

# NOVATO SANITARY DISTRICT

Meeting Date: April 10, 2017

**The Board of Directors of Novato Sanitary District will hold a regular meeting at 5:30 p.m. Monday, April 10, 2017, 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). Note: All times and order of consideration for agenda items are for reference only. The Board of Directors may consider item(s) in a different order than set forth herein.*

## 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. **REVIEW OF MINUTES:**
  - a. Approve minutes of the March 27, 2017 meeting.
5. **CONSENT CALENDAR:**

*The General Manager-Chief Engineer has reviewed the following item(s). To his knowledge, there is no opposition to the action. The item(s) 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, March 27 - April 10, 2017.
  - b. Receive deposit summary, March 2017.
6. **DEBRIS BOX RENTALS IN NOVATO:**
  - a. Presentation by Mr. Fred Grange regarding debris box service. Presentation requested by Mr. Grange. No staff report.
  - b. Receive report and provide direction, if any, to staff.
7. **WASTEWATER OPERATIONS:**
  - a. Receive Wastewater Operations Report, March 2017.

(Next page)

**8. ADMINISTRATION:**

- a. Receive Proposed Schedule for Approval of Preliminary and Final Budget, Appropriations Limit, and Sewer Service Charges.

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

- a. North Bay Watershed Association (NBWA) meeting, April 7, 2017 (Director Miller).

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

**11. ADJOURN:**

Next Resolution No. 3108.

**Next regular meeting date: Monday, April 24, 2017, 5:30 p.m. at the Novato Sanitary District office, 500 Davidson Street, Novato, CA**

*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 Meeting Minutes

**DRAFT**

Meeting Date: March 27, 2017

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, March 27, 2017, at the District offices, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Jerry Peters, Directors Carole Dillon-Knutson, William Long, and Jean Mariani. Director Brant Miller arrived at 5:34 p.m. (delayed by construction on Davidson Street).

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

ALSO PRESENT: Fred Grange, Grange Debris Box  
Delyn Kies, Novato resident  
Casey Williams, Novato Disposal Services  
Jim Salyers, Vice President, Novato Disposal Services  
Charles Boltin  
John Bailey, Project Manager, Veolia Water  
Brian Exberger, Assistant Project Manager, Veolia Water  
John O'Hare, Pretreatment Programs Manager, Veolia Water  
Sonia Tanner, Novato resident  
Erik Brown, Technical Services Manager, Novato Sanitary District  
Steve Krautheim, Field Services Manager, Novato Sanitary District  
Dee Johnson, Solid & Household Hazardous Waste Program Coordinator

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: President Peters called for public comment.

Fred Grange, Grange Debris Box Service, requested consideration to place the following item on a future agenda: debris box rentals in Novato.

REVIEW OF MINUTES:

Consider approval of minutes of the March 13, 2017 meeting.

*On motion of Director Mariani, seconded by Director Long, and carried unanimously by those Directors present, the Board approved the meeting minutes of March 13, 2017.*

CONSENT CALENDAR:

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

- a. Approve capital project disbursements in the amount of \$33,233.65, and regular disbursements in the amount of \$124,480.60.
- b. Approve March 2017 payroll and payroll related disbursements in the amount of \$305,210.28.
- c. Receive report on the District's Government Compensation in California (GCC) statement for Calendar Year 2016, as filed with the State Controller's Office (SCO).
- d. Receive e-mail correspondence from County Registrar of Voters: "SB415-Special District requests to change election date".

*On motion of Director Mariani, seconded by Director Dillon-Knutson, and carried unanimously, the Board approved the above listed Consent Calendar items.*

#### SOLID WASTE OPERATIONS:

- Receive Novato Disposal Service – 4<sup>th</sup> Quarter 2016 report. The General Manager noted that at the March 13<sup>th</sup> meeting, the Board opted to consolidate the Solid Waste Committee reports and have them presented to the entire Board with the Regular Board meeting materials for consistency and efficiency.

Casey Williams, Novato Disposal Service (NDS), provided an overview of the solid waste, recycling, and green waste data. Director Dillon-Knutson commented on the increase in residential and commercial solid waste delivered to the disposal site. Mr. Williams stated that he was not sure if the increase was due to additional debris disposal or if the materials were simply wet, causing the material to weigh more.

Director Miller noted that Marin Sanitary is declaring achievement of a 75% solid waste diversion, and he requested clarification. Dee Johnson, Solid and Household Hazardous Waste Coordinator, noted that the methods used to calculate the diversion numbers for the two entities are not similar. She then explained why diversion rates for Novato Disposal seemed lower than rates presented by Marin Sanitary. Ms. Johnson stated that she would provide a more detailed explanation at a future meeting following discussions with Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA) staff.

- Receive verbal report on Marin County JPA and Local Task Force. Ms. Johnson stated that she met with the Marin County JPA Local Task Force in January. She noted that Delyn Kies was also present at that meeting. Discussion items included the JPA's role, and future outreach opportunities the task force might like to target.

- Receive Disposal/Diversion reports for 2016. Ms. Johnson provided an overview of the 2016 Disposal/Diversion Report. She pointed out that the green waste collection has remained steady, even increasing slightly, in spite of the drought. She also noted that commercial food waste numbers have increased, due to an increase in commercial food waste accounts.

- Receive verbal update on schools recycling program. Ms. Johnson stated that Novato Disposal Outreach staff visited 5 elementary schools, 2 middle schools, and 1 high school, providing service information, presentations, assemblies, and suggestions on diversion.

Household Hazardous Waste (HHW) programs: Ms. Johnson stated that 3,812 households used the HHW facility in 2016, which was an 8% increase from 2015, and was the highest participation ever recorded at the HHW facility. She elaborated that a total of 406,174 pounds of household hazardous waste was collected at the HHW facility in 2016, noting that this number did not include the waste collected at the two E-Waste events. Ms. Johnson stated that a total of 1,584 residents dropped off E-Waste during the spring and fall events, resulting in a total of 54,604 pounds of E-waste collected. She stated that the next e-waste event will take place from April 22<sup>nd</sup> to April 24<sup>th</sup> and directed the Board's attention to the E-Waste flyer on page 37 of the agenda packet.

President Peters thanked Ms. Johnson and NDS for the presentation, and asked for any public comments. Fred Grange, Grange Debris Box, commented that Ms. Johnson did a good job of explaining the complexities of diversions and what he would like to present to the Board would be equally as complex and that he would send something in writing. He stated that Grange Debris Box was the first debris box company in Novato and that he hopes Grange Debris Box could work with the new garbage collection company in Novato. He also stated that he is in favor of franchises and believes that some things should be franchised and some things do not have to be franchised and therefore, shouldn't be.

At 6:12 p.m., President Peters called for a short recess.

The following individuals left the meeting: Fred Grange, Jim Salyers, Casey Williams, Charles Boltin, Delyn Kies, and Sonia Tanner.

At 6:20 p.m., President Peters reconvened the meeting.

#### WASTEWATER OPERATIONS:

- Receive and accept Wastewater Treatment Facilities 2016 Annual Operations and Maintenance Report, subject to minor edits. The General Manager stated that the Report is essentially an encapsulation of information that was previously presented to the Board in each month of 2016. He introduced Veolia Project Manager John Bailey who provided a short verbal presentation of the Annual Report. The Project Manager stated that 2016 represents Veolia's fifth consecutive year of zero effluent violations and the sixth year of zero recordable incidents. He discussed the treatment plant performance summary, stating that BOD and TSS removal efficiency was at 98% for the year. In addition, he stated that the facility produced 89.582 million gallons of Title 22 recycled water. The Project Manager discussed Veolia's Asset Management Program and the preventative, predictive, and corrective maintenance that was performed by Veolia support staff.

#### BOARD OF DIRECTORS:

- Review Local Agency Formation Commission (LAFCO) ballot for Election of a Regular Special District Member, finalize by consensus the District's ranked choices of the nominated candidates on the ballot, and authorize the General Manager-Chief Engineer to complete and transmit the ballot to LAFCO. The General Manager noted that this item had

also been brought forward at the March 13<sup>th</sup> Board meeting for review, and requested the Board finalize, by consensus, and rank the three nominees on the ballot.

*On motion of Director Mariani, seconded by Director Dillon-Knutson, and carried unanimously, the Board voted by consensus and ranked the three LAFCO candidates as follows: 1) Craig K. Murray; 2) Todd Gates; and 3) Lew Kious. The General Manager was authorized to complete and transmit the ballot to LAFCO.*

#### BOARD MEMBER REPORTS AND REQUESTS:

- North Bay Water Reuse Authority (NBWRA) Board meeting, March 27, 2017 (Director Long). Director Long commented on his attendance at the NBWRA meeting, which was held at the Novato City Hall Council Chambers. He stated that the City of American Canyon was approved as a new member of NBWRA, and that the FY 2016/17 Budget has been amended to include new member projects. He noted that the Board is conducting a Reconciliation and Reassessment of Costs and that the District may receive a refund of about \$170,000 of Phase 2 funds, and about \$80,000 in Phase 2 Study grant funds.

- NBWRA Day in the State Capitol, March 22, 2017 (Director Long). Director Long commented on his attendance at the NBWRA Day in Sacramento, and on meetings with the legislative staff he met at the event.

- Novato Theater Company (NTC) performance, 'Company, a Musical Comedy'. Director Dillon-Knutson stated that NTC was performing a musical and encouraged the Board and public to attend.

#### INFORMATIONAL ITEMS:

- Marin Independent Journal article titled "Marin Garbage Rates Rising Along With Recycling Costs". The General Manager noted that this article was for informational purposes only.

#### GENERAL MANAGER'S REPORT AND ANNOUNCEMENTS:

The General Manager had the following reports and announcements:

- Reports:
  - The District's Regional Water Board permit handler conducted a compliance evaluation inspection of the District's facilities on March 14<sup>th</sup>. District and Veolia Staff prepared for, and participated in, the inspection. He stated that the inspection went well, that the inspection report has been received, and there does not appear to be any items in the report that require follow-up.
  
- Announcements:
  - Reminder: The CASA Sacramento Policy Forum is April 19<sup>th</sup>. Directors Dillon-Knutson, Long, Peters, and Mariani are registered. Carpooling is encouraged.
  - CASA's 62<sup>nd</sup> Annual Conference will take place from August 22<sup>nd</sup> to 24<sup>th</sup> in San Diego. Board members are requested to confirm their attendance with the Administrative Secretary.

- The District will be participating in the Novato Chamber of Commerce 2017 Business & Community Expo, which will be held at the Novato Bay Club-Stonetree Golf Course, and Directors are invited to attend.
- Directors are required to file their Form 700 with the County of Marin by Monday, April 3, 2017. Completed and signed forms can be returned to the District office and the Administrative Secretary will mail them to the County.
- The next Regular Board meeting will be Monday, April 10, 2017 at 5:30 p.m.

ADJOURNMENT: There being no further business to come before the Board, President Peters adjourned the meeting at 7:07 p.m.

Respectfully submitted,

---

Sandeep Karkal  
Secretary

Julie Hoover, Recording

DRAFT

# Novato Sanitary District Board Fees Check Register for March 2017

April 7, 2017

---

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
<b>Apr 7, 17</b>			
04/07/2017	4902	Dillon-Knutson-, Carole	415.58
04/07/2017	4903	Long, William C	413.78
04/07/2017	4904	Mariani, Jean M	489.58
04/07/2017	4905	Miller, Brant	
04/07/2017	4906	Peters, Arthur Gerald	389.57
<b>Apr 7, 17</b>			<b><u>1,708.51</u></b>

# Novato Sanitary District Operating Check Register

April 10, 2017

Date	Num	Name	Credit
<b>Apr 10, 17</b>			
04/10/2017	60496	Veolia Water North America, Inc.	169,760.32
04/10/2017	60485	PARS-OPEB-Post Employment Be...	63,636.36
04/10/2017	60486	PARS-PSRP-Post Employment Be...	18,181.82
04/10/2017	60501	Johnson, Dee	8,280.00
04/10/2017	60469	EOA, Inc.	7,161.62
04/10/2017	60460	Buckles-Smith1	5,418.26
04/10/2017	60467	Dearborn National	2,459.55
04/10/2017	60494	U.S. Bank Card (3)Craig	2,437.94
04/10/2017	60500	WECO	2,329.09
04/10/2017	60477	Meyers, Nave, Riback, Silver & Wil...	2,050.00
04/10/2017	60478	Monterey Mechanical, Inc.	1,800.00
04/10/2017	60491	Siemens Industry	1,675.59
04/10/2017	60454	Alpha Analytical Lab, Inc.	1,656.00
04/10/2017	60462	Caltest Analytical Lab Inc.	1,617.85
04/10/2017	60471	Frontier Communications of CA	1,384.75
04/10/2017	60464	Cintas Corporation	1,187.97
04/10/2017	60475	Labworks Equipment, Inc.	1,172.55
04/10/2017	60474	Jan-Pro Cleaning Systems	1,005.00
04/10/2017	60497	Veolia Water Recycled Water Oper.	796.23
04/10/2017	60492	SMART	757.31
04/10/2017	60480	North Marin Water District	713.28
04/10/2017	60499	Vision Service Plan	570.58
04/10/2017	60488	Pini Hardware	529.53
04/10/2017	60468	Diesel Emissions Service, Inc.	511.41
04/10/2017	60461	Cagwin & Dorward Inc.	448.00
04/10/2017	60498	Verizon Wireless-	422.10
04/10/2017	60490	Rice Lake, formerly Heusser Newe...	366.22
04/10/2017	60463	CDW Government, Inc.	264.00
04/10/2017	60482	Novato Disposal-	254.44
04/10/2017	60465	Claremont EAP, Inc.	250.00
04/10/2017	60481	Novato Chamber of Commerce	250.00
04/10/2017	60458	BoundTree Medical, LLC	247.81
04/10/2017	60466	Datco Billing Inc.	204.75
04/10/2017	60457	Batteries Plus Inc	181.95
04/10/2017	60476	Leonardi Automotive & Electric, Inc.	172.21
04/10/2017	60484	Orkin Pest Control, Inc.	144.56
04/10/2017	60459	Buck's Saw Service, Inc.	123.72
04/10/2017	60489	R & B Company	116.84
04/10/2017	60455	American Messaging	104.32
04/10/2017	60479	North Marin Auto Parts	95.18
04/10/2017	60472	Honey Bucket	88.18
04/10/2017	60495	Unicorn Group	79.74
04/10/2017	60483	O'Reilly Auto Parts	66.75
04/10/2017	60493	Talley	65.65
04/10/2017	60456	AT&T Mobility	63.25
04/10/2017	60473	Integrity Shred LLC	50.00
04/10/2017	60487	Petty Cash	44.59
04/10/2017	60470	First Alarm	39.91
<b>Apr 10, 17</b>			<b><u>301,237.18</u></b>

# Novato Sanitary District Capital Projects Check Register

April 10, 2017

---

Date	Num	Name	Credit
<b>Apr 10, 17</b>			
04/10/2017	3158	Eaton Corporation	34,876.67
04/10/2017	3162	RMC Water & Environment, Inc.	23,430.66
04/10/2017	3163	Team Ghilotti, Inc.	7,888.78
04/10/2017	3164	W.R. Forde	5,525.33
04/10/2017	3161	Nute Engineering Inc.	3,157.50
04/10/2017	3159	Lateral-Ropko	2,000.00
04/10/2017	3160	Meyers, Nave, Riback, Silver & ...	216.38
<b>Apr 10, 17</b>			<b><u>77,095.32</u></b>

**Novato Sanitary District**  
**Deposit Detail**  
 March 2017

Item 5.b.  
(Pages 11-12)

