



**TO:** Sandeep Karkal, District Manager-Engineer  
Novato Sanitary District

**FROM:** Tom Gaffney, Alison Lechowicz

**DATE:** April 20, 2016

**SUBJ:** 2016 Sewer Rate Study

The Novato Sanitary District (District) has requested Bartle Wells Associates (BWA) provide a sewer rate study to analyze the District’s cost of service and recommend sewer service charges through fiscal year (FY) 2020/21. The proposed sewer service charges are shown below.

	Current	Proposed				
	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21
Annual Cost per Equivalent Dwelling Unit	\$552	\$573	\$594	\$615	\$636	\$657

Includes \$2.00 per account charge from the County of Marin for collecting service charges on the property tax roll.

**Table 1: Current and Projected Operating Expenses.** This table provides the District’s actual FY2014/15 operating expenses and budgeted expenses for FY2015/16 and FY2016/17. The District’s two largest operating costs are treatment and administration/engineering, which are projected to cost about \$3 million each annually. The District’s FY2015/16 total operating expense is budgeted at about \$9.8 million and the FY2016/17 budgeted operating cost is about \$10.0 million.

**Table 2: Capital Improvement Program.** This table shows the District’s capital improvement and major replacement expenses for FY2015/16 and the subsequent five years. Annual capital expenses vary from about \$2.9 million to about \$4.1 million. FY2016/17 through FY2020/21, the capital costs total about \$16.7 million. Just under half of this amount is made up of collection system improvements. Table 2 does not include the annual costs related to retiring the outstanding State Revolving Fund loan or Certificates of Participation debt.

**Table 3: State Revolving Fund Loan.** In FY2007/08, the California State Water Resources Control Board issued a loan to the District of \$81 million through the State Revolving Fund (SRF) program. The loan funded an upgrade and expansion of the Novato Treatment Plant to treat the combined flow of the District’s wastewater treatment plants. The loan term is 20 years at an interest rate of 2.4%. Repayment began in FY2011/12. The annual payment is about \$5.4 million, and the loan payments extend through FY2030/31.

**Table 4: Wastewater Certificates of Participation.** In addition to the SRF loan, the District issued \$21.75 million of debt as Certificates of Participation (COPs) in FY2011/12 to finance collection system, pump station and additional treatment plant improvements. This issue sold for

an average interest rate of 4.11% and will be fully retired in FY2031/32. The annual debt service payments vary from about \$1.6 million to \$1.7 million over the next five years.

**Table 5: Operating Cash Flow.** Table 5 presents the wastewater operating expenses and projects the operating sewer service charge over the next five years. The District currently provides wastewater service to 29,288 equivalent dwelling units (EDUs) and projects annual growth of 40 new EDUs. The current operating service charge is \$302 per EDU plus \$2 per account annually for collection of the charge on the Marin County property tax roll. FY2015/16, the District expects to generate about \$8.9 million in operating service charges, including the county charge revenue. The District also collects about \$870,000 in miscellaneous revenues and about \$18,000 in interest earnings. In total, the District projects operating revenues of about \$9.8 million in FY2015/16.

At the current sewer service charge, revenues will not be adequate to fund operating cost increases over the next five years. Operating costs are budgeted at about \$9.8 million and are projected to increase to \$11.26 million by FY2020/21, an average annual increase of about 2.9%.

To meet operating costs, maintain reserves, and generate positive net revenues for debt coverage, BWA recommends that the District increase the operating wastewater service charge by \$10 per EDU annually through FY2020/21.

**Table 6: Capital Cash Flow.** Table 6 presents the wastewater capital expenses and projects the capital sewer service charge over the next five years. Capital revenues include capital service charges, property taxes, capacity fees, interest earnings, and miscellaneous revenues. Property taxes are projected to increase by 2% annually. Capacity fee revenues are projected to increase in FY2016/17 due to the Board-approved increase in the capacity fee from \$9,870 to \$10,860 per EDU. Into the future, the capacity fee is projected to increase 3% annually. This fiscal year, the District expects to generate about \$9.6 million in capital wastewater revenues.

