

# NOVATO SANITARY DISTRICT

Meeting Date: June 13, 2016

**The Board of Directors of Novato Sanitary District will hold a meeting at 6:00 p.m., Monday, June 13, 2016, at the District Offices, 500 Davidson Street, Novato.**

*Materials related to items on this agenda are available for public inspection in the District Office, 500 Davidson Street, Novato, during normal business hours. They are also available on the District's website: [www.novatosan.com](http://www.novatosan.com).*

## AGENDA

- 1. PLEDGE OF ALLEGIANCE:**
- 2. AGENDA APPROVAL:**
- 3. PUBLIC COMMENT (PLEASE OBSERVE A THREE-MINUTE TIME LIMIT):**

*This item is to allow anyone present to comment on any subject not on the agenda, or to request consideration to place an item on a future agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Board at this time as a result of any public comments made.*

- 4. PUBLIC HEARING PURSUANT TO ARTICLE 13(D) OF THE CALIFORNIA CONSTITUTION – INCREASED SEWER SERVICE CHARGES:**
  - a. Staff report.
  - b. Open public hearing.
  - c. Receive public comments.
  - d. Receive and tally written protests.
  - e. Close public hearing.
- 5. ORDINANCE SETTING SEWER SERVICE CHARGES:**
  - a. Consider adoption of Ordinance No. 120 – An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years FY2016-17, 2017-18, 2018-19, 2019-20, and 2020-21.
- 6. PUBLIC HEARING PURSUANT TO SECTION 5471 ET SEQ. AND 6520.5 OF THE CALIFORNIA HEALTH AND SAFETY CODE – FY2016-17 SEWER SERVICE CHARGE REPORT, AND ELECTING TO COLLECT ON COUNTY TAX ROLLS:**
  - a. Sewer Service Charge Report.
  - b. Open public hearing.
  - c. Consider protests regarding sewer service charge report.
  - d. Close public hearing.
- 7. RESOLUTION CONFIRMING FY2016-17 SEWER SERVICE CHARGE REPORT AND ELECTING TO COLLECT ON COUNTY TAX ROLLS:**
  - a. Consider adoption of Resolution No. 3098 – A Resolution Confirming Sewer Service Charge Report and Collection of Sewer Service Charges for Novato Sanitary District on the County of Marin Tax Rolls for Fiscal Year FY2016-17.

**8. BREAK: THE BOARD WILL RECONVENE AFTER A SHORT BREAK.**

**9. REVIEW OF MINUTES:**

- a. Approval of minutes of the May 23, 2016 regular meeting.

**10. CONSENT CALENDAR:**

*The General Manager-Chief Engineer has reviewed the following items. To his knowledge, there is no opposition to the action. The items can be acted on in one consolidated motion as recommended, or may be removed from the Consent Calendar and separately considered at the request of any person.*

- a. Approve regular disbursements, May 24 – June 13, 2016.
- b. Receive Deposit Summary, May 2016.
- c. Approve a contract in the not-to-exceed amount of \$80,000 with Duke's Root Control, Inc., & authorize the General Manager-Chief Engineer to execute it.

**11. SOLID WASTE COMMITTEE REPORT:**

- a. Receive report, meeting of June 1, 2016, and accept recommendation to adopt preliminary solid and household hazardous waste (HHW) operating budget for FY16-18.
- b. Approve contract with DLJ Associates to provide AB939, household hazardous waste (HHW), and related services for FY2016-17 in the amount of \$102,964, & authorize General Manager-Chief Engineer to execute it.

**12. WASTEWATER OPERATIONS**

- a. Receive Wastewater Operations Report, May 2016.

**13. STAFF REPORT:**

- a. Comprehensive Annual Financial Report (CAFR) Award.

**14. BOARD MEMBER REPORTS AND REQUESTS:**

- a. North Bay Watershed Association (NBWA), meeting of June 3, 2016.

**15. GENERAL MANAGER'S REPORT AND ANNOUNCEMENTS:**

**16. ADJOURNMENT:**

**Next regular meeting date: Monday, June 27, 2016, 6:00 PM, at the Novato Sanitary District office, 500 Davidson Street, Novato, CA.**

Next resolution no. 3099.

***In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the District at (415) 892-1694 at least 24 hours prior to the meeting. Notification prior to the meeting will enable the District to make reasonable accommodation to help ensure accessibility to this meeting.***

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Increased Sewer Service Charges (SSCs): Public Hearing and Ordinance setting SSCs for FY2016-17 through FY2020-21 - Staff report.</b>	<b>MEETING DATE: June 13, 2016</b>  <b>AGENDA ITEM NO.: 4.a.-4.e., 5.a.</b>
<b>RECOMMENDED ACTION: Hold Public Hearing, and consider adoption of Ordinance No. 120 setting sewer service charges for Fiscal Years FY2016-17 through FY2020-21.</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>At its April 25, 2016 meeting, the Board of Directors reviewed the 2016 Sewer Service Charge report prepared by Bartle Wells Associates (BWA), and received a presentation from Tom Gaffney of BWA. A copy of the BWA report is provided as Attachment 1. Briefly, the BWA report looks at the District's current operating and capital revenues and expenditures, projects its operating and capital revenues and expenditures over the next five years, and recommends a staged five-year series of moderate rate increases of \$21 per Equivalent Dwelling Unit (EDU) each year.</p> <p>At the April 25, 2016 meeting, the Board also set the date of June 13, 2016 for a Public Hearing on the proposed increases to the sewer service charges, and authorized the mailing of notices proposing a maximum rate increase of \$21/EDU/per year in each of fiscal years (FY) 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21.</p> <p>Notices were mailed April 28, 2016 to all property owners of record from a legally mandated list. Public notices for the hearing were published in the Marin IJ on May 26<sup>th</sup> and June 2<sup>nd</sup>. A copy of the Proof of Publication is provided as Attachment 2. Following the hearing, the Board will consider adoption of Ordinance No. 120 "An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21". The Ordinance has been reviewed and approved by the District's Legal Counsel.</p> <p>As of June 9, 2016, the District had received 33 valid protests to the rate increase. At this time, it is recommended that the Board hold the public hearing, receive and consider any additional public comments or protests, and consider adoption of Ordinance 120.</p>	
<b>ATTACHMENTS:</b> <ol style="list-style-type: none"> <li>1. 2016 Sewer Rate Study by Bartle Wells Associates.</li> <li>2. Marin Independent Journal Proof of Publication - Notice of Public Hearing.</li> </ol>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update. The item also addresses other goals of the Strategic Plan including Goal 1 (Operational Excellence), and Goal 3 (Alignment and Communications).	
<b>DEPT. MGR.:</b> ssk	<b>GENERAL MANAGER:</b> SSK



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS

1889 Alcatraz Avenue  
Berkeley, CA 94703  
T: 510-653-3399  
www.bartlewells.com

**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

**Marin Independent Journal**

4000 Civic Center Drive, Suite 301  
San Rafael, CA 94903  
415-382-7335  
legals@marinij.com  
2071871

NOVATO SANITARY DISTRICT  
500 DAVIDSON ST  
NOVATO, CA 94945-3328

**PROOF OF PUBLICATION  
(2015.5 C.C.P.)**

**STATE OF CALIFORNIA  
County of Marin**

I am a citizen of the United States and a resident of the County aforesaid: I am over the age of eighteen years, and not a party to or interested in the above matter. I am the principal clerk of the printer of the MARIN INDEPENDENT JOURNAL, a newspaper of general circulation, printed and published daily in the County of Marin, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Marin, State of California, under date of FEBRUARY 7, 1955, CASE NUMBER 25566; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

**05/26/2016, 06/02/2016**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated this 2nd day of June, 2016.

*Donna Lazarus*

Signature

**PROOF OF PUBLICATION**

Legal No. **0005741616**

**NOTICE OF PUBLIC HEARING**

**SEWER SERVICE CHARGES  
FISCAL YEARS 2016-2017 THROUGH 2020-2021  
AND INTENT TO COLLECT ON TAX ROLLS**

**NOVATO SANITARY DISTRICT**

**NOTICE IS HEREBY GIVEN** that pursuant to Proposition 218, Article XIII(D), Section 6, of the California Constitution, Sections 5471 and 6520.5 of the Health and Safety Code, and Section 53756 of the Government Code, the Board of Directors of the **NOVATO SANITARY DISTRICT** intends to consider an Increase in rates and fix its charges for sewerage services for fiscal years 2016-2017 through 2020-2021. Pursuant to Section 543 of the Health and Safety Code, the Board of Directors of Novato Sanitary District further intends to elect to collect such charges on the tax roll of the County of Marin in the same manner as general taxes. A written report containing a description of each parcel of real property receiving sanitary sewerage service from said District and the anticipated amount of charges for each such parcel will be filed with the District Secretary.

**NOTICE IS FURTHER GIVEN** that on Monday, the 13th day of June, 2016, at the hour of 6:00 p.m. at the regular meeting place of the District Board of Directors, Novato Sanitary District, 500 Davidson Street, Novato, California, said Board will hear and consider all protests and objections to the increase in proposed sewer service charges and the charges set forth in said report.

By order of the Board of Directors of the Novato Sanitary District.

Dated: April 25, 2016

/s/ Sandeep Karkal

Sandeep Karkal  
Secretary, Novato Sanitary District

NO. 653 May 26, 2016, and June 2, 2016.

**ORDINANCE NO. 120**

**AN ORDINANCE OF THE NOVATO SANITARY DISTRICT  
ESTABLISHING SEWER SERVICE CHARGES  
FOR FISCAL YEARS 2016-17, 2017-18, 2018-19, 2019-20, 2020-21**

**WHEREAS**, the Novato Sanitary District has previously developed and instituted a Sewer Service Charge Program to finance the services and facilities furnished by the District, and

**WHEREAS**, Ordinance No. 111, adopted by the Board of Directors on August 6, 2007, set the sewer service charges through fiscal year 2009-2010 and the methodology for calculating the charges; and

**WHEREAS**, in adopting Ordinance No. 111, the Board relied on various studies and documents, which are available for inspection at the District offices; and

**WHEREAS**, Section 23 of Ordinance No. 111 provides that from time to time, when rates and charges are updated but there is no modification of methodology, the Board may modify rates and charges by adopting new tables; and

**WHEREAS**, Ordinance No. 116, adopted by the Board of Directors on June 25, 2012, set the sewer service charges through fiscal year 2015-16; and

**WHEREAS**, on Monday, the 13<sup>th</sup> day of June, 2016, at the hour of 6:00 p.m. at the regular meeting place of the District, 500 Davidson Street, Novato, California, the Board of Directors of the District heard and considered proposed sewer service charge increases for fiscal years 2016-2017 through 2020-2021, and the Secretary published a notice of said hearing once a week for two successive weeks with at least five days intervening between the respective publication dates, with the first publication being at least fourteen days prior to the date set for said hearing, in the Independent Journal, a newspaper of general circulation printed and published in the County; and

**WHEREAS**, the Board of Directors of the District has reviewed the present sewer service charge schedule and has determined that the residential Service Unit rate should be increased by an amount of \$21.00 for each of fiscal years 2016-17; 2017-18; 2018-19; 2019-20; and 2020-21. Non-residential rates will be increased proportionately based on square footage and variable water use charges; and

**WHEREAS**, in determining that the sewer service charges should be increased, the Board of Directors also considered the “2016 Sewer Rate Study” completed by Bartle Wells Associates and dated April 20, 2016; and

**WHEREAS**, the District will consider, at its regular meeting on June 13, 2016, whether to elect, pursuant to Section 5473 of the Health and Safety Code of the State of California, to have the sewer service charges, established pursuant to this Ordinance No. 120, collected on the tax roll of the County of Marin; and

**WHEREAS**, in adopting this Ordinance, the Board of Directors finds that:

- a. Written notices of the proposed increases in sewer service charges were sent by first class U.S. mail to every owner of property connected in the District at least 45 days prior to the Public Hearing on the proposed increases conducted on June 13, 2016.
- b. All proper protests submitted by property owners or occupants (one protest per parcel) against the proposed increases in the sewer service charges, including those provided in person or by U.S. mail or fax or e-mail, were considered and tallied at the public hearing conducted on June 13, 2016, and the District was not presented with protests by a majority of the owners of the identified parcels affected by this change.
- c. Based on the draft budget, the amount of the charges imposed does not exceed the proportional cost of the service attributable to the properties receiving service and the charges are imposed only on those properties actually receiving service or for those which service is immediately available.
- d. Adoption of this Ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080(b)(8) and Section 15273 of the State CEQA Guidelines codified at 14 CCR §15273 because the Ordinance pertains to the adoption of charges necessary to maintain services within the District’s existing service area.

**NOW, THEREFORE, BE IT ORDAINED** by the Board of Directors of the Novato Sanitary District as follows:

**Section 1.** Table 1A, Table 1, and Table 2 of Section 4 of that certain ordinance entitled “Ordinance No. 111, An Ordinance of the Novato Sanitary District “Repealing District Ordinance No. 42, and Prescribing Rates and Charges for Sewage Disposal Service and Providing Procedures and

Penalties for its Enforcement”, passed by the Board of Directors of the Novato Sanitary District on August 6, 2007 are hereby amended as set forth in Attachment A to this Ordinance.

**Section 2.** The rates for residential customers in Table 1A of Attachment A reflect the inclusion of an annual collection fee of Two and 00/100 Dollars (\$2.00) per County Assessor’s parcel billed. For each non-residential parcel whose service charges are collected on the Marin County tax roll, an additional Two and 00/100 Dollars (\$2.00) fee also will be collected.

**Section 3.** Charges for users of the District’s sewer system set out in this Ordinance will be initiated for the fiscal year beginning July 1, 2016, and shall continue thereafter in effect until further action of the Board of Directors. To the extent this Ordinance No. 120, or the sewer service charges adopted herein, is challenged and set aside for any reason, Ordinance No. 116 and the preexisting 2015-16 sewer service charges adopted therein shall be immediately restored and will be effective until further action of the Board of Directors.

**Section 4.** Except as provided above, all of the balance of said Ordinance No. 111 shall remain in full force and effect.

**Section 5.** Upon adoption, this ordinance shall be entered in the minutes of the Novato Sanitary District Board, shall be published once in the Marin Independent Journal, a newspaper of general circulation published in the District, shall be posted in three (3) public places in the District, and shall take effect on July 1, 2016.

**PASSED AND ADOPTED** this 13<sup>th</sup> day of June, 2016, by the Board of Directors of the Novato Sanitary District by the following vote:

AYES:           Members:

NOES:           Members:

ABSENT:       Members:

SIGNED:

\_\_\_\_\_  
President of the Board of Directors  
Novato Sanitary District

COUNTERSIGNED:

\_\_\_\_\_  
Secretary of the Novato Sanitary District  
County of Marin, State of California

Approved as to Form:

\_\_\_\_\_  
Kenton L. Alm  
Counsel for the District

DRAFT

**ATTACHMENT A  
SEWER SERVICE CHARGE SCHEDULE FOR  
FISCAL YEARS 2016-17, 2017-18, 2018-19, 2019-20, 2020-21  
AND THEREAFTER UNTIL MODIFIED BY THE BOARD**

Table 1A – Residential Rates, annual*	Current Charge	2016-17	2017-18	2018-19	2019-20	2020-21
1 SU (Average Water Use)	\$552	\$573	\$594	\$615	\$636	\$657
Low Water Use	\$332	\$345	\$357	\$370	\$382	\$395
High Water use	\$992	\$1,030	\$1,068	\$1,105	\$1,143	\$1,181

\*Rates apply to equivalent dwelling units including, but not limited to, single family residential homes, and each unit of multi-family residential buildings. Includes \$2 County of Marin charge for collection on tax rolls.

Table 1 - Non-Residential Rates

Fixed Charge Per Square Foot  
Including flow factors

User Type	Floor Area Flow Factor	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
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

Note for Table 1: Warehouses, ministorage buildings and other storage buildings not connected to the sewers are not charged for sewer use.

Table 2 – Non-Residential Rates

Variable Charge  
(water use and strength factors)

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
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

Notes for Table 2: The annual volume of water use in hundred cubic feet/year is calculated based on the average winter water use. (Winter bimonthly water use x 6 = annual volume of water use.)

Warehouses, ministorage buildings and other storage buildings not connected to the sewers are not charged for sewer use.

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: FY2016-17 Sewer Service Charges (SSCs): Public Hearing &amp; Resolution Confirming FY2016-17 SSC Report, and Electing to Collect on County Tax Rolls – Staff report.</b>	<b>MEETING DATE: June 13, 2016</b>  <b>AGENDA ITEMS NO.: 6.a.-6d., 7.a.</b>
<b>RECOMMENDED ACTION: Hold public hearing, and consider adoption of Resolution No. 3098 confirming FY16-17 sewer service charge report and electing to collect on County tax rolls.</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>At its April 25, 2016 meeting, the Board reviewed the 2016 Sewer Service Charge Study by Bartle Wells Associates (BWA), which proposed a maximum rate increase of \$21 per year per Equivalent Dwelling Unit (EDU) in each of fiscal years (FY) 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21. A copy of the BWA report is provided as Attachment 1 to Item 4 of this agenda packet.</p> <p>If the Board adopts Ordinance No. 120 – “An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21”, the Board will conduct a Public Hearing on the FY16-17 Sewer Service Charge report, and receive protests on individual sewer service charges on the sewer service charge report. This public hearing was “noticed” twice in the Marin Independent Journal (Marin IJ). A copy of the Proof of Publication is provided in this agenda packet as Attachment 2 to agenda item No. 4. District staff will have the computerized database and the Sewer Service Charge report at the meeting so that anyone may request their individual sewer service rate in the coming year and have an opportunity to protest.</p> <p>Following the hearing, the Board will consider adoption of Resolution 3098 confirming the FY16-17 Sewer Service Charge report and elect to collect the charges on the County tax rolls. This Resolution No. 3098 has been reviewed and approved by District Counsel. The resolution is formally titled as follows: Resolution No. 3098 - “A Resolution Confirming Sewer Service Charge Report and Collection of Sewer Service Charges for Novato Sanitary District on the County of Marin Tax Rolls for the Fiscal Year FY2016-17”.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update. The item also addresses other goals of the Strategic Plan including Goal 1 (Operational Excellence), and Goal 3 (Alignment and Communications).	
<b>BUDGET INFORMATION:</b> The Preliminary Budget for Fiscal Years 2016-18 estimates that the FY16-17 Sewer Services Charges will result in Operating Revenue of about \$9.21 million and Capital Revenue of about \$7.60 million for FY16-17, versus corresponding figures of about \$9.12 million and \$7.44 million respectively for FY15-16.	
<b>DEPT. MGR.:</b> ssk	<b>GENERAL MANAGER:</b> SSK

**RESOLUTION NO. 3098**

**A RESOLUTION CONFIRMING SEWER SERVICE CHARGE REPORT  
AND COLLECTION OF SEWER SERVICE CHARGES FOR  
NOVATO SANITARY DISTRICT  
ON THE COUNTY OF MARIN TAX ROLLS  
FOR FISCAL YEAR FY2016-17**

**RESOLVED**, by the Board of Directors of the Novato Sanitary District, Marin County, California, that:

**WHEREAS**, The District does hereby elect, pursuant to Section 5473 of the Health and Safety Code of the State of California, to have the sewer service charges for the fiscal year 2016-17, established by said District, collected on the tax roll of the County of Marin, State of California, in the manner provided pursuant to Sections 5471 through 5473.11 of the Health and Safety Code of the State of California.

**WHEREAS**, Monday, the 13<sup>th</sup> day of June, 2016, at the hour of 6:00 p.m. at the regular meeting place of said District, Novato Treatment Plant, 500 Davidson Street, Novato, California, was fixed as the time and place for hearing on the sewer service charge report filed with the Secretary of this District, pursuant to law, and the Secretary published a notice of said hearing and of the filing of said report, once a week for two successive weeks with at least five days intervening between the respective publication dates, with the first publication being at least fourteen days prior to the date set for said hearing, in the Marin Independent Journal, a newspaper of general circulation printed and published in the County.

**WHEREAS**, notice was given of the time therein stated in the manner provided by law as appears by the affidavits of publication on file in the office of the Secretary of said District;

**WHEREAS**, said matter came on regularly for hearing at the time fixed; and

**WHEREAS**, there were no written or oral protests in placing the sewer service charges on the tax roll;

**NOW, THEREFORE, IT IS ORDERED**, as follows:

1. That objections to and protests against said report were not made by the owners of a majority of the separate parcels of property described in the report against which charges for the services and facilities provided by the District were fixed.
2. No objections to, or protests against, said report were made at the hearing.
3. That said report be, and it is hereby, adopted in full as revised, changed, reduced or modified by the Board, and that said charges shall be collected on the tax roll of the County of Marin, in the manner provided by law.
4. That the Secretary of this District be, and he is hereby, directed to timely file a copy of said report with the Director of Finance of Marin County upon which shall be endorsed, over his signature, a statement that the report has been finally adopted by the Board of Directors of the Novato Sanitary District.
5. The Director of Finance of Marin County shall, upon receipt of said report, enter the amounts of the charges against the respective lots or parcels as they appear on the assessment roll for the fiscal year 2016-17.
6. For premises connected to the sewer system of the District, the average sewer service rate per Service Unit (or Equivalent Dwelling Unit, or EDU) for fiscal year 2016-17 shall be **FIVE HUNDRED AND SEVENTY-THREE AND 00/100 DOLLARS (\$573.00)** as established by Novato Sanitary District Ordinance No. 120 adopted June 13, 2016. Said rate shall be subject to modification and change, from time to time, as may be required to permit the District to meet State and Federal revenue program guidelines and as the total number of Service Units and the budgetary requirements of the District change. Service Charges shall be calculated for various sewer user categories as described in Ordinance No. 111, and Ordinance No. 120 (including Tables 1A, 1, 2, and 3).

For all users whose service charges are collected on the Marin County tax roll,

the fiscal year 2016-17 sewer service rate includes a County collection fee of **TWO AND 00/100 DOLLARS (\$2.00)** per County Assessor's parcel billed.

\* \* \* \* \*

I hereby certify that the foregoing resolution was duly and regularly passed and adopted by the Board of Directors of the Novato Sanitary District, Marin County, California, at a meeting thereof duly held on the 13th day of June 2016, by the following vote:

AYES, and in favor thereof, Directors:

NOES, Directors:

ABSENT, Directors:

\_\_\_\_\_  
President, Novato Sanitary District

COUNTERSIGNED:

\_\_\_\_\_  
Secretary

## NOVATO SANITARY DISTRICT

Board Meeting Minutes

Meeting Date: May 23, 2016

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 6:02 p.m., Monday, May 23, 2016, at the District offices, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Jean Mariani, Directors Carole Dillon-Knutson, William C. Long, and Brant Miller. Director Jerry Peters arrived at 6:19 p.m.

STAFF PRESENT: General Manager-Secretary Sandeep Karkal and Administrative Secretary Julie Swoboda.

ALSO PRESENT:

Steve Krautheim, Field Services Manager, Novato Sanitary District  
Erik Brown, Technical Services Manager, Novato Sanitary District  
Brian Exberger, Assistant Project Manager, Veolia Water  
Laura Creamer, Finance Officer, Novato Sanitary District

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The General Manager stated that the payroll check register (page 10 of the packet) was revised and a copy was given to each Board member. With no further corrections, the agenda was approved as written.

PUBLIC COMMENT: None.

REVIEW OF MINUTES:

- Consider approval of minutes of the May 9, 2016 regular meeting. Director Miller stated that his absence from the April 25<sup>th</sup> Board meeting was not noted as an excused absence. The definition of excused absence was discussed. It was noted that Director Miller's absence from the April 25<sup>th</sup> Board meeting was prior to the adoption on May 9<sup>th</sup> of District Policy No. 4020 which discusses Board of Directors' meeting attendance. However, the General Manager stated that Director Miller's absence from the April 25<sup>th</sup> Board meeting was considered an excused absence.

*On motion of Director Dillon-Knutson, seconded by Director Long, and carried unanimously by those Directors present, the May 9<sup>th</sup>, 2016 Board meeting minutes were approved.*

CONSENT CALENDAR:

President Mariani called for a motion on the Consent Calendar items as follows:

- a. Approval of operating check disbursements in the amount of \$90,649.25, and capital project disbursements in the amount of \$8,983.50.

- b. Ratify May 2016 payroll and payroll related disbursements in the amount of \$223,402.11.
- c. Approve an application from the North Marin Water District (NMWD) and authorize the General Manager-Chief Engineer to issue a one-time, temporary, Class I non-domestic discharge permit for discharge of groundwater.

*On motion of Director Long, seconded by Director Miller, and carried unanimously by those Directors present, the above listed Consent Calendar items were approved.*

#### ANNUAL BUDGET:

- Receive update on Sewer Lateral Grant Program. The General Manager provided an overview of the District's current sewer lateral grant program and stated that 83 grants had been made in the last six years, with a total of \$123,271 expended. He stated that staff expects the program would be more successful if the grant amounts were increased. He stated that the preliminary 5-year Capital Improvement budget includes provisions for incrementally increasing grant amounts to the following: \$2,000 FY 16/17; \$2,500 FY 17/18; \$3,000 FY 18/19; \$3,500 FY 19/20; and \$4,000 FY 20/21. The General Manager stated that this provision addresses the District's intent to be good stewards of the environment by encouraging residents to repair their private laterals.

- Receive Fiscal Year (FY) 16-18 Preliminary Capital Improvements Program (CIP) Budget – Summary of Anticipated Project Work. The General Manager stated that the Capital Improvement Program (CIP) budget is based on an anticipated level of project work and is summarized in a memorandum provided in the Board packet.

(Director Peters arrived, 6:19 p.m.)

The General Manager introduced Technical Services Manager Erik Brown, who provided a summary of the anticipated scope of work and project work included within the various accounts of the 2016/18 Preliminary CIP Budget.

- Receive Preliminary Budget for Fiscal Years FY 16-17 and FY 17-18. The General Manager gave a PowerPoint presentation and reviewed the preliminary budget for fiscal years 2016-18. He provided an overview of the FY 15/16 budget and outlined the FY 16/17 budget highlights.

At 7:18 p.m., President Mariani declared a ten minute break.

The meeting was reconvened at 7:26 p.m.

The General Manager continued his PowerPoint presentation and discussed the year over year preliminary proposed budget. Discussion followed. A correction to the budget was made: page 18: ANTICIPATED DEBT BALANCE 6/30/**18** should be changed to 6/30/**17**.

President Mariani stated that the Preliminary Budget for FY 2016/18 will be reviewed in more detail by the District's Solid Waste Committee, Wastewater Operations Committee and the Strategic Planning and New Facilities Committee. (The General Manager provided the proposed meeting schedule for the committees in his announcements.)

BOARD MEMBER REPORTS AND REQUESTS: None.

INFORMATIONAL ITEMS:

- University of North Carolina, Chapel Hill, Environmental Finance Center article: "Six Keys to Improve Your Water Utility's Credit Rating – a Cheat Sheet." This item was for informational purposes only. Director Peters thanked the General Manager for the information and stated that it was useful.

GENERAL MANAGER'S REPORT AND ANNOUNCEMENTS:

- The next regular Board meeting will be held on Monday, June 13<sup>th</sup>, at 6:00 p.m. The meeting will include a Public Hearing for considering increased Sewer Service Charges as well as a Public Hearing on the FY 16/17 Sewer Service Charge report (individual properties) and collection on the County tax roll.
- The Solid Waste Committee will meet on Wednesday, June 1, 2016, at 3:00 p.m. and the Solid Waste Budget will be considered.
- The Wastewater Operations Committee will meet on Monday, June 20, 2016, at 2:00 p.m. and the Operating Budget will be considered.
- The Strategic Planning and New Facilities Committee will meet on Tuesday, June 21, 2016, at 2:00 p.m. and the Capital Improvements Program (CIP) budget will be considered.
- A Marin Association of Sanitary Supervisors (MASS) meeting will take place on Tuesday, May 24<sup>th</sup> to discuss the County's new trench restoration requirements. The General Manager and the Field Services Manager will attend.
- The California Association of Sanitation Agencies (CASA) will hold an annual conference in Monterey from August 9<sup>th</sup> through the 12<sup>th</sup>. Directors planning to attend should notify the District office.

ADJOURNMENT: There being no further business to come before the Board, President Mariani adjourned the meeting at 7:59 p.m.

