

NOVATO SANITARY DISTRICT

Meeting Date: March 18, 2013

The Wastewater Operations Committee of Novato Sanitary District will hold a meeting at 2:00 PM, Monday, March 18, 2013 at the District offices, 500 Davidson Street, Novato.

AGENDA

1. AGENDA APPROVAL:

2. 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 Committee at this time as a result of any public comments made.

3. APPROVAL OF MEETING MINUTES FOR FEBRUARY 19, 2013:

4. WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR FEBRUARY 2013:

- a. Treatment Plant Operation and Maintenance Report.
- b. Odor control and landscaping progress report.

5. COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR FEBRUARY 2013:

- a. Collection System Operation and Maintenance.
- b. Pump Station Operation and Maintenance.

6. RECLAMATION FACILITY REPORT FOR FEBRUARY 2013

- a. Reclamation Facility Operation and Maintenance Report.

7. ADJOURNMENT:

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.

Materials that are public records and that relate to an open session agenda item will be made available for public inspection at the District office, 500 Davidson Street, Novato, during normal business hours.

February 19, 2013

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 2:00 p.m., Tuesday, February 19, 2013, at the District Office, 500 Davidson Street, Novato.

MEMBERS PRESENT: NSD Board Members William Long and Jerry Peters.

STAFF PRESENT: Beverly James, Manager-Engineer
Tim O'Connor, Collection Systems Supervisor
Steve Krauthem, Field Services Superintendent
John Bailey, Project Manager, Veolia Water
Julie Swoboda, Administrative Secretary
(Sandeep Karkal, Deputy Manager-Engineer, was absent.)

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

APPROVAL OF MEETING MINUTES FOR JANUARY 22, 2013: The January 22, 2013 minutes were approved as written.

WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR JANUARY 2013:

- Treatment Plant Performance Report, Maintenance Report and Safety & Training: John Bailey, Plant Manager, Veolia Water, reported on the treatment plant performance for the month of January. He stated that there were no permit exceedances, violations or excursions and noted that January flows were at dry weather patterns. Mr. Bailey reported on the key events at the Novato treatment facility, the Ignacio transfer pump station, the recycled water plant and the lagoons. He stated that Veolia employees have been accident free for a total of 974 days/43,830 hours.

Mr. Bailey reported that Veolia continues to take Jerome Meter readings in the Lea Drive neighborhood and within the treatment plant. He reviewed the treatment plant performance graphs and reported that there were only five outstanding work orders as of February 1st.

COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR JANUARY 2013:

Tim O'Connor, Collections System Superintendent, discussed the Collections System Monthly Report for January 2013. He reported that the crew cleaned a total of 40,034 feet of sewer pipeline and completed 104 of 107 maintenance work orders which were generated in January. He discussed pump station maintenance and noted that approximately 231 lift station inspections were conducted.

Mr. O'Connor stated that there were two sanitary sewer overflows in January, noting that an approximate total of 2,200 gallons were released and 880 gallons were recovered. He stated that one overflow was caused by root intrusion and one by structural failure.

Mr. O'Connor stated that safety performance for his department was excellent with a total of 685 accident-free days until January 31st when one lost time injury occurred.

Mr. O'Connor discussed pump station rehabilitation and stated that as part of the District's continuing multi-year Pump Station Rehabilitation Project, construction started on Bel Marin Keys (BMK) pump station #9 on January 7th. He noted that this pump station along with Hangar Ave and BMK pump station #10 remains the responsibility of the contractor, W.R. Forde, until the project is completed.

RECLAMATION FACILITY REPORT FOR JANUARY 2013:

Steve Krautheim, Field Services Superintendent presented the Reclamation Facility report. He stated that there were no ranch operation and no irrigation activities for the month on either sites. He noted that the heavy rains which flooded the majority of Site 2 have receded. He stated that Caltrans had been asked to clean the ditch along Highway 37 but stated that the area was too wet.

ADJOURNMENT: There being no further business to come before the Committee, the meeting adjourned at 2:40 p.m. The next Wastewater Operations Committee meeting will be held on Monday, March 18th.

Respectfully submitted,

Beverly James
Manager-Engineer

Julie Swoboda, Recording



March 12, 2013

Ms. Beverly James
Manager - Engineer
Novato Sanitary District
500 Davidson Street
Novato, CA 94545

Subject: Veolia Water Operations Report – February 2013

Dear Ms. James:

We are pleased to provide this updated activity report for February 2013.

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

Regards,

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

John Bailey
Project Manager

**MONTHLY OPERATIONS REPORT
February 2013**

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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TREATMENT PLANT PERFORMANCE SUMMARY: February 2013:**Bay Discharge**

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	4.59	5.00	N/A	N/A
Max Peak Hour, MGD – Daily (Dry Weather)	N/A	8.00	N/A	N/A
Influent BOD ₅ , lb/day (month ave/max)	11,174	14,354	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	14,138	20,999	N/A	N/A
Effluent BOD ₅ , mg/L (monthly ave/weekly max)	12	13	30	45
Effluent TSS, mg/L (monthly ave/weekly max)	10	13	30	45
Effluent BOD ₅ - % Removal, Minimum	96	N/A	85	N/A
Effluent TSS - % Removal, Minimum	98	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	0.87	2.90	6	21
pH, su (min / max)	7.0	7.2	6.5	8.5
Enterococcus, mpn (30 day geo mean)	6.4	N/A	35	N/A
Fecal Coliform, mpn (30 day median)	22.5	N/A	140	N/A
Fecal Coliform, mpn (90 th percentile)	50	N/A	430	N/A
Total Permit Exceedances (NPDES)	0			

NA – Not Applicable

Discussion of Violations / Excursions: NONE

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

February flow remains low as a dry weather pattern continues.

Novato

- Routine rounds, readings and maintenance
- Plant is in Bay Discharge mode
- Installed new electrical service for sample pump at UV System.
- Installed new weather proof electrical connections for effluent sampler
- Replaced seal water sight glass on Digested Sludge Pump #2
- Primary Clarifier #1 placed in service
- UVT meter interface repaired

Ignacio Transfer Pump Station

- Routine rounds, readings, and maintenance
- Removed plug in Influent Pump #3

Recycled Water Plant

- Performed plant rounds
- Topped off Plum Street Reservoir 2/19/13 with recycled water as requested by North Marin Water District (NMWD)

Lagoons

- Performed daily checks and made adjustments accordingly

ADMINISTRATION:

- Electronic Self Monitoring Report for January 2012, submitted on 2/27/13

SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTF completed on 2/6/13
- Five Minute Tailgate training is held daily with the O&M staff.
- No safety incidents for the month of February 2013.
- Accident Free: 6/1/10 – 2/28/13: 1,002 days / 45,090 hours.
- Safety Training:
 - Asbestos Awareness
 - Personal Protective Equipment
 - Behavioral Observation Safety
- SOP Review: Ignacio Pump Station Equalization Basin Operation
- SOP Review: Septage Receiving Station
- SOP Review: Pump Station Daily Inspection
- SOP Review: Ignacio Monthly Valve Exercise
- SOP Review: Operations Plan for Recycled Water Facility

ODORS:

- Jerome Meter (H2S) readings performed in neighborhood and within treatment plant.