Wastewater capital expenses are budgeted to be about \$10.4 million in FY2015/16 consisting of capital projects and debt service payments. The District expects to cash fund the capital improvement projects listed in Table 2. In addition, the District's annual debt service payments total about \$7.1 million annually.

The capital cash flow shown in Table 6 also includes a projection of the District's debt service coverage. Debt service coverage is calculated as the total revenues less operating expenses divided by the annual debt service payment. The minimum debt coverage ratio required by the District's debt agreements is 1.2 times the annual payment; however, the District prefers to budget conservatively and maintain coverage of at least 1.4 times the annual payment.

It is anticipated that Capital Fund Ending Fund Balances will fluctuate below the beginning FY2015/16 level in FY2016/17 and FY2017/18, but will balance out to the FY2015/16 level (or net neutral position) by FY2018/19. The District is embarking on its next Collection System Master Plan (CSMP) in FY2016/17, and excess net annual revenues in the Capital Fund over the beginning FY2015/16 level would potentially be available for capital work identified by the CSMP effort in future years of the 5-year period of this Rate Study.

To fund capital expenses, maintain reserves, and meet and exceed the District's debt service coverage target, BWA recommends that the capital wastewater service charge increase by \$11 per EDU annually.

**Table 7: Summary of Projected Service Charges.** The sum of projected capital and operating service charges is shown in Table 7. The total service charge is projected to increase by \$21 per EDU annually through FY2020/21, equal to about 3.5%, on average.

**Table 8: Proposed Non-Residential Fixed Charges.** For non-residential users, service charges are developed based on a combination of fixed costs and variable costs. The District last conducted a cost allocation to fixed and variable expense categories in 2007. For this rate update, the allocation of costs is held constant. Non-residential fixed charges are based on floor area flow factors for various customer classes. Flow factor charges are increased at the same rate as those developed for residential customers.

**Table 9: Proposed Non-Residential Variable Charges.** Non-residential user variable costs are assigned based on winter water consumption and estimated strength factors in accordance with guidelines developed in the State Water Resources Control Board's *Revenue Program Guidelines*. Future variable charges are increased at the same rate as those developed for residential customers.

**Table 10: Service Charge Cost Comparison.** This table shows a comparison of the District's sewer service charges with those of neighboring wastewater agencies. Where available, the future-year approved rate increases of other agencies are included. The Cities of Santa Rosa, Petaluma, and Rohnert Park bill for wastewater service based on metered water use. For these agencies, the sewer service charges are calculated based on assumed winter water use of 141.7 gallons per day (4,250 gallons monthly), which is equal to the District's winter water use.

The District's charges are currently on the lower end of surveyed agencies. Even if the proposed rate increases are implemented, the District's charges will remain on the lower end of the nearby agencies. Most likely, other agencies' rates will also require upward adjustment within the same study period.

**Table 1: Current and Projected Operating Expenses  
Novato Sanitary District  
2016 Sewer Rate Study**

	<b>Actual Expenditures FY2014/15</b>	<b>Final Budget FY2015/16</b>	<b>Preliminary Budget FY2016/17</b>
Collection	\$1,240,062	\$1,386,100	\$1,388,527
Treatment - Contract Operations	2,795,808	3,018,331	3,098,586
Reclamation	398,117	487,029	510,713
Laboratory	555,215	601,633	629,767
Pump Stations	679,829	814,633	869,203
Administration/Engineering	2,075,333	2,936,237	2,993,010
Hazardous Household Waste	289,587	402,501	409,787
Recycled Water	<u>100,353</u>	<u>117,000</u>	<u>120,510</u>
<b>Totals</b>	<b>\$8,134,304</b>	<b>\$9,763,464</b>	<b>\$10,020,13</b>

