	35.9%	< 35%	< 35%
Employee Survey: "Efforts are being made to capture critical institutional knowledge..."	na	3.45	3.68	3.26	> 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 Surveys, as appropriate	Ongoing
4C:	Prepare for and begin MOU negotiations	June 2020
4D:	Address succession planning through supervisory/management training and an internal mentorship program	June 2020

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)
- Maintain 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 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Media Coverage Quantity	33	44	21	29	> 20	> 20
Media Coverage Accuracy	100%	86%	95%	100%	> 85%	> 85%
Customer Satisfaction-Plug Ups (percent “good” or “excellent”)	99.1%	96.5%	99.1%	99.4%	> 95%	> 95%
Customer Satisfaction-Cleanouts (percent “good” or “excellent”)	98.2%	100%	95.9%	100%	> 95%	> 95%

Strategic Objectives:**Completion:**

5A:	Inform and engage the community and stakeholders to increase and promote understanding of NapaSan services, rates and key messages	Ongoing
5B:	Proactively communicating with the public, stakeholders and the press regarding current programs, accomplishments, projects, and news	Ongoing
5C:	Collaborate with other local agencies and groups to meet common goals	Ongoing
5D:	Build and maintain relationships with community leaders, elected officials and stakeholders	Ongoing

Related Department Objectives:

- Work with community partners to promote NapaSan's services and rate structure (Community Outreach & Pollution Prevention)
- 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 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Recycled Water Reused on Non-District Property	78%	81%	83%	91.6%	> 85%	> 85%
Self-Generated Electricity	38.4%	31.5%	40.8%	55.8%	> 50%	> 50%
Biosolids Beneficially Reused	100%	100%	100%	100%	> 95%	> 95%
Digester Gas Beneficial Reuse	96%	78%	84%	93%	> 80%	> 90%

Strategic Objectives:**Completion:**

6A:	Evaluate current recycled water allocation policy annually	Ongoing
6B:	Implement capital projects in partnership with local agencies for the distribution of recycled water	Dec. 2019
6C:	Participate with local partners on long-term opportunities for water reuse	Ongoing
6D:	Develop partnership with cities of Napa and American Canyon to complete preliminary feasibility study for "purified water" potable reuse program	Dec. 2019/ Ongoing
6E:	Evaluate energy self-generation with the primary goal of decreasing overall energy costs and reliance on the energy grid	June 2020
6F:	Improve recycled water quality to increase appeal and acceptability	Dec. 2021

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 2,300 acre feet of recycled water, with 90% sold to customers (Water & Biosolids Reclamation)

- Facilitate additional recycled water conversions in the MST and Los Carneros Water District areas (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)

Goal 7: Regulatory Compliance

The goal is to implement policies, best practices and capital investments to ensure compliance with all federal, state and local regulatory requirements. The NapaSan Board wants the District to comply with all existing and future regulatory requirements. This includes its NPDES permit, SWRCB and RWQCB general orders, BAAQMD permits, Cal/OSHA standards, and other federal, state and local laws.

Key Performance Indicators

Indicator	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Target 2019	Target 2020
Compliance with NPDES Permit	100%	100%	100%	100%	100%	100%
Sanitary Sewer Overflows (Cat. 1) per 100 miles of main	0.0	1.11	13.64	0.74	0.0	0.0

Strategic Objectives:

Completion:

7A:	Negotiate a new NPDES permit with the RWQCB	Aug. 2021
7B:	Stay current on proposed state and federal legislation that could positively or negatively impact NapaSan's current or future operations.	Ongoing

Related Department Objectives:

- Engage with professional associations to remain aware of potential regulatory and legislative changes (General Manager's Office).
- Continue producing an effluent that meets the NPDES permit requirements (Treatment Plant Operations).

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
- Revenue
- Budgeting and Capital Asset Management
- Debt Issuance and Management
- Investments
- Financial Reporting
- Accounting
- 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

Financial Policy Compliance		
NSD Policy	Target	FY 19/20
Balanced Budget	Operating revenues minus operating expenditures & debt service \geq \$0	\$15,519,910
Operating Reserve	\geq 15% of Operating Budget	28.6%
Cash Flow Reserve	As necessary	\$12,500,000
Debt Coverage Ratio	\geq 1.25x coverage	4.50x
Pension Funding	CalPERS minimum plus additional UAL contribution	\$135,000 above minimum
OPEB Contribution	100% of ADC	100% of ADC

- 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.
- Pension contributions include an additional \$135,000 payment toward the Unfunded Actuarial Liability (UAL) above the minimum required payment to CalPERS.
- Contribution to Other Post-Employment Benefits (OPEB), including current retiree medical and contributions of the normal cost for current employees to an OPEB trust, equal 100% of the Actuarially Determined Contribution (ADC).

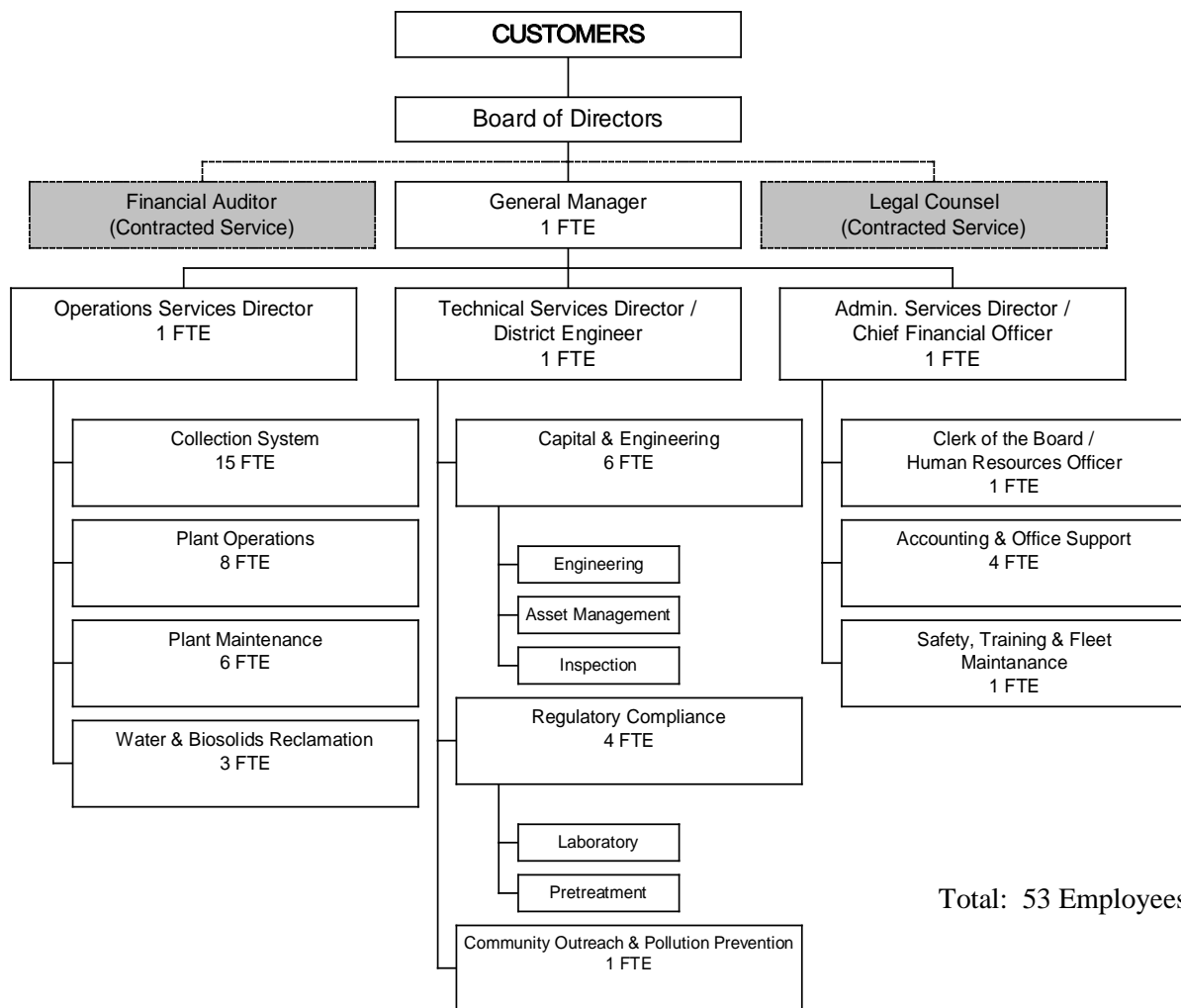
Organization

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



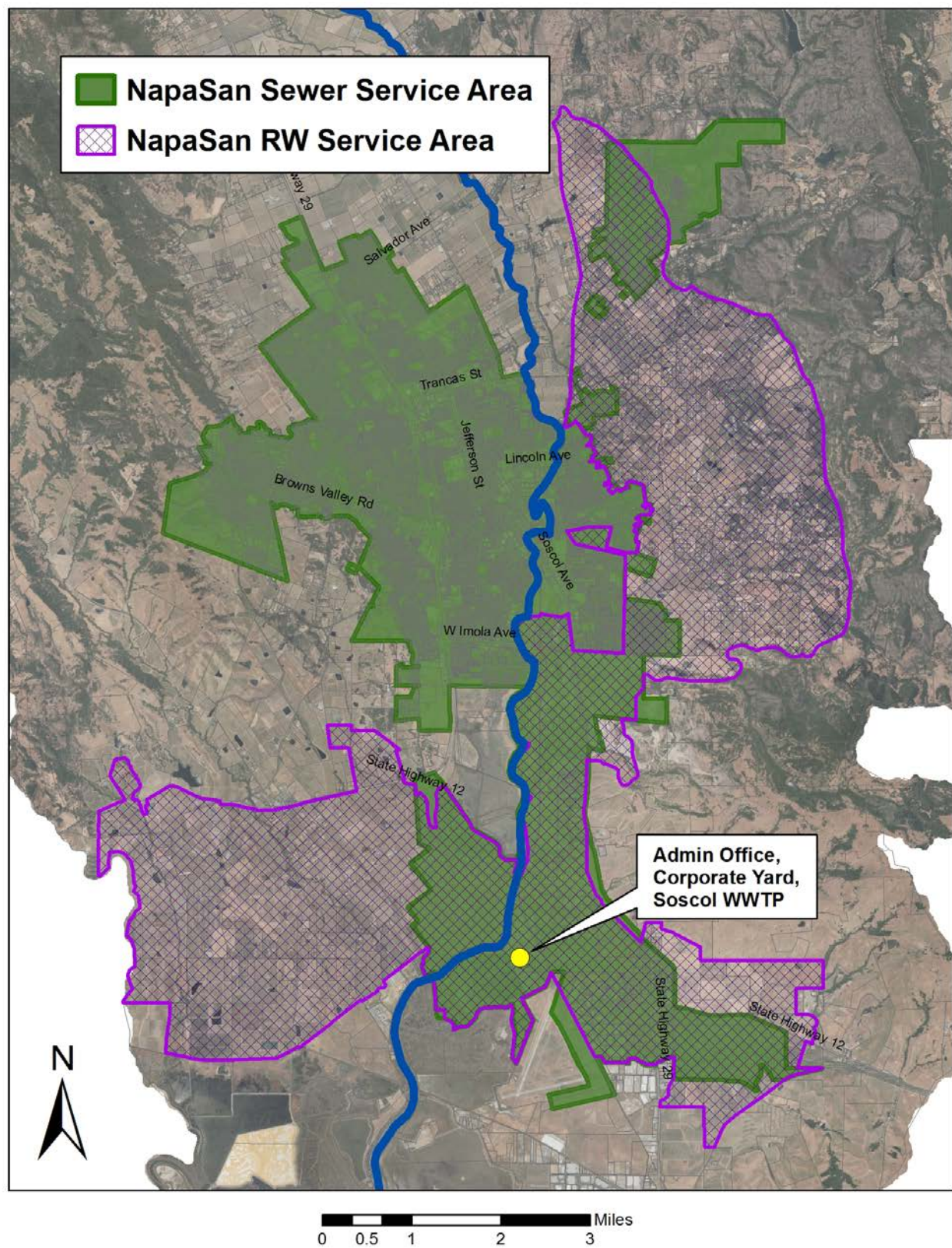
**Napa Sanitation District
Position Control Roster**

As adopted on July 1

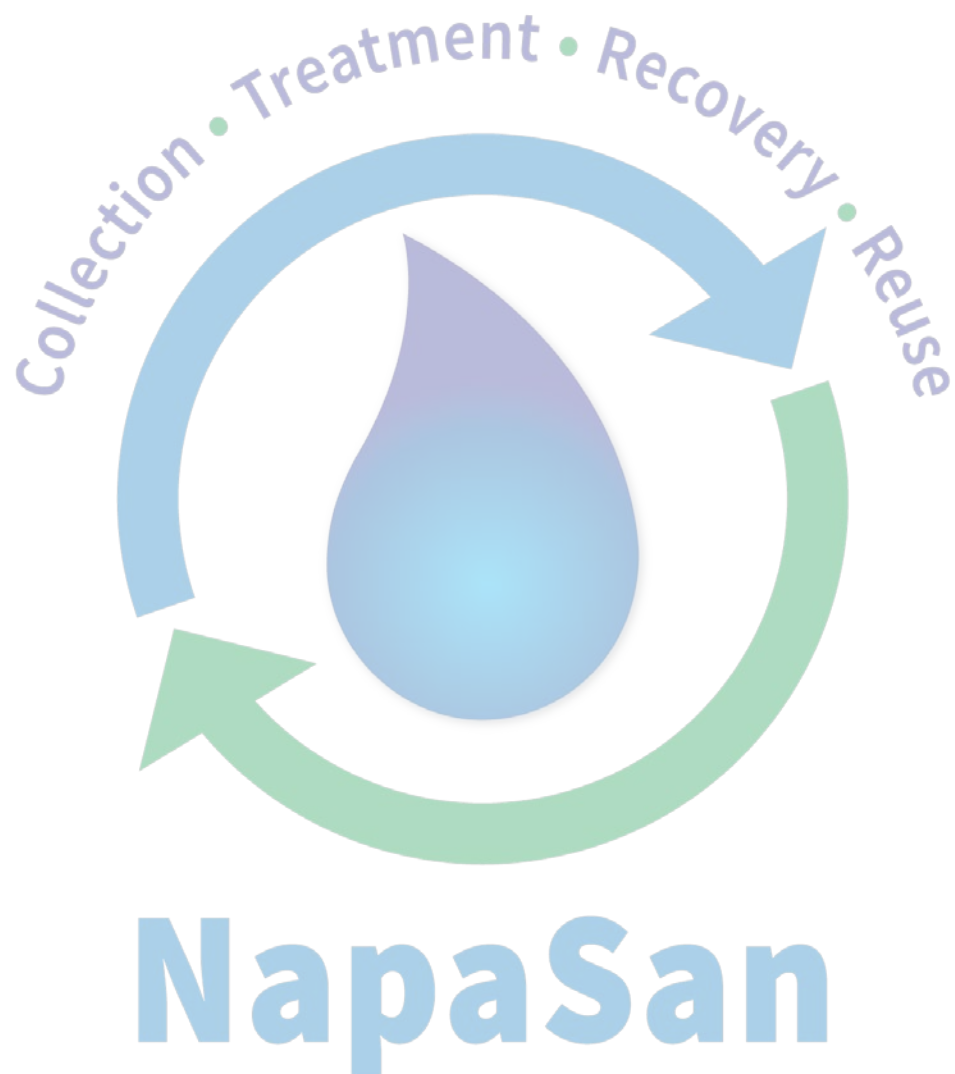
Position Series (excluding Board Members)	FY 16/17 Adopted	FY 17/18 Adopted	FY 18/19 Adopted	FY 19/20 Proposed
General Manager's Office				
General Manager	1	1	1	1
Administrative Services				
Director of Administrative Services/CFO	1	1	1	1
Human Resources				
Clerk to the Board/Human Resources Officer	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	10	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	53	53	53	53

Napa Sanitation District

Map of NapaSan Service Area



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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.

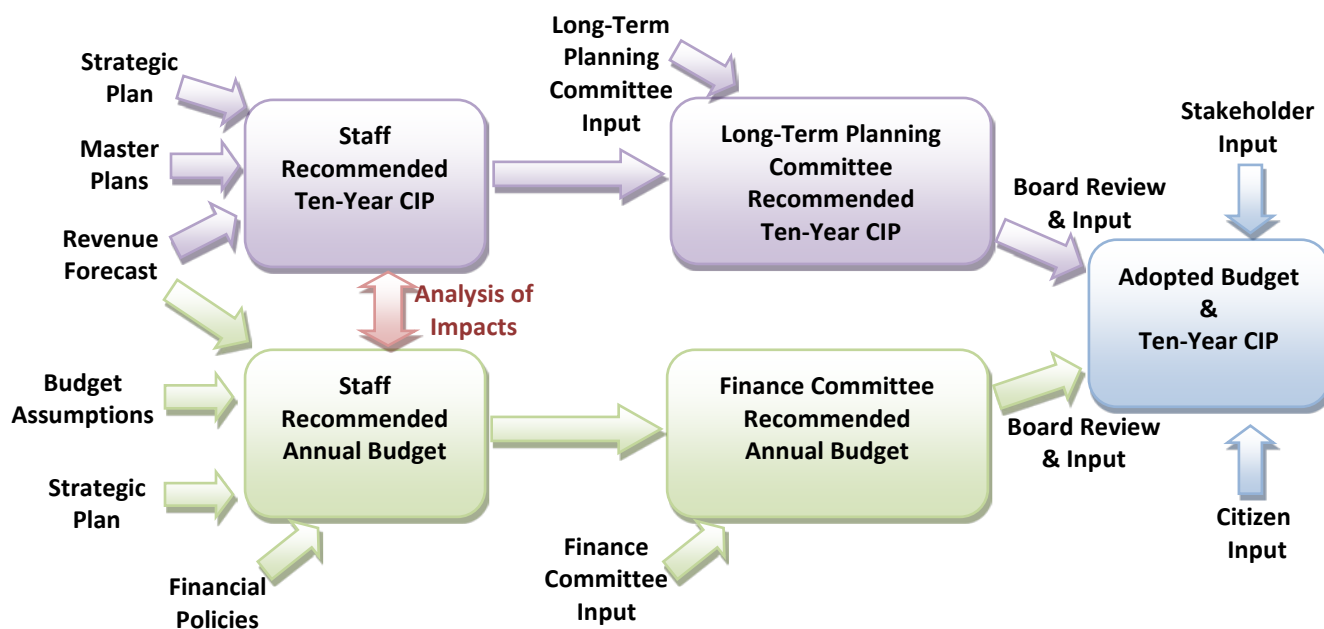
Budget Development Process

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 2019/20

Jan. 17, 2019	Finance Committee meeting, to discuss budget development calendar, assumptions for next year, and policy direction.
March 6, 2019	Budget direction and assumptions confirmed with Board of Directors.
Jan. to April	Staff develops proposed budget and Ten-Year CIP.
April 18, 2019	Finance Committee makes recommendations.
April 25, 2019	Long Term Planning Committee reviews Ten-Year CIP and makes recommendations.
May 1, 2019	Board of Directors receives and discusses the Proposed Operating Budget for FY 2019/20.
May 15, 2019	Board of Directors receives and discusses the Ten-Year CIP for FY 2019/20 through FY 2028/29.
June 5, 2019	Board of Directors adopts the FY 2019/20 Operating and Capital Budget and Ten-Year CIP.

Sources of Funds/Revenues

NapaSan has a stable revenue foundation, with 57% of NapaSan's FY 19/20 total revenues coming from sewer service charges collected as assessments on property tax bills (excluding loan proceeds, the number is closer to 81%). Other significant revenue sources include capacity charges, recycled water sales, land leases, and interest earnings.

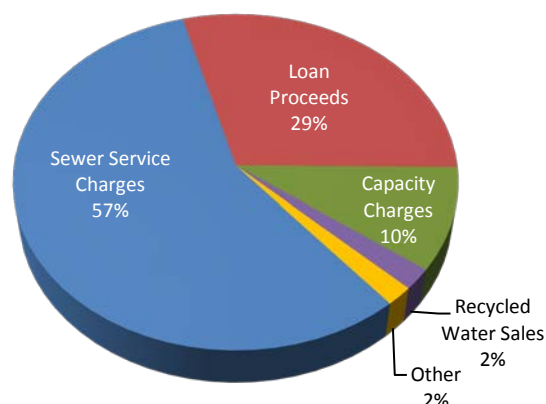
Sewer service charges (SSC's) are the fees charged to residences and businesses for sewer use. For most residences and businesses, these fees are paid annually as assessments on property tax bills. Some industrial and commercial customers are charged monthly, rather than annually, based either on water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

Sewer service charges are a highly distributed revenue source for NapaSan. The top ten sewer service customers represent only 9.2% 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 2019/20 from \$676.38 to \$710.20 per Equivalent Dwelling Unit (EDU). For FY 2020/21, the rate can increase up to the maximum amount shown in the chart to the right, but the Board will set the actual amount annually.

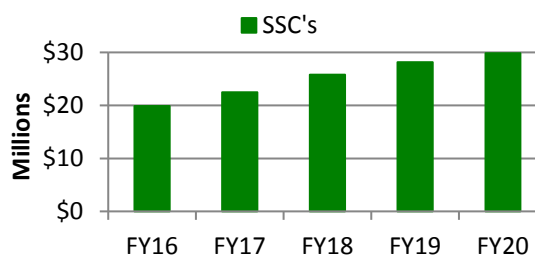
Source of Funds
Total = \$52,476,100
(excluding intrafund transfers)



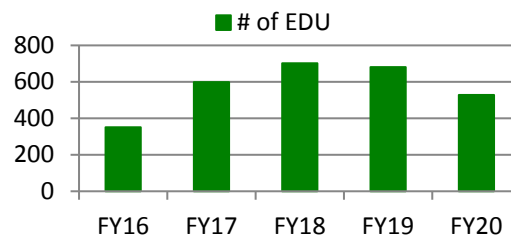
Sewer Service Charges History and Projection

	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 2019/20 based on the estimated number of EDUs and the sewer service charge fee of \$710.20 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 528 EDU being developed during the fiscal year. The annual capacity charge fee increase is based on the Engineering News Record Construction Cost Index for the United States 20-City Average (February-to-February). For February 2019, there was a 3.0% increase to the index compared to prior year. (Note, in October 2018, the capacity charge was decreased from \$9,624 to \$9,520.)

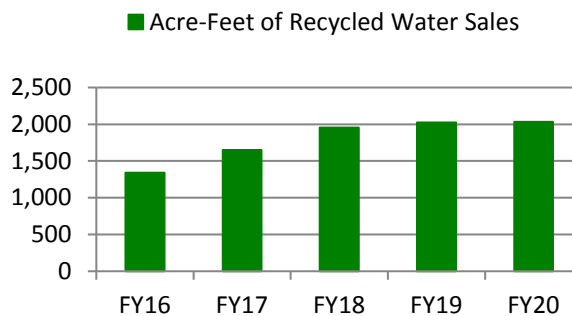
Capacity Charges Fee Schedule

	Charge per EDU	% Change
FY 16	\$8,950	2.6%
FY 17	\$8,950	0.0%
FY 18	\$9,299	3.8%
FY 19	\$9,624	3.4%
FY 19	\$9,520	(1.1%)
FY 20	\$9,803	3.0%

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 2,035 acre-feet (663 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.

Recycled water rates are set on a calendar year basis. In January 2019, the rates increased to \$1.78 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. This rate includes an additional 2% increase to begin funding the recycled water renewal and replacement reserve. In January 2020, the rate is estimated to increase to \$1.87 per 1,000 gallons.



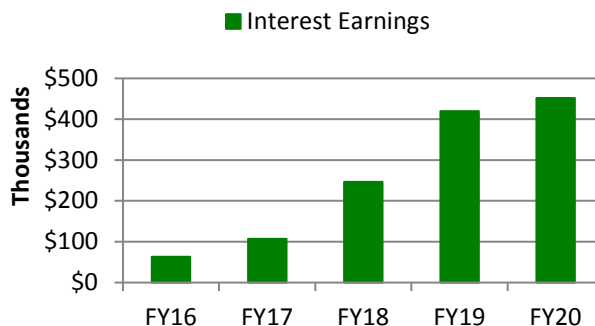
Recycled water sales are affected by the weather. Cooler, wetter spring and summer months result in less need to irrigate and therefore lower volumes of water are sold.

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. In early 2019, NapaSan was informed that the largest lease (Somky Ranch) would no longer be paid. Management is evaluating options for leasing that or other parcels to reestablish lease revenues.

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 accounts quarterly.

With recent increases in the Federal Funds rate and an indication of one potential rate increase in 2019, the forecast assumes interest earnings to increase from an average 2.0% in FY 18/19 to 2.25% in FY 19/20. 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 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
780 - Operations						
Interest: Invested Funds	103,686	235,840	311,000	420,000	452,000	45.3%
Rent - Building/Land	718,251	725,626	725,000	427,000	126,000	(82.6%)
Construction/Bldg Permit Review Svcs	154,607	167,564	193,800	100,000	102,500	(47.1%)
Hauler Fees	150,757	187,705	180,000	185,000	191,000	6.1%
Sewer Usage Fees	22,501,543	25,806,368	28,156,000	28,166,000	29,856,000	6.0%
State - Other Funding	13,680	63,286	-	-	-	-
Penalties on Delinquent Sewer Fees	21,167	29,513	10,000	13,000	10,000	-
Recycled Water Sales	735,717	833,333	1,042,000	979,000	1,064,000	2.1%
Miscellaneous	80,472	386,405	53,000	55,000	50,000	(5.7%)
Total - Operations	24,479,880	28,435,641	30,670,800	30,345,000	31,851,500	3.8%
781 - Capital Improvement Projects						
Interest: Invested Funds	-	-	-	-	-	-
Federal Grants - USBR & FEMA	353,338	543,096	-	32,000	-	-
Other Government Agencies	2,694,683	2,535,003	375,000	440,050	-	(100.0%)
Miscellaneous	-	6,870	5,000	-	5,000	-
Bond/Loan Proceeds	-	-	9,075,000	-	15,416,600	69.9%
Sale of Capital Assets	20,313	8,372	25,000	90,000	25,000	-
Intrafund Transfers In	7,737,000	8,080,000	16,150,000	-	14,078,000	(12.8%)
Total - Capital Improvement Projects	10,805,334	11,173,341	25,630,000	562,050	29,524,600	15.2%
782 - Expansion						
Interest: Invested Funds	3,405	10,796	-	-	-	-
Capacity Charges	5,355,828	6,532,806	4,614,600	5,100,000	5,178,000	12.2%
Total - Expansion	5,359,233	6,543,602	4,614,600	5,100,000	5,178,000	12.2%
Total - All Departments	40,644,447	46,152,584	60,915,400	36,007,050	66,554,100	9.3%

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 2019/20 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 2019/20 budget. Overall, salaries are budgeted to increase 3.0% over prior year.

Health benefits are known for the first two quarters in FY 2019/20. The budget assumes a 7% increase in employer costs for the last two quarters. Because the rates in the first two quarters were lower than previously estimated, the overall budget for insurance premiums decreased 0.4% compared to last fiscal year.

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. Under the current MOUs, the employees will pick up 6.75% of the employee contribution for FY 2019/20. The minimum retirement cost contribution to CalPERS increased by less than 1%. The budgeted amount is 6.6% higher than prior year and includes an additional \$135,000 payment toward this liability.

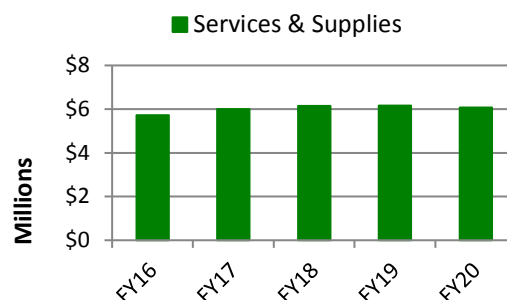
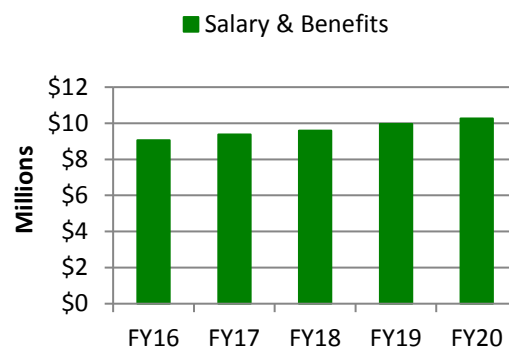
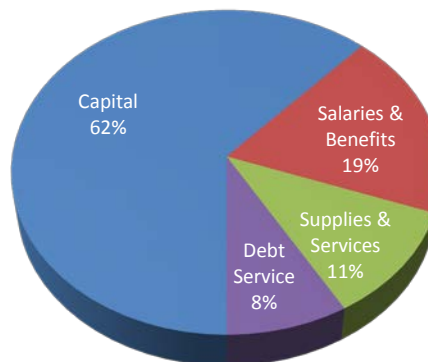
Payments in lieu of health benefits are expected to decrease by 3.4%. A decrease in the per-person eligible is built into the MOUs.

Workers' compensation insurance costs are lower than prior year by 3.7%, based on a decrease in the Experience Modification ("X-Mod") Rate.

In total, the salaries and benefits budget increases 3.0% 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 = \$54,792,590 (excluding intrafund transfers)



<u>EXPENSES - OPERATING AND CAPITAL</u>						
<u>Account Description</u>	<u>Actual FY 16/17</u>	<u>Actual FY 17/18</u>	<u>Adj. Budget FY 18/19</u>	<u>Estimated FY 18/19</u>	<u>Proposed FY 19/20</u>	<u>Percent Change</u>
Salaries & Benefits	\$8,907,912	\$7,045,111	\$9,961,350	\$9,450,000	\$10,258,600	3.0%
Services & Supplies	5,263,274	4,960,077	6,160,950	5,160,650	6,066,800	(1.5%)
Capital Expenses	10,096,002	14,288,430	32,410,100	20,735,100	33,873,300	4.5%
Debt Service	4,770,891	4,391,899	4,593,800	4,593,800	4,593,900	0.0%
Taxes & Assessments	26,545	28,710	29,150	29,150	41,800	43.4%
Total All Expenses	\$29,064,624	\$30,714,227	\$53,155,350	\$39,968,700	\$54,834,400	3.2%
<i>(excluding intrafund transfers)</i>						
<i>(presented on budgetary basis – does not conform to GAAP)</i>						

Total services and supplies for FY 2019/20 are budgeted to be 1.5% lower than the prior fiscal year adjusted budget. One-time only projects in the prior year were removed, lowering the overall budget. Electricity is up only 1.0%, even with PG&E rate increase and expanded recycled water distribution expected in FY 2019/20, because of anticipated savings from the solar and stationary storage projects. The chemicals budget is anticipated to increase about 9.6%, which represents increases in unit costs, even with lower anticipated chemical 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 2019/20 capital plan include the Summer 2019 and Summer 2020 collection system rehabilitation projects, the Browns Valley trunk project and replacement of the West Napa Pump Station, and 2019 and 2020 treatment plant rehabilitation projects. The plan also includes the completion of the Coombsville recycled water truck 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, the same as last fiscal year. 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 (SRF loan) and the 66" Trunk (Kaiser Road to IPS) Rehabilitation project financing begin. 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 (\$5,178,000)

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 2019/20, the estimated Ending Fund Equity is \$2,358,290 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 (10.5% reduction) is due to the implementation of planned capital projects.

