

NOVATO SANITARY DISTRICT

Meeting Date: August 24, 2015

The Board of Directors of Novato Sanitary District will hold a regular meeting at 6:00 p.m., Monday, August 24, 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 August 10, 2015 meeting.

5. CONSENT CALENDAR:

The General Manager-Chief 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 payroll, and payroll-related disbursements.
- c. Ratify Board meeting schedule: regular meetings - September 14th, September 28th, October 12th, October 26th, November 9th, and December 14th; no meetings - November 23rd and December 21st.

6. WASTEWATER OPERATIONS:

- a. Receive Wastewater Operations Committee report for July 2015.
- b. Approve a change of electricity service provider for the District's Irrigation Pump Station from Pacific Gas and Electric Company to MCE Clean Energy.

7. ANNUAL BUDGET: FY2015-16 FINAL BUDGET

- a. Present Final FY2015-16 District Annual Budget.
- b. Adopt Final FY2015-16 District Annual Budget.

- c. Adopt Resolution No. 3091 establishing appropriations limit for FY15-16.

8. NORTH BAY WATER REUSE AUTHORITY (NBWRA):

- a. Approve a Memorandum of Agreement (MoA) with the County of Marin for the County to pay the District one hundred forty-eight thousand one hundred fifty-three dollars (\$148,153) for the County's participation in the NBWRA Phase 2 Feasibility Study, and authorize the General Manager to execute it.

9. BOARD MEMBER REPORTS AND REQUESTS:

- a. California Association of Sanitation Agency (CASA) Annual Meeting.

10. INFORMATIONAL ITEMS:

(These items are for information only, no action will be taken on these items).

- a. New York Times article: "How California is Winning the Drought", August 14, 2015.

11. MANAGER'S ANNOUNCEMENTS:

12. ADJOURNMENT:

Next resolution no. 3092.

Next regular meeting date: Monday, September 14, 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: August 10, 2015

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 6:00 p.m., Monday, August 10, 2015, at the District Office, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Jean Mariani, Directors Jerry Peters, Gary Butler, William Long and Brant Miller.

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

ALSO PRESENT: Steve Krautheim, Field Services Manager, Novato Sanitary District
John Bailey, Project Manager, Veolia
John O'Hare, Pretreatment Programs Manager, Veolia
Erik Brown,) Technical Services Manager, Novato Sanitary District
(new hire)

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: Director Miller requested that item 14.b. *North Bay Watershed Association Board meeting*, be removed from the agenda as the meeting was cancelled. The agenda was approved as revised.

PUBLIC COMMENT:

The Manager-Engineer introduced Erik Brown, newly hired Technical Services Manager, to the Board and stated that his tentative start date will be September 1, 2015. Mr. Brown thanked the Board and the Manager-Engineer for the trust and confidence in offering him the position and stated that he looks forward to working at the District. The Board welcomed Mr. Brown.

REVIEW OF MINUTES:

Consider approval of minutes of the July 13, 2015 meeting.

On motion of Director Peters, seconded by Director Long, and carried unanimously, the July 13, 2015 Board meeting minutes were approved.

CONSENT CALENDAR:

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

- a. Approval of Board member disbursements in the amount of \$1,543.71, regular disbursements in the amount of \$271,434.27, and capital project disbursements in the amount of \$172,762.50. Ratification of July 27th regular disbursements in the amount of \$167,856.70, and capital project disbursements in the amount of \$27,707.62.
- b. Ratification of July 2015 payroll and payroll-related disbursements in the amount of \$210,063.82.
- c. Received deposit summary, July 2015.
- d. Received 4th Quarter Investment Report, Fiscal Year (FY) 2014-15.
- e. Received Accounts Receivable (AR) Summary Report as of August 6, 2015.

On approval of Director Peters, seconded by Director Butler and carried unanimously, the above listed Consent Calendar items were approved.

WASTEWATER OPERATIONS:

- Receive Wastewater Operations Committee Report. The Manager-Engineer stated that the Wastewater Operations Committee met on July 20, 2015 at 2:00 p.m. at the District office. John Bailey, Veolia Plant Manager, provided an overview of the Monthly Operations Report for June 2015 as presented to the Wastewater Operations Committee. He stated that the monthly average flow for June was 3.45 MGD (million gallons per day) and that water quality performance was excellent with no excursions or violations. He stated that the Recycled Water Facility produced 13.7 MG (million gallons) in June. He outlined the monthly safety and training activities, and stated that five notifications from residents were received in June.

The Plant Manager stated that Jerome meter readings continue to be performed in the treatment facility and in the Lea Drive neighborhood. He stated that the frequency of Jerome meter testing will be increased in the Lea Drive neighborhood. He provided an update of the excursion regarding the high coliform values for the Recycled Water Facility that were reported at the June Committee meeting. He stated that the problem appears to be at the clear well, not at the sample location as was previously thought. He noted that Veolia will continue to monitor the situation and will have additional details at the August Committee meeting.

The Manager-Engineer provided a summary of the odor control and landscaping report. He stated that the media in the large odor control bed between primary clarifiers #1 and #2 continues to perform well. He stated that sodium hypochlorite continues to be added as an oxidizer on an as-needed basis to the influent flow, with operations staff monitoring performance.

Field Services Manager, Steve Krautheim, provided a summary of the Collection System Operations Report, and reviewed the department's performance for June 2015. He noted that staff cleaned a total of 80,131 ft. of sewer lines and televised a total of 6,965 ft. He stated that, with the assistance of District Staff, an outside vendor foam-treated 209 line segments totaling 41,512 feet to inhibit root growth in the sewer mains and manholes. He stated that as of June 30th, District staff and the Collections

Department have worked a total of 1,570 accident-free days. He stated that there were no sanitary sewer overflows in June.

The Field Services Manager provided a summary of the Reclamation Facilities report. He stated that the rancher completed hay harvesting and began moving all cattle into the pastures. He stated that troubleshooting and repairs continue on the control systems at each site. The Field Services Manager stated that the leak on the Wildlife Pond Feed Line was repaired and it was put back into service. He stated that the sump pump in the Dedicated Land Disposal Area failed and is being replaced. He noted that there was no sludge handling activity in June.

SEWER USE ORDINANCE:

- Set a date for a public hearing to amend and restate District Ordinance No. 115 to incorporate changes to pretreatment program requirements. The Manager-Engineer provided an overview of Ordinance 115 which amended Ordinance No. 70. He stated that Ordinance 115 needs to be amended to incorporate changes to BOD, TSS, and pH local limits, and two non-substantial changes to satisfy requirements of the 2013 Pretreatment Compliance Audit. He discussed the sections of Ordinance 115 affected by the proposed modifications and noted that the proposed pretreatment program modifications have been approved by the Regional Water Quality Control Board by letter of July 24, 2015. The Manager-Engineer stated that the District needs to publish notice of the public hearing and requested that the Board authorize and set the hearing for the September 14th Board meeting.

On motion of Director Peters, seconded by Director Long, and carried unanimously, the Board set the date of September 14, 2015, for a Public Hearing to amend and restate District Ordinance No. 115 to incorporate changes to pretreatment program requirements.

CAPITAL PROJECTS:

- Collection System Improvements, Account No. 72706: Hamilton Trunk Sewer Replacement – Make CEQA findings, approve plans and specifications, and authorize Manager-Engineer to advertise for bids. The Manager-Engineer stated that the project consists of rehabilitating 900 feet of 24" diameter trunk sewer line located in an easement west of Hamilton Drive along the SMART rail bed. He stated that the existing trunk sewer is constructed of corrugated metal pipe, is about 60 years old, is failing, and needs to be replaced. He stated that the Engineer's Estimate for the replacement work is \$480,000. He noted that staff has completed the California Environmental Quality Act (CEQA) documentation and determined that the project is categorically exempt.

The Manager-Engineer recommended that the Board approve the CEQA findings, approve the plans and specification, and authorize the Manager-Engineer to advertise for bids. He stated that bids are expected to be received on September 3, 2015 and will be presented to the Board at a subsequent meeting. Discussion followed.

On motion of Director Peters, seconded by Director Long and carried unanimously, the Board approved the CEQA findings, approved the plans and specifications, and authorized the Manager-Engineer to advertise for bids – Hamilton Trunk sewer Rehabilitation Project; Account 72706: Collection System Improvements.

RECLAMATION – SLUDGE DISPOSAL, ACCOUNT NO 63115:

- Approve contract with Custom Tractor Services (CTS) for biosolids disposal and sludge lagoon cleaning in a not-to-exceed amount of \$187,000, and authorize the Manager-Engineer to execute it. The Manager-Engineer stated that under the terms of its discharge permit, the District is required to dispose of biosolids generated from its treatment facilities at its dedicated land disposal (DLD) site off of Highway 37, in accordance with Title 40 Code of Federal Regulations (CFR) Part 503. He stated that consistent with past practices, the District has contracted with CTS for its biosolids disposal by either spreading or by injection into the DLD. He stated that staff requested and received a proposal from CTS to perform these services at a cost of 2.4 cents per gallon plus a one-time setup fee of \$2,500. He noted that these prices and terms are consistent with last year's prices and terms.

On motion of Director Peters, seconded by Director Miller and carried unanimously, the Board approved a contract with Custom Tractor Services for their proposal that incorporates: (a) a not-to-exceed amount of \$125,000 for sludge pumping, and (b) a lump sum amount of \$62,000 for cleaning out the lagoons, and authorized the Manager-Engineer to execute the contract in the not-to-exceed amount of \$187,000.

ADMINISTRATION:

- Adopt Resolution No. 3090 Retitling Manager-Engineer Position to General Manager-Chief Engineer. President Mariani reviewed the item, and asked for comments from the Board. Director Peters expressed his agreement and stated that the change would more accurately describe the Manager-Engineer's duties.

On motion of Director Long, seconded by Director Miller, and carried unanimously, the Board ordered that the "Manager-Engineer" position be retitled to "General Manager-Chief Engineer", and the Board adopted Resolution No. 3090, authorizing retitling of the Manager-Engineer position to General Manager-Chief Engineer, effective immediately.

- Approve transfer of \$118,635.52 from the Capital Fund to the Operating Fund for staff time spent on Capital Fund projects in FY 14/15. The Manager-Engineer stated that at the end of each fiscal year, the Operating Fund is reimbursed from the Capital Fund for staff time spent on Capital Projects. He noted that this truing up process is a standard procedure.

On motion of Director Peters, seconded by Director Miller, and carried unanimously, the Board approved a transfer of \$118,635.52 from the Capital Fund to the Operating Fund for staff time spent on Capital Fund projects in FY 14/15.

- Receive report on 2016 CalPERS Health Plan Premium rates. The Manager-Engineer stated that the 2016 CalPERS Health Plan Premium rates were released and show an increase of approximately 4.5% for regular health coverage and a 0.58% increase in Medicare rates. He stated that the preliminary FY 15/16 budget had projected an increase of 7% across both sets of rates. He stated that the final budget will be revised to reflect the actual amounts.

President Mariani noted an error on the Board report in the 'Budget Information' section: "The Preliminary FY2015-16 Budget had projected a ten percent (7%) increase...". The sentence should read: "projected a ten percent (10%) increase...".

PERSONNEL:

- Approve promotion of Collections Lead Worker Dasse de longh to Interim Collection System Superintendent, including an interim salary increase to \$8,917/month (Salary Range MC 115, Step B). The Manager-Engineer stated that after the retirement of Collection Systems Superintendent Tim O'Connor on June 25, 2015, the District considered various options to fill the vacancy. He stated that after looking at these options, staff recommended that Collection Systems Lead Worker Dasse de longh be appointed as Interim Collection Systems Superintendent, with the goal of appointing him to the position on a permanent basis at the conclusion of a satisfactory transition period. He noted that at the end of the transition period, staff will prepare a Board report along with a recommendation for permanent appointment, as appropriate.

Director Miller stated that he is a strong supporter of promoting from within and asked about the required certification in the Collection Systems Superintendent position. The Manager-Engineer stated that a Collection Systems Maintenance Certification, offered through the California Water Environment Association (CWEA) is preferred, but not mandated by the State of California. He stated that as part of the transition plan, an outside individual will be brought in to assist with and train Mr. de longh in his new duties and to provide assistance with the CWEA Certification as necessary. The Manager-Engineer stated that he is inclined to not make the Certification mandatory and noted that Mr. de longh understands the significance of achieving the Collection Systems Maintenance Certification.

Directors Butler and Peters expressed their appreciation for Mr. de longh's performance and commitment to the District as a Collection System Lead Worker.

On motion of Director Long, seconded by Director Peters, and carried unanimously, the Board approved the promotion of Dasse de longh to Interim Collection Systems Superintendent with an interim salary increase to \$8,917/month, effective August 10, 2015.

BOARD OF DIRECTORS:

- Consider authorizing compensation for attendance by District Board delegates at "Regular" Board Committee Meetings. The Manager-Engineer stated that this item was

considered at the July 13th Board meeting and staff was directed to further research District records on the topic of Board Committee compensation. He stated that based on this research and the documentation available, he recommends the Board authorize compensation for attendance by Board delegates at “Regular” Board Committee meetings.

On motion of Director Peters, seconded by Director Miller, and carried unanimously, the Board approved: (a) authorization for paid attendance by a District board member delegate at NBWA Board meetings, and (b) A single payment at the current \$225 per meeting rate for Board delegate attendance at the California Association of Sanitation Agencies (CASA) and California Sanitation Risk Management Authority (CSRMA) Board meetings.

INFORMATIONAL ITEMS:

- San Francisco Chronicle Article: “Oaklanders furious over unexpected jumps in garbage collection costs.” – July 26, 2015.

- University of North Carolina (Chapel Hill), Environmental Finance Center article: “Emerging Themes in Environmental Finance.”

- Marin Independent Journal Article: “Novato City Manager Announces Resignation – August 4, 2015.

BOARD MEMBER REPORTS AND REQUESTS:

- North Bay Water Reuse Authority (NBWRA) Board meeting. Director Long discussed his attendance at the North Bay Water Reuse Authority (NBWRA) Board meeting which was held on Monday, July 27th. He stated that a Congressional Staff tour of some of the NBWRA projects will occur on August 20th. He stated that he will be assisting with the tours and for this reason will be unavailable to attend the Annual CASA Conference in San Diego, August 19 – 21.

Director Butler stated that he has made the decision to not run for re-election for the two-year District Board of Directors seat as he will be running for City Council. He stated that he has enjoyed serving on the Board and thanked the Manager-Engineer and fellow Board members.

President Mariani stated that, based on the County Registrar of Voters Office, she and Director Peters are running unopposed for their Board positions.

The Manager-Engineer stated that prior to the Board meeting, he received an email from Dan Miller, County Registrar of Voters, confirming the status of President Mariani and Director Peters.

MANAGER'S ANNOUNCEMENTS:

- Confirming the offer of the Technical Services Manager position to Erik Brown, with an anticipated start date of September 1, 2015.
- Annual CASA conference in San Diego, August 19th – 21st. The Manager-Engineer will attend as well as Directors Miller, Peters, and Mariani.
- The next Regular Board meeting will be held on Monday, August 24th at 6:00 p.m. at the District office. The Final Budget for Fiscal Year 15/16 will be presented for adoption .
- The Wastewater Operations Committee meeting will be held on Monday, August 17th 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 7:08 p.m.

Respectfully submitted,

Sandeep Karkal
Secretary

Julie Swoboda, Recording

**Novato Sanitary District
Capital Projects Check Register**

August 24, 2015

Item 5.a.
(2 pages)

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Aug 24, 15			
08/24/2015	2908	Linscott Engineering Contract...	5,502.50
08/24/2015	2909	RMC Water & Environment, Inc.	3,517.10
Aug 24, 15			<u>9,019.60</u>

Novato Sanitary District Operating Check Register

August 24, 2015

Date	Num	Name	Credit
Aug 24, 15			
08/24/2015	58539	Pacific, Gas & Electric	80,732.58
08/24/2015	58519	Bay Area Air Quality	16,959.00
08/24/2015	58524	CSRMA-	13,347.43
08/24/2015	58514	American Express-21007	7,865.11
08/24/2015	58541	Regional Government Services	6,440.00
08/24/2015	58548	WECO	4,099.12
08/24/2015	58529	Harris & Associates, Inc	2,750.00
08/24/2015	58517	Bartle Wells Assoc, Inc	2,423.00
08/24/2015	58545	U.S. Bank Corporate	2,420.00
08/24/2015	58536	North Marin Water District - Lab	2,255.00
08/24/2015	58531	Irvine Consulting Services Inc.	2,205.00
08/24/2015	58535	North Marin Water District	1,904.83
08/24/2015	58533	Marin Mechanical II, Inc.	1,395.18
08/24/2015	58537	North Marin Water District Payroll	1,337.50
08/24/2015	58528	Grainger	1,143.93
08/24/2015	58530	IEDA, INC	1,104.00
08/24/2015	58543	Steven Engineering Inc.	703.24
08/24/2015	58515	AutoSonics	674.25
08/24/2015	58522	CDW Government, Inc.	631.40
08/24/2015	58546	Verizon EQ	590.41
08/24/2015	58518	Batteries Plus Inc	547.72
08/24/2015	58521	Cagwin & Dorward Inc.	435.00
08/24/2015	58523	Central Marin Sanitation District	400.00
08/24/2015	58516	B.W.S. Distributors, Inc.	387.46
08/24/2015	58542	Staples Business Adv Inc.	375.12
08/24/2015	58520	BoundTree Medical, LLC	248.96
08/24/2015	58525	Diesel Emissions Service, Inc.	248.11
08/24/2015	58532	Marin County Ford	244.12
08/24/2015	58540	Red Wing Shoe Store	200.00
08/24/2015	58513	Able Tire & Brake Inc.	162.95
08/24/2015	58538	Orkin Pest Control, Inc.	144.56
08/24/2015	58526	Don Johnsons Pool Service	130.78
08/24/2015	58547	Verizon Wireless-	97.95
08/24/2015	58544	Stevenson, Jeffrey MD	85.00
08/24/2015	58527	First Alarm	38.74
08/24/2015	58534	North Marin Auto Parts	19.60
Aug 24, 15			<u>154,747.05</u>

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

Item 5.b.

<u>Date</u>	<u>Description</u>	<u>Amount</u>
08/31/2015	August - Payroll	93,150.14
08/21/2015	August - Retirees Health Benefits	12,274.62
08/05/2015	Personnel agreement	26,892.00
08/21/2015	CALPERS Retirement	7,137.41
08/21/2015	United States Treasury	17,884.12
08/21/2015	CalPers Supplemental Income Plan	2,500.00
08/21/2015	EDD	5,496.45
08/21/2015	Lincoln Financial Group	8,214.60
08/21/2015	Lincoln Financial Group-401a Plan	3,162.76
08/21/2015	Lincoln Financial Group-401a Plan	3,201.03
08/21/2015	CALPERS Retirement	12,285.11
08/21/2015	CALPERS Retirement Funding	12,232.00
08/21/2015	Local Union 315	500.00
08/21/2015	Delta Dental	2,396.82
08/21/2015	Operating Engineers Trust	302.08
		<u>207,629.14</u>

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Receive Wastewater Operations Committee Meeting Report, July 2015	MEETING DATE: August 24, 2015 AGENDA ITEM NO.: 6.a.
RECOMMENDED ACTION: Information. Receive report.	
SUMMARY AND DISCUSSION: <p>The July 2015 reports for wastewater treatment operations, collection system operations, and reclamation facilities are attached.</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 8.456 MG of recycled water in July, and had no excursions. Safety performance was excellent with another accident-free month for a total of 1,893 accident-free days at the end of May. The Discharge Monitoring Report (DMR), the Electronic Self-Monitoring Report (e-SMR), and the Recycled Water Report, for June 2015, were all submitted on July 20, 2015.</p> <p>Odor Control and Landscaping</p> <p>All of the odor control beds were topped off with media in July to preclude potential odor breakthrough. Operations staff continued to perform liquid phase sulfide sampling and analysis. Also, operations staff continued to add sodium hypochlorite at the influent junction structure as needed. The redwood trees replanted to the northeast corner of the plant site, and the site vegetation in general, appear to be doing well under the drought conditions, likely due to irrigation with recycled water.</p> <p>Collection System and Pump Stations</p> <p>Staff cleaned a total of 82,722 ft of sewer lines, televised 6,798 ft with the CCTV truck, and 5,303 ft with the Push Cam. Staff also assisted in root-treating 23,974 ft of lines, conducted 360 lift station inspections, and completed maintenance inspections on nine (9) air relief/vacuum (ARVs) valves.</p> <p><u>Safety:</u> No lost time accidents in July 2015 for a total of 1,601 accident-free days.</p> <p><u>Standard and Emergency Operating Procedures (SOPs & EOPs):</u> No new core SOPs were generated however, staff continues to use the recently completed draft Core Competency Checklist for training purposes.</p> <p><u>Sanitary Sewer Overflows (SSOs):</u> There were no SSOs in July 2015.</p> <p>Reclamation Facility</p> <p>The rancher tended to his cattle this month treating them for flies to prevent the spread of pink eye. Parcels were irrigated on all Site without any reportable issues. The Wildlife Pond level was raised to 6 feet. The sump pump in the Dedicated Land Disposal (DLD) Area was replaced.</p>	
Attachment to this Item Summary: Attachment 1: Agenda Packet from August 17, 2015 Wastewater Operations Committee meeting, (July 2015 Reports).	
DEPT.MGR.: JB (Veolia), SRK, DD	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT

Meeting Date: August 17, 2015

The Wastewater Operations Committee of the Novato Sanitary District will hold a meeting at 2:00 PM, Monday, August 17, 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. CONSIDER APPROVAL OF MINUTES OF THE JULY 20, 2015 MEETING

4. WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR JULY 2015:

- a. Treatment Plant Performance Report
- b. Maintenance Report
- c. Safety and training
- d. Odor control and landscaping report.

5. COLLECTION SYSTEM OPERATIONS AND MAINTENANCE REPORT FOR JULY 2015:

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

6. RECLAMATION FACILITY REPORT FOR JULY 2015:

- a. Ranch Operations
- b. Irrigation Parcels
- c. Irrigation Pump Station

7. OTHER ITEMS:

8. 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.

July 20, 2015

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 2:01 p.m., Monday, July 20, 2015, at the District Office, 500 Davidson Street, Novato.

MEMBERS PRESENT: Committee Member Jerry Peters and Alternate Member Jean Mariani. Committee Member Brant Miller was absent.

STAFF PRESENT: Steve Krautheim, Field Services Manager
John Bailey, Project Manager, Veolia
Julie Swoboda, Administrative Secretary

STAFF ABSENT: Sandeep Karkal, Manager-Engineer

AGENDA APPROVAL: Approved as presented.

PUBLIC COMMENT: None.

APPROVAL OF MEETING MINUTES FOR JUNE 15, 2015: The June 15, 2015 meeting minutes were approved as presented.

WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR JUNE 2014:

- Treatment Plant Performance Report, Maintenance Report and Safety & Training:

Veolia Project Manager John Bailey provided an overview of treatment plant operations for the month of June. He discussed key operations and maintenance events at the Novato facility, the Ignacio Transfer Pump Station, the Recycled Water Plant, and the Sludge Lagoons. He noted that the facility transitioned from Bay discharge to reclamation/storage on June 1st.

The Project Manager reviewed the Laboratory Activities Summary as prepared by Environmental Services Supervisor Liz Falejczyk. He noted that Stephanie Larson, Sonoma County Director and Livestock Range Management Advisor at University of CA Cooperative Extension toured and inspected the reclamation pastureland in preparation for the Irrigated Pasture Report. He stated that Veolia hosted a Comprehensive Ethics and Integrity Training for Environmental Laboratory Professionals presented by Diane Lawver of Quality Assurance Solutions, LLC.

The Project Manager stated that a new Jerome Meter Readings report was provided, as requested at the previous Committee meeting. He outlined the report and stated that no readings were found in the Lea Drive neighborhood with a number greater than 0.001 units. He stated that Veolia will provide additional testing in the neighborhood to gain parameters regarding odor levels. The Project Manager provided additional information regarding the high coliform values for the Recycled Water Facility that were reported at

the June Committee meeting. He stated that the problem appears to be at the clear well, not at the sample location as was previously thought. He noted that Veolia will continue to monitor the situation and will have additional details at the August Committee meeting.

The Project Manager discussed training events completed in June and stated that as of June 30th, Veolia employees have been accident free for a total of 1,862 days. He discussed the training Veolia employees participated in during June. He reviewed the operations and maintenance report and stated that 13.747 MG (million gallons) of recycled water was produced during the month.

- Odor control and landscaping report: The Field Services Manager discussed odor control related activities in June. He stated that monitoring of the media continues in the large odor control bed and that operations staff will be evaluating additional topping off of the media in July. He noted that the landscaping at the District's fence-line on Lea Drive and at the northeast corner area of the treatment facility is being irrigated with recycled water and seems to be responding well during the drought conditions.

COLLECTION SYSTEMS OPERATION AND MAINTENANCE REPORT FOR JUNE 2015:

The Field Services Manager presented the Collection Systems Monthly Report for June 2015. He reported that the Collection Systems crew cleaned a total of 80,131 feet of sewer pipeline and that the department completed 413 maintenance work orders which were generated for June. He stated that the District's CCTV van (Closed Circuit TV) televised 56 line segments for 6,965 feet of production and he noted that three areas were identified as needing spot repairs. He reported on the current Collection System Projects, and stated that staff attended a Confined Space Training. He stated that as of June 30, 2015, the Collections Department and the District have worked accident free for a total of 1,570 days.

The Field Services Manager reported that there were zero sanitary sewer overflows in June.

RECLAMATION FACILITY REPORT FOR JUNE 2015:

The Field Services Manager presented the Reclamation Facilities report for June. He stated that the protective corral fencing panels for the new enclosures around the exposed pull boxes in Site 7 were received and one was installed. He stated that full time irrigation began in June and that the Wildlife Pond Feed line repair was completed and placed back into service. He stated that there were no sludge handling activities in June.

The Field Services Manager stated that approximately 59.2 MG of treated water was used for irrigation in the month of June.

ADJOURNMENT: There being no further business to come before the Committee, the meeting adjourned at 2:36 p.m.

Respectfully submitted,

Steve Krautheim
Field Services Manager

Julie Swoboda, Recording

DRAFT



July 15, 2015

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

Subject: Veolia Water Operations Report – July 2015

Dear Mr. Karkal:

I am pleased to provide the Monthly Operation report for July 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 fluid and cursive, with a large initial "J" and "B".