Respectfully submitted,

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Sandeep Karkal  
Secretary

Julie Swoboda, Recording

**Novato Sanitary District  
Board Fees**

For May 2016

Item 10.a.  
(Pages 30 to 32)

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
<b>Jun 8, 16</b>			
06/08/2016	4495	Long, William C	575.48
06/08/2016	4498	Peters, Arthur Gerald	389.57
06/08/2016	3210	Dillon-Knutson-, Carole	207.79
06/08/2016	4496	Mariani, Jean M	
06/08/2016	4497	Miller, Brant	
<b>Jun 8, 16</b>			<u><u>1,172.84</u></u>

# Novato Sanitary District Operating Check Register

June 13, 2016

Date	Num	Name	Credit
<b>Jun 13, 16</b>			
06/13/2016	59469	Veolia Water North America, Inc.	167,361.00
06/13/2016	59470	Veolia Water North America, Lab	26,742.31
06/13/2016	59465	Stericycle-(Previously PSC)	16,421.50
06/13/2016	59460	Rauch Communication Consultan...	15,164.47
06/13/2016	59462	Roto Rooter-(Inc.)	14,212.75
06/13/2016	59447	Monterey Mechanical, Inc.	10,983.27
06/13/2016	59443	Johnson, Dee	8,280.00
06/13/2016	59421	Bartle Wells Assoc, Inc	6,759.16
06/13/2016	59454	Novato, City	5,061.67
06/13/2016	59437	Golden Gate Petroleum, Corp	4,251.10
06/13/2016	59446	Meyers, Nave, Riback, Silver & W...	3,073.00
06/13/2016	59467	U.S. Bank Card (3)Craig	2,942.09
06/13/2016	59430	Dearborn National	2,281.42
06/13/2016	59433	Environmental Products and Acc...	1,940.00
06/13/2016	59450	North Marin Water District	1,737.97
06/13/2016	59435	Frontier Communications of CA	1,674.79
06/13/2016	59427	Calcon Systems, Inc.	1,396.96
06/13/2016	59426	Cagwin & Dorward Inc.	1,200.00
06/13/2016	59473	WECO	1,121.45
06/13/2016	59440	IEDA, INC	1,104.00
06/13/2016	59418	B.W.S. Distributors, Inc.	1,088.14
06/13/2016	59451	North Marin Water District - Lab	1,045.00
06/13/2016	59442	Jan-Pro Cleaning Systems	1,005.00
06/13/2016	59428	Cintas Corporation	994.84
06/13/2016	59419	Barber Sign Company, Inc.	971.11
06/13/2016	59439	Hertz Corporation	815.63
06/13/2016	59434	Frontier Analytical Laboratory, Inc.	800.00
06/13/2016	59416	Aries Industries Inc.	689.98
06/13/2016	59424	BoundTree Medical, LLC	685.34
06/13/2016	59448	Newspapers in Education	600.00
06/13/2016	59445	MarinScope Inc.	550.00
06/13/2016	59414	Alpha Analytical Lab, Inc.	507.00
06/13/2016	59472	Vision Service Plan	504.26
06/13/2016	59466	Teeters & Schacht Auto Glass & ...	468.94
06/13/2016	59425	Buck's Saw Service, Inc.	458.82
06/13/2016	59463	RP Equipment previously MBE	448.01
06/13/2016	59438	Grainger	412.22
06/13/2016	59422	Bay Area Barricade Service, Inc.	407.08
06/13/2016	59444	Marin Independent Journal	376.50
06/13/2016	59461	Red Wing Shoe Store	351.24
06/13/2016	59456	Occumetric Inc.	325.00
06/13/2016	59429	Claremont EAP, Inc.	250.00
06/13/2016	59471	Verizon Wireless-	246.85
06/13/2016	59441	Irvine Consulting Services Inc.	190.00
06/13/2016	59449	North Marin Auto Parts	182.24
06/13/2016	59423	Black Box Network Services	180.98
06/13/2016	59459	Pini Hardware	177.14
06/13/2016	59457	Orkin Pest Control, Inc.	144.56
06/13/2016	59420	Barnett Medical LLC	135.00
06/13/2016	59432	ECS Refining, Inc	122.38
06/13/2016	59464	SRS Private Investigations, Inc	120.00
06/13/2016	59455	O'Reilly Auto Parts	111.40
06/13/2016	59436	Fuses Unlimited	88.27
06/13/2016	59431	E & M Wonderware, Inc.	85.91
06/13/2016	59417	AT&T Mobility	78.87
06/13/2016	59415	American Messaging	78.64
06/13/2016	59458	Petty Cash	49.79
06/13/2016	59468	Uline	31.33
06/13/2016	59452	Novato Builders Supply	19.54
06/13/2016	59453	Novato Car Wash	12.00
<b>Jun 13, 16</b>			<b><u>309,517.92</u></b>

# Novato Sanitary District Capital Projects Check Register

June 13, 2016

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
<b>Jun 13, 16</b>			
06/13/2016	3041	Maggiora & Ghilotti Inc.	77,372.28
06/13/2016	3043	Michael Paul Company Inc.	49,771.60
06/13/2016	3047	W.R. Forde	12,340.00
06/13/2016	3046	RMC Water & Environment, Inc.	8,730.00
06/13/2016	3045	National Coating & Lining Co.	6,468.25
06/13/2016	3040	Bruce Enterprises, Inc.	3,675.00
06/13/2016	3044	Miller Pacific Engineering, Inc.	2,007.60
06/13/2016	3042	Marin Fence Company	887.00
06/13/2016	3048	Water Components & Building...	382.38
<b>Jun 13, 16</b>			<b><u>161,634.11</u></b>

**Novato Sanitary District  
Deposit Detail  
May 2016**

Type	Date	Name	Account	Amount
<b>Deposit</b>	<b>05/03/2016</b>		<b>11113 - Westamerica - Operations</b>	
		Evenich Construction	41040 - Permit & Inspection Fee	60.00
		Cabrera, Abel	41040 - Permit & Inspection Fee	40.00
		Interstate Batteries	60150 - Repairs & Maintenance	163.14
		County of Marin	51015 - Property Taxes	6,167.21
		City of Novato - Used Oil/Beverage	11200 - Accounts Receivable	14,853.00
		City of Novato - Used Oil/Beverage	11200 - Accounts Receivable	14,180.00
		Superior Septic Pumping Service	11200 - Accounts Receivable	302.13
		P,G & E1	11200 - Accounts Receivable	1,240.00
<b>TOTAL</b>				<b>37,005.48</b>
<b>Deposit</b>	<b>05/09/2016</b>		<b>11113 - Westamerica - Operations</b>	
		Burch, Gene	41040 - Permit & Inspection Fee	60.00
		Team Ghilotti, Inc.	73003 - Admin Bldg/Maint.Bldg Upgrades	40.00
		Douglas, Pat	41040 - Permit & Inspection Fee	40.00
		County of Marin	51015 - Property Taxes	61,278.10
		Ravicz, Arthur	41040 - Permit & Inspection Fee	40.00
		Ravicz, Arthur	51020 - Connection Charges	7,896.00
		Evenich Construction	41040 - Permit & Inspection Fee	40.00
		SMART-	11200 - Accounts Receivable	277.44
<b>TOTAL</b>				<b>69,671.54</b>
<b>Deposit</b>	<b>05/11/2016</b>		<b>11113 - Westamerica - Operations</b>	
		Advanced Trenchless	41040 - Permit & Inspection Fee	40.00
		Roto Rooter	41040 - Permit & Inspection Fee	40.00
		County of Marin	51015 - Property Taxes	43.74
		Novato Disposal	11200 - Accounts Receivable	85,655.25
		North Marin Water District-	11200 - Accounts Receivable	20.00
<b>TOTAL</b>				<b>85,798.99</b>
<b>Deposit</b>	<b>05/16/2016</b>		<b>11113 - Westamerica - Operations</b>	
		USCG-Finance Center	11200 - Accounts Receivable	183.34
		USCG	11200 - Accounts Receivable	45.84
<b>TOTAL</b>				<b>229.18</b>
<b>Deposit</b>	<b>05/18/2016</b>		<b>11113 - Westamerica - Operations</b>	
		USCG	11200 - Accounts Receivable	14,025.00
<b>TOTAL</b>				<b>14,025.00</b>
<b>Deposit</b>	<b>05/19/2016</b>		<b>11113 - Westamerica - Operations</b>	
		Superior Septic Pumping Service	41040 - Permit & Inspection Fee	85.00
		County of Marin	51015 - Property Taxes	3,616.27
		Ben Franklin Plumbing	41040 - Permit & Inspection Fee	40.00
		Thom, Madeline	41040 - Permit & Inspection Fee	40.00
		Devcon Const	41040 - Permit & Inspection Fee	60.00
		Zaragoza Plumbing	41040 - Permit & Inspection Fee	40.00
		Roy's Sewer Service, Inc.-	11200 - Accounts Receivable	878.97
<b>TOTAL</b>				<b>4,760.24</b>

**Novato Sanitary District  
Deposit Detail  
May 2016**

<b>Deposit</b>	<b>05/23/2016</b>	<b>11113 - Westamerica - Operations</b>	
	Ben Franklin Plumbing	41040 - Permit & Inspection Fee	40.00
	Beercraft	41040 - Permit & Inspection Fee	60.00
	Beercraft	51020 - Connection Charges	7,155.75
	County of Marin	51015 - Property Taxes	72.61
<b>TOTAL</b>			<b>7,328.36</b>
<b>Deposit</b>	<b>05/25/2016</b>	<b>11113 - Westamerica - Operations</b>	
	County of Marin	51015 - Property Taxes	9,555.75
	Holbrook, Megan	41040 - Permit & Inspection Fee	40.00
	Holbrook, Megan	51020 - Connection Charges	9,870.00
<b>TOTAL</b>			<b>19,465.75</b>
<b>Deposit</b>	<b>05/27/2016</b>	<b>11113 - Westamerica - Operations</b>	
	Roto Rooter	41040 - Permit & Inspection Fee	40.00
	Valley Memorial Park	41040 - Permit & Inspection Fee	60.00
	Valley Memorial Park	51020 - Connection Charges	28,623.00
	Roto Rooter	11200 - Accounts Receivable	591.31
<b>TOTAL</b>			<b>29,314.31</b>
<b>Total Deposits for May 2016</b>			<b>267,598.85</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Consent Calendar: Collection System Maintenance, 2016 Root Control Treatment - Account No. 60153 (Outside Services)</b>	<b>MEETING DATE: June 13, 2016</b>  <b>AGENDA ITEM NO.: 10.c.</b>
<b>RECOMMENDED ACTION: Approve a contract in the not-to-exceed amount of \$80,000 with Duke's Root Control, Inc., (Duke's), and authorize the General Manager-Chief Engineer to execute it.</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>An important part of the District's annual collection system maintenance activities is to control and abate tree roots that intrude into its sewers. If left unchecked, these roots can grow within the sewers to where they can impede or completely block flow in the sewers, either by themselves or in combination with grease, rags, and debris build-up, and potentially result in sanitary sewer overflows (SSOs).</p> <p>Based on maintenance history records, staff has identified approximately 66,000 feet of sewer mains ranging in size from 6 inch to 15 inch that will benefit from root abatement this year. Duke's can provide root abatement services using a chemical root control foaming agent to control this problem. Staff has verified that the use of this chemical will not affect the District's ability to meet its discharge permit requirements. Duke's has performed this work for the District in previous years.</p> <p>Staff has negotiated a scope of services with Duke's on a time-and-materials basis in the not-to-exceed amount of \$80,000 to accomplish this work. The unit costs negotiated are comparable to the costs negotiated last year. Staff therefore recommends that the Board approve a contract with Duke's in the not-to-exceed amount of \$80,000, and authorize the General Manager-Chief Engineer to execute it.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), and Goal 2 (Reliable and Efficient Facilities), of the latest Strategic Plan Update.	
<b>BUDGET INFORMATION:</b> This work will be funded from Account No. 60153 - Outside Services. The FY15-16 budget amount for this account is \$225,000. As of May 31, 2016, the budget balance for this account is \$90,588. No other expenditures are expected from this account this fiscal year.	
<b>DEPT. MGR.:</b> DD, SRK	<b>GENERAL MANAGER:</b> SSK

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Solid Waste: Solid Waste Committee - meeting report, June 1, 2016.</b>	<b>MEETING DATE: June 13, 2016</b>  <b>AGENDA ITEM NO.: 11.a.</b>
<b>RECOMMENDED ACTION:</b> Receive report, meeting of June 1, 2016, and accept recommendation to adopt preliminary Solid and Household Hazardous Waste (HHW) operating budget for FY16-18.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The Solid Waste Committee held its meeting on June 1, 2016. Solid Waste Board Committee members Mariani and Dillon-Knutson attended.</p> <p>The District's Solid and Household Hazardous Waste (HHW) coordinator Ms. Dee Johnson of DLJ Associates was present along with representatives from Novato Disposal Services (NDS), the District's solid waste franchisee. Ms. Johnson presented the Solid and HHW Waste reports.</p> <p>A copy of the Solid Waste Committee agenda packet including the report is attached.</p> <p>The Committee reviewed the 2015 and 1<sup>st</sup> quarter 2016 disposal/diversion reports. Committee members expressed concern over diversion numbers. Committee Member Mariani suggested conducting a Board workshop on current and future recycling issues and proposals for future progress.</p> <p>Also, staff reviewed the preliminary FY16-18 Solid and HHW operating budget with the Committee. The Committee unanimously agreed to recommend the preliminary FY16-18 Solid and HHW operating budget for adoption by the full Board of Directors.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), Goal 3 (Alignment and Communications), and Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
<b>ATTACHMENTS:</b> 1. Agenda Packet for Solid Waste Committee meeting of June 1, 2016.	
<b>DEPT. MGR.:</b> dlj, ssk	<b>GENERAL MANAGER:</b> SSK

**NOVATO SANITARY DISTRICT**  
**Solid Waste Committee**

**Meeting Date: June 1, 2016**

**The Solid Waste Committee of Novato Sanitary District will hold a meeting at 3:00pm, Wednesday, June 1, 2016 at the District offices, 500 Davidson Street, Novato CA.**

**AGENDA**

**1. APPROVE AGENDA:**

**2. PUBLIC COMMENT: (PLEASE OBSERVE A THREE MINUTE TIME LIMIT)**

This item is to allow anyone present to speak on an item not on the agenda, or to request consideration to place on item on a future agenda. No action will be taken by the Committee at this time as a result of public comments made.

**3. REVIEW OF MINUTES:**

- a. Consider approval of minutes of March 10, 2016 meeting.

**4. UPDATES/ROUTINE BUSINESS ITEMS:**

- a. City of Novato.
- b. Redwood Landfill.
- c. Novato Disposal quarterly report.
- d. Marin County JPA and Local Task Force.

**5. PROPOSED FY16-17 SOLID AND HOUSEHOLD HAZARDOUS WASTE (HHW) PROGRAMS BUDGET:**

- a. Review and recommend budget to District Board for adoption.

**6. DISPOSAL/DIVERSION REPORTS 2015 AND 1<sup>ST</sup> QUARTER 2016:**

**7. ZERO WASTE PROGRAMS CALENDAR/TIMETABLE STATUS:**

**8. HOUSEHOLD HAZARDOUS WASTE PROGRAMS:**

- a. 2015 HHW programs report
- b. 2016 HHW program update
- c. E-Waste event update.

**9. ADJOURN:**

*In compliance with the American with Disabilities Act, if you need special assistance to participate in this meeting, please contact the District offices at (415) 892-1694 during their regular business hours, at least 24 hours prior to the scheduled meeting. This will enable the District to make reasonable accommodation to help ensure accessibility to this meeting.*

*Materials that are public records and that relate to an agenda item will be made available for public inspection at the District offices, 500 Davidson Street, Novato, CA, during regular business hours. They are also available on the District's website: [www.novatosan.com](http://www.novatosan.com).*

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**NOVATO SANITARY DISTRICT  
SOLID WASTE COMMITTEE MEETING  
March 10, 2016**

**MINUTES**

Members Present:

Jean Mariani                      Carole Dillon-Knutson

Others in Attendance:

Sandeep Karkal                  Dee Johnson      Steve McCaffrey                  Tina Balderamma                  Sonia Tanner  
Casey Williams                  Scott Pariani      Delyn Kies                          Jim Salyers

1. Approve agenda: The agenda for March 10, 2016 was approved as submitted.
2. Public Comment: There was no comment from the public.
3. Review of Minutes: The minutes of October 20, 2015 were approved as submitted.
4. Updates/Routine Business Items:
  - a. City of Novato. There was no update from the City.
  - b. Redwood Landfill. Ramin Khany provided an update on Redwood Landfill's programs. He indicated that they were not accepting commercial food waste due to the problems with contamination of commercial sources. Currently Redwood is producing a high quality certified organic compost from its food/green waste mix and it doesn't want to jeopardize that product. Although they could produce a non-organic product with commercial food waste, they are not considering this until 2018 or later. Also, although they are permitted to receive commercial food waste, if they were to keep it separate from the organic product, it would require additional permits for a separate location. Carol Dillon Knutson asked if Redwood would be willing to educate commercial customers regarding the contamination issues. Ramin agreed, but said there would be no way to enforce this. He indicated that the haulers, District and producers should be involved with this education. Carol asked if their compost product is for sale to residents. Ramin indicated it was. Jean Mariani asked who is producing organic compost from commercial food waste. Ramin didn't know. Carol asked about complaints re: odors at the landfill and who should a resident call. Ramin indicated they should contact County Environmental Health and also Redwood Landfill.
  - c. Novato Disposal quarterly report. Steve McCaffrey reviewed the quarterly report. Disposal has increased; green waste has decreased and C&D has increased. Currently commercial food waste is being delivered to Richmond. The 20 gallon can customer count continues to increase. Contamination in the recycling cart continues to be an issue. Bulky waste pick ups are limited to 3 cubic yard maximum, 4 times per year. In addition, Christmas trees can be cut up and put in the green cart anytime.
  - d. Marin County JPA and Local Task Force (LTF). Dee and Delyn Kies indicated that the LTF had recently reviewed a report on school recycling. In addition, Dee indicated that she was re-elected vice-chair of the LTF for the following year.
5. Tentative Meeting Schedule: Committee members agreed on the next dates for meeting in 2016: Wednesday, June 1; Monday, August 29 and Tuesday, October 18. All meetings to begin at 3:00 pm at the District.
6. Disposal/Diversion Report 2015: Steve and Dee reviewed the diversion numbers. Steve explained that in 2010, green waste diversion was increasing. Since then, we experienced the drought, which impacted the green waste numbers. Commercial food waste collection fell behind schedule and the recycling markets have decreased significantly since 2014. The market issues with China - putting restrictions on types of recycled material accepted - is a long term problem. Certain markets have entirely dried up, such as plastic bags. With low oil prices it is cheaper to produce plastic bags from original material. In addition, over the years the waste stream has changed – less newsprint; more plastic. Steve indicated that Extended

Producer Responsibility (EPR) could help resolve some of these issues by placing more responsibility on the packaging industry.

7. Zero Waste Programs Calendar/Timetable Status: Dee and Novato Disposal staff reviewed the Calendar with Committee members and made some suggested changes.
8. Household Hazardous Waste Programs:
  - a. 2015 HHW programs report. Dee indicated that participation at the HHW facility continues to increase. Attendance in 2015 was 20% higher than 2014. Additional information on amounts of wastes and costs will be available at the next meeting.
  - b. E-Waste Event scheduled. The next E-Waste event is scheduled for April 23-25 from 10 am-3 pm. It will be advertised in the District and Novato Disposal newsletters as well as newspaper ads.
9. Adjourn. The meeting adjourned at 4:30 pm.

**CITY OF NOVATO**  
**1<sup>st</sup> Quarterly Report**  
**January- March 2016**

Submitted by Novato Disposal Service

## Solid Waste Data

### A. Tons Delivered to Disposal Site

		<b>This Quarter</b>	<b>Same Quarter One Year Ago</b>
<b>Residential</b>	*	3,942.25	3,515.15
<b>Commercial</b>	**	3,097.49	2,761.90
<b>TOTAL:</b>		<b>7,039.74</b>	<b>6,277.05</b>

\*includes commercial/multifamily locations served with carts

\*\*includes multifamily accounts service with bins

## Recycling Data

### Tons Collected and Processed

**This Quarter: 2,713.02**

**Same Quarter One Year Ago 1,990.56**

<b>Commodity</b>	<b>Curbside</b>	<b>Buyback</b>	<b>Total</b>
	Commercial Multifamily Residential		
<b>Cardboard</b>	365.37	-	365.37
<b>Paper (News &amp; Mixed)</b>	1,421.34	-	1,421.34
<b>Paper (Overages)*</b>	160.20	-	160.20
<b>Aluminum Cans &amp; Foil</b>	2.43	9.64	12.07
<b>Metal Cans</b>	15.11	-	15.11
<b>**Glass</b>	565.28	48.22	613.50
<b>Plastic PET</b>	50.38	-	50.38
<b>Plastic NHDPE</b>	9.66	.41	10.07
<b>Plastic All Other</b>	8.89	19.48	28.37
<b>Other diverted materials</b>	24.08	-	24.08
<b>Total</b>	<b>2635.26</b>	<b>77.76</b>	<b>2713.02</b>

\* Please note this number was included in Mixed Paper in past reports.

\*\*This includes glass overages

## Greenwaste Data

### Tons Collected and Processed

This Quarter: 3,462.51

Same Quarter One Year Ago: 3,619.64

### Final Disposition:

All green waste was used as compost.

## Construction and Demolition Data, including inert solids

### Tons Collected and Processed

This Quarter: 493.71

Same Quarter One Year Ago: 692.85

## Service Accounts

Residential Cart Weekly		Same Quarter One Year Ago
Can size	Number of Customers	Number of Customers
20 gallon	2330	2,171
32 gallon	11,071	11,221
68 gallon	3,044	3,068
95 gallon	328	307
Non-Auto	6	6

Multifamily Cart Customers**			Cart Amt. ,Same Quarter One Year Ago**	
Can size	Weekly	2 or more times weekly	Weekly	2 or more times weekly
20 gallon	13	0	13	0
32 gallon	299	0	306	0
68 gallon	111	0	112	0
95 gallon	26	0	21	0

Multifamily Bin Customers				Same Quarter One Year Ago		
Bin size	Weekly	2 times weekly	3 or more times weekly	Weekly	2 times weekly	3 or more times

						weekly
2 yd.	11	4	2	18	4	2
3 yd.	38	38	53	38	40	56
4 yd.	0	0	4	0	0	2
6 yd.	0	1	9	0	1	7

Commercial Cart Weekly		Same Quarter One Year Ago
Can size	Number of Customers	Number of Customers
20 gallon	0	0
32 gallon	230	230
68 gallon	171	174
95 gallon	121	132

Commercial Bin Customers				Same Quarter One Year Ago		
Bin size	Weekly	2 times weekly	3 or more times weekly	Weekly	2 times weekly	3 or more times weekly
2 yd.	106	10	4	97	10	3
3 yd.	160	98	78	158	91	84
4 yd.	14	14	11	13	12	7
6 yd.	7	2	10	7	3	10

Commercial Special Service*		Same Quarter One Year Ago
Bin Size	Number of Customers	Number of Customers
3 yd.	9	7
15 yd.	2	2
20 yd.	1	3
30 yd.	2	2
Compactor	12	11

\*Special service is bimonthly, monthly, on-call or other irregular service

## Holiday Tree Collection

Novato Disposal Service collected holiday trees from residents during the week of January 4<sup>th</sup>-8<sup>th</sup>. Novato Disposal also provided boxes and tree removal service to San Marin High School's tree drop-off Project Safe Grad Fundraiser. Over 51 tons of holiday trees were collected and disposed of as compost.

## **E-Waste Event**

Novato Disposal Service will be participating in the Novato Sanitary District's E-Waste Drop-off event April 23<sup>rd</sup> – 24<sup>th</sup>.

### **Community Education/Outreach**

- Novato Disposal Outreach staff visited Paradise Properties. Left recycle information in drop off box and did a visual site audit. Staff noticed oil containers in bushes and 32in. television on the side walk. A follow up phone call will be provided to educate about disposal in regards to the various items found.
- Novato Disposal Outreach staff dropped off recycling information at the First Church of Christ.
- Novato Disposal Outreach visited Third St Apartments and delivered a business packet.
- Novato Disposal Staff spoke to Laura (Apartment Mgmt) gave her information to provide to tenants. At 1024 3rd St.
- Novato Disposal Outreach staff dropped off recycling information to Lewis Fredrickson at 1036 3rd St at apartment A.
- Novato Disposal staff delivered recycling information at MGLY to apartment A.
- Novato Disposal Outreach staff left recycling information at main apartment and updated recycling bin signage.
- Novato Disposal Outreach staff dropped off recycling materials and updated recycling bin with new signage at 1121 Third St Apartments.
- Novato Disposal staff dropped off recycling information to staff at Team Maple/ WM/ JP Morgan.
- Novato Disposal staff left recycle information with staff at Bank of America.
- Novato Disposal staff left recycling information with staff at Tagliferiri Deli.
- Novato Disposal Staff delivered recycle information to Tine Kulvete / WM/ Einstein.
- Novato Disposal staff spoke to Tina at CVS. She informed staff that the recycle bin was removed a few months ago due to contamination. Staff left recycle outreach information with a contact number to our service department to get started on some staff education.
- Novato Disposal staff met with Danielle in regards to increasing recycling efforts and possible presentations for employees at Consolidated Waste.
- Novato Disposal staff spoke with Pandey in regards to recycling and food scrap on site. Staff offered presentations and left food scraps signage at Creekside Bakery.
- Novato Disposal staff spoke to Morning Glory Flowers employee in regards to their concerns as far as how people are dumping recycling and trash in to yard waste container. Staff placed a visible compost sticker on yard debris bin.

- Novato Disposal staff dropped off recycling information to Subway on Grant Ave.
- Novato Disposal staff dropped off recycling information at Baskin Robbins.

## **Schools**

During the 1<sup>st</sup> quarter of 2016, various contacts at each school in Novato were sent a quarterly recycle update letter about Earth Day highlighting the importance of recycling and the free recycle services/education available to them.

- Novato Disposal Outreach staff spoke to Grechen an active mother looking to start up a recycling program at Lynwood Elementary. A meeting along with a few assemblies will follow.

## **Additional Information**

### **Mailers**

Please find attached:

- New start post cards
- Novato E-waste Billing insert

### **Donations**

- Novato Disposal service donated (8) 30 cubic yard, yard waste boxes to the City of Novato for the Annual Holiday Tree Drop off.
- Novato Disposal service donated (4) 4 yard garbage bins to Idesi for the Crab Feed on January 15<sup>th</sup>, 2016 and March 7<sup>th</sup>, 2016.
- Novato Disposal service donated (1) 4 yard garbage bin to Novato High School Baseball for the Novato High Baseball and Novato High Softball on March 6 2016.
- Novato Disposal service donated (1) 3 yard garbage bin to Idesi for the Fado Dinner Show on March 14, 2016.
- Novato Disposal service donated (1) 3 yard garbage bin, (1) 3 yard recycle bin to Knights of Columbus for the KC St. Patrick's Day Dinner Dance on March 18, 2016.

## **Proposed FY2016-2017 Solid and Household Hazardous Waste (HHW) Programs Budget**

Enclosed is the proposed budget and narrative for the Solid and Household Hazardous Waste programs for FY 2016/2017 and estimated FY2017/2018.

### **Expenditures**

67400 - Management Services. Expenditures include the ongoing operation, administration and staffing of the permanent HHW facility, E-Waste events, HHW contracts, monthly, quarterly and annual reporting requirements, staffing of Committee meetings, attending Local Task Force and JPA meetings, managing Zero Waste programs, monitoring legislation, and outreach to businesses, multifamily and community events. Expenditures also include administration of 2 grant programs – Used Oil and Beverage Container Recycling – funded entirely by these grants.

Increased staff time in FY2016/2017 will be dedicated to outreach and education at community events, schools and multifamily/commercial properties, a focus on commercial food waste diversion, work with CalRecycle and Novato Disposal on AB32 commercial/multifamily mandatory recycling requirements, Zero Waste issues and ongoing HHW programs. Expenditures are also included for consulting services to study and plan for move of the HHW facility to a new location.

67500 – Household Hazardous Waste. Expenditures include contractor costs for the HHW facility, E-Waste events and maintenance of the HHW facility including floor striping, repair of roll-up doors, signage and pigeon control.