Type	Date	Name	Account	Amount
<b>Deposit</b>	<b>03/06/2017</b>		<b>11113 · Westamerica - Operations</b>	
		Peter Levi Plumbing	41040 · Permit & Inspection Fee	40.00
		County of Marin	51015 · Property Taxes	26.78
		Roy A Tanner Builder	41040 · Permit & Inspection Fee	60.00
		Peters, A. Gerald	11200 - Accounts Receivable	156.40
		SMART-	11200 - Accounts Receivable	60.18
		Bel Marin Keys CDS <b>(See Note 1)</b>	11200 - Accounts Receivable	412.56
		Marin County Housing Auth <b>(See Note 1)</b>	11200 - Accounts Receivable	11,460.00
<b>TOTAL</b>				<b>12,215.92</b>
<b>Deposit</b>	<b>03/07/2017</b>		<b>11113 · Westamerica - Operations</b>	
		Dada, Codi	41040 · Permit & Inspection Fee	60.00
		Homeward Bound <b>(See Note 1)</b>	11200 - Accounts Receivable	7,414.62
		Novato Unified School District <b>(See Note 1)</b>	11200 - Accounts Receivable	97,375.60
		City of Novato <b>(See Note 1)</b>	11200 - Accounts Receivable	17,519.50
		Veolia Water	11200 - Accounts Receivable	7,507.87
		Indian Valley College <b>(See Note 1)</b>	11200 - Accounts Receivable	21,143.70
<b>TOTAL</b>				<b>151,021.29</b>
<b>Deposit</b>	<b>03/10/2017</b>		<b>11113 · Westamerica - Operations</b>	
		Miscellaneous	41040 · Permit & Inspection Fee	40.00
		Adobe Creek Brewing Co.	41040 · Permit & Inspection Fee	25.00
		Adobe Creek Brewing Co.	51020 · Connection Charges	2,823.60
		Novato Children's Center <b>(See Note 1)</b>	11200 - Accounts Receivable	1,002.75
		Novato Charter School <b>(See Note 1)</b>	11200 - Accounts Receivable	1,806.09
		Roy's Sewer Service, Inc.-	11200 - Accounts Receivable	261.76
<b>TOTAL</b>				<b>5,959.20</b>
<b>Deposit</b>	<b>03/10/2017</b>		<b>11113 · Westamerica - Operations</b>	
		USCG	11200 - Accounts Receivable	14,608.10
		USCG-Finance Center	11200 - Accounts Receivable	190.35
<b>TOTAL</b>				<b>14,798.45</b>
<b>Deposit</b>	<b>03/14/2017</b>		<b>11113 · Westamerica - Operations</b>	
		Pipe Spy Marin	41040 · Permit & Inspection Fee	15.00
		Long, William C	66170 · Travel, Meetings & Training	551.60
		AT &T <b>(See Note 1)</b>	11200 - Accounts Receivable	1,148.87
		Frontier California, Inc. <b>(See Note 1)</b>	11200 - Accounts Receivable	3,598.45
		Marin Municipal Water District <b>(See Note 1)</b>	11200 - Accounts Receivable	4,965.05
		Novato Disposal <b>(3rd qtr ABA 939 fees)</b>	11200 - Accounts Receivable	88,533.50
		Novato Disposal <b>(2nd half of NDS Franchise fee)</b>	11200 - Accounts Receivable	26,093.00
		Novato Disposal	11200 - Accounts Receivable	299.00
		Petaluma Septic	11200 - Accounts Receivable	286.70
<b>TOTAL</b>				<b>125,491.17</b>
<b>Deposit</b>	<b>03/17/2017</b>		<b>11113 · Westamerica - Operations</b>	
		Anderson, David	41040 · Permit & Inspection Fee	40.00
		County of Marin	51015 · Property Taxes	80.68

**Novato Sanitary District**  
**Deposit Detail**  
**March 2017**

	Novato Community Hospital (See Note 1)	11200 - Accounts Receivable	24,931.23
	Golden Gate Bridge Hwy&Trans (See Note 1)	11200 - Accounts Receivable	1,249.14
	<b>TOTAL</b>		<b>26,301.05</b>
<b>Deposit</b>	<b>03/17/2017</b>	<b>11113 · Westamerica - Operations</b>	
	Sewer Connection	41040 · Permit & Inspection Fee	15.00
	Marin County Free Library (See Note 1)	11200 - Accounts Receivable	1,736.19
	Novato Fire Protection (See Note 1)	11200 - Accounts Receivable	11,482.94
	<b>TOTAL</b>		<b>13,234.13</b>
<b>Deposit</b>	<b>03/21/2017</b>	<b>11113 · Westamerica - Operations</b>	
	Gene Burch Plumbing	41040 · Permit & Inspection Fee	15.00
	Roto Rooter	60153 · Outside Services	290.25
	Saratoga Fund	41140 · Other Revenue	250.00
	North Marin Water District (See Note 2)	11200 - Accounts Receivable	111,019.25
	<b>TOTAL</b>		<b>111,574.50</b>
<b>Deposit</b>	<b>03/23/2017</b>	<b>11113 · Westamerica - Operations</b>	
	Pipe Spy Marin	41040 · Permit & Inspection Fee	15.00
	Roto Rooter	41040 · Permit & Inspection Fee	80.00
	Marin General	41040 · Permit & Inspection Fee	60.00
	Indian Valley Golf Course(See Note 1)	11200 - Accounts Receivable	5,652.65
	<b>TOTAL</b>		<b>5,807.65</b>
<b>Deposit</b>	<b>03/28/2017</b>	<b>11113 · Westamerica - Operations</b>	
	First Capitol Auction, Inc.	41142 · Loss on disposal of assets	1,627.00
	Sewer Connection	41040 · Permit & Inspection Fee	40.00
	Sewer Connection	41040 · Permit & Inspection Fee	25.00
	North Marin Water District (See Note 3)	11200 - Accounts Receivable	10,223.31
	<b>TOTAL</b>		<b>11,915.31</b>
<b>Deposit</b>	<b>03/31/2017</b>	<b>11113 · Westamerica - Operations</b>	
	County of Marin	51015 · Property Taxes	6,713.14
	Ross, Steven	41040 · Permit & Inspection Fee	30.00
	P,G & E (See Note 1)	11200 - Accounts Receivable	60.17
	Foged, Larry -	11200 - Accounts Receivable	243.00
	<b>TOTAL</b>		<b>7,046.31</b>
	<b>Total Deposits for March 2017</b>		<b>485,364.98</b>
<b>Note 1:</b>	Collection of semi annual sewer service charges for entities not on the tax roll.		
<b>Note 2:</b>	Collection of prior years utilites for Recycled Water Facility operations and current year recycled water facility operations billings for August & September.		
<b>Note 3:</b>	Collection of Recycled Water Facility Operations billings for October, November & December.		

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE:** Wastewater Operations Report, March 2017.

**MEETING DATE:** April 10, 2017

**AGENDA ITEM NO.:** 7.a.

**RECOMMENDED ACTION:** Receive Wastewater Operations Report for March 2017.

**SUMMARY AND DISCUSSION:**

The March 2017 Wastewater Operations Report incorporating operations reports for wastewater treatment operations, collection system operations, and the reclamation facilities is attached.

District and Veolia staff will be present at the meeting to provide overviews of the reports for their operational areas, and be available to discuss the reports or respond to any questions.

**ATTACHMENTS:** 1. Wastewater Operations Report for the month of March 2017.

**STRATEGIC PLAN INFORMATION:** This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.

**DEPT. MGR.:** JB (Veolia), SRK, DD, EB

**GENERAL MANAGER:** SSK



April 6, 2017

Mr. Sandeep Karkal  
General Manager – Chief Engineer  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94545

**Subject: Veolia Water Operations Report – March 2017**

Dear Mr. Karkal:

I am pleased to provide the Monthly Operation report for March 2017.

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

Best regards,

A handwritten signature in blue ink that reads "John Bailey".

John Bailey  
Project Manager, Veolia



MONTHLY OPERATIONS REPORT  
March 2017

Prepared for

NOVATO SANITARY DISTRICT (NSD)  
WASTEWATER TREATMENT PLANT  
500 Davidson Street  
Novato, CA 94945

Prepared by

Veolia Water West Operating Services, Inc. (VWWOS)

TABLE OF CONTENTS

---

- A: TREATMENT PLANT PERFORMANCE SUMMARY
- B: SAFETY AND TRAINING
- C: OPERATIONS AND MAINTENANCE STATUS / REVIEW
- D: LABORATORY ACTIVITIES SUMMARY
- E: ADMINISTRATION
- F: ODORS & LANDSCAPING
- G: MISCELLANEOUS

ATTACHMENTS

- 1) Photos
  - 2) Laboratory Data
  - 3) Recycled Water Report
  - 4) Annual Performance Graphs
  - 5) Process Control Data / Graphs
  - 6) Customer Notifications (Odor / Noise)
  - 7) Jerome Meter Readings and Locations
  - 8) **Authorized Anticipated Bypass**
-

**A: TREATMENT PLANT PERFORMANCE SUMMARY: March 2017:**

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	6.41	10.59	N/A	N/A
Max Peak Hour, MGD – 3/24/17 : 1320 - 1420 Hours	N/A	~14.5	N/A	N/A
Rainfall Inches (monthly total / peak day – 3/20/17)	3.48	0.88	N/A	N/A
<b>Influent</b>				
BOD <sub>5</sub> , lb/day (month ave/max)	10,084	12,844	N/A	N/A
TSS, lb/day (monthly ave/max)	8,999	10,275	N/A	N/A
<b>Effluent</b>				
BOD <sub>5</sub> , mg/L (monthly ave/max weekly ave)	<5	5	30	45
TSS, mg/L (monthly ave/max weekly ave)	<5	6	30	45
BOD <sub>5</sub> - % Removal, Minimum	98	N/A	85	N/A
TSS - % Removal, Minimum	97	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	0.26	0.26	5.9	21
pH, su (min / max)	6.8	7.0	6.0	9.0
Enterococcus, MPN/100 ml (30 day geo mean)	3.13	N/A	35	N/A
Fecal Coliform, MPN/100 ml (30 day median)	7.8	7.8	140	N/A
Fecal Coliform, MPN/100 ml (90 <sup>th</sup> percentile)	7.8	7.8	430	N/A
<b>Total Permit Exceedances (NPDES)</b>	<b>0</b>			

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

Description	Units	Value	Limit
Volume Produced	Million Gallons	0.00	N/A
Average Turbidity	NTU	N/A	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	N/A	72
Minimum CT (disinfection)	mg-min/L	N/A	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	N/A	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	N/A	240
Maximum Total Coliform 2 Samples 30 d	MPN/100 ml	N/A	23
Total Coliform 7 Sample Median	MPN/100 ml	N/A	2.2

**Discussion of Violations / Excursions**

- Bay Discharge (NPDES) – None
- Recycled Water – No Production / Demand

**Other**

- Authorized Anticipated Bypass Closeout March 16, 2017 – **See Attachment 8.**



**B: 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 March
- Accident Free: 6/1/10 – 3/31/17: 2,502 days
- Monthly Safety Topics and Training:
  - Fire Prevention Training
  - Fire Extinguisher Training
  - Defensive Driving

**C: OPERATIONS & MAINTENANCE STATUS / REVIEW:****Key events for the period:****Novato**

- Routine rounds, readings and maintenance
- Replaced E-Prim Chip in Influent Pump #1
- Flushed Headworks Channel
- Pumped out Digested Sludge Box
- Battery Maintenance on main UPS
- Diesel Fuel, tank sampling for water/contaminants (3)
- Repaired Grit Chute in Grit Building
- Replaced UV Transmittance Meter Motor & Strainer
- Replaced High Pressure Water Pump – Gravity Belt Thickener (GBT)

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

- Aeration Basin #1 & #3 (standby)
- Primary Clarifier #1 (standby)

**Ignacio Transfer Pump Station**

- Routine rounds, readings and maintenance
- Replaced Exhaust Fan motor on MCC Building
- Replaced supply Fan motor on MCC Building
- Diesel Fuel, tank sampling for water/contaminants

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

- None



**Recycled Water Plant (RWP)**

- Plant is offline (no demand)
- Started up Filters
- Repaired sodium hypochlorite line leak

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

- None

**Sludge Lagoons (and Reclamation Area)**

- Performed routine rounds and inspection

**D: LABORATORY ACTIVITIES SUMMARY:****Discharge to Bay****Wildlife Pond and Reclamation Activities****Wildlife Pond**

Samples and weekly/monthly observations at the Wildlife pond were taken according to the WDR (Order No. 92-065).

**Drainage Pump Station 3 (DPS3)**

Sampling continued through the completion of authorized discharge of impounded water. All appropriate samples were taken and all parameters were below effluent limits.

**EFF-001P Storage Pond Discharge**

Weekly and Monthly samples were taken as required for storage pond discharge. These analysis are BOD, TSS, Oil and Grease, pH, Temperature, Fecal Coliform, Enterococcus, Acute Toxicity, Ammonia, Copper and Cyanide. All parameters were at or below the effluent limits.

**Total Coliforms**

When effluent is discharged to the Bay, there is no requirement for Total Coliform.

**Enterococcus**

When effluent is discharged to the Bay, the bacteriological requirement is for *Enterococcus*. Three samples were analyzed each week in March and all were well under the regulatory limits.

**Fecal Coliforms**

Fecal Coliform sampling is required once per quarter during Bay discharge. The quarterly sample was analyzed in March for the March through May Quarter, with the results well below the regulatory limit.



**Public Education**

We hosted approximately 30 High School students from San Marin High School for an introduction to wastewater treatment and a tour of the treatment plant.

**Pretreatment****Permits**

- Received 1 application (zero discharge)

**Inspections and Sampling**

- Inspected 2 Food Service Establishments
- Inspected 1 industry

**E: ADMINISTRATION:**

- February Electronic Self-Monitoring Report (SMR) submitted on March 31, 2017
- February Electronic Discharge Monitoring Report (DMR) submitted on March 31, 2017

**F: ODORS & LANDSCAPING:**

- No contacts from neighbors during the month.
- Jerome meter (H2S) readings performed in neighborhood and within treatment plant.
- All readings in neighborhood were at the minimum detection threshold of the Jerome meter.
- Sodium Hypochlorite tank for Ignacio has been installed and is targeted to be in service in April.

**G: MISCELLANEOUS**

- Process Control Management Plan (PCMP) meetings held weekly.
- Leadership Novato Plant Tour
- San Marin High School Plant Tour
- Regional Water Quality Control Board (RWQCB) Inspection

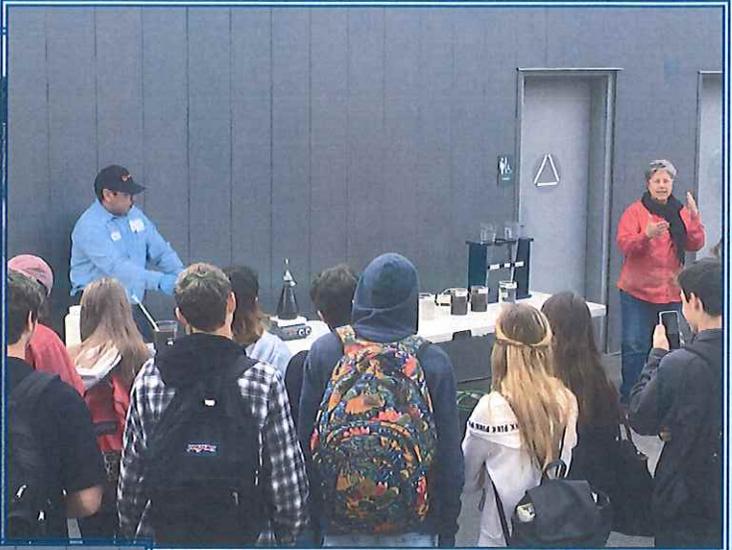
**Veolia Support Staff On/Off Site (Various Times)**

John O'Hare (Veolia Corporate)                      Technical Support, Pretreatment & Laboratory



*1) PHOTOS*

SAN MARIN HIGH SCHOOL - TOUR  
MARCH 2017

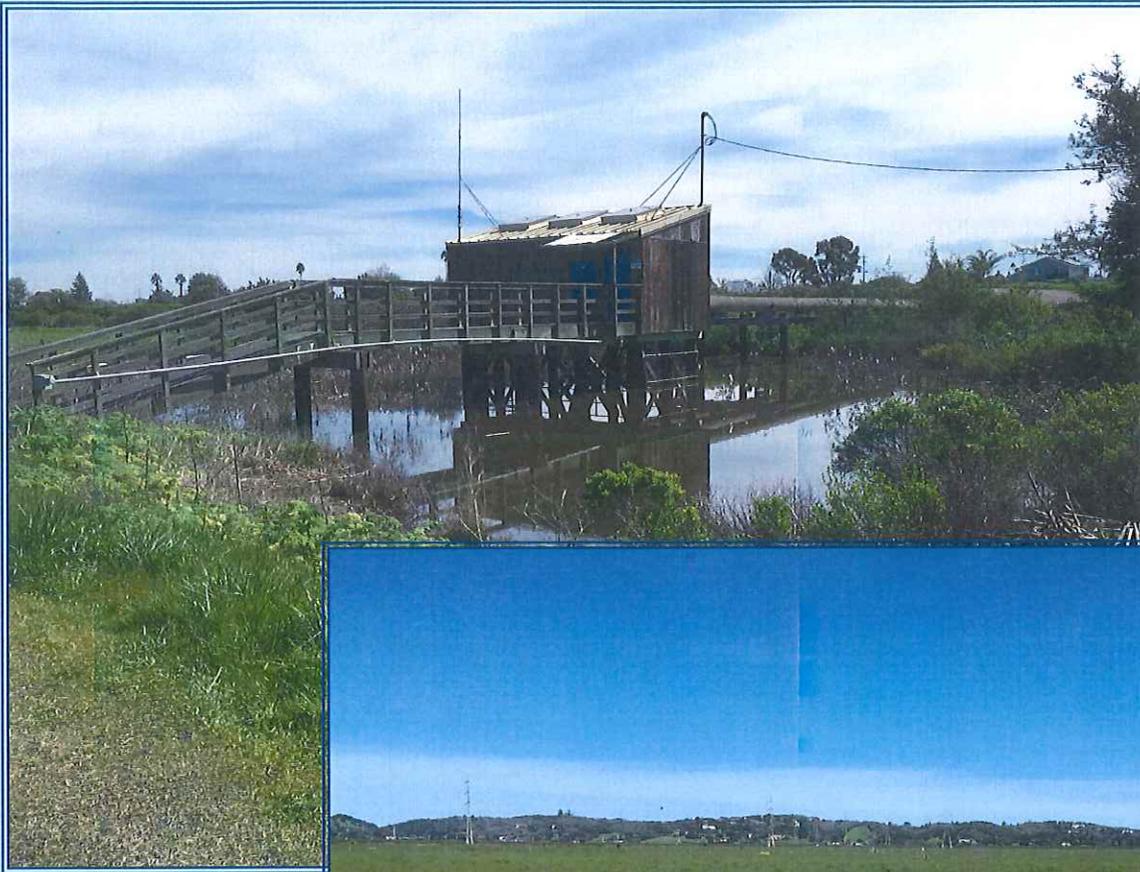


Top Left – Liz Falejczyk prepares bench scale treatment plant model  
Top Right & Bottom – Liz and Manny Arias describe how a treatment plant works

