

NOVATO SANITARY DISTRICT

Meeting Date: June 17, 2013

The Wastewater Operations Committee of the Novato Sanitary District will hold a meeting at 2:00 PM, Monday, June 17, 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. CONSIDER APPROVAL OF MINUTES OF THE MAY 20, 2013 MEETING
4. WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR MAY 2013:
 - a. Treatment Plant Performance Report
 - b. Maintenance Report
 - c. Safety and training
 - d. Odor control, noise, and landscaping report
5. COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR MAY 2013:
 - a. Collection System Maintenance
 - b. Pump Station Maintenance
 - c. Collection System Performance
 - d. Safety and Training
6. RECLAMATION FACILITY REPORT FOR MAY 2013
 - a. Ranch Operations
 - b. Irrigation Parcels
 - c. Irrigation Pump Station
 - d. Sludge Handling and Disposal
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.

May 20, 2013

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 4:00 p.m., Monday, May 20, 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
Sandeep Karkal, Deputy Manager-Engineer
Steve Krauthaim, Field Services Superintendent
Julie Swoboda, Administrative Secretary
John Bailey, Project Manager, Veolia Water
(*Tim O'Connor, Collection Systems Supervisor was absent.*)

ALSO PRESENT: Lynda Rodefer, Veolia Water

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

APPROVAL OF MEETING MINUTES FOR APRIL 15, 2013: The April 15, 2013 minutes were approved as written.

WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR APRIL 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 April. He stated that there were no permit exceedances, violations or excursions and noted that April flows remain low as a dry weather pattern continues.

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 the secondary clarifier #2 at the Novato facility was taken out of service and that the secondary clarifier #1 was placed back into service. He stated that aeration basin #3 was taken out of service.

Mr. Bailey reported that Veolia employees have been accident free for a total of 1,063 days/48,473 hours. He discussed the safety training for the month and reviewed the treatment plant performance graphs.

- Odor control: Sandeep Karkal, Deputy Manager-Engineer, stated that staff continues to work to address issues of concern relating to odor control, noise, and landscaping. In regards to odor control, he stated that the District had received a proposal from Brown and Caldwell (B&C) to evaluate current issues associated with residential complaints regarding continuing odors of the aeration basins. The Deputy Manager-Engineer stated that the Board

of Directors at their May 13th meeting, approved the proposed contract with B&C and directed staff to execute the contract. He stated that B&C will provide guidance in addressing odor complaints from nearby neighbors and improving plant operations. The Deputy Manager-Engineer stated that David McEwen, local odor control specialist, has been completing odor control studies and designs since 1999 and stated he is confident with B&C's field testing and scientific approach to odor control.

The Manager discussed a modular covering solution for the aeration basins which would also provide odor control. She noted that she has requested a proposal from Pi² Technologies to provide the modular units with delivery and installation anticipated for July. She noted that the proposed cost will be approximately \$30,000.

- Noise update: The Manager discussed the efforts previously made to abate noise relating to the fans for the main odor control biofilter unit. She stated that current sound measurements at the property line on Lea Drive indicate that the sound levels are those of an "average quiet street" and well below the 60 decibels the Novato General Plan specifies for residential neighborhoods. The Manager stated that the District requested a quote to enclose the blowers in an engineered building but that the lowest quote was approximately \$75,000. She stated that at this time, the District is awaiting a proposal from a sound insulation specialist.

- Landscaping progress report: The Manager reported that the tall weeds have been cut back for fire control and she discussed the vegetation currently being planted. She noted that the Tulip Trees have been replaced with Leland Cypress trees.

COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR APRIL 2013:

Deputy Manager-Engineer Sandeep Karkal gave the report on behalf of Tim O'Connor, Collections System Superintendent, who was absent. The Deputy Manager-Engineer discussed the Collections System Monthly Report for April 2013. He reported that the Collections System crew cleaned a total of 27,756 feet of sewer pipeline and that the department completed 374 maintenance work orders which were generated in April. He discussed pump station maintenance and noted that approximately 244 lift station inspections were conducted.

The Deputy Manager-Engineer stated that there were no sanitary sewer overflows during April and that safety performance for the Collections System department was good with a total of 89 accident-free days. He reported that staff issued one Standard Operating Procedure (SOP's) during the month: Manhole Opening Procedure.

RECLAMATION FACILITY REPORT FOR APRIL 2013:

Steve Krautheim, Field Services Superintendent, presented the Reclamation Facilities report for April 2013. He stated that the rancher has moved harvesting equipment in to begin haying operations in May. He noted that the irrigation system on Site 2 was activated to irrigate the parcels seeded earlier this year. Mr. Krautheim noted that the supply of recycled

water to Stonetree Golf Course began in late February and is continuous at this point. He estimated that approximately 500,000 gallons of recycled water are delivered to North Marin Water District each day.

ADJOURNMENT: There being no further business to come before the Committee, the meeting adjourned at 5:12 p.m. The next Wastewater Operations Committee meeting will be held on Monday, June 17th.

Respectfully submitted,



Beverly James
Manager-Engineer

Julie Swoboda, Recording

DRAFT



June 12, 2013

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

Subject: Veolia Water Operations Report – May 2013

Dear Ms. James:

We are pleased to provide this updated activity report for May 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
May 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: May 2013:

Bay Discharge

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	4.23	4.81	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)	10,096	21,845	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	11,893	14,941	N/A	N/A
Effluent BOD ₅ , mg/L (monthly ave/weekly max)	<8	11	15	30
Effluent TSS, mg/L (monthly ave/weekly max)	<4	6	10	20
Effluent BOD ₅ - % Removal, Minimum	97	N/A	85	N/A
Effluent TSS - % Removal, Minimum	98	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	<0.13	0.24	6	21
pH, su (min / max)	6.9	7.1	6.5	8.5
Enterococcus, mpn (30 day geo mean)	3.0	N/A	35	N/A
Fecal Coliform, mpn (30 day median)	8	N/A	140	N/A
Fecal Coliform, mpn (90 th percentile)	23	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:

Novato

- Routine rounds, readings and maintenance
- Secondary Clarifier #2 taken out of service, drained and cleaned
- Aeration Basin #3 cleaned, aerators submerged and environmentally friendly dye added to prevent algae growth while out of service
- Updated Spill Prevention Control and Countermeasures Plan (SPCC)
- Solicited quote for topping off biofilters (odor beds)
- Purchased batteries for Uninterruptible Power Supply (UPS) for Operations Center
- Site cleanup weeding and landscaping
- Annual generator maintenance by Cal-Diesel
- Broken water line at UV Generator (repaired)
- Screening Auger Compactor failed (broken shaft) Ordered replacement attempted repair (weld)

Ignacio Transfer Pump Station

- Routine rounds, readings and maintenance
- Ordered Channel Monster Grinder replacement cutter cartridge replacement
- Annual generator maintenance by Cal-Diesel
- Site cleanup weeding and landscaping

Recycled Water Plant

- Performed plant rounds and maintenance
- Produced 12.9 million gallons of recycled water in May.