Estimated expenditures for the HHW program continue to increase due to increased participation and increasing waste streams. In 2015, participation at the HHW facility increased over 19% from 2014 – the highest participation ever at the facility. This continues to result in higher waste disposal and labor costs. Although the Paintcare program launched in March 2014 resulted in lower costs for disposal of latex and some oil base paints, Paintcare does not accept many types of paints and related products, which account for a significant portion of our waste stream. In addition, the Paintcare program requires a detailed sorting process, which has increased staff time. With higher participation in the program, HHW contractor costs will continue to increase in FY2016/2017 and beyond. Also included for FY2016/2017 are expenditures for ongoing purchase of sharps containers distributed at 3 Novato pharmacies for free, along with disposal of sharps waste.

67530 – Used Oil and Beverage Container Grants. These CalRecycle grant funds are used exclusively for used oil and filter recycling, oil tank maintenance, supplies, and promotion of beverage container recycling.

67540 - Education, Publicity/Advertising, Outreach. As a result of increased outreach for the Zero Waste and multifamily/commercial programs, expenditures include sponsorship and booth rental at many community events, handouts and promotional items, and advertising. Included are costs for website development, Facebook monitoring, newsletter articles, print advertising, and social media outreach. For FY 2016/2017, outreach will

continue at local community events, farmer's markets and schools, along with increased focus on food waste diversion at commercial facilities.

Other. A contingency of \$5,000. is included for unanticipated expenses.

City AB939 Administrative Services. Funds maintained for City staff services.

### **Revenues.**

AB939 Solid Waste Fees. There is a small increase (3.30%) in fees for FY2016/2017, as a result of increased HHW program and education/ outreach costs. 85% of the revenues to fund these programs come from these fees assessed on the garbage rate. (AB939 fees).

Used Oil Grant. Grant amount is budgeted at \$15,060., which is the preliminary amount proposed by CalRecycle. Actual amount is not known until state budget passes.

Beverage Container Recycling Grant. Grant amount is budgeted at \$13,836. Actual amount is not known until state budget passes.

JPA reimbursement fees. JPA fee revenues are budgeted at \$32,757. for FY 2016/2017. The \$32,757. accounts for current fees on Novato self haul waste disposed at Redwood Landfill.

**AB 939 SOLID, ZERO WASTE AND HAZARDOUS WASTE BUDGET  
 FY 2016/2017 AND 2017/2018 PROPOSED BUDGET**

**EXPENDITURES**

<u>Account</u>	<u>Program</u>	<u>Budget FY2014/2015</u>	<u>Budget FY2015/2016</u>	<u>Projected Expenditures FY2015/2016</u>	<u>Preliminary Budget FY2016/2017</u>	<u>Preliminary Budget FY2017/2018</u>
67400	Management Services	\$130,161.00	\$131,464.00	\$100,555.00	\$134,750.00	\$138,118.00
67500	Household Hazardous Waste & E-Waste	\$164,000.00	\$211,500.00	\$211,500.00	\$220,000.00	\$225,000.00
67530	Used Oil and Beverage Container grant programs	\$22,537.00	\$22,537.00	\$22,026.00	\$22,537.00	\$22,537.00
67540	Outreach/Publicity/Education	\$37,000.00	\$22,000.00	\$16,000.00	\$23,500.00	\$23,500.00
67600	Other	\$5,000.00	\$5,000.00	\$3,500.00	\$5,000.00	\$5,000.00
67610	City AB939 Admin Services	<u>\$10,000.00</u>	<u>\$10,000.00</u>	<u>\$10,000.00</u>	<u>\$10,000.00</u>	<u>\$10,000.00</u>
<b>TOTAL AB939 SOLID/HAZARDOUS WASTE EXPENDITURES</b>		<b>\$368,698.00</b>	<b>\$402,501.00</b>	<b>\$363,581.00</b>	<b>\$415,787.00</b>	<b>\$424,155.00</b>

**REVENUES**

AB939 Solid Waste Fees	\$297,586.00	\$342,621.00	\$342,621.00	\$354,134.00	\$362,502.00
Used Oil Grant	\$15,060.00	\$15,060.00	\$15,060.00	\$15,060.00	\$15,060.00
Beverage Container Recycling Grant	\$13,836.00	\$13,836.00	\$13,836.00	\$13,836.00	\$13,836.00
JPA reimbursement & self haul fees	\$30,984.00	\$30,984.00	\$30,984.00	\$32,757.00	\$32,757.00
<b>TOTAL AB939 SOLID/HAZARDOUS WASTE REVENUES</b>	<b>\$357,466.00</b>	<b>\$402,501.00</b>	<b>\$402,501.00</b>	<b>\$415,787.00</b>	<b>\$424,155.00</b>

**CITY OF NOVATO & DISTRICT AB939 DISPOSAL AND DIVERSION MONITORING**

Haulers: Novato Disposal  
Self Haulers

Reporting period: January - December 2015

<b>A. 2015 DIVERSION</b>	<b>1st Qtr.</b>	<b>2nd Qtr</b>	<b>3rd Qtr.</b>	<b>4th Qtr.</b>	<b>TOTAL 2015</b>
Novato Disposal Recycled (Curbside & Buyback)	1,991.00	3,320.00	3,409.00	3,119.00	11,839.00
MRRC recovery	523.94	637.90	505.55	496.77	2,164.16
Self haul Inerts Diverted Redwood Landfill	2,188.57	1,635.97	1,821.37	2,088.49	7,734.40
Redwood Landfill self haul C&D& wood waste recycled	100.37	156.11	88.80	41.59	386.87
City of Novato C&D diverted(included in Novato Disposal)	N/A	N/A	N/A	N/A	N/A
ADC from MRRC	0.00	0.00	0.00	0.00	0.00
Compost from MRRC	44.89	37.19	54.38	51.28	187.74
Greenwaste From Redwood Landfill self haul/compost	81.31	106.21	105.75	20.00	313.27
Novato Disposal Inerts	728.00	937.00	1,234.00	794.00	3,693.00
Novato Disposal Green/Food Waste used for compost	3,586.00	3,271.00	3,034.00	3,483.00	13,374.00
Novato Disposal commercial food waste used for compost	19.00	19.00	41.00	64.00	143.00
North Marin Metal Recycling	N/A	N/A	N/A	N/A	N/A
<b>2015 TOTAL TONS DIVERTED</b>	<b>9,263.08</b>	<b>10,120.38</b>	<b>10,293.85</b>	<b>10,158.13</b>	<b>39,835.44</b>
<b>B. 2015 DISPOSAL</b>					
MSW& Debris Box/Novato Disposal	6,277.00	6,438.00	6,890.00	6,792.00	26,397.00
MRRC Residuals	279.29	294.40	382.91	320.86	1,277.46
MRRC Wood/Yard Waste incinerated/transformation	117.78	90.98	139.37	86.99	435.12
Redwood Landfill self haul C&D waste disposed	1,023.97	816.18	1,032.75	1,020.98	3,893.88
Novato waste disposed out-of-county	N/A	N/A	N/A	N/A	N/A
<b>2015 TOTAL TONS DISPOSED</b>	<b>7,698.04</b>	<b>7,639.56</b>	<b>8,445.03</b>	<b>8,220.83</b>	<b>32,003.46</b>
<b>C. 2015 TOTAL WASTE GENERATED(TONS)</b>	<b>16,961.12</b>	<b>17,759.94</b>	<b>18,738.88</b>	<b>18,378.96</b>	<b>71,838.90</b>
<b>D. COMPLIANCE WITH AB939 DIVERSION MANDATE</b>	<b>55.31%</b>	<b>57.50%</b>	<b>55.68%</b>	<b>55.74%</b>	<b>56.06%</b>
<b>Percent Diverted Using Generation Based Calculation Method(includes 10% incineration waste)</b>					

**REDWOOD LANDFILL SELF HAUL BREAKDOWN (TONS)**

	<b>1st Qtr.</b>	<b>2nd Qtr</b>	<b>3rd Qtr.</b>	<b>4th Qtr.</b>	<b>TOTAL 2015</b>
Inerts/ Diverted	2,188.57	1,635.97	1,821.37	2,088.49	7,734.40
Greenwaste Diverted/compost	81.31	106.21	105.75	20.00	313.27
C&D/ Disposed	1,023.97	816.18	1,032.75	1,020.98	3,893.88
C&D & Wood Waste Recycled	100.37	156.11	88.80	41.59	386.87
<b>Total</b>	<b>3,394.22</b>	<b>2,714.47</b>	<b>3,048.67</b>	<b>3,171.06</b>	<b>12,328.42</b>
<b>Percent Redwood self haul diverted</b>	<b>69.83%</b>	<b>69.93%</b>	<b>66.12%</b>	<b>67.80%</b>	<b>68.42%</b>

**AB939 NOVATO DISPOSAL AND DIVERSION MONITORING**

Haulers: Novato Disposal  
Self Haulers

Reporting period: Comparison 2008 - 2015

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>A. DIVERSION</b>								
Novato Disposal Recycled (Curbside & Buyback)	12,471.50	12,772.72	13,962.00	14,144.00	14,298.00	14,306.00	12,091.00	11,839.00
MRRC recovery	2,050.00	1,062.00	1,271.88	1,512.83	1,672.94	2,047.79	2,335.73	2,164.16
Self haul Inerts Diverted Redwood Landfill	18,198.30	8,942.72	7,653.87	5,830.80	8,362.25	7,176.55	5,216.94	7,734.40
Redwood Landfill self haul C&D recycled	7.32	96.00	42.52	107.89	290.56	397.63	318.11	386.87
City of Novato Inerts diverted	N/A	N/A	0.00	N/A	N/A	N/A		N/A
ADC from MRRC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compost from MRRC	189.00	127.00	185.50	193.74	253.51	190.26	189.44	187.74
Greenwaste From Redwood Landfill self haul/compost	1,305.93	1,040.00	893.20	779.83	453.99	588.20	335.06	313.27
Novato Disposal Inerts	4,049.25	5,062.84	6,370.63	3,748.00	3,440.00	4,023.00	3,334.00	3,693.00
Novato Disposal Green Waste/residential food waste for compost	13,349.39	12,527.34	14,973.97	14,076.00	14,328.00	13,397.00	13,163.00	13,374.00
Novato Disposal commercial food waste for compost				117.00	137.00	100.00	88.00	143.00
North Marin Metal Recycling						53.84	50.94	N/A
<b>TOTAL TONS DIVERTED</b>	<b>51,620.69</b>	<b>41,630.61</b>	<b>45,353.57</b>	<b>40,510.09</b>	<b>43,236.25</b>	<b>42,280.27</b>	<b>37,122.22</b>	<b>39,835.44</b>
<b>B. DISPOSAL</b>								
MSW& Debris Box/Novato Disposal	32,823.74	29,722.71	31,557.69	29,336.00	25,859.00	25,294.00	26,093.00	26,397.00
MRRC Residuals	1,387.00	649.00	856.37	886.75	929.21	1,092.33	1,135.70	1,277.46
MRRC Wood/Yard Waste incinerated	433.00	178.00	238.86	253.36	308.38	404.08	376.79	435.12
Redwood Landfill self haul C&D waste disposed	4,950.54	4,530.00	3,569.07	3,181.87	4,006.14	3,435.86	2,730.24	3,893.88
Novato waste disposed out-of-county		N/A	N/A	N/A	N/A	N/A	11.48	N/A
<b>TOTAL TONS DISPOSED</b>	<b>39,594.28</b>	<b>35,079.71</b>	<b>36,221.99</b>	<b>33,657.98</b>	<b>31,102.73</b>	<b>30,856.27</b>	<b>30,347.21</b>	<b>32,003.46</b>
<b>C. TOTAL WASTE GENERATED(TONS)</b>	<b>91,214.97</b>	<b>76,710.32</b>	<b>81,575.56</b>	<b>74,168.07</b>	<b>74,338.98</b>	<b>73,135.54</b>	<b>67,469.43</b>	<b>71,838.90</b>
<b>D. COMPLIANCE WITH AB939 DIVERSION MANDATE</b>	<b>56.64%</b>	<b>54.29%</b>	<b>55.63%</b>	<b>54.96%</b>	<b>58.16%</b>	<b>57.81%</b>	<b>55.58%</b>	<b>56.06%</b>
Percent Diverted Using Generation Based Calculation Method(includes 10% incineration waste)								

**REDWOOD LANDFILL SELF HAUL BREAKDOWN (TONS)**

	<u>TOTAL 2008</u>	<u>TOTAL 2009</u>	<u>TOTAL 2010</u>	<u>TOTAL 2011</u>	<u>TOTAL 2012</u>	<u>TOTAL 2013</u>	<u>TOTAL 2014</u>	<u>TOTAL 2015</u>
Inerts/ Diverted	18,198.30	8,942.72	7,653.87	5,830.80	8,362.25	7,176.55	5,216.94	7,734.40
Greenwaste Diverted/compost	1,305.93	1,040.00	893.20	779.83	453.99	588.20	335.06	313.27
C&D/ Disposed	4,950.54	4,530.00	3,569.07	3,181.87	4,006.14	3,435.86	2,730.24	3,893.88
C&D Recycled	0.00	96.00	42.52	107.89	248.84	397.63	318.11	386.87
<b>Total</b>	<b>24,454.77</b>	<b>14,608.72</b>	<b>12,158.66</b>	<b>9,900.39</b>	<b>13,071.22</b>	<b>11,598.24</b>	<b>8,600.35</b>	<b>12,328.42</b>
<b>Percent Redwood self haul diverted</b>	<b>79.76%</b>	<b>68.99%</b>	<b>70.65%</b>	<b>67.86%</b>	<b>69.35%</b>	<b>70.38%</b>	<b>68.25%</b>	<b>68.42%</b>

**NOVATO DISPOSAL SERVICES DISPOSAL/DIVERSION 2016**

<b>DIVERSION</b>	<b><u>1stQ</u></b>	<b><u>2ndQ</u></b>	<b><u>3rdQ</u></b>	<b><u>4thQ</u></b>	<b><u>TOTAL</u></b>
<b>Novato Disposal Recycled Shipped (Curbside &amp; Buyback)</b>	2,688				
Novato Disposal C&D, Wood, Inerts & Bulky waste	530				
Novato Disposal Green waste & residential food waste for compost	3,463				
Novato Disposal Commercial Food Waste for compost	76				
<b>TOTAL TONS DIVERTED</b>	<b>6,756</b>				
<b>DISPOSAL</b>					
MSW& Debris Box/Novato Disposal	7,040				
<b>TOTAL TONS DISPOSED</b>	<b>7,040</b>				
<b>TOTAL WASTE GENERATED(TONS)</b>	<b>13,796</b>				
<b>PERCENT DIVERTED</b>	<b>48.97%</b>				
<b>PERCENT DIVERTED WITH REDWOOD &amp; MRRC</b>					
<b>NOVATO DISPOSAL RECYCLED COLLECTED(CURBSIDE &amp; BUYBACK)</b>					

**NOVATO DISPOSAL SERVICES DISPOSAL/DIVERSION 2015 vs. 2016**

<b>DIVERSION</b>	<b>2015 <u>1stQ</u></b>	<b>2016 <u>1stQ</u></b>	<b>2015 <u>2ndQ</u></b>	<b>2016 <u>2ndQ</u></b>	<b>2015 <u>3rdQ</u></b>	<b>2016 <u>3rd Q</u></b>	<b>2015 <u>4th Q</u></b>	<b>2016 <u>4th Q</u></b>	<b>2015 <u>TOTAL</u></b>	<b>2016 <u>TOTAL</u></b>
Novato Disposal Recycled (Curbside & Buyback)	1,991	2,688								
Novato Disposal C&D, Wood, Inerts & Bulky waste	728	530								
Novato Disposal Green/residential food waste for compost	3,586	3,463								
Novato Disposal Commercial Food Waste for compost	19	76								
<b>TOTAL TONS DIVERTED</b>	<b>6,323</b>	<b>6,756</b>								
<b>DISPOSAL</b>										
MSW& Debris Box/Novato Disposal	6,277	7,040								
<b>TOTAL TONS DISPOSED</b>	<b>6,277</b>	<b>7,040</b>								
<b>TOTAL WASTE GENERATED(TONS)</b>	<b>12,600</b>	<b>13,796</b>								
<b>PERCENT DIVERTED</b>	<b>50.18%</b>	<b>48.97%</b>								
<b>PERCENT DIVERTED WITH REDWOOD &amp; MRRC</b>	<b>55.31%</b>									

**CALENDAR/TIMETABLE FOR ZERO WASTE PROGRAMS IN FRANCHISE AGREEMENT**

All items taken from Exhibits 4 through 6 of March 14, 2010 Solid Waste Franchise Agreement

**EXHIBIT 4: Zero Waste Community Outreach**

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
1. Novato Disposal newsletters	Casey/Bessie	2 times a year	Notify District in Fall for dates of subsequent annual newsletters	One Zero Waste feature article in each newsletter <b>Fall newsletter article still to be determined</b>
2. Promote 20 gallon cans	Casey/Bessie	Ongoing	Ongoing	Promote in newsletters & bills <b>Note: 20 gal can use increased 7% from 1<sup>st</sup> Q 2015</b>
3. Promote backyard compost bins	Jim/Casey/Bessie	Ongoing	Ongoing	Promote at events & with Backyard Compost classes run by Marin Food Scrap Coalition or Marin Master Gardeners
4. 2 Outreach Campaigns promoting zero waste, waste reduction and/or other diversion	Jim/Casey	Ideas for 2016 campaign	October of each year to District for approval	<u>2016 Outreach Campaigns</u> <b>1. Commercial, multifamily &amp; school recycling outreach, including "keeping it clean" campaign</b> <b>2. Commercial food scraps composting – AB1826</b>
5. Promote audits to all businesses of 4 cy. or greater	Scott/Dee	(see AB32 item)	(see AB32 Item)	<b>Include in AB32 promotions</b>
6. New customer packets to include Zero Waste promotions	Casey/Bessie	Ongoing	Ongoing	New customer to be directed to website; packets upon request and update annually
7. Visit all commercial businesses with 4 c.y. service or more and multi-family complexes of 5 units or more annually	Scott/Dee	(see AB32 item)	Ongoing	Visits to determine service level, contact business owners, property managers; identify resident outreach methods; conduct presentations

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
8. Participate in 10 events annually	Jim/Casey/Bessie/Dee	Submit ideas for events to District by 4 <sup>th</sup> quarter of each year for following year	List submitted to District for 2016 events	<p><b><u>2016 Events Scheduled</u></b></p> <ul style="list-style-type: none"> <li>• Sr. Center Health Fair – <b>February 17</b></li> <li>• Novato’s Clean &amp; Green Day – <b>April 25</b></li> <li>• E-Waste Events handouts <b>April 23 - 25</b></li> <li>• School Tour of Novato – <b>May 14</b></li> <li>• Novato Art &amp; Wine Festival <b>June 11 &amp; 12</b></li> <li>• 4<sup>th</sup> of July Parade</li> <li>• Rotary presentations – <b>to schedule</b></li> <li>• Farmer’s Markets - <b>to schedule</b></li> <li>• E-Waste event handouts – <b>October 8-10</b></li> </ul>
9. Conduct annual retraining at schools on recycling & Zero Waste; participate in developing Zero Waste curricula for schools; offer Zero Waste & recycling programs for school assemblies	Bessie/MCC/Dee	(See Ex. 5 School Recycling and Food Waste Program)	Ongoing	<p><b><i>Novato Disposal sends email out to all schools re: recycling education opportunities; schedule meeting with School District; work with San Marin &amp; Novato H.S. re: food waste</i></b></p>
10. Annual Waste Audit of all City facilities and work with City on Zero Waste goals	Jim/Scott/Dee/City staff	Ongoing	Ongoing	<p><b><u>Sites for 2016</u></b></p> <ul style="list-style-type: none"> <li>• <b><i>Check with City staff on sites &amp; Zero Waste goals</i></b></li> </ul>
11. Bilingual Zero Waste guides(Spanish/English)	Casey/Bessie	Initial revisions	Ongoing	Update as needed
12. Interactive website with links to Zero waste & reuse options	Casey/Dee	See Exhibit 6	See Exhibit 6	<p><b><i>NSD website has this function; Novato Disposal is updating their website</i></b></p>

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
13. Billing inserts on program updates as needed	Jim/Casey	4 2-sided inserts annually	March 2016, June 2016, Sept 2016 & December 2016	<i>March insert – E-Waste flier June insert – Sept. insert.- E-Waste flier Dec. insert – Xmas trees Permanent 2<sup>nd</sup> side –</i>
14. Annual selective residential route audits to gauge program success	Jim/ Scott	Annual baseline audit	Ongoing	Conducted route audits in 2011, 2012 and 2013 for food waste program and green waste program participation; <i>route audit for “set out rates” now scheduled for spring 2016-</i>
15. Corrective action cart hangers	Jim/Route supervisor	As needed	As needed	

**Exhibit 5: School Recycling and Food Waste Program outline**

See Exhibit 5 from Franchise Agreement

**EXHIBIT 6: Zero Waste Program Implementation Schedule**

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
<b>Food/Green Waste Composting</b>				
1. Single family residential	Jim/Scott/Casey/Bessie/Dee	Ongoing	<b>2/28/11</b> ; Implemented April 2011; ongoing program	Work with HOA's without green carts, but with single family service; List of Novato HOA's updated; residential food waste audit in 2013; <b>meet with HOA's to provide carts for food and green waste</b>
2. Place food waste diversion stickers on food carts and notify re: food scrap pail availability	Jim/Scott/Casey	Stickers mailed week of 1/20/12	<b>10/01/11</b> ; Stickers mailed January 2012  Over 1500 <b>free</b> food scrap pails distributed	Food Waste green can stickers mailed January 2012, asking all households to place on cart; 85% of households have stickers on green cans; food scrap pails advertised in newsletter, website,ads; distributed at Farmer's Market & Senior Center; <b>NDS notice in newsletters re: can stickers and availability of food scrap pails for purchase at \$6.00 each</b>
3. Supermarket food waste diversion	Jim/Scott/Casey	Begin early 2013	<b>02/2012</b> ; Implemented June 2012; Ongoing program	<b>Promote businesses diverting food waste in newsletter and window stickers</b>

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
4. Restaurant Food waste diversion	Jim/Scott/Casey	Begin early 2013	<b>03/2012;</b> Implemented 2013; Ongoing program	<b>Promote businesses diverting food waste in newsletter and window stickers</b>
5. Multi-family food waste diversion	Jim/Scott/Casey	Ongoing	<b>07/2012;</b> Implemented 2014; Ongoing program	<b>Continue work with multifamily units on food waste diversion; review cost structure</b>
<b>C&amp;D Recycling, reports &amp; enforcement</b>				
1. Monitor C&D recycling reports & conduct outreach to contractors	Casey/Dee	Ongoing/quarterly reports	<b>Ongoing</b>	NDS provides quarterly C&D recycling reports to City & Dee
2. Enforce C&D recycling thru Solid Waste ordinance	Sandeep/Dee	Ongoing	<b>Ongoing;</b> revisions to Solid Waste ordinance pending	District solid waste ordinance to be reviewed, updated & enforced
<b>Public Outreach/Education Campaign</b>				
1. Revise Novato Disposal website to include zero waste messages	Jim/Casey/Bessie	Ongoing	<b>09/2011;</b>	<b>Novato Disposal updating website; Zero Waste messages to be added</b>
2. Include zero waste messages in newsletter, ads, etc	Jim/Casey/Bessie	Ongoing	<b>Ongoing</b>	Zero Waste messages included in newsletters, promotions and outreach

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
<b>AB32 /AB341/AB818 Multi-family &amp; Commercial mandated recycling</b>				
1. Identify all multifamily & commercial sites	Casey/Dee/Scott/Bessie	Staff meeting – completed	<b>May 2011</b> Ongoing database implementation	Database to include site name, address, phone, bill payer and/or site owner, level & type of service provided (garbage; recycling); site visits; outcome
2. Develop materials for commercial & multifamily residents	Bessie/Dee review	Ongoing	<b>01/2012;</b> Ongoing	Novato Disposal developed mailers, door hangers and web page; information on District web page;
3. Make site visits	Scott/Dee/Bessie	Ongoing	<b>09/2012</b> Ongoing	Visits to include information on AB32 recycling requirements, waste audit availability; <b>Dee, Bessie &amp; Scott to make ongoing site visits in commercial and multi-family areas; Bel Marin Keys area walk-thru conducted in May 2015; additional BMK walk –thru scheduled for spring 2016</b>

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
4. Participate in workshops for multifamily & commercial property managers	Dee/Scott/Bessie	Ongoing	<b>03/2012</b> Ongoing	Novato Disposal develops materials & schedules meetings with property managers as necessary; revised HOA list; <b>contact rental housing associations, HOA's and property managers; follow-up with site visits</b>
5. Provide recycling containers	Jim/Scott	Ongoing	<b>05/2012</b> Ongoing	Following site visits determine size & placement, deliver containers
6. Implement mandated multifamily & commercial recycling	District & Novato Disposal	Ongoing	<b>07/2012</b> Ongoing	Multifamily/commercial implemented; <b>a/o FY2015 865 commercial and 122 multifamily sites provided with recycling;</b> District & Novato Disposal provide ongoing outreach thru site visits, brochures, etc.
<b>Schools Campaign</b>				
1. Institute food waste recycling	District & Novato Disposal	Ongoing	<b>2010</b> Ongoing	Program instituted in select schools and central kitchen 3/2011; <b>meet with School District staff re: food waste in new San Marin &amp; Novato H.S. cafeterias and school site recycling</b>
2. Monitor food waste/recycling programs; meet with teachers & students	Bessie	Ongoing	<b>Ongoing</b>	Separate calendar & schedule to be developed

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
<b>Backyard Composting</b>				
1. Promote backyard composting through compost bin promotion	Jim/Casey/Bessie	Ongoing	<b>Ongoing</b>	See Item EX 4, Item 3
<b>Wet/Dry Route Collections</b>				
1. Discuss feasibility of system & institute if feasible	District & Novato Disposal	2018/2020	<b>2020</b>	Begin discussions in 2018, with system instituted in 2020 if feasible
<b>Discuss feasibility &amp; diversion potential of conversion technology systems</b>	District & Novato Disposal		<b>2025</b>	
<b>Zero waste diversion goals</b>				
1. 60% diversion	Novato Disposal	12/31/15	<b>12/31/15</b>	With 60% diversion required by 12/31/2015, reports will be required within 60 days , or by end of February 2016 to District to prepare final reports
2. 70% diversion	Novato Disposal	12/31/20	<b>12/31/20</b>	With 70% diversion required by 12/31/2020, reports will be required within 60 days , or by end of February 2021 to District to prepare final reports
3. 80% diversion	Novato Disposal	12/31/25	<b>12/31/25</b>	With 80% diversion required by 12/31/2025, reports will be required within 60 days , or by end of February 2026 to District to prepare final reports

## 2015 NOVATO HHW and E-WASTE REPORT

**Number of Total Participants: 5,131 residents**

**HHW and E- Waste Collected: 548,619 pounds**

### Background

In 2015 Novato's HHW facility served a total of 3,523 Novato residents. In addition 13 Novato businesses participated in the business hazardous waste program for conditionally exempt small quantity generators (CESQG). Novato also conducted two *E-Waste* events in 2015, serving 1,608 Novato residents.

Since 1996, the household hazardous waste and *E-Waste* programs sponsored by the Novato Sanitary District have served over 52,775 participants and collected over 5,958,449 pounds of waste

### HHW Facility

The permanent household hazardous waste facility is available to Novato residents on a regular monthly basis, 4 days per month. The facility is open from 8:30am – 1:30pm, the first and third consecutive Sundays and Mondays of each month, excluding most holidays.

The facility also continues to operate as a BOP – battery, oil and paint collection center – during the Recycling Center's regular open hours, Tues – Sun, 10am – 4pm. Used motor oil, oil filters, antifreeze, latex paint, fluorescents and household and car batteries are accepted.

Outreach continues to be conducted through the District and Novato Disposal semi-annual newsletters, website, newspaper ads, fliers, hotlines and social media.

A total of **3,523 households** used the HHW facility in 2015. This is a 20% increase from 2014 and our highest participation ever recorded at the HHW facility. (This does not include the 1,608 participants in the *E-Waste* events, nor the individuals dropping off waste at the BOP.) Open a total of 49 days in 2015, participation has averaged 72 per day, with Sunday being the greatest participation.