NPDES INSPECTION  
MARCH 14, 2017

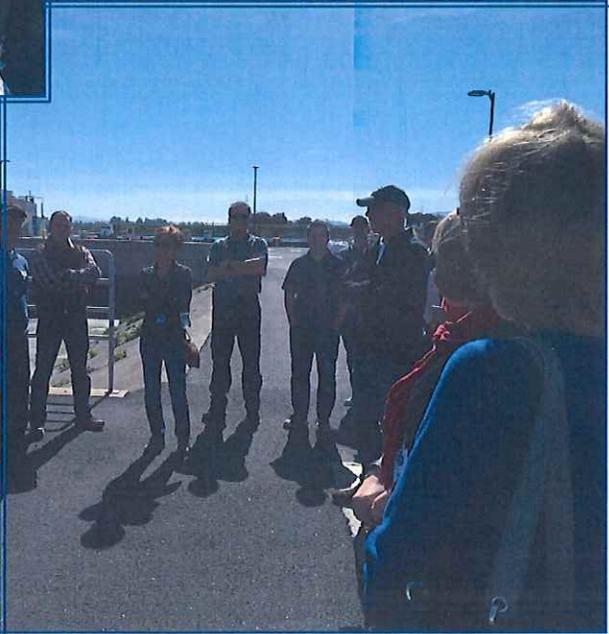


DRAINAGE PUMP STATION #3  
MARCH 2017



Top – Drainage Pump Station #3 (provides drainage for Irrigation Site #2 & #3)  
Bottom – Irrigation Site #3 showing virtually no standing or ponded water.

MARCH 2017  
LEADERSHIP NOVATO TOUR



RECYCLED WATER PLANT (RWP) STARTUP  
MARCH 2017



Top Left & Right – Brian Exberger & Bob Stiles (NSD) prepare for (RWP) startup  
Bottom Left – Joe Moreno operates Vacuum Truck to clean Backwash Sump  
Bottom Right – Manny Arias adds sodium hypochlorite to chlorine contact tank

## 2) LABORATORY DATA

Novato Sanitary District  
BOD/TSS Report



March, 2017

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		
03/01/17	6.16	250	12,844	200	10,275	4	205	5	257	98.4	97.5
03/02/17	6.06										
03/03/17	5.42										
03/04/17	6.71										
03/05/17	7.62										
03/06/17	7.69										
03/07/17	6.49										
03/08/17	6.21	186	9,633	186	9,633	4	207	6	311	97.8	96.8
03/09/17	5.83					<5	<243	<3	<146		
03/10/17	5.82										
03/11/17	5.54										
03/12/17	5.47										
03/13/17	5.66										
03/14/17	5.48										
03/15/17	4.89	240	9,788	160	6,525	5	204	4	163	97.9	97.5
03/16/17	4.98										
03/17/17	4.61										
03/18/17	4.85										
03/19/17	4.81										
03/20/17	7.73										
03/21/17	8.58										
03/22/17	8.45										
03/23/17	6.91	140	8,068	150	8,644	<5	<288	6	346	96.4	96.0
03/24/17	10.59										
03/25/17	8.28										
03/26/17	7.56										
03/27/17	6.61										
03/28/17	6.72	180	10,088	177	9,920	<5	<280	3	168	97.2	98.3
03/29/17	5.77										
03/30/17	5.87										
03/31/17	5.37										
<b>Weekly Averages</b>											
03/04/17	Week 1	250	12,844	200	10,275	4	205	5	257		
03/11/17	Week 2	186	9,633	186	9,633	5	225	5	228		
03/18/17	Week 3	240	9,788	160	6,525	5	204	4	163		
03/25/17	Week 4	140	8,068	150	8,644	5	288	6	346		
	Week 5										
<b>Monthly</b>											
Minimum	4.61	140	8,068	150	6,525	4	204	<3	<146	96	96
Maximum	10.59	250	12,844	200	10,275	5	<288	6	346	98	98
Total	198.74										
Average	6.41	199	10,084	175	8,999	<5	<238	<5	<232	98	97

Novato Sanitary District  
Conventional Pollutants Report



March, 2017

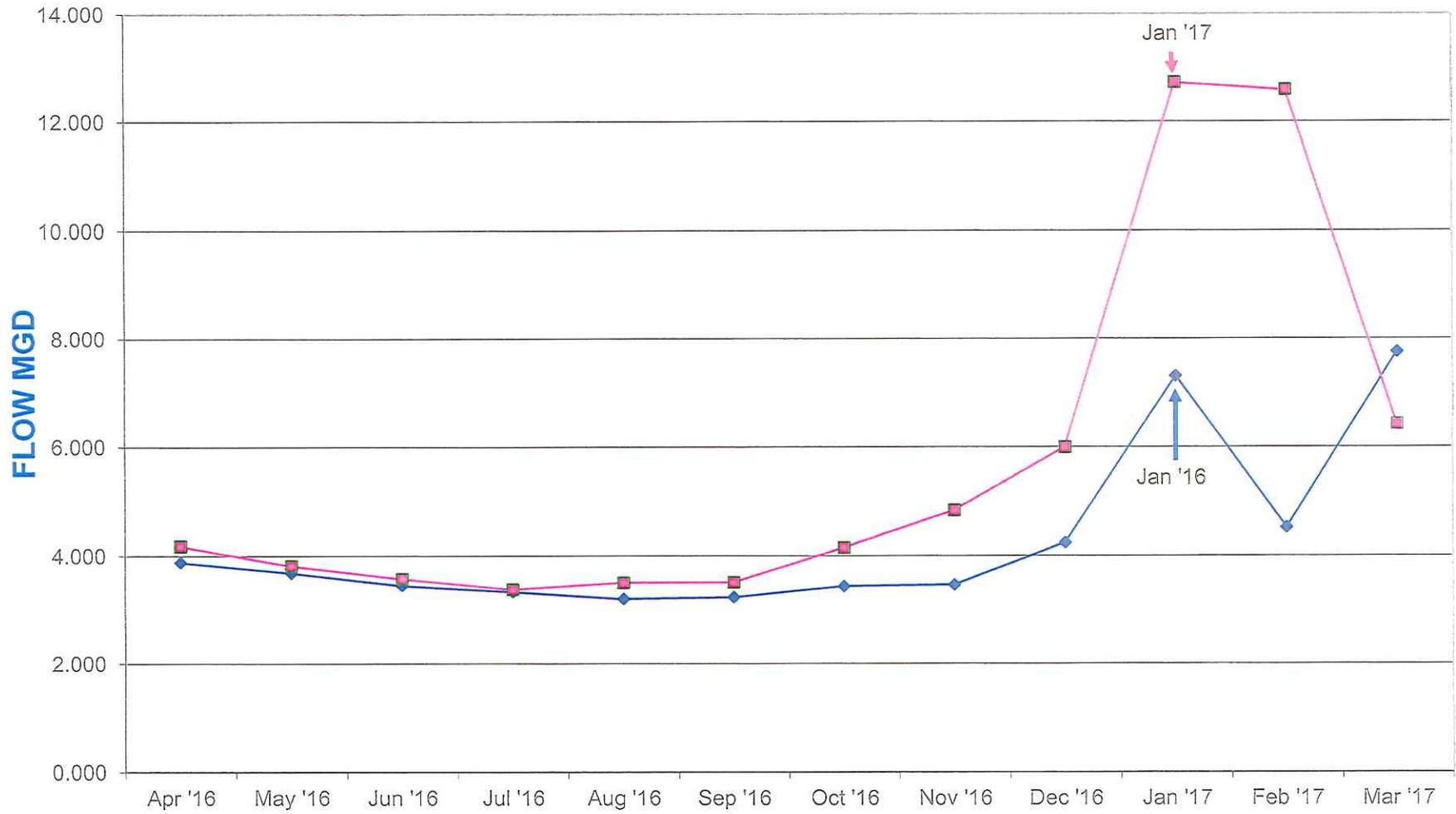
Date	INFLUENT - A001			Effluent - E002							
	Flow Total	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Oil & Grease	Temp	Rainfall
				Fecal	Entero	Total					
	MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L	Deg C	Inches
03/01/17	6.16				1.0		6.9			16.8	0.00
03/02/17	6.06			7.8	1.0		6.8			16.6	0.00
03/03/17	5.42	7.3			<1.0		7.0			17.1	0.00
03/04/17	6.71										0.37
03/05/17	7.62										0.41
03/06/17	7.69						7.0			16.9	0.24
03/07/17	6.49						7.0			16.8	0.00
03/08/17	6.21				7.5		7.0			17.2	0.00
03/09/17	5.83				2.0		7.0	0.26	<1.4	17.7	0.00
03/10/17	5.82	7.5			27.2		7.0			17.6	0.00
03/11/17	5.54										0.00
03/12/17	5.47										0.00
03/13/17	5.66				<1.0		7.0			18.4	0.00
03/14/17	5.48						6.9			18.3	0.00
03/15/17	4.89				8.6		7.0			18.4	0.00
03/16/17	4.98				2.0		6.9			18.5	0.00
03/17/17	4.61						6.9			19.0	0.00
03/18/17	4.85										0.00
03/19/17	4.81										0.00
03/20/17	7.73						7.0			18.8	0.88
03/21/17	8.58				7.4		6.8			18.2	0.52
03/22/17	8.45				9.6		6.8			17.9	0.32
03/23/17	6.91				2.0		6.9			17.5	0.00
03/24/17	10.59						6.9			17.7	0.71
03/25/17	8.28										0.01
03/26/17	7.56										0.02
03/27/17	6.61				1.0		6.9			18.0	
03/28/17	6.72				5.2		6.9			18.0	
03/29/17	5.77	7.5			5.2		6.9			18.4	
03/30/17	5.87						6.9			18.1	
03/31/17	5.37						6.9			18.5	
<b>Monthly</b>											
Minimum	4.61	7.3		7.8	<1.0		6.8	0.26		16.6	0.00
Maximum	10.59	7.5		7.8	27.2		7.0	0.26	<1.4	19.0	0.88
Total	198.74										3.48
Average	6.41	7.4					6.9	0.26	<1.4	17.8	0.13
Geo Mean					3.13						

### *3) RECYCLED WATER REPORT*

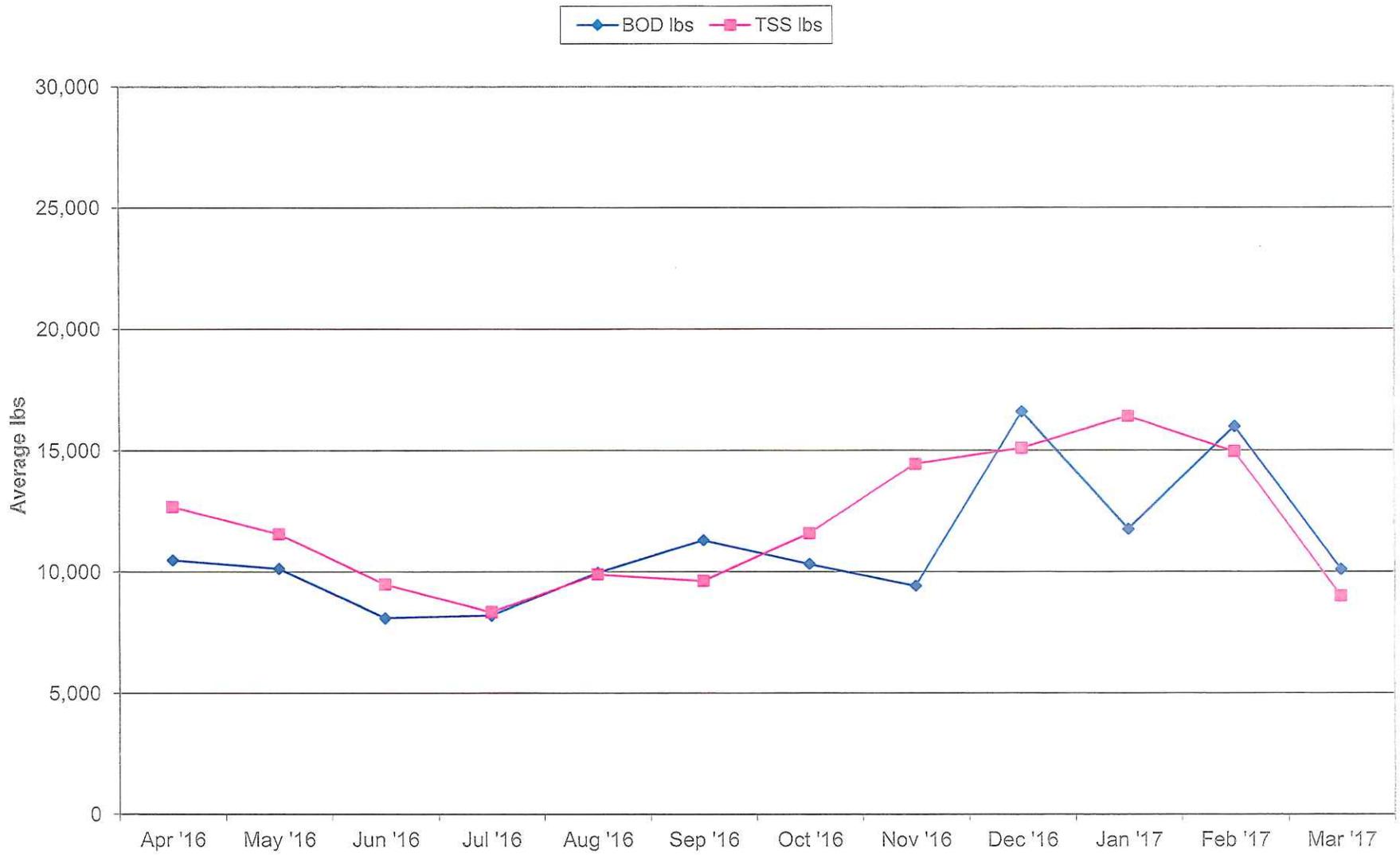
*(No Recycled Water Produced in March 2017 – No Demand)*

