

NOVATO SANITARY DISTRICT

Meeting Date: March 23, 2015

The Board of Directors of Novato Sanitary District will hold a regular meeting at 6:00 p.m., Monday, March 23, 2015, 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.

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. Consider approval of minutes of the March 9, 2015 meeting.

5. CONSENT CALENDAR:

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

- a. Approve regular disbursements.
- b. Approve March payroll and payroll-related disbursements.
- c. Adopt a resolution providing relief on pH limits for the Buck Institute, and setting the revised pH limit.

6. WASTEWATER OPERATIONS:

- a. Receive Wastewater Operations Committee Report, February 2014.
- b. Receive Wastewater Treatment Facilities 2014 Annual Operations and Maintenance Report.

7. STAFF REPORTS:

- a. Report on tour of treatment facilities by California Water Environment Association (CWEA) – Redwood Section, on March 19, 2015.

- b. Report on attending “Investment and Financial Management Forum” in Sacramento, CA, on March 18, 2015.

8. BOARD OF DIRECTORS:

- a. Receive Local Agency Formation Commission (LAFCO) materials for Election for Special District Member, and provide direction.
- b. Presidential appointment of Ad-Hoc Personnel Committee to discuss Technical Services Manager recruitment.

9. BOARD MEMBER REPORTS AND REQUESTS:

10. MANAGER’S ANNOUNCEMENTS:

11. ADJOURN:

Next resolution no. 3084.

Next regular meeting date: Monday, April 13, 2015, 6:00 PM 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

Meeting Date: March 09, 2015

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 6:00 p.m., Monday, March 9, 2015, at the District Office, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Jean Mariani, Directors Brant Miller and Jerry Peters. Director William Long arrived at 6:35 p.m. Director Gary Butler was absent (excused).

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

ALSO PRESENT: Steve Krautheim, Field Services Manager, Novato Sanitary District
Laura Creamer, Finance Officer, Novato Sanitary District
John Bailey, Project Manager, Veolia
Brian Exberger, Assistant Project Manager, Veolia
Liz Falejczyk, Environmental Services Supervisor, Veolia

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as written.

PUBLIC COMMENT: None

REVIEW OF MINUTES:

Consider approval of minutes of the February 9, 2015 meeting.

On motion of Director Peters, seconded by President Mariani, and carried unanimously by the following Directors, the February 9, 2015 Board meeting minutes were approved. Ayes: Peters, Mariani, Miller. Absent: Long.

CONSENT CALENDAR:

The Manager-Engineer stated that Director Long phoned him prior to the meeting and requested that item 5.d. "Receive Memorandum on Internal Controls and Required Communications for Year Ended June 30, 2014" be removed from the Consent Calendar and reviewed when Director Long would be present.

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

- a. Approval of Board member disbursements in the amount of \$741.34, regular disbursements in the amount of \$220,102.85, capital project disbursements in the amount of \$228,133.25. Ratification of February 23rd regular

- disbursements in the amount of \$349,824.23 and capital project disbursements in the amount of \$166,164.32.
- b. Ratification of February payroll and payroll-related disbursements in the amount of \$195,173.98.
 - c. Approval of Regular Board meeting schedule as follows: March 23rd, April 13th, May 11th, Tuesday, May 26th (Monday, May 25th is Memorial Day), June 8th, and June 22nd. Meeting of April 27th cancelled due to CASA Sacramento Legislative & Public Policy Forum.
 - e. Approved application from AU Energy, LLC, and authorized Manager-Engineer to issue a one-time, temporary, Class I Non-Domestic Discharge permit for discharge of excavation water from removal of underground fuel tanks at former Novato Shell Station, 1390 South Novato Boulevard.

On approval of Director Peters, seconded by Director Miller and carried unanimously with the following vote, the above listed Consent Calendar items were approved. Ayes: Peters, Mariani, Miller. Absent: Long.

WASTEWATER OPERATIONS:

- Receive Wastewater Operations Committee Report. The Manager-Engineer stated that the Wastewater Operations Committee met on March 2, 2015 at 2:00 p.m. at the District office. John Bailey, Veolia Plant Manager, provided an overview of the Monthly Operations Report for January 2015 as presented to the Wastewater Operations Committee. He stated that the monthly average flow for January was 4.38 MGD (million gallons per day) and that water quality performance was excellent. He stated that the Recycled Water Facility produced 0.28 MG (million gallons) in January. He outlined the monthly safety and training activities and stated that in January there was one odor complaint and one noise complaint.

The Veolia Plant Manager introduced Liz Falejczyk, Environmental Services Supervisor, Veolia, and noted that she would be attending the meetings periodically to provide lab updates.

Ms. Falejczyk left the meeting at 6:12 p.m.

The Manager-Engineer provided a summary of the odor control and landscaping report. He noted that the District Board of Directors conducted a detailed tour of the entire wastewater treatment plant at their regular Board meeting of January 26, 2015. He stated that the tour emphasized the odor control and management systems.

The Manager-Engineer stated that the media in the large odor control bed between primary clarifiers #1 and #2 was topped off in November and that it appeared to be performing very well. He also noted that in January, operations staff continued to work on optimizing air flow inputs to operating range(s) where odor causing compounds can be oxidized. The Manager-Engineer stated that also in January the District received three bids for replanting the redwood trees in planter boxes along the east fence line of

the plant. The low bid of these three bids was accepted, and the work was completed with the trees being planted in February.

Field Services Manager Steve Krautheim provided a summary of the Collection System Operations Report, and reviewed the department's performance for January 2015. He noted that staff cleaned a total of 78,863 ft. of sewer lines and televised a total of 10,376 ft. He stated that as of January 31st, District staff and the Collections Department have worked a total of 1,418 accident-free days. He stated that there was one sanitary sewer overflow in January at 5 Pivato Ct. He noted that the total estimated discharge was 126 gallons and that the probable cause was the result of root intrusion and debris in the line segment just below the discharge point.

The Field Services Manager provided a summary of the Reclamation Facilities report. He stated that the Rancher applied weed suppressant around sprinkler heads on some parcels in the Reclamation area. He noted that the contractor for the Drainage Pump Station Improvement Project began on site work in January. He stated that there was no sludge handling activity in January.

CAPITAL PROJECTS:

- Pump Station Improvement Project, Account No. 72403 – Unit 5, Digital Drive Pump Station and Los Robles Pump Station, Project No. 72403-05: Grant Final Acceptance of the Project and authorize staff to file the Notice of Completion. The Manager-Engineer gave an overview of the project and stated that substantial completion was granted on September 24, 2014. He requested the Board authorize staff to file the Notice of Completion.

On motion of Director Peters, seconded by Director Miller, and carried unanimously by those Directors present, the Board granted Final Acceptance of the Pump Station Improvement Project, Digital Drive Pump Station and Los Robles Pump Station, Project No. 72403-05 and authorized staff to file the Notice of Completion. Ayes: Peters, Mariani, Miller. Absent: Long.

- Maintenance Building, Account No. 73003 - Phase 1, Site Demolition, Project No. 73003-01: Approve plans and specifications, and authorize Manager-Engineer to advertise for bids. The Manager-Engineer noted that the District has been constructing the Wastewater Treatment Facility Improvements in phases over the past several years. He stated that RMC Water & Environment has completed the plans and specifications for the next phase of these improvements and the work is ready for bid. He noted that the Engineer's Estimate for the work is \$400,000. He stated that bids are expected to be received on April 7, 2015 and will be presented to the Board at a subsequent meeting.

On motion of Director Peters, seconded by Director Long and carried unanimously by those Directors present, the Board approved the plans and specifications for the Administration Building Upgrade/Maintenance Building, Phase 1, Site Demolition, Project No. 73003-01 and authorized the Manager-Engineer to advertise for bids. Ayes: Peters, Mariani, Miller, Long.

CONSENT CALENDAR:

President Mariani noted that Director Long had joined the Board meeting during discussion of the previous agenda item. She stated that the Board would now consider Consent Calendar Item 5.d.: *“Receive Memorandum on Internal Controls and Required Communications for Year Ended June 30, 2014”, prepared by the District’s independent outside auditor, Maze and Associates.*

The Manager-Engineer noted that at the December 16, 2014 Finance Committee meeting and at the January 12, 2015 Board meeting, auditor Ms. Vikki Rodriguez of Maze and Associates had reviewed the District’s financial documents, and discussed the “Memorandum on Internal Controls and Required Communications (Memorandum)” that she was in the process of preparing at the time. He stated that Ms. Rodriguez had now completed and transmitted the Memorandum to the District. The Manager-Engineer noted that a copy was included in the agenda package, and separately, bound hard copies were also available. Upon request by the Board members present, a bound hard copy of the Memorandum was provided to each Board member by Finance Officer Laura Creamer. The Manager-Engineer further noted that the Memorandum captured the items of information that Ms. Rodriguez had discussed during her two presentations.

Director Long noted the discussion on OPEB (Other Post-Employment Benefits) liability in the Memorandum, and stated his interest in a long term strategy to address the obligation. Discussion followed.

President Mariani suggested that the question of OPEB liability receive further consideration in a Finance Committee meeting, with any recommendations being brought before the Board of Directors for discussion.

On motion of Director Peters, seconded by Director Long and carried unanimously by those Directors present, the Board moved to accept the Memorandum on Internal Controls and Required Communications as provided by Maze and Associates. Ayes: Peters, Mariani, Miller, Long.

Finance Officer Laura Creamer left the meeting at 6:55 p.m.

BOARD OF DIRECTORS:

- Receive California Special District Association (CSDA) call for nominations – Board of Directors Bay Area Network, Seat A – “at large” seat, and provide direction. The Manager-Engineer stated that CSDA is conducting a call for nominations for an elected (“at large”) seat. The Directors received the report.

- Receive Local Agency Formation Commission (LAFCO) materials for Election for Alternate Special District Member, and provide direction. The Manager-Engineer and the Board discussed the candidates. The Board directed staff to complete and file the ballot form as follows:

- First choice: Jack Baker – North Marin Water District
- Second choice: Ron Kosciusko – Richardson Bay Sanitary District
- Third choice: Lew Kious – Almonte Sanitary District

STAFF REPORTS:

- California Association of Sanitation Agencies (CASA) Washington DC Conference.

The Manager-Engineer discussed his attendance at the annual CASA Washington DC Conference held from February 23rd – 25th. He noted that the Conference was, as always, consistent with CASA's high standards for such events. He then provided a brief summary of the key themes presented and discussed at the Conference: Infrastructure Financing, Regulatory Reform, Citizen Suit Reform, and Drought and Climate Resiliency.

At 7:05 p.m., President Mariani stated that the Board would take a short break.

The Board meeting was reconvened at 7:13 p.m.

The Manager-Engineer completed his discussion of the CASA conference.

- North Bay Water Reuse Authority (NBWRA) Capitol Day in Sacramento. The Manager-Engineer discussed his attendance at the NBWRA Capitol Day in Sacramento on March 4, 2015.

BOARD MEMBER REPORTS AND REQUESTS:

- Annual City Manager's State of the City Event. President Mariani and Director Peters discussed their attendance at Michael Frank's State of the City Address which was held on February 24, 2015 from 8:00 a.m. to 9:30 a.m. at Novato City Hall.

- North Bay Water Reuse Authority (NBWRA) Capitol Day in Sacramento. Director Long discussed his attendance at the NBWRA Capitol Day in Sacramento which took place on March 4, 2015. He noted particularly that there was extensive discussion on funding for future recycled water projects.

- North Bay Watershed Association (NBWA) meeting. Director Miller discussed his attendance at the NBWA meeting which took place at the District office on Friday, March 6, 2015.

At 7:44 p.m., President Mariani stated that the Board would take a short break.

The Board meeting was reconvened at 7:46 p.m.

Director Miller completed his discussion of the NBWA meeting.

President Mariani then asked if there were any further reports or requests from the Board members present. There being none, she moved onto the next item.

MANAGER'S ANNOUNCEMENTS:

Mr. Dave McEwen of Brown and Caldwell has now been scheduled to make a presentation at the May 11th Regular Board meeting and provide an update on his odor study. The Manager-Engineer noted that this presentation has had to be rescheduled several times due to various schedule conflicts of Mr. McEwen as well as Board members.

- The CWEA Redwood Empire Section Dinner Meeting event will take place on Wednesday, March 19th and be preceded by a tour of the Novato Sanitary District's Recycled Water Facility.

- The CASA Public Policy Forum is being held in Sacramento on April 27th and 28th. Directors are invited to attend.

- The next Regular Board meeting will be held on Monday, March 23rd at 6:00 p.m. at the District office.

- The Wastewater Operations Committee meeting will be held on Monday, March 16th at 2:00 p.m. at the District office.

ADJOURNMENT: There being no further business to come before the Board, President Mariani adjourned the meeting at 8:02 p.m.

Respectfully submitted,

Sandeep Karkal
Secretary

Julie Swoboda, Recording

Novato Sanitary District Operating Check Register

March 23, 2015

Date	Num	Name	Credit
Mar 23, 15			
03/23/2015	57998	Pacific, Gas & Electric	56,037.44
03/23/2015	58001	Regional Government S...	9,343.75
03/23/2015	57999	R & B Company	8,297.31
03/23/2015	57996	North Marin Water Distri...	3,347.50
03/23/2015	57981	EOA, Inc.	3,306.46
03/23/2015	57973	Aqua Science	2,750.00
03/23/2015	57978	DKF Solutions Group, L...	1,817.47
03/23/2015	57977	CED Santa Rosa, Inc	1,510.09
03/23/2015	57980	Eaton Corporation	1,476.00
03/23/2015	57982	Fastsigns	1,270.41
03/23/2015	57994	Monterey Mechanical, Inc.	1,200.00
03/23/2015	58002	Restoration Managemen...	1,169.07
03/23/2015	57985	IEDA, INC	1,072.00
03/23/2015	57993	MB Equipment, Inc.	814.88
03/23/2015	57979	DLT Solutions Inc.	745.82
03/23/2015	57983	Grainger	734.98
03/23/2015	57992	Marin Mechanical II, Inc.	710.00
03/23/2015	58000	Rauch Communication ...	688.75
03/23/2015	57989	Koffler Electrical Mech, I...	660.00
03/23/2015	57974	Cagwin & Dorward Inc.	603.58
03/23/2015	57990	Leonardi Automotive & ...	592.56
03/23/2015	58008	Verizon EQ	589.46
03/23/2015	57975	California Diesel & Power	487.00
03/23/2015	57986	Jan-Pro Cleaning Syste...	425.00
03/23/2015	58007	USA BlueBook	405.82
03/23/2015	58006	Teeters & Schacht Auto ...	392.65
03/23/2015	57976	Cantarutti Electric, Inc	360.00
03/23/2015	58003	Ricoh USA, Inc.	297.22
03/23/2015	57988	Kentfield Occupational ...	164.00
03/23/2015	58009	Verizon Wireless-	142.17
03/23/2015	57997	Novato Radiator and Air...	136.17
03/23/2015	57995	North Marin Auto Parts	113.04
03/23/2015	57972	American Water Works ...	104.00
03/23/2015	dir dep	Karkal, Sandeep	100.00
03/23/2015	57984	Honey Bucket	70.52
03/23/2015	58004	Staples Business Adv Inc.	65.38
03/23/2015	57991	Marin County Ford	35.41
03/23/2015	57971	Able Tire & Brake Inc.	26.85
03/23/2015	58005	Staples~in store purcha...	10.13
Mar 23, 15			102,072.89

**Novato Sanitary District
Capital Projects Check Register**

March 23, 2015

Date	Num	Name	Credit
Mar 23, 15			
03/23/2015	2837	John Deere Landscapes	20,020.58
03/23/2015	2836	Bill Doughty Landscaping, Inc	18,830.00
03/23/2015	2841	RMC Water & Environment, Inc.	4,544.00
03/23/2015	2838	Linscott Engineering Contracto...	4,423.35
03/23/2015	2839	Miller Pacific Engineering, Inc.	2,866.50
03/23/2015	2840	Monterey Mechanical, Inc.	600.00
Mar 23, 15			51,284.43

Novato Sanitary District
Payroll and Payroll Related Check Register
March - 2015

<u>Date</u>	<u>Description</u>	<u>Amount</u>
03/31/2015	March - Payroll	90,757.63
03/20/2015	March - Retirees Health Benefits	13,958.57
03/20/2015	CALPers Health	25,916.47
03/20/2015	CALPERS Retirement	5,689.54
03/31/2015	United States Treasury	17,295.94
03/20/2015	CalPers Supplemental Income Plan	2,500.00
03/31/2015	EDD	5,090.48
03/20/2015	Lincoln Financial Group	7,080.00
03/20/2015	Lincoln Financial Group-401a Plan	2,399.70
03/20/2015	Lincoln Financial Group-401a Plan	3,193.50
03/20/2015	CALPERS Retirement	16,402.97
03/20/2015	Local Union 315	360.00
03/20/2015	Operating Engineers Trust	226.17
		<u>190,870.97</u>

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar; Pretreatment – The Buck Institute	MEETING DATE: March 23, 2015 AGENDA ITEM NO.: 5.c.
RECOMMENDED ACTION: Adopt a resolution providing relief on pH limits for the Buck Institute, and setting the revised pH limit.	
SUMMARY AND DISCUSSION: The District has received an application for renewal of its non-domestic discharge permit from the Buck Institute for Research on Aging. By letter request dated March 10, 2015, the Buck Institute has requested continuing relief on its upper pH limit. Specifically, the request is to raise the upper pH limit to 10.5 from the current District local limit of 8.5. Given that the Board has consistently authorized such relief for the Buck Institute (as well as for other dischargers who have requested pH relief) in the past, staff sees no issues in granting the requested relief. The basis of the upper limit relief can be found in Section 207 (Relief on Application) of the District's Sanitary Code. Accordingly, staff recommends that the Board approve an upper pH limit of 10.5 for the Buck Institute's renewed discharge permit, and adopt the attached resolution that documents approval and sets the revised pH limits.	
DEPT. MGR.: lf, ssk	MANAGER-ENGINEER: SSK

NOVATO SANITARY DISTRICT

RESOLUTION NO. 3083

**A RESOLUTION APPROVING RELIEF ON pH LIMITS,
AND SETTING REVISED pH LIMITS
FOR BUCK INSTITUTE, 8001 REDWOOD BLVD., NOVATO**

WHEREAS, the District has received application for upper limit relief of pH 10.5 from pH 8.5 for Buck Institute's (Permittee) discharge permit for its 8001 Redwood Blvd. facility; and

WHEREAS, Section 207 of the Sanitary Code of Novato Sanitary District states that relief from any provision of said Code may be made by Resolution of the Board; and

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED AND ORDERED as follows:

- A. The Permittee shall maintain the pH within the range of 5.5 to 10.5.
- B. In addition, District staff will continue to use Section 401.17 of Title 40 of the Code of Federal Regulations (40 CFR §401.17) as the basis to exempt excursions from the 5.5 to 10.5 pH range subject to the following limitations:
 - (1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and
 - (2) No individual excursion from the range of pH values shall exceed 60 minutes.

* * * * *

I hereby certify that the foregoing resolution was duly and regularly passed and adopted by the Board of Directors of Novato Sanitary District, Marin County, California, at a meeting thereof duly held on the 23rd day of March, 2015, by the following vote:

AYES, and in favor thereof, Directors: _____

NOES, _____

ABSENT, _____

President, Board of Directors
Novato Sanitary District

ATTEST:

Secretary
Novato Sanitary District

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Operations Committee Meeting Report, February 2015.	MEETING DATE: March 23, 2015 AGENDA ITEM NO.: 6.a.
RECOMMENDED ACTION: Information. Receive report.	
SUMMARY AND DISCUSSION: <p>The Draft Wastewater Treatment Facilities 2104 Annual Operations and Maintenance Report was presented. The Committee reviewed the draft report, and directed staff to finalize it for presentation the full Board at the next Board meeting. The Committee also reviewed the attached February 2015 reports for wastewater treatment operations, collection system operations, and reclamation facilities.</p> <p>Wastewater Treatment Facility</p> <p>Novato Treatment Plant (NTP) water quality performance was excellent with all parameters well within effluent standards, and there were no NPDES violations. The Recycled Water Facility produced 0.59 MG of recycled water in February. Safety performance was excellent with another accident-free month for a total of 1,731 accident-free days at the end of February. Routine maintenance activities were performed at the NTP and the Ignacio Transfer Pump Station (ITPS). The Discharge Monitoring Report (DMR) and the Electronic Self-Monitoring Report (e-SMR) for January 2015 were submitted on February 28, 2015.</p> <p>Odor Control and Landscaping</p> <p>Odor control related activities in February included: (1) Operations staff initiated liquid phase sulfide sampling as recommended by the District's odor consultant Dave McEwen of Brown and Caldwell (B&C), (2) As needed use of a trial installation of the Aqua-Fog odor counteractant system (3) Monitoring the media in the large odor control bed between primary clarifiers #1 & #2 which was topped off in November – it appears to be performing very well, and (4) As-needed addition of sodium hypochlorite to the influent flow. In terms of landscaping, staff received bids in January to relocate the redwood trees in planter boxes along the eastern fence line of the plant site to the northeast corner of the plant site. The contract was awarded to the low bidder, and the trees were installed in February.</p> <p>Collection System and Pump Stations</p> <p>Staff cleaned a total of 40,553 ft of sewer lines. Staff also televised 6,622 ft of sewer lines with the CCTV truck, hand televised 806 ft with the Push Cam, and conducted 249 lift station inspections. In addition, outside contractors cleaned and televised 553ft of trunk sewers.</p> <p><u>Safety:</u> No lost time accidents in February 2015 for a total of 1,446 accident-free days.</p> <p><u>Standard and Emergency Operating Procedures (SOPs & EOPs):</u> No SOPs were generated in February, but a revised SOP tracking matrix generated in January is being reviewed internally.</p> <p><u>Sanitary Sewer Overflows (SSOs):</u> There were four (4) SSO in February 2015 as discussed in the attached Collections System Operations Report.</p> <p>Reclamation Facility</p> <p>The rancher continued to apply weed suppressant around sprinkler heads on various Parcels in the Reclamation area. The contractor for the Drainage Pump Station Improvement Project continued work for the project as weather and conditions allowed. There were no irrigation or sludge handling activities this month.</p>	
DEPT.MGR.: JB (Veolia), SRK, TMO	MANAGER-ENGINEER: SSK

NOVATO SANITARY DISTRICT

Meeting Date: March 16, 2015

The Wastewater Operations Committee of the Novato Sanitary District will hold a meeting at 2:00 PM, Monday, March 16, 2015, 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. APPROVE MINUTES OF MARCH 2, 2015 MEETING

4. WASTEWATER TREATMENT FACILITIES REPORT FOR FEBRUARY 2015:

- a. Receive "DRAFT" 2014 Annual Operations and Maintenance Report.
- b. Treatment Plant Performance Report
- c. Maintenance Report
- d. Safety and training
- e. Odor control and landscaping report

5. COLLECTION SYSTEM REPORT FOR FEBRUARY 2015:

- a. Collection System Maintenance
- b. Pump Station Maintenance
- c. Collection System Performance
- d. Safety and Training

6. RECLAMATION FACILITY REPORT FOR FEBRUARY 2015

- 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.

March 2, 2015

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 2:00 p.m., Monday, March 2, 2015, at the District Office, 500 Davidson Street, Novato.

MEMBERS PRESENT: Committee Members Jerry Peters and Brant Miller.

STAFF PRESENT: Sandeep Karkal, Manager-Engineer
Steve Krauthem, Field Services Manager
Tim O'Connor, Collections System Superintendent
John Bailey, Project Manager, Veolia
Julie Swoboda, Administrative Secretary

OTHERS PRESENT: Brian Exberger, Assistant Project Manager, Veolia
John O'Hare, Pretreatment Programs Manager, Veolia
Liz Falejczyk, Environmental Services Supervisor, Veolia

AGENDA APPROVAL: Approved as presented.

PUBLIC COMMENT: None.

APPROVAL OF MEETING MINUTES FOR JANUARY 20, 2015: The January 20, 2015 meeting minutes were approved as presented.

WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR JANUARY 2014:

- Treatment Plant Performance Report, Maintenance Report and Safety & Training:
Manager-Engineer Sandeep Karkal introduced Veolia Project Manager John Bailey, who provided an overview of treatment plant operations for the month of January. He noted that due to the dry weather, flows were much lower than the previous month. He stated that there were no permit exceedances, violations, or excursions in the month of January.

The Project Manager discussed the key operations and maintenance events at the Novato facility, the Ignacio Transfer Pump Station, the Recycled Water Plant, and the Sludge Lagoons. He discussed training events completed in January and stated that as of January 30th, Veolia employees have been accident free for a total of 1,703 days / 77,656 hours. He outlined the training Veolia employees participated in during January. He reviewed the operations and maintenance report and stated that 0.28 million gallons of recycled water were produced.

The Project Manager stated that Jerome Meter (H₂S) readings continue to be taken within the treatment plant as well as in the Lea Drive neighborhood area and that one odor notification and one noise complaint were received in January. He noted that

Veolia conducted a site walk/tour for the District Board of Directors at the January 26th Regular Board meeting.

- Odor control, and landscaping report: The Manager-Engineer discussed the odor related activities in January which included: a trial installation of a new odor counteractant technique that broadcasts a water based non-toxic odor neutralizer (the Aqua-Fog system) in the vicinity of the aeration basins; media in the large odor control bed between primary clarifiers #1 and #2 was topped off in November and appears to be performing satisfactorily; operations staff continued to fine-tune the air flow input to the converted anoxic zones in the aeration basins; continued addition of an oxidizing agent to the influent flow as needed with staff monitoring performance.

The Manager-Engineer commented on the landscaping activities in January and noted that the replanting of the redwood trees currently in planter boxes on the east fence line should take place before March 15th.

COLLECTION SYSTEMS OPERATION AND MAINTENANCE REPORT FOR JANUARY 2015:

The Collections System Superintendent gave the Collection Systems Monthly Report for January 2015. He reported that the Collection Systems crew cleaned a total of 78,863 feet of sewer pipeline and that the department completed 416 maintenance work orders which were generated in December. He noted that outside contractors also cleaned 1,349 feet of trunk sewer main line during the month. He stated that the District's CCTV van (Closed Circuit TV) televised 24 line segments for 3,998 feet of production and he outlined the areas identified as needing repairs or further evaluation. He reported on the current Collection System Projects and outlined the specialized training that the department completed.

The Collections System Superintendent stated that as of January 30, 2015, the Collections Department and the District have worked accident free for a total of 1,418 days and discussed the Collection System minor projects completed in January. He stated that staff generated two (2) Standard Operation Procedures (SOP's) in January. He stated that one sanitary sewer overflow occurred on January 31st on Pivato Ct. with an estimated volume of approximately 126 gallons. The discharge was determined to be the result of a partial root intrusion and debris in the line segment just below the discharge rodding inlet.

RECLAMATION FACILITY REPORT FOR JANUARY 2014:

The Field Services Manager presented the Reclamation Facilities report for January. He stated that the rancher applied weed suppressant around sprinkler heads on some parcels in the Reclamation area and noted that there were no irrigation or sludge handling activities this month. He noted that the contractor for the Drainage Pump Station Improvement project began on site work.

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 16th at 2:00 p.m.

Respectfully submitted,

Sandeep Karkal
Manager-Engineer

Julie Swoboda, Recording

DRAFT

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT

**The full Draft Report is attached as Appendix A to
this Board meeting packet for reference purposes.**

Prepared by:

Veolia Water Operating Services

Draft – March 2014





March 11, 2015

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

Subject: Veolia Water Operations Report – February 2015

Dear Mr. Karkal:

I am pleased to provide the Monthly Operation Report for February 2015.

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

Best regards,

A handwritten signature in blue ink, appearing to read "John Bailey". The signature is stylized and cursive.

John Bailey
Project Manager, Veolia



**MONTHLY OPERATIONS REPORT
February 2015**

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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○ Biofilter Rehabilitation – Ignacio Transfer Pump Station	
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TREATMENT PLANT PERFORMANCE SUMMARY: February 2015:

Bay Discharge – NPDES Limits

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	5.78	14.22	N/A	N/A
Max Peak Hour, MGD – 2/8/2015, 1240 Hours	N/A	~ 21	N/A	N/A
Influent BOD ₅ , lb/day (month ave/max)	10,956	24,183	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	14,287	33,197	N/A	N/A
Effluent BOD ₅ , mg/L (monthly ave/weekly max)	12	16	30	45
Effluent TSS, mg/L (monthly ave/weekly max)	<4	5	30	45
Effluent BOD ₅ - % Removal, Minimum	94	N/A	85	N/A
Effluent TSS - % Removal, Minimum	99	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	2.05	4.90	6	21
pH, su (min / max)	6.9	7.1	6.5	8.5
Enterococcus, mpn (30 day geo mean)	4.2	N/A	35	N/A
Fecal Coliform, mpn (30 day median)	8	N/A	140	N/A
Fecal Coliform, mpn (90 th percentile)	21.1	N/A	430	N/A
Total Coliform, mpn (5 Sample Median / Max)	N/A	N/A	240	10,000
Total Permit Exceedances (NPDES)	0			

NA – Not Applicable

Discussion of Violations / Excursions: NONE

Title 22 - Recycled Water Production and Quality

Description	Units	Value	Limit
Volume Produced	Million Gallons	0.59	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 Dissolved Oxygen (DO)	mg/L	N/A	1.0
Maximum Total Coliform	mpn/100 ml	<2	2

Total Rainfall. – 4.13 inches

Daily Max 2/6/15 – 2.13 inches

Note: Rainfall data from weather station readings at 500 Davidson St (WWTP)

SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTP and Ignacio Pump Station completed
- Five Minute Tailgate training is held daily with all staff.
- No safety incidents for the month of February.
- Accident Free: 6/1/10 – 2/28/15: 1,731 days
- Monthly Safety Topic and Training – Personal Protective Equipment (PPE)

OPERATIONS & MAINTENANCE STATUS / REVIEW:

Key events for the period:

We experienced two days of significant rainfall during the month. Peak flows in excess of 21 mgd were noted. No process or equipment problems were noted.

Novato

- Routine rounds, readings and maintenance
- Replaced fuse in Blower #2
- Repair Primary Effluent Sampler Door
- Replaced tires on lab wagon – sampling aid
- Repaired oil leak on Wet Weather Pump #1

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

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

Ignacio Transfer Pump Station

- Routine rounds, readings and maintenance
- Biofilter – Media replacement

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

- None

Recycled Water Plant (RWP)

- Performed plant rounds and maintenance

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

- None

Sludge Lagoons

- Performed routine rounds and inspection
- Assisted Contractor with clean out installation – District Project
- Flushed lines

ADMINISTRATION:

- January Electronic Self Monitoring Report submitted on February 28, 2015
- January Electronic DMR Report submitted on February 28, 2015

ODORS:

- Jerome Meter (H₂S) readings performed in neighborhood and within treatment plant.
- No odor complaints in February

MISCELLANEOUS

- Process Control Management Plan (PCMP) meetings held weekly.

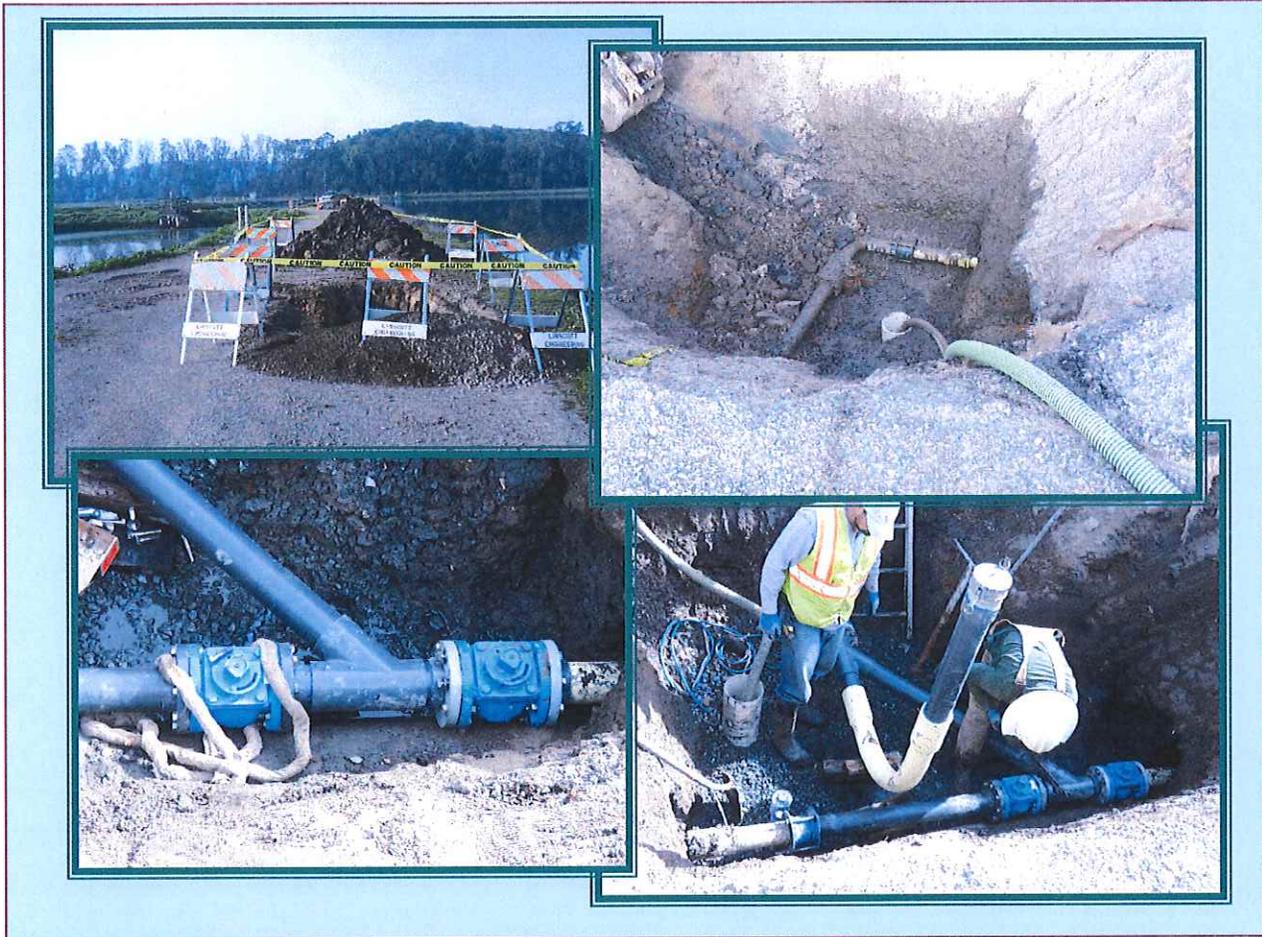
Veolia Support Staff On/Off Site (Various Times)

John O'Hare

Technical Support

RECLAMATION AREA – SLUDGE LAGOONS
REPLACEMENT OF VALVES AND RECONFIGURATION
OF DISTRIBUTION LINES

February 25, 2015



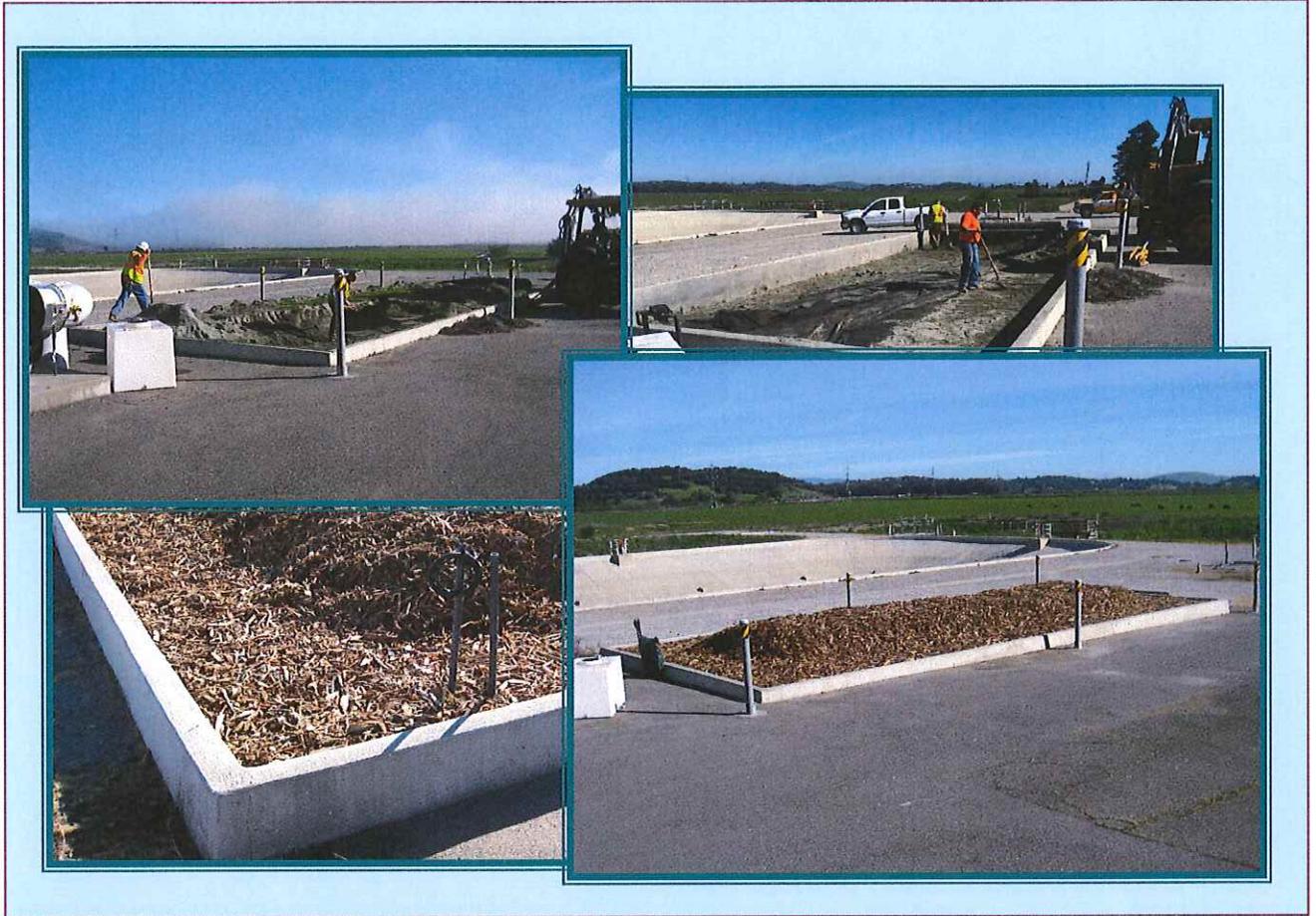
Top Left – Excavation of Sludge Feed Line to Lagoons #3, #4, #5, & #5

Top Right – Frozen Isolation Valve

Bottom Left – New Isolation Valves and Wye (wye will facilitate better flow to lagoons)

Bottom Right – New Cleanout Installed

IGNACIO TRANSFER PUMP STATION
BIOFILTER MEDIA REPLACEMENT
February 25, 2015



Top Left & Right – Removal of old media
Bottom Left – Closeup of new media
Bottom Right – Biofilter with new media installed

Novato Plant : Bacterial Results

EFFLUENT: E-002 Station

Feb-15

Fecal Coliform		Enterococcus	
(1) 30-Day Median not to exceed	(2) 90th Percentile not to exceed	30-Day Geometric mean not to exceed	
140 MPN/100 mL	430 MPN/100 mL	35 MPN/100 mL	

February 1, 2015		
February 2, 2015		
February 3, 2015	30	
February 4, 2015	22	
February 5, 2015		
February 6, 2015	8	
February 7, 2015		
February 8, 2015		
February 9, 2015	8	
February 10, 2015		
February 11, 2015	11	
February 12, 2015		
February 13, 2015	2	
February 14, 2015		
February 15, 2015		
February 16, 2015		
February 17, 2015	7	
February 18, 2015		
February 19, 2015	4.5	
February 20, 2015	13	
February 21, 2015		
February 22, 2015	13	
February 23, 2015		
February 24, 2015	4	
February 25, 2015		
February 26, 2015	< 2	
February 27, 2015		
February 28, 2015		