John Bailey
Project Manager, Veolia



**MONTHLY OPERATIONS REPORT
July 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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TREATMENT PLANT PERFORMANCE SUMMARY: July 2015:

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	3.33	4.22	N/A	N/A
Max Peak Hour, MGD – No Significant Rainfall	N/A	~ 7	N/A	N/A
Influent				
BOD ₅ , lb/day (month ave/max)	8,518	11,490	N/A	N/A
TSS, lb/day (monthly ave/max)	9,773	15,095	N/A	N/A
Effluent				
BOD ₅ , mg/L (monthly ave/weekly max)	9	16	40	N/A
TSS, mg/L (monthly ave/weekly max)	<4	6	N/A	N/A
BOD ₅ - % Removal, Minimum	96	N/A	N/A	N/A
TSS - % Removal, Minimum	99	N/A	N/A	N/A
Ammonia, mg/L – (monthly ave/daily max)	N/A	N/A	N/A	N/A
pH, su (min / max)	6.9	7.0	6.0	9.0
Enterococcus, MPN/100 ml (30 day geo mean)	N/A	N/A	N/A	N/A
Fecal Coliform, MPN/100 ml (30 day median)	N/A	N/A	N/A	N/A
Fecal Coliform, MPN/100 ml (90 th percentile)	N/A	N/A	N/A	N/A
Total Coliform, MPN/100 ml (5 Sample Median/Max)	39	49	240	10,000
Total Permit Exceedances (NPDES)	0			

Title 22 - Recycled Water Production and Quality

Description	Units	Value	Limit
Volume Produced	Million Gallons	8.456	N/A
Average Turbidity	NTU	1.1	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	0	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	7.3	2 mg/L
Maximum Total Coliform	MPN/100 ml	<2	240
Maximum Total Coliform 2 Samples 30 d	MPN/100 ml	<2	23
Total Coliform 7 Sample Median	MPN/100 ml	<2	2.2

Discussion of Violations / Excursions:

Waste Discharge Requirements (WDR) – None

Recycled Water – None

Rainfall. – N/A

SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTP and Ignacio Transfer Pump Station completed
- Five Minute Tailgate training is held daily with all staff.
- No safety incidents for the month of July.
- Accident Free: 6/1/10 – 7/31/15: 1,893 days
- Monthly Safety Topics and Training:
 - Emergency Action Plan Overview
 - Fire Extinguishers

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

- Routine rounds, readings and maintenance
- Hardwired new sampler
- Annual service on emergency generators
- Annual service on wet weather pumps
- Topped off media on all bio-filters (foul air scrubbers)
- Unplugged septage receiving station, grease inadvertently dumped. Waste hauler took responsibility and assisted with cleanup
- Annual forklift service
- Temporary repair to ferric eyewash station
- Repaired #3 waterline behind Primary Clarifier #2
- Repaired piping of High Pressure Water Pump #2

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

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

Ignacio Transfer Pump Station

- Routine rounds, readings and maintenance
- Annual service on emergency generator

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

- None

Recycled Water Plant (RWP)

- Performed plant rounds and maintenance
- Replaced sensor on turbidity analyzers
- Repairs to polymer pump #1

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

- None

Sludge Lagoons

- Performed routine rounds and inspection
- Cleaned sludge lines
- Changed out decant pump return pump

LABORATORY ACTIVITIES SUMMARY:**Irrigation Wet Well Sampling**

Monthly sampling of the irrigation wetwell was performed in July and will continue throughout reclamation / irrigation season. The data collected will be compiled and reported in the 2015 triennial Irrigated Pasture Report.

Wildlife Pond and Reclamation Activities

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

Public Education**Algebra Academy**

Liz Falejczyk, Kurt Hawkyard, and Christian Williams participated in the Annual Algebra Academy held at the NSD site on July 27th. Liz, Kurt and Christian invested many hours preparing and it paid off. The lab was laid out in stations depicting processes in a wastewater plant using 1-liter beakers and other lab materials. Kurt Hawkyard demonstrated the analysis of Total Suspended Solids (TSS) using influent (50 mLs) and Effluent (1000 mLs) and the weighing of glass fiber filters before and after filtration and drying. Using the values generated we then calculated the influent and effluent TSS and the percent removal. How dilution works was demonstrated using an indicator, Phenolphthalein, which is a fuchsia color at high pH and a series of volumetric flasks from 10-2000mL which went from dark fuchsia to pale pink. Applying dilutions to plant operations was demonstrated by adding different amounts of polymer to waste activated sludge to determine the proper dilution to achieve effective coagulation. Using a gang mixer (borrowed from NMWD) we were able to provide a dramatic visual demonstration, evidenced by the oohs and aahs of the students. Christian Williams then demonstrated how we use algebra in our operation by calculating cost associated with polymer use on an annual basis

Marin County Fair

Kurt Hawkyard staffed the Public Education booth for the Marin County Wastewater Agencies at the Marin County Fair on July 1 & 2. Adults and Children are encouraged to take environmental quizzes which give us the opportunity to gauge knowledge of wastewater and stormwater issues and engage the public in conversations about those topics. Prizes are awarded for participation.

ADMINISTRATION:

- June Electronic Self-Monitoring Report (SMR) submitted on July 20, 2015
- June Electronic Discharge Monitoring Report (DMR) submitted on July 20, 2015
- June Recycled Water Report submitted on July 20, 2015

ODORS:

- Jerome Meter (H2S) readings performed in neighborhood and within treatment plant.
- All readings in neighborhood were below the detection threshold
- Five contacts all at the West end of Lea Drive. Odors characterized as Headworks and Bio-Filters

MISCELLANEOUS

- Process Control Management Plan (PCMP) meetings held weekly.
- Recruitment open for Operator III.
- On July 27th NSD and Veolia hosted the Algebra Academy. Students learned the importance of mathematics in a work environment and how we use algebra and science on a daily basis. Plant tours and “hands-on” laboratory analysis made for an exciting day.

Veolia Support Staff On/Off Site (Various Times)

John O'Hare	Technical Support
Dave Coffman	Asset Management
Dennis Flosi	Electrical, Instrumentation, & Controls

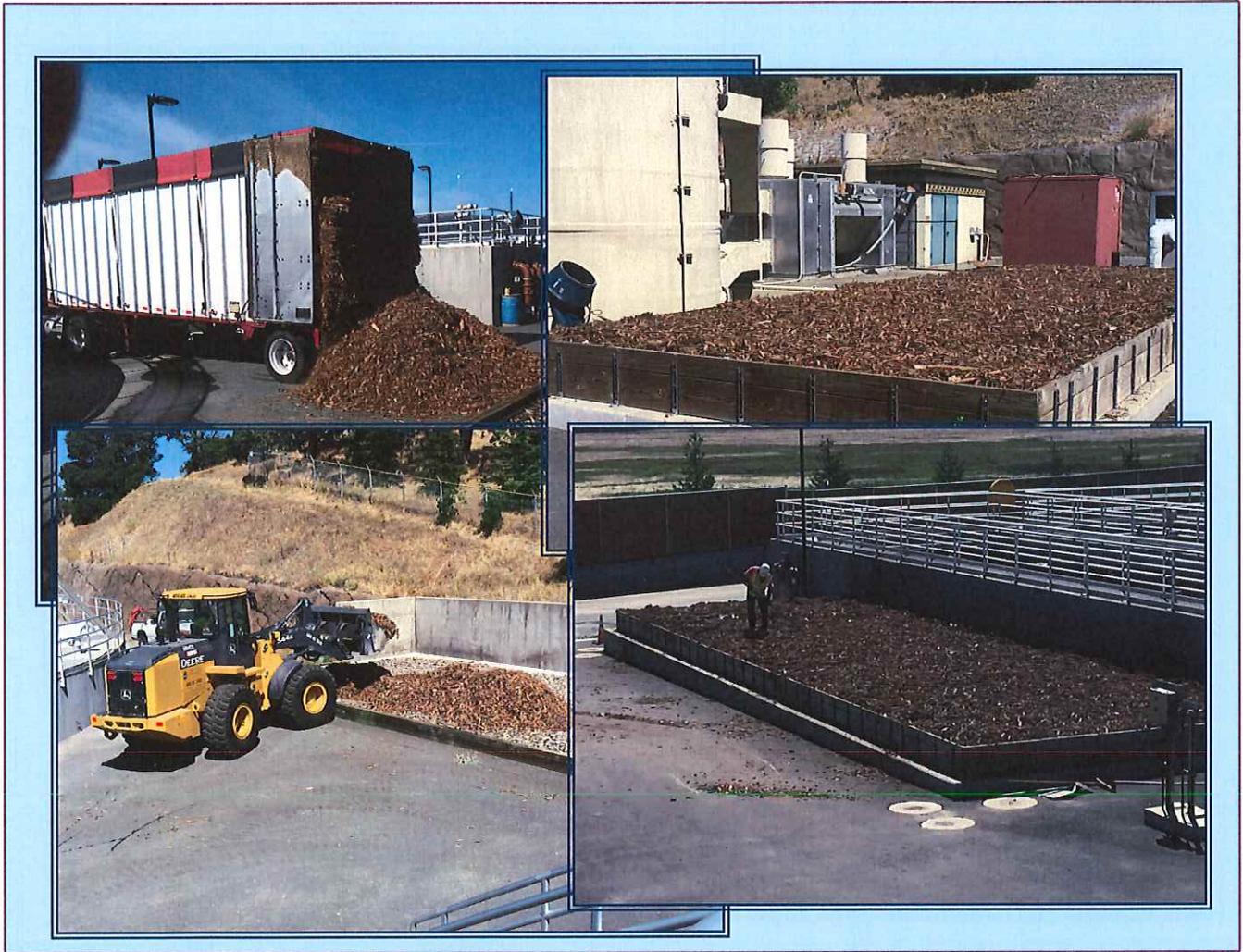


CHANGE OUT LAMPS & BALLAST ON UV DISINFECTION
July 2015





TOPPING OFF BIOFILTER MEDIA
July 2015





ALGEGRA ACADEMY – NORTH BAY LEADERSHIP COUNCIL
July 2015



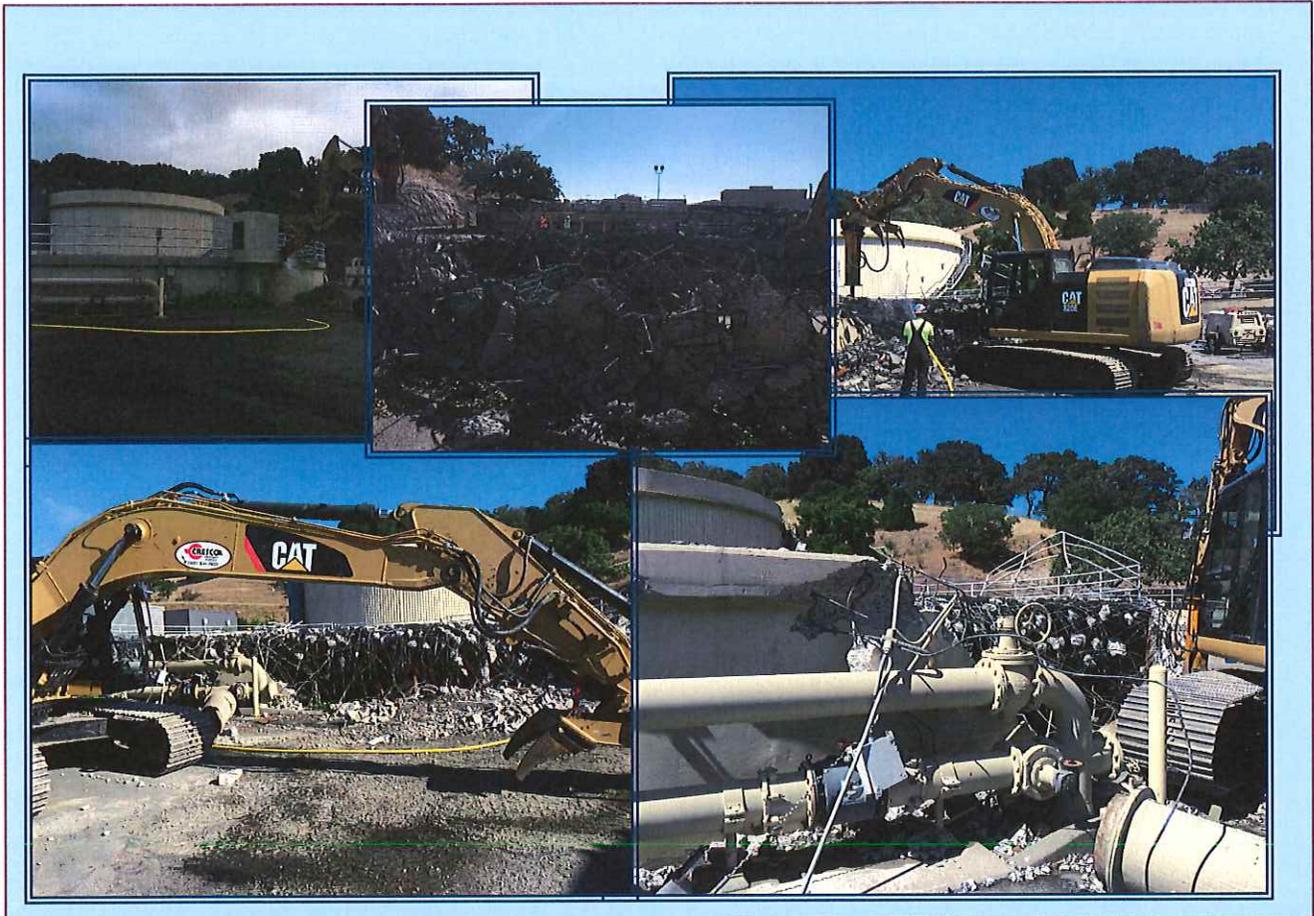


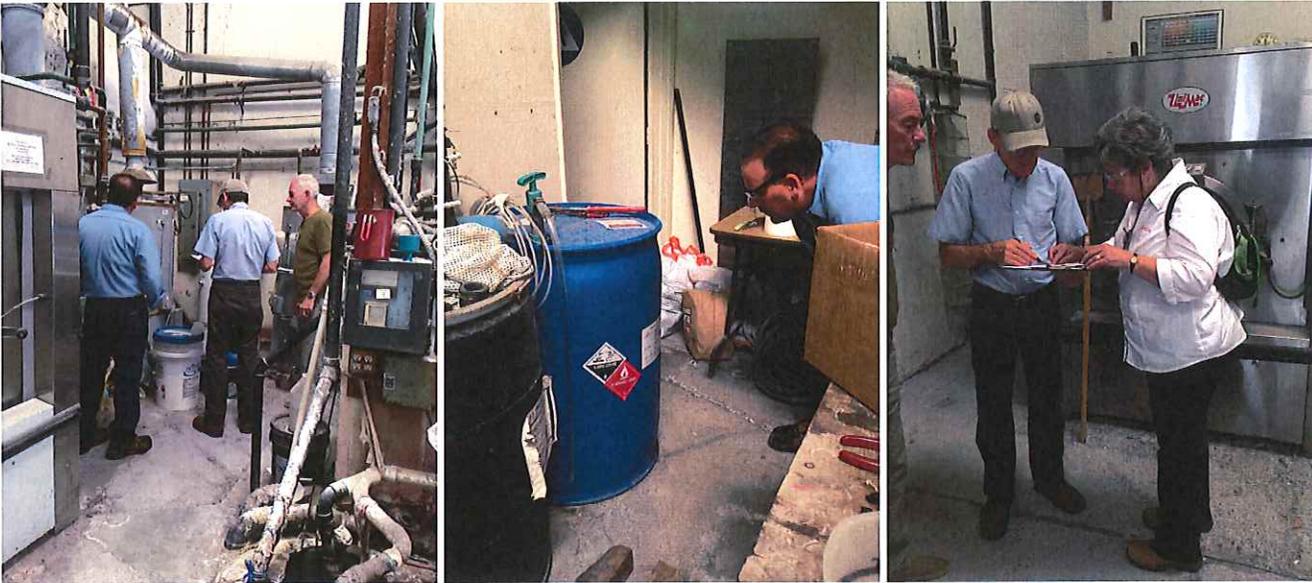
ALGEGRA ACADEMY – NORTH BAY LEADERSHIP COUNCIL
July 2015





DEMOLITION OF OLD AERATION BASINS
July 2015

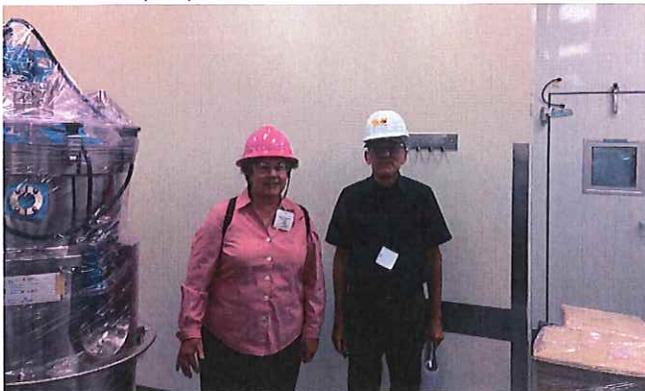




Buck Center 7/14/2015



BioMarin 7/22/2015



Novato Sanitary District
BOD/TSS Report



July, 2015

Date	Flow MGD	Influent				Effluent				BOD % Removal PERCENT	TSS % Removal PERCENT	
		BOD		TSS		BOD		TSS				
		mg/l	lb/d	mg/l	lb/d	mg/l	lb/d	mg/l	lb/d			
07/01/15	3.19											
07/02/15	3.06											
07/03/15	3.05											
07/04/15	2.82											
07/05/15	3.06											
07/06/15	3.62											
07/07/15	3.52	276	8,102	276	8,102	19	558	8	235	93.1	97.1	
07/08/15	4.22	271	9,538	297	10,453	9	317	3	106	96.7	99.0	
07/09/15	3.74	259	8,079	296	9,233	19	593	7	218	92.7	97.6	
07/10/15	3.46											
07/11/15	4.00											
07/12/15	3.48	342	9,926	410	11,900	12	348	4	116	96.5	99.0	
07/13/15	2.99	295	7,356	266	6,633	6	150	3	75	98.0	98.9	
07/14/15	3.04											
07/15/15	3.00											
07/16/15	3.45	274	7,884	328	9,438	11	317	5	144	96.0	98.5	
07/17/15	2.81											
07/18/15	3.37											
07/19/15	3.26											
07/20/15	3.39											
07/21/15	4.04	341	11,490	448	15,095	8	270	5	168	97.7	98.9	
07/22/15	3.25	265	7,183	266	7,210	<5	<136	<3	<81	98.1	98.9	
07/23/15	3.36											
07/24/15	3.18	268	7,108	373	9,892	<5	<133	<3	<80	98.1	99.2	
07/25/15	3.41											
07/26/15	3.46											
07/27/15	3.12											
07/28/15	3.14	265		328		5		4				
07/29/15	3.26	327		306		<5		<3				
07/30/15	3.24	309		286		6		<3				
07/31/15	3.23											
Weekly Averages												
07/04/15	Week 1	300	8,475	308	8,694	8	232	4	122			
07/11/15	Week 2	269	8,573	290	9,263	16	489	6	186			
07/18/15	Week 3	304	8,389	335	9,323	10	271	4	112			
07/25/15	Week 4	291	8,593	362	10,732	6	179	4	110			
	Week 5											
Monthly												
Minimum		2.81	259	7,108	266	6,633	<5	<133	<3	75	93	97
Maximum		4.22	342	11,490	448	15,095	19	593	8	235	98	99
Total		103.22										
Average		3.33	291	8,518	323	9,773	<9	<313	<4	<136	96	99

Novato Sanitary District
Conventional Pollutants Report



July, 2015

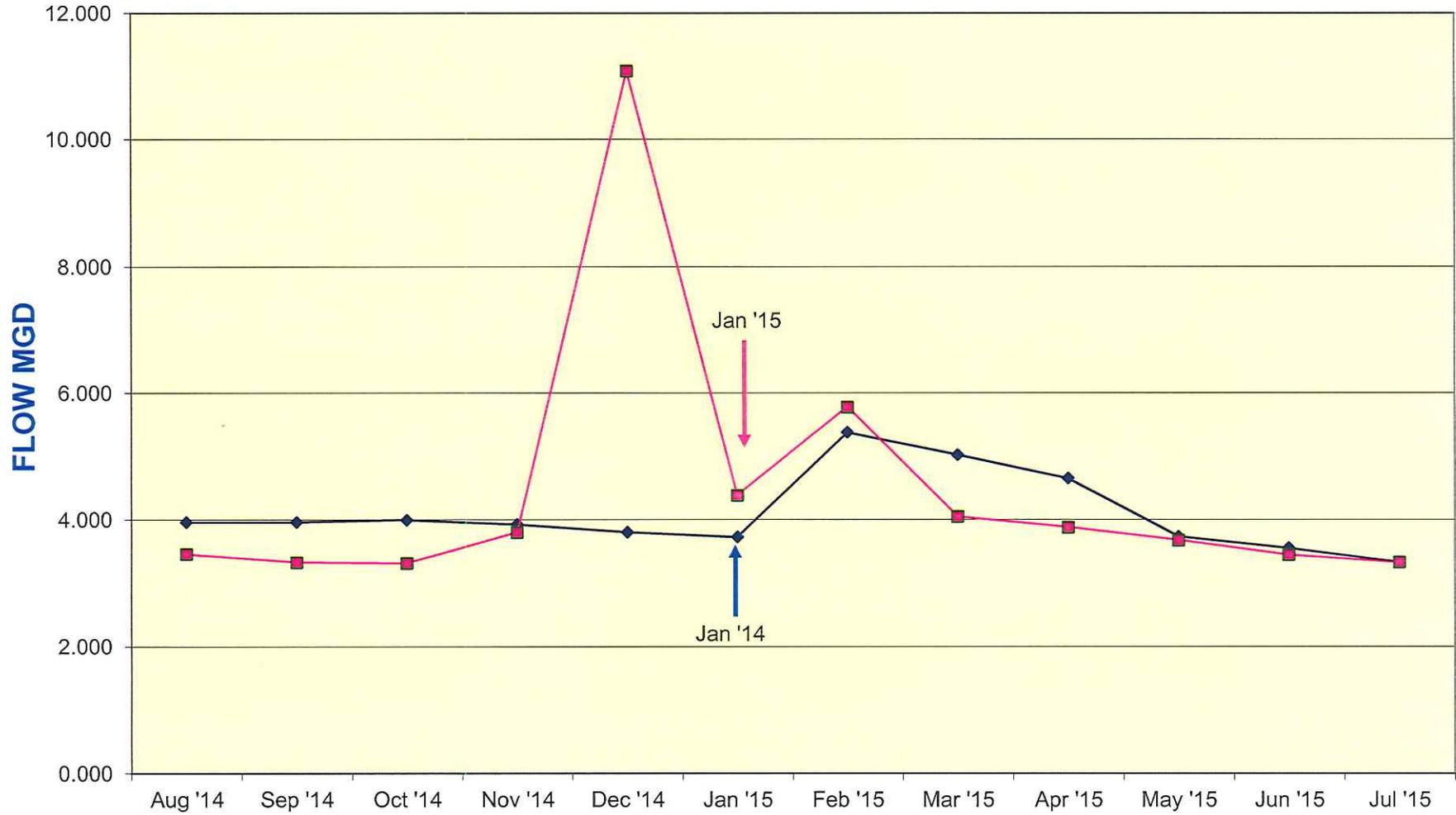
Date	INFLUENT - A001			Effluent - E002							
	Flow Total	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Unionized Ammonia	Oil & Grease	Temp
				Fecal	Entero	Total					
	MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L		Deg C
07/01/15	3.19						6.9				24.4
07/02/15	3.06						6.9				24.8
07/03/15	3.05						7.0				24.7
07/04/15	2.82										
07/05/15	3.06										
07/06/15	3.62						6.9				24.1
07/07/15	3.52					17	7.0				24.0
07/08/15	4.22					8	6.9				23.7
07/09/15	3.74					6	6.9				23.5
07/10/15	3.46						6.9				23.7
07/11/15	4.00										
07/12/15	3.48					5					
07/13/15	2.99					8	7.0				24.6
07/14/15	3.04						7.0				24.4
07/15/15	3.00	7.0					7.0				24.6
07/16/15	3.45					23	7.0				24.1
07/17/15	2.81	7.1					7.0				24.4
07/18/15	3.37										
07/19/15	3.26										
07/20/15	3.39	7.0					7.0				25.4
07/21/15	4.04					23	7.0				24.7
07/22/15	3.25					49	7.0				24.4
07/23/15	3.36						7.0				24.3
07/24/15	3.18	7.3				7	7.0				24.2
07/25/15	3.41										
07/26/15	3.46										
07/27/15	3.12						7.0				24.5
07/28/15	3.14					39	6.9				25.0
07/29/15	3.26					33	6.9				25.3
07/30/15	3.24					46	6.9				25.3
07/31/15	3.23						6.9				24.4
Monthly											
Minimum	2.81	7.0				5	6.9				23.5
Maximum	4.22	7.3				49	7.0				25.4
Total	103.22										
Average	3.33	7.1					7.0				24.5