## *4) ANNUAL COMPLIANCE SUMMARY – GRAPHS*

## WASTEWATER INFLUENT FLOW COMPARISON

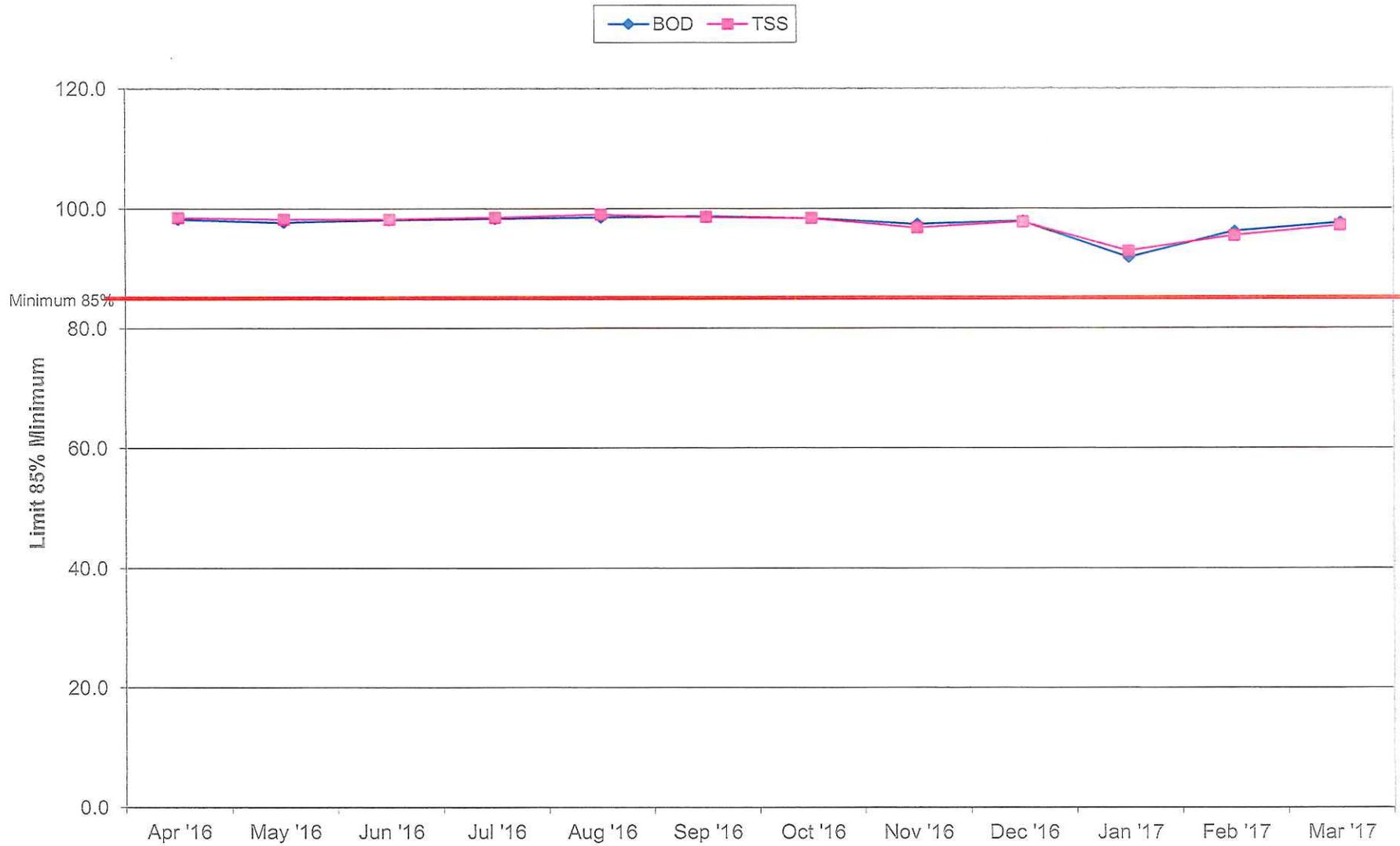


### Influent Load BOD / TSS lbs

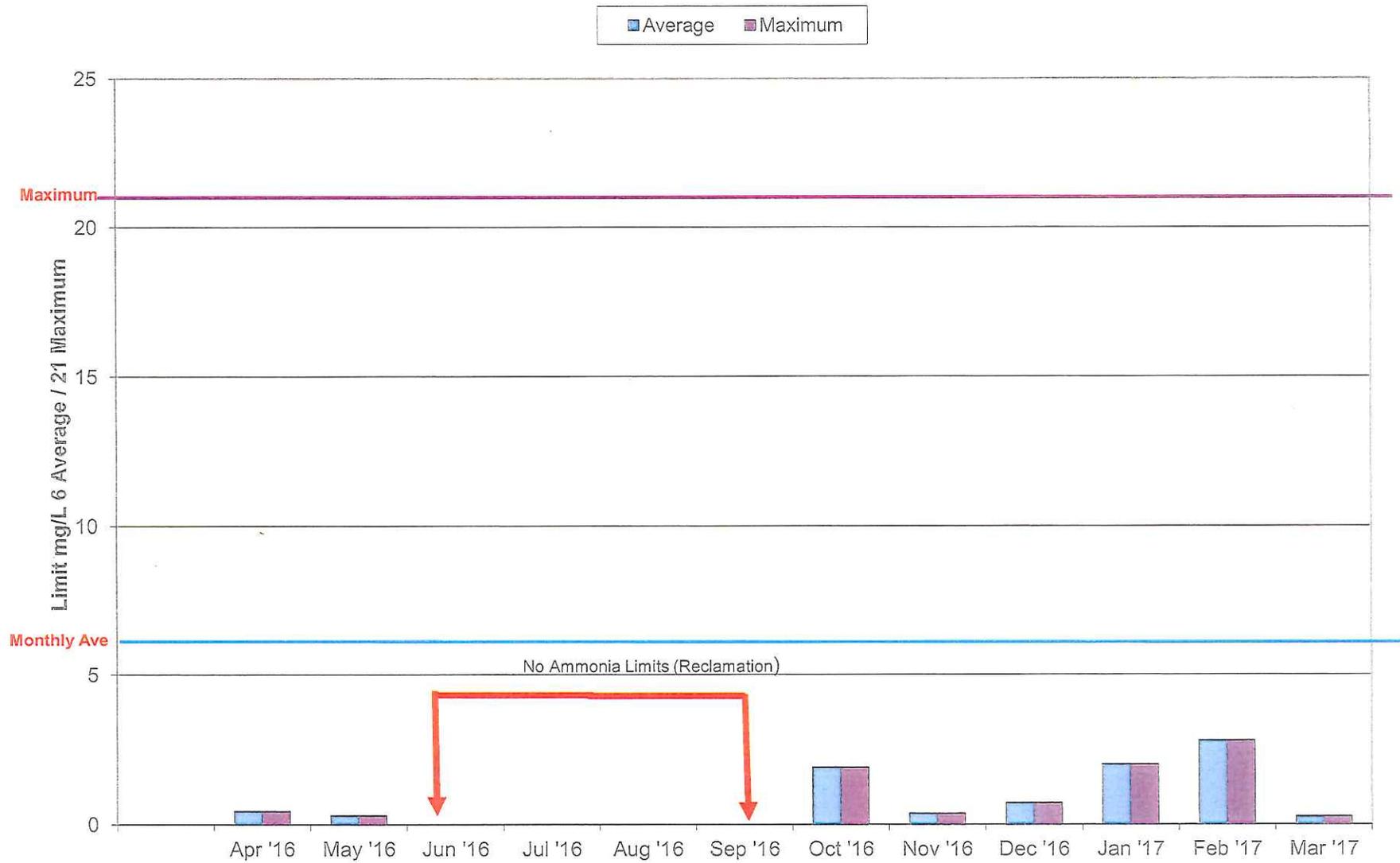




### BOD / TSS Percent Removal

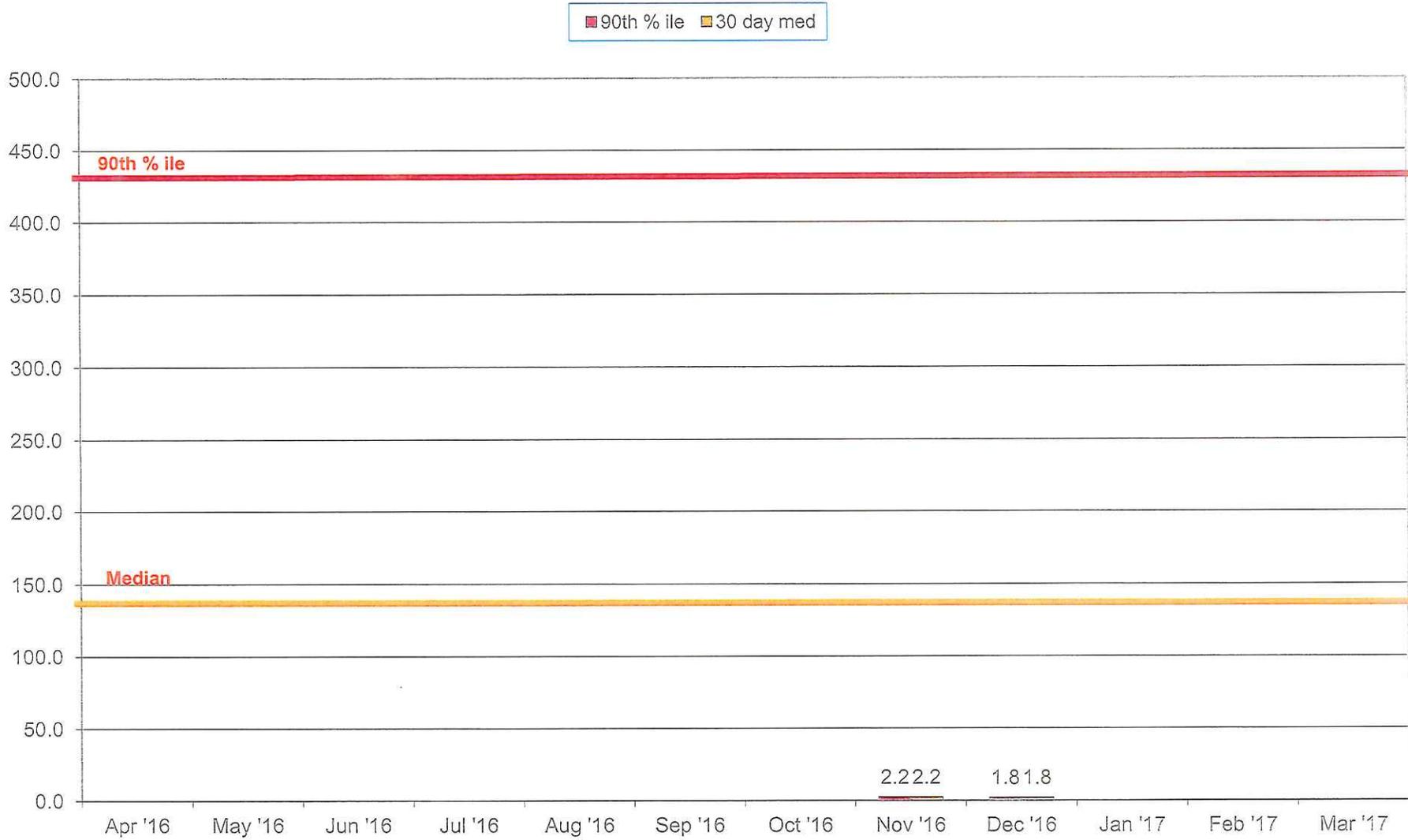


# Effluent Ammonia



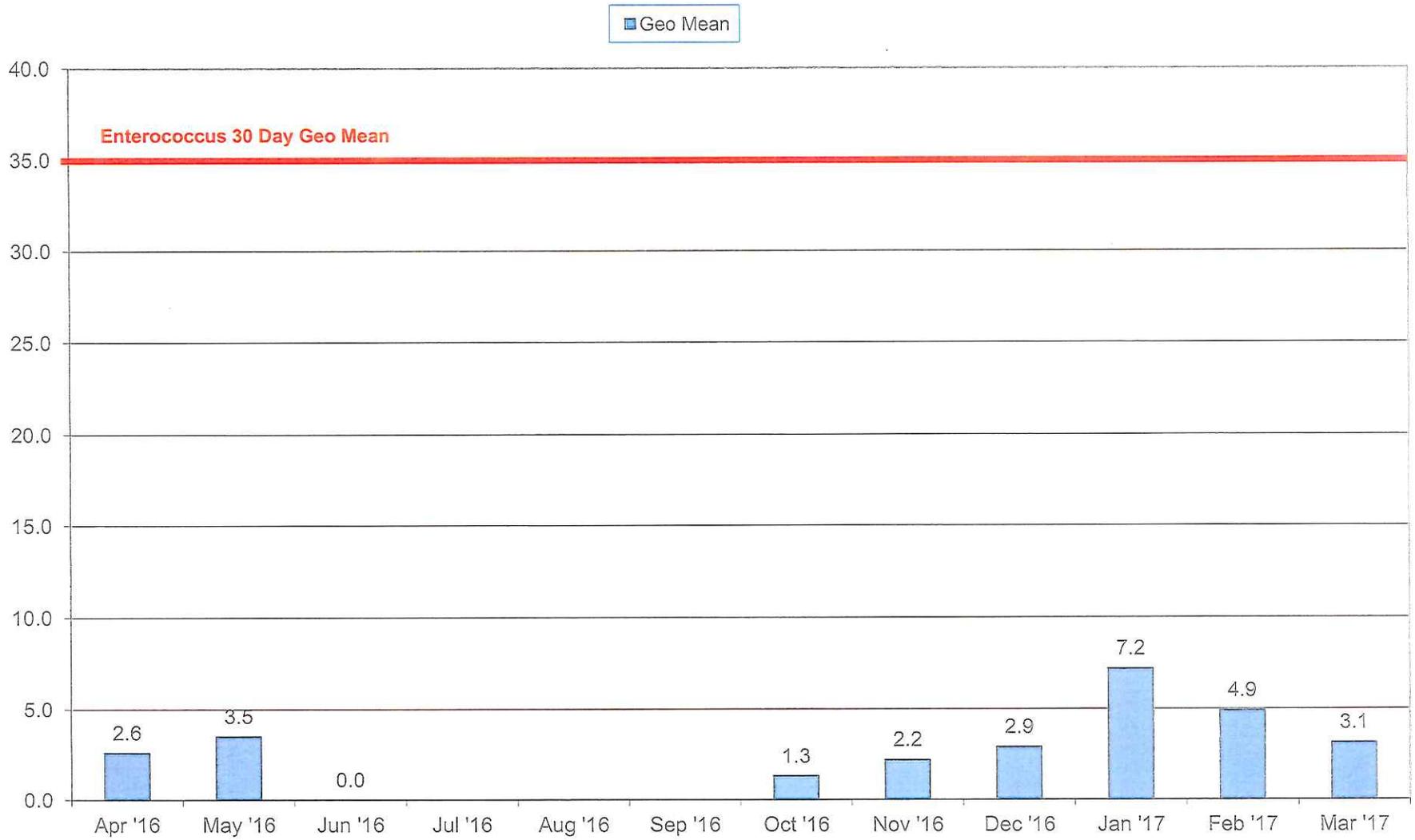
# Disinfection - Fecal Coliform

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



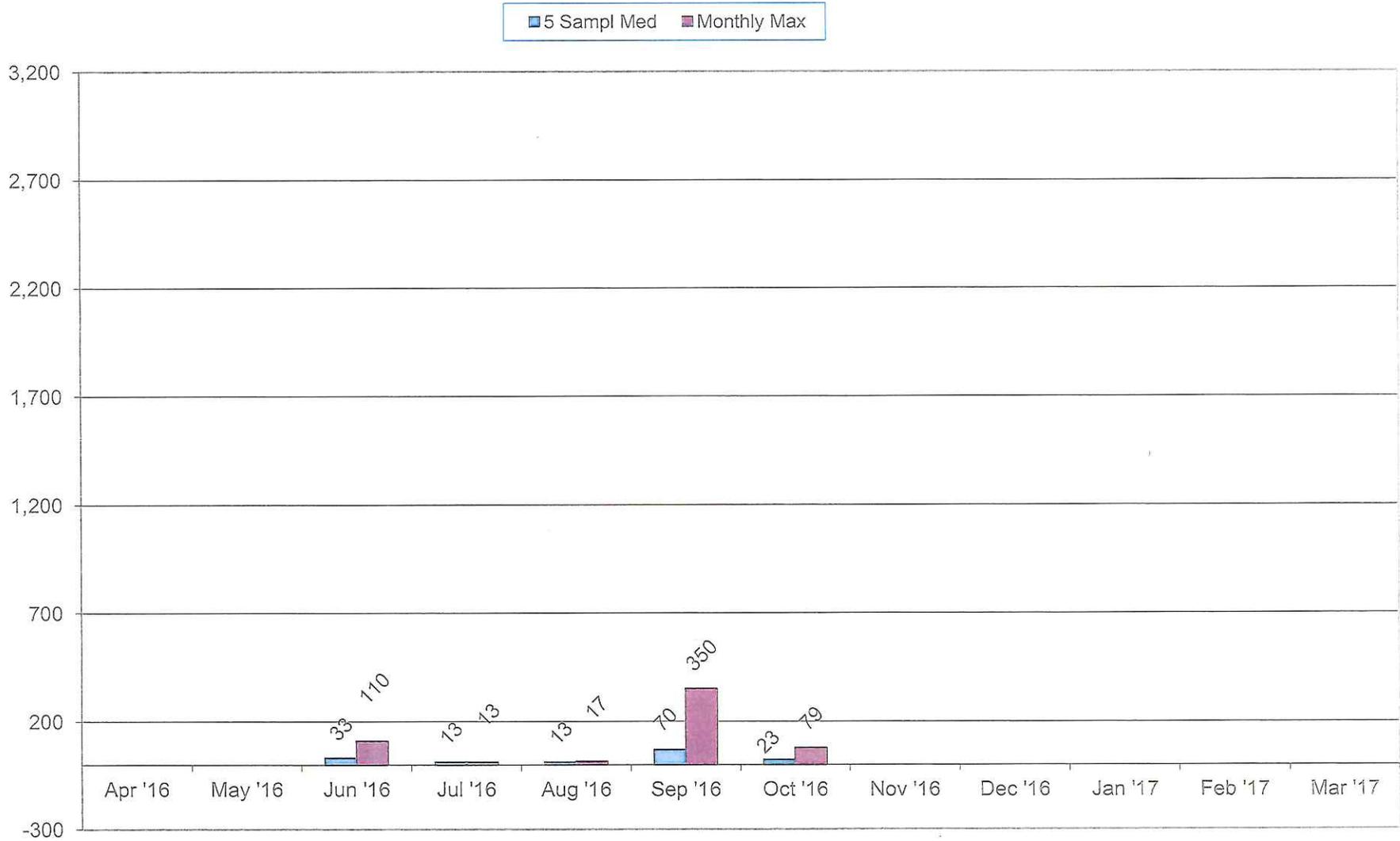
# Disinfection - Enterococcus

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

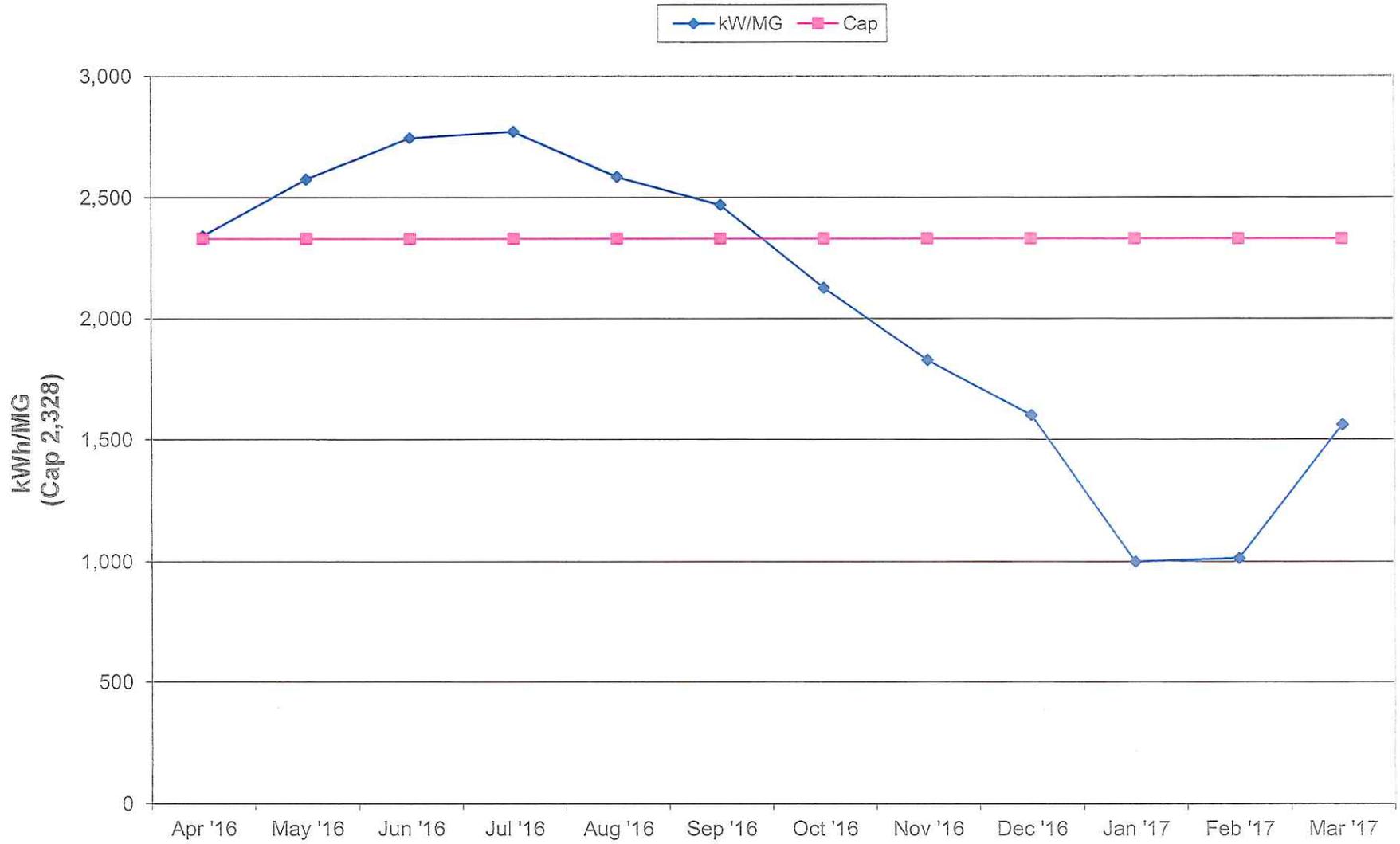


# Disinfection - Total Coliform

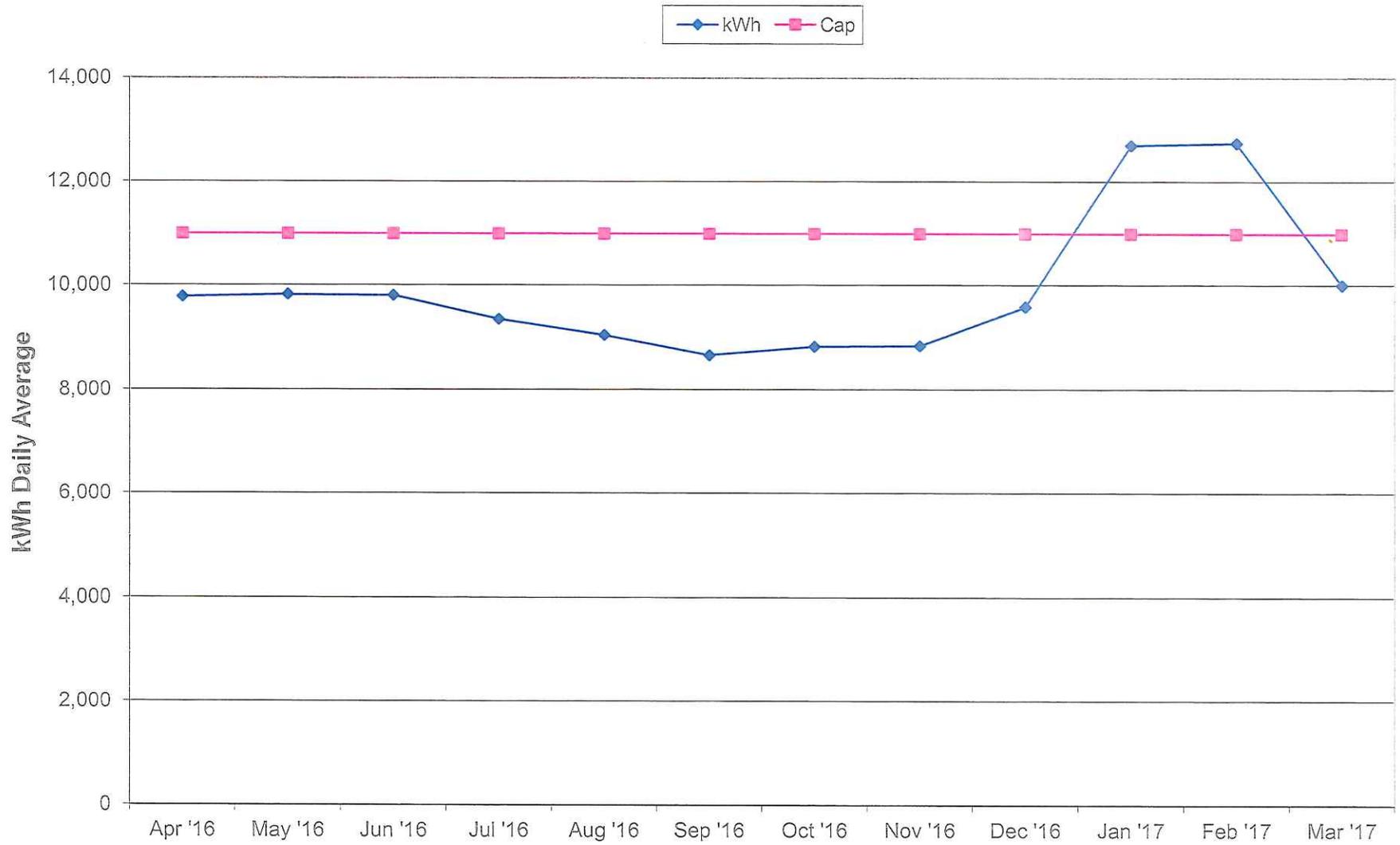
TOTAL COLIFORM LIMITS - WDR  
 5 Sample Median - 240 mpn /100 ml  
 Maximum - 10,000 mpn/100 ml