Source: District Budgets

**Table 2: Capital Improvements Program FY2016/17-2020/21  
Novato Sanitary District  
2016 Sewer Rate Study**

<b>Project No.</b>	<b>Project Name</b>	<b>Budget 2015/16</b>	<b>Projected FY2016/17</b>	<b>Projected FY2017/18</b>	<b>Projected FY2018/19</b>	<b>Projected FY2019/20</b>	<b>Projected FY2020/21</b>	<b>FY2016/17 to FY2020/21</b>
72403	Pump Station Rehab.	50,000	50,000	250,000	250,000	500,000	500,000	1,550,000
72508	N. Bay Water Reuse Authority	403,000	440,000	100,000	50,000	50,000	50,000	690,000
72706	Collection System Improvements	1,050,000	900,000	1,700,000	1,700,000	1,700,000	1,700,000	7,700,000
72706-1	Lateral Replacement Program	50,000	60,000	75,000	120,000	140,000	160,000	555,000
72707	Hamilton Wetlands/Outfall monitoring	22,500	10,000	10,000	10,000	10,000	10,000	50,000
72708	Cogeneration	20,000	20,000	20,000	20,000	20,000	20,000	100,000
72802	Annual Sewer Adj. for City Projects	10,000	10,000	10,000	10,000	10,000	10,000	50,000
72803	Annual Coll. Sys. Repairs (Spot Repairs)	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
72804	Annual Recl. Facilities Improvements	100,000	100,000	100,000	100,000	100,000	100,000	500,000
72805	Annual Treatment Plant Improvements	150,000	100,000	100,000	100,000	100,000	100,000	500,000
72806	Annual Pump Station Improvements	150,000	100,000	100,000	100,000	100,000	100,000	500,000
72808	Strategic Plan Update	10,000	20,000	20,000	20,000	20,000	20,000	100,000
72809	Novato Creek Watershed	15,000	10,000	10,000	10,000	10,000	10,000	50,000
73003	Admin Bldg. Upgrades/Maintenance Bldg.	740,000	250,000	50,000	20,000	20,000	20,000	360,000
73004	Odor Control & NTP Landscaping	50,000	50,000	50,000	50,000	50,000	50,000	250,000
73005	RWF Expansion	150,000	1,300,000	20,000	10,000	-	-	1,330,000
73006	NTP Corrosion Control	150,000	75,000	150,000	150,000	75,000	75,000	525,000
73090	Vehicle Replacement	25,000	400,000	25,000	25,000	25,000	400,000	875,000
<b>Total</b>		<b>\$3,345,500</b>	<b>\$4,095,000</b>	<b>\$2,990,000</b>	<b>\$2,945,000</b>	<b>\$3,130,000</b>	<b>\$3,525,000</b>	<b>\$16,685,000</b>

Project costs are based on 2016 dollars without escalation.

**Table 3: SRF Loan Payments**  
**Novato Sanitary District**  
**2016 Sewer Rate Study**

**Original Loan Amount - \$81,328,983**  
**Term - 20 years; 2.4% Interest**

<b>Date</b>	<b>Outstanding Principal</b>	<b>Interest Payment</b>	<b>Principal Payment</b>	<b>Total Annual Payment</b>
FY2016/17	67,119,301	1,610,863	3,768,093	5,378,956
FY2017/18	63,351,209	1,520,429	3,858,527	5,378,956
FY2018/19	59,492,682	1,427,824	3,951,132	5,378,956
FY2019/20	55,541,550	1,332,997	4,045,959	5,378,956
FY2020/21	51,495,591	1,235,894	4,143,062	5,378,956
FY2021/22	47,352,529	1,136,461	4,242,495	5,378,956
FY2022/23	43,110,034	1,034,641	4,344,315	5,378,956
FY2023/24	38,765,719	930,377	4,448,579	5,378,956
FY2024/25	34,317,140	823,611	4,555,345	5,378,956
FY2025/26	29,761,795	714,283	4,664,673	5,378,956
FY2026/27	25,097,123	602,331	4,776,625	5,378,956
FY2027/28	20,320,497	487,692	4,891,264	5,378,956
FY2028/29	15,429,233	370,302	5,008,654	5,378,956
FY2029/30	10,420,579	250,094	5,128,862	5,378,956
FY2030/31	5,291,717	127,001	5,251,955	5,378,956