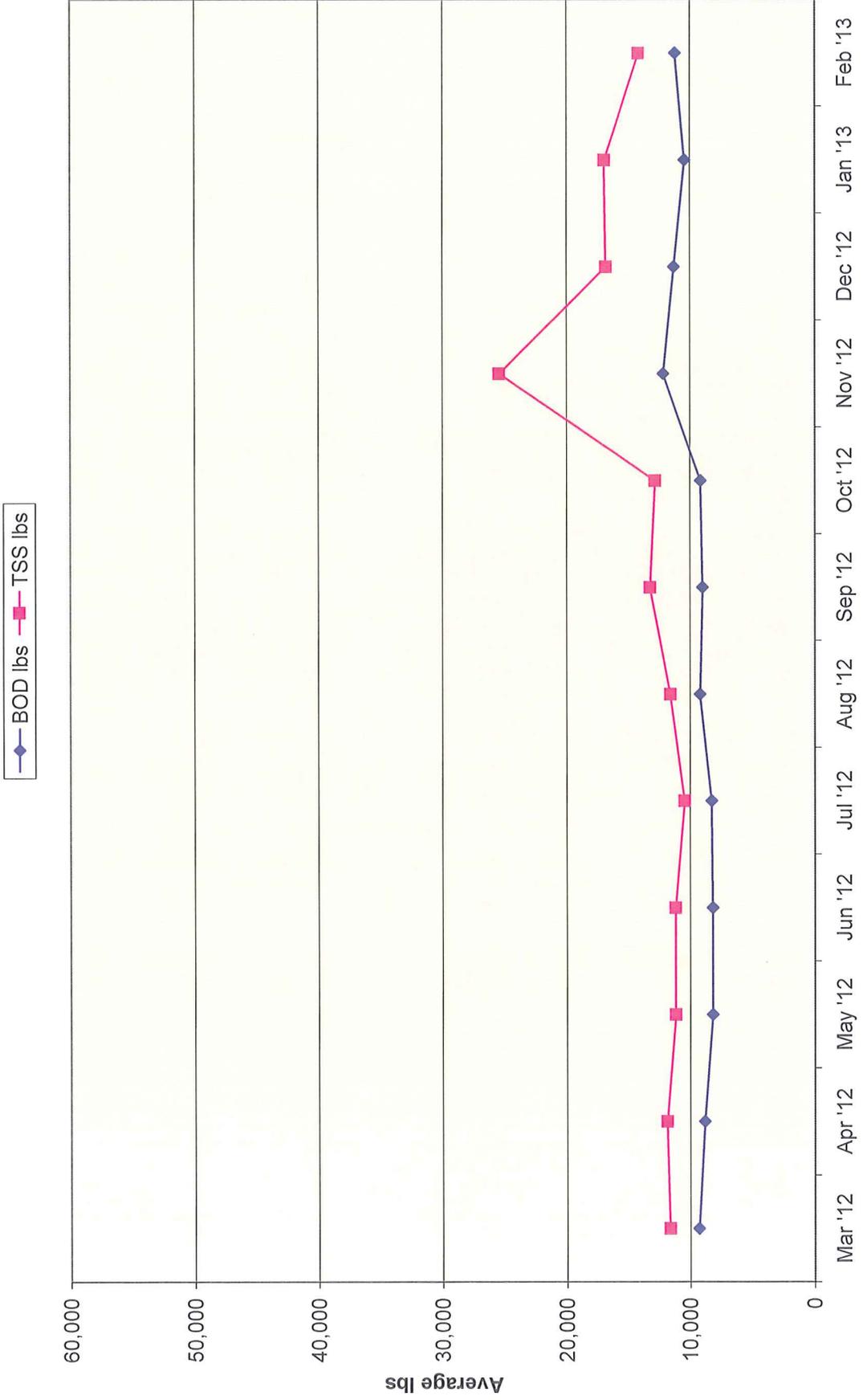
MISCELLANEOUS

- Process Control Management Plan (PCMP) meetings held regularly

Veolia Support Staff On/Off Site (Various Times)

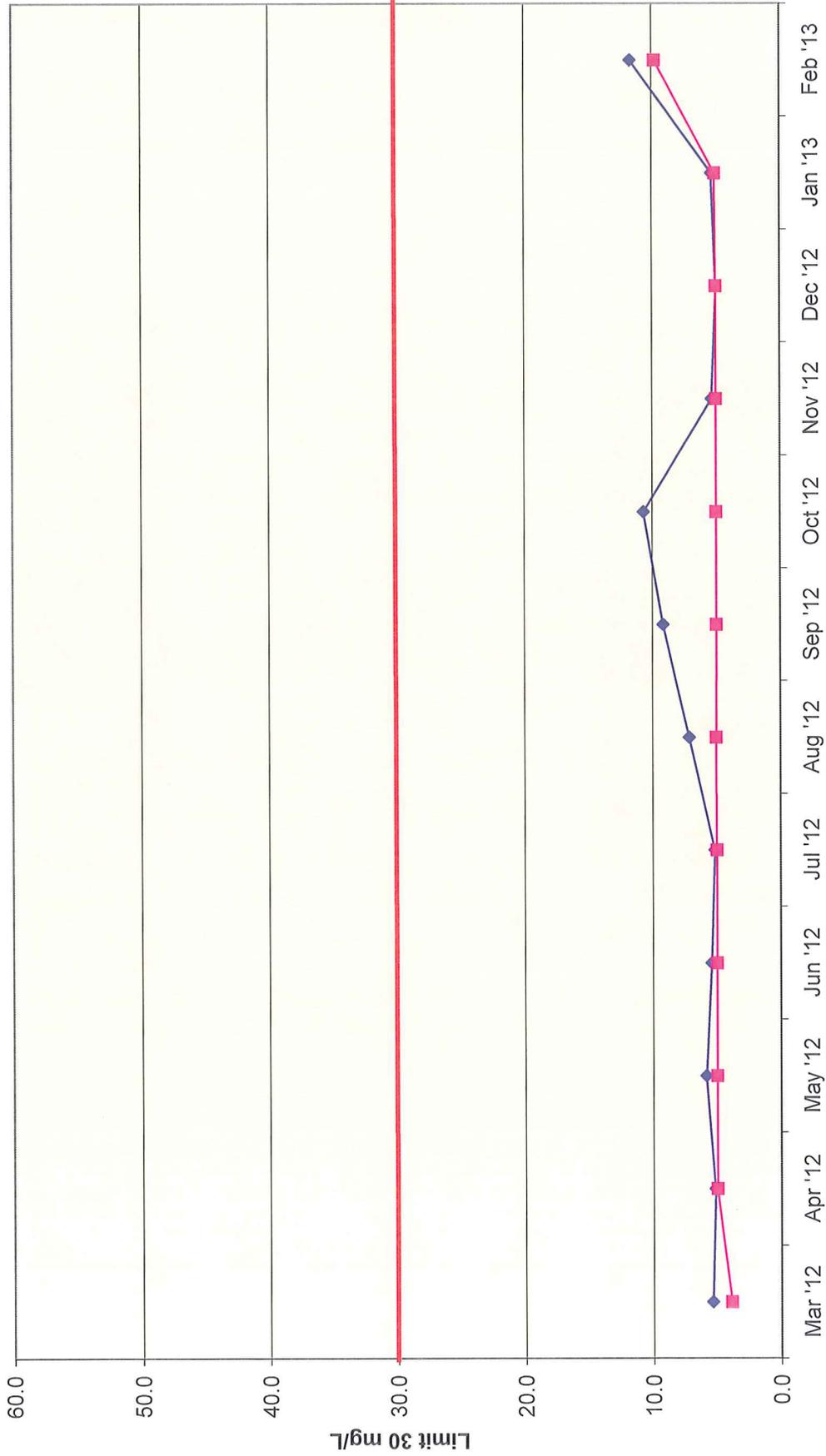
John O'Hare	Technical Support
Chris McAuliffe	District Manager
John Herron	Northern California Area Manager
Bryce Behnke	Technical Support via conference call & web exchange
Brian Exberger	Electronic Operations and Maintenance Manual Development
Jeremiah Danielson	Environmental, Health, and Safety – Confined Space Training
Mel Demsky	Regional Director of Asset Management
Dan Brown	Asset Manager