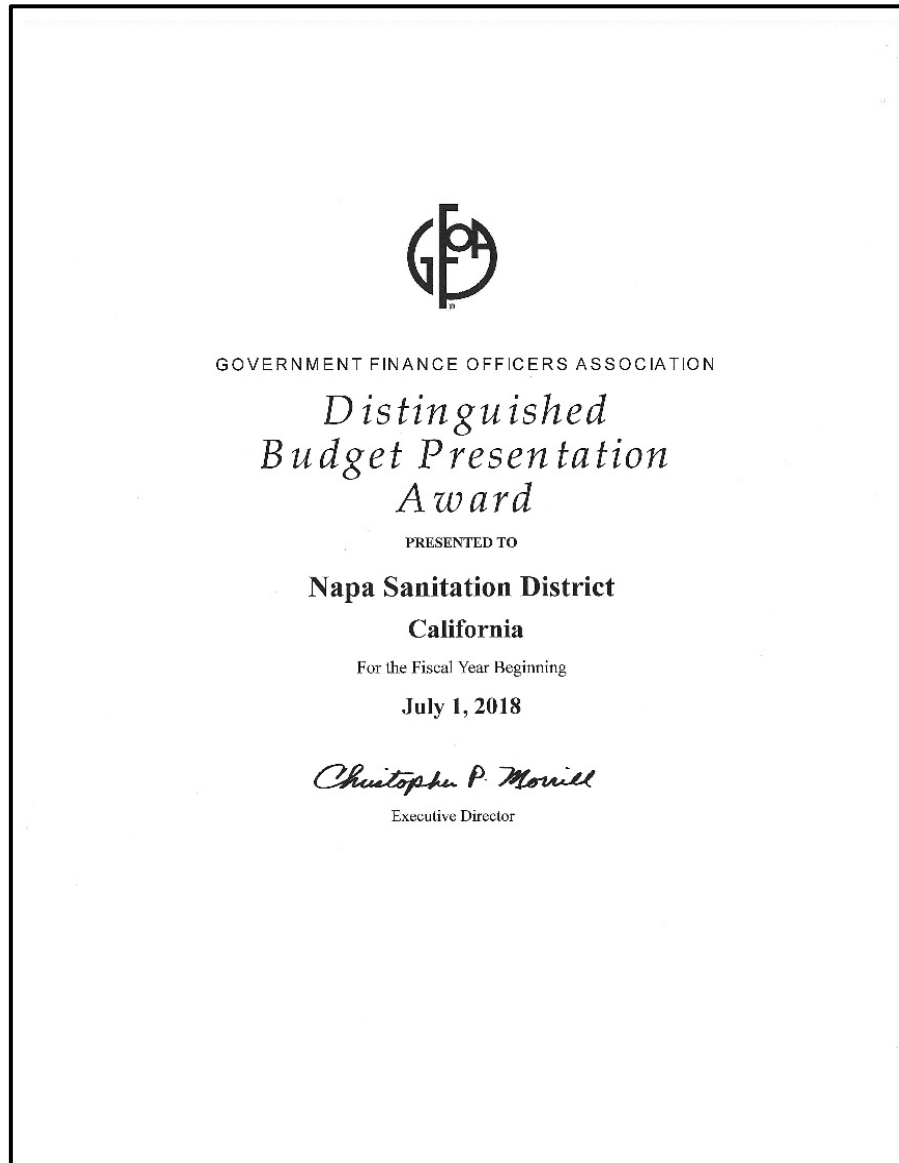
Reserves

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 19/20 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 service reserve**. 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 16/17 Actuals	FY 17/18 Actuals	FY 18/19 Adj Budget	FY 18/19 YTD	FY 18/19 Estimate	FY 19/20 Budget
Beginning Fund Equity	\$17,262,069	\$22,145,297	\$25,609,380	\$25,609,380	\$25,609,380	\$22,447,700
Revenues						
Use of Money/Property	\$825,342	\$972,262	\$1,036,000	\$579,603	\$847,000	\$578,000
Charges for Services	28,959,620	33,557,289	34,186,400	21,153,872	34,530,000	36,391,500
Intergovernmental	3,061,702	3,141,384	375,000	(5,344)	472,050	0
Bond Proceeds	0	0	9,075,000	0	0	15,416,600
Sale of assets	20,313	8,372	25,000	81,370	90,000	25,000
Miscellaneous Revenues	40,473	415,164	68,000	42,661	68,000	65,000
Total Revenues	\$32,907,450	\$38,094,471	\$44,765,400	\$21,852,162	\$36,007,050	\$52,476,100
Operating Expenditures						
Salaries and Benefits	\$8,179,992	\$6,213,994	\$9,961,350	\$4,691,602	\$9,450,000	\$10,258,600
Services and Supplies	5,263,276	4,959,918	6,160,950	2,531,343	5,160,650	6,066,800
Taxes and Assessments	26,545	28,710	29,150	14,880	29,150	41,800
Debt Service	4,770,891	4,456,644	4,593,800	3,679,849	4,593,800	4,593,900
Total Operating Expenditures	\$18,240,704	\$15,659,266	\$20,745,250	\$10,917,673	\$19,233,600	\$20,961,100
Capital Expenditures	\$10,096,002	\$14,288,430	\$32,410,100	\$6,102,806	\$20,735,100	\$33,873,300
GAAP Adjustments	(312,484)	4,682,692	0	0	(800,000)	0
Total Expenditures	\$28,024,222	\$34,630,388	\$53,155,350	\$17,020,480	\$39,168,700	\$54,834,400
Ending Fund Equity	\$22,145,297	\$25,609,380	\$17,219,430	\$30,441,063	\$22,447,730	\$20,089,400
RW Repair & Replacement Reserve	\$0	\$0	\$0	\$0	\$0	\$106,000
Debt Reserve	1,990,000	1,990,000	0	0	0	1,032,000
Operating Reserve	2,243,000	2,314,000	6,000,000	6,000,000	6,000,000	6,000,000
Operating Cash Flow Reserve	10,375,000	10,750,000	12,500,000	12,500,000	12,500,000	12,500,000
Total Reserves	\$14,608,000	\$15,054,000	\$18,500,000	\$18,500,000	\$18,500,000	\$19,638,000
Available for Use	\$7,537,297	\$10,555,380	(\$1,280,570)	\$11,941,063	\$3,947,730	\$451,400

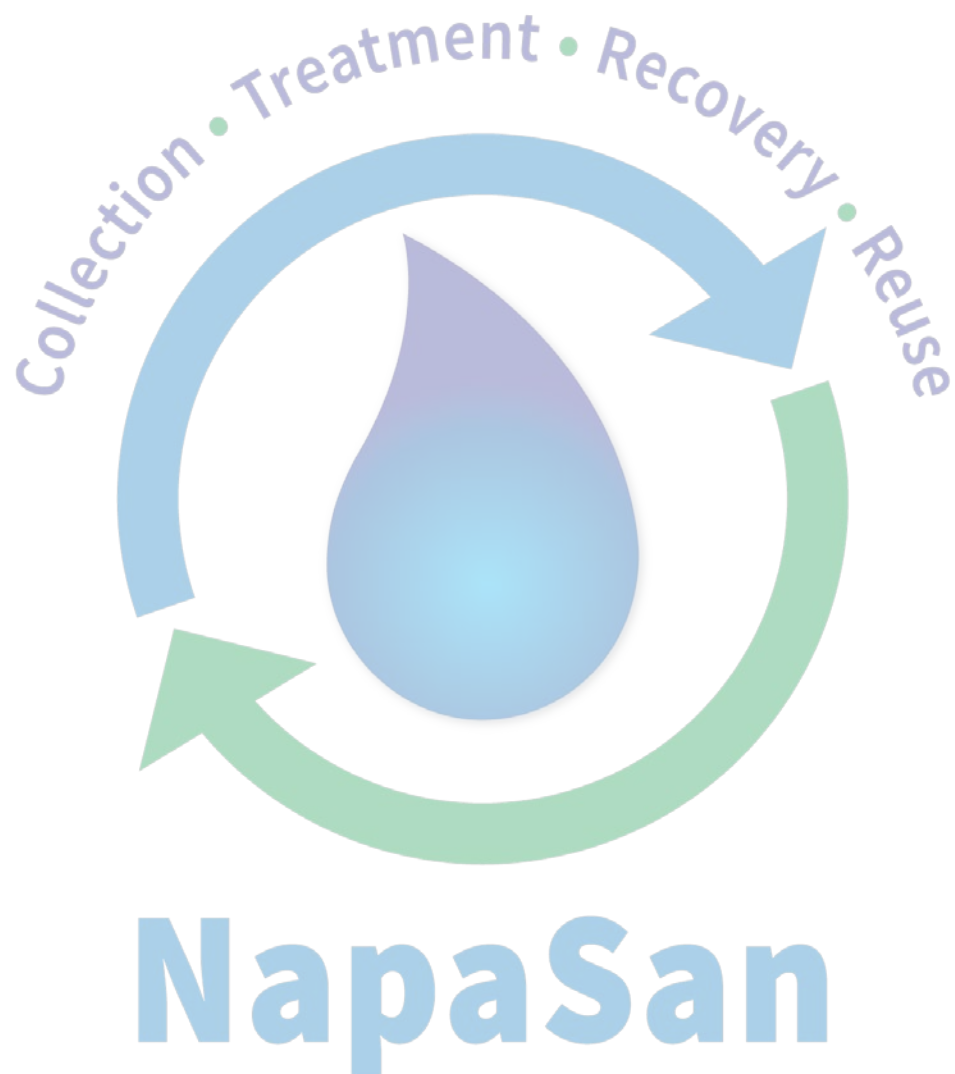


GFOA Budget Award

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, 2018. 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 2019/20 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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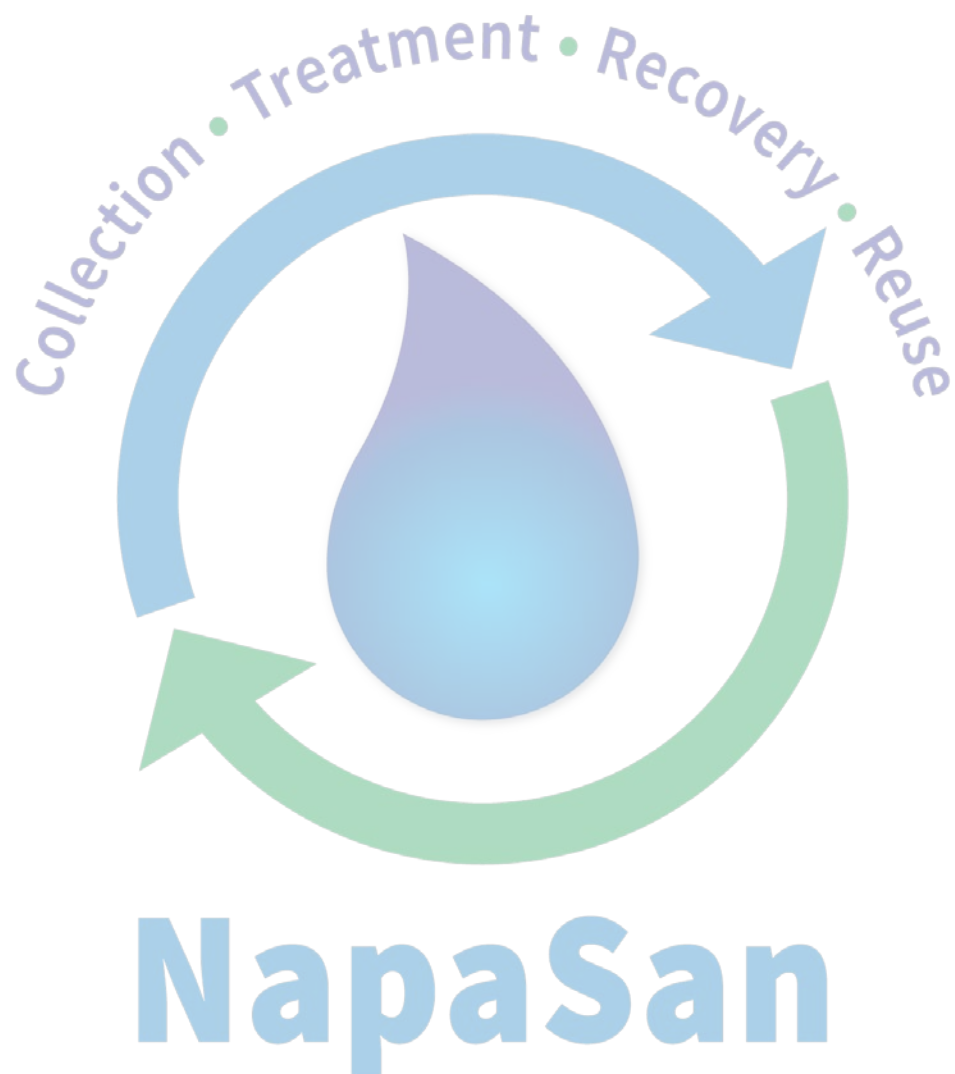


Detailed Tables of Revenues and Operating Expenditures



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

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**Napa Sanitation District
FY 2019/20 Budget**

REVENUE - ALL SOURCES

Account Description	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
<u>780 - Operations</u>						
Interest: Invested Funds	103,686	235,840	311,000	420,000	452,000	45.3%
Rent - Building/Land	718,251	725,626	725,000	427,000	126,000	(82.6%)
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Hauler Fees	150,757	187,705	180,000	185,000	191,000	6.1%
Sewer Usage Fees	22,501,543	25,806,368	28,156,000	28,166,000	29,856,000	6.0%
State - Other Funding	13,680	63,286	-	-	-	-
Penalties on Delinquent Sewer Fees	21,167	29,513	10,000	13,000	10,000	-
Recycled Water Sales	735,717	833,333	1,042,000	979,000	1,064,000	2.1%
Miscellaneous	80,472	386,405	53,000	55,000	50,000	(5.7%)
Total - Operations	24,479,880	28,435,641	30,670,800	30,345,000	31,851,500	3.8%
<u>781 - Capital Improvement Projects</u>						
Interest: Invested Funds	-	-	-	-	-	-
Federal Grants - USBR & FEMA	353,338	543,096	-	32,000	-	-
Other Government Agencies	2,694,683	2,535,003	375,000	440,050	-	(100.0%)
Miscellaneous	-	6,870	5,000	-	5,000	-
Bond/Loan Proceeds	-	-	9,075,000	-	15,416,600	69.9%
Sale of Capital Assets	20,313	8,372	25,000	90,000	25,000	-
Intrafund Transfers In	7,737,000	8,080,000	16,150,000	-	14,078,000	(12.8%)
Total - Capital Improvement Projects	10,805,334	11,173,341	25,630,000	562,050	29,524,600	15.2%
<u>782 - Expansion</u>						
Interest: Invested Funds	3,405	10,796	-	-	-	-
Capacity Charges	5,355,828	6,532,806	4,614,600	5,100,000	5,178,000	12.2%
Total - Expansion	5,359,233	6,543,602	4,614,600	5,100,000	5,178,000	12.2%
Total - All Departments	40,644,447	46,152,584	60,915,400	36,007,050	66,554,100	9.3%

**Napa Sanitation District
FY 2019/20 Budget**

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OPERATING EXPENDITURES - ALL ACCOUNTS

Account	Account Description	Actual FY 16/17	Actual FY 17/18	Adj. Budget FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
51100	Salaries and Wages	4,819,100	4,960,558	5,287,750	4,871,750	5,418,100	2.5%
51115	Overtime	271,537	225,426	180,100	206,200	197,000	9.4%
51120	Holiday Pay	13,758	6,453	10,050	7,150	7,550	(24.9%)
51130	Vacation Payout	36,045	10,228	5,000	5,100	-	(100.0%)
51200	457B Employer Contribution	74,706	78,071	85,200	85,200	85,200	0.0%
51205	Cell Phone Allowance	7,227	7,350	8,800	8,800	8,800	0.0%
51210	Director Pay	29,452	26,380	30,350	28,350	28,350	(6.6%)
51300	Medicare	75,565	76,269	74,900	75,500	78,500	4.8%
51305	F.I.C.A. / Social Security	1,677	1,311	1,900	1,450	1,450	(23.7%)
51400	Employee Insurance - Premiums	966,973	888,812	1,038,150	940,248	1,033,700	(0.4%)
51405	Workers Compensation	127,625	79,420	110,450	90,752	106,350	(3.7%)
51410	Unemployment Compensation	-	3,935	-	2,250	500	-
51600	Retirement	2,068,426	(245,459)	2,136,700	2,135,250	2,277,800	6.6%
51605	Other Post Employment Benefits	302,510	816,652	891,750	891,750	918,450	3.0%
51990	Other Employee Benefits	113,311	109,704	100,250	100,250	96,850	(3.4%)
Subtotal Salaries & Benefits		\$8,907,912	\$7,045,111	\$9,961,350	\$9,450,000	\$10,258,600	3.0%
52115	Property Tax/Assessment Admin	12,297	12,333	12,500	12,400	12,500	0.0%
52125	Accounting/Auditing Services	56,289	59,940	59,800	67,000	71,000	18.7%
52130	Information Technology Services	337,007	290,987	298,650	298,650	346,950	16.2%
52140	Legal Services	134,554	84,438	266,500	75,700	231,150	(13.3%)
52145	Engineer Services	2,767	-	-	-	-	-
52150	Temporary/Contract Help	98,826	92,224	119,800	55,800	132,600	10.7%
52205	Actuarial Services	1,950	6,750	1,100	1,050	1,100	0.0%
52220	Medical/Laboratory Services	43,390	35,874	39,100	37,700	41,150	5.2%
52305	Training Services	19,358	14,588	9,750	7,000	14,800	51.8%
52310	Consulting Services	269,847	397,734	680,900	276,550	369,600	(45.7%)
52325	Waste Disposal Services	51,758	51,927	45,550	46,700	58,050	27.4%
52330	Hazardous Waste Disposal Services	1,894	5,431	8,000	8,500	9,500	18.8%
52335	Security Services	12,665	14,016	14,000	14,400	14,400	2.9%
52340	Landscaping Services	15,150	23,025	25,200	17,700	25,800	2.4%
52345	Janitorial Services	61,389	66,517	79,250	77,100	81,350	2.6%
52490	Other Professional Services	90,408	185,212	326,700	181,800	321,800	(1.5%)
52500	Maintenance - Equipment	144,763	128,332	185,850	151,450	188,750	1.6%
52505	Maintenance - Bldgs/Improvements	56,794	66,647	154,800	189,335	155,650	0.5%
52515	Maintenance - Software	93,316	75,648	96,000	99,050	99,650	3.8%
52520	Maintenance - Vehicles	148,500	115,119	113,300	82,900	126,600	11.7%
52600	Rents and Leases - Equipment	123,346	74,238	66,200	79,500	78,950	19.3%
52605	Rents and Leases - Buildings/Land	1,202	1,227	1,450	1,450	1,450	0.0%
52705	Insurance - Premiums	176,721	199,327	210,500	218,700	225,200	7.0%
52710	Insurance - Claims	14,650	7,565	15,000	15,000	15,000	0.0%
52800	Communications/Telephone	39,416	39,988	40,850	43,350	44,150	8.1%
52810	Advertising/Marketing	32,163	28,208	60,700	40,300	34,400	(43.3%)
52820	Printing and Binding	9,612	3,708	3,600	3,750	3,800	5.6%
52825	Bank Charges	1,260	584	1,450	1,200	1,450	0.0%
52830	Publications and Legal Notices	4,198	4,473	5,900	4,800	5,950	0.8%
52840	Permits/License Fees	150,588	136,218	165,000	168,300	176,900	7.2%
52900	Training/Conference Expenses	59,233	79,566	119,750	87,650	112,500	(6.1%)
52905	Business Travel/Mileage (Meetings)	1,308	1,666	2,100	1,300	2,100	0.0%

**Napa Sanitation District
FY 2019/20 Budget**

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OPERATING EXPENDITURES - ALL ACCOUNTS

Account	Account Description	Actual FY 16/17	Actual FY 17/18	Adj. Budget FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
53100	Office Supplies	20,566	20,662	18,600	21,200	21,300	14.5%
53105	Office Supplies - Furniture/Fixtures	1,195	528	1,300	1,000	10,250	688.5%
53110	Freight/Postage	11,214	9,180	17,600	13,000	13,500	(23.3%)
53115	Books/Media/Subscriptions	2,147	2,612	4,050	3,890	3,500	(13.6%)
53120	Memberships/Certifications	76,852	77,253	92,750	90,150	97,250	4.9%
53200	Utilities - Gas	34,170	18,295	19,500	20,500	20,500	5.1%
53205	Utilities - Electric	1,071,341	854,651	883,300	788,100	891,750	1.0%
53215	Utilities - Fire Suppression Systems	1,480	2,802	12,350	18,600	4,100	(66.8%)
53220	Utilities - Water	4,899	9,113	4,650	4,400	9,050	94.6%
53250	Fuel	101,154	125,542	96,700	151,880	116,150	20.1%
53300	Clothing and Personal Supplies	37,187	41,479	50,800	46,100	49,450	(2.7%)
53315	Medical/Laboratory Supplies	69,073	58,229	70,000	58,600	70,000	0.0%
53320	Safety Supplies	39,505	30,832	34,350	28,460	53,450	55.6%
53330	Janitorial Supplies	19,765	18,775	19,800	19,400	20,000	1.0%
53340	Chemicals	919,966	752,759	973,100	1,008,000	1,067,000	9.6%
53350	Maintenance Supplies	433,638	495,163	470,300	371,400	463,700	(1.4%)
53360	Infrastructure Repair Supplies	7,922	13,616	15,050	18,200	15,800	5.0%
53400	Minor Equipment/Small Tools	73,326	79,836	61,150	59,950	58,200	(4.8%)
53410	Computer Equipment/Accessories	11,683	2,214	6,600	6,350	3,600	(45.5%)
53415	Computer Software/Licensing Fees	5,656	4,071	8,900	8,850	10,900	22.5%
53600	Special Department Expense	40,345	20,328	35,150	30,815	35,150	0.0%
53635	Service Awards	5,213	6,160	12,300	12,000	8,300	(32.5%)
53650	Business Related Meals/Supplies	1,876	758	1,500	1,470	3,000	100.0%
53665	Wellness Reimbursement	6,483	8,810	17,900	8,250	12,650	(29.3%)
53670	Education Reimbursement	-	2,896	4,000	4,000	4,000	0.0%
Subtotal Services & Supplies		\$5,263,274	\$4,960,077	\$6,160,950	\$5,160,650	\$6,066,800	(1.5%)
54100	Principal on Bonds/COPs	2,834,297	2,936,935	2,819,700	2,987,450	2,987,450	5.9%
54310	Interest on Bonds/COPs	1,933,484	1,188,756	1,768,250	1,596,400	1,596,400	(9.7%)
54320	Administration on Bonds/COPs	3,110	266,208	5,850	9,950	10,050	71.8%
54500	Taxes and Assessments	26,545	28,710	29,150	29,150	41,800	43.4%
57900	Intrafund Expenditures	2,225,000	4,450,000	8,900,000	8,900,000	8,900,000	-
Subtotal Other		\$7,022,436	\$8,870,610	\$13,522,950	\$13,522,950	\$13,535,700	0.1%
TOTALS		\$21,193,622	\$20,875,797	\$29,645,250	\$28,133,600	\$29,861,100	0.7%

**Napa Sanitation District
FY 2019/20 Budget**

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OPERATING EXPENDITURES - BY MAJOR CATEGORY

	Actual FY 16/17	Actual FY 17/18	Adj. Budget FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
Salaries & Benefits						
Board of Directors	31,796	28,523	33,500	30,931	31,000	(7.5%)
General Manager's Office	387,026	306,357	320,200	304,870	309,800	(3.2%)
Administrative Services	1,124,480	863,486	997,450	967,250	992,850	(0.5%)
Safety, Training & Fleet Maintenance	152,151	150,843	143,950	128,750	143,900	(0.0%)
Collection System	2,081,791	1,713,928	2,021,050	1,850,558	2,014,700	(0.3%)
Treatment Plant Operations	1,662,278	1,194,693	1,406,400	1,289,210	1,394,900	(0.8%)
Treatment Plant Maintenance	994,246	756,724	922,750	881,100	914,850	(0.9%)
Regulatory Compliance	640,065	419,804	619,900	589,160	608,350	(1.9%)
Engineering	1,210,787	1,086,598	1,186,400	1,107,650	1,183,400	(0.3%)
Community Outreach & Poll. Prev.	144,385	136,575	124,550	124,520	130,800	5.0%
Water & Biosolids Reclamation	478,906	387,580	455,350	446,151	453,450	(0.4%)
Non-Departmental Expenses	-	-	1,729,850	1,729,850	2,080,600	-
Subtotal Salaries & Benefits	\$8,907,912	\$7,045,111	\$9,961,350	\$9,450,000	\$10,258,600	3.0%
Services & Supplies						
Board of Directors	228,346	254,206	603,550	170,770	392,800	(34.9%)
General Manager's Office	71,478	48,976	179,600	31,740	179,750	0.1%
Administrative Services	544,375	525,708	538,100	526,650	599,900	11.5%
Safety, Training & Fleet Maintenance	91,557	82,866	90,350	85,160	80,700	(10.7%)
Collection System	337,725	329,133	443,100	348,180	493,500	11.4%
Treatment Plant Operations	2,301,007	1,984,647	2,305,000	2,232,950	2,383,300	3.4%
Treatment Plant Maintenance	698,316	803,868	949,150	873,750	979,600	3.2%
Regulatory Compliance	227,761	169,854	174,100	154,750	187,250	7.6%
Engineering	202,366	189,799	179,550	152,500	103,550	(42.3%)
Community Outreach & Poll. Prev.	76,992	57,386	116,250	79,900	85,250	(26.7%)
Water & Biosolids Reclamation	234,298	250,387	290,300	206,000	274,150	(5.6%)
Non-Departmental Expenses	249,053	263,246	291,900	298,300	307,050	5.2%
Subtotal Services & Supplies	\$5,263,274	\$4,960,077	\$6,160,950	\$5,160,650	\$6,066,800	(1.5%)
Other						
Administrative Services	24	-	-	-	-	-
Treatment Plant Operations	190	-	-	-	-	-
Water & Biosolids Reclamation	26,331	28,710	29,150	29,150	41,800	43.4%
Non-Departmental Expenses	6,995,891	8,841,899	13,493,800	13,493,800	13,493,900	0.0%
Subtotal Other	\$7,022,436	\$8,870,610	\$13,522,950	\$13,522,950	\$13,535,700	0.1%
Total	\$21,193,622	\$20,875,797	\$29,645,250	\$28,133,600	\$29,861,100	0.7%

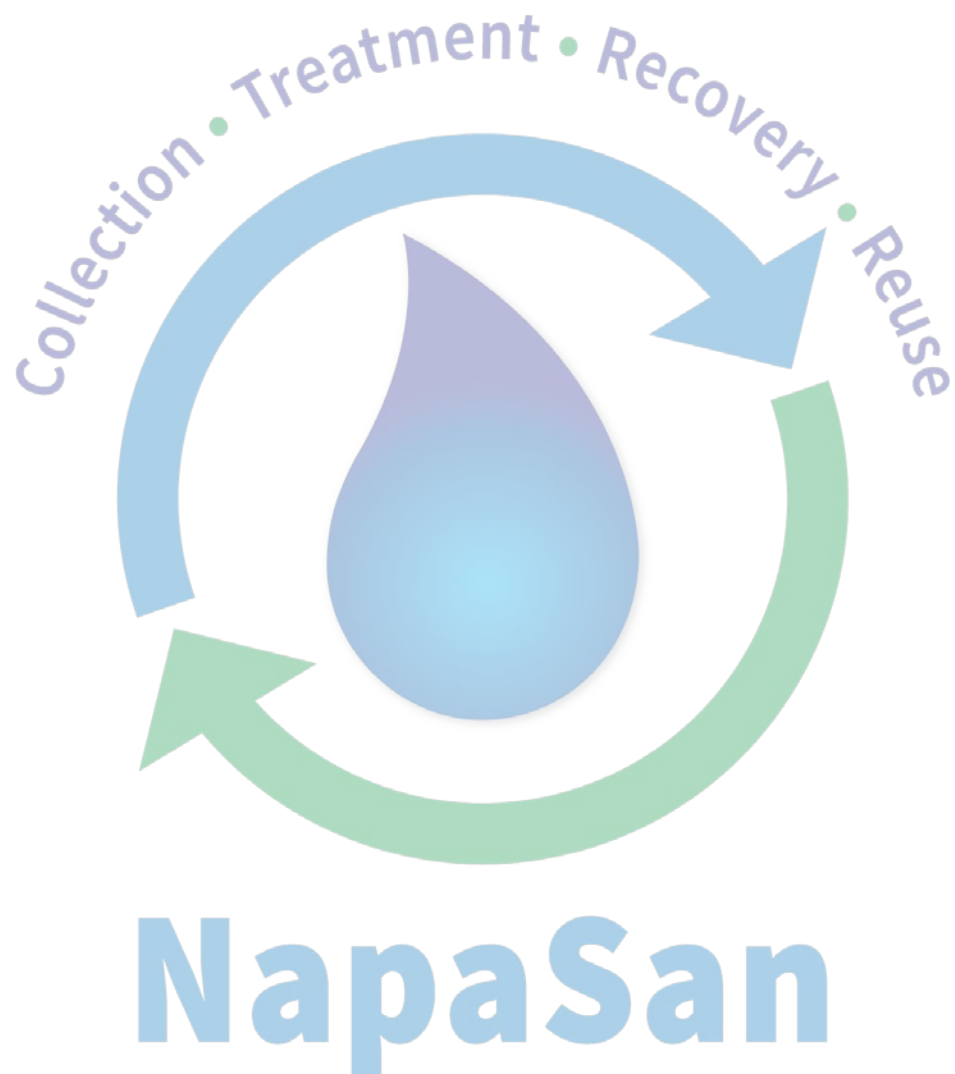
**Napa Sanitation District
FY 2019/20 Budget**

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OPERATING EXPENDITURES - BY DEPARTMENT

Department	Category	Actual FY 16/17	Actual FY 17/18	Adj. Budget FY 18/19	Estimated FY 18/19	Proposed FY 19/20	Percent Change
Board of Directors	Salaries & Benefits	31,796	28,523	33,500	30,931	31,000	(7.5%)
	Services & Supplies	228,346	254,206	603,550	170,770	392,800	(34.9%)
	Total	260,142	282,729	637,050	201,701	423,800	(33.5%)
General Manager's Office	Salaries & Benefits	387,026	306,357	320,200	304,870	309,800	(3.2%)
	Services & Supplies	71,478	48,976	179,600	31,740	179,750	0.1%
	Total	458,503	355,333	499,800	336,610	489,550	(2.1%)
Administrative Services	Salaries & Benefits	1,124,480	863,486	997,450	967,250	992,850	(0.5%)
	Services & Supplies	544,375	525,708	538,100	526,650	599,900	11.5%
	Other	24	-	-	-	-	-
	Total	1,668,880	1,389,195	1,535,550	1,493,900	1,592,750	3.7%
Safety, Training & Fleet Maintenance	Salaries & Benefits	152,151	150,843	143,950	128,750	143,900	(0.0%)
	Services & Supplies	91,557	82,866	90,350	85,160	80,700	(10.7%)
	Total	243,708	233,709	234,300	213,910	224,600	(4.1%)
Community Outreach & Poll. Prev.	Salaries & Benefits	144,385	136,575	124,550	124,520	130,800	5.0%
	Services & Supplies	76,992	57,386	116,250	79,900	85,250	(26.7%)
	Total	221,378	193,961	240,800	204,420	216,050	(10.3%)
Non-Departmental Expenses	Salaries & Benefits	-	-	1,729,850	1,729,850	2,080,600	20.3%
	Services & Supplies	249,053	263,246	291,900	298,300	307,050	5.2%
	Debt Service	4,770,891	4,391,899	4,593,800	4,593,800	4,593,900	0.0%
	Transfers	2,225,000	4,450,000	8,900,000	8,900,000	8,900,000	0.0%
	Total	7,244,944	9,105,146	15,515,550	15,521,950	15,881,550	2.4%
Treatment Plant Operations	Salaries & Benefits	1,662,278	1,194,693	1,406,400	1,289,210	1,394,900	(0.8%)
	Services & Supplies	2,301,007	1,984,647	2,305,000	2,232,950	2,383,300	3.4%
	Other	190	-	-	-	-	-
	Total	3,963,475	3,179,340	3,711,400	3,522,160	3,778,200	1.8%
Treatment Plant Maintenance	Salaries & Benefits	994,246	756,724	922,750	881,100	914,850	(0.9%)
	Services & Supplies	698,316	803,868	949,150	873,750	979,600	3.2%
	Total	1,692,562	1,560,592	1,871,900	1,754,850	1,894,450	1.2%
Regulatory Compliance	Salaries & Benefits	640,065	419,804	619,900	589,160	608,350	(1.9%)
	Services & Supplies	227,761	169,854	174,100	154,750	187,250	7.6%
	Total	867,826	589,657	794,000	743,910	795,600	0.2%
Engineering	Salaries & Benefits	1,210,787	1,086,598	1,186,400	1,107,650	1,183,400	(0.3%)
	Services & Supplies	202,366	189,799	179,550	152,500	103,550	(42.3%)
	Total	1,413,153	1,276,397	1,365,950	1,260,150	1,286,950	(5.8%)
Collection System	Salaries & Benefits	2,081,791	1,713,928	2,021,050	1,850,558	2,014,700	(0.3%)
	Services & Supplies	337,725	329,133	443,100	348,180	493,500	11.4%
	Total	2,419,517	2,043,061	2,464,150	2,198,738	2,508,200	1.8%
Water & Biosolids Reclamation	Salaries & Benefits	478,906	387,580	455,350	446,151	453,450	(0.4%)
	Services & Supplies	234,298	250,387	290,300	206,000	274,150	(5.6%)
	Other	26,331	28,710	29,150	29,150	41,800	43.4%
	Total	739,534	666,677	774,800	681,301	769,400	(0.7%)
Total Operating Expenditures		\$21,193,622	\$20,875,797	\$29,645,250	\$28,133,600	\$29,861,100	0.7%

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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
- regulatory compliance

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, audit services, and fiduciary oversight, as these functions report directly to the Board.
- The FY 19/20 budget includes \$25,000 to support expenses related to labor negotiations.
- The FY 19/20 budget includes \$10,200 to participate in a valley-wide Drought Contingency Plan.

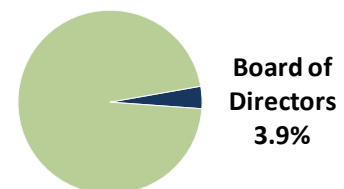


Board of Directors honor 2017 Napa Engineering Society scholarship recipients.



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 16/17	Actual FY 17/18	Adj. Budget FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 31,796	\$ 28,523	\$ 33,500	\$ 30,931	\$ 31,000	(7.5%)
Services & Supplies	\$ 228,346	\$ 254,206	\$ 603,550	\$ 170,770	\$ 392,800	(34.9%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 260,142	\$ 282,729	\$ 637,050	\$ 201,701	\$ 423,800	(33.5%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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 update of sewer service charge rate study in advance of Prop. 218 process (**Goal Two: Financial Stability, Objective 2A**). General Manager's Office is also overseeing the next employee survey (**Goal Four: Employee Development, Objective 4B**), working with the Board to pursue leases on District property (**Goal Two: Financial Stability, Objective 2B**), promoting NapaSan as a progressive, professional organization as a great place to work (**Goal Four: Employee Development, Objective 4A**).

