

NOVATO SANITARY DISTRICT

Meeting Date: October 15, 2012

The Wastewater Operations Committee of Novato Sanitary District will hold a meeting at 2:00 PM, Monday, October 15, 2012, 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 SEPTEMBER 17, 2012 MEETING

4. WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR SEPTEMBER 2012:

- a. Treatment Plant Performance Report.
- b. Maintenance Report.
- c. Safety and training.
- d. Odor control and landscaping progress report.
- e. Report on reconciliation of natural gas usage.

5. COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR SEPTEMBER 2012:

- a. Collection System Maintenance.
- b. Pump Station Maintenance.
- c. Collection System Performance.

6. RECLAMATION FACILITY REPORT FOR SEPTEMBER 2012

- a. Irrigation system.
- b. Ranching status.

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.

September 17, 2012

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 2:00 p.m., Monday, September 17, 2012, at the District Office, 500 Davidson Street, Novato.

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

STAFF PRESENT: Sandeep Karkal, Deputy Manager-Engineer
Steve Krauthem, Field Services Superintendent
Julie Swoboda, Administrative Secretary
John Bailey, Plant Manager, Veolia Water

ALSO PRESENT: Lynda Rodefer, Veolia Water
Bob Guinan, Novato resident

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

APPROVAL OF MINUTES: The minutes of the August 20, 2012 Wastewater Operations Committee meeting were accepted as written.

WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR AUGUST 2012:

- Treatment Plant Performance Report, Maintenance Report and Safety & Training: John Bailey, Plant Manager, Veolia Water, reviewed the monthly operations report for August 2012 and discussed the treatment plant performance. He stated that the treatment plant was performing very well and that there were no violations or excursions during the month.

Mr. Bailey reported on the key events at the Novato Treatment Facility and the Ignacio Transfer Pump Station. He reported that aeration basin #1 was returned to service and that aeration basins #2 and #3 were drained for repairs. He stated that aeration basin #2 was subsequently returned to service. Mr. Bailey reported that Veolia continues to make routine rounds, readings and maintenance at the Ignacio Transfer Pump Station.

Mr. Bailey discussed a detailed report of odor/noise complaints that were received in August.

Mr. Bailey reported that Veolia continues to take Jerome Meter (H₂S) readings in the Lea Drive neighborhood and within the treatment plant.

Mr. Bailey discussed safety and training for the month of August and noted that Veolia Water has been operating the treatment facility accident free for 821 days/36,954 hours. He outlined the safety and training events that Veolia employees participated in for the month of August. Mr. Bailey discussed the plant flow charts and the energy usage for the past 12 months.

- Odor control, noise, and landscaping progress report: The Deputy Manager-Engineer discussed in detail the landscaping plans, prepared by Cagwin and Dorward, and presented as

part of the committee's materials. Steve Krautheim, Field Services Superintendent, discussed a few slight modifications that were made to the plans since the drawings were prepared.

Bob Guinan, Lea Drive neighborhood resident, stated that a neighborhood meeting was held recently and he gave an overview of the topics discussed. He outlined the neighbor's comments regarding noise levels and the proposed vegetation.

COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR AUGUST 2012:

The Deputy Manager-Engineer stated that Tim O'Connor, Collection System Superintendent, was unavailable to attend the Wastewater Operations Committee meeting. The Deputy Manager-Engineer proceeded to discuss the Collections System Monthly Report for August 2012. He stated that the Collections System spent about 67% of its time on sewer maintenance and 33% on pump station maintenance.

The Deputy Manager-Engineer reported that there was one sanitary sewer overflow in the month of August. He stated that only 5 gallons of sewage was released and that the District recovered 100%. He noted that the overflow was a result of roots and wipes in the main line.

The Deputy Manager-Engineer reported that the Collections System crew cleaned a total of 79,740 feet of sewer pipeline in August and completed 467 maintenance work orders. He discussed pump station maintenance and noted that approximately 226 lift station inspections were conducted during August.

Member Long stated he would like the District to prepare an outreach event to educate Novato plumbers on sound lateral cleaning practices. He hoped the information provided would alert the plumbers to the importance of not allowing root balls cleared from private laterals to enter the main lines which can/does cause sanitary sewer backups.

RECLAMATION FACILITY REPORT FOR AUGUST 2012:

Steve Krautheim, Field Services Superintendent, stated that there were no significant changes in the irrigated parcels. He stated that the motor for irrigation Pump No. 2 failed last month and due to the high replacement cost, staff has requested quotes for repair of the motor.

Mr. Krautheim stated that 95.40 million gallons of recycled water was irrigated during the month of August.

ADJOURNMENT: There being no further business to come before the Committee. The meeting adjourned at 3:32 p.m.

Respectfully submitted,

Sandeep Karkal
Deputy Manager-Engineer

Julie Swoboda, Recording



October 10, 2012

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

Subject: Veolia Water Operations Report – September 2012

Dear Ms. James:

We are pleased to provide this updated activity report for September 2012.

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

Regards,

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

John Bailey
Project Manager

**MONTHLY OPERATIONS REPORT
September 2012**

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: September 2012:

Reclamation

Parameter	Monthly Performance			
	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	4.43	4.96	N/A	N/A
Influent BOD ₅ , lb/day (month ave/max)	8,991	10,594	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	13,215	19,060	N/A	N/A
Effluent BOD ₅ , mg/L (monthly ave/weekly max)	9	<20	40	N/A
Effluent TSS, mg/L (monthly ave/weekly max)	<5	5	N/A	N/A
Effluent BOD ₅ - % Removal, Minimum	96	N/A	N/A	N/A
Effluent TSS - % Removal, Minimum	99	N/A	N/A	N/A
pH, su (min / max)	7.0	7.2	6.0	9.0
Total Coliform, mpn (5 Sample median / max)	130	80	240	10,000
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
- Aeration Basins rotated in and out of service for annual maintenance and cleaning.

Ignacio Transfer Pump Station

- Routine rounds, readings, and maintenance

Digester Cleaning

- Developed specifications for cleaning Ignacio and Novato #2 digesters.
- Solicited proposals for digester cleaning.
- Informed both Bay Area Air Quality Management District and Regional Water Quality Control Board (RWQCB) of intent to clean digesters.
- Cleaning anticipated to begin in October

Recycled Water Plant

- Submitted startup and operations plan to RWQCB
- Received approval to proceed with startup (RWQCB)
- Plant start up / testing 9/13/12
- Began delivering water on 9/17/12
- Plant offline 9/21/12 prepared plant for second dye tracer study

CONSTRUCTION UPDATE:

- Attended weekly construction meetings.

ADMINISTRATION:

- Electronic Self Monitoring Report for August 2012, submitted on 9/19/12

SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTF completed on 9/24/12
- Five Minute Tailgate training is held daily with the O&M staff.
- No safety incidents for the month of September 2012.
- Accident Free: 6/1/10 – 9/30/12: 851 days / 38,295 hours.
- Monthly Safety Training: Confined Space Rescue Training 9/5 & 9/6
Ergonomics Training 9/28/12
- Recycled Water - Tesco Instrumentation Training 9/7/12
- Recycled Water - Telstar Chlorine Analyzer Training 9/17/12
- Christian Williams to 4 day prep class for Grade V Certification
- Reviewed Recycled Water PAC "Proprietary Blend" Chemical MSDS sheet

ODORS:

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

MISCELLANEOUS

- Process Control Management Plan (PCMP) meetings held regularly
- Sent out request for proposal for Digester Cleaning

