

# NOVATO SANITARY DISTRICT

Meeting Date: November 18, 2019

The Board of Directors of Novato Sanitary District will hold a **special** meeting at 5:30 p.m. Monday, November 18, 2019, 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](http://www.novatosan.com). Note: All times and order of consideration for agenda items are for reference only. The Board of Directors may consider item(s) in a different order than set forth herein.*

## 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. **MEETING MINUTES:**
  - a. Review and approve minutes, October 14, 2019 regular meeting.
5. **CONSENT CALENDAR:**

*The General Manager-Chief Engineer has reviewed the following item(s). To his knowledge, there is no opposition to the consent action. The item(s) 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. Ratify regular disbursements, October 14 – November 18, 2019.
  - b. Ratify payroll and payroll related disbursements, October 2019.
  - c. Receive Deposit Summary, October 2019.
  - d. Receive 1<sup>st</sup> Quarter Investment Report, Fiscal Year (FY) 2019-20.
  - e. Receive 1<sup>st</sup> Quarter Financial Report, FY 2019-20 (unaudited).
  - f. Approve a Memorandum of Understanding (MOU) with the Marin County Flood Control and Water Conservation District (Flood Control District) authorizing the construction of drainage improvements on District property along Simmons Slough, and access for construction and operations and maintenance of the improvements; and authorize the Board President and General Manager-Chief Engineer to execute it.
6. **SOLID WASTE: PUBLIC HEARING – SET CALENDAR YEAR (CY) 2020 MAXIMUM ALLOWABLE SOLID WASTE RATES.**
  - a. Consider recommendation for a Calendar Year (CY) 2020 maximum solid waste rate adjustment of +6.27 percent.

- b. Open public hearing.
- c. Receive Public comments.
- d. Receive Board comments.
- e. Close public hearing.

**Consider action to:**

- f. Adopt Resolution No. 3141 setting CY 2020 maximum allowable rates for refuse collection and disposal services.

**7. WASTEWATER OPERATIONS:**

- a. Receive staff presentation: Pacific Gas & Electric Co. (PG&E) Public Safety Power Shutdown (PSPS) event of October 26-29, 2019.
- b. Receive Wastewater Operations Reports, October 2019:
  - Collection Systems
  - Treatment Facilities
  - Reclamation Facilities

**8. CAPITAL PROJECTS:**

- a. Receive presentation from TerraVerde Energy, LLC, on opportunities in energy saving, use-optimization, and generation, through the deployment of Distributed Energy Resources (DERs), and provide direction.
- b. *Vehicle Replacement, Account No. 73090*: Approve purchase of two, 30 kW portable generators, and authorize the General Manager-Chief Engineer to execute a purchase order with Bay City Electric Works in the amount of \$65,773.91.
- c. *Collection System Improvements, Account No. 72706 – ARV Improvements*: Make CEQA findings that the project is categorically exempt; authorize the General Manager-Chief Engineer to accept plans and specifications and advertise for bids – ARV Vault Rehabilitation Project; Project No. 72706-2019-01.
- d. Receive Capital Projects Update, October 2019.

**9. BOARD MEMBER REPORTS AND REQUESTS:**

- a. North Bay Watershed Association (NBWA) meeting, November 2019 (none - meeting cancelled).

**10. GENERAL MANAGER'S REPORT AND ANNOUNCEMENTS:**

**11. ADJOURN:**

Next Resolution No. 3142.

**Next meeting date: Monday, December 9, 2019, 5:30 p.m., 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: October 14, 2019

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, October 14, 2019, at the District Office, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Carole Dillon-Knutson, Directors Tim Fuelle, William Long, Jean Mariani, and Jerry Peters.

STAFF PRESENT: General Manager-Secretary Sandeep Karkal and Administrative Secretary Julie Hoover.

ALSO PRESENT: Erik Brown, Deputy General Manager, Novato Sanitary District  
John O'Hare, Project Manager, Veolia  
Dale Thrasher, Administrative Services Officer, Novato Sanitary District  
Jeff Boheim, Field Services Manager, Novato Sanitary District  
Jeff Andress, Collection System Superintendent, Novato Sanitary District  
Javier Vega, Collection System Lead Worker, Novato Sanitary District  
Jason Fried, Executive Officer, Marin LAFCO  
Jeff Melby, Project Manager, State Coastal Conservancy (SCC)  
Moirra McEnespy, S.F. Bay Area Regional Manager, SCC  
Fred Stemmler, General Manager, Recology-Sonoma/Marin  
Noemi Carmargo, Bel Marin Keys Community Services District  
Eric Polson, Novato resident  
James Spaulding, Novato resident  
Glen & Judy Harrington, Novato resident  
Marianne Rios, Novato resident  
Mark Barter, Novato resident  
David Ball, Novato resident  
Kanja Kambur, Novato resident  
Susanna Mahoney, Novato resident  
Lawrence Bauer, Novato resident  
Susan Schuster, Novato resident  
Robert Jaret, Novato resident

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The General Manager stated that a number of the attendees present were likely interested in agenda item 5.a.: *Presentation from Novato Area Municipal Service Review, Jason Fried, Marin LAFCo*. Therefore, he requested that item 5.a. be moved for discussion prior to agenda item 3: Public Comment. President Dillon-Knutson and the Board agreed with the request.

PRESENTATIONS (INFORMATION ONLY):

- Receive presentation: Novato Area Municipal Service Review (MSR) – Jason Fried, Executive Officer, Marin Local Agency Formation Commission (Marin LAFCo): Jason Fried, Executive Officer for Marin LAFCo, greeted the Board members, and acknowledged Novato residents in attendance at the meeting, stating that they were likely in attendance to address the issue of perceived annexations of unincorporated “islands” in the Novato area of Marin County to the

City of Novato. He noted also that the issue of unincorporated “islands” was completely unrelated to the Novato Sanitary District, and arose from material presented in a completely separate section of the draft MSR report that was unrelated to the District. Further, he noted that LAFCo had no intention of annexing these unincorporated Novato area “islands” to the City of Novato, and stated that a portion of the text in the draft report may have been misinterpreted to appear as if LAFCo did intend to begin annexations. He stated that LAFCo intended to modify the final report to state that LAFCo does not intend to make any annexations of these unincorporated “islands” to the City of Novato. He noted that LAFCo was extending the comment period to October 31, 2019 to address these concerns. Also, he stated that he would make himself available in the lobby after his Board presentation, to answer any questions regarding the perceived annexation issue.

Mr. Fried then began his PowerPoint presentation on the draft MSR report related to the District, titled: *Novato Regional Municipal Service Reviews*. He stated that LAFCo had completed a Municipal Services Review (MSR) of Novato, and stated that the outcomes would be used by the Commission to guide subsequent sphere of influence updates, inform future boundary changes, and initiate government reorganizations, as appropriate. He reviewed the MSR’s outcomes and timeline, and concluded his presentation inviting questions from the Board.

The Board had no questions, and President Dillon-Knutson opened the topic for public comment.

Several members of the public then spoke, expressing opposition to the draft MSR’s perceived intention of annexing Novato area unincorporated “islands” to the City of Novato. Mr. Fried again reassured the public that the final MSR report would be modified to state that LAFCo does not intend to make any annexations of these unincorporated “islands” to the City of Novato.

At the close of public comments, President Dillon-Knutson called for Board member comments on the portion of the draft MSR relating to the District. Director Mariani commented that in a table on page 38 of the draft MSR report, the District’s revenue-to-expenditures figures were shown as negative, and noted that explanatory language was needed as these negative figures are an artifact of the uneven nature of the District’s on-going and long term capital expenditures. Mr. Fried stated that District staff had also previously contacted LAFCo on the issue, and he assured the Board that it would be addressed in the final MSR report.

There being no further comments, President Dillon-Knutson declared a short recess at 6:09 p.m.

At 6:16 p.m., President Dillon-Knutson reconvened the Board meeting.

PUBLIC COMMENT: None.

REVIEW OF MINUTES:

- Consider approval of minutes of the September 9, 2019 regular meeting.

*On motion of Director Mariani, seconded by Director Peters, and carried unanimously, the September 9, 2019 Board meeting minutes were approved.*

PRESENTATIONS (INFORMATION ONLY):

- Receive update: Hamilton (Bel Marin Keys V) Wetlands Restoration project – Jeff Melby, Project Manager, State Coastal Conservancy (SCC): Mr. Melby began his presentation and

discussed the SCC's Bel Marin Keys Unit V Phase 1 Restoration Project. He reviewed project elements including the Phase 1 levee construction. He discussed the District's partnership with SCC, and stated that SCC's goal for the project was to utilize the District's effluent as a reliable, long-term fresh water source to establish and maintain a brackish marsh habitat conducive to native vegetation and animals. He reviewed the location of the sites where SCC will be developing tidal and seasonal wetlands, and outlined necessary modifications to the District's effluent pipeline within the Phase 1 project area. Mr. Melby concluded his presentation by stating that more information could be found at the SCC website: [HamiltonWetlands.scc.ca.gov](http://HamiltonWetlands.scc.ca.gov).

#### CONSENT CALENDAR:

President Dillon-Knutson called for a motion on the Consent Calendar items as follows:

- a. Approve disbursements as follows: Board member disbursements in the amount of \$1,932.28; operating disbursements in the amount of \$114,673.84, and capital project disbursements in the amount of \$60,396.95. Ratification of September 23<sup>rd</sup> operating disbursements in the amount of \$140,255.72, and capital project disbursements in the amount of \$15,983.32.
- b. Ratify payroll and payroll related disbursements for September 2019 in the amount of \$283,276.37.
- c. Receive deposit summary, September 2019.
- d. Receive Accounts Receivable (A/R) Summary Report as of September 30, 2019.
- e. Receive notification of Award of Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA).
- f. Approve promotion of Russell Farmery from Electrical Instrumentation Technician I to Electrical Instrumentation Technician.
- g. Adopt Resolution No. 3140: "A Resolution Authorizing Acceptance of Grant of Easement from Bahia Heights LLC – Bahia Heights Sewer Main Extension."
- h. Authorize District Deputy General Manager, Erik Brown, to attend the 2020 Water and Wastewater Leadership Center Training program, University of North Carolina at Chapel Hill, NC, March 8-20, 2020.
- i. Authorize District Construction Inspector II, William Christoffersen, to attend the Underground Construction Technology International Conference in Fort Worth, TX, January 28-30, 2020.

*On motion of Director Peters, seconded by Director Mariani, and carried unanimously, the Board approved the above listed Consent Calendar items.*

#### SOLID WASTE OPERATIONS:

- Receive Solid Waste Committee report, meeting of September 23, 2019.

- Receive Solid Waste Committee recommendation for a Calendar Year (CY) 2020 maximum solid waste rate adjustment of up to +6.32%, with consideration of a proposed actual rate adjustment of +6.27%.

- Review revised Schedule, draft Notice of Intent and Public Hearing, and set public hearing date for establishing Calendar Year (CY) 2020 maximum solid waste rates.

The General Manager stated that the Solid Waste Committee met September 23<sup>rd</sup>, and reviewed a solid waste rate adjustment request for +5.93% for CY 2020 from Recology Sonoma

Marin (RSM). He stated that, as in previous years, the District had retained R3 Consulting Group, Inc. (R3) to prepare its own independent analysis for the proposed rate adjustment. He stated that during R3's review, they found a mathematical error in RSM's vehicle depreciation methodology, resulting in a +2.08% adjustment for the purchase of new vehicles. (RSM had requested a +1.69% adjustment.). The General Manager stated that R3's draft report recommended to the Committee that the District grant a rate adjustment of +6.32%, and upon review, the Committee concurred with the draft R3 report.