**Table 4: Wastewater Certificates of Participation - 2011  
Novato Sanitary District  
2016 Sewer Rate Study**

<b>Payment Date</b>	<b>Principal</b>	<b>Rate</b>	<b>Interest</b>	<b>Period Debt Svc</b>	<b>Fiscal Year Debt Svc</b>
08/01/16			387,874	387,874	
02/01/17	905,000	4.000%	387,874	1,292,874	1,680,748
08/01/17			369,774	369,774	
02/01/18	925,000	4.000%	369,774	1,294,774	1,664,548
08/01/18			351,274	351,274	
02/01/19	945,000	4.000%	351,274	1,296,274	1,647,548
08/01/19			332,374	332,374	
02/01/20	970,000	4.000%	332,374	1,302,374	1,634,748
08/01/20			312,974	312,974	
02/01/21	1,000,000	4.000%	312,974	1,312,974	1,625,948
08/01/21			292,974	292,974	
02/01/22	1,035,000	4.000%	292,974	1,327,974	1,620,948
08/01/22			272,274	272,274	
02/01/23	1,065,000	4.000%	272,274	1,337,274	1,609,548
08/01/23			250,974	250,974	
02/01/24	1,105,000	4.000%	250,974	1,355,974	1,606,948
08/01/24			228,874	228,874	
02/01/25	1,145,000	4.000%	228,874	1,373,874	1,602,748
08/01/25			205,974	205,974	
02/01/26	1,190,000	4.000%	205,974	1,395,974	1,601,948
08/01/26			182,174	182,174	
02/01/27	1,235,000	4.250%	182,174	1,417,174	1,599,348
08/01/27			155,930	155,930	
02/01/28	1,285,000	4.250%	155,930	1,440,930	1,596,860
08/01/28			128,624	128,624	
02/01/29	1,340,000	4.500%	128,624	1,468,624	1,597,248
08/01/29			98,474	98,474	
02/01/30	1,395,000	4.500%	98,474	1,493,474	1,591,948
08/01/30			67,086	67,086	
02/01/31	1,455,000	4.700%	67,086	1,522,086	1,589,173
08/01/31			32,894	32,894	
02/01/32	1,385,000	4.750%	32,894	1,417,894	1,450,788