90th Percentile Ranking		
Sample #1	2	
Sample #2	2	
Sample #3	4	
Sample #4	4.5	
Sample #5	7	
Sample #6	8	
Sample #7	8	
Sample #8	11	
Sample #9	13	
Sample #10	13	
Sample #11	22	
Sample #12	30	
Sample #13		
Sample #14		
Sample #15		
Sample #16		
Sample #17		
Sample #18		
Sample #19		
Sample #20		
Sample #21		

February 1, 2015		
February 2, 2015		
February 3, 2015	85.7	
February 4, 2015	3.0	
February 5, 2015	81.3	
February 6, 2015		
February 7, 2015		
February 8, 2015	5.2	
February 9, 2015		
February 10, 2015	1.0	
February 11, 2015		
February 12, 2015	2.0	
February 13, 2015		
February 14, 2015		
February 15, 2015		
February 16, 2015		
February 17, 2015	3.1	
February 18, 2015		
February 19, 2015	< 1.0	
February 20, 2015	2.0	
February 21, 2015		
February 22, 2015	7.5	
February 23, 2015		
February 24, 2015	< 1.0	
February 25, 2015		
February 26, 2015	3.0	
February 27, 2015		
February 28, 2015		

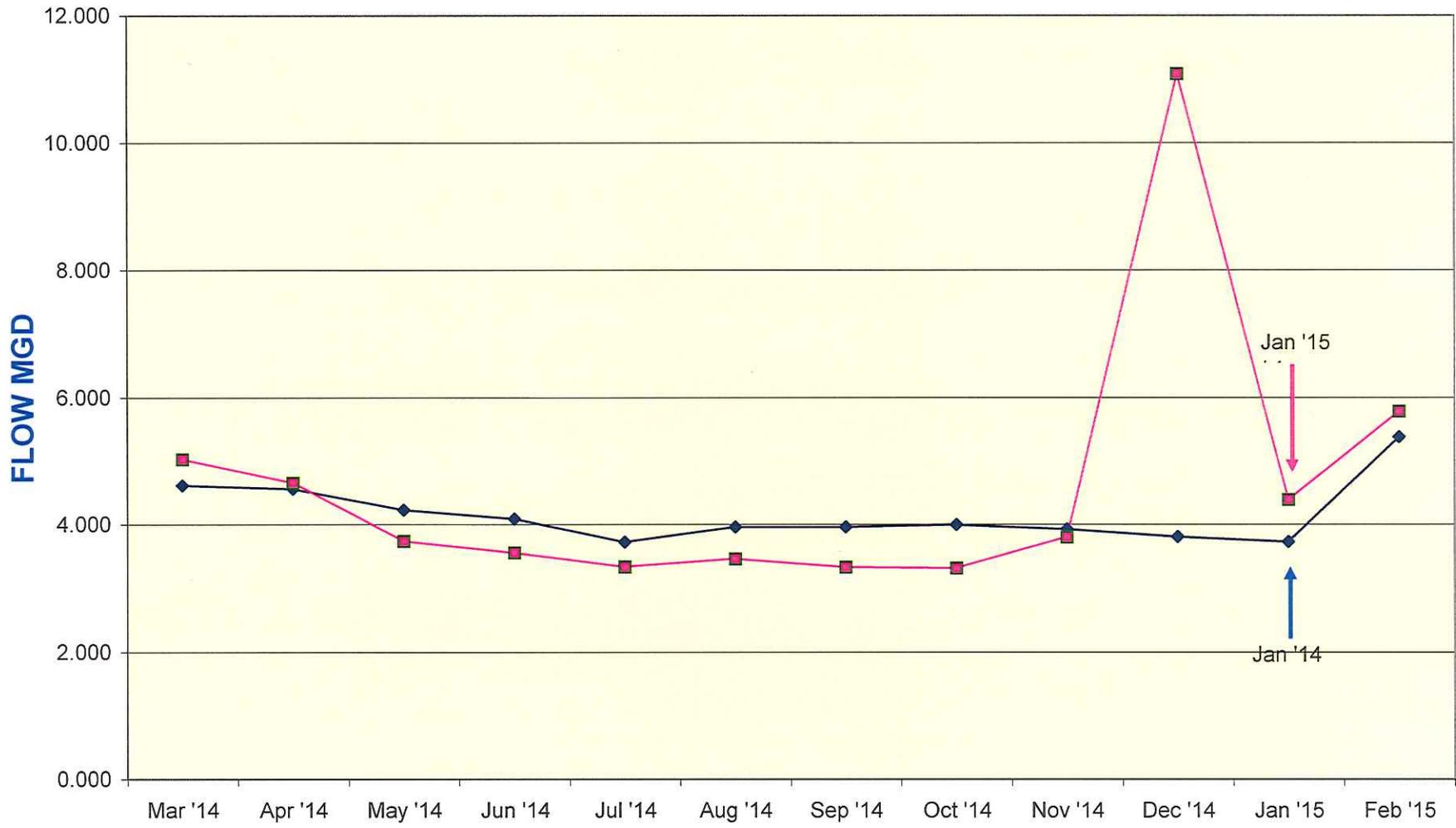
Max	30
Min	2.0
Avg	10.38
30-Day Median	8

90th Percentile Value **21.1**

Max	85.7
Min	1.0
Avg	16.3
30 Day Geo. Mean	4.2

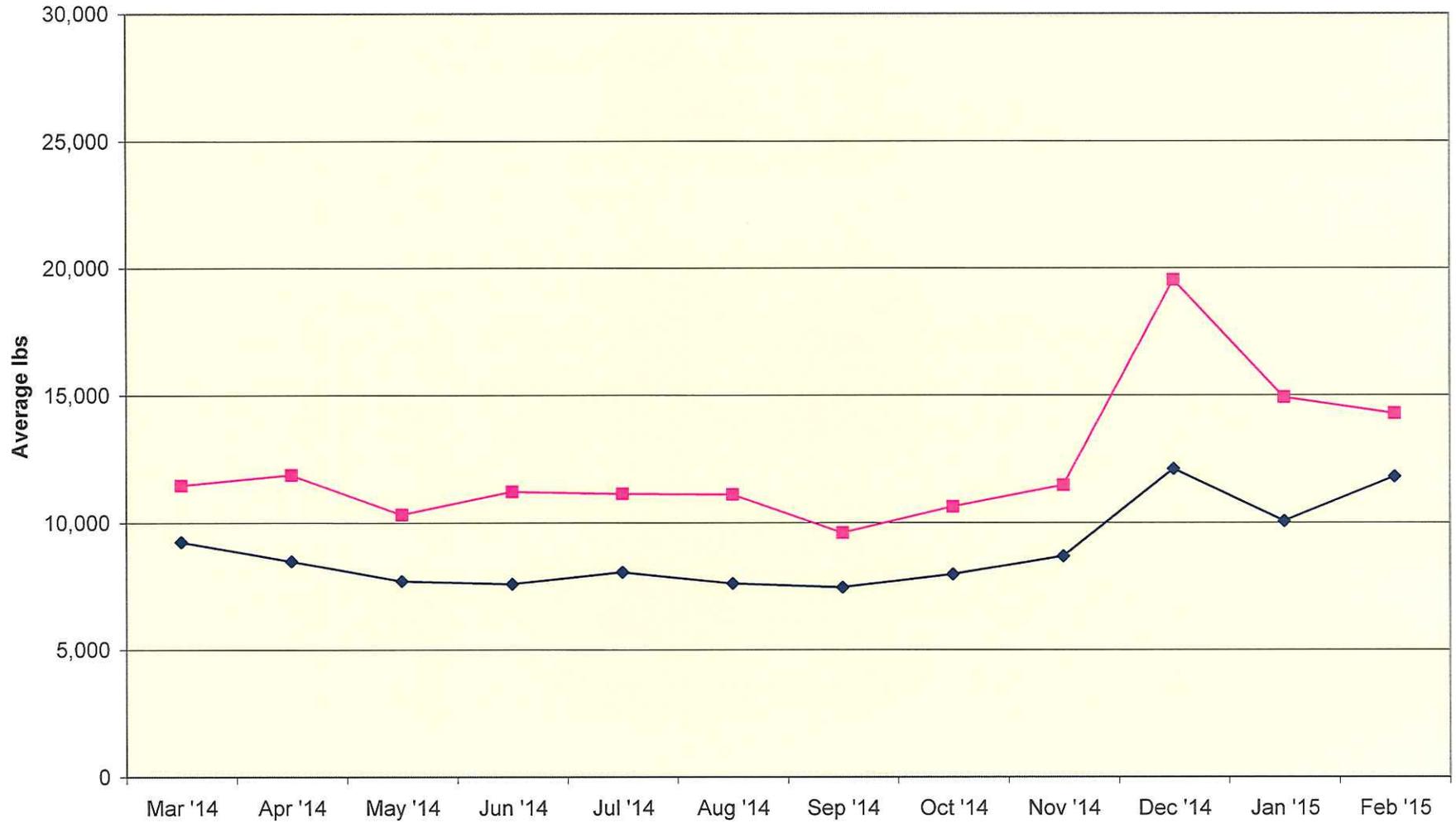
FLOW COMPARISON

—◆— 2013 / 14 —■— 2014 / 15



Influent Load BOD / TSS lbs

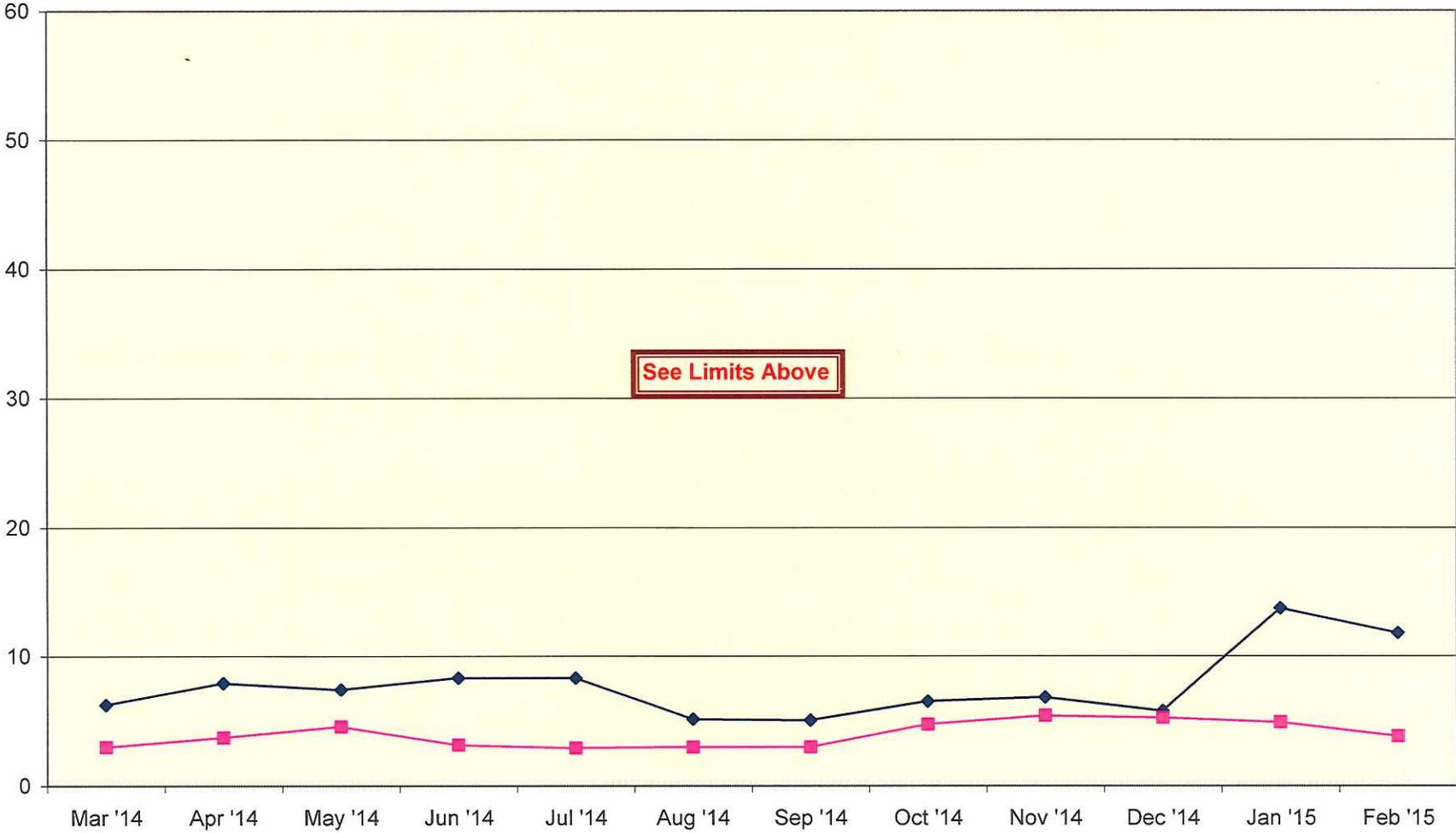
◆ BOD lbs ■ TSS lbs



Effluent BOD / TSS Concentration

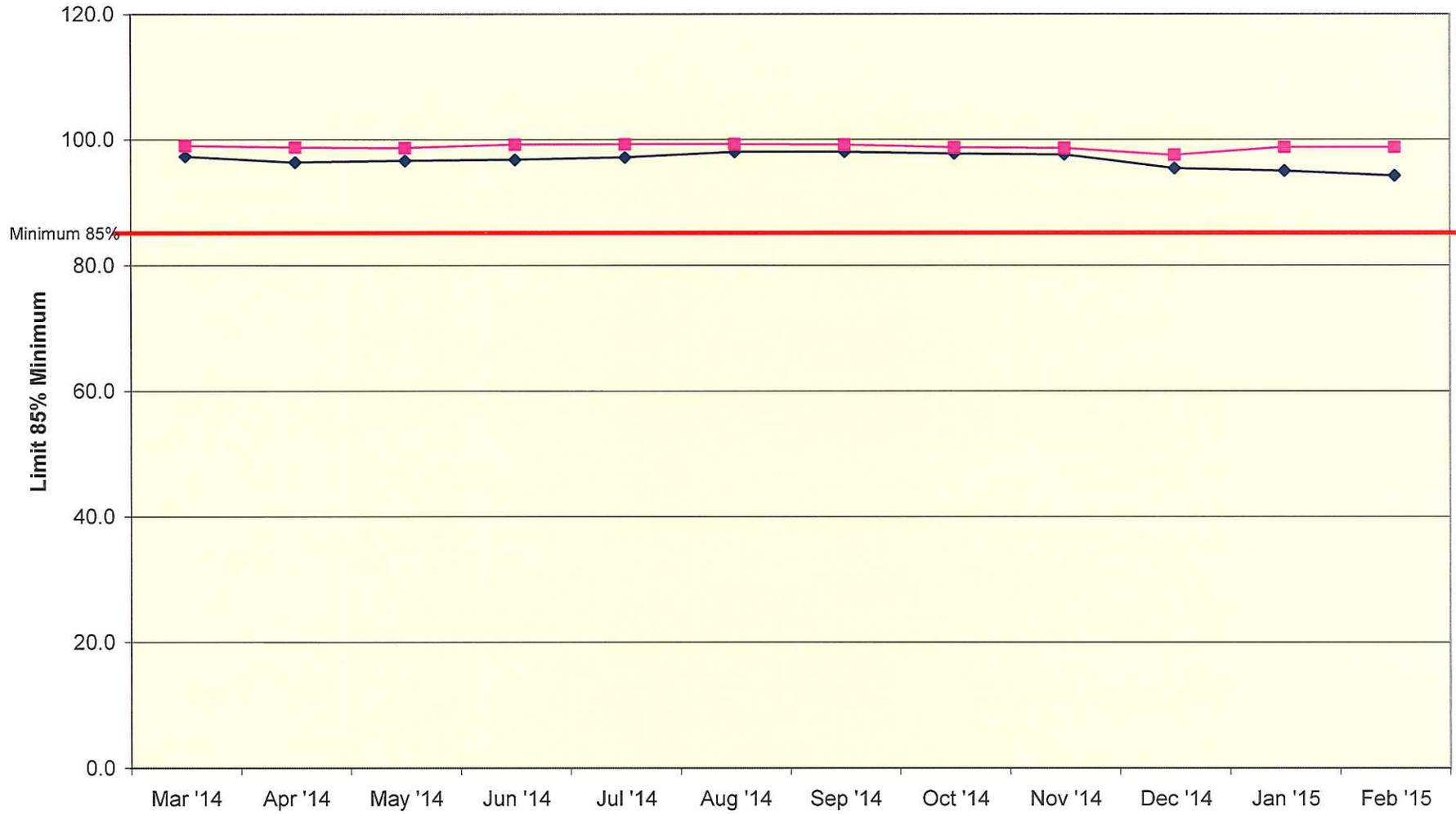
NPDES LIMITS WET SEASON
BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave
NPDES LIMITS DRY SEASON
BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave
TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave
WDR (Waste Discharge Requirements) RECLAMATION
BOD - 40 mg/L

◆ BOD ■ TSS



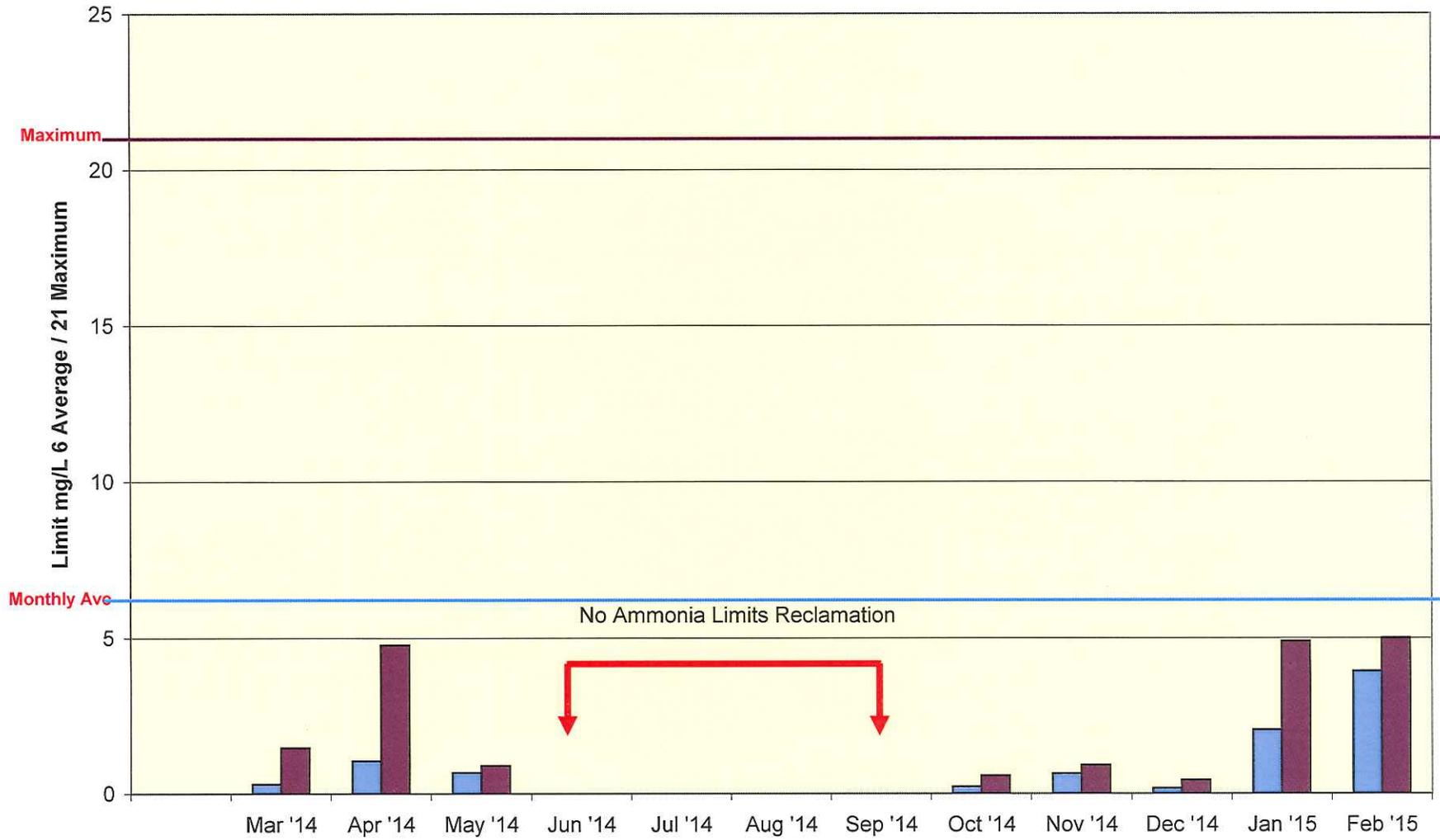
BOD / TSS Percent Removal

◆ BOD ■ TSS



Effluent Ammonia

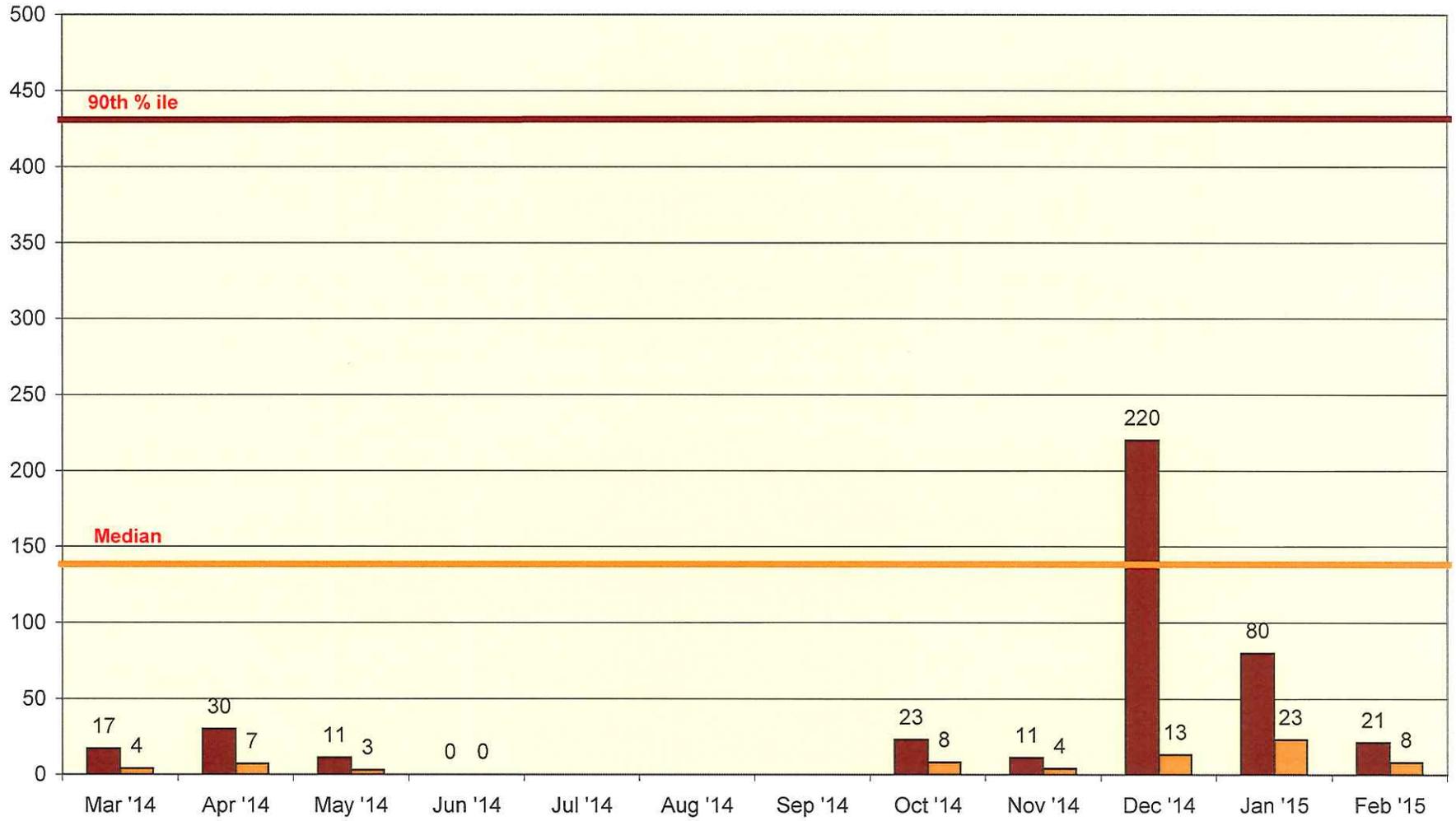
Average Maximum



Disinfection - Fecal Coliform

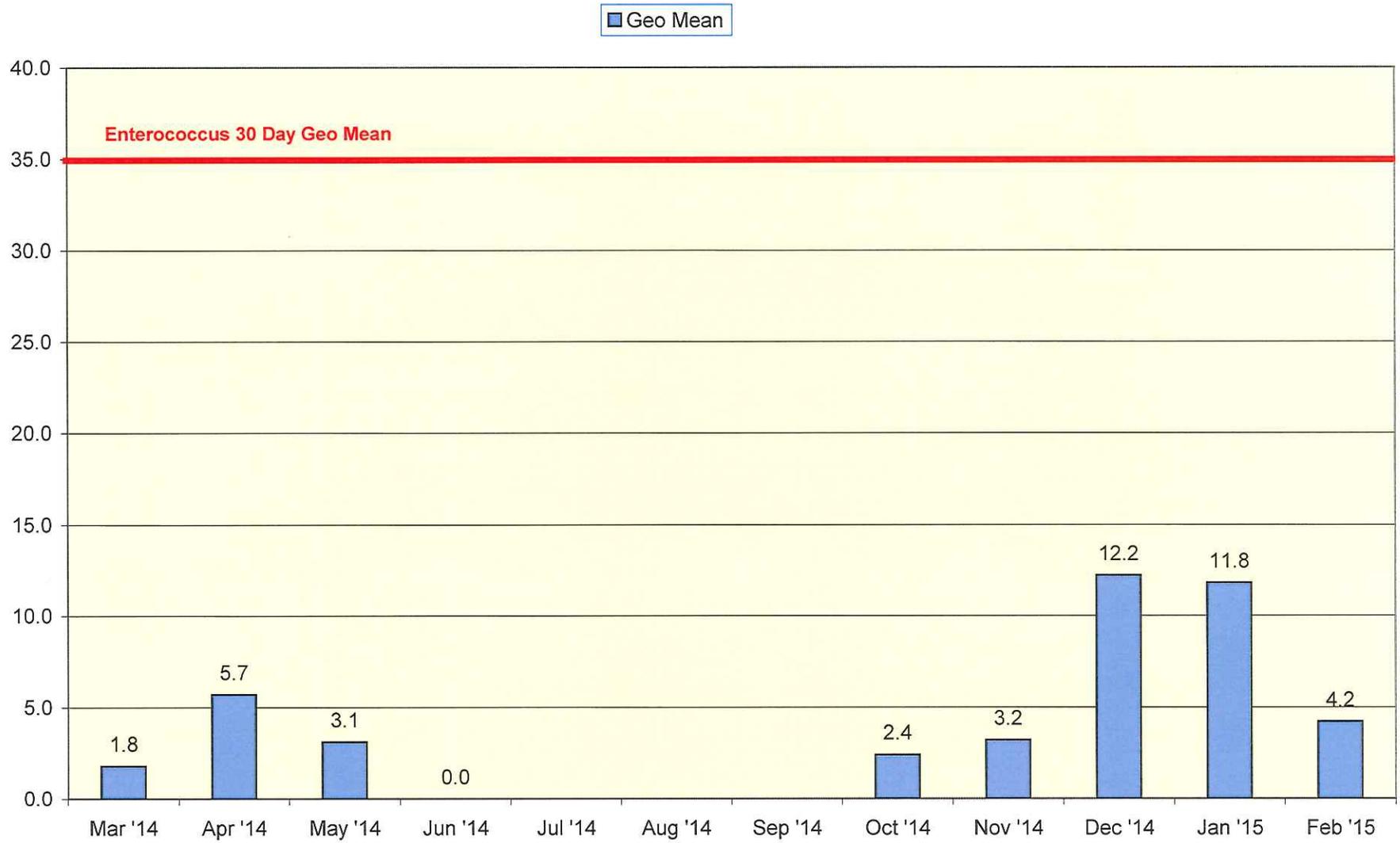
LIMITS - NPDES
Fecal 140 mpn monthly median
Fecal 430 mpn 90th percentile 30 day

90th % ile 30 day med



Disinfection - Enterococcus

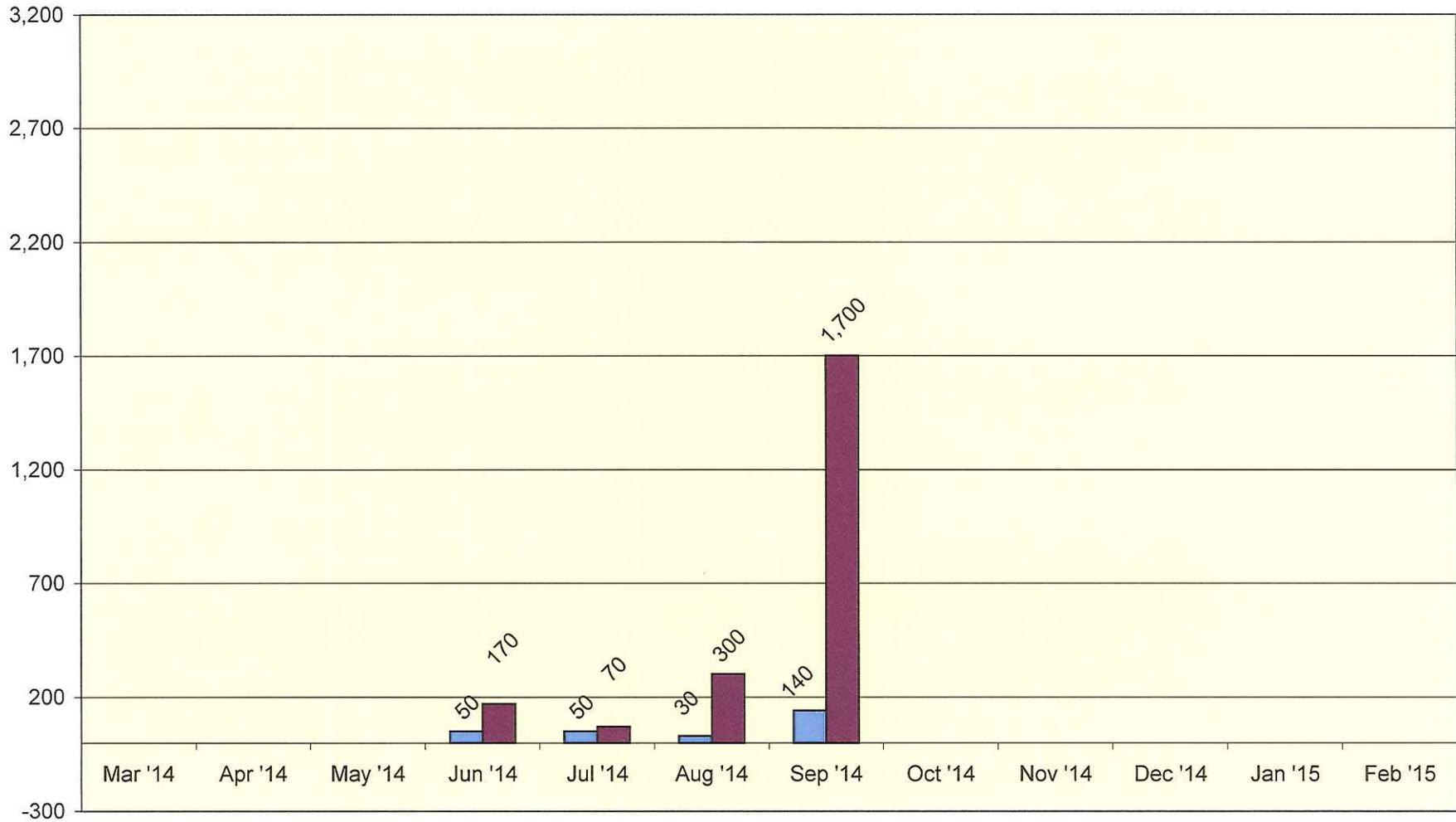
LIMITS - NPDES
Entero 30 day geo mean 35 mpn /100ml