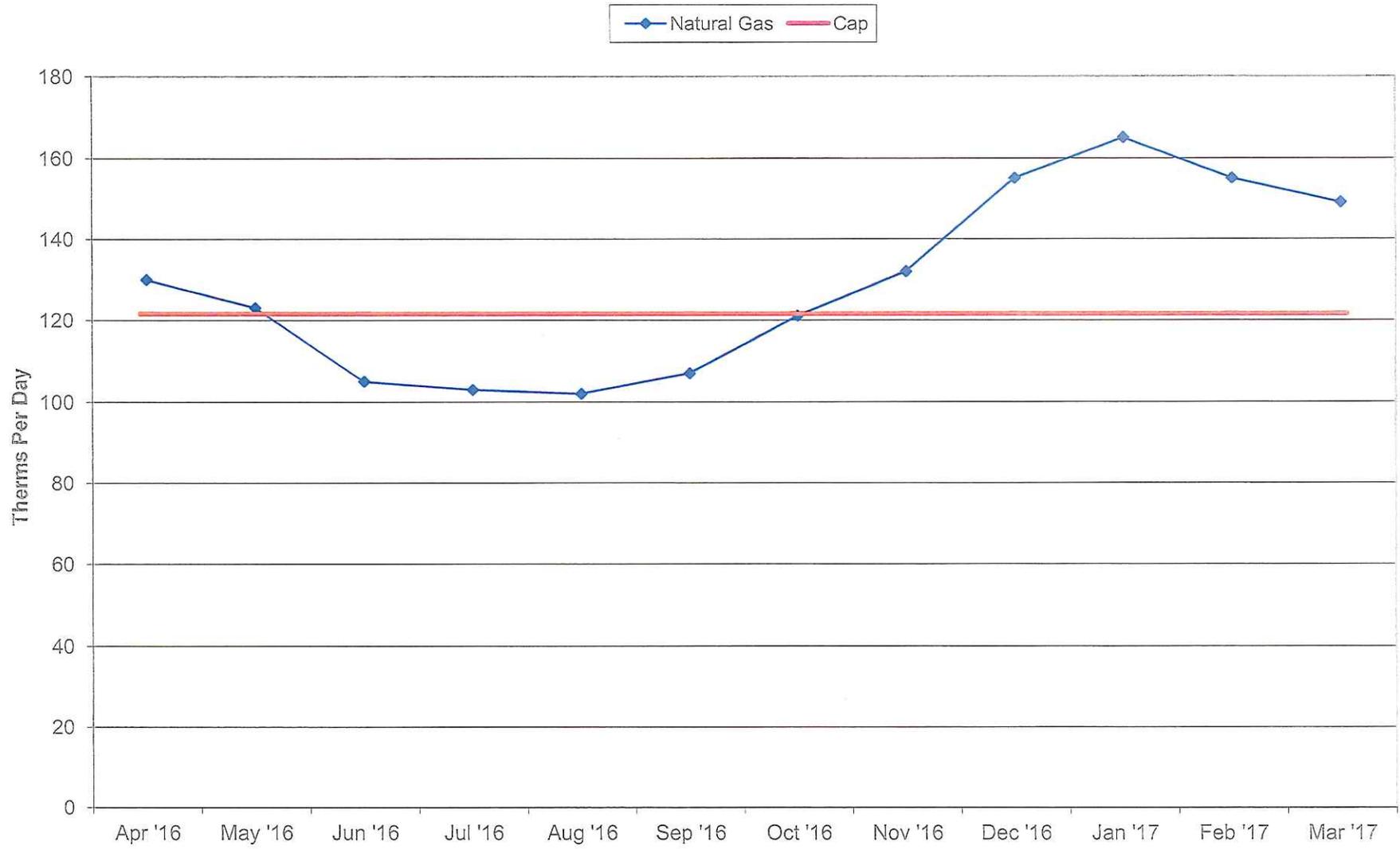
# Energy kWh/MG



# Energy kWh

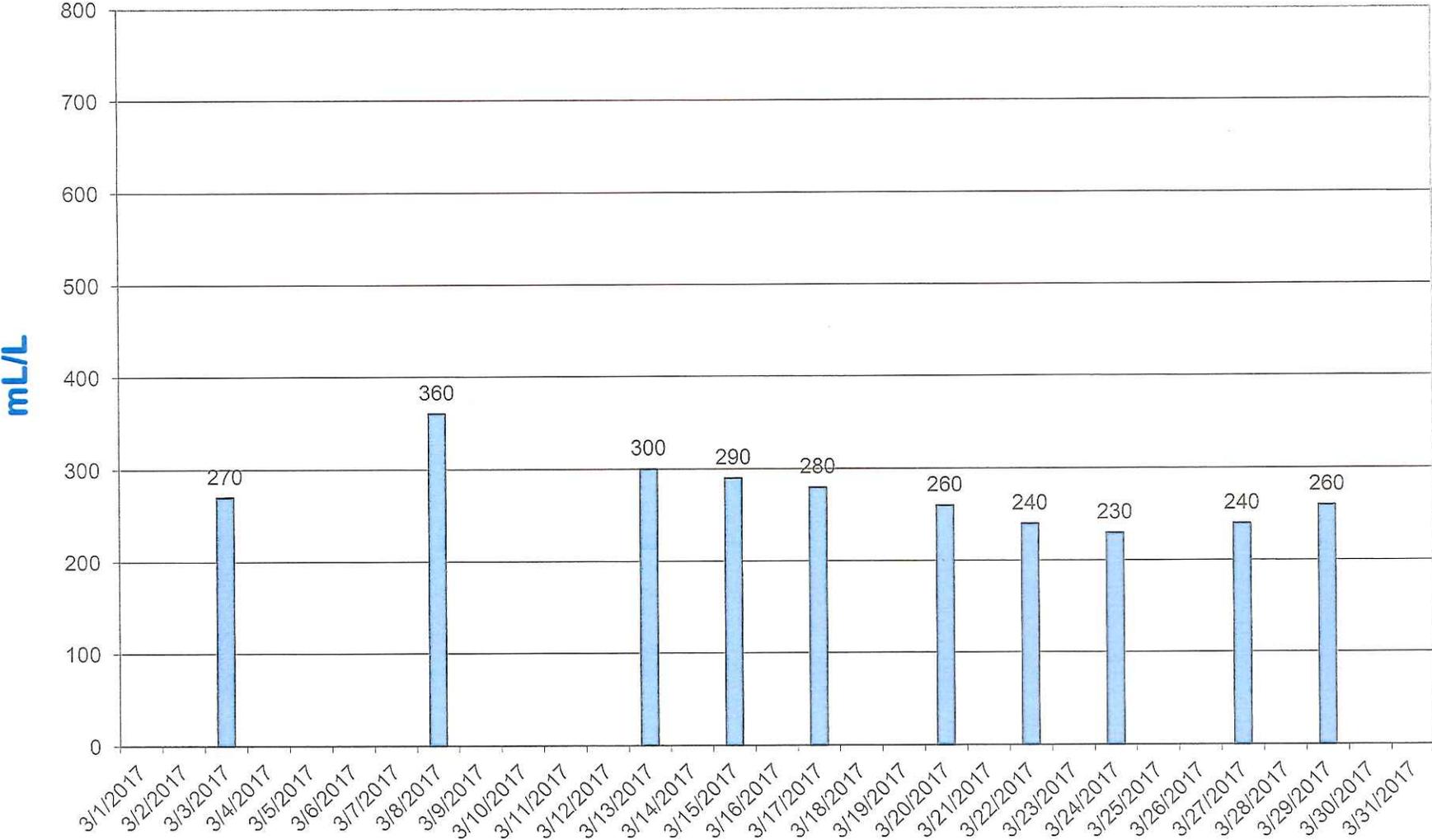


### Natural Gas Use

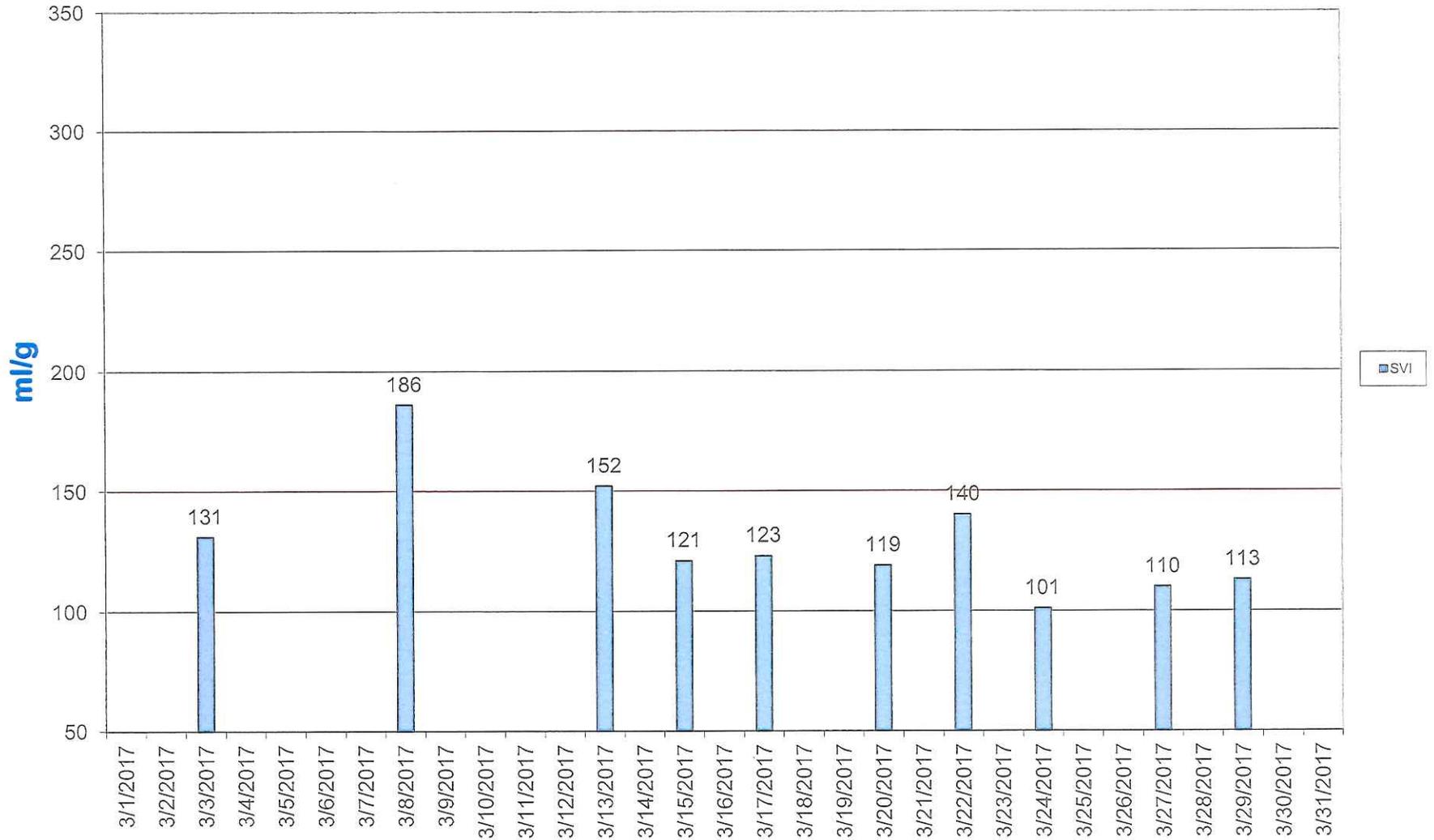


## *5) PROCESS CONTROL DATA / GRAPHS*

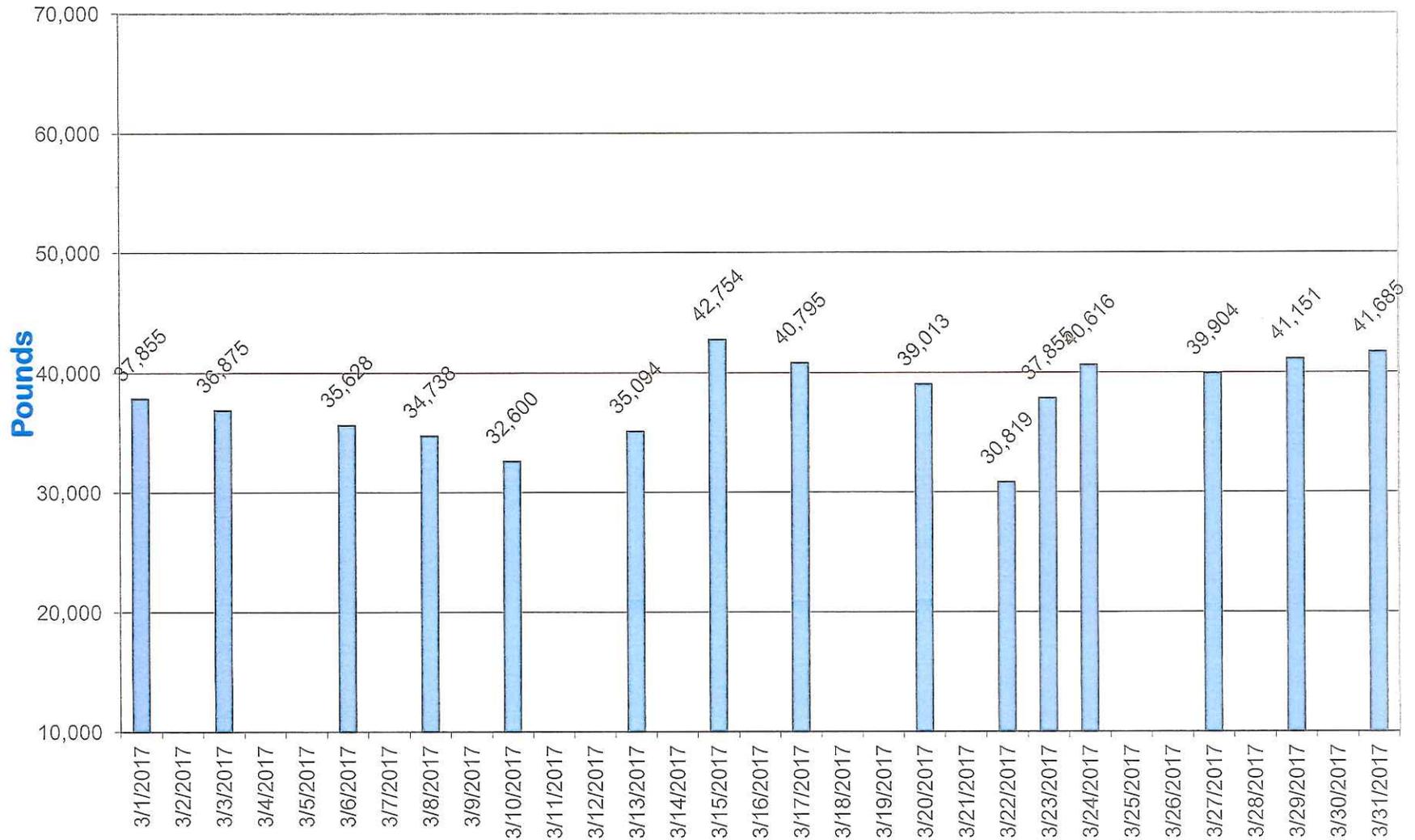
# Settleability



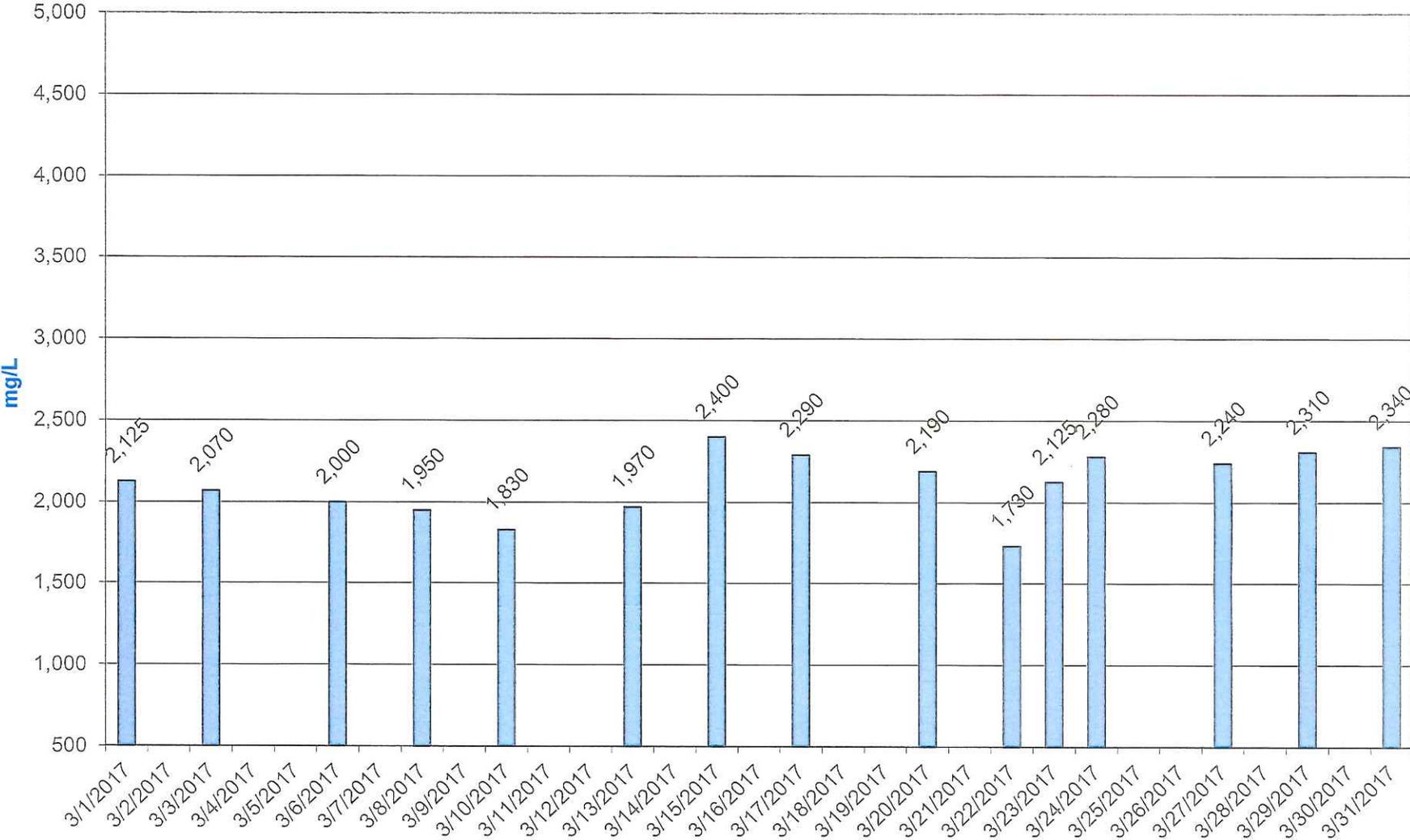
## Sludge Volume Index



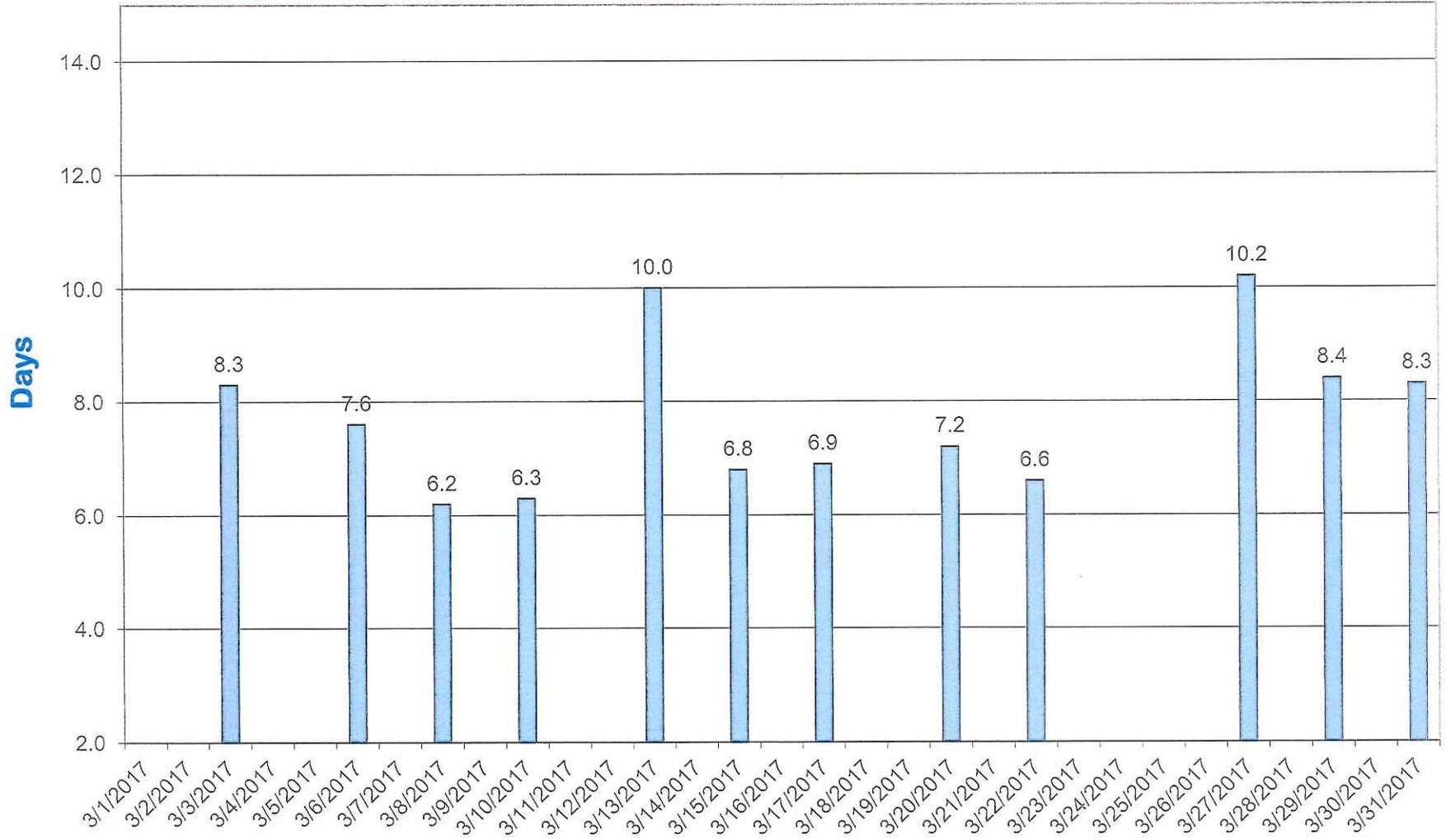
## MLSS Inventory



### MLSS Concentration



# Mean Cell Residence Time

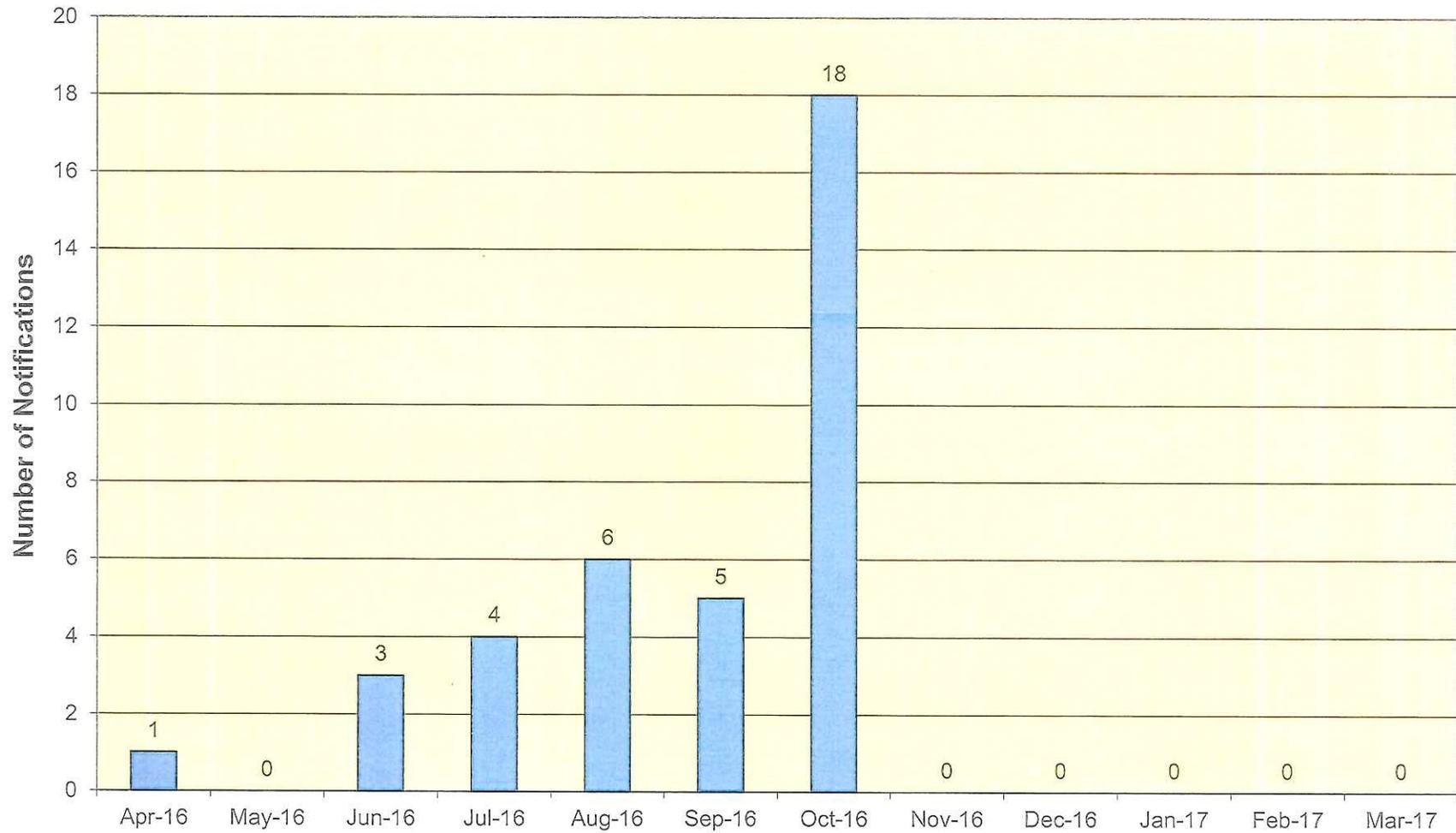


## Process Control Data

	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	F:M Ratio	MCRT	SVI
3/1/2017	6.16		2,125	37,855	0.23		
3/2/2017	6.06						
3/3/2017	5.42	270	2,070	36,875		8.3	131
3/4/2017	6.71						
3/5/2017	7.62						
3/6/2017	7.69		2,000	35,628		7.6	
3/7/2017	6.49						
3/8/2017	6.21	360	1,950	34,738	0.23	6.2	186