NOVATO SANITARY DISTRICT RECYCLED WATER COMPLIANCE SUMMARY REPORT

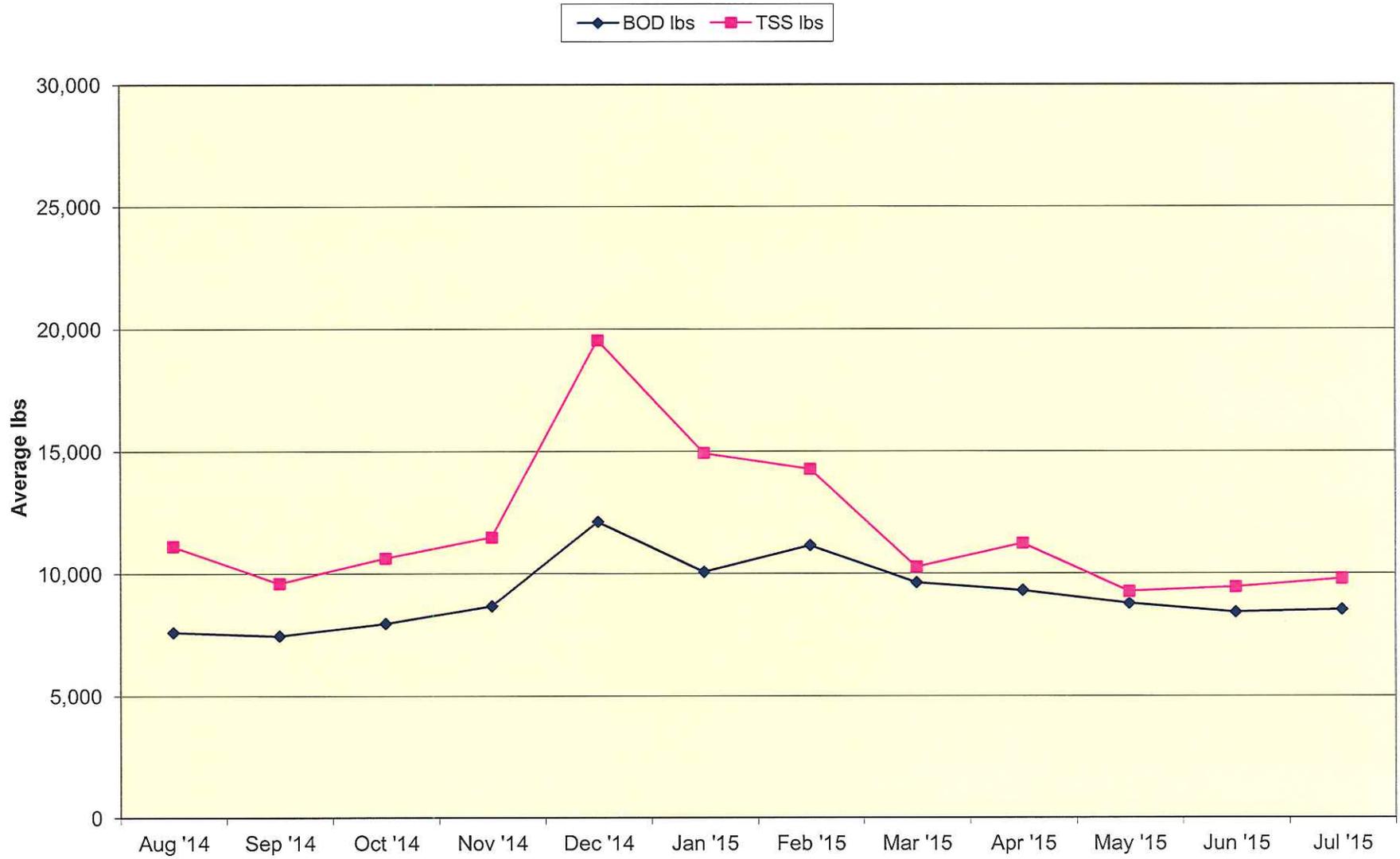
Date	Filter Influent Flow	Recycled Water Flow to Plum St.	Recycled Water Banked	Banked Water To Plum Street Tank	Potable Water To Plum St Tank	Recycled Water Influent Turbidity Max	Recycled Water Influent Turbidity Ave.	Minutes Over 5 NTU Turbidity	Filter Effluent 24 Hr Average Turbidity	Recycled Water Inf Chlorine Dose	Filter Effluent Dissolved Oxygen	Filter Effluent Total Coliform	Chlorint Contact Time
	MGD	MGD	MG	MGD	MGD	NTU	NTU	(m)	NTU	(mg/l)	(mg/l)	MPN/100m	Minutes
7/1/2015	0.720	0.066					3.3	0	1.8		7.3	<2	>450.000
7/2/2015	0.640	0.092					10.4	0	1.6			<2	>450.000
7/3/2015				0.086	0.574							<2	
7/4/2015					0.545								
7/5/2015	0.640	0.571			0.018			0	1.4		7.9	<2	>450.000
7/6/2015	0.750	0.590						0	1.5		7.5	<2	>450.000
7/7/2015	0.720	0.423						0	1.2		7.7	<2	>450.000
7/8/2015	0.660	0.130						0	1.5			<2	>450.000
7/9/2015	0.660	0.182						0	1.6			<2	>450.000
7/10/2015	0.650	0.178						0	1.2			<2	>450.000
7/11/2015	0.650	0.231						0	1.0			<2	>450.000
7/12/2015	0.820	0.831						0	0.9		8.0	<2	>450.000
7/13/2015	0.640	0.241						0	1.1		7.9	<2	>450.000
7/14/2015	0.650	0.037						0	1.1		8.2	<1.8	>450.000
7/15/2015	0.710	0.164					1.8	0	1.1			<2	>450.000
7/16/2015	0.670	0.097					1.8	0	1.0			<2	>450.000
7/17/2015	0.700	0.340					1.6	0	1.0			<2	>450.000
7/18/2015	0.650	0.223					1.6	0	1.1			<2	>450.000
7/19/2015	0.660	0.218					1.9	0	0.9			<2	>450.000
7/20/2015	0.640	0.302					1.6	0	0.8		7.9	<2	>450.000
7/21/2015	0.230	0.061						0	0.7			<2	>450.000
7/22/2015	0.620	0.319					1.7	0	1.0		8.0	<2	>450.000
7/23/2015													
7/24/2015	0.700	0.522					1.2	0	1.0		8.4	<2	>450.000
7/25/2015	0.670	0.464					1.2	0	1.1			<2	>450.000
7/26/2015	0.870	0.794					0.9	0	1.0			<2	>450.000
7/27/2015	0.650	0.234					1.0	0	1.1		7.9	<2	>450.000
7/28/2015	0.660	0.389					1.5	0	1.0		8.0	<2	>450.000
7/29/2015	0.670	0.194					1.7	0	1.0		8.5	<2	>450.000
7/30/2015	0.680	0.244					1.5	0	1.0			<2	>450.000
7/31/2015	0.660	0.319					2.0	0	1.1			<2	>450.000
Total	18.640	8.456		0.086	1.137		36.7	0	31.8		103.2	<52	>12,600.0
Minimum	0.230	0.037		0.086	0.018		0.9	0	0.7		7.3	<2	>450.0
Maximum	0.870	0.831		0.086	0.574		10.4	0	1.8		8.5	<2	>450.0
Average	0.666	0.302		0.086	0.379		2.2	0	1.1		7.9	<2	>450.0
Average	0.666	0.302		0.086	0.379		2.2	0	1.1		7.9	<2	>450.0

FLOW COMPARISON

—◆— 2013 / 14 —■— 2014 / 15



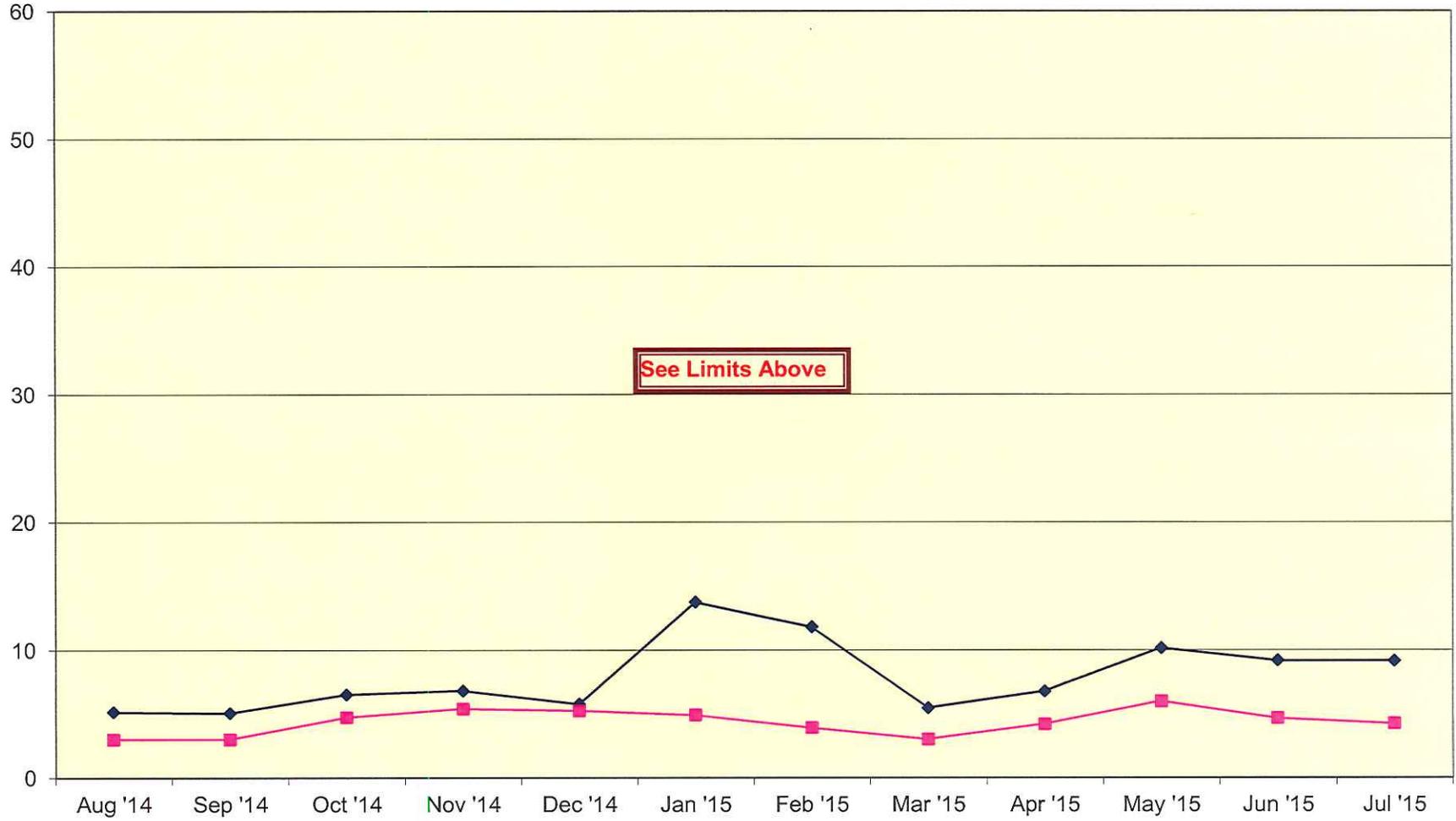
Influent Load BOD / TSS lbs



Effluent BOD / TSS Concentration

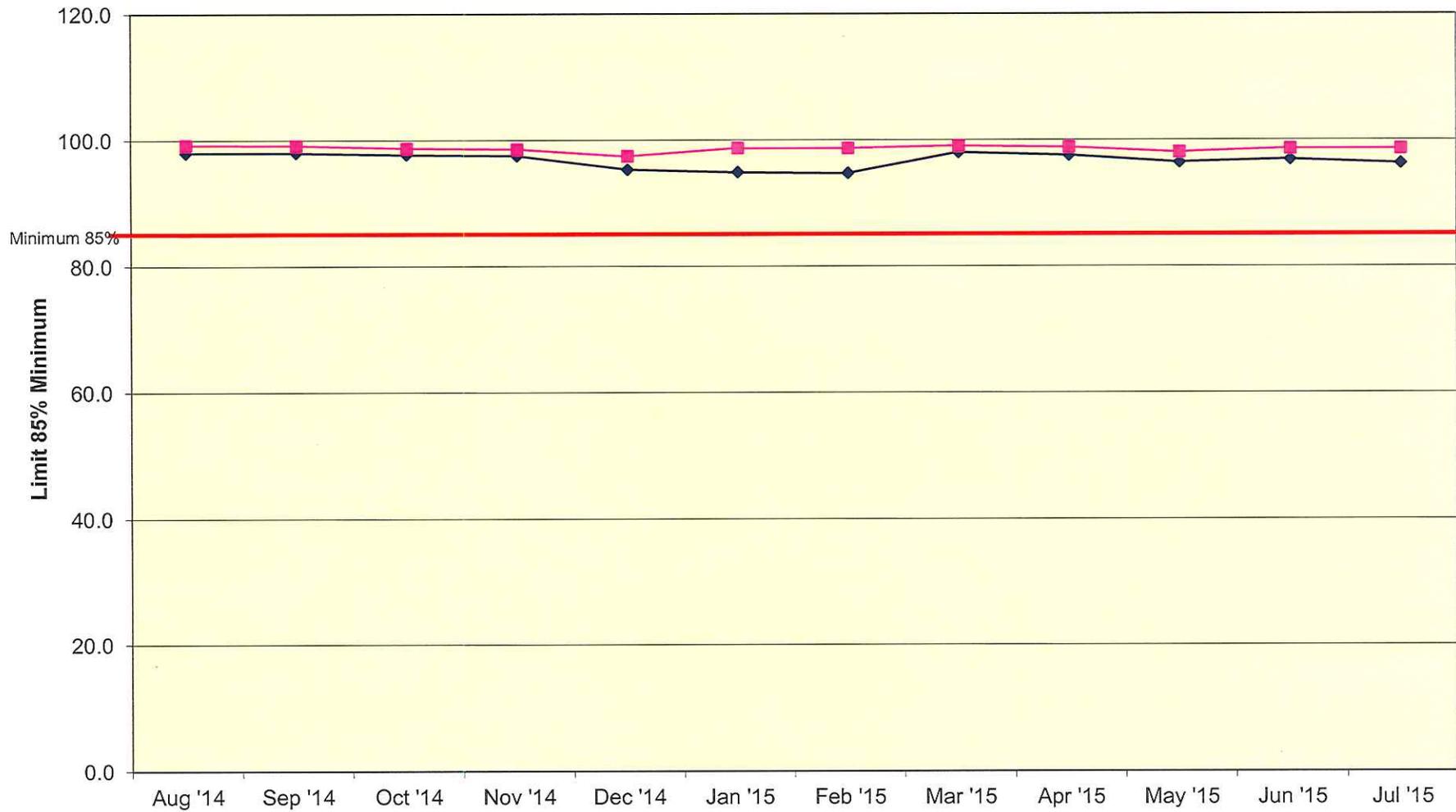
NPDES LIMITS WET SEASON
BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave
NPDES LIMITS DRY SEASON
BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave
TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave
WDR (Waste Discharge Requirements) RECLAMATION
BOD - 40 mg/L

◆ BOD ■ TSS



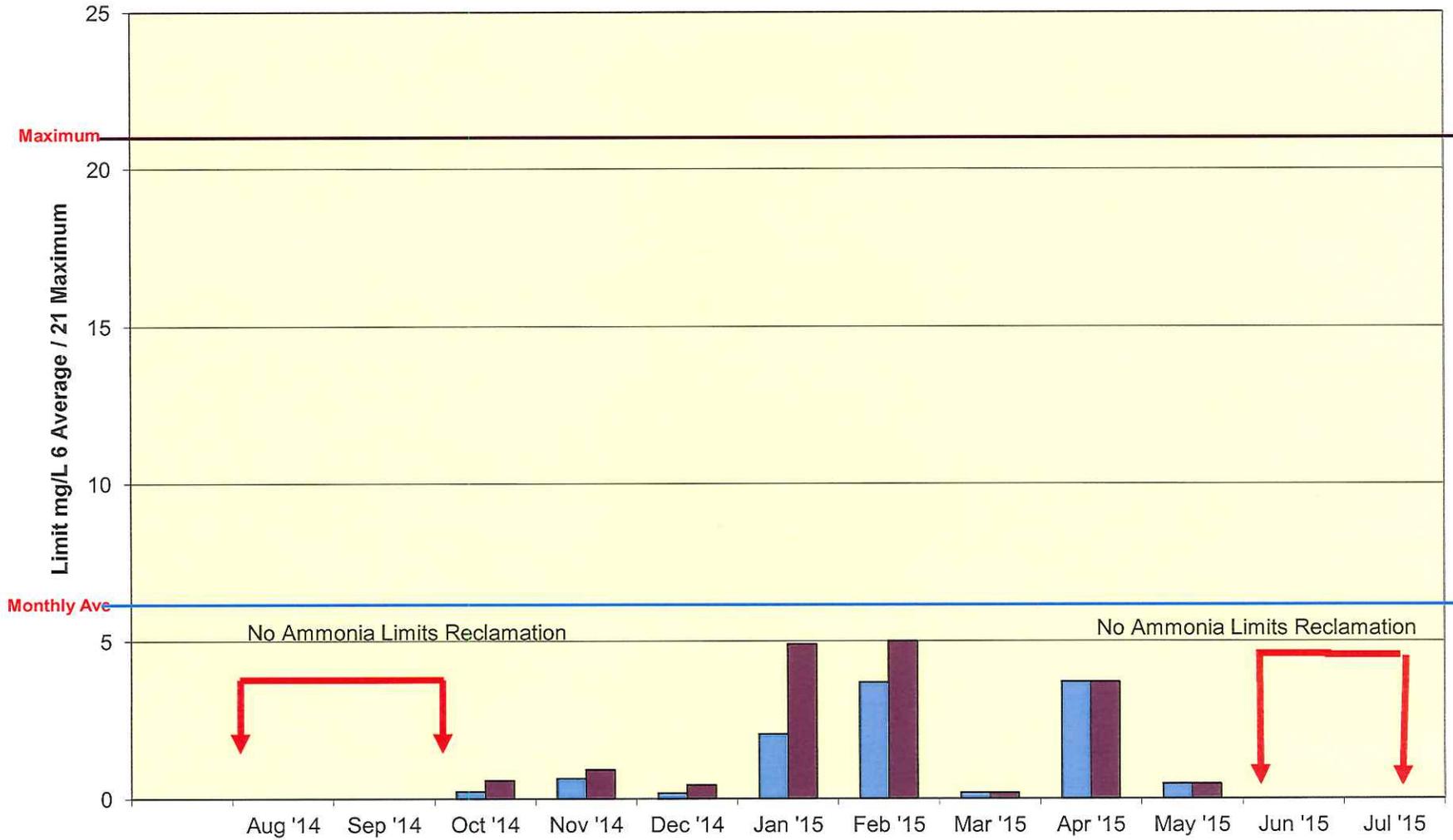
BOD / TSS Percent Removal

—◆— BOD —■— TSS



Effluent Ammonia

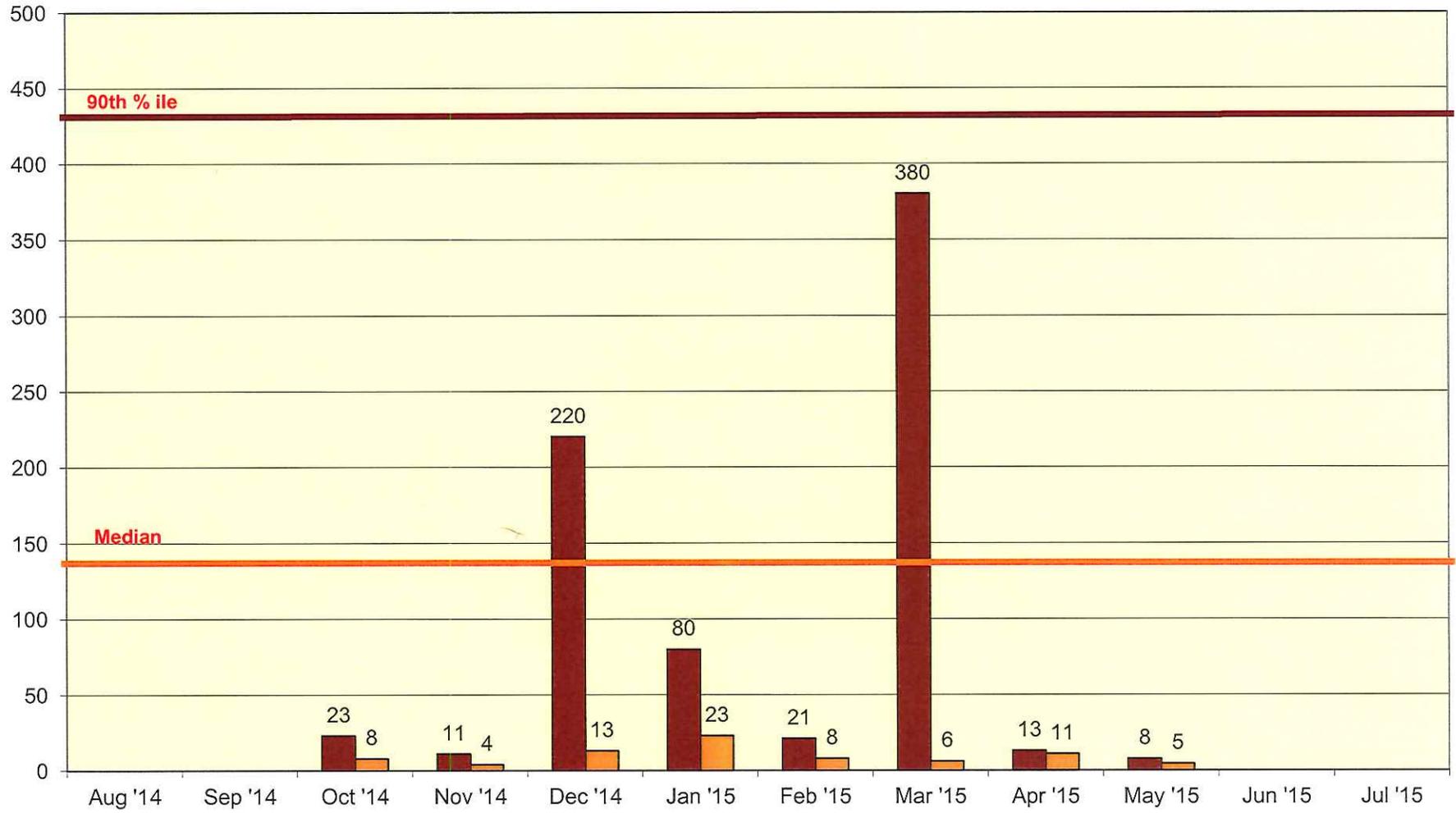
Average Maximum



Disinfection - Fecal Coliform

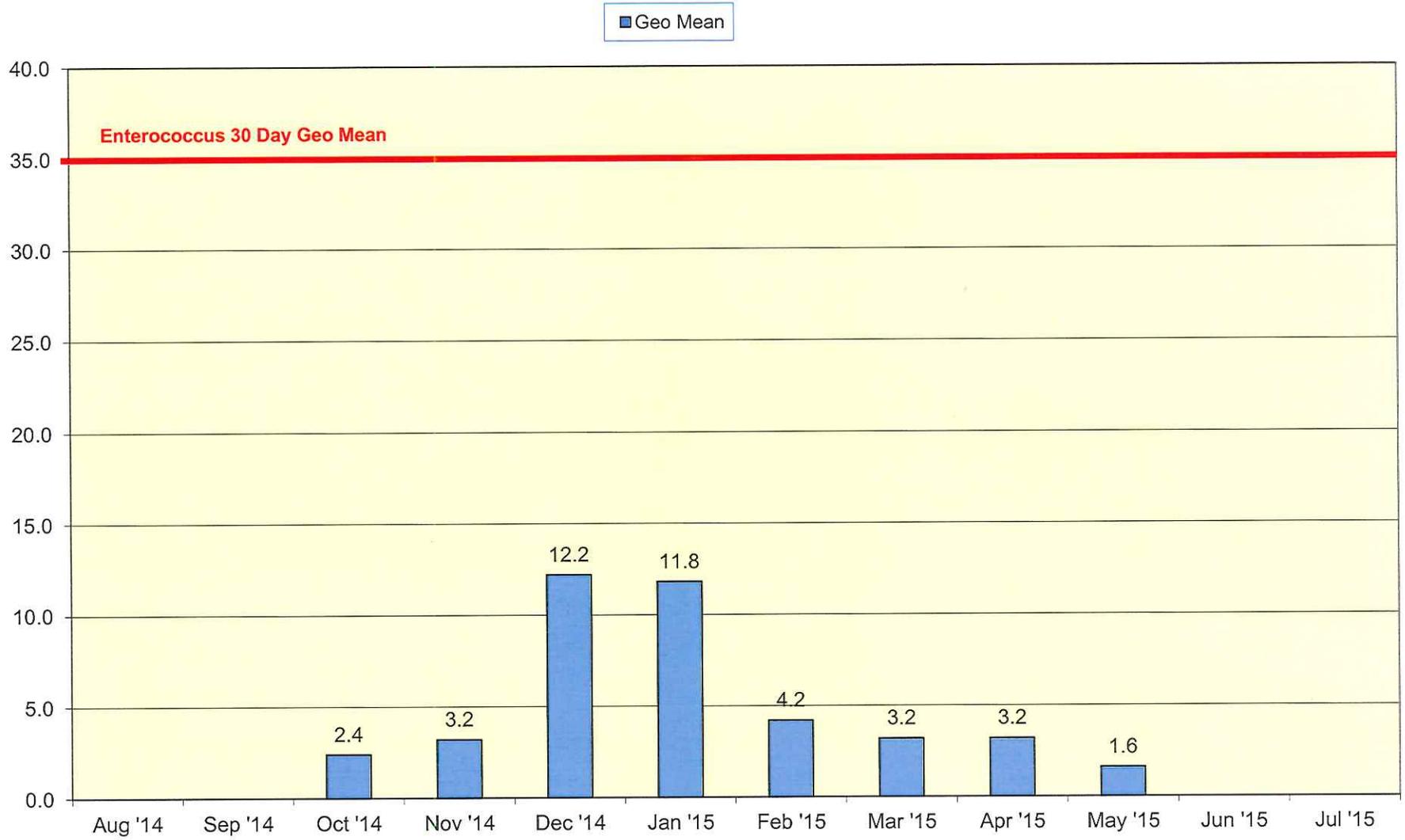
LIMITS - NPDES
Fecal 140 mpn monthly median
Fecal 430 mpn 90th percentile 30 day