The General Manager continued, stating that R3 subsequently issued a revised draft report noting a small mathematical error in RSM's request, and changed the R3 recommended rate adjustment to +6.27%, which is slightly less than the Committee's recommended maximum adjustment of up to +6.32%. He recommended that the Board receive the Committee's recommendation, with consideration of a proposed actual maximum +6.27% rate adjustment. Furthermore, he stated that a public hearing to set the rates is required if the Board considers adjusting rates consistent with the recommendation. Therefore, he also recommended that the Board review the proposed Notice of Intent and Public Hearing language, and set the date for the public hearing to establish the CY 2020 maximum solid waste rates for its Special meeting of November 18, 2019.

*On motion of Director Mariani, seconded by Director Long, and carried unanimously, the Board received the Solid Waste Committee recommendation for a Calendar Year 2020 maximum solid waste rate adjustment of up to +6.32%, with consideration of a proposed actual maximum rate adjustment of +6.27%, and set a public hearing date to establish the Calendar Year 2020 maximum solid waste rates for its Special meeting of November 18, 2019.*

#### WASTEWATER OPERATIONS:

- Receive staff presentation: District readiness on Pacific Gas & Electric Co.'s Public Safety Power Shutdowns (PSPS). The General Manager stated that the Board had requested information on the District's readiness for potential Public Safety Power Shutdown (PSPS) events by Pacific, Gas, and Electric Co. (PG&E). He stated that Dale Thrasher, Administrative Services Officer, had prepared a presentation summarizing the District's preparations to sustain operations during a Power Shutdown.

The Administrative Services Officer began his presentation by providing an overview of the PSPS program along with a detailed map showing where the major energy transmission lines were located in Novato and the surrounding areas. He stated that he had assessed the District's ability to sustain operations for up to seven days during a power shutdown, and provided information on the District's standby or emergency power generation capabilities.

He continued, detailing protocols for immediate and continuing responses to and during a PSPS, and discussed the need for follow-up activities to identify areas for continuous on-going improvements to respond to future PSPS events. He stated that the District will continue to optimize emergency or standby generator operations, evaluate new communication technologies, and participate with other local agencies PSPS activities to develop plans for future outage events. He concluded his presentation, by noting that while PSPS events will likely continue into the future, and that while each such event will bring forth new challenges, in general, the District is well prepared at this time.

The Directors thanked the Administrative Services Officer for his report and commended him and staff for the efforts to prepare the District for future power outage events.

- Receive Wastewater Operations Reports, September 2019.

Collection System Report: The Collection Systems Superintendent provided the Collections System Report for September 2019. He stated that 55,904 lineal feet of sewer pipelines were cleaned by staff, and that 294 maintenance work orders were completed, leaving zero (0) work orders outstanding. He stated that the District's CCTV equipment televised a total of 16,678 feet of sewer main, and that one new structural issue was added to the Collections repair request list. Further, he noted that staff conducted 176 lift station inspections and completed maintenance inspections on nine (9) air relief/vacuum valves. The Collection System Superintendent then outlined the training provided in September, stating that Collection Department staff attended four (4) safety tailgate meetings, and participated in one specialized training event, Hearing Conservation Training, which was combined with the District's annual hearing tests. He stated that there were no lost time accidents in the month, and concluded the September report, noting that there were no sanitary sewer overflows (zero SSOs).

Treatment Facilities Report: Veolia Project Manager John O'Hare provided the September 2019 Treatment Facilities Monthly Operations Reports (MOR). He reviewed the treatment plant performance, stating that the average flow was 3.58 MGD (million gallons per day). He stated that there were no discharge violations in the month, and that the Recycled Water Facility (RWF) produced about 21.3 million gallons of recycled water. The Project Manager stated that Veolia staff participated in weekly tailgates, and that all employees participated in Veolia International Safety Week (September 16-20, 2019). He also stated that Veolia conducted a mock fire drill on September 26<sup>th</sup> in conjunction with the District's fire drill. He reviewed the monthly routine inspections, maintenance activities, and key events for the Novato treatment facility, the Ignacio transfer pump station, and the recycled water facility. The Project Manager discussed pretreatment and pollution prevention activities, and concluded the report, stating that no odor contacts were received in September.

Reclamation Facilities Report: Field Services Manager Jeff Boheim summarized the Reclamation Facilities report for September. He stated that the treatment plant was in Reclamation mode (i.e. plant effluent was discharged to storage ponds 1 and 2) from September 1<sup>st</sup> through September 17<sup>th</sup> and that treatment plant effluent flow to the storage ponds totaled 49.6 million gallons (MG) for that period. He stated that on September 18<sup>th</sup>, the treatment plant was returned to Bay discharge mode. He continued, stating that approximately 225 cows and their calves grazed Site 3 and Site 7 pastures during the month. The Field Services Manager concluded his report, stating that the pastures received 80.8 MG of recycled water in September.

CAPITAL PROJECTS:

- Receive Capital Projects Update, September 2019. The Deputy General Manager provided an update of the Capital Improvement Program capital projects.

BOARD MEMBER REPORTS AND REQUESTS:

- North Bay Watershed Association (NBWA) meeting, October 4, 2019. Director Mariani discussed her attendance at the NBWA meeting held on October 4<sup>th</sup> in Kenwood. She stated that the focus of the meeting was to provide an update on the Re-Oaking project, started by the Napa County Resource Conservation District.

Director Mariani also discussed her attendance at a Marin County Special Districts Chapter Formation meeting held by CSDA (California Special Districts Association), on September 18<sup>th</sup>, at the Novato Fire District training room. She stated that the meeting took place to discuss the benefits of forming a local Chapter of special districts. The General Manager-Chief Engineer and the Administrative Services Officer also attended the meeting.

GENERAL MANAGER'S REPORTS AND ANNOUNCEMENTS:

- Announcements:

- Special Board meeting on Monday, November 18<sup>th</sup>, at 5:30 p.m. (as November 11, 2019 is Veterans Day, a District holiday).

ADJOURNMENT: There being no further business to come before the Board, President Dillon-Knutson adjourned the meeting at 8:07 p.m.

Respectfully submitted,

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Sandeep Karkal  
Secretary

Julie Hoover, Recording

## Novato Sanitary District Board Fees

For October 2019

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Date	Num	Name	Credit
<b>Nov 8, 19</b>			
11/08/2019	6347	Dillon-Knutson-, Carole	407.78
11/08/2019	6348	Fuette, Timothy G	207.79
11/08/2019	6349	Long, William C	313.79
11/08/2019	6350	Mariani, Jean M	502.57
11/08/2019	6351	Peters, Arthur Gerald	107.79
<b>Nov 8, 19</b>			<b><u>1,539.72</u></b>

# Novato Sanitary District Operating Check Register

October 28, 2019

Date	Num	Name	Credit
<b>Oct 28, 19</b>			
10/28/2019	63450	Veolia Water North America, Inc.	183,398.83
10/28/2019	63443	Pacific, Gas & Electric	87,835.69
10/28/2019	63451	Veolia Water North America, Lab	30,403.96
10/28/2019	63427	Calcon Systems, Inc.	29,851.37
10/28/2019	63425	Bay Area Air Quality	20,065.00
10/28/2019	63448	Stericycle	16,218.26
10/28/2019	63439	North Marin Water District	10,514.46
10/28/2019	63441	Novato, City	6,121.58
10/28/2019	63428	Caltest Analytical Lab Inc.	4,982.00
10/28/2019	63453	WECO	4,234.84
10/28/2019	63430	Diego Truck Repair Inc.	3,493.67
10/28/2019	63426	Cagwin & Dorward Inc.	3,395.00
10/28/2019	63444	R3 Consulting Group, Inc.	3,010.00
10/28/2019	63436	Marin/Sonoma Mosquito Dist	1,633.42
10/28/2019	63440	North Marin Water District Payroll	1,504.11
10/28/2019	63432	Fire King Fire Protection, Inc.	777.85
10/28/2019	63437	Meyers, Nave, Riback, Silver &...	516.00
10/28/2019	63449	Telstar Instruments Inc	480.00
10/28/2019	63434	Frontier California Inc EQ	454.96
10/28/2019	63452	VWR International Inc.	406.85
10/28/2019	63431	Evoqua Water Technologies - ...	294.09
10/28/2019	63435	Grainger	276.62
10/28/2019	63445	Recology Sonoma Marin	276.21
10/28/2019	63442	Onspot Welding & Design Inc	270.00
10/28/2019	63447	Roto Rooter-(Inc.)	195.00
10/28/2019	63446	Red Wing Shoe Store	189.92
10/28/2019	63429	CDW Government, Inc.	189.00
10/28/2019	63433	First Alarm	42.34
10/28/2019	63438	NAPA Auto Parts	22.00
10/28/2019	63424	Batteries Plus Inc	16.22
<b>Oct 28, 19</b>			<b><u>411,069.25</u></b>

# Novato Sanitary District Operating Check Register

November 12, 2019

Date	Num	Name	Credit
<b>Nov 12, 19</b>			
11/12/2019	63470	Custom Tractor Service	211,450.00
11/12/2019	63503	Veolia Water North America, Inc.	184,295.01
11/12/2019	63499	Stericycle	64,648.88
11/12/2019	63504	Veolia Water North America, Lab	30,905.11
11/12/2019	63496	San Francisco Estuary	24,811.00
11/12/2019	63505	Veolia Water Recycled Water ...	18,602.58
11/12/2019	63507	Woodard & Curran formerly RMC	16,748.25
11/12/2019	63491	PARS-PSRP-Post Employment...	15,056.63
11/12/2019	63482	Maze & Associates	12,620.00
11/12/2019	63473	East Bay Muni Utility District/B...	10,878.00
11/12/2019	63468	Citi Visa (Costco)	8,621.80
11/12/2019	63490	PARS-OPEB-Post Employment...	8,370.51
11/12/2019	63479	Johnson, Dee	7,740.00
11/12/2019	63466	Central Marin Sanitation District	5,909.96
11/12/2019	63484	North Bay Watershed Assoc.	5,507.58
11/12/2019	63476	HACH/American Sigma Inc	4,054.75
11/12/2019	63460	Bay Area Air Quality	3,275.00
11/12/2019	63454	Able Fence Company, Inc.	3,265.00
11/12/2019	63494	Rauch Communication Consult...	3,223.75
11/12/2019	63472	Dearborn National	2,761.52
11/12/2019	63463	Cagwin & Dorward Inc.	2,400.00
11/12/2019	63474	EEC	2,330.12
11/12/2019	63478	Johnson Controls, Inc.	2,276.70
11/12/2019	63467	Cereske Electric Cable Co.	1,365.63
11/12/2019	63455	Alpha Analytical Lab, Inc.	761.50
11/12/2019	63495	RedHawk Glass, Inc.	735.00
11/12/2019	63459	B.W.S. Distributors, Inc.	716.10
11/12/2019	63462	BoundTree Medical, LLC	695.28
11/12/2019	63457	AppRiver, LLC	582.00
11/12/2019	63471	CWEAmembers	582.00
11/12/2019	63506	Vision Service Plan	548.83
11/12/2019	63465	Campway's	438.44
11/12/2019	63500	SWRCB-Recycled Water	360.00
11/12/2019	63493	Pini Hardware	333.46
11/12/2019	63487	Nute Engineering Inc.	322.50
11/12/2019	63477	IDEXX Distributing Corp.	253.77
11/12/2019	63469	Claremont EAP, Inc.	250.00
11/12/2019	63497	Sebastopol Bearing & Hydraulic	248.82
11/12/2019	63501	U.S. Bank Equipment Finance	219.06
11/12/2019	63456	American Messaging	198.63
11/12/2019	63483	NAPA Auto Parts	176.84
11/12/2019	63489	Orkin Pest Control, Inc.	153.36
11/12/2019	63475	Grainger	135.46
11/12/2019	63461	Boheim, Jeff-	124.53
11/12/2019	63480	Marin Conservation League	100.00
11/12/2019	63486	Novato Builders Supply	97.23
11/12/2019	63502	Unicorn Group	96.01
11/12/2019	63498	Staples Advantage	92.94
11/12/2019	63481	MarinScope Inc.	69.00
11/12/2019	63458	AT&T Mobility	62.05
11/12/2019	63488	O'Reilly Auto Parts	58.99
11/12/2019	63492	Petty Cash	51.44
11/12/2019	63464	CalChamber	39.05
11/12/2019	63485	North Marin Water District	34.15
<b>Nov 12, 19</b>			<b><u>659,654.22</u></b>