The General Manager's Office strives to build and maintain relationships with community leaders, elected officials and stakeholders (**Goal Five: Community Outreach and Communication, Objective 5D**) and collaborate with other local agencies and groups to meet common goals (**Objective 5C**), and works with partners to expand recycled water delivery and long-term water reuse opportunities (**Goal Six: Resource Recovery, Objectives 6A, 6B, 6C, 6D and 6F**). The General Manager's Office will also actively engage with partners and professional organizations to remain aware of potential regulatory and legislative changes (**Goal Seven: Regulatory Compliance, Objective 7B**).

Department Goals

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

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.
- Under the direction of the Lands Committee and Board, work to develop options for lease revenue on District-owned property.
- Represent NapaSan interests by working cooperatively with LAFCO on the municipal services review for water, wastewater and recycled water treatment and delivery.
- Work cooperatively with other agencies to develop a valley-wide Drought Contingency Plan.
- Engage with professional associations to remain aware of potential regulatory and legislative changes.

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.
- Oversee changes derived from Employee Surveys



NapaSan Booth at annual Earth Day event

- 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.

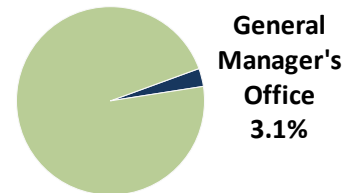
Changes in Service Levels

- 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 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 387,026	\$ 306,357	\$ 320,200	\$ 304,870	\$ 309,800	(3.2%)
Services & Supplies	\$ 71,478	\$ 48,976	\$ 179,600	\$ 31,740	\$ 179,750	0.1%
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 458,503	\$ 355,333	\$ 499,800	\$ 336,610	\$ 489,550	(2.1%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
General Manager	1	1	1	1
Assistant General Manager/District Engineer	-	-	-	-
Totals	1	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**). The Department also develops financing plans, such as the one for the Browns Valley Trunk and West Napa Pump Station project (**Goal One: Infrastructure Reliability, Objective 1C**).

This Department is also responsible for evaluating opportunities for shared services (**Goal 3: Operational Optimization, Objective 3A**). The Department will take a leadership role in promoting further succession planning through training and mentorship (**Goal 4: Employee Development, Objective 4D**), promoting NapaSan as a progressive, professional workplace (**Objective 4A**), and assisting in MOU negotiations (**Objective 4C**), as appropriate.

Department Goals

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

Related Department Objectives

- Prepare to update the sewer service charge rate study.
- Review cash flow and emergency reserves for adequacy.
- Complete the tenth annual 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.
- Continue efforts in succession planning, including training and mentorship programs.
- Support the labor negotiations in providing unbiased costing analysis and technical advice.
- Continue to provide human resource support to managers, supervisors and staff, in support of NapaSan activities.

Operating Ratio

(above 1.0 is goal)

14/15	15/16	16/17	17/18	18/19	19/20
0.90	1.02	1.07	1.36	1.4	1.4

Debt Service Coverage Ratio

(greater than 125% is required)

14/15	15/16	16/17	17/18	18/19	19/20
227%	284%	344%	534%	442%	450%

Sewer Service Charge Bill Affordability

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

14/15	15/16	16/17	17/18	18/19	19/20
0.66%	0.68%	0.74%	0.80%	0.80%	0.80%

Experience Turnover Rate

(Lower is better)

2015	2016	2017	2018	2019	2020
0.0%	3.7%	3.9%	6.7%	5.0%	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."

2015	2016	2017	2018	2019	2020
na	na	3.49	na	na	3.50

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.

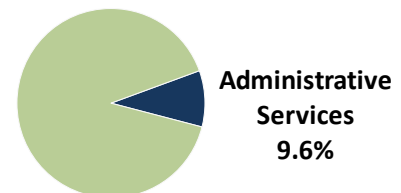
Changes in Service Levels

- Budget for accounting services, Information Technology services and Human Resource services through Napa County increased \$58,500 from prior year, for same level of service.
- FY 19/20 budget moved expenses related to 457 Plan Fiduciary Oversight to the Board of Directors budget.
- FY 19/20 budget adds \$15,000 to update the HR Policies Handbook (done every 5 years).



NapaSan Open House

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 1,124,480	\$ 863,486	\$ 997,450	\$ 967,250	\$ 992,850	(0.5%)
Services & Supplies	\$ 544,375	\$ 525,708	\$ 538,100	\$ 526,650	\$ 599,900	11.5%
Other	\$ 24	-	-	-	-	-
TOTAL EXPENDITURES	\$ 1,668,880	\$ 1,389,195	\$ 1,535,550	\$ 1,493,900	\$ 1,592,750	3.7%

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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. The Department also directly assists in planning and training associated with resiliency, disaster mitigation and disaster recovery (**Goal 3: Operational Optimization, Objective 3C**).

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.
- Maintain 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)

	14/15	15/16	16/17	17/18	18/19	19/20
NSD	84	89	104	68	64	62
Avg	94	93	93	99	na	na

Total Recordable Incidence Rate

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

	2015	2016	2017	2018	2019	2000
NSD	2.10	8.36	8.23	5.98	0	0
Avg	7.1	8.2	5.4	na	na	na

Number of Insurance Claims

(number of claims per 200,000 hours of work)

14/15	15/16	16/17	17/18	18/19	19/20
18.85	6.27	22.64	5.97	0	0

Severity of Insurance Claims

(cost of claims per 200,000 hours of work)

14/15	15/16	16/17	17/18	18/19	19/20
\$104k	\$92	\$111k	\$107k	\$0	\$0

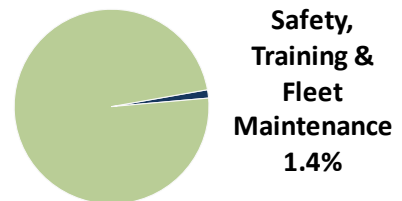
Changes in Service Levels

- The training budget fluctuates annually to facilitate the different trainings required, on a two or three-year rotational basis.
- FY 19/20 budget removes one-time budget for replacement of SCBA masks
- FY 19/20 budget removes one-time budget for purchase of radios as part of business continuity and disaster recovery planning.
- There are no significant changes in service levels in this program.



District staff training on fire extinguisher use

Percent of Operating Budget



	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 152,151	\$ 150,843	\$ 143,950	\$ 128,750	\$ 143,900	(0.0%)
Services & Supplies	\$ 91,557	\$ 82,866	\$ 90,350	\$ 85,160	\$ 80,700	(10.7%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 243,708	\$ 233,709	\$ 234,300	\$ 213,910	\$ 224,600	(4.1%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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.

Related Department Objectives

- Support Engineering in the design and implementation of annual I&I and other projects designed to reduce overflows through ongoing asset condition assessment, identifying specific performance problems, and pre-design reconnaissance.

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)

	2015	2016	2017	2018	2019	2020
NSD	0.0	1.1	13.6	0.7	0	0
CA	3.9	4.9	5.7	3.9	na	na
Reg	6.1	7.0	6.2	5.2	na	na

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

	2015	2016	2017	2018	2019	2020
NSD	1.4	2.0	0.0	1.4	0	0
CA	2.4	3.7	2.0	44.3	na	na
Reg	1.4	4.3	0.0	1.0	na	na

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

2015	2016	2017	2018	2019	2020
8.5%	9.2%	9.4%	16.9%	10%	10%

Percent of Main Lines Cleaned (Goal is 40%)

2015	2016	2017	2018	2019	2020
42.3%	34.2%	42.5%	57.9%	40%	40%

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

2015	2016	2017	2018	2019	2020
86.7%	87.1%	88.5%	99.2%	88%	88%

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

2015	2016	2017	2018	2019	2020
72	36	53	74	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

2015	2016	2017	2018	2019	2020
32	30	26	26	30	30

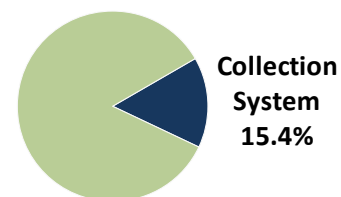
Changes in Service Levels

- FY 19/20 budget includes \$20,000 to maintain Smart Cover monitoring that was piled in last fiscal year.
- FY 19/20 budget includes additional \$12,200 in fuel costs.
- FY 19/20 budget includes a \$3,400 fee for the new Underground Service Alert Board.



Collection system workers excavate a sewer lateral to make repairs

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 2,081,791	\$ 1,713,928	\$ 2,021,050	\$ 1,850,558	\$ 2,014,700	(0.3%)
Services & Supplies	\$ 337,725	\$ 329,133	\$ 443,100	\$ 348,180	\$ 493,500	11.4%
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 2,419,517	\$ 2,043,061	\$ 2,464,150	\$ 2,198,738	\$ 2,508,200	1.8%

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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
Totals	13	15	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 consumption (Goal Three: Operational Optimization, Objective 3B), and continue to study the effects of accepting and treating winery waste through alternative methods (Objective 3E).

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

For "Goal Seven: Regulatory Compliance," the Department will provide all necessary information necessary for renewal of the NPDES permit (Objective 7A). The Department also contributes toward Goal Four: Employee Development in its hiring training of Operators-in-Training (Objective 4A).

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

	2015	2016	2017	2018	2019	2020
Wnt	28.8	20.3	10.2	12.2	15	15
Smr	103.5	109.6	39.3	21.7	50	50

Hypochlorite per MG processed

	2015	2016	2017	2018	2019	2020
Wnt	124.3	85.4	55.2	62.5	60	60
Smr	211.9	211.3	198.6	191.1	200	200

Percent of Self-Generated Electricity

	2015	2016	2017	2018	2019	2020
	35%	27%	41%	56%	56%	56%

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

	2015	2016	2017	2018	2019	2020
Wnt	2.1	1.6	1.5	2.3	1.8	1.8
Smr	6.3	6.0	6.6	6.1	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 19/20 budget subtracts \$120,000 for an one-time Alternative Chemicals study.
- FY 19/20 budget adds \$50,000 for an ultrafiltration/reverse osmosis (UF/RO) pilot study.
- FY 19/20 budget adds \$14,450 for electricity, due to change in PG&E rates and increased recycled water distribution.
- FY 19/20 budget adds \$97,840 in chemicals, for increase unit costs combined with decreased quantities used.
- FY 19/20 budget includes \$5,000 for one-time purchase of four ammonia sensors.
- FY 19/20 budget adds \$10,100 for increases in NPDES permit, Regional Monitoring Plan, and Biosolids permit fees.

Treatment for BOD and TSS Removal

(Must be higher than 85% - monthly average)

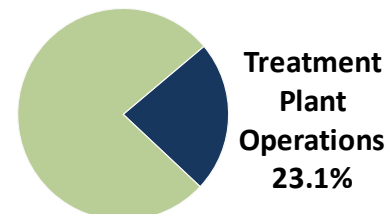
	2015	2016	2017	2018	2019	2020
BOD	98.2%	96.7%	97.0%	97.6%	95%	95%
TSS	96.3%	94.6%	95.6%	96.5%	95%	95%

Total Allowable BOD and TSS

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

	2015	2016	2017	2018	2019	2020
BOD	4.6	5.3	4.8	5.9	5.0	5.0
TSS	9.8	10.0	7.7	8.8	10.0	10.0

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 1,662,278	\$ 1,194,693	\$ 1,406,400	\$ 1,289,210	\$ 1,394,900	(0.8%)
Services & Supplies	\$ 2,301,007	\$ 1,984,647	\$ 2,305,000	\$ 2,232,950	\$ 2,383,300	3.4%
Other	\$ 190	-	-	-	-	-
TOTAL EXPENDITURES	\$ 3,963,475	\$ 3,179,340	\$ 3,711,400	\$ 3,522,160	\$ 3,778,200	1.8%

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Director of Operations Services	1	1	1	1
Operations Supervisor	1	1	1	1
Operator OIT/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**). The Department also contributes toward "Goal Four: Employee Development" in its hiring training of Mechanical Technician interns (**Objective 4A**).

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.)

2015	2016	2017	2018	2019	2020
45.2%	40.5%	61.3%	67.9%	68%	68%

Number of work orders completed

2015	2016	2017	2018	2019	2020
1,314	1,482	1,334	1,379	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.)

2015	2016	2017	2018	2019	2020
98%	79%	81%	98%	95%	95%

Uptime for Major Mission-Critical Pumps

2015	2016	2017	2018	2019	2020
na	98.0%	98.6%	96.8%	95%	95%

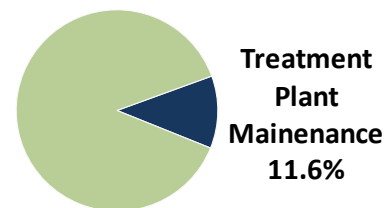
Changes in Service Levels

- FY 19/20 budget includes \$10,000 to evaluate and develop a plan for marsh dredging and maintenance.
- FY 19/20 budget includes \$13,000 for annual asphalt crack sealing (converting a one-time project to ongoing).
- FY 19/20 budget adds \$15,000 to replace aging emergency eye wash and emergency shower stations.
- 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 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 994,246	\$ 756,724	\$ 922,750	\$ 881,100	\$ 914,850	(0.9%)
Services & Supplies	\$ 698,316	\$ 803,868	\$ 949,150	\$ 873,750	\$ 979,600	3.2%
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 1,692,562	\$ 1,560,592	\$ 1,871,900	\$ 1,754,850	\$ 1,894,450	1.2%

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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 6B**) and providing technical assistance regarding recycled water allocation policy (**Objective 6A**).

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 750 million gallons (2,300 acre feet) recycled water, with 90% 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.)

2015	2016	2017	2018	2019	2020
100%	100%	100%	99%	100%	100%

Recycled Water Reuse by Customers

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

2015	2016	2017	2018	2019	2020
78.3%	80.6%	83.1%	91.6%	90%	90%

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)

2015	2016	2017	2018	2019	2020
100%	100%	100%	100%	100%	100%

Changes in Service Levels

- FY 19/20 budget includes \$2,500 for additional cross connection inspections for new MST and LCWD customers.
- FY 19/20 budget removes a number of one-time budget items from the prior fiscal year, including the purchase of a water meter for Kennedy Park and replacement of a portable welder.
- FY 19/20 budget subtracts \$6,000 in electricity based on lower recycled water distribution on NapaSan property.

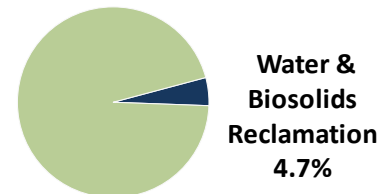


Sheep Grazing at Somky Ranch



Irrigating Jameson Ranch with recycled water

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 478,906	\$ 387,580	\$ 455,350	\$ 446,151	\$ 453,450	(0.4%)
Services & Supplies	\$ 234,298	\$ 250,387	\$ 290,300	\$ 206,000	\$ 274,150	(5.6%)
Other	\$ 26,331	\$ 28,710	\$ 29,150	\$ 29,150	\$ 41,800	43.4%
TOTAL EXPENDITURES	\$ 739,534	\$ 666,677	\$ 774,800	\$ 681,301	\$ 769,400	(0.7%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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," "Goal Three: Operational Optimization," "Goal Four: Employee Development" and "Goal Six: Resource Recovery" by providing project management and leadership on all of the infrastructure and planning 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 and West Napa Pump Station (**Objective 1C**)
- Study whether to implement a Private Lateral Program (**Objective 1E**)
- Evaluate and plan for potential impacts of sea/river level rise, prolonged drought and increased winter storm intensity to NapaSan's current and future operations (**Objective 3D**)
- Work with local partners to expand the distribution of recycled water (**Objective 6B**)
- Work with local partners to achieve long-term recycled water goals (**Objective 6C**), evaluate the current recycled water allocation policy (**Objective 6A**) and evaluate the feasibility of "purified water" potable reuse (**Objective 6D**)
- Evaluate energy self-generation to reduce overall energy costs (**Objective 6E**)
- Hiring high school and college interns (**Objective 4A**).

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.
- Begin construction 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

14/15	15/16	16/17	17/18	18/19	19/20
89.5%	78.0%	54.3%	42.1%	85%	85%

Capital Expenses as Percent of Operating Expenses

14/15	15/16	16/17	17/18	18/19	19/20
322%	239%	78%	127%	125%	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

Percent of Sewer Mains Rehabilitated

2015	2016	2017	2018	2019	2020
2.60%	1.01%	2.21%	2.54%	1.3%	2.0%

Renewal & Replacement of Assets

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

14/15	15/16	16/17	17/18	18/19	19/20
10.2%	4.5%	3.8%	3.9%	4%	4%

System mains in 2019, and at least 2.0% in 2020.

- Plan for and complete renewal & replacement capital projects that impact approximately 4% of NapaSan's total assets annually.
- Complete the Summer 2019 Sewer Rehabilitation project and complete in-house design of the Summer 2020 I&I project to reduce peak wet-weather flow.
- Construct the 2019 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

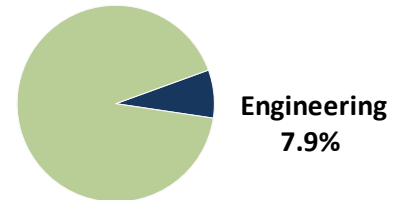
(% of applications where 30-day goal is met)

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
94.4%	93.6%	98.3%	99.8%	95%	95%

Changes in Service Levels

- FY 19/20 budget removes \$19,200 in temporary help for implementing the asset management program, and adds \$16,000 in temporary help for the internship program.
- FY 19/20 budget removes \$65,000 in one-time consulting support for asset management Phase 1.

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 1,210,787	\$ 1,086,598	\$ 1,186,400	\$ 1,107,650	\$ 1,183,400	(0.3%)
Services & Supplies	\$ 202,366	\$ 189,799	\$ 179,550	\$ 152,500	\$ 103,550	(42.3%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 1,413,153	\$ 1,276,397	\$ 1,365,950	\$ 1,260,150	\$ 1,286,950	(5.8%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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. The Regulatory Compliance Department contributes toward **Goal Four: Employee Development** in its analyst education outreach training program for high school and college interns (**Objective 4A**).

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 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>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
4,670	2,699	2,276	2,024	2,000	2,000

Number of Process Control analyses processed

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
12,827	12,138	13,410	11,459	12,000	12,000

Number of special request analyses processed

<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
1,885	829	55	70	100	100

Number of Quality Control/Assurance analyses processed

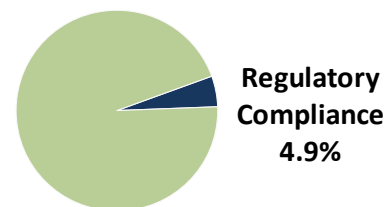
<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
2,434	2,457	8,124	7,820	8,000	8,000

Changes in Service Levels

- FY 19/20 budget adds 24,000 for temporary assistance in the lab for implementation of new TNI standards.
- FY 19/20 budget subtracts \$4,000 in software maintenance for the discontinuance of specific software that will no longer be used.



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

Percent of Operating Budget**Department Operating Budget**

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 640,065	\$ 419,804	\$ 619,900	\$ 589,160	\$ 608,350	(1.9%)
Services & Supplies	\$ 227,761	\$ 169,854	\$ 174,100	\$ 154,750	\$ 187,250	7.6%
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 867,826	\$ 589,657	\$ 794,000	\$ 743,910	\$ 795,600	0.2%

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Regulatory Compliance Manager	1	1	1	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 3E**) and “**Goal Five: Community Outreach and Communication**” in the development of proactive communication methods and practices (**Objective 5B**), engagement with the community to increase understanding of NapaSan services, rates and messages (**Objective 5A**), collaboration with other local agencies and groups to meet common goals (**Objective 5C**), and building relationships with community leaders, elected officials and stakeholders (**Objective 5D**). The program also contributes toward “**Goal Six: Resource Recovery, Objective 6F**” 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)

2015	2016	2017	2018	2019	2020
155	154	167	170	162	162

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

2015	2016	2017	2018	2019	2020
1	0	1	4	0	0

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

2015	2016	2017	2018	2019	2020
1	1	1	2	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

- Work with community partners to promote NapaSan's services and rate structure.
- Partner with local partners for collection of unwanted medications from drop-off sites.

Plant Tours Conducted and Presentations Made

2015	2016	2017	2018	2019	2020
14	44	51	53	50	50

Pounds of Unwanted Pharmaceuticals Diverted

2015	2016	2017	2018	2019	2020
3,126	3,838	1,388	597	500	500

- Conduct plant tours and make public presentations.
- 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.
- Organize 2nd Annual Citizens Academy.
- Continue monitoring, sampling, reporting, and billing for all categorical dischargers.

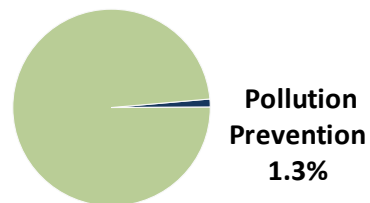


School tour of the Treatment Plant Headworks

Changes in Service Levels

- FY 19/20 budget removes one-time website development expenses from prior year.
- FY 19/20 budget removes one-time marketing development support for implementing messaging on NapaSan vehicles, and marketing support for additional outreach related to the upcoming 75th Anniversary of the district.
- FY 19/20 adds \$1,500 for continuation of the Citizens Academy.

Percent of Operating Budget



Department Operating Budget

	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	\$ 144,385	\$ 136,575	\$ 124,550	\$ 124,520	\$ 130,800	5.0%
Services & Supplies	\$ 76,992	\$ 57,386	\$ 116,250	\$ 79,900	\$ 85,250	(26.7%)
Other	-	-	-	-	-	-
TOTAL EXPENDITURES	\$ 221,378	\$ 193,961	\$ 240,800	\$ 204,420	\$ 216,050	(10.3%)

Position Authorizations

Position Series	FY 16/17	FY 17/18	FY 18/19	FY 19/20
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.

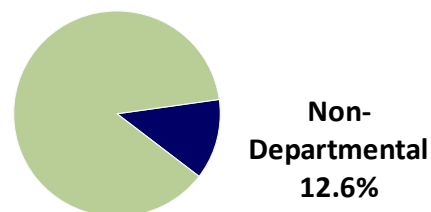
Changes in Service Levels

- There is an increase in the FY 19/20 budget of \$14,700 for liability insurance premiums.



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

Percent of Operating Budget



Non-Departmental Operating Budget

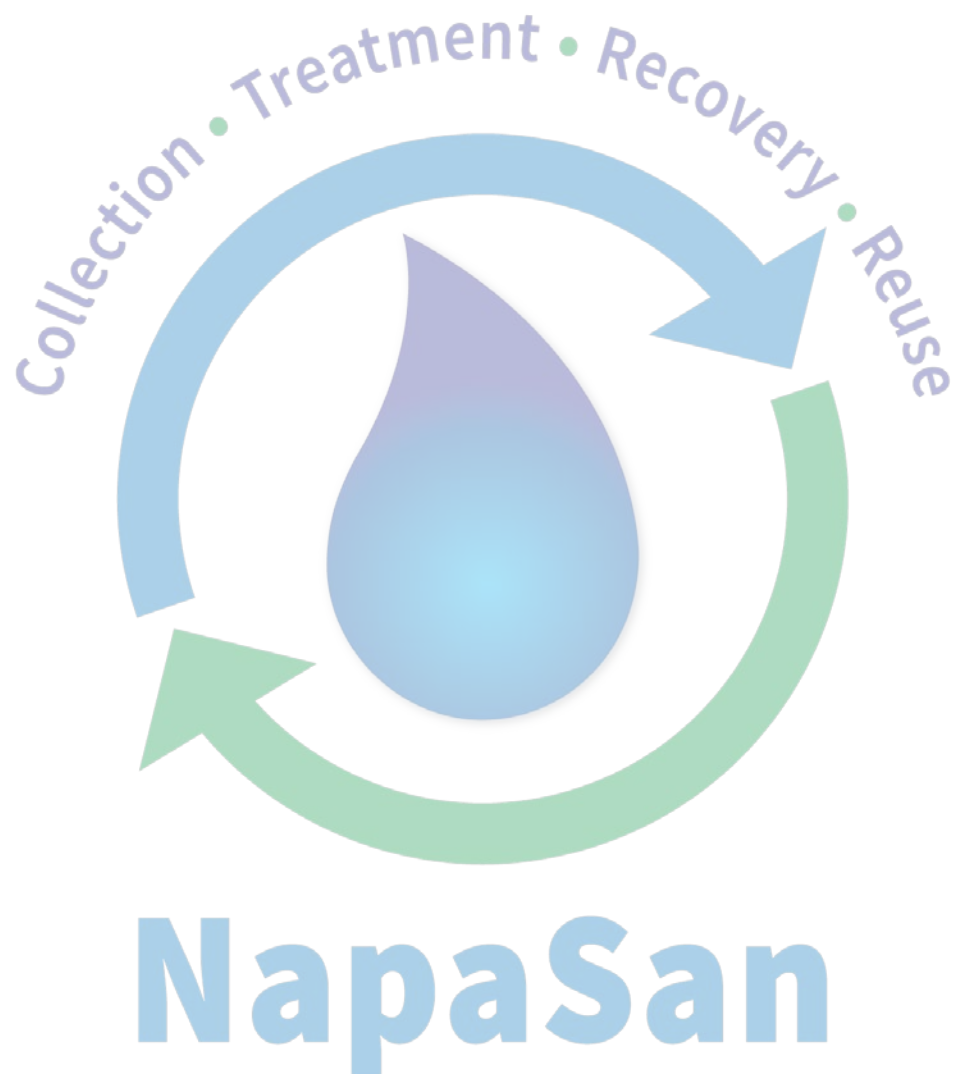
	Actual FY 16/17	Actual FY 17/18	Adjusted FY 18/19	Estimated FY 18/19	Budget FY 19/20	Percent Change
Salaries & Benefits	-	-	\$ 1,729,850	\$ 1,729,850	\$ 2,080,600	20.3%
Services & Supplies	\$ 249,053	\$ 263,246	\$ 291,900	\$ 298,300	\$ 307,050	5.2%
Debt Service, Transfers and Taxes	\$ 6,995,891	\$ 8,841,899	\$ 13,493,800	\$ 13,493,800	\$ 13,493,900	0.0%
TOTAL EXPENDITURES	\$ 7,244,944	\$ 9,105,146	\$ 15,515,550	\$ 15,521,950	\$ 15,881,550	2.4%

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 \$6.47 million, or 2.5% of the entire Ten-Year Capital Improvement Plan. All revenues collected from the sale of any vehicles declared surplus are 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 34, 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:

<u>Actual</u>		<u>Estimated/Projected</u>	
Beginning Deficit (7/1/08)	(\$12,607,167)	Beginning Deficit (7/1/18)	(\$15,814,204)
FY 2008/09 – Revenues	1,387,193	FY 2018/19 – Revenues	5,100,000
FY 2008/09 – Expansion Projects	(1,663,801)	FY 2018/19 – Expansion Projects	(7,314,997)
FY 2009/10 – Revenues	600,664	FY 2019/20 – Revenues	5,178,000
FY 2009/10 – Expansion Projects	(2,191,370)	FY 2019/20 – Expansion Projects	(9,400,120)
FY 2010/11 – Revenues	2,183,802	Projected Ending Deficit	(\$22,251,321)
FY 2010/11 – Expansion Projects	(2,811,161)	(6/30/2020)	
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)		
FY 2017/18 – Revenues	6,543,602		
FY 2017/18 – Expansion Projects	(1,847,962)		
Ending Deficit (6/30/17)	(\$15,814,204)		



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 2017/18 can be found in Appendix F of this budget document.

Changes from Prior CIP

The CIP was amended by the Board after initial adoption during FY 2018/19 to carry forward the budgets of unfinished projects from the prior year (\$4,549,850) and to increase appropriations by \$1,474,550 (details below). 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:

- Increase the project size of the 2019 Sewer System Rehabilitation project (CIP #18706) by \$335,850 to expand the scope of the project.
- The 72-inch Trunk Construction project (CIP #19702) allocation of \$1,000,000 for FY 18/19 was moved to begin the Collection System Master Plan project (CIP #19727).
- The Pond 1 Dredge project (CIP #13745) budget was reduced by \$350,000 as it was not needed for anticipated expenses in the FY 18/19 fiscal year. Savings was allocated to Pond Transfer Structure 2 to 3 project (CIP #19717).
- An additional \$1,000,000 was added to the Chemical Storage Building Piping Repair (CIP #18740) to address the significant deterioration in the asset condition.

Summary of FY 2019/20 Capital Projects

The following is a summary of FY 2019/20 capital projects. **Dollar amounts noted are the amount budgeted for FY 2019/20, and not the entire amount of the project.** For complete financial information, see the table of projects that follows, starting on page 85.

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 2019 Sewer Rehabilitation project, the Summer 2020 Sewer Rehabilitation project, and the 66-inch trunk rehabilitation project. This category also includes the development of the Collection System Master Plan update. Collection system projects for the fiscal year total \$20,201,500.

Collection System Equipment – The Collection Department will be replacing one of its locatable mini-cameras (\$11,900) and one of its “eels” (\$5,900).

Lift Stations – Lift stations are pump stations within the sewer collection system. In FY 2019/20, the West Napa Pump Station replacement project will begin. Lift Station capital projects for the year total \$5,500,000.

Treatment – FY 2019/20 includes a project to dredge solids from Pond 1, the completion of the 2019 Treatment Plant Improvement Project and the beginning of the 2020 Treatment Plant Improvement Project. This year will also see the beginning of the Treatment Plant Master Plan Update. Capital costs in this area total \$4,305,000 for this fiscal year.

Ten-Year CIP Summary

	<u>FY 2019/20</u>	<u>10-Year CIP</u>
Collection System Projects	\$20,201,500	\$146,937,250
Collection System Equipment	17,800	4,513,400
Collection System Lift Stations	5,500,000	11,269,500
Treatment Projects	4,305,000	59,006,100
Treatment Equipment	2,872,300	11,779,200
Lab Equipment	20,000	1,362,200
SCADA	-	886,000
Recycling Projects	510,000	7,566,400
Recycling Equipment	109,700	4,250,600
Other	337,000	6,686,000
Total	\$33,873,300	\$254,256,650

Treatment – Equipment – These projects include a number of equipment replacements, most notable of which are projects to replace equipment in the Headworks building, repairing and coating equipment in the primary clarifier and DAF clarifier, conducting elevator control updates, and replacing the telehandler. The total FY 2019/20 expenditure is \$2,872,300.

Lab Equipment – This category includes the replacement of the 4700 Sampler (\$20,000).

SCADA – SCADA is the hardware and software that is used to operate the treatment plant. In FY 2019/20, there are no planned expenditures. However, with the planned completion of the SCADA Master Plan in FY 2018/19, it is expected that there will be future projects recommended for implementation.

Recycling-Projects – This section includes projects to expand or rehabilitation major components of the recycled water distribution system and biosolids application program. Projects in FY 2019/20 include the completion of the Coombsville Recycled Water Truck Fill Station, rehabilitation of the Kirkland Pipeline, and continued environmental plan development and grant applications with the NBWRA. The total FY 2019/20 expenditure is \$510,000.

Recycling-Equipment – This section includes projects to replace equipment necessary to manage or maintain the recycled water distribution system or the biosolids application program. The FY 2019/20 plan includes the replacement of the Badger meters and replacement of tractor attachments used in biosolids application. Total FY 2019/20 budget is \$109,700.

Other – Development technical support is the capitalization of staff time spent reviewing the plans and inspections associated with contributed capital. IN FY 2019/20, there are no other expenditures in this category. Total for FY 2019/20 is \$337,000.

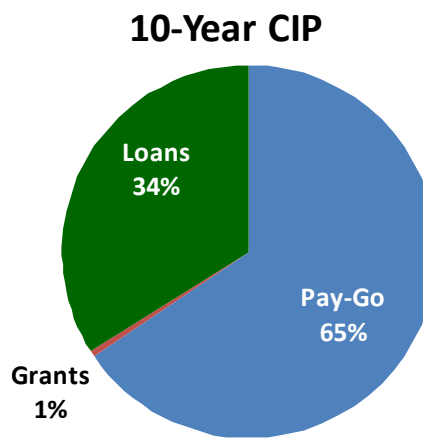
FY 2019/20 Partner-Funded Projects

There are no partner-funded projects in the FY 2019/20 Capital Improvement Plan.

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 19/20	51.3%	-	48.7%
FY 20/21	36.1%	-	63.9%
FY 21/22	64.4%	-	35.4%
FY 22/23	99.4%	0.2%	0.4%
FY 23/24	97.0%	0.8%	2.2%
FY 24/25	75.0%	5.0%	20.0%
FY 25/26	83.0%	-	17.0%
FY 26/27	43.4%	-	56.6%
FY 27/28	90.4%	-	9.6%
FY 28/29	73.3%	-	26.7%



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:

- The **Browns Valley Road Trunk** project and the **West Napa Pump Station Replacement** project start of construction has been delayed to FY 2019/20 as a result of delays in funding through the SRF program.
- The **66-inch Trunk Rehabilitation** project has been divided into two projects, with the lower end of the pipeline (Kaiser Road to IPS) rehabilitated sooner than the upper portion (Imola Avenue to Kaiser Road). This change is based on condition assessments made in FY 2019/20.
- The construction of the **Second Digester** and **Third Aeration Basin** start dates were pushed back, from FY 2022/23 to FY 2024/25 based on the current and projected flow and loading numbers, and to provide for the completion of the Treatment Plant Master Plan prior to project commencement.