Influent Load BOD / TSS lbs



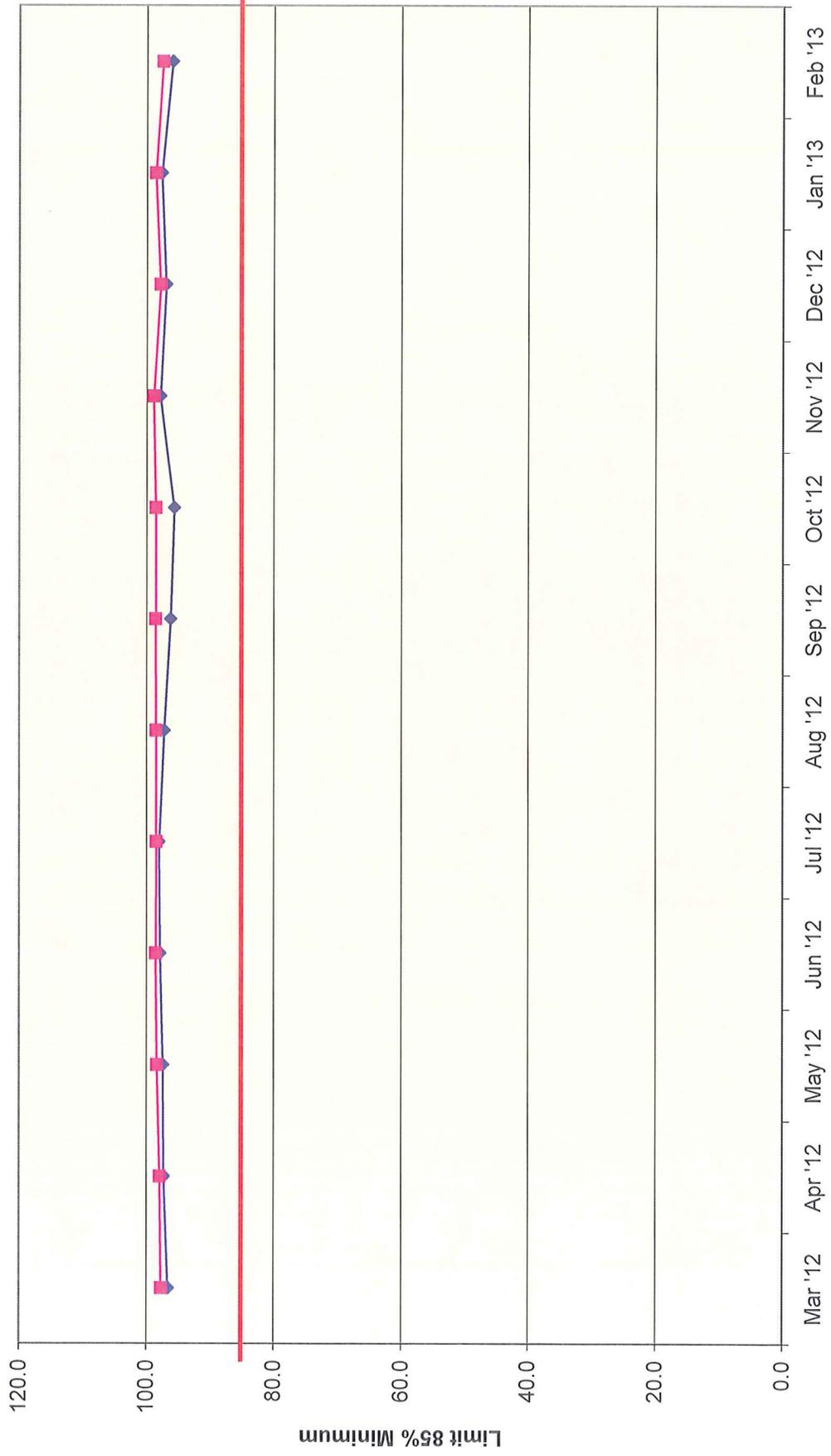
Effluent BOD / TSS Concentration

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

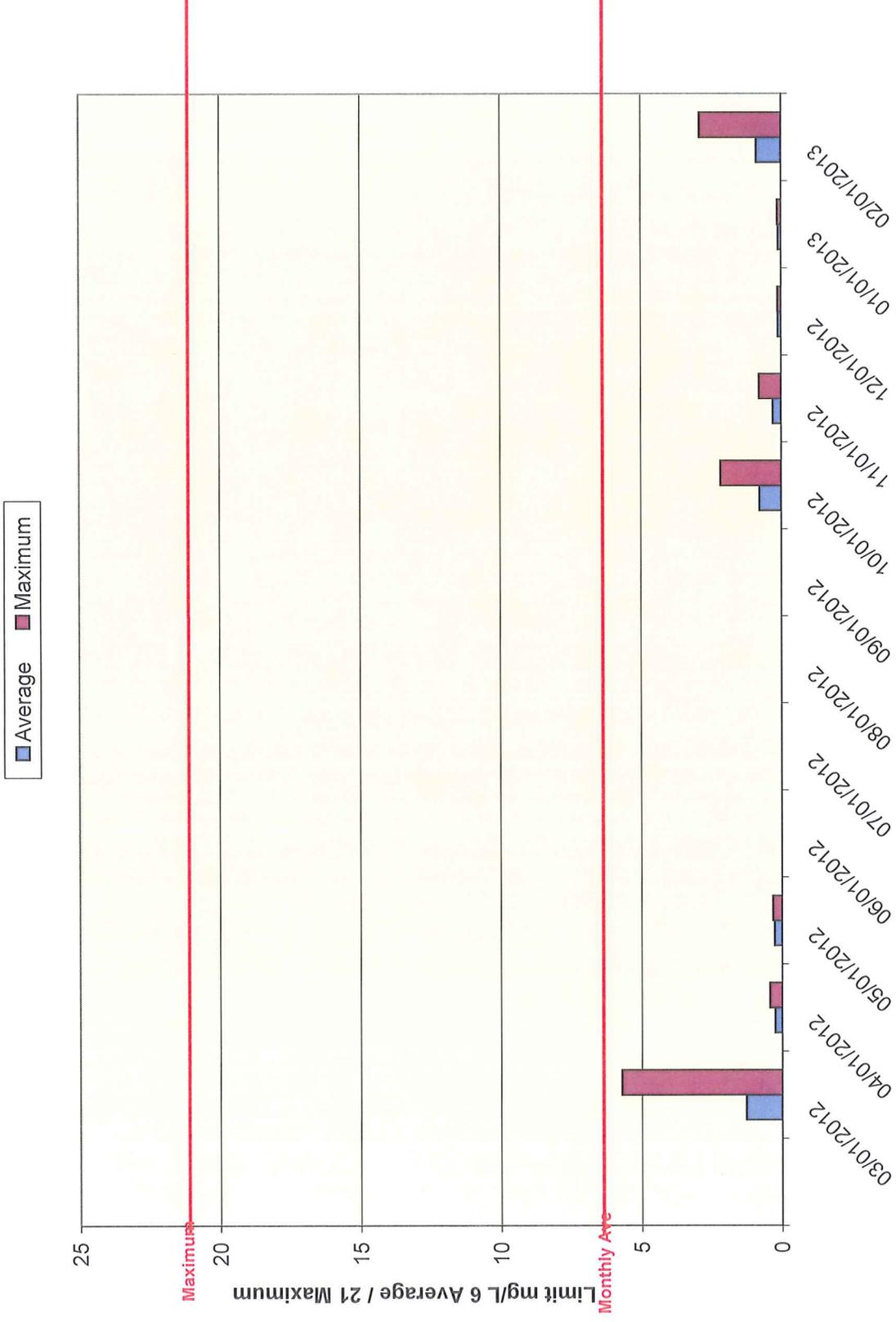


BOD / TSS Percent Removal