**Table 5: Operating Cash Flow  
Novato Sanitary District  
2016 Sewer Rate Study**

	Budget FY2015/16	Preliminary FY2016/17	Projected			
			FY2017/18	FY2018/19	FY2019/20	FY2020/21
Number of equivalent connections	29,288	29,328	29,368	29,408	29,448	29,488
New equivalent connections	40	40	40	40	40	40
Annual operating service charge	\$302	\$312	\$322	\$332	\$342	\$352
County's annual charge per account (1)	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00
Total annual operating service charge	\$304	\$314	\$324	\$334	\$344	\$354
<b>Annual % Change year to year (2)</b>		3.29%	3.18%	3.09%	2.99%	2.91%
Beginning total operating funds balance (3)	\$10,635,000	\$10,643,000	\$10,708,000	\$10,736,000	\$10,782,000	\$10,807,000
<b>Operating revenues</b>						
Operating service charges	\$8,887,000	\$9,193,000	\$9,499,000	\$9,806,000	\$10,113,000	\$10,422,000
Other revenues - 1% increase	867,000	876,000	885,000	894,000	903,000	912,000
Interest	<u>18,000</u>	<u>18,000</u>	<u>18,000</u>	<u>19,000</u>	<u>19,000</u>	<u>19,000</u>
<b>Total operating revenues</b>	\$9,772,000	\$10,087,000	\$10,402,000	\$10,719,000	\$11,035,000	\$11,353,000
<b>Operating expenses (4)</b>						
Collection	\$1,386,000	\$1,389,000	\$1,433,000	\$1,490,000	\$1,527,000	\$1,566,000
Treatment - Contract Operations	3,018,000	3,099,000	3,187,000	3,277,000	3,370,000	3,466,000
Reclamation	487,000	511,000	532,000	555,000	578,000	601,000
Laboratory	602,000	630,000	649,000	668,000	688,000	709,000
Pump Stations	815,000	869,000	894,000	925,000	946,000	967,000
Administration (5)	2,936,000	2,993,000	3,137,000	3,204,000	3,335,000	3,369,000
Hazardous Household Waste	403,000	410,000	418,000	426,000	435,000	446,000
Recycled Water	<u>117,000</u>	<u>121,000</u>	<u>124,000</u>	<u>128,000</u>	<u>131,000</u>	<u>135,000</u>
<b>Total operating expenses</b>	\$9,764,000	\$10,022,000	\$10,374,000	\$10,673,000	\$11,010,000	\$11,259,000
<b>Annual % Change year to year (6)</b>		2.64%	3.51%	2.88%	3.16%	2.26%
Net annual revenues	\$8,000	\$65,000	\$28,000	\$46,000	\$25,000	\$94,000
Ending fund balance	\$10,643,000	\$10,708,000	\$10,736,000	\$10,782,000	\$10,807,000	\$10,901,000

1 - District collects an additional \$2 per account each year for the County's fee for collecting on the tax roll. County's fee has not changed since 1978.

2 - The average annual percentage change for the operating sewer service charge is 3.09% from FY2016/17 to FY2020/21.

3 - July 1, 2015 balance. Please note that the District receives no revenues from July until mid-December due to the County's tax collection schedule.

4 - Operating expenses projected based on current fiscal year budget.

5 - Includes provisions for Government Standards Accounting Board Statement 45 (GASB-45) Other Post-Employment Benefits (OPEB) and GASB-68 Pension Benefits related costs.

6 - The average annual percentage change for the total operating expenditures is 2.89%.

Source: Final Budget for Fiscal Year 2015/16 Including Preliminary Budget for Fiscal Year 2016/17