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

Most of the capital projects planned for FY 2019/20 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, a few the FY 2019/20 capital projects will have a significant impact on the current and future NapaSan operations and maintenance budgets.

The Browns Valley Trunk project (CIP #14703) will increase the amount of sewer main that will need to be maintained in the Collection System (an additional 3 miles). However, it is not significant enough in size to impact the staffing levels in the Collection System operating budget. A small impact on chemicals and water for cleaning activities is expected.

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.

The Coombsville Recycled Water Truck Fill Station (CIP #18731) will have increased annual operating expenses related to the automated access and metering system, as well as routine system maintenance. These costs, and the additional expenses related to treating increased amounts of recycled water are offset by the recycled water fees charged to water truck haulers.

The Rehabilitation projects in the Collection System will decrease the amount of rain and groundwater that get into the system. This reduces future costs by reducing the amount of influent that needs to be treated. 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.

Net Impacts of Capital Projects on Operating Budget

<u>CIP #</u>	<u>2019/20</u>	<u>2020/21</u>	<u>2021/22</u>
14703	0	0	\$1,500
17711	0	(3,600)	(3,600)
18731	0	8,000	8,000
Total	\$0	\$4,400	\$5,900

FY 2019/20
CIP Project Descriptions

COLLECTION SYSTEM - PROJECTS

13701	Mainline Sewer Rehabilitation		FY 2019/20:	\$60,000
	<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		FY 2019/20:	\$332,600
	<i>Ongoing program to fund the raising of manhole rims in streets that have been resurfaced.</i>			
13703	Lateral Replacement / Rehabilitation		FY 2019/20:	\$110,000
	<i>Ongoing program to rehabilitate street laterals as required using NapaSan crews.</i>			
13704	Cleanout Installation / Rehabilitation		FY 2019/20:	\$107,000
	<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 2019/20:	\$221,700
	<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>			
18701	Inflow & Infiltration (I&I) Smoke Testing		FY 2019/20:	\$150,000
	<i>This program conducts smoke testing at strategic locations throughout the collection system for planning of I&I reduction projects. NapaSan crews and/or an outside consultant will perform the smoke testing and analysis.</i>			
19727	Collection System Master Plan	Project Total: \$2,071,200	FY 2019/20:	\$1,071,200
	<i>This project will update the Collection System Master Plan which was last updated in 2007. The project will include flow monitoring and the development of an all-pipes dynamic hydraulic model.</i>			
18703	Upper Lateral Rehabilitation - (Pilot #4)		FY 2019/20:	\$166,300
	<i>This pilot project will replace residential private sewer lateral pipes in a strategic area where the public system has already been rehabilitated.</i>			
20701	Upper Lateral Rehabilitation - (Pilot #5)	Project Total: \$187,900	FY 2019/20:	\$5,000
	<i>This pilot project will replace residential private sewer lateral pipes in a strategic area where the public system has already been rehabilitated.</i>			
20702	Manhole Rehabilitation		FY 2019/20:	\$250,000
	<i>Ongoing program to rehabilitate manholes that have I&I or are in otherwise poor condition.</i>			
14703	Browns Valley Trunk Interceptor	Project Total: \$28,000,000	FY 2019/20:	\$7,000,000
	<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>			
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	Project Total: \$9,400,000	FY 2019/20:	\$4,000,000
	<i>The project will rehabilitate approximately 1.3 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>			
18706	2019 Collection System Rehabilitation	Project Total: \$6,228,950	FY 2019/20:	\$3,538,100
	<i>This collection system rehabilitation project (also known as the Southeast Napa Sewer and Roadway Rehabilitation Project) of approximately 2% of sewer mainlines is currently under construction in the Southeast Napa area.</i>			

FY 2019/20
CIP Project Descriptions

19703 2020 Collection System Rehabilitation **Project Total: \$6,338,700** **FY 2019/20: \$3,169,600**
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.

20703 2021 Collection System Rehabilitation **Project Total: \$6,559,900** **FY 2019/20: \$20,000**
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.

COLLECTION SYSTEM - EQUIPMENT

20704 Locatable Mini-Camera #3 Replacement **FY 2019/20: \$11,900**
This project will purchase a new CCTV camera to replace an existing camera that is at the end of its useful life.

20705 Eel Replacement #2 **FY 2019/20: \$5,900**
This project will purchase a new sewer cleaning tool to replace an existing tool that is at the end of its useful life.

COLLECTION SYSTEM - LIFT STATIONS

17711 West Napa PS Replacement **Project Total: \$11,000,000** **FY 2019/20: \$5,500,000**
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.

TREATMENT - PROJECTS

20706 WWTP Master Plan **Project Total: \$1,870,185** **FY 2019/20: \$5,000**
This project will update the Wastewater Treatment Plant Master Plan which was last updated in 2011.

13745 Pond 1 Dredge **Project Total: \$2,350,000** **FY 2019/20: \$2,100,000**
This project will remove solids from Oxidation Pond 1.

20707 Pond Levee Repair **Project Total: \$950,000** **FY 2019/20: \$100,000**
Repair of pond levees to re-establish a uniform top elevation.

18740 2019 Treatment Plant Improvements Project **Project Total: \$1,875,000** **FY 2019/20: \$600,000**
The project will replace concrete, tanks, drain pipes, and protective coatings in the chemical handling building and re-surface degraded asphalt near the solids handling building.

20708 2020 Treatment Plant Improvements Project **Project Total: \$2,400,000** **FY 2019/20: \$1,500,000**
The project will replace or rehabilitate various assets at the treatment plant, including valves and corroded metallic piping.

TREATMENT - EQUIPMENT

17726 Headworks Equipment Rehab/Replacement **Project Total: \$3,201,350** **FY 2019/20: \$1,000,000**
Purchase and install equipment for the headworks building to replace equipment that is at the end of its useful life.

18722 Main - FOG Station Water Heater **Project Total: \$25,000** **FY 2019/20: \$20,000**
The project will provide a hot water source to the FOG receiving station to improve maintenance and operation of the system.

FY 2019/20
CIP Project Descriptions

19715	Main - ARV Replacement	Project Total: \$61,100	FY 2019/20:	\$31,100
	The project will replace air release valves on plant piping systems in two phases.			
20709	Main - AB Caustic Pumps & Enclosure		FY 2019/20:	\$85,700
	This project will replace the aeration basin caustic pumps and enclosure which are at the end of their useful lives.			
20710	Main - Septage Pump & Motor Replacement		FY 2019/20:	\$28,700
	This project will replace the septage pump and motor which are at the end of their useful lives.			
20711	Main - Marsh-to-Pond Pump Station Upgrade		FY 2019/20:	\$88,700
	This project will upgrade the marsh pump station with a new vault for improved functionality and access for maintenance.			
15707	Main - DAFT Overflow Pumps (2)	Project Total: \$24,200	FY 2019/20:	\$11,900
	This project will rebuild two existing pumps and motors which are at the end of their useful lives. FY 19/20 is the first year of a two-year project to rebuild these two pumps.			
16712	Main - Primary Clarifier and DAFT Rehab	Project Total: \$1,664,000	FY 2019/20:	\$814,000
	The project will rehabilitate the primary clarifiers to extend their useful life.			
20712	Main - Grit Pump Rebuild		FY 2019/20:	\$60,000
	This project will rebuild the grit pump which is at the end of its useful life.			
20713	Main - Elevator Control Update		FY 2019/20:	\$400,000
	This project will update the controls for the elevator in the digester tower. The elevator is currently unreliable.			
20714	Main - Flare Rebuild		FY 2019/20:	\$50,000
	This project will rebuild the digester flare to restore its design operating capacity.			
20715	Main - Concrete Pipe Chase Covers		FY 2019/20:	\$80,000
	This project will replace the traffic-rated concrete pipe chase covers that are in a deteriorated condition.			
20716	Main - Plant Door Replacement - Phase 1	Project Total: \$119,000	FY 2019/20:	\$22,200
	This project will replace doors throughout the plant which are at the end of their useful lives.			
20717	Vehicle 163 - Ford F-150		FY 2019/20:	\$33,300
	This project will purchase a new vehicle to replace an existing vehicle that is at the end of its useful life.			
20718	Vehicle 162 - Ford F-250 Diesel		FY 2019/20:	\$43,600
	This project will purchase a new vehicle to replace an existing vehicle that is at the end of its useful life.			
20719	Vehicle 206 - Forklift TH103 (Telehandler)		FY 2019/20:	\$103,100
	This project will purchase a new telehandler to replace the existing telehandler that is at the end of its useful life.			
LAB - EQUIPMENT				
20720	Lab - Sampler 4700 Replacement (2)		FY 2019/20:	\$20,000
	This project will purchase two new lab samplers to replace two existing samplers which are at the end of their useful lives.			

FY 2019/20
CIP Project Descriptions

SCADA

There are no SCADA projects in FY 2019/20

RECYCLING - PROJECTS

13727 North Bay Water Reuse Project **FY 2019/20: \$150,000**
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.

18731 Coombsville Truck Fill Station **Project Total: \$840,050** **FY 2019/20: \$300,000**
Install a recycled water truck fill station in the MST area on Coombsville Road.

20721 Kirkland Recycled Water Pipeline Rehabilitation **Project Total: \$1,206,400** **FY 2019/20: \$60,000**
Condition assessment and feasibility study in FY 2019/20 to evaluate the future rehabilitation of the Kirkland recycled water pipeline.

RECYCLING - EQUIPMENT

19722 Vehicle 723/720 - Attachments/Implements **FY 2019/20: \$29,700**
This project will replace tractor attachments/implements

20722 Badger Meter Replacement **FY 2019/20: \$80,000**
This project will replace five existing 8" recycled water meters

OTHER

13729 Development Technical Support **FY 2019/20: \$337,000**
District staff reviews and comments on development plans involving sewer and recycled water facilities and contributed capital.

FY 2019/20 Capital Project Schedule
Allocation of Capacity Charges

#	Name	FY 19/20	% Funded by Capacity Charges	% Funded by Other Revenue	Total Capacity Charges	Total Other Revenue
<u>COLLECTION SYSTEM - PROJECTS</u>						
13701	Main Line Sewer Rehab	60,000		100%	-	60,000
13702	Manhole Raising/Rehab	332,600		100%	-	332,600
13703	Lateral Replacement/Rehab	110,000		100%	-	110,000
13704	Cleanouts Installation/Rehab	107,000		100%	-	107,000
13705	I&I Monitoring Program	221,700	40%	60%	88,680	133,020
18701	I&I Smoke Testing	150,000	40%	60%	60,000	90,000
19727	Collection System Master Plan	1,071,200	70%	30%	749,840	321,360
18703	Upper Lateral Rehab - Pilot #4	166,300	40%	60%	66,520	99,780
20701	Upper Lateral Rehab - Pilot #5	5,000	40%	60%	2,000	3,000
20702	Manhole Rehabilitation	250,000		100%		250,000
14703	Browns Valley Trunk	7,000,000	82%	18%	5,740,000	1,260,000
19701	66" Trunk Rehabilitation (Kaiser to IPS)	4,000,000		100%	-	4,000,000
18706	2019 Collection System Rehabilitation	3,538,100	40%	60%	1,415,240	2,122,860
19703	2020 Collection System Rehabilitation	3,169,600	40%	60%	1,267,840	1,901,760
20703	2021 Collection System Rehabilitation	20,000	40%	60%	8,000	12,000
<u>COLLECTION SYSTEM - EQUIPMENT</u>						
20704	Locatable Mini-Camera #3 Replacement	11,900		100%	-	11,900
20705	Eel Replacement #2	5,900		100%	-	5,900
<u>COLLECTION SYSTEM - LIFT STATIONS</u>						
17711	West Napa PS - Replacement	5,500,000		100%	-	5,500,000
<u>TREATMENT - PROJECTS</u>						
20706	WWTP Master Plan	5,000	40%	60%	2,000	3,000
13745	Pond 1 Dredge	2,100,000		100%	-	2,100,000
20707	Pond Levee Repair	100,000		100%	-	100,000
18740	2019 Treatment Plant Improvement Projects	600,000		100%	-	600,000
20708	2020 Treatment Plant Improvement Projects	1,500,000		100%	-	1,500,000
<u>TREATMENT - EQUIPMENT</u>						
17726	Headworks Equipment Replacement	1,000,000		100%	-	1,000,000
18722	Main - FOG Station Water Heater	20,000		100%	-	20,000
19715	Main - ARV Replacement	31,100		100%	-	31,100
20709	Main - AB Caustic Pumps & Enclosures	85,700		100%	-	85,700
20710	Main - Septage Pump & Motor Replacement	28,700		100%	-	28,700
20711	Main - Marsh-to-Pond Pump Station Upgrade	88,700		100%	-	88,700
15707	Main - DAFT Overflow Pumps (2) Cornell	11,900		100%	-	11,900
16712	Main - Primary Clarifier & DAFT Rehabilitation	814,000		100%	-	814,000
20712	Main - Grit Pump Rebuild	60,000		100%	-	60,000
20713	Main - Elevator Control Update	400,000		100%	-	400,000
20714	Main - Flare Rebuild	50,000		100%	-	50,000
20715	Main - Concrete Pipe Chase Covers	80,000		100%	-	80,000
20716	Plant Door Replacement - Phase 1	22,200		100%	-	22,200
20717	Vehicle 163 - Ford Ranger (Replace w/ F-150)	33,300		100%	-	33,300
20718	Vehicle 162 - Ford F-250 Diesel	43,600		100%	-	43,600
20719	Vehicle 206 - Forklift TH103 (Telehandler)	103,100		100%	-	103,100
<u>LAB EQUIPMENT</u>						
20720	Lab - Samplet 4700 Replacement (2)	20,000		100%	-	20,000
<u>RECYCLING - PROJECTS</u>						
13727	North Bay Water Reuse Project	150,000		100%		150,000
18731	Coombsville Truck Fill Station	300,000		100%	-	300,000
20721	Kirkland RW Pipeline Rehabilitation	60,000		100%	-	60,000
<u>RECYCLING - EQUIPMENT</u>						
20722	Badget Meter Replacement	80,000		100%	-	80,000
19722	Vehicle 723/720 - Attachments/Implements	29,700		100%	-	29,700
<u>OTHER</u>						
13729	Development Technical Support	337,000		100%	-	337,000
TOTAL		33,873,300			9,400,120	24,473,180

#	Name	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	FY 28/29 Projected	Total 10-Year CIP
COLLECTION SYSTEM - PROJECTS												
13701	Mainline Sewer Rehab	60,000	62,100	64,300	66,500	68,900	71,300	73,800	76,300	79,000	81,800	704,000
13702	Manhole Raising	332,600	344,300	356,300	368,800	381,700	395,000	408,900	423,200	438,000	453,300	3,902,100
13703	Lateral Replacement / Rehab	110,000	113,900	117,800	122,000	126,200	130,600	135,200	140,000	144,800	149,900	1,290,400
13704	Cleanout Installation / Rehab	107,000	110,700	114,600	118,600	122,800	127,100	131,500	136,100	140,900	145,800	1,255,100
13705	I&I Monitoring Program	221,700	229,500	237,500	245,900	254,500	263,400	272,600	282,100	292,000	302,200	2,601,400
18701	I&I Smoke Testing	150,000	-	-	-	100,000	-	-	-	-	-	250,000
19727	Collection System Master Plan	1,071,200	-	-	-	-	-	-	-	-	-	1,071,200
18703	Upper Lateral Rehab - Pilot #4	166,300	-	-	-	-	-	-	-	-	-	166,300
20701	Upper Lateral Rehab - Pilot #5	5,000	182,900	-	-	-	-	-	-	-	-	187,900
	Upper Lateral Rehab - Pilot #6	-	5,000	189,300	-	-	-	-	-	-	-	194,300
20702	Manhole Rehabilitation	250,000	173,000	179,000	185,300	191,800	198,500	205,400	212,600	220,100	227,800	2,043,500
14703	Browns Valley Trunk	7,000,000	14,000,000	7,000,000	-	-	-	-	-	-	-	28,000,000
19701	66-inch Trunk Rehabilitation (Kaiser to IPS)	4,000,000	4,000,000	-	-	-	-	-	-	-	-	8,000,000
	66-inch Trunk Rehabilitation (Imola to Kaiser)	-	-	-	-	-	-	-	-	2,000,000	8,000,000	10,000,000
18706	2019 Collection System Rehabilitation	3,538,100	-	-	-	-	-	-	-	-	-	3,538,100
19703	2020 Collection System Rehabilitation	3,169,600	3,213,700	-	-	-	-	-	-	-	-	6,383,300
20703	2021 Collection System Rehabilitation	20,000	3,213,700	3,326,200	-	-	-	-	-	-	-	6,559,900
	2022 Collection System Rehabilitation	-	20,000	3,326,200	3,442,600	-	-	-	-	-	-	6,788,800
	2023 Collection System Rehabilitation	-	-	20,000	3,442,600	3,563,100	-	-	-	-	-	7,025,700
	2024 Collection System Rehabilitation	-	-	-	20,000	3,563,100	3,687,800	-	-	-	-	7,270,900
	2025 Collection System Rehabilitation	-	-	-	-	20,000	3,687,800	3,816,800	-	-	-	7,524,600
	2026 Collection System Rehabilitation	-	-	-	-	-	20,000	3,816,800	3,950,400	-	-	7,787,200
	2027 Collection System Rehabilitation	-	-	-	-	-	-	20,000	3,950,400	4,088,700	-	8,059,100
	2028 Collection System Rehabilitation	-	-	-	-	-	-	-	20,000	4,088,700	4,231,800	8,340,500
	2029 Collection System Rehabilitation	-	-	-	-	-	-	-	-	20,000	4,231,800	4,251,800
	2030 Collection System Rehabilitation	-	-	-	-	-	-	-	-	-	20,000	20,000
	North Napa Trunk Phase 1 (R60-022 to R61-006)	-	-	-	40,000	979,850	1,400,000	-	-	-	-	2,419,850
	North Napa Trunk Phase 3 (Garfield to Big Ranch)	-	-	-	-	-	40,000	667,950	691,300	-	-	1,399,250
	Milliken Trunk Rehab Project	-	-	-	-	-	-	40,000	1,711,850	1,771,750	-	3,523,600
	El Centro and N. Jefferson Trunk Rehab Project	-	-	-	-	-	-	-	40,000	1,158,450	2,000,000	3,198,450
	Basin L Trunk Rehab Project Phase 1	-	-	-	-	-	-	-	-	40,000	3,100,000	3,140,000
	North Solano Trunk Rehab Project	-	-	-	-	-	-	-	-	-	40,000	40,000
COLLECTION SYSTEM - EQUIPMENT												
16706	Locatable Mini-Camera #1 Replacement	-	-	-	-	13,600	-	-	-	-	-	13,600
18707	Locatable Mini-Camera #2 Replacement	-	-	-	-	-	-	14,600	-	-	-	14,600
20704	Locatable Mini-Camera #3 Replacement	11,900	-	-	-	-	-	-	-	15,600	-	27,500
	Locatable Mini-Camera #4 Replacement	-	-	12,700	-	-	-	-	-	-	-	12,700
17709	Eel Replacement #1	-	-	-	-	-	7,100	-	-	-	-	7,100
20705	Eel Replacement #2	5,900	-	-	-	-	-	-	-	7,800	-	13,700
	Eel Replacement #3	-	-	-	6,600	-	-	-	-	-	-	6,600
	Eel Replacement #4	-	-	-	-	-	-	7,300	-	-	-	7,300
13711	Vehicle 711 - Kubota	-	-	-	-	53,400	-	-	-	-	-	53,400
13712	Vehicle 173 - Plugup Truck - Secondary	-	-	73,800	-	-	-	-	-	-	-	73,800
	Vehicle 185 - Plugup Truck - Primary	-	-	-	76,400	-	-	-	-	-	-	76,400
19704	Vehicle 180 - Ford F-150 - USA truck	-	-	-	-	-	-	-	-	-	49,900	49,900
	Vehicle 155 - Ford Ranger	-	-	-	-	-	43,500	-	-	-	-	43,500
	Vehicle 164 - Ford F-150 - Manager Truck	-	-	-	-	-	48,000	-	-	-	-	48,000
	Vehicle 15 - Water Trailer	-	-	-	-	12,900	-	-	-	-	-	12,900
19729	Vehicle 166 - Ford F-350	-	-	-	-	-	-	-	-	-	37,800	37,800
	Vehicle 706 - 410 Backhoe	-	-	-	-	175,900	-	-	-	-	-	175,900
18709	Vehicle 504 - TV Truck	-	-	-	-	614,600	-	-	-	380,900	-	995,500
	Vehicle 100 - Backhoe Trailer	-	25,300	-	-	-	-	-	-	-	-	25,300
	Vehicle 512 - Rodder	-	-	-	180,000	-	-	-	-	-	-	180,000

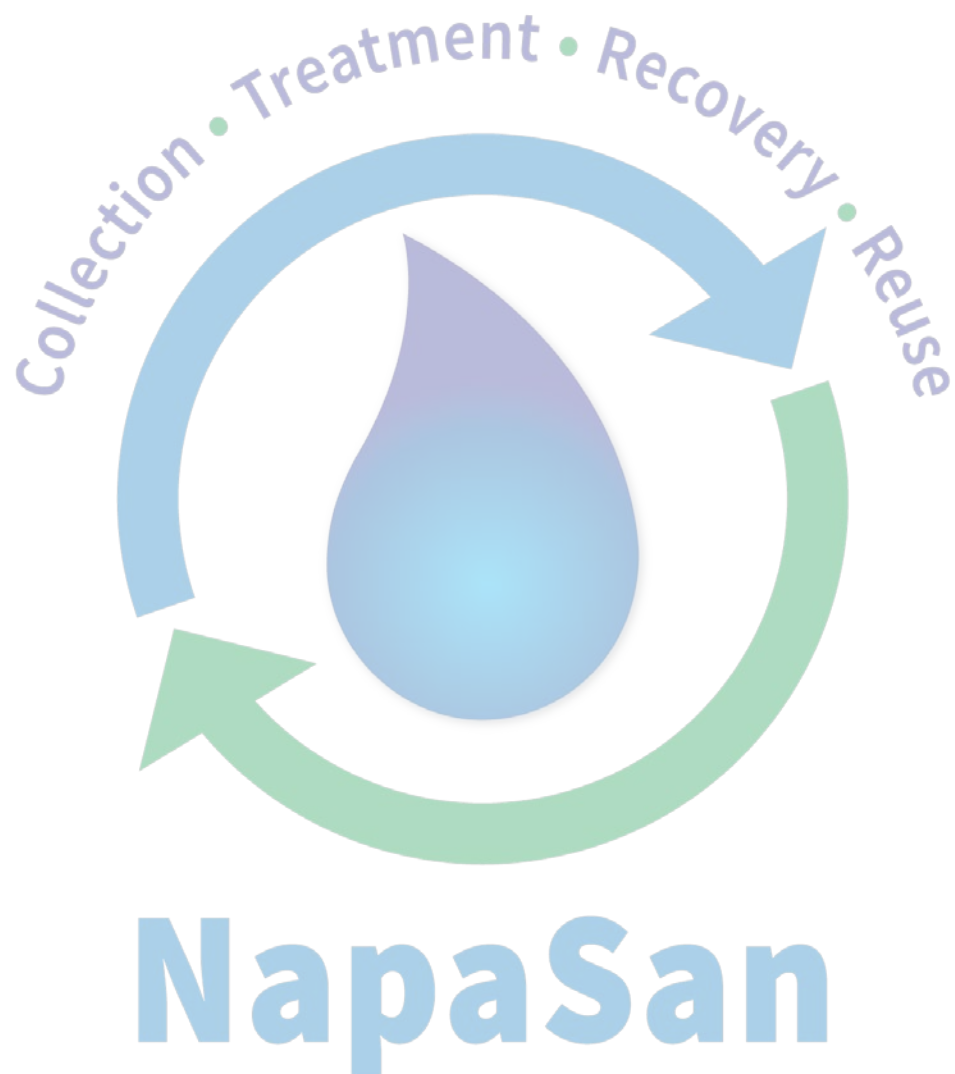
#	Name	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected	FY 26/27 Projected	FY 27/28 Projected	FY 28/29 Projected	Total 10-Year CIP
	Vehicle 18 - Cement Trailer	-	-	-	-	-	41,500	-	-	-	-	41,500
	Vehicle 16 - 18ft Trailer	-	-	-	-	11,200	-	-	-	-	-	11,200
	Vehicle 205 - Forklift	-	43,200	-	-	-	-	-	-	-	-	43,200
	Vehicle 179 - Mini-Dump	-	-	-	-	-	-	72,200	-	-	-	72,200
	Vehicle 182 - Mini-Dump	-	-	-	-	-	-	72,200	-	-	-	72,200
	Vehicle 514 - 10 Yard Dump	-	-	-	-	-	-	252,600	-	-	-	252,600
	Vehicle 528 - Vacuum Truck	-	626,400	-	-	-	-	-	-	797,000	-	1,423,400
	Vehicle 529 - Vacuum Truck	-	-	-	-	-	656,500	-	-	-	-	656,500
	Vehicle 183 - Ford F-550 Repair Truck	-	-	-	55,300	-	-	-	-	-	-	55,300
	Vehicle 20 - Bypass Trailer	-	-	-	-	-	-	-	-	9,800	-	9,800
COLLECTION SYSTEM - LIFT STATIONS												
17711	West Napa PS - Replacement	5,500,000	5,500,000	-	-	-	-	-	-	-	-	11,000,000
	River Park PS Improvements	-	-	-	75,000	155,200	-	-	-	-	-	230,200
	Pump - River Park #1 - 10 HP Rebuild	-	19,300	-	-	-	-	-	-	-	-	19,300
	Pump - River Park #2 - 10 HP Rebuild	-	-	20,000	-	-	-	-	-	-	-	20,000
TREATMENT - PROJECTS												
20706	WWTP Master Plan	5,000	1,235,400	629,800	-	-	-	-	-	-	-	1,870,200
	WWTP MP - Pond Imp - Ph 2 - Trans Struct 3 to 4	-	5,000	292,000	-	-	-	-	-	-	-	297,000
	WWTP MP - Pond Imp - Ph 2 - Trans Struct 2 to 4	-	5,000	292,000	-	-	-	-	-	-	-	297,000
	Pond Labyrinth Abandonment	-	-	40,000	-	-	-	-	-	-	-	40,000
	WWTP MP - Second Digester	-	-	-	-	-	795,800	2,387,400	15,915,800	-	-	19,099,000
	WWTP MP - Aeration Basin Expansion	-	-	-	-	-	293,200	879,600	5,863,700	-	-	7,036,500
13745	Pond 1 Dredge	2,100,000	-	-	1,050,000	1,000,000	-	-	-	-	-	4,150,000
20707	Pond Levee Repair	100,000	500,000	350,000	-	-	-	-	-	-	-	950,000
	Siloxane Filter - Venturi	-	-	-	245,800	-	-	-	-	-	-	245,800
	Headworks - Biofilter	-	-	-	-	267,800	-	-	-	-	-	267,800
18740	2019 Treatment Plant Improvements Project	600,000	-	-	-	-	-	-	-	-	-	600,000
20708	2020 Treatment Plant Improvements Project	1,500,000	600,000	-	-	-	-	-	-	-	-	2,100,000
	2022 Treatment Plant Project (MP project)	-	20,000	1,721,300	300,000	-	-	-	-	-	-	2,041,300
	2023 Treatment Plant Project (MP project)	-	-	20,000	593,800	614,600	-	-	-	-	-	1,228,400
	2024 Treatment Plant Project (MP project)	-	-	-	20,000	614,600	636,100	-	-	-	-	1,270,700
	2025 Treatment Plant Project (MP project)	-	-	-	-	20,000	1,000,000	716,800	-	-	-	1,736,800
	2026 Treatment Plant Project (MP project)	-	-	-	-	-	20,000	1,975,200	2,044,300	-	-	4,039,500
	2027 Treatment Plant Project (MP project)	-	-	-	-	-	-	20,000	2,044,300	2,115,900	-	4,180,200
	2028 Treatment Plant Project (MP project)	-	-	-	-	-	-	-	20,000	2,115,900	2,700,000	4,835,900
	2029 Treatment Plant Project (MP project)	-	-	-	-	-	-	-	-	20,000	2,700,000	2,720,000
TREATMENT - EQUIPMENT												
17726	Headworks Equipment Replacement	1,000,000	-	-	-	-	-	-	-	-	-	1,000,000
13743	Residual Analyzers (Deox) Replacements	-	-	-	79,000	-	-	-	-	-	-	79,000
18710	3W Pipeline - Soscol PS to Plant - Rehab	-	-	-	39,500	-	-	-	-	-	-	39,500
	Turbidimeters (9) Tertiary Replacements	-	-	-	-	-	45,800	-	-	-	-	45,800
	SBS Flash Mixers	-	-	-	98,300	-	-	-	-	-	-	98,300
	Main - Rotork Actuator Replacement	-	101,800	-	-	-	-	-	-	-	-	101,800
	Main - Rotork Actuator Replacement	-	-	-	109,000	-	-	-	-	-	-	109,000
	Main - Rotork Actuator Replacement	-	-	-	-	-	116,800	-	-	-	-	116,800
18717	Main - Septage Card Reader Replacement	-	-	-	-	-	49,200	-	-	-	-	49,200
	Main - Dewatering Polymer Injection Mixers - Relocation	-	34,400	-	-	-	-	-	-	-	-	34,400
18720	Main - Neuros Blowers Rebuild	-	-	-	73,800	76,300	-	-	-	-	-	150,100
	Main - Neuros Blowers Replacement	-	-	-	-	-	-	-	-	-	576,800	576,800
	Main - New Small "Jockey" Blower	-	-	-	-	114,800	-	-	-	-	-	114,800
18722	Main - FOG Station Water Heater	20,000	-	-	-	-	-	-	-	-	-	20,000
19715	Main - ARV Replacement	31,100	-	-	-	-	-	-	-	-	-	31,100
	Main - AB Diffuser Disk Replacement	-	-	-	-	95,400	-	-	-	-	-	95,400
20709	Main - AB Caustic Pumps & Enclosure	85,700	-	-	-	-	-	-	-	-	-	85,700
	Pump - IPS 110 Wet Well 1 - 365 HP Rebuild	-	-	-	59,400	-	-	-	-	-	-	59,400