A total of **474,939 pounds** of HHW was collected at the HHW facility in 2015. (This does not include the waste collected at the 2 *E-Waste* events.) Overall, 70% of the waste was recycled, 17% used as a supplemental fuel, 6.0% sent for destructive incineration, 3.0% for treatment or neutralization and 4% was sent to hazardous waste landfill.

HHW contractor costs for 2015, including labor, set-up and transport and disposal of the waste amounted to \$217,975.81. Labor and materials costs totaled \$99,806.96 (46%)

and waste disposal costs \$118,168.85 (54%). This does not include costs for the *E-Waste* events.

### **E-Waste Events**

Novato held 2 special *E-Waste* events in 2015 - one in the spring and the second in the fall. The events are held over a three day period at the Novato Recycling Center. These special drop off events offer residents the opportunity to properly dispose of all electronic items.

Since 2003, at these events, we have collected over 1,384,457 pounds of *E-Waste* from over 20,731 Novato residents.

A total of **1,608 residents** dropped off *E-Waste* during the two events. Average daily participation was **268**. A total of **73,680 pounds** of *E-Waste* was collected, averaging 46 pounds per participant.

Outreach methods included articles in the District and Novato Disposal newsletters, ads in Novato Advance, fliers, website postings and social media.

Costs for these events totaled **\$1,500.00**. Our *E-Waste* recycler – ECS Refining– did not charge for 2 unloaders on Saturday and Sunday and continued to provide us with all transport and supplies at no charge. ECS paid Novato Disposal the SB20/50 reimbursement rate of \$.16/pound for CRT devices to offset Novato Disposal labor charges.

### **Summary**

Recommendations for future programs include:

- Increase promotion on website and social media – Facebook, Twitter, etc.
- Increase promotion of additional opportunities for collection of paint, batteries and fluorescents
- Maintain 2 *E-Waste* events
- Expand outreach to small businesses

### **Attachments:**

HHW and E-Waste Events Comparative Data 2005-2015  
2015 HHW & E-Waste Collected  
CalRecycle Form 303 for 2015

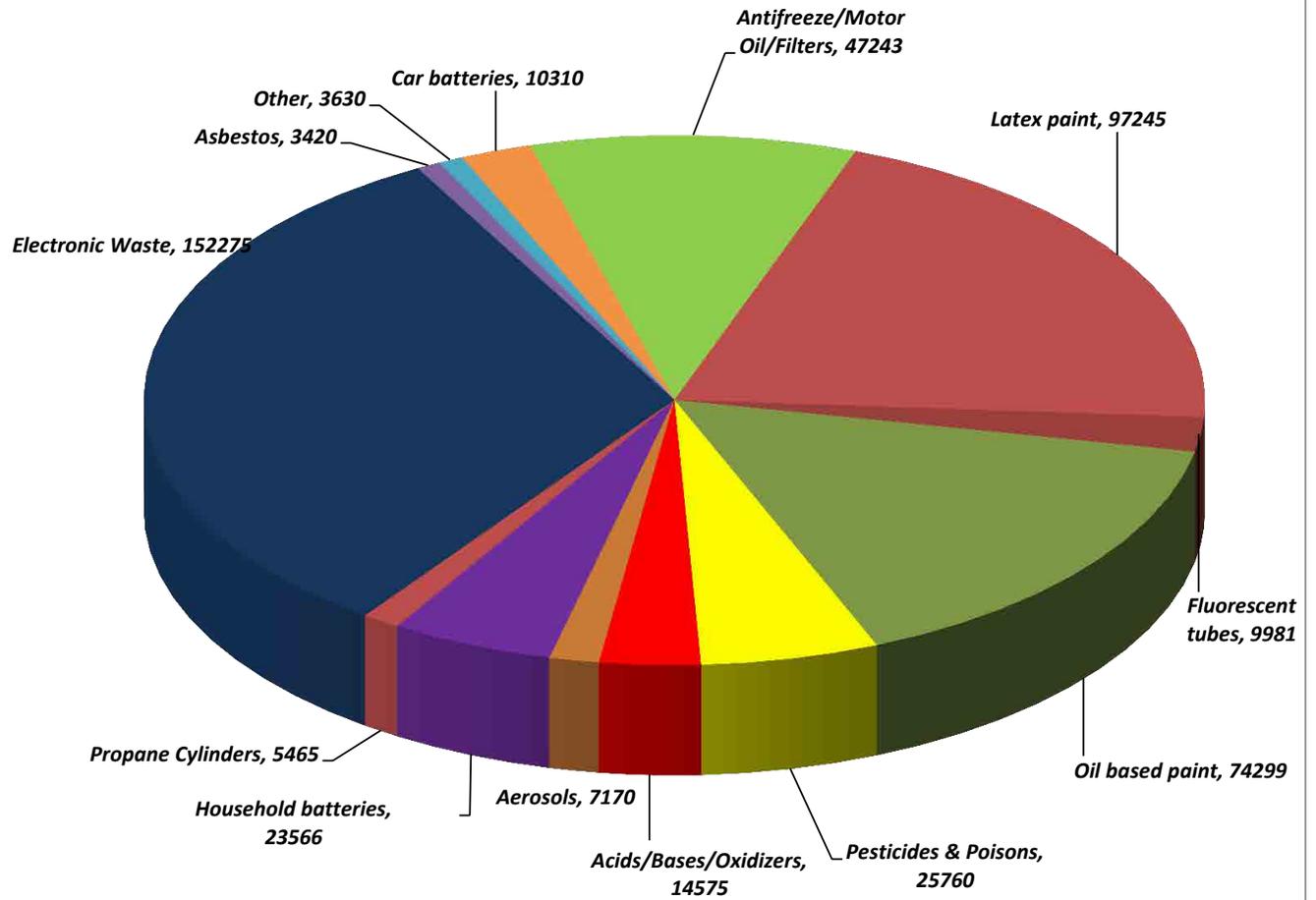
<b>NOVATO HOUSEHOLD HAZARDOUS WASTE AND E-WASTE EVENTS COMPARATIVE ANALYSIS</b>											
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>PARTICIPANTS</b>											
# of vehicles	2,662	2,625	3,534	3,665	4,139	4,440	4,315	3,792	4,160	4,526	5,131
<b>TOTAL WASTE COLLECTED</b>											
Pounds per vehicle	121	119	108	116	121	100	102	106	93	100	93
<b>WASTE MANAGEMENT METHOD(lbs)</b>											
Supplemental Fuels & Recycling	292,244	282,345	350,281	390,320	464,623	407,519	403,169	360,724	345,427	404,666	408,114
Treatment&Neutralization	6,250	4,900	4,100	4,850	5,058	4,744	5,316	6,460	5,750	6,955	14,163
Destructive Incineration	12,420	8,285	11,850	12,015	12,913	13,690	11,278	13,386	15,319	18,413	28,362
Landfill	10,250	15,700	16,100	18,765	19,570	18,990	20,950	20,590	18,900	23,197	24,300
<b>WASTE COLLECTED BY CATEGORY(lbs)</b>											
Oil-Based Paint & related	91,950	56,300	81,850	47,650	81,390	46,170	46,100	80,290	48,450	73,750	74,299
Aerosols	3,519	2,600	2,900	2,900	2,900	4,100	3,010	2,710	3,360	4,200	7,170
Antifreeze/Motor Oil & Filters	840	N/A	N/A	52,061	63,223	54,780	38,821	48,586	55,034	38,625	47,243
Fluorescents	7,601	6,862	9,031	11,380	7,126	13,861	10,163	8,876	8,000	8,339	9,981
Pesticides & Poisons	8,331	7,850	10,950	8,755	8,850	9,150	9,400	9,680	11,400	13,050	25,760
Asbestos	750	900	300	700	960	790	1,000	440	500	1,847	3,420
Latex paint	52,100	68,000	78,400	79,200	73,700	80,240	76,900	78,430	79,220	108,859	97,245
Electronic Waste	134,297	145,078	176,120	157,119	199,589	185,526	210,650	121,760	137,111	151,953	152,275
Compressed Gas Cylinders	4,686	3,655	2,050	3,150	2,490	1,490	3,570	4,228	5,170	5,795	5,465
Household batteries	9,100	14,300	15,800	18,105	18,910	25,750	21,985	22,390	20,550	25,140	23,566
Car batteries				39,950	36,250	14,260	13,095	14,960	10,280	12,380	10,310
Acids/Bases/Oxidizers	6,250	4,350	4,100	4,560	5,058	4,744	5,316	6,600	5,750	7,387	14,575
Other**	1,740	1,335	830	420	1,718	4,082	703	2,210	571	1,906	3,630
<b>COSTS</b>											
<b>HHW Contractor Costs</b>	\$156,563	\$121,255	\$139,647	\$147,687	\$188,601	\$186,809	\$200,699	\$199,101	\$191,930	\$192,624	\$217,976
Labor/Materials	\$58,461	\$50,166	\$53,975	\$62,252	\$86,141	\$88,720	\$89,911	\$88,220	\$93,281	\$96,926	\$99,807
Waste Disposal	\$93,472	\$72,120	\$89,674	\$88,161	\$107,219	\$100,973	\$114,197	\$114,649	\$102,644	\$97,521	\$120,174
CESQG Waste Disposal	\$4,630	\$1,031	\$4,002	\$2,726	\$4,759	\$2,884	\$3,410	\$3,769	\$3,995	\$1,823	\$2,005
<b>E-Waste Contractor Costs</b>											
Labor,Printing.Mailing		\$11,374	\$23,276	\$23,610	\$24,716	\$21,307	\$19,254	\$5,306	\$4,268	\$4,268	\$4,268
Disposal/Recycling		\$11,744	\$7,181	\$1,646	\$0	\$0	\$0	\$0	\$0	\$0	\$140
Reimbursement(CRT's)	-\$10,735	-\$9,813	-\$13,054	-\$11,093	-\$10,705	-\$10,940	-\$7,007	-\$5,272	-\$4,342	-\$4,603	-\$4,331
<b>CESQG/BUSINESS PROGRAM</b>											
# of Businesses	26	20	14	25	34	22	36	25	19	12	13

\*\*Other includes Sharps,PCB's,Non-RCRA and mercury-containing waste

CIWMB FORM 303  
NOVATO SANITARY DISTRICT  
TOTAL 2015

WASTE VOLUMES COLLECTED MATERIAL TYPE		POUNDS COLLECTED BY PROGRAM TYPE				MANAGEMENT METHOD OF WASTE DISPOSED/DIVERTED							
		Permanent Facility	Recycle Only Facility	E-Waste Event	TOTAL POUNDS COLLECTED	DI	FB	L	N	R	RU	S	TOTAL POUNDS
1. Flammable & Poison	Flammable solid/liquid	2,250	0	0	2,250	0	2,250	0	0	0	0	0	2,250
	Bulked flammable liquids	0	0	0	0	0	0	0	0	0	0	0	0
	Oil-base paint	68,349	0	0	72,049	0	72,049	0	0	0	0	0	72,049
	Poison(excl. aerosols)	25,760	0	0	25,760	25,760	0	0	0	0	0	0	25,760
	Reactive & explosives	137	0	0	137	137	0	0	0	0	0	0	137
	<b>Subtotal</b>	<b>96,496</b>	<b>0</b>	<b>0</b>	<b>100,196</b>	<b>25,897</b>	<b>74,299</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100,196</b>
2. Acid	Organic and Inorganic acid	4,074	0	0	4,074	0	0	0	4,074	0	0	0	4,074
3. Base	Organic and Inorganic base	9,000	0	0	9,000	0	0	0	9,000	0	0	0	9,000
4 Oxidizer	Neutral oxidizers,organic peroxides,oxidizing acids and bases	1501	0	0	1,501	412	0	0	750	0	0	339	1,501
5. PCB-containing	PCB-containing paint	0	0	0	0	0	0	0	0	0	0	0	0
	Other PCB waste	1,936	0	0	1,936	1,936	0	0	0	0	0	0	1,936
	<b>Subtotal</b>	<b>1,936</b>	<b>0</b>	<b>0</b>	<b>1,936</b>	<b>1,936</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,936</b>
6 Reclaimable	Antifreeze	0	4,680	0	4,680	0	0	0	0	4,680	0	0	4,680
	Auto type batteries	1,550	8,760	0	10,310	0	0	0	0	10,310	0	0	10,310
	Latex Paint	47,057	50,188	0	97,245	0	0	0	0	97,245	0	0	97,245
	Motor oil/oil products	0	41,063	0	41,063	0	0	0	0	37,313	0	0	37,313
	Oil filters	0	1,500	0	1,500	0	0	0	0	5,250	0	0	5,250
	<b>Subtotal</b>	<b>48,607</b>	<b>106,191</b>	<b>0</b>	<b>154,798</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>154,798</b>	<b>0</b>	<b>0</b>	<b>154,798</b>
7 Asbestos	Asbestos	3,420	0	0	3,420	0	0	3,420	0	0	0	0	3,420
8 Universal Waste	Mercury containing thermostats /switches/thermometers	40	0	0	40	0	0	0	0	40	0	0	40
	Mercury containing waste other	0	0	0	0	0	0	0	0	0	0	0	0
	Fluorescent bulbs	2,435	7,546	0	9,981	0	0	0	0	9,981	0	0	9,981
	Rechargeable batteries	480	2,706	0	3,186	0	0	0	0	3,186	0	0	3,186
	Other Household batteries	5,280	15,100	0	20,380	0	0	20,380	0	0	0	0	20,380
Electronic Waste	Covered Electronic Devices	56,620	0	28,704	85,324	0	0	0	0	85,324	0	0	85,324
	Other Electronic Devices	25,975	0	40,976	66,951	0	0	0	0	66,951	0	0	66,951
	<b>Subtotal</b>	<b>90,050</b>	<b>25,352</b>	<b>69,680</b>	<b>185,862</b>	<b>0</b>	<b>0</b>	<b>20,380</b>	<b>0</b>	<b>165,482</b>	<b>0</b>	<b>0</b>	<b>185,862</b>
Aerosol Containers	Managed as universal waste	0	0	0	0	0	0	0	0	0	0	0	0
Other		0	0	0	0	0	0	0	0	0	0	0	0
	<b>Universal Waste Subtotal</b>	<b>90,050</b>	<b>25,352</b>	<b>69,680</b>	<b>185,862</b>	<b>0</b>	<b>0</b>	<b>20,380</b>	<b>0</b>	<b>165,482</b>	<b>0</b>	<b>0</b>	<b>185,862</b>
9 Other HHW	Sharps	117	0	0	117	117	0	0	0	0	0	0	117
	Pharmaceutical Waste	0	0	0	0	0	0	0	0	0	0	0	0
	Compressed Gas Cylinders	5,465	0	0	5,465	0	0	0	0	5,465	0	0	5,465
	Treated Wood	0	0	0	0	0	0	0	0	0	0	0	0
	Non-UW aerosol containers - corrosives, flammables, poisons	7,170	0	0	7,170	0	7,170	0	0	0	0	0	7,170
	Other-Class9/Non RCRA	1,400	0	0	1,400	0	0	500	0	900	0	0	1,400
	<b>Subtotal</b>	<b>14,152</b>	<b>0</b>	<b>0</b>	<b>14,152</b>	<b>117</b>	<b>7,170</b>	<b>500</b>	<b>0</b>	<b>6,365</b>	<b>0</b>	<b>0</b>	<b>14,152</b>
		0	0	0	0	0	0	0	0	0	0	0	0
10.	<b>Grand Total</b>	<b>269,236</b>	<b>131,543</b>	<b>69,680</b>	<b>474,939</b>	<b>28,362</b>	<b>81,469</b>	<b>24,300</b>	<b>13,824</b>	<b>326,645</b>	<b>0</b>	<b>339</b>	<b>474,939</b>

## 2015 HHW & E-Waste Collected

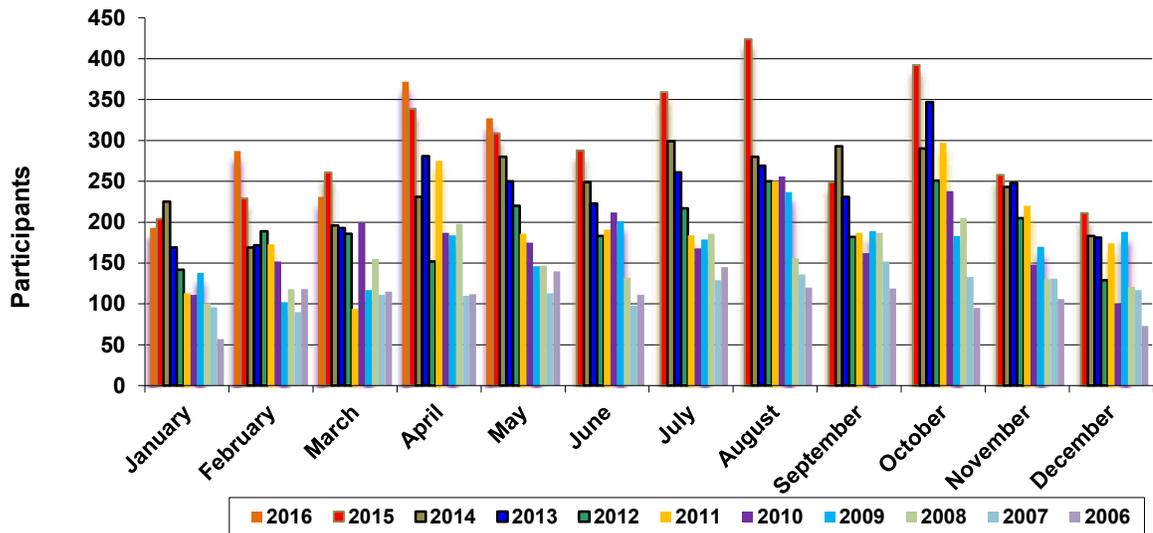


HHW FACILITY SUMMARY 2016	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
<b>Total Participants</b>	<b>193</b>	<b>287</b>	<b>231</b>	<b>372</b>	<b>327</b>								<b>1,410</b>
Been to events before?(Yes)	156	241	179	298	258								1,132
Permanent facility?	139	214	157	275	225								1,010
Temporary events?	23	40	34	34	50								181
First time user?	37	46	52	74	69								278
<b>Type of waste brought in?</b>													
Antifreeze	9	13	19	26	22								89
Asbestos	1	5	5	3	3								17
<b>Auto products</b>	<b>24</b>	<b>28</b>	<b>31</b>	<b>55</b>	<b>56</b>								<b>194</b>
Car batteries	5	9	8	9	14								45
<b>Computer monitors</b>	<b>19</b>	<b>32</b>	<b>12</b>	<b>18</b>	<b>5</b>								<b>86</b>
Cements, sealers	17	28	29	41	44								159
<b>E-Waste(all types)</b>	<b>81</b>	<b>99</b>	<b>57</b>	<b>74</b>	<b>65</b>								<b>376</b>
<b>Fluorescent tubes&amp; bulbs</b>	<b>38</b>	<b>66</b>	<b>39</b>	<b>82</b>	<b>54</b>								<b>279</b>
Fuels(gas, kerosene, diesel)	11	20	19	34	43								127
Household batteries	<b>46</b>	<b>70</b>	<b>59</b>	<b>105</b>	<b>74</b>								<b>354</b>
Household cleaners, polishes	37	71	58	89	97								352
<b>Latex paint</b>	<b>62</b>	<b>95</b>	<b>61</b>	<b>144</b>	<b>135</b>								<b>497</b>
Motor oil/filters	12	34	35	48	39								168
<b>Oil base paint</b>	<b>37</b>	<b>60</b>	<b>53</b>	<b>96</b>	<b>94</b>								<b>340</b>
<b>Paint thinners, solvents</b>	<b>35</b>	<b>56</b>	<b>57</b>	<b>76</b>	<b>106</b>								<b>330</b>
<b>Pesticides, herbicides, insecticides</b>	<b>21</b>	<b>37</b>	<b>43</b>	<b>74</b>	<b>79</b>								<b>254</b>
Pet care products	2	6	3	17	13								41
Photo chemicals	1	4	1	1	1								8
Pool Chemicals	6	11	4	13	11								45
Propane/helium tanks/fire extinguishers	9	21	20	36	41								127
Sharps	3	2	7	4	8								24
<b>Spray paints</b>	<b>18</b>	<b>39</b>	<b>45</b>	<b>66</b>	<b>62</b>								<b>230</b>
Television	31	30	27	26	32								146
Thermometers/Thermostats	0	5	2	7	8								22
Wood preservatives, stains	12	34	27	46	44								163
Other	9	8	8	17	15								57
<b>Hear about program?</b>													
Recycling Center flier	69	90	71	159	143								532
Sanitary District newsletter	26	49	48	65	84								272
Sanitary District website	20	43	37	31	29								160
Novato Disposal newsletter	79	125	67	144	137								552
Word of mouth	37	46	40	42	38								203
Other	17	20	23	15	18								93
<b>Change your own motor oil?</b>													
<b>Yes</b>	<b>26</b>	<b>37</b>	<b>28</b>	<b>46</b>	<b>39</b>								<b>176</b>
Novato Recycling Center	19	21	19	24	27								110
O'Reilly's	9	18	11	18	10								66
Pennzoil	0	1	0	2	0								3
Other	0	0	1	3	3								7
If yes, want curbside pickup?	10	15	10	13	9								57
<b>No</b>	<b>167</b>	<b>250</b>	<b>203</b>	<b>326</b>	<b>288</b>								<b>1,234</b>
<b>Comments</b>													
<b>Compliments/Good</b>	<b>60</b>	<b>90</b>	<b>76</b>	<b>109</b>	<b>116</b>								<b>451</b>
<b>Complaints</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>								<b>7</b>

**HHW PARTICIPANTS 2006 - 2016**

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Totals</u>
2016	193	287	231	372	327								
2015	204	229	261	339	309	288	359	424	249	392	258	211	3,523 open 3 days in April, 6 days in August
2014	225	169	196	231	280	249	299	280	293	290	262	183	2,957 open 3 days in April
2013	169	172	193	281	250	223	261	269	231	347	248	181	2,825
2012	142	189	186	152	220	183	217	250	182	251	205	129	2,306
2011	113	173	94	275	186	191	184	250	187	297	220	174	2,344
2010	111	152	199	187	175	212	168	256	162	238	148	100	2,108 August 6 days
2009	138	102	117	184	146	201	179	237	189	183	170	188	2,034 August 6 days
2008	101	118	155	198	147	132	186	156	187	205	130	121	1,836
2007	96	90	111	110	113	98	129	136	152	133	131	117	1,416
2006	57	118	115	112	140	111	145	120	119	95	106	73	1,311
<b>% Change from 2015</b>	-5.39%	25.33%	-11.49%	9.73%	5.83%								

### HHW Facility Monthly Participation 2006- 2016





**NOVATO E-WASTE COLLECTION**  
**Saturday, April 23 – Monday, April 25, 2016**

**Number of Participants: 911 residents**

**E- Waste Collected: 22,345 pounds**

**Background**

Novato’s spring E-Waste collection event was held from Saturday, April 23 – Monday, April 25, 2015 at the Recycling Center. This special drop off event offers residents the opportunity to properly dispose of all electronic items.

Since 2003, at these events, we have collected over 1,406,801 pounds of E-waste, from over 21,642 Novato residents.

**Participation**

A total of **911 residents** dropped off *E-Waste* during the three day event. Average daily participation was **304**. The daily participation, based on actual surveys completed is listed below:

	SAT	SUN	MON
Daily Participation	382	259	270

A total of **22,345 pounds** of *E-Waste* was collected over the 3-day period. The chart below illustrates the total pounds and pounds per participant.

Number of participants	911
Total <i>E-Waste</i> Collected (lbs)	22,345
Pounds per participant	25

**Costs/reimbursements**

Reimbursement for CRT disposal totaled **\$1,032.00**. used to offset Novato Disposal labor costs. Costs totaled \$892. for ECS non-CRT material collected and fork lift rental.



**Publicity and Outreach**

Outreach methods included:

- Article in Novato Disposal newsletter, mailed to all customers
- Article in Sanitary District newsletter, mailed to all residents
- Ads placed in Novato Advance
- Separate notice on Sanitary District website and Facebook page
- Fliers posted at city hall, Sanitary District, Recycling Center
- Notices on hotline

**Next Event is scheduled for Sat., October 8 – Mon., October 10, 2016**

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Solid Waste: Household Hazardous Waste (HHW) Management Contract</b>	<b>MEETING DATE: June 13, 2016.</b>  <b>AGENDA ITEM NO.: 11.b.</b>
<b>RECOMMENDED ACTION: Approve contract with DLJ Associates to provide AB939, household hazardous waste (HHW), and related services for FY2016-17 in the amount of \$102,964, and authorize the General Manager-Chief Engineer to execute it.</b>	
<b>SUMMARY AND DISCUSSION:</b>  Dee Johnson of DLJ Associates has managed the District’s Household Hazardous Waste and AB 939 services for many years. For the past five years she has also managed the Zero Waste outreach and AB 341 solid waste requirements. As in previous years, staff requested and Ms. Johnson provided a detailed proposal of her services for the upcoming year. In summary, she proposes to provide the following services on a time and materials basis for a total not-to-exceed amount of \$102,964. <ul style="list-style-type: none"> <li>• HHW facility administering, promoting, and monitoring: \$72,500.</li> <li>• AB939 and 341 and Zero Waste Program administrative, technical support, outreach, monitoring &amp; reporting, and commercial and multi-family recycling: \$27,500.</li> <li>• Administering the Department of Conservation Beverage Container Recycling program: \$2,964.</li> </ul> <p>For comparison purposes, Ms. Johnson’s FY15-16 proposal was in the not-to-exceed amount of \$101,464.</p> <p>Staff recommends that the Board approve the contract with a not-to-exceed limit of \$102,964, and authorize the General Manager-Chief Engineer to execute it.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), Goal 2 (Reliable and Efficient Facilities), and Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
<b>BUDGET INFORMATION:</b> This work will be funded in the preliminary FY2016-17 budget under Management Services with a budget amount of \$134,750.	
<b>DEPT. MGR.:</b> dlj, ssk	<b>GENERAL MANAGER:</b> SSK

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Receive Wastewater Operations Report, May 2016 – Information.</b>	<b>MEETING DATE: June 13, 2016</b>  <b>AGENDA ITEM NO.: 12.a.</b>
<b>RECOMMENDED ACTION:</b> Receive Wastewater Operations Report for the month of May 2016.	
<b>SUMMARY AND DISCUSSION:</b> <p>The May 2016 Wastewater Operations Report incorporating reports for wastewater treatment operations, collection system operations, and reclamation facilities is attached.</p> <p><b>Wastewater Treatment Facility</b></p> <p>Novato Treatment Plant (NTP) water quality parameters were well within effluent standards in May with no NPDES violations. The Recycled Water Plant produced a total of 14.3 MG of recycled water. May was another accident-free month for a total of 2,198 days. Veolia staff performed repairs on Gravity Belt Thickener No. 1 and performed cleaning on Digester No. 1 Supernatant Line. Additionally, the Annual Infrared Survey was performed at Novato Treatment Plant and Ignacio Transfer Pump Station with no “hot spots” observed. Environmental Services staff performed sampling for PCBs and sent samples to Frontier Analytical. There were not results above the reporting limit. Jerome meter readings in the neighborhood were either zero or at the minimum detection threshold; there were no neighborhood contacts regarding odor in May. Veolia staff submitted the Discharge Monitoring Report (DMR), Electronic Self-Monitoring Report (e-SMR) and the Recycled Water Report for April 2016 on May 30th.</p> <p><b>Collection System and Pump Stations</b></p> <p>Staff cleaned a total of 82,286 ft. of sewer pipelines in May. The CCTV van was out of service for repairs. Hand-cam CCTV work was performed to support upcoming root treatment. Staff also conducted 239 lift station inspections and inspected four (4) air relief valves. Additionally, staff set up temporary bypass operations for scheduled repair work at Enfrente Pump Station and performed work to improve pump station communications at the Southgate and East Hamilton Pump Stations.</p> <p><u>Safety:</u> No lost time accidents in May 2016 for a total of 1,906 accident-free days.</p> <p><u>Training:</u> Collections staff attended 5 safety tailgate meetings, and a Heat Illness training conducted by Dale Thrasher. Dasse de longh, Collection System Superintendent, attended a full day CWEA Supervisor’s Safety Seminar in San Leandro.</p> <p><u>Sanitary Sewer Overflows (SSOs):</u> There were zero (0) overflows in May.</p> <p><b>Reclamation Facility</b></p> <p>There were no sludge handling activities or irrigation in May. The rancher completed cutting pasture grass on all sites except Parcel 3 on Site 2 this month. Drainage Pump Station No. 7 pumped 0.675 MG of water this month. The drainage pumps were taken out of service for the season at the end of the month. Work began to repair irrigation lines in Parcels 1 &amp; 4 in Site 2.</p>	
<b>ATTACHMENTS:</b> 1. Wastewater Operations Report for the month of May 2016.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> JB (Veolia), SRK, DD, EB	<b>GENERAL MANAGER:</b> SSK



June 9, 2016

Mr. Sandeep Karkal  
Manager - Engineer  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94545

**Subject: Veolia Water Operations Report – May 2016**

Dear Mr. Karkal:

I am pleased to provide the Monthly Operation report for May 2016.