**Table 6: Capital Cash Flow  
Novato Sanitary District  
2016 Sewer Rate Study**

	Budget	Preliminary	Projected			
	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21
Number of equivalent connections	29,288	29,328	29,368	29,408	29,448	29,488
New equivalent connections	40	40	40	40	40	40
Annual capital service charge	\$248	\$259	\$270	\$281	\$292	\$303
<b>Annual % Change year to year (1)</b>		4.44%	4.25%	4.07%	3.91%	3.77%
Connection charge - 3% increase	\$9,870	\$10,860	\$11,190	\$11,530	\$11,880	\$12,240
Beginning capital fund balance (2)	\$6,048,000	\$5,243,000	\$4,100,000	\$4,459,000	\$5,270,000	\$6,302,000
<b>Capital revenues</b>						
Capital service charges	\$7,263,000	\$7,596,000	\$7,929,000	\$8,264,000	\$8,599,000	\$8,935,000
Property taxes @ 2%	1,900,000	1,938,000	1,977,000	2,017,000	2,057,000	2,098,000
Capacity fees	395,000	434,000	448,000	461,000	475,000	490,000
Interest @ 0.467% (LAIF Feb 2016)	22,000	24,000	19,000	21,000	25,000	29,000
Other revenues	<u>26,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
<b>Total annual funding</b>	\$9,606,000	\$10,012,000	\$10,393,000	\$10,783,000	\$11,176,000	\$11,572,000
<b>Capital expenses</b>						
Treatment plant	\$1,260,000	\$1,795,000	\$390,000	\$350,000	\$265,000	\$265,000
Collection system (3)	1,335,000	1,570,000	2,010,000	2,055,000	2,075,000	2,470,000
Pump stations	200,000	150,000	350,000	350,000	600,000	600,000
Reclamation system	541,000	560,000	220,000	170,000	170,000	170,000
Other projects	<u>10,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
Subtotal capital projects	\$3,346,000	\$4,095,000	\$2,990,000	\$2,945,000	\$3,130,000	\$3,525,000
SRF Loan pmts (Table 3)	5,379,000	5,379,000	5,379,000	5,379,000	5,379,000	5,379,000
COP debt service (Table 4)	<u>1,686,000</u>	<u>1,681,000</u>	<u>1,665,000</u>	<u>1,648,000</u>	<u>1,635,000</u>	<u>1,626,000</u>
<b>Total annual capital expense</b>	\$10,411,000	\$11,155,000	\$10,034,000	\$9,972,000	\$10,144,000	\$10,530,000
Net annual revenues	-\$805,000	-\$1,143,000	\$359,000	\$811,000	\$1,032,000	\$1,042,000
Ending fund balance	\$5,243,000	\$4,100,000	\$4,459,000	\$5,270,000	\$6,302,000	\$7,344,000
Debt service coverage (4)	1.363	1.430	1.482	1.543	1.599	1.668

1 - The average annual percentage change for the sewer service charge is 4.09% from FY2016/17 to FY2020/21.

2 - July 1, 2015 balance. Please note that the District receives no revenues from July until mid-December due to the County's tax collection schedule.

3 - Includes lateral replacements, vehicles, spot repairs, and other collection system improvements.

4 - The District prefers to maintain debt service coverage of a least 1.4 times the annual debt service payment.

Source: Final Budget for Fiscal Year 2015/16 Including Preliminary Budget for Fiscal Year 2016/17

**Table 7: Summary of Projected Sewer Service Charges  
Novato Sanitary District  
2016 Sewer Rate Study**

**Annual Cost per Equivalent Dwelling Unit**

	Current	Projected				
	FY2015/16	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21
Operating	\$304	\$314	\$324	\$334	\$344	\$354
% increase		3.3%	3.2%	3.1%	3.0%	2.9%
Capital	\$248	\$259	\$270	\$281	\$292	\$303
% increase		4.4%	4.2%	4.1%	3.9%	3.8%
<b>Total</b>	<b>\$552</b>	<b>\$573</b>	<b>\$594</b>	<b>\$615</b>	<b>\$636</b>	<b>\$657</b>
<b>Annual increase</b>		<b>\$21</b>	<b>\$21</b>	<b>\$21</b>	<b>\$21</b>	<b>\$21</b>
% increase		3.8%	3.7%	3.5%	3.4%	3.3%

**Table 8: Proposed Non-Residential Fixed Charges  
Novato Sanitary District  
2016 Sewer Rate Study**

User Type	Floor Area Flow Factor	Charge Per Square Foot					
		Current	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21
Base Charge/square foot	1.0	\$0.23	\$0.24	\$0.25	\$0.26	\$0.27	\$0.27
Office	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Warehouse/mini storage	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Retail	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Public office buildings	1.0	0.23	0.24	0.25	0.26	0.27	0.27
School classrooms/admin	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Churches	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Meeting halls w/kitchens	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Auto service stations	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Supermarkets	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Auditoriums theaters	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Gymnasium w/showers	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Hotels/motels (1)	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Mortuary	1.0	0.23	0.24	0.25	0.26	0.27	0.27
Medical offices	1.3	0.30	0.31	0.32	0.33	0.35	0.36
Veterinary offices	1.3	0.30	0.31	0.32	0.33	0.35	0.36
Dental offices	1.3	0.30	0.31	0.32	0.33	0.35	0.36
Hospitals	1.3	0.30	0.31	0.32	0.33	0.35	0.36
Cafeteria/dining area	2.0	0.45	0.47	0.48	0.50	0.52	0.54
Restaurants/cafes	2.0	0.45	0.47	0.48	0.50	0.52	0.54
Bakeries	2.0	0.45	0.47	0.48	0.50	0.52	0.54
Ice cream/yogurt shops	2.0	0.45	0.47	0.48	0.50	0.52	0.54
Delicatessens	2.0	0.45	0.47	0.48	0.50	0.52	0.54
Laundry & laundromats	3.0	0.68	0.71	0.73	0.76	0.78	0.81