90th % ile 30 day med



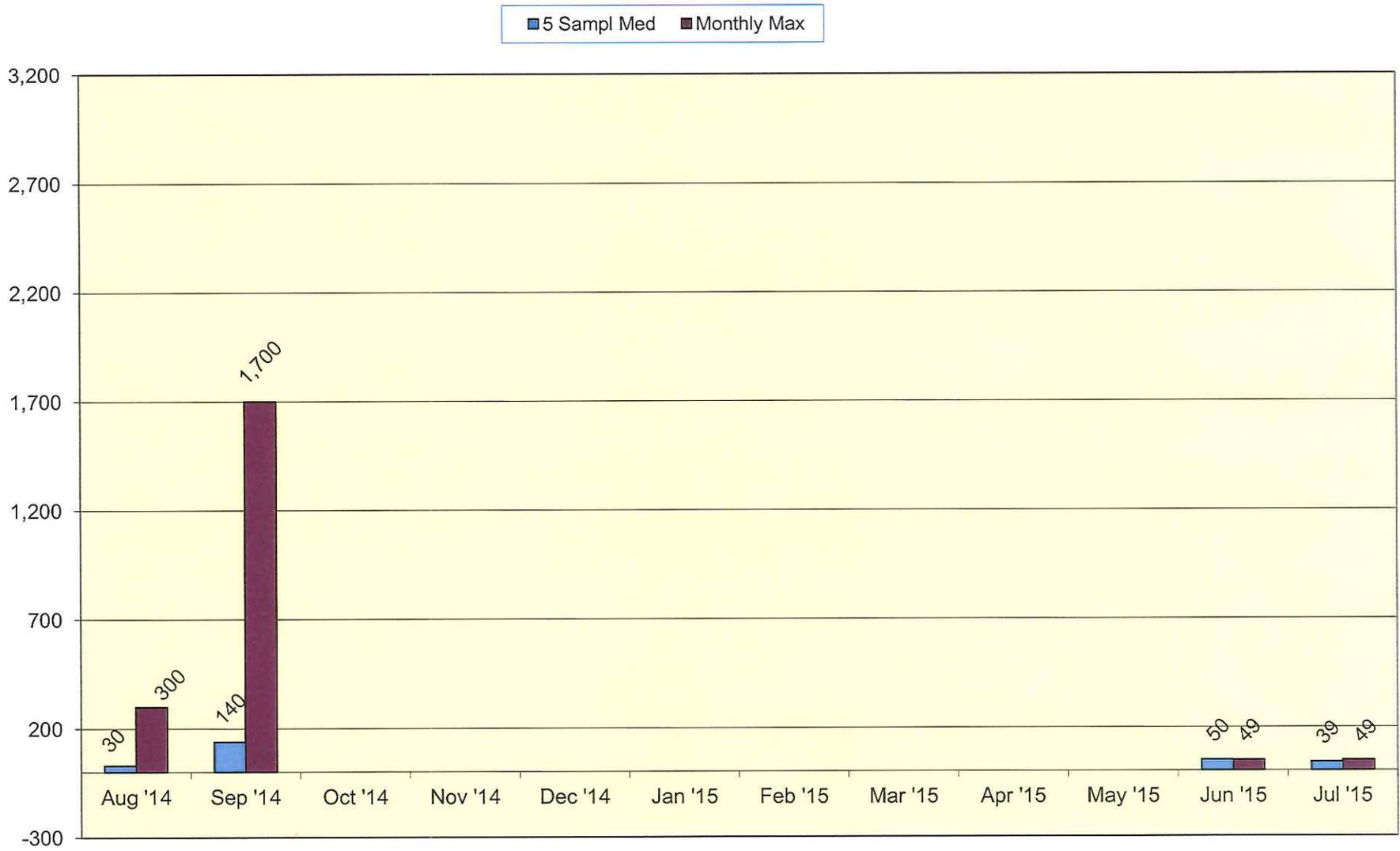
Disinfection - Enterococcus

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

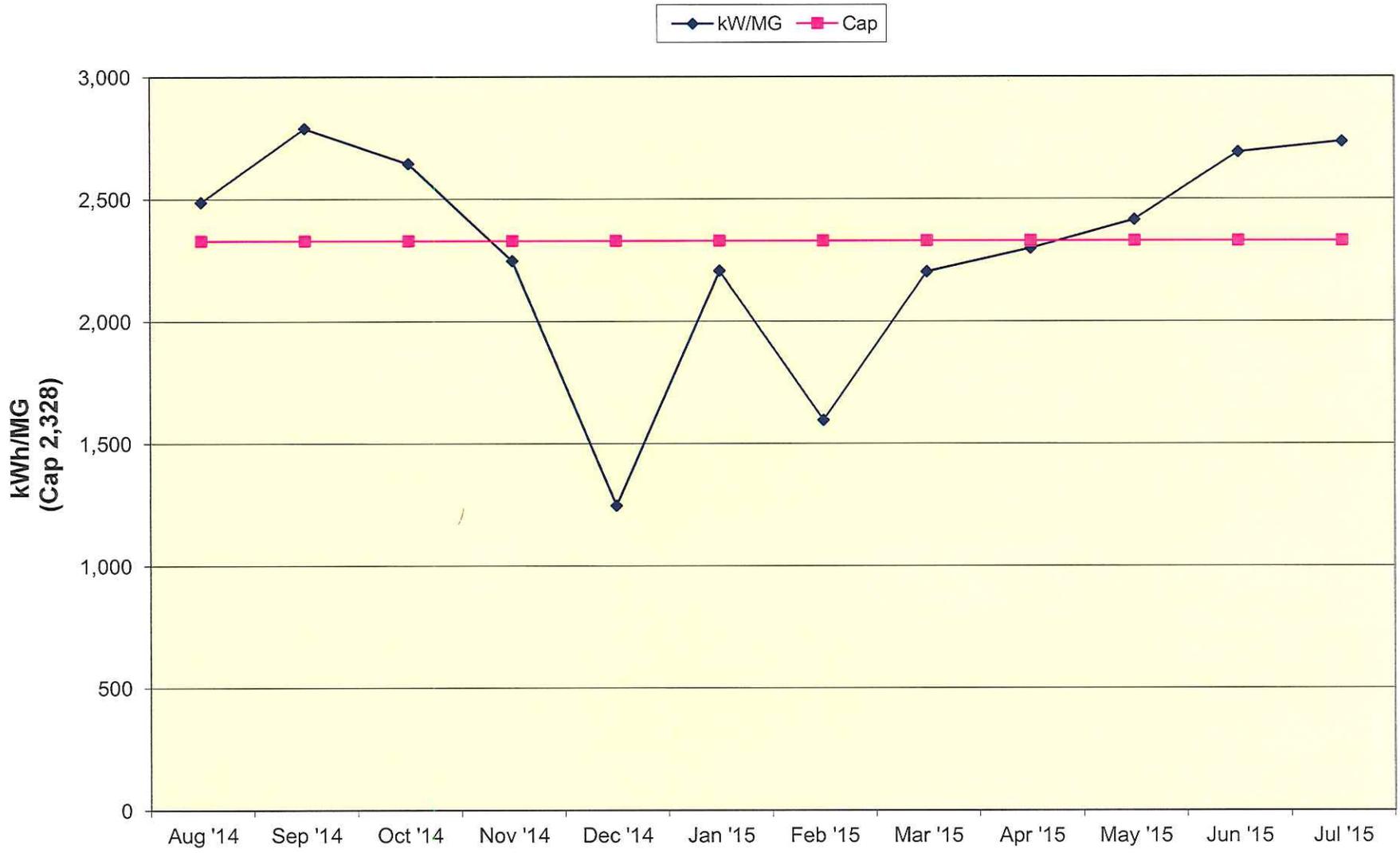


Disinfection - Total Coliform

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

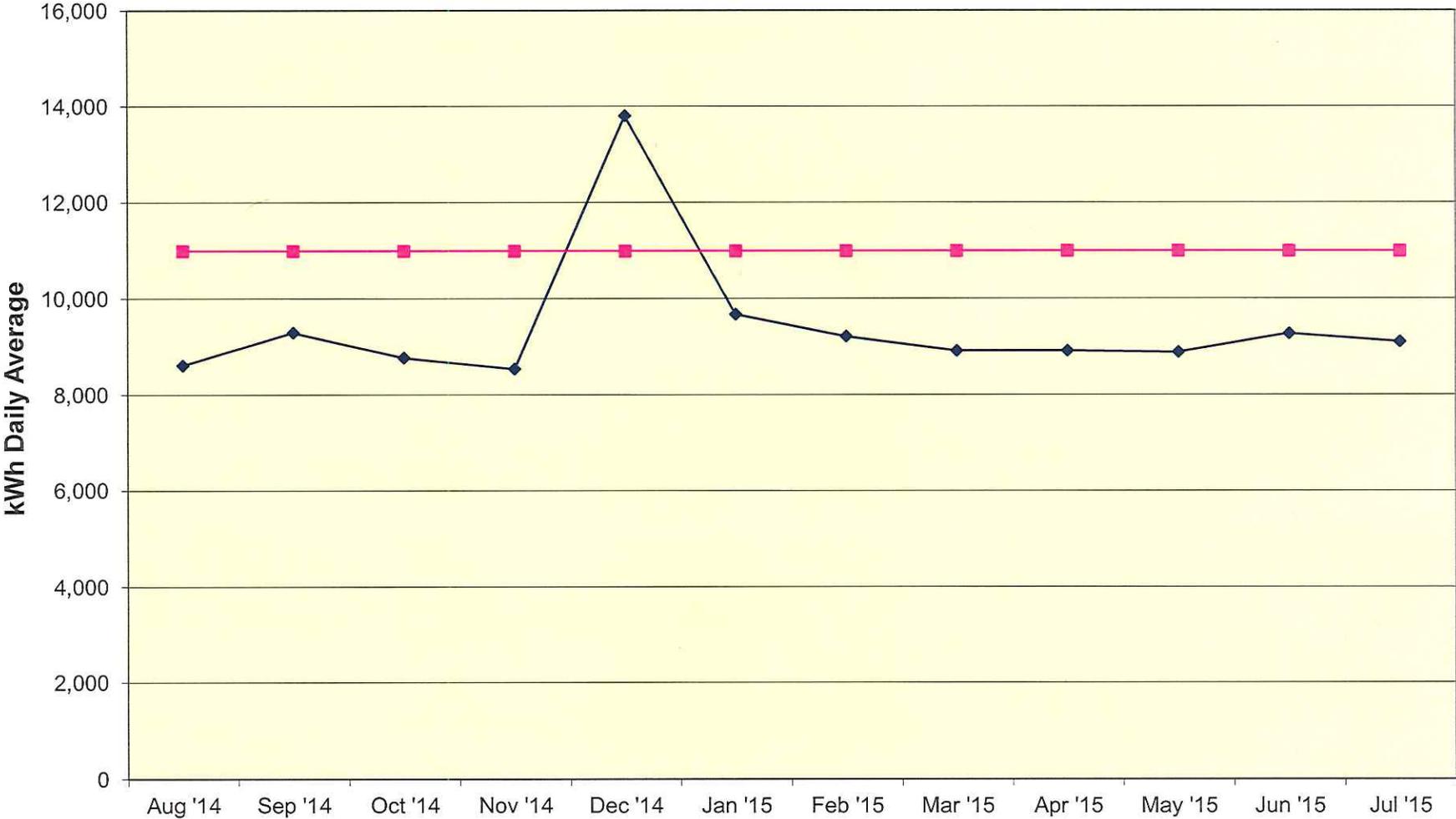


Energy kWh/MG



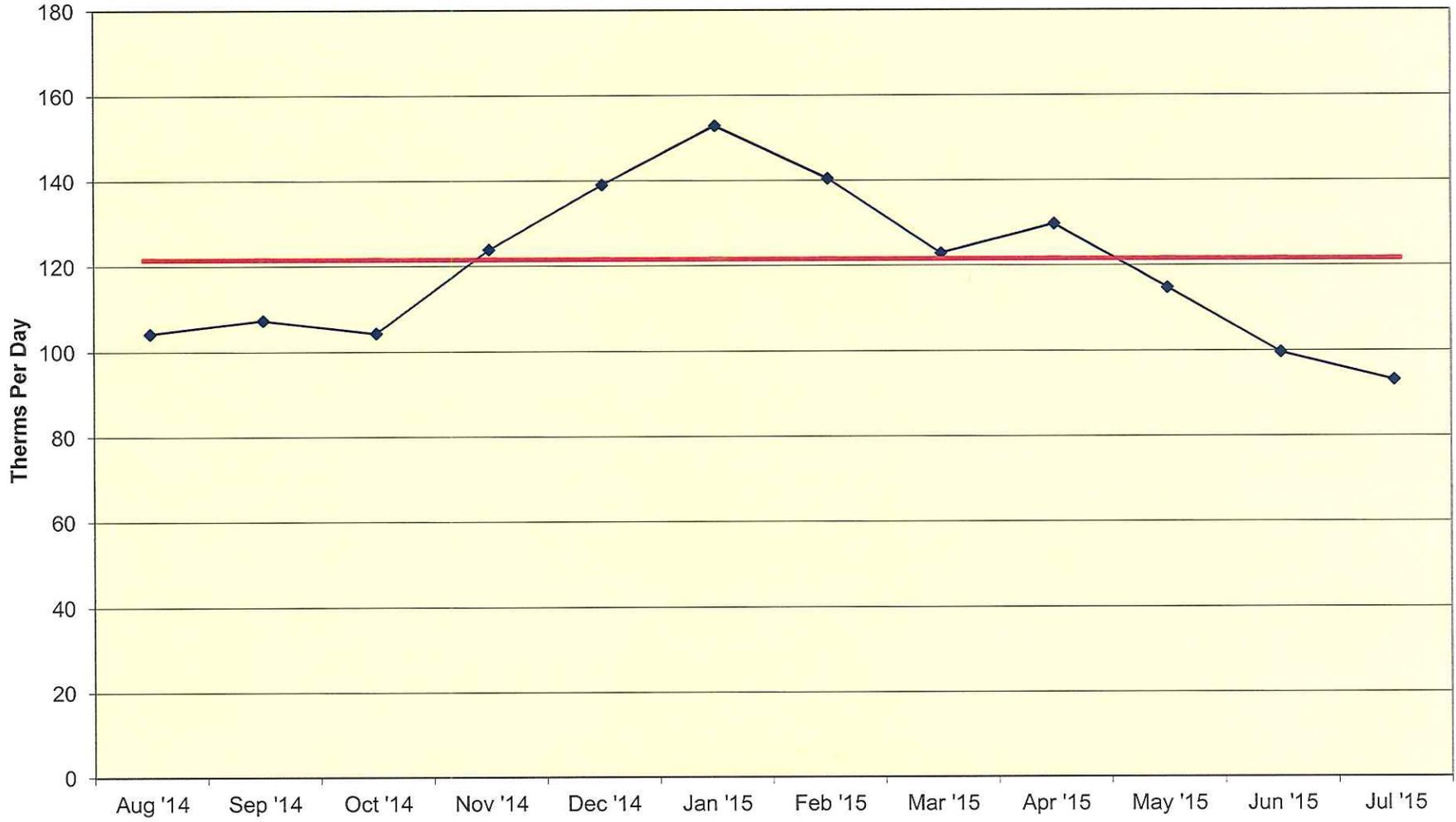
Energy kWh

◆ kWh ■ Cap

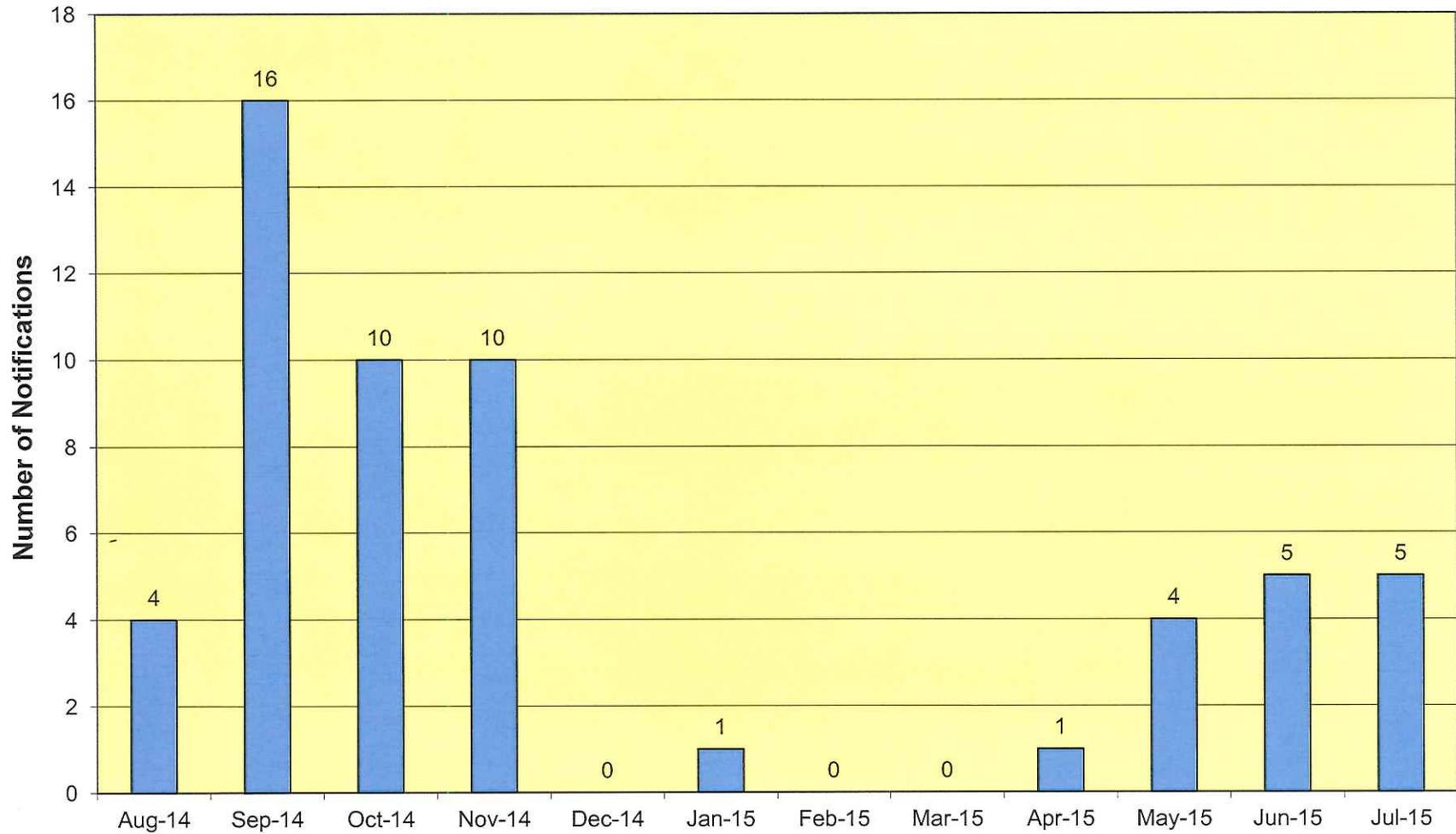


Natural Gas Use

◆ Natural Gas — Cap

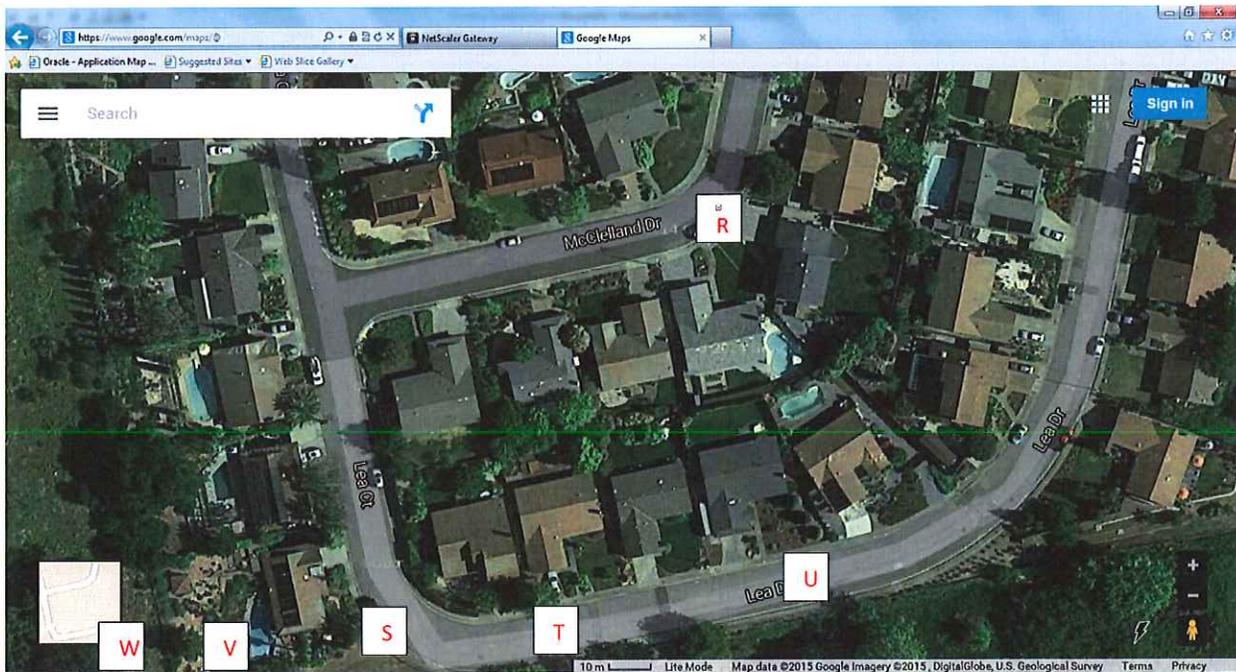
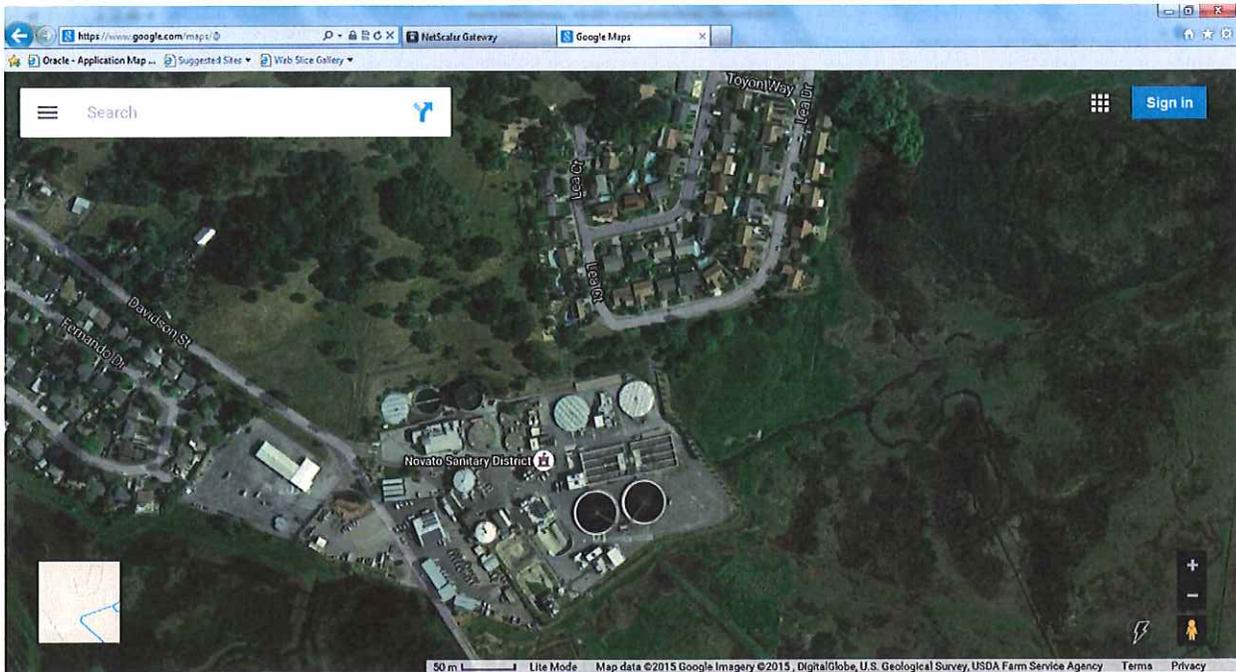


Complaints / Contacts Received



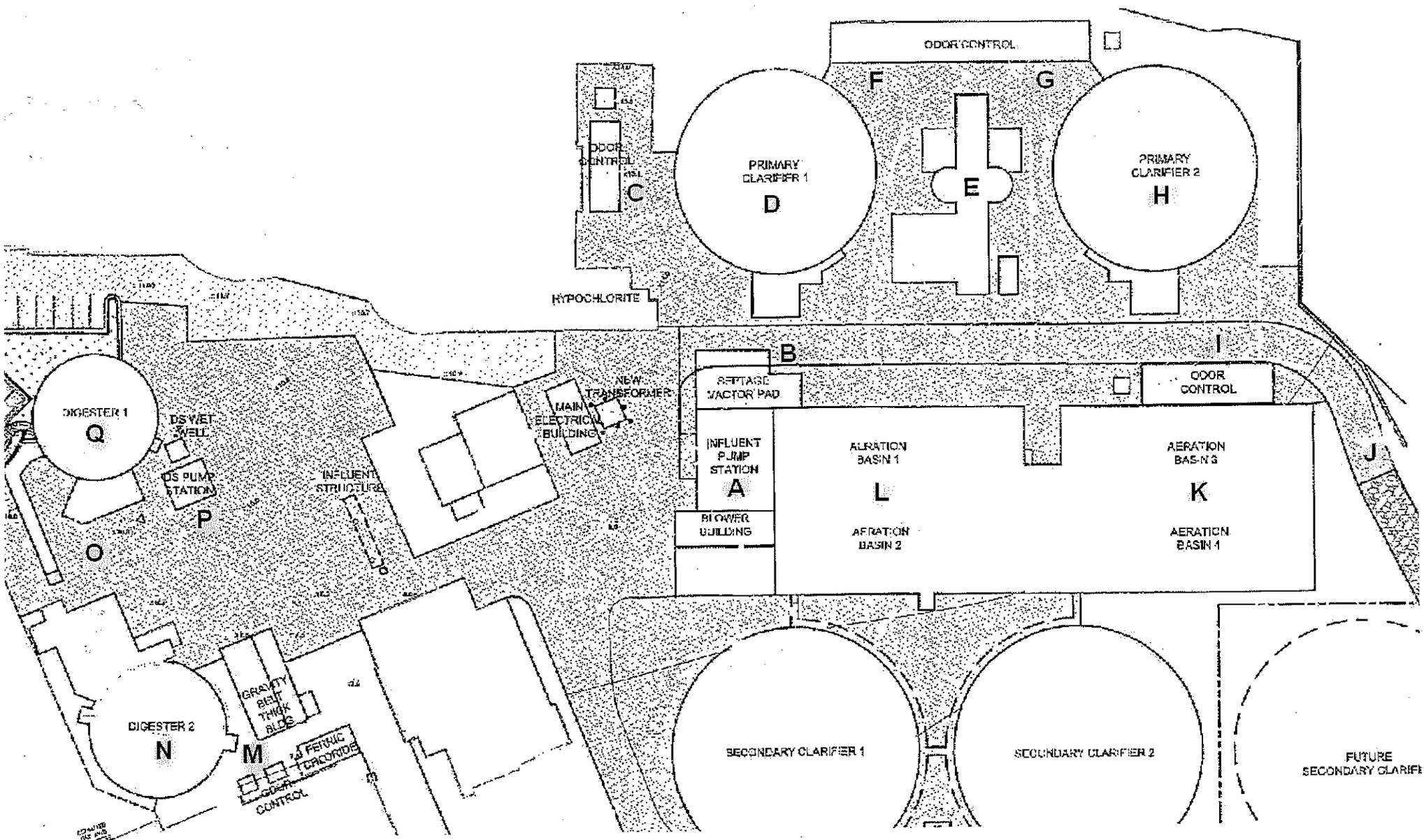
JEROME METER READINGS - JULY 2015

Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: Influent Pump Station	0.000	0.124	0.016	
B: Septage Dumpster	0.000	0.002	0.001	
C: Primary Clarifier #1 Odor Bed	0.000	0.010	0.002	
D: Primary Clarifier #1	0.000	0.002	0.001	
E: Headworks	0.000	0.021	0.005	
F: Primary Clarifier #2 Odor Bed West	0.000	0.150	0.022	
G: Primary Clarifier #2 Odor Bed East	0.000	0.002	0.001	
H: Primary Clarifier #2	0.000	0.001	0.000	
I: Influent Odor Bed	0.000	0.002	0.001	
J: Behind Aeration Basins	0.000	0.002	0.001	
K: Between Aeration Basins 3 & 4	0.000	0.001	0.000	
L: Between Aeration Basins 1 & 2	0.000	0.002	0.000	
M: Digester Odor Bed	0.000	0.001	0.000	
N: Digester #2	0.000	0.000	0.000	
O: Flare Stack	0.000	0.000	0.000	
P: Digested Sludge Transfer Pit	0.000	0.002	0.001	
Q: Digester #1	0.000	0.130	0.017	
R: McLelland	0.000	0.001	0.000	Neighborhood
S: Lea 1	0.000	0.002	0.000	Neighborhood
T: Lea 2	0.000	0.001	0.000	Neighborhood
U: Lea 3	0.000	0.001	0.000	Neighborhood
V: Lea 4	0.000	0.000	0.000	Neighborhood
W: Lea 5	0.000	0.001	0.000	Neighborhood
Primary Clarifier #1 Headspace	0.005	33.000	12.661	Scrubbed Space
Primary Clarifier #2 Headspace	0.002	1.800	0.304	Scrubbed Space



JEROME METER

NEIGHBORHOOD SAMPLE LOCATIONS – LEA AND McCLELLAND.