**Novato Sanitary District**  
**Capital Projects Check Register**

October 28, 2019

	<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
<b>Oct 28, 19</b>				
	10/28/2019	3514	Associated Northwest Valves & Control	19,032.11
	10/28/2019	3518	V&A Consulting Engineers	7,503.34
	10/28/2019	3521	Covello Group, The	7,340.00
	10/28/2019	3515	Cagwin & Dorward Inc.	2,093.36
	10/28/2019	3517	Martin Ranch Supply Inc.	1,620.33
	10/28/2019	3519	Woodard & Curran formerly RMC	886.36
	10/28/2019	3516	Grainger	74.00
	10/28/2019	3520	VOID	0.00
<b>Oct 28, 19</b>				<b><u><u>38,549.50</u></u></b>

# Novato Sanitary District Capital Projects Check Register

November 12, 2019

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Date	Num	Name	Credit
<b>Nov 12, 19</b>			
11/12/2019	3524	JMB Construction, Inc	195,320.00
11/12/2019	3526	Nute Engineering Inc.	23,122.25
11/12/2019	3529	JMB Construction, Inc - Es...	10,280.00
11/12/2019	3528	Citi Visa (Costco)	8,656.42
11/12/2019	3525	Linscott Engineering Contr...	3,888.63
11/12/2019	3527	Roy's Sewer Service, Inc.	1,425.00
11/12/2019	3522	Beecher Engineering, Inc	195.00
11/12/2019	3523	CDW Government, Inc.	38.63
<b>Nov 12, 19</b>			<b><u>242,925.93</u></b>

**Novato Sanitary District**  
**Payroll and Payroll Related Disbursements**  
**October - 2019**

Date	Description	Amount
10/31/2019	October Payroll	126,825.67
10/31/2019	United States Treasury	24,565.83
10/31/2019	EDD	8,093.72
10/22/2019	CalPERS Health	30,612.05
10/22/2019	Retiree Health Benefits	13,627.28
10/22/2019	CALPERS Retirement	12,568.34
10/22/2019	CALPERS Retirement	15,741.02
10/22/2019	CalPers Supplemental Income Plan	9,683.33
10/22/2019	Lincoln Financial Group 457	9,013.23
10/22/2019	Lincoln Financial Group Roth 457	100.00
10/22/2019	Lincoln Financial Group-401a Plan	9,063.43
10/22/2019	PARS-OPEB Contribution	8,370.51
10/22/2019	PARS-Pension Contribution	15,056.63
10/22/2019	Local Union 315	540.00
10/22/2019	California State Disbursement Unit	571.00
10/22/2019	Delta Dental	2,838.41
10/22/2019	ICMA-RC Retiree Health Program	1,623.92
<b>Total for October 2019</b>		<b>288,894.37</b>

**Novato Sanitary District  
Deposit Detail-October 2019**

Item 5.c.

Type	Date	Name	Account	Amount
<b>Deposit</b>	<b>10/04/2019</b>		<b>11113 · Westamerica - Operations</b>	
		Hardiman Construction	41040 · Permit & Inspection Fee	40.00
		Marin County Department of Public Works	11200 - Accounts Receivable	(1) 36,906.00
TOTAL				36,946.00
<b>Deposit</b>		USCG	11200 - Accounts Receivable	16,431.20
<b>Deposit</b>	<b>10/16/2019</b>	Gopher It	41040 · Permit & Inspection Fee	100.00
		Peter Levi Plumbing	41040 · Permit & Inspection Fee	40.00
		Ben Franklin Plumbing	41040 · Permit & Inspection Fee	40.00
		Ben Franklin Plumbing	41040 · Permit & Inspection Fee	40.00
		Cook, Chris	41040 · Permit & Inspection Fee	40.00
		Marin H2O Inc	41040 · Permit & Inspection Fee	60.00
		Gopher It	41040 · Permit & Inspection Fee	20.00
		Roto Rooter	11200 - Accounts Receivable	361.62
		Marin County Flood Control	11200 - Accounts Receivable	(2) 8,184.92
TOTAL				8,886.54
<b>Deposit</b>	<b>10/21/2019</b>	Ben Franklin Plumbing	41040 · Permit & Inspection Fee	40.00
		Clement, Casey	41040 · Permit & Inspection Fee	60.00
		Postage	66090 · Office Expense	35.00
		Incom Mechanical	41040 · Permit & Inspection Fee	60.00
		County of Marin	51015 · Property Taxes	354.76
		Lanford Construction	41040 · Permit & Inspection Fee	60.00
		Novato CA Real Estate LLC	41040 · Permit & Inspection Fee	60.00
		Novato CA Real Estate LLC	21041 · Cash in Lieu of Bond	500.00
		Reggie's Plumbing	41040 · Permit & Inspection Fee	40.00
		Lankford Construction	51020 · Connection Charges	1,188.00
		Golden Gate Compounding Pharmacy	41090 · Non-domestic Permit Fees	85.00
TOTAL				2,482.76
<b>Deposit</b>	<b>10/25/2019</b>	Recology	11200 - Accounts Receivable	(3) 108,565.00
		Bel Marin Keys CSD	11200 - Accounts Receivable	(4) 429.30
TOTAL				108,994.30
<b>Deposit</b>	<b>10/25/2019</b>	Tight Access Excavation	41040 · Permit & Inspection Fee	60.00
		Tight Access Excavation	51020 · Connection Charges	4,158.00
		SMART-	11200 - Accounts Receivable	179.46
TOTAL				4,397.46
<b>Deposit</b>	<b>10/29/2019</b>	Blue Barn	41040 · Permit & Inspection Fee	60.00
		Indian Valley College	11200 - Accounts Receivable	(4) 31,421.58
		Marin County Housing Auth	11200 - Accounts Receivable	(4) 12,720.00
TOTAL				44,201.58
				<b>222,339.84</b>
(1)	Collection of annual billing for agreement with Marin County Solid and Hazardous Waste JPA.			
(2)	Per 2017 agreement with Marin County Flood Control & Water Conservation District - Seasonal Pumping Electrical Charges billing for reimbursement of January to April 2019.			
(3)	Collection of second quarter billing for AB939 Hazardous household waste fees from Recology .			
(4)	Collection of non tax roll sewer service charges for first half of FY19-20.			

**Novato Sanitary District**

06-Nov-19

**QUARTERLY INVESTMENT REPORT -- For Quarter Ended September 30, 2019**

INVESTMENT	ACTIVITY	July	August	September	QTR TOTAL
<b>STATE TREASURER'S INVESTMENT FUND</b>	Total deposits/transfers in	0	0	0	<b>0</b>
	Total transfers out	2,291,000	1,267,000	746,000	<b>4,304,000</b>
Current Yield 2.280%	Minimum daily balance	26,054,517	24,787,517	24,041,517	<b>24,041,517</b>
	Maximum daily balance	28,171,113	26,054,517	24,787,517	<b>28,171,113</b>
	Interest earned	0	0	159,374	<b>159,374</b>
<b>The LAIF Pooled Money Investment Account Report is attached as specified in California Government Code Section 53646(e)</b>					
<b>TRUST ACCOUNTS</b>					
For 2017 Refunding Wastewater Bond Funds (3)	Total deposits/transfers in	315,500	0	0	<b>315,500</b>
	Total transfers out	(315,500)	0	0	<b>(315,500)</b>
	Month End balance	0	0	0	
For 2019 Refunding Wastewater Bond Funds (4)	Total deposits/transfers in	906,769	55,636,955	0	<b>56,543,724</b>
	Total transfers out	0	(56,519,020)	(1,500)	<b>(56,520,520)</b>
	Month End balance	906,769	24,704	23,204	
<b>CHECKING ACCOUNTS</b>					
Interest Rate 0.02%	<b>Operations Account</b>				
	Total deposits & transfers in	2,499,590	1,342,527	917,335	<b>4,759,452</b>
	Total checks & transfers out	2,583,308	991,627	1,085,588	<b>4,660,523</b>
	Minimum daily balance	47,511	10,347	40,932	<b>10,347</b>
	Maximum daily balance	1,117,538	622,621	499,394	<b>1,117,538</b>
	Interest earned	5	4	4	<b>13</b>
	<b>Payroll Account</b>				
	Total transfers in	146,200	149,500	147,100	<b>442,800</b>
	Total checks & transfers out	145,604	145,370	143,697	<b>434,671</b>
	Minimum daily balance	816	304	242	<b>242</b>
	Maximum daily balance	121,629	120,557	116,903	<b>121,629</b>
	<b>Project Account</b>				
	Total transfers in	1,270,600	103,500	78,000	<b>1,452,100</b>
	Total checks & transfers out	1,361,639	37,815	133,874	<b>1,533,328</b>
	Minimum daily balance	2,622	2,700	2,529	<b>2,529</b>
	Maximum daily balance	337,628	69,200	67,028	<b>337,628</b>
	Interest earned	2	0	1	<b>3</b>

- NOTES:** (1) The above investments are consistent with the annual Statement of Investment Policy approved by the District Board, most recently May 2019.  
The District has the ability to meet six months cash needs.
- (2) LAIF interest rate is currently 2.280% which is a slight decrease from 2.428% in June 2019, 2.436% in March 2019 and 2.291% in December 2018, but is an increase from 2.063% in September 2018.
- (3) The 2017 Bond fund accounts consist of debt service payments, no balance required in these accounts until debt service payments are funded which are due in February and August.
- (4) The 2019 New bond fund accounts consist of the sale of the New 2019 Wastewater Revenue Bond issue and paying the issuance and related debt service. The 2019 bond proceeds paid off the State Revolving Fund Loan.



# CALIFORNIA STATE TREASURER FIONA MA, CPA



## PMIA Performance Report

Date	Daily Yield*	Quarter to Date Yield	Average Maturity (in days)
09/16/19	2.28	2.35	182
09/17/19	2.27	2.35	188
09/18/19	2.27	2.35	187
09/19/19	2.27	2.35	186
09/20/19	2.26	2.35	185
09/21/19	2.26	2.34	185
09/22/19	2.26	2.34	185
09/23/19	2.26	2.34	186
09/24/19	2.26	2.34	185
09/25/19	2.25	2.34	184
09/26/19	2.25	2.34	186
09/27/19	2.25	2.34	187
09/28/19	2.25	2.34	187
09/29/19	2.25	2.34	187
09/30/19	2.25	2.34	185
10/01/19	2.22	2.22	200
10/02/19	2.22	2.22	200
10/03/19	2.21	2.22	198
10/04/19	2.21	2.22	198
10/05/19	2.21	2.21	198
10/06/19	2.21	2.21	198
10/07/19	2.21	2.21	197
10/08/19	2.21	2.21	197
10/09/19	2.21	2.21	196
10/10/19	2.20	2.21	199
10/11/19	2.20	2.21	200
10/12/19	2.20	2.21	200
10/13/19	2.20	2.21	200
10/14/19	2.20	2.21	197
10/15/19	2.20	2.21	198
10/16/19	2.19	2.21	197

\*Daily yield does not reflect capital gains or losses

[View Prior Month Daily Rates](#)