—◆— BOD —■— TSS



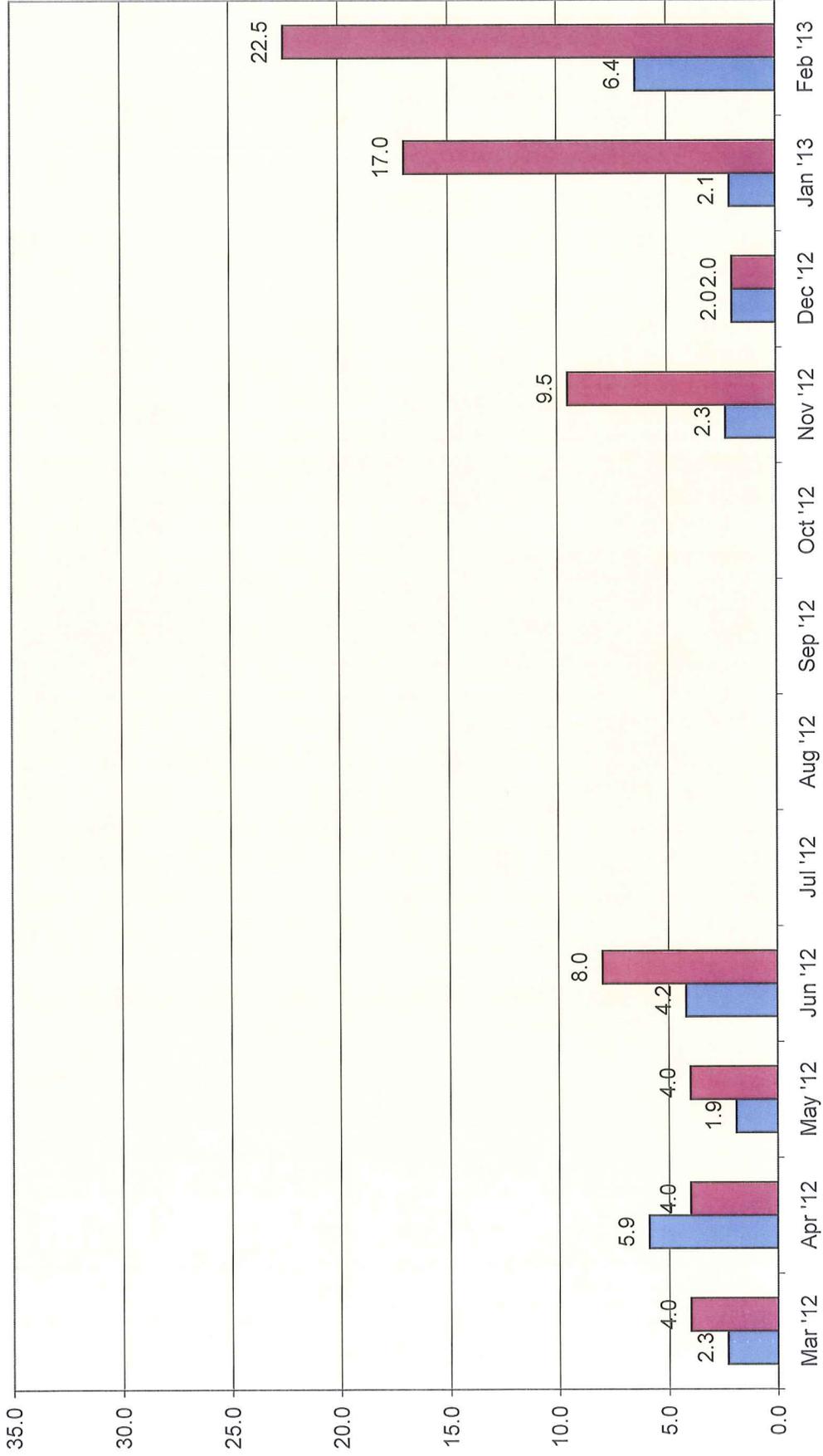
Effluent Ammonia



Disinfection

LIMITS - NPDES
 Entero 30 day geo mean 35 mpn /100ml
 Fecal 140 mpn monthly median
 Fecal 430 mpn 90th percentile 30 day