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

1.0 Background

Staff continues to maintain the on-going operation of the odor control facilities; and the landscaping, especially 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

Activities related to maintenance of the odor control facilities in July included:

- Staff continued to monitor media in the large odor control bed between primary clarifiers #1 & #2 which continued to perform satisfactorily. A potential for odor breakthrough was identified in late June, and operations staff arranged for additional topping off of the media for this bed, as well as topping off of all of the other odor beds, in July.
- Liquid phase sulfide sampling and analysis continues and the operations staff continued to provide data the District's odor consultant Dave McEwen of Brown and Caldwell. Additional Jerome meter readings in the neighborhood continued at the Committee's request.
- The Aqua-Fog system continues to be used as needed (another recommendation by Mr. McEwen).
- Pre-chlorination: Sodium hypochlorite continues to be added as an oxidizer on an as-needed basis to the influent flow, with operations staff monitoring performance (also a recommendation by Mr. McEwen).

3.0 Landscaping

The District's landscaping contractor Cagwin and Dorward (C&D) continues to work on an as-needed/as-directed basis on landscaping and vegetation at the District's fence-line on Lea Drive, and at the northeast corner area of the NTP. The redwood trees in the northeast corner of the plant site, and the site vegetation overall seems to be responding to well to the drought conditions, largely likely due to the irrigation with recycled water.

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

1.0 General:

An equivalent of about six (6) full time employees (FTE) worked in the Collection System Department during the month of July. The breakdown of staff time for the month in terms of equivalent full-time employee hours utilized, works out approximately as follows:

- 2.1 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
- 2.4 FTE field workers for time spent on data input, training, service calls, overflow response, or any other activity that does not directly relate to main line cleaning, CCTV work or pump station maintenance, and
- An equivalent of 1.0 FTE field workers were on vacation, sick leave or on 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 420 work orders were generated for July by the ICOM3 Computerized Maintenance Management System (CMMS). Staff completed 395 work orders leaving 25 work orders outstanding. The 405 maintenance work orders completed in July resulted in 82,722 feet of sewer pipelines cleaned by staff. Of the 15 outstanding work orders, 7 of the work orders are for hydro-flushing and 8 of the work orders are for rodding. The completion of 12 of these work orders was postponed because the line segments were recently root treated. The remaining 3 will be completed in August.



In addition to line cleaning, both flusher trucks were outfitted to accept recycled water for flushing activities (photo at right).

Root Treatment:

With the assistance of District staff, an outside vendor foam-treated 123 line segments totaling 23,974 feet to inhibit root growth in the sewer mains and manholes. The root treatment work is complete for the year.

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

CCTV Performance:

The District's CCTV van was in the field for five (5) working days inspecting 40 line segments totaling 6,798 feet. Staff also televised 29 line segments totaling 5,303 using the Push Cam. The push cam work was performed in lieu of hand rod work. Visual inspection of a sewer main is much more efficient than hand rod, and the crew can also determine if hand rodding is actually necessary.

CCTV Findings:

- Infrastructure related: The July CCTV did not identify any line segments that will require spot repairs.
- O&M related: The July 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 360 lift station inspections this month. 236 of the inspection visits were generated through the District's JobsCal Plus CMMS system. There are 9 outstanding work orders for the month, 7 corrective and 2 preventative. A Collection Systems (Pump Stations) Work Order Statistics summary is attached.

In addition to normal maintenance activities, District staff performed the following:

- Assisted an outside vendor who tested and polished, as necessary, diesel fuel in all diesel fueled generators storage tanks.

4.0 Air Relief/Vacuum Valves (ARVs):

Staff completed maintenance inspections on nine (9) air relief/vacuum valves.

5.0 Safety and Training:

General:

Collection System staff attended four safety tailgate meetings.

Specialized training:

- Collection System staff completed the field portion of Confined Space Training (photo at right).
- Collection system staff attended traffic control training.



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

Safety performance:

There were no lost time accidents this month for a total of 1,601 accident free days since the last lost time accident.

6.0 Minor Projects:

The District replaced a rod inlet casting at 1101 Second Street. This rod hole casting was replaced at the request of the City of Novato in advance of a street resurfacing project, the area around the casting had settled and needed repair. This work was performed under the informal contract provisions of the Uniform Public Construction Cost Accounting Act (UPCCAA) this month.

7.0 Standard Operating Procedures (SOPs):

No new core SOPs were identified, and as development of lower priority SOPs is being balanced against workload priorities, department staff did not generate any new SOPs in July. Also, the recently completed draft Core Competency Checklist continues to be used to track the initial training of a recently hired employee, and lessons learned will be incorporated in the final version, which will be used track the training of all department employees. Staff will also develop a similar draft checklist to use for tracking annual checks of Collections Department employees to determine where annual training is necessary.

8.0 Sanitary Sewer Overflows (SSOs):

There were zero (0) SSO's in July.

Novato Sanitary District
Collection System Monthly Report For July 2015 (as of July 31, 2015)

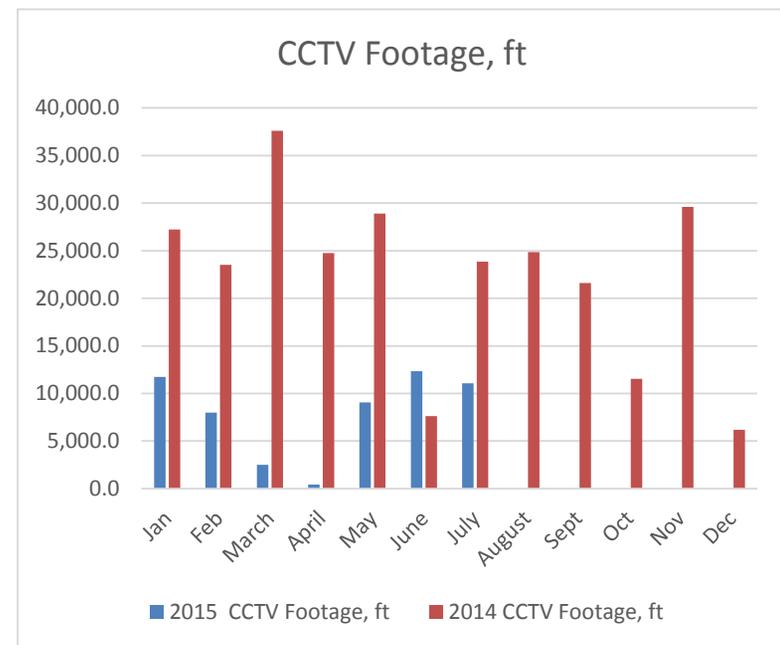
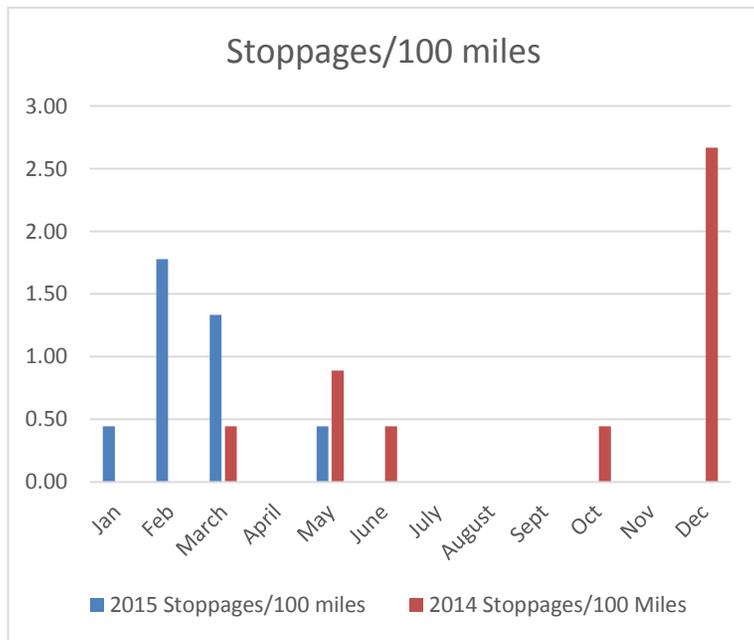
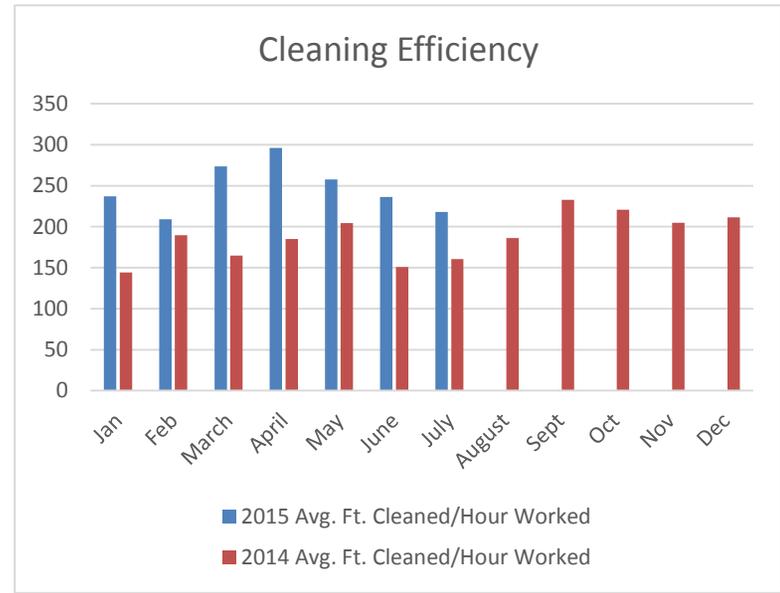
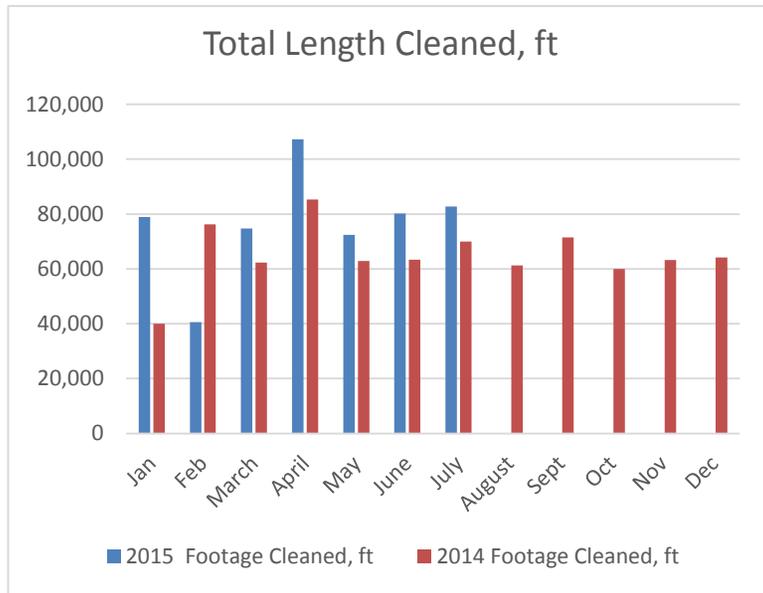
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
A. Employee Hours Worked														
Number of FTEs (main line cleaning), hrs.	1.9	1.2	1.5	2.2	1.7	1.9	2.1	0.0	0.0	0.0	0.0	0.0	NA	1.0
Number of FTEs (other)	1.6	2.1	1.8	2.0	1.9	2.1	2.4	0.0	0.0	0.0	0.0	0.0	NA	1.2
Number of FTEs (CCTV)	0.1	0.2	0.0	0.0	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.0	NA	0.1
Total, FTEs	3.6	3.5	3.4	4.2	4.0	4.5	4.7	0.0	0.0	0.0	0.0	0.0	NA	2.3
Regular Time Worked, (main line cleaning), hrs	333	194	273	363	281	339	380							
Regular Time Worked on Other, hrs (1)	281	329	320	341	312	382	433							
Regular Time Worked on CCTV (2)	15	36	4	0	71	72	45							
Total Regular time, worked, hrs	628	559	597	703	663	793	857	0	0	0	0	0	4,798	400
Total Vacation/Sick Leave/Holiday, hrs	403	356	271	277	307	239	181						2,031	290
Vacation/Sick Leave/Holiday, FTEs	2.3	2.2	1.5	1.6	1.8	1.3	1.0	0.0	0.0	0.0	0.0	0.0	11.8	1.0
Overtime Worked on Coll. Sys., hrs	3	0	16	3	7	4	6						38	5
Overtime Worked on Other, hrs (1)	14	45	31	19	15	29	39						191	27
Overtime Worked on CCTV (2)	0	0	0	0	4	0	0						4	1
Total Overtime, hrs	17	45	46	22	25	33	45	NA	NA	NA	NA	NA	232	33
B. Productivity														
1. Line Cleaning														
Rodder Work Orders generated	90	31	42	23	11	46	69						312	45
Rodder 3208 ft. cleaned	15,611	6,776	7,657	3,885	2,857	8,033	12,373						57,192	8,170
Rodder - outside services, ft cleaned	0	0	0	0	0	0	0						0	0
Flusher Work Orders generated	340	183	388	543	455	396	351						2,656	379
Truck 3205V ft. cleaned	107	4,165	2,352	22,584	18,806	1,100	4,618						53,732	7,676
Truck 3206V ft. cleaned	63,145	29,612	64,665	80,792	50,753	70,998	65,731						425,696	60,814
Flusher - outside services, ft. cleaned	1,349	553	0	127	0	0	0						2,029	
Total Footage cleaned(3)	78,863	40,553	74,674	107,261	72,416	80,131	82,722	NA	NA	NA	NA	NA	536,620	76,660
Work Orders completed	416	198	397	551	449	413	405						2,829	404
Work Orders backlog	14	16	33	15	17	29	15	NA	NA	NA	NA	NA	139	20
2. Closed Circuit Television (CCTV)														
Camera Work Orders generated	0	0	0	0	0	0	0						0	
CCTV Truck 3126T, ft. videoed	3,998	6,622	1,795	303	7,211	7,037	6,793						33,759	4,823
CCTV (hand cam), ft. videoed	6,378	806	706	0	1,842	5,303	4,279						19,314	
CCTV Inspection - outside services, ft. videoed	1,349	553	0	127	0	0	0						2,029	
Total CCTV footage(3)	11,725	7,981	2,501	430	9,053	12,340	11,072	NA	NA	NA	NA	NA	55,102	
C. Sanitary Sewer Overflows (SSOs)														
Minor (Category III)	1	4	3	0	1	0	0						9	NA
Major (Category II)	0	0	0	0	0	0	0						4	NA
Major (Category I)	0	3	2	0	0	0	0						0	NA
Overflow Gallons	126	2,419	1,603	0	5	0	0						4,153	NA
Volume Recovered	0	0	98	0	0	0	0						98	NA
Percent Recovered	0%	0%	6%	NA	0%	NA	NA	NA	NA	NA	NA	NA	2%	NA
D. Service Calls (non-SSO related)														
Service calls, normal hours, #	10	11	7	2	5	6	6						47	7
Normal hours S.C. response time, mins (avg.)	22	20	15	10	25	45	24						161	23
Service Callouts, after hours, #	1	1	1	1	1	1	0						6	1
After Hours S.C. response time, mins (avg.)	33	35	40	7	40	45	0						200	29
E. Benchmarks														
Average Ft. Cleaned/Hour Worked	237	209	274	296	258	236	218	NA	NA	NA	NA	NA	NA	247
Total Stoppages/100 Miles	0.4	1.8	1.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	NA
Average spill response time (mins)	28	5	22	0	55	0	0						NA	16
Callouts/100 Miles	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.2
Overtime hours/100 Miles	1	0	7	1	3	2	3	0	0	0	0	0	16.67	1
Overflow Gallons/100 Miles	55	1052	697	0	2	0	0	0	0	0	0	-	1,806	150

(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
July 1, 2015 - July 31, 2015**

	Open Work Orders Due Prior to 7/1/2015	Open Work Orders 7/1/2015 - 7/31/2015	Total Open Work Orders
Preventive	2	236	238
Corrective	7	0	7
Total	9	236	245

	Closed Work Orders 7/1/2015 - 7/31/2015
Preventive	236
Corrective	0
Total	236

Total Outstanding Work Orders as of 7/31/2015	9
--	----------

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

1.0 Summary:

The rancher tended to his cattle this month treating them for flies to prevent the spread of pink eye. Parcels were irrigated on all Site without any reportable issues. The Wildlife Pond level was raised to 6 feet. The sump pump in the Dedicated Land Disposal Area was replaced.

2.0 Ranch Operations:

The rancher spent most of his time tending to the cattle on site. They treated the cattle for flies to prevent the spread of pink eye. The rancher also culled out the young cows to send them to market. Cattle was moved into Site 2 this month.

3.0 Irrigation Parcels:

District staff continued to check the control system at each site to make sure they are functioning as expected. Irrigation times were shortened on all Sites to balance storage pond levels.

4.0 Irrigation Pump Station:

The Wildlife Pond was raised to 6 feet this month as recommended in the Reclamation Operations & Maintenance Manual. This action is recommended to limit the amount of vegetation growing in the bottom of the pond.

Approximately 91.6 MG of treated water was used for irrigation this month.



5.0 Sludge Handling & Disposal:

There was no sludge handling activity this month. The sump pump in the Dedicated Land Disposal Area (DLD) was replaced, the pump had failed late last month. This pump is used to pump accumulated rainwater out of the DLD.

NOVATO SANITARY DISTRICT
Reclamation Facility - Monthly Statistics for Calendar Year 2015, as of July, 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	0	0	90.64	88.64						179.3	14.94
Irrigation (MG)		0	0	0.0	0.09	7.86	59.2	91.59					158.7	13.23
Irrigation Pump 1 Hours				0.3	17.2	100.2	125.6						243.3	20.28
Irrigation Pump 2 Hours				0.1	16.7	102.4	121.1						240.3	20.03
Irrigation Pump 3 Hours				0.1	15.2	99.6	127.9						242.8	20.23
Washdown Water Pump Hours				0	0	0	0						-	0.00
Wildlife Feed Pump Hours			331.5	51.6	0	626.8	740.5						1,750.4	145.87
Water Circulated through Wildlife Pond (MG)	0	0	20.88	3.25	0	39	47	0	0	0	0	0	110.3	9.19
Strainer No. 1 Hours				0.2	6.3	38	45.9						90.4	7.53
Strainer No. 2 Hours				0	6.3	39.8	45.9						92.0	7.67
Pond 1 Gauge @ Beginning of Month	5.4	5.4	5.6	5.4	5.4	4.9	5.3							
Pond 1 Gauge @ End of Month	5.4	5.6	5.4	5.4	4.9	5.3	3.6							
Pond 1 Gallons Stored @ End of Month(MG)	39.2	41	39.2	39.2	35.2	38.4	24.8							
Pond 2 Gauge @ Beginning of Month	5.5	5.5	5.7	5.5	5.5	5	5.5							
Pond 2 Gauge @ End of Month	5.5	5.7	5.5	5.5	5	5.5	3.7							
Pond 2 Gallons Stored @ End of Month(MG)	52	54	52	52	47	52	33							
Total Irrigation Water Stored	91.2	95	91.2	91.2	82.2	90.4	57.8	0	0	0	0	0		
Drainage Pump Station No. 3														
Drainage Pump No. 1 Hours	0	133.1	2.4	1.2	0	0	0							
Drainage Pump No. 2 Hours	0	0	2.1	0.1	0	0	0							
Drainage Pump No. 3 Hours	100.3	127.1	0.6	2.7	0	0	0							
Total Gallons Stormwater Pumped (MG)	30.09	78.06	1.53	1.2	0	0	0	0	0	0	0	0	110.88	9.24
Drainage Pump Station No. 7														
Drainage Pump No. 1 Hours	331.6	46.2	13.3	0.2	0.1	0	0							
Drainage Pump No. 2 Hours	0	0	0	0	0	0	0							
Drainage Pump No. 3 Hours	0	1.5	2.7	7.5	0.1	0	0							
Total Gallons Stormwater Pumped (MG)	149.22	21	7	3.47	0.09	0	0	0	0	0	0	0	181.44	15.12

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Operations – MCE Clean Energy.	MEETING DATE: August 24, 2015 AGENDA ITEM NO.: 6.b.
RECOMMENDED ACTION: Approve a change of electricity service provider for the District’s Irrigation Pump Station (IPS) from Pacific Gas and Electric Company to MCE Clean Energy.	
SUMMARY AND DISCUSSION: <p>Previously, the District had considered changing its electricity service provider from Pacific Gas and Electric Company (PG&E) to MCE Clean Energy (MCE), but opted to stay with PG&E. However, staff continues to periodically check with MCE to verify cost information. Consistent with this, earlier this month, staff asked MCE to provide a cost comparison using the District’s Irrigation Pump Station (IPS) as a test case.</p> <p>Staff provided a verbal report of MCE’s analysis of IPS power charges for the May, June, and July 2015 billing cycles, to the Board’s Wastewater Operations Committee at its August 17, 2015 meeting. In summary, the District could potentially have saved about \$922 on \$14,158 of purchased power generation charges if MCE were the service provider, over those three billing cycles, for an approximately 6.5% savings.</p> <p>To further verify the potential for savings from switching to MCE and as a pilot case, staff recommends switching the account for the Irrigation Pump Station from PG&E to MCE. Staff feels that given the characteristics of the IPS including the seasonal nature of its operation, this is a low risk option to obtaining actionable cost information for comparative purposes. Information would be gathered over the remainder of the current reclamation season and the next reclamation season.</p> <p>If at the end of the test period for IPS, the actual cost information indicates significant savings, then staff will ask MCE to further analyze the remainder of the District’s major accounts for potential savings. If that analysis confirms potential savings, staff will bring back a recommendation for consideration by the Board to eventually transfer these accounts to MCE.</p>	
ALTERNATIVES: NA	
BUDGET INFORMATION: The total District-wide budget for Gas and Electricity in the FY15-16 Preliminary Budget is \$861,140.	
DEPT. MGR.: ssk	GENERAL MANAGER: SSK



NOVATO SANITARY DISTRICT

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Legal Counsel

Final Budget

FOR

FISCAL YEARS 2015-17

Including Preliminary Budget for Fiscal Year 2016-17

August 24, 2015

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SECTION I

***LETTER OF TRANSMITTAL AND SUMMARY OF FUND
BALANCES***

August 24, 2015

Honorable Board of Directors
Novato Sanitary District
500 Davidson Street
Novato, California 94945

Honorable Board Members:

The proposed Final District Budget for the 2015-16 and 2016-17 fiscal years is attached for your consideration and approval.

The FY 2015-16 Final Budget includes the following components:

- Summary of the Operating and Capital Improvement Funds, and Summary of Fund Balances (Section I).
- Operating Budget: Summary Revenues/Expenditures, and Summary Budget by Cost Center and Account Category (Section II).
- Detailed Operating Budget by Cost Center and Account Category (Section III).
- Capital Improvement Budget: Revenue and Expenditures Budget, (Section IV)
- Wastewater Capital Reserve Fund and Certificates of Participation Reserve Fund (Section V)
- Debt Service Fund Summary for State Revolving Fund (SRF) Loan and Certificates of Participation (COP) Bond Fund (Section VI).

Note that this year's annual Sewer Service Charge (SSC) increases from \$533 to \$552 per service unit, or an increase of 3.6% over the prior year.

The basis of the rate increase is District Ordinance No. 116 - AN ORDINANCE OF THE NOVATO SANITARY DISTRICT ESTABLISHING SEWER SERVICE CHARGES FOR FISCAL YEARS 2012-13, 2013-14, 2014-15, 2015-16. This Ordinance No. 116 was adopted by the District Board at its regular meeting of June 25, 2012 upon completion of the appropriate Proposition 218 process.

As in prior years, the sewer service charge is divided with \$304 (55%) allocated to the Operating Budget, and \$248 (45%) allocated to the Capital Budget.

A. BUDGET STRUCTURE

The District's budget is prepared on a cash basis. Table 1 summarizes the Operating and Capital Revenue and Expenditures and compares the immediate past year with the proposed budget. Total revenues are projected to increase slightly due to the sewer service charge rate increase approved on June 25, 2012 and discussed above. More detailed information regarding the variances between the two budget years both by cost center and account are also provided in this letter.

Table 1: Summary of Revenues and Expenditures for FY 15 and FY 16

	FY 14/15 Adopted Budget	FY 15/16 Proposed Budget	% Change FY 15 to FY 16
Operating Revenues	\$ 9,601,856	\$ 10,006,483	4.21%
Capital Revenues	9,482,700	9,901,040	4.41%
Total Revenues	\$ 19,084,556	\$ 19,907,523	4.31%
Operating Expenditures	9,406,216	9,763,464	3.80%
CIP Expenditures	5,735,223	3,360,500	-41.41%
Debt Service	7,070,654	7,075,104	0.06%
Total Expenditures	\$ 22,212,093	\$ 20,199,068	-9.06%

B. FISCAL YEAR 2015-16 OPERATING BUDGET DETAILS

Operating Revenues

The final proposed FY 2015-16 Operating Budget by revenue source is shown in Table 2 below (and graphically in Figure 1 at the end of this letter), along with the figures for the past two fiscal years. Total operating revenues are expected to increase by 4.2% or \$404,627 from FY 2014-15.

Table 2: Operating Budget Revenue Three-Year Summary

Funding Sources by Category	FY 13-14 Adopted Budget	FY 14-15 Adopted Budget	FY 15-16 Proposed Budget	% Change FY 15 to FY 16
Operating Sewer Service Charges	\$ 8,506,680	\$ 8,776,815	\$ 9,121,520	3.93%
Permit & Inspection fees	34,183	31,500	31,500	0.00%
Interest Income	15,000	15,000	18,000	20.00%
Engineering/Admin Chgs	165,000	165,000	165,000	0.00%
Franchise Fees	48,602	49,768	50,962	2.40%
AB 939 Collector Fees	297,586	297,586	342,621	15.13%
Oil and Beverage Grant	50,234	50,187	59,880	19.31%
Ranch Income	70,000	70,000	70,000	0.00%
Recycled Water Revenue	75,000	116,000	117,000	0.86%
Other Revenue	50,000	30,000	30,000	0.00%
Total Operating Revenue	\$9,312,285	\$9,601,856	\$10,006,483	4.21%

Operating Sewer Service Charges (SSCs) - expected increase of \$344,705 or 3.9% primarily from the 3.6% rate increase. For informational purposes, see Figure 2 (attached to this letter) which compares SSC changes relative to changes in the Consumer Price Index (CPI) for the last ten years, CPI as measured by the Bureau of Labor Statistics-U.S. City Average, by expenditure category and commodity – Water and Sewer Services.