1 – Not including restaurants

**Table 9: Proposed Non-Residential Variable Charges  
(water use and strength factors)  
Novato Sanitary District  
2016 Sewer Rate Study**

User Type	Strength Factor	Current Charge	Charge Per Hundred Cubic Feet (1)				
			FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21
Base Charge/square foot	1.0	\$3.00	\$3.11	\$3.23	\$3.34	\$3.46	\$3.57
Office	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Warehouse/mini-storage	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Retail	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Public office buildings	1.0	3.00	3.11	3.23	3.34	3.46	3.57
School classrooms/admin	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Churches	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Auto service stations	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Auditoriums theaters	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Gymnasium w/showers	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Hotels/motels (2)	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Medical offices	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Veterinary offices	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Dental offices	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Hospitals	1.0	3.00	3.11	3.23	3.34	3.46	3.57
Laundries & laundromats	1.4	4.20	4.36	4.52	4.68	4.84	5.00
Meeting halls w/kitchens	1.4	4.20	4.36	4.52	4.68	4.84	5.00
Cafeteria/dining area	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Restaurants/cafes	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Supermarkets	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Bakeries	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Ice cream/yogurt shops	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Delicatessens	2.2	6.52	6.77	7.02	7.26	7.51	7.76
Mortuary	2.2	6.52	6.77	7.02	7.26	7.51	7.76

1 – One hundred cubic foot is 748 gallons. Charges based on historical winter water consumption.

2 – Not including restaurants

**Table 10: Cost Comparison with Neighboring Agencies  
Annual Sewer Service Charges per Equivalent Dwelling Unit  
Novato Sanitary District  
2016 Sewer Rate Study**

<b>AGENCY</b>	<b>FY 2015/16</b>	<b>FY 2016/17</b>	<b>FY 2017/18</b>	<b>FY 2018/19</b>	<b>FY 2019/20</b>	<b>FY 2020/21</b>
Sanitary District No. 5 - Belvedere	\$1,985					
Sausalito-Marín City Sanitary Dist - Sausalito	\$1,308	\$1,340	\$1,377	\$1,414		
Tamalpais Community Service District	\$1,111					
Sanitary District No. 5 - Tiburon	\$1,034					
Sanitary District No. 1 - City of Larkspur	\$1,012	\$1,067	\$1,125	\$1,178		
City of Santa Rosa (1)	\$940	\$948	\$957	\$965	\$973	\$980
City of Petaluma (1)	\$865					
San Rafael Sanitation District	\$788	\$830	\$863			
Las Gallinas Valley Sanitary District	\$748	\$837	\$870	\$900	\$929	
Sanitary District No. 1 - Ross Valley	\$743	\$797	\$856	\$909		
City of Mill Valley	\$685					
City of Rohnert Park (1)	\$671					
<b>NOVATO SANITARY DISTRICT</b>	<b>\$552</b>	<b>\$573</b>	<b>\$594</b>	<b>\$615</b>	<b>\$636</b>	<b>\$657</b>
Vallejo Sanitation & Flood Control District	\$520					
Town of Corte Madera (S.D. #2)	\$500					
Napa Sanitation District	\$483	\$555	\$638	\$676	\$710	\$739

1 - Based on 4,250 gallons of monthly sewer flow