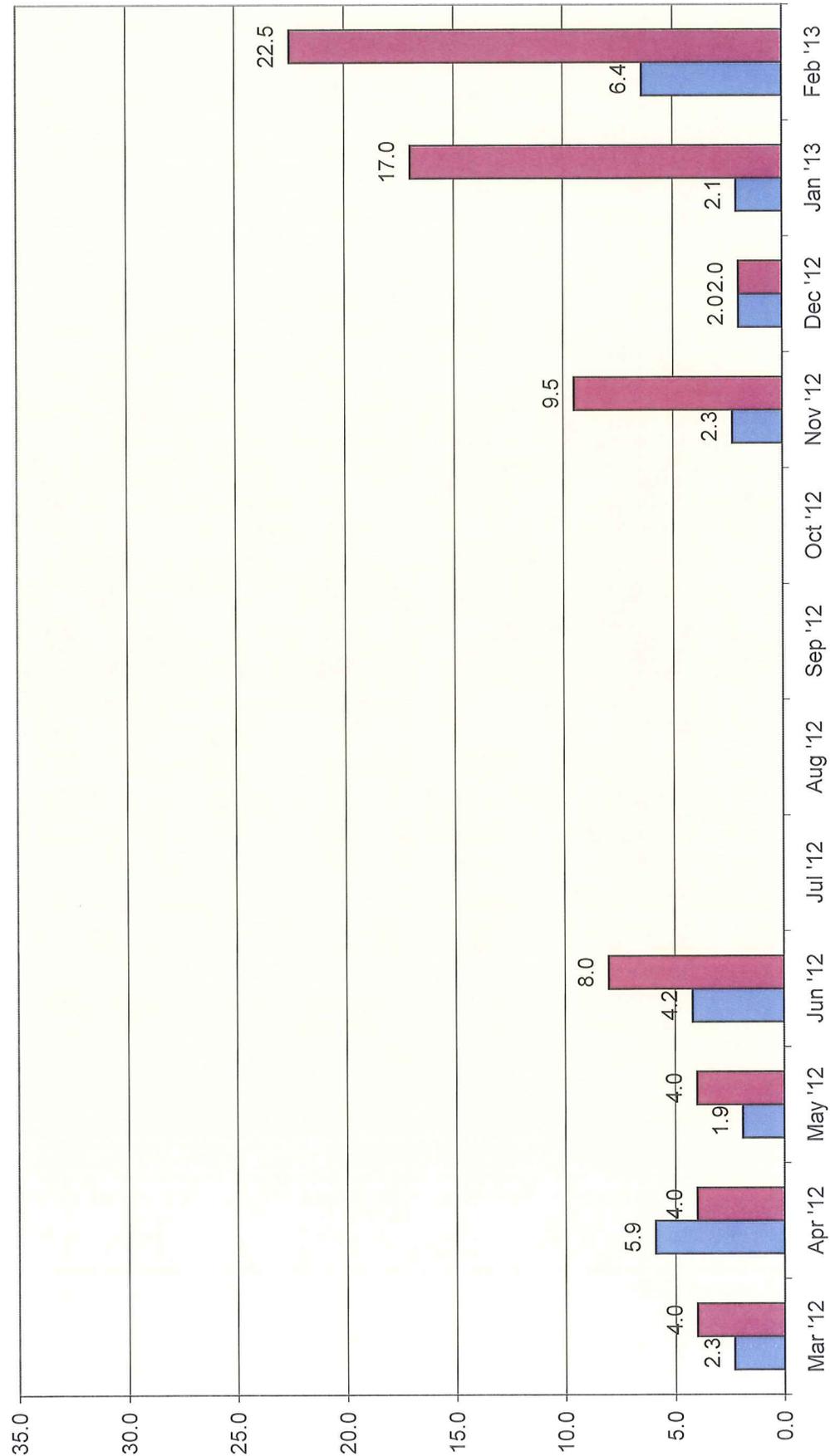
■ Entero ■ Fecal Med



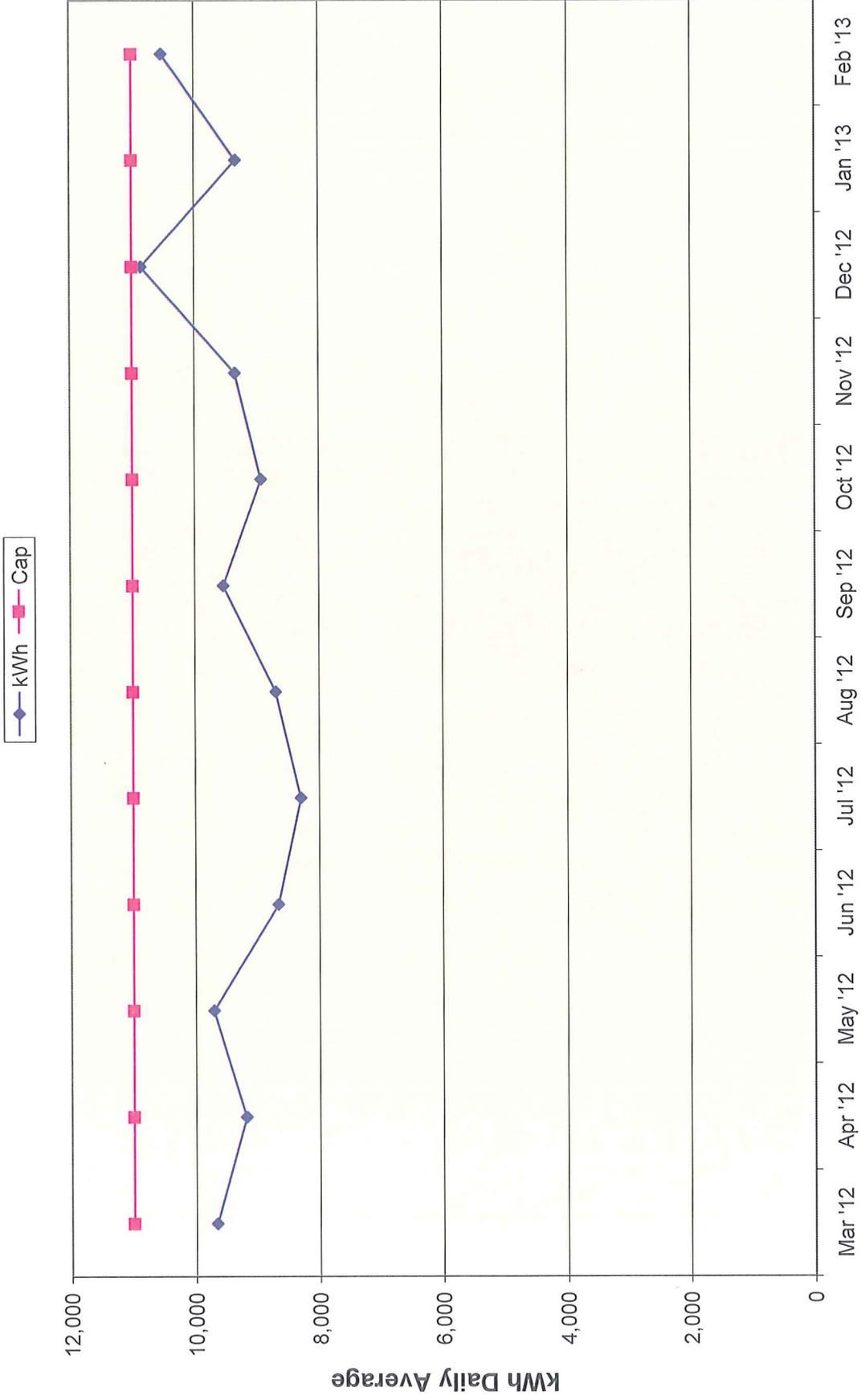
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Disinfection