3/9/2017	5.83						
3/10/2017	5.82		1,830	32,600		6.3	
3/11/2017	5.54						
3/12/2017	5.47						
3/13/2017	5.66	300	1,970	35,094		10.0	152
3/14/2017	5.48						
3/15/2017	4.89	290	2,400	42,754	0.20	6.8	121
3/16/2017	4.98						
3/17/2017	4.61	280	2,290	40,795		6.9	123
3/18/2017	4.85						
3/19/2017	4.81						
3/20/2017	7.73	260	2,190	39,013		7.2	119
3/21/2017	8.58						
3/22/2017	8.45	240	1,730	30,819		6.6	140
3/23/2017	6.91		2,125	37,855	0.17		
3/24/2017	10.59	230	2,280	40,616			101
3/25/2017	8.28						
3/26/2017	7.56						
3/27/2017	6.61	240	2,240	39,904		10.2	110
3/28/2017	6.72						
3/29/2017	5.77	260	2,310	41,151		8.4	113
3/30/2017	5.87						
3/31/2017	5.37		2,340	41,685		8.3	
Minimum	4.61	230	1,730	30,819	0.17	6.2	101
Maximum	10.59	360	2,400	42,754	0.23	10.2	186
Total	198.74						
Average	6.41	273	2,123	37,825	0.21	7.7	130