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

WORK ORDER STATISTICS

September 1, 2012 - September 30, 2012

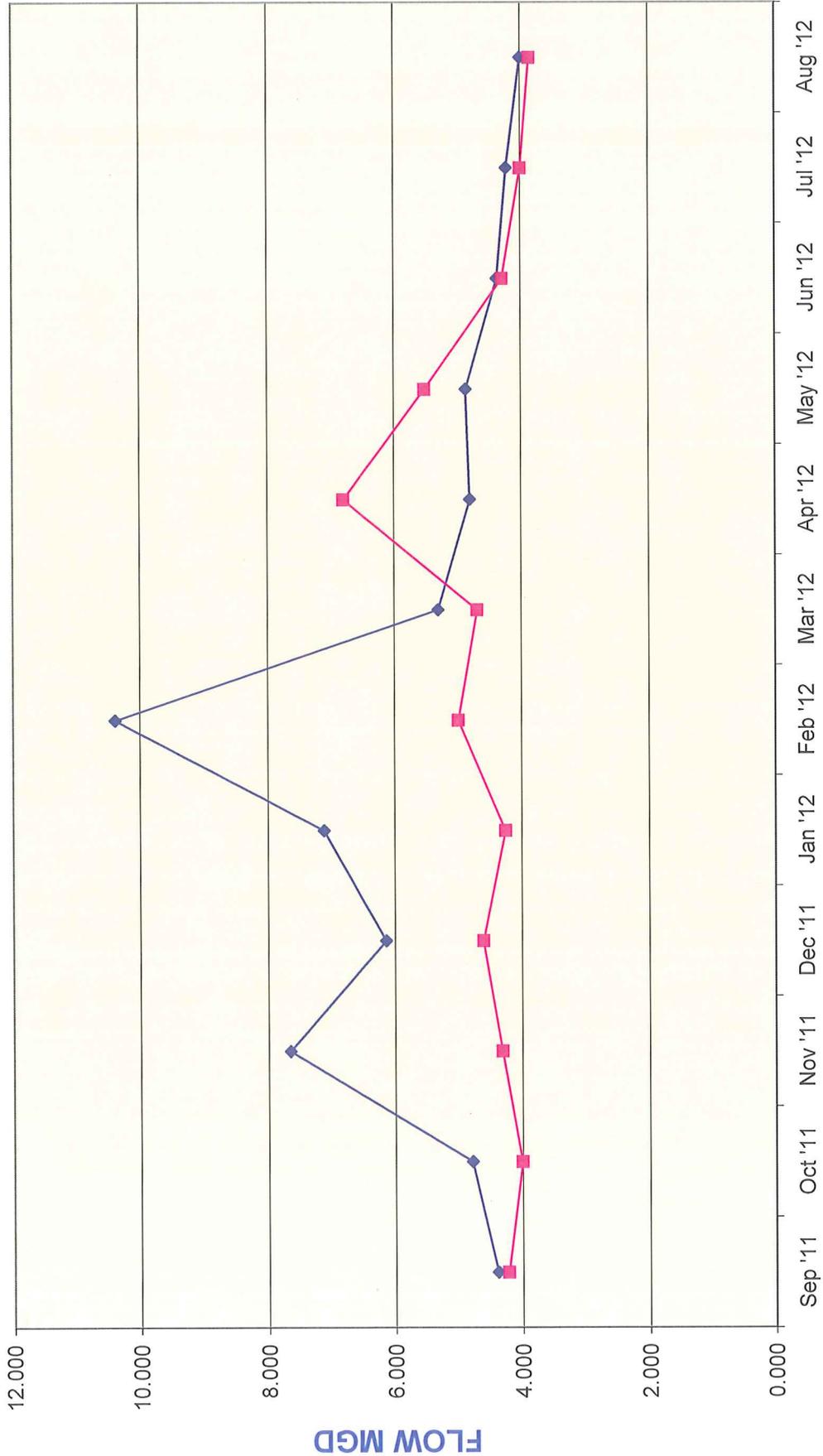
	Open Work Orders Due Prior to 9/1/12	Open Work Orders 9/1/12 - 9/30/12	Total Open Work Orders
Preventative	8	219	227
Corrective	5	18	23
Total	13	237	250

	Closed Work Orders 9/1/12 - 9/30/12
Preventative	217
Corrective	15
Total	232

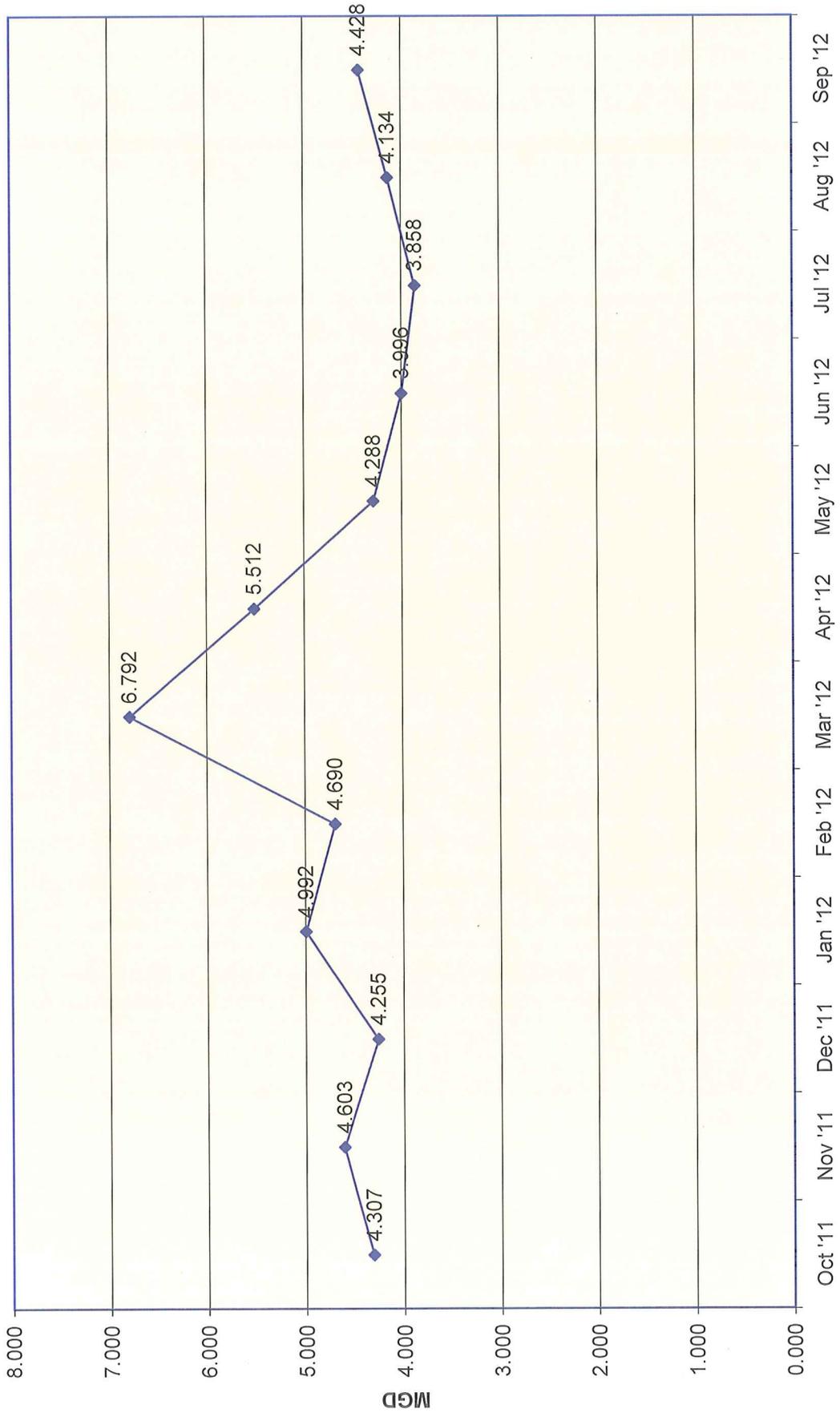
Total Outstanding Work Orders as of October 1, 2012	18
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FLOW COMPARISON