#	Name	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	FY 28/29 Projected	Total 10-Year CIP
	Pump - IPS 120 Wet Well 1 - 365 HP Rebuild	-	-	-	59,400	-	-	-	-	-	-	59,400
	Pump - IPS 140 Wet Well 1 - 135 HP Rebuild	-	-	-	-	61,500	-	-	-	-	-	61,500
	Pump - IPS 220 Wet Well 2 - 365 HP Rebuild	-	-	-	-	61,500	-	-	-	-	-	61,500
	Pump - IPS 230 Wet Well 2 - 135 HP Rebuild	-	-	-	-	-	63,600	-	-	-	-	63,600
	Pump - IPS 240 Wet Well 2 - 135 HP Rebuild	-	-	-	-	-	63,600	-	-	-	-	63,600
	Pump - IPS 110 Wet Well 1 - 365 HP VFD	-	-	-	-	-	-	-	-	70,500	-	70,500
	Pump - IPS 120 Wet Well 1 - 365 HP VFD	-	-	-	-	-	-	-	-	70,500	-	70,500
	Pump - IPS 140 Wet Well 1 - 135 HP VFD	-	-	-	-	-	-	-	-	-	51,100	51,100
	Pump - IPS 220 Wet Well 2 - 365 HP VFD	-	-	-	-	-	-	-	-	-	73,000	73,000
	Pump - Pond 4 PS #1 - 75 HP Rebuild	-	-	-	45,900	-	-	-	-	-	-	45,900
	Pump - Pond 4 PS #2 - 75 HP Rebuild	-	-	-	-	47,500	-	-	-	-	-	47,500
19716	Pump - Pond 4 PS #3 - 75 HP Rebuild	-	-	-	-	-	-	50,900	-	-	-	50,900
	Pump - Pond 4 PS #1 - 75 HP VFD	-	-	-	-	-	-	-	-	49,400	-	49,400
	Pump - Pond 4 PS #2 - 75 HP VFD	-	-	-	-	-	-	-	-	49,400	-	49,400
	Pump - Pond 4 PS #3 - 75 HP VFD	-	-	-	-	-	-	-	-	49,400	-	49,400
	Pump - Secondary Effluent #1 - 100 HP Rebuild	-	-	-	47,500	-	-	-	-	-	-	47,500
	Pump - Secondary Effluent #2 - 100 HP Rebuild	-	-	-	-	49,200	-	-	-	-	-	49,200
	Pump - Secondary Effluent #3 - 100 HP Rebuild	-	-	-	-	-	50,900	-	-	-	-	50,900
	Pump - Secondary Effluent #1 - 100 HP VFD	-	-	-	-	-	-	-	-	-	49,400	49,400
	Pump - Secondary Effluent #2 - 100 HP VFD	-	-	-	-	-	-	-	-	-	49,400	49,400
	Pump - Secondary Effluent #3 - 100 HP VFD	-	-	-	-	-	-	-	-	-	49,400	49,400
	Pump - CCB Svc Water #1 - 200 HP Rebuild	-	-	65,000	-	-	-	-	-	-	-	65,000
	Pump - CCB Svc Water #2 - 200 HP Rebuild	-	-	-	67,300	-	-	-	-	-	-	67,300
	Pump - CCB Svc Water #1 - 200 HP VFD	-	-	-	-	-	-	-	-	-	70,500	70,500
	Pump - CCB Svc Water #2 - 200 HP VFD	-	-	-	-	-	-	-	-	-	70,500	70,500
	Pump - CCB Svc Water #3 - 200 HP VFD	-	-	-	-	-	-	-	-	-	70,500	70,500
	PUMP - DAF Recycle Pump Rebuild	-	-	-	23,800	24,600	-	-	27,300	28,200	-	103,900
	Pump - Pond Area Drain Sump #1 - 20 HP Rebuild	-	-	-	-	-	20,000	-	-	-	-	20,000
	Pump - Pond Area Drain Sump #2 - 20 HP Rebuild	-	-	-	-	-	20,000	-	-	-	-	20,000
20710	Main - Septage Pump & Motor Replacement	28,700	-	-	-	-	-	-	-	-	-	28,700
20711	Main - Marsh-to-Pond Pump Station Upgrade	88,700	-	-	-	-	-	-	-	-	-	88,700
	MLE Recirculation Pumps (2) - Nutrient Opt	-	-	-	-	272,600	-	-	-	-	-	272,600
15707	Main - DAFT Overflow Pumps (2) Cornell	11,900	12,300	-	-	-	-	-	-	-	-	24,200
	Solids Handling Building - Loading Dock Mod	-	-	-	59,400	-	-	-	-	-	-	59,400
	WWTP Site Paving	-	-	-	500,000	-	-	-	-	-	-	500,000
16712	Main - Primary Clarifier & DAFT Rehab	814,000	700,000	-	-	-	-	-	-	-	-	1,514,000
18718	Main - Secondary Clarifier Mech/Struct Rehabilitation	-	83,200	86,100	-	-	-	-	-	-	-	169,300
	Main - Flocc Clarifier Rehabilitation	-	-	-	-	-	580,150	600,450	-	-	-	1,180,600
19711	Main - CCB Coating E&W Channels & valve replacement	-	-	5,000	450,000	550,000	-	-	-	-	-	1,005,000
20712	Main - Grit Pump Rebuild	60,000	-	-	-	-	-	-	-	-	-	60,000
20713	Main - Elevator Control Update	400,000	-	-	-	-	-	-	-	-	-	400,000
20714	Main - Flare Rebuild	50,000	-	-	-	-	-	-	-	-	-	50,000
20715	Main - Concrete Pipe Chase Covers	80,000	-	-	-	-	-	-	-	-	-	80,000
	Main - Digester Roof Grating Replacement	-	110,900	-	-	-	-	-	-	-	-	110,900
	Roof Replacement - Filter Support	-	66,600	-	-	-	-	-	-	-	-	66,600
	Roof Replacement - Chemical Storage	-	-	53,400	-	-	-	-	-	-	-	53,400
	Roof Replacement - Secondary Effluent PS	-	-	-	9,800	-	-	-	-	-	-	9,800
	Roof Replacement - Headworks	-	-	-	-	89,100	-	-	-	-	-	89,100
20716	Plant Door Replacement - Phase 1	22,200	-	-	-	-	-	-	-	-	-	22,200
	Plant Door Replacement - Phase 2	-	23,000	-	-	-	-	-	-	-	-	23,000
	Plant Door Replacement - Phase 3	-	-	23,800	-	-	-	-	-	-	-	23,800
	Plant Door Replacement - Phase 4	-	-	-	24,600	-	-	-	-	-	-	24,600
	Plant Door Replacement - Phase 5	-	-	-	-	25,400	-	-	-	-	-	25,400
19709	Tank - Polymer Tanks (3) replacement	-	-	-	-	229,500	-	-	-	-	-	229,500
	Tank - Sodium Bisulfite Tank #2	-	-	-	-	147,500	-	-	-	-	-	147,500

#	Name	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	FY 28/29 Projected	Total 10-Year CIP
	Tank - P4PS PAC Tank (1) replacement	-	-	-	-	-	63,600	-	-	-	-	63,600
	Tank - Ferric Tank (1) replacement	-	-	-	-	-	63,600	-	-	-	-	63,600
	Tank - Bulk Polymer Tank (1) replacement	-	-	-	-	-	-	65,800	-	-	-	65,800
	Tank - Sodium Hydroxide Tank (1) replacement	-	-	-	-	-	-	65,800	-	-	-	65,800
13722	Vehicle 132 - Ford F-150	-	-	-	-	-	35,600	-	-	-	-	35,600
20717	Vehicle 163 - Ford Ranger (Replace w/ F-150)	33,300	-	-	-	-	-	-	-	-	-	33,300
20718	Vehicle 162 - Ford F-250 Diesel	43,600	-	-	-	-	-	-	-	-	59,500	103,100
	Vehicle 165 - Ford F-350	-	-	-	43,900	-	-	-	-	-	-	43,900
	Vehicle 178 - Ford F-350 SRW	-	-	38,000	-	-	-	-	-	-	-	38,000
	Vehicle 158 - Ford F-250 Diesel	-	-	40,700	-	-	-	-	-	-	-	40,700
	Vehicle 175 - Escape Hybrid	-	26,400	-	-	-	-	-	-	-	-	26,400
	Vehicle 28-39 - Electric Truck	-	17,700	-	-	-	-	-	-	-	-	17,700
	Vehicle 513 - 10 Yard Dump	-	-	178,100	-	-	-	-	-	-	-	178,100
20719	Vehicle 206 - Forklift TH103 (Telehandler)	103,100	-	-	-	-	-	-	-	-	-	103,100
	Vehicle 184 - Ford F-550 EM Truck	-	-	-	55,300	-	-	-	-	-	-	55,300
	Vehicle 131 - Ford F-250	-	-	-	43,600	-	-	-	-	-	-	43,600
	Vehicle 302 - Boat	-	-	-	20,700	-	-	-	-	-	-	20,700
	Vehicle 40 - Cushman 1200X	-	-	-	12,700	-	-	-	-	-	-	12,700
	Vehicle 41 - Cushman 1200X	-	-	-	12,700	-	-	-	-	-	-	12,700
	Vehicle 42 - Cushman 1200X	-	-	-	12,700	-	-	-	-	-	-	12,700
	Vehicle 28-30 - Western Golf Cart	-	8,900	-	-	-	-	-	-	-	-	8,900
	Vehicle 28-31 - Western Golf Cart	-	8,900	-	-	-	-	-	-	-	-	8,900
	Vehicle 28-32 - Western Golf Cart	-	8,900	-	-	-	-	-	-	-	-	8,900
LAB - EQUIPMENT												
	Lab - Upgrade Project	-	-	-	25,000	150,000	529,000	-	-	-	-	704,000
	Lab - Lab Grade Dishwasher Replacement #1	-	-	-	-	-	29,600	-	-	-	-	29,600
	Lab - Refrigerator/Freezer (2)	-	-	13,100	-	-	-	-	-	-	-	13,100
15710	Lab - Amperometric Titrator Replacement	-	6,100	-	-	-	-	-	-	-	-	6,100
	Lab - Bioassay System Replacement	-	-	-	20,000	-	-	-	-	-	-	20,000
14731	Lab - Balance Replacement	-	-	-	-	-	-	22,700	-	-	-	22,700
	Lab - Autoclave Replacement	-	34,400	-	-	-	-	-	-	-	-	34,400
	Lab - BOD Incubator Replacement	-	-	9,300	-	-	-	-	-	-	-	9,300
	Lab - BOD System Replacement	-	51,600	-	-	-	-	-	-	-	-	51,600
20720	Lab - Sampler 4700 Replacement (2)	20,000	-	-	-	-	-	-	-	-	-	20,000
	Lab - Sampler 4700 Replacement	-	10,400	-	-	-	-	-	-	-	-	10,400
19728	Lab - Sampler 5800 Replacement	-	-	-	-	-	-	-	-	-	13,600	13,600
	Lab - Sampler 5800 Replacement	-	-	10,700	-	-	-	-	-	-	-	10,700
	Lab - Sampler 5800 Replacement	-	-	-	11,100	-	-	-	-	-	-	11,100
	Lab - Centrifuge Replacement	-	-	-	7,500	-	-	-	-	-	-	7,500
16711	Lab - Waterbath	-	-	-	-	-	-	7,500	-	-	-	7,500
	Lab - FIA IC Unit	-	-	-	118,500	-	-	-	-	-	-	118,500
17721	Lab - Chlorophyll A Analyzer - Pond Water	-	-	-	-	-	-	-	8,700	-	-	8,700
	Lab - LIMS Software Replacement	-	-	-	-	-	-	263,400	-	-	-	263,400
SCADA												
18729	SCADA MP Project #1 - Network Monitoring	-	172,100	-	-	-	-	-	-	-	-	172,100
	SCADA MP Project #2	-	-	200,000	-	-	-	-	-	-	-	200,000
	SCADA MP Project #3	-	-	-	200,000	-	-	-	-	-	-	200,000
	SCADA Backup System	-	-	-	141,700	-	-	-	-	-	-	141,700
	SCADA Server Replacement	-	114,800	-	-	-	-	-	-	-	-	114,800
	Plant Panel - Upgrade	-	57,400	-	-	-	-	-	-	-	-	57,400
RECYCLING - PROJECTS												
13727	North Bay Water Reuse Project	150,000	150,000	150,000	150,000	150,000	150,000	-	-	-	-	900,000
	NBWRA - 3rd Reservoir	-	-	-	58,000	290,000	2,552,000	-	-	-	-	2,900,000
	NBWRA - RW Expansion Ph 2	-	-	-	44,000	220,000	1,936,000	-	-	-	-	2,200,000
18731	Coombsville Truck Fill Station	300,000	-	-	-	-	-	-	-	-	-	300,000

#	Name	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	FY 28/29 Projected	Total 10-Year CIP
19719	24" Valve Replacement on Kirkland Pipeline	-	-	60,000	-	-	-	-	-	-	-	60,000
20721	Kirkland Recycled Water Pipeline Rehabilitaton	60,000	-	-	-	300,000	846,400	-	-	-	-	1,206,400
RECYCLING - EQUIPMENT												
20722	Badger Meter Replacement	80,000	-	-	-	-	-	-	-	-	-	80,000
19720	Jameson PS VFD	-	-	-	-	-	-	-	-	-	97,100	97,100
	Jameson Sprinkler Replacement - Field A	-	-	-	98,300	-	-	-	-	-	-	98,300
	Jameson Sprinkler Replacement - Field B	-	-	-	-	101,800	-	-	-	-	-	101,800
	Jameson Sprinkler Replacement - Field C	-	-	-	-	-	105,300	-	-	-	-	105,300
	Jameson Sprinkler Replacement - Field D	-	-	-	-	-	-	109,000	-	-	-	109,000
	Jameson Sprinkler Replacement - Field E	-	-	-	-	-	-	-	112,800	-	-	112,800
19721	Pump - Soscol Recycle #1 - 600 HP Rehab/Replace	-	-	-	-	178,200	-	-	-	-	211,600	389,800
	Pump - Soscol Recycle #2 - 600 HP Rehab/Replace	-	160,700	-	-	-	-	190,800	-	-	-	351,500
	Pump - Soscol Recycle #3 - 600 HP Rehab/Replace	-	-	-	172,100	-	-	-	-	204,400	-	376,500
	Pump - Recycle Jockey - 125 HP Rehab/Replace	-	-	-	-	-	36,900	-	-	-	-	36,900
	Pump - Soscol Recycle #1 - 600 HP VFD	-	-	-	-	-	136,300	-	-	-	-	136,300
	Pump - Soscol Recycle #2 - 600 HP VFD	-	-	-	-	-	136,300	-	-	-	-	136,300
	Pump - Soscol Recycle #3 - 600 HP VFD	-	-	-	-	-	136,300	-	-	-	-	136,300
	Pump - Recycle Jockey Pump - 125 HP VFD	-	-	-	-	-	136,300	-	-	-	-	136,300
	Pump - BPS-1 Recycle Pump #1 - 75 HP Rebuild	-	-	-	-	73,800	-	-	-	-	-	73,800
	Pump - BPS-1 Recycle Pump #2 - 75 HP Rebuild	-	-	-	-	-	76,300	-	-	-	-	76,300
	Pump - BPS-1 Recycle Pump #3 - 75 HP Rebuild	-	-	-	-	-	-	79,000	-	-	-	79,000
	Pump - BPS-1 Recycle Pump #1 - 75 HP VFD	-	-	-	-	-	-	-	-	70,500	-	70,500
	Pump - BPS-1 Recycle Pump #2 - 75 HP VFD	-	-	-	-	-	-	-	-	70,500	-	70,500
	Pump - BPS-1 Recycle Pump #3 - 75 HP VFD	-	-	-	-	-	-	-	-	70,500	-	70,500
	Pump - Jameson Pump #1 (no VFD)	-	-	-	-	-	-	84,600	-	-	-	84,600
	Pump - Jameson Pump #2 (no VFD)	-	-	-	-	-	81,800	-	-	-	-	81,800
	Pull Flail Chopper Replacement	-	-	-	-	-	-	-	43,600	-	-	43,600
	CT-5 Composter (Ag-Bag) Replacement	-	-	-	-	-	-	-	107,400	-	-	107,400
17733	Vehicle 172 - Ford F-150	-	-	-	-	-	43,500	-	-	-	-	43,500
14725	Vehicle 713 - Yanmar Tractor	-	-	-	-	104,400	-	-	-	-	-	104,400
19722	Vehicle 723/720 - Attachments/Implements	29,700	-	-	-	-	-	-	-	-	-	29,700
	Vehicle 171 - Ford F-350	-	44,900	-	-	-	-	-	-	-	-	44,900
	Vehicle 174 - Ford F-350 SB	-	75,700	-	-	-	-	-	-	-	-	75,700
	Vehicle 311 - Kubota	-	23,900	-	-	-	-	-	-	-	-	23,900
	Vehicle 312 - Kubota	-	23,900	-	-	-	-	-	-	-	-	23,900
	Vehicle 721 - John Deer 8430T Tractor	-	-	-	357,800	-	-	-	-	-	-	357,800
	Vehicle 17 - 18ft Trailer	-	-	-	-	-	-	11,000	-	-	-	11,000
	Vehicle 722 - John Deer 444K Loader	-	-	-	-	-	-	-	238,500	-	-	238,500
	Vehicle 720 - KubotaTractor Loader	-	-	-	-	-	74,500	-	-	-	-	74,500
	Vehicle 013 - Pipe Dolly	-	-	16,300	-	-	-	-	-	-	-	16,300
	Vehicle xxx - Water Trailer	-	-	44,300	-	-	-	-	-	-	-	44,300
OTHER												
13729	Development Technical Support	337,000	348,800	361,000	373,600	386,700	400,300	414,300	428,800	-	-	3,050,500
	Solar Purchase Buy Out	-	-	-	1,950,000	-	-	-	-	-	-	1,950,000
18732	Box Culvert - Fugundes Emergency Access	-	-	-	-	-	100,000	1,185,100	-	-	-	1,285,100
	Carpet Replacement - Admin/Collection Bldgs	-	-	-	-	35,600	-	-	-	-	-	35,600
	HVAC Replacement - Admin/Collection Bldgs	-	-	-	-	-	-	-	-	102,200	-	102,200
19724	Fence Repair - District Wide	-	-	-	28,700	-	-	31,800	-	-	35,300	95,800
14728	Vehicle 161 - Ford C-Max	-	-	-	-	30,500	-	-	-	-	-	30,500
	Vehicle 176 - Ford Escape Hybrid	-	26,400	-	-	-	-	-	-	-	-	26,400
	Vehicle 177 - Ford Escape Hybrid	-	-	27,300	-	-	-	-	-	-	-	27,300
14729	Vehicle 133 - Ford F-150	-	-	-	-	42,000	-	-	-	-	-	42,000
	Vehicle 130 - Ford F150	-	-	-	40,600	-	-	-	-	-	-	40,600
	PROJECT TOTALS	33,873,300	36,752,500	19,764,900	16,400,400	16,833,650	22,242,850	19,169,000	38,489,450	20,780,800	29,949,800	254,256,650

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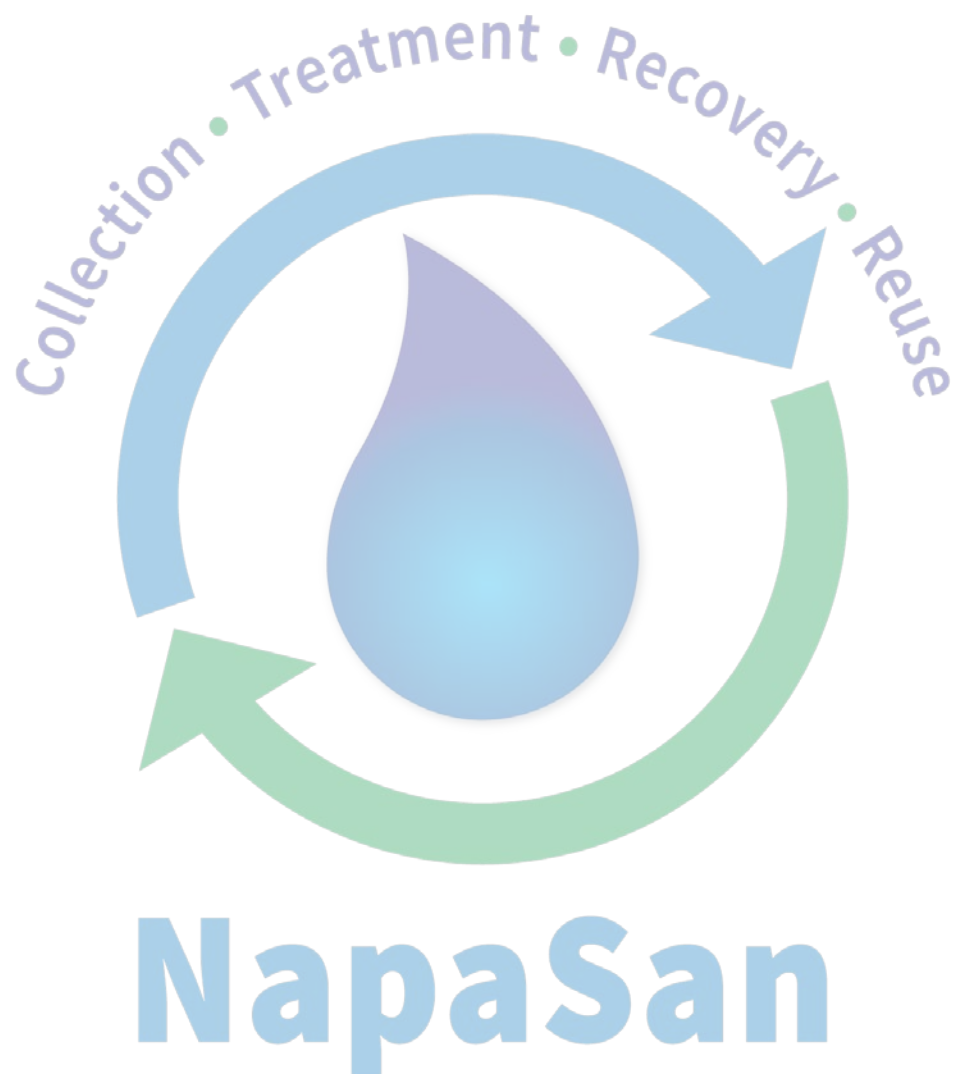


Ten-Year Financial Plan



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 Cash Flow 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/outflows.

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 18/19	\$676.38 per EDU
FY 19/20	\$710.20 per EDU
FY 20/21	\$738.62 per EDU
FY 21/22	\$760.78 per EDU
FY 22/23	\$783.60 per EDU
FY 23/24	\$807.10 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 2019.

The forecast assumes that NapaSan sell 2,035 acre feet of recycled water in FY 2019/20, with increasing sales in subsequent years until a total of 2,300 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 5.0% in 2020, and 4.8% annually starting in 2021, which includes an increase for operating expenses (by CPI) and a 2.0% increase for funding the recycled water renewal and replacement reserve.

Calendar Year	Peak RW Rate
2019	\$1.78 per 1,000 gallons
2020	\$1.87 per 1,000 gallons
2021	\$1.96 per 1,000 gallons
2022	\$2.06 per 1,000 gallons
2023	\$2.16 per 1,000 gallons
2023	\$2.27 per 1,000 gallons

Capacity Charges

Annually, the capacity charge rate increases with the Engineering News Record's Construction Cost Index (February-to-February), an inflation measure for capital infrastructure costs. Capacity charges increased 3.0% for FY 2019/20 to \$9,806 per Equivalent Dwelling Unit (EDU). Future year rates are estimated to increase 3.0% 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 assumed for the remaining ten-year forecast.

Fiscal Year	Forecasted EDU
FY 19/20	528 EDU
FY 20/21	500 EDU
FY 21/22	425 EDU
FY 22/23	350 EDU
FY 23/24	300 EDU

Leases and Rents

Lease revenues include the existing lease with Eagle Vines Golf Club and the continuation of the Somky lease. 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 budget for 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% for 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 annually, 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 increase with inflation for future years. For the Ten-Year Financial Plan, salaries and benefits combined are projected to increase 2.8% 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 \$0.5 million 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 full 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. Several of these plans are set to be updated during the ten-year planning period.

When all of the recommendations from the current 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.

The Ten-Year Financial Plan includes five new debt issuances over the planning period for capital projects. Details about these planned debts can be found in the “Debt and Other Long Term Liabilities” section in this budget document. The loan proceeds and the associated debt service for these issuances have been included in the Ten-Year Financial Plan.

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.

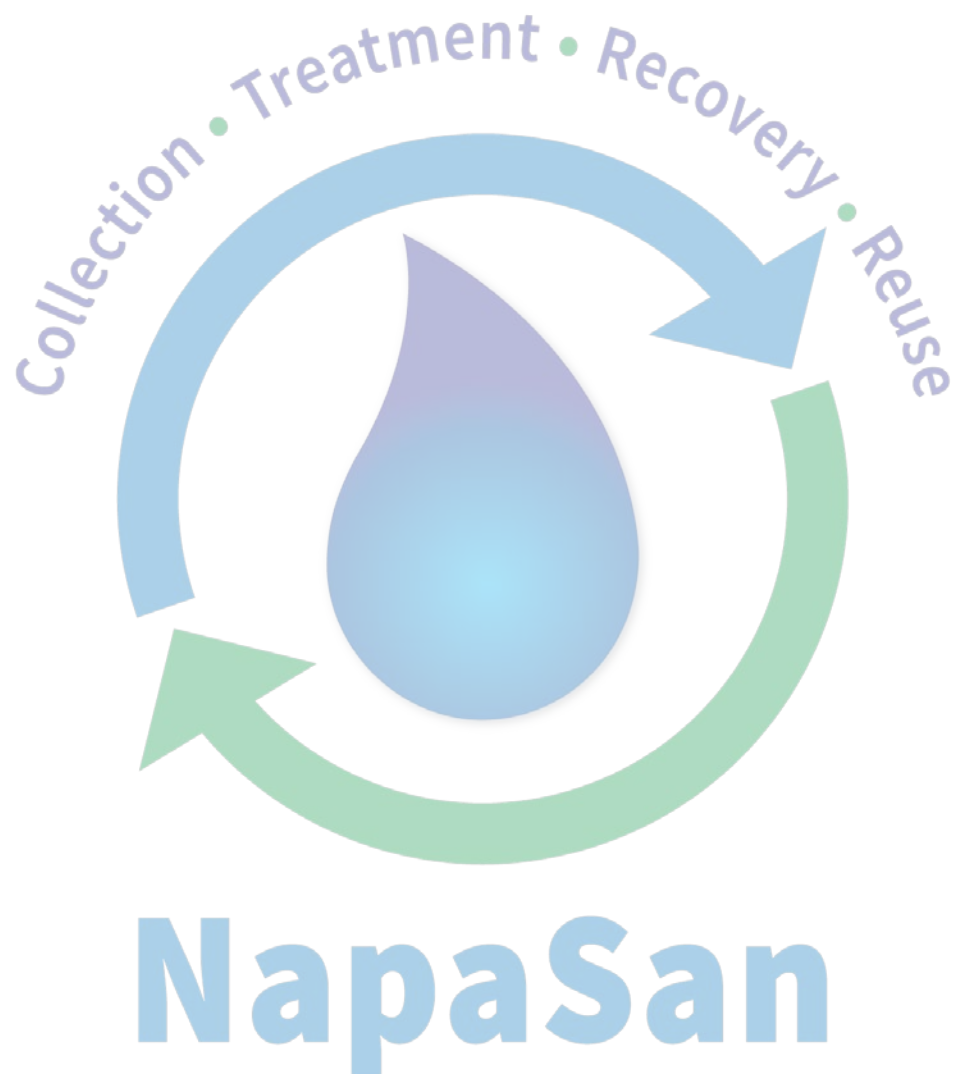
10-Year Financial/Cash Flow Forecast

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23	Projected 2023/24
Beginning Fund Equity	\$22,447,700	\$20,089,400	\$20,324,700	\$23,444,500	\$23,824,500
Operating revenue					
Sewer service charges	29,856,000	31,440,000	32,764,000	34,080,000	35,385,000
Capacity Charges	5,178,000	5,050,000	4,421,000	3,750,000	3,311,000
Recycled Water Sales	1,064,000	1,124,000	1,229,000	1,373,000	1,439,000
Hauler Fees	191,000	197,000	203,000	209,000	215,000
Development Fees	102,500	105,100	107,700	110,400	113,200
Miscellaneous Revenue	<u>90,000</u>	<u>92,000</u>	<u>94,000</u>	<u>96,000</u>	<u>98,000</u>
Total Operating Revenue	36,481,500	38,008,100	38,818,700	39,618,400	40,561,200
Non-Operating Revenue					
Interest	452,000	452,000	457,000	528,000	536,000
Rents and leases	126,000	129,000	433,000	736,000	739,000
From Other Governments	0	0	0	25,500	127,500
Loan / Bond Proceeds	<u>15,416,600</u>	<u>20,249,900</u>	<u>5,833,300</u>	<u>76,500</u>	<u>382,500</u>
Total - Non-Operating Revenue	15,994,600	20,830,900	6,723,300	1,366,000	1,785,000
Total Revenue	52,476,100	58,839,000	45,542,000	40,984,400	42,346,200
Operating Expense					
Salaries and benefits	10,258,600	10,615,400	10,951,900	11,302,000	11,605,900
Services and supplies	6,066,800	6,606,000	6,261,000	6,436,000	6,895,700
Taxes and Other	41,800	42,600	33,500	34,200	34,900
Debt Service - Existing	4,593,900	4,587,200	4,590,900	4,579,800	4,523,500
Debt Service - New/Projected	<u>0</u>	<u>0</u>	<u>820,000</u>	<u>1,852,000</u>	<u>1,852,000</u>
Total Operating Expense	20,961,100	21,851,200	22,657,300	24,204,000	24,912,000
Capital Projects	33,873,300	36,752,500	19,764,900	16,400,400	16,833,650
Total - All Expenses	54,834,400	58,603,700	42,422,200	40,604,400	41,745,650
Net revenue (deficit)	(2,358,300)	235,300	3,119,800	380,000	600,550
Ending combined fund equity	\$20,089,400	\$20,324,700	\$23,444,500	\$23,824,500	\$24,425,050
RW Repair & Replacement Reserve	106,000	218,000	341,000	478,000	622,000
Bond Reserve	1,032,000	1,032,000	1,032,000	1,382,000	1,382,000
Operating Reserve	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Cash Flow Reserve	12,500,000	13,000,000	14,000,000	14,800,000	15,700,000
Fund Equity Available for Use	\$451,400	\$74,700	\$2,071,500	\$1,164,500	\$721,050

10-Year Financial/Cash Flow Forecast

	Projected 2024/25	Projected 2025/26	Projected 2026/27	Projected 2027/28	Projected 2028/29
Beginning Fund Equity	\$24,425,100	\$25,778,500	\$26,922,200	\$28,416,400	\$29,053,900
Operating revenue					
Sewer service charges	36,696,000	38,053,000	39,460,000	40,916,000	42,424,000
Capacity Charges	3,410,000	3,512,000	3,618,000	3,726,000	3,838,000
Recycled Water Sales	1,513,000	1,586,000	1,666,000	1,753,000	1,839,000
Hauler Fees	221,000	228,000	235,000	242,000	249,000
Development Fees	116,000	118,900	121,900	124,900	128,000
Miscellaneous Revenue	<u>100,000</u>	<u>103,000</u>	<u>106,000</u>	<u>109,000</u>	<u>112,000</u>
Total Operating Revenue	42,056,000	43,600,900	45,206,900	46,870,900	48,590,000
Non-Operating Revenue					
Interest	550,000	580,000	606,000	639,000	654,000
Rents and leases	743,000	746,000	750,000	754,000	758,000
From Other Governments	1,122,000	0	0	0	0
Loan / Bond Proceeds	<u>4,455,000</u>	<u>3,267,000</u>	<u>21,779,500</u>	<u>2,000,000</u>	<u>8,000,000</u>
Total - Non-Operating Revenue	6,870,000	4,593,000	23,135,500	3,393,000	9,412,000
Total Revenue	48,926,000	48,193,900	68,342,400	50,263,900	58,002,000
Operating Expense					
Salaries and benefits	11,921,400	12,249,000	12,589,200	12,942,600	13,309,900
Services and supplies	6,644,000	6,777,000	6,913,000	7,051,000	7,192,000
Taxes and Other	35,600	36,300	37,000	37,700	38,500
Debt Service - Existing	4,526,800	4,516,900	4,517,600	4,512,300	2,756,400
Debt Service - New/Projected	<u>2,202,000</u>	<u>4,302,000</u>	<u>4,302,000</u>	<u>4,302,000</u>	<u>5,352,000</u>
Total Operating Expense	25,329,800	27,881,200	28,358,800	28,845,600	28,648,800
Capital Projects	22,242,850	19,169,000	38,489,450	20,780,800	29,949,800
Total - All Expenses	47,572,650	47,050,200	66,848,250	49,626,400	58,598,600
Net revenue (deficit)	1,353,350	1,143,700	1,494,150	637,500	(596,600)
Ending combined fund equity	\$25,778,450	\$26,922,200	\$28,416,350	\$29,053,900	\$28,457,300
RW Repair & Replacement Reserve	773,000	932,000	1,099,000	1,274,000	1,458,000
Bond Reserve	1,382,000	3,482,000	3,482,000	3,482,000	3,482,000
Operating Reserve	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Cash Flow Reserve	16,000,000	16,500,000	17,000,000	17,500,000	17,500,000
Fund Equity Available for Use	\$1,623,450	\$8,200	\$835,350	\$797,900	\$17,300

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Debt and Other Long Term Liabilities

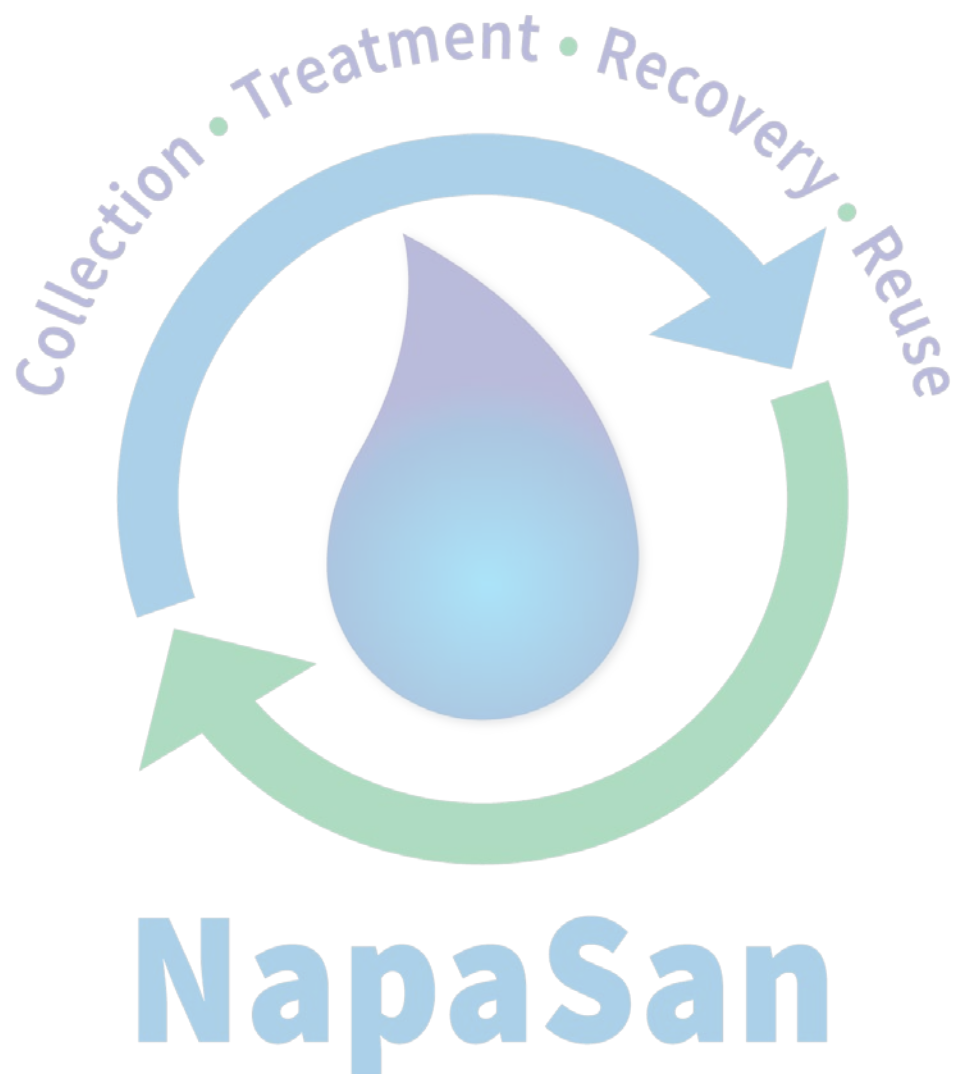


Construction of the secondary effluent equalization basin in 2014



Completed secondary effluent equalization basin

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Debt and Other Long Term Liabilities

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 \$226,646 as of July 1, 2019.