As always, please give me a call at 707-208-4491 should you have any questions.

Best regards,

A handwritten signature in blue ink, appearing to read "John Bailey".

John Bailey  
Project Manager, Veolia



**MONTHLY OPERATIONS REPORT  
May 2016**

Prepared for

**NOVATO SANITARY DISTRICT (NSD)  
WASTEWATER TREATMENT PLANT  
500 Davidson Street  
Novato, CA 94545**

Prepared by

**Veolia Water West Operating Services, Inc. (VWWOS)**

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  - Low Level Mercury Sampling – Clean Hands Technique
  - Removing Mixed Liquor Return Pump
  - Ultra Violet Disinfection System Maintenance
- Laboratory Data
- Weather Data
- Recycled Water Report
- Annual Compliance Summary
- Process Control Data / Graphs
- Neighborhood Contacts
- Jerome Meter Readings and Locations

**TREATMENT PLANT PERFORMANCE SUMMARY: May 2016:**

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	3.82	4.64	N/A	N/A
Max Peak Hour, MGD – Dry Conditions, No Max Peak	N/A	N/A	N/A	N/A
<b>Influent</b>				
BOD <sub>5</sub> , lb/day (month ave/max)	9,636	10,350	N/A	N/A
TSS, lb/day (monthly ave/max)	11,116	13,642	N/A	N/A
<b>Effluent</b>				
BOD <sub>5</sub> , mg/L (monthly ave/weekly max)	<7	13	15	30
TSS, mg/L (monthly ave/weekly max)	5	8	10	20
BOD <sub>5</sub> - % Removal, Minimum	98	N/A	85	N/A
TSS - % Removal, Minimum	98	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	0.29	0.29	5.9	21
pH, su (min / max)	6.9	7.1	6.5	8.5
Enterococcus, MPN/100 ml (30 day geo mean)	3.5	8.5	35	N/A
Fecal Coliform, MPN/100 ml (30 day median)	N/A	N/A	140	N/A
Fecal Coliform, MPN/100 ml (90 <sup>th</sup> percentile)	N/A	N/A	430	N/A
<b>Total Permit Exceedances (NPDES)</b>	0			

**Title 22 - Recycled Water Production and Quality**

Description	Units	Value	Limit
Volume Produced	Million Gallons	14.296	N/A
Average Turbidity	NTU	1.1	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	0.0	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	6.8	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	2.0	240
Maximum Total Coliform 2 Samples 30 d	MPN/100 ml	2.0	23
Total Coliform 7 Sample Median	MPN/100 ml	2.0	2.2

Discussion of Violations / Excursions:

National Pollutant Discharge Elimination System (NPDES) – None

Recycled Water – None

Rainfall. – **May Total Rainfall = 0.2 inches**



**SAFETY AND TRAINING:**

- Monthly plant safety inspections for Novato WWTP and Ignacio Transfer Pump Station completed
- Five Minute Tailgate training is held daily with all staff.
- No safety incidents for the month of May 2016.
- Accident Free: 6/1/10 – 5/31/16: 2,198 days
- Monthly Safety Topics and Training:  
Forklift Operator Safety

**OPERATION & MAINTENANCE STATUS / REVIEW:**

**Key events for the period:**

**Novato**

- Routine rounds, readings and maintenance
- Annual Inspection – Boiler
- Annual Infrared Survey, no hot spots observed
- Annual Crane Certification
- Replaced bearing on gravity belt thickener #1
- Cleaned struvite from digester supernatant pipe
- Replaced bearing on Grit Classifier #2
- Replaced stator and rotor on Sludge Transfer Pump #1
- Replaced batteries in GEM electric cart

**Equipment Out of Service – Due to Planned Servicing, Maintenance, or Replacement**

- Aeration Basin #1 & #2 (not needed at current flows)
- Primary Clarifier #1 (not needed at current flows)

**Ignacio Transfer Pump Station**

- Routine rounds, readings and maintenance
- Annual Infrared Survey, no hot spots observed
- Cleared weeds at Equalization Basins and berms.

**Equipment Out of Service – Due to Planned Servicing, Maintenance, or Replacement**

- Channel Screen / Grinder, Maintenance

**Decant Pump Station**

- Performed routine inspection

**Recycled Water Plant (RWP)**

- Performed routine rounds and inspections
- Repaired Chlorine Residual Analyzer, replaced worn cell and associated parts



**Equipment Out of Service – Due to Planned Servicing, Maintenance, or Replacement**

- None

**Sludge Lagoons**

- Performed routine rounds and inspection
- Monitoring Wells – drained wells, cleared weeds and assisted with sample collection

**LABORATORY ACTIVITIES SUMMARY:****Wildlife Pond and Reclamation Activities**

Samples and weekly/monthly observations at the Wildlife pond were taken according to the WDR (Order No. 92-065). Floating vegetation observed in the wildlife pond this month.

**Fecal Coliforms**

No Fecal Coliform sample in May as this is only required once per quarter. The quarterly (March-May) sample was analyzed in March with the result (1.8 MPN/100 mL) well below the regulatory limits.

**Enterococcus**

Three samples were analyzed each week for Enterococcus and monthly geometric mean of 3.5 MPN/100 mL was well below the regulatory limit of 35 MPN/100 mL.

**Whole Effluent Toxicity Testing**

No quarterly Acute and Chronic Toxicity testing were performed in May. The quarterly (March-May) samples were analyzed in April and both were compliant with permit limits.

**PCBs (40 Congeners)**

Samples were sent to Frontier Analytical May 5, 2016. There were no results above the method (reporting) limit for any of the congeners. These PCB Congeners were not included in Order R2-2018-0008 Alternate Monitoring and Reporting Programs for Municipal Wastewater Dischargers to Add Support for RMP and are analyzed quarterly during bay discharge.

**Order R2-2016-0008 Alternate Monitoring and Reporting Programs for Municipal Wastewater Dischargers to Add Support for RMP**

This order took effect April 1, 2016. The order modifies the monitoring requirements for NSD in that quarterly Dioxin and semi-annual VOC, BNA and Total PCBs (as aroclors) for effluent is changed to once per permit cycle. In addition, the most sensitive species evaluation required once per permit term is also not required. This cost savings for analysis will now be applied to and billed (annually) through the Regional Monitoring Program (RMP).

**Pretreatment****Permits**

- Renewed one Waste Hauler Permit.
- Met with discharger to discuss their permit renewal.



**Inspections**

- Conducted three (3) inspections. Directed one discharger to increase grease trap cleaning.
- Follow-up and other communications with five (5) discharges.

**Sampling**

- None for pretreatment

**Reports Received**

- "Documentation of Compliance, Composite Sampler Set-up" submitted by discharger.

**ADMINISTRATION:**

- April Electronic Self-Monitoring Report (SMR) submitted on May 30, 2016
- April Electronic Discharge Monitoring Report (DMR) submitted on May 30, 2016
- April Recycled Water Report submitted on May 30, 2016

**ODORS:**

- Jerome meter (H2S) readings performed in neighborhood and within treatment plant.
- All readings in neighborhood were either zero or at the minimum detection threshold of the Jerome meter.
- Continuing to monitor media in the large odor control bed between primary clarifiers #1 & #2. The media for this bed, as well as for all the other odor beds, was topped off last summer, and all seem to be functioning well. Additional media will be added to top off the beds this summer.
- Purchased spare pump for Microcool Fogger (odor control)

**LANDSCAPING:**

- The recent oleander plantings along a portion of the Lea Drive fence-line are well established and healthy.

**MISCELLANEOUS**

- Process Control Management Plan (PCMP) meetings held weekly.
- Plant Tour for Marin Association of Sanitary Supervisors.
- Pump out Monitoring Wells and Assisted with Sampling

**Veolia Support Staff On/Off Site (Various Times)**

John O'Hare

Technical Support

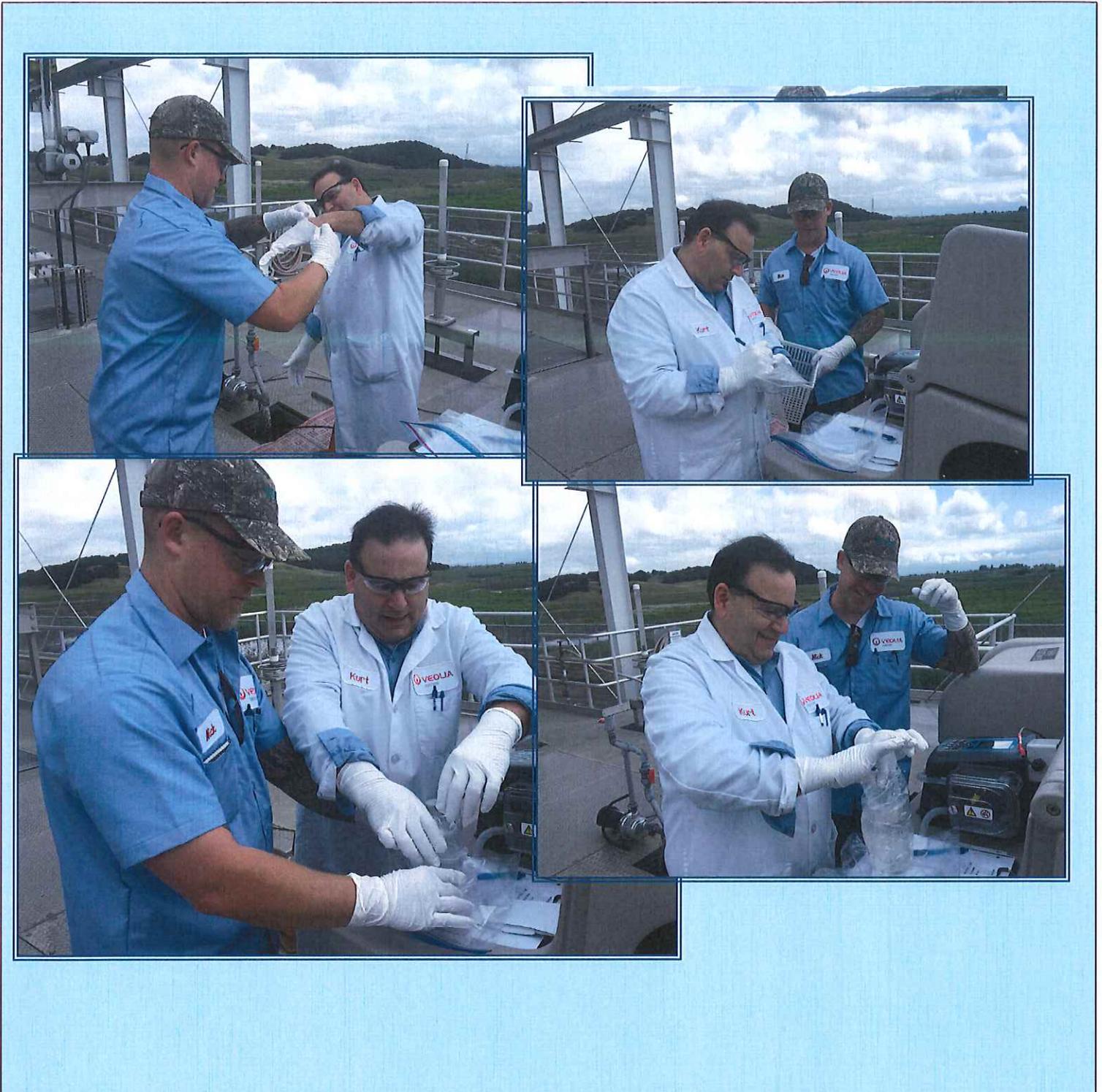
Paul Proctor

Technical Support



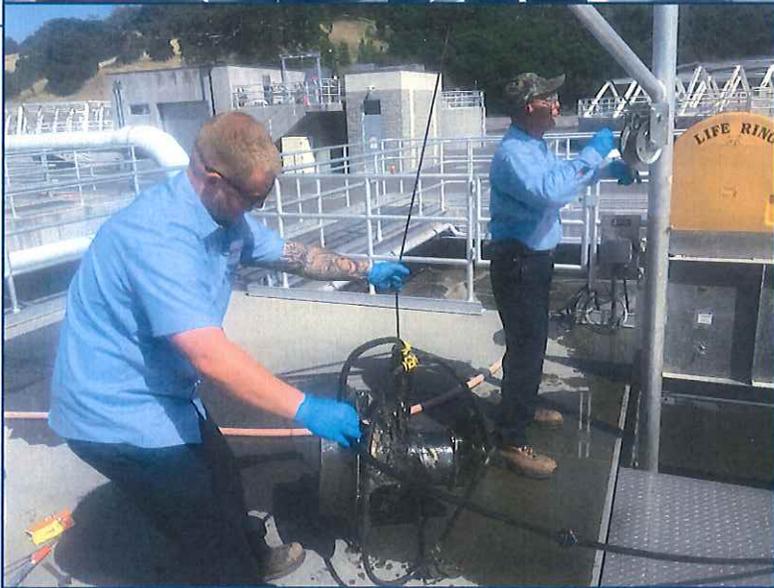
# ***PHOTOS***

LOW LEVEL MERCURY SAMPLING - CLEAN HANDS TECHNIQUE  
MAY 2016



Top Left – Nick Brewington assists Kurt Hawkyard donn sterile gloves .  
Top Right – Nick and Kurt Employ *Clean Hands* Sampling Method for Low Level Mercury  
Bottom Right & Left – Nick and Kurt Secure and Seal Sample Container

REMOVING MIXED LIQUOR RETURN PUMP FOR REPAIR  
MAY 2016



Nick Brewington and Alejo Cuntapay Removing Mixed Liquor Return Pump From Aeration Basin #3

ULTRA VIOLET DISINFECTION SYSTEM MAINTENANCE  
MAY 2016



Top Left & Right – Brian Exberger Prepares to Install Control Board in UV Module.  
Bottom Left & Right – Brian Inspects Burned Out UV Light

# ***LABORATORY DATA***

Novato Sanitary District  
BOD/TSS Report



May, 2016

Date	Flow MGD	Influent				Effluent				BOD % Removal PERCENT	TSS % Removal PERCENT
		BOD		TSS		BOD		TSS			
		mg/l	lb/d	mg/l	lb/d	mg/l	lb/d	mg/l	lb/d		
05/01/16	3.82										
05/02/16	4.64										
05/03/16	3.86										
05/04/16	4.11	290	9,940	398	13,642	<5	<171	4	137	98.3	99.0
05/05/16	4.11					<5	<171	3	103		
05/06/16	4.05										
05/07/16	4.37										
05/08/16	4.21										
05/09/16	3.72										
05/10/16	3.65	340	10,350	396	12,055	<5	<152	3	91	98.5	99.2
05/11/16	4.00										
05/12/16	3.51										
05/13/16	4.08										
05/14/16	3.60										
05/15/16	3.61										
05/16/16	3.93										
05/17/16	3.63										
05/18/16	3.74										
05/19/16	4.02	290	9,723	335	11,231	5	168	8	268	98.3	97.6
05/20/16	4.19										
05/21/16	4.02										
05/22/16	4.18	300	10,458	265	9,238						
05/23/16	3.41					13	370	8	228		
05/24/16	3.59										
05/25/16	3.43										
05/26/16	3.48										
05/27/16	3.34										
05/28/16	3.44										
05/29/16	3.23										
05/30/16	3.72										
05/31/16	3.65										
<b>Weekly Averages</b>											
05/07/16	Week 1	290	9,940	398	13,642	5	171	4	120		
05/14/16	Week 2	340	10,350	396	12,055	5	152	3	91		
05/21/16	Week 3	290	9,723	335	11,231	5	168	8	268		
05/28/16	Week 4	300	10,458	265	9,238	13	370	8	228		
	Week 5										
<b>Monthly</b>											
Minimum	3.23	290	9,723	265	9,238	<5	<152	3	91	98	98
Maximum	4.64	340	10,458	398	13,642	13	370	8	268	99	99
Total	118.34										
Average	3.82	305	10,118	349	11,542	<7	<206	5	165	98	99

Novato Sanitary District  
Conventional Pollutants Report



May, 2016

Date	INFLUENT - A001			Effluent - E002							
	Flow	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Unionized Ammonia	Oil & Grease	Temp
	Total			Fecal	Entero	Total					
MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L		Deg C	
05/01/16	3.82										
05/02/16	4.64						6.9				
05/03/16	3.86						7.0				
05/04/16	4.11					5.2	6.9			<1.5	
05/05/16	4.11					6.3	6.9				
05/06/16	4.05	7.3				2.0	7.0				
05/07/16	4.37										
05/08/16	4.21										
05/09/16	3.72						7.0				
05/10/16	3.65					8.5	7.0				
05/11/16	4.00					6.3	6.9				
05/12/16	3.51					2.0	6.9				
05/13/16	4.08	7.2					6.9				
05/14/16	3.60										
05/15/16	3.61										
05/16/16	3.93					3.1	7.0				
05/17/16	3.63	7.4				4.1	6.9				
05/18/16	3.74						6.9				
05/19/16	4.02					1.0	7.0				
05/20/16	4.19						7.1				
05/21/16	4.02										
05/22/16	4.18					1.0					
05/23/16	3.41					5.2	7.1				
05/24/16	3.59						7.0				
05/25/16	3.43					5.2	7.0				
05/26/16	3.48						7.0				
05/27/16	3.34						6.9				
05/28/16	3.44										
05/29/16	3.23					5.2					
05/30/16	3.72					6.3	7.1				
05/31/16	3.65					2.0	7.0				
<b>Monthly</b>											
Minimum	3.23	7.2				1.0	6.9				
Maximum	4.64	7.4				8.5	7.1			<1.5	
Total	118.34										
Average	3.82	7.3					7.0			<1.5	

# ***WEATHER DATA***

### Weather Data Novato WWTP -May 2016

Date	Temperatur		Humidity			Pressure		Rainfall	Windspeed
	High	Low	High	Low		High	Low	Inches	Max
1-May	85	56	77	24		29.89	29.61	0.00	13.0
2-May	75	47	100	58		30.00	29.84	0.00	13.0
3-May	78	51	100	46		30.00	29.75	0.00	10.0
4-May	74	54	100	44		29.87	29.69	0.00	13.0
5-May	67	52	98	64		29.84	29.71	0.00	10.0
6-May	63	53	98	77		29.86	29.75	0.01	8.0
7-May	61	53	100	90		29.93	29.83	0.10	3.0
8-May	69	52	100	71		29.95	29.81	0.02	15.0
9-May	72	50	100	63		29.94	29.77	0.00	12.0
10-May	77	48	100	59		29.96	29.77	0.00	14.0
11-May	76	48	100	59		30.00	29.82	0.00	11.0
12-May	75	49	100	56		30.02	29.84	0.00	21.0
13-May	69	50	97	59		29.99	29.87	0.00	24.0
14-May	73	49	97	58		30.01	29.87	0.00	18.0
15-May	72	53	100	58		29.93	29.81	0.07	25.0
16-May	81	50	100	41		29.93	29.72	0.00	17.0
17-May	80	52	100	36		29.88	29.74	0.00	4.0
18-May	<b>96</b>	<b>52</b>	<b>87</b>	<b>28</b>		<b>29.98</b>	<b>29.86</b>	<b>0.00</b>	<b>14.0</b>
19-May	<b>71</b>	<b>52</b>	<b>77</b>	<b>48</b>		<b>29.91</b>	<b>29.74</b>	<b>0.00</b>	<b>21.0</b>
20-May	<b>63</b>	<b>50</b>	<b>81</b>	<b>50</b>		<b>29.93</b>	<b>29.74</b>	<b>0.00</b>	<b>25.0</b>
21-May	<b>70</b>	<b>50</b>	<b>85</b>	<b>52</b>		<b>30.09</b>	<b>29.93</b>	<b>0.00</b>	<b>16.0</b>
22-May	<b>68</b>	<b>45</b>	<b>92</b>	<b>50</b>		<b>30.13</b>	<b>30.02</b>	<b>0.00</b>	<b>20.0</b>
23-May	<b>71</b>	<b>48</b>	<b>86</b>	<b>47</b>		<b>30.02</b>	<b>29.90</b>	<b>0.00</b>	<b>19.0</b>
24-May	<b>69</b>	<b>49</b>	<b>90</b>	<b>58</b>		<b>30.06</b>	<b>29.89</b>	<b>0.00</b>	<b>23.0</b>
25-May	<b>71</b>	<b>53</b>	<b>84</b>	<b>57</b>		<b>30.13</b>	<b>30.05</b>	<b>0.00</b>	<b>21.0</b>
26-May	<b>83</b>	<b>47</b>	<b>91</b>	<b>45</b>		<b>30.10</b>	<b>29.98</b>	<b>0.00</b>	<b>16.0</b>
27-May	<b>88</b>	<b>45</b>	<b>91</b>	<b>33</b>		<b>29.99</b>	<b>29.83</b>	<b>0.00</b>	<b>13.0</b>
28-May	<b>95</b>	<b>53</b>	<b>70</b>	<b>21</b>		<b>29.88</b>	<b>29.80</b>	<b>0.00</b>	<b>13.0</b>
29-May	<b>86</b>	<b>49</b>	<b>84</b>	<b>37</b>		<b>29.98</b>	<b>29.88</b>	<b>0.00</b>	<b>16</b>
30-May	<b>92</b>	<b>48</b>	<b>90</b>	<b>37</b>		<b>30.01</b>	<b>29.90</b>	<b>0.00</b>	<b>16</b>
31-May	<b>97</b>	<b>47</b>	<b>90</b>	<b>29</b>		<b>29.92</b>	<b>29.79</b>	<b>0.00</b>	<b>13</b>
Total								0.20	
Min	61	45				29.84	29.61	0.00	3
Max	97	56				30.13	30.05	0.10	25
Ave	76	50				30	30	0.01	15

Data from May 18 - May 31 is from Novato Weather Underground due to problems with weatherstation