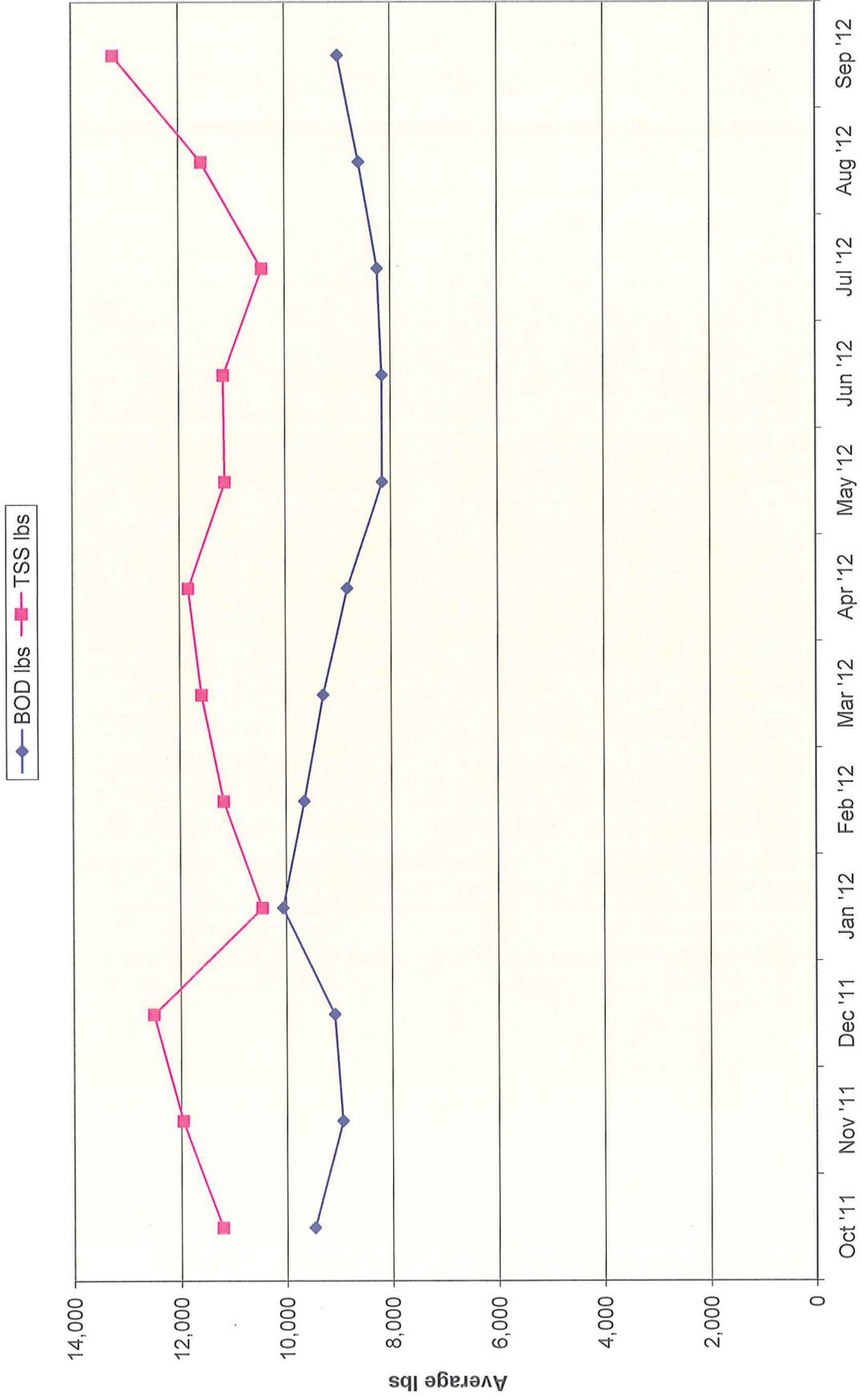
—◆— 2011 —■— 2012



Plant Flow



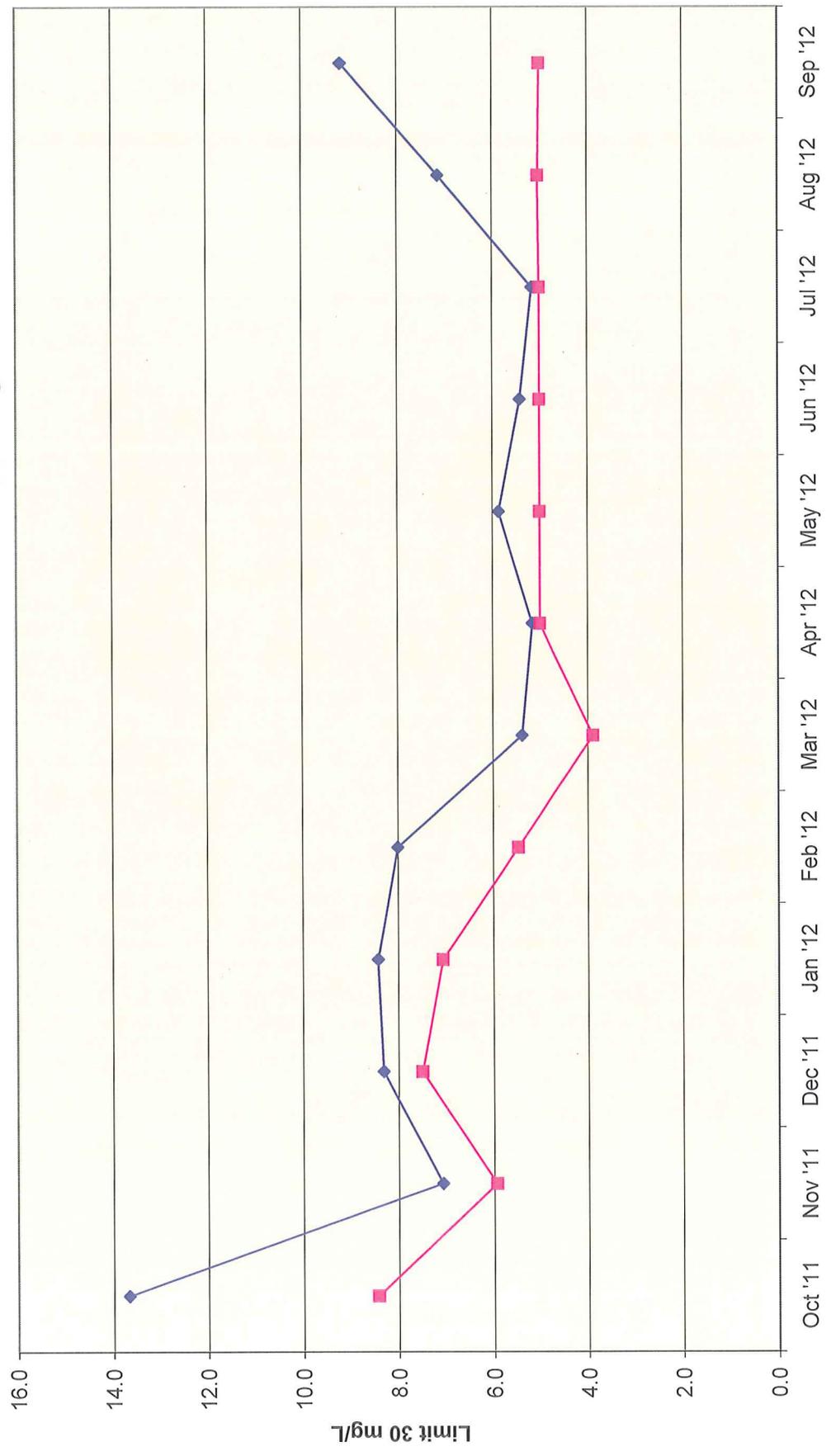
Influent Load BOD / TSS lbs



Effluent BOD / TSS Concentration

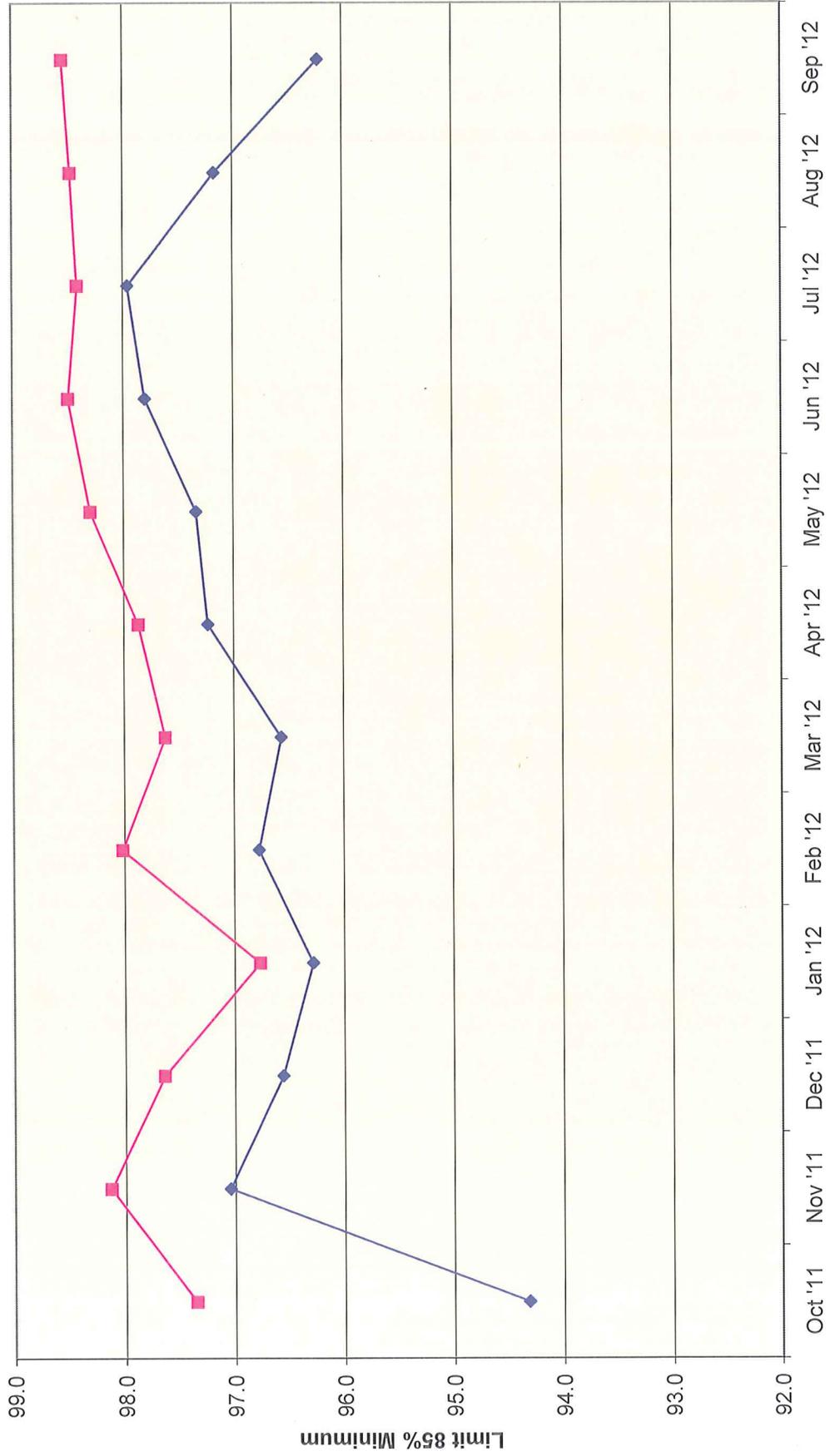
NPDES LIMITS WET SEASON
 BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave
NPDES LIMITS DRY SEASON
 BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave
 TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave
 WDR (Waste Discharge Requirements) RECLAMATION
 BOD - 40 mg/L