## LAIF Performance Report

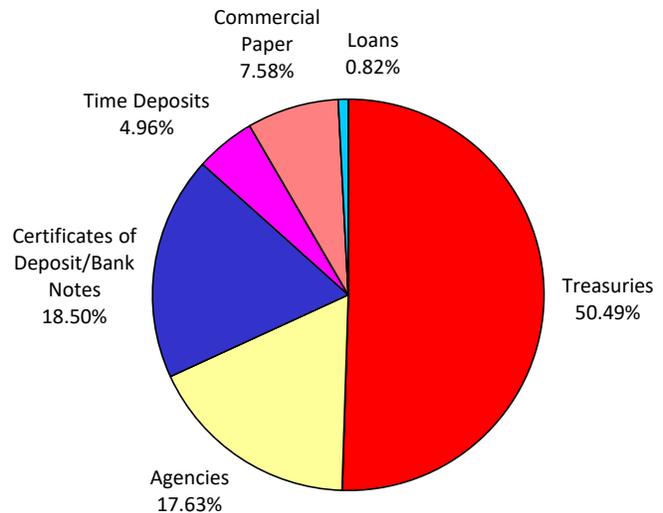
### Quarter Ending 09/30/19

Apportionment Rate: 2.45  
 Earnings Ratio: .00006701807521016  
 Fair Value Factor: 1.001642817  
     Daily: 2.25%  
 Quarter to Date: 2.34%  
 Average Life: 185

### PMIA Average Monthly Effective Yields

**Sep 2019 2.280**  
 Aug 2019 2.341  
 July 2019 2.379

## Pooled Money Investment Account Portfolio Composition 09/30/19 \$97.4 billion



Percentages may not total 100% due to rounding

Notes: The apportionment rate includes interest earned on the CalPERS Supplemental Pension Payment pursuant to Government Code 20825 (c)(1)

Based on data available as of 10/16/2019



## State of California Pooled Money Investment Account Market Valuation 9/30/2019

Description	Carrying Cost Plus		Fair Value	Accrued Interest
	Accrued Interest	Purch. Amortized Cost		
1* United States Treasury:				
Bills	\$ 19,962,799,548.19	\$ 20,149,631,218.46	\$ 20,170,090,000.00	NA
Notes	\$ 29,230,407,269.94	\$ 29,224,407,968.98	\$ 29,342,840,500.00	\$ 124,119,915.50
1* Federal Agency:				
SBA	\$ 620,381,235.24	\$ 620,381,235.24	\$ 617,521,687.16	\$ 1,426,589.91
MBS-REMICs	\$ 20,423,873.00	\$ 20,423,873.00	\$ 21,069,725.56	\$ 95,454.83
Debentures	\$ 2,293,822,254.52	\$ 2,293,719,546.19	\$ 2,306,791,550.00	\$ 9,880,630.25
Debentures FR	\$ -	\$ -	\$ -	\$ -
Debentures CL	\$ 450,000,000.00	\$ 450,000,000.00	\$ 450,819,500.00	\$ 1,309,916.50
Discount Notes	\$ 13,081,447,402.81	\$ 13,155,472,340.33	\$ 13,157,427,000.00	NA
1* Supranational Debentures	\$ 539,155,502.87	\$ 539,155,502.87	\$ 543,537,100.00	\$ 2,598,084.50
1* Supranational Debentures FR	\$ 200,220,716.29	\$ 200,220,716.29	\$ 200,322,832.09	\$ 789,345.53
2* CDs and YCDs FR	\$ 400,000,000.00	\$ 400,000,000.00	\$ 400,000,000.00	\$ 965,740.06
2* Bank Notes	\$ 650,000,000.00	\$ 650,000,000.00	\$ 649,844,510.98	\$ 4,031,486.11
2* CDs and YCDs	\$ 16,975,000,000.00	\$ 16,975,000,000.00	\$ 16,978,243,253.92	\$ 122,495,097.25
2* Commercial Paper	\$ 7,386,012,069.47	\$ 7,418,124,113.81	\$ 7,418,575,176.70	NA
1* Corporate:				
Bonds FR	\$ -	\$ -	\$ -	\$ -
Bonds	\$ -	\$ -	\$ -	\$ -
1* Repurchase Agreements	\$ -	\$ -	\$ -	\$ -
1* Reverse Repurchase	\$ -	\$ -	\$ -	\$ -
Time Deposits	\$ 4,833,740,000.00	\$ 4,833,740,000.00	\$ 4,833,740,000.00	NA
AB 55 & GF Loans	\$ 795,980,000.00	\$ 795,980,000.00	\$ 795,980,000.00	NA
<b>TOTAL</b>	<b>\$ 97,439,389,872.33</b>	<b>\$ 97,726,256,515.17</b>	<b>\$ 97,886,802,836.41</b>	<b>\$ 267,712,260.44</b>

Fair Value Including Accrued Interest

\$ 98,154,515,096.85

\* Governmental Accounting Standards Board (GASB) Statement #72

Repurchase Agreements, Time Deposits, AB 55 & General Fund loans, and Reverse Repurchase agreements are carried at portfolio book value (carrying cost).

The value of each participating dollar equals the fair value divided by the amortized cost (1.001642817). As an example: if an agency has an account balance of \$20,000,000.00, then the agency would report its participation in the LAIF valued at \$20,032,856.33 or \$20,000,000.00 x 1.001642817.



## PAR VALUES MATURING BY DATE AND TYPE

### Maturities in Millions of Dollars

ITEM	1 day to 30 days	31 days to 60 days	61 days to 90 days	91 days to 120 days	121 days to 150 days	151 days to 180 days	181 days to 210 days	211 days to 270 days	271 days to 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 year/out
TREASURY	\$ 4,550	\$ 4,000	\$ 2,100	\$ 4,750	\$ 4,450	\$ 2,950	\$ 400	\$ 3,650	\$ 10,050	\$ 12,050	\$ 600		
REPO													
TDs	\$ 1,593	\$ 1,175	\$ 1,178	\$ 361	\$ 278	\$ 250							
AGENCY	\$ 4,370	\$ 4,900	\$ 1,950	\$ 100	\$ 350	\$ 1,590	\$ 1,175	\$ 425	\$ 827	\$ 2,226	\$ 450	\$ 50	
CP	\$ 2,400	\$ 1,850	\$ 1,395	\$ 150	\$ 300	\$ 1,100	\$ 250						
CDs + BNs	\$ 7,050	\$ 3,175	\$ 2,000	\$ 200	\$ 400	\$ 3,250	\$ 1,200	\$ 200	\$ 550				
CORP BND													
<b>TOTAL</b>													
<b>\$ 98,268</b>	<b>\$ 19,963</b>	<b>\$ 15,100</b>	<b>\$ 8,623</b>	<b>\$ 5,561</b>	<b>\$ 5,778</b>	<b>\$ 9,140</b>	<b>\$ 3,025</b>	<b>\$ 4,275</b>	<b>\$ 11,427</b>	<b>\$ 14,276</b>	<b>\$ 1,050</b>	<b>\$ 50</b>	<b>\$ -</b>
<b>PERCENT</b>	<b>20.3%</b>	<b>15.4%</b>	<b>8.8%</b>	<b>5.7%</b>	<b>5.9%</b>	<b>9.3%</b>	<b>3.1%</b>	<b>4.4%</b>	<b>11.6%</b>	<b>14.5%</b>	<b>1.1%</b>	<b>0.1%</b>	<b>0.0%</b>

Notes:

1. SBA Floating Rate Securities are represented at coupon change date.
2. Mortgages are represented at current book value.
3. Figures are rounded to the nearest million.
4. Does not include AB55 and General Fund loans.

# NOVATO SANITARY DISTRICT

## MEMORANDUM

**BOARD**

**MEETING DATE:** November 18, 2019

**TO:** District Board of Directors

**FROM:** Sandeep Karkal, General Manager-Chief Engineer  
Laura M. Creamer, Finance Officer

**SUBJECT:** Fiscal Year (FY) 19-20 First Quarter Financial Report (Unaudited)

### INTRODUCTION

This memorandum presents a summary unaudited year-to-date financial report for the District as of the FY19-20 First Quarter ended September 30, 2019. The following items are presented as three sections herein:

1. Revenue and Expenditures Report (for the quarter ended September 30, 2019).
2. Debt Service Schedule as of September 30, 2019.
3. Operating and Capital Cash Flow for July 1, 2019 – September 30, 2019

### 1.0 REVENUE AND EXPENDITURES REPORT

This section presents an overview of revenues and expenditures for the operating and capital funds through the first quarter of Fiscal Year 2019-20. A more detailed summary is presented in the attached tables titled “DRAFT – Revenues and Expenditures – Budget vs. Actual”. A brief discussion and analysis of items displaying variance from the final budget is also provided below, as appropriate.

### OPERATING FUND

**Table 1: OPERATING REVENUE**

	YTD Balance Received	Annual Budget	Budget Overage	Pct. Received
<b>Total Operating Revenues</b>	\$334,273	\$11,534,649	\$11,200,376	2.9%

### Discussion

Overall, operating revenues are approximately 2.9% of the total budget amount with 25% of the year complete. The operating revenue accounts are within the normal range for this time of year, since the District receives its primary revenues in December and April.

**Table 2: OPERATING EXPENDITURES**

	<b>YTD Balance</b>	<b>Annual Budget</b>	<b>Budget Unused</b>	<b>Pct. Used</b>
<b>Total Operating Expenditures</b>	\$ 2,342,620	\$11,423,358	\$9,080,738	20.5%

**Discussion**

Overall, operating expenditures are at approximately 20.5% of budget, with 25% of the year complete. Variances in individual expenditure accounts are discussed below:

**Collection System (22.0%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variance in individual expenditure accounts are discussed below.

Employee Benefits: 32.1%. Significant variance due to workers compensation premium of approximately \$80k paid in first quarter for the entire fiscal year and allocated to the different cost centers. The account is expected to stay within budget over remainder of the fiscal year.

Gas, Oil & Fuel: 27.0%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Safety Expense: 31.5%. Per review of account, significant variance due to the District replacing the AED units in this quarter in the amount of \$3,510 split between Collection, Pump Stations and Administrative cost centers. The account is expected to stay within budget over remainder of the fiscal year.

Operating Supplies: 36.0%. Significant variance is due to the purchase of a new gas detection unit, along with new sensors for all other existing units in the amount of approximately \$4,300. These are not typical charges and occur every three to four years. The account is expected to stay within budget over remainder of the fiscal year.

Other(Garbage Coll.): 27.1%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

**Treatment Facilities - Contract Operations: (20.8%)**

General: In general, no significant variances noted for this cost center for the first quarter.

**Reclamation/Disposal Facilities: (13.2%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

Employee Benefits: 27.1%. See explanation on previous page in Collection Cost Center.

Gas, Oil & Fuel: 27.0%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Operating Supplies: 27.6%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Repairs & Maintenance: 32.6%. Variance is due to the seasonal nature of the reclamation facility's irrigation activities. Per review of account, no significant items noted, and account is expected to stay within budget for the current fiscal year.

**Laboratory/Monitoring: (18.1%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

Operating Supplies: 26.6%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Permits & Fees: 105.9%. Significant variance is due to the annual permit fee for the California Environmental Laboratory Accreditation Program (ELAP) increasing by about \$1,000 from the prior fiscal year due to an increase in the program rates, and the small budget amount for this account (\$6,000) which amplifies small dollar amount changes into large percentage amount changes.

**Pump Stations: (21.9%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

Employee Benefits: 33.1%. See explanation on page 2 in Collection Cost Center.

Gas, Oil & Fuel: 27.0%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Safety Expenses: 43.7%. See explanation on page 2 in Collection Cost Center.

**Administration and Engineering: (21.9%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

Employee Benefits: 29.9%. See explanation on page 2 in Collection Cost Center.

Gas, Oil & Fuel: 28.6%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

Safety Expenses: 34.2%. See explanation on page 2 in Collection Cost Center.

**AB 939 Solid Waste Programs: (8.8%)**

General: In general, no significant variances noted for this cost center for the first quarter.

**Recycled Water: (27.7%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

O & M Services: 35.7%. Per review of account, account is within normal range for this time of year. Normal operational costs for Recycled Water Facility operations typically are the highest during July through December, when recycled water sees the highest use. The account is expected to stay within budget over remainder of the fiscal year.