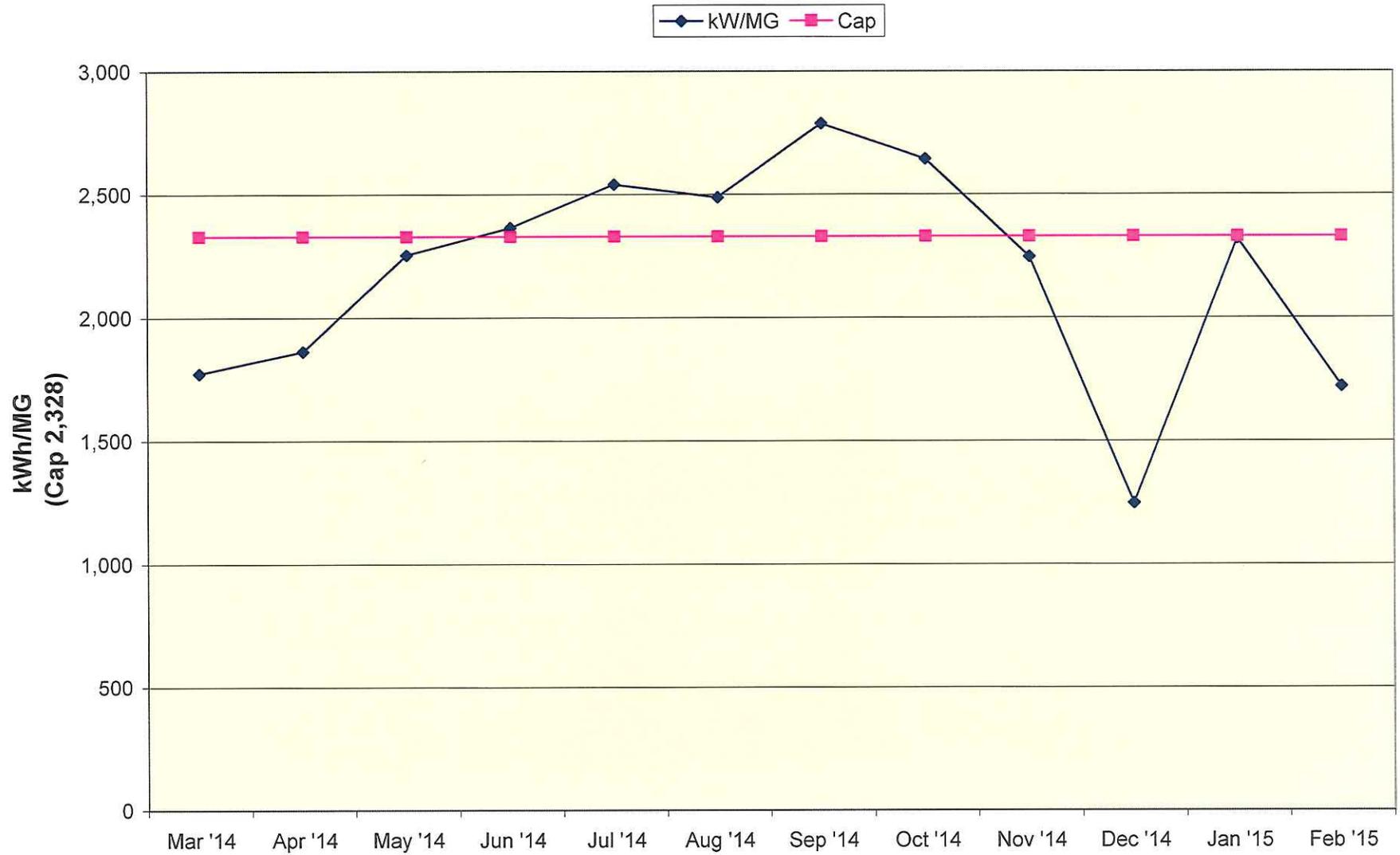
Disinfection - Total Coliform

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

5 Sampl Med Monthly Max

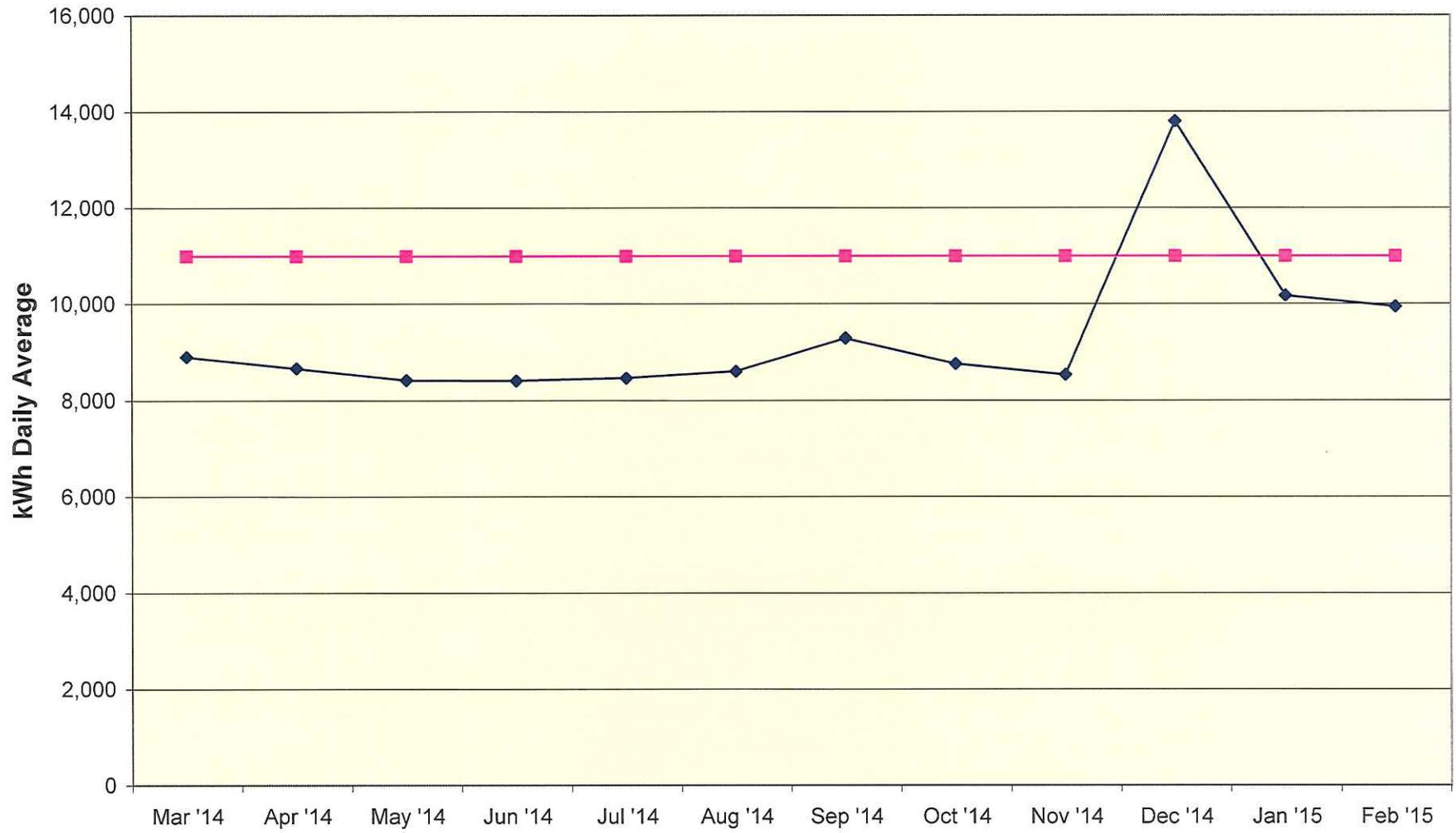


Energy kWh/MG



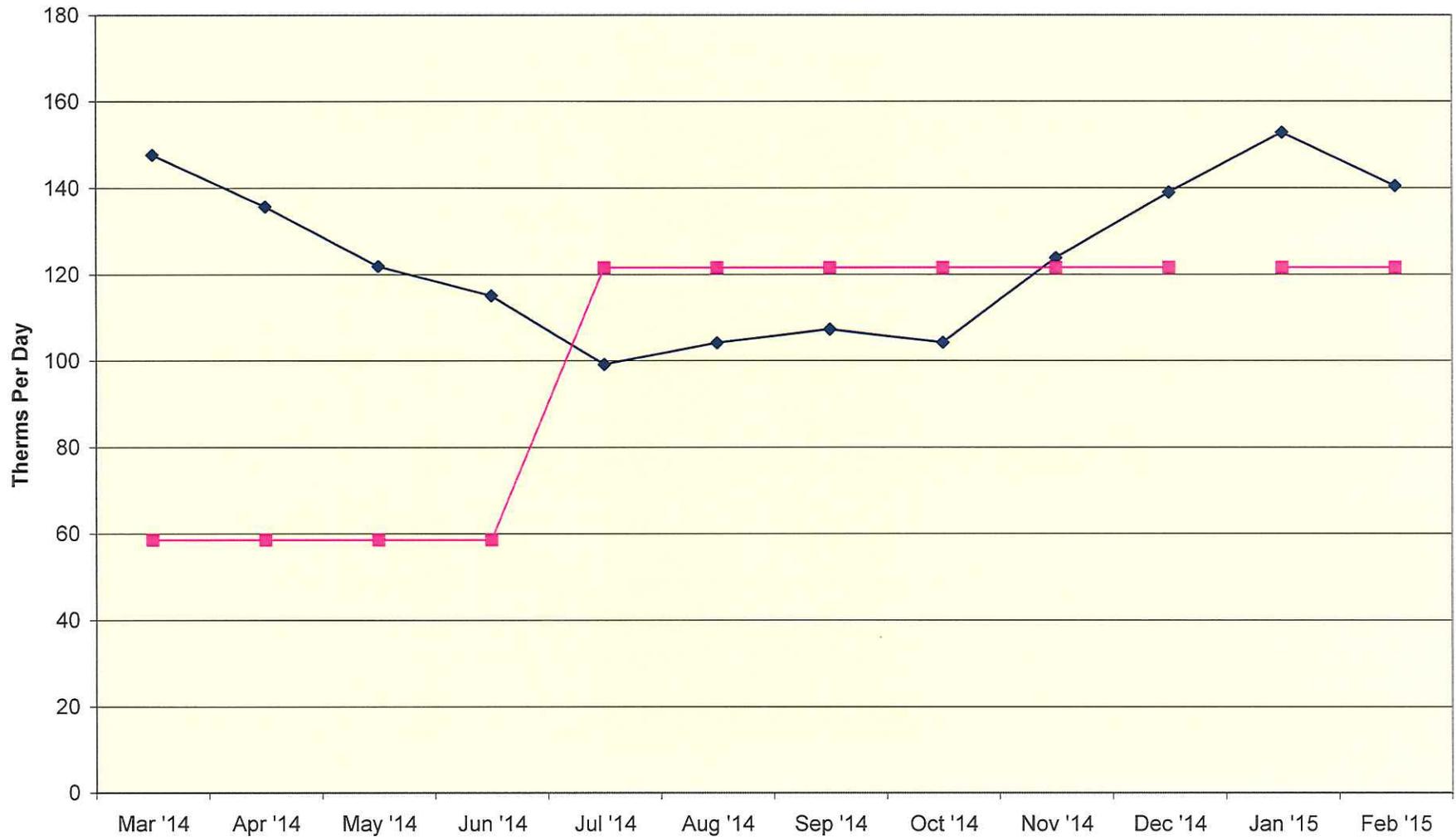
Energy kWh

—◆— kWh —■— Cap

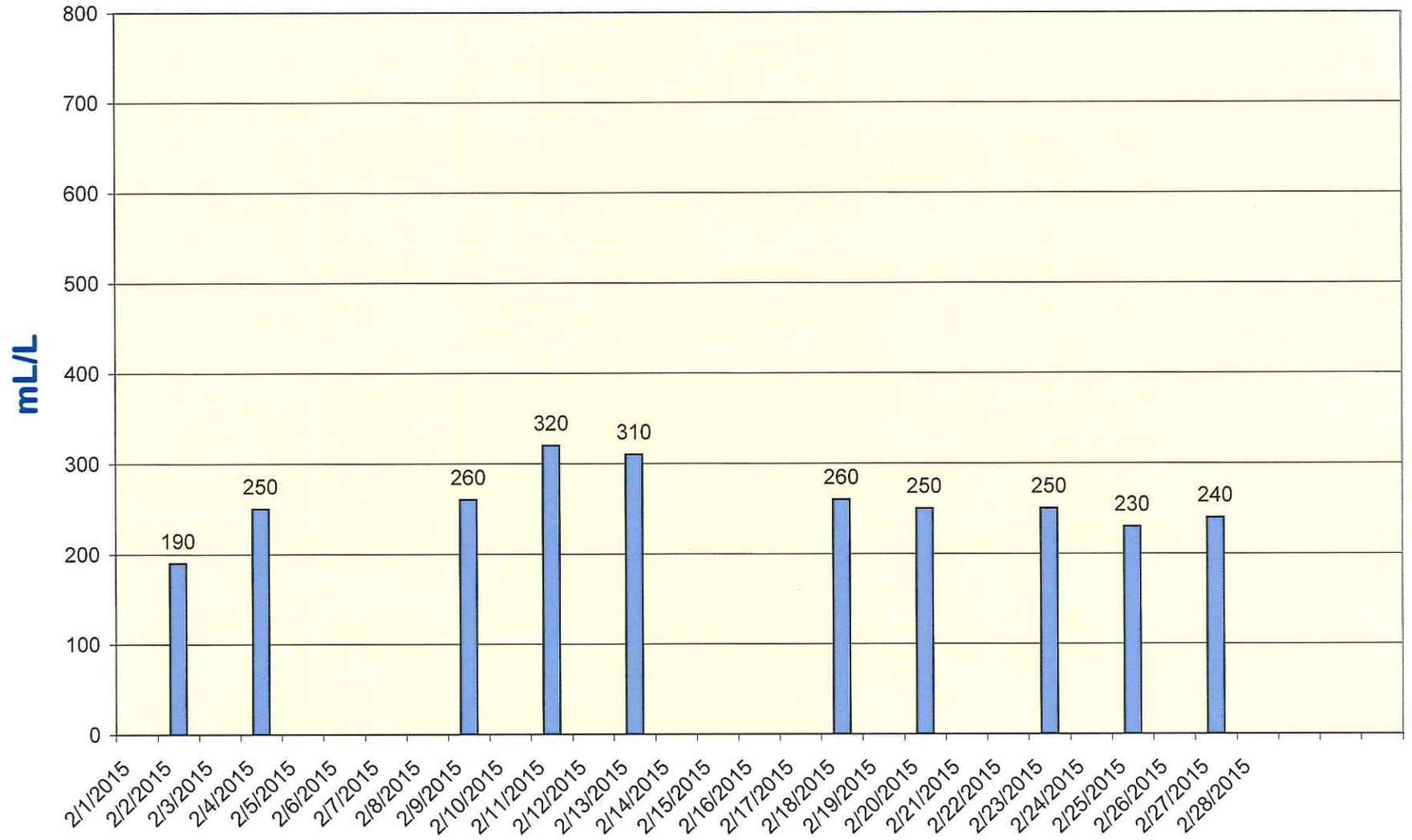


Natural Gas Use

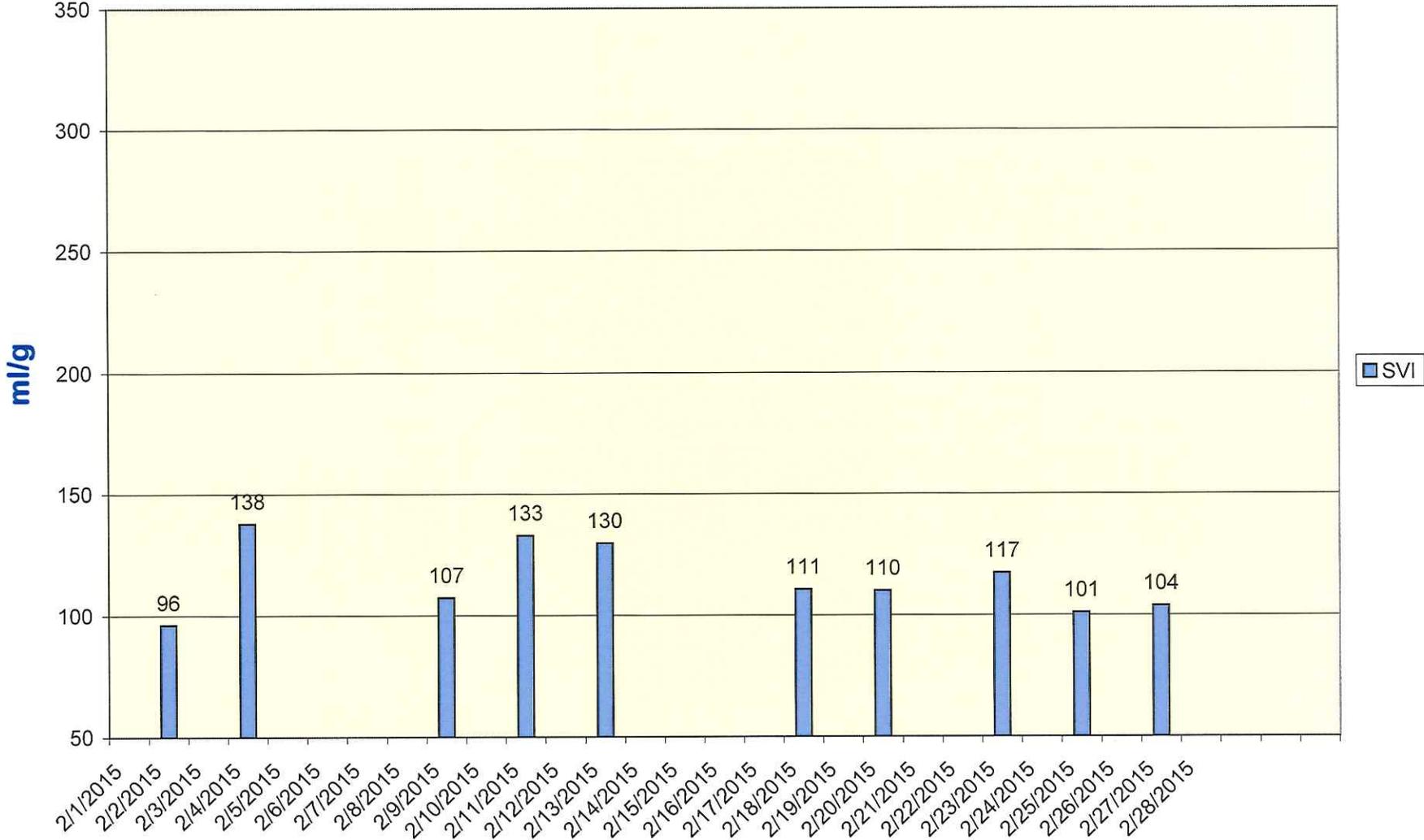
◆ Natural Gas ■ Cap



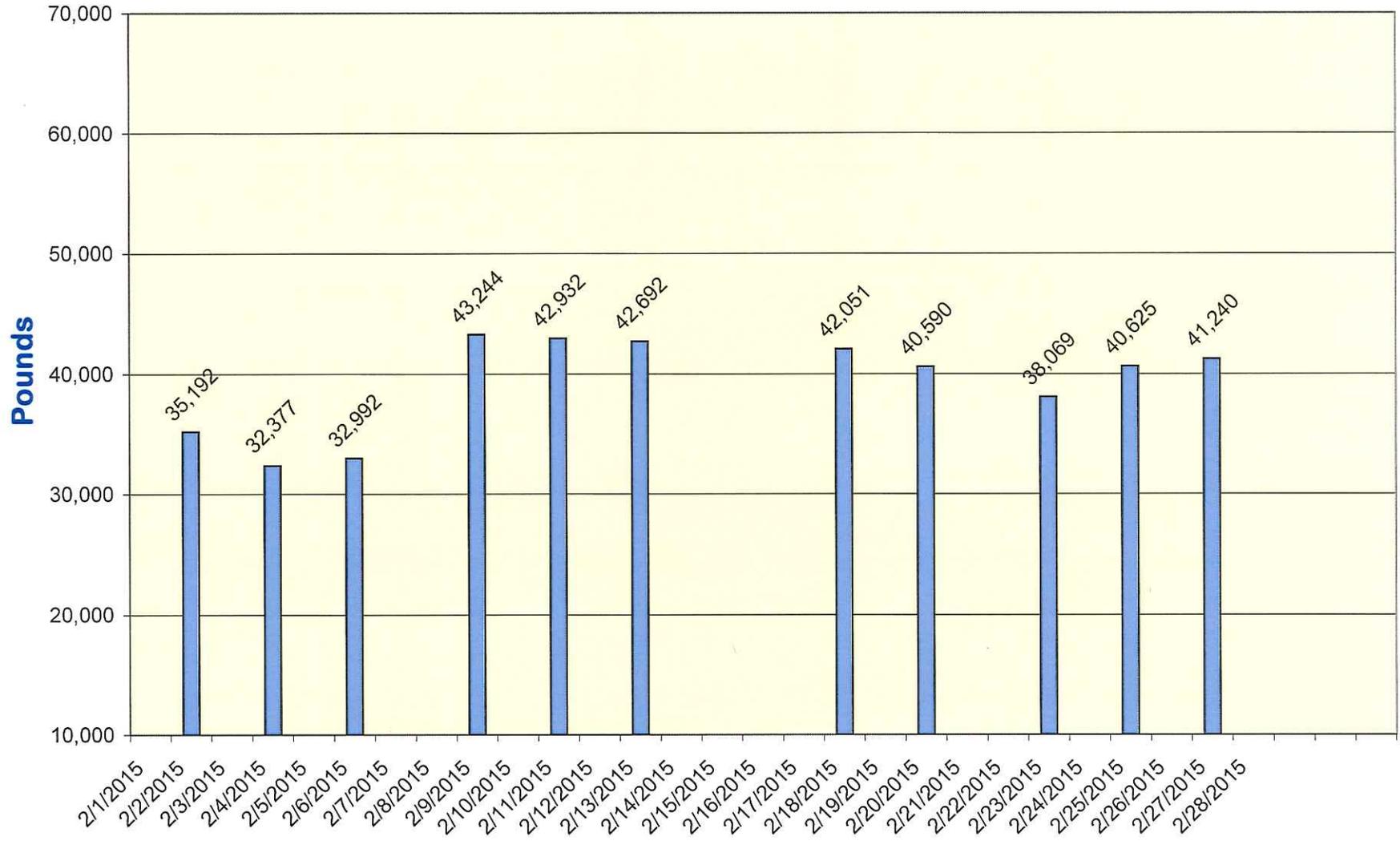
Settleability



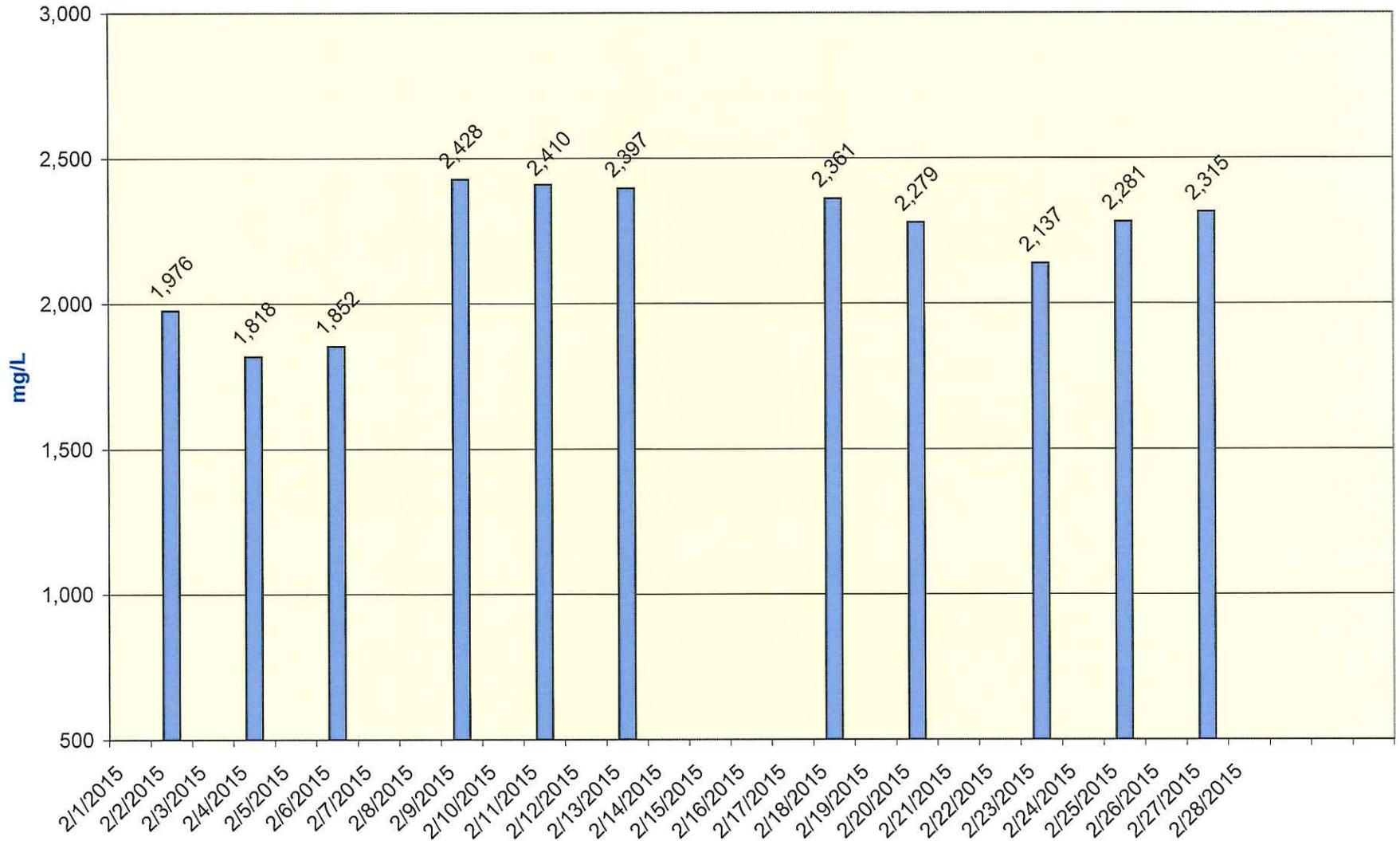
Sludge Volume Index



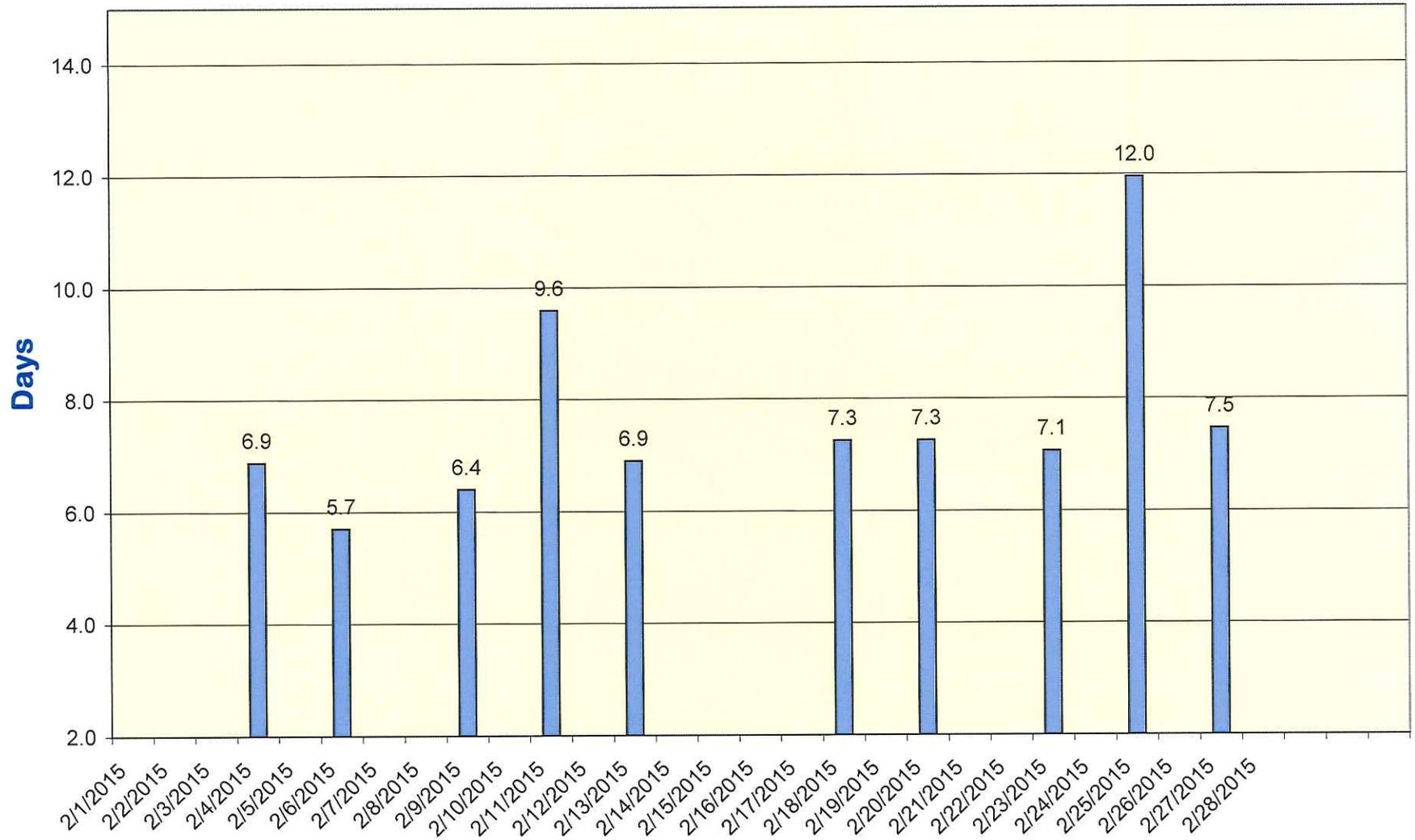
MLSS Inventory



MLSS Concentration



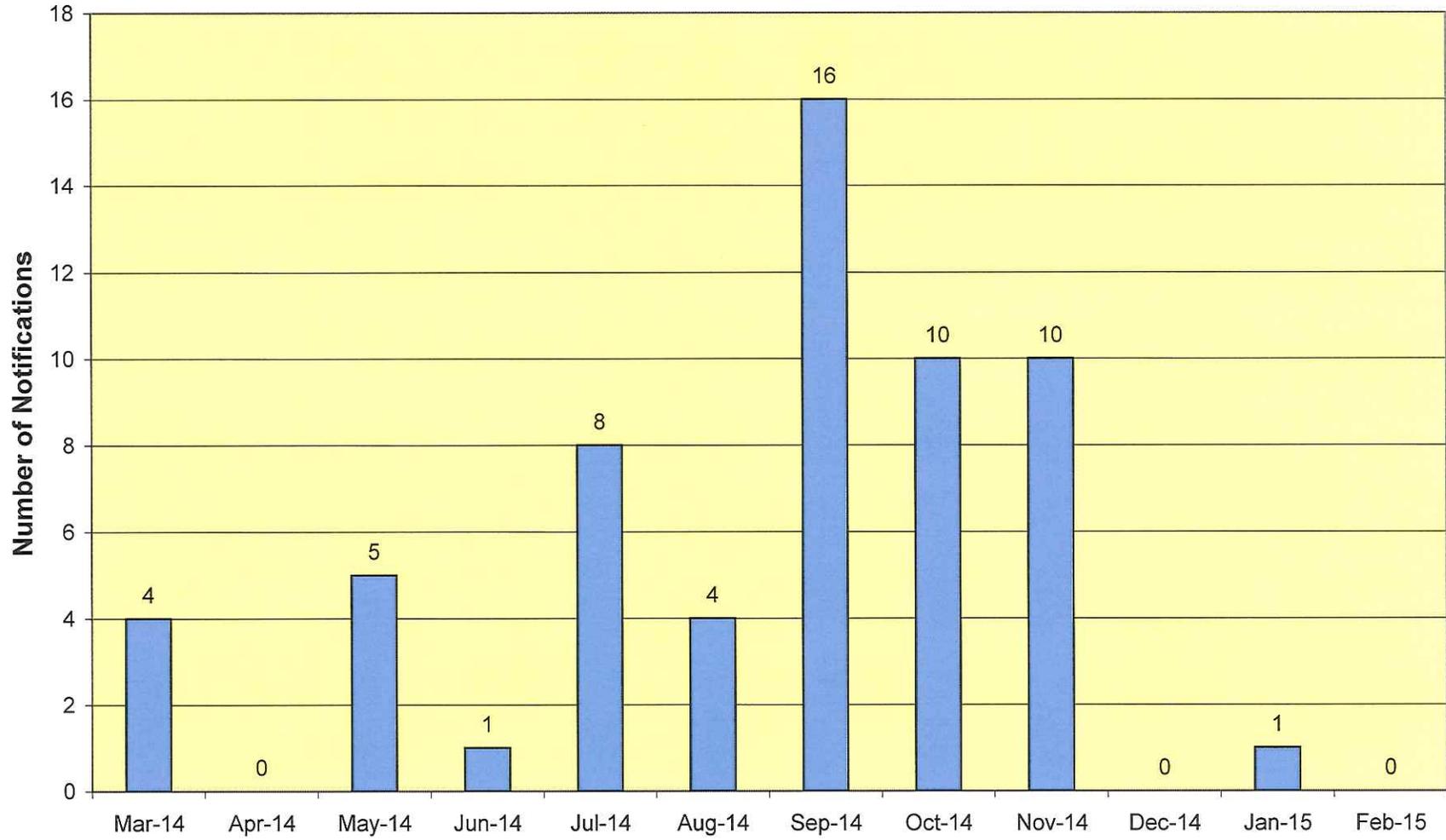
Mean Cell Residence Time



Process Control Data

	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	F:M Ratio	MCRT	SVI
2/1/2015	3.98						
2/2/2015	3.88	190	1,976	35,192			96
2/3/2015	3.86						
2/4/2015	3.85	250	1,818	32,377	0.23	6.9	138
2/5/2015	3.99						
2/6/2015	10.70		1,852	32,992	0.61	5.7	
2/7/2015	10.92						
2/8/2015	14.22						
2/9/2015	9.41	260	2,428	43,244		6.4	107
2/10/2015	7.71						
2/11/2015	6.92	320	2,410	42,932		9.6	133
2/12/2015	6.02						
2/13/2015	5.54	310	2,397	42,692		6.9	130
2/14/2015	5.36						
2/15/2015	5.25						
2/16/2015	5.09						
2/17/2015	4.98						
2/18/2015	4.90	260	2,361	42,051		7.3	111
2/19/2015	5.03						
2/20/2015	4.86	250	2,279	40,590		7.3	110
2/21/2015	4.95						
2/22/2015	4.99						
2/23/2015	4.34	250	2,137	38,069		7.1	117
2/24/2015	4.41						
2/25/2015	4.21	230	2,281	40,625		12.0	101
2/26/2015	4.23						
2/27/2015	4.07	240	2,315	41,240		7.5	104
2/28/2015	4.09						
Minimum	3.85	190.00	1,817.50	32,377	0.23	5.7	96
Maximum	14.22	320	2,428	43,244	0.61	12.0	138
Total	161.76	2,560	24,251	432,004	0.84	76.5	1,146
Average	5.78	256	2,205	39,273	0.42	7.6	115

Complaints / Contacts Received



NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Odor Control and Landscaping Report
February 2015

1.0 Background

The District continues to work on odor control and landscaping, specifically at the fence-line area next to the Lea Drive neighborhood, and at the northeast portion of the Novato Treatment Plant (NTP) site. As mentioned in prior reports, the District has already invested significant amounts beyond the substantial initial investment for odor control and landscaping from the original WWTP Upgrade Project. These additional costs have included operational changes, measures related to further odor control measures, noise abatement, visual screening, wind shielding, and daily monitoring.

2.0 Odor control

Odor control related activities in February included:

- Staff initiated liquid phase sulfide sampling and analysis, based on recommendations from Dave McEwen of Brown and Caldwell (B&C), the District's odor consultant. For process and water quality reasons, operations staff had to revert the converted anoxic zones in the aeration basins, back to anoxic mode in February. Although initially unrelated, this process change will fortuitously enable staff to provide Mr. McEwen with liquid phase sulfide data for this process mode of operation.
- As-needed use from a trial installation of the new Aqua-Fog system which utilizes an odor counteractant technique that broadcasts a water based non-toxic odor neutralizer in the vicinity of the aeration basins.
- Monitoring the performance of the media in the large odor control bed between primary clarifiers #1 & #2. The media was topped off in November, and appears to be performing very well.
- Continued addition of an oxidizing agent, sodium hypochlorite, on an as-needed basis to the influent flow, with staff monitoring performance.

3.0 Landscaping

Staff continues to work with the District's landscaping contractor Cagwin and Dorward (C&D) on vegetation at the District's fence-line on Lea Drive and at the northeast corner area of the NTP. In January, staff had solicited bids to relocate the redwood trees in planter boxes along the eastern fence line of the plant site to the northeast corner of the plant site. Three bids were received, and the contract was awarded to the low bidder Doughty Landscaping of Novato, CA in January. The trees were installed in February, and the District has received some positive comments from at least one Lea Drive neighbor. Staff will continue to monitor the landscaping, and evaluate the potential for additional tree plantings, in this area of the plant site.

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

1.0 General:

The breakdown of Collection System department staff time for February 2015, in terms of equivalent full-time employee (FTE) hours utilized, works out approximately as follows:

- 1.2 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.3 FTE field workers for Pump Station Maintenance
- 0.2 FTE field workers for Closed Circuit Television (CCTV) work
- 2.1 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, and
- 2.2 FTE field workers Vacation/Sick Leave/Holiday

2.0 Collection System Maintenance:

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

Line Cleaning Performance:

A total of 214 work orders were generated for February by the ICOM3 Computerized Maintenance Management System (CMMS). Staff completed 198 work orders leaving 14 work orders outstanding. The 198 maintenance work orders completed in February resulted in 40,553 feet of sewer pipelines cleaned by staff. The 16 outstanding work orders are all work orders for hydro-flushing which will be completed in March. Outside contractors also cleaned 553 feet of trunk sewer main line during the month.

For rodding work orders in easement areas, the crew inspected 6 line segments (806 feet) using the push camera in lieu of hand rodding, a more efficient, effective and less labor intensive method to assure that the sewer main is clear.

CCTV Performance:

The District's CCTV van was in the field for 6 working days, inspecting 40 line segments totaling 6,622 feet. Staff also televised 806 feet using the Push Cam. Outside contractors televised 553 feet of trunk sewer main line during the month.

CCTV production was low this month due to mechanical/electrical issues with the truck as well as staff availability for this activity.

CCTV Findings:

- Infrastructure related: The February CCTV work did not find any line segments that will require repair.

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

- O&M related: The February CCTV work did not identify any areas that require a change in sewer line operations.

3.0 Pump Station Maintenance:

The Collection System Department conducted 228 lift station inspections this month. 112 of the inspection visits were generated through the District's JobsCal Plus CMMS system. There are 5 outstanding work orders for the month that will be completed in February.

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

4.0 Air Relief/Vacuum Valves (ARVs):

Staff completed maintenance inspections on 2 air relief/vacuum valves.

5.0 Safety and Training:

General: Collection System staff attended four safety tailgate meetings.

Specialized training: Collection System staff did not attend any specialized training during the month of February

Safety performance: There were no lost time accidents this month for a total of 1,446 accident free days since the last lost time accident.

6.0 Minor Projects:

The District did not perform any repair projects under the informal contract provisions of the Uniform Public Construction Cost Accounting Act (UPCCAA).

7.0 Standard Operating Procedures (SOPs):

Department staff generated zero (0) SOPs during the month of February. As mentioned in the January report, a matrix document for tracking SOP development was created in January. This document is still in the draft stage and is being reviewed internally by staff.

8.0 Sanitary Sewer Overflows (SSOs):

In February, there were four (4) SSO's:

No.	Date	Location	Amount, gal	Cause/Probable Cause
1.	2/6/2015	Railroad Avenue	25	Existing Olive PS force main pipe failure during replacement project
2.	2/10/2015	42 San Benito Way	70	Root Intrusion/Debris
3.	2/12/2015	2034 Shady Lane	452	Root Intrusion/Debris
4.	2/23/2015	63 Capilano Drive	1,872	Root Intrusion/Debris

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

1. SSO at Railroad Ave:

Overview: This event was categorized as a Category III event due to its low volume, (estimated at twenty-five (25) gallons or less), and the fact that the discharge likely soaked into the soil in the adjacent railroad right of way. The event occurred on a pipeline replacement project where the District is paralleling an existing force main with a new force main. The discharge likely occurred as a result of a break in the existing force main within the same excavation as for the new pipe, and all of the discharge (except for an estimated 25 gallons) was contained within the trench.

Photographs taken during cleanup activities support this volume estimate. District staff used eyewitness interviews, visual estimation and pictures taken during cleanup activities to determine the volume and duration of this event.

Discussion: On Friday, February 6, 2015 at 08:04, Javier Vega, CSW III, noticed an open sink hole along the trench line of the Olive Street Pump Station force main replacement project while enroute to perform daily pump station checks, so he pulled over to investigate the problem. The construction project and the trench failure were located on Railroad Avenue near Orange Street. At 08:05, Javier observed a car drive into the sink hole, causing damage to the vehicle.



Javier called Dasse de longh, Collection System Lead Worker, at 08:07 to inform him of the incident while he was securing the accident site with cones to direct traffic around the sinkhole. Javier checked the driver for injuries and calmed the driver, then called Novato Police Department to report the accident and to get help with traffic control at 08:09.

Javier called Dasse at about 08:12 to update his arrival status and called Aaron Hendricks, CSW I, and PJ Siragusa, CSW I, the hydro-flusher crew, at 08:14 for assistance with traffic control. He called Dasse again at about 08:20 and told him that he saw water rapidly rising in the construction trench. Dasse assumed that the force main had failed and so he went directly to Olive Street pump station and shut down the pumps at 08:22. As Dasse shut down the pumps, Javier visually estimated 100 gallons escaping the trench. As the pressure in the force main went down, most of the water flowed back into the trench with a small amount discharging into the gutter pan on the west side of the street. This gutter pan has cutouts at several locations that drain into an open ground dirt area along the railroad tracks. Because of this condition, all the sewage that escaped soaked into the soil of the open ground area so there was no measurable recovery for this discharge. PJ and Aaron arrived on site at about 08:30 to assist with shutting off the force main, continuing traffic control, and cleanup activities.

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

During the course of this response, Sandeep Karkal, Manager/Engineer and Kevin Craig, Construction Inspector, arrived on site to observe the operation.

Staff determined that the cause of this discharge was likely the result of pipe failure on the existing force main. It is unclear what caused the force main pipe to fail. The force main is constructed of Techite pipe, a material now known in the industry as prone to failure and it is one reason the District is completing the force main replacement project. Also, during the repair, an unknown white PVC pipeline was found directly under the pipe failure location (see photo at right).

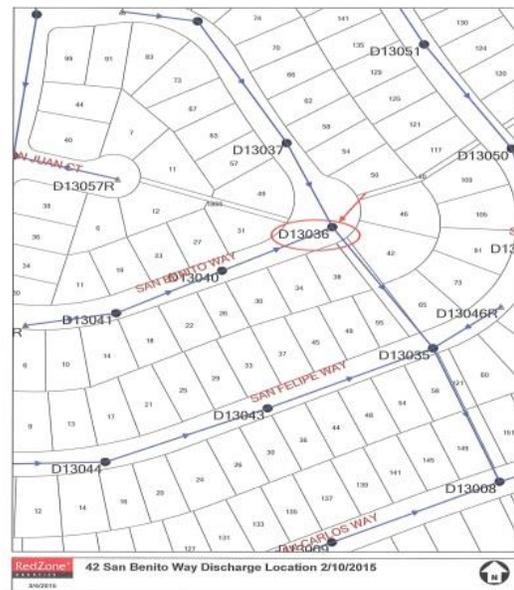


The District and the contractor mobilized in a joint effort to secure pumps, parts, & manpower to repair the force main. All of the repair parts necessary were not readily available so a temporary repair was made. The permanent repair was completed a week later. The force main replacement project should be completed by March or April, 2015.

This event was reported into the CIWQS database on March 10, 2015 as a Category III event, SSO Event ID # 813807 and was certified in CIWQS on March 11, 2015, Certification ID # 523847.

2. SSO at 42 San Benito Way: This event was categorized as a Category I event because the discharge reached a storm drain and potentially entered Novato Creek.

On Tuesday, February 10, 2015 at 11:00, Tim O'Connor, Collection System Superintendent, received a call from Robin Merrill, Information Systems Specialist II, reporting a possible overflow at 42 San Benito Way. Tim contacted Javier Vega, CSW III, and Aaron Hendricks, CSW I, who were on the hydro-flusher, and Dasse de longh, Collection System Lead Worker, and directed them to respond immediately to the site.



Tim proceeded to the site and arrived at 11:12, at which time he took pictures and implemented containment protocols. Javier and Aaron arrived on site with the hydro-flusher at approximately 11:15 and setup on manhole D13035 on San Felipe Way to relieve the stoppage. During setup, they noticed flow in the downstream manhole,

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

indicating that the event was as a result of a partial stoppage. Javier and Aaron relieved the blockage at 11:20 and came over to the overflow site at 42 San Benito Way to begin cleanup operations.

Tim interviewed the reporting party, Lita Carroll, by phone, and she said that she noticed the discharge during her morning walk (at ~11:00am), and called it in immediately. Tim then interviewed four residents in the immediate area of the discharge, none of whom saw the discharge. Tim then interviewed Mark Ross with One Hour Heating and Air Conditioning who drove over the discharge site at 10:00 enroute to 46 San Benito Way. Mr. Ross stated that the overflow had not started at that time. Tim estimated a start time of 10:30 based on these interviews and a discharge rate of 1.4 gallons per minute using the "Water Height Above the Pick-hole Method" (from the District's SSO Response Plan) for a total estimated discharge volume of 70 gallons.



Armando Alegria of Marin County Environmental Health Services (MCEHS) was notified of this event on February 10, 2015 at 12:04 and Michael Ford of CAL-EMA was notified on February 10, 2015 at 12:36 meeting the two hour reporting requirement for a Category I Discharge event.

Mr. Alegria of MCEHS directed District staff to post Public Notification signs along Novato Creek at points of public access and did not require water sampling for this discharge. Two signs were posted by staff after cleanup operations were complete.

Staff determined that the cause of this discharge was the result of root intrusion and debris in the line segment. This line segment was last cleaned on schedule on December 12, 2012 using a hydro-flusher and was on a thirty-six (36) month cleaning frequency. The cleaning schedule has been changed to a 12 month cleaning frequency as a precautionary measure.

CCTV inspection following the discharge event showed the line segment to have root intrusion at several points in the line segment. This line segment will be added to the 2014/15 root abatement schedule. The Public Notification signs were removed on February 19, 2015.