—◆— BOD —■— TSS

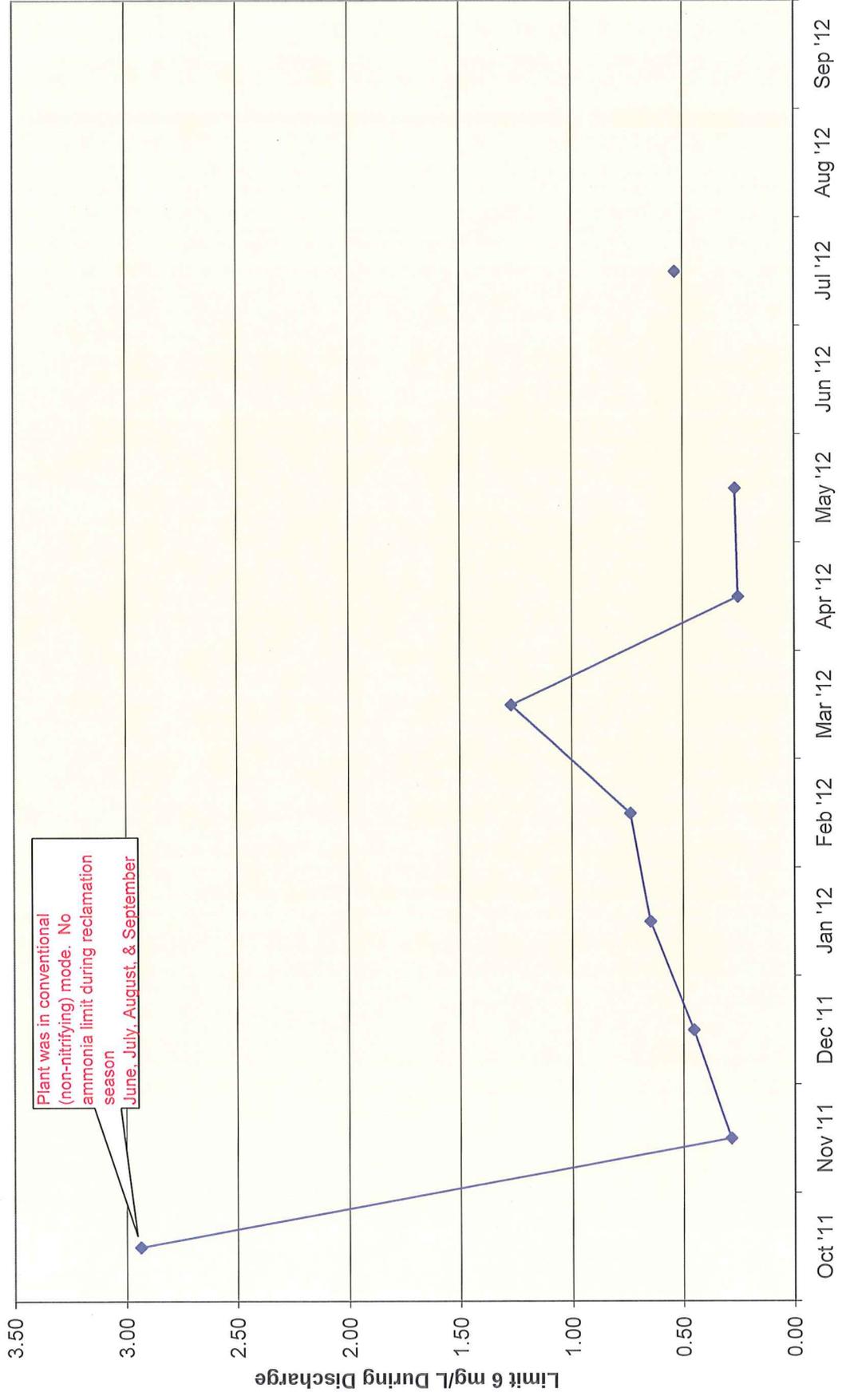


BOD / TSS Percent Removal

—◆— BOD —■— TSS



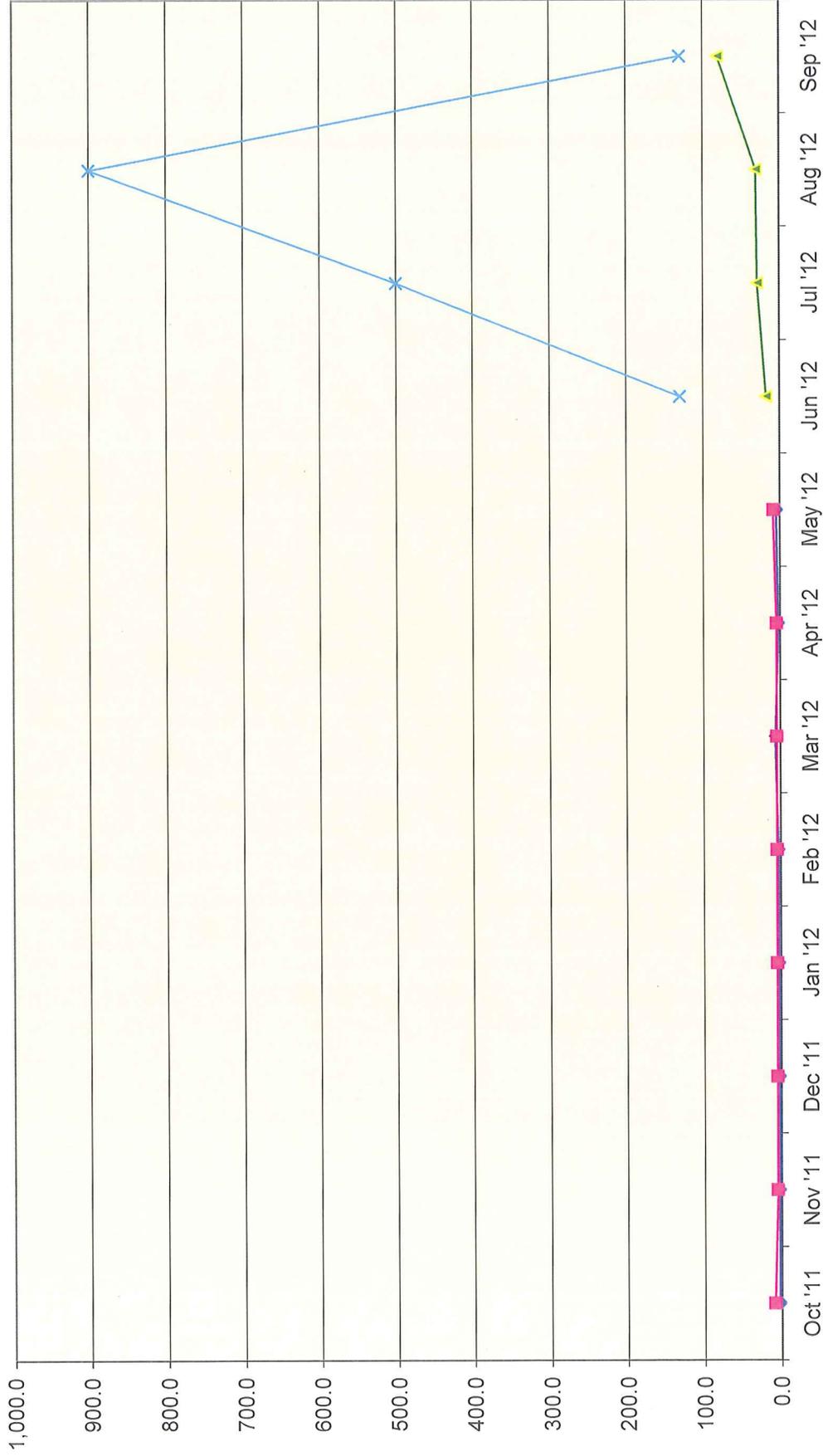
Effluent Ammonia



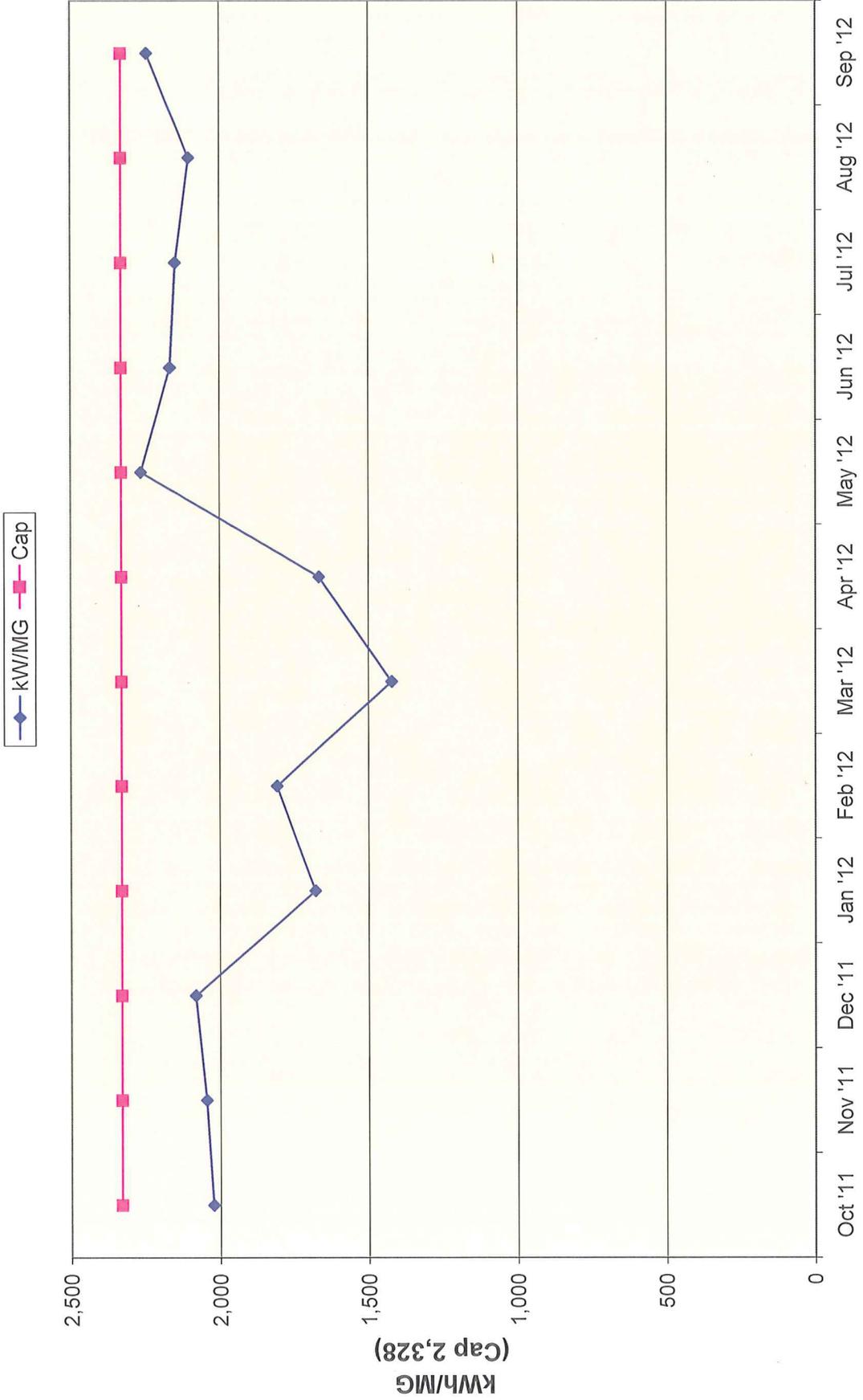
Disinfection

LIMITS - NPDES
 Entero 30 day geo mean 35 mpn /100ml