Research & Monitoring: 41.6%. Please refer to explanation above for O & M Services.

**Non - Departmental: (21.4%)**

General: In general, no significant variances noted for this cost center for the first quarter. Variances in individual expenditure accounts are discussed below.

Insurance Expense: 36.7%. Insurance expense is within expected parameters for this time of year, since it is typically paid as billed in the first and second quarter of the fiscal year. Account expected to stay within budget over remainder of the fiscal year.

Memberships/Certifications: 32.1%. Significant variance as a large portion of membership/certification fees are paid in the first quarter. Account expected to stay within budget over remainder of the fiscal year.

Board Travel & Training: 31.4%. Per review of account, no significant items noted. The account is expected to stay within budget over remainder of the fiscal year.

**CAPITAL FUND**

**Table 3: CAPITAL REVENUE**

<b>Capital Revenue</b>	<b>YTD Balance Received</b>	<b>Annual Budget</b>	<b>Over/(Under) Budget</b>	<b>Pct. Received</b>
<b>Sewer Service Charges</b>	\$14,788	\$ 8,422,128	(\$8,407,340)	.2%
<b>Property Taxes</b>	18,343	2,382,632	(2,364,289)	.8%
<b>Connection Charges</b>	49,513	475,200	(425,687)	10.4%
<b>Collector Sewer/Special Equalization Charges</b>	0	1,000	(1,000)	0.0%
<b>Interest</b>	63,752	120,000	(56,248)	53.1%
<b>Other Revenue</b>	0	20,000	(20,000)	0.0%
<b>Total Revenue</b>	\$146,396	\$11,420,960	(\$11,274,564)	1.3%

**Discussion**

Overall capital revenues are 1.3% of budget at the close of the first quarter, consistent with the District receiving the bulk of its revenue in December and April.

**Table 4: CAPITAL EXPENDITURES**

	<b>YTD Balance</b>	<b>Annual Budget</b>	<b>Budget Unused</b>	<b>Pct. Used</b>
<b>Capital Expenditures</b>	\$1,291,313	\$12,229,956	(\$10,938,643)	10.6%

**Discussion**

The list of capital project accounts is shown in the attached tables. Overall expenses are 10.6% of budget.

Attachments:

1. Draft Revenue and Expenditure Reports:
  - a. Operating, July 2019-September 2019.
  - b. Capital, July 2019-September 2019.
2. Debt Service Schedule as of September 30, 2019
3. Operating and Capital Cash Flow, July 2019-September 2019.

\*\*\*\*\*

**Novato Sanitary District**  
**DRAFT - Revenues & Expenditures Budget vs. Actual**  
 July through September 2019

	Jul - Sep 19	Budget	\$ Over Budget	% of Budget
<b>41000 · OPERATING INCOME</b>				
41010 · Sewer Service Charges	21,150.15	10,306,800.00	(10,285,649.85)	0.2%
41030 · Plan Check & Inspection Fee	3,646.00	500.00	3,146.00	729.2%
41040 · Permit & Inspection Fee	1,450.00	6,000.00	(4,550.00)	24.2%
41060 · Interest Income	95,637.74	180,000.00	(84,362.26)	53.1%
41080 · Engineering & Admin Charges	0.00	165,000.00	(165,000.00)	0.0%
41090 · Non-domestic Permit Fees	0.00	30,000.00	(30,000.00)	0.0%
41100 · Garbage Franchise Fees	0.00	58,210.00	(58,210.00)	0.0%
41105 · AB 939 Collector Fees	108,565.00	434,260.00	(325,695.00)	25.0%
41107 · Oil/Bev/Tire Grants	36,906.00	52,009.00	(15,103.00)	71.0%
41130 · Ranch Income	(2,400.00)	40,000.00	(42,400.00)	(6.0%)
41135 · Recycle Water Facility Revenue	63,637.76	231,870.00	(168,232.24)	27.4%
41140 · Other Revenue	5,680.28	20,000.00	(14,319.72)	28.4%
41142 · Gain/Loss on disposal of assets	0.00	10,000.00	(10,000.00)	0.0%
<b>Total 41000 · OPERATING INCOME</b>	<b>334,272.93</b>	<b>11,534,649.00</b>	<b>(11,200,376.07)</b>	<b>2.9%</b>
<b>Expense</b>				
<b>60000 · COLLECTION SYSTEM</b>				
60010 · Salaries & Wages	162,318.90	679,353.00	(517,034.10)	23.9%
60020 · Employee Benefits	105,479.17	328,738.00	(223,258.83)	32.1%
60060 · Gas, Oil & Fuel	4,859.83	18,000.00	(13,140.17)	27.0%
60085 · Safety	1,729.73	5,500.00	(3,770.27)	31.5%
60091 · Software Maint	1,733.75	35,000.00	(33,266.25)	5.0%
60100 · Operating Supplies	9,007.88	25,000.00	(15,992.12)	36.0%
60150 · Repairs & Maintenance	18,897.63	75,000.00	(56,102.37)	25.2%
60152 · Small Tools	141.96	2,000.00	(1,858.04)	7.1%
60153 · Outside Services	5,364.00	145,000.00	(139,636.00)	3.7%
60192 · Water	1,027.60	12,000.00	(10,972.40)	8.6%
60193 · Telephone	505.67	3,500.00	(2,994.33)	14.4%
60200 · Other(Garbage Coll)	189.51	700.00	(510.49)	27.1%
60201 · Permits & Fees	0.00	85,000.00	(85,000.00)	0.0%
<b>Total 60000 · COLLECTION SYSTEM</b>	<b>311,255.63</b>	<b>1,414,791.00</b>	<b>(1,103,535.37)</b>	<b>22.0%</b>
<b>61000 · TREATMENT FACILITIES</b>				
61000-1 · Fixed Fee	550,196.49	2,275,786.00	(1,725,589.51)	24.2%
61000-2 · Insurance & Bonds	2,150.50	14,000.00	(11,849.50)	15.4%
61000-3 · Major Repair/Replacement	24,309.25	150,000.00	(125,690.75)	16.2%
61000-4 · Water/Permits/Telephone	5,083.20	90,000.00	(84,916.80)	5.6%
61000-5 · Gas & Electricity	113,712.33	816,033.00	(702,320.67)	13.9%
<b>Total 61000 · TREATMENT FACILITIES</b>	<b>695,451.77</b>	<b>3,345,819.00</b>	<b>(2,650,367.23)</b>	<b>20.8%</b>
<b>63000 · RECLAMATION/DISPOSAL</b>				
63010 · Salaries & Wages	21,089.58	86,909.00	(65,819.42)	24.3%
63020 · Employee Benefits	6,660.73	24,565.00	(17,904.27)	27.1%
63060 · Gasoline & Oil	269.99	1,000.00	(730.01)	27.0%
63085 · Safety	0.00	1,500.00	(1,500.00)	0.0%
63091 · Software Maintenance	0.00	2,000.00	(2,000.00)	0.0%

**Novato Sanitary District**  
**DRAFT - Revenues & Expenditures Budget vs. Actual**  
 July through September 2019

	Jul - Sep 19	Budget	\$ Over Budget	% of Budget
63100 · Operating Supplies	552.78	2,000.00	(1,447.22)	27.6%
63115 · Sludge Disposal	0.00	225,000.00	(225,000.00)	0.0%
63150 · Repairs & Maintenance	22,799.36	70,000.00	(47,200.64)	32.6%
63152 · Small Tools	108.31	500.00	(391.69)	21.7%
63157 · Ditch/Dike Maintenance	0.00	11,000.00	(11,000.00)	0.0%
63191 · Gas & Electricity	16,203.46	80,000.00	(63,796.54)	20.3%
63192 · Water - Reclamation	281.53	5,000.00	(4,718.47)	5.6%
63201 · Permits & Fees	0.00	4,500.00	(4,500.00)	0.0%
<b>Total 63000 · RECLAMATION/DISPOSAL</b>	<b>67,965.74</b>	<b>513,974.00</b>	<b>(446,008.26)</b>	<b>13.2%</b>
<b>64000 · LABORATORY/MONITORING</b>				
64010 · Contract Lab Services	92,199.38	379,848.00	(287,648.62)	24.3%
64060 · Gasoline & Oil	78.87	500.00	(421.13)	15.8%
64085 · Safety	0.00	1,000.00	(1,000.00)	0.0%
64091 · Software Maintenance	0.00	1,000.00	(1,000.00)	0.0%
64100 · Operating Supplies	5,462.54	20,500.00	(15,037.46)	26.6%
64150 · Repairs & Maintenance	1,762.40	12,200.00	(10,437.60)	14.4%
64160 · Research & Monitoring	7,548.90	130,000.00	(122,451.10)	5.8%
64170 · Pollution Prevention/Public Ed	(6,294.09)	40,000.00	(46,294.09)	(15.7%)
64201 · Permits & Fees	6,352.00	6,000.00	352.00	105.9%
<b>Total 64000 · LABORATORY/MONITORING</b>	<b>107,110.00</b>	<b>591,048.00</b>	<b>(483,938.00)</b>	<b>18.1%</b>
<b>65000 · PUMP STATIONS</b>				
65010 · Salaries & Wages	80,476.41	337,492.00	(257,015.59)	23.8%
65020 · Employee Benefits	45,358.79	136,951.00	(91,592.21)	33.1%
65060 · Gasoline & Oil	1,727.94	6,400.00	(4,672.06)	27.0%
65085 · Safety Expenses	1,749.51	4,000.00	(2,250.49)	43.7%
65091 · Software Maintenance	0.00	8,500.00	(8,500.00)	0.0%
65100 · Operating Supplies	1,832.30	10,000.00	(8,167.70)	18.3%
65150 · Repairs & Maintenance	22,679.11	120,000.00	(97,320.89)	18.9%
65152 · Small Tools	149.64	2,000.00	(1,850.36)	7.5%
65153 · Outside Services, Electrical	1,865.10	55,000.00	(53,134.90)	3.4%
65191 · Gas & Electricity	20,427.38	115,000.00	(94,572.62)	17.8%
65192 · Water	1,102.67	7,000.00	(5,897.33)	15.8%
65193 · Telephone	8,574.59	42,000.00	(33,425.41)	20.4%
65201 · Permits & Fees	483.00	7,000.00	(6,517.00)	6.9%
<b>Total 65000 · PUMP STATIONS</b>	<b>186,426.44</b>	<b>851,343.00</b>	<b>(664,916.56)</b>	<b>21.9%</b>
<b>66000 · ADMIN/ENGINEERING</b>				
66010 · Salaries & Wages	309,926.79	1,383,416.00	(1,073,489.21)	22.4%
66020 · Employee Benefits	187,677.96	628,135.00	(440,457.04)	29.9%
66030 · Director's Fees	5,850.00	32,400.00	(26,550.00)	18.1%
66060 · Gasoline & Oil	744.63	2,600.00	(1,855.37)	28.6%
66085 · Safety	1,436.36	4,200.00	(2,763.64)	34.2%
66090 · Office Expense	3,452.57	28,000.00	(24,547.43)	12.3%
66100 · Engineering Supplies	214.02	5,000.00	(4,785.98)	4.3%
66121 · Accounting & Auditing	7,103.00	30,000.00	(22,897.00)	23.7%