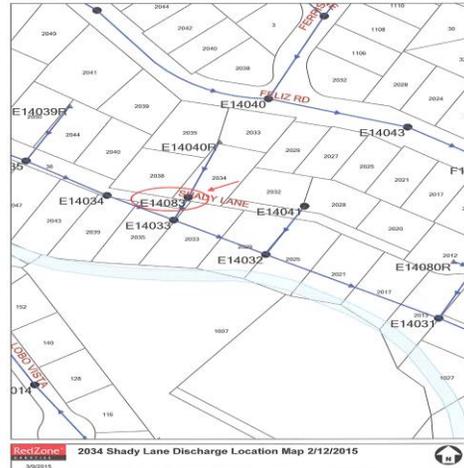
This event was reported into the CIWQS database on February 12, 2015 as a Category I event, SSO Event ID # 813078 and was certified in CIWQS on February 23, 2015, Certification ID # 294147.

3. SSO at 2034 Shady Lane: This event was categorized as a Category I event because the discharge reached a storm drain and potentially entered Novato Creek.

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On Thursday, February 12, 2015 at 08:40, Tim O'Connor, Collection System Superintendent, checked his e-mail and found a forwarded voice message from Maria Cuevas who lives at 2034 Shady Lane reporting a possible overflow in front of her home. The call came in and went to voice mail at the District main telephone line at 08:04 on that day. Tim contacted Bob Stiles, CSW I, and Justin Wall, CSW I, who were working on the hydro-flusher and directed them to respond immediately to the site.

Tim proceeded to the site and arrived at 08:45, at which time he took pictures and implemented containment protocols. Bob and Justin arrived on site with the hydro-flusher at approximately 08:51 and setup on manhole E14083 and vacuumed the water out of the manhole, temporarily alleviating the overflow at 09:00. The crew was unable to access downstream of the discharge manhole because it is a blind tie-in. Tim authorized them to carefully clear the stoppage from the upstream side using a hydro-flusher. Bob and Justin relieved the blockage at 09:36 and began cleanup operations.



Tim interviewed the reporting party, Maria Cuevas, and she stated that her husband had seen the discharge two (2) days earlier. Tim asked her if she could call her husband to clarify the time when he had first noticed the overflow. Mr. Cuevas said that he had noticed the overflow on Tuesday, February 10, 2015 at approximately 07:00 when he left for work. Mrs. Cuevas asked Mr. Cuevas why he had not mentioned the problem sooner and he said that he was too busy to call anyone about the discharge. Tim then interviewed four residents in the immediate area of the discharge and only Brenda Roberts at 2038 Shady Lane saw the discharge. Mrs. Roberts also stated that she saw the manhole weeping on Tuesday, February 10, 2015 at about 07:00. Both people who saw the discharge said that it was an intermittent event and did not discharge continuously. Tim determined a start time of 06:30 on February 10, 2015 based on these interviews and used residential winter water use records to calculate a total estimated discharge volume of 452 gallons.



Armando Alegria of Marin County Environmental Health Services (MCEHS) was notified of this event on February 12, 2015 at 10:16 and Michael Ford of CAL-EMA was notified

**Novato Sanitary District
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on February 12, 2015 at 10:40, meeting the two hour reporting requirement for a Category I Discharge event.

Mr. Alegria of MCEHS directed District staff to post Public Notification signs along Novato Creek at points of public access and did not require water sampling for this discharge. Nine (9) signs were posted by staff after cleanup operations were complete.

Staff determined that the cause of this discharge was the result of root intrusion and debris in the line segment. This line segment was last cleaned on schedule on December 2, 2014 using a mechanical rodder and was on a six (6) month cleaning frequency. The cleaning schedule has not been changed as a result of this event but instructions have been added to the work order to visually inspect this line segment after cleaning with CCTV equipment.

CCTV inspection following the discharge event showed the line segment to have root intrusion at several points in the line segment. This line segment will be added to the 2014/15 root abatement schedule.

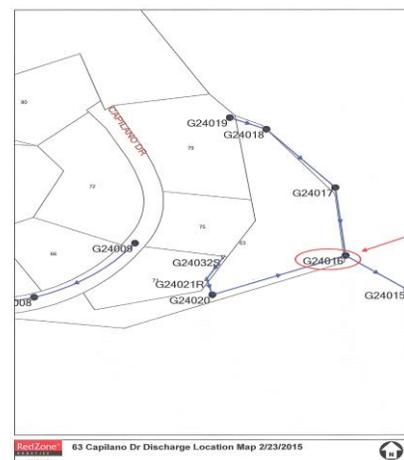
The Public Notification signs were removed on February 19, 2015.

This event was reported into the CIWQS database on February 13, 2015 as a Category I event, SSO Event ID # 813101 and was certified in CIWQS on February 23, 2015, Certification ID # 388596.

4. SSO at 63 Capilano Dr.: This event was categorized as a Category I event because the discharge reached a storm drain and potentially entered Arroyo de San Jose Creek.

On Monday, February 23, 2015 at 09:15, Javier Vega, CSW III and Bob Stiles, CSW I were performing routine mechanical rodder cleaning maintenance in an easement on the Marin Country Club Golf Course near 63 Capilano Drive and discovered an overflowing manhole in a secluded area on the course. Javier immediately called Tim O'Connor, Collection System Superintendent to notify him of the overflow.

Tim proceeded to the site and arrived at 09:43 and inspected the overflow site. Bob and Javier had blocked a storm drain inlet, after observing a trickle of water leading to the inlet, approximately 40 feet away from the discharge manhole (G24016). They then set up the mechanical rodder on the downstream manhole to remove the blockage. Bob and Javier relieved the blockage at 09:35 and began cleanup operations. Initial observations of the discharge area found the area to be composed of highly absorbent leaf litter debris and sandy



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Wastewater Operations Committee meeting
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loam soil. They also found the ground saturated for approximately twenty (20) feet around the discharge manhole. Dasse de longh, Collection System Lead Worker, PJ Siragusa, CSW I, and Justin Wall, CSW I, had also been called, and arrived at the golf course to assist with cleanup operations.

District staff removed seven (7) fifty-five gallon (55) bags of saturated debris from the site. They also spread wood chips around the site to act as a barrier over the moist soil and for aesthetic purposes for the golf course, although this area is not an area frequented by golfers.

Tim interviewed Scott Thomsen, Assistant Golf Course Superintendent in an effort to establish a probable start time for the discharge and to determine where the golf course drainage lines were installed. During this first interview, Tim determined that the discharge may have reached a pond on the course that is part of the Arroyo de San Jose Creek. Staff vacuumed approximately one hundred and ten gallons of mixed runoff and overflow water from a runoff collection box in line with the discharge location, but prior to reaching the pond. During subsequent interviews with Mr. Thomsen, Tim estimated a start time of midnight, February 13, 2015. Based on these



interviews and using residential winter water use records of homes tributary to the discharge manhole, Tim was able to calculate a total estimated total discharge volume of 1,872 gallons. Based on staff observations and consultations with Mr. Thomsen, Tim estimated that approximately ninety-five percent (1,778 gallons) of the discharge soaked into open ground with potentially five percent (94 gallons) reaching a waterway.

This event was determined to be a Category I event because it reached a storm drain and potentially entered Arroyo de San Jose Creek. District staff used reporting party/local resident interviews, and residential water use rates to estimate the volume and duration of this event.

Armando Alegria of Marin County Environmental Health Services (MCEHS) was notified of this event on February 23, 2015 at 11:05 and Blake Tyson of CAL-EMA was notified on February 23, 2015 at 11:07 meeting the two hour reporting requirement for a Category I Discharge event.

Mr. Alegria of MCEHS directed District staff to post Public Notification signs around the pond in Arroyo de San Jose Creek at points of public access and did not require water

**Novato Sanitary District
Wastewater Operations Committee meeting
Collection System Operations Report
February 2015**

sampling for this discharge. Seven (7) signs were posted by staff after cleanup operations were complete.

Staff determined that the cause of this discharge was the result of root intrusion and debris in the line segment. This line segment was last cleaned via ad hoc work order on September 8, 2014, two months before a scheduled cleaning. The cleaning was in preparation for CCTV inspection. There were no unusual problems noted during the September 8th CCTV inspection. This line segment was on a thirty-six (36) month cleaning frequency. The cleaning schedule has been adjusted to a 12 month schedule as a result of this event.

CCTV inspection following the discharge event showed the line segment to have root intrusion in the line segment. This line segment will be added to the 2014/15 root abatement schedule. The Public Notification signs were removed on March 3, 2015 after consulting with Mr. Alegria, MCEHS.

This event was reported into the CIWQS database on February 25, 2015 as a Category I event, SSO Event ID # 813307 and was certified in CIWQS on March 9, 2015, Certification ID # 683205.

Novato Sanitary District
Collection System Monthly Report For February 2015 (as of February 28, 2015)

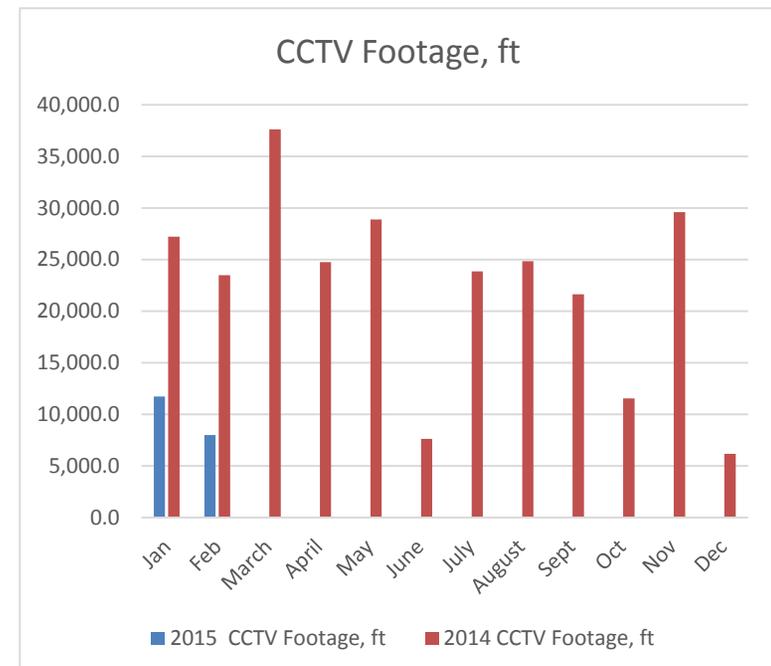
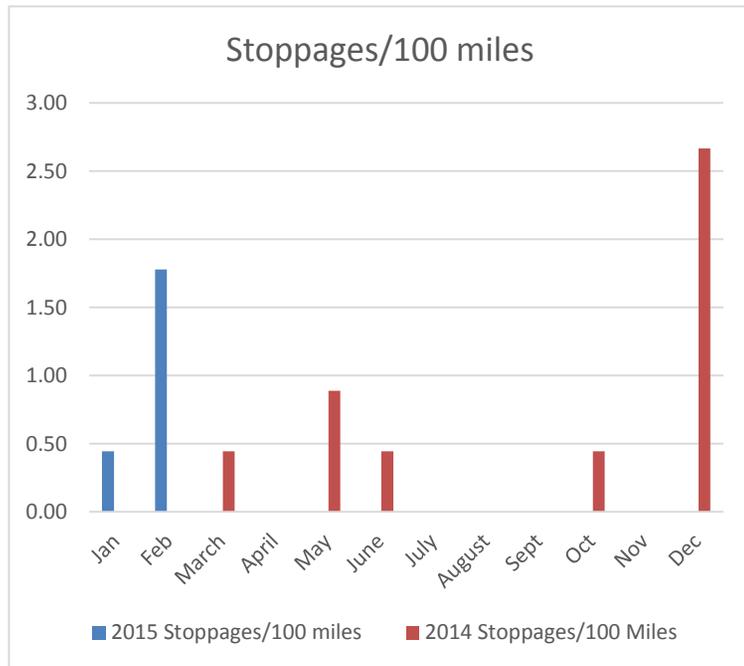
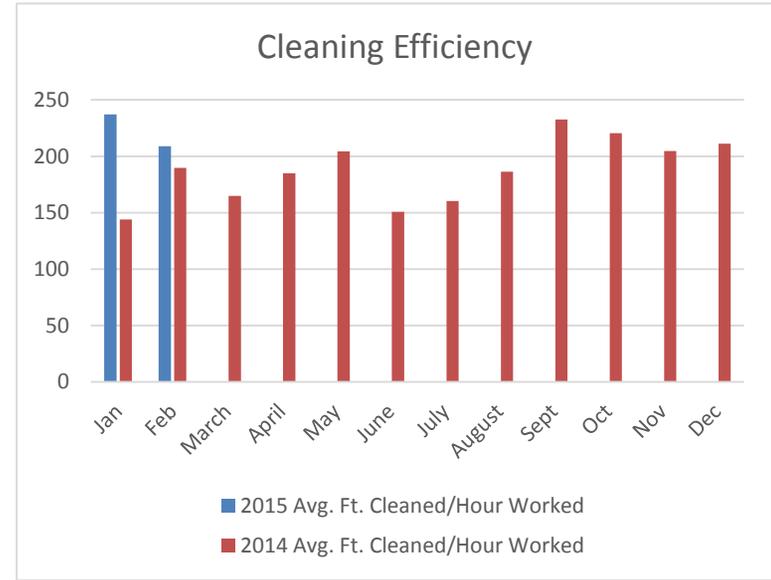
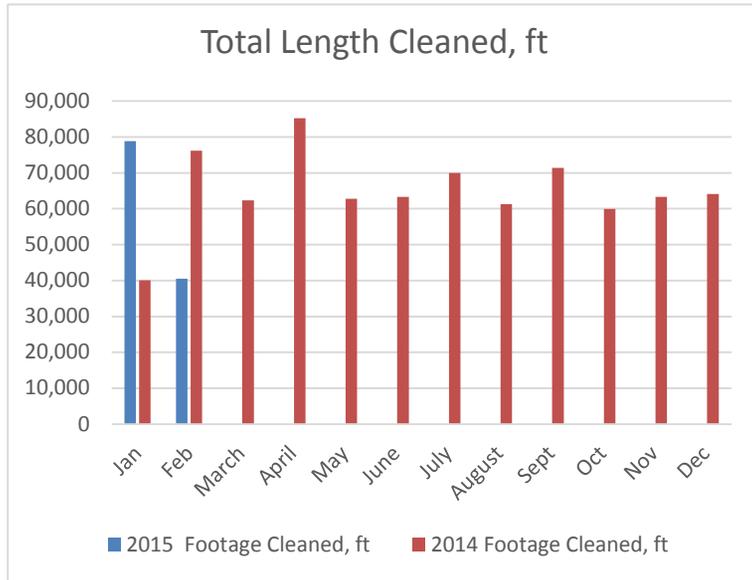
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
A. Employee Hours Worked														
Number of FTEs (main line cleaning), hrs.	1.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.3
Number of FTEs (other)	1.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.3
Number of FTEs (CCTV)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0
Total, FTEs	3.6	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.6
Regular Time Worked, (main line cleaning), hrs	333	194												
Regular Time Worked on Other, hrs (1)	281	329												
Regular Time Worked on CCTV (2)	15	36												
Total Regular time, worked, hrs	628	559	0	0	0	0	0	0	0	0	0	0	1,186	99
Total Vacation/Sick Leave/Holiday, hrs	403	356											758	379
Vacation/Sick Leave/Holiday, FTEs	2.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.4
Overtime Worked on Coll. Sys., hrs	3	0											3	1
Overtime Worked on Other, hrs (1)	14	45											59	30
Overtime Worked on CCTV (2)	0	0											0	0
Total Overtime, hrs	17	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62	31
B. Productivity														
1. Line Cleaning														
Rodder Work Orders generated	90	31											121	61
Rodder 3208 ft. cleaned	15,611	6,776											22,387	11,194
Rodder - outside services, ft cleaned	0	0											0	0
Flusher Work Orders generated	340	183											523	262
Truck 3205V ft. cleaned	107	4,165											4,272	2,136
Truck 3206V ft. cleaned	63,145	29,612											92,757	46,379
Flusher - outside services, ft. cleaned	1,349	553											1,902	
Total Footage cleaned(3)	78,863	40,553	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	119,416	59,708
Work Orders completed	416	198											614	307
Work Orders backlog	14	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30	15
2. Closed Circuit Television (CCTV)														
Camera Work Orders generated	0	0											0	
CCTV Truck 3126T, ft. videoed	3,998	6,622											10,620	5,310
CCTV (hand cam), ft. videoed	6,378	806											7,184	
CCTV Inspection - outside services, ft. videoed	1,349	553											1,902	
Total CCTV footage(3)	11,725	7,981	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19,706	
C. Sanitary Sewer Overflows (SSOs)														
Minor (Category III)	1	4											5	NA
Major (Category II)	1	1											2	NA
Major (Category I)	0	0											0	NA
Major (Category I)	0	3											3	NA
Overflow Gallons	126	2,419											2,545	NA
Volume Recovered	0	0											0	NA
Percent Recovered	0%	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0%	NA
D. Service Calls (non-SSO related)														
Service calls, normal hours, #	10	11											21	11
Normal hours S.C. response time, mins (avg.)	22	20											42	21
Service Callouts, after hours, #	1	1											2	1
After Hours S.C. response time, mins (avg.)	33	35											68	34
E. Benchmarks														
Average Ft. Cleaned/Hour Worked	237	209	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	223
Total Stoppages/100 Miles	0.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	NA
Average spill response time (mins)	28	5											NA	17
Callouts/100 Miles	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1
Overtime hours/100 Miles	1	0	0	0	0	0	0	0	0	0	0	0	1.11	0
Overflow Gallons/100 Miles	55	1052	0	0	0	0	0	0	0	0	0	-	1,107	92

(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 2014-15 Graphs



**COLLECTION SYSTEM (Pump Stations)
WORK ORDER STATISTICS
February 1, 2015 - February 28, 2015**

	Open Work Orders Due Prior to 2/1/2015	Open Work Orders 2/1/2015 - 2/28/2015	Total Open Work Orders
Preventive	0	117	117
Corrective	0	0	0
Total	0	117	117

	Closed Work Orders 2/1/2015 - 2/28/2015
Preventive	112
Corrective	0
Total	112

Total Outstanding Work Orders as of 2/28/2015	5
------------------------------------------------------------------	----------

NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
February 2015

1.0 Summary:

The rancher continued to apply weed suppressant around sprinkler heads on Parcels in the pasture areas. The contractor for the Drainage Pump Station Improvement Project continued work on the project as the weather and conditions allowed. There were no irrigation or sludge handling activities this month.

2.0 Ranch Operations:

The rancher continued to apply weed suppressant around sprinkler heads on various Parcels throughout Reclamation. There were no other ranching activities.

3.0 Irrigation Parcels:

As previously reported, staff determined that a culvert which is either plugged or collapsed is causing rainwater to accumulate in the ditch along the line of eucalyptus trees on Site 2. Staff used a portable pump to move the accumulated water around the culvert because this water was backing up and flowing across an access road and into Parcel 1. After the water was pumped out of the ditch the early February rains quickly filled the ditch up before staff could locate the subject culvert.

A Work Order was issued to fill in potholes along the access road which were exacerbated by the water crossing the road. Also, several trees have fallen out of the eucalyptus grove, knocked down by heavy winds and wet soil conditions (see photo at right).



The Drainage Pump Stations pumped approximately 99 MG of rainwater in February.

The contractor for the Drainage Pump Station Improvement Project continued working on the project as weather, tides and conditions allowed. The contractor completed installing the structural steel for the new pipe supports and also installed the new discharge pipe ends with flap gates at each pump station (see photos below). Debris fencing around the pump wells at each station remain to be installed.



**NOVATO SANITARY DISTRICT
Wastewater Operations Committee Meeting
Reclamation Facilities Report
February 2015**

4.0 Irrigation Pump Station:

There was no irrigation activity this month. The Irrigation Storage Ponds accumulated 3.8 MG of rainwater this month.

5.0 Sludge Handling & Disposal:

There was no sludge handling activity this month.

NOVATO SANITARY DISTRICT
Reclamation Facility - Monthly Statistics for Calendar Year 2015, as of February 2015

	January	February	March	April	May	June	July	August	September	October	November	December	Total Year to Date	Annualized Monthly Average
Irrigation Pump Station														
Plant flow to ponds (MG)		0											-	0.00
Irrigation (MG)		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													-	0.00
Water Circulated through Wildlife Pond (MG)	0	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	5.4	5.4												
Pond 1 Gauge @ End of Month	5.4	5.6												
Pond 1 Gallons Stored @ End of Month(MG)	39.2	41												
Pond 2 Gauge @ Beginning of Month	5.5	5.5												
Pond 2 Gauge @ End of Month	5.5	5.7												
Pond 2 Gallons Stored @ End of Month(MG)	52	54												
Total Irrigation Water Stored	91.2	95	0	0	0	0	0	0	0	0	0	0		
Drainage Pump Station No. 3														
Drainage Pump No. 1 Hours	0	133.1												
Drainage Pump No. 2 Hours	0	0												
Drainage Pump No. 3 Hours	100.3	127.1												
Total Gallons Stormwater Pumped (MG)	30.09	78.06	0	0	0	0	0	0	0	0	0	0	108.15	9.01
Drainage Pump Station No. 7														
Drainage Pump No. 1 Hours	331.6	46.2												
Drainage Pump No. 2 Hours	0	0												
Drainage Pump No. 3 Hours	0	1.5												
Total Gallons Stormwater Pumped (MG)	149.22	21	0	0	0	0	0	0	0	0	0	0	170.685	14.22

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Treatment Facilities
2014 Annual Operations and
Maintenance Report.

MEETING DATE: March 23, 2015

AGENDA ITEM NO.: 6.b.

RECOMMENDED ACTION: Receive and accept report.

SUMMARY AND DISCUSSION:

The draft Wastewater Treatment Facilities 2014 Annual Operations and Maintenance Report (Report) was included in the agenda package and presented to the Board's Wastewater Operations Committee (Committee) at its meeting of March 16, 2015.

The Committee discussed the Report at that meeting, and subsequently directed staff to finalize it for presentation to the full Board.

Therefore, the final report is attached, and staff recommends that the Board receive and accept the Report.

DEPT.MGR.: JB (Veolia), ssk

MANAGER-ENGINEER: SSK

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT

Prepared by:

**Veolia Water Operating Services
March 2014**



ANNUAL OPERATIONS REPORT
2014
Veolia Water West Operating Services Novato

SECTION

- 1 Summary
 - a. Overview
 - b. Process Descriptions & Loading Summary

- 2 Treatment Plant Performance & Compliance Summary

3. Asset Management

4. Safety and Training

- 5 Staffing and Organization

- 6 Budget

- 7 Data and Graphs

- 8 Community Outreach Activities

- 9 Recycled Water Production Report

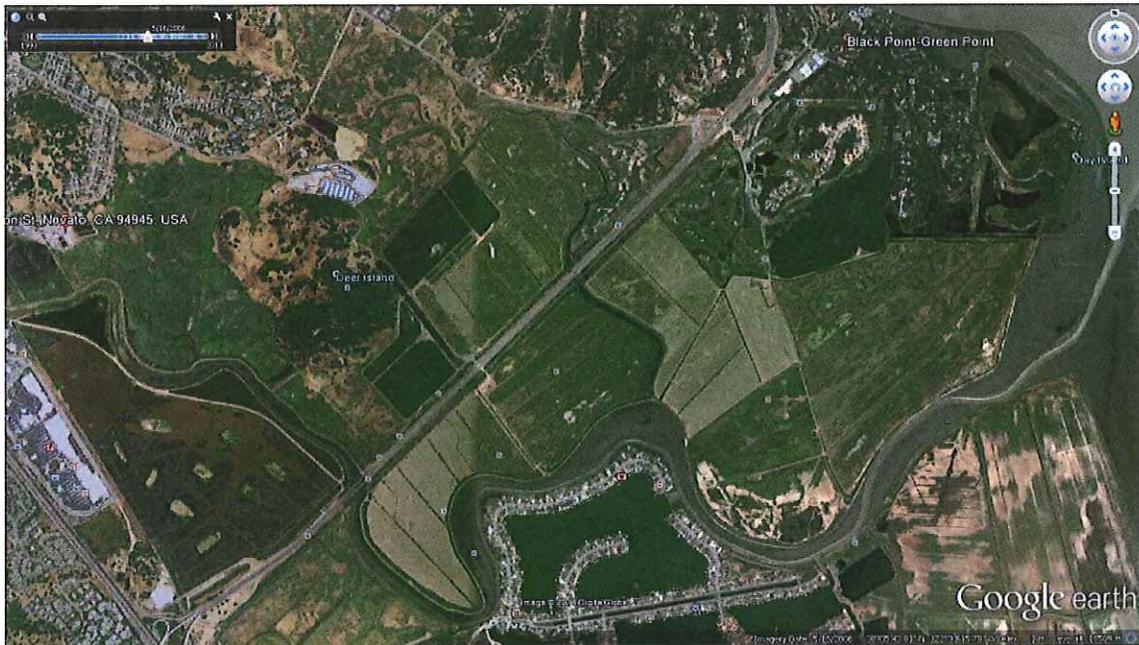
SECTION I

SUMMARY

OVERVIEW

PROCESS DESCRIPTIONS & LOADING

SUMMARY



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Overview:

The top priorities for 2014 were to meet the goals of zero lost time incidents or OSHA recordable incidents and no environmental excursions or treatment plant violations. This is a year in and year out objective plainly stated and firmly established throughout Veolia Water. A term we apply to this end is “Zero Harm”. We are very happy and proud to report that both goals were met. 2014 represents our third consecutive year of zero effluent violations and fourth year of zero recordable incidents. We celebrate that success with and offer congratulations to the Novato Sanitary District on its vision and commitment to water quality.

Key areas of focus throughout the year include:

- Safety Training
- Regulatory Compliance
- Third Party Facility Reviews
- Reporting (internal and external)
- Records Keeping and Data Base
- No Safety Incidents (recordable, lost time, or medical)
- Participation in Company *Near Miss* Reporting Program (focused on prevention)
- Employee Education and Certification / Professional Advancement
- Community Outreach and Participation
- Utilization of Job Cal Plus (CMMS) for Maintenance Tracking and Scheduling

On December 11, 2014 we experienced the highest Peak and Daily Flows since commissioning the new plant in April 2010. Both peak flows in excess of 35 mgd (million gallons per day) as well as total daily flow of 28.04 mgd were handled with relative ease. All of the raw sewage received full secondary treatment and all effluent standards were met. Prior to the new plant upgrades only a portion of the flow would have received full secondary treatment. Raw sewage above the treatment capacity would have received either primary or in some cases no treatment prior to filtration and *blending* with fully treated effluent. Recent regulatory monitoring requirements designed to discourage *blending* would have almost certainly resulted in numerous effluent violations.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Plant Operations and Process Summaries:

Wastewater is collected throughout the Novato Sanitary District service area and conveyed by gravity as well as mechanical means (pump stations) to the Davidson Street site.

Preliminary Treatment - Influent Pump Station and Headworks

When the wastewater arrives at the Treatment Plant it is pumped from the Influent Pump Station to the Headworks. The Headworks provides screening of coarse materials and removal of grit which consists of heavy matter such as sand, silt, and gravel.



Top Left – Influent Pump Station

Top Right – Parkson Aqua Guard Screen™

Bottom Left – Grit Conveyance and Pumping

Bottom Right – Screenings Washer / Compactor, Compacted Screenings Being Discharged to Dumpster

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Flow and Loading Measurement

Flow at the Novato Wastewater Treatment Plant is measured using a Parshall Flume and Hydro Ranger™ ultra sonic level meter in combination. This pairing is considered very reliable and provides a high degree of accuracy.

Composite samples for biochemical oxygen demand (BOD) and total suspended solids (TSS) are collected downstream of screening and grit removal. Composite samples are flow proportioned throughout the sampling period (normally 24 hours). Flow proportioning provides the most representative sample.



Above Left – Hydro Ranger level meter, hourglass shaped plating over Parshall Flume
 Above Right – Hach Model 3540 SDR Composite Sampler

Rated Capacities

DESIGN CRITERIA			
Condition	Value	Unit	Notes
Average Dry Weather Flow	7.0	MGD	
Peak Wet Weather Flow (Max Day)	30.7	MGD	
Max Peak Wet Weather (1-3 Hour)	47.0	MGD	
Average BOD Loading	14,600	Lbs/D	
Average TSS Loading	17,600	Lbs/D	

Actual 2014

2014 FLOWS AND LOADS SUMMARY			
Condition	Value	Unit	Notes
Average Dry Weather Flow	3.37	MGD	Jul / Aug / Sep
Peak Wet Weather Flow (Max Day)	28.04	MGD	12/11/2014
Max Peak Wet Weather (1-3 Hour)	35.00	MGD	12/11/2014, 8:15 am
Average BOD Loading	8,477	Lbs/D	
Average TSS Loading	11,608	Lbs/D	

Significant Peak Wet Weather Events occurred in December.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Primary Treatment – Primary Clarifiers

Primary clarifiers typically remove approximately 60 – 70% of the solids from raw wastewater. Clarifiers are large tanks that slow the flow of water and allow the force of gravity to remove solids. Heavier solids referred to as “sludge” settles to the bottom. Lighter material such as fat, oil, grease and plastic referred to as “scum” rises to the surface. Both sludge and scum are removed from the waste stream and pumped to a digester for additional treatment.



Above Left – Primary Clarifier #2, Superstructure supports the cover.
 Above Right – Sludge and Scum Pumping

PRIMARY CLARIFIERS			
	Value	Unit	Notes
Number	2		
Diameter	100	Ft	Each
Sidewall Depth	12	Ft	Each
Capacity (Volume)	880,770	Gallons	Each
BOD Removal	30	%	2014 Results
TSS Removal	65	%	2014 Results

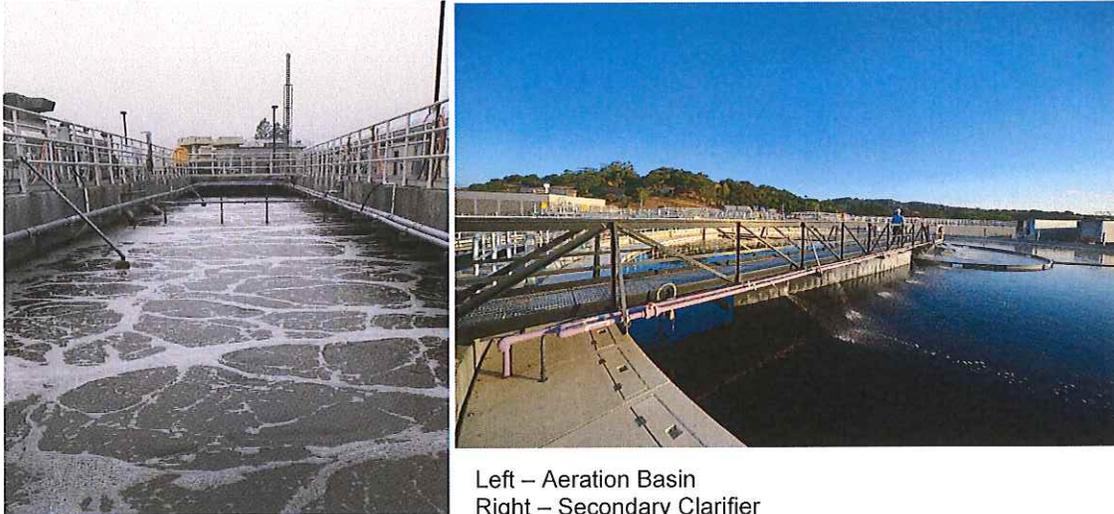
Novato’s primary clarifiers are covered to contain foul air associated with raw sewage. The foul air is removed and discharged to odor scrubbing biofilters by large fans. Like much of the wastewater process the biofilters are living processes. Various life forms including fungi, worms, and microbial populations convert odorous compounds to other gases, primarily carbon dioxide.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Secondary Treatment – Aeration Basins & Secondary Clarifiers

After screening, grit removal, and primary solids removal, all wastewater receives full secondary treatment. Large rectangular tanks with baffle walls, mechanical mixers, air diffusers, and recirculation pumps make up the aeration basins. The Novato facility was designed with both flexibility and reliability in mind. Four aeration basins, each with a capacity of more than 850,000 gallons provides complete secondary treatment under all flow conditions.

Each aeration basin has three anoxic (no dissolved oxygen) zones accounting for almost 25% of the tank volume. The anoxic zones convert nitrate and nitrite to nitrogen gas to reduce the level of total nitrogen in the effluent.



Left – Aeration Basin
 Right – Secondary Clarifier

Solids, primarily biological cell mass, are produced during the process of removing dissolved pollutants (BOD) in the aeration basins. A combination of wastewater and bio-mass, known as mixed liquor, typically contains between 1,500 mg/L and 2,500 mg/L (0.15% to 0.25%) of solids. The aeration basins are well mixed and as a result a continuous stream of solids leaves the aeration basins. Solids are captured in the secondary clarifiers and the majority returned to the head end of the aeration basins to maintain the proper biomass concentration for treatment. Excess solids are sent to the gravity belt thickener (GBT) where they are concentrated to 4% - 6% and then pumped to a digester for additional treatment. Effluent from the secondary clarifiers is then ready for disinfection.

SECONDARY CLARIFIERS			
	Value	Unit	Notes
Number	2		
Diameter	125	Ft	Each
Sidewall Depth	16	Ft	Each
Capacity (Volume)	1.468	MG	Each

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Ultra Violet (UV) Disinfection

Prior to discharge wastewater must be disinfected. Ultra violet light disrupts the DNA of pathogens and other life forms leaving them incapable of reproduction. UV unlike other methods of disinfection uses no chemicals, produces no harmful byproducts (trihalomethanes for example), and leaves no toxic residual.

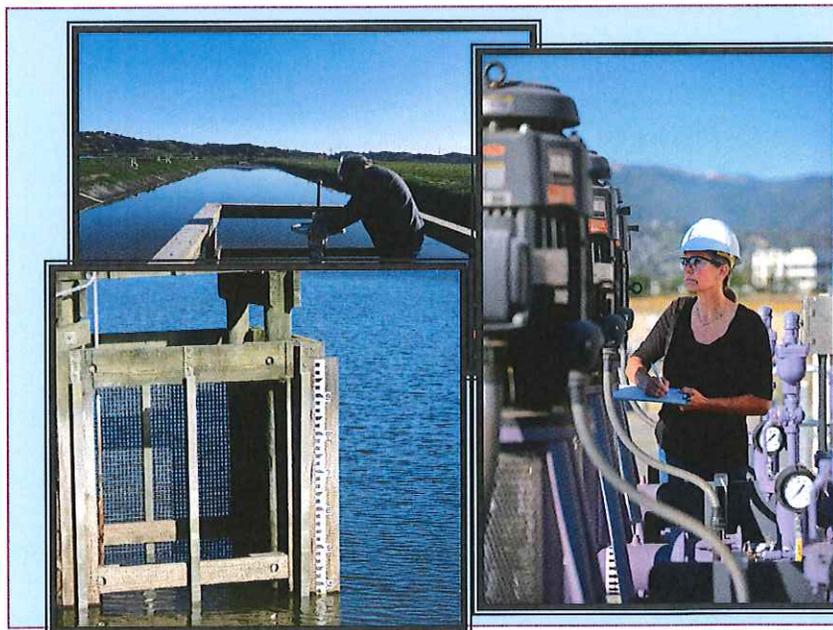


Left – UV Rack Removed for Cleaning
Below – Preparing UV Rack for Removal



Effluent Disposal – Bay Discharge / Reclamation / Storage

There are several options for disposal of treated effluent. During wet weather the majority of Novato's effluent is discharged to San Pablo Bay. Seasonal NPDES permit restrictions combined with a responsible approach to water conservation drive effluent disposal options. Discharge to the San Pablo Bay during the months of June, July, and August is prohibited. Restrictive discharge limits during the months of May, September, and October are also considerations



SECTION II

**TREATMENT PLANT PERFORMANCE
&
COMPLIANCE SUMMARY**



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Performance Summary

The following summary provides an overview of plant performance and activities for the period January 1, 2014 through December 31, 2014.

Total Volume of Water Processed	1,655 Million Gallons
Total Volume of Water Reclaimed	503 Million Gallons
Total Volume of Water Discharged	1,152 Million Gallons
Average Daily Dry Weather Flow	3.37 MGD
Maximum Daily Flow	28.04 MGD
Pounds of BOD Treated	2,951,310
Pounds of BOD Removed	2,855,315
Percent BOD Removal Efficiency	97
Pounds of TSS Treated	4,062,500
Pounds of TSS Removed	4,007,081
Percent of TSS Removal Efficiency	99
Pounds of Bio-solids Treated	1,778,600
Cubic Feet of Biogas Produced	25,821,050
Total Number of Violations / Excursions	0
NPDES (Bay Discharge)	0
WDR (Reclamation)	0

Maintenance

Total Number of Work Orders Issued	5,238
Total Number of Work Orders Closed	5,330
Percentage Preventive Maintenance	88%
Average Completion	5.01 Days

Consumables / Energy

*Electricity – kWh / Year	3,365,946
Electricity – kWh / MG	2,170
*Natural Gas – Therms / Year	45,496
Natural Gas – Therms / MG	29
Diesel Fuel – Gallons / Year	1,965
Diesel Fuel – Gallons / MGD	1.27

*Excludes Administration Building, Recycled Water Plant, and Flare Pilot.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

**Treatment Plant
Compliance Summary**

No treatment plant violations were experienced in 2014. The compliance summary table (below) is broken down by constituent and discharge season.

Waste Discharge Limits / Reclamation				
Parameter	Limit	Units	Samples Analyzed	Violations
BOD Monthly Average	40	mg/L	4	0
Total Coliform – 5 Sample Median	240	mpn/100 ml	51	0
Total Coliform - Maximum	10,000	mpn/100 ml	51	0
pH – High	9.0	s.u.	87	0
pH – Low	6.0	s.u.	87	0

NPDES Wet Season Limits - November – April				
Parameter	Limit	Units	Samples Analyzed	Violations
BOD Weekly	45	mg/L	25	0
BOD Monthly	30	mg/L	6	0
TSS Weekly	45	mg/L	25	0
TSS Monthly	30	mg/L	6	0
BOD Removal (minimum)	85	%	6	0
TSS Removal (minimum)	85	%	6	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	6	0
Fecal Coliform - Median	140	mpn/100 ml	6	0
Fecal Coliform - 90 th Percentile	430	mpn/100 ml	6	0
Ammonia – Daily Maximum	21	mg/L	57	0
Ammonia - Monthly Average	6	mg/L	6	0
pH – High	8.5	s.u.	128	0
pH – Low	6.5	s.u.	128	0
Oil & Grease - Daily Maximum	15	mg/L	6	0
Oil & Grease - Monthly Average	5	mg/L	6	0

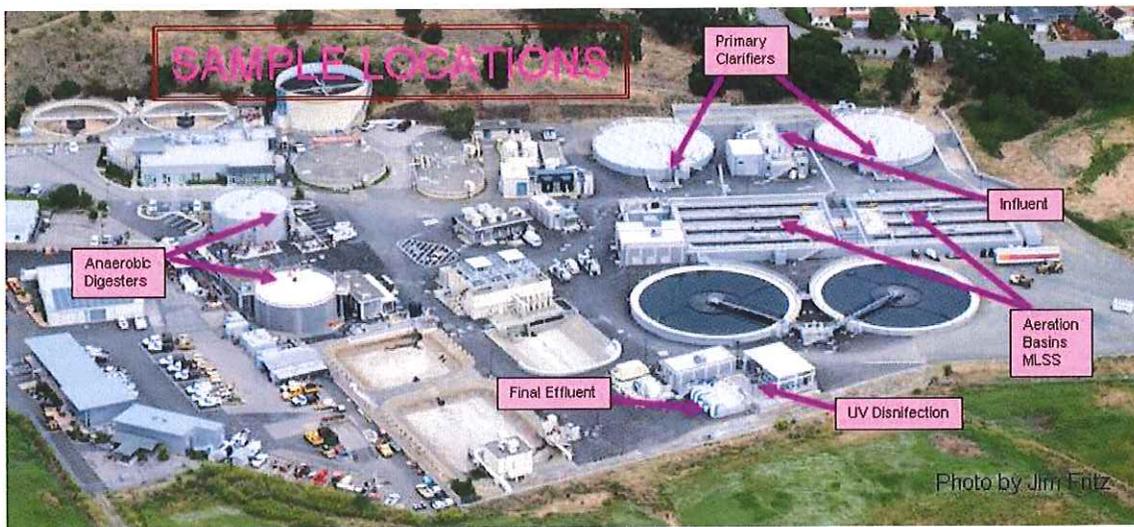
2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Compliance Summary (Continued)

NPDES Dry Season Limits - May, September, & October				
Parameter	Limit	Units	Samples Analyzed	Violations
BOD Weekly	30	mg/L	10	0
BOD Monthly	15	mg/L	2	0
TSS Weekly	20	mg/L	10	0
TSS Monthly	10	mg/L	2	0
BOD Removal (minimum)	85	%	2	0
TSS Removal (minimum)	85	%	2	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	2	0
Fecal Coliform - Median	140	mpn/100 ml	2	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	2	0
Ammonia – Daily Maximum	21	mg/L	10	0
Ammonia - Monthly Average	6	mg/L	2	0
pH – High	8.5	s.u.	45	0
pH – Low	6.5	s.u.	45	0
Oil & Grease - Daily Maximum	15	mg/L	2	0
Oil & Grease - Monthly Average	5	mg/L	2	0

Sample Locations



SECTION III

ASSET MANAGEMENT



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Asset Management

Key components of an Asset Management Program include:

- Computerized Maintenance Management System (CMMS)
- Preventive, Predictive, and Corrective Maintenance
- Equipment Inventory
- Reliability / Criticality Assessment (Hierarchy of Equipment Priority)

Computerized Maintenance Management System

Veolia uses *Job Cal Plus*[™] (Job Plus) as the basis for scheduling and tracking maintenance and repairs at Novato. Job Plus is an off-the-shelf, non proprietary software program available from Hach Company, Loveland, Colorado. Job Plus uses the Microsoft Access[™] data base platform to store information. A description of Job Plus can be found at the end of this section.