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 \$846,642 as of July 1, 2019.

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 2019/20 is \$2,652,975. (See Debt Service Table 4.) Outstanding principal on this debt obligation is \$29,485,000 as of July 1, 2019.

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 2019/20 is \$1,776,900. (See Debt Service Table 5.) Outstanding principal on this debt obligation is \$13,060,000 as of July 1, 2019.

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 2019/20, the District's coverage ratio is budgeted to be 4.50.

Debt Coverage Ratio Calculation		
	Estimated FY 18/19	Budget FY 19/20
Revenue		
Sewer Service Charges	\$28,166,000	\$29,856,000
Capacity Charges	\$5,100,000	\$5,178,000
Recycled Water	\$979,000	\$1,064,000
Interest	\$420,000	\$452,000
Rents & Leases	\$427,000	\$126,000
Other Revenue	443,000	383,500
<i>(excl. sale of property and grant revenue)</i>		
Operating Expenses	(\$14,639,800)	(\$16,367,200)
Net Revenue	\$20,895,200	\$20,692,300
Parity Debt Service		
2003 SRF	\$60,300	\$60,300
2008 SRF	93,650	93,650
2012A COPs	2,663,000	2,663,050
2017 RBBs	1,776,850	1,776,900
Total Debt Service	\$4,593,800	\$4,593,900
Parity Debt Coverage Ratio	4.55	4.50
<i>(net revenue ÷ total debt service)</i>		
<i>(must be greater than 1.25)</i>		

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 generally 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.

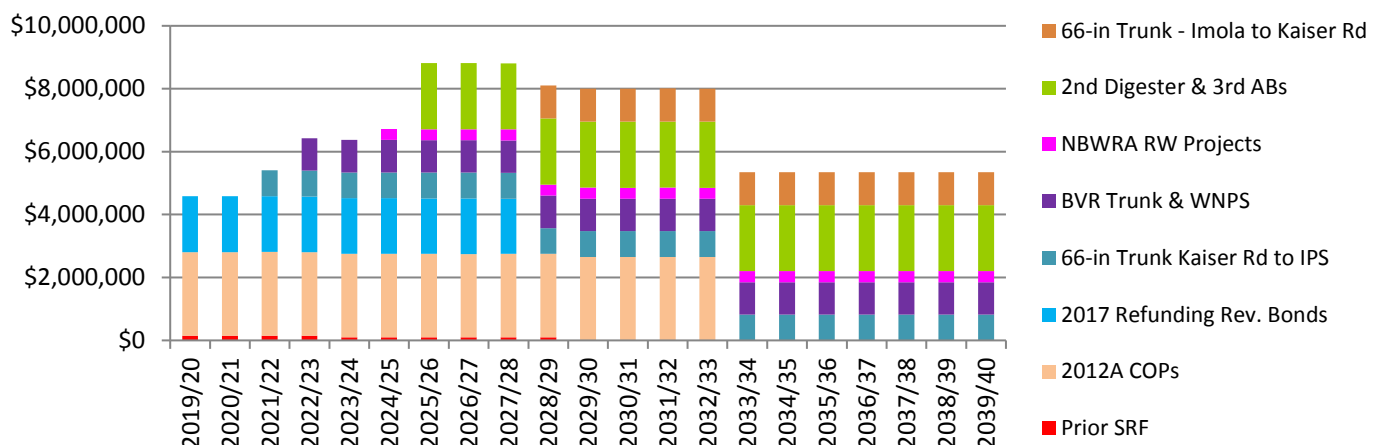
Currently, NapaSan has the capacity to issue approximately \$170 million in additional debt (3.5% TIC, 20 year term), assuming that there was a buyer for that debt in the bond market, NapaSan could pay the debt service, and other financial policies are maintained.

Future Debt Issues

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

- 1) **Browns Valley Road Trunk and West Napa Pump Station Replacement** – In FY 19/20, NapaSan intends to execute a 30-year State Revolving Fund loan agreement with the State Water Resources Control Board to construct the Browns Valley Trunk and West Napa Pump Station projects. The loan is for an amount not to exceed \$33,466,680, which represents 83.6667% of the maximum project cost of \$40 million. In exchange for NapaSan paying the remaining 16.3333% as “local match” directly and not including the amount in the loan, the loan agreement was set at 0% interest for the full 30-year term. The actual amount of the loan and the annual debt service will not be determined until after project construction is completed (estimated in November 2020). The finance package also includes an application for a Green Project Reserve grant for 50% reimbursement of expenses associated with increased energy efficiency, which could result in loan forgiveness of up to \$4 million.
- 2) **Rehabilitation of the 66” Sewer Trunk (Kaiser Rd to IPS)** – this sewer main rehabilitation project is estimated to need \$10 million in external financing. It has not yet been determined whether this financing will be secured through the municipal bond market or through private placement. Resources are anticipated to be needed beginning in late spring 2020. For planning purposes, it has been assumed that \$4 million in private placement loan proceeds will be received in FY 19/20 and the remaining \$6 million received in FY 20/21.
- 3) **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 2024/25.
- 4) **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). The timing and scope of this project is subject to potential changes in the Treatment Plant Master Plan.
- 5) **Rehabilitation of the 66” Sewer Trunk (Imola to Kaiser Rd)** – this project, to rehabilitate the existing 66” sewer trunk from Imola Avenue south to Kaiser Road, is expected to cost \$18 million, with debt service beginning in FY 2028/29. This project will be financed through the issuance of Certificates of Participation (COPs) or some other external financing vehicle. To be conservative, it is assumed the debt will be financed through the issuance of 20-Year COPs at 5% TIC.

Projected Debt Service Summary



Pensions

NapaSan contributes to the California Public Employees' Retirement System (CalPERS), a cost-sharing multi-employer public employees' retirement system that acts as a common investment and administrative agency for participating public entities.

NapaSan has three different benefits plans, based on the date of initial employment with NapaSan and enrollment in the CalPERS system. Tier 1 is a closed plan, with new employees not eligible to enter. Tier 2 is open to new employees who have previously been enrolled in CalPERS prior to January 1, 2013 (and meet other requirements). PEPR is open to all other new employees:

Tier 1	Hired prior to September 5, 2009
Tier 2	Hired on or after September 5, 2009
PEPR	Hired on or after January 1, 2013

As of June 30, 2017 (last available date), NapaSan had unfunded accrued liabilities and funded ratios as follows:

	<u>Unfunded Accrued Liability (UAL)</u>	<u>Funded Ratio</u>
Tier 1	\$ 12,816,573	69.1%
Tier 2	\$ 117,396	90.3%
PEPR	\$ 7,147	96.0%

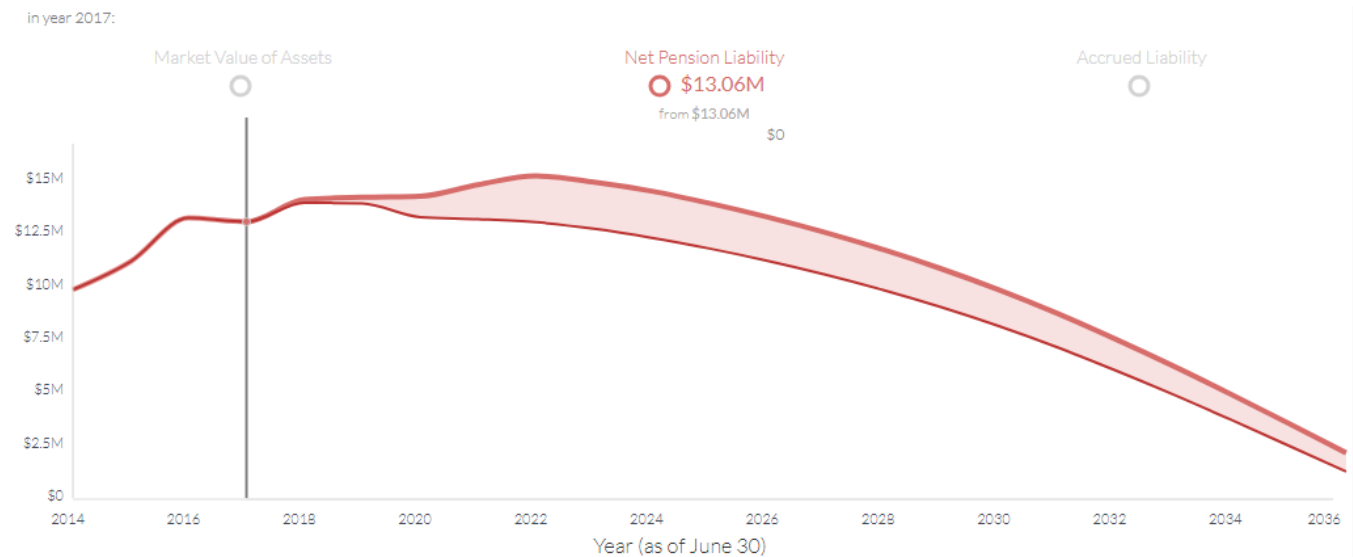
For FY 2019/20, NapaSan will pay 15.097% of Tier 1 employees' salaries, 10.868% of Tier 2 employees' salaries, and 7.072% of PEPR employees' salaries to CalPERS for the Normal Cost. In addition, NapaSan will pay \$1,346,093 toward the Tier 1 UAL, \$16,710 toward the Tier 2 UAL, and \$3,831 toward the PEPR UAL.

These payments toward the UAL are the minimum required contribution to CalPERS. NapaSan has also budgeted \$135,000 in FY 2019/20 as an additional voluntary contribution toward the Tier 1 UAL.

The 10-Year Financial Forecast includes an assumption to pay additional voluntary contributions toward the UAL as follows, based on the implementation of NapaSan's Financial Policies. These additional payments are estimated to reduce the UAL by over \$4 million over the next thirty years:

<u>Fiscal Year</u>	<u>Additional Contribution</u>
2019/20	\$ 135,000
2020/21	651,873
2021/22	560,356
2022/23	489,164
2023/24	460,181
2024/25	429,451
2025/26	397,838
2026/27	365,316
2027/28	331,859
2028/29	297,441

The following graph illustrates the difference in the projected unfunded pension liability with and without the additional voluntary contributions.



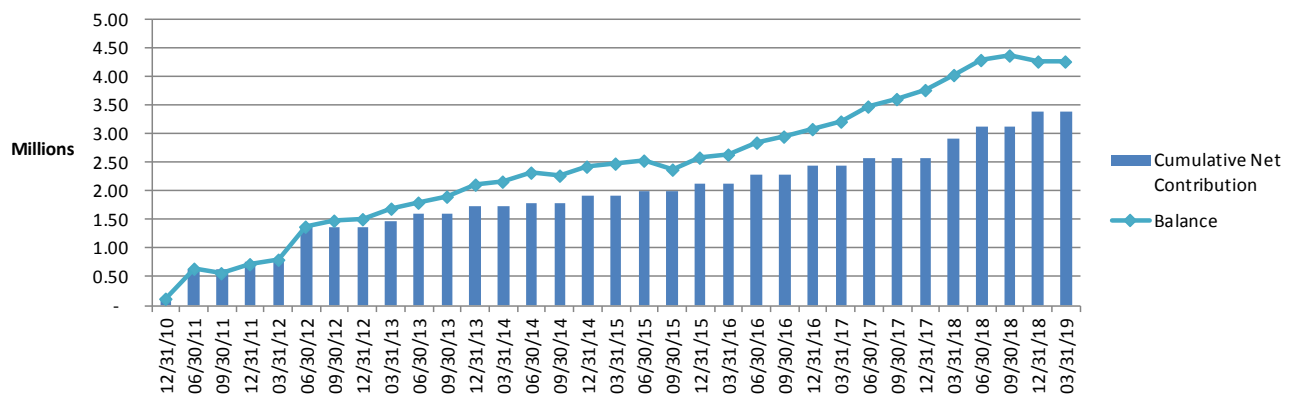
OPEB

Other Post-Employment Benefits (OPEB) are benefits, other than retirement pensions, that are provided to retirees of NapaSan. These include health care, life insurance and vision insurance. Beginning in 2010, NapaSan started to contribute at least the Normal Cost, if not more, of OPEB costs to a trust account invested and administered by CalPERS. Assets in this trust account can be used to net against NapaSan's total OPEB liability.

The FY 2019/20 budget includes a payment to the OPEB trust of \$504,950 and direct benefit payments of \$413,500.

Assets in NapaSan's OPEB Trust were greater than the actual contributions (as of March 31, 2019) because of investment earnings:

Cumulative Net Contributions and Ending Assets



Based on the current actuarial report for the OPEB benefits, it is projected that the unfunded OPEB liability will be eliminated as early as 2029, assuming that NapaSan continues to transfer the actuarial determined contribution (less direct payments) to the OPEB trust on an annual basis.

OPEB Liability Projection

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
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
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
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
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

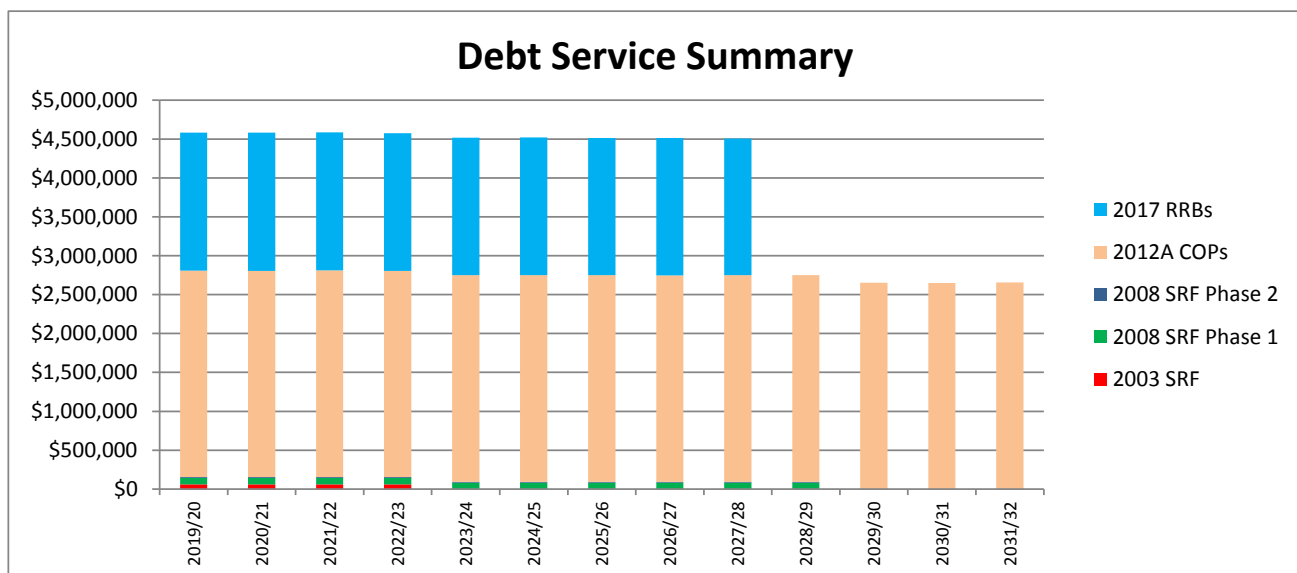
1.75% True Interest Cost (TIC), 11 year term
\$14,185,000

Fiscal Year Jul 1	Annual Interest	Principal Payment	Ending Principal	Total Payment
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

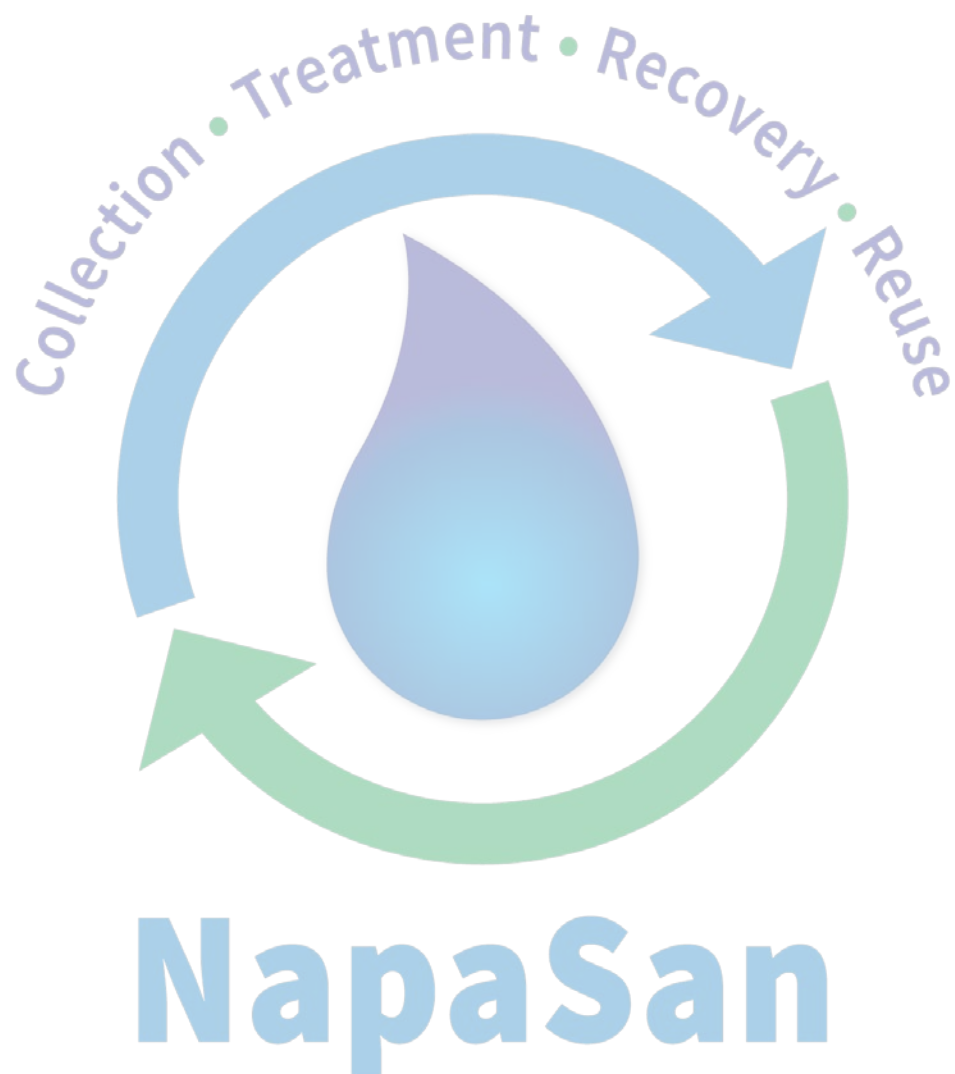
	Table 1 2003 SRF \$901,376	Table 2 2008 SRF Phase I \$1,652,171	Table 3 2008 SRF Phase II \$219,444	Table 4 Series 2012A COPs \$37,845,000	Table 5 Series 2017 RRBs \$14,185,000	
Fiscal Year Jul 1	Total	Total	Total	Total	Total	FY Total All Debt Service
2019/20	60,247	82,609	10,972	2,652,975	1,776,900	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	-	-	-	-	-	-



Appendix A

Glossary of Terms

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Glossary of Terms

ADC	Actuarially Determined Contribution	POTW	Publically Owned Treatment Works
BMPs	Best Management Practices	RAS	Return Activated Sludge
BOD	Biochemical Oxygen Demand	RRB	Refunding Revenue Bond
CalPERS	California Public Employee Retirement System	SCADA	Supervisory Control and Data Acquisition
CARB	California Air Resources Board	SWRCB	State Water Resources Control Board
CASA	California Association of Sanitation Agencies	SRF	State Revolving Fund
COPs	Certificates of Participation	SWRF	Soscol Water Recycling Facility
DAF	Dissolved Air Floatation	TSS	Total Suspended Solids
CIP	Capital Improvement Plan or Capital Improvement Program	TIC	True Interest Cost
CPI	Consumer Price Index	UAL	Unfunded Actuarial Liability
DAF	Dissolved Air Flotation	USBR	United States Bureau of Reclamation
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		
OPEB	Other Post Employment Benefits		

Accrual Accounting– An accounting method that records revenues and expenses when they are incurred, regardless of when cash is exchanged.

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.

Actuarially Determined Contribution – the amount needed in the current period to fund a defined set of benefits over time.

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.

Audit – the official inspection or examination of an organization's financial records, typically by an independent third party.

Balanced Budget – defined in NapaSan’s financial policies as total resources (operating revenue, non-operating revenue, intrafund transfers and beginning fund equity) greater than or equal to total requirements (operating expenses, capital expenses, intrafund transfers and ending fund equity) including contingencies. Furthermore, NapaSan considers the budget to be balanced whenever annual operating and non-operating revenues meet or exceed annual operating expenditures.

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.

Expense – Money spent or cost incurred to generate revenue or provide a good or service. An expense may be in the form of actual cash payment or a computed expired portion of an asset. It is recognized when the obligation is incurred, rather than when the cash is paid out.

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.

Modified Accrual Accounting – accounting method under which revenues are recognized in the period they become available and measurable (as opposed to when earned), and expenditures are recognized the associated liability is incurred (as opposed to an expense being recognized).

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.

Normal Cost – This is an actuarial cost method used to calculate the amount NapaSan must pay periodically (usually annually) to cover its pension or other retirement expense.

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 Socol 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.

Socol Water Recycling Facility (SWRF) – This is the District's wastewater treatment plant and recycled water production facility located on Socol 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.

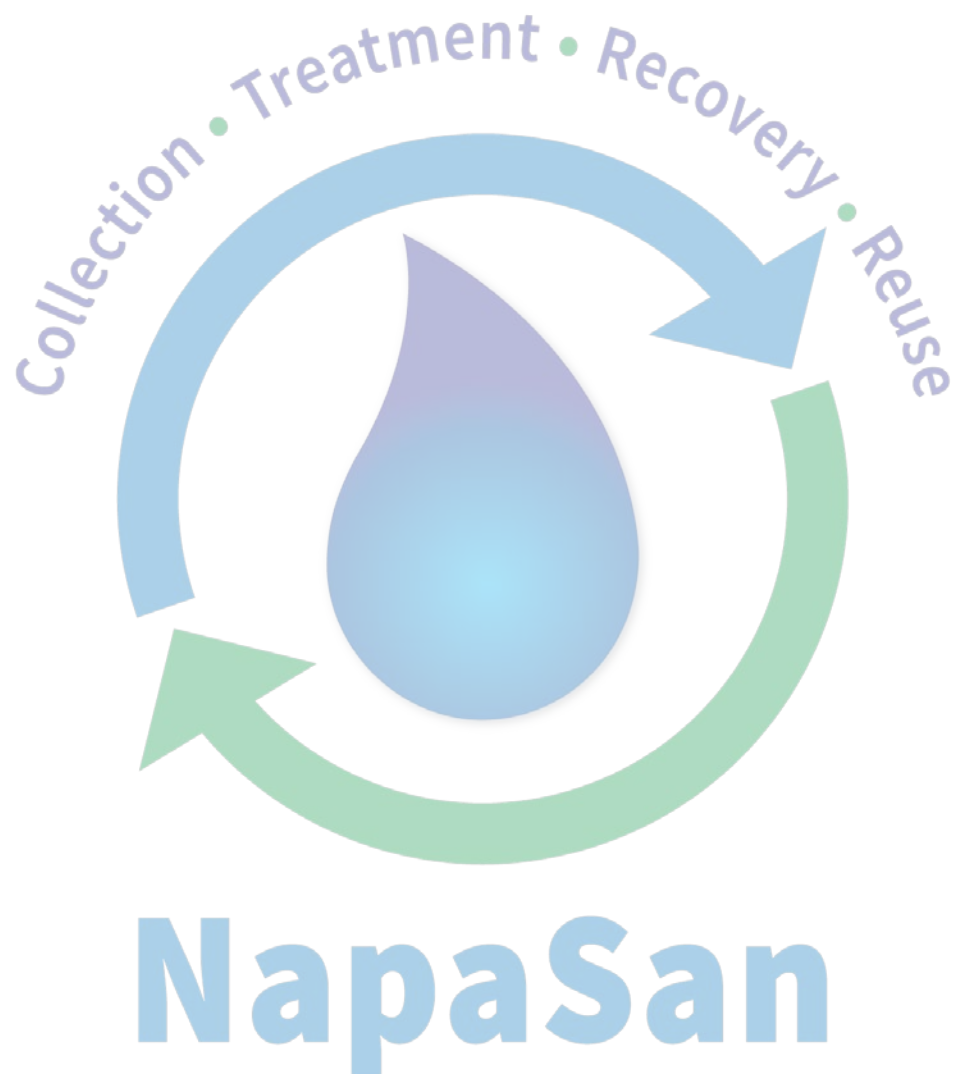
Total Suspended Solids (TSS) – particulate weight obtained by separating particles from a water sample using a filter, usually measured as milligrams per liter (mg/l).

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	2017
Population:	76,915	79,722
Median Age:	37.4	38.2
Median Household Income:	\$62,767	\$75,341
Persons Below Poverty Level	7.7%	8.1%
Median Housing Value:	\$397,100	\$536,800
Housing Units		
Owner-Occupied	16,148	16,047
Renter-Occupied	12,018	12,233
Not Computed	-	-
Vacant	1,983	2,016
	30,149	30,296

Source: US Census Bureau Census Data; 2013-2017 American Community Survey 5-Year Estimates

General Information for Napa Sanitation District

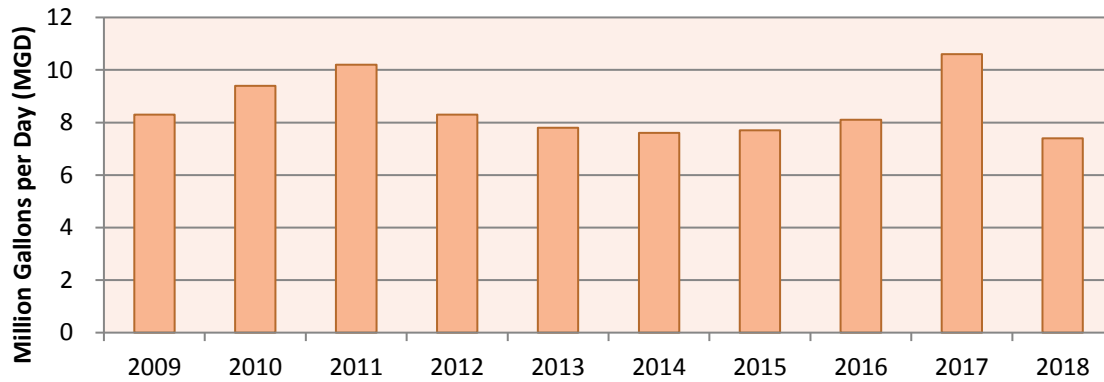
Year of Formation:	1945
Service Area (jurisdictional):	13,292 Acres
Service Population (est.):	81,500
Plant Design Capacity:	15.4 mgd ⁽²⁾
Connections:	37,535
Miles of Sewer:	270 miles
Street Laterals:	33,000
Sewer Manholes:	5,565
On-plant pump stations:	1
Off-plant pump stations:	3
NPDES Permit Number:	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



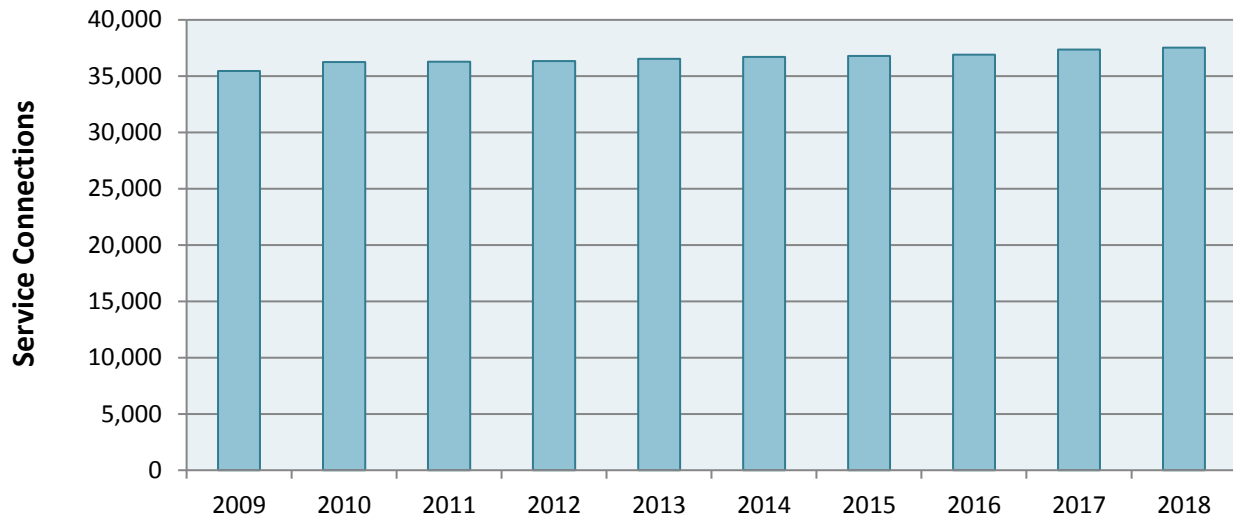
Historic Average Daily Influent Flow at Wastewater Treatment Plant

Fiscal Year Ended June 30	Daily Average Flow (MGD)	Increase/ (Decrease)
2009	8.3	-
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%
2018	7.4	(43.2%)

Source: Napa Sanitation District

MGD = Million Gallons per Day

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

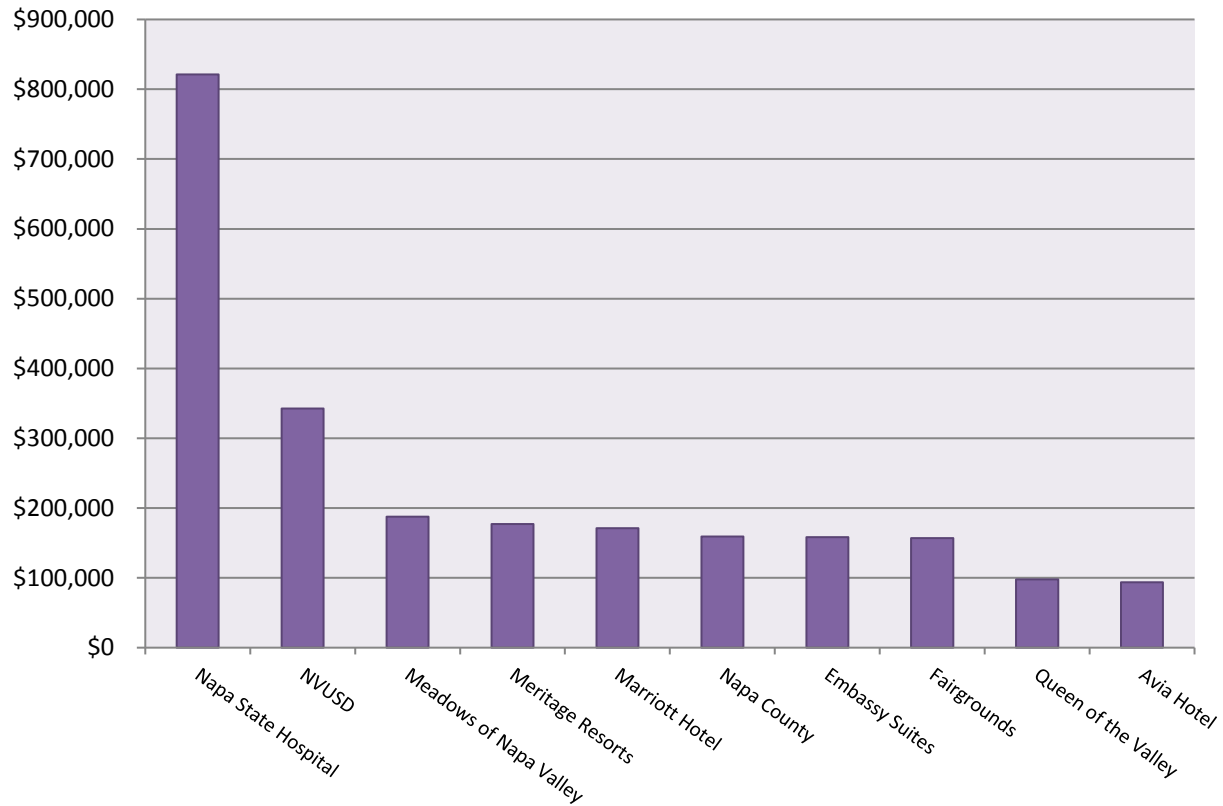


Historic Sewer System Service Connections and Equivalent Dwelling Units (EDU's)