**Novato Sanitary District**  
**DRAFT - Revenues & Expenditures Budget vs. Actual**  
 July through September 2019

	Jul - Sep 19	Budget	\$ Over Budget	% of Budget
66123 · O/S Contractual	35,623.77	283,000.00	(247,376.23)	12.6%
66124 · IT/Misc Electrical	1,368.10	57,000.00	(55,631.90)	2.4%
66150 · Repairs & Maintenance	4,974.22	95,000.00	(90,025.78)	5.2%
66193 · Telephone	3,366.05	13,000.00	(9,633.95)	25.9%
<b>Total 66000 · ADMIN/ENGINEERING</b>	<b>561,737.47</b>	<b>2,561,751.00</b>	<b>(2,000,013.53)</b>	<b>21.9%</b>
<b>67000 · AB 939 SOLID WASTE PROGRAMS</b>				
67400 · Consulting Services	22,230.00	147,500.00	(125,270.00)	15.1%
67500 · Household Hazardous Waste	18,633.38	292,000.00	(273,366.62)	6.4%
67530 · Used Oil/Beverage Cont Grant	1,710.00	11,269.00	(9,559.00)	15.2%
67540 · Outreach/Publicity/Education	300.42	20,500.00	(20,199.58)	1.5%
67600 · Other	0.00	5,000.00	(5,000.00)	0.0%
67610 · City AB 939 Admin Services	0.00	10,000.00	(10,000.00)	0.0%
<b>Total 67000 · AB 939 SOLID WASTE PROGRAMS</b>	<b>42,873.80</b>	<b>486,269.00</b>	<b>(443,395.20)</b>	<b>8.8%</b>
<b>68000 · Recycled Water</b>				
68010 · O & M Services	23,530.75	66,000.00	(42,469.25)	35.7%
68100 · Operating Supplies	511.75	4,400.00	(3,888.25)	11.6%
68101 · Operating Chemicals	16,517.72	72,120.00	(55,602.28)	22.9%
68150 · Repairs & Maintenance	7,252.20	33,550.00	(26,297.80)	21.6%
68160 · Research & Monitoring	5,824.75	14,000.00	(8,175.25)	41.6%
68191 · Gas & Electricity	10,555.14	41,800.00	(31,244.86)	25.3%
<b>Total 68000 · Recycled Water</b>	<b>64,192.31</b>	<b>231,870.00</b>	<b>(167,677.69)</b>	<b>27.7%</b>
<b>69000 · Non-Departmental</b>				
69021-1 · Retiree Health Benefits - Trust	50,991.90	201,661.00	(150,669.10)	25.3%
69021 · Retiree Health Benefits	51,526.35	226,673.00	(175,146.65)	22.7%
69022 · Pension Expense-Trust	90,339.78	361,359.00	(271,019.22)	25.0%
69040 · Election Expenses	9,778.31	95,000.00	(85,221.69)	10.3%
69070 · Insurance Expense	61,249.98	167,000.00	(105,750.02)	36.7%
69071 · Insurance Claim Expense	0.00	45,000.00	(45,000.00)	0.0%
69075 · Agency Dues	18,446.21	74,800.00	(56,353.79)	24.7%
69080 · Memberships/Certifications	3,209.00	10,000.00	(6,791.00)	32.1%
69122 · Attorney Fees	2,207.65	50,000.00	(47,792.35)	4.4%
69125 · Safety & Wellness Incentive	28.95	10,000.00	(9,971.05)	0.3%
69130 · Printing & Publications	504.20	24,000.00	(23,495.80)	2.1%
69170 · Board Travel & Training	8,169.14	26,000.00	(17,830.86)	31.4%
69171 · Staff Travel & Training	9,155.39	65,000.00	(55,844.61)	14.1%
69202 · County Fees-Property Taxes	0.00	33,000.00	(33,000.00)	0.0%
69203 · County Fees-Sewer Serv Chg	0.00	32,000.00	(32,000.00)	0.0%
69250 · Service Charge Syst Exp	0.00	5,000.00	(5,000.00)	0.0%
<b>Total 69000 · Non-Departmental</b>	<b>305,606.86</b>	<b>1,426,493.00</b>	<b>(1,120,886.14)</b>	<b>21.4%</b>
<b>Total Expense</b>	<b>2,342,620.02</b>	<b>11,423,358.00</b>	<b>(9,080,737.98)</b>	<b>20.5%</b>
<b>Net Income (Loss)</b>	<b>(2,008,347.09)</b>	<b>111,291.00</b>	<b>(2,119,638.09)</b>	<b>(1,804.6%)</b>

**Novato Sanitary District**  
**DRAFT Revenues & Expenditures - Capital**  
 July 2019 through September 2019

	Jul '19 - Sep 19	Budget	\$ Over Budget	% of Budget
<b>Income</b>				
<b>51000 · CAPITAL IMPROVEMENT INCOME</b>				
51010 · Sewer Service Charges	14,788.08	8,422,128.00	(8,407,339.92)	0.2%
51015 · Property Taxes	18,342.50	2,382,632.00	(2,364,289.50)	0.8%
51020 · Connection Charges	49,513.50	475,200.00	(425,686.50)	10.4%
51040 · Special Equalization Charge	0.00	1,000.00	(1,000.00)	0.0%
51060 · Interest	63,752.18	120,000.00	(56,247.82)	53.1%
51070 · Other Revenue	0.00	20,000.00	(20,000.00)	0.0%
<b>Total 51000 · CAPITAL IMPROVEMENT INCOME</b>	<b>146,396.26</b>	<b>11,420,960.00</b>	<b>(11,274,563.74)</b>	<b>1.3%</b>
<b>Expense</b>				
<b>72000 · CAPITAL IMPROVEMENT PROJECTS</b>				
72403 · Pump Station Rehabilitation	0.00	50,000.00	(50,000.00)	0.0%
72508 · N. Bay Water Recycling Auth	0.00	25,000.00	(25,000.00)	0.0%
<b>72706 · Collection System Improv</b>				
72706-1 · Lateral Replacement Program	4,000.00	60,000.00	(56,000.00)	6.7%
72706 · Collection System Improv - Other	65,271.52	2,910,000.00	(2,844,728.48)	2.2%
<b>Total 72706 · Collection System Improv</b>	<b>69,271.52</b>	<b>2,970,000.00</b>	<b>(2,900,728.48)</b>	<b>2.3%</b>
72707 · Hamilton Wetlands/Outfall Integ	0.00	10,000.00	(10,000.00)	0.0%
72708 · Cogeneration/Alt Energy	0.00	400,000.00	(400,000.00)	0.0%
72802 · Annual Sewer Adj. for City Proj	0.00	25,000.00	(25,000.00)	0.0%
72803 · Annual Collection Sys Repairs	9,047.18	100,000.00	(90,952.82)	9.0%
72804 · Annual Reclamation Fac Imp	37,704.38	400,000.00	(362,295.62)	9.4%
72805 · Annual Treatment Plnt Improv	0.00	300,000.00	(300,000.00)	0.0%
72806 · Annual Pump Station Improv	9,880.00	175,000.00	(165,120.00)	5.6%
72807 · Annual Ignacio Facility Improv	3,493.36	50,000.00	(46,506.64)	7.0%
72808 · Strategic Plan Update	0.00	20,000.00	(20,000.00)	0.0%
72809 · Novato Creek Watershed	0.00	5,000.00	(5,000.00)	0.0%
73003 · Admin Bldg/Maint.Bldg Upgrades	24,551.32	150,000.00	(125,448.68)	16.4%
73004 · Odor Control & NTP Landscaping	5,350.00	50,000.00	(44,650.00)	10.7%
73005 · RWF Expansion	2,243.02	10,000.00	(7,756.98)	22.4%
73006 · NTP Corrosion Control	7,503.34	80,000.00	(72,496.66)	9.4%
73090 · Vehicle Replacement	0.00	580,000.00	(580,000.00)	0.0%
<b>Total 72000 · CAPITAL IMPROVEMENT PROJECTS</b>	<b>169,044.12</b>	<b>5,400,000.00</b>	<b>(5,230,955.88)</b>	<b>3.1%</b>
<b>78400 · Principal and Interest</b>				
78500 · Interest - Capital Projects	1,122,269.14	1,963,279.00	(841,009.86)	57.2%
78501 · Principal - Capital Projects	0.00	4,866,677.00	(4,866,677.00)	0.0%
<b>Total 78400 · Principal and Interest</b>	<b>1,122,269.14</b>	<b>6,829,956.00</b>	<b>(5,707,686.86)</b>	<b>16.4%</b>
<b>Total Expense</b>	<b>1,291,313.26</b>	<b>12,229,956.00</b>	<b>(10,938,642.74)</b>	<b>10.6%</b>
<b>Net Income (Loss)</b>	<b>(1,144,917.00)</b>	<b>(808,996.00)</b>	<b>(335,921.00)</b>	<b>141.5%</b>



### 3.0 OPERATING AND CAPITAL CASH FLOW

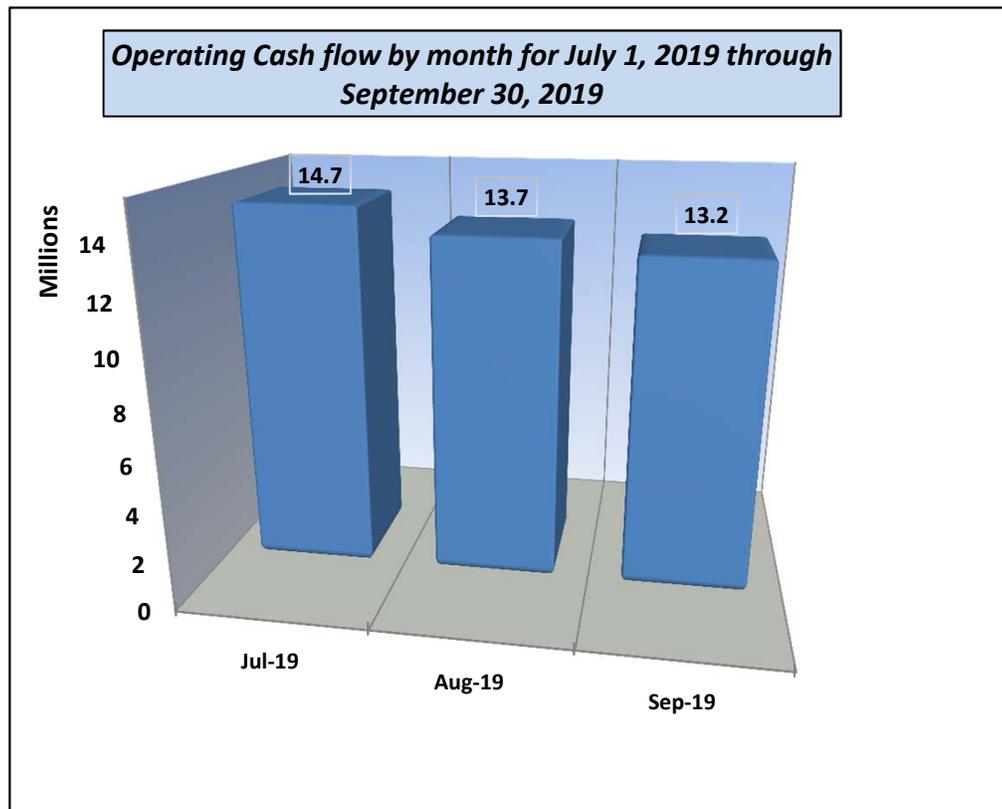
Operating:

Cash Flow For Novato Sanitary District

July 1, 2019 - September 30, 2019

Dated: November 18, 2019

Month Earned	Operating Revenue	Monthly Operating Expenditures	Cash Balance
Jul-19	\$ 101,674	\$ 1,036,111	* \$ 15,627,565
Aug-19	33,708	1,031,194	14,693,128
Sep-19	241,015	731,831	13,695,642
			13,204,826