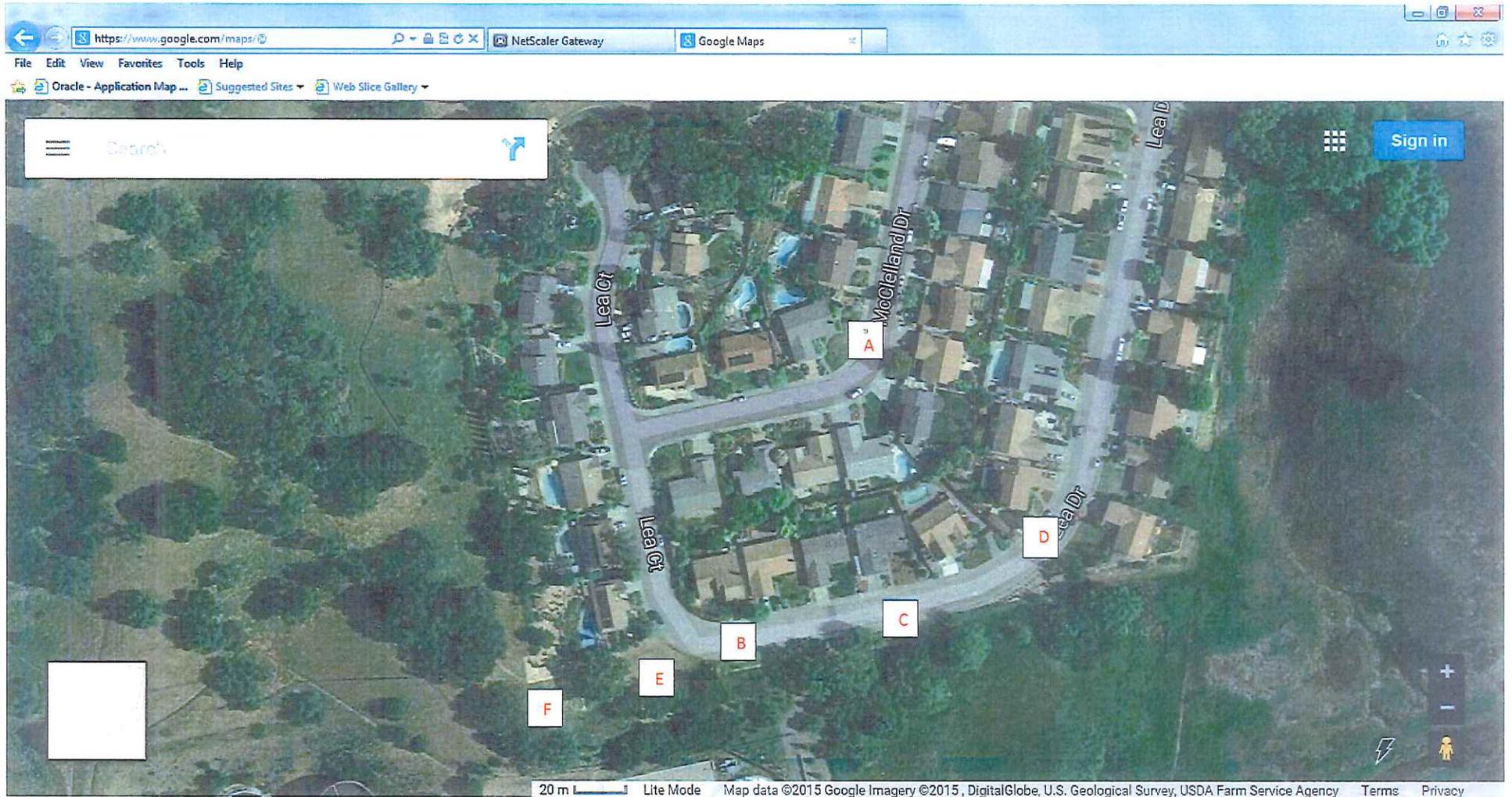
## *6) NEIGHBORHOOD CONTACTS*

## Neighborhood Contacts Received



## *7) JEROME METER READINGS & LOCATIONS*

# NEIGHBORHOOD JEROME METER LOCATIONS – LEA AND McCLELLAND



JEROME METER READINGS - MARCH 2017

Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.001	0.0002	Neighborhood
B: Lea 1	0.000	0.000	0.0000	Neighborhood
C: Lea 2	0.000	0.000	0.0000	Neighborhood
D: Lea 3	0.000	0.000	0.0000	Neighborhood
E: Lea 4	0.000	0.000	0.0000	Neighborhood
F: Lea 5	0.000	0.000	0.0000	Neighborhood

8) *AUTHORIZED ANTICIPATED BYPASS*  
*Closed Out March 16, 2017*



We had previously estimated the ponded water inventory on Sites 2 & 3 to be 147 million gallons (see **Attachment B**). The estimate was conservatively based on observed water levels on the fields with allowances for drainage channels, as well as an additional 10% safety factor.

I estimate at the time of pump shut down we have pumped approximately 156 million gallons, almost 10 million gallons more than our estimated inventory for a safety factor of 15%. Therefore, at this time, we propose transitioning from the Authorized Anticipated Bypass to mode to normal operation of DPS#3.

All laboratory samples and data analyzed to date are well below limits. I will forward the final results as soon as all data is in.

Thank you,  
John Bailey

--

John Bailey  
Project Manager  
Municipal & Commercial Business  
VEOLIA NORTH AMERICA

tel

+1 415 892 1694

/ cell

+1 707 208 4491

500 Davidson Street, Novato, California 94945

[john.bailey@veolia.com](mailto:john.bailey@veolia.com)

[www.veolianorthamerica.com](http://www.veolianorthamerica.com)

Resourcing the world  VEOLIA





Attachment A  
page 1 of 2

March 3, 2017

California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, #1400  
Oakland, CA 94612

Attention: Mr. James Parrish

Re: Anticipated Bypass - Update

The following is an update regarding the Anticipated Bypass, authorized via email, February 21, 2017.

**Background:**

Very heavy rainfall rapidly filled the Districts (Novato Sanitary District or NSD) Reclamation Storage Ponds. The storage ponds are used during our dry (Non-Discharge season).

Initial actions by the Novato Sanitary District was to identify low spots in the levy and build them up and/or sandbag to prevent overtopping and spillage onto adjacent properties.

As heavy rains persisted and water levels in the ponds began to rise it became apparent that more storage would be needed. On February 6, 2017, we requested, and were granted, authority to transfer fully treated effluent from the ponds into the Dedicated Land Disposal (DLD) basin directly adjacent to Pond #2.

On February 13, 2017 it was discovered that the DLD had overtopped a low spot on the South end. Approximately 350,000 gallons of water spilled onto District owned irrigation fields, Site #2.

Notification was made to RWQCB via telephone with a follow-up email to James Parrish. The event was classified and an *Unauthorized Discharge* as outlined by the NPDES permit. Both two hour 5-Day Reporting requirements were met.

**Immediate Steps Taken:**

The initial plan was to impound the tainted water and either evaporate or return it to the DLD for evaporation and/or return to the wastewater treatment plant via the decant pump station.

- In order to ensure that the water did not migrate off site Drainage Pump Station #3 (DPS 3) was turned off and locked out. DPS 3 is used to remove ponded (rain) water from Irrigation Sites #2 & #3 (discharge to Novato Creek).
- A contractor was called in to build up the low spot in the levee.
- Samples were taken at both affected and unaffected locations.

**Conditions Worsen – Change in Plan:**

Intense rains persisted and ponding at Irrigation Sites #2 & #3 became problematic. The water threatened to flood Highway 37 and possibly do damage to the roadway as well as the irrigation fields and other infrastructure.

On February 21, 2017 a call was placed to RWQCB, James Parrish to advise that DPS 3 would have to be placed back in service and we would not be able to impound the tainted water as initially planned.

**Classification Change:**

On February 21, 2017 the classification of the event was changed from *Unauthorized Discharge* to authorized *Anticipated Bypass* (of the outfall) pursuant to NPDES No. CA0037958, Attachment D, page 2 and 3. See Attachment 3.

A new sample plan was developed and implemented in accordance with the *Anticipated Bypass* classification. See Attachment 3.

On February 23, 2017 DPS 3 was placed in service, grab samples were taken and a composite sampler started in conjunction with the pump start. The required sampling will continue until conclusion of the *Anticipated Bypass* event.

All sample results received to date (March 3, 2017) are compliant. A summary of sample results will be sent with the next update.

**Projected Conclusion of *Anticipated Bypass***

I estimate that it will take just over 10 full days (245 hours) of pumping at 10,000 gpm to remove the ponded water from Irrigation Sites #2 & #3. There will be some periods that DPS 3 will be turned off to allow water to migrate from Site #2 to DPS 3 on Site #3. We will continue to monitor and sample (when pumps are running) until the migration of impounded water is complete. When flow of water ceases we will request that the *Anticipated Bypass* be considered complete and sampling for the event terminated. At the time we stop sampling we will also turn off DPS 3 for a period of not less than three days (or longer if not needed).

If you have any questions please feel free to contact me via email [john.bailey@veolia.com](mailto:john.bailey@veolia.com) or phone (707) 208-4491.

Sincerely,



John Bailey  
Project Manager  
Veolia Water West - Novato CA

- Attachment 1 – Email Dated February 13, 2017, "Prohibited Discharge"
- Attachment 2 – Letter Dated February 16, 2017 "Unauthorized Discharge"
- Attachment 3 – Email Dated February 21, 2017 "By Pass Approval and Monitoring"
- Attachment 4 – Google Aerial Image of Reclamation Area with Labels #1
- Attachment 5 – Google Aerial Image of Reclamation Area with Labels #2
- Attachment 6 – Map (Green & Yellow Shading) Includes Ponds, DLD, & Parcels with Acreage

F:\SMR\Special Reports\2017\Anticipated Bypass February 2017 – Update March 3, 2017.doc

Irrigation Site #2	Parcel #	Acres	Sq Ft	MG/Ft	MG/In
	1	22.5	980100	7.331	0.611
	2	23.1	1006236	7.527	0.627
	3	16.1	701316	5.246	0.437
	4	10.2	444312	3.323	0.277
	5	21.7	945252	7.070	0.589
	6	23.4	1019304	7.624	0.635
	7	21.8	949608	7.103	0.592
	8	20.8	906048	6.777	0.565
				4.334	

Irrigation Site #3	Parcel #	Acres	Sq Ft	MG/Ft	MG/In
	31	28.3	1232748	9.221	0.768
	32	26.5	1154340	8.634	0.720
	33	26.8	1167408	8.732	0.728
	34	27.4	1193544	8.928	0.744
	5	28.8	1254528	9.384	0.782
	6	28.8	1254528	9.384	0.782
	7	23.3	1014948	7.592	0.633
	8	30.2	1315512	9.840	0.820
				5.976	

	Inches	Total MG
Site #2	12	52.002
Site #3	12	71.715
Channels and Trenches	10	10.000
	10%	13.372
<b>Total Water Inventory Site 2 &amp; 3 (estimated)</b>		<b>147.089</b>

	gpm/pump	# Pumps	Total gpm	MGD
DPS #3 Capacity	5,000	2	10,000	14.40

Days of pumping required to remove impounded water 10.21  
 Hours of pumping required to remove impounded water 245

	Hours	Days	MG
Run Time as of March 3, 2017	329.3	13.72083	98.79
Run Time as of March 8, 2018 (3-3, plus 96 hrs)	425.3	17.72083	127.59
Run Time as of March 16, 2017 (3-8, plus 72 hrs)	497.3	20.72083	149.19
<b>Total Water Pumped DPS#3 (estimated)</b>	<b>521.3</b>	<b>21.72083</b>	<b>156.39</b>

## 1.0 General:

An equivalent of about seven (7) full time employees (FTE) worked in the Collection System Department (Collections) during the month. The breakdown of staff time for the month in terms of equivalent full-time employee hours utilized, works out approximately as follows:

- 1.4 FTE field workers for sewer maintenance (main line cleaning)
- 1.3 FTE field workers for pump stations' maintenance
- 1.0 FTE field workers for closed circuit television (CCTV) work
- 2.0 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, pump station maintenance, or special activities (for e.g. smoke testing of mainlines), and
- An equivalent of 1.4 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

The sewer system ICOM3 Computerized Maintenance Management System (CMMS) generated 206 work orders for the month. Collections staff completed the 206 work orders, leaving zero work orders outstanding. The 206 maintenance work orders completed resulted in 42,473 feet of sewer pipelines cleaned by staff.

### Root Treatment Preparation:

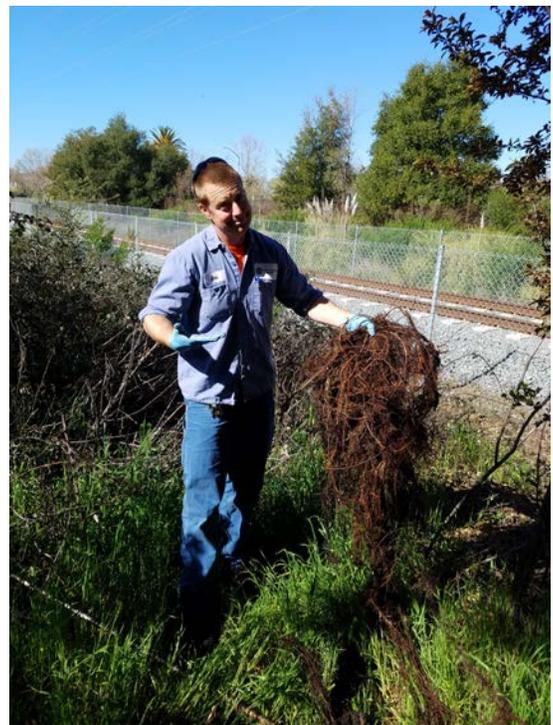
Collections staff began root treatment preparation activities this month, pre-cleaning 14 line segments (as ad-hoc work orders) totaling 2,372 feet of sewer main cleaned. In addition, staff inspected 27,927 feet of sewer main by CCTV, and 13 manholes by visual observation. Currently, staff has scheduled 67,653 feet of sewer mains for root treatment in June.

### CCTV Performance:

All CCTV work completed this month was for condition assessment for this year's root treatment program. COLLECTIONS staff did not conduct any sewer main inspections by push camera in the month.

### CCTV Findings:

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



Root treatment preparation activities

### 3.0 Pump Station Maintenance:

Collections staff conducted 213 lift station inspections this month, of which 89 inspections were generated through the District's JobsCal Plus CMMS system. There are two (2) outstanding work orders for the month - zero correctives and two (2) preventives. A Collection Systems (Pump Stations) Work Order Statistics summary is attached.