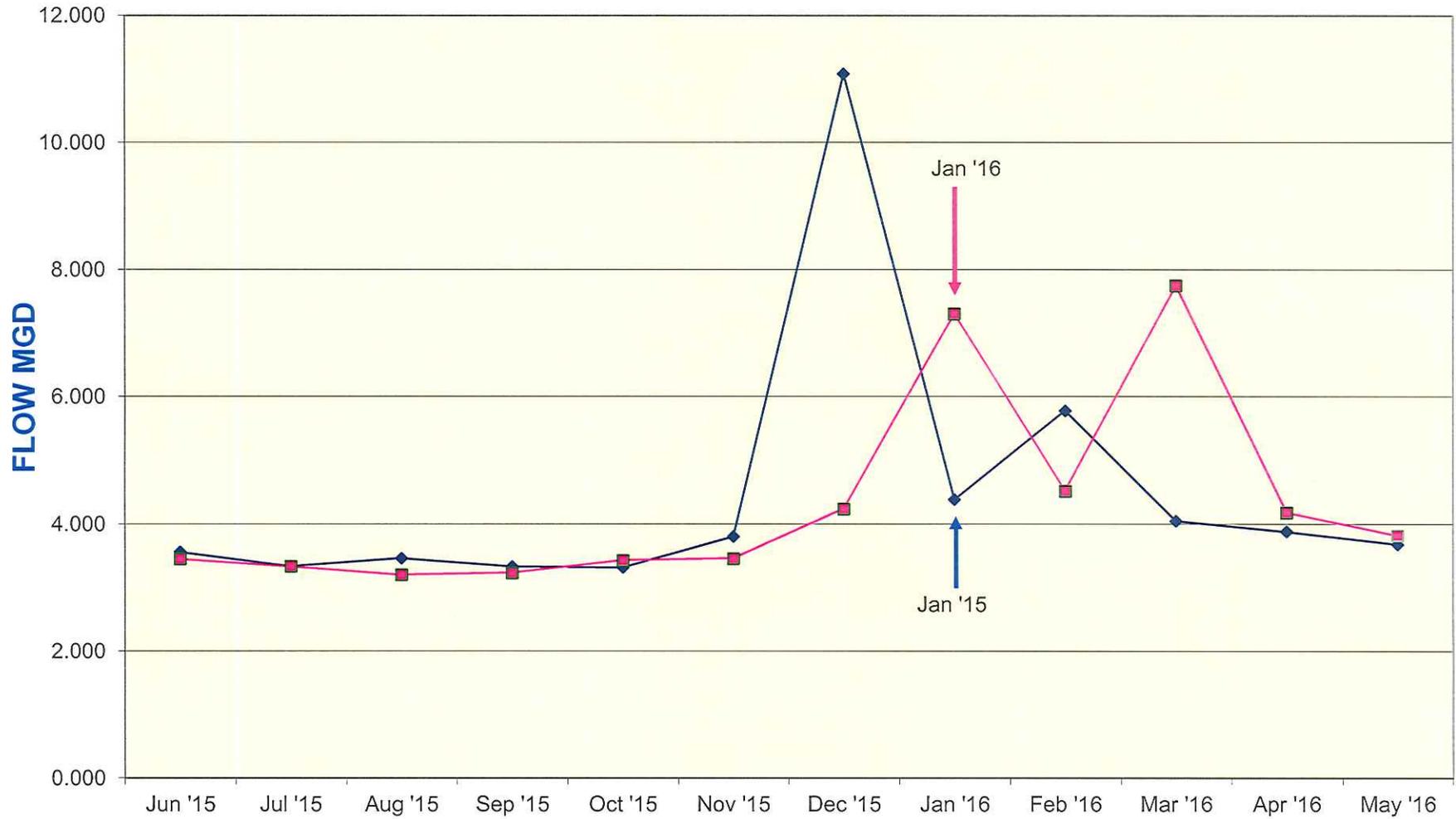
# ***RECYCLED WATER REPORT***

**NOVATO SANITARY DISTRICT  
RECYCLED WATER  
COMPLIANCE SUMMARY REPORT**

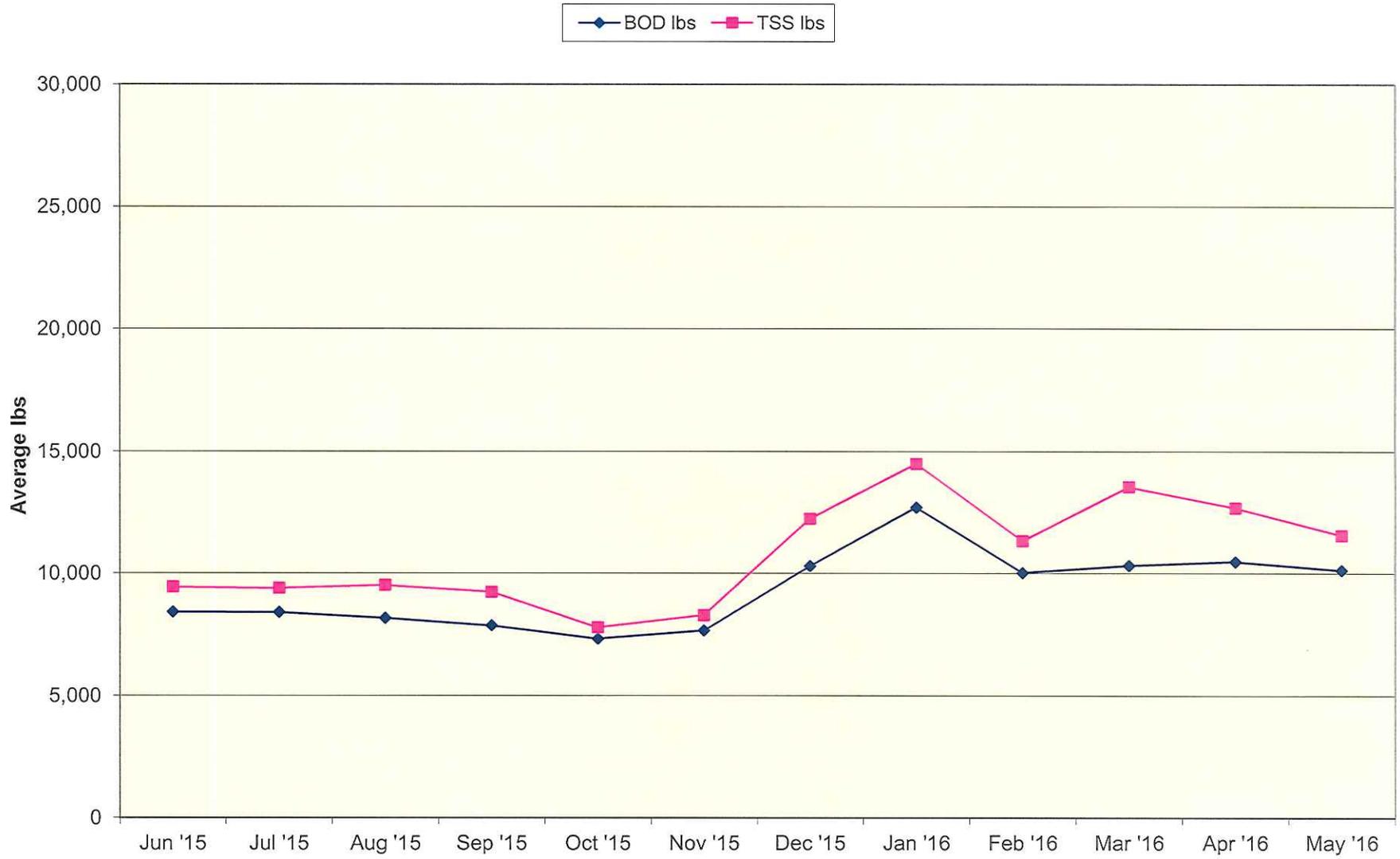
Date	Filter Influent Flow	Recycled Water Flow to Plum St.	Recycled Water Banked	Banked Water To Plum Street Tank	Potable Water To Plum St Tank	Recycled Water Influent Turbidity Max	Recycled Water Influent Turbidity Ave.	Minutes Over 5 NTU Turbidity	Filter Effluent 24 Hr Average Turbidity	Recycled Water Inf Chlorine Dose	Filter Effluent Dissolved Oxygen	Filter Effluent Total Coliform	Chlorint Contact Time
	MGD	MGD	MG	MGD	NTU	NTU	(m)	NTU	(mg/l)	(mg/l)	MPN/100m	Minutes	
5/1/2016	0.850	0.576				1.2	0	0.9		8.3		>450.000	
5/2/2016	0.890	0.272				1.0	0	0.8		8.6		>450.000	
5/3/2016	0.900	0.781				1.6	0	0.8		8.8		>450.000	
5/4/2016	0.640	0.521				1.4	0	0.8				>450.000	
5/5/2016	0.530	0.426				1.2	0	0.8				>450.000	
5/6/2016	0.710	0.571				1.3	0	0.7				>450.000	
5/7/2016	0.170	0.073				1.4	0	0.7				>450.000	
5/8/2016													
5/9/2016	0.230	0.158				1.8	0	0.8		8.6		>450.000	
5/10/2016	0.680	0.449				1.6	0	0.8		8.8		>450.000	
5/11/2016	0.750	0.375				1.5	0	0.7		8.0		>450.000	
5/12/2016	0.580	0.447				1.5	0	0.8				>450.000	
5/13/2016	0.730	0.495				1.7	0	1.1				>450.000	
5/14/2016	0.730	0.513				1.4	0	1.1				>450.000	
5/15/2016	0.490	0.338				1.1	0	1.0		8.2		>450.000	
5/16/2016	0.670	0.485				2.4	0	1.2		7.8		>450.000	
5/17/2016	0.700	0.576				3.3	0	1.6		8.0		>450.000	
5/18/2016	0.860	0.289				4.1	0	1.7				>450.000	
5/19/2016	0.830	0.717				4.1	0	1.7				>450.000	
5/20/2016	0.960	0.351				1.3	0	1.3				>450.000	
5/21/2016	0.580	0.406				3.3	0	1.2				>450.000	
5/22/2016	0.670	0.561				3.0	0	1.1		7.3		>450.000	
5/23/2016	0.630	0.512				3.3	0	1.3		7.1		>450.000	
5/24/2016	0.670	0.563				3.2	0	1.3		6.8		>450.000	
5/25/2016	0.640	0.553				2.8	0	1.4				>450.000	
5/26/2016	0.620	0.437				2.5	0	1.4				>450.000	
5/27/2016	0.920	0.660				1.8	0	1.4				>450.000	
5/28/2016	0.720	0.592				2.5	0	1.5				>450.000	
5/29/2016	0.720	0.542				2.2	0	1.4		7.5		>450.000	
5/30/2016	0.710	0.481				3.3	0	1.3		7.4		>450.000	
5/31/2016	0.710	0.576				3.1	0	1.1		7.2		>450.000	
<b>Total</b>	<b>20.490</b>	<b>14.296</b>											
<b>Minimum</b>	<b>0.170</b>	<b>0.073</b>				<b>1.0</b>	<b>0</b>	<b>0.7</b>		<b>6.8</b>		<b>&gt;450.0</b>	
<b>Maximum</b>	<b>0.960</b>	<b>0.781</b>				<b>4.1</b>	<b>0</b>	<b>1.7</b>		<b>8.8</b>		<b>&gt;450.0</b>	
<b>Average</b>	<b>0.683</b>	<b>0.477</b>				<b>2.2</b>	<b>0</b>	<b>1.1</b>		<b>7.9</b>		<b>&gt;450.0</b>	

# ***ANNUAL COMPLIANCE SUMMARY – GRAPHS***

## WASTEWATER INFLUENT FLOW COMPARISON



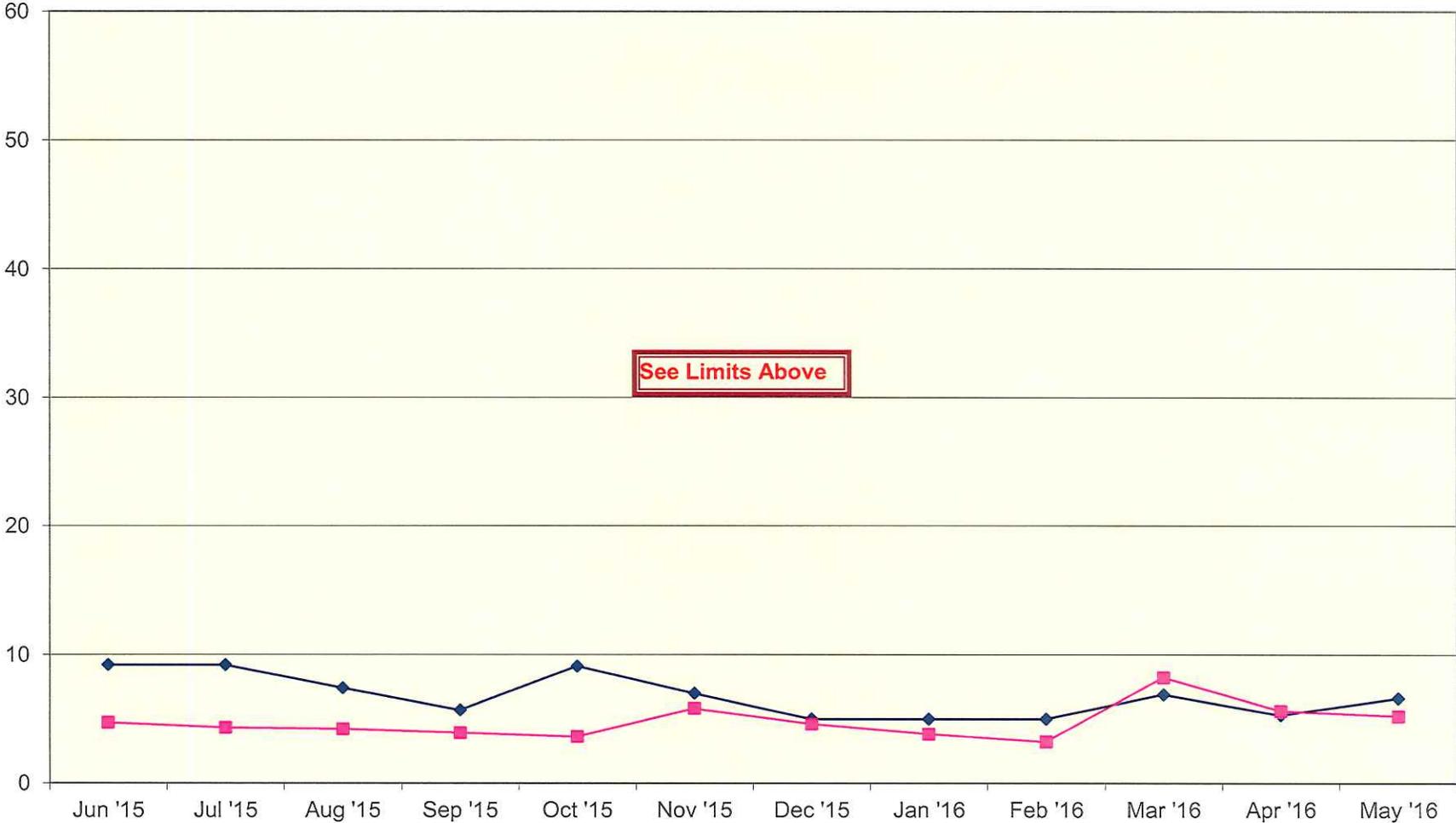
### Influent Load BOD / TSS lbs



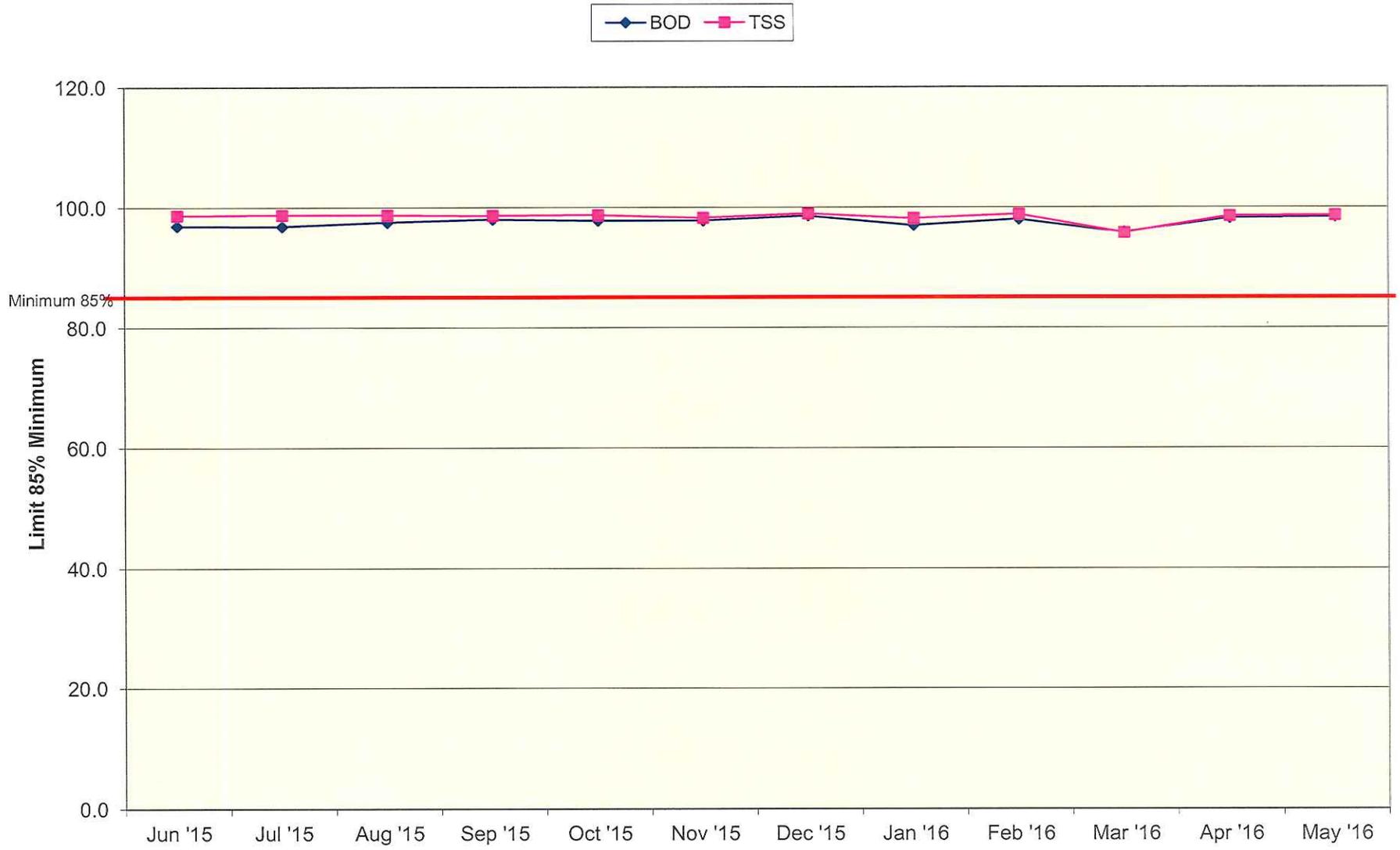
### Effluent BOD / TSS Concentration

—◆— BOD —■— TSS

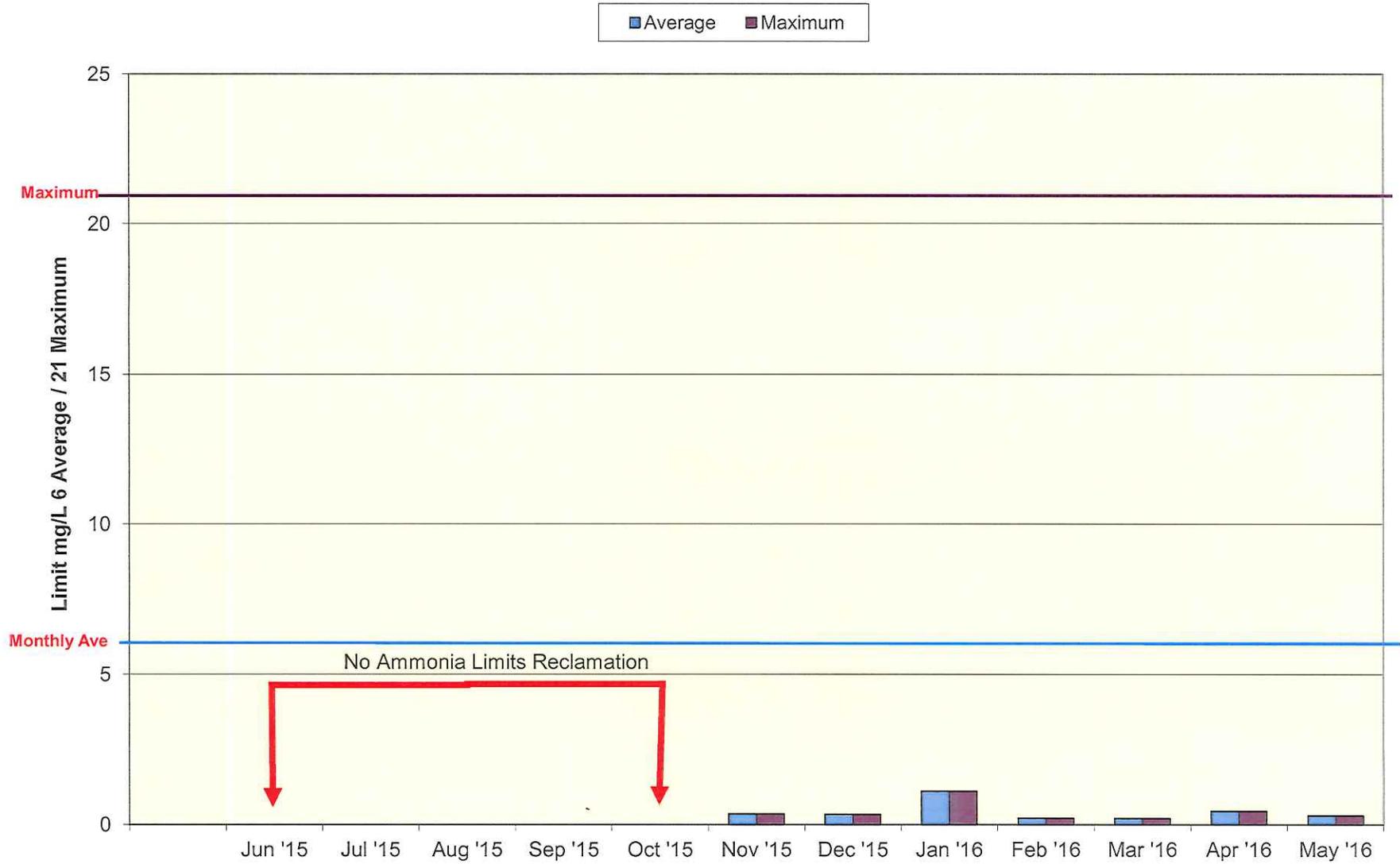
NPDES LIMITS WET SEASON  
 BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave  
**NPDES LIMITS DRY SEASON**  
**BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave**  
**TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave**  
 WDR (Waste Discharge Requirements) RECLAMATION  
 BOD - 40 mg/L



### BOD / TSS Percent Removal

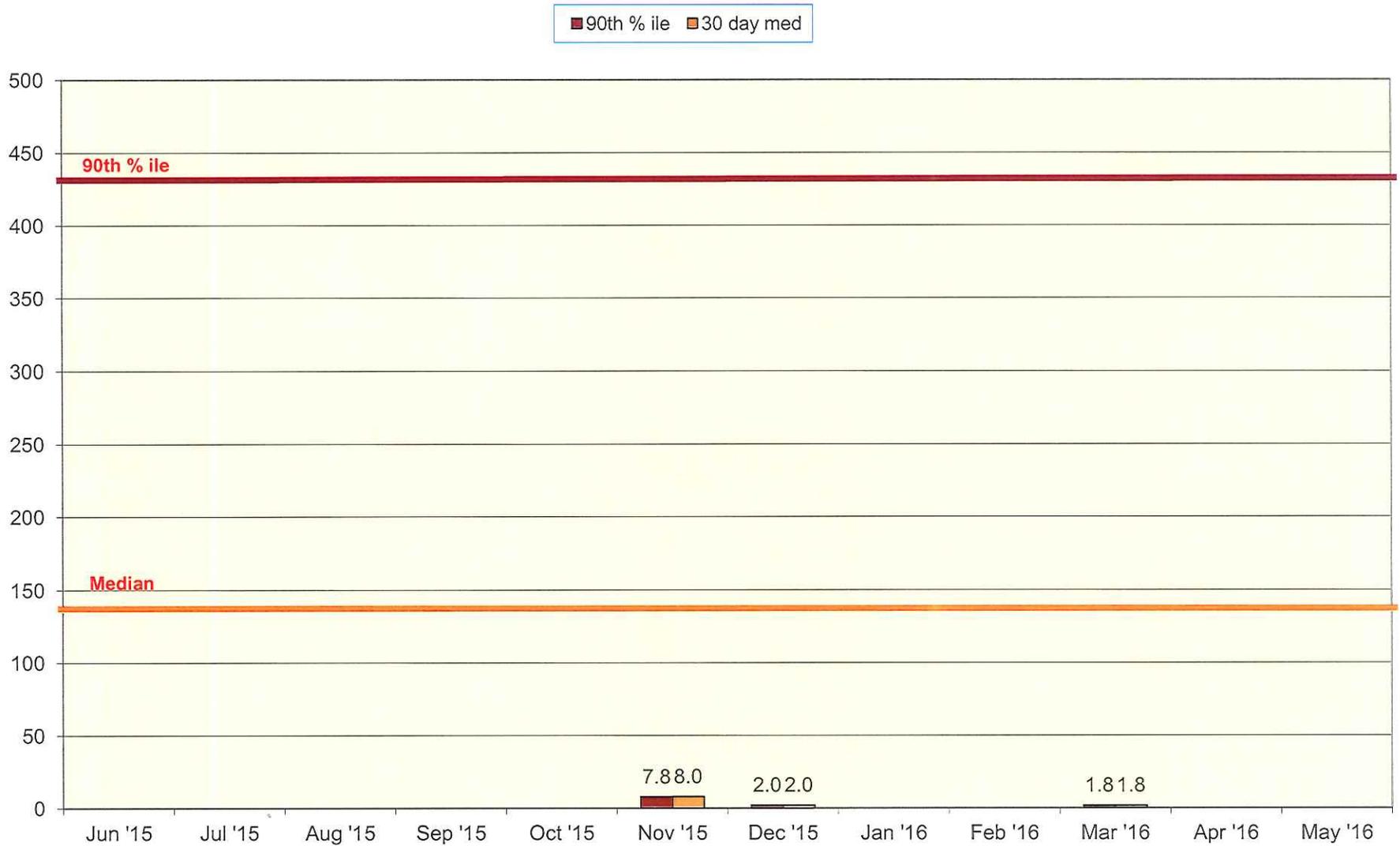


# Effluent Ammonia



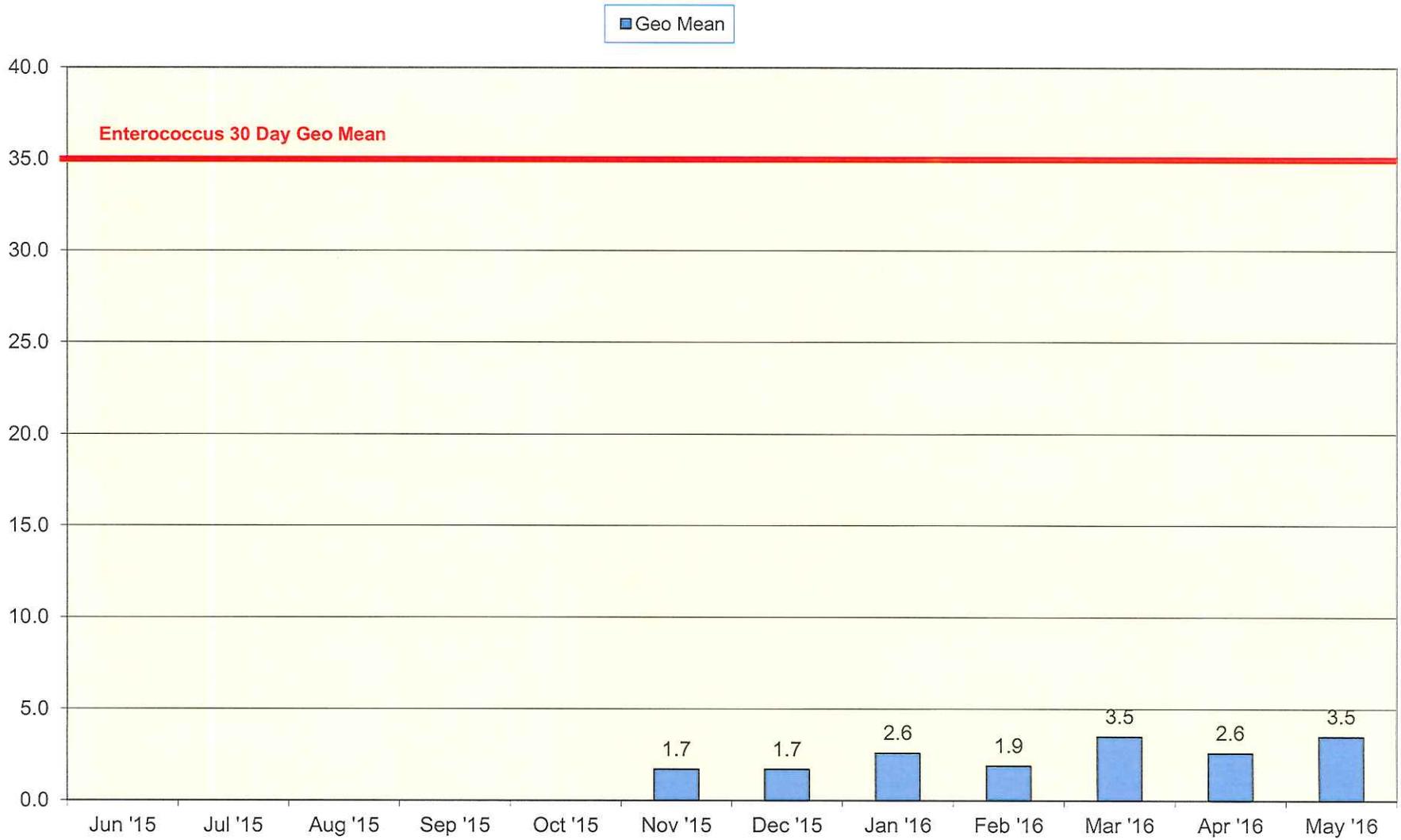
# Disinfection - Fecal Coliform

**LIMITS - NPDES**  
 Fecal 140 mpn monthly median  
 Fecal 430 mpn 90th percentile 30 day

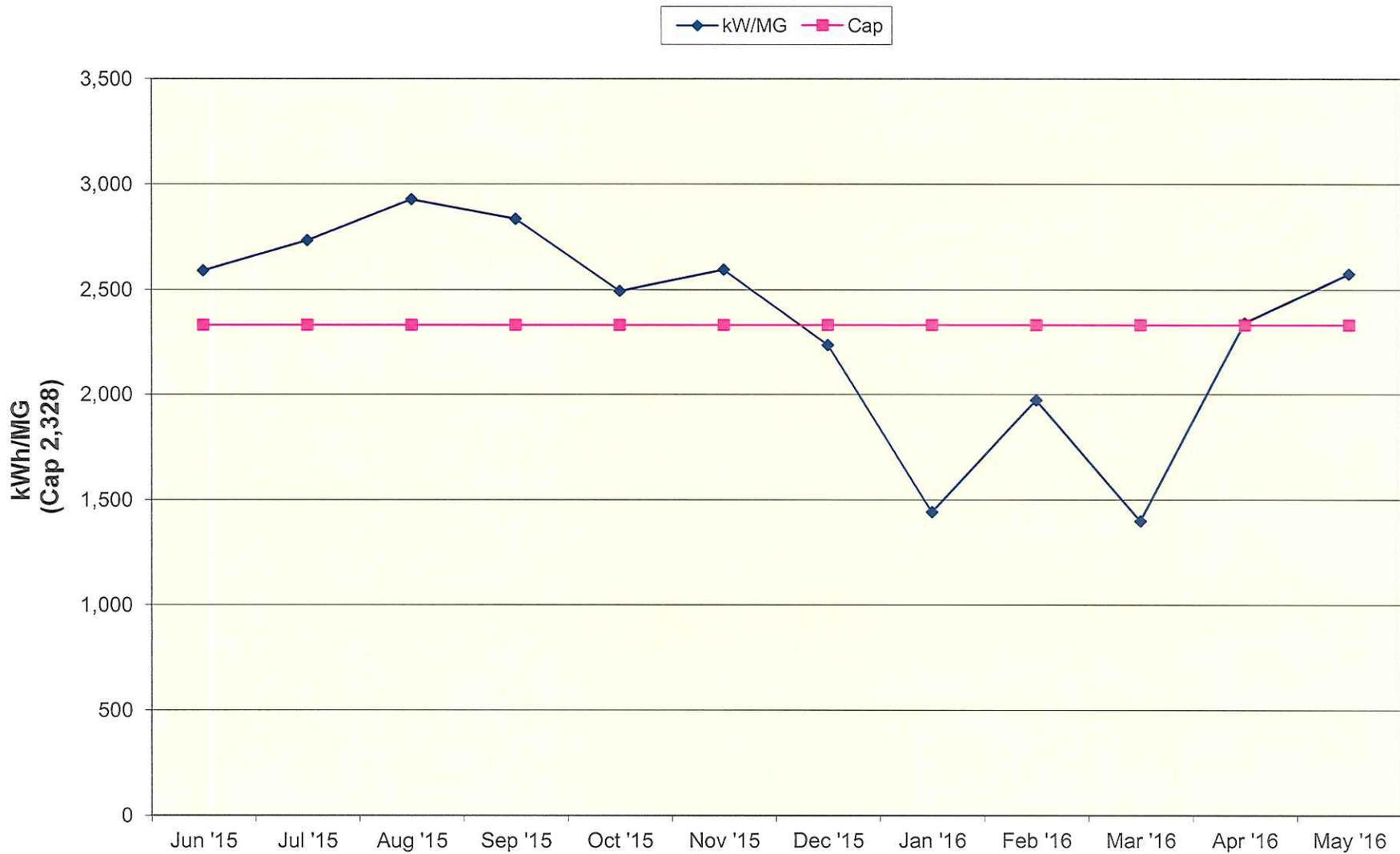


# Disinfection - Enterococcus

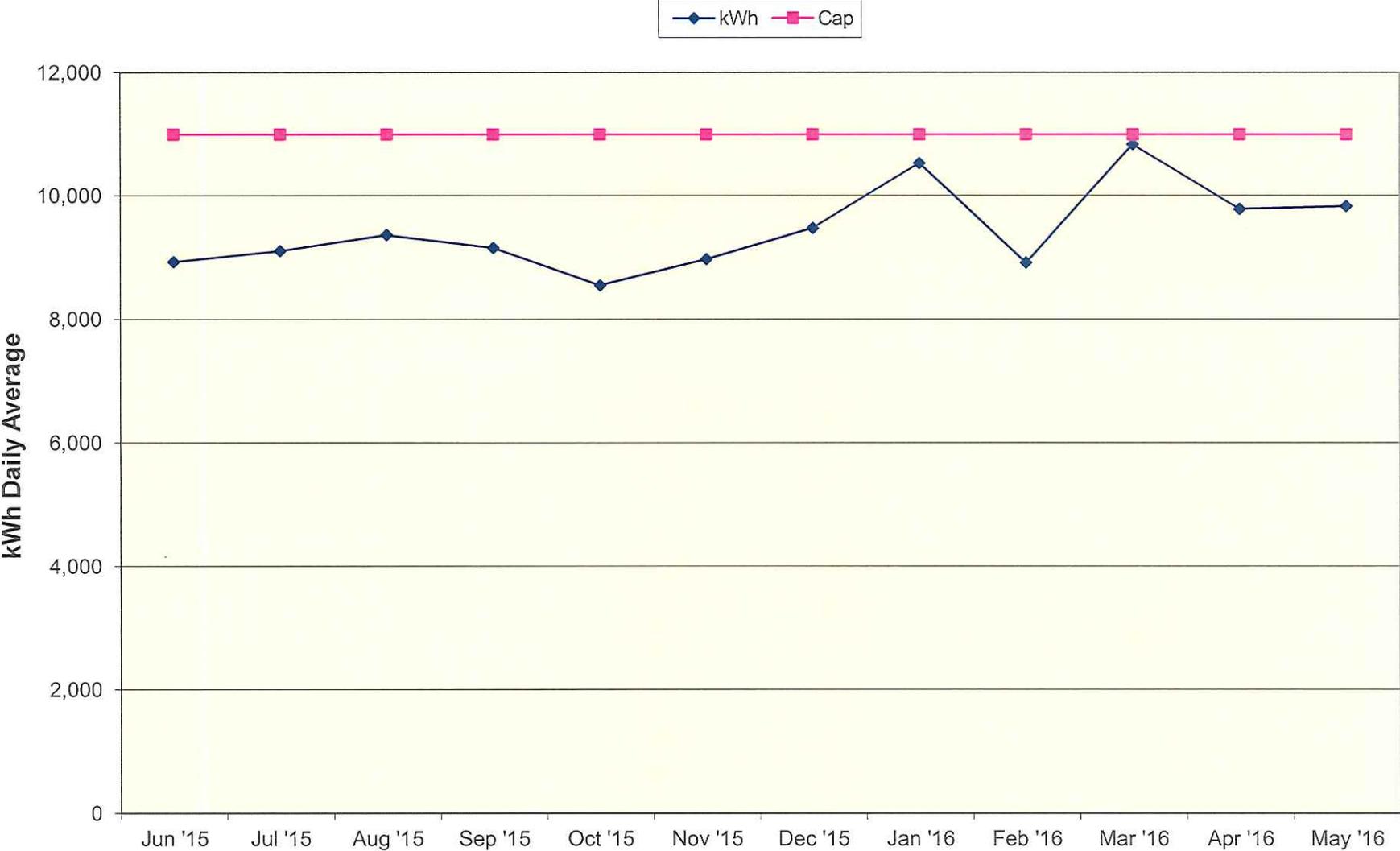
LIMITS - NPDES  
Enterococcus 30 day geo mean 35 mpn /100ml