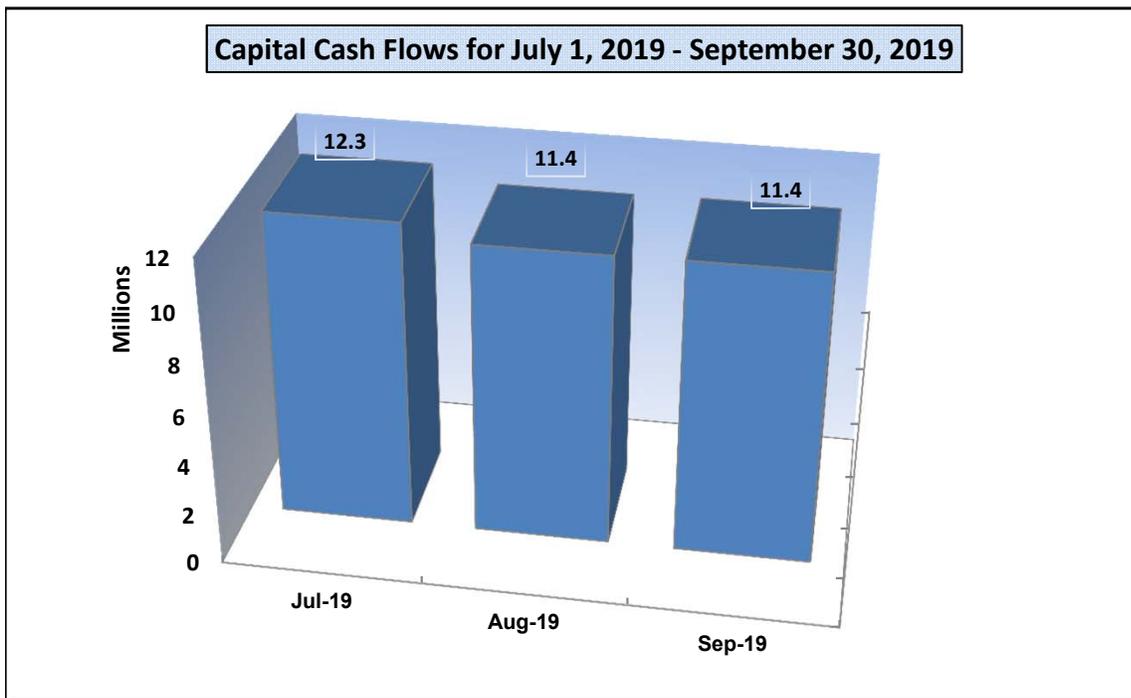


Note: Cash balances at year end split 55/45 - Operating/Capital based on split sewer service charges.

\* Beginning balance adjusted for accrual vs cash basis differences.

**Capital:**  
**Cash Flow For Novato Sanitary District**  
**July 1, 2019 - September 30, 2019**  
**Dated: November 18, 2019**

Month Earned	Monthly Operating Expenditures	Debt Service	Capital Revenue	Cash Balance
Jul-19	\$ 147,999	\$ 315,500	\$ 108,629	\$ 12,608,691
Aug-19	84,528	806,769	29,026	12,253,821
Sep-19	53,488		89,460	11,391,550
				11,427,522



# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Administration: Memorandum of Understanding with Marin County Flood Control and Water Conservation District.	<b>MEETING DATE:</b> November 18, 2019  <b>AGENDA ITEM NO.:</b> 5.f.
<b>RECOMMENDED ACTION:</b> Approve a Memorandum of Understanding (MOU) with the Marin County Flood Control and Water Conservation District (Flood Control District) authorizing the construction of drainage improvements on District property along Simmons Slough, and access for construction and operations and maintenance of the improvements: and authorize the Board President and General Manager-Chief Engineer to execute it.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The Novato Sanitary District (District or Sanitary District) and the Marin County Flood Control and Water Conservation District (Flood Control District) entered into a Joint Exercise of Powers Agreement (JEPA) in June 1983. The JEPA outlines the desire to operate compatible sanitary and flood control facilities as necessary in the area covered by the JEPA and generally referred to as the District's Reclamation Facility within the Novato Creek Bay Plain. Currently, the Flood Control District operates the Simmons Slough stormwater pump station and associated flood control appurtenances, and the Sanitary District operates stormwater pump stations and associated appurtenances at Sites 3 and 7 of the Reclamation Facility.</p> <p>The Flood Control District is undertaking water management improvements in the Simmons Slough watershed including improvements to drainage structures along Simmons Slough and construction of a new stormwater pumping system. The Flood Control District desires: (a) to construct or improve drainage structures at four locations on District property, commonly referred to Site 2 of the Reclamation facility, along Simmons Slough, and (b) access for the construction, operation and maintenance of said structures.</p> <p>The attached Draft Memorandum of Understanding (MOU) authorizes the Flood Control District: (a) to construct drainage structures at four locations on District property, on Site 2 of the Reclamation facility, along Simmons Slough, and (b) access for the construction, operation and maintenance of said structures. The term of the MOU will be continuous until terminated by either party, with provisions that if unilaterally terminated by the Flood Control District, the Flood Control District will restore any impacted areas to a condition acceptable to the District.</p> <p>District Counsel and staff have reviewed the MOU, and recommend that the Board approve the MOU (subject to minor changes and revisions), and authorize the Board President and General Manager-Chief Engineer to execute it on behalf of the District.</p>	
<b>ATTACHMENTS:</b>  1. Draft Memorandum of Understanding between the Marin County Flood Control and Water Conservation District and Novato Sanitary District.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 3 (Board District and Community, Alignment and Communications) of the latest Strategic Plan Update.	
<b>BUDGET INFORMATION:</b> The MOU is intended to be budget neutral to the District.	
<b>DEPT. MGR.:</b> eb, ssk	<b>GENERAL MANAGER:</b> SSK

**MEMORANDUM OF UNDERSTANDING  
BETWEEN THE MARIN COUNTY FLOOD CONTROL AND WATER  
CONSERVATION DISTRICT AND NOVATO SANITARY DISTRICT**

This Memorandum of Understanding (“MOU”) made and entered into this \_\_\_ day of \_\_\_\_\_, 201\_, by and between the MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, (the “FLOOD CONTROL DISTRICT”) and the NOVATO SANITARY DISTRICT (the SANITARY DISTRICT), collectively the “PARTIES”.

**WHEREAS**, the FLOOD CONTROL DISTRICT and the SANITARY DISTRICT entered into a Joint Exercise of Powers Agreement (JEPA) on June 14, 1983 that outlines the desire to operate compatible sanitary and flood control facilities as necessary in an area described in the JEPA; and

**WHEREAS**, on February 2, 2016, the FLOOD CONTROL DISTRICT and the SANITARY DISTRICT amended the Joint Exercise of Powers Agreement (JEPA) of June 14, 1983; and

**WHEREAS**, the FLOOD CONTROL DISTRICT currently operates the Simmons Slough portable stormwater pump and associated flood control appurtenances, and

**WHEREAS**, the SANITARY DISTRICT operates a stormwater pump station #3 and associated appurtenances; and

**WHEREAS**, the FLOOD CONTROL DISTRICT is undertaking water management improvements in the Simmons Slough watershed area as defined by plans attached hereto as Exhibit A; and

**WHEREAS**, the Parties now wish to enter into an agreement to bring specificity to their plans and to set out in general terms, and actions, and permissions for accomplishing such work.

**NOW THEREFORE**, it is mutually agreed and understood as follows:

- A. The foregoing recitals are true and correct and made part of this MOU.
- B. The SANITARY DISTRICT authorizes the FLOOD CONTROL DISTRICT to:
  - a. Construct improvements at FLOOD CONTROL DISTRICT Sites 1, 2, 3, and 4 on SANITARY DISTRICT property as shown on FLOOD CONTROL DISTRICT plan set 2019-20-Z1-Simmons.
  - b. Access, for construction, the FLOOD CONTROL DISTRICT Sites 1, 2, 3, and 4 shown on plan set 2019-20-Z1-Simmons.

- c. Access, maintain and operate said improvements at FLOOD CONTROL DISTRICT Sites 1, 2, 3, and 4 shown on plan set 2019-20-Z1-Simmons after construction is complete.
- C. The June 14, 1983 JEPa, and the February 2, 2016 Amendment to the 1983 JEPa, between the SANITARY DISTRICT and the FLOOD CONTROL DISTRICT shall remain in effect.
- D. INDEMNIFICATION: The FLOOD CONTROL DISTRICT shall defend, indemnify, save and hold harmless the SANITARY 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 FLOOD CONTROL DISTRICT'S performance and/or obligations under this MOU, whether or not due to its negligence, except for liability arising through active negligence or willful misconduct of the SANITARY DISTRICT, its officers, agents, or employees.  
  
The SANITARY DISTRICT shall defend, indemnify, save and hold harmless FLOOD CONTROL 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 SANITARY DISTRICT'S performance and/or obligations under this MOA; except (i) as otherwise set forth above and (ii) for liability arising through active negligence or willful misconduct of FLOOD CONTROL DISTRICT, its officers, agents, or employees.
- E. CONTACTS AND NOTICES: All notices under this MOU 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 FLOOD CONTROL DISTRICT:

Liz Lewis  
Water Resources Manager  
Marin County Flood Control & Water Conservation District  
3501 Civic Center Drive, Room 304  
San Rafael, California 94903  
Phone: (415) 473-7226  
Facsimile: (415) 473-3799  
lizlewis@marincounty.org

For SANITARY DISTRICT:

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

- F. DURATION AND TERMINATION: The terms of this MOU shall be in full force and effect beginning with the date of execution of this MOU and shall continue unless terminated by either Party upon sixty (60) days' written notice, including the reason(s) for termination. If the MOU is unilaterally terminated by FLOOD CONTROL DISTRICT, FLOOD CONTROL DISTRICT agrees to restore the Simmons Slough watershed area and any other impacted area to a condition acceptable to the SANITARY DISTRICT.
- G. SUCCESSORS AND ASSIGNS: The terms and provisions of this MOU 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 MOU.

DRAFT

**Marin County Flood Control and Water Conservation District**

By: Kate Sears  
President, Board of Supervisors, Marin County Flood Control & Water  
Conservation District

Attest:

\_\_\_\_\_  
Clerk of the Board

Approved as to Form:  
DEPUTY COUNTY COUNSEL

By: \_\_\_\_\_

**Novato Sanitary District**

By: Carole Dillon-Knutson  
President, Board of Directors, Novato Sanitary District