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

Staff completed maintenance inspections on six (6) air relief/vacuum valves.

### 5.0 Safety and Training:

General: Collections staff attended five (5) safety tailgate meetings in March.

Specialized training: The Collection Systems Superintendent and Lead Worker participated in two webinars presented by the California Sanitation Risk Management Authority, "Is Your Overflow Emergency Response Plan and Staff Training in Compliance?" and "Is Your Agency Providing Annual SSO Response and Volume Estimation Drills?"

Safety performance: There were no lost time accidents this month, for a total of 2,210 accident free days since the last lost time accident.

### 6.0 Miscellaneous Projects:

Collections staff reconfigured the mounting frame for the ultra-sonic level transducer at the Bel Marin Keys 9 Pump Station. The relocated framework allows for easier pump removal.

Collections staff replaced the impeller on Pump No. 1 at the Vintage Oaks Pump Station No. 1.

An outside contractor continued work this month to install a new Air Relief/Vacuum Valve Vault in place of a junction manhole on the Dry Weather Force Main for the East Hamilton Pump Station. The project is located on the high point of the force main on Hamilton Parkway at Sunny Cove Drive.



Transducer mount relocation at BMK 9 Pump Station

In addition, an outside contractor repaired the end of a stub for a future sewer main on Park Avenue at 4<sup>th</sup> Street. A sink hole developed in the street prompting the work.

### 7.0 Sanitary Sewer Overflows (SSOs):

There were zero (0) sanitary sewer overflows in March.

\*\*\*\*\*

Novato Sanitary District  
Collection System Monthly Report For March 2017 (as of March 31, 2017)

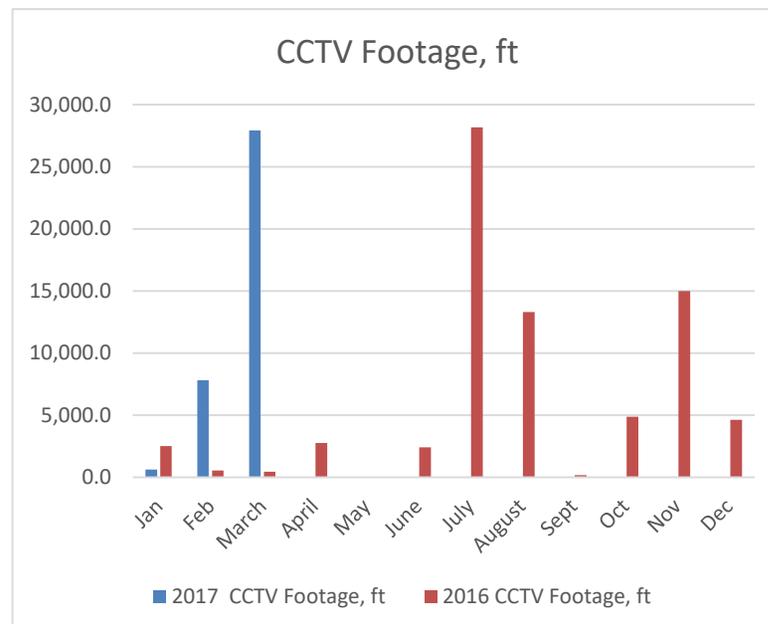
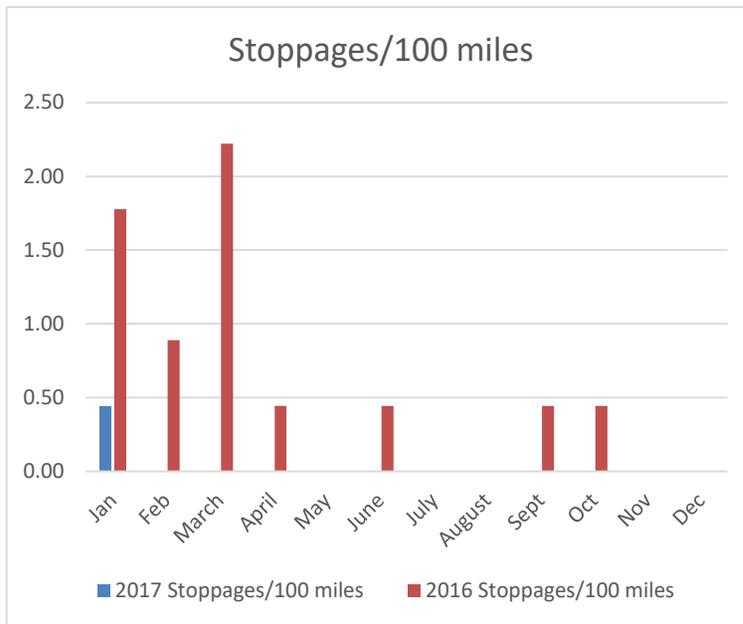
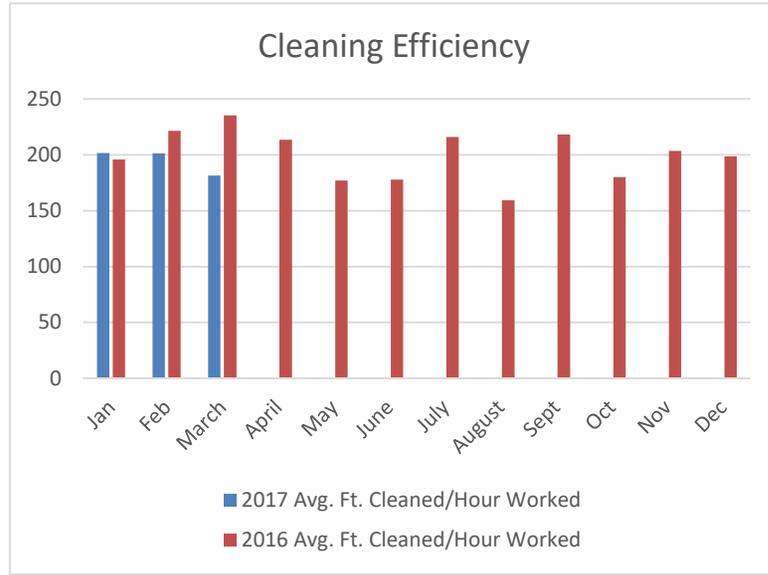
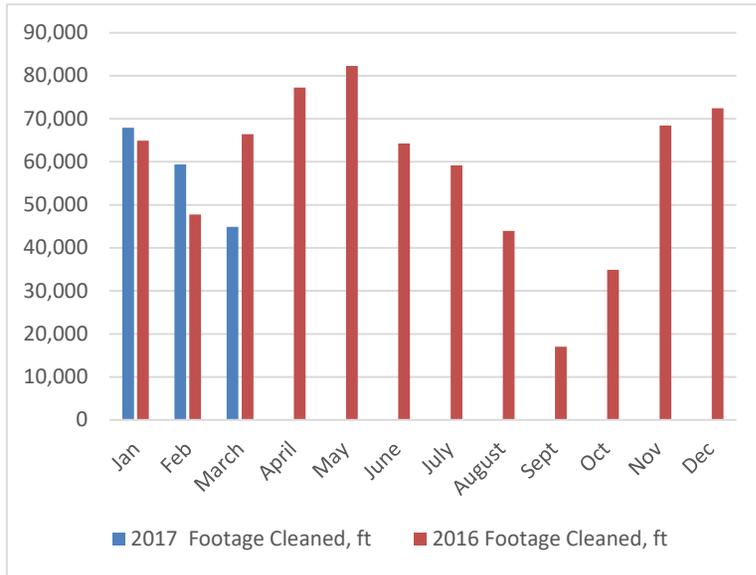
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>A. Employee Hours Worked</b>														
Number of FTEs (main line cleaning), hrs.	1.9	1.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.4
Number of FTEs (other)	2.0	1.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.5
Number of FTEs (CCTV)	0.0	0.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.1
Total, FTEs	3.9	3.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	1.0
Regular Time Worked, (main line cleaning), hrs	337	295	247											
Regular Time Worked on Other, hrs (1)	360	270	362											
Regular Time Worked on CCTV (2)	2	57	182											
Total Regular time, worked, hrs	699	622	791	0	0	0	0	0	0	0	0	0	2,112	176
Total Vacation/Sick Leave/Holiday, hrs	359	295	254										908	303
Vacation/Sick Leave/Holiday, FTEs	2.0	1.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.4
Overtime Worked on Coll. Sys., hrs	0	0	0										0	0
Overtime Worked on Other, hrs (1)	74	11	4										89	30
Overtime Worked on CCTV (2)	0	5	0										5	2
Total Overtime, hrs	74	16	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	94	31
<b>B. Productivity</b>														
<b>1. Line Cleaning</b>														
Rodder Work Orders generated	39	28	6										73	24
Rodder 3208 ft. cleaned	8,884	5,385	1,145										15,414	5,138
Rodder - outside services, ft cleaned	0	0	0										0	0
Flusher Work Orders generated	277	278	214										769	256
Truck 3205V ft. cleaned	8,395	12,037	512										20,944	6,981
Truck 3206V ft. cleaned	50,644	41,951	43,188										135,783	45,261
Flusher - outside services, ft. cleaned	0	0	0										0	0
Total Footage cleaned(3)	67,923	59,373	44,845	NA	NA	NA	NA	NA	NA	NA	NA	NA	172,141	57,380
Work Orders completed	316	306	220										842	281
Work Orders backlog	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0
<b>2. Closed Circuit Television (CCTV)</b>														
Camera Work Orders generated	0	0	0										0	0
CCTV Truck 3126T, ft. videoed	0	7,055	27,927										34,982	11,661
CCTV (hand cam), ft. videoed	612	757	0										1,369	0
CCTV Inspection - outside services, ft. videoed	0	0	0										0	0
Total CCTV footage(3)	612	7,812	27,927	NA	NA	NA	NA	NA	NA	NA	NA	NA	36,351	0
<b>C. Sanitary Sewer Overflows (SSOs)</b>														
Minor (Category III)	1	0	0										1	NA
Major (Category II)	0	0	0										0	NA
Major (Category I)	0	0	0										0	NA
Overflow Gallons	90	0	0										90	NA
Volume Recovered	0	0	0										0	NA
Percent Recovered	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0%	NA
<b>D. Service Calls (non-SSO related)</b>														
Service calls, normal hours, #	9	9	6										18	9
Normal hours S.C. response time, mins (avg.)	10	12	18										40	13
Service Callouts, after hours, #	0	1	0										1	0
After Hours S.C. response time, mins (avg.)	NA	30	NA										30	30
<b>E. Benchmarks</b>														
Average Ft. Cleaned/Hour Worked	202	201	182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	195
Total Stoppages/100 Miles	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	NA
Average spill response time (mins)	0	0											NA	0
Callouts/100 Miles	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Overtime hours/100 Miles	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Overflow Gallons/100 Miles	39	0	0	0	0	0	0	0	0	0	0	-	39	3

(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: 2017 & 2016 Graphs



**Novato Sanitary District**  
**Pump Station Monthly Report For March 2017 (as of March 31, 2017)**

	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>	218	239	276	0	0	0	0	0	0	0	0	0	733	
Number of Employees (FTEs)	1.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.3
Regular Time Worked on Pump Sta	190	203	235										628	
Overtime Worked on Pump Sta	28	36	41										105	
After Hours Callouts	3	3	6										12	
Average Callout response time (mins)	23	28	30										81	27
<b>Work Orders</b>														
Number generated in month	99	95	87										281	94
Number closed in month	99	95	87										281	94
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**PUMP STATIONS  
WORK ORDER STATISTICS  
March 1, 2017-March 31, 2017**

	<b>Open Work Orders Due Prior to 3/1/2017</b>	<b>Open Work Orders 3/1/2017-3/31/2017</b>	<b>Total Open Work Orders</b>
Preventive	4	87	91
Corrective	0	0	0
Total	4	87	91

	<b>Closed Work Orders 3/1/2017 - 3/31/2017</b>
Preventive	89
Corrective	0
Total	89

<b>Total Outstanding Work Orders as of 3/31/2017</b>	<b>2</b>
--	----------

## **1.0 Summary:**

The rancher continued with annual weed abatement work this month. Drainage Pump Station No. 3 continued to pump accumulated rainfall from Sites 2 & 3. Disposal of accumulated rainwater in the storage ponds into the Outfall pipeline was discontinued.

## **2.0 Ranch Operations:**

The rancher completed weed mitigation on Sites 7 & 3. Weed mitigation could not be completed on Site 2 because the parcels were still flooded from the heavy rains during the last two months.

## **3.0 Irrigation Parcels:**

There were no irrigation activities this month.

Drainage Pump Station No. 3 pumped approximately 115 MG of storm water out of Sites 2 & 3 and Drainage Pump Station No. 7 pumped approximately 53 MG of storm water out of Site 7 this month. Most of the accumulated rainfall was pumped out of Site 2 and the parcels are beginning to dry up.

## **4.0 Irrigation Pump Station:**

The Irrigation Storage Ponds dropped 0.4 feet in March due to discharging in the Outfall pipeline and evaporation.

## **5.0 Sludge Handling & Disposal:**

There were no sludge handling activities this month.

**NOVATO SANITARY DISTRICT**  
**Reclamation Facility - Monthly Statistics for Calendar Year 2017, as of February 2017**

	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									-	0.00
Irrigation (MG)		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		0	0	0									-	0.00
Water Circulated through Wildlife Pond (MG)		0	0	0	0	0	0	0	0	0	0	0	-	0.00
Strainer No. 1 Hours													-	0.00
Strainer No. 2 Hours													-	0.00
Pond 1 Gauge @ Beginning of Month	8.1	9.5	9.4											
Pond 1 Gauge @ End of Month	9.5	9.4	9											
Pond 1 Gallons Stored @ End of Month(MG)	74	73	70											
Pond 2 Gauge @ Beginning of Month	8.1	9.5	9.4											
Pond 2 Gauge @ End of Month	9.5	9.4	9											
Pond 2 Gallons Stored @ End of Month(MG)	95	94	90											
Total Irrigation Water Stored	169	167	160	0	0	0	0	0	0	0	0	0		
<b>Drainage Pump Station No. 3</b>														
Drainage Pump No. 1 Hours	427.9	315.2	312.9											
Drainage Pump No. 2 Hours	69.3	123.5	0											
Drainage Pump No. 3 Hours	226.5	0	70.8											
Total Gallons Stormwater Pumped (MG)	217.11	131.61	115.11	0	0	0	0	0	0	0	0	0	463.83	38.65
<b>Drainage Pump Station No. 7</b>														
Drainage Pump No. 1 Hours	50.6	230.1	117.8											
Drainage Pump No. 2 Hours	380.8	532.8	0											
Drainage Pump No. 3 Hours	345.9	0	0											
Total Gallons Stormwater Pumped (MG)	349.79	343	53	0	0	0	0	0	0	0	0	0	746.1	62.18

**NOVATO SANITARY DISTRICT**

**PROPOSED SCHEDULE FOR APPROVAL OF 2017-19 PRELIMINARY AND FINAL BUDGET, APPROPRIATIONS LIMIT, AND SEWER SERVICE CHARGES**

- April 10, 2017      Regular Board Meeting: Receive schedule for adoption of 2017-19 Preliminary and Final Budget, and Appropriations Limit.
- April 14, 2017      First three quarters of revenues and expenditures report for 2016-17; preliminary estimate of annual expenditures for 2016-17; and fill in column for new budget projections goes to supervisors for their review.
- April 28, 2017      Budget projections from supervisors due to Finance Officer.
- May 12, 2017      Department budgets for 2017-18 and 2018-19 to General Manager-Chief Engineer for review.
- May 22, 2017      Regular Board Meeting: Budget workshop on updated Capital Improvements Program (CIP) and 2017-19 Preliminary Budget. Set date for public hearing on sewer service charges and collection on tax rolls.
- June 12, 2017      Initial presentation of 2017-19 Preliminary Budget. Review Annual Operating and Capital Improvements Program (CIP) Budgets.
- June 12, 2017      Publish first public hearing notice in Marin I.J.
- June 19, 2017      Publish second public hearing notice in Marin I.J.
- June 26, 2017      Regular Board Meeting: Board adoption of 2017-19 Preliminary Budget. Public Hearing on 2017-18 sewer service charges and collection on County of Marin tax rolls.
- July 3, 2017      Deadline to provide sewer service charge information to County of Marin.
- July 29, 2017      State Department of Finance provides growth factors for calculation of the District's 2017-18 appropriations limit.
- August 14, 2017      Regular Board Meeting: Board establishes 2017-18 appropriations limit, approves Final Budget, and adopts resolution fixing tax allocation for 2017-2018.

Public Hearing and Service Charge Ordinance Noticing Procedures

Hearing Notice published once a week for two successive weeks with at least 5 days intervening between the respective publication dates. First publication to be at least 14 days prior to the date set for hearing. (Publish in Marin IJ)  
Ordinance to be published once in the IJ and posted in 3 public places for one week, to take effect upon the conclusion of the hearing.