Preventive, Predictive, and Corrective Maintenance

Preventive maintenance (PM) is a scheduled maintenance activity generally tied to equipment run time (x hours) or period schedule (weekly / quarterly). Routines such as lubrication, oil change, filter change fall into the category of PM. Predictive maintenance (PdM) is performed to determine when maintenance might be required and or to assess condition. Tasks such as vibration, temperature, and oil analysis are types of PdM. Corrective maintenance is initiated when a deficiency is found.

Equipment Inventory

An accurate equipment inventory is crucial to all phases of Asset Management. Equipment at the Novato facility has been entered into the Job Plus data base. The equipment inventory is a dynamic process with additions and deletions over time. An accurate equipment inventory is an essential component when planning for equipment replacement.

Reliability / Criticality Assessment (Hierarchy of Equipment Priority)

A Criticality Assessment was performed at the Novato facility in August 2010 and updated in June 2014. The assessment evaluates processes and equipment and rates the relative importance. The evaluation process looks at consequences and likelihood of failure. The product helps the user prioritize replacement and maintenance.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Maintenance Activities Under \$10,000.00*

January		
	MCC Panels	Thermographic imaging
	Gravity Belt Thickener #2	Replaced belt
	Sludge/Scum Pump #1 - Primary #1	Replaced seal water line
	Sludge/Scum Pump #2 - Primary #1	Replaced seal water line & regulator
	Primary Clarifier #2	Replaced mercoird switch
	TWAS Pump #2	Replaced drive
	Novato WWTP & Ignacio PS	Thermographic testing

February		
	Operation Chevy Truck	Replaced 4 tires
	Ignacio	Backflow preventer repaired
	Ignacio – SCADA	Bezel replacement
	Aeration Basin #3	#3 water line repair
	GBT Odor Control Fans	Replaced bearings
	Headworks Gate #1 Actuator	Repaired actuator
	Gravity Belt Thickener #1	Replaced batteries in UPS unit
	Gravity Belt Thickener #2	Replaced batteries in UPS unit
	UV Emergency Generator Day Tank	Replaced floats

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

March		
	Maintenance Truck - Dodge	Replaced bench seat
	Maintenance Truck - Dodge	Replaced all 4 tires
	Digester #1	Replaced all Ferric feed lines
	GBT Polymer Pump	Replaced pump, pressure switch and tubing
	WAS Pump #2	Rebuild pump
	Ignacio Emergency Generator	Replaced filters & performed annual service
	Ignacio Grinder	Replaced drive

April		
	Diesel Fuel Tanks & Day Tanks	Annual fuel filtering
	Aeration Basins	Repairs to water piping
	Digested Sludge Transfer Pump #1	Replaced flush lines and hose
	Influent Gates	Gate repairs
	SCADA	Annual upgrade

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

May		
	Novato WWTP & Ignacio Pump Station	Infrared Survey at Novato WWTP and Ignacio PS
	Blower Room UPS	Replaced UPS unit
	Overhead Cranes	Annual crane inspection/certification
	Flow Meters	Annual flow meter calibration
	Jerome Meter	Annual re-calibration
	Fire Extinguishers	Annual recharge of all fire extinguishers at Novato WWTP & Ignacio PS
	Primary Clarifier #1	Repaired scum arm and skimmer plate
	Emergency Generators	Annual service

June		
	Wet Weather effluent Pump #1	Replaced batteries
	Wet Weather Pumps	Annual service
	Blower #3	Replaced cooling fan and driver board
	Digester Sludge Sump	Pumped out sump
	Sodium Hypochlorite Pump #2	Replaced discharge line
	Sodium Hypochlorite Tank #1	Replaced drain valve and piping
	Screenings Washer Compactor	Installed new mechanical seal
	Ignacio Influent Pump #1	Retrofit - assisted in pulling and re-installation of pump
	Emergency Generator #2	Day tank repairs

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

July		
	Operations Truck - Dodge	Replaced water pump and fan belt
	Ignacio Gas Sensor	Replaced H2S sensor
	GBT Control Center	Replaced PLC I/O module and fuses
	Influent Channel #2	Replaced float
	Channel Grinder	Replaced drive/reducer

August		
	Boiler	Replaced linkage arm and replaced piping
	Wet Weather Pump #1	Replaced coolant filters and fuel line
	Emergency Generator	Annual service performed on all 4 Emergency Generators
	Grit Bin	Replaced Liner
	Primary Clarifier #1	Replaced limit switch
	UV Diesel Fuel Tank	Replaced digital tank level display
	Novato & Ignacio VFD	Annual inspections
	UV System	System overhaul

September		
	Old Wastewater Flow Meter Concrete Box	Installed safety railing around underground box
	Blower #3	Replaced cooling fan
	Digester Sludge Sump	Pumped out sump
	Primary Clarifier #1 Ultima X Gas Monitor	Replaced LEL sensor
	Primary Clarifier #2 Ultima X Gas Monitor	Replaced LEL sensor
	Digester Sludge Sump	Pumped out sump
	Flygt Pumps/Mixers	Annual Flygt pump/mixer inspection

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

October		
	Old Influent Pump Building	Repaired piping - water leak
	Above Ground Fuel Tank - old	Replace supply & return lines, prime wet weather pumps, clean probes and fuel in tank, repaired anti siphon valve
	Ignacio Channel Grinder	Re-installed rebuilt cutter stack
	TWAS Pump #2	Replaced seal water line
	Blower Room	Replaced Compressor - rooftop
	UV System	UV breakers, tighten connections, continuity testing, wiring to breakers
	Filter Screen #1	Removed grit from channel

November		
	Effluent Pump Station Piping	Repaired #3 water system piping
	Decant Line	Cleaned supernatant main pipe to decant pump station
	Headworks Channel #1	Replaced transducer/level sensor
	Influent Pump #5 VFD	Replaced fan
	UV Channel 2, Module 10	Replaced fan
	Wet Weather Pump #2	Replaced gasket on gear box

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

December		
	Trucks	Annual oil change on 4 trucks
	Dry Weather Effluent Pump #4	Replaced seal water line
	Odor Bed Moisture Control Panel	Replaced din mounted breaker and GFI receptacle in control panel
	Ignacio Influent Pump #2	Retrofit - assisted in pulling and re-installation of pump
	Ignacio - Raw Sewage Pump #2 Control Valve	Repaired actuator
	Ignacio - Force main Header Discharge Valve	Repaired actuator
	Channel #2 Mechanical Filter Screen	Replaced chain idler/tensioner

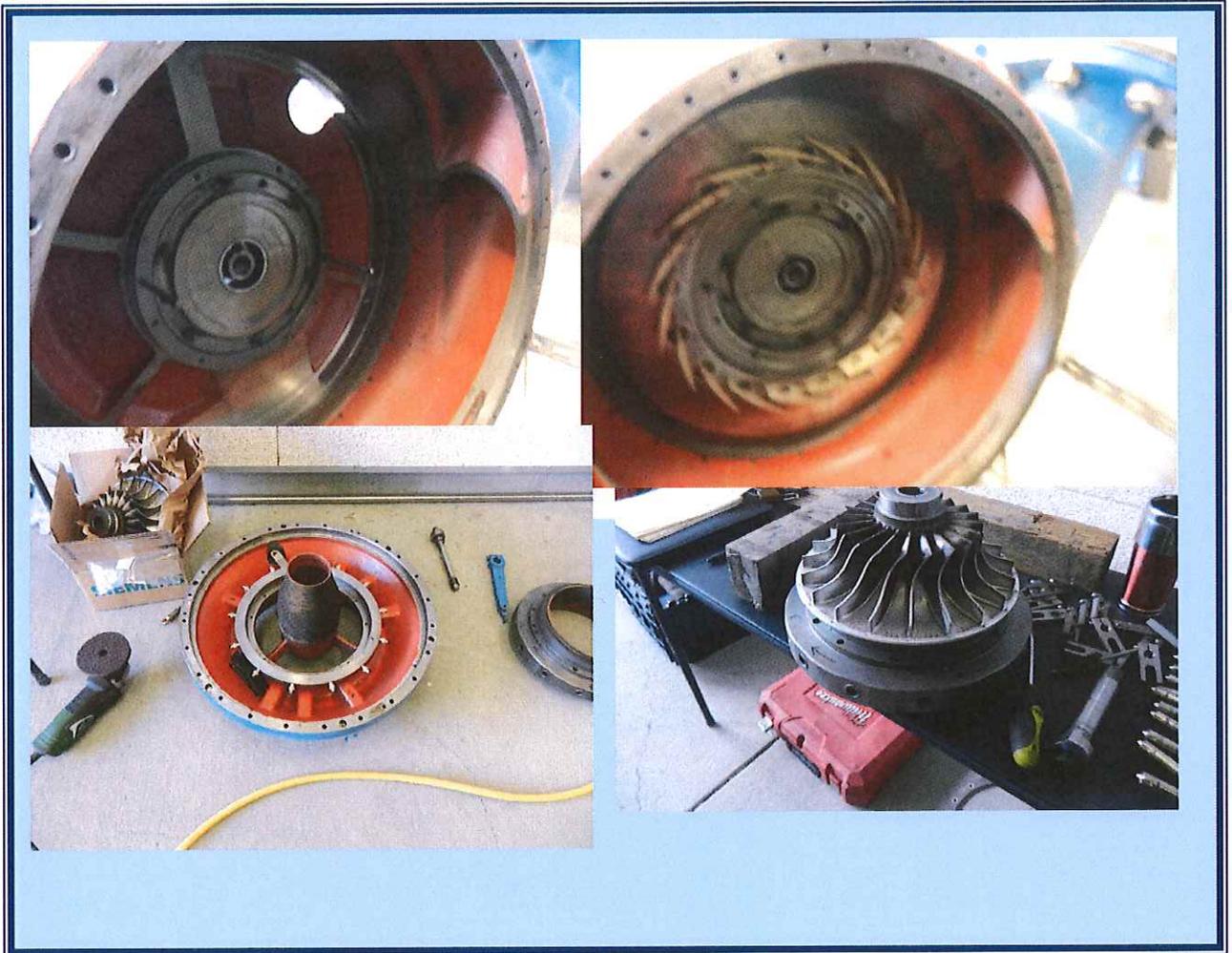
Maintenance Activities Over \$10,000.00*

Task Description	Labor Cost	Material Cost	Outside Contractor Cost	Total Cost District	Total Cost (Preventative Maintenance)
Performed 36,000 Hour Class 1 Inspection			\$16,098.61		\$16,098.61

* Limit Set by Section 3.0 of the Service Agreement between Veolia and NSD.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

TURBLEX BLOWER - 36,000 HOUR LEVEL ONE INSPECTION



Complete disassembly of Turblex Blowers (1 & 2)
Blowers were found to be in excellent condition

**REMOVAL AND CLEANING TELESCOPIC VALVE
AT SLUDGE LAGOONS**



Top Left – Struvite Buildup in Telescoping Valve Receiver
Top Right – Telescoping Valve Removed Ready for Cleaning
Bottom Left – Buildup in Telescoping Valve
Bottom Right – Cleaned Telescoping Valve

SECTION IV

SAFETY & TRAINING

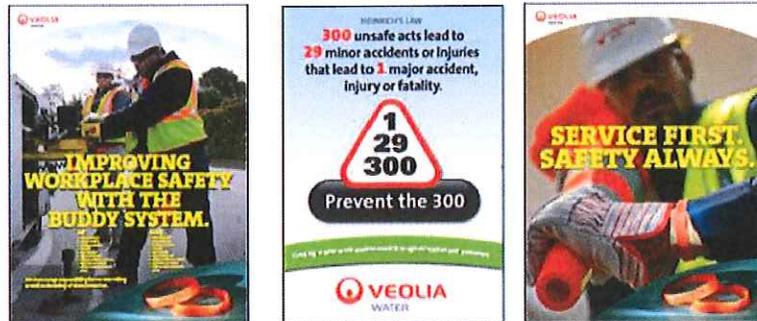


2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Safety

It's a Culture, Not a Campaign



Veolia Water North America (VWNA) recognizes the importance of an effective health and safety program to the well being of each employee, the general public, clients/facility owners, and to the overall success of our company. VWNA is committed to providing its employees a healthful and safe place of employment. To that end, VWNA will provide proper training, materials, and equipment so that work can be performed safely and in compliance with the Occupational Safety and Health Administration Regulations (OSHA) and other applicable standards. In turn, each employee is responsible to participate in a cooperative effort to maintain an effective health and safety program. Adherence to company policies and work practice guidelines is an essential part of this responsibility. By maintaining an effective program, we reduce the risk of personal injury, operational interruptions, regulatory fines, and maintain the company's reputation as a world leader in environmental management.

Our highest duty - to ensure health, safety and security for all. It is our highest duty, essential business priority, and the individual responsibility of each of us to ensure that at all time and in all of our operations, the health, safety and security of the general public, our customers, subcontractors and our fellow employees are protected. We allow for no compromise in this matter, and we strive to proactively identify potential risks and take diligent corrective and preventative actions to reduce and eliminate them. In the same spirit, we support, advise and encourage our fellow employees to maintain good personal health, as well as to develop positive practices and behaviors in that respect.

VWNA Novato has obtained a zero harm safety record from reinstatement of the Operations Contract. We have had no incidents from 6/1/10 to present. This reporting period from 1/1/14 - 12/31/14 resulting in 365 days - accident/incident free. In recognition of this achievement - staff celebrated at a luncheon with gifts of appreciation. Each employee received a cash incentive reward from the Company for 4 years no loss time incidents as a group and also as individual achievements.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

VVNA Novato provides daily safety topics - 5 minutes in length at each of our daily morning meeting. Subjects range from personal to job related safety topics.

2014 Safety Training	
Date	Topic
January	Hazard Communication – GHS
February	Personal Protective Equipment
March	General Electrical Safety LOTO - Control of Hazardous Energy
April	Confined Space Training Office Safety
May	Fire Extinguisher Use
June	Bloodborne Pathogens Housekeeping Preventing Heat Stress Overexertion - Sprains and Strains
July	Fire Extinguisher Use Hot Work - Welding Cutting and Brazing
August	Overexertion
September	LOTO - Policy Review
October	First Aid/CPR/AED Certification Training Great Shakeout – Earthquake Preparedness Drill
November	Fall Protection Powered Industrial Trucks Hearing Protection
December	SPCC Plans - Novato and Ignacio

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

GREAT SHAKEOUT – ANNUAL EARTHQUAKE DRILL
OCTOBER 16, 2014



Top Left – Christian Williams, Duck Cover Hold

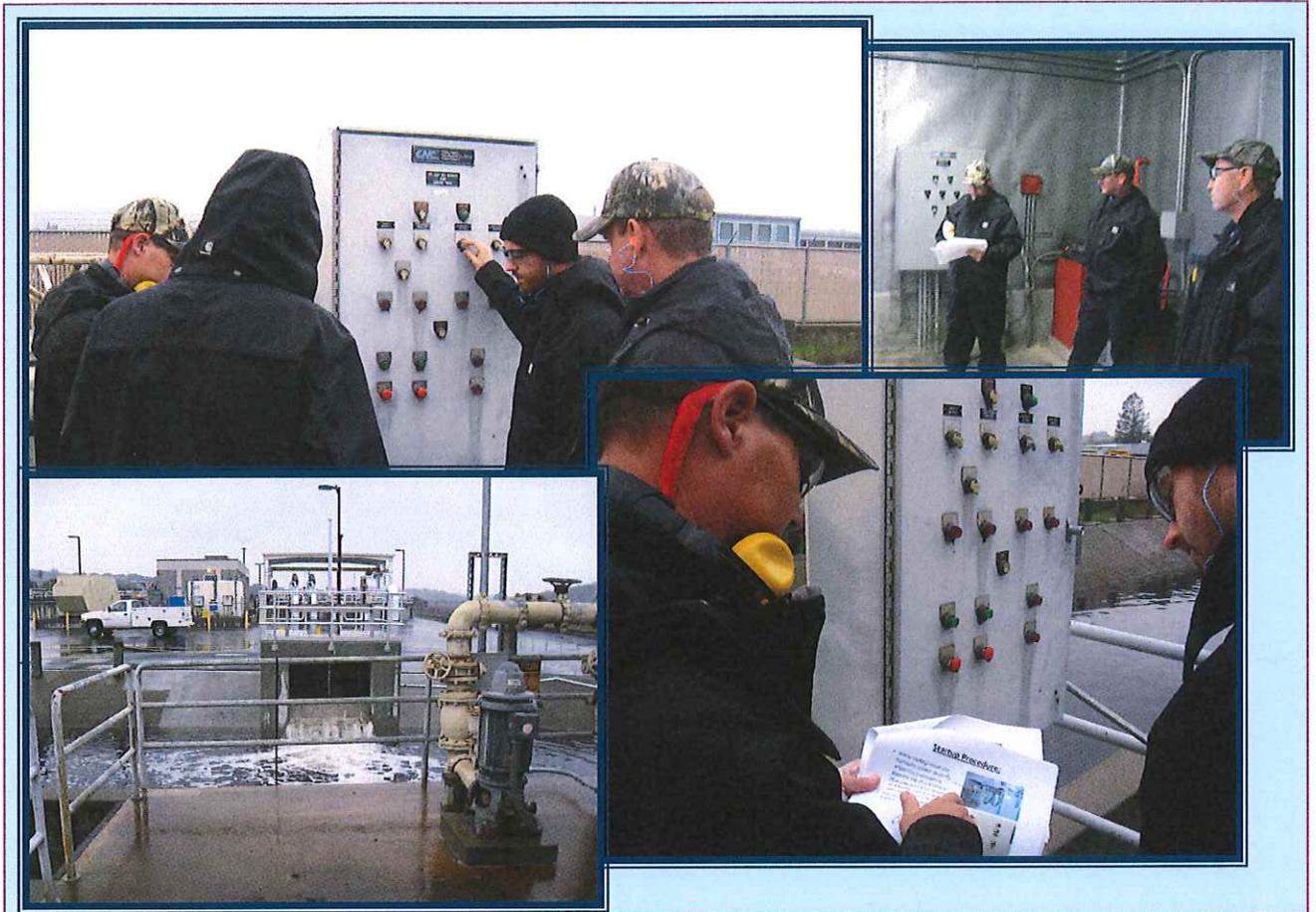
Top Right – Brian Exberger, Duck Cover Hold

Bottom Left – Inventory Emergency Supplies

Bottom Right – Brian Exberger Simulates Shutoff of Natural Gas

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

NOVEMBER 19th
HANDS-ON REVIEW OF THE WET WEATHER SOP



Training in November prepared staff for the heavy rains of December

Above Left – Operations and maintenance staff review operation of the (hydraulic) wet weather pump valves

Above Right – Brian Exberger reviews Wet Weather Pump SOP with O&M staff.

Below Left – Staff tests operation of wet weather overflow structure.

Below Right – Brian Exberger reviews SOP with O&M staff

SECTION V

STAFFING AND ORGANIZATION



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Staffing and Organization

STAFFING & CERTIFICATION STATUS

John Bailey – Project Manager

Grade V California Wastewater Treatment Plant Operator #4123, December 31, 2016

Brian N. Exberger – Assistant Project Manager / Operations Manager

Grade V California Wastewater Treatment Plant Operator #10424, June 30, 2015

Lynda Rodefer – Administrative Assistant/Planner/Scheduler/Safety Coordinator

Anthony M. Silva – Operator III

Grade V California Wastewater Treatment Plant Operator #10973, December 31, 2015

Grade II Collection System Maintenance Technician, 354, January 31, 2016

Dean B. Heffelfinger – Operator III

Grade III California Wastewater Treatment Plant Operator #III-27610, June 30, 2015
Grade T2 Water Treatment Operator #34890

Christian R. Williams – Operator IV

Grade IV California Wastewater Treatment Plant Operator #28555, June 30, 2016

Preston Ingram – Operator III

Grade IV California Wastewater Treatment Plant Operator #10277, June 30, 2015

Jeffrey D. Hendricks – Operator II

Grade II California Wastewater Treatment Plant Operator #II-28377, December 31, 2015

Grade I Plant Maintenance Technologist, 070750011, July 31, 2015

Ralph Loveless – Maintenance Technician/Operator II

Grade II California Wastewater Treatment Plant Operator #28638, August 13, 2016

Additional Support

Sachin Chawla – Area Manager

Christopher McAuliffe – District Manager, Grade V Wastewater Treatment Plant Operator

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

John O'Hare – Technical Director

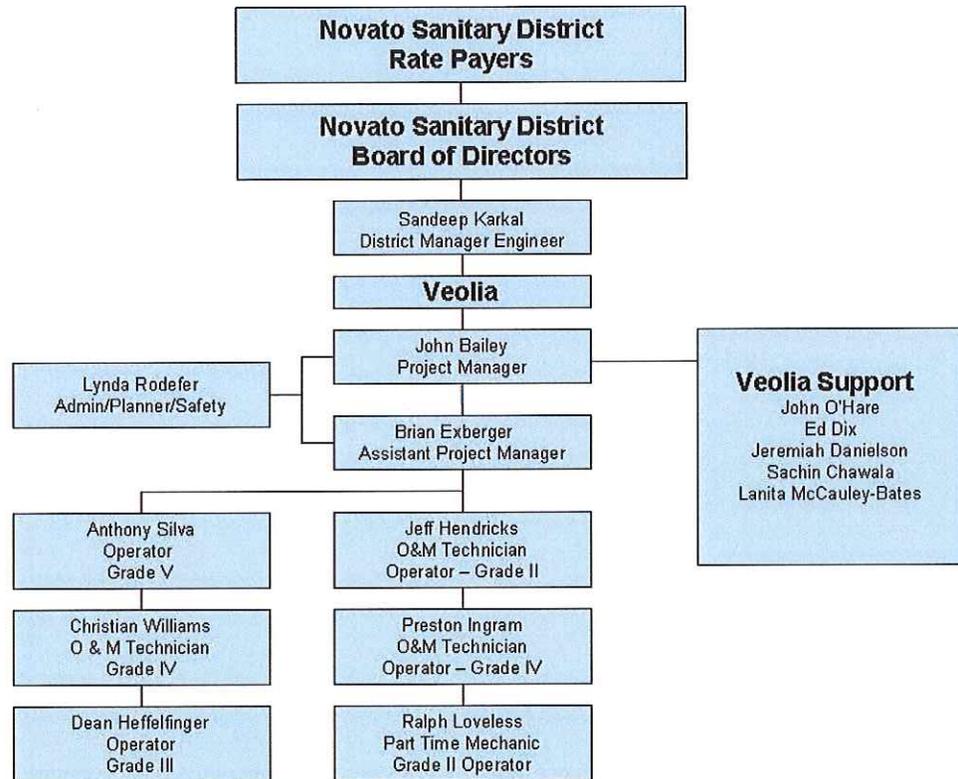
Grade V, Wastewater Treatment Plant Operator, California, # 10669 (2005)
Grade IV, Wastewater Treatment Plant Operator, Association of Boards of Certification, # S40011R (2004)
Grade IV, Collection Systems, Massachusetts, #866 (1986)
Grade VII, Wastewater Treatment Plant Operator, Massachusetts, # 977 (1977)
Grade I, Environmental Compliance Inspection, California, CWEA # 04074112 (2004)
Grade I, Laboratory Analyst, California, CWEA # 05013114 (2005)
Grade I, Plant Maintenance Technologist, California, CWEA # 05075101 (2005)
Grade I, Collection System Maintenance, California, CWEA # 070121088 (2007)
Grade I, Water Distribution Operator, California Department of Public Health, #34234 (2008)



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Organization Chart –
Veolia Water/Novato Sanitary District



SECTION VI

BUDGET



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Budget

ADJUSTMENTS OCCUR ON A “CONTRACT YEAR CYCLE”, JULY - JUNE

The Novato Operations and Maintenance Service Agreement dated March 27, 2014 is a fixed price contract. Included in the base contract fee are operation, maintenance, and management. Exceptions to the fixed price include:

Schedule 13 – *Pass Through Costs*

Section 5.6 – Performance Bond

Schedule 8 – Cost Adjustment and Escalation Indices

Schedule 8 – Flow and Loading Adjustments

Schedule 11 – Usage Caps

- Electrical
- Natural Gas
- Diesel Fuel

Schedule 5 – Operation of Recycled Water Facility

Equipment Repair in excess of \$10,000

2014 service fee adjustment was 1.22%.

SECTION VII

DATA AND GRAPHS



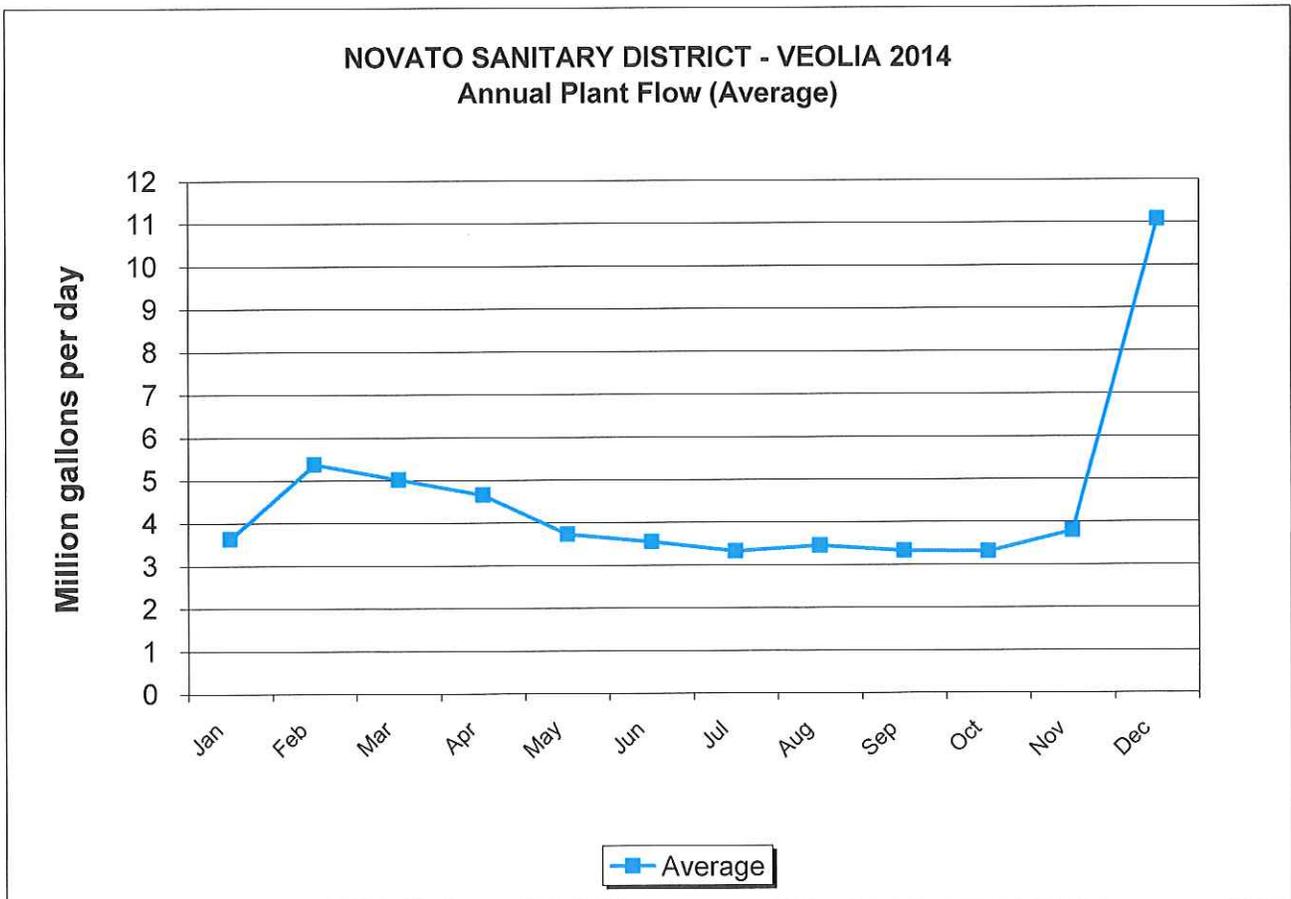
**NOVATO SANITARY DISTRICT - VEOLIA
PLANT FLOW**

Annual Waste Characteristics & Loading Summary

(IN GALLONS TIMES 1,000,000)

YEAR: 2014

	Total Flow	High	Low	Average	
January	112.70	4.39	1.00	3.64	
February	150.57	11.56	3.40	5.38	
March	155.76	7.66	3.99	5.02	
April	139.61	7.87	3.61	4.65	
May	115.84	4.26	3.19	3.74	
June	106.70	4.19	3.10	3.56	
July	103.36	3.77	2.96	3.33	
August	107.29	3.78	3.06	3.46	Three month dry weather averages:
September	99.96	3.74	3.06	3.33	3.46
October	102.80	3.87	2.80	3.32	3.33
November	114.01	5.82	3.00	3.80	3.32
December	343.49	28.04	4.92	11.08	
ANNUAL TOTAL	1652.09				
ANNUAL MAX.	343.49	28.04			Max. 3.46
ANNUAL MIN.	99.96		1.00		Min. 3.32
ANNUAL AVG.	137.67			4.53	Avg. Dry Weather Flow 3.37

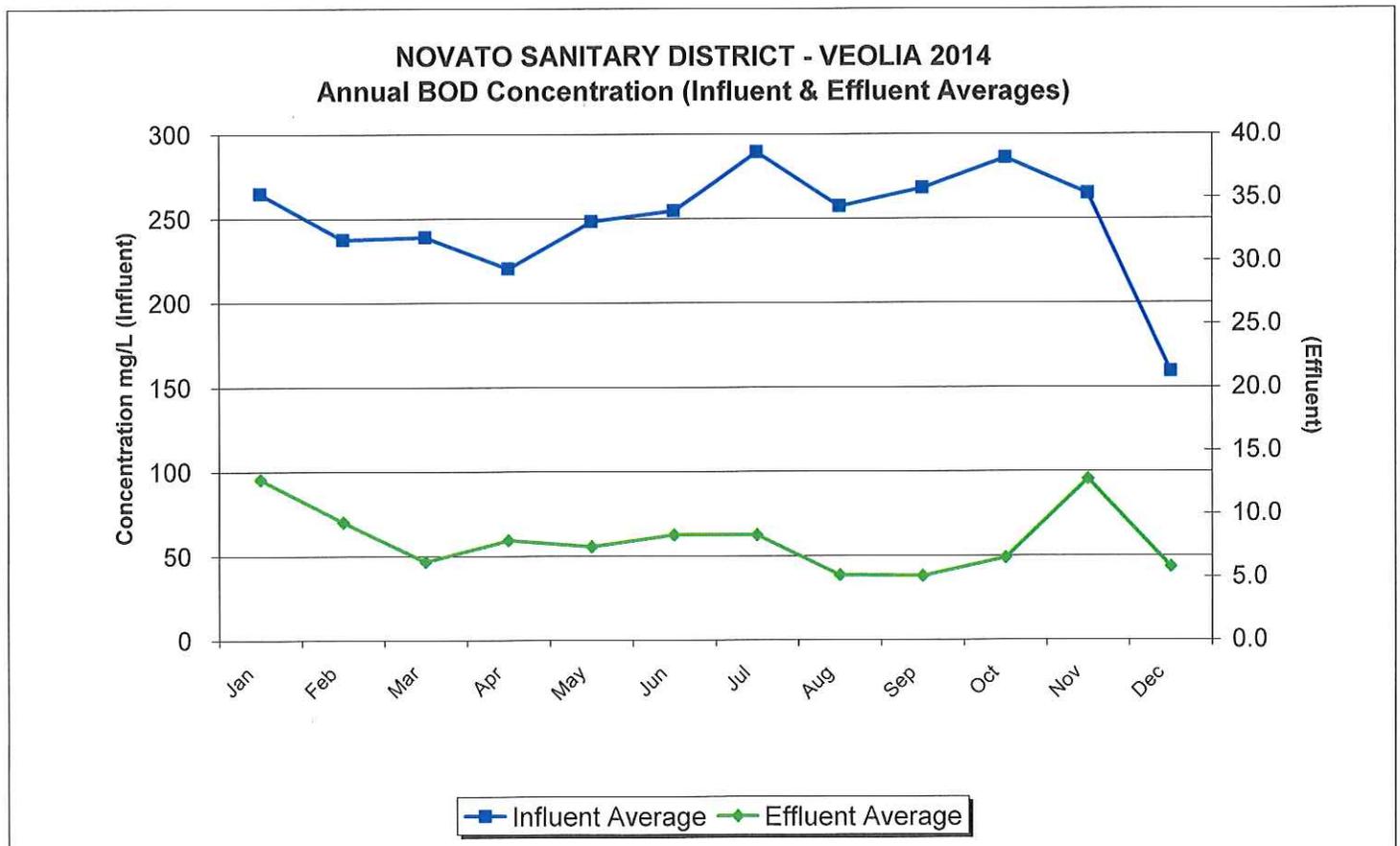


**NOVATO SANITARY DISTRICT - VEOLIA
BOD (Influent & Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	339	229	265	11	5004	958	3546	19.0	6.0	12.8	12	291	30	176
February	322	110	238	13	5540	2606	4144	34.0	5.0	9.4	13	525	77	166
March	343	163	239	12	5388	3689	4194	12.0	5.0	6.3	12	255	79	113
April	470	143	220	15	6653	2317	3847	19.0	5.0	7.9	15	316	73	138
May	487	91	248	12	6765	1374	3495	11.0	5.0	7.4	12	159	66	105
June	299	216	255	12	4215	2912	3440	15.0	5.0	8.3	12	192	62	112
July	350	215	289	15	4684	2653	3651	19.0	5.0	8.3	15	237	61	105
August	305	227	257	12	4364	2664	3452	6.0	5.0	5.2	12	85	59	69
September	348	150	268	12	4768	2084	3382	6.0	5.0	5.1	12	71	58	64
October	343	206	286	15	4204	2901	3613	16.0	5.0	6.5	15	210	60	83
November	339	229	265	11	5639	2722	3907	19.0	6.0	12.8	12	279	90	182
December	323	54	159	15	8986	3096	5496	12.0	5.0	5.8	15	783	93	251
ANNUAL HIGH	487	229	289	15	8986	3689	5496	34.0	6.0	12.8	15	783	93	251
ANNUAL LOW	299	54	159	11	4204	958	3382	6.0	5.0	5.1	12	71	30	64
ANNUAL AVG.	356	169	249	13	5517	2498	3847	15.7	5.2	8.0	13	284	67	130

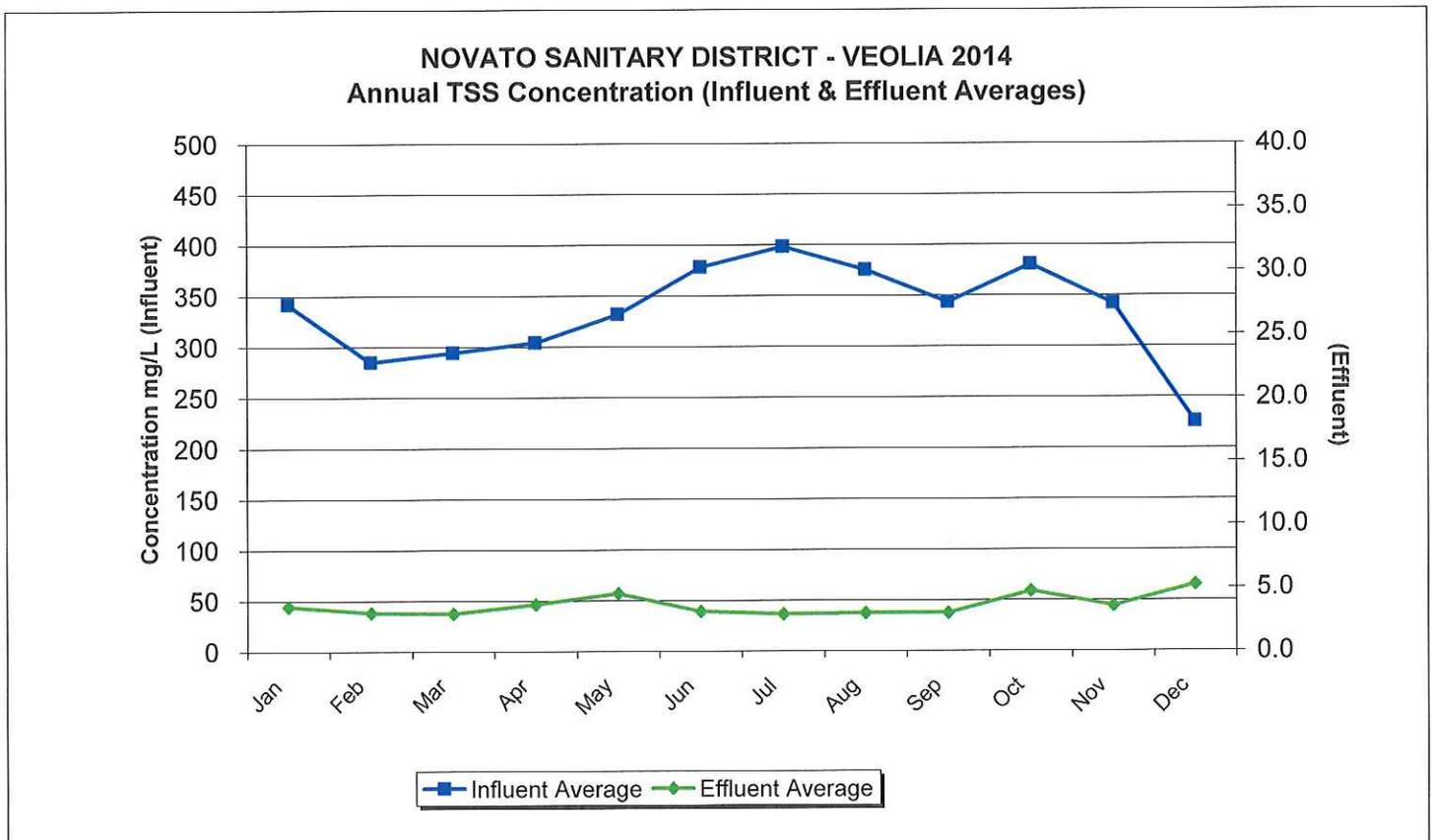


**NOVATO SANITARY DISTRICT - VEOLIA
SUSPENDED SOLIDS (Influent & Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	476	298	342	11	6072	1177	4588	8.0	3.0	3.6	11	122	11	49
February	377	162	285	13	7669	3838	5070	4.0	3.0	3.1	13	125	42	57
March	356	224	295	12	6190	4282	5201	3.0	3.0	3.0	12	76	46	54
April	404	203	304	15	8381	4310	5388	5.0	3.0	3.7	15	149	49	69
May	464	153	332	12	6322	2183	4679	9.0	3.0	4.6	12	124	40	65
June	490	316	378	12	6195	4019	5091	4.0	3.0	3.2	12	61	35	43
July	585	128	399	15	7334	1555	5051	4.0	2.0	2.9	15	55	24	37
August	427	317	376	12	6109	3720	5039	3.0	3.0	3.0	12	43	35	40
September	414	278	344	12	5294	3495	4352	3.0	3.0	3.0	12	42	35	38
October	530	249	381	15	6379	3506	4816	14.0	2.0	4.7	15	158	24	60
November	476	298	342	11	7776	3733	5082	8.0	3.0	3.6	11	120	36	53
December	386	83	226	15	21468	4334	8859	16.0	3.0	5.3	15	1044	56	252
ANNUAL HIGH	585	317	399	15	21468	4334	8859	16.0	3.0	5.3	15	1044	56	252
ANNUAL LOW	356	83	226	11	5294	1177	4352	3.0	2.0	2.9	11	42	11	37
ANNUAL AVG.	449	226	334	13	7933	3346	5268	6.8	2.8	3.6	13	177	36	68