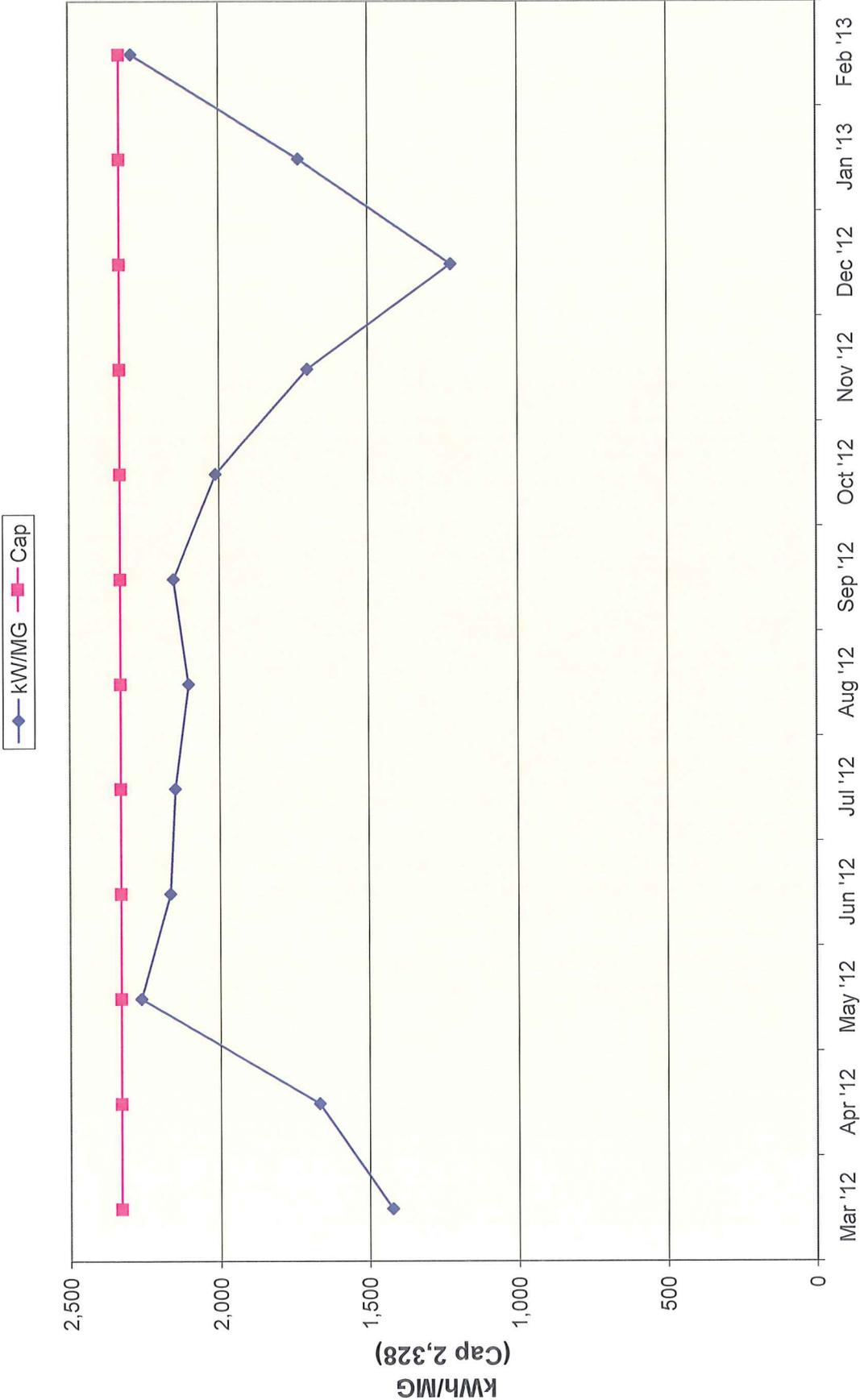
■ Entero ■ Fecal Med



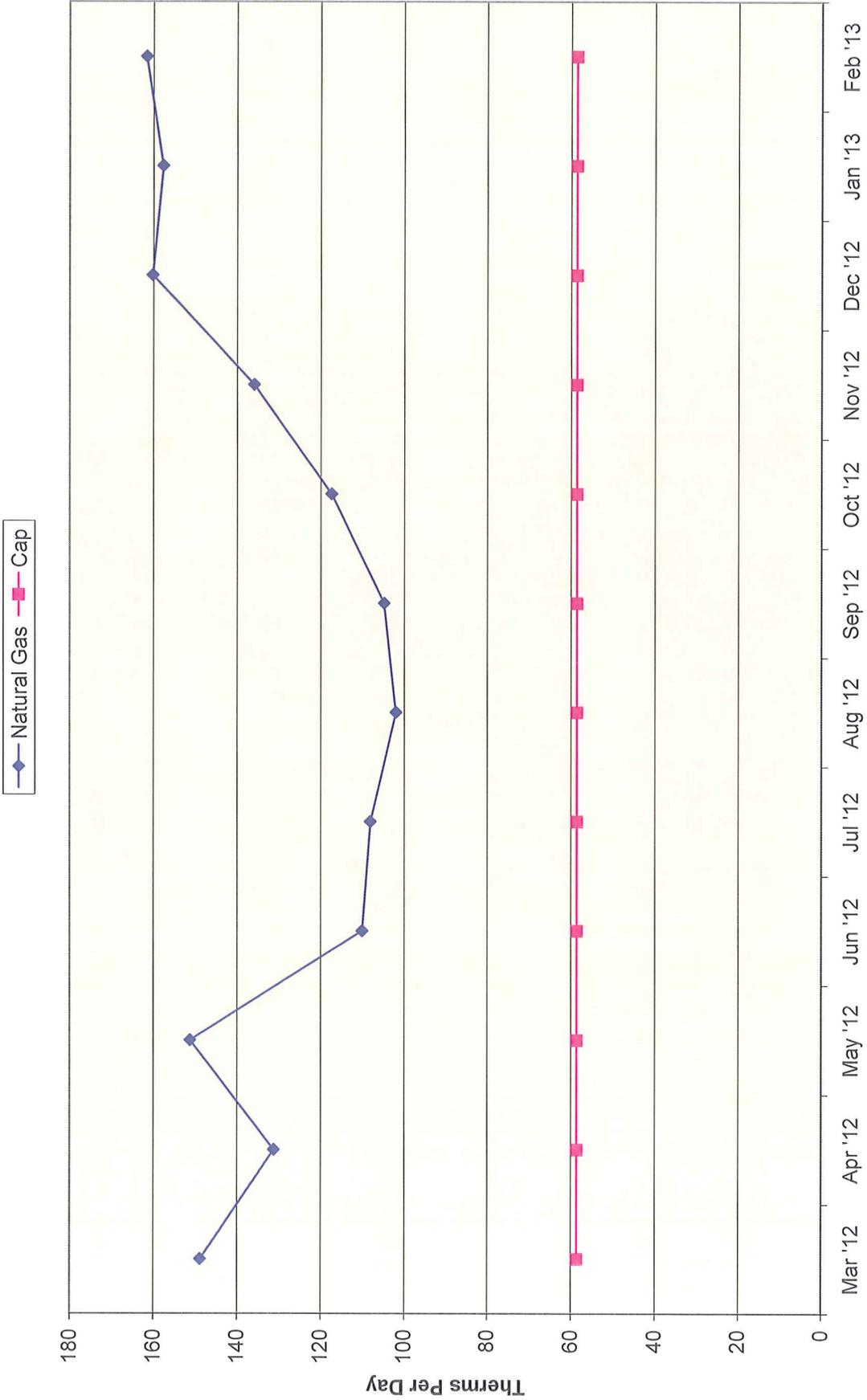
Energy kWh



Energy kWh/MG

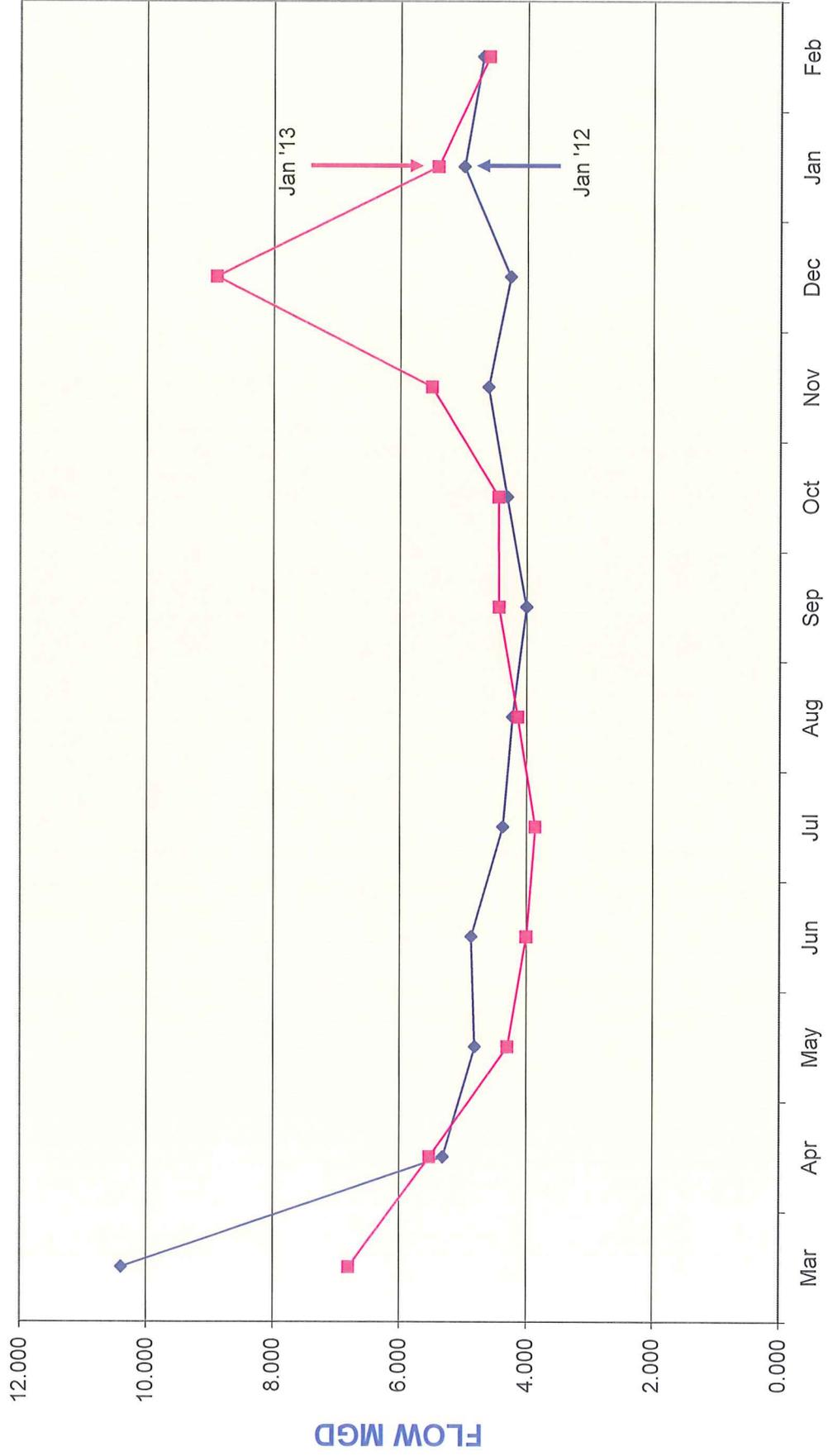


Natural Gas Use

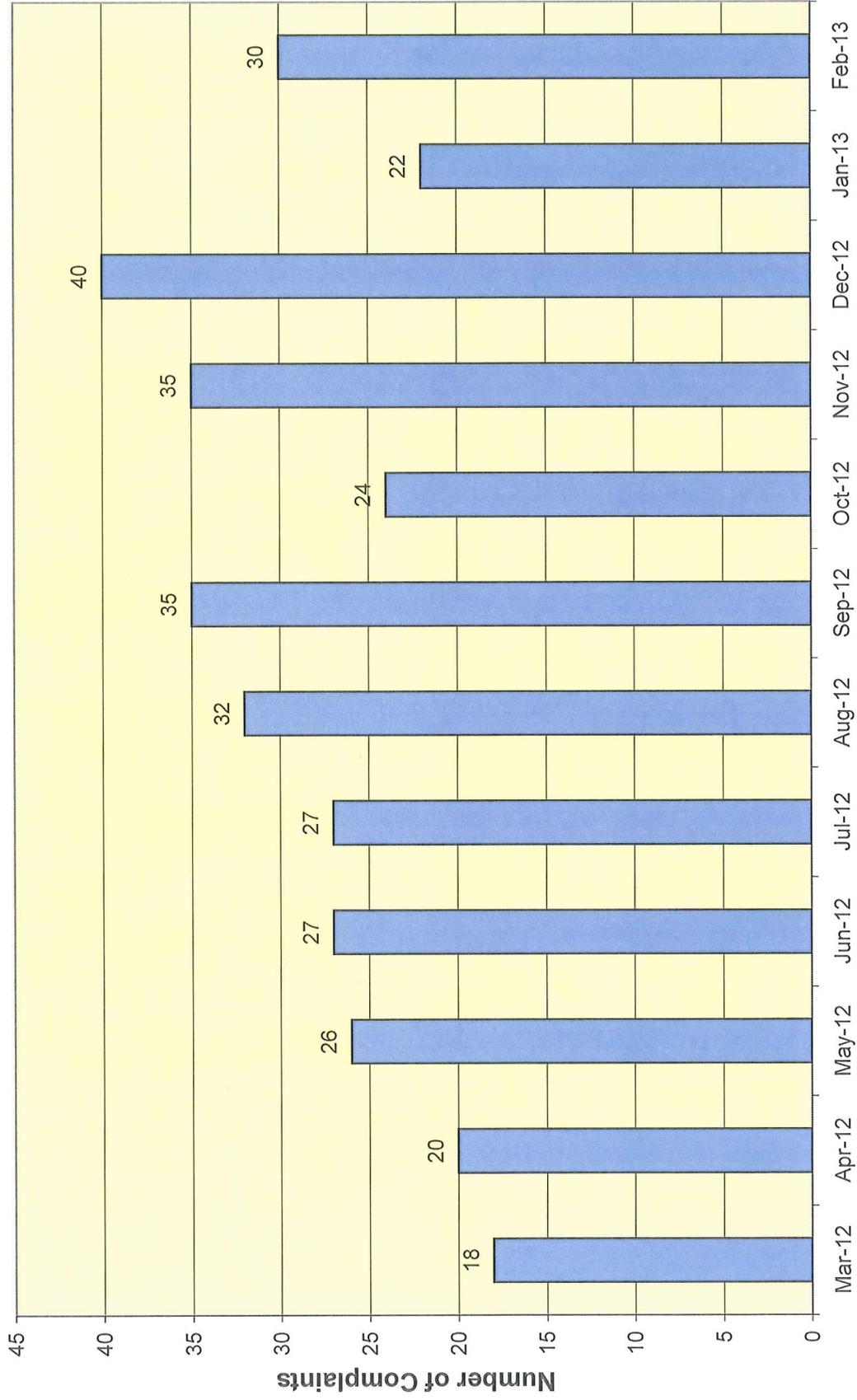


FLOW COMPARISON

—◆— 2011/12 —■— 2012/13



Complaints Received



WORK ORDER STATISTICS

February 1, 2013 - February 28, 2013

	Open Work Orders Due Prior to 2/1/13	Open Work Orders 2/1/13 - 2/28/13	Total Open Work Orders
Preventative	3	347	350
Corrective	0	16	16
Total	3	363	366

	Closed Work Orders 2/1/13 - 2/28/13
Preventative	325
Corrective	14
Total	339

Total Outstanding Work Orders as of March 1, 2013	27
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**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2013**

General:

For February 2013, after accounting for all leaves, the breakdown of Collection System department staff time, in terms of equivalent full-time employee (FTE) hours utilized, works out approximately as follows:

- 1.7 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.3 FTE field workers for Pump Station Maintenance
- 0.1 FTE field workers for CCTV work, and
- 1.4 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.

Collection System Maintenance:

A total of 54,371 feet of sewer pipelines were cleaned for the month. Staff completed 252 maintenance work orders generated by the ICOMMM3 CMMS system, with no outstanding work orders. The footage cleaned per hour, line cleaned/month, and outstanding work orders are within established parameters for the department. Graphs showing the length of line cleaned/month, footage cleaned/hour worked, along with the overflows/month are attached.

The CCTV van was not used extensively during the month of February so that staff could focus on pump stations and line cleaning maintenance. The department's CCTV production for the month (at 4,912 feet), was below normal production goals. However, staff anticipates catching up to these goals with the addition of two new Collection System Workers that joined the District on March 1, 2013.