Fiscal Year Ended June 30	Single Family	Multifamily	Commercial/ Industrial	Total Service Connections	Total EDU's
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
2018	23,849	8,393	5,293	37,535	40,655

Source: Napa Sanitation District

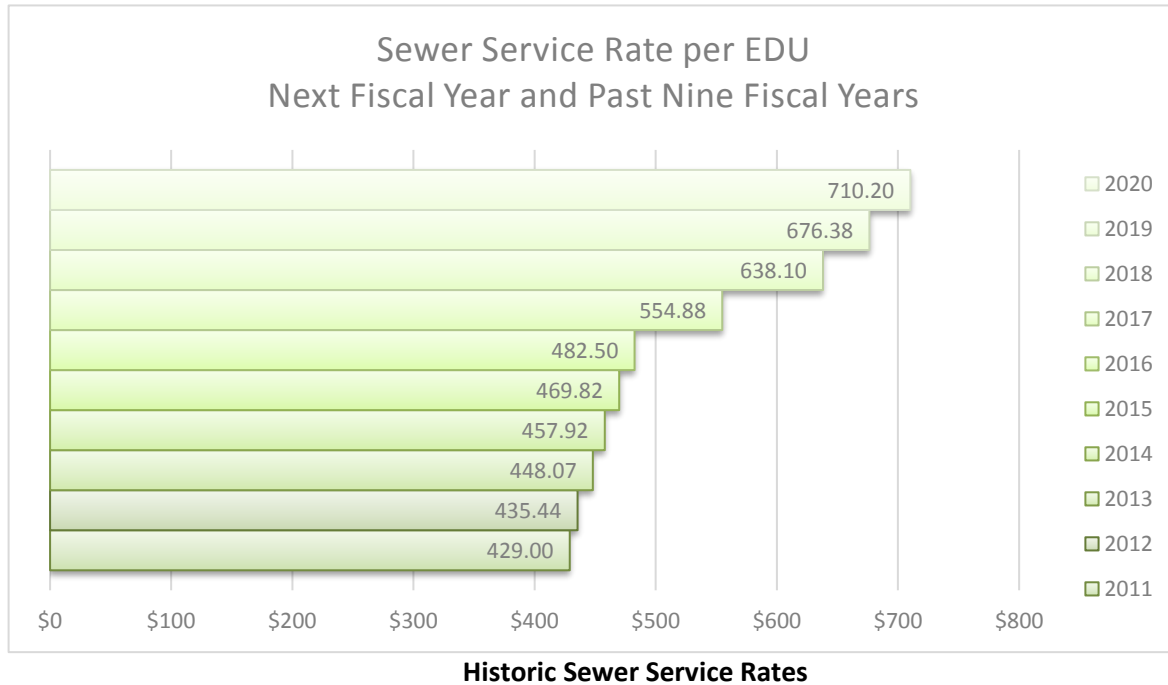
Ten Largest Sewer Users



FY 2017/18

	Sewer Service Charges	% of Total ⁽¹⁾
Napa State Hospital	\$821,405	3.2%
NVUSD	342,404	1.3%
Meadows of Napa Valley	187,538	0.7%
Meritage Resorts	177,264	0.7%
Marriott Hotel	171,138	0.7%
Napa County	159,334	0.6%
Embassy Suites	158,504	0.6%
Fairgrounds	157,164	0.6%
Queen of the Valley	97,757	0.4%
Avia Hotel	93,673	0.4%
Total	\$2,366,181	9.2%

(1) Sewer service charges total: \$25,806,368

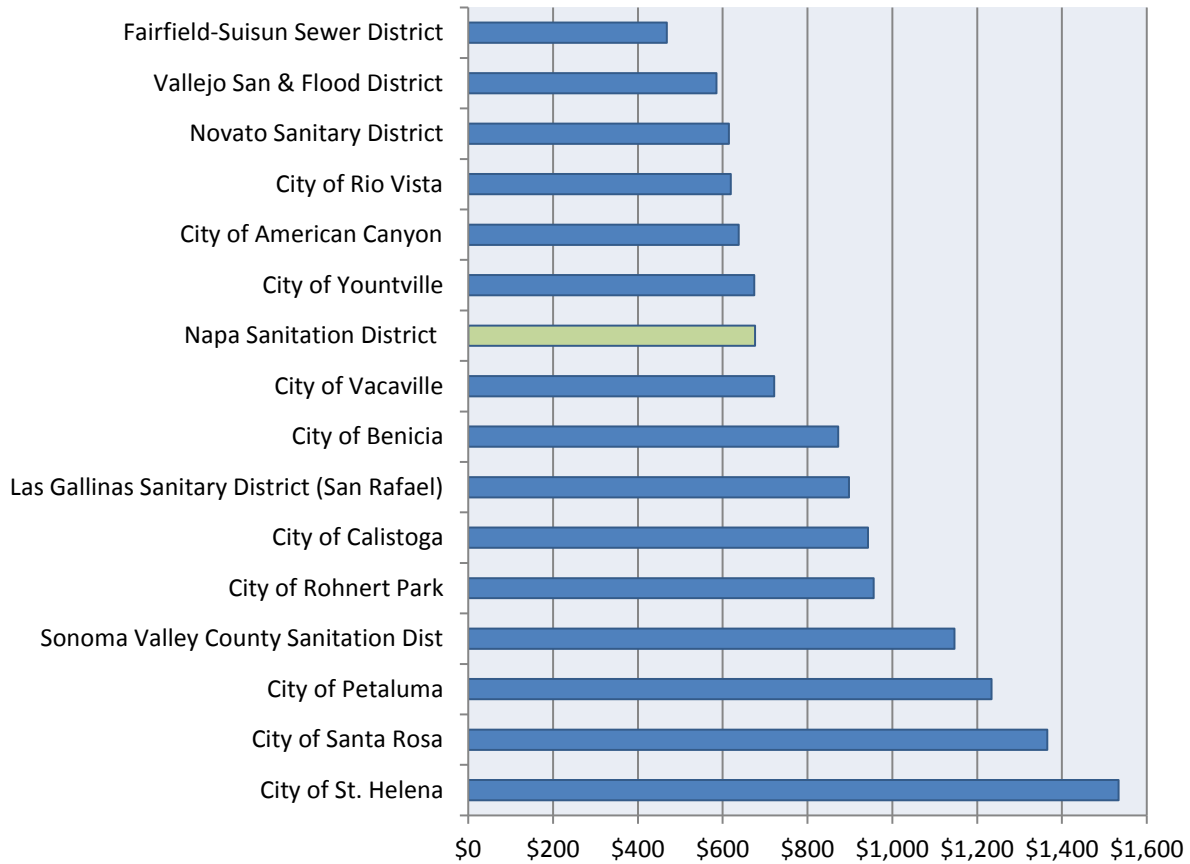


Fiscal Year Ended		
June 30	Sewer Service Rates	% Increase
2011	429.00	1.8%
2012	435.44	1.5%
2013	448.07	2.9%
2014	457.92	2.2%
2015	469.82	2.6%
2016	482.50	2.7%
2017	554.88	15.0%
2018	638.10	15.0%
2019	676.38	6.0%
2020	710.20	5.0%

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).

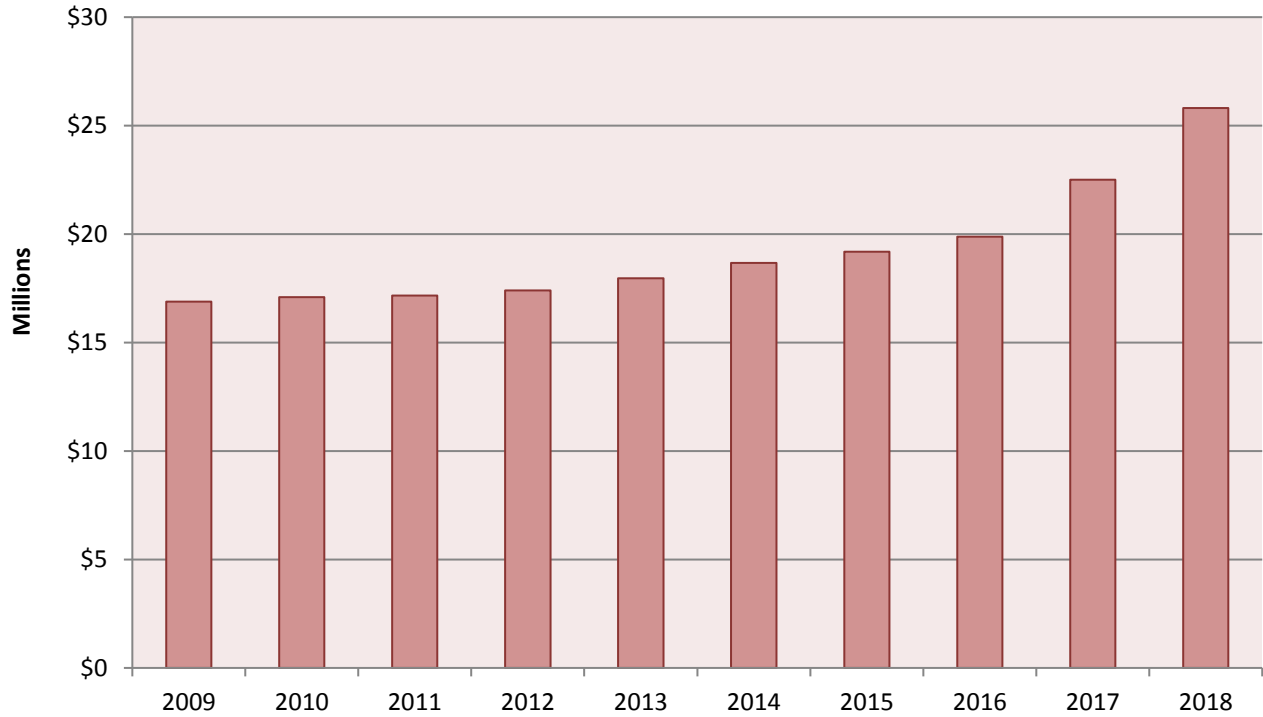
Sewer Service Rate for Surrounding Areas



FY 2018/19

Agency	Sewer Service Rate ⁽¹⁾
Fairfield-Suisun Sewer District	\$468
Vallejo San & Flood District	585
Novato Sanitary District	615
City of Rio Vista	619
City of American Canyon	638
City of Yountville	675
Napa Sanitation District	676
City of Vacaville	722
City of Benicia	872
Las Gallinas Sanitary District (San Rafael)	898
City of Calistoga	942
City of Rohnert Park	956
Sonoma Valley County Sanitation Dist	1,146
City of Petaluma	1,234
City of Santa Rosa	1,365
City of St. Helena	1,533

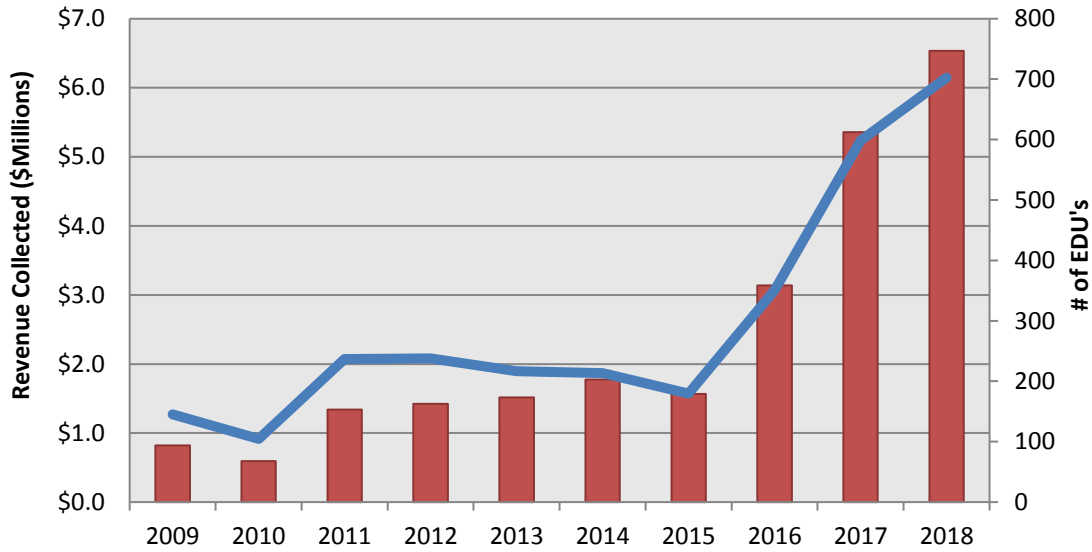
Sewer Service Revenue



Historic Sewer Service Revenues

Fiscal Year Ended June 30	Sewer Service Revenues	Percentage Change
2009	16,880,763	-
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%
2018	25,806,368	14.7%

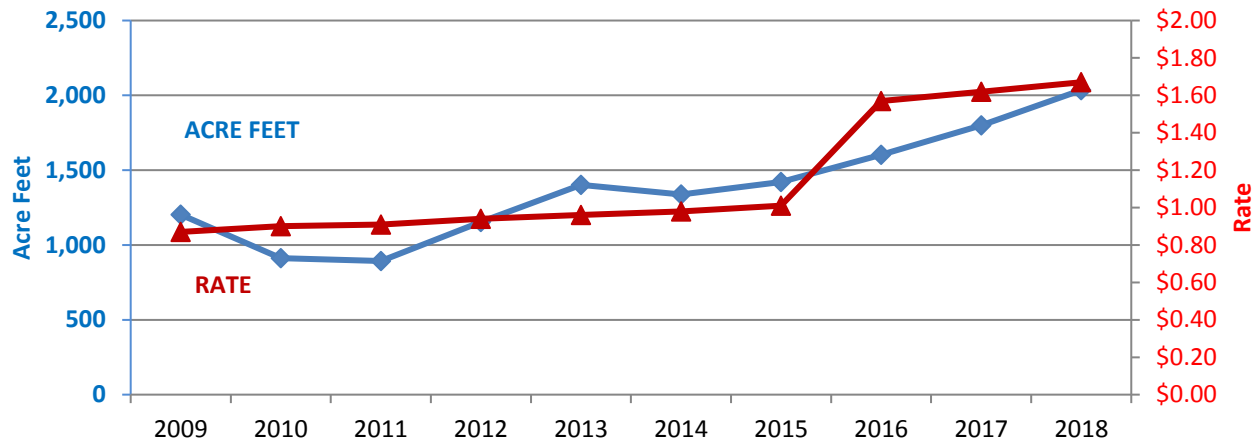
Capacity Charges Past Ten Fiscal Years



Historic Capacity Charges

FY Ended June 30	Capacity Charges (per EDU)	Total Collected	Number of EDU's
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
2018	9,299	6,532,806	702.5

Recycled Water Sales in Acre Feet



Historic Annual Recycled Water Sales

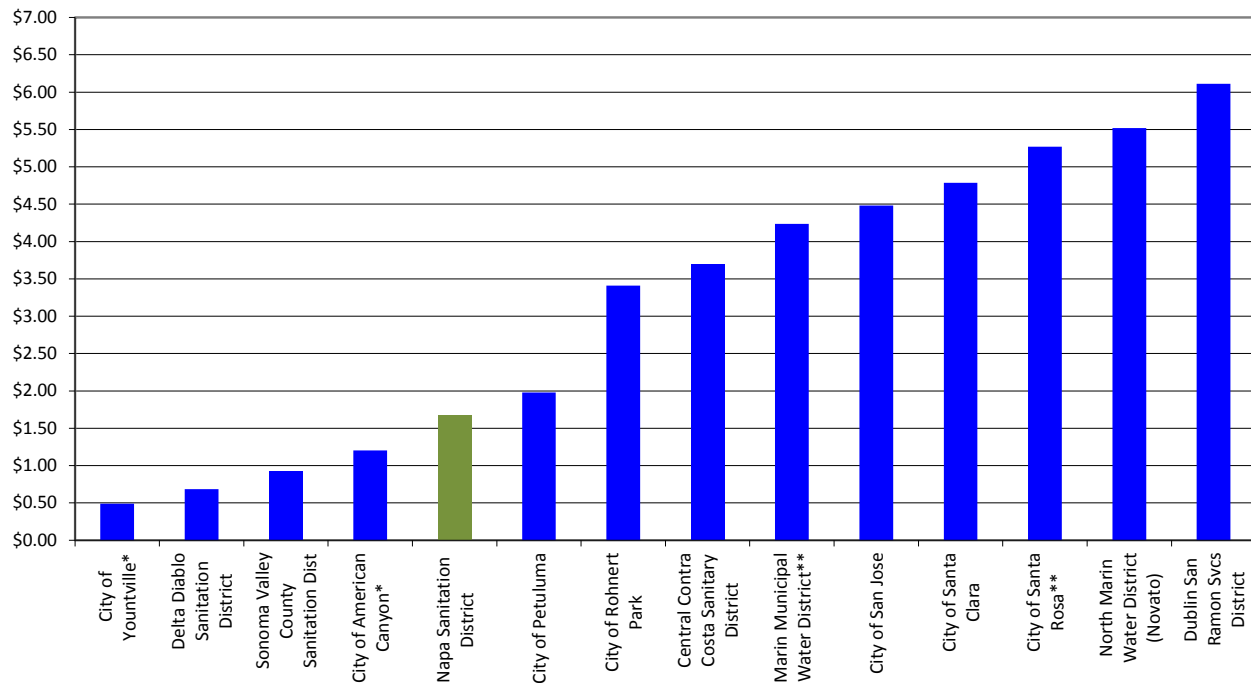
Calendar Year Ending December 31	QUANTITY		RATES
	Total Acre Feet	Total Million Gallons	Rate per 1,000 Gallons
2009	1,204	392	0.87
2010	913	298	0.90
2011	893	291	0.91
2012	1,153	376	0.94
2013	1,402	457	0.96
2014	1,337	436	0.98
2015	1,422	463	1.01
2016 ⁽¹⁾	1,603	522	1.57
2017	1,799	586	1.62
2018	2,035	663	1.67

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
City of Yountville*	\$0.49
Delta Diablo Sanitation District	0.68
Sonoma Valley County Sanitation Dist	0.92
City of American Canyon*	1.20
Napa Sanitation District	1.67
City of Petaluma	1.98
City of Rohnert Park	3.41
Central Contra Costa Sanitary District	3.69
Marin Municipal Water District**	4.24
City of San Jose	4.48
City of Santa Clara	4.79
City of Santa Rosa**	5.27
North Marin Water District (Novato)	5.52
Dublin San Ramon Svcs District	6.11

*Most customers are being charged this rate

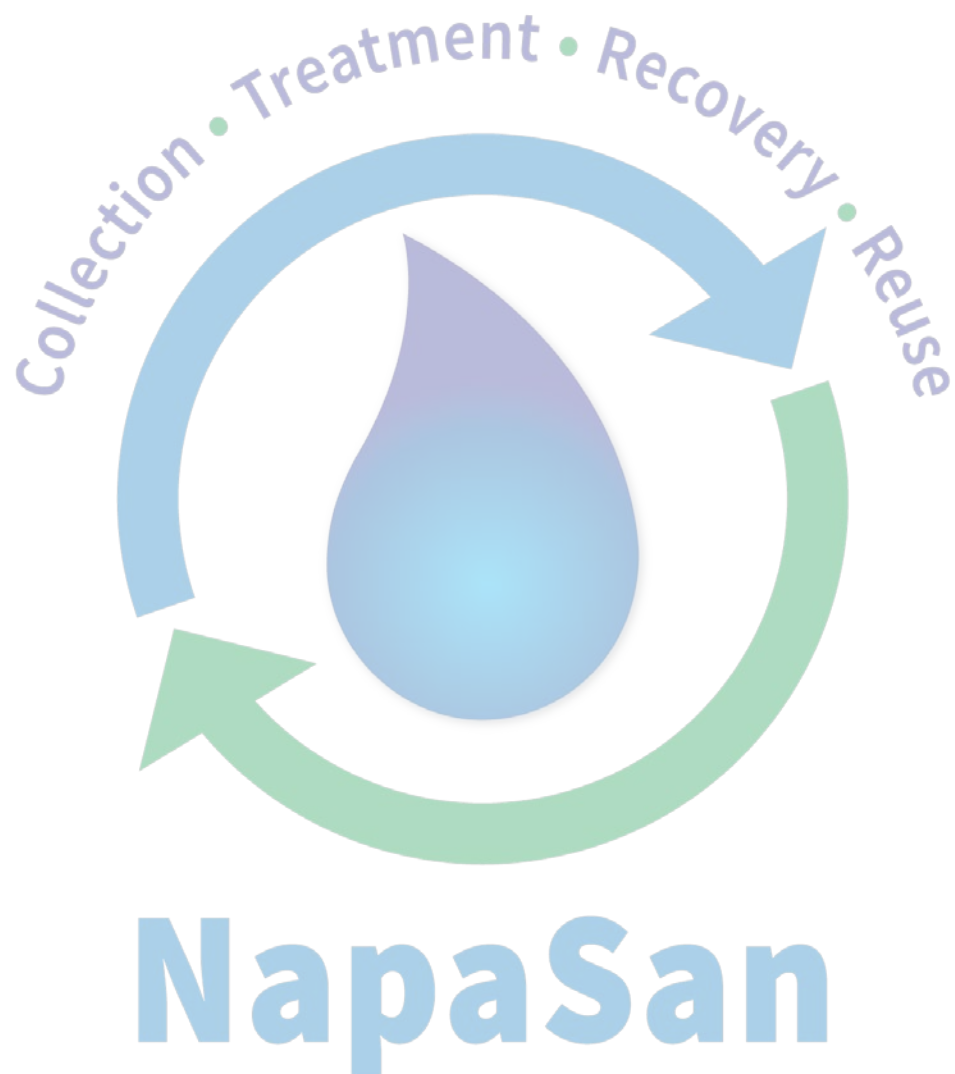
**Tier 1 Rate

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

Appendix C

NapaSan Strategic Plan

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NAPA SANITATION DISTRICT
Strategic Plan
2019-2021

Adopted
May 15, 2019

Napa Sanitation District Strategic Plan

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I. Introduction and Overview

The purpose of the Strategic Plan is to describe the goals, objectives and priorities of the Napa Sanitation District (NapaSan).

The Strategic Plan reflects the direction, insights and expertise of NapaSan Board of Directors and NapaSan staff.

NapaSan strategic planning began in 2008 with work sessions involving the Board of Directors and Department heads. Subsequent Board of Directors work sessions in 2011, March 2013, March 2015, March 2017 and most recently in April 2019 provided the forum to review and critically evaluate key components of the "Planning Guide" adopted by the Board in 2009, including the environmental scan, the mission and vision statements, strategic goals and objectives, and priority projects and programs. In this 2019 plan update we continue the method of engagement with our staff and other key stakeholders, engaging the support of our outside facilitator Dr. Larry Bienati of the Bienati Consulting Group, Inc.

This document represents the culmination of these planning activities and discussions and provides the overall strategic direction for the Napa Sanitation District.

II. NapaSan Accomplishments from 2017 Strategic Plan

Since the last update of NapaSan's Strategic Plan in 2017, NapaSan has made strong progress towards achieving Board priorities. Construction projects are on schedule, policy direction has been provided, and NapaSan remains on solid financial footing. Directors specifically noted accomplishments with recycled water expansion reduction of inflow and infiltration (I&I) in the collection system, improved working conditions, and the success of the internship and volunteer program.

Specific achievements during the last two years include:

- **Completion of a number of key projects** identified in the previous NapaSan Strategic Plan including MST recycled water distribution expansion, sewer rehabilitation projects to meet the new 2% annual replacement goal, and the beginning of the recycled water fill station project.
- **Completion of a series of programs and activities** also identified in the previous NapaSan Strategic Plan including the finalization of a financing strategy for Browns Valley Road Trunk and West Napa Pump Station projects (pending state approval), implementation of the Communications Plan, executing a lease option agreement for the installation of a floating solar array on Ponds 3 and 4.
- The continued implementation of the asset management program.
- The sewer service charge fee methodology study and capacity charge update

NapaSan staff also noted the improved efficiencies in overall NapaSan operations which were achieved or those which are in-process including:

- **Negotiated Savings in Employee Contracts** - Employee contract negotiations in 2009 and 2014 resulted in systemic reductions in the growth of retirement benefits. NapaSan continued to see benefits the past two years from decisions made in these employee contracts.
- **Revenues from Land Leases** - The lease of the Somky Ranch and lease of land to Eagle Vines Golf Course has generated significant revenues for NapaSan to fund its Low Income Assistance Program for sewer service charges.

Overall Board and staff members believe that much was accomplished during the last two years in accordance with the priorities set forward in the 2017 NapaSan Strategic Plan.

III. Environmental Scan

CURRENT TRENDS, CHALLENGES AND OPPORTUNITIES

Board members and other stakeholders identified a myriad of issues, challenges and opportunities facing NapaSan as it looks to the future. This section includes items identified in the course of the Board Strategic Planning sessions since 2011.

Wastewater Treatment System

- Monitoring and addressing new system requirements related to discharge limitations
- Recognizing and understanding treatment plant vulnerabilities, determining the level of acceptable risk and developing contingency plans and appropriate messages and responses
- Maintaining and replacing aging sewer infrastructure Maintaining the high rates of beneficial reuse
- Maintaining compliance with all environmental regulations
- Understanding the potential impact of Constituents of Emerging Concern (CECs), such as endocrine disrupters, on the treatment process and potential regulatory requirements
- Implementing long-term system master plans

NapaSan Recycled Water Services

- Increasing demand for recycled water
- Expanding use of recycled water
- Change in regulatory restrictions
- Evaluating the allocation of water in the recycled water program
- Expanding recycled water delivery in the Milliken-Sarco-Tulocay (MST) and Los Carneros Water District (LCWD) areas

Customer Service

- Providing excellent, responsive customer service
- Providing excellent and timely plan checking services
- Developing and promoting “business friendly” policies and practices
- Understanding our ongoing role as water “purveyor”

Resource Stewardship and Efficiencies

- An increasing focus by regulators and customers on water quality and nutrient removal
- Continuing to evaluate opportunities for waste as a resource
- Continuing development of cost-effective energy production
- Maximizing energy efficiency and conservation
- Exploring opportunities to utilize renewable energy sources

Facilities and Operations

- Continuing impact of technology on NapaSan operations and evaluate potential threats cyber-attacks to our systems
- Enhancing the District's resiliency plan and preparedness
- Meeting all regulatory standards now and in the future
- Considering the potential impact of rising sea levels on NapaSan operations, such as the impact on pond levees, sewer assets adjacent to the river and creeks, salt water I&I intrusion, and the impacts of drought and larger storm events on the Collection System, treatment process and recycled water quality.

Human Resources and Employee Development

- Expanding the existing succession plan and having the back-up staff and potential new leaders in place who are cross-trained and ready to take on new assignments if necessary
- Attracting and recruiting the right skilled people
- Maintaining an emphasis on workplace safety
- Maintaining good labor and management relations

Organization, Budget and Finance

- Maintaining a solid financial footing (currently have a AA rating)
- Managing the conflict between political process and financial stability
- Balancing current rates against future needs (affordability issues)
- Keeping costs under control
- Implementing new residential sewer service rates with appropriate usage categories (single family residence (SFR), apartment, condo, accessory dwelling units (ADU))
- Assess possibilities for affordable housing assistance
- Analyze long term liabilities for retirement (pension) and medical expenses (OPEB) and implement strategies for managing
- Evaluate and expand existing partnerships with other agencies in areas of capital improvements, education, outreach, operations and administration
- Setting clear priorities
- Acquiring the data and information needed to make sound decisions with regard to future capital projects
- Advocating for sound policies at the regional, state and federal levels?

Public Engagement, Attitudes and Perception

- Implementing a proactive approach to community outreach
- Developing key messages for NapaSan and our value proposition in what we do

- Clearly communicating complex topics including the establishment of service and rate setting
- Continuing need to make all aspects of NapaSan transparent to the public

NAPASAN CONSTITUENCIES AND CUSTOMERS

The Board identified NapaSan's core stakeholders and broadly discussed their importance and the role they play in NapaSan decision-making and operations.

Stakeholders	Stakeholder Needs and Expectations	Stakeholder Contributions
A. Regulators	Regulatory compliance	Regulatory requirements and guidelines
B. Ratepayers	Fair, equitable rates and transparency	Fees, service level requests, public meeting comments
C. Agencies	Collaboration and partnership	Technical information and support, administrative services
D. Policy-Makers	Top performance and transparency	Policy direction
E. NapaSan Employees	Tools and resources	Customer service, executing on strategic plan

IV. NapaSan Vision and Mission Statements

Vision Statement

NapaSan will provide reliable service to its customers in its management of Napa's critical water resources, manage risks intelligently and will remain in full compliance with all applicable regulations while anticipating and preparing for the future.

Mission Statement

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.

Values

NapaSan staff and Board members adhere to a set of core values in all aspects of operations:

- Safety
- Fiscal Responsibility
- Manage Risks Intelligently
- Environmental Stewardship
- Quality Customer Service
- Collaboration
- Transparency
- Pragmatism
- Professional Excellence
- Fairness
- Innovation

V. NapaSan Goals and Objectives

The NapaSan Strategic Plan is organized according to seven major goal areas:

Goal One: Infrastructure Reliability

Goal Two: Financial Stability

Goal Three: Operational Optimization

Goal Four: Employee Development

Goal Five: Community Outreach and Communications

Goal Six: Resource Recovery

Goal Seven: Regulatory Compliance

The goal areas represent Board members' overall top priorities. Within each goal area, Board members and operational staff identified their top priority strategies and resulting projects and programs which are summarized on the following pages.

GOAL ONE: INFRASTRUCTURE RELIABILITY

Build, maintain and operate a cost-effective and reliable wastewater treatment system for the NapaSan service area.

Systematic replacement of NapaSan's aging infrastructure is priority number one. A long term capital facilities plan is needed, drawing on accurate information about current facility conditions and projections of future service area needs in five, ten or more years from now. **NapaSan must ensure that treatment capacity will be in place to address current and projected future business and residential capacity needs.**

The District Board established the following key objectives:

1A. Strive to replace and rehabilitate at least 2% of sewers annually, and preferably higher, with a focus on reducing Inflow & Infiltration

Continue recent achievements to average at least 2.0% replacement or rehabilitation of sewers, focusing on those basins with significant inflow and infiltration of stormwater and groundwater, with the desired goal of a higher replacement rate if possible. Consider condition of pipe, risk analysis, road paving schedules, and salinity of infiltration (for chlorides issue) as additional factors in prioritization.

Timeframe:

Staff will report to the Board at the end of each year's replacement and rehabilitation project on progress toward the 2% goal. Staff will report annually, by September 30, on the I & I flow monitoring results.

1B. Continue to Implement an Asset Management program

Asset Management will help NapaSan to be proactive in addressing the management of its collection system, plant and recycled water infrastructure. It will result in better prioritization of projects and reduced costs by predicting the most cost effective timing for asset maintenance, renewal and replacement.

Timeframe:

Present an updated strategy and plan for Board consideration and approval by June 30, 2019. Complete implementation of Phase 1 CMMS software installation by converting existing data to GIS-compatible data, migrating the existing databases into the new system, and testing and auditing the data by June 2020. Update the Board on the status of Asset Management implementation, progress of the program, and confirmation of strategic direction by December 31, 2020.

1C. Design and construct the Browns Valley Road Interceptor and replacement of the West Napa Pump Station

This is a significant project in the 10-year Capital Improvement Plan.

Timeframe:

Begin construction by May 2020, with completion anticipated in early spring 2022.

1D. Update the Collection System Master Plan, Treatment Plant Master Plan and SCADA System Master Plan

The current Collection System Master Plan (CSMP) was completed in 2007. With the completion of several I&I sewer rehabilitation projects and post-construction flow monitoring data, the Master Plan should be updated to incorporate the results. Once the CSMP is complete and projected flow and loading data is understood, the Treatment Plant Master Plan (TPMP) should be updated to align with the CSMP and address both capacity issues and anticipated changes in the regulatory environment.

Concurrently, the master plan for the SCADA system, which allows for automation of treatment plant and pump station activities, should be updated to address any deficiencies in resiliency, reliability and security.

Timeframe:

Complete CSMP by June 30, 2020.

Begin TPMP before August 1, 2020, with completion by June 30, 2022.

Complete SCADA System Master Plan by June 30, 2020.

1E. Study whether to implement a Private Lateral Program

Study the benefits to NapaSan of developing a private lateral program for the reduction of inflow and infiltration (I&I). Complete pilot projects with flow monitoring following in the winter months. Then develop policy options for Board consideration.

Timeframe:

First three pilot projects are completed, with flow monitoring results for the first two. Complete flow monitoring for third pilot by September 30, 2019. Complete fourth and fifth pilot projects in summer 2019 and summer 2020, with flow monitoring completed spring 2021. Develop policy options, including cost analysis and program design options, for Board consideration by December 31, 2021.

GOAL TWO: FINANCIAL STABILITY

Ensure adequate fiscal resources to fulfill NapaSan's mission.

The District Board has a fiduciary responsibility to ensure that adequate financial resources are in place to operate NapaSan and carry out its mission, and that those resources are used efficiently.

The District Board established the following key objectives:

2A. Update NapaSan's Sewer Service Charge Rate Study in anticipation of the Prop 218 Hearing and Rate Setting Process in Spring 2021.