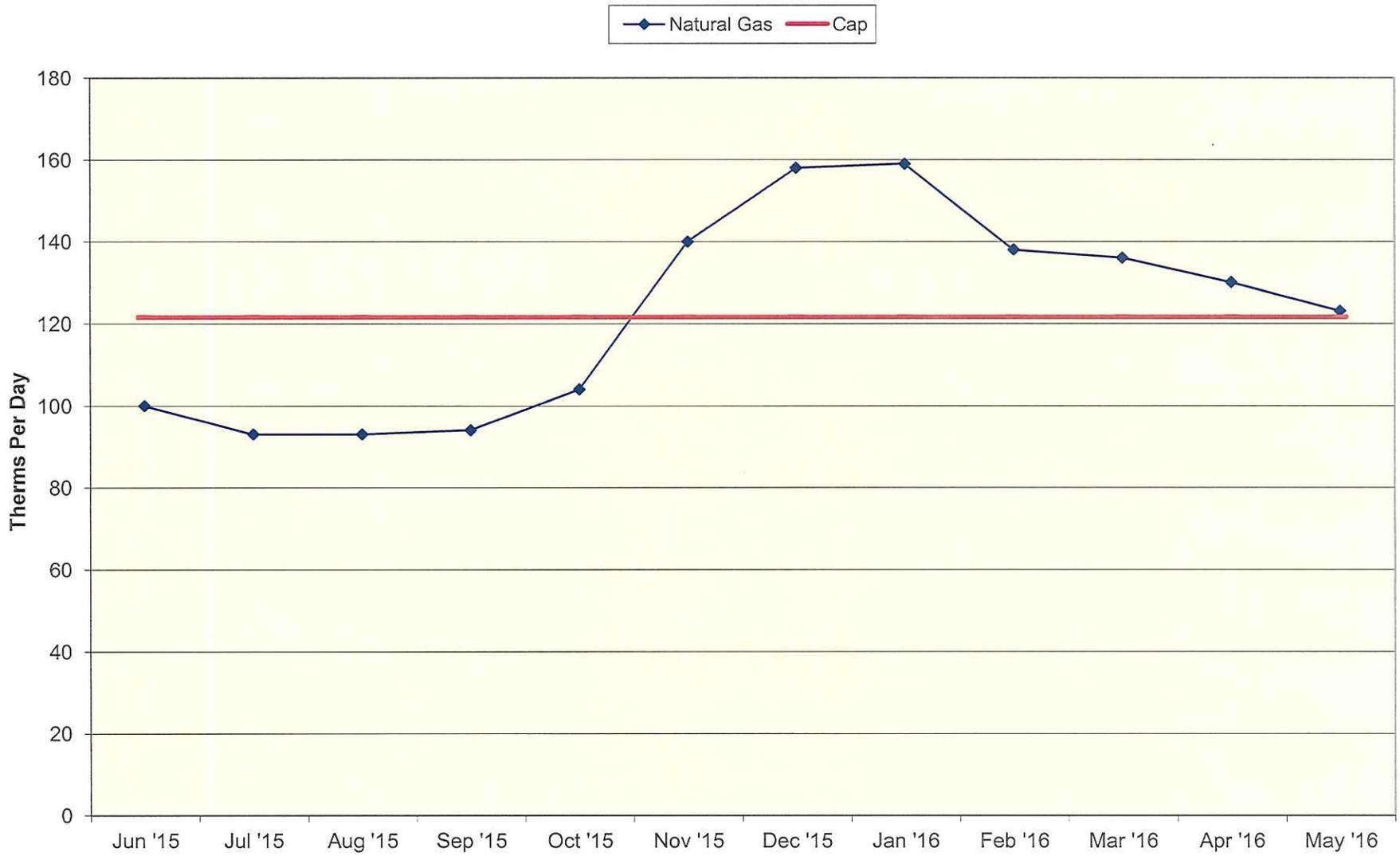
### Energy kWh/MG



# Energy kWh

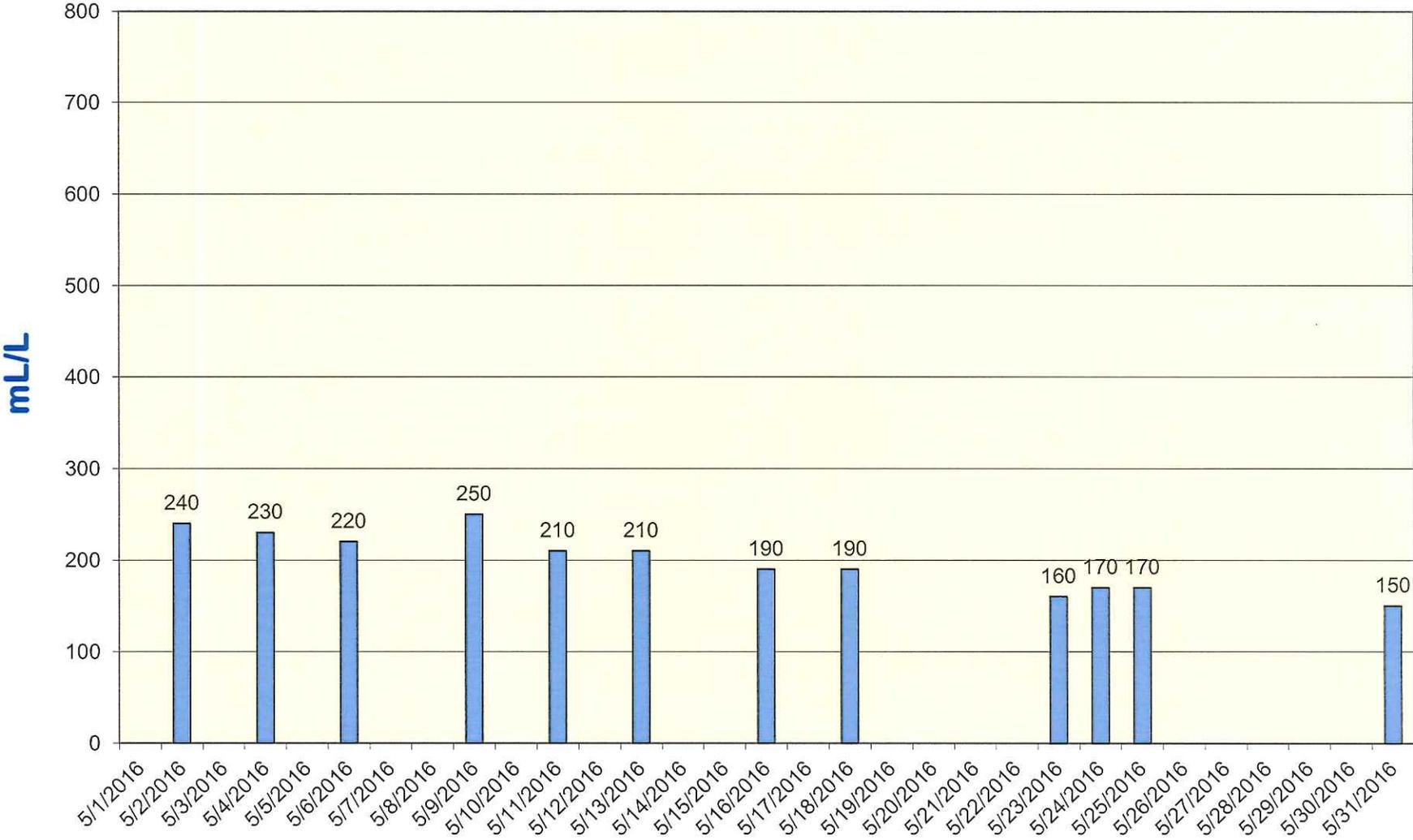


### Natural Gas Use

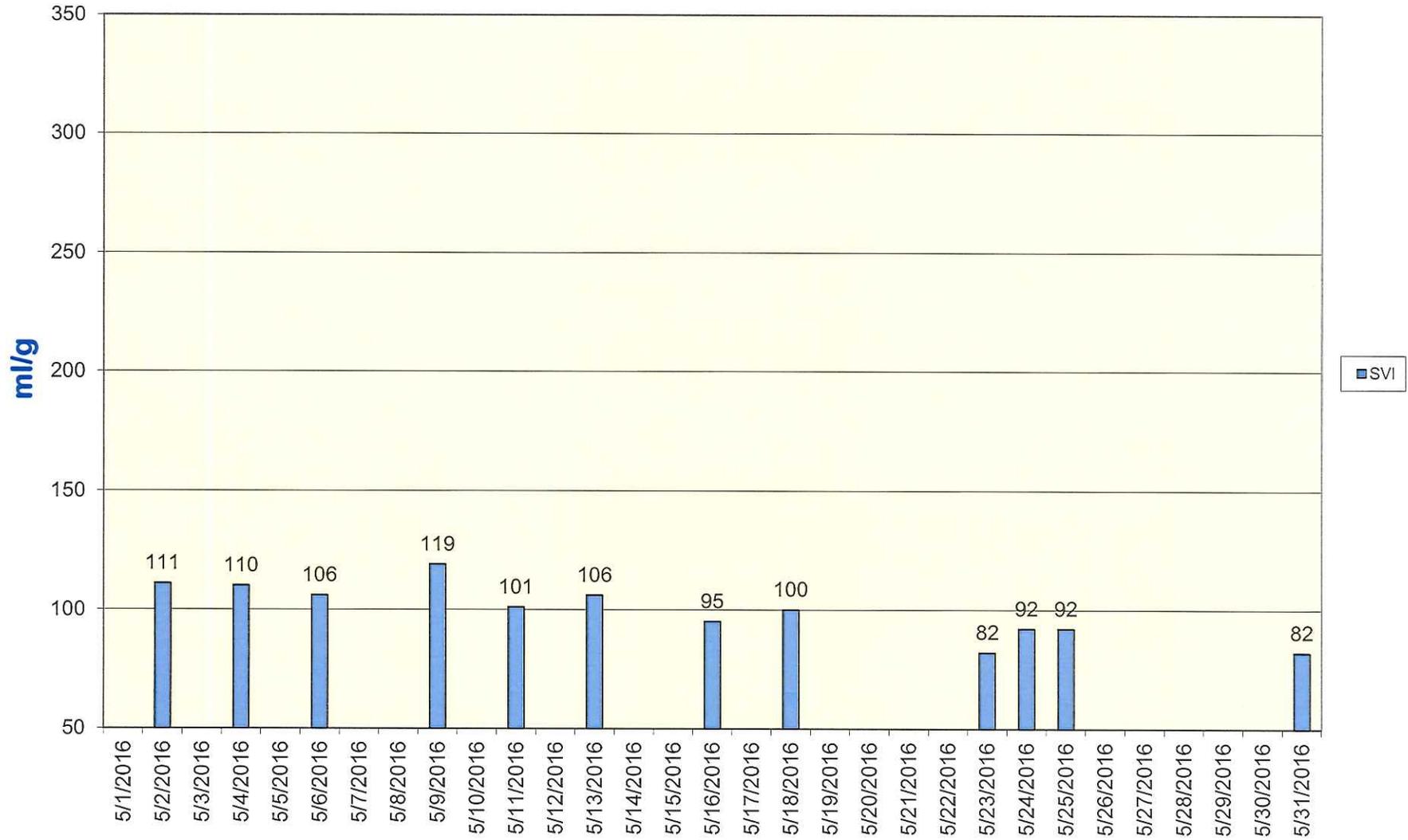


# ***PROCESS CONTROL DATA / GRAPHS***

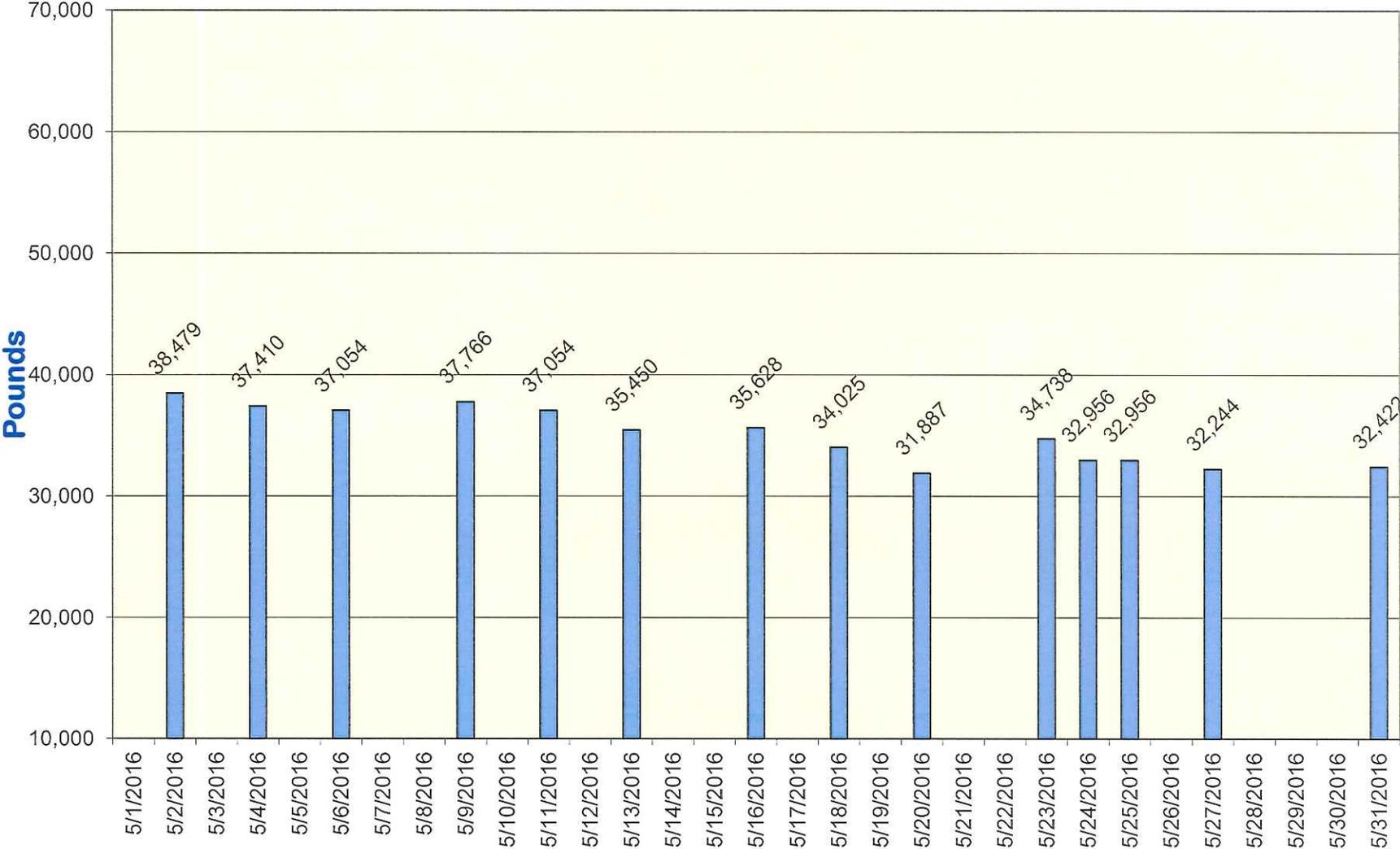
# Settleability



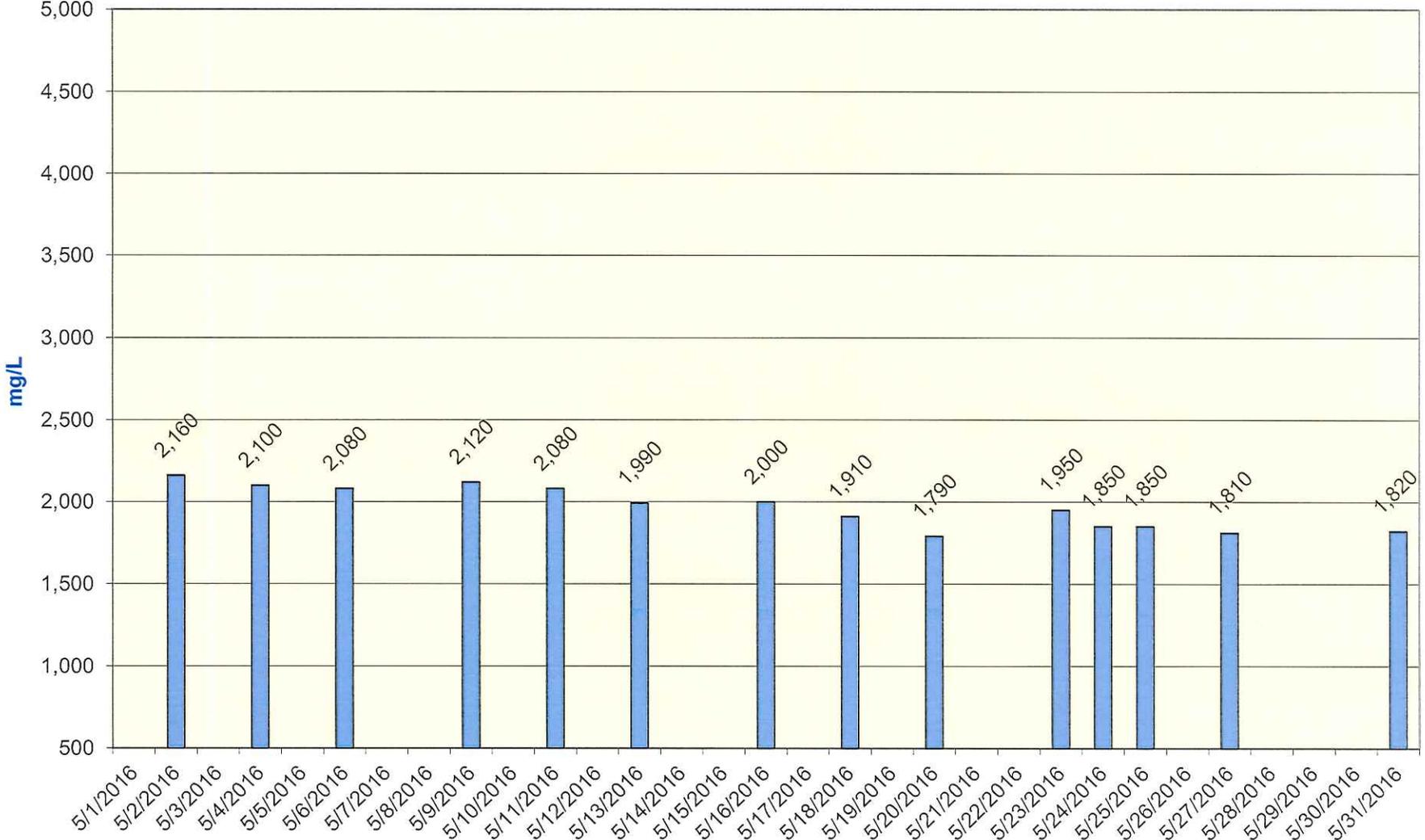
## Sludge Volume Index



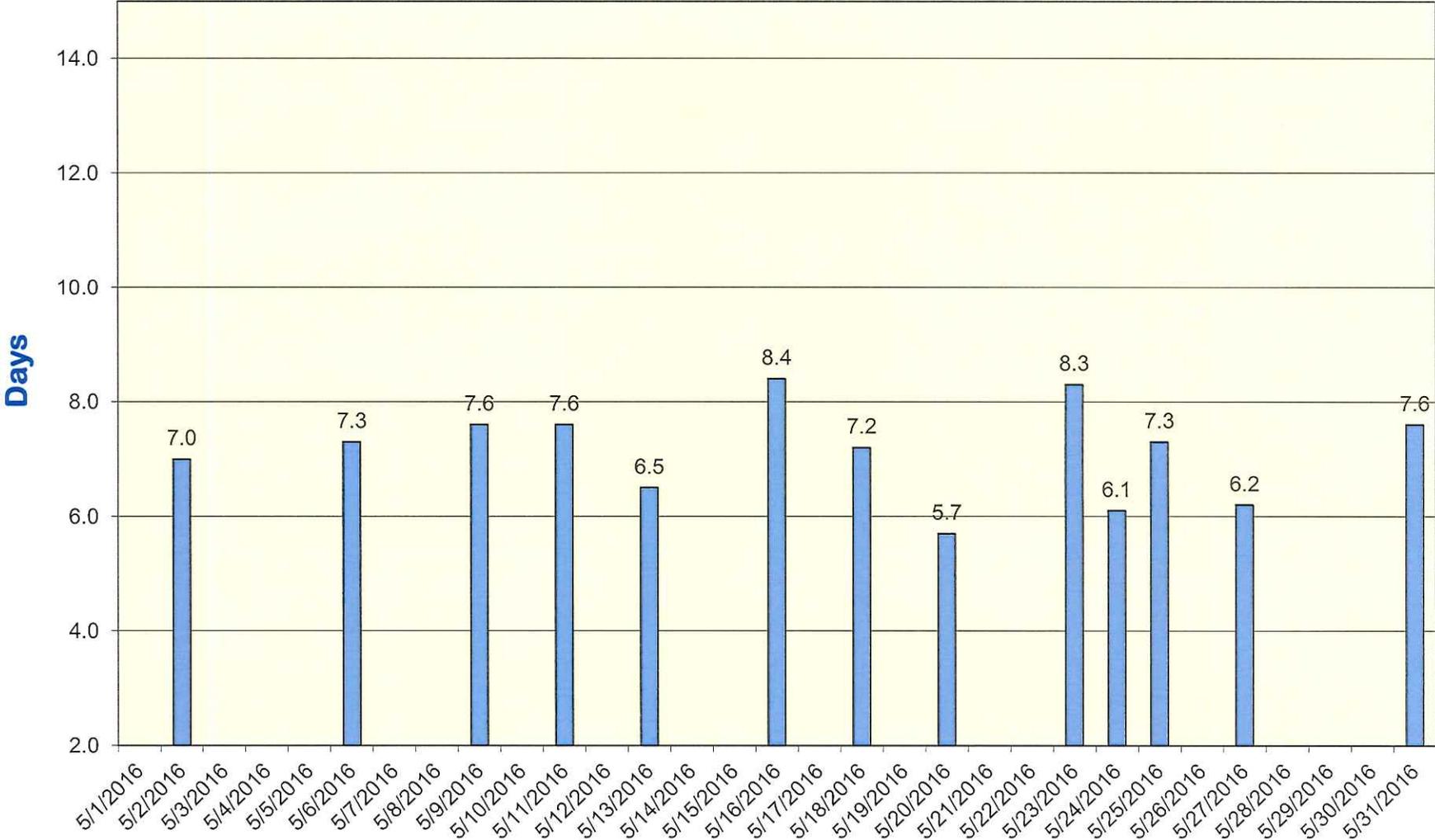
# MLSS Inventory



### MLSS Concentration



# Mean Cell Residence Time

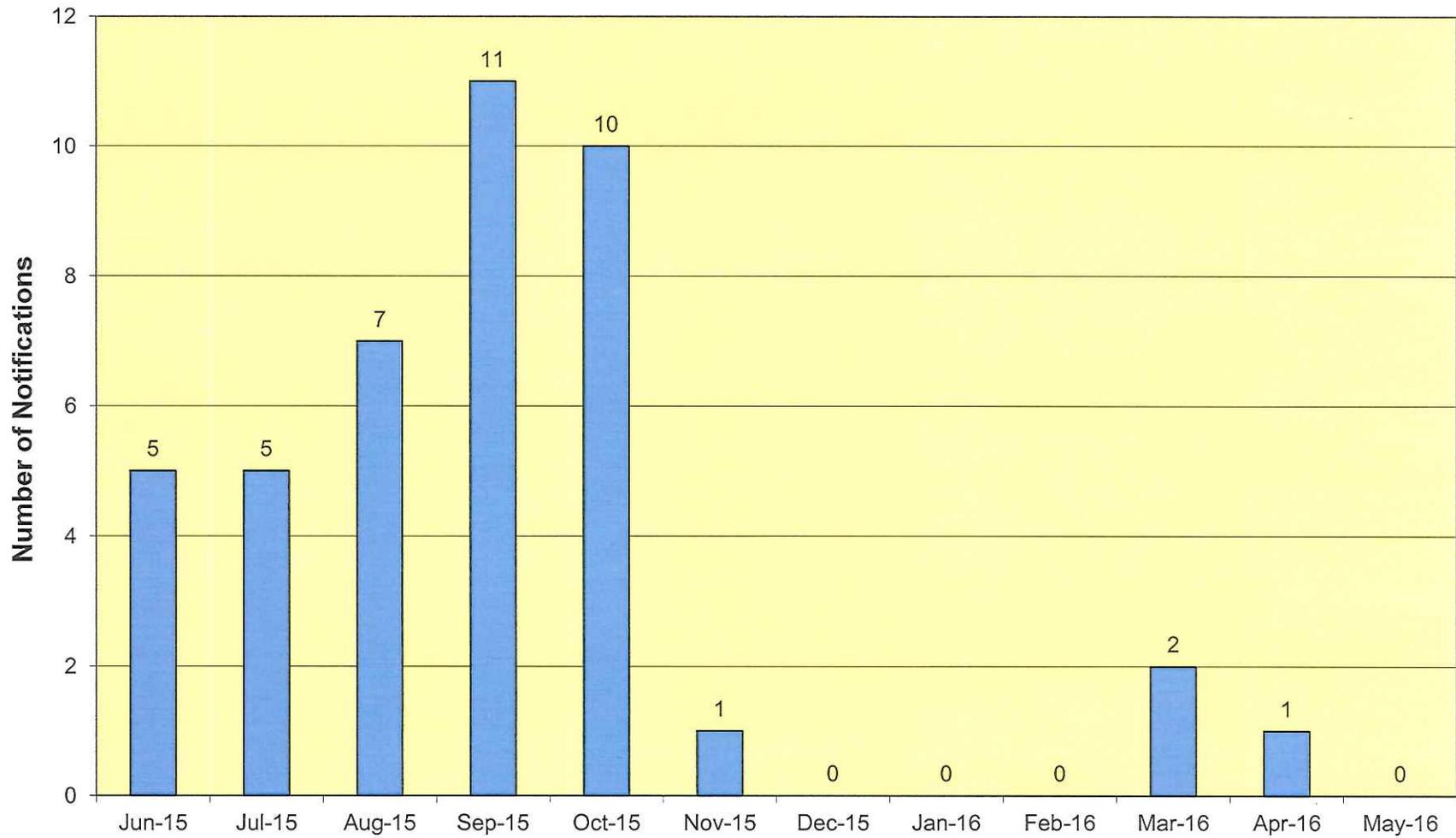


## Process Control Data

	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	F:M Ratio	MCRT	SVI
5/1/2016	3.82						
5/2/2016	4.64	240	2,160	38,479		7.0	111
5/3/2016	3.86						
5/4/2016	4.11	230	2,100	37,410			110
5/5/2016	4.11						
5/6/2016	4.05	220	2,080	37,054		7.3	106
5/7/2016	4.37						
5/8/2016	4.21						
5/9/2016	3.72	250	2,120	37,766		7.6	119
5/10/2016	3.65						
5/11/2016	4.00	210	2,080	37,054		7.6	101
5/12/2016	3.51						
5/13/2016	4.08	210	1,990	35,450		6.5	106
5/14/2016	3.60						
5/15/2016	3.61						
5/16/2016	3.93	190	2,000	35,628		8.4	95
5/17/2016	3.63						
5/18/2016	3.74	190	1,910	34,025		7.2	100
5/19/2016	4.02						
5/20/2016	4.19		1,790	31,887		5.7	
5/21/2016	4.02						
5/22/2016	4.18						
5/23/2016	3.41	160	1,950	34,738		8.3	82
5/24/2016	3.59	170	1,850	32,956		6.1	92
5/25/2016	3.43	170	1,850	32,956		7.3	92
5/26/2016	3.48						
5/27/2016	3.34		1,810	32,244		6.2	
5/28/2016	3.44						
5/29/2016	3.23						
5/30/2016	3.72						
5/31/2016	3.65	150	1,820	32,422		7.6	82
Minimum	3.23	150	1,790	31,887	0.00	5.7	82
Maximum	4.64	250	2,160	38,479	0.00	8.4	119
Total	110.97						
Average	3.83	204	1,976	35,204		7.1	101