Pump Station Maintenance:

The Collection System Department conducted 224 lift station inspections for the month of February, 2013, with 112 of the inspection visits generated through the JobCal Plus CMMS system.

The breakdown of these inspections is as follows: 22 Flygt submersible pump stations, 1 time per month, 6 Gorman/Rupp dry well/wet well stations, 1 entry per month, and 4 main stations that are visited daily. The number 2 pump at Marin Village was reinstalled during the month of February and is now operational.

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

Note: The JobCal Plus program is not only used for scheduling and tracking pump station related maintenance work orders, it is also used for ladder inspections,

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2013**

reclamation maintenance work orders, SCADA backup scheduling, and vehicle maintenance scheduling.

Pump Station Rehabilitation:

As part of the District's continuing multi-year Pump Station Rehabilitation Project (Capital Improvement Project No. 72403), construction continues on BMK 9, BMK 10, and Hanger Pump Stations and control of these stations are the responsibility of the contractor, W.R. Forde, until the project is complete.

Safety and Training:

General: The Collection System crew attended weekly safety tailgate meetings.

Specialized training: Worker's Compensation Accident Reporting training on 2/21/13. Collection System Worker III Javier Vega attended Fall Protection Training on 2/28/13.

Safety performance: There were no lost time accidents this month for a total of 28 accident-free days.

Standard Operating Procedures:

Collection System staff issued 10 Periodic Station Check SOPs and 1 Energized Electrical Control SOP for pump stations during the month of February, 2013.

Sanitary Sewer Overflows (SSOs):

For the month of February, there were **zero** (0) SSO's.