Interest Income - expected increase of \$3,000 or 20% from potential increase in interest rates.

AB 939 Collector Fees expected to increase by \$342,621 or 15.1% due to the current projection for the HHW Cost center revenue. In the same cost center, **Oil and Beverage Grant** are expected to increase by \$59,880 or 19.3% based on projections provided by the District's HHW consultant coordinator.

Recycled Water Revenue is based on projections for cost recovery of operating costs through an agreement with the North Marin Water District (NMWD).

Operating Expenditures

A summary of proposed and past two fiscal years Operating Expenditures are shown in Table 3 (and graphically in Figure 3 at the end of this letter) by department/cost center. Operating expenditures are budgeted to increase by 3.8% or \$359,452 between FY2014-15 and FY2015-16.

In terms of staffing, note that in general, FY14-15 expenditures for Salaries and Benefits within the individual cost centers represent one-time "savings" from vacant positions which will be filled in FY15-16. Also, note that total Full-Time Equivalent (FTE) budgeted positions remain stable between FY2014-15 and FY2015-16 after accounting for the transition of Laboratory/Environmental Services to contract services with Veolia.

Table 3: Operating Budget Expenditures 3-year Summary:

Expenditures by Department	FY 13-14 Adopted Budget	FY 14-15 Adopted Budget	FY 15-16 Proposed Budget	% Change FY 15 to FY 16
Collections	\$ 1,316,424	\$ 1,389,859	\$ 1,386,100	-0.27%
Treatment	2,699,200	2,827,499	3,018,331	6.75%
Reclamation	534,268	484,649	487,029	0.49%
Laboratory	685,376	593,829	601,633	1.31%
Pump Stations	822,016	807,072	814,633	0.94%
Administration/Engineering	2,766,336	2,818,610	2,936,237	4.17%
Hazardous Household Waste	371,301	368,698	402,501	9.17%
Recycled Water	108,000	116,000	117,000	0.86%
Total Expenditures	\$ 9,302,921	\$ 9,406,216	\$ 9,763,464	3.80%

The following table summarizes the main operational budget variances and their impact.

Table 4: Operating Budget - Significant Budget Variances 2014-15 to 2015-16

Main Budget Variances – FY 15 to FY 16	Budget Impact
1. Contract Services for the Laboratory Cost Center is a new account this year to reflect the contract with Veolia Water in February 2015. Funding for this account was reallocated from the Salaries and Benefits Accounts of the FY14-15 Laboratory Cost Center	\$ 357,133
2. Anticipated cost of District election	\$ 50,000
3. Anticipated decrease of 35.7% for the District liability insurance premium	\$ (81,570)
4. Anticipated decrease of 25% for District's attorney fees	\$ (23,000)
5. Anticipated decrease of 18.4% for outside services for Collection and Pump Station cost centers	\$ (30,000)
6. Anticipated decrease of 28.3% for Research and Monitoring fees	\$ (58,000)
7. Anticipated decrease of 21.4% for Travel, Meetings and Training expense	\$ (70,000)
8. Anticipated increase of 15% for Gas and Electricity expense	\$ 116,730

C. FISCAL YEAR 2015-16 CAPITAL BUDGET DETAILS

Capital Revenues

The proposed FY2015-16 Capital Budget by Revenue source is shown in Table 5 below along with the figures for the past two fiscal years. Total capital revenues are expected to increase by 4.4% or \$418,740 from FY 2014-15. Notable items include:

Capital SSC Revenues - projected increase of \$251,840 or 3.5% primarily from the 3.6% rate increase.

Property Taxes - projected increase of 8.6% from greater activity in the housing market over the past few years. For comparative purposes, Figure 4 (attached to this letter) depicts property tax-related revenues for the last ten years.

Connection Fees – projected to be relatively flat assuming about 50 new connections per year.

Grants/Loans - no anticipated grant income, and no more funds from the 2011 Certificates of Participation (COPS).

Interest Income – projected decrease of 26.6% from loss of interest with completion of draw-down of COP funds.

Table 5: Capital Budget Revenue 3-year Summary:

Funding Sources by Category	FY 13-14 Adopted Budget	FY 14-15 Adopted Budget	FY 15-16 Proposed Budget	% Change FY 15 to FY 16
Capital Sewer Service Charges	\$ 6,728,280	\$ 7,183,200	\$ 7,435,040	3.51%
Property Taxes	1,740,000	1,750,000	1,900,000	8.57%
Connection Charges	470,000	493,500	518,000	4.96%
Collector/Special Equalization Charges	6,000	6,000	6,000	0.00%
Interest Income	50,000	30,000	22,000	-26.67%
Grant and Other Revenue	20,000	20,000	20,000	0.00%
Total Capital Revenues:	\$9,014,280	\$9,482,700	\$9,901,040	4.41%

Capital Expenditures

The proposed Capital Improvement Program (CIP) Budget for FY15-16 is \$10,435,604 or \$2,370,273 less or a decrease of (18.5%) over last year. Capital projects for 2015-16 will be funded through sewer service charges, property taxes, and connection fees. Notable items include:

New accounts for odor control and landscaping work, and corrosion control at the Novato Treatment Plant site.

On-going major capital project work, including Collection System Improvements, demolition to make site space available for a future Maintenance Building, and the expansion of the Recycled Water Facility (RWF).

Continuing work on regional efforts including North Bay Water Reuse Authority (NBWRA), Novato Creek Watershed, and the Hamilton Wetlands/Outfall study.

Debt service of \$7,075,104 which will be funded similar to capital projects. Table 6 shows summary Capital Debt Service and Capital Project Costs for three fiscal years.

Table 6: Capital Budget Expenditures, 3-year Summary:

Capital Expenditures	FY 13-14 Adopted Budget	FY 14-15 Adopted Budget	FY 15-16 Proposed Budget	% Change FY 15 to FY 16
Capital Projects	\$8,076,377	\$5,735,223	\$3,360,500	-41.41%
Debt Service	7,070,654	7,070,654	7,075,104	0.1%
Total	\$15,147,031	\$12,805,877	\$10,435,604	-18.5%

Debt Coverage Ratio

In the 2011 COP Installment Sale Agreement the District agreed to collect rates and charges during each fiscal year that are sufficient to yield net revenues equal to at least 120 percent of the installment payments on the COPs and all parity debt in the fiscal year. The projected Debt Coverage Ratio for FY2015-16 is 1.43.

D. COMPARISON OF ANNUAL SEWER SERVICE CHARGES LEVIED BY NEIGHBORING AGENCIES

The following table compares the District's rate with those of other nearby sanitation agencies.

AGENCY	RATE (\$/yr.)
Sausalito-Marin City Sanitary District ⁽¹⁾	1,309 ^(b)
Tamalpais Community Services District	1,111 ^(b)
City of Petaluma	1,075 ^(b)
City of Santa Rosa	1,005 ^(b)
City of Larkspur	961 ^(a)
San Rafael Sanitation District	788 ^(b)
Las Gallinas Valley Sanitary District	748 ^(b)
Ross Valley Sanitary District (SD #1)	692 ^(a)
City of Mill Valley	685 ^(a)
NOVATO SANITARY DISTRICT	552 ^(b)
Vallejo Sanitation & Flood Control District	520 ^(a)
Napa Sanitation District	470 ^(a)

Notes: ⁽¹⁾ Includes SMCS D charge of \$817 and City of Sausalito charge of \$492.
^(a)FY2014-15 charges; ^(b)FY2015-16 (proposed or adopted)

In conclusion, the proposed FY2015-16 budget will be able to accomplish the District's commitments to achieving the key goals set forth in its Strategic Plan while maintaining reasonable rates for its customers.

Sincerely,



SANDEEP KARKAL
General Manager-Chief Engineer

Additional Charts for Informational Purposes:

Figure 1:

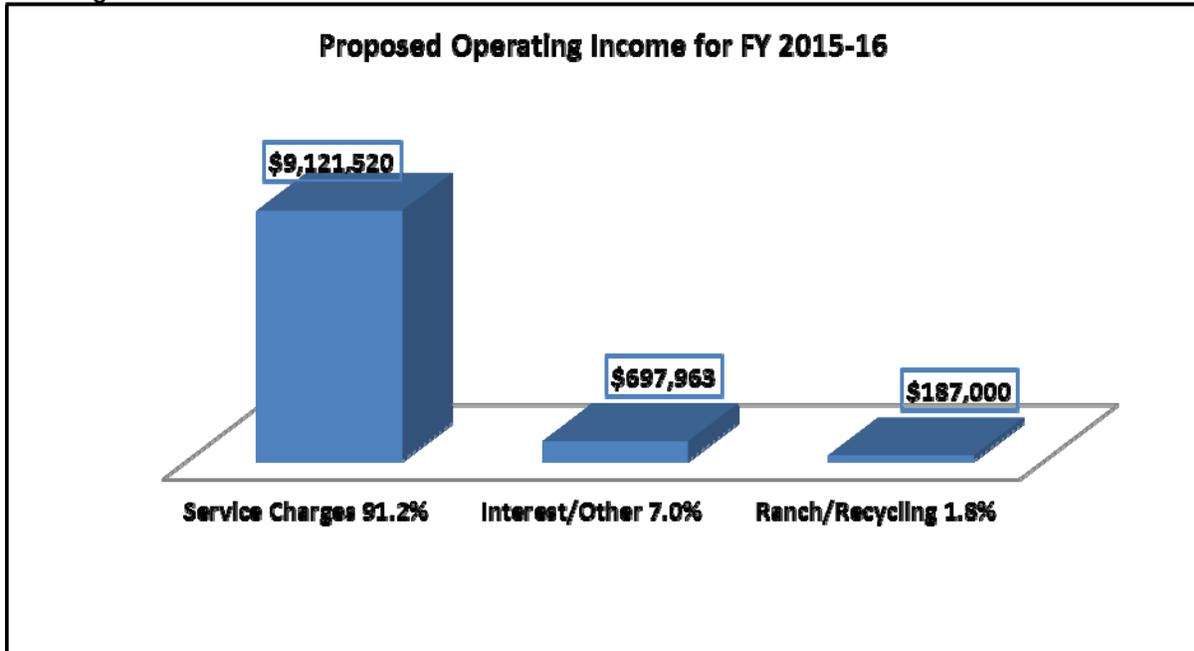
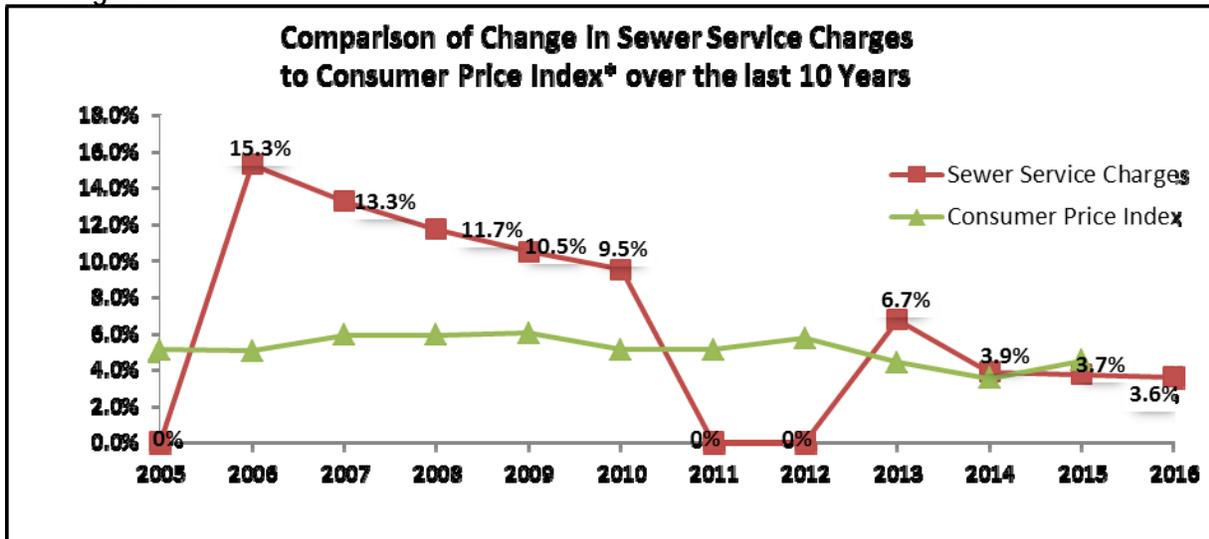


Figure 2:



*CPI – Bureau of Labor Statistics – U.S. City Average, by expenditure category and commodity – Water and Sewer Services.

Figure 3:

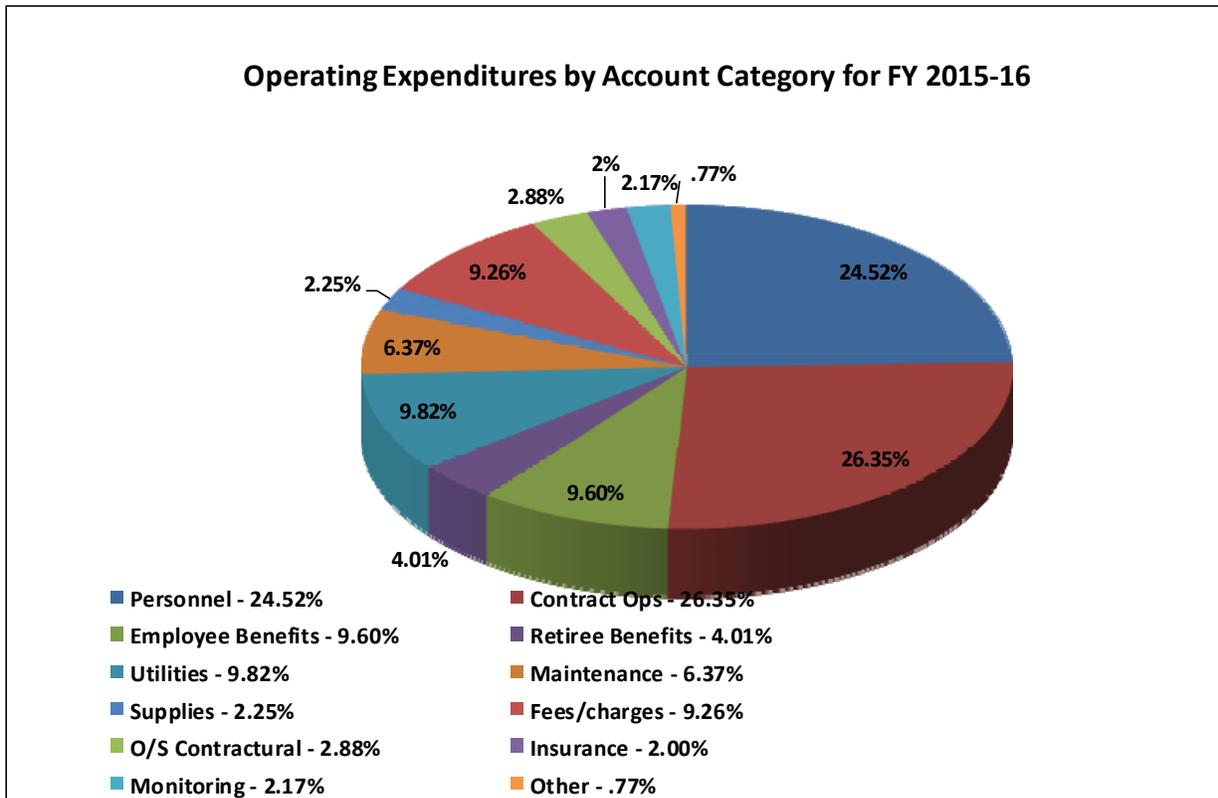
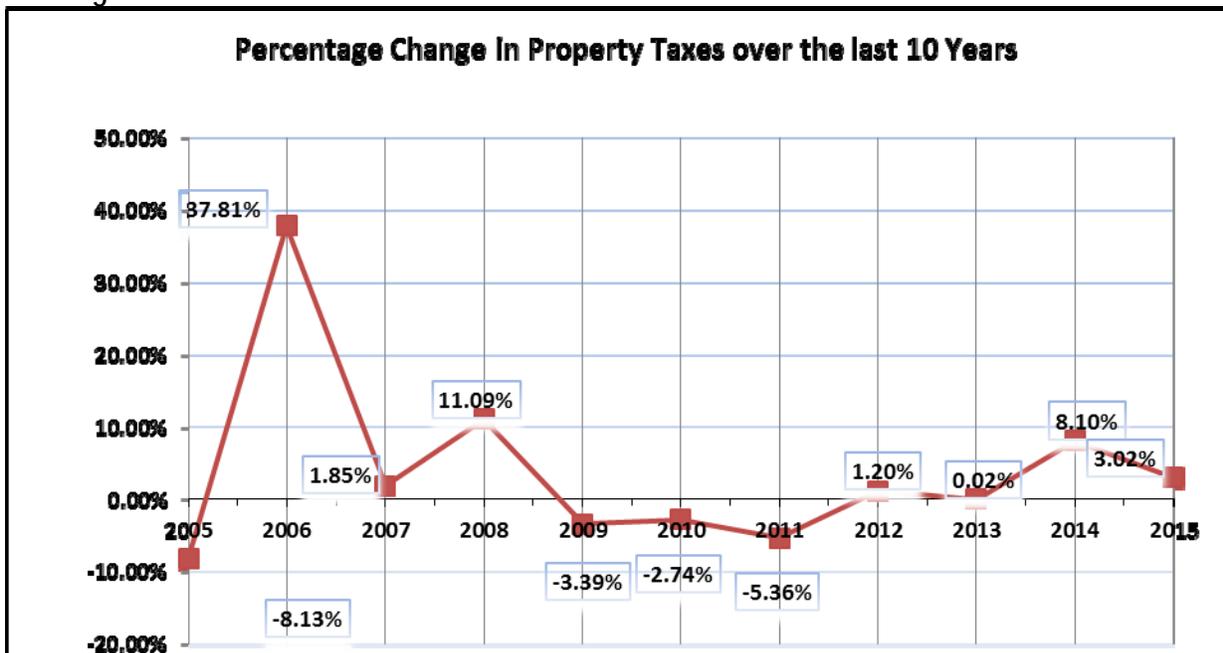


Figure 4:



**Novato Sanitary District
2015-17 Final Budget
Summary of Operating Fund
And Capital Fund Balances**

	Budget 2014-15	Actual Rev/Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Operating Fund					
July 1st Beginning of Each Year	9,287,659	9,281,819	10,138,284	10,635,267	10,878,286
Operating Revenue (p. 2)	9,601,856	9,487,752	10,000,483	10,006,483	10,028,129
Operating Expenditures (p. 3)	9,406,216	8,134,304	9,762,313	9,763,464	9,971,936
Net Operating Revenue	195,640	1,353,448	238,170	243,019	56,194
Operating Fund at the End of Each Year	9,483,299	10,635,267	10,376,454	10,878,286	10,934,479
Capital Fund					
July 1st Beginning of Each Year	7,482,115	7,482,059	5,787,502	6,047,581	5,252,938
Capital Revenue (p. 15)	9,482,700	9,384,546	9,901,040	9,901,040	9,977,440
Total Capital Revenues	9,482,700	9,384,546	9,901,040	9,901,040	9,977,440
Capital Expenditures (p. 16)	5,735,123	3,748,270	3,360,500	3,360,500	4,450,000
Debt Service (p. 19)	7,070,754	7,070,754	7,075,104	7,075,104	7,059,705
Total Capital Expenditures	12,805,877	10,819,024	10,435,604	10,435,604	11,509,705
Capital Fund Balance at the End of Each Year	4,158,938	6,047,581	5,252,938	5,513,017	3,720,673
Reserved	1,500,000	1,692,382	1,692,382	1,693,343	1,694,343
Unreserved	12,142,237	14,990,466	13,937,010	14,697,960	12,960,809
Operating and Capital Fund Balances at The End of Each Year	13,642,237	16,682,848	15,629,392	16,391,303	14,655,152

SECTION II

OPERATING BUDGET SUMMARY SCHEDULES

**Novato Sanitary District
2015-17 Final Operating Budget
Revenue Summary**

Operating Fund Revenue Center - 41000	Budget 2013-14	Budget 2014-15	Act Rev 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
41010 · Sewer Service Charges (1)	8,506,680	8,776,815	8,636,784	9,121,520	9,121,520	9,136,720
41030 · Plan Check & Inspection Fee	500	500	5,879	500	500	500
41040 · Permit & Inspection Fee	7,500	6,000	9,065	6,000	6,000	6,000
41060 · Interest Income	15,000	15,000	20,099	18,000	18,000	20,000
41080 · Engineering & Admin Charges	165,000	165,000	118,636	165,000	165,000	165,000
41090 · Non-domestic Permit Fees (2)	26,183	25,000	35,429	25,000	25,000	20,000
41100 · Garbage Franchise Fees	48,602	49,768	49,768	50,962	50,962	52,186
41105 · AB 939 Collector Fees	297,586	297,586	297,586	342,621	342,621	350,844
41107 · Oil/Bev/Tire Grants (3)	50,234	50,187	88,945	59,880	59,880	59,880
41130 · Ranch Income	70,000	70,000	92,829	70,000	70,000	70,000
41135 · Recycled Water Revenue	75,000	116,000	91,942	111,000	117,000	117,000
41140 · Other Revenue (4)	40,000	20,000	21,702	20,000	20,000	20,000
41142 · Loss on disposal of assets	10,000	10,000	19,088	10,000	10,000	10,000
Totals	9,312,285	9,601,856	9,487,752	10,000,483	10,006,483	10,028,129

Comments:

- (1) Sewer Service Charge (SSC) revenue is based on rate increase approved on June 25, 2012 and actual revenue received in prior year. The Sewer Service Charges allocations are as follows:
- For 2015/16 the charge is \$552 split between operations(\$304) and capital (\$248).
 - For 2016/17 the charge remains at \$552 split between operations(\$304) and capital(\$248).
- (2) Includes application fees, permits and monitoring charges.
- (3) Oil/Bev/Tire Grants \$28,896/ JPA Reimb Fees \$30,984.
- (4) Other revenue includes septic tank hauling fees, and miscellaneous revenue.

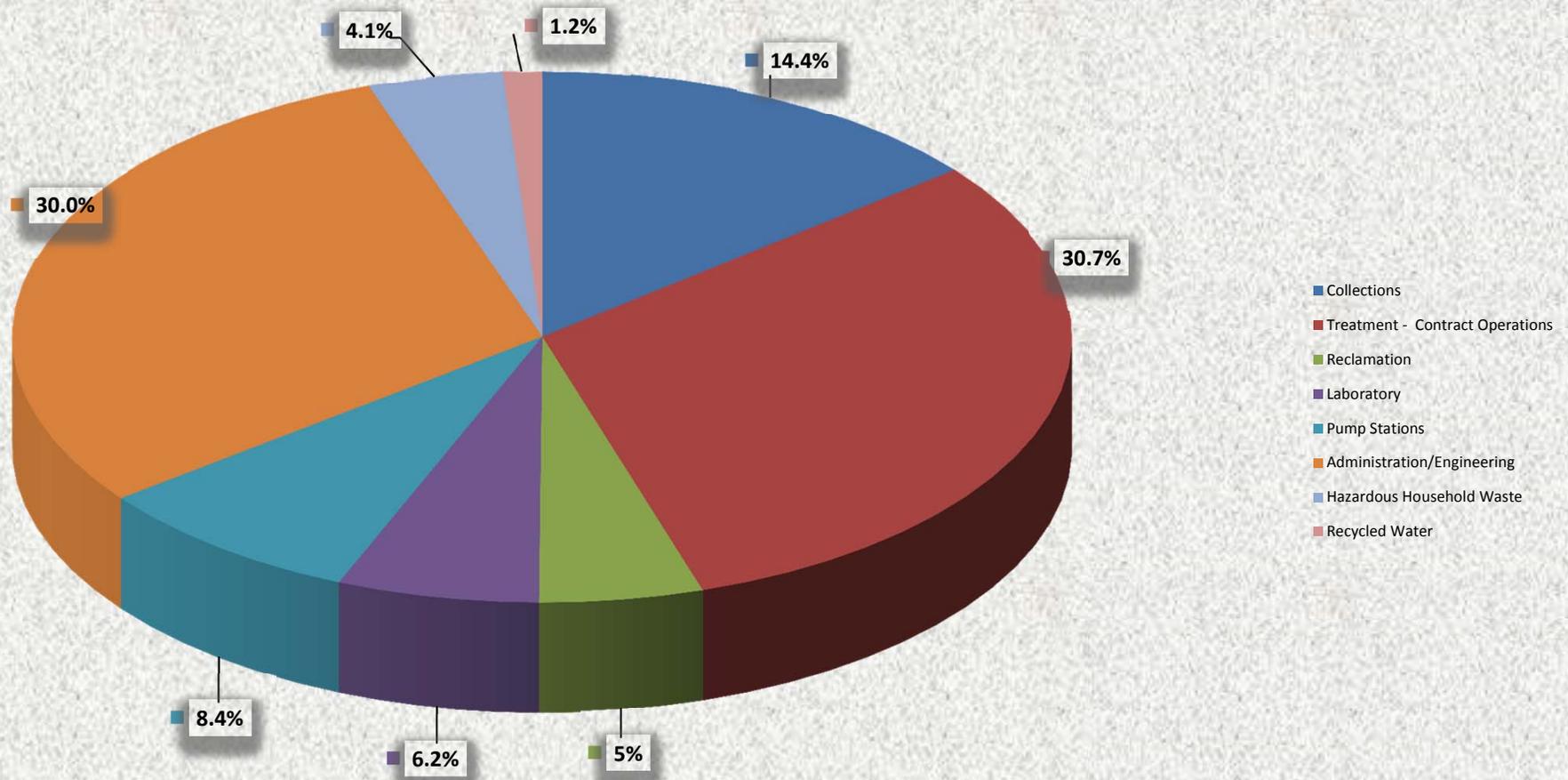
APPROPRIATIONS LIMITATION

The appropriations limitation, pursuant to Article XIII B of the California Constitution, is determined to be \$5,995,198 for the FY 2015-16.