 Fecal 140 mpn monthly median
 Fecal 430 mpn 90th percentile 30 day
LIMITS - RECLAMATION
 Total Coliform 240 mpn 5 sample median
 Total Coliform maximum 10,000 mpn/100 ml

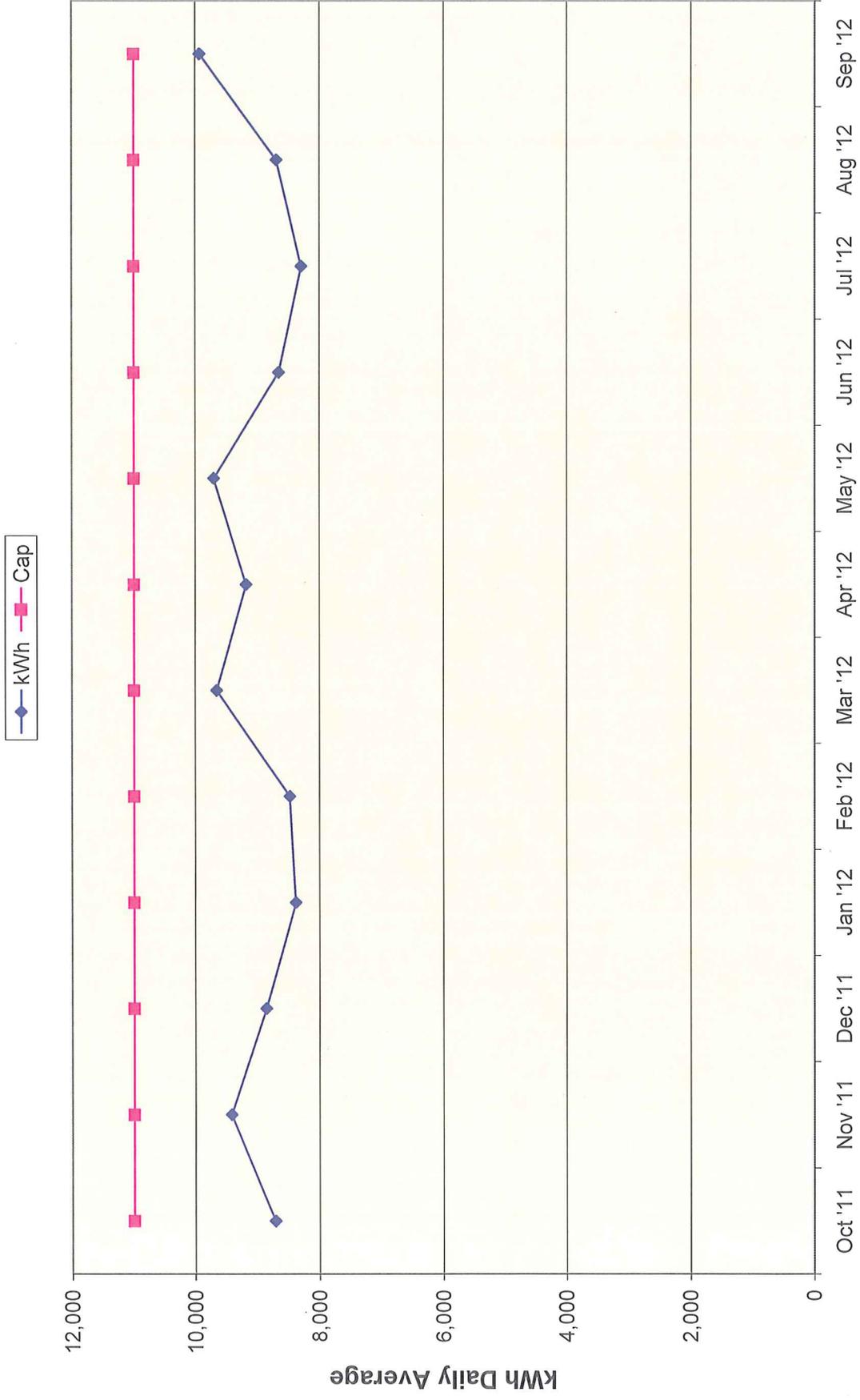
—◆— Entero —■— Fecal Med —▲— Median 5 —*— Maximum