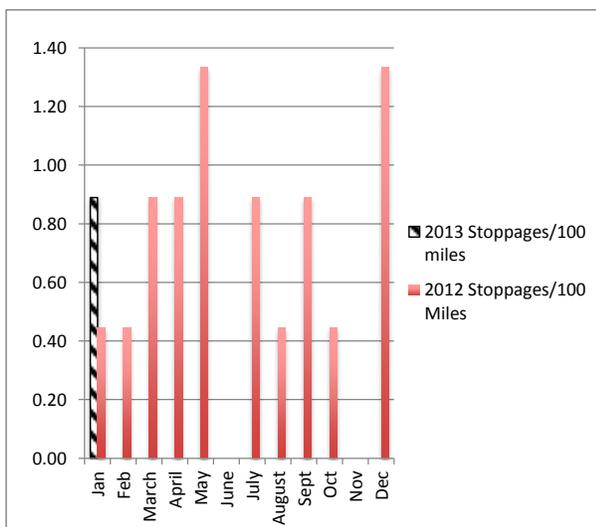
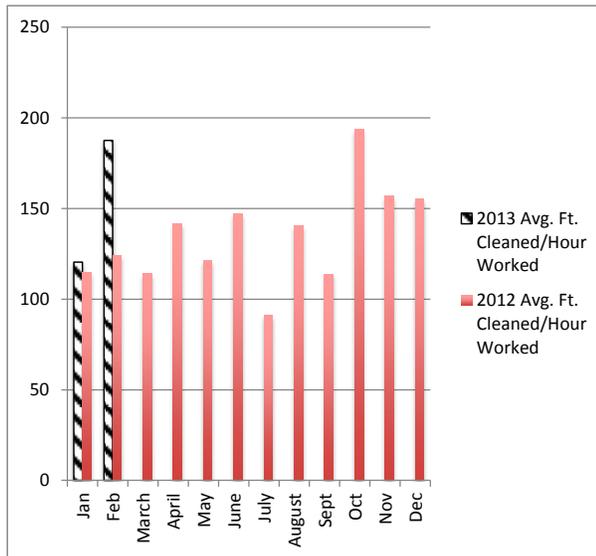
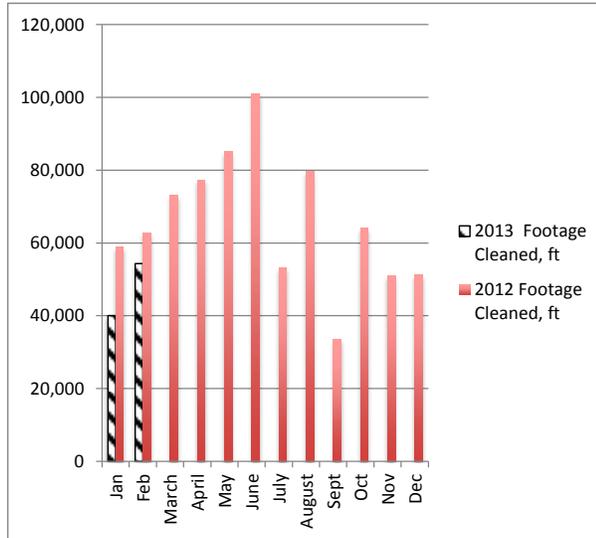
Novato Sanitary District
Collection System Monthly Report For 2013 (as of February 28, 2013)

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
Employee Hours Worked														
Number of FTEs (main line cleaning), hrs.	1.9	1.7											NA	1.8
Number of FTEs (other)	1.9	1.4											NA	1.7
Number of FTEs (CCTV)	0.1	0.3											NA	0.2
Total, FTEs	3.9	3.4											NA	3.6
Regular Time Worked, (main line cleaning), hrs	333	290											623	311
Regular Time Worked on Other, hrs ⁽¹⁾	326	249											575	287
Regular Time Worked on CCTV ⁽²⁾	20	46											66	33
Total Regular time, worked, hrs	678	585											1,263	631
Total Vacation/Sick Leave/Holiday, hrs	204	77											281	141
Vacation/Sick Leave/Holiday, FTEs	1.2	0.4											1.6	0.8
Overtime Worked on Coll. Sys., hrs	6	45											51	26
Overtime Worked on Other, hrs ⁽¹⁾	3	19											22	11
Overtime Worked on CCTV ⁽²⁾	1	3											4	2
Total Overtime , hrs	10	67											77	39
Productivity														
Rodder Work Orders Generated, ft	14	0											14	7
Rodder 3203 Ft. Cleaned	3,138	0											3,138	1,569
Flusher Work Orders Generated	187	252											439	220
Truck 3205V Ft. Cleaned	2,782	5,146											7,928	3,964
Truck 3206V Ft. Cleaned	34,114	49,225											83,339	41,670
Camera Work Orders Generated	0	0											0	
Camera Ft. Videoed	10,905	4,912											15,817	7,909
Work Orders Completed	201	252											453	227
Work Orders backlog	6	0											6	3
Total Footage Cleaned	40,034	54,371											94,405	47,203
Sanitary Sewer Overflows (SSOs)														
Minor (Category II)	0	0											0	NA
Major (Category I)	2	0											2	NA
Overflow Gallons	2,200	0											2,200	NA
Volume Recovered	880	0											880	NA
Percent Recovered	40%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40%	NA
Service Calls (non-SSO related)														
Service calls, normal hours, #	7	5											12	6
Normal hours S.C. response time, mins (avg.)	12	15											27	14
Service Callouts, after hours, #	1	0											1	1
After Hours S.C. response time, mins (avg.)	23	NA											23	23
Benchmarks														
Average Ft. Cleaned/Hour Worked	120	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	154
Total Stoppages/100 Miles	0.9	0.0											0.9	NA
Average spill response time (mins)	18	0											NA	9
Callouts/100 Miles	0.4	0.0											0.4	0.2
Overtime hours/100 Miles	3	20											23	11
Overflow Gallons/100 Miles	978	0											978	489

⁽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.

Collection System 2012-13 Graphs



**COLLECTION SYSTEM (Pump Stations)
WORK ORDER STATISTICS
February 1, 2012 - February 28, 2012**

	Open Work Orders Due Prior to 2/1/2013	Open Work Orders 2/1/2013 - 2/28/2013	Total Open Work Orders
Preventive	0	112	2
Corrective	0	0	0
Total	0	112	112

	Closed Work Orders 2/1/2013 - 2/28/2013
Preventive	99
Corrective	11
Total	110

Total Outstanding Work Orders as of 2/28/2013	2
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**NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
February 2013**

Summary:

The first phase of parcel rehabilitation of Parcels 24 & 28 was completed. A portion of Parcel 21 and all of Parcel 25 were ripped in preparation for reseeded after these pasture areas were severely damaged due to prolonged flooding. Staff is re-evaluating the repair or replacement of Irrigation Pump 2 to take advantage of any PG&E rebate programs.

Ranch Operations:

The rancher resumed spraying weed suppressor around sprinkler heads on Sites 2 & 3.

Irrigation Parcels:

The Parcels in Site 2 which were flooded for a prolonged period by above normal rainfall in December have dried out and were inspected to determine the extent of damage. The following is an estimate of the losses due to the prolonged flooding:

Parcel 21	30%
Parcel 25	95%
Parcel 26	15%
Parcel 27	30%

Due to the prolonged dry period, Custom Tractor was able to complete the disking, seeding and rolling of Parcels 24 & 28 with a cover crop. These two Parcels were previously disked in November in preparation for rehabilitation. In addition, the damaged portions of Parcels 21 & 25 were ripped in preparation for disking and reseeded with permanent crop. Rehabilitation of Parcels 26 & 27 will wait to see if the existing crop recovers. Staff will talk to the rancher about limiting cattle grazing on Site 2 this year to give the new crops a chance to mature.

Irrigation Pump Station:

Staff is re-evaluating the replacement/repair of Irrigation Pump No. 2. Staff will contact PG&E to investigate any rebate programs for replacing the pump with a more efficient motor. This may also include the replacement of the other two motors.

Staff ordered new flange coupling adapters for each side of the strainers replaced last year. The gaskets on the existing adapters began leaking after the Strainers were replaced.

Sludge Handling & Disposal:

There was no activity to report.