Sludge Lagoons

- Performed daily checks
- Site cleanup weeding and landscaping

ADMINISTRATION:

- Electronic Self Monitoring Report for April submitted on 5/29/13

SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTF completed
- Five Minute Tailgate training is held daily with the O&M staff.
- No safety incidents for the month of May 2013
- Accident Free: 6/1/10 – 4/30/13: 1,094 days / 49,886 hours

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
Mel Demsky	Regional Director of Asset Management
Dan Brown	Asset Manager

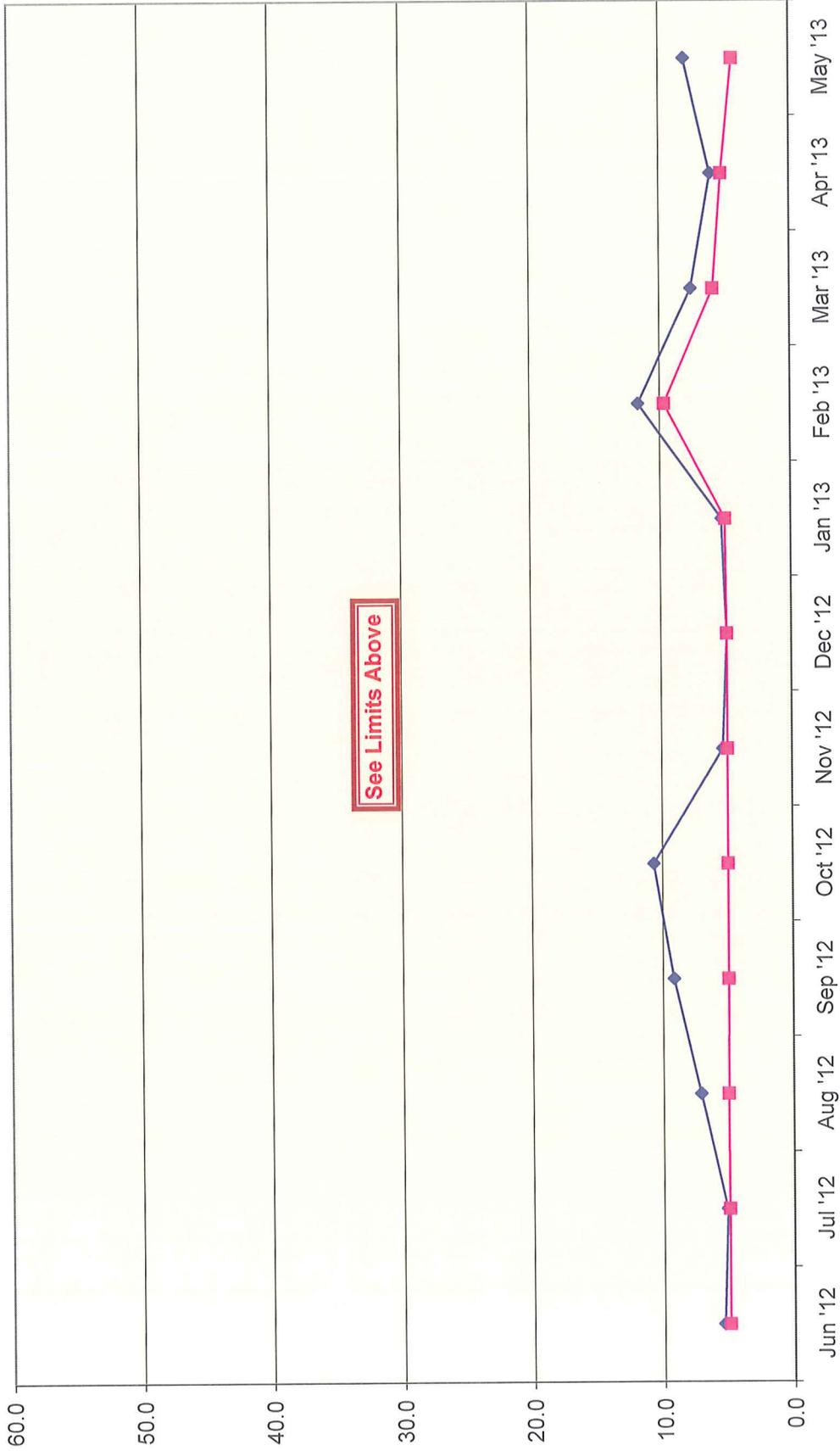
Influent Load BOD / TSS lbs



Effluent BOD / TSS Concentration

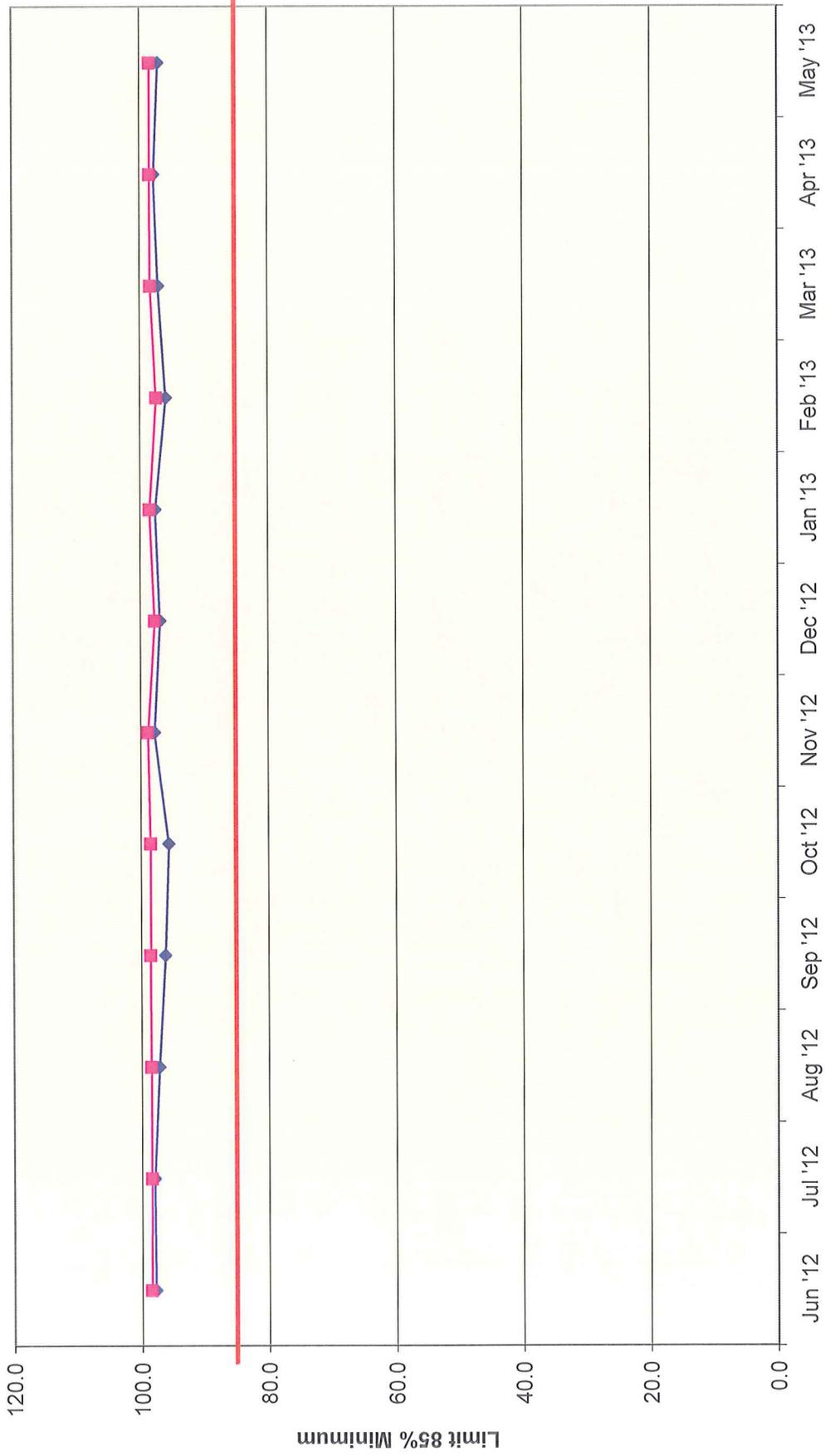
NPDES LIMITS WET SEASON
 BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave
 NPDES LIMITS DRY SEASON
 BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave
 TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave
 WDR (Waste Discharge Requirements) RECLAMATION
 BOD - 40 mg/L