The study should update the current model for domestic, commercial and industrial sewer service charges, and make recommendations regarding the rate structure, cost of service and calculated rates based on the current level of service, as articulated in the Ten-Year Financial Plan and Ten-Year Capital Improvement Plan.

The study should have significant and meaningful public outreach and stakeholder input built into the information gathering and policy option development process.

Timeframe:

Present scope of work for the study and associated outreach campaign to the Board by June 30, 2020. Completion of the study and associated outreach prior to the Prop. 218 hearing in March 2021.

2B. Continue efforts to develop non-rate/non-fee revenues through the development of land leases.

NapaSan owns properties that are currently being leased and/or are available for non-district usage for revenue generation. The Board has provided direction to staff on strategies to convert these properties into revenue streams. Staff will implement the direction provided by the Board.

Timeframe:

Ongoing. Discussions with Lands Committee and/or Board of Directors on progress, as appropriate.

GOAL THREE: OPERATIONAL OPTIMIZATION

Implement and maintain effective and efficient operational practices.

The District Board wants to operate NapaSan at or above best practices, utilizing proven technology. Customers, ratepayers and internal staff all deserve high quality service through efficient use of our resources.

The District Board established the following key objectives:

3A. Continue to work with local partners on projects or programs that result in efficiencies and cost savings for our ratepayers and the populations we serve.

NapaSan currently outsources administrative services to Napa County, including Accounting (payroll, accounts payable, accounts receivable, general ledger, software maintenance), Human Resources (benefits administration, HRIS), Information Technology (desktop, network, database management, printer servers, website), and Treasury (property assessment collection, cash investment, banking).

NapaSan also successfully partners with the County and with the City of Napa on many different projects and programs. These include coordination of projects with road paving schedules, combined capital projects, combined outreach and educational programs, integrated emergency management, and others.

Direction is to continue to partner in ways that reduce costs, increase efficiencies, or enhance services to the public.

Timeframe:

This is a continuous process improvement goal expected to continue beyond the timeframe of this strategic plan. Staff will report to the Board in the Quarterly Reports on activities and accomplishments under this objective.

3B. Evaluate and recommend ways to reduce energy and chemistry consumption in treatment process and collection system.

Chemistry and energy are the largest “consumables” in the operating budget, making up about 34% of the total Services and Supplies budget and 12% of the overall operating budget.

Timeframe:

This evaluation will be completed by NapaSan staff. Update the Board on efforts made to date and provide options for future reductions by December 31, 2019.

3C. Enhance NapaSan's plans and training associated with resiliency, disaster mitigation and disaster recovery

NapaSan should continue to improve the operational resiliency of the system, particularly in the treatment plant. Focus on continuity of service provision during and after emergencies and/or disaster events. This includes integration of these concepts into the SCADA Master Plan (Objective 1D), coordination of NapaSan's emergency communications system with the city and county's emergency management system, participate as an active partner in the County's Hazard Mitigation Plan, and participation in specific trainings on the activation of these plans.

Timeframe:

Complete installation of emergency radio system by June 30, 2019. Continue to integrate into County's Hazard Mitigation planning efforts, expected to be completed by September 30, 2019. Develop resiliency plan for SCADA as part of Objective 1D SCADA Master Plan. Ongoing training. Ongoing coordination with Napa County emergency planning team.

3D. Evaluate and plan for the potential impacts of sea/river level rise, prolonged drought and increased winter storm intensity to NapaSan's current and future operations.

Increases to the river level could have significant impacts to NapaSan's ability to hold and treat wastewater in its pond system and throughout the treatment plant. Drought and increase storm intensity also can significantly impact the collection system, the treatment plant, and the quality of recycled water.

Staff should engage with regional groups and partners to learn about the specific impacts that NapaSan could experience in the future, learn "best practices" from other agencies addressing the same issues, and participate in plans that can help develop future mitigation strategies.

Activities include partnering with the City of Napa on the Drought Contingency Plan and joining other regional partnerships, as appropriate.

Timeframe:

This is a continuous objective expected to continue beyond the timeframe of this strategic plan. Staff will report to the Board on the progress, findings and outcome of the Drought Contingency Plan as appropriate. Join and begin participating in a regional consortium of local governments focused on Bay Area climate change impacts by September 30, 2019. Conduct an evaluation of options for access to the NapaSan treatment plant during flow/high river flow events by December 2021. Evaluate the need for a study to evaluate the river

levees near NapaSan and the impacts of river level rise on the levees by December 2022. Staff will report to the Board on the progress, findings and outcome of the Drought Contingency Plan.

3E. Continue to study the effects of accepting and treating winery waste through alternative methods.

NapaSan staff will continue to receive winery waste on a limited basis through alternative methods, such as directly into the day storage tank or digester, to study the impacts to treatment. Successful methods will be evaluated for applicability at a larger scale, while including analysis regarding service costs and the economic market.

Timeframe:

This is a continuous objective expected to continue beyond the timeframe of this strategic plan. Updates will be provided to the Board as appropriate by October 31 annually on the status of service need, NapaSan's response to the service need, and the response to the service need provided by others.

GOAL FOUR: EMPLOYEE DEVELOPMENT

Maintain a dynamic and skilled workforce through employee engagement, professional development and opportunities for advancement

The District Board wants to create a positive and respectful working environment that encourages all employees to do the best job possible for the ratepayers of NapaSan.

The District Board established the following key objectives:

4A. Promote NapaSan as progressive, professional workplace through engagement and the development and promotion of internships and “in training” programs

Encourage staff to give presentations at professional organization trainings and conferences, assume leadership positions in professional organizations; form associations to research and develop Best Practices, engage in interagency exchanges of staff or trainings that showcase innovative approaches. Maintain an active role in BAYWORK, offer internship opportunities and scholarships, and promote careers in the water sector at career fairs, direct engagement with local students, during plant tours and at public events.

Timeframe:

Staff will report annually to the Board by June 30 on the status of scholarships, internships and other activities.

4B. Conduct Employee Surveys, as appropriate

The last employee survey was in Fall 2017. Continue the pattern of surveying employees periodically to ensure we are providing successful work environment so employees can come to work each day and give their personal best. Successful customer services starts with a productive and satisfied workforce.

Timeframe:

Have periodic discussions with the Board regarding the timing of the surveys, including whether questions should be included, excluded or modified, as appropriate.

4C. Prepare for and begin MOU Negotiations

The two labor MOUs and one management association agreement for NapaSan will expire on June 30, 2020.

Timeframe:

The Board already maintains a contract with a labor relations firm to assist in MOU negotiations and other labor relations activities. It is expected that preparation for negotiations will begin in mid-2019, with new MOUs approved by June 30, 2020. Specific direction will be provided by the Board in closed session.

4D. Address succession planning through supervisory/management training and an internal mentorship program

Develop an appropriate internal management training program to ensure managers/supervisors have the right skills and abilities to lead their team consistent with the core values. Ensure adequate training and opportunities are provided and encouraged for employees to develop the skills and experiences necessary to promote into more responsible positions.

Timeframe:

Hire a consultant to help develop an ongoing program by conducting a gap analysis and recommending the most effective practices to implement. Report to the Board by June 30, 2020 on new practices that have been or will be implemented.

GOAL FIVE: COMMUNITY OUTREACH AND COMMUNICATION

Provide ratepayers with the information they need to understand NapaSan's mission, operations, finances and rate structures.

The District Board wants to ensure that NapaSan operates in a transparent manner, communicates the value of NapaSan's services, and serves as a resource to all ratepayers.

The District Board established the following key objectives:

5A. Inform and engage the community and stakeholders to increase and promote understanding of NapaSan services, rates, and key messages..

Continue to communicate NapaSan's key education and organizational messages to increase awareness of NapaSan as an agency and gain support for initiatives, programs, and the mission of NapaSan.

Timeframe:

Staff will write and submit a quarterly column to the Napa Register highlighting key messages. Staff will send two issues of the pipeline newsletter annually (one in the fall and one in the spring). Staff will plan and host an annual open house (typically in the fall). Staff will plan and host an annual citizen's academy (typically in the fall). Staff will plan and host a 75th Anniversary event in the fall of 2020.

5B. Proactively communicating with the public, stakeholders and the press regarding current programs, accomplishments, projects, and news.

Anticipate issues and news of interest to the public and develop materials, messages, and delivery mechanisms for connecting with the public and stakeholders. Coordinate communications as appropriate with City, County, and other stakeholder groups to maximize outreach efficacy.

Timeframe:

This is a continuous objective expected to continue beyond the timeframe of this strategic plan.

5C. Collaborate with other local agencies and groups to meet common goals.

Look for opportunities to work with other local agencies to achieve common goals. Enhance existing communications channels, leverage existing networks, and enhance partnerships with other local agencies, schools, industry organizations, businesses, community groups, and environmental organizations to reach and serve more of the community.

Timeframe:

Plan, sponsor, and participate in the annual Earth Day event in downtown Napa (typically in April). Aid in planning the Napa County Science Fair annually (typically in May).

5D. Build and maintain relationships with community leaders, elected officials and stakeholders.

Engage local and regional community leaders, elected officials, and stakeholders to aid in the distribution of NapaSan's messaging to the wider community, build participation in key programs and initiatives, and increase overall awareness of NapaSan. Plan regular meetings and tour events for community leaders and officials to learn more about NapaSan as an agency.

Timeframe:

This is a continuous objective expected to continue beyond the timeframe of this strategic plan. Staff will report to the Board twice annually (in June and November) on community outreach and communication activities and planned future events.

GOAL SIX: RESOURCE RECOVERY

Implement policies and technologies to recover resources from wastewater for beneficial reuse.

The District 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.

The District Board established the following key objectives:

6A. Evaluate current recycled water allocation policy.

Determine whether there is a need to change the prioritization, and if there is additional or unused capacity that should be reallocated. Staff will prepare information for the Board to have meaningful conversations and provide direction to staff regarding the end-use of recycled water that may be available now and in the future.

Timeframe:

Evaluate recycled water usage against existing policy and updates will be provided to the Board annually.

6B. Implement capital projects in partnership with local agencies for the distribution of recycled water

Continue partnership with Napa County and others to install a recycled water truck fill station along Coombsville Road and other projects as appropriate.

Timeframe:

Construct recycled water truck fill station by December 31, 2019.

6C. Participate with local and regional partners on long-term opportunities for water reuse, including the Phase II project with NBWRA

Phase II EIR/EIS study for recycled water projects as part of NBWRA has been adopted by the Board. Staff will plan to implement projects along associated timeline and as grant funding becomes available.

Timeframe:

The Record of Decision (ROD) for the EIR/EIS Study is dependent on associated project funding and the review/approval of a federal waiver to EIR/EIS requirements. Staff will update the Board as appropriate regarding the ROD and waiver approvals, and on the success of grant applications.

- 6D. Develop a partnership with cities of Napa and American Canyon, if possible, to complete a preliminary feasibility study for developing a “purified water” potable reuse program.**

NapaSan staff will engage with staff from Cities of Napa and American Canyon to determine if there is interest in exploring “purified water” potable reuse.

Timeframe:

Outreach to cities on exploring this concept by December 31, 2019.

Develop next steps of engagement if there is mutual interest.

- 6E. Evaluate energy self-generation with the primary goal of decreasing overall energy costs and reliance on the energy grid, and recommend policy options for consideration.**

Explore the expansion of the FOG receiving and the internal combustion combined heat and power (Cogen) system, linear electromagnetic induction, fuel cell, expanded solar, or other ideas to increase NapaSan’s generation of electrical power, as long as there is both immediate and long-term cost savings.

Timeframe:

Initial framework of alternatives will be provided to the Board for consideration by June 30, 2020.

- 6F. Improve recycled water quality to increase appeal and acceptability of recycled water to current and future users.**

All of NapaSan’s recycled water is treated to meet the highest recycled water tertiary treatment water quality standards in Title 22. However, those standards allow for chloride levels that could be detrimental to sensitive grape species. NapaSan has been working to reduce the amount of chlorides in recycled water through the reduction of salt water I & I into sewer pipes and through altered water treatment management. Staff will continue to emphasize salt water I & I projects, management practices, and pollution prevention efforts to reduce chlorides to acceptable levels.

Staff may partner in a pilot study for ultrafiltration/reverse osmosis to determine whether these technologies can cost effectively improve water quality.

Timeframe:

Complete the rehabilitation of the 66-inch trunk main from Kaiser Road to IPS and evaluate the impacts on chlorides by December 31, 2021. Report regularly on chloride testing results through weekly website updates during the irrigation season and periodic reports to the Board.

GOAL SEVEN: REGULATORY COMPLIANCE

Implement policies, best practices and capital investments to ensure compliance with all federal, state and local regulatory requirements.

The District Board wants the District to comply with all existing and future regulatory requirements. This includes its NPDES permit, SWRCB and RWQCB general orders, BAAQMD permits, Cal/OSHA standards, and other federal, state and local laws.

The District Board established the following key objectives:

7A. Negotiate a new National Pollutant Discharge Elimination System (NPDES) permit with the Regional Water Quality Control Board (RWQCB)

NapaSan must renew its NPDES every 5 years. The current permit expires in August 2021.

Timeframe:

Submit required application materials to RWQCB in late-fall 2020, in advance of the August 2021 expiration of the current permit.

7B. Stay current on proposed state and federal legislation that could positively or negatively impact NapaSan's current or future operations.

NapaSan staff should actively engage with federal, state and regional associations to remain aware of potential changes in the regulatory environment, and respond when appropriate with suggestions to improve regulations. This will be done through active participation in CASA, CSDA, BACWA, CWEA, NACWA, WateReuse and other appropriate organizations.

Timeframe:

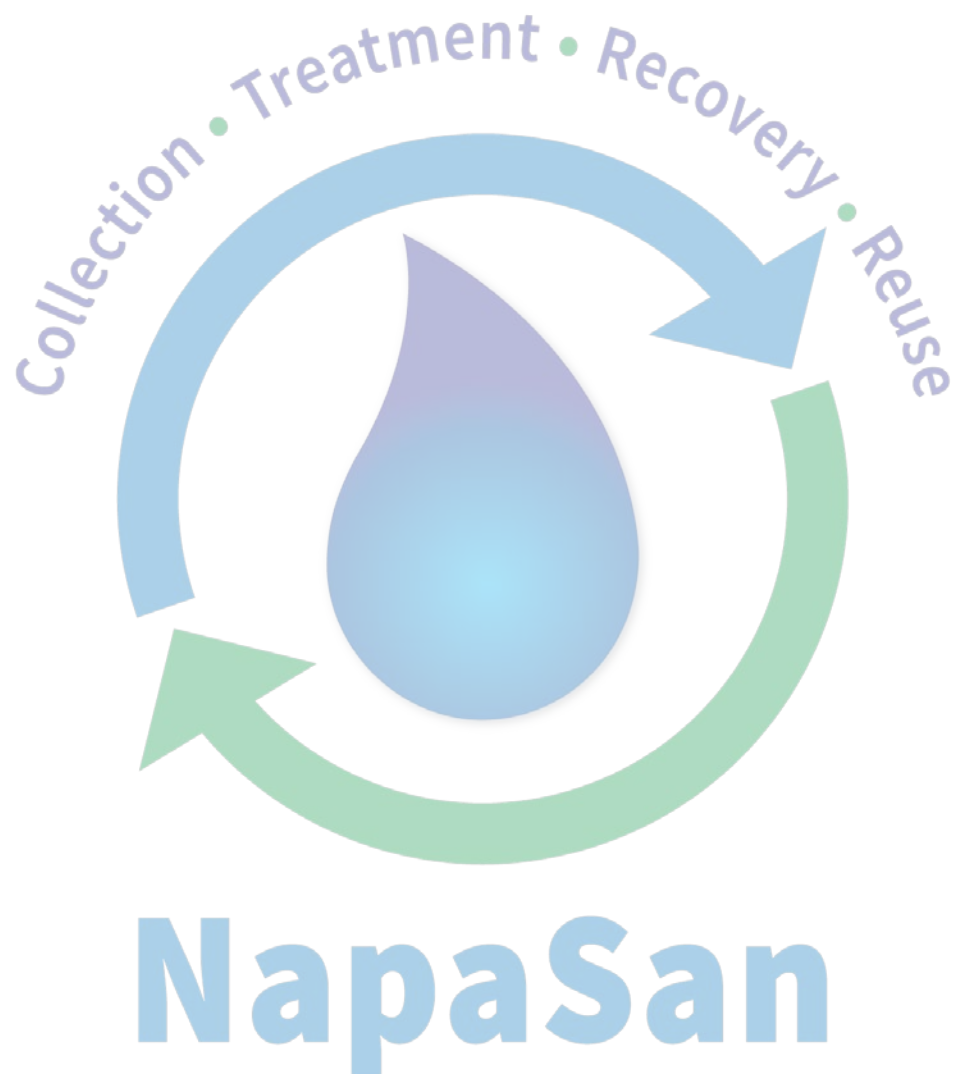
Ongoing. General Manager or Legal Counsel will periodically update the Board on pending legislation and regulations that could impact NapaSan.

VI. On-Going Plan Review and Monitoring

Board members and staff agree that the Quarterly Report of Priority Goals will be updated with the new goals and objectives in this Strategic Plan, with quarterly reporting continuing in a similar fashion.

Board members will receive presentations by NapaSan staff members on key topics (such as infrastructure and capital needs) to explore top priorities in more depth, as needed or requested by the Board.

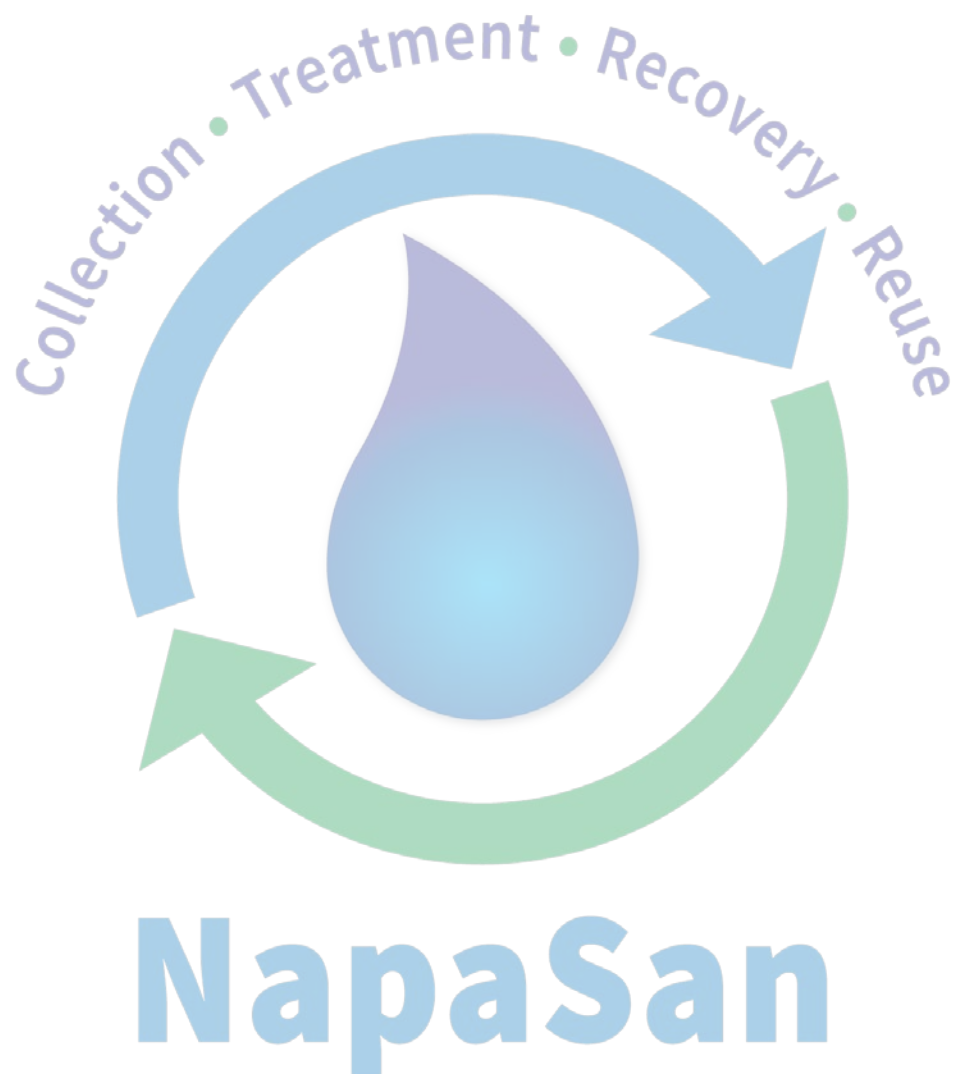
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Appendix D

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

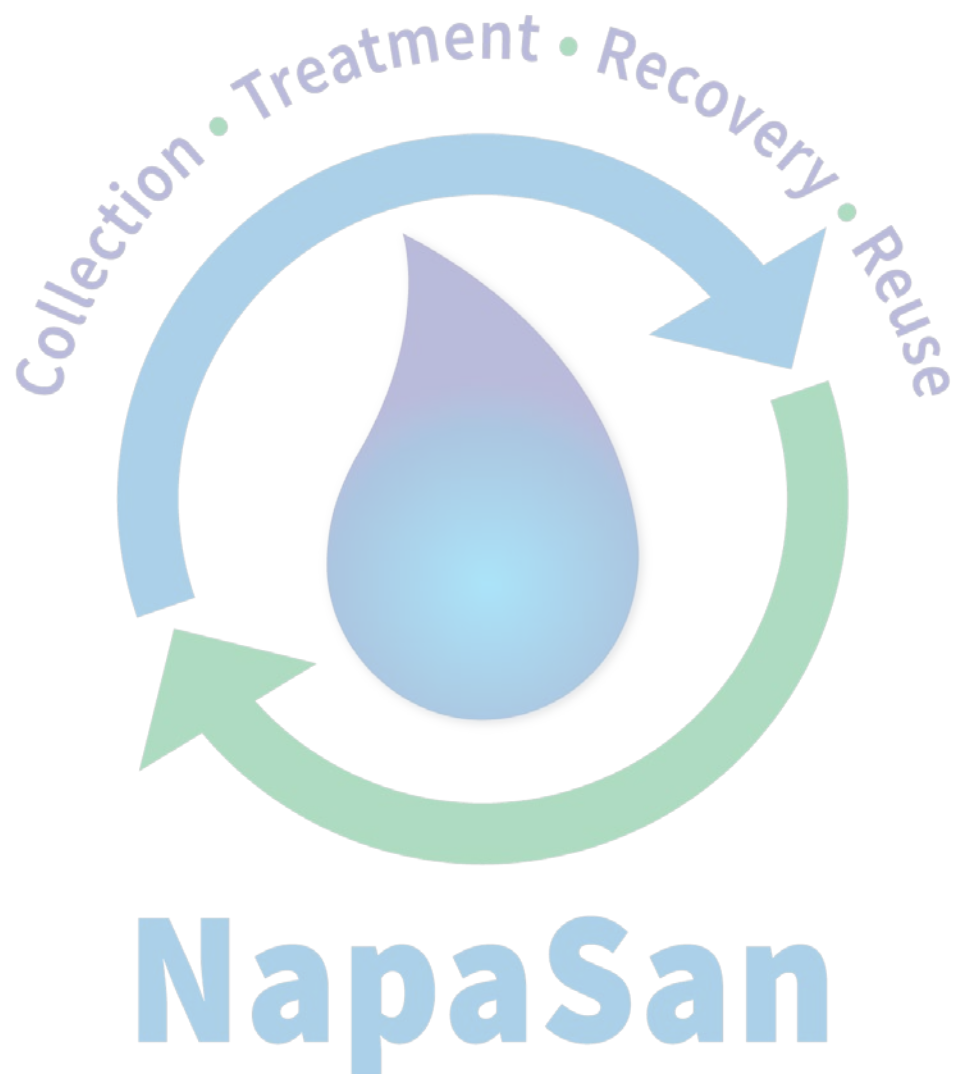
NapaSan shall establish an OPEB Trust account under Section 115 of the Internal Revenue Code, and shall prepare an actuarial report for the plan every two years. If the actuarial report identifies a Net OPEB Liability, then NapaSan staff will include payments to the OPEB Trust in the proposed annual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

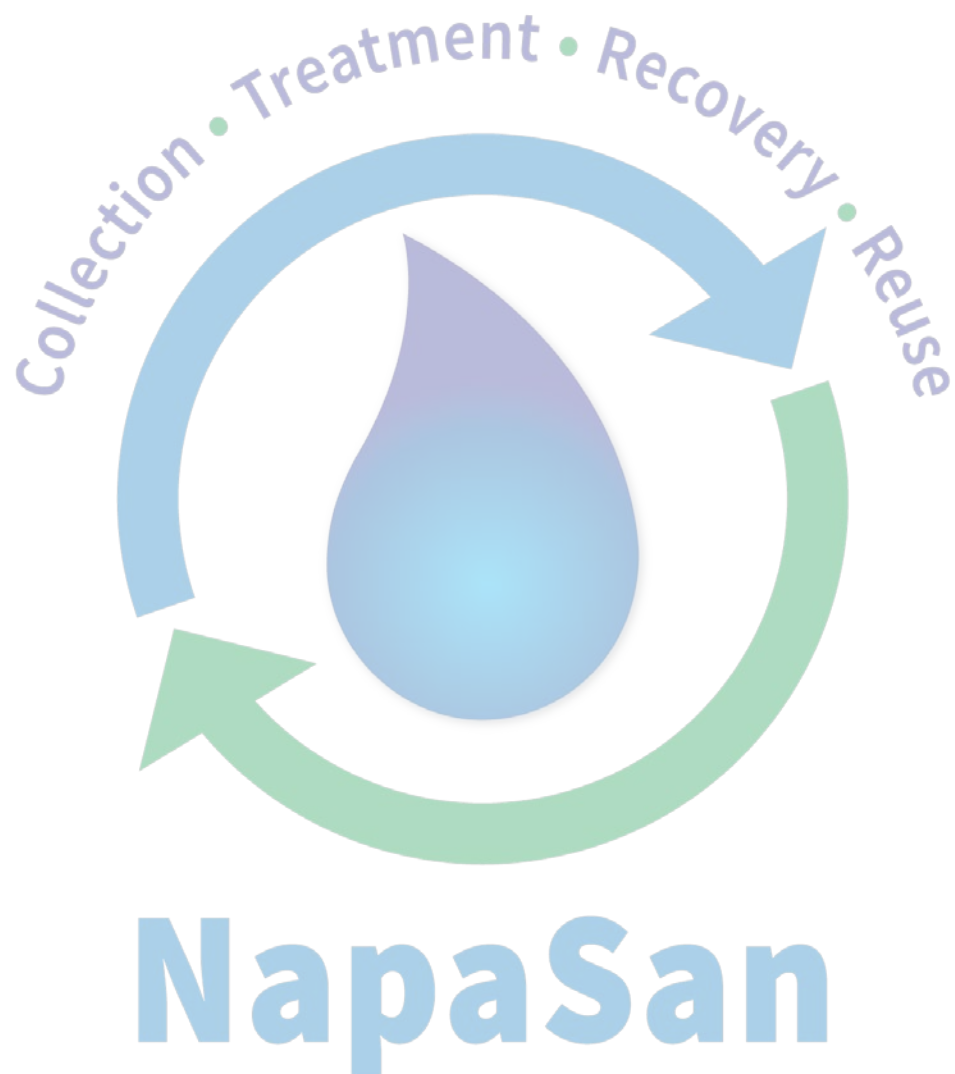
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Appendix E

2018 Performance Measurement Report

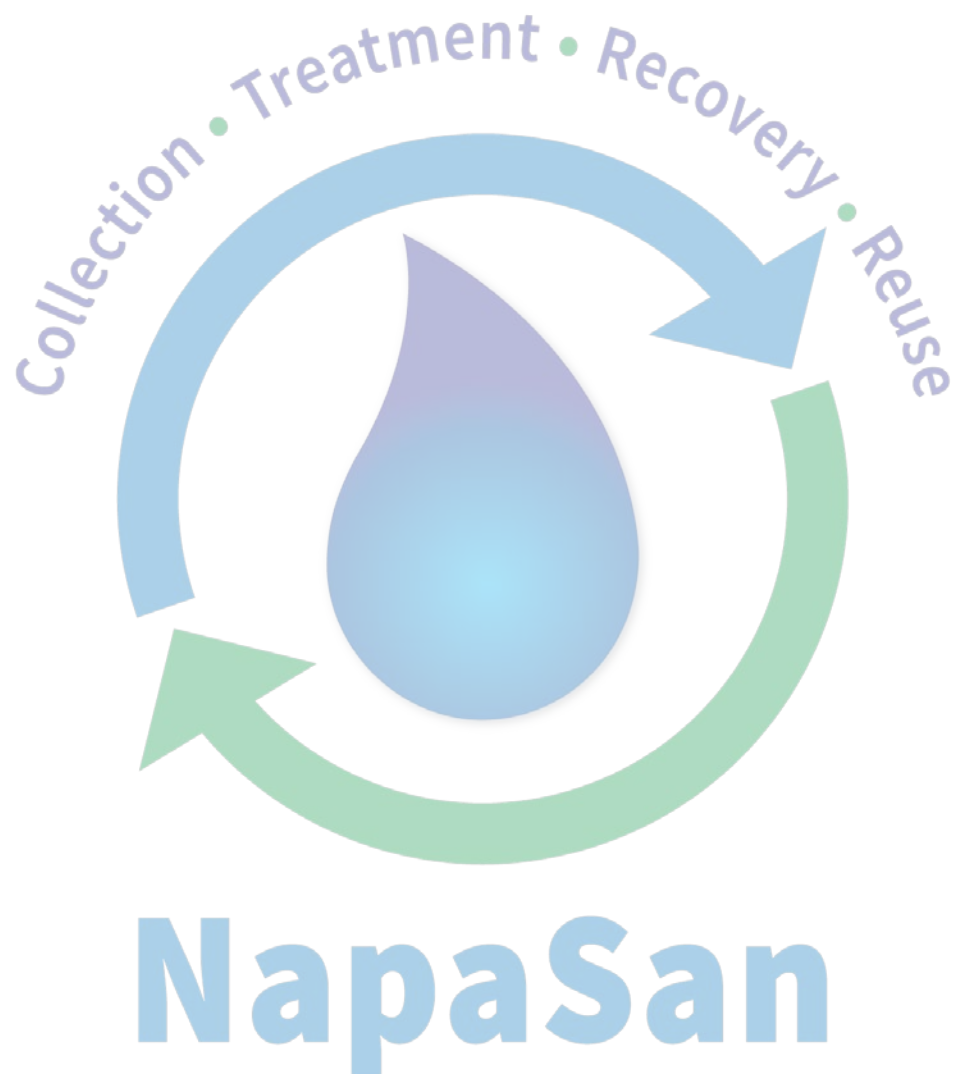
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Appendix F

Capacity Charges Report for Fiscal Year 2017/18

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Capacity Charges Report for Fiscal Year 2017/18

Purpose of the Report

This report is prepared to comply with California Government Code 66013, detailing the amount of capacity charges were received by Napa Sanitation District (NapaSan) 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. NapaSan 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 2017/18, the fee for capacity charges was \$9,299 per Equivalent Dwelling Unit.

Reporting Requirements

NapaSan 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, NapaSan 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.
 In FY 2016/17, that deficit shrunk by \$4,655,241.32 to \$20,509,844.41.

Activity for Current Reporting Period (FY 2017/18)

Beginning Balance (deficit) **(\$20,509,844.41)**

Revenue

Capacity Charges Collected	\$6,182,137.94
Mitigation Fees*	350,688.11
Interest	10,796.42
Other Associated Revenues**	
USBR – WaterSMART Grant	0.00
Total Revenue	\$6,543,602.47

	FY 17/18 Total Expended	% of project allocated to Cap Charges	Total Cap Charges	Status as of 6/30/18
<u>Expenditures / Capital Projects</u>				
13705 – I&I Reduction Program	\$46,545.71	39.4%	\$18,339.01	Ongoing
14703 – Browns Valley Trunk	238,987.39	82.0%	\$195,969.66	Ongoing
17708 – Basin G - I&I Reduction Project #1	3,736,826.73	39.4%	1,472,309.73	Ongoing
18701 – I&I Smoke Testing	262.72	39.4%	103.51	Ongoing
18705 – Summer 2018 Sewer I&I	403,130.54	39.4%	158,833.43	Ongoing
18706 – Summer 2019 Sewer I&I	6,108.31	39.4%	2,406.67	Ongoing
Total Expansion Capital Expenditures			\$1,847,962.02	
Ending Balance (deficit)				(\$15,814,203.96)

Budgeted Capacity Charge Expenses for Next Reporting Period (as of 9/30/2018)

<u>CIP# / Name</u>	<u>FY 18/19</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	\$214,200	39.4%	60.6%	\$84,395	\$129,805
14703 – Browns Valley Trunk	5,075,000	82.0%	18.0%	4,161,500	913,500
17708 – Basin G - I&I Reduction Project #1	200,000	39.4%	60.6%	78,800	121,200
18705 – Summer 2018 Sewer I&I	4,898,750	39.4%	60.6%	1,930,108	2,968,643
18706 – Summer 2019 Sewer I&I	2,670,850	39.4%	60.6%	1,052,315	1,618,535
19703 – Summer 2020 Sewer I&I	20,000	39.4%	60.6%	7,880	12,120
Total Capacity Charge Expenses	\$13,078,800			\$7,314,997	\$5,763,803

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 NapaSan Adopted Operating and Capital Budget at www.NapaSan.com.

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