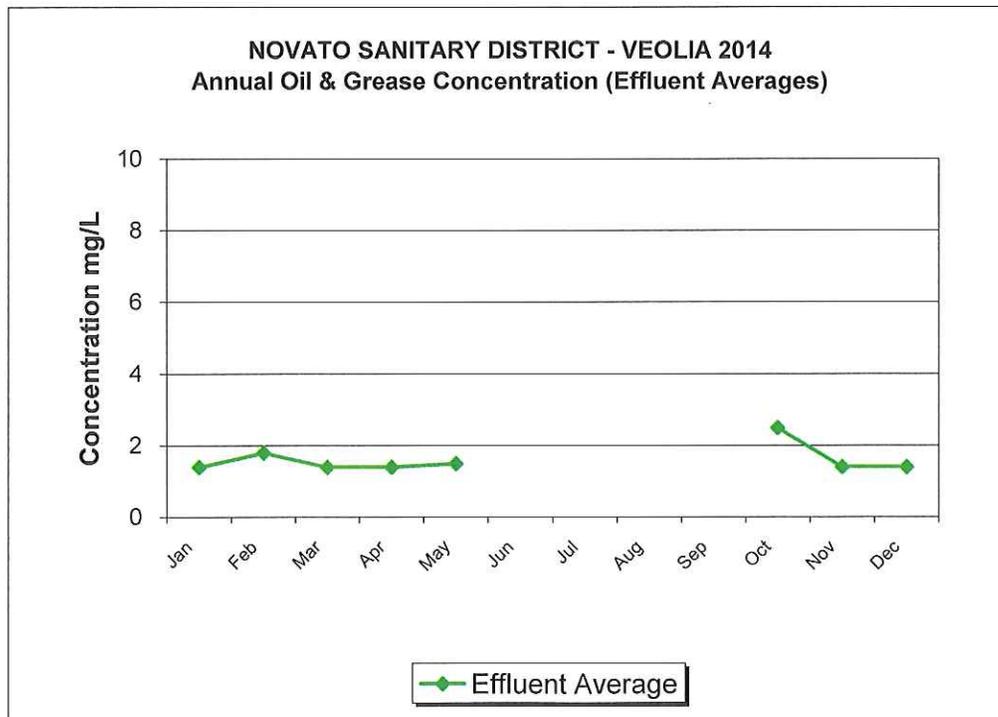


**NOVATO SANITARY DISTRICT - VEOLIA
OIL & GREASE (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

	EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average
January	1.4	1.4	1.4	1	21	21	21
February	1.8	1.8	1.8	1	29	29	29
March	1.4	1.4	1.4	1	27	27	27
April	1.4	1.4	1.4	1	29	29	29
May	1.5	1.5	1.5	1	21	21	21
June				0			
July				0			
August				0			
September				0			
October	2.5	2.5	2.5	1	30	30	30
November	1.4	1.4	1.4	1	17	17	17
December	1.4	1.4	1.4	1	64	64	64
ANNUAL HIGH	2.5	2.5	2.5	1	64	64	64
ANNUAL LOW	1.4	1.4	1.4	0	17	17	17
ANNUAL AVG.	1.6	1.6	1.6	1	30	30	30

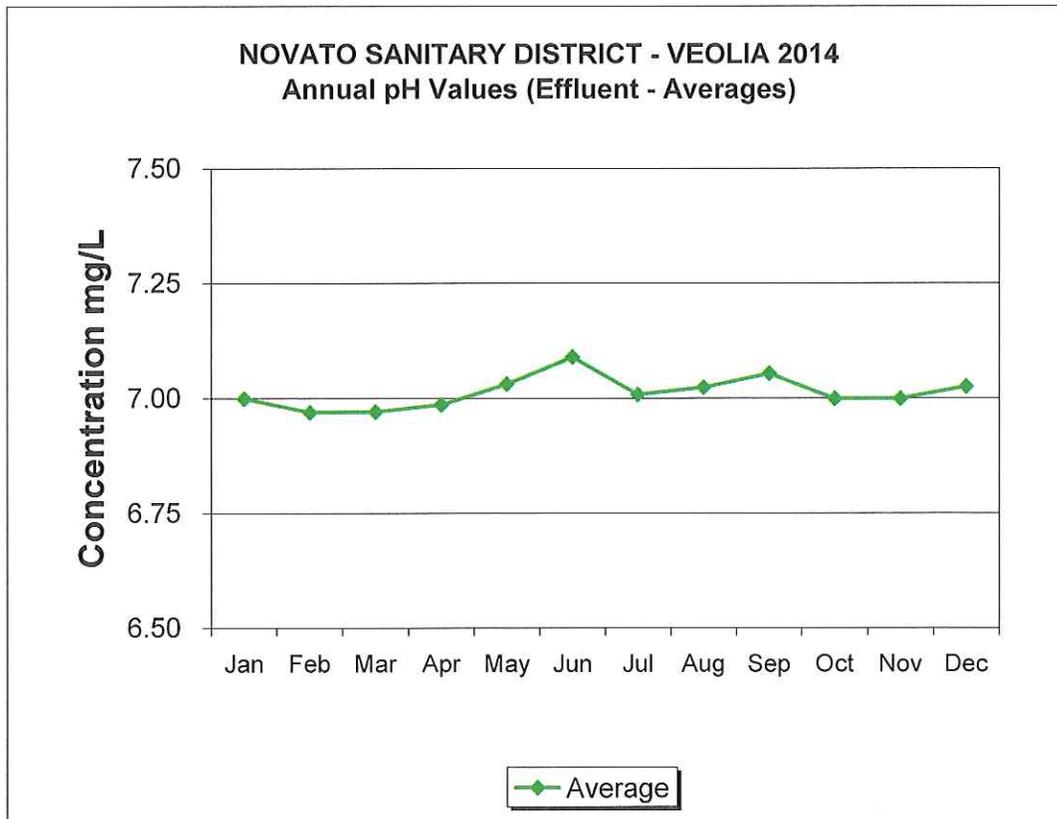


**NOVATO SANITARY DISTRICT - VEOLIA
pH (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

	High	Low	Average	Number of Samples			
January	7.1	6.9	7.0	22			
February	7.0	6.8	7.0	20			
March	7.0	6.9	7.0	21			
April	7.1	6.8	7.0	22			
May	7.2	6.9	7.0	22			
June	7.4	6.9	7.1	21			
July	7.1	6.9	7.0	23			
August	7.3	6.9	7.0	21			
September	7.2	7.0	7.1	22			
October	7.1	6.9	7.0	23			
November	7.1	6.9	7.0	21			
December	7.1	6.9	7.0	23			
				Number of Samples Total = 261			
ANNUAL MAX.	7.40	7.00	7.09				
ANNUAL MIN.	7.00	6.80	6.97	1st Qtr.	63	2nd Qtr.	65
ANNUAL AVG.	7.14	6.89	7.01	3rd Qtr.	66	4th Qtr.	67

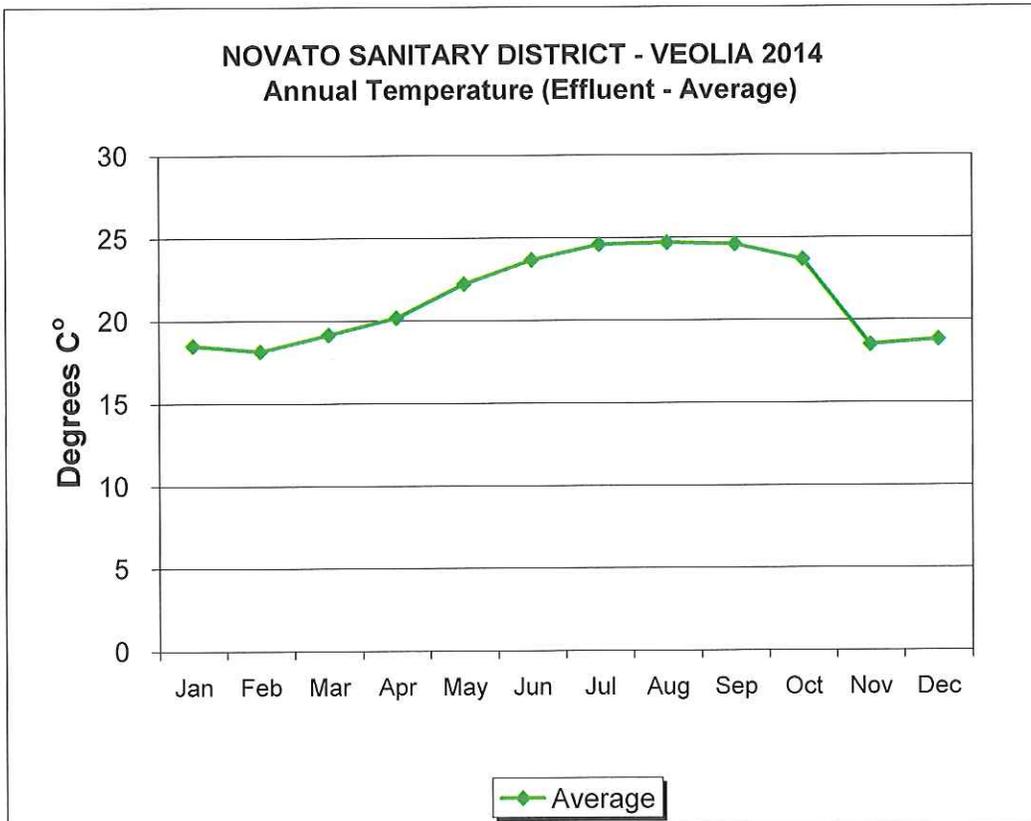


**NOVATO SANITARY DISTRICT - VEOLIA
TEMPERATURE (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

	High	Low	Average	Number of Samples			
January	19.4	17.9	18.5	22.0			
February	19.2	17.1	18.2	20.0			
March	20.4	18.0	19.2	21.0			
April	21.9	18.3	20.2	22.0			
May	23.6	20.9	22.2	22.0			
June	25.1	22.8	23.7	21.0			
July	25.7	23.7	24.6	23.0			
August	25.6	24.4	24.7	21.0			
September	25.4	23.9	24.6	22.0			
October	25.0	21.7	23.7	23.0			
November	19.4	17.9	18.5	21.0			
December	21.1	17.5	18.8	23.0			
				Number of Samples Total = 261			
ANNUAL MAX.	25.7	24.4	24.7	1st Qtr.	63	2nd Qtr.	65
ANNUAL MIN.	19.2	17.1	18.2	3rd Qtr.	66	4th Qtr.	67
ANNUAL AVG.	22.7	20.3	21.4				



SECTION VIII

COMMUNITY OUTREACH ACTIVITIES



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Community Outreach Activities 2014:

Veolia is proud to be a member of the Novato community and we are committed to support of local activities. The following are events and organizations supported by Veolia in 2014.

School Fuel – Tour of Novato

Novato Festival of Art, Wine & Music

Member Rotary Club Novato Sunrise (RCNS)

2014 American Crown Circus/Circus Osorio (RCNS)

Member – Novato Chamber of Commerce

Margaret Todd Senior Center Monthly Birthday Celebrations

Senior Pharmaceutical Collection

Senior Craft Fair

Senior Health Fair

Senior Health and Fitness Day

Senior Center Christmas Tree Donation

Rotary Club of Ignacio – Novato Bike and Hike

Chamber of Commerce Annual Golf Tournament

North Bay Leadership Council - Algebra Academy

North Bay Science Fair

Paint The Town Red – “Novato Birthday Bash”

NORTH BAY SCIENCE FAIR

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

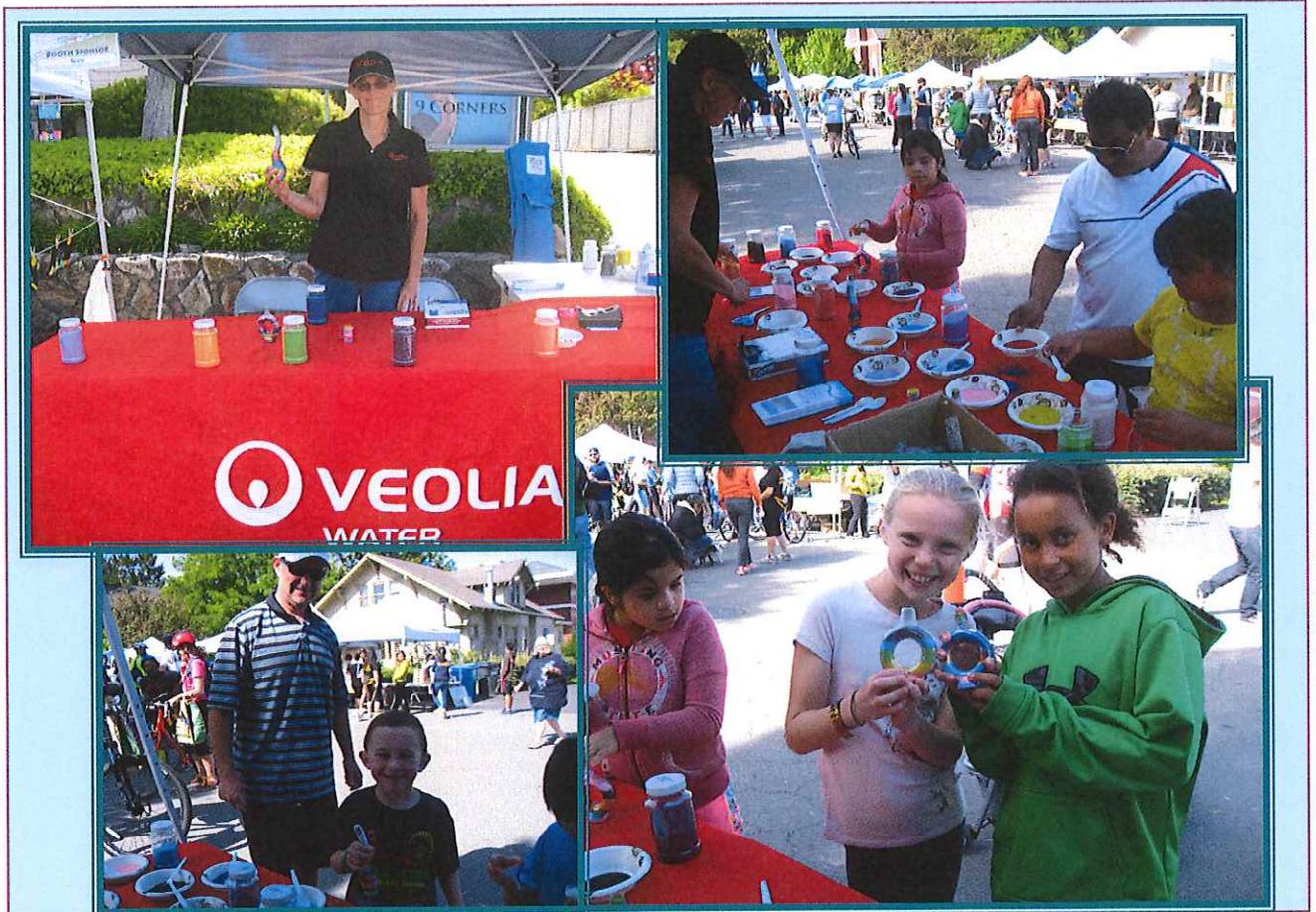
NORTH BAY SCIENCE FAIR
NOVEMBER 1, 2014



VEOLIA STAFF – Brian Exberger, John O’Hare, Lynda Rodefer, and John Bailey participated in the North Bay Science and Discovery Fair. The Veolia display highlighted water science, microbiology, and the inner workings of a wastewater treatment plant.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

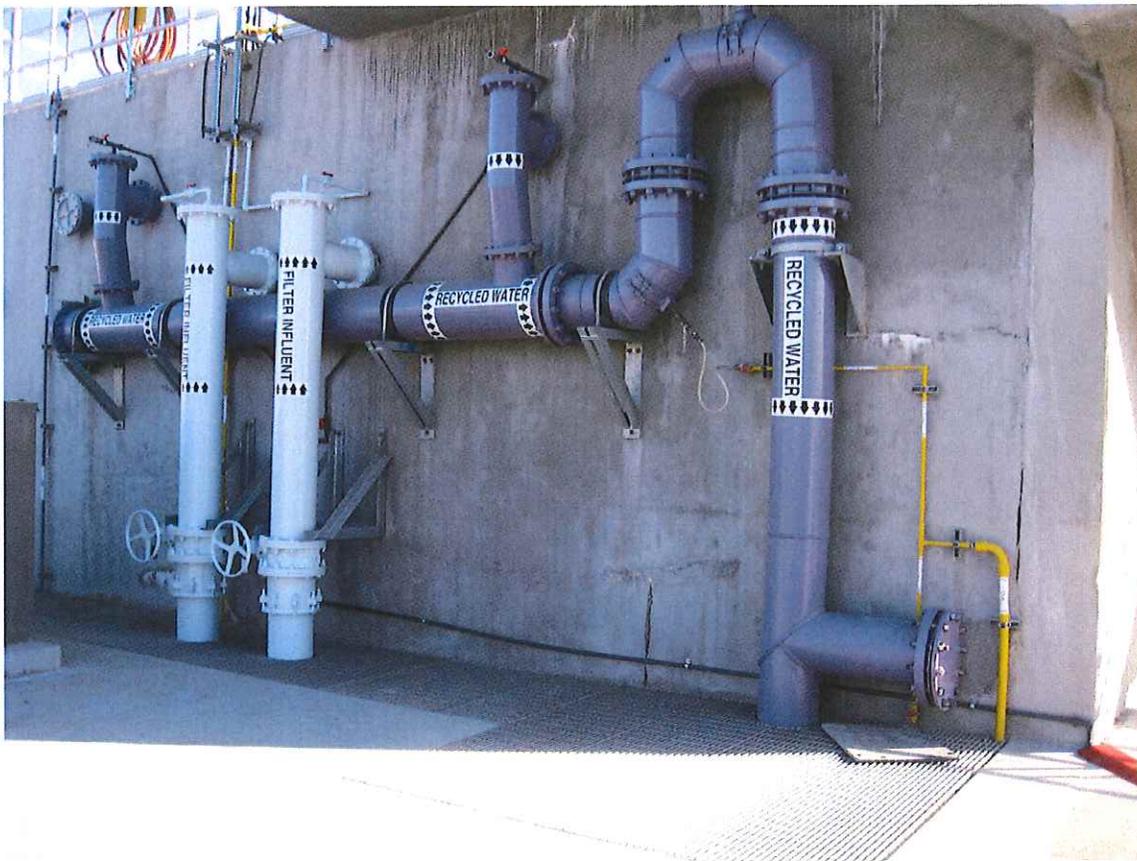
SCHOOL FUEL – TOUR OF NOVATO
May 3, 2014



Top Left – Lynda Farmery prepares for a big day of sand art
Fun was had by all!

SECTION IX

RECYCLED WATER PRODUCTION REPORT



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

**TITLE 22 - RECYCLED WATER
PRODUCTION REPORT FOR 2014**

Novato Sanitary District 2014 Recycled Water Production Data								
	Water Delivered (Million Gal)	Effluent Turbidity (NTU)		Effluent CT Value (mg min/L)		Effluent Coliform (mpn/100 ml)		Notes
Criteria	1.7 mgd	<2		>450		<2.2		
		Max	Ave	Min	Ave	Max	Ave	
January	0.00	No Production in January						
February	0.00	No Production in February						
March	0.00	No Production in March						
April	1.97	1.7	1.5	>450	>450	<2	<2	
May	16.25	1.9	1.2	>450	>450	<2	<2	
June	16.34	1.8	1.3	>450	>450	<2	<2	
July	13.55	1.9	1.6	>450	>450	<2	<2	
August	17.62	1.7	1.8	>450	>450	<2	<2	
September	10.87	1.9	1.5	>450	>450	<2	<2	
October	5.54	1.8	1.2	>450	>450	<2	<2	
November	1.34	1.6	1.3	>450	>450	<2	<2	
December	0.78	1.4	1.4	>450	>450	<2	<2	
TOTAL	84.26							

MARIN LAFCO

Political Subdivision of the State of California

DATE: February 18, 2015

TO: Presiding Officers, Marin Independent Special Districts

FROM: Candice Bozzard, Clerk to the Commission

RE: Election for LAFCO Special District Member

The nomination period for special district member election to the Marin Local Agency Formation Commission closed on February 13, 2015. LAFCO staff received six nominations for the seat currently held by Dennis Rodoni. This term of office will end in May of this year. A mail ballot election must be held to select a member for this position, serving a four-year term ending in May 2019. The nominees for regular member are John Carapiet, Sanitary District #5 (Tiburon); Lew Kious, Almonte Sanitary District; Justin Kai, Marinwood Community Services District; Brad Beedle, Novato Fire Protection District; Jack Baker, North Marin Water District; Pamela Meigs, Ross Valley Sanitary District.

Enclosed are the ballot and candidate qualification forms for participation in the selection process. Please rank your first, second and third choices on the ballot form to enable an "instant runoff". **Your ranking of second and third choices for use in the instant runoff process is required in elections such as this, where there are more than two nominees.** If ballots are received without rankings for first, second and third choices the ballot will be deemed invalid.

Selection Schedule

The final date the LAFCO office will receive ballots will be **5:00pm** on **Monday, April 18, 2015**. Ballots will be accepted by mail to the LAFCO office, fax to (415) 446-4410 or by email to staff@marinlafco.org. The newly-elected special district member will be seated at the June 2015 LAFCO meeting.

If your district has questions or comments, please contact the Marin LAFCO office at (415) 446-4409.

RECEIVED
FEB 23 2015

NOVATO SANITARY DISTRICT

Chairperson: Jeffrey Blanchfield / *Vice Chairperson:* Dennis J. Rodoni
Regulars: Susan Adams, Judy Arnold, Carla Condon, Craig K. Murray, Gary Phillips
Alternates: Jack Baker, Christopher Burdick, Kathrin Sears, Herb Weiner
Executive Officer: Keene Simonds

Marin Local Agency Formation Commission

555 Northgate Drive, Suite 230 • San Rafael, California 94903
 Telephone (415) 446-4409 • Facsimile (415) 446-4410 • General E-Mail: staff@marinlafco.org
www.marinlafco.org

BALLOT FORM

MARIN LAFCO AGENCY FORMATION COMMISSION

SPECIAL DISTRICT REPRESENTATIVE

REGULAR

Purpose of Election: Selection of **Regular Special District Member** to serve until May 2019. Seat currently left vacant.

Voting Procedure: Vote shall be one per district. Ballot may be signed by the District Presiding Officer or a designee appointed by the Board of the District.

Choice of Candidate:

(AS THERE ARE SEVERAL CANDIDATES - PLEASE INDICATE FIRST, SECOND AND THIRD CHOICE TO ENABLE AN "INSTANT RUNOFF" IF NECESSARY.)

- _____ John Carapiet – Sanitary District #5 (Tiburon)
- _____ Lew Kious – Almonte Sanitary District
- _____ Justin Kai – Marinwood Community Services District
- _____ Brad Beedle – Novato Fire Protection District
- _____ Jack Baker – North Marin Water District
- _____ Pamela Meigs – Ross Valley Sanitary District

District

Signature

RETURN FORM TO MARIN LAFCO AFTER THE DISTRICT'S VOTE,
NO LATER THAN APRIL 18, 2015

Ballot may be transmitted by facsimile to (415) 446-4410 or
Emailed to staff@marinlafco.org

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: SANITARY DISTRICT NO. 5 OF MARIN COUNTY

1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee:

JOHN CARARIET

*District of Nominee:

SANITARY DISTRICT NO. 5 OF MARIN COUNTY

2. Board did not act.

*Attach completed qualification form.

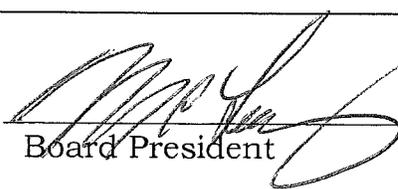
BOARD ACTION:

Ayes: 5 

Noes: 0

Absent: 0

Abstain: 0


Board President

Attest:

 
Board Secretary

Date: 1/23/15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.

Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: John Carapet

Name of Special District: SANITARY DISTRICT NO. 5 OF MARIN COUNTY

Telephone: (Home) (415) 435-8476 (Work) (415) 575-4840 ^{cel}

Email Address: johncarapet@gmail.com

Home Address: 4 Lagoon Rd
Belvedere 94920

Work Address: N/A

Present Occupation: Retired

➤ Summary of Qualifications for Position:

➤ Reasons for Applying:

➤ Please list any organizations of which you are an officer or an employee:

Please return to: Marin LAFCO
555 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: ALMONTE SANITARY DISTRICT

X 1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee: LEW KLOPS

*District of Nominee: ALMONTE SANITARY DISTRICT

_____ 2. Board did not act.

*Attach completed qualification form.

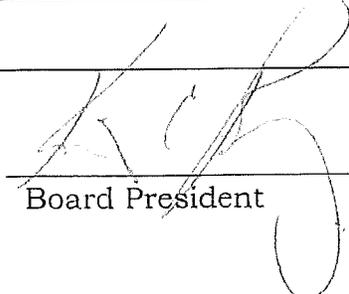
BOARD ACTION:

Ayes: 5

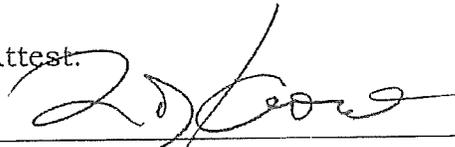
Noes: 0

Absent: _____

Abstain: _____



Board President

Attest: 

Board Secretary

Date: 1/26/15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.
Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: HOMESTEAD VALLEY SANITARY DISTRICT

X 1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee:

LEW KIOUS

*District of Nominee:

ALMONTE SANITARY DISTRICT

_____ 2. Board did not act.

*Attach completed qualification form.

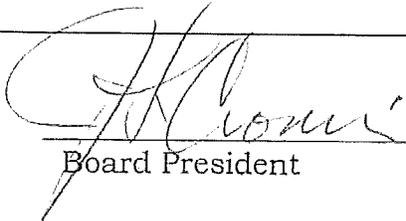
BOARD ACTION:

Ayes: 5

Noes: 0

Absent: _____

Abstain: _____


Board President

Attest:

Burnett Tregouing
Board Secretary

Date: 1-27-15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.
Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: LEW KIOUS

Name of Special District: ALMONTE SANITARY DISTRICT

Telephone: (Home) 415-383-8950 (Work) 415-389-6112

Email Address: LPKIOUS@SBCGLOBAL.NET

Home Address: 233 PRINCETON AVE.
MILL VALLEY, CA 94941

Work Address: 900 DOLITTLE DR, SUITE 8A
SAN LEANDRO, CA 94577

Present Occupation: SALES MANAGER

➤ Summary of Qualifications for Position:

SEE ATTACHED

➤ Reasons for Applying:

SEE ATTACHED

➤ Please list any organizations of which you are an officer or an employee:

SEE ATTACHED

Please return to: Marin LAFCO
555 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

Marin Local Area Formation Commission

Nominee Qualifications- Lew Kiou

Regular Special District Member

- As the President of the SASM Board of Commissioners since 2011 (elected in the last 4 annual elections), member of the Almonte Sanitary District Board since 2008, and resident of Mill Valley since 1983, I am confident in my ability to represent the constituents and issues affecting Southern Marin. I have spoken before the LAFCO Board, and met with its members on many occasions. I strongly feel that Southern Marin needs a voice on LAFCO, a board on which Southern Marin is currently un-represented.

Summary of qualifications for Position:

- President of Board of Commissioners for Sewerage Agency of Southern Marin (SASM) since 2011. In this position, I am focused on the responsible management of SASM's resources to meet the needs of its constituents (residents). As President, I seek the responsible input from all parties and then encourage the Board and SASM toward taking meaningful steps forward. I directly negotiated with the City of Mill Valley an extension of the Operations and Management Agreement by which Mill Valley operates the water treatment plant on behalf of SASM.
- Secretary/Treasurer and Board member of Almonte Sanitary District. I implemented the District's website and expanded our outbound communication. I worked to update and automate our District's operations, such as the digitizing of the District's maps and sewer system records. I have consistently pursued a policy of fiscal conservatism to maintain low, and responsible, rates for our residents.
- Resident of Mill Valley for 30+ years. Lifelong Bay Area resident.
- Successful businessman with experience in achieving consensus and getting results.

Reasons for Applying:

- I believe that with my election to LAFCO, I will be the only representative from Southern Marin, and I believe that representation is critical and vitally important.
- I have seen Marin LAFCO in action, and am aware of its potential value to Marin residents. I am also aware of the challenge to keep LAFCO focused on beneficial actions, as opposed to actions that may be viewed by its Board as a legislative mandate. I believe that I can help to maintain that balance to the benefit of all of Marin.
- I have worked with LAFCO's staff and Board and believe I can develop good relationships within LAFCO to immediately provide positive results.
- I believe I have the perspective, experience, and knowledge to provide value as a member of LAFCO, and to provide value to Marin residents, and specifically the Special Districts of Marin.

Please list any organizations of which you are an officer or an employee:

- Secretary/Treasurer- Almonte Sanitary District
- President: Board of Commissioners- Sewerage Agency of Southern Marin (SASM)

NOTE: While my preference and focus is on becoming the Regular Special District Member of LAFCO, I have been nominated for both the Regular and Alternate positions so that in the event that I am not elected as the Regular Member I would still have an opportunity to represent Southern Marin in the Alternate position. This is completely within the election guidelines. Should I be elected as the Regular member, I would be removed as a candidate for the Alternate position.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: MARINWOOD COMMUNITY SERVICES DISTRICT

X 1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee: JUSTIN KAI

*District of Nominee: MARINWOOD COMMUNITY SERVICES DISTRICT

_____ 2. Board did not act.

*Attach completed qualification form.

BOARD ACTION:

Ayes: READ, SHEA, HANSELL, KAI

Noes: _____

Absent: DEARBORN

Abstain: _____

Tony Read
Board President

Attest:
Carolyn Sullivan
Board Secretary

Date: 2.11.2015

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.

Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: Justin Kai

Name of Special District: Marinwood Community Services District

Telephone: (Home) 415.215.7865 (Work) Same as home

Email Address: kai,justin@gmail.com

Home Address: 240 Cobblestone Drive
San Rafael, CA 94903

Work Address: Same as home

Present Occupation: Real Estate Agent

➤ **Summary of Qualifications for Position:**

Through my interactions with various county residents, my community involvement and time as an elected official, I've developed an understanding that what's best for the public majority isn't always easy to implement, but it is necessary that it is done. These are often the hard choices LAFCO deals with, to execute difficult decisions responsibly for the best interests of the public, which I'm prepared to do.

➤ **Reasons for Applying:**

After attending a recent LAFCO primer workshop, I gained a greater understanding of LAFCO's purpose to promote orderly growth, while ensuring the preservation of Marin's prime agricultural lands. As a resident and local official, I have a strong interest in LAFCO and would be honored to offer my time and serve as the regular special district member.

➤ **Please list any organizations of which you are an officer or an employee:**

N/A

Please return to: **Marin LAFCO**
555 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: Novato Fire Protection District

X 1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee: Brad Beedle

*District of Nominee: Novato Fire Protection District

 2. Board did not act.

*Attach completed qualification form.

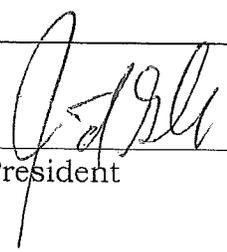
BOARD ACTION:

Ayes: Directors Galli, Fenner, Jr., and Silverman

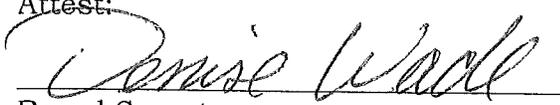
Noes: Director Kaselionis

Absent: President Beedle

Abstain: None



Board President

Attest:


Board Secretary

Date: 1/7/15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.

Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: BRAD BEEBLE

Name of Special District: NOVATO FIRE Protection District

Telephone: (Home) 415 898-1843 (Work) 415 309-7442

Email Address: BRAD.BEEBLE@AOL.COM

Home Address: 59 ORCHARD WAY
NOVATO CA 94947-3071

Work Address: 936 B 7th STREET SUITE 246
NOVATO CA 94945

Present Occupation: BUSINESS OWNER - EVENT MEDIC SERVICES - FIRST AID / SAFETY PRODUCT RESE.

➤ Summary of Qualifications for Position:

- SERVE ON NOVATO FIRE DISTRICT BOARD 3 TERMS!
- COMMUNITY INVOLVEMENT
- BORN AND RAISED IN MARIN WITH A CLEAR UNDERSTANDING OF THE COUNTY POLITICS AND ACTI

➤ Reasons for Applying:

CURRENT LAFCO BOARD LACKS FIRE DISTRICT REPRESENTATION.

➤ Please list any organizations of which you are an officer or an employee:

BOARD MEMBER CURRENT PRESIDENT 2015
NOVATO FIRE PROTECTION
DISTRICT

Please return to: Marin LAFCO
555 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: North Marin Water District

 ^x 1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee:

Jack Baker

*District of Nominee:

North Marin Water District

 2. Board did not act.

*Attach completed qualification form.

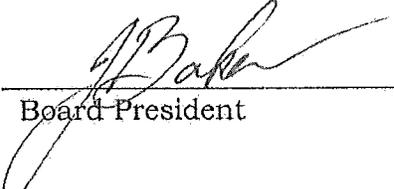
BOARD ACTION:

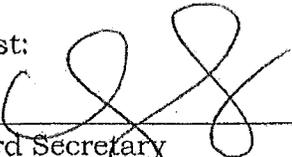
Ayes: Directors Baker, Fraites, Petterle, Rodoni, Schoonover

Noes: None

Absent: None

Abstain: None


Board President

Attest: 
Board Secretary

Date: 2/3/15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.
Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

Name of District: Del Marine Keys CSD

1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee: JACK BAKER

*District of Nominee: No. marin water District

2. Board did not act.

*Attach completed qualification form.

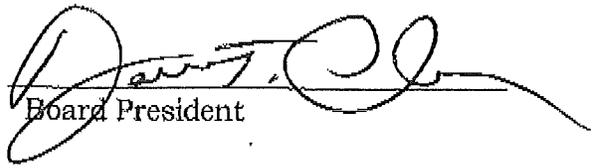
BOARD ACTION:

Ayes: 5

Noes: 0

Absent: 0

Abstain: 0


Board President

Attest:

Board Secretary

Date: 1/13/2015

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.
Forms may be mailed to the LAFCO Office, faxed to (415) 446-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: Jack Baker

Name of Special District: North Marin Water District

Telephone: (Home) (415) 382-3332 (Work) N/A

Email Address: jckbaker@gmail.com

Home Address: 425 Corte Norte Novato, CA 94949

Work Address: _____

Present Occupation: Registered Civil Engineer (Retired)

➤ **Summary of Qualifications for Position:**

- 1- Served as LAFCO Alternate Special District Member (2013-present)
- 2- Over 30 years service as Director for North Marin Water District
- 3- Over 40 years of engineering experience (6 1/2 with the State of California, 35+ years with County of Marin) in the design and construction of public facilities.
- 4- Served one term as Director for Novato Sanitary District (1978 - 1982).

➤ **Reasons for Applying:**

During the course of employment with County of Marin Department of Public Works (DPW) I have had frequent interactions with Marin County Special Districts as well as the eleven Cities/Towns. Familiarity with these entities and their respective services has enabled me to effectively contribute as a member of the LAFCO decision making process.

➤ **Please list any organizations of which you are an officer or an employee:**

North Marin Water District (Director)

Please return to: Marin LAFCO
555 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINATION FORM

REGULAR SPECIAL DISTRICT MEMBER

(1)

Name of District: Ross Valley Sanitary District

1. Board voted to nominate the following current member of its own or another independent special district.

*Name of Nominee: Pamela Meigs

*District of Nominee: #7

2. Board did not act.

*Attach completed qualification form.

BOARD ACTION:

Ayes: 5

Noes: 0

Absent: 0

Abstain: 0

Thomas Goffney
Board President

Attest:
[Signature]
Board Secretary

Date: 2/10/15

MUST BE RETURNED TO LAFCO BY 5:00PM on FEBRUARY 12, 2015.
Forms may be mailed to the LAFCO Office, faxed to (415) 445-4410 or sent electronically to staff@marinlafco.org.

MARIN LOCAL AGENCY FORMATION COMMISSION

NOMINEE STATEMENT OF QUALIFICATIONS

REGULAR SPECIAL DISTRICT MEMBER

Nominated for: Regular Special District Representative

Name: Pamela Meigs

Name of Special District: Ross Valley Sanitary District (1)

Telephone: (Home) 258 2882 (Work) 302 0805

Email Address: pamela.meigs@sbcglobal.net

Home Address: 310 Cypress Dr.
FAIRFAX CA, 94930

Work Address: 250 Bon Air Rd. Greenbrae, Ca

Present Occupation: Registered Nurse Master in
Community Health

➤ Summary of Qualifications for Position:

* see attached copy

➤ Reasons for Applying:

* see attached copy

➤ Please list any organizations of which you are an officer or an employee:

Director - Ross Valley Sanitary District
C.M.S.A. Commission, North Bay Watershed Assc.
* please attached information

Please return to: Marin LAFCO
655 Northgate Drive, Suite 230
San Rafael, CA 94903
Fax: (415) 446-4410
Email: staff@marilafco.org

*Additional information may be attached.

Local Agency Formation Commission
555 Northgate Drive, Suite 230
San Rafael, CA. 94903

Reasons for Applying for LAFCO:

I have a great love of the land and the community. My passion to serve the community stems from the philosophy to serve "the greatest good for the greatest number" while weighing each community member's needs and requests.

I understand the critical importance of planning effectively for a sustainable future. I enjoy and have the ability to look ahead at the "big picture" when approaching planning.