—◆— BOD —■— TSS



BOD / TSS Percent Removal

—◆— BOD —■— TSS



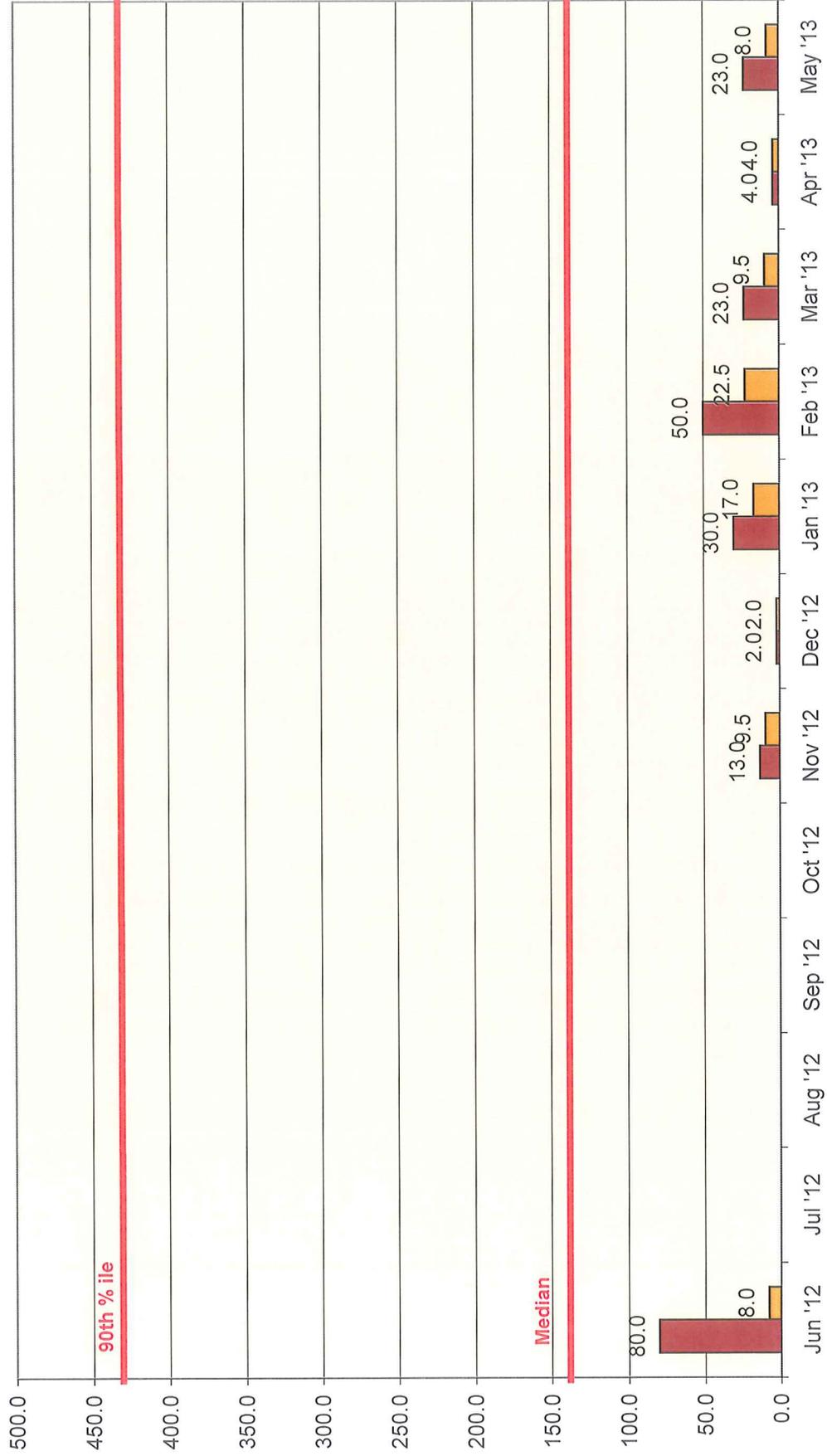
Effluent Ammonia



Disinfection

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