**Novato Sanitary District
2015-17 Final Budget
Operating Budget - Summary of Expenditures**

Operating Cost Center	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Collections	1,316,424	1,389,859	1,240,062	1,408,761	1,386,100	1,382,990
Treatment - Contract Operations	2,699,200	2,827,499	2,795,808	2,977,341	3,018,331	3,073,224
Reclamation	534,268	484,649	398,117	492,380	487,029	510,150
Laboratory	685,376	593,829	555,215	601,633	601,633	632,767
Pump Stations	822,016	807,072	679,829	826,927	814,633	863,306
Administration/Engineering	2,766,336	2,818,610	2,075,333	2,941,770	2,936,237	2,982,712
Hazardous Household Waste	371,301	368,698	289,587	402,501	402,501	409,787
Recycled Water	108,000	116,000	100,353	111,000	117,000	117,000
	9,302,921	9,406,216	8,134,304	9,762,313	9,763,464	9,971,936

Final Operating Budget 2015-16 Expenditures by Cost Center



Novato Sanitary District 2015-16 Final Operating Budget Operating Budget Detail by Account Category													Over/ Under PY Budget	% Over/ Under PY Budget
	Treatment Facilities	Recl	L-M	Pump Stations	Collection System	A-E	HHW Program	Recycled Water	Total	As Percent of Budget	Over/ Under PY Budget	% Over/ Under PY Budget		
Salaries and Wages		75,400		337,753	634,609	1,102,409			2,150,171	22.02%	(8,389)	-0.39%		
Contract Services (Operations & Lab)	2,059,201		357,133					50,000	2,466,333	25.26%	458,804	22.85%		
Employee Benefits		28,629	0	141,880	269,491	440,568			880,568	9.02%	9,865	1.13%		
Retiree Health Benefits						375,260			375,260	3.84%	(20,895)	-5.27%		
Directors' Fees						43,000			43,000	0.44%	(2,000)	-4.44%		
Election Expense						50,000			50,000	1%	50,000	100.00%		
Gasoline, Oil & Fuel		4,000	3,000	5,000	28,000	10,000			50,000	0.51%	-	0.00%		
Insurance	12,000					135,000			147,000	1.51%	(81,570)	-35.69%		
Ins Claims Expense						40,000			40,000	0.41%	(5,000)	-11.11%		
Agency Dues						55,000			55,000	0.56%	(5,000)	-8.33%		
Memberships						9,000			9,000	0.09%	500	5.88%		
Office Expense						25,000			25,000	0.26%	(4,000)	-13.79%		
Safety		500	1,000	2,000	7,000	2,000			12,500	0.13%	6,000	92.31%		
Software Maint		2,000	4,000	12,000	25,000				43,000	0.44%	(1,100)	-2.49%		
Operating Supplies		2,000	20,000	10,000	30,000	8,000		2,000	72,000	0.74%	(7,500)	-9.43%		
Operating Chemicals				15,000				26,000	41,000	0.42%	(23,000)	-35.94%		
Sludge Disposal-Contractual		210,000							210,000	2.15%	10,000	5.00%		
Accounting & Auditing						24,000			24,000	0.25%	6,000	33.33%		
Attorney						90,000			90,000	0.92%	(30,000)	-25.00%		
Outside Consulting						270,000			270,000	2.77%	(5,000)	-1.82%		
IT/Misc. Electrical						36,000			36,000	0.37%	(4,000)	-10.00%		
Safety & Wellness Incentive Program						10,000			10,000	0.10%	10,000	100.00%		
Printing & Publication						22,000			22,000	0.23%	-	0.00%		
Repairs & Maintenance		50,000	10,500	110,000	85,000	50,000		22,000	327,500	3.35%	(15,000)	-4.38%		
Unusual Equipment Maint	150,000	0							150,000	1.54%	-	0.00%		
Small Tools		500		1,000	2,000				3,500	0.04%	-	0.00%		
Outside Services				32,000	225,000				257,000	2.63%	(58,000)	-18.41%		
Ditch/Dike Maintenance		20,000							20,000	0.20%	-	0.00%		
Research & Monitoring			163,000					14,000	177,000	1.81%	(70,000)	-28.34%		
Travel, Mtgs & Train.						55,000			55,000	0.56%	(15,000)	-21.43%		
Pollution Prevention/Pub. Ed.			40,000						40,000	0.41%	5,000	14.29%		
Gas & Electricity	707,130	85,000		100,000				2,000	894,130	9.16%	116,730	15.02%		
Water		3,000		7,000	12,000				22,000	0.23%	2,000	10.00%		
Telephone				24,000	2,000	10,000			36,000	0.37%	(5,000)	-12.20%		
Other/Operational Assistance					1,000				1,000	0.01%	-	0.00%		
Permits & Fees	90,000	6,000	3,000	17,000	65,000		1,000		182,000	1.86%	-	0.00%		
Co. Collection Fees						69,000			69,000	0.71%	9,000	15.00%		
Ser. Chg. System Exp						5,000			5,000	0.05%	-	0.00%		
AB 939 Solid Waste Programs						402,501			402,501	4.12%	33,803	9.17%		
Total	3,018,331	487,029	601,633	814,633	1,386,100	2,936,237	402,501	117,000	9,763,464	100.00%	357,249	3.80%		

SECTION III

***OPERATING BUDGET
By Cost Center and Account Category***

**Novato Sanitary District
2015-17 Final Budget
Operating Budget - Collections**

Collections Cost Center - 60000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
60010 · Salaries & Wages	549,300	604,357	511,683	654,553	634,609	675,938
60020 · Employee Benefits	250,124	262,502	242,831	272,208	269,491	283,552
60060 · Gas, Oil & Fuel	30,000	28,000	15,236	28,000	28,000	28,000
60085 · Safety	5,000	2,000	1,043	7,000	7,000	3,500
60091 · Software Maint	20,000	25,000	18,894	25,000	25,000	20,000
60100 · Operating Supplies	30,000	30,000	25,930	30,000	30,000	30,000
60150 · Repairs & Maint	85,000	85,000	87,400	85,000	85,000	85,000
60152 · Small Tools	2,000	2,000	1,709	2,000	2,000	2,000
60153 · Outside Services	225,000	275,000	272,980	225,000	225,000	175,000
60192 · Water	7,000	8,000	11,704	12,000	12,000	12,000
60193 · Telephone	2,000	2,000	2,086	2,000	2,000	2,000
60200 · Other(Garbage Coll)	1,000	1,000	986	1,000	1,000	1,000
60201 · Permits & Fees	110,000	65,000	47,580	65,000	65,000	65,000
	1,316,424	1,389,859	1,240,062	1,408,761	1,386,100	1,382,990

**Novato Sanitary District
2015-17 Final Budget
Operating Budget - Treatment Facilities Contract Operations**

Treatment Facilities - Contract Operations Cost Center - 61000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015 -16	Preliminary Budget 2016-17
Accounts						
61000-1 · Fixed Fee ⁽¹⁾	1,940,900	2,057,529	2,044,052	2,059,201	2,059,201	2,119,777
61000-2 · Insurance & Bonds	50,600	42,570	11,532	12,000	12,000	14,000
61000-3 · Major Repair/Replacement ⁽²⁾	109,200	50,000	45,512	150,000	150,000	150,000
61000-4 · Water/Permits/Phone	65,000	90,000	70,048	90,000	90,000	90,000
61000-5 · Gas & Electricity ⁽³⁾	533,500	587,400	624,664	666,140	707,130	699,447
	2,699,200	2,827,499	2,795,808	2,977,341	3,018,331	3,073,224

Comments:

- ⁽¹⁾ Includes an annual contractual adjustment to the service fee, and an allowance for contractual incentive payment.
- ⁽²⁾ Per District Policy No. 3512, "Annual Budget - Non-Personnel Related Changes to Budget Amounts", a budget amount of \$100k has been reallocated from Account 61000-3 to Account 61000-1 for FY14-15.
- ⁽³⁾ Assumes a 10% increase for purchased utility power based on actual expenditures for 2014/15, and an allowance for contractual incentive payment with 50-50 sharing of savings from power usage below contract baseline, between Veolia and the District.

**Novato Sanitary District
2015-2017 Final Budget
Operating Budget - Reclamation**

Reclamation Cost Center - 63000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
63010 · Salaries & Wages	51,991	60,549	35,899	75,669	75,400	84,380
63020 · Employee Benefits	17,277	22,500	16,834	28,711	28,629	30,270
63060 · Gasoline & Oil	5,000	4,000	2,173	4,000	4,000	4,000
63085 · Safety	1,000	500	0	500	500	500
63091 · Software Maint	3,000	3,100	1,509	2,000	2,000	2,000
63100 · Operating Supplies	3,000	2,500	1,242	2,000	2,000	2,500
63115 · Sludge Disposal	190,000	200,000	179,757	190,000	210,000	215,000
63150 · Repairs & Maint	60,000	70,000	69,036	70,000	50,000	50,000
63151 · Unusual Equipment Maint	60,000	0	0	0	0	0
63152 · Small Tools	1,000	500	11	500	500	500
63157 · Ditch/Dike Maint	20,000	20,000	2,850	20,000	20,000	20,000
63191 · Gas & Electricity	110,000	90,000	81,237	90,000	85,000	90,000
63192 · Water	10,000	5,000	2,533	3,000	3,000	5,000
63201 · Permits & Fees	2,000	6,000	5,036	6,000	6,000	6,000
	534,268	484,649	398,117	492,380	487,029	510,150

**Novato Sanitary District
2015-17 Final Budget
Operating Budget - Laboratory**

Laboratory Cost Center - 64000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
64010 · Contract Lab Services (1)	217,324	194,138	186,048	357,133	357,133	366,767
64020 · Employee Benefits	80,402	72,191	74,577	0	0	0
64060 · Gasoline & Oil	3,000	3,000	1,630	3,000	3,000	3,000
64085 · Safety	1,000	1,000	0	1,000	1,000	1,000
64091 · Software Maintenance	8,500	4,000	1,830	4,000	4,000	4,000
64100 · Operating Supplies	25,000	25,000	23,631	20,000	20,000	20,000
64150 · Repairs & Maintenance	10,000	9,500	4,387	10,500	10,500	12,000
64160 · Research & Monitoring	297,150	247,000	239,357	163,000	163,000	180,000
64170 · Pollution Prev/Public Ed	40,000	35,000	21,396	40,000	40,000	43,000
64201 · Permits & Fees	3,000	3,000	2,359	3,000	3,000	3,000
	685,376	593,829	555,215	601,633	601,633	632,767

Comments:

(1) This account previously titled "Salaries and Wages", is renamed to reflect fees paid for contract laboratory and environmental services provided by Veolia and North Marin Water District.

**Novato Sanitary District
2015-2017 Final Budget
Operating Budget - Pump Stations**

Pump Stations Cost Center - 65000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
65010 · Salaries & Wages	315,414	316,295	251,390	347,650	337,753	362,278
65020 · Employee Benefits	146,602	137,777	111,188	149,277	141,880	156,028
65060 · Gasoline & Oil	5,000	5,000	2,726	5,000	5,000	6,000
65085 · Safety	3,000	2,000	162	2,000	2,000	2,000
65091 · Software Maintenance	12,000	12,000	4,910	12,000	12,000	12,000
65100 · Operating Supplies	10,000	10,000	10,027	10,000	10,000	10,000
65101 · Operating Chemicals	45,000	30,000	12,000	15,000	15,000	15,000
65150 · Repairs & Maintenance	115,000	115,000	102,742	110,000	110,000	115,000
65152 · Small Tools	2,000	1,000	675	1,000	1,000	2,000
65153 · Outside Services, Elect.	45,000	40,000	42,130	32,000	32,000	35,000
65191 · Gas & Electricity	90,000	90,000	98,401	95,000	100,000	100,000
65192 · Water	5,000	7,000	6,459	7,000	7,000	7,000
65193 · Telephone	23,000	24,000	23,204	24,000	24,000	24,000
65201 · Permits & Fees	5,000	17,000	13,815	17,000	17,000	17,000
	822,016	807,072	679,829	826,927	814,633	863,306

**Novato Sanitary District
2015-2017 Final Budget
Operating Budget - Administration**

Administration and Engineering Cost Center - 66000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
66010 · Salaries & Wages	1,007,722	983,222	861,011	1,098,396	1,102,409	1,227,560
66020 · Employee Benefits	402,036	375,733	324,399	448,114	440,568	472,871
66021 · Retiree Health Benefits	387,078	396,155	204,206	375,260	375,260	383,281
66030 · Director's Fees	45,000	45,000	31,500	55,000	43,000	43,000
66040 · Election Expense	0	0	0	50,000	50,000	0
66060 · Gasoline & Oil	9,000	10,000	5,588	10,000	10,000	11,000
66070 · Insurance	129,000	186,000	81,429	135,000	135,000	142,000
66071 · Insurance Claim Expense	45,000	45,000	29,608	40,000	40,000	40,000
66075 · Agency Dues	46,000	60,000	43,645	55,000	55,000	55,000
66080 · Memberships	8,000	8,500	7,662	9,000	9,000	9,500
66085 · Safety	1,000	1,000	1,121	2,000	2,000	1,500
66090 · Office Expense	27,000	29,000	25,583	25,000	25,000	30,000
66100 · Engineering Supplies	9,000	9,000	7,133	8,000	8,000	9,000
66121 · Accounting & Auditing	22,500	18,000	17,365	24,000	24,000	28,000
66122 · Attorney Fees	140,000	120,000	30,856	90,000	90,000	50,000
66123 · O/S Contractual	235,000	275,000	201,284	270,000	270,000	223,000
66124 · IT/Misc Electrical	40,000	40,000	32,809	36,000	36,000	40,000
66125 · Safety & Wellness Incentive Prog	0	0	0	10,000	10,000	10,000
66130 · Printing & Publications	18,000	22,000	19,423	22,000	22,000	22,000
66150 · Repairs & Maintenance	40,000	45,000	46,469	40,000	50,000	42,000
66170 · Travel, Meetings & Training	70,000	70,000	39,835	55,000	55,000	60,000
66193 · Telephone	15,000	15,000	8,712	10,000	10,000	10,000
66202 · County Fees-Property Taxes	33,000	25,000	26,961	27,000	27,000	26,000
66203 · County Fees-Sewer Ser Chg	32,000	35,000	28,735	42,000	42,000	42,000
66250 · Service Charge Sys Exp	5,000	5,000	0	5,000	5,000	5,000
	2,766,336	2,818,610	2,075,333	2,941,770	2,936,237	2,982,712

Novato Sanitary District						
Preliminary Operating Budget 2015-17						
PERSONNEL DETAIL						
Number	Position	Dept.	Pay Range	Total		
				2015-16 Salaries	2016-17 Salaries	
1.00	Manager-Engineer.....	A/E		200,302	206,311	
1.00	Technical Services Manager.....	A/E	MC119	110,480	136,553	
1.00	Field Services Manager25AE/.25CS/.25PS/.25Rec	MC119	146,160	150,545	
1.00	Senior Engineer.....	.75AE/.25PS	MC116.5	129,432	133,315	
0.46	Administrative Services Specialist	A/E	MC117.5	62,726	64,608	
1.00	Administrative Services Officer	A/E	MC115	85,896	123,862	
1.00	Administrative Assistant	A/E	MC103	43,380	62,554	
1.00	Administrative Secretary.....	A/E	MC106	77,520	79,846	
1.00	Finance Officer.....	A/E	MC115	114,528	123,862	
1.00	Project Specialist	.25AE/.25CS/.25PS/.25Rec	MC112.5	68,985	99,476	
1.00	Staff Engineer.....	.5A/E/.5CS	47	98,940	101,908	
1.00	Construction Inspector.....	A/E	44.5	87,600	90,228	
1.00	Information System Specialist II.....	.5A/E/.5CS	43.5	83,424	85,927	
1.00	Environmental Services Supervisor...(Note 1)	L/M	MC115.5	-	-	
1.00	ECA II...(Note 1)	L/M	45.5	-	-	
1.00	Collection System Superintendent.....	.67CS/.33PS	MC115	103,884	107,001	
1.00	Collection System Leadworker.....	.67CS/.33PS	47	90,695	101,908	
1.00	Collection System Worker III.....	.67CS/.33PS	43.5	83,424	85,927	
1.00	Collection System Worker II.....	.67CS/.33PS	40.5	72,072	74,234	
5.00	Collection System Worker I.....	.67CS/.33PS	38.5	291,980	315,776	
1.00	Admin Intern	A/E	N/A	13,500	13,500	
1.00	Engineering Aide - temp	A/E	N/A	16,200	18,000	
0.40	Hourly Electrician	.25AE/.25PS/.50Rec	N/A	40,000	40,000	
	Allowance for Overtime.....	C/S		35,000	35,000	
	Allowance for Overtime.....	A/E		7,500	7,500	
	Allowance for Standby Duty Pay.....	C/S		28,000	28,000	
	Subtotal			2,091,629	2,285,841	
	Allowance for Possible COLA - across the board	3.00%		58,543	64,315	
				2,150,171	2,350,157	
25.86	Administration and Engineering (A/E)		1,102,409	1,227,560		
Note 1:	Laboratory and Monitoring (L/M)		-	-		
	Collection System	67%	634,609	675,938		
	Pump Stations	33%	337,753	362,278		
	Reclamation Facilities		75,400	84,380		
	Total/Check		2,150,171	2,350,157		
Note 1:	Work for these positions now performed through contract services with Veolia Water and NMWD.					

**Novato Sanitary District
2015-2017 Final Budget
Operating Budget - Hazardous Household Waste**

HHW Cost Center - 67000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
67400 · Management Services	119,264	130,161	81,691	131,464	131,464	134,750
67500 · Household Hazardous Wst	187,500	164,000	181,197	211,500	211,500	214,000
67530 · Used Oil Grant	5,000	11,963	5,130	11,269	11,269	11,269
67530-1Beverage Container Grant	22,537	10,574	0	11,268	11,268	11,268
67540 · Education/Public Outreach	22,000	37,000	11,569	22,000	22,000	23,500
67600 · Other	5,000	5,000	0	5,000	5,000	5,000
67610 · City AB 939 Admin Service	10,000	10,000	10,000	10,000	10,000	10,000
	371,301	368,698	289,587	402,501	402,501	409,787

**Novato Sanitary District
2015-2017 Final Budget
Operating Budget - Recycled Water**

Recycled Water Cost Center - 68000	Budget 2013-14	Budget 2014-15	Actual Exp 2014-15	Proposed Budget 2015-16	Final Budget 2015-16	Preliminary Budget 2016-17
Accounts						
68010 · O & M Services	50,000	50,000	49,613	50,000	50,000	50,000
68100 · Operating Supplies	2,000	3,000	28	2,000	2,000	2,000
68101 · Operating Chemicals	20,000	34,000	21,826	26,000	26,000	26,000
68150 · Repairs & Maintenance	25,000	18,000	14,045	22,000	22,000	22,000
68160 · Research & Monitoring	0	0	13,125	0	14,000	14,000
68191 · Gas & Electricity	10,000	10,000	1,716	10,000	2,000	2,000
68201 · Permits & Fees	1,000	1,000	0	1,000	1,000	1,000
	108,000	116,000	100,353	111,000	117,000	117,000

SECTION IV

CAPITAL IMPROVEMENT BUDGET

**Novato Sanitary District
2015-17 Final Budget
Capital Improvement Budget - Revenue Summary**

				Proposed	Final	Preliminary
Capital Fund	Budget	Budget	Act Rev	Budget	Budget	Budget
Revenue Center - 51000	2013-14	2014-15	2014-15	2015-16	2015-16	2016-17
Accounts						
Capital Improvement Income						
51010 · Sewer Service Charges(1)	6,728,280	7,183,200	7,067,920	7,435,040	7,435,040	7,447,440
51015 · Property Taxes	1,740,000	1,750,000	1,999,816	1,900,000	1,900,000	1,938,000
51020 · Connection Charges(2)	470,000	493,500	291,565	518,000	518,000	544,000
51030 · Collector Sewer Charges	2,000	2,000	2,000	2,000	2,000	2,000
51040 · Special Equalization Chrg	4,000	4,000	227	4,000	4,000	4,000
51060 · Interest	50,000	30,000	23,018	22,000	22,000	22,000
51070 · Other Revenue	20,000	20,000	0	20,000	20,000	20,000
Total Capital Improvement Income	9,014,280	9,482,700	9,384,546	9,901,040	9,901,040	9,977,440
Comments:						
(1) Sewer Service Charge (SSC) revenue is based on rate increase approved on June 25, 2012 and actual revenue received in prior year. The Sewer Service Charges allocations are as follows:						
- For 2015/16 the charge is \$552 split between operations (\$304) and capital (\$248).						
- For 2016/17 the charge remains at \$552 split between operations(\$304) and capital(\$248).						
(2) Connection Charges projected on 50 new connections each year.						
(3) Note that the FY 2016-17 Preliminary Capital Improvement budget is based on currently forecasted revenues. However, future capital improvement needs may exceed the amounts shown, and additional revenue will be required.						

**Novato Sanitary District
2015-2017 Final Budget
Capital Improvement Budget - CIP Expenditures**

Capital Improvements			Actual	Proposed	Final	Preliminary
Cost Centers - 72000 & 73000	Budget	Budget	Exp	Budget	Budget	Budget
	2013-14	2014-15	2014-15	2015-16	2015-16	2016-17
Accounts						
72110 · Drainage PS 3&7 Outfall Rehab	150,000	265,000	260,758	5,000	5,000	0
72403 · Pump Station Rehabilitation	1,440,000	1,082,185	513,043	50,000	50,000	50,000
72508 · North Bay Water Reuse Authority (NBWRA)	150,000	355,000	331,295	403,000	403,000	440,000
72609 · WWTP Upgrade - Contract B	100,000	45,000	44,499	0	0	0
72611 · Bayside Sewer	3,000	0	0	0	0	0
72612 · Southgate Sewer	1,000	0	0	0	0	0
72706 · Collection System Improvments	1,730,000	1,600,000	1,366,749	1,050,000	1,050,000	900,000
72706-1 · Lateral Replacement Program	30,000	50,000	18,950	50,000	50,000	50,000
72707 · Hamilton Wetlands/Outfall Integration	90,000	36,542	15,300	22,500	22,500	0
72708 · Cogeneration	50,000	40,000	0	20,000	20,000	20,000
72801 · Annual Minor Projects	0	0	0	0	0	0
72802 · Annual Sewer Adj. for City Proj	10,000	10,000	10,000	10,000	10,000	10,000
72803 · Annual Collection Sys Repairs	275,000	200,000	187,016	200,000	200,000	200,000
72804 · Annual Reclamation Fac Improvements	250,000	150,000	102,815	100,000	100,000	100,000
72805 · Annual Trtmt Plnt/Pump St Improvements	275,000	200,000	194,136	300,000	300,000	200,000
72808 · Strategic Plan Update	0	0	0	0	10,000	10,000
72809 · Novato Creek Watershed	50,000	50,000	50,000	15,000	15,000	0
73001 · WWTP Upgrade - Contract C(Solids handling)	2,858,377	461,396	420,994	10,000	10,000	0
73002 · WWTP Up-Contract D-Recycled Water	150,000	10,000	395	0	0	0
73003 · Admin Building Upgrade/Maint. Building	400,000	1,000,000	57,254	750,000	740,000	1,120,000
73004 · Odor Control and NTP Landscaping	0	0	0	50,000	50,000	50,000
73005 · RWF Expansion	0	0	0	150,000	150,000	1,200,000
73006 · NTP Corrosion Control	0	0	0	150,000	150,000	75,000
73090 · Vehicle Replacement	64,000	180,000	175,066	25,000	25,000	25,000
78500 · Interest - SRF/COP Bond	2,730,721	2,621,583	2,621,583	2,509,673	2,509,673	2,385,943
78500 · Principal	4,339,933	4,449,171	4,449,171	4,565,431	4,565,431	4,673,762
Totals	15,147,031	12,805,877	10,819,024	10,435,604	10,435,604	11,509,705

SECTION V

***WASTEWATER CAPITAL RESERVE FUND &
CERTIFICATE OF PARTICIPATION (COP)
RESERVE FUND***

**Novato Sanitary District
2015-17 Final Budget
Wastewater Capital Reserve Fund**

		2015-16 Budget	
		Prelim	Final
Wastewater Capital Reserve Fund			
	FUND BALANCE 6/30/14	3,275,000	3,275,000
	Required Deposits	0	0
	FUND BALANCE 6/30/15	3,275,000	3,275,000
	Required Deposits	0	0
	ANTICIPATED FUND BALANCE 6/30/16	3,275,000	3,275,000
Note:	Per the SRF Loan agreement, the District must deposit sufficient funds to build up the Wastewater Capital Reserve Fund (WCRF) at a minimum rate of 0.5% of the SRF loan amount each year for a period of ten years. The District's unused bonding capacity of \$3,275,000 from the 1970 and 1986 GO Bonds may be used to offset, dollar for dollar, the required cash deposits to the WCRF. The maximum required WCRF balance is \$3,599,654 of which \$3,275,000 is satisfied.		

**Novato Sanitary District
2015-17 Final Budget
COP Reserve Fund**

		2015-16 Budget			
		Proposed	Final		
Certificates of Participation Reserve Fund					
FUND BALANCE 6/30/14		1,686,737	1,686,746		
	Interest Income	5,645	6,597		
FUND BALANCE 6/30/15		1,692,382	1,693,343		
	Interest Income	1,000	1,000		
ANTICIPATED FUND BALANCE 6/30/16		1,693,382	1,694,343		
Summary of COP Activity:		12/13	13/14	14/15	15/16
Beginning Balance each year		14,431,619	9,610,463	4,804,012	1,693,343
Cop Proceeds		-	-	-	-
Less Withdrawals		(4,859,140)	(4,824,518)	(3,117,266)	-
Interest earned and Reinvested		37,984	18,067	6,597	1,000
Cash Balance for COP Expenditures		9,610,463	4,804,012	1,693,343	1,694,343
Note: The Trust Agreement established a reserve fund in October 2011.					
The reserve fund is funded based on the upcoming annual debt service payment which is currently at \$1.6 million, and is held by the Trustee. This amount will be used to make the final payment on the COP and the Reserve Fund will be closed out at that time.					