# ***NEIGHBORHOOD CONTACTS***

## Neighborhood Contacts Received

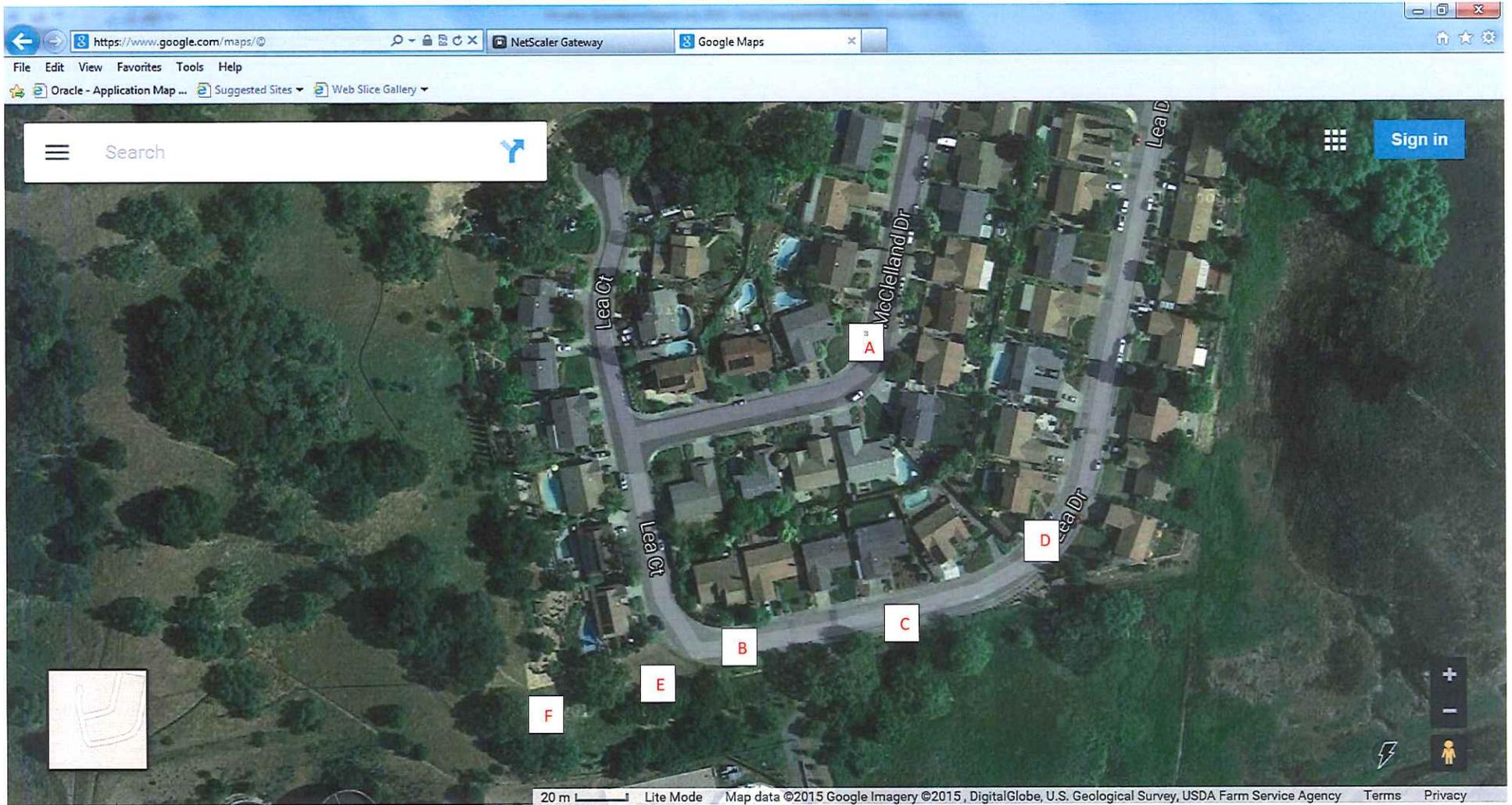


# ***JEROME METER READINGS & LOCATIONS***

JEROME METER READINGS - MAY 2016

Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.001	0.000	Neighborhood
B: Lea 1	0.000	0.000	0.000	Neighborhood
C: Lea 2	0.000	0.002	0.000	Neighborhood
D: Lea 3	0.000	0.001	0.000	Neighborhood
E: Lea 4	0.000	0.000	0.000	Neighborhood
F: Lea 5	0.000	0.001	0.000	Neighborhood

# NEIGHBORHOOD JEROME METER LOCATIONS – LEA AND McCLELLAND



## **1.0 General:**

An equivalent of about six (6) full time employees (FTE) worked in the Collection System Department during the month of May. The breakdown of staff time for the month in terms of equivalent full-time employee hours utilized, works out approximately as follows:

- 2.7 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.2 FTE field workers for Pump Station Maintenance
- 0.0 FTE field workers for Closed Circuit Television (CCTV) work
- 2.2 FTE field workers for time spent on data input, training, service calls, overflow response, or any other activity that does not directly relate to main line cleaning, CCTV work, or pump station maintenance, or special activities (for e.g. smoke testing of mainlines), and
- An equivalent of 1.1 FTE field workers for vacation, holiday or sick leave.

## **2.0 Collection System Maintenance:**

Performance metrics for the department are presented in the attached graphs showing the length of line cleaned/month, footage cleaned/hour worked, overflows/month, and the CCTV footage achieved. A brief discussion is also provided below.

### Line Cleaning Performance:

A total of 452 work orders were generated for May by the ICOM3 Computerized Maintenance Management System (CMMS). Staff completed 452 work orders leaving zero (0) work orders outstanding. The 452 maintenance work orders completed in May resulted in 82,286 feet of sewer pipelines cleaned by staff.

### CCTV Performance:

The District's CCTV van was in the field briefly in May before the recently repaired Power Control Unit (PCU) failed a second time. After consulting with the manufacturer, the van was driven to Fresno, CA for diagnosis and repair. Hand-cam CCTV work was performed for upcoming root treatment preparation only.

### CCTV Findings:

- Infrastructure related: The May CCTV work did not identify any areas that require spot repairs.
- O&M related: The May CCTV work did not identify any area that required a change in sewer line maintenance operations.

## **3.0 Pump Station Maintenance:**

The Collection System Department conducted 239 lift station inspections this month. 115 of the inspection visits were generated through the District's JobsCal Plus CMMS system. There are 17 outstanding work orders for the month, 6 correctives and 8

preventives. A Collection Systems (Pump Stations) Work Order Statistics summary is attached.

#### **4.0 Air Relief/Vacuum Valves (ARVs):**

Staff completed maintenance inspections on four (4) air relief/vacuum valves.

#### **5.0 Safety and Training:**

##### General:

Collection System staff attended 5 safety tailgate meetings.

##### Specialized training:

District staff attended Heat Illness training conducted by Safety Director Dale Thrasher.

Dasse de longh, Collection System Superintendent, attended a full day CWEA Supervisor's Safety Seminar in San Leandro.

##### Safety performance:

There were no lost time accidents this month for a total of 1,906 accident free days since the last lost time accident.

#### **6.0 Minor Projects:**

Staff set up temporary bypass pumping operations for scheduled repair work to replace a motor overload assembly at the Enfrente Pump Station.

Staff performed work to improve pump station communications at the Southgate and East Hamilton Pump Stations.

#### **7.0 Sanitary Sewer Overflows (SSOs):**

There were zero (0) overflows in May.

Novato Sanitary District  
Collection System Monthly Report For May 2016 (as of May 31, 2016)

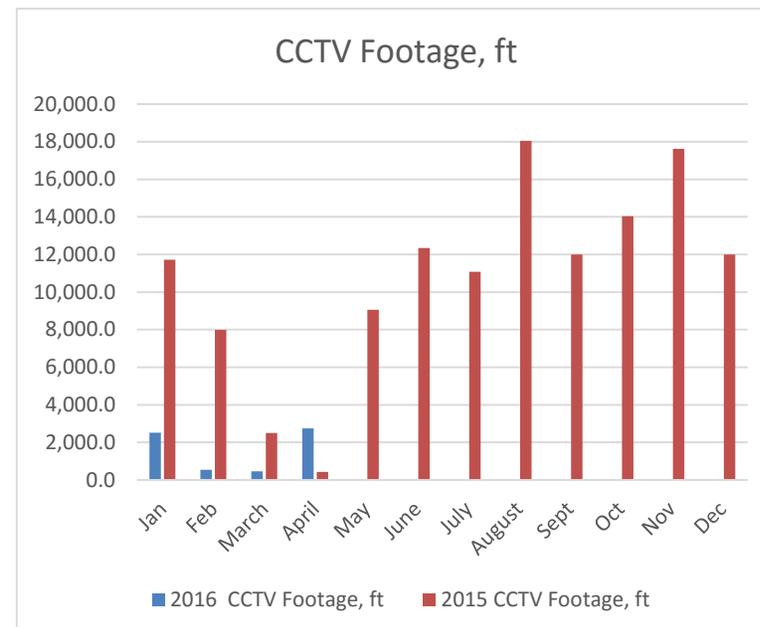
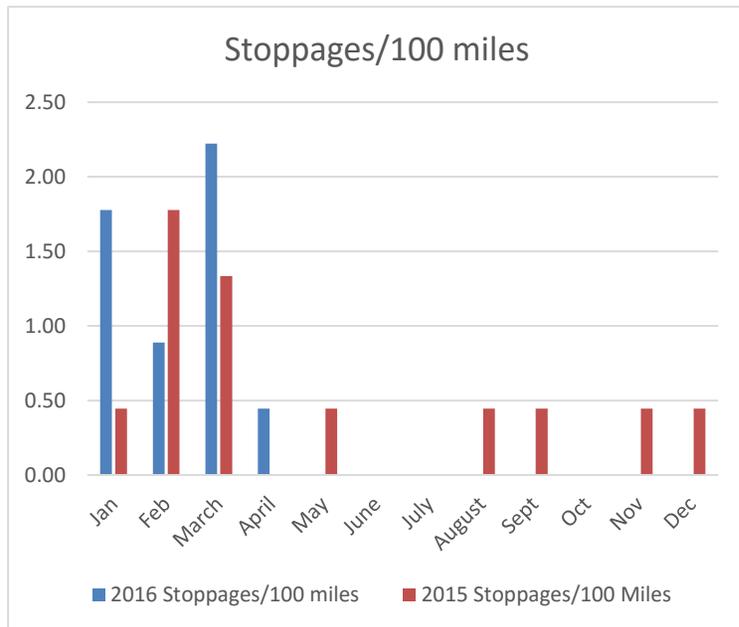
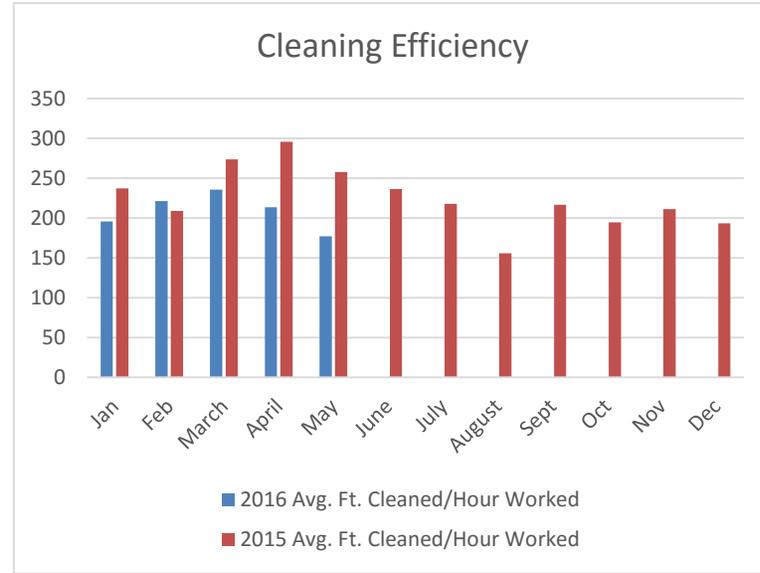
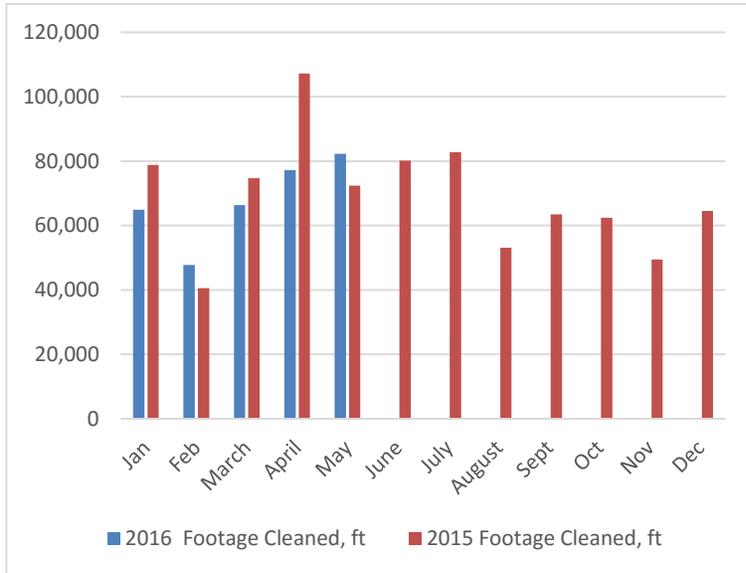
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>A. Employee Hours Worked</b>														
Number of FTEs (main line cleaning), hrs.	1.9	1.3	1.7	2.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.8
Number of FTEs (other)	2.5	3.5	3.3	2.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	1.2
Number of FTEs (CCTV)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0
Total, FTEs	4.5	4.9	4.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	2.0
Regular Time Worked, (main line cleaning), hrs	332	216	282	362	465									
Regular Time Worked on Other, hrs (1)	426	556	552	496	388									
Regular Time Worked on CCTV (2)	19	17	0	7	0									
Total Regular time, worked, hrs	776	788	834	865	853	0	0	0	0	0	0	0	4,116	343
Total Vacation/Sick Leave/Holiday, hrs	225	238	262	89	192								1,006	201
Vacation/Sick Leave/Holiday, FTEs	1.3	1.5	1.6	0.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.5
Overtime Worked on Coll. Sys., hrs	2	0	0	0	3								5	1
Overtime Worked on Other, hrs (1)	65	6	19	30	6								125	25
Overtime Worked on CCTV (2)	0	0	0	0	0								0	0
Total Overtime , hrs	67	6	19	30	9	NA	NA	NA	NA	NA	NA	NA	130	26
<b>B. Productivity</b>														
<b>1. Line Cleaning</b>														
Rodder Work Orders generated	59	10	41	45	204								359	72
Rodder 3208 ft. cleaned	11,888	2,289	8,682	9,749	36,994								69,602	13,920
Rodder - outside services, ft cleaned	0	0	0	0	0								0	0
Flusher Work Orders generated	227	237	307	350	248								1,369	274
Truck 3205V ft. cleaned	14,729	6,341	5,004	5,886	2,776								34,736	6,947
Truck 3206V ft. cleaned	38,305	39,088	52,713	61,606	42,516								234,228	46,846
Flusher - outside services, ft. cleaned	0	0	0	0	0								0	0
Total Footage cleaned(3)	64,922	47,718	66,399	77,241	82,286	NA	NA	NA	NA	NA	NA	NA	338,566	67,713
Work Orders completed	278	247	348	395	452								1,720	344
Work Orders backlog	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8	8
<b>2. Closed Circuit Television (CCTV)</b>														
Camera Work Orders generated	0	0	0	0	0								0	0
CCTV Truck 3126T, ft. videoed	843	540	0	541	0								1,924	385
CCTV (hand cam), ft. videoed	1,669	0	456	2,210	0								4,335	
CCTV Inspection - outside services, ft. videoed	0	0	0	0	0								0	0
Total CCTV footage(3)	2,512	540	456	2,751	0	NA	NA	NA	NA	NA	NA	NA	6,259	
<b>C. Sanitary Sewer Overflows (SSOs)</b>														
Minor (Category III)	4	2	5	1	0								12	NA
Major (Category II)	3	1	4	1	0								9	NA
Major (Category I)	0	1	1	0	0								2	NA
Major (Category I)	1	0	0	0	0								1	NA
Overflow Gallons	482	290,330	2,308	20	0								293,140	NA
Volume Recovered	130	147,250	760	20	0								148,160	NA
Percent Recovered	27%	51%	33%	100%	NA	NA	NA	NA	NA	NA	NA	NA	51%	NA
<b>D. Service Calls (non-SSO related)</b>														
Service calls, normal hours, #	8	7	8	4	5								32	6
Normal hours S.C. response time, mins (avg.)	20	17	18	17	16								88	18
Service Callouts, after hours, #	5	3	1	1	1								11	2
After Hours S.C. response time, mins (avg.)	17	27	16	60	35								155	31
<b>E. Benchmarks</b>														
Average Ft. Cleaned/Hour Worked	196	221	235	213	177	NA	NA	NA	NA	NA	NA	NA	NA	209
Total Stoppages/100 Miles	1.8	0.9	2.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	NA
Average spill response time (mins)	15	31	11	11	0								NA	14
Callouts/100 Miles	2.2	1.3	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.4
Overtime hours/100 Miles	1	0	0	0	1	0	0	0	0	0	0	0	2.22	0
Overflow Gallons/100 Miles	210	126,230	1003	9	0	0	0	0	0	0	0	-	127,452	10621

(1) This category includes time spent on: Data input, Training, Service Calls, Overflow Response, as well as any other activity that does not directly relate to main line cleaning or CCTV work.

(2) This category separates time spent on CCTV from other Collection System maintenance activities.

(3) Does not include outside services (tracked separately)

# Collection System 2015-16 Graphs



Novato Sanitary District

Pump Station Report For May 2016 (As of May 31, 2016)

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>Employee Hours Worked</b>	238	185	252	238	235	0	0	0	0	0	0	0	1,148	
Number of Employees (FTEs)	1.4	1.0	1.2	1.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.5
Regular Time Worked on Pump Sta	183	157	210	194	202								945	
Overtime Worked on Pump Sta	55	28	43	44	33								203	
After Hours Callouts	4	1	8	2	0								15	
Average Callout response time (mins)	30	10	34	28	0								102	20
<b>Work Orders</b>														
Number generated in month	136	106	89	92	115								538	108
Number closed in month	111	106	89	92	115								513	103
Backlog	25	0	0	0	0	0	0	0	0	0	0	0	25	2

**Job Cal CMMS  
WORK ORDER STATISTICS  
May 1,2016-May 31,2016**

	<b>Open Work Orders Due Prior to 5/1/2016</b>	<b>Open Work Orders 5/1/2016-5/31/2016</b>	<b>Total Open Work Orders</b>
Preventive	8	178	186
Corrective	6	0	6
<b>Total</b>	<b>17</b>	<b>178</b>	<b>192</b>

	<b>Closed Work Orders 5/1/2016 - 5/31/2016</b>
Preventive	178
Corrective	0
<b>Total</b>	<b>178</b>

<b>Total Outstanding Work Orders as of 5/31/2016</b>	<b>17</b>
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## 1.0 Summary:

The rancher completed cutting pasture grass on the majority of the Parcels throughout the Reclamation Facility. Four Parcels of pasture grass were baled and removed by the end of the month. Repairs to the irrigation system were started at the end of the month. Mowing of various access roads was completed on Site 2.

## 2.0 Ranch Operations:

The rancher completed cutting pasture grass on all Sites except for Parcel 3 on Site 2. The cut pasture grass was baled and removed from Parcels 1, 3, 6 & 7 on Site 7. The rancher was baling the pasture grass on Parcel 4 and was removing bales from Parcel 8 at the end of the month.

Drainage Pump Station No. 3 did not pump any water from the ditches in May. Drainage Pump Station No. 7 pumped 675,000 gallon of water from the ditches in May. The drainage pumps were taken out of service for the season at the end of the month.



Baled Pasture Grass on Site 7

## 3.0 Irrigation Parcels:

There were no irrigation activities this month.

Staff found a failed fuse for the control system on Site 7. Staff contacted a local electrician and scheduled troubleshooting work in early June.

Work began on the last day of the month to repair irrigation lines in Parcels 1 & 4 in Site 2. The repair of a  $\frac{3}{4}$ " line in Parcel 4 was completed however, the repair in Parcel 1 was a bit more complex and would take an additional day to complete. Two full circle repair clamps were used some time ago to make a repair on a 6-inch header pipe in Parcel 1. The bolts corroded over time and the couplings failed late last irrigation season.

The Irrigation Storage Ponds lost 9 MG of water in May due to evaporation.

## 4.0 Irrigation Pump Station:

There was no irrigation performed this month.

The District hired a local contractor to mow along the access roads around the Wildlife Pond and Storage Pond No. 1 as well as various access roads around Site 2. Veolia also rented a mower and completed some mowing around the sludge lagoons.

## 5.0 Sludge Handling & Disposal:

There were no sludge handling activities this month.

\*\*\*\*

**NOVATO SANITARY DISTRICT**  
**Reclamation Facility - Monthly Statistics for Calendar Year 2016, as of May 2016**

	January	February	March	April	May	June	July	August	September	October	November	December	Total Year to Date	Annualized Monthly Average
<b>Irrigation Pump Station</b>														
Plant flow to ponds (MG)	0	0	0	0	0								-	0.00
Irrigation (MG)	0	0	0.0	0	0								-	0.00
Irrigation Pump 1 Hours													-	0.00
Irrigation Pump 2 Hours													-	0.00
Irrigation Pump 3 Hours													-	0.00
Washdown Water Pump Hours													-	0.00
Wildlife Feed Pump Hours	744	696	744	720	744								3,648.0	304.00
Water Circulated through Wildlife Pond (MG)	46.872	43.848	46.872	45.36	47	0	0	0	0	0	0	0	229.8	19.15
Strainer No. 1 Hours													-	0.00
Strainer No. 2 Hours													-	0.00
Pond 1 Gauge @ Beginning of Month	3.1	3.9	3.9	4.4	4									
Pond 1 Gauge @ End of Month	3.9	3.9	4.4	4	3.5									
Pond 1 Gallons Stored @ End of Month(MG)	27.2	27.2	31.2	28	24									
Pond 2 Gauge @ Beginning of Month	3.1	3.9	3.9	4.4	4									
Pond 2 Gauge @ End of Month	3.9	3.9	4.4	4	3.5									
Pond 2 Gallons Stored @ End of Month(MG)	35	35	40	36	31									
Total Irrigation Water Stored	62.2	62.2	71.2	64	55	0	0	0	0	0	0	0		
<b>Drainage Pump Station No. 3</b>														
Drainage Pump No. 1 Hours	341.4	0.2	386	15.1	0									
Drainage Pump No. 2 Hours	0	34.7	0	0	0									
Drainage Pump No. 3 Hours	0	1.9	0.1	0	0									
Total Gallons Stormwater Pumped (MG)	102.42	11.04	115.83	4.53	0	0	0	0	0	0	0	0	233.82	19.49
<b>Drainage Pump Station No. 7</b>														
Drainage Pump No. 1 Hours	131.7	0.2	72.4	3.4	0.2									
Drainage Pump No. 2 Hours	14.2	13	0	0	0.7									
Drainage Pump No. 3 Hours	2.9	0	41.3	12.2	0.6									
Total Gallons Stormwater Pumped (MG)	66.96	6	51	7.02	0.675	0	0	0	0	0	0	0	131.76	10.98

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Staff Report: Comprehensive Annual Financial Report (CAFR).	<b>MEETING DATE:</b> June 13, 2016  <b>AGENDA ITEM NO.:</b> 13.a.
<b>RECOMMENDED ACTION:</b> Information only. Receive report.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The District submitted its Comprehensive Annual Financial Report (CAFR) for Fiscal Year ended June 30, 2015 to the Government Finance Officers Association (GFOA) of the United States and Canada for review against the qualification requirements for a Certificate of Achievement for Excellence in Financial Reporting. The Certificate is the highest form of recognition in the area of government accounting and financial reporting.</p> <p>By letter dated June 7, 2016, GFOA has announced that the District has been awarded the Certificate. In addition, District Finance Officer Laura Creamer was recognized as the individual primarily responsible for preparing the award-winning report. An Award of Financial Reporting Achievement (AFRA) has been presented to her by GFOA. This will be the fifth year in a row that the District and Ms. Creamer have achieved these distinctions.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), Goal 3 (Alignment and Communications), and Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> lc, ssk	<b>GENERAL MANAGER:</b> SSK