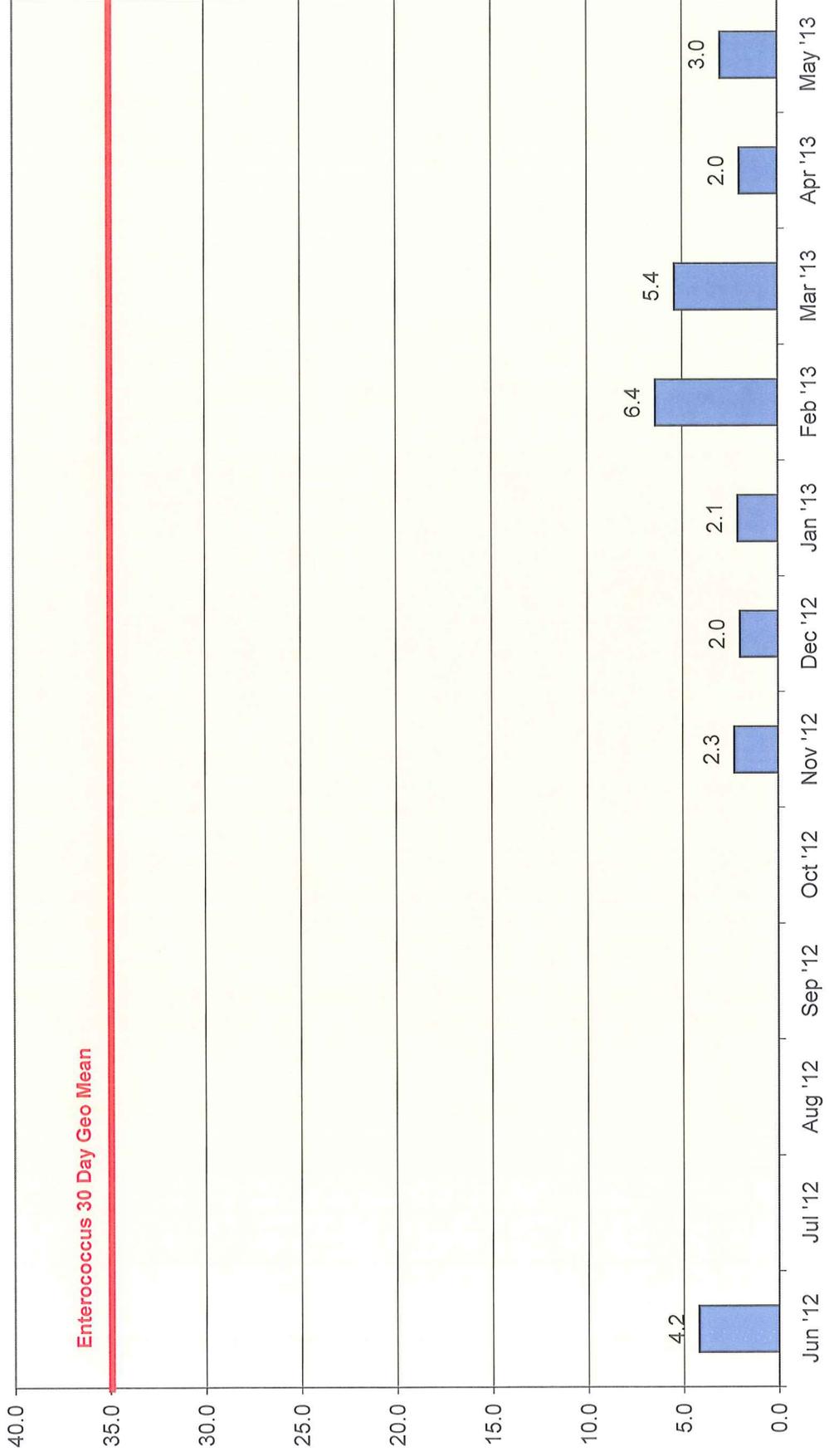
Fecal 90th %ile Fecal Med



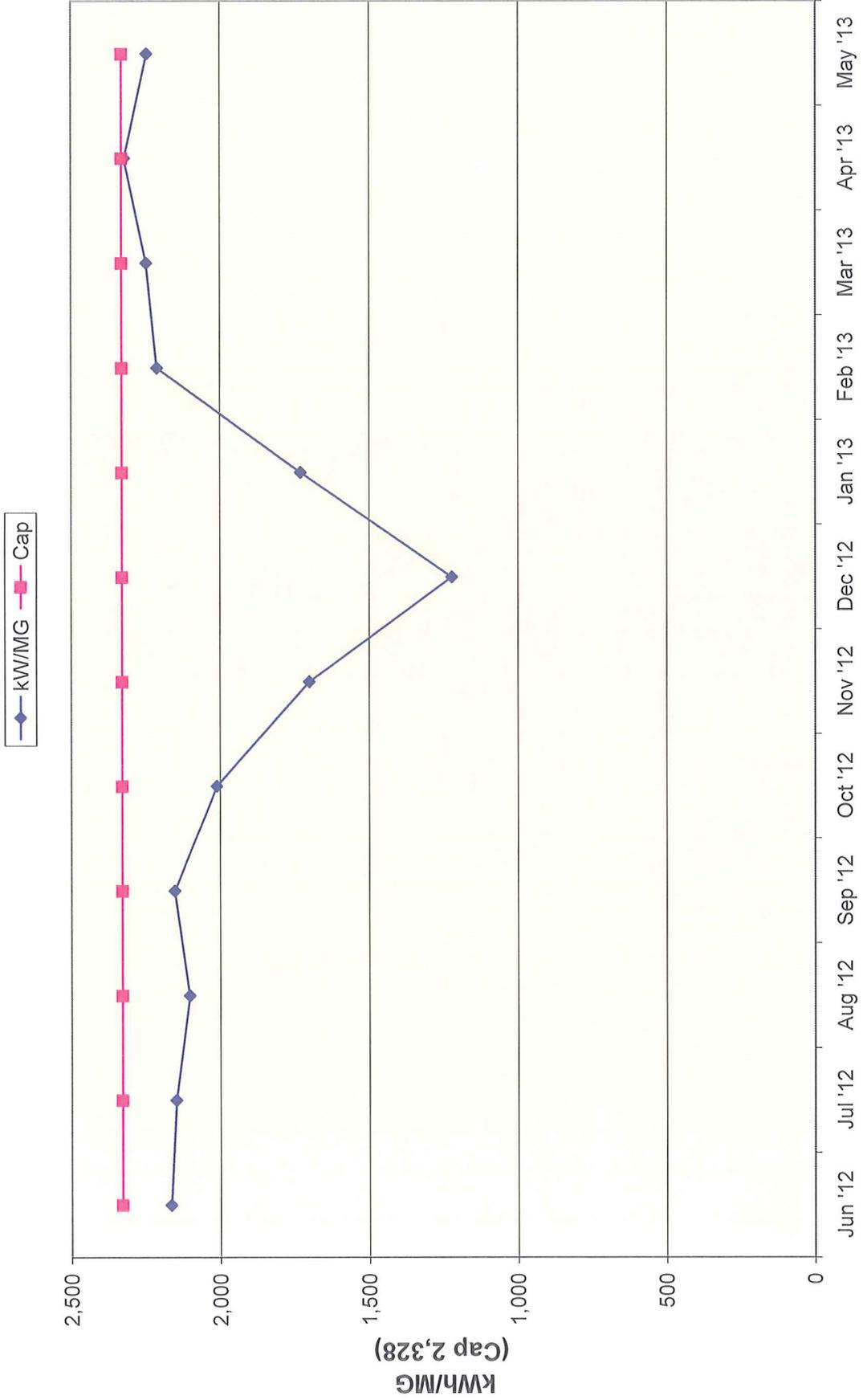
LIMITS - NPDES
Enterococcus 30 day geo mean 35 mpn /100ml