SECTION VI

DEBT SERVICE FUND SUMMARY

**Novato Sanitary District
2015-17 Final Budget
State Revolving Fund Loan
and
COP Bond Fund**

		2015-16 Budget		
		Proposed	Final	
<u>State Revolving Fund Loan</u>				
DEBT BALANCE 6/30/14		74,366,046	74,366,046	
Principal Payment 2014-15		(3,594,171)	(3,594,171)	
Interest payments 2014-15		(1,784,785)	(1,784,785)	
Transfer from Capital Improvement Fund 2014-15		1,784,785	1,784,785	
DEBT BALANCE 6/30/15		70,771,875	70,771,875	
Principal Payment 2015-16		(3,680,431)	(3,680,431)	
Interest payments 2015-16		(1,698,525)	(1,698,525)	
Transfer from Capital Improvement Fund 2015-16		1,698,525	1,698,525	
ANTICIPATED DEBT BALANCE 6/30/16		67,091,444	67,091,444	
<u>COP Bond Financing Issued October 2011</u>				
DEBT BALANCE 6/30/14		20,120,000	20,120,000	
Principal Payment 2014-15		(855,000)	(855,000)	
Interest payments 2014-15		(836,798)	(836,798)	
Transfer from Capital Improvement Fund 2014-15		836,798	836,798	
DEBT BALANCE 6/30/15		19,265,000	19,265,000	
Principal Payment 2015-16		(885,000)	(885,000)	
Interest payments 2015-16		(811,148)	(811,148)	
Transfer from Capital Improvement Fund 2015-16		811,148	811,148	
ANTICIPATED DEBT OWED 6/30/16		18,380,000	18,380,000	
		Actual	Final	Preliminary
		Rev/Exp	Budget	Budget
Debt Coverage Ratio(1)		2014-15	2015-16	2016-17
		Budget 14/15		
Net Operating Revenue		195,640	1,353,448	243,019
Capital Revenue		9,482,700	9,384,546	9,977,440
Annual Debt Service		7,070,754	7,070,754	7,075,104
Debt Coverage Ratio		1.37	1.52	1.43
1.42				
Net revenues covenant requires a 1.20 coverage ratio				
(1)Net Operating Revenue + Capital Revenue/ Annual Debt Service = Debt Coverage Ratio				

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Appropriations Limit for FY2015-16.	MEETING DATE: August 24, 2015. AGENDA ITEM NO.: 7.c.
RECOMMENDED ACTION: Adopt Resolution No. 3091 Establishing the District's Appropriations Limit for FY2015-16.	
SUMMARY AND DISCUSSION: Under the Gann Spending-Limitation Initiative (Article XIII B of the State Constitution) adopted as Proposition 4 in June 1979 (and subsequently modified by Proposition 111 in June 1990), the District is required to annually adopt a resolution setting an appropriations limit for the upcoming year. For 2015-16, staff projects that the District's appropriations subject to limitation will be \$5,995,198. The Gann Spending-Limitation Initiative provides for the limitation of state and local government appropriations and is actually a limitation on tax revenues rather than a direct limitation on appropriations. Appropriations subject to limitation may not exceed appropriations made in 1978-79 except as adjusted for increases in the cost of living, population and service responsibility transfers. Appropriations financed through service fees (to the degree that they do not exceed the cost of performing the service), grant programs, and other specified "non-tax" sources are not subject to the appropriations limit. Originally, the Gann Initiative was self-executing, requiring no formal review; however, Proposition 111 requires that the annual calculation be reviewed as part of the annual financial audit. The annual adjustment factors for changes in population and cost of living for the appropriations limit calculation must be selected by a recorded vote of the Board.	
BUDGET INFORMATION: N/A	
DEPT. MGR.: lc, ssk	GENERAL MANAGER: SSK

**RESOLUTION NO. 3091
A RESOLUTION OF THE NOVATO SANITARY DISTRICT
CORRECTING AND AMENDING PRIOR CALCULATIONS
AND MAKING DETERMINATION AND ESTABLISHING
THE 2015-16 APPROPRIATION LIMIT**

RESOLVED, by the Board of Directors of the Novato Sanitary District, Marin County, California, that in order to conform to modifications in the appropriation limit calculation as provided by Proposition 111 amending Article XIII B of the Constitution of the State of California and regulations adopted thereunder and by Senate Bill No. 88, Chapter 60 of Statutes of 1990 and especially the amendment of Section 7901 relating to the calculations of appropriation limits and the addition of Section 7914 defining "qualified capital outlay project" of the Government Code of the State of California, and in order to correct and adjust earlier calculations to comply with constitutional changes and with regulations adopted thereunder, the previously calculated limits for the District shall be amended in accordance with the appropriation limit calculations which have been on file and available in the office of the Secretary of the Novato Sanitary District. The District has calculated the maximum limit applicable to the appropriation of tax proceeds for the fiscal year 2015-16 to be the sum of FIVE MILLION NINE HUNDRED NINETY-FIVE THOUSAND ONE HUNDRED NINETY EIGHT AND NO/100 (\$5,995,198). The basis of said calculations are available and on file in the office of the Secretary and the Board of Directors does hereby determine that for said fiscal year the calculations are based on the percentage change in the local assessment roll due to the addition of non-residential new construction and the population change of the County of Marin within which the District is situated, and that this resolution shall be posted by the Secretary at the official places of posting and shall be effective immediately.

* * * * *

I hereby certify that the foregoing resolution was passed and adopted by the Board of Directors of the Novato Sanitary District, Marin County, California, at a meeting thereof held on the 24th day of August, 2015, by the following vote of the members thereof:

AYES, and in favor thereof, Members:

NOES, Members:

ABSENT, Members:

President
Board of Directors

APPROVED:

Secretary

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: North Bay Water Reuse Authority (NBWRA), Account No. 72508: Memorandum of Agreement (MoA) with County of Marin.	MEETING DATE: August 24, 2015 AGENDA ITEM NO.: 8.a.
RECOMMENDED ACTION: Approve a Memorandum of Agreement (MoA) with the County of Marin for the County to pay the District one hundred forty-eight thousand one hundred fifty-three dollars (\$148,153) for the County's participation in the NBWRA Phase 2 Feasibility Study, and authorize the General Manager-Chief Engineer to execute it.	
SUMMARY AND DISCUSSION: <p>At the July 14, 2014 and July 13, 2015 Board meetings, staff had provided informational updates to the Board on the District's participation in the NBWRA Phase 2 Feasibility Study (see attached).</p> <p>As seen from these attachments, the third project element identified for the Phase 2 study is the Tidal Prism and habitat restoration (in cooperation with Marin County) at an estimated cost of \$4.64 million. The cost of this study was included in the District's three year cost allocation of \$343,005 in FY14-15, \$377,090 in FY15-16, and \$414,684 in FY16-17. The County of Marin's share of this cost (for the Tidal Prism and habitat restoration project element), is \$44,781 in FY 14-15, \$49,232 in FY 15-16, and \$54,140 in FY 16-17 for a total of \$148,153. At this time, the County is proposing to reimburse the District the entire \$148,153 amount in FY15-16.</p> <p>The attached MoA memorializes the terms of the proposed reimbursement. This MoA has been extensively reviewed by both District staff and County Flood control staff. It has also been approved by District Counsel for forwarding to the District Board for its approval, and by County Counsel for forwarding to the County Board of Supervisors for its approval.</p> <p>It is recommended that the Board approve the MoA and authorize the General Manager-Chief Engineer to execute it.</p>	
Attachments: <p>Attachment 1: Agenda Summary Item No. 11.a. from July 14, 2014 Board meeting. Attachment 2: Agenda Summary Item No. 9.a. from July 13, 2015 Board meeting. Attachment 3: Proposed Memorandum of Agreement between the County of Marin and Novato Sanitary District.</p>	
BUDGET INFORMATION: The adopted Preliminary Budget for Fiscal Years 2015-17 includes an amount of \$403,000 for FY15-16 as the District's share of the cost of the Phase 2 Feasibility Study for FY15-16.	
DEPT. MGR. : ssk	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Informational Item - North Bay Water Reuse Authority (NBWRA), Account No. 72508:	MEETING DATE: July 14, 2014 AGENDA ITEM NO.: 11.a.
RECOMMENDED ACTION: Informational Item - payment to Sonoma County Water Agency (SCWA) of an amount up to \$343,005 as the District's FY14-15 portion of the cost of the NBWRA Phase 2 Feasibility Study.	
SUMMARY AND DISCUSSION: <p>Previously, the NBWRA Phase 2 Scoping Study identified about \$136 million in overall project costs for all of the NBWRA Member Agencies Phase 2 projects, including about \$36 million in specific projects for the District as follows:</p> <ol style="list-style-type: none"> 1. Construct a ~250 acre wetlands/pond for secondary effluent - \$15.1 million 2. Treatment Plant Upgrade to increase tertiary capacity to ~5MGD - \$15.8 million 3. Tidal Prism and habitat restoration (in cooperation with Marin County) - \$4.64 million. <p>The next step is the Phase 2 Feasibility Study. NBWRA has identified the total cost for this study to its Member Agencies at \$4,985,479 over the three year period of Fiscal Year FY14-15, FY15-16, and FY16-17. The NBWRA Board approved its FY14-15, FY15-16, and FY16-17 budgets and the Member Agency Cost Allocations at its May 19, 2014 meeting. The resulting cost allocation for the District over the three year period is \$1,134,778, spread out as \$343,005 in FY14-15, \$377,090 in FY15-16, and \$414,684 in FY16-17.</p> <p>The District's three identified projects, associated costs, and potential benefits to the District from participating in the NBWRA Phase 2 Feasibility Study were discussed during the District's FY14-15 Budget Workshop at the Board's May 27, 2014 meeting. The discussion addressed both implementation issues and longer term strategic considerations. Based on this discussion, staff prepared and presented the District's "Preliminary Budget for Fiscal Years 2014-16" at the June 9, 2014 Board meeting. This Preliminary Budget included \$370,000 under Account No. 72508 of the Capital Improvements Program (CIP) budget as the District's FY14-15 cost for the Phase 2 Feasibility Study. At its June 11, 2014 meeting, the Board's Strategic Planning/New Facilities Committee discussed the District's projects and the CIP Budget, and recommended approval and adoption of the CIP budget by the full Board. Subsequently, the Board approved and adopted the entire "Preliminary Budget for Fiscal Years 14-16" at its June 23, 2014 meeting.</p> <p>Sonoma County Water Agency (SCWA) is the administrative agency for the NBWRA Member Agencies, and will be billing the District appropriately. Therefore, District staff will work with SCWA staff to process a payment to SCWA in an amount of up to \$343,005, as the District's FY14-15 portion of the cost of the NBWRA Phase 2 Feasibility Study.</p>	
ALTERNATIVES: N/A	
BUDGET INFORMATION: The adopted Preliminary Budget for Fiscal Years 2014-16 includes an amount of \$370,000 for FY14-15 as the District's share of the cost of the Phase 2 Feasibility Study for FY14-15.	
DEPT. MGR. :	MANAGER'S APPROVAL:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Informational Item - North Bay Water Reuse Authority (NBWRA), Account No. 72508:	MEETING DATE: July 13, 2015 AGENDA ITEM NO.: 9.a.
RECOMMENDED ACTION: Informational Item - payment to Sonoma County Water Agency (SCWA) of an amount up to \$377,090 as the District's FY15-16 portion of the cost of the NBWRA Phase 2 Feasibility Study.	
SUMMARY AND DISCUSSION: <p>Previously, the NBWRA Phase 2 Scoping Study (completed in 2014) identified about \$136 million in overall project costs for all of the NBWRA Member Agencies Phase 2 projects, including about \$36 million in potential District projects as follows:</p> <ol style="list-style-type: none"> 1. Construct a ~250 acre wetlands/pond for secondary effluent - \$15.1 million 2. Treatment Plant Upgrade to increase tertiary capacity to ~5MGD - \$15.8 million 3. Tidal Prism and habitat restoration (in cooperation with Marin County) - \$4.64 million. <p>The next step is the ongoing Phase 2 Feasibility Study. NBWRA had identified the total cost for this study to its Member Agencies at \$4,985,479 over the three year period of Fiscal Year FY14-15, FY15-16, and FY16-17. The NBWRA Board approved its FY14-15, FY15-16, and FY16-17 budgets and the Member Agency Cost Allocations at its May 19, 2014 meeting. The resulting cost allocation for the District over the three year period is \$1,134,778, spread out as \$343,005 in FY14-15, \$377,090 in FY15-16, and \$414,684 in FY16-17.</p> <p>The District's potential projects, costs, and benefits from participating in the NBWRA Phase 2 Feasibility Study were discussed at the District's Budget Workshops and Strategic Planning/New Facilities Committee meetings for FY14-15 and FY15-16, and approved by the Board as part of the budget approval and adoption process. Note that while the project scopes are still evolving and costs are being refined further as part of the Phase 2 Feasibility Study, the 3-year budget amounts for individual agencies (including the District), have not been modified. It is expected that this will be addressed through a "truing-up" process at the end of the Phase 2 Feasibility Study (similar to what occurred after the Phase 1 Feasibility Study), to match each participating NBWRA agency's cost to the benefit it will receive.</p> <p>Sonoma County Water Agency (SCWA) is the administrative agency for the NBWRA Member Agencies, and will be billing the District appropriately. Therefore, District staff will work with SCWA staff to process a payment to SCWA in an amount of up to \$377,090, as the District's FY15-16 portion of the cost of the NBWRA Phase 2 Feasibility Study.</p>	
BUDGET INFORMATION: The adopted Preliminary Budget for Fiscal Years 2015-17 includes an amount of \$403,000 for FY15-16 as the District's share of the cost of the Phase 2 Feasibility Study for FY14-15.	
DEPT. MGR. : ssk	MANAGER-ENGINEER: SSK

MEMORANDUM OF AGREEMENT

**BETWEEN THE COUNTY OF MARIN
AND NOVATO SANITARY DISTRICT**

This Memorandum of Agreement (MOA) made and entered into this ____ day of ____ 2015, by and between the County of Marin, a political subdivision of the State of California (hereinafter referred to as the "COUNTY"), and the Novato Sanitary District, (hereinafter referred to as the "DISTRICT"), collectively the "PARTIES".

Whereas, the COUNTY Board of Supervisors authorized implementation of the County-wide Watershed Program to integrate flood protection and wetland restoration in the Novato Creek Watershed, and

Whereas, the Novato Creek Watershed includes the jurisdiction of both the COUNTY and the DISTRICT, including the DISTRICT'S facilities, and

Whereas, on December 9, 2013 the COUNTY and the DISTRICT signed an MOA to collaborate on hydrologic, geomorphic, hydraulic, and stormwater studies to benefit multiple watershed goals, and

Whereas, the North Bay Water Reuse Authority ("NBWRA"), is embarking on a Phase 2 Feasibility Study and EIR/EIS within the NBWRA region which includes the counties of Napa, Sonoma and Marin, and

Whereas, the DISTRICT as a full voting member of NBWRA, is taking the lead on the Novato portion of the NBWRA Phase 2 Feasibility Study and EIR/EIS, and

Whereas, the COUNTY, as an Associate Member of NBWRA, is allowed to participate in and benefit from NBWRA studies, but is not permitted to take the lead in these studies, and

Whereas, it is in the interest of the COUNTY to have the DISTRICT include the Lower Novato Creek Tidal Marsh/Flood Protection Project ("Project") into the scope of the NBWRA Phase 2 Feasibility Study and EIR/EIS, to ensure it qualifies for future Bureau of Reclamation construction funding, and

Whereas, it is a benefit to the DISTRICT to have the COUNTY contribute financially to the cost of the Novato Creek portion of the NBWRA Phase 2 Feasibility Study and EIR/EIS,

Now therefore, the COUNTY and the DISTRICT are entering into this Agreement to meet the goals listed below:

I. Goals

- A. The DISTRICT and the COUNTY will work jointly on the Novato portion of the NBWRA Phase 2 Feasibility Study and EIR/EIS, with the DISTRICT serving as the “lead” or “voting” entity on NBWRA, representing both the DISTRICT and the COUNTY.
- B. The DISTRICT will include the Project into the scope of the NBWRA Phase 2 Feasibility Study and EIR/EIS.
- C. The COUNTY will agree to pay the DISTRICT for costs associated with adding the Project to the NBWRA Phase 2 Feasibility Study and EIR/EIS.

II. Statement of Agreement

It is mutually agreed and understood that, upon signing of this Agreement:

- A. The DISTRICT will through its membership in NBWRA have the Project included in the scope of the NBWRA Phase 2 Feasibility Study and EIR/EIS.
- B. The COUNTY will pay the DISTRICT a total sum of one hundred forty-eight thousand one hundred fifty-three dollars (\$148,153) to fund the additional costs of adding the Project to the NBWRA Phase 2 Feasibility Study and EIR/EIS.
- C. The DISTRICT will invoice the COUNTY for \$148,153 in FY 15-16 for the cost of the Project, and the COUNTY will make payment within thirty (30) days.
- D. The DISTRICT shall use the payment from the COUNTY solely for the purpose of developing the Project to the NBWRA Phase 2 Feasibility Study and EIR/EIS.
- E. The DISTRICT (through NBWRA) will deliver (or cause to be delivered) to the COUNTY a complete EIR/EIS, by December 31, 2018, which includes the Project area, provided that the overall NBWRA Phase 2 Feasibility Study and EIR/EIS is completed on schedule, but if this does not occur, then as soon as practicable after any approved delay(s).
- F. The COUNTY shall only be responsible for any additional costs for the Project if the COUNTY and the District have agreed in writing to a change in scope or payment of additional Project costs.
- G. If, for any reason, the Phase 2 Feasibility Study and EIR/EIS is not completed by the NBWRA by December 31, 2018, (or as soon as practicable after any approved delay(s)), then the DISTRICT shall return to the COUNTY any unused funds from the funds contributed by the COUNTY.

- H. The COUNTY shall defend, indemnify, save and hold harmless DISTRICT, its officers, agents and employees from any and all claims, demands, suits, costs, liability, and expenses, including reasonable attorneys' fees, for any damages, injury, sickness or death to the extent arising out of COUNTY'S performance and/or obligations under this Agreement, except for liability arising through active negligence or willful misconduct of DISTRICT, its officers, agents, or employees.
- I. The DISTRICT shall defend, indemnify, save and hold harmless COUNTY, its officers, agents and employees from any and all claims, demands, suits, costs, liability, and expenses, including reasonable attorneys' fees, for any damages, injury, sickness or death to the extent arising out of DISTRICT'S performance and/or obligations under this Agreement, except for liability arising through active negligence or willful misconduct of COUNTY, its officers, agents, or employees.

III. Contacts and Notices

All notices under this Agreement shall be in writing (unless otherwise specified), delivered to the parties by hand, by commercial courier service, or by United States mail, postage prepaid, addressed to the parties at the addresses set forth below or such other addresses as the parties may designate by notice.

For COUNTY: Liz Lewis
Principal Planner
County of Marin
3501 Civic Center Drive, Room 304
San Rafael, California 94903
Phone: (415) 473-7226
Facsimile: (415) 473-3799
lizlewis@marincounty.org

For DISTRICT: Sandeep Karkal, P.E.
General Manager-Chief Engineer
Novato Sanitary District
500 Davidson Street
Novato, California 94945
Phone: (415) 892-1694
Facsimile: (415) 898-2279
sandeepk@novatosan.com

IV. Duration and Termination

The terms of this Agreement shall remain in full force and effect for the term of the development of the NBWRA Phase 2 Feasibility Study and EIR/EIS or through December 31, 2018. The terms and provisions of this Agreement shall extend to and

be binding upon and inure to the benefit of the heirs, executors, and administrators or to any approved successor, as well as to any assignee or legal successor to any party to this Agreement. Any party may terminate this Agreement by notifying the other parties in writing. Upon any early termination, there shall be no return of funds except as provided above in Paragraph II.G.

County of Marin

By: Katie Rice
President, Board of Supervisors

Attest:

Clerk of the Board

Approved as to Form:
DEPUTY COUNTY COUNSEL

By: _____

Novato Sanitary District

By: _____
Novato Sanitary District

Approved as to Form:
DISTRICT COUNSEL

By: _____

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SundayReview | OPINION

How California Is Winning the Drought

By CHARLES FISHMAN AUG. 14, 2015

FOR California, there hasn't ever been a summer quite like the summer of 2015. The state and its 39 million residents are about to enter the fifth year of a drought. It has been the driest four-year period in California history — and the hottest, too.

Yet by almost every measure except precipitation, California is doing fine. Not just fine: California is doing fabulously.

In 2014, the state's economy grew 27 percent faster than the country's economy as a whole — the state has grown faster than the nation every year of the drought.

California has won back every job lost in the Great Recession and set new employment records. In the past year, California created 462,000 jobs — nearly 9,000 a week. No other state came close.

The drought has inspired no Dust Bowl-style exodus. California's population has grown faster even as the drought has deepened.

More than half the fruits and vegetables grown in the United States come from California farms, and last year, the third growing season of the drought, both farm employment and farm revenue increased slightly.

Amid all the nervous news, the most important California drought story is the one we aren't noticing. California is weathering the drought with remarkable resilience, because the state has been getting ready for this drought for the past 20 years.

The future of water is going to be turbulent for all of us — not far away, but right where we live; not in some distant decade, but next month or next spring. A sense of water insecurity is coming to many places that have never had a water worry. Here's what California's scorching summer of 2015 is showing us: We know what to do. We just have to do it.

Cannon Michael, 43, is a sixth-generation farmer in California's Central Valley, growing tomatoes, cotton, melons and wheat on 10,000 acres of dirt that were part of the holdings of his great-great-great grandfather Henry Miller, a rancher who was known as the "Cattle King."

Mr. Michael returned to work the family farm in 1998, and has gradually transformed the mix of crops and how they are grown. In the past 10 years, he has spent \$10 million installing drip irrigation on about half the land. When he grows tomatoes using drip hoses that squirt water right below where the plants emerge from the ground, he uses about 35 percent less water per acre than he would with traditional irrigation. But the plants produce more tomatoes — he says that he gets at least 70 percent more tomatoes per 1,000 gallons of water.

Mr. Michael isn't an isolated example. He's part of a trend. Since 1980, the amount of California farmland watered by drip- or micro-irrigation has gone from almost nothing to nearly three million acres, 39 percent of the state's irrigated fields. In perfect parallel, farmland that is flood-irrigated — using more water to produce less food — has fallen to about 3.5 million acres from more than six million.

California's urban areas are also slowly transforming themselves. East of Los Angeles is a quietly innovative water district called the Inland Empire Utilities Agency, providing water for just under a million people.

The agency has an aggressive water recycling program, which cleans and resupplies 52 million gallons of water a day for an immediate second use, on farms, in factories and commercial laundries, in recharging the area's groundwater.

And although it is dozens of miles from the Pacific Ocean, the agency also desalinates water. The Inland Empire sits over an aquifer that has been polluted by a legacy of careless agricultural and human habitation. The desalination process removes chemicals and salt, turning 35 million gallons a day of tainted brine into water at least as clean as tap.

Those techniques expand Inland Empire's water supply without actually requiring any new water, and they represent the leading edge of an effort in Southern California toward "water independence." In water terms, California is famously a kind of teeter-totter: Most of the water is in the north, most of the people are in the south, and the water flows to the people.

But across Southern California, the progress is quietly astonishing. The Metropolitan Water District of Southern California now supplies roughly 19 million people in six counties, and it uses slightly less water than it did 25 years ago, when it supplied 15 million people. That savings — more than one billion gallons each day — is enough to supply all of New York City.

California's resilience is fragile. It won't last another two years, it might not last another year.

And to say that the state is weathering the drought is not to trivialize the damage. This summer's wildfires — which have killed one firefighter, have already burned more acreage to date than last year's fires and have destroyed dozens of homes — are just one example.

In the town of East Porterville, in the central part of the state, the drinking wells began to go dry a year ago or more. Many residents rely on bottled water and water distributed at the fire station. Their taps, their toilets, their showers

are dry — an astonishing level of deprivation in a state with great wealth.

Farm production numbers look good partly because prices for produce are high. Irrigation water, which comes from surface water sources mostly in the north, is allocated based on history, law and availability. Despite cuts of irrigation water of up to 100 percent, farmers have continued to get water, pumping it from aquifers under their land.

California is the only state in the nation that has never regulated groundwater — farmers are largely free to pump as much as they want, without even tracking what they use. In wet years, pumping well water is generally unnecessary and expensive. In dry years, it's survival.

In 2014, California farmers were able to substitute groundwater for 77 percent of the irrigation water they did not receive. In 2015, farmers are increasing their pumping by an astonishing one billion gallons a day, but the irrigation cuts are so severe that they will replace only 71 percent of their water.

The farmers are saving themselves now, but they are inflicting long-term damage to the vast underground water supply that is really California's only remaining water cushion.

What can we learn from California's resilience in this drought? The first lesson goes back 20 years before it started, when cities began to put conservation measures in place — measures that gradually changed water use and also water attitudes. If cities look at the water they have — rainwater, reservoir water, groundwater, wastewater — as different shades of one water, they quickly realize that there's no such thing as “storm water” or “wastewater.” It's all water. You can start giving yourself new water sources quickly by cleaning and reusing the water you've already got.

California's progress has been bumpy. The second lesson is that a drought starkly reveals water absurdities that need to be fixed, often urgently.

How can the largest agricultural economy in the country not require farmers to report how much water they use — and allow them to use groundwater without limit?

How can the water-starved city of Los Angeles have an elaborate system of drains and pipes to collect the rain that does fall — often in brief, intense torrents — only to discard it in the Pacific instead of storing it?

How can it be that in Sacramento nearly half the homes have no water meters? Residents don't know how much water they use and can't see how much they conserve if they want to.

And the third lesson is how to use water insecurity to create its opposite. A drought like this one creates the opportunity to change things — even really big things — that couldn't be changed without a sudden sense of vulnerability.

Last fall, prodded by Gov. Jerry Brown's administration, the California Legislature passed a sweeping groundwater law, taking California from having the least regulated groundwater in the country to being a model. The concept is simple: No community will be allowed to pump more water from the underground aquifers than can refill those aquifers — either naturally, or with human help.

The law is so innovative, it will eventually remake water use across the state, and if other states pay attention, across the nation. The law could inspire new techniques for getting rainwater to refill overtaxed aquifers.

In a similarly future-focused move, San Francisco just passed an ordinance to require that new buildings of a certain size have on-site water recycling systems, and reuse their own wastewater. It's the first city in the United States with such a requirement.

In May, the water district for all of Southern California decided to use the drought to change attitudes about lawns. It increased funding more than

fivefold for a program that gives rebates to homeowners who replace their lawns with desert-appropriate landscaping. Las Vegas helped pioneer such “cash for grass” programs as a water-saving technique, removing 170 million square feet of turf — thousands of lawns — since 1999.

The response in Southern California, where \$340 million was allocated for the program, stunned even experienced water managers. After five weeks, all the rebate money had been spoken for. The amount of turf set to be removed: about the same square footage that Las Vegas needed 16 years to take out.

For a century, California has pioneered innovations that have changed the way we all live. Without much fanfare, the state is doing that again, with water, moving to make standard what has been novel. A lawn landscaped with rocks and cactus instead of turf, morning coffee brewed matter-of-factly with recycled water, cities designed to return rainwater to the ground — these aren’t just symbols, they are how you handle water when you understand its value.

One of the wonderful ironies of water is that the more attention you pay to it, the less you have to worry about it. By the drought of 2045, the way California uses water will have been transformed again. Just as powerfully, the way ordinary Californians regard water will have been transformed. More than any water conservation practice in particular, it’s that attitude that will save the state — and the rest of us, as well.

Charles Fishman is the author of “The Big Thirst: The Secret Life and Turbulent Future of Water.”

Leave a question in the comments with this story or on the [Times Opinion Facebook page](#) for Charles Fishman about water conservation in California. He will respond to a selection next week.

A version of this op-ed appears in print on August 16, 2015, on page SR1 of the New York edition with the headline: Winning the Drought.