I enjoy working collaboratively with others (public and private) so that all government agencies are the best they can be. I am a strong team member who is able to evaluate and solve problems efficiently. I recently have created better working relationships with CMSA and RVSD. I have also created liaison and outreach to other municipalities (Fairfax, San Anselmo, Larkspur) for RVSD.

Since young adulthood, I continue to have a great affinity to care for and understand how government promotes and coordinates local lands, especially open space and local government land practices.

My service reflects many years to serve the community especially as a Planning Commissioner for the Town of Fairfax (8 years). The General Plan of Fairfax was drafted and implemented during that time (10 years).

I feel very much at home to continue my service for the community in regards to planning as LAFCO has designated such as: developing spheres of influence for a planned service area boundary, applications of municipal service reviews, approving/reviewing boundary changes if needed, annexations, formation/amending JPA's, and other regulatory planning as ascribed in the policies including most recent 2015 strategic plans for LAFCO.

My experience as a Planning Commissioner for the Town of Fairfax and being a Ross Valley Sanitary District Director (4.5 years) has given me the knowledge to understand regulatory municipal planning, in various ways.

I enjoy working with the public in many ways such as: liaison with community leaders and the public for creating trust and transparency of policy making, education for a means to understand what local governments do, and supporting the public process as open and transparent while allowing the public to weigh in with their input in a respectful/inviting manner. I advocate transparency, integrity and honesty.

One of my interests on LAFCO issues includes mapping urban planning boundaries and urban service boundaries so it is clear to all who is or should be the public service provider, such as unincorporated areas adjacent to special districts, cities, and towns.

I feel strongly that special districts play an important role in Marin's governance. I would be a devoted and diligent voice for all special districts as well as the community at large for LAFCO. I respectfully request your support and vote so I can continue to serve the community as a LAFCO board member.

Pamela Meigs, RN, MSN
pamelameigs@sbcglobal.net
415-302-0805

Marin Local Agency Formation Commission
555 Northgate Drive, Suite 230
San Rafael, CA. 94903

- Bay Area native, and a Ross Valley resident for over 25 years
- A health professional (Registered Nurse) in the community for over 30 years
- Masters in Community Health
- An Advocate of Community Health, the Environment and Fiscal Responsibility
- Over 20 years of community leadership experience
- Past Chair and past member (8 years) of the Fairfax Planning Commission
- Past Co-Chair and initiator of the Fairfax Open Space Committee
- Fairfax Advisory Committee for the Fairfax General Plan
- North Bay Watershed Association, voting member for RVSD
- Former Finance Committee for RVSD, current Finance Committee for CMSA
- Supports Friends of Corte Madera Creek
- Supports RVSD Lateral Grant Program and Lateral Loan Program
- Larkspur Landing Development Committee for RVSD
- Former Secretary for RVSD
- Former RVSD LAFCO Representative
- Past adjunct Professor (Registered nursing) at local Colleges/Universities in the Bay Area
- Long term Sierra Club member
- Environmental Forum Leadership Program
- Director for Ross Valley Sanitary District since 2010 (second term, high vote getter for 2014 election)
- Current Central Marin Sanitary Agency Commission Board member (JPA)
- Graduate of Napa College (AA), Dominican University (BSN), Holy Names University (MSN), and Diamond Light Massage School (CMT)

I am a registered nurse with a Masters degree in Community Health. I currently work at a local hospital, and have worked there for 30 years. I have been a part-time adjunct professor and faculty member at various Nursing Colleges and Universities in the Bay Area. I volunteered in Lafayette, LA in the aftermath of hurricane Katrina.

I am an activist and leader in the Town of Fairfax. I have served on the Fairfax Planning Commission for over seven years and served as the Chair of the Planning Commission for two years. As a Commissioner, I worked on the Mixed Use Overlay Zone Draft (as a means to promote affordable housing), the recently revised Tree Ordinance, Circulation, Land Use, Safety, and the Open Space Elements for the General Plan (GP) for the Town of Fairfax. My committee work on the GP elements included zoning, municipal ordinances/regulations if required by state and local laws, and all criteria required for creating/updating a GP including mapping. The Fairfax General Plan was completed (2010) with my involvement of many hours with community leaders and the general public. I am the initiator of and past Chair of the Fairfax Open Space (2004) Committee. In the past I have been the Secretary for the Marin County Green Party. I have participated in successful fund raising to acquire nine acres of pristine open space for the people and Town of Fairfax. I have been a volunteer at the annual creek cleanup for the Fairfax Creek. I have been a past member of the General Plan Advisory Committee for the Town of Fairfax and the Tree Committee, which evaluates the hazard and health of trees in the community. I have worked on campaigns for local elections, special tax measures and the campaign for President Obama.

I am a member of Sigma Theta Tau International Honor Society of Nursing, the Sierra Club, Daughters of the Golden West, Young Ladies Institute, the California Nurses Association, the Fairfax Chamber of Commerce, Sustainable Fairfax, Marin Conservation League and the Marin County Women's Political

Caucus. I have also served as a Girl Scout Leader. I am a mother, grandmother and world adventure traveler.



LAK ASSOCIATES, LLC

3030 Bridgeway, Suite 103, Sausalito, CA 94965
tel: (415) 331-4551 fax: (415) 331-4573 info@lakassociates.com

February 6, 2015

Jeff Blanchfield
Marin County Local Agency Formation Commission
555 Northgate Drive, Suite 230
San Rafael, CA 94903

Subject: Endorsement for Pam Meigs for the Marin LAFCO

Dear Jeff,

As the principal planning consultant to the Town of Fairfax for the last 15 years I have worked directly with Pam Meigs on a variety of levels related to land use planning. First, when she served the Town as an appointed member of the General Plan Advisory Committee, and then as a member and Chair of the Town's Planning Commission.

It is with great enthusiasm that I endorse Pam for the Marin LAFCO representing the Ross Valley Sanitary District. Pam has proven to be a conscientious student of land use planning issues and will certainly contribute well to LAFCO's deliberations from an informed perspective.

Please feel free to contact me directly if you have any questions regarding my endorsement of Pam Meigs. I can be reached at 415/272-2780 or larry@lakassociates.com.

Respectfully,

Larry Kennings

Marin LAFCO Staff

From: Lawrence Bragman <bragman@msn.com>
Sent: Monday, February 09, 2015 3:17 PM
To: Marin LAFCO Staff
Subject: Pam Meigs for LAFCO Representative

To whom it may concern:

I am writing to recommend Pam Meigs to fill the open position on the LAFCO Board.

I have known and worked with Pam for over twelve years. Pam is a competent and caring public servant who will take all points of view into account when considering an issue or making a decision. Pam has tirelessly devoted many hours of her time to Fairfax and the greater Ross Valley community. Her background and training as a Registered Nurse is also an added benefit that she brings to bear. Hence, in my estimation, Pam will be a great choice for LAFCO.

Please feel free to call or write to me if you need any additional information about Pam Meigs or her qualifications for this office. Thank you very much for your time and consideration.

Larry Bragman
Representative for Division 3
Marin Municipal Water District Board of Directors

Marin LAFCO Staff

From: barbara coler <barbaracolier@gmail.com>
Sent: Monday, February 09, 2015 7:42 PM
To: Marin LAFCO Staff
Subject: Pamela Meigs for LAFCO Board of Directors

To whom it may concern:

I am writing to support and recommend Pamela Meigs for the open position on the LAFCO Board.

I have known Pamela for the last several years. She is a truly dedicated public servant, caring and committed to all positions she has served in. She has demonstrated effective leadership and a spirit of collaboration. She is able to consider all sides and perspectives before making decisions which affect organizations and citizens. Her background and work as a Registered Nurse and her Master's degree in community health provide her a unique perspective and a strong background to address many varied challenges. As you know, she is currently a Director of the Ross Valley Sanitary District and previously ably served as a Planning Commissioner for the Town of Fairfax for eight years.

Pam will be a great choice for the position on the LAFCO Board.

Please feel free to call or write to me if you any questions. Thank you very much for your consideration.

Sincerely,

**Barbara Coler, Mayor
Town of Fairfax**

Marin LAFCO Staff

From: fjegger@gmail.com on behalf of Frank Egger <fegger@pacbell.net>
Sent: Wednesday, February 11, 2015 1:36 PM
To: Marin LAFCO Staff
Subject: Pamela Meigs, candidate for LAFCO Special District appointment

Pam Meigs has been a member of the Ross Valley Sanitary District Board of Directors since her election in 2010. As a registered nurse currently working at Marin General Hospital, she has a keen sense about health and welfare issues affecting the residents of Marin. Those issues are fire, emergency medical, water, sewer, garbage collection, mosquito abatement and hospital services.

She knows and understands the issues from health to politics to growth and development and will be a great advocate for Marin's Special Districts. Pam knows well the vital role of special districts in the delivery of services here in Marin County.

I urge your vote for Pam Meigs for the Marin LAFCO representative from the special districts.

Thank you, Frank Egger
Ross Valley Sanitary District

Marin LAFCO Staff

From: Mimi Newton <mimi.newton@gmail.com>
Sent: Thursday, February 12, 2015 11:51 AM
To: Marin LAFCO Staff
Subject: Recommending Pamela Meigs for LAFCO Board of Directors

To: Marin LAFCO

I strongly recommend Pamela Meigs for appointment to LAFCO's Board.

I've had the opportunity to work with Pam on a number of different community projects and observed her tireless commitment to public service for almost a decade. She was a gracious and supportive member of the Fairfax Open Space Committee when I was appointed to that organization shortly after I moved to Fairfax in 2006. As a newbie to the Town, and with no land preservation experience, I found Pam's advice and counsel invaluable. Since then, I've watched her tackle numerous difficult issues on behalf of our community and the environment with seemingly unlimited energy.

In addition to her experience and energy, Pam has the intellectual curiosity that enables her to delve into the complex details of a variety of different subjects. She is cautious but acts decisively when action is called for. One of her great strengths is an open mind that allows her to patiently investigate all sides of an issue.

At her core, Pam is somebody who cares deeply about people, as evidenced by her nursing career. She is also a strong advocate for a healthy environment and has a keen understanding of the connections between our environment and our health. And, fortunately for all of us, Pam's commitment to serve the Marin community is unswerving.

If she is chosen to sit on the LAFCO Board, I know Pam's contributions will greatly benefit both the other Board members and our County. She would be a great choice!

Please call or email me if you have any questions.

Thank you,

Mimi Newton, Chair
Fairfax Open Space Committee
(415) 845-6464

Appendix A

DRAFT 2014 Annual Operations and Maintenance Report

As presented to the

Wastewater Operations Committee Meeting

March 16, 2015

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT

Prepared by:

Veolia Water Operating Services

Draft – March 2014



ANNUAL OPERATIONS REPORT
2014
Veolia Water West Operating Services Novato

SECTION

- 1 Summary
 - a. Overview
 - b. Process Descriptions & Loading Summary
- 2 Treatment Plant Performance & Compliance Summary
3. Asset Management
4. Safety and Training
- 5 Staffing and Organization
- 6 Budget

ATTACHMENTS

- 1 Data and Graphs
- 2 Community Outreach Activities
- 3 Recycled Water Production Report

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Overview:

The top priorities for 2014 were to meet the goals of zero lost time accidents or OSHA recordable incidents and no environmental excursions or treatment plant violations. This is a year in and year out objective plainly stated and firmly established throughout Veolia Water. A term we apply to this end is “Zero Harm”. We are very happy and proud to report that both goals were met. 2014 represents our third consecutive year of zero effluent violations and fourth year of zero recordable accidents. We celebrate that success with and offer congratulations to the Novato Sanitary District on its vision and commitment to water quality.

Key areas of focus throughout the year include:

- Safety Training
- Regulatory Compliance
- Third Party Facility Reviews
- Reporting (internal and external)
- Records Keeping and Data Base
- No Safety Incidents (recordable, lost time, or medical)
- Participation in Company *Near Miss* Reporting Program (focused on prevention)
- Employee Education and Certification / Professional Advancement
- Community Outreach and Participation
- Utilization of Job Cal Plus (CMMS) for Maintenance Tracking and Scheduling

On December 11, 2014 we experienced the highest Peak and Daily Flows since commissioning the new plant in April 2010. Both peak flows in excess of 35 mgd (million gallons per day) as well as total daily flow of 28.04 mgd were handled with relative ease. All of the raw sewage received full secondary treatment and all effluent standards were met. Prior to the new plant upgrades only a portion of the flow would have received full secondary treatment. Raw sewage above the treatment capacity would have received either primary or in some cases no treatment prior to filtration and *blending* with fully treated effluent. Recent regulatory monitoring requirements designed to discourage *blending* would have almost certainly resulted in numerous effluent violations.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

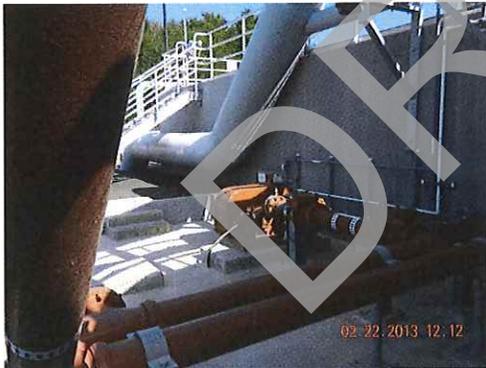
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Plant Operations and Process Summaries:

Wastewater is collected throughout the Novato Sanitary District service area and conveyed by gravity as well as mechanical means (pump stations) to the Davidson Street site.

Preliminary Treatment - Influent Pump Station and Headworks

When the wastewater arrives at the Treatment Plant it is pumped from the Influent Pump Station to the Headworks. The Headworks provides screening of coarse materials and removal of grit which consists of heavy matter such as sand, silt, and gravel.



Top Left – Influent Pump Station

Top Right – Parkson Aqua Guard Screen™

Bottom Left – Grit Conveyance and Pumping

Bottom Right – Screenings Washer / Compactor, Compacted Screenings Being Discharged to Dumpster

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Flow and Loading Measurement

Flow at the Novato Wastewater Treatment Plant is measured using a Parshall Flume and Hydro Ranger™ ultra sonic level meter in combination. This pairing is considered very reliable and provides a high degree of accuracy. Composite samples for biochemical oxygen demand (BOD) and total suspended solids (TSS) are collected downstream of screening and grit removal. Composite samples are flow proportioned throughout the sampling period (normally 24 hours). Flow proportioning provides the most representative sample.



Above Left – Hydro Ranger level meter, hourglass shaped plating over Parshall Flume
 Above Right – Hach Model 3540 SDR Composite Sampler

Rated Capacities

DESIGN CRITERIA			
Condition	Value	Unit	Notes
Average Dry Weather Flow	7.0	MGD	
Peak Wet Weather Flow (Max Day)	30.7	MGD	
Max Peak Wet Weather (1-3 Hour)	47.0	MGD	
Average BOD Loading	14,600	Lbs/D	
Average TSS Loading	17,600	Lbs/D	

Actual 2014

2014 FLOWS AND LOADS SUMMARY			
Condition	Value	Unit	Notes
Average Dry Weather Flow	3.37	MGD	Jul / Aug / Sep
Peak Wet Weather Flow (Max Day)	28.04	MGD	12/11/2014
Max Peak Wet Weather (1-3 Hour)	35.00	MGD	12/11/2014, 8:15 am
Average BOD Loading	8,477	Lbs/D	
Average TSS Loading	11,608	Lbs/D	

Significant Peak Wet Weather Events occurred in December.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Primary Treatment – Primary Clarifiers

Primary clarifiers typically remove approximately 60 – 70% of the solids from raw wastewater. Clarifiers are large tanks that slow the flow of water and allow the force of gravity to remove solids. Heavier solids referred to as “sludge” settles to the bottom. Lighter material such as fat, oil, grease and plastic referred to as “scum” rises to the surface. Both sludge and scum are removed from the waste stream and pumped to a digester for additional treatment.



Above Left – Primary Clarifier #2, Superstructure supports the cover.
 Above Right – Sludge and Scum Pumping

PRIMARY CLARIFIERS			
	Value	Unit	Notes
Number	2		
Diameter	100	Ft	Each
Sidewall Depth	12	Ft	Each
Capacity (Volume)	880,770	Gallons	Each
BOD Removal	30	%	2014 Results
TSS Removal	65	%	2014 Results

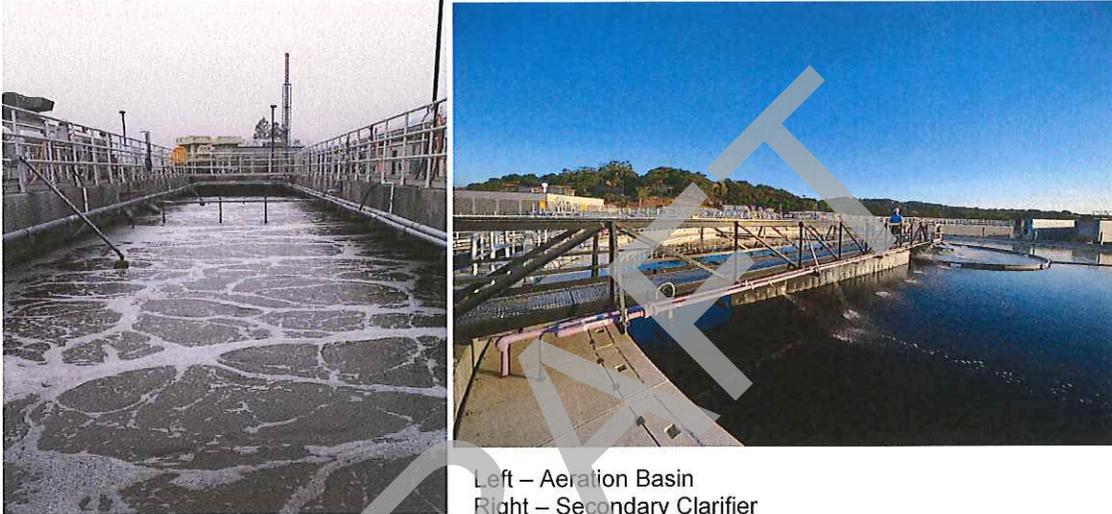
Novato’s primary clarifiers are covered to contain foul air associated with raw sewage. The foul air is removed and discharged to odor scrubbing biofilters by large fans. Like much of the wastewater process the biofilters are living processes. Various life forms including fungi, worms, and microbial populations convert odorous compounds to other gases, primarily carbon dioxide.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Secondary Treatment – Aeration Basins & Secondary Clarifiers

After screening, grit removal, and primary solids removal, all wastewater receives full secondary treatment. Large rectangular tanks with baffle walls, mechanical mixers, air diffusers, and recirculation pumps make up the aeration basins. The Novato facility was designed with both flexibility and reliability in mind. Four aeration basins, each with a capacity of more than 850,000 gallons provides complete secondary treatment under all flow conditions.

Each aeration basin has three anoxic (no dissolved oxygen) zones accounting for almost 25% of the tank volume. The anoxic zones convert nitrate and nitrite to nitrogen gas to reduce the level of total nitrogen in the effluent.



Left – Aeration Basin
 Right – Secondary Clarifier

Solids, primarily biological cell mass, are produced during the process of removing dissolved pollutants (BOD) in the aeration basins. A combination of wastewater and bio-mass, known as mixed liquor, typically contains between 1,500 mg/L and 2,500 mg/L (0.15% to 0.25%) of solids. The aeration basins are well mixed and as a result a continuous stream of solids leaves the aeration basins. Solids are captured in the secondary clarifiers and the majority returned to the head end of the aeration basins to maintain the proper biomass concentration for treatment. Excess solids are sent to the gravity belt thickener (GBT) where they are concentrated to 4% - 6% and then pumped to a digester for additional treatment. Effluent from the secondary clarifiers is then ready for disinfection.

SECONDARY CLARIFIERS			
	Value	Unit	Notes
Number	2		
Diameter	125	Ft	Each
Sidewall Depth	16	Ft	Each
Capacity (Volume)	1.468	MG	Each

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Ultra Violet (UV) Disinfection

Prior to discharge wastewater must be disinfected. Ultra violet light disrupts the DNA of pathogens and other life forms leaving them incapable of reproduction. UV unlike other methods of disinfection uses no chemicals, produces no harmful byproducts (trihalomethanes for example), and leaves no toxic residual.



Left – UV Rack Removed for Cleaning
Below – Preparing UV Rack for Removal



Effluent Disposal – Bay Discharge / Reclamation / Storage

There are several options for disposal of treated effluent. During wet weather the majority of Novato's effluent is discharged to San Pablo Bay. Seasonal NPDES permit restrictions combined with a responsible approach to water conservation drive effluent disposal options. Discharge to the San Pablo Bay during the months of June, July, and August is prohibited. Restrictive discharge limits during the months of May, September, and October are also considerations



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Performance Summary

The following summary provides an overview of plant performance and activities for the period January 1, 2014 through December 31, 2014.

Total Volume of Water Processed	1,655 Million Gallons
Total Volume of Water Reclaimed	503 Million Gallons
Total Volume of Water Discharged	1,152 Million Gallons
Average Daily Dry Weather Flow	3.37 MGD
Maximum Daily Flow	28.04 MGD
Pounds of BOD Treated	2,951,310
Pounds of BOD Removed	2,855,315
Percent BOD Removal Efficiency	97
Pounds of TSS Treated	4,062,500
Pounds of TSS Removed	4,007,081
Percent of TSS Removal Efficiency	99
Pounds of Bio-solids Treated	1,778,600
Cubic Feet of Biogas Produced	25,821,050
Total Number of Violations / Excursions	0
NPDES (Bay Discharge)	0
WDR (Reclamation)	0

Maintenance

Total Number of Work Orders Issued	5,238
Total Number of Work Orders Closed	5,330
Percentage Preventive Maintenance	88%
Average Completion	5.01 Days

Consumables / Energy

*Electricity – kWh / Year	3,365,946
Electricity – kWh / MG	2,170
*Natural Gas – Therms / Year	45,496
Natural Gas – Therms / MG	29
Diesel Fuel – Gallons / Year	1,965
Diesel Fuel – Gallons / MGD	1.27

*Excludes Administration Building, Recycled Water Plant, and Flare Pilot.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

**Treatment Plant
Compliance Summary**

No treatment plant violations were experienced in 2014. The compliance summary table (below) is broken down by constituent and discharge season.

Waste Discharge Limits / Reclamation				
Parameter	Limit	Units	Analysis	Violations
BOD Monthly Average	40	mg/L	4	0
Total Coliform – 5 Sample Median	240	mpn/100 ml	51	0
Total Coliform - Maximum	10,000	mpn/100 ml	51	0
pH – High	9.0	s.u.	87	0
pH – Low	6.0	s.u.	87	0

NPDES Wet Season Limits - November – April				
Parameter	Limit	Units	Analysis	Violations
BOD Weekly	45	mg/L	25	0
BOD Monthly	30	mg/L	6	0
TSS Weekly	45	mg/L	25	0
TSS Monthly	30	mg/L	6	0
BOD Removal (minimum)	85	%	6	0
TSS Removal (minimum)	85	%	6	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	6	0
Fecal Coliform - Median	140	mpn/100 ml	6	0
Fecal Coliform - 90 th Percentile	430	mpn/100 ml	6	0
Ammonia – Daily Maximum	21	mg/L	57	0
Ammonia - Monthly Average	6	mg/L	6	0
pH – High	8.5	s.u.	128	0
pH – Low	6.5	s.u.	128	0
Oil & Grease - Daily Maximum	15	mg/L	6	0
Oil & Grease - Monthly Average	5	mg/L	6	0

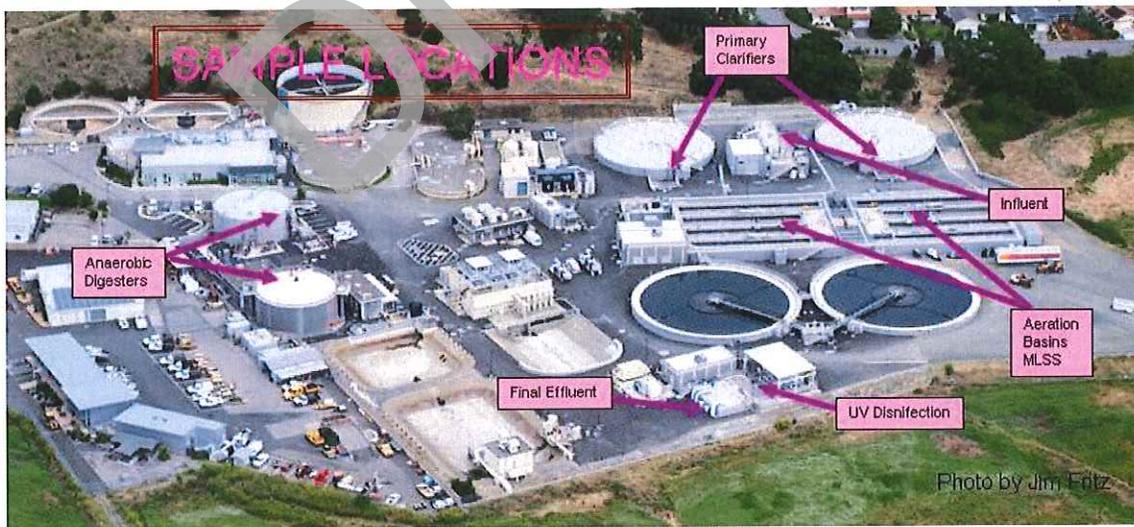
2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Compliance Summary (Continued)

NPDES Dry Season Limits - May, September, & October				
Parameter	Limit	Units	Analysis	Violations
BOD Weekly	30	mg/L	10	0
BOD Monthly	15	mg/L	2	0
TSS Weekly	20	mg/L	10	0
TSS Monthly	10	mg/L	2	0
BOD Removal (minimum)	85	%	2	0
TSS Removal (minimum)	85	%	2	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	2	0
Fecal Coliform - Median	140	mpn/100 ml	2	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	2	0
Ammonia – Daily Maximum	21	mg/L	10	0
Ammonia - Monthly Average	6	mg/L	2	0
pH – High	8.5	s.u.	45	0
pH – Low	6.5	s.u.	45	0
Oil & Grease - Daily Maximum	15	mg/L	2	0
Oil & Grease - Monthly Average	5	mg/L	2	0

Sample Locations



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Asset Management

Key components of an Asset Management Program include:

- Computerized Maintenance Management System (CMMS)
- Preventive, Predictive, and Corrective Maintenance
- Equipment Inventory
- Reliability / Criticality Assessment (Hierarchy of Equipment Priority)

Computerized Maintenance Management System

Veolia uses *Job Cal Plus*[™] (Job Plus) as the basis for scheduling and tracking maintenance and repairs at Novato. Job Plus is an off-the-shelf, non proprietary software program available from Hach Company, Loveland, Colorado. Job Plus uses the Microsoft Access[™] data base platform to store information. A description of Job Plus can be found at the end of this section.

Preventive, Predictive, and Corrective Maintenance

Preventive maintenance (PM) is a scheduled maintenance activity generally tied to equipment run time (x hours) or period schedule (weekly / quarterly). Routines such as lubrication, oil change, filter change fall into the category of PM. Predictive maintenance (PdM) is performed to determine when maintenance might be required and or to assess condition. Tasks such as vibration, temperature, and oil analysis are types of PdM. Corrective maintenance is initiated when a deficiency is found.

Equipment Inventory

An accurate equipment inventory is crucial to all phases of Asset Management. Equipment at the Novato facility has been entered into the Job Plus data base. The equipment inventory is a dynamic process with additions and deletions over time. An accurate equipment inventory is an essential component when planning for equipment replacement.

Reliability / Criticality Assessment (Hierarchy of Equipment Priority)

A Criticality Assessment was performed at the Novato facility in August 2010 and updated in June 2014. The assessment evaluates processes and equipment and rates the relative importance. The evaluation process looks at consequences and likelihood of failure. The product helps the user prioritize replacement and maintenance.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Maintenance Activities Under \$10,000.00*

January		
	MCC Panels	Thermographic imaging
	Gravity Belt Thickener #2	Replaced belt
	Sludge/Scum Pump #1 - Primary #1	Replaced seal water line
	Sludge/Scum Pump #2 - Primary #1	Replaced seal water line & regulator
	Primary Clarifier #2	Replaced mercoid switch
	TWAS Pump #2	Replaced drive
	Novato WWTP & Ignacio PS	Thermographic testing

February		
	Operation Chevy Truck	Replaced 4 tires
	Ignacio	Backflow preventer repaired
	Ignacio – SCADA	Bezel replacement
	Aeration Basin #3	#3 water line repair
	GBT Odor Control Fans	Replaced bearings
	Headworks Gate #1 Actuator	Repaired actuator
	Gravity Belt Thickener #1	Replaced batteries in UPS unit
	Gravity Belt Thickener #2	Replaced batteries in UPS unit
	UV Emergency Generator Day Tank	Replaced floats

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

March		
	Maintenance Truck - Dodge	Replaced bench seat
	Maintenance Truck - Dodge	Replaced all 4 tires
	Digester #1	Replaced all Ferric feed lines
	GBT Polymer Pump	Replaced pump, pressure switch and tubing
	WAS Pump #2	Rebuild pump
	Ignacio Emergency Generator	Replaced filters & performed annual service
	Ignacio Grinder	Replaced drive

April		
	Diesel Fuel Tanks & Day Tanks	Annual fuel filtering
	Aeration Basins	Repairs to water piping
	Digested Sludge Transfer Pump #1	Replaced flush lines and hose
	Influent Gates	Gate repairs
	SCADA	Annual upgrade

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

May		
	Novato WWTP & Ignacio PS	Infrared Survey at Novato WWTP and Ignacio PS
	Blower Room UPS	Replaced UPS unit
	Overhead Cranes	Annual crane inspection/certification
	Flow Meters	Annual flow meter calibration
	Jerome Meter	Annual re-calibration
	Fire Extinguishers	Annual recharge of all fire extinguishers at Novato WWTP & Ignacio PS
	Primary Clarifier #1	Repaired scum arm and skimmer plate
	Emergency Generators	Annual service

June		
	Wet Weather effluent Pump #1	Replaced batteries
	Wet Weather Pumps	Annual service
	Blower #3	Replaced cooling fan and driver board
	Digester Sludge Sump	Pumped out sump
	Sodium Hypochlorite Pump #2	Replaced discharge line
	Sodium Hypochlorite Tank #1	Replaced drain valve and piping
	Screenings Washer Compactor	Installed new mechanical seal
	Ignacio Influent Pump #1	Retrofit - assisted in pulling and re-installation of pump
	Emergency Generator #2	Day tank repairs

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

July		
	Operations Truck - Dodge	Replaced water pump and fan belt
	Ignacio Gas Sensor	Replaced H2S sensor
	GBT Control Center	Replaced PLC I/O module and fuses
	Influent Channel #2	Replaced float
	Channel Grinder	Replaced drive/reducer

August		
	Boiler	Replaced linkage arm and replaced piping
	Wet Weather Pump #1	Replaced coolant filters and fuel line
	Emergency Generator	Annual service performed on all 4 Emergency Generators
	Grit Bin	Replaced Liner
	Primary Clarifier #1	Replaced limit switch
	UV Diesel Fuel Tank	Replaced digital tank level display
	Novato & Ignacio VFD	Annual inspections
	UV System	System overhaul

September		
	Old Wastewater Flow Meter Concrete Box	Installed safety railing around underground box
	Blower #3	Replaced cooling fan
	Digester Sludge Sump	Pumped out sump
	Primary Clarifier #1 Ultima X Gas Monitor	Replaced LEL sensor
	Primary Clarifier #2 Ultima X Gas Monitor	Replaced LEL sensor
	Digester Sludge Sump	Pumped out sump
	Flygt Pumps/Mixers	Annual Flygt pump/mixer inspection

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

October		
	Old Influent Pump Building	Repaired piping - water leak
	Above Ground Fuel Tank - old	Replace supply & return lines, prime wet weather pumps, clean probes and fuel in tank, repaired anti siphon valve
	Ignacio Channel Grinder	Re-installed rebuilt cutter stack
	TWAS Pump #2	Replaced seal water line
	Blower Room	Replaced Compressor - rooftop
	UV System	UV breakers, tighten connections, continuity testing, wiring to breakers
	Filter Screen #1	Removed grit from channel

November		
	Effluent Pump Station Piping	Repaired #3 water system piping
	Decant Line	Cleaned supernatant main pipe to decant pump station
	Headworks Channel #1	Replaced transducer/level sensor
	Influent Pump #5 VFD	Replaced fan
	UV Channel 2, Module 10	Replaced fan
	Wet Weather Pump #2	Replaced gasket on gear box

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

December		
	Trucks	Annual oil change on 4 trucks
	Dry Weather Effluent Pump #4	Replaced seal water line
	Odor Bed Moisture Control Panel	Replaced din mounted breaker and GFI receptacle in control panel
	Ignacio Influent Pump #2	Retrofit - assisted in pulling and re-installation of pump
	Ignacio - Raw Sewage Pump #2 Control Valve	Repaired actuator
	Ignacio - Force main Header Discharge Valve	Repaired actuator
	Channel #2 Mechanical Filter Screen	Replaced chain idler/tensioner

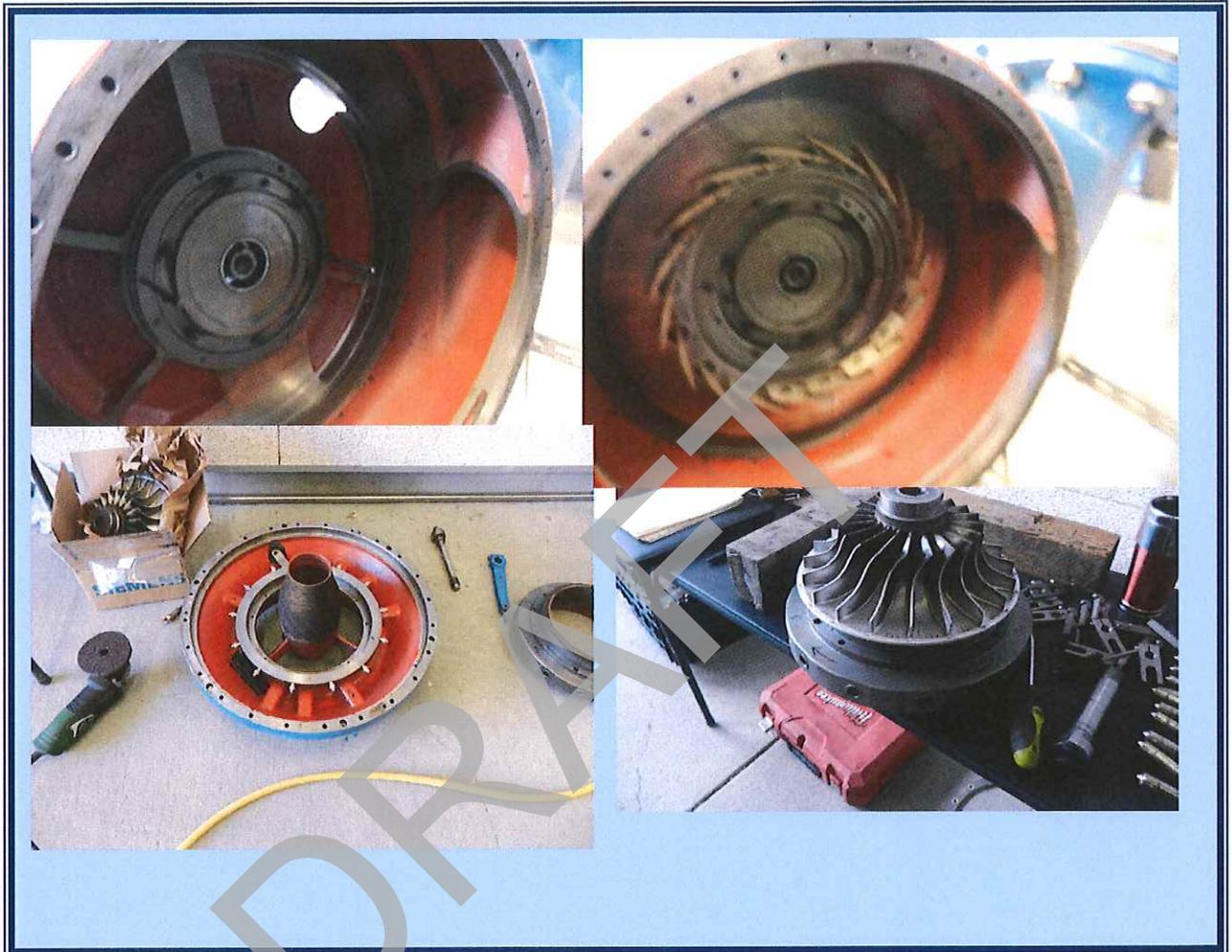
Maintenance Activities Over \$10,000.00*

Task Description	Labor Cost	Material Cost	Outside Contractor Cost	Total Cost District	Total Cost (Preventative Maintenance)
Performed 36,000 Hour Class 1 Inspection			\$16,098.61		\$16,098.61

* Limit Set by Section 3.0 of the Service Agreement between Veolia and NSD.

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

TURBLEX BLOWER - 36,000 HOUR LEVEL ONE INSPECTION



Complete disassembly of Turblex Blowers (1 & 2)
Blowers were found to be in excellent condition

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

**REMOVAL AND CLEANING TELESCOPIC VALVE
AT SLUDGE LAGOONS**



Top Left – Struvite Buildup in Telescoping Valve Receiver
Top Right – Telescoping Valve Removed Ready for Cleaning
Bottom Left – Buildup in Telescoping Valve
Bottom Right – Cleaned Telescoping Valve

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Safety

It's a Culture, Not a Campaign



Veolia Water North America (VWNA) recognizes the importance of an effective health and safety program to the well being of each employee, the general public, clients/facility owners, and to the overall success of our company. VWNA is committed to providing its employees a healthful and safe place of employment. To that end, VWNA will provide proper training, materials, and equipment so that work can be performed safely and in compliance with the Occupational Safety and Health Administration Regulations (OSHA) and other applicable standards. In turn, each employee is responsible to participate in a cooperative effort to maintain an effective health and safety program. Adherence to company policies and work practice guidelines is an essential part of this responsibility. By maintaining an effective program, we reduce the risk of personal injury, operational interruptions, regulatory fines, and maintain the company's reputation as a world leader in environmental management.

Our highest duty - to ensure health, safety and security for all. It is our highest duty, essential business priority, and the individual responsibility of each of us to ensure that at all time and in all of our operations, the health, safety and security of the general public, our customers, subcontractors and our fellow employees are protected. We allow for no compromise in this matter, and we strive to proactively identify potential risks and take diligent corrective and preventative actions to reduce and eliminate them. In the same spirit, we support, advise and encourage our fellow employees to maintain good personal health, as well as to develop positive practices and behaviors in that respect.

VWNA Novato has obtained a zero harm safety record from reinstatement of the Operations Contract. We have had no incidents from 6/1/10 to present. This reporting period from 1/1/14 - 12/31/14 resulting in 365 days - accident/incident free. In recognition of this achievement - staff celebrated at a luncheon with gifts of appreciation. Each employee received a cash incentive reward from the Company for 4 years no loss time incidents as a group and also as individual achievements.