Disinfection

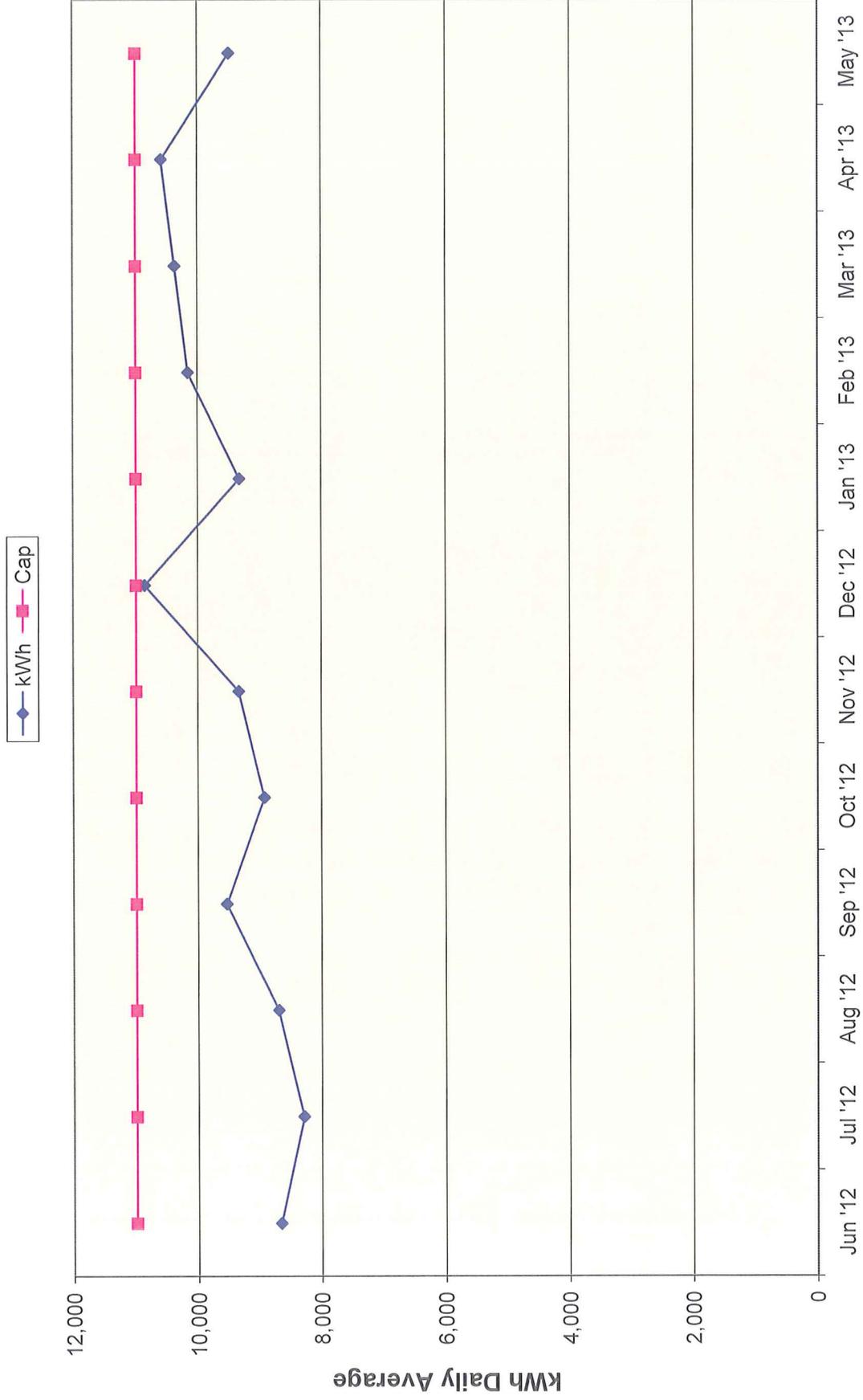
■ Enterococcus



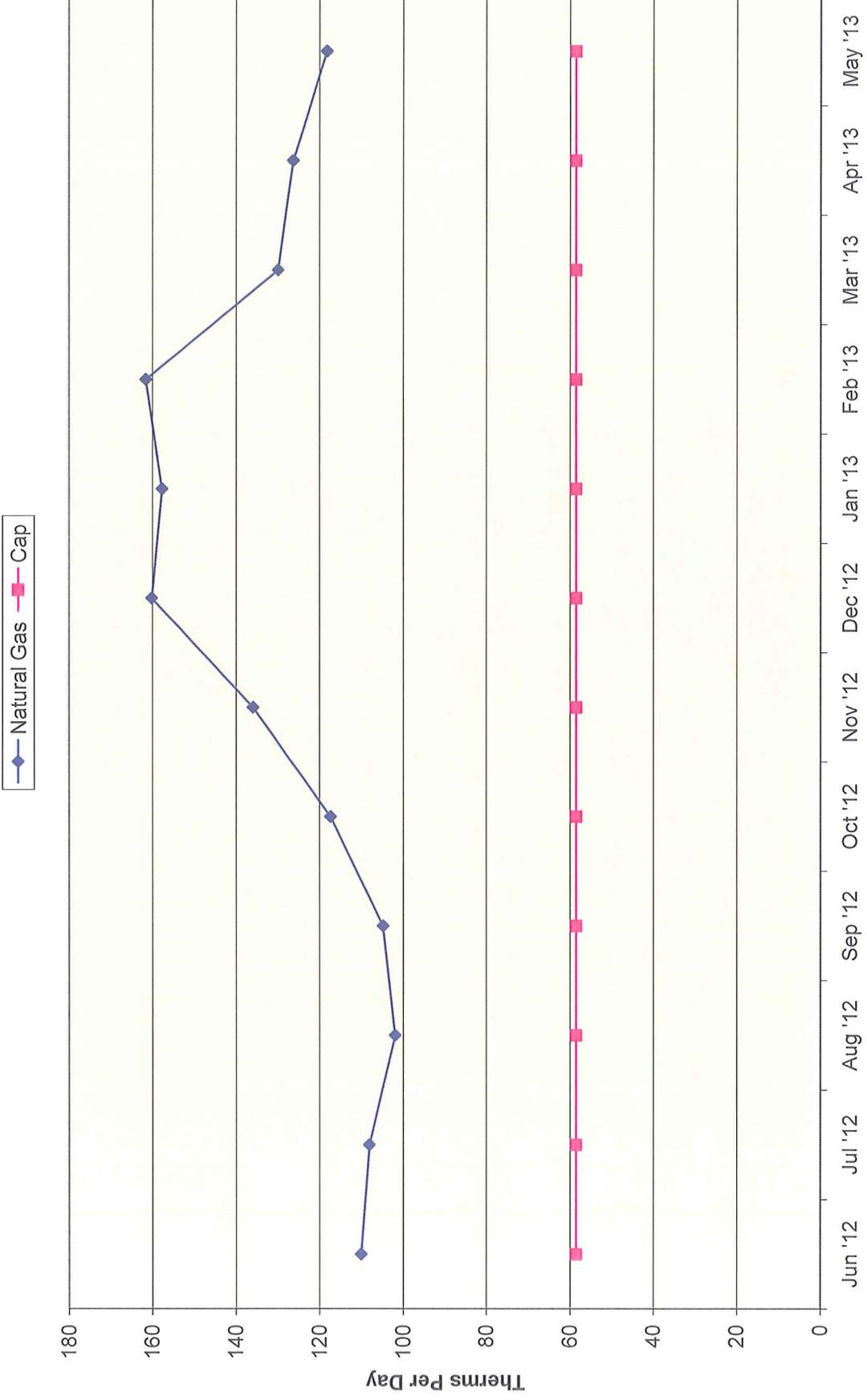
Energy kWh/MG



Energy kWh

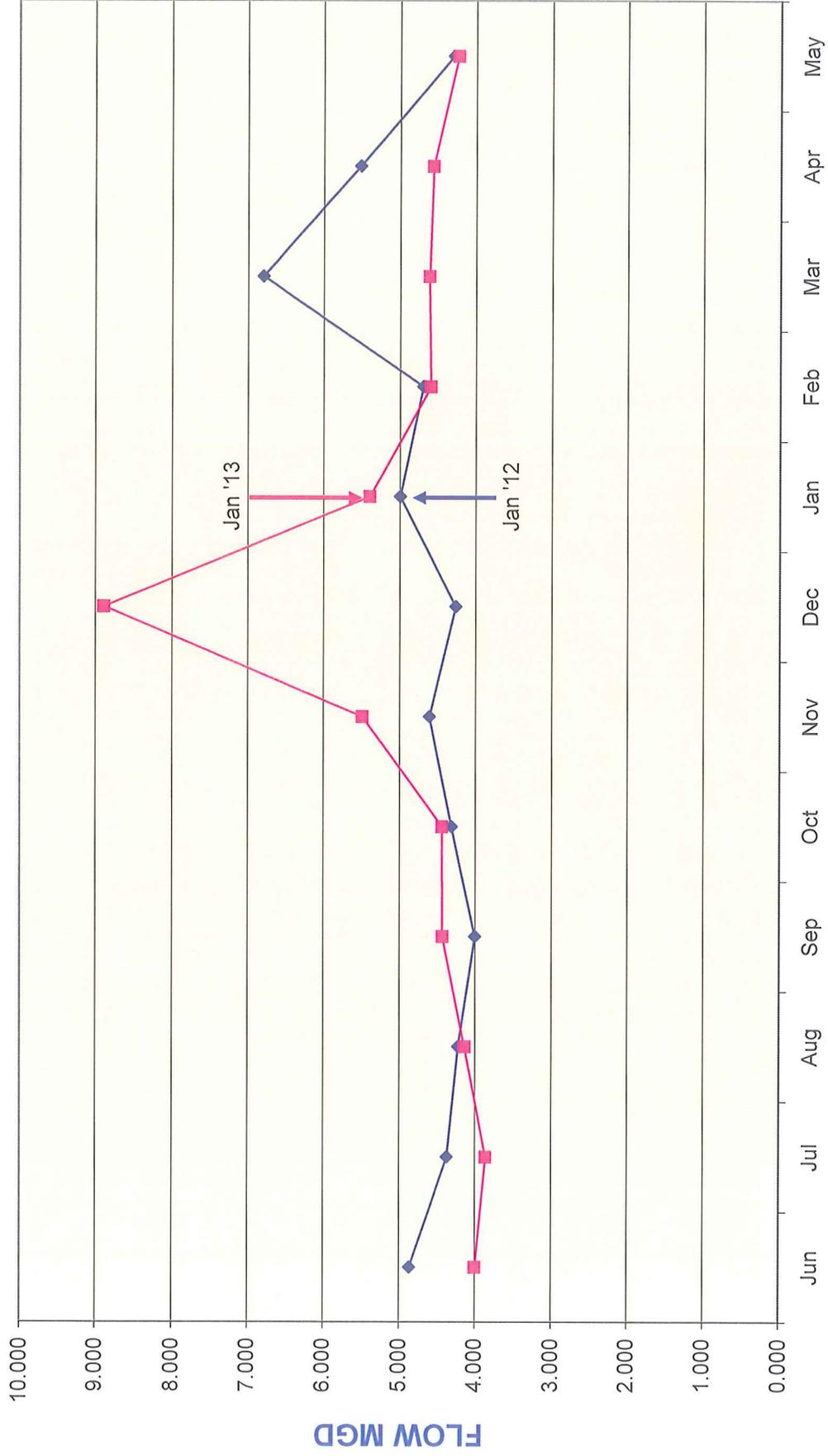


Natural Gas Use

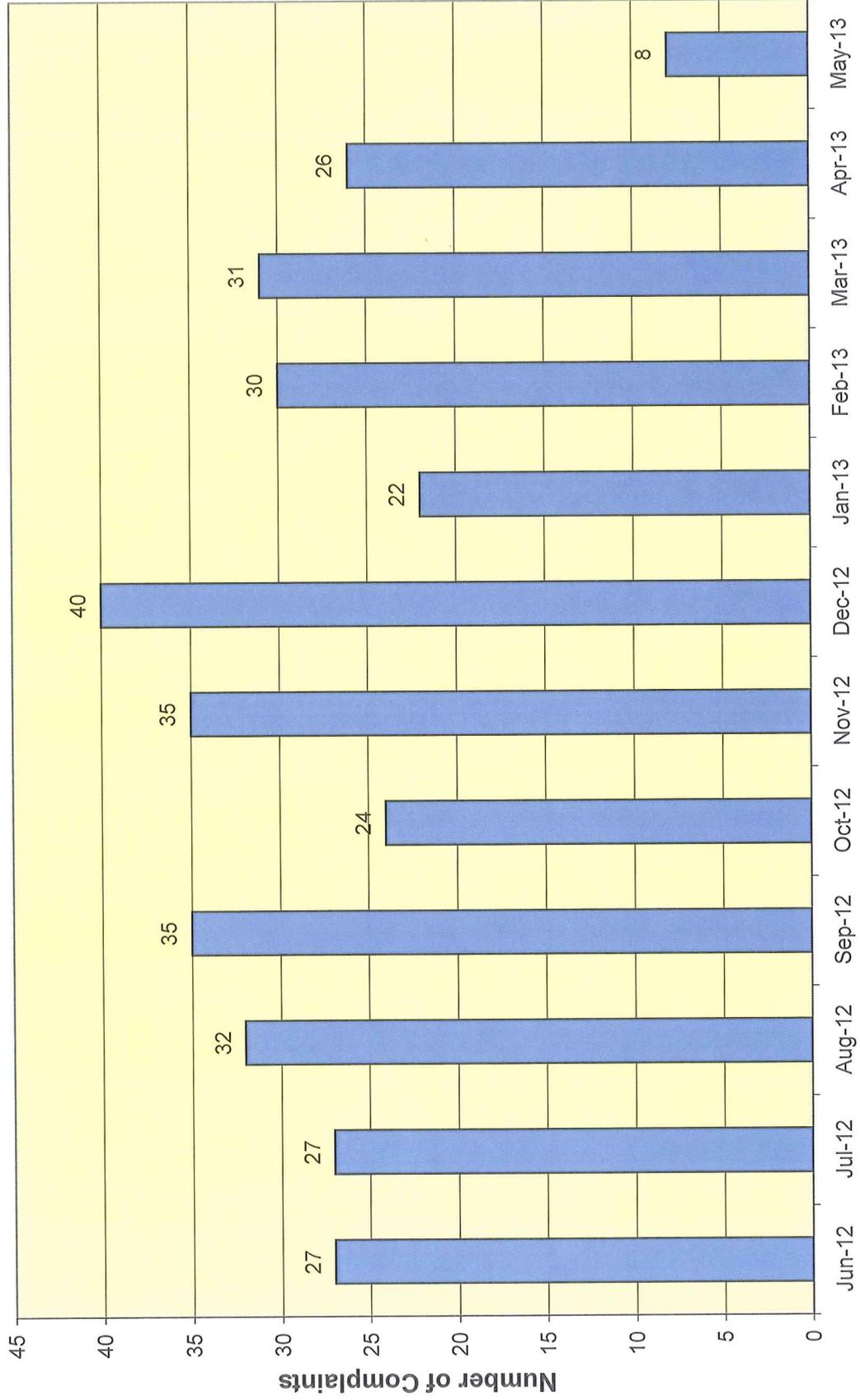


FLOW COMPARISON

—◆— 2011/12 —■— 2012/13



Complaints Received



NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Odor Control, Noise, and Landscaping Report
May 2013

Summary:

Staff continues to work to address issues of concern relating to odor control, noise, and landscaping, specifically from the Lea Drive neighborhood, and in the northeast corner of the Novato Treatment Plant (NTP) site.

To demonstrate its commitment, the District has already expended significant amounts beyond the substantial investment for odor control, noise, and landscaping included in the original WWTP Upgrade, Contract B - Novato Treatment Plant (NTP), Project No. 72609. These additional costs have included operational changes and measures related to further noise abatement, visual screening, wind shielding, and daily monitoring.

A summary of activities since the last Wastewater Operations Committee meeting is provided below.

Odor control:

In May 2013, staff fast-tracked and brought forward to the Board, a proposed scope of services and fee estimate from a local odor control specialist that was also well-versed in wastewater treatment processes, specifically secondary treatment processes similar to the District's activated sludge process. The proposal from Brown and Caldwell (B&C) with their proposed project manager Mr. David McEwen, was approved by the Board, and staff proceeded towards executing a contract (along with an implementation schedule), with B&C.