Energy kWh/MG

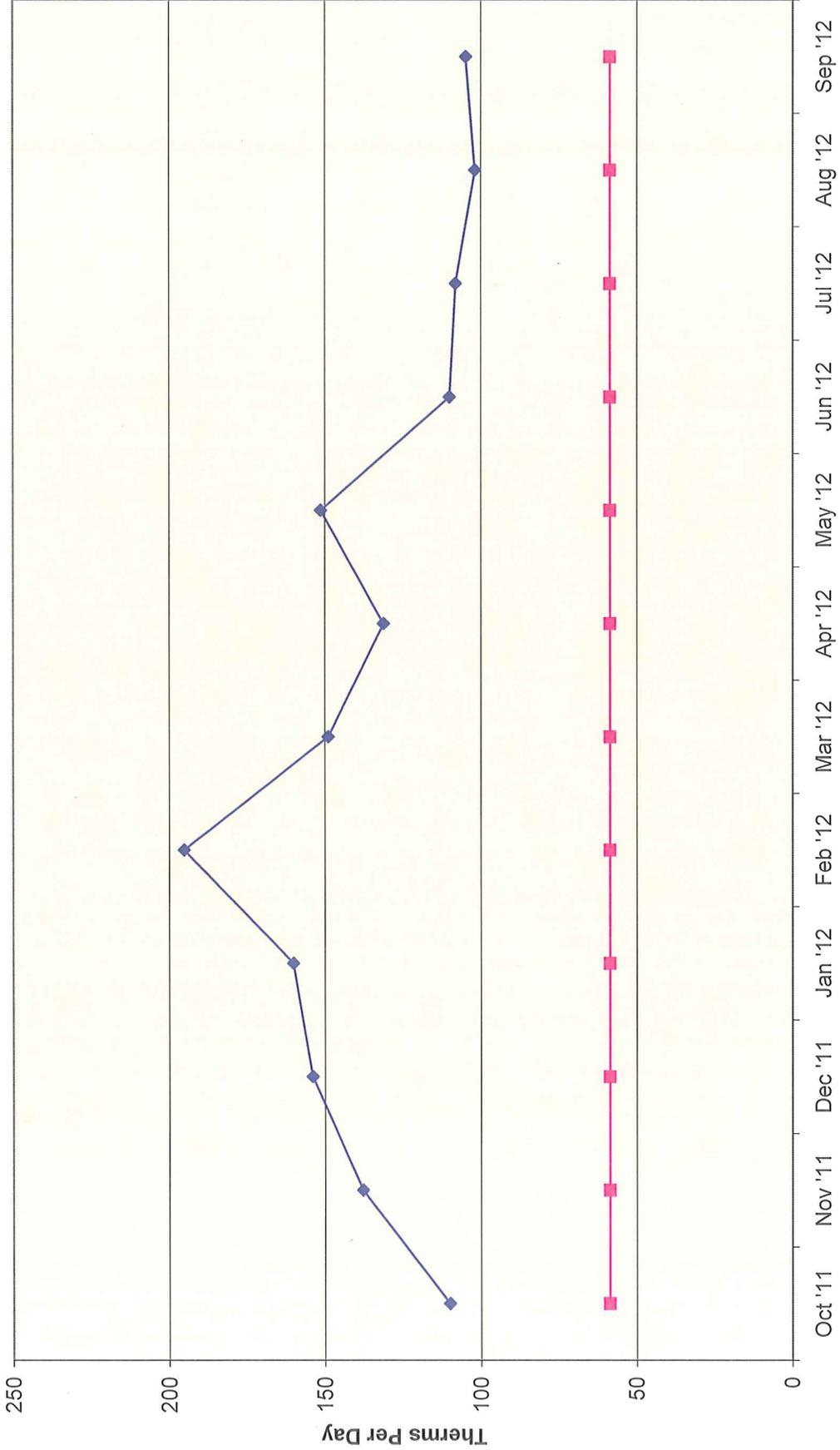


Energy kWh



Natural Gas Use

◆ Natural Gas ■ Cap



ODOR LOG

September 24-30

NEIGHBOR	Mon 9/24	Tue 9/25	Wed 9/26	Thu 9/27	Fri 9/28	Sat 9/29	Sun 9/30	Notes
	Time	Time	Time	Time	Time	Time	Time	
Guinan	1 3 7:00	1 3 16:00	1 1 6:00		1 6 8:00			
Carlamagno								
Erze								
Matan								
Johnstone								
Ruda								
Holmes								
Total								

Legend

Description	Intensity
Aeration Basins	1
Raw Sewage	2
H2S	3
Aeration + Sewage	4
Aeration, Sewage, H2S	5
Sewage + H2S	6
Other (see notes)	7
Not Specified / Unknown	8
Mild Intermittent	1
Mild Persistent	2
Moderate Intermittent	3
Moderate Persistent	4
Strong Intermittent	5
Strong Persistent	6
Other (see notes)	7
Not Specified / Unknown	8