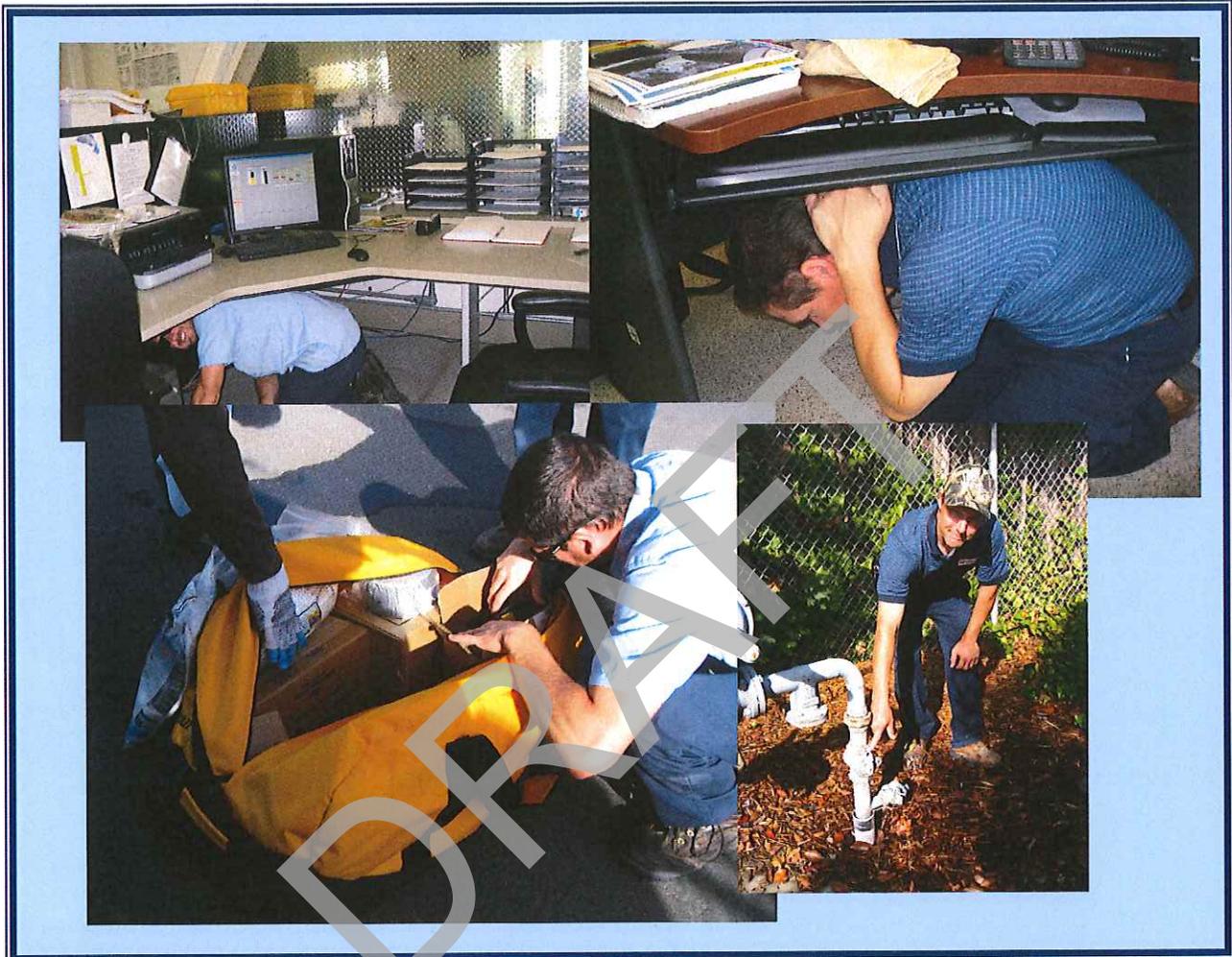
2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

WWNA Novato provides daily safety topics - 5 minutes in length at each of our daily morning meeting. Subjects range from personal to job related safety topics.

2014 Safety Training	
Date	Topic
January	Hazard Communication – GHS
February	Personal Protective Equipment
March	General Electrical Safety LOTO - Control of Hazardous Energy
April	Confined Space Training Office Safety
May	Fire Extinguisher Use
June	Bloodborne Pathogens Housekeeping Preventing Heat Stress Overexertion - Sprains and Strains
July	Fire Extinguisher Use Hot Work - Welding Cutting and Brazing
August	Overexertion
September	LOTO - Policy Review
October	First Aid/CPR/AED Certification Training Great Shakeout – Earthquake Preparedness Drill
November	Fall Protection Powered Industrial Trucks Hearing Protection
December	SPCC Plans - Novato and Ignacio

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

GREAT SHAKEOUT – ANNUAL EARTHQUAKE DRILL
OCTOBER 16, 2014



Top Left – Christian Williams, Duck Cover Hold

Top Right – Brian Exberger, Duck Cover Hold

Bottom Left – Inventory Emergency Supplies

Bottom Right – Brian Exberger Simulates Shutoff of Natural Gas

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

NOVEMBER 19th
HANDS-ON REVIEW OF THE WET WEATHER SOP



Training in November prepared staff for the heavy rains of December

Above Left – Operations and maintenance staff review operation of the (hydraulic) wet weather pump valves

Above Right – Brian Exberger reviews Wet Weather Pump SOP with O&M staff.

Below Left – Staff tests operation of wet weather overflow structure.

Below Right – Brian Exberger reviews SOP with O&M staff

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Staffing and Organization

STAFFING & CERTIFICATION STATUS

John Bailey – Project Manager

Grade V California Wastewater Treatment Plant Operator #4123, December 31, 2016

Brian N. Exberger – Assistant Project Manager / Operations Manager

Grade V California Wastewater Treatment Plant Operator #10424, June 30, 2015

Lynda Rodefer – Administrative Assistant/Planner/Scheduler/Safety Coordinator

Anthony M. Silva – Operator III

Grade V California Wastewater Treatment Plant Operator #10973, December 31, 2015

Grade II Collection System Maintenance Technician, 354, January 31, 2016

Dean B. Heffelfinger – Operator III

Grade III California Wastewater Treatment Plant Operator #III-27610, June 30, 2015

Grade T2 Water Treatment Operator #34890

Christian R. Williams – Operator IV

Grade IV California Wastewater Treatment Plant Operator #28555, June 30, 2016

Preston Ingram – Operator III

Grade IV California Wastewater Treatment Plant Operator #10277, June 30, 2015

Jeffrey D. Hendricks – Operator II

Grade II California Wastewater Treatment Plant Operator #II-28377, December 31, 2015

Grade I Plant Maintenance Technologist, 070750011, July 31, 2015

Ralph Loveless – Maintenance Technician/Operator II

Grade II California Wastewater Treatment Plant Operator #28638, August 13, 2016

Additional Support

Sachin Chawla – Area Manager

Christopher McAuliffe – District Manager, Grade V Wastewater Treatment Plant Operator

2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

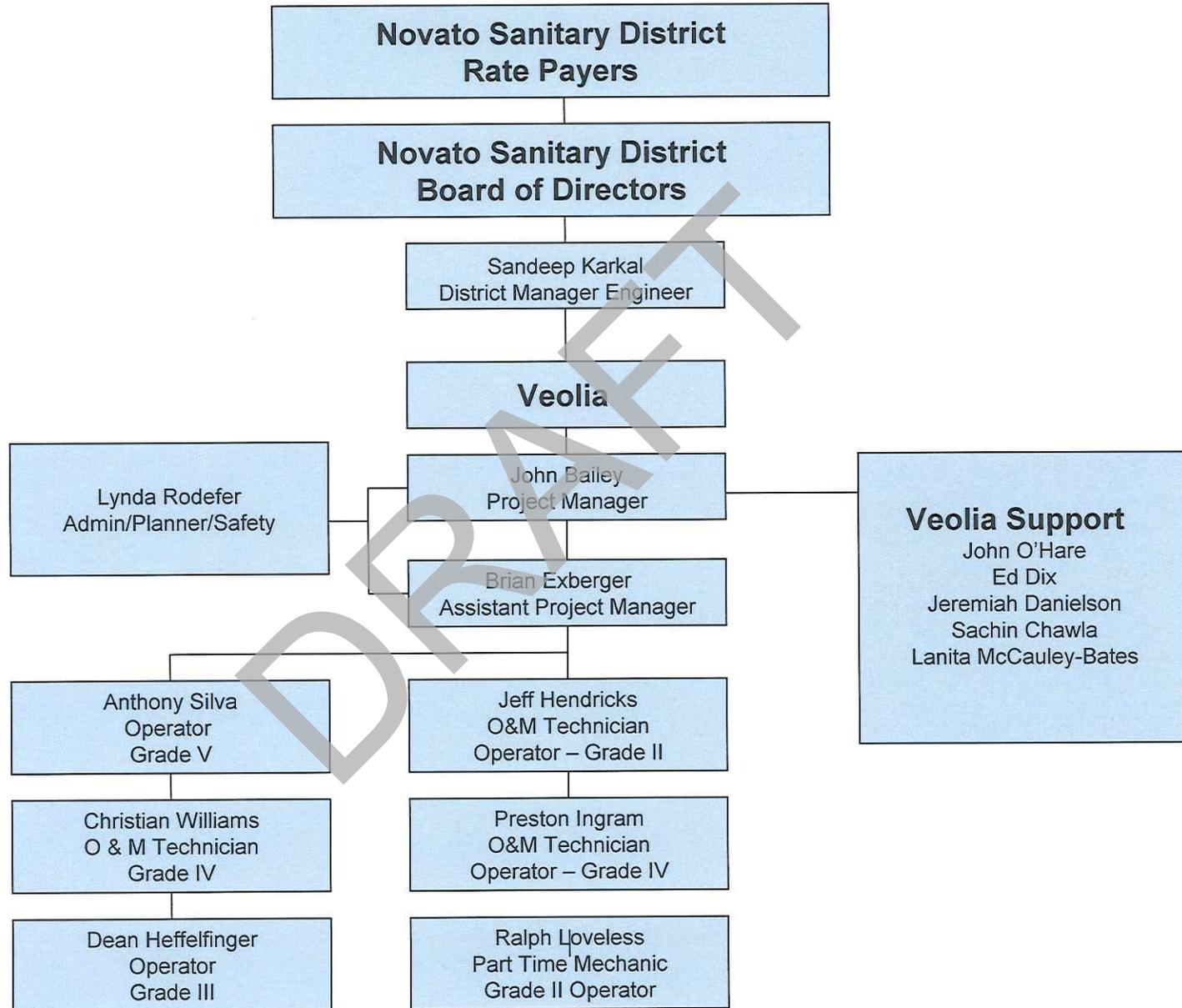
Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

John O'Hare – Technical Director

Grade V, Wastewater Treatment Plant Operator, California, # 10669 (2005)
Grade IV, Wastewater Treatment Plant Operator, Association of Boards of Certification, # S40011R (2004)
Grade IV, Collection Systems, Massachusetts, #866 (1986)
Grade VII, Wastewater Treatment Plant Operator, Massachusetts, # 977 (1977)
Grade I, Environmental Compliance Inspection, California, CWEA # 04074112 (2004)
Grade I, Laboratory Analyst, California, CWEA # 05013114 (2005)
Grade I, Plant Maintenance Technologist, California, CWEA # 05075101 (2005)
Grade I, Collection System Maintenance, California, CWEA # 070121088 (2007)
Grade I, Water Distribution Operator, California Department of Public Health, #34234 (2008)



Organization Chart –
Veolia Water/Novato Sanitary District



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Budget

ADJUSTMENTS OCCUR ON A “CONTRACT YEAR CYCLE”, JULY - JUNE

The Novato Operations and Maintenance Service Agreement dated March 27, 2014 is a fixed price contract. Included in the base contract fee are operation, maintenance, and management. Exceptions to the fixed price include:

Schedule 13 – *Pass Through Costs*

Section 5.6 – Performance Bond

Schedule 8 – Cost Adjustment and Escalation Indices

Schedule 8 – Flow and Loading Adjustments

Schedule 11 – Usage Caps

- Electrical
- Natural Gas
- Diesel Fuel

Schedule 5 – Operation of Recycled Water Facility

Equipment Repair in excess of \$10,000

2014 service fee adjustment was 1.22%.

DRAFT

NOVATO SANITARY DISTRICT - VEOLIA PLANT FLOW

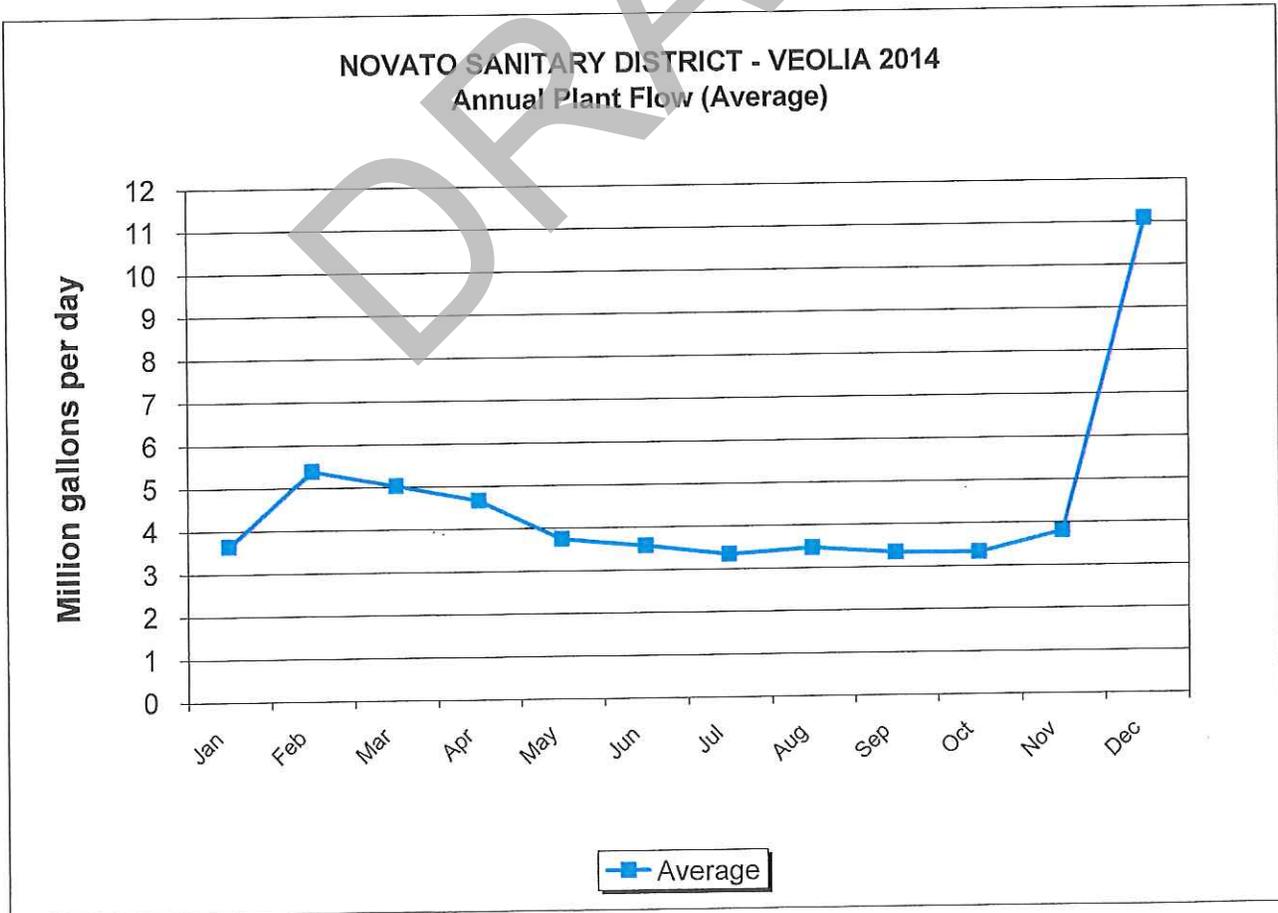
Annual Waste Characteristics & Loading Summary

(IN GALLONS TIMES 1,000,000)

YEAR: 2014

PRINT DATE: 28-Jan-2015

	Total Flow	High	Low	Average	
January	112.70	4.39	1.00	3.64	
February	150.57	11.56	3.40	5.38	
March	155.76	7.66	3.99	5.02	
April	139.61	7.87	3.61	4.65	
May	115.84	4.26	3.19	3.74	
June	106.70	4.19	3.10	3.56	
July	103.36	3.77	2.96	3.33	
August	107.29	3.78	3.06	3.46	Three month dry weather averages:
September	99.96	3.74	3.06	3.33	3.46
October	102.80	3.87	2.80	3.32	3.33
November	114.01	5.82	3.00	3.80	3.32
December	343.49	28.04	4.92	11.08	
ANNUAL TOTAL 1652.09					
ANNUAL MAX.	343.49	28.04			Max. 3.46
ANNUAL MIN.	99.96		1.00		Min. 3.32
ANNUAL AVG.	137.67			4.53	Avg. Dry Weather Flow 3.37



**NOVATO SANITARY DISTRICT - VEOLIA
BOD (Influent & Effluent)**

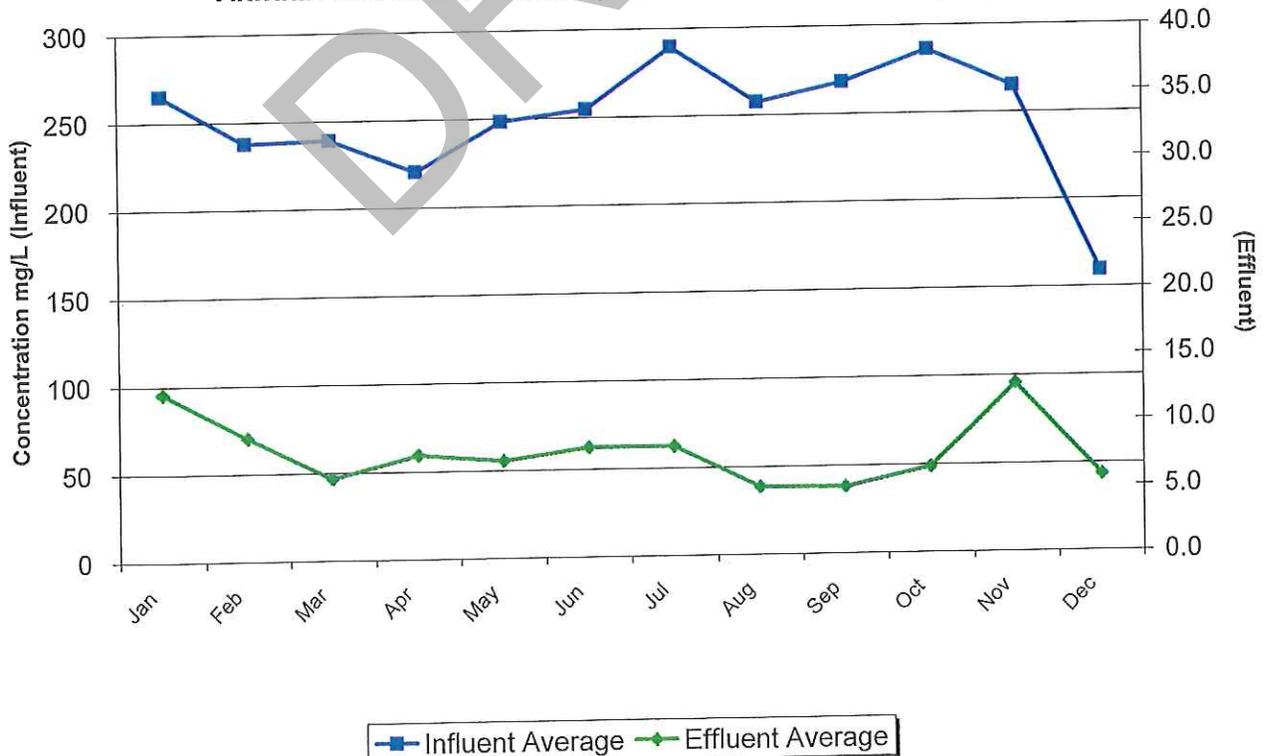
Annual Waste Characteristics & Loading Summary

YEAR: 2014

PRINT DATE: 28-Jan-2015

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	339	229	265	11	5004	958	3546	19.0	6.0	12.8	12	291	30	176
February	322	110	238	13	5540	2606	4144	34.0	5.0	9.4	13	525	77	166
March	343	163	239	12	5388	3689	4194	12.0	5.0	6.3	12	255	79	113
April	470	143	220	15	6653	2317	3847	19.0	5.0	7.9	15	316	73	138
May	487	91	248	12	6765	1374	3495	11.0	5.0	7.4	12	159	66	105
June	299	216	255	12	4215	2912	3440	15.0	5.0	8.3	12	192	62	112
July	350	215	289	15	4684	2653	3651	19.0	5.0	8.3	15	237	61	105
August	305	227	257	12	4364	2664	3452	6.0	5.0	5.2	12	85	59	69
September	348	150	268	12	4768	2084	3382	6.0	5.0	5.1	12	71	58	64
October	343	206	286	15	4204	2901	3613	16.0	5.0	6.5	15	210	60	83
November	339	229	265	11	5639	2722	3907	19.0	6.0	12.8	12	279	90	182
December	323	54	159	15	8986	3096	5496	12.0	5.0	5.8	15	783	93	251
ANNUAL HIGH	487	229	289	15	8986	3689	5496	34.0	6.0	12.8	15	783	93	251
ANNUAL LOW	299	54	159	11	4204	958	3382	6.0	5.0	5.1	12	71	30	64
ANNUAL AVG.	356	169	249	13	5517	2498	3847	15.7	5.2	8.0	13	284	67	130

**NOVATO SANITARY DISTRICT - VEOLIA 2014
Annual BOD Concentration (Influent & Effluent Averages)**



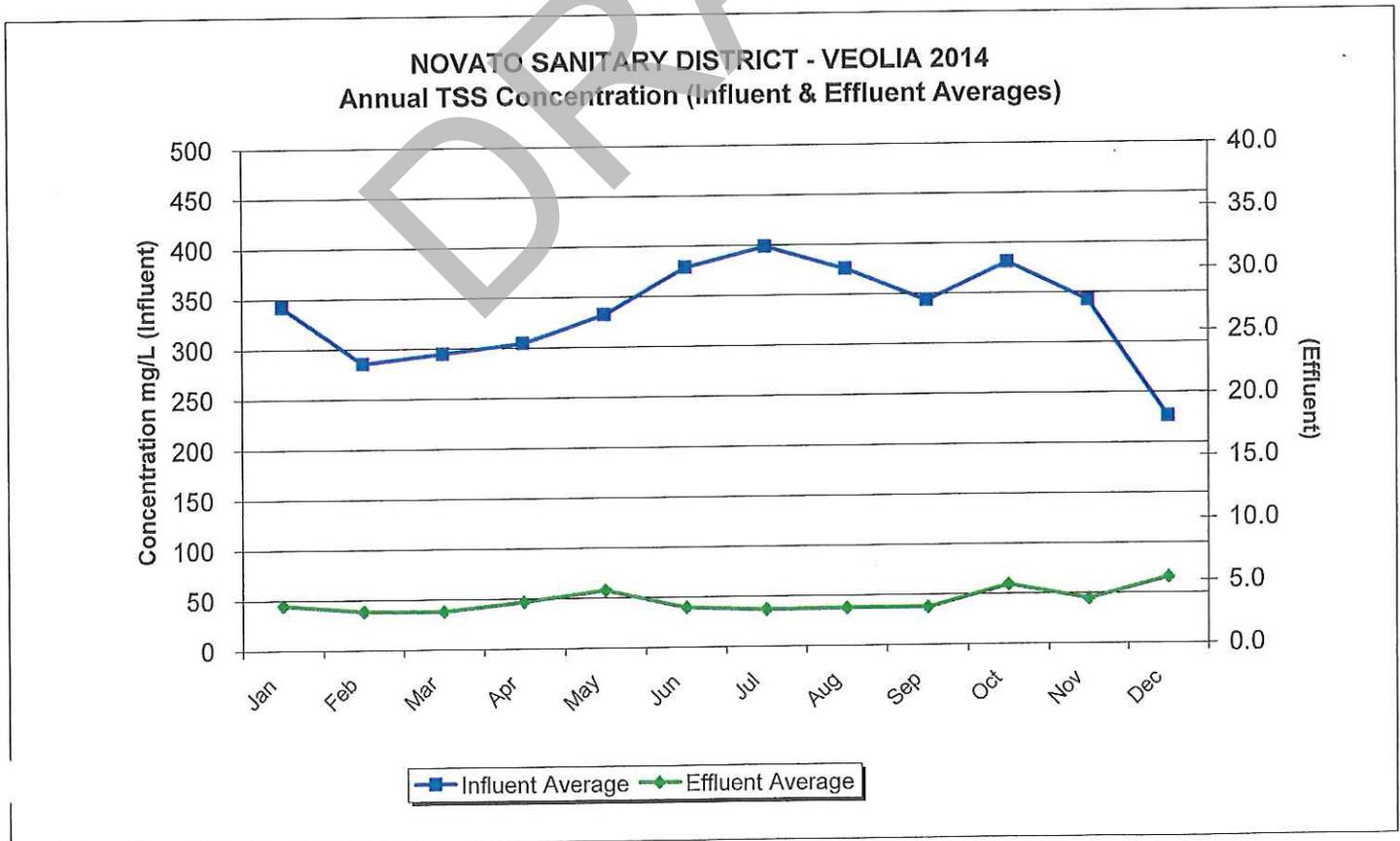
NOVATO SANITARY DISTRICT - VEOLIA SUSPENDED SOLIDS (Influent & Effluent)

Annual Waste Characteristics & Loading Summary

YEAR: 2014

PRINT DATE: 28-Jan-2015

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	476	298	342	11	6072	1177	4588	8.0	3.0	3.6	11	122	11	49
February	377	162	285	13	7669	3838	5070	4.0	3.0	3.1	13	125	42	57
March	356	224	295	12	6190	4282	5201	3.0	3.0	3.0	12	76	46	54
April	404	203	304	15	8381	4310	5388	5.0	3.0	3.7	15	149	49	69
May	464	153	332	12	6322	2183	4679	9.0	3.0	4.6	12	124	40	65
June	490	316	378	12	6195	4019	5091	4.0	3.0	3.2	12	61	35	43
July	585	128	399	15	7334	1555	5051	4.0	2.0	2.9	15	55	24	37
August	427	317	376	12	6109	3720	5039	3.0	3.0	3.0	12	43	35	40
September	414	278	344	12	5294	3495	4352	3.0	3.0	3.0	12	42	35	38
October	530	249	381	15	6379	3506	4816	14.0	2.0	4.7	15	158	24	60
November	476	298	342	11	7776	3733	5082	8.0	3.0	3.6	11	120	36	53
December	386	83	226	15	21468	4334	8859	16.0	3.0	5.3	15	1044	56	252
ANNUAL HIGH	585	317	399	15	21468	4334	8859	16.0	3.0	5.3	15	1044	56	252
ANNUAL LOW	356	83	226	11	5294	1177	4352	3.0	2.0	2.9	11	42	11	37
ANNUAL AVG.	449	226	334	13	7933	3346	5268	6.8	2.8	3.6	13	177	36	68



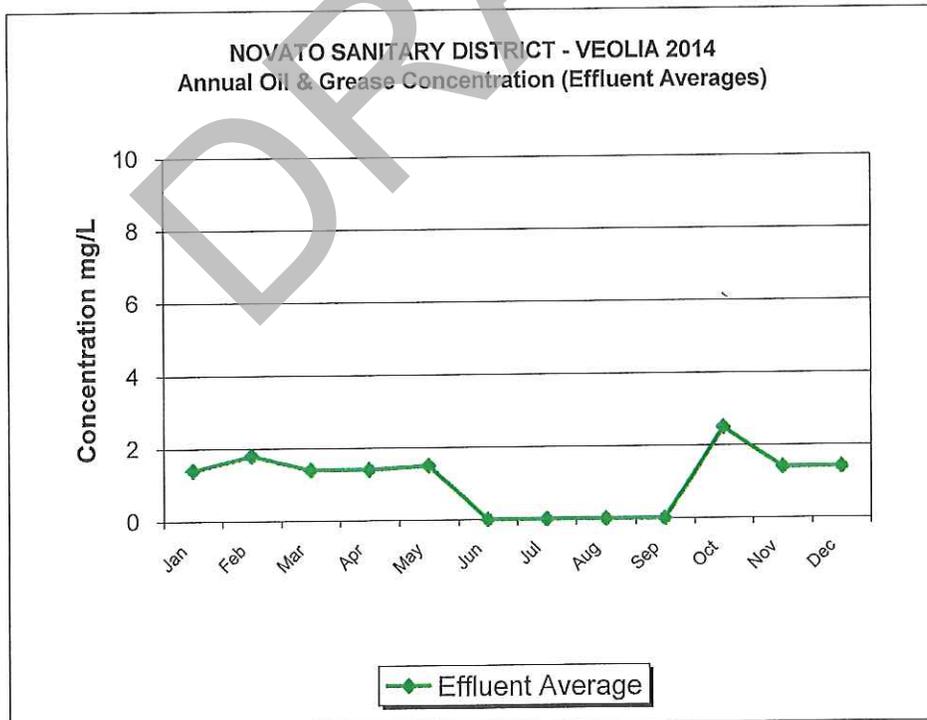
**NOVATO SANITARY DISTRICT - VEOLIA
OIL & GREASE (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

PRINT DATE: 27-Jan-2015

	EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average
January	1.4	1.4	1.4	1	21	21	21
February	1.8	1.8	1.8	1	29	29	29
March	1.4	1.4	1.4	1	27	27	27
April	1.4	1.4	1.4	1	29	29	29
May	1.5	1.5	1.5	1	21	21	21
June	0.0	0.0	0.0	0	0	0	0
July	0.0	0.0	0.0	0	0	0	0
August	0.0	0.0	0.0	0	0	0	0
September	0.0	0.0	0.0	0	0	0	0
October	2.5	2.5	2.5	1	30	30	30
November	1.4	1.4	1.4	1	17	17	17
December	1.4	1.4	1.4	1	64	64	64
ANNUAL HIGH	2.5	2.5	2.5	1	64	64	64
ANNUAL LOW	0.0	0.0	0.0	0	0	0	0
ANNUAL AVG.	1.1	1.1	1.1	1	20	20	20



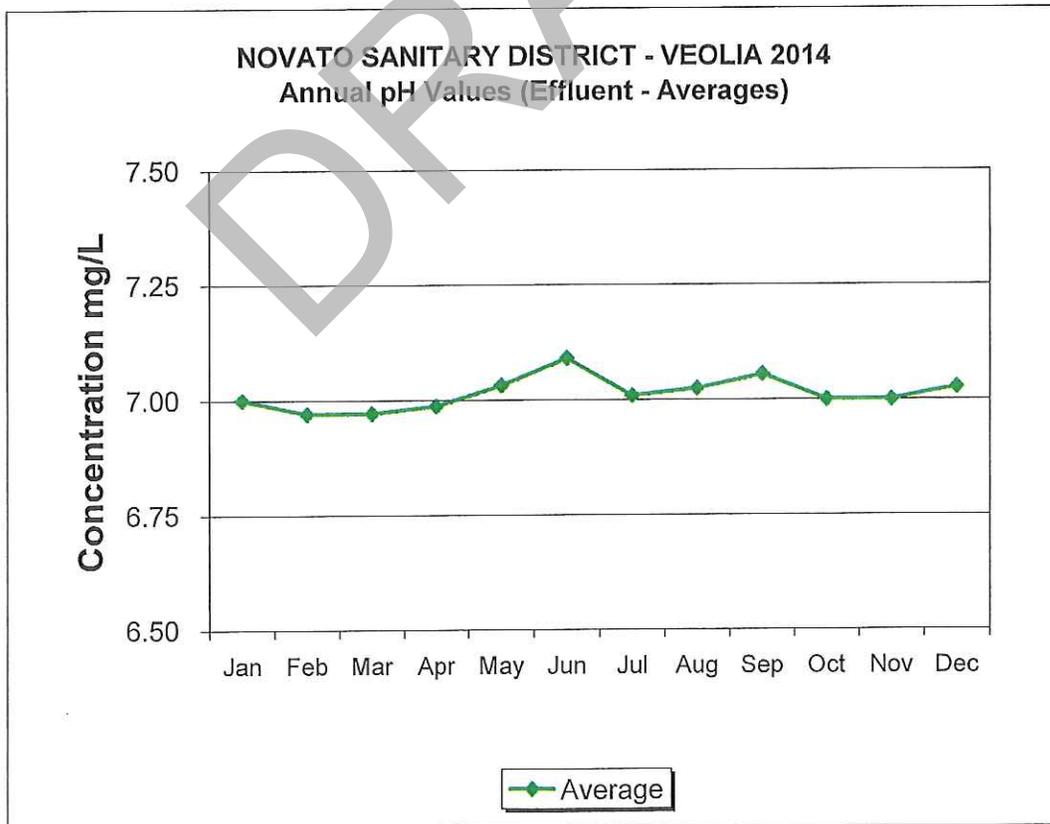
**NOVATO SANITARY DISTRICT - VEOLIA
pH (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

PRINT DATE: 27-Jan-2015

	High	Low	Average	Number of Samples			
January	7.1	6.9	7.0	22			
February	7.0	6.8	7.0	20			
March	7.0	6.9	7.0	21			
April	7.1	6.8	7.0	22			
May	7.2	6.9	7.0	22			
June	7.4	6.9	7.1	21			
July	7.1	6.9	7.0	23			
August	7.3	6.9	7.0	21			
September	7.2	7.0	7.1	22			
October	7.1	6.9	7.0	23			
November	7.1	6.9	7.0	21			
December	7.1	6.9	7.0	23			
				Number of Samples Total = 261			
ANNUAL MAX.	7.40	7.00	7.09	1st Qtr.	63	2nd Qtr.	65
ANNUAL MIN.	7.00	6.80	6.97	3rd Qtr.	66	4th Qtr.	67
ANNUAL AVG.	7.14	6.89	7.01				



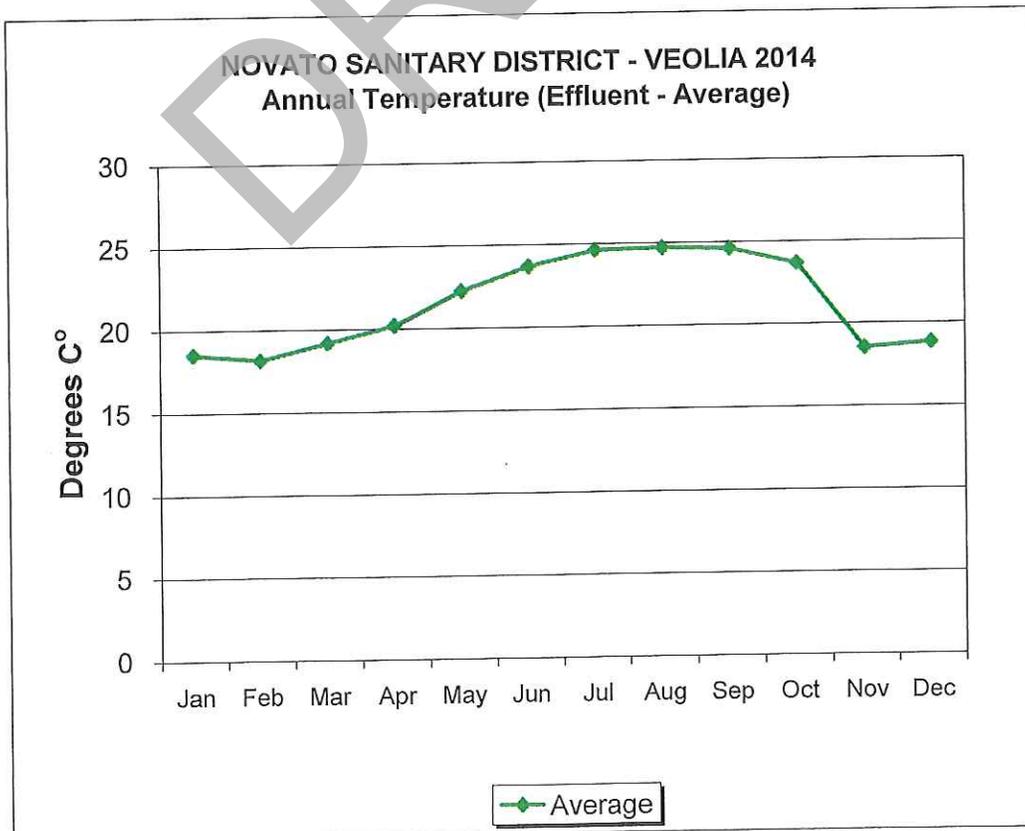
**NOVATO SANITARY DISTRICT - VEOLIA
TEMPERATURE (Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2014

PRINT DATE: 27-Jan-2015

	High	Low	Average	Number of Samples	
January	19.4	17.9	18.5	22.0	
February	19.2	17.1	18.2	20.0	
March	20.4	18.0	19.2	21.0	
April	21.9	18.3	20.2	22.0	
May	23.6	20.9	22.2	22.0	
June	25.1	22.8	23.7	21.0	
July	25.7	23.7	24.6	23.0	
August	25.6	24.4	24.7	21.0	
September	25.4	23.9	24.6	22.0	
October	25.0	21.7	23.7	23.0	
November	19.4	17.9	18.5	21.0	
December	21.1	17.5	18.8	23.0	
				Number of Samples Total = 261	
ANNUAL MAX.	25.7	24.4	24.7	1st Qtr. 63	2nd Qtr. 65
ANNUAL MIN.	19.2	17.1	18.2	3rd Qtr. 66	4th Qtr. 67
ANNUAL AVG.	22.7	20.3	21.4		



2014 ANNUAL OPERATIONS AND MAINTENANCE REPORT

Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station

Community Outreach Activities 2014:

Veolia is proud to be a member of the Novato community and we are committed to support of local activities. The following are events and organizations supported by Veolia in 2014.

School Fuel – Tour of Novato

Novato Festival of Art, Wine & Music

Member Rotary Club Novato Sunrise (RCNS)

2014 American Crown Circus/Circus Osorio (RCNS)

Member – Novato Chamber of Commerce

Margaret Todd Senior Center Monthly Birthday Celebrations

Senior Pharmaceutical Collection

Senior Craft Fair

Senior Health Fair

Senior Health and Fitness Day

Senior Center Christmas Tree Donation

Rotary Club of Ignacio – Novato Bike and Hike

Chamber of Commerce Annual Golf Tournament

North Bay Leadership Council - Algebra Academy

North Bay Science Fair

Paint The Town Red – “Novato Birthday Bash”

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NORTH BAY SCIENCE FAIR NOVEMBER 1, 2014



VEOLIA STAFF – Brian Exberger, John O'Hare, Lynda Rodefer, and John Bailey participated in the North Bay Science and Discovery Fair. The Veolia display highlighted water science, microbiology, and the inner workings of a wastewater treatment plant.

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SCHOOL FUEL – TOUR OF NOVATO
May 3, 2014



Top Left – Lynda Farmery prepares for a big day of sand art
Fun was had by all!

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**TITLE 22 - RECYCLED WATER
PRODUCTION REPORT FOR 2014**

Novato Sanitary District 2014 Recycled Water Production Data								
	Water Delivered (Million Gal)	Effluent Turbidity (NTU)		Effluent CT Value (mg min/L)		Effluent Coliform (mpn/100 ml)		Notes
Criteria	1.7 mgd	<2		>450		<2.2		
		Max	Ave	Min	Ave	Max	Ave	
January	0.00	No Production in January						
February	0.00	No Production in February						
March	0.00	No Production in March						
April	1.97	1.7	1.5	>450	>450	<2	<2	
May	16.25	1.9	1.2	>450	>450	<2	<2	
June	16.34	1.8	1.3	>450	>450	<2	<2	
July	13.55	1.9	1.6	>450	>450	<2	<2	
August	17.62	1.7	1.8	>450	>450	<2	<2	
September	10.87	1.9	1.5	>450	>450	<2	<2	
October	5.54	1.8	1.2	>450	>450	<2	<2	
November	1.34	1.6	1.3	>450	>450	<2	<2	
December	0.78	1.4	1.4	>450	>450	<2	<2	
TOTAL	84.26							

DRAFT

Informational Item
Following:

Marin IJ Readers' Forum for March 18

Posted: 03/17/15, 10:51 AM PDT

marini.com

Use toilet paper instead of 'wipes'

I received a letter from the Las Gallinas Valley Sanitation District stating that baby wipes and moist toilet wipes are blocking sewage pipes.

You can get around that problem by wiping the rear end with a little body lotion on a small amount of toilet paper and wiping the front end with water on toilet paper. If you use a scented organic body lotion you have a real sweet end.

— *Karen Arnold, San Rafael*