As mentioned in the April 2013 report, an added advantage of Mr. McEwen to the District over its previous specialist is that Mr. McEwen will have available to him the depth of resources provided by a large national firm such as B&C. The District's last batch of odor control work has generally been accepted by the Lea Drive neighbors as having substantially addressed their concerns, with the exception of the aeration basins. Therefore, a primary focus of Mr. McEwen and B&C work will be related specifically to the investigation of the aeration basins.

Also, the District developed a pilot project to cover the anoxic zones of the aeration basins this summer. The covers are a new technology developed by Pi2 Technologies of Montreal, Quebec. These covers incorporate a honeycomb design, float on the water surface, and utilize carbon filtering/scrubbing media to remove odors. Further, to investigate the effectiveness of this technology, staff worked to include provisions in B&C's contract for B&C's scope of work to include testing of this technology.

Noise:

In May 2013, staff continued to address the low level noise issues raised by some Lea Drive neighbors, related to the fans for the main odor control biofilter in the northwest corner of the Novato plant. These fans are currently inside a temporary insulated enclosure, and staff has been evaluating various options to provide a cost-effective

NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Odor Control, Noise, and Landscaping Report
May 2013

permanent sound attenuating solution. Current sound measurements at the property line on Lea Drive indicate that the sound levels are those of an "Average Quiet Street" and well below the 60 decibels the Novato General Plan specifies for residential neighborhoods.