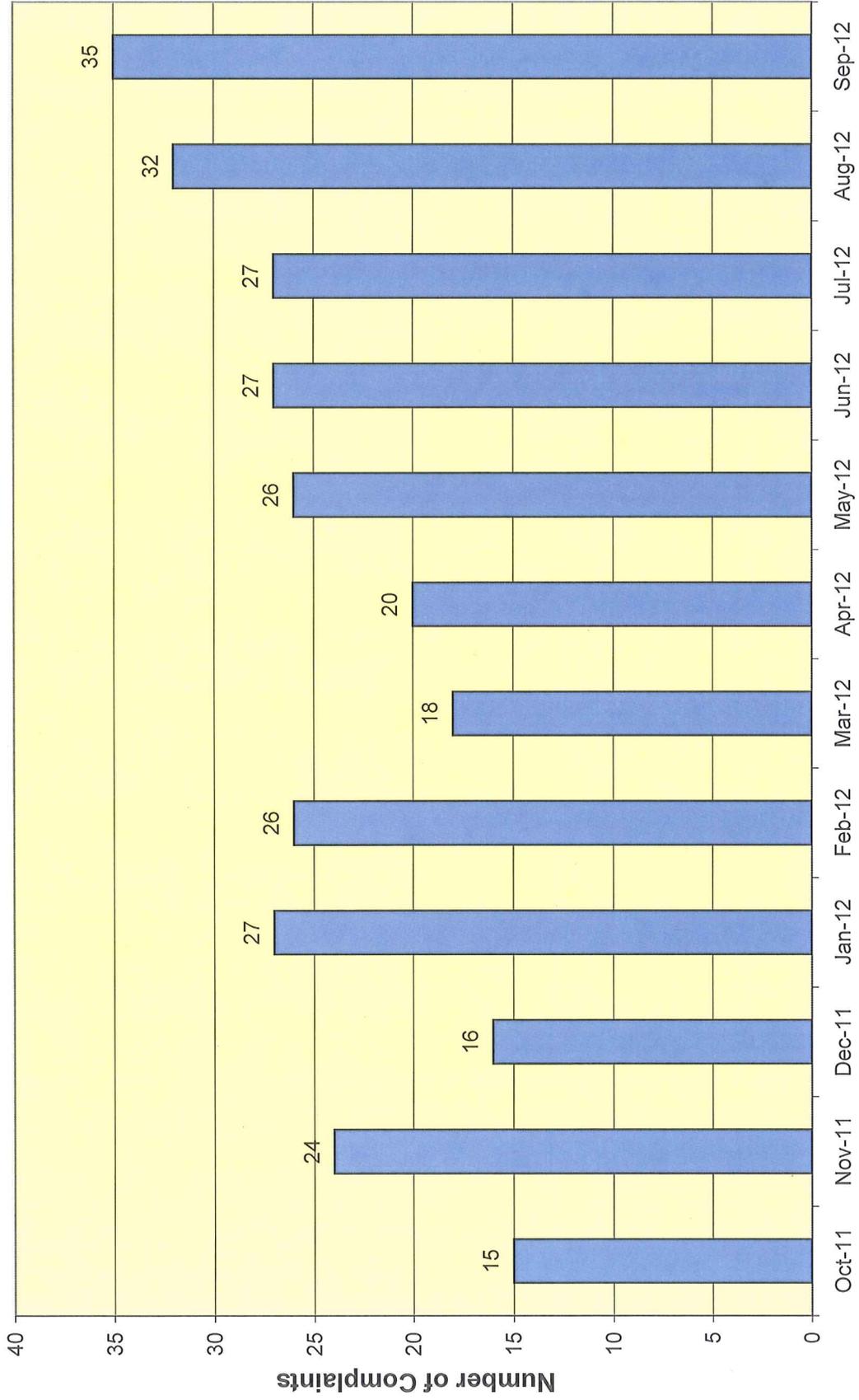
Email -

Thursday 9/20 am starting at 6:30 am thru 9:00 am classified as mild intermittent
 Friday 9/21 on & off starting at 4 pm thru 11 pm varied in classification mild to moderate to strong intermittent to persistent
 Sunday 9/23 pm from 6 pm until bedtime at 11:30 pm classified as moderate to strong persistent
Monday 9/24 on & off all day starting at 7 am thru the evening 10:00 pm classified as mild to moderate intermittent
Tuesday 9/25 pm on & off from 4 pm until 11:30 pm classified as mild to moderate intermittent
Wednesday 9/26 @ 6:00 am classified as mild intermittent

Email - Detected Aeration Type Odors all day Friday 9/28 starting at 8:00 am and continuing on & off throughout the day & evening until 12:15 am Saturday 9/29. Classified at times as Strong Persistent to Moderate Intermittent.

**Bob Guinan
1144 Lea Dr**

Complaints Received



**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
September 2012**

General:

For the month of September 2012, the Collection System Department spent about 52% of its time on sewer maintenance, and 48% of its time on pump station maintenance.

After accounting for all leaves for the month of September, the Collection System had the equivalent of: (a) 1.8 full time field workers for on Sewer Maintenance, and (b) 1.6 full time field workers on Pump Station Maintenance.

Sewer Maintenance:

A total of 33,492 feet of sewer pipelines were cleaned for the month. Staff completed 161 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.

Pump Station Maintenance:

The Collection System Department conducted 257 lift station inspections for the month of September, 2012, with 137 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, 9 Gorman/Rupp dry well/wet well stations, 1 entry per month, and 4 main stations that are visited daily. District personnel installed a new Flygt submersible pump at the Bahia 4 pump station.

A Collection Systems 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, reclamation maintenance work orders, SCADA backup scheduling, and vehicle maintenance scheduling.

Safety and Training:

The Collection System crew attended weekly safety tailgate meetings. Collection System staff attended 8 hrs. of training on the revised Confined Space Entry program.

Safety performance was excellent with no lost time accidents for a total of 534 accident-free days at the end of September 2012

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
September 2012**

Sanitary Sewer Overflows (SSOs):

For the month of September 2012, there were two (2) SSOs as discussed below.

No.	Date	Location	Amount, gal	Cause
1	9/17/2012	732 Rowland Blvd	6,048	Lateral Roots
2	9/26/2012	217 Fairway Drive	8,136	Root Intrusion

SSO at 732 Rowland Blvd.: The Collections department had previously cleaned the impacted sewer main from which this SSO occurred in May 2012, and had it chemically root-treated in June 2012.

Following the SSO, staff conducted interviews with the residents of seven of the eight homes tributary to the discharge manhole on the impacted main. It was determined that the SSO was caused by lateral roots cut out the lateral for the property at 27 Pierce Drive and pushed into the District's main. As a follow-up action to the SSO, staff televised and cleaned downstream sections of the main and did not find any other evidence of root intrusion.

SSO at 217 Fairway Drive: The Collections department had previously inspected (by CCTV) the impacted sewer main from which this SSO occurred in December 2011. No debris or root blockage had been observed in the main at that time. District staff responding to the SSO found that of the 4 homes upstream of this sewer main segment, only two homes were tributary to the discharge manhole of this line segment. Also, given the inaccessible location of the manhole on a steep hillside upslope in a backyard, it would have been hard to notice any overflow.

Following the SSO, staff conducted interviews with the residents of the two homes. The homeowner of 217 Fairway estimated that the discharge had been occurring for about two months and only realized something was awry when they noticed their lawn was getting soggy. He then sent this gardener up on the hillside to investigate and realized it was a discharging manhole. The resident then notified the City of Novato via e-mail on 9/21/12, letting them know about a "water leak" on the hillside. City staff responded on 9/26/12, realized that it was a sewer manhole and notified the Sanitary District at 3:45pm on 9/26/12.

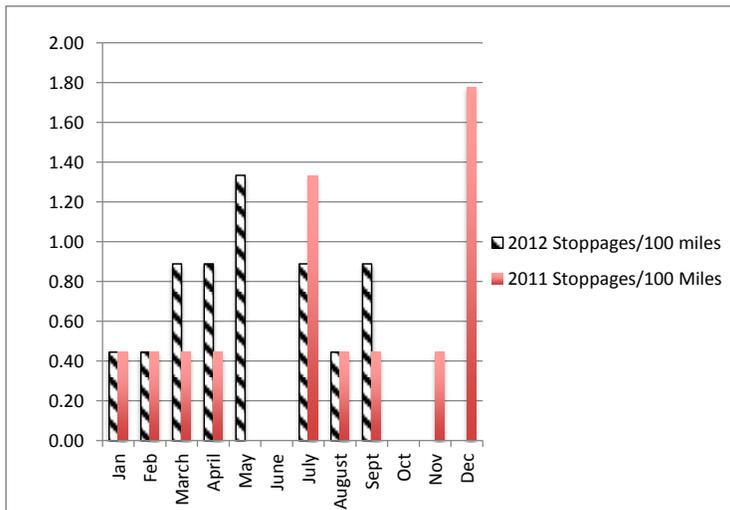
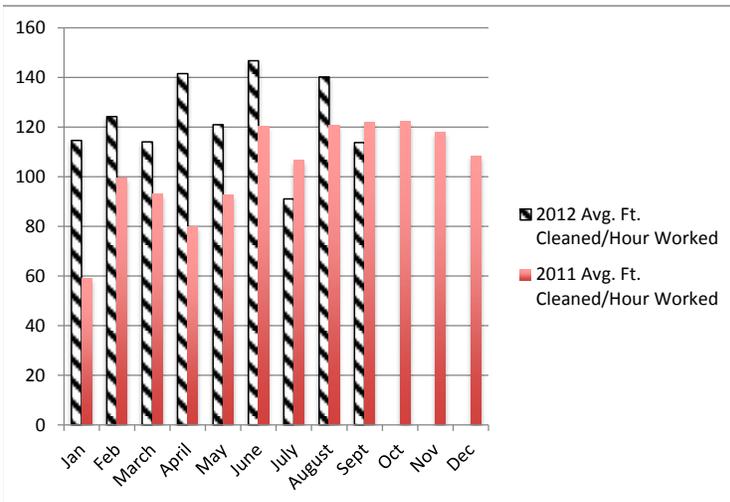
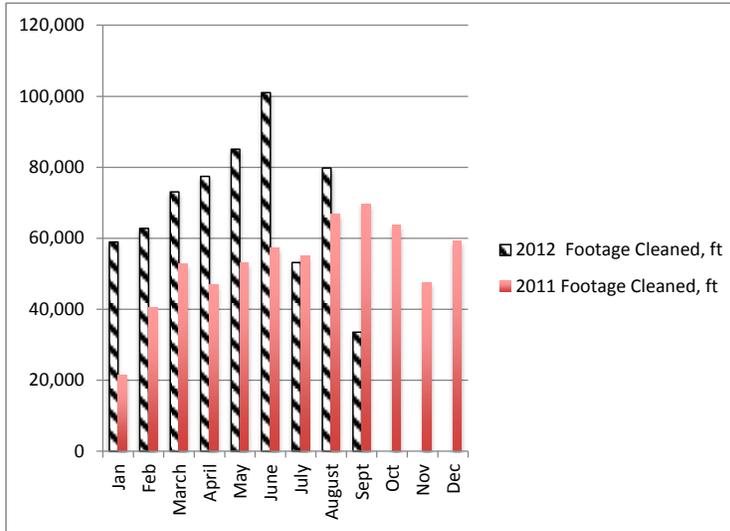
Novato Sanitary District
Collection System Monthly Report For 2012