Based on experience from the installation of the temporary enclosure, and engineering judgment, one identified option is to enclose the blowers in an engineered building. Staff contacted engineered building manufacturers and installation experts and received quotes for a suitable structure. The lowest quote was for about \$75,000, which was significantly higher than anticipated.

Staff has also had a sound insulation specialist evaluate the blower installation and requested a proposal from them. The thinking is that the source of the low level noise may be just from air flow in the discharge ducting from the fans, and providing sound insulation to this ducting might further reduce this low level noise to acceptable levels.

In summary, the District has budgeted for soundproofing of these fans, and is evaluating alternative designs.

Landscaping:

In May 2013, staff worked with its landscaping contractor Cagwin and Dorward (C&A), Novato, CA, to improve the attributes of the landscaping installed at the District's fence-line on Lea Drive at the northeast corner area of the NTP.

Previously, staff had scheduled landscaping upgrades for May and June to replace plants that were damaged by high groundwater conditions, frost, and damage from wildlife, and to augment the current visual screening at a cost of about \$19,000. The work was fast-tracked and in May, these landscaping upgrades were completed to replace plants that died and augment the current visual screening on the open corridor.

Also, in May, staff completed negotiation of a maintenance contract with C&A in May, for C&A to provide periodic maintenance services to this landscaping, including weed control and irrigation systems.

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

General:

For May 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:

- 1.8 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.4 FTE field workers for Pump Station Maintenance
- 1.1 FTE field workers for CCTV work, and
- 1.8 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 49,276 feet of sewer pipelines were cleaned for the month. Staff completed 283 maintenance work orders generated by the ICOMMM3 CMMS system, with 238 outstanding work orders. The footage cleaned per hour, line cleaned/month, 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 in the field for a total of 17 working days during the month of May and the department's CCTV production of 27,913 ft. for the month is below expected production goals.

Both issues, i.e. outstanding cleaning work orders being higher than normal and the lower than expected CCTV production are primarily due to: (a) lower available FTE hours from a Collection System Worker I (CSW I) leaving District employment, and (b) an experiment to better integrate flushing/CCTV work practices as part of the department's continuous improvement practices. Both issues are being addressed and resolved, and staff anticipates catching up to its production goals in June.

Pump Station Maintenance:

The Collection System Department conducted 263 lift station inspections for the month with 110 of the inspection visits generated through the JobCal Plus CMMS system.

The breakdown of these inspections is as follows: 27 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.

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
May 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), the District accepted as substantially complete all three pump stations of Project Unit 4. Operational responsibility for these pump stations is now with District staff while punch list items continue being addressed.

Safety and Training:

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

Specialized training: Collection System staff attended annual fire extinguisher training in May. Javier Vega attended a seminar for Supervisor's Safety Training and Aaron Hendricks and Bob Stiles attended Overflow Estimation training during the month of May.

Safety performance: There were no lost time accidents this month for a total of 120 accident-free days.

Standard Operating Procedures (SOPs):

Collection System staff issued two (2) SOP's (Periodic Pump Station Checks) during the month of May, 2013.

Sanitary Sewer Overflows (SSOs):

For the month of May, there was one (1) SSO.

No.	Date	Location	Amount, gal	Cause
1	5/17/2013	7 Marion Ct.	158	Debris

SSO at 7 Marion Ct: This SSO was a Category II event with the discharge volume remaining fully contained within the curb and gutter pan. There was full recovery (100%) for this discharge due to the location of this event. This discharge was reported to the District by a neighborhood resident.

This discharge was determined to be the result of a debris blockage in the District main. The duration of this discharge was determined using residential and reporting party interviews. The volume of this event was estimated, (and the estimates were verified), by using a combination of: (a) the San Diego picture method, and (b) a chart from the

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

NSD Overflow Response Plan that provides an estimate of the discharge vs. the observed height of the discharge above the pick-hole, and (c) geometric calculation.

Marin County Environmental Health Services (MCEHS) was notified of this discharge. No other immediate notification is required for Category II events.

In terms of cleaning history, the affected line segment was last cleaned on schedule on April 25, 2013 using a hydro-flusher, and this line segment is on a thirty-six (36) month cleaning frequency. CCTV inspection immediately after the discharge event showed the line segment to have minor sags at two locations but was otherwise in good condition. No changes to the cleaning schedule will be made to the cleaning schedule as a result of this event. Staff believes that the gravel debris may be from a failed/broken lateral at 2 Paradise Ct., upstream from the discharge location. The owners of this property had been notified by a letter dated May 13, 2013, that a repair is required to the lateral serving this property, and a reminder notification was also transmitted to the property owners subsequent to the SSO event.

This event was reported into the CIWQS database on May 22, 2013 as a Category II event, SSO Event ID # 794394 and was certified in CIWQS on May 22, 2013, Certification ID # 687372.

Novato Sanitary District

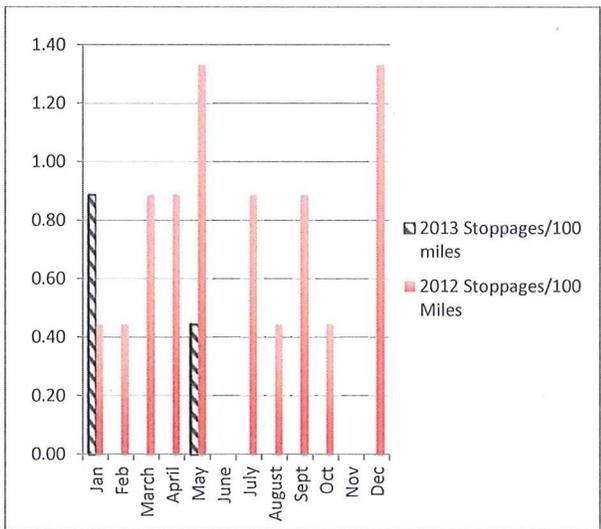
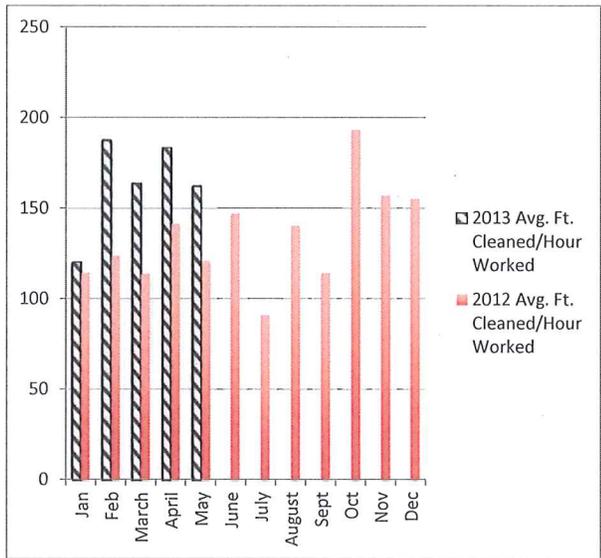
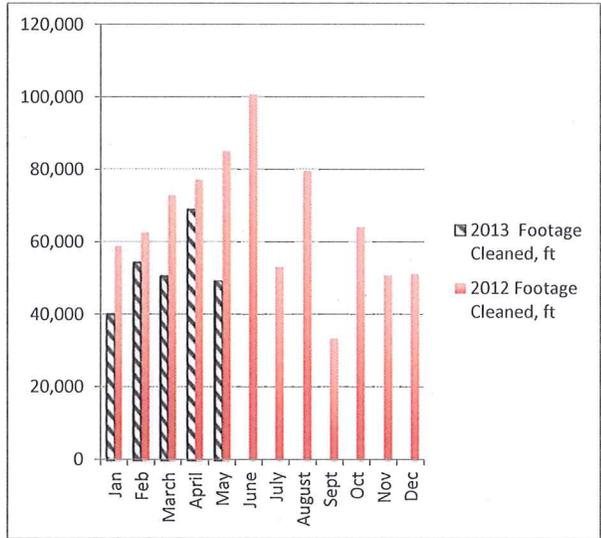
Collection System Monthly Report For 2013 (as of May 31, 2013)