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
Employee Hours Worked	547	549	689	575	709	723	611	612	307	0	0	0	5,322	
Number of Employees	3.2	3.2	4.0	3.3	4.1	4.2	3.5	3.5	1.8	0.0	0.0	0.0		
Regular Time Worked on Coll. Sys., hrs	514	505	640	547	703	688	584	569	295				5,044	
Regular Time Worked on Other, hrs ⁽¹⁾	69	148	174	189	153	232	341	336	383				2,024	
Regular Time Worked on CCTV ⁽²⁾									NA				0	
Vacation/Sick Leave/Holiday, hrs	221	357	292	365	371	77	194	257	142				2,276	
Overtime Worked on Coll. Sys., hrs	33	44	49	29	6	35	27	44	12				278	
Overtime Worked on Other, hrs ⁽¹⁾	1	0	3	13	1	7	1	10	30				65	
Overtime Worked on CCTV ⁽²⁾									NA				0	
After Hours Callouts, #	1	2	0	0	0	1	0	1	0				5	
Service calls, normal hours, #	7	3	8	4	6	6	8	3	10				55	
Average S.C. response time, mins	29	30	23	13	14	14	18	20	19				180	20
Productivity														
Rodder Work Orders Generated, ft	16	18	3	54	92	75	56	13	10				337	
Rodder 3203 Ft. Cleaned	1,626	1,064	708	10,369	12,117	12,886	8,995	3,071	2,936				53,772	5,975
Flusher Work Orders Generated	275	286	299	344	428	452	235	454	151				2,924	
Truck 3205V Ft. Cleaned	7,667	23,744	0	2,364	2,125	0	6,892	24,699	6,366				73,857	8,206
Truck 3206V Ft. Cleaned	49,636	37,928	59,307	64,640	70,815	88,100	37,294	51,970	24,190				483,880	53,764
Camera Ft. Videoed	5,274	1,031	13,000	1,565	8,545	17,237	23,790	15,534	19,268				105,244	11,694
Work Orders Completed	291	304	302	398	520	527	291	467	161	NA	NA	NA	3,261	362
Work Orders backlog	14	42	67	41	27	28	16	0	0				235	26
Total Footage Cleaned	58,929	62,736	73,015	77,373	85,057	100,986	53,181	79,740	33,492	0	0	0	624,509	52,042
Stoppages	1	1	2	2	3	0	2	1	2				14	
Minor	0	1	2	2	3	0	1	1	0				10	
Major	1	0	0	0	0	0	1	0	2				4	
Overflow Gallons	75	26	398	316	68	0	3,385	5	14,184				18,457	
Volume Recovered	0	26	108	93	63	0	3,385	5	707				4,387	
Percent Recovered	0%	100%	27%	29%	93%	NA	100%	100%	5%	NA	NA	NA	24%	
Benchmarks														
Average Ft. Cleaned/Hour Worked	115	124	114	142	121	147	91	140	114	NA	NA	NA	NA	123
Total Stoppages/100 Miles	0.4	0.4	0.9	0.9	1.3	0.0	0.9	0.4	0.9	0.0	0.0	0.0	6.2	NA
Average spill response time (mins)	8	9	20	20	28	0	14	60	17	NA	NA	NA	NA	20
Callouts/100 Miles	0.4	0.9	0.0	0.0	0.0	0.4	0.0	0	0	NA	NA	NA	2.2	0.2
Overtime hours/100 Miles	15	20	22	13	3	16	12	1	481	NA	NA	NA	124	64
Overflow Gallons/100 Miles	33	12	177	140	30	0	1504	2	6304	0	0	0	8203	

⁽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 beginning October 2012 .

Collection System 2011-12 Graphs



Novato Sanitary District
Pump Station Monthly Report For 2012

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
Employee Hours Worked	334	263	336	276	401	331	352	307	284	0	0	0	2,883	
Number of Employees	1.9	1.5	1.9	1.6	2.3	1.9	2.0	1.8	1.6	0.0	0.0	0.0		1.4
Regular Time Worked on Pump Sta	254	236	280	246	281	277	294	283	234				2,385	
Overtime Worked on Pump Sta	80	27	56	30	120	54	58	25	50				499	
After Hours Callouts	4	2	6	2	3	4	4	4	4				33	
Average Callout response time (mins)	23	25	38	27	34	22	24	23	35				251	28
Work Orders														
Number generated in month	114	154	112	105	119	119	130	123	119	0	0	0	1095	
Number closed in month	87	73	88	80	92	93	103	97	137					
Backlog	27	81	24	25	27	26	27	26	8					

COLLECTION SYSTEM WORK ORDER STATISTICS

September 1, 2012 - September 30, 2012

	Open Work Orders Due Prior to 9/1/2012	Open Work Orders 9/1/2012 - 9/30/2012	Total Open Work Orders
Preventive	26	119	145
Corrective	NA	0	0
Total	26	119	145

	Closed Work Orders 9/1/2012 - 9/30/2012
Preventive	137
Corrective	NA
Total	137

Total Outstanding Work Orders as of 9/30/2012	8
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NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
September 2012

Summary:

The rancher worked on sprinkler repairs and weed spraying this month. There were no significant changes in the irrigated parcels and irrigation times have been shortened to maintain a balanced pond level. The motor for Irrigation Pump No. 2 failed in August and repairs will be completed after the irrigation season closes. Both Irrigation Strainers failed due to failed shear keys in each and were repaired and placed back in operation. 58.10 MG of recycled water was irrigated during the month of September. Pond depth at the end of the month averaged 6.2 feet. Sludge Lagoons 2, 3, 5 & 6 were pumped out to the Dedicated Land Disposal area. Solids were also excavated out of Sludge Lagoon No. 1 and spread in the Dedicated Land Disposal Area.

Ranch Operations:

The rancher continues to repair sprinklers broken by hay removal operations and cattle. The rancher is also spraying thistles and weeds around the sprinkler heads.

Irrigation Systems:

Site 2: As previously reported, valves and actuators in Parcel 6 have failed and need to be replaced. Refurbished valves and actuators and corral fencing have been received and staff will schedule the replacement work in October when irrigation demand is low. This is also the case for Zone 1 in Parcel 7. Zone 2 in Parcel 8 is also malfunctioning and staff is trouble-shooting the problem. A new control board will be installed in October to see if that solves the problem. Irrigation times in all Parcels have been reduced to balance Plant flow into the Storage Ponds with irrigation flow to the Parcels to maintain a balanced pond level.

Site 3: All zones in all Parcels are functioning normally and there is nothing to report. Irrigation times in all Parcels have been reduced to balance Plant flow into the Storage Ponds with irrigation flow to the Parcels to maintain a balanced pond level.

Site 7: All zones in all Parcels are functioning normally. Zone 3 in Parcel 7 and Zone 3 in Parcel 8 were left off as these two Zones are in an area that gets too wet. Irrigation times in all Parcels have been reduced to balance Plant flow into the Storage Ponds with irrigation flow to the Parcels to maintain a balanced pond level. Irrigation was stopped late in the month and Drainage Pump Station No. 7 was activated to pump the ditches down in preparation for the Culvert Replacement Project in the main ditch. Irrigation may resume after the culvert replacement work is complete, weather permitting.

Irrigation Pump Station:

The 400 Hp motor for Pump 2 failed in July and staff has received quotes for repair. This work will be completed after the irrigation season closes.

**NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
September 2012**

Both irrigation water strainers failed this month preventing steady irrigation for approximately one week until staff could troubleshoot problem and make repairs. Staff found that brass shear keys in the drives for each strainer failed preventing the backwash mechanism from functioning correctly, allowing the strainers to plug up and eventually causing the irrigation pumps to shut down due to low flow conditions to sustain irrigation. The shear keys were replaced and the strainers were placed back in operation.

58.10 MG of recycled water (1.94 MG per day average) was irrigated during the month of September. Pond depth at the end of the month averaged 6.2 feet between the two storage ponds.

Sludge Handling & Disposal:

The contractor pumped approximately 1,730,000 gallons of sludge out of Lagoon No. 2, 3, 5 & 6 into the Dedicated Land Disposal (DLD) Area. The contractor also excavated approximately 1,170 cubic yards of solids out of Sludge Lagoon No. 1 and spread it in the Dedicated Land Disposal Area.