	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	1.8	2.2	1.8								NA	1.9
Number of FTEs (other)	1.9	1.4	2.4	1.5	1.8								NA	1.8
Number of FTEs (CCTV)	0.1	0.3	0.5	1.7	1.1								NA	0.7
Total, FTEs	3.9	3.4	4.7	5.4	4.6								NA	4.4
Regular Time Worked, (main line cleaning), hrs	333	290	309	377	304								1,612	322
Regular Time Worked on Other, hrs ⁽¹⁾	326	249	415	259	308								1,556	311
Regular Time Worked on CCTV ⁽²⁾	20	46	85	300	192								642	128
Total Regular time, worked, hrs	678	585	809	935	804								3,810	762
Vacation/Sick Leave/Holiday, FTEs	204	77	101	114	239								735	147
Overtime Worked on Coll. Sys., hrs	1.2	0.4	0.6	0.7	1.4								4.2	0.8
Overtime Worked on Other, hrs ⁽¹⁾	6	45	5	47	5								108	22
Overtime Worked on CCTV ⁽²⁾	3	19	5	28	12								67	13
Total Overtime, hrs	10	67	10	75	17								4	1
													179	36
Productivity														
Rodder Work Orders Generated, ft	14	0	24	31	83								152	30
Rodder 3203 Ft. Cleaned	3,138	0	3,856	5,490	678								13,162	2,632
Flusher Work Orders Generated	187	252	290	385	438								1,552	310
Truck 3205V Ft. Cleaned	2,782	5,146	2,755	13,698	15,477								39,858	7,972
Truck 3206V Ft. Cleaned	34,114	49,225	43,954	49,898	33,121								210,312	42,062
Camera Work Orders Generated	0	0	0	0	0								0	0
Camera Ft. Videoed	10,905	4,912	7,075	27,756	27,913								78,561	15,712
Work Orders Completed	201	252	286	374	283								1,396	279
Work Orders backlog	6	0	28	42	238								314	63
Total Footage Cleaned	40,034	54,371	50,565	69,086	49,276								263,332	52,666
Sanitary Sewer Overflows (SSOs)														
Minor (Category II)	2	0	0	0	1								3	NA
Major (Category I)	0	0	0	0	1								1	NA
Overflow Gallons	2,200	0	0	0	0								2,358	NA
Volume Recovered	880	0	0	0	158								1,038	NA
Percent Recovered	40%	NA	NA	NA	100%								44%	NA
Service Calls (non-SSO related)														
Service calls, normal hours, #	7	5	7	12	6								37	7
Normal hours S.C. response time, mins (avg.)	12	15	14	18	17								76	15
Service Callouts, after hours, #	1	0	0	1	1								3	1
After Hours S.C. response time, mins (avg.)	23	NA	NA	20	30								73	24
Benchmarks														
Average Ft. Cleaned/Hour Worked	120	187	164	183	162								NA	163
Total Stoppages/100 Miles	0.9	0.0	0.0	0.0	0.4								1.3	NA
Average spill response time (mins)	18	0	0	0	15								NA	7
Callouts/100 Miles	0.4	0.0	0.0	0.4	0.4								1.3	0.3
Overtime hours/100 Miles	3	20	2	21	2								48	10
Overflow Gallons/100 Miles	978	0	0	0	70								1048	210

⁽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
May 1, 2013 -May 31, 2013**

	Open Work Orders Due Prior to 5/1/2013	Open Work Orders 5/1/2013 -5/31/2013	Total Open Work Orders
Preventive	0	108	0
Corrective	0	2	0
Total	0	110	110

	Closed Work Orders 5/1/2013 -5/31/2013
Preventive	108
Corrective	2
Total	110

Total Outstanding Work Orders as of 5/30/2013	0
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**NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
May 2013**

Summary:

The rancher began harvesting hay this month. Hay was cut on most Parcels on all Sites. Baled hay was removed from most of Sites 3 & 7 in preparation for irrigation. Parcels in Site 2 seeded earlier this year with pasture grass failed to germinate due to lack of rainfall. Conduit chases for freshwater and control wires were installed across a new ditch in Site 7. New flange coupling adapters were installed on the Irrigation Strainers. Staff has completed compiling the data to submit to PG&E to determine if a rebate program is available from PG&E for the replacement of Irrigation Pump No. 2 and the data was being reviewed for accuracy.

Ranch Operations:

Site 2: The hay was cut on Parcels 22, 23, 26 & 27 as well as the western half of Parcel 21. The east portion of Parcel 21 and all of Parcel 25 which were replanted in February were not cut because the planted seed did not germinate due to lack of rainfall. The irrigation performed in late April only encouraged weed growth. Parcels 24 & 28 were not harvested this month because the cover crop is still maturing.

Site 3: All hay was cut, baled and stacked on Parcels 34, 35, 36 & 37. Parcel 38 is fallow this year due to ongoing parcel rehabilitation work and was not harvested.

Site 7: All hay was cut, baled and stacked on all parcels on Site 7 except for Parcel 71 where half of the bales were removed before the harrow bed broke down. Parcel 78 is fallow this year due to ongoing parcel rehabilitation work and was not harvested. The rancher brought in a few head of cattle to eat the grass down on Parcel 78.

Irrigation Parcels:

Site 2: Irrigation to Parcels 21, 24, 25 & 28 was stopped early this month in preparation for hay harvesting. Due to the lack of rainfall, these parcels were being irrigated to encourage seed germination in the last half of April. The cover crop on Parcels 24 & 28 benefited from the irrigation but the pasture mix seed sown in February on Parcels 21 & 25 did not germinate.

Site 7: Conduit chases for fresh water and control wires were installed across the new ditch between Parcel 77 & 78. This ditch was installed last fall to achieve better rainwater runoff. As previously reported, Pump 1 at Drainage Pump Station No. 7 shut down due to high amps last month. Staff determined that the motor is not the problem so staff will budget monies in the 2013/2014 budget to pull the pump in the next fiscal year to determine what the problem is.

Irrigation Pump Station:

New restrained flange coupling adapters (FCA's) were installed on each side of the Irrigation Strainers. These required replacement because when the rehabilitated strainers were installed last year the gasket in the FCA's leaked irrigation water and

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became a nuisance. This may have been exacerbated by the corroded spool section of the FCA where the gasket seated.

The Wildlife Pond Fill Pump was turned on at the beginning of May as recommended in the Reclamation Operation & Maintenance Manual to increase oxygen levels in the pond water.

As previously reported, staff is re-evaluating the replacement/repair of Irrigation Pump No. 2. Staff contacted PG&E to inquire about rebate programs for replacing the pump with a more efficient motor. PG&E requested run time data and staff had compiled the data to send off to PG&E, and the data was being reviewed for accuracy in May.

Sludge Handling & Disposal:

There were no reclamation area related sludge handling and disposal activities in May. The Dedicated Land Disposal (DLD) site continues to hold a high water level from the December rains. Treatment plant operations staff will be bringing back this water for treatment through the Novato Treatment Plant through the early part of summer so that the DLD site can be dried out in adequate time for sludge disposal activities later this year.