\_\_\_\_\_  
Novato Sanitary District

By: Sandeep Karkal  
General Manager-Chief Engineer, Novato Sanitary District

\_\_\_\_\_  
Novato Sanitary District

Approved as to Form:  
DISTRICT COUNSEL

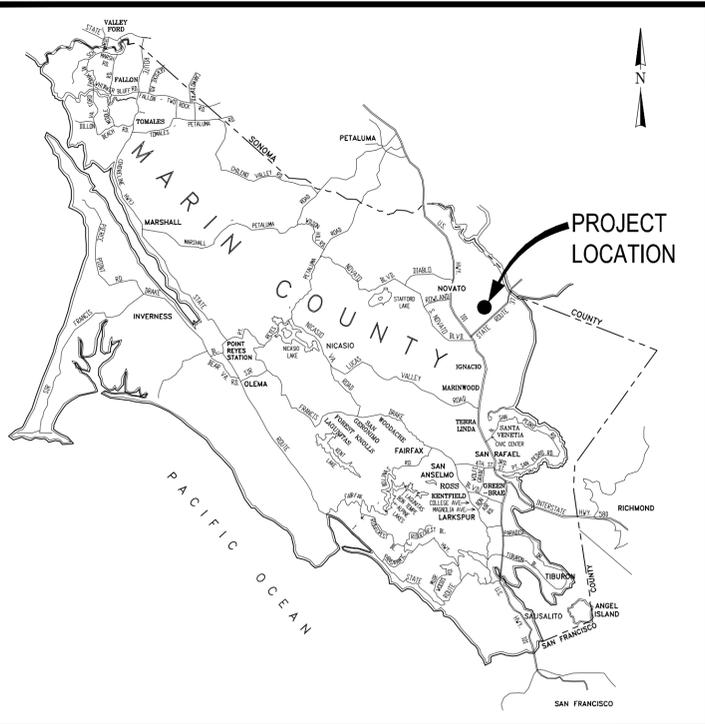
By: \_\_\_\_\_

**EXHIBIT A**

**PLANS FOR CONSTRUCTION OF**

**SIMMONS SLOUGH WATER MANAGEMENT**

**SYSTEM DRAINAGE IMPROVEMENTS**



VICINITY MAP  
NOT TO SCALE

**PROJECT TEAM**

**CIVIL / SURVEY / STRUCTURAL / MECHANICAL**  
WOOD RODGERS  
180 GRAND AVE., STE 775  
OAKLAND, CA 94612

**GEOTECHNICAL ENGINEERING**  
CAL ENGINEERING & GEOLOGY (CE&G)  
785 YGNACIO VALLEY ROAD  
WALNUT CREEK, CA 94596

**ELECTRICAL ENGINEERING**  
TJC & ASSOCIATES  
1330 BROADWAY, SUITE 1101  
OAKLAND, CA 94612-2503

**GENERAL NOTES**

- ALL WORK SHOWN ON THESE PLANS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITIES OF MARIN AND COUNTY OF MARIN DATED JUNE, 1992, THE UNIFORM CONSTRUCTION STANDARDS OF THE CITIES OF MARIN AND THE COUNTY OF MARIN DATED MAY, 2008, THE STATE STANDARD PLANS DATED MAY, 2006, AND THE STATE STANDARD SPECIFICATIONS DATED MAY, 2006, (INSOFAR AS THE SAME MAY APPLY) AS MODIFIED BY THE SPECIAL PROVISIONS FOR THIS PROJECT.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL OF THE WORK PERFORMED BY HIS SUBCONTRACTORS, WITHOUT EXCEPTION.
- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST "MANUAL OF TRAFFIC CONTROL" PUBLISHED BY CALTRANS.
- THE LOCATION FOR UTILITIES SHOWN ON THESE PLANS IS APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATION AND DEPTH. THIS VERIFICATION SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY. A MINIMUM OF 2 WORKING DAYS, BUT NOT MORE THAN 14 CALENDAR DAYS, PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" AT 811 / 1-800-227-2600 FOR LOCATING AND MARKING UTILITIES IN THE AREAS OF THE WORK.
- INSTALL TEMPORARY FENCE AROUND WORK AREA.
- THE CONTRACTOR SHALL ARRANGE FOR HIS OWN TEMPORARY ELECTRICAL POWER FOR CONSTRUCTION NEEDS.

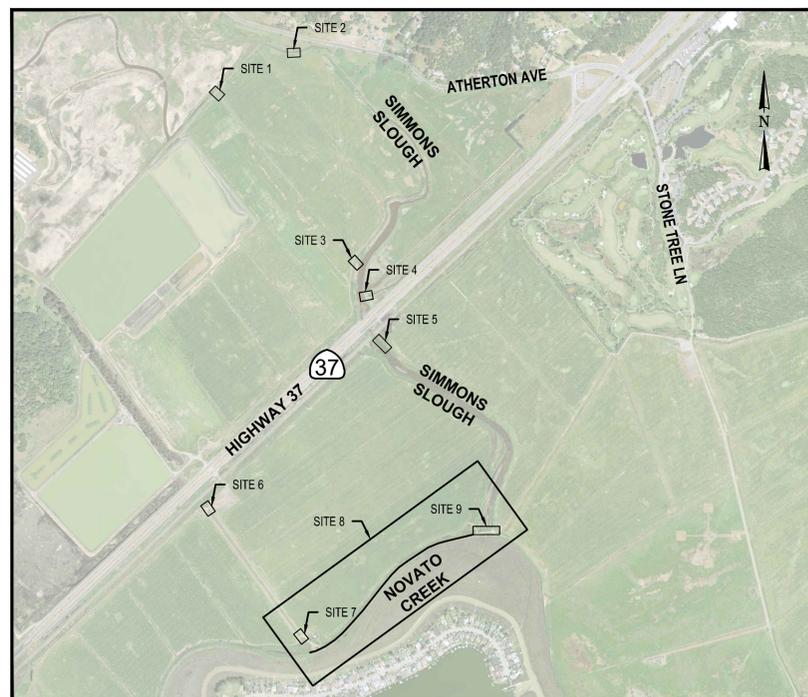
**NOTE:**  
THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE

**DATUM NOTE:**  
ALL ELEVATIONS ON THESE PLANS REFER TO VERTICAL DATUM NAVD88

**COUNTY OF MARIN**  
**DEPARTMENT OF PUBLIC WORKS**  
**FLOOD CONTROL & WATER CONSERVATION DISTRICT**  
**ZONE NO. 1**

**PLANS FOR CONSTRUCTION OF**  
**SIMMONS SLOUGH WATER MANAGEMENT**  
**SYSTEM DRAINAGE IMPROVEMENTS**

**NOVATO, CA**  
**PROJECT NO. Z1-54**  
**APRIL 2019**



LOCATION MAP  
NOT TO SCALE

INDEX OF SHEETS		
SHEET NO.	DWG NO.	SHEET TITLE
1	G1.0	TITLE & SHEET INDEX
2	G1.1	POLLUTION PREVENTION NOTES
3	G1.2	GENERAL NOTES & ABBREVIATIONS
4	C0.0	CIVIL OVERALL SITE, STAGING AREAS, ACCESS & HAUL ROUTES
5	C0.1	OVERLAND FLOW SCHEMATIC
6	C1.0	CIVIL SITE 1 CULVERT IMPROVEMENTS
7	C1.1	CIVIL SITE 2 CULVERT IMPROVEMENTS
8	C1.2	CIVIL SITE 3 & 4 CULVERT IMPROVEMENTS
9	C1.3	CIVIL SITE 5 SLOUGH IMPROVEMENTS
10	C1.4	CIVIL SITE 6 & 7 CULVERT IMPROVEMENTS
11	C1.5	CIVIL SITE 8 LEVEE IMPROVEMENTS
12	C1.6	CIVIL SITE 9 PUMP STATION EXISTING CONDITIONS & DEMOLITION PLAN
13	C1.7	CIVIL SITE 9 PUMP STATION IMPROVEMENTS & OFF-HAUL PLAN
14	C1.8	CIVIL SITE 9 PUMP STATION GRADING & OFF-HAUL PLAN
15	C1.9	CIVIL SITE 9 PUMP STATION SECTIONS
16	C2.0	CIVIL DETAILS
17	C2.1	CIVIL DETAILS
18	C2.2	CIVIL DETAILS
19	C3.0	EROSION CONTROL NOTES AND DETAILS
20	M1.1	UPPER AND LOWER DECK MECHANICAL PLAN
21	M2.1	MECHANICAL SECTIONS
22	M3.1	MECHANICAL DETAILS
23	S1.1	STRUCTURAL NOTES
24	S1.2	STRUCTURAL NOTES AND ABBREVIATIONS
25	S1.3	TYPICAL STRUCTURAL DETAILS
26	S2.1	FOUNDATION PLAN
27	S2.2	LOWER DECK FRAMING PLAN
28	S2.3	UPPER DECK FRAMING PLAN
29	S3.1	LONGITUDINAL SECTION
30	S3.2	TRANSVERSE SECTIONS
31	S4.1	FOUNDATION AND STEEL DETAILS
32	S4.2	STEEL AND METAL DECK DETAILS
33	S4.3	STEEL AND WALKWAY ABUTMENT DETAILS
34	GE-1	ELECTRICAL LEGEND AND ABBREVIATIONS
35	GE-2	ELECTRICAL INSTALLATION DETAILS
36	E-1	PUMP STATION ELECTRICAL PLAN
37	E-2	PUMP STATION ELECTRICAL SINGLE LINE DIAGRAM
38	E-3	ELECTRICAL EQUIPMENT ELEVATIONS AND SCHEDULES
39	E-4	CONTROL DIAGRAMS
40	E-5	NETWORK ARCHITECTURE DIAGRAM
41	E-6	CONTROL SYSTEM I-O DIAGRAM

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
DISTRICT ENGINEER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
PE

1" = 100'  
IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT FULL SCALE.

NO.	DESCRIPTION	BY	DATE	APPROVED



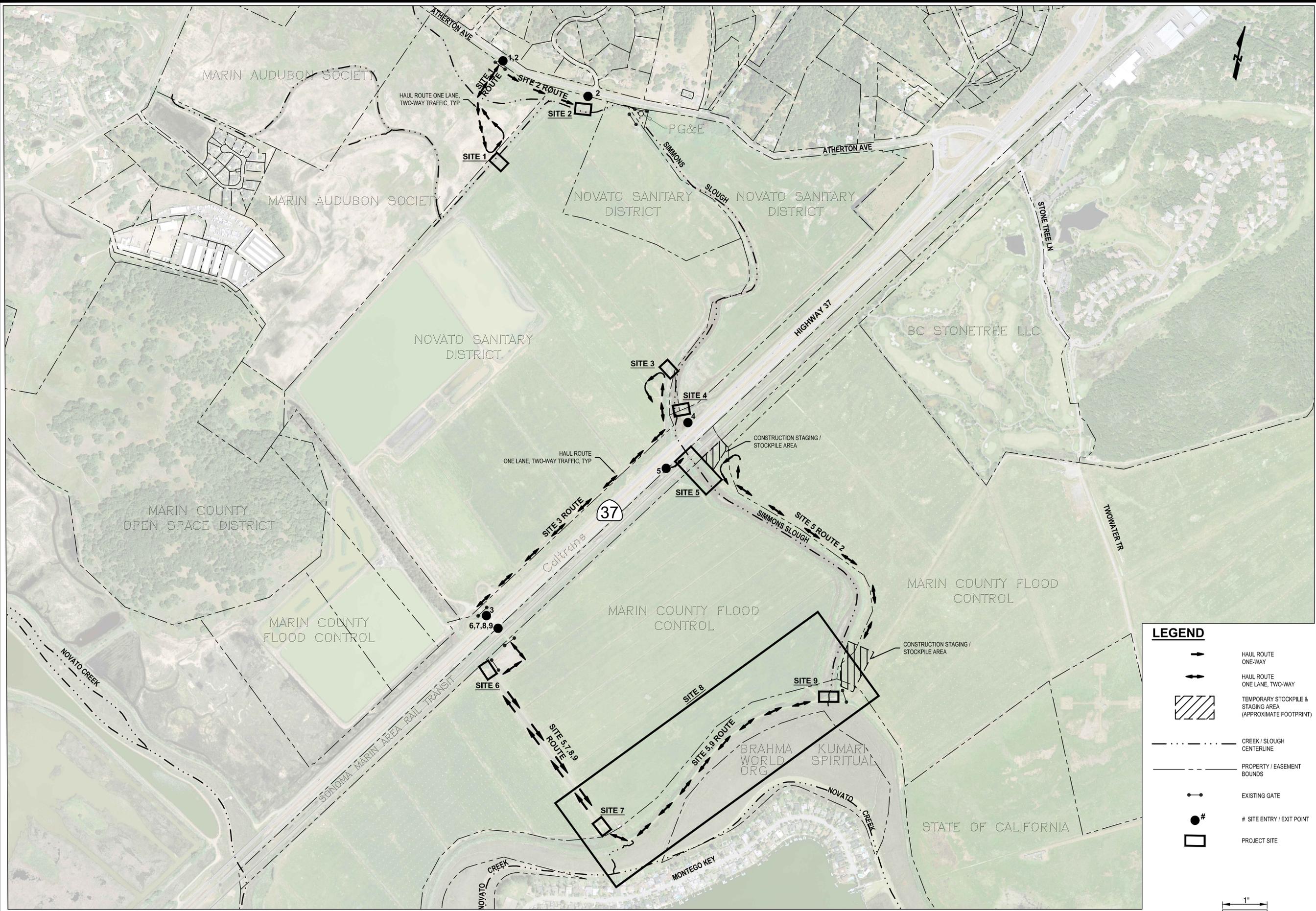
**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
180 GRAND AVE., STE 775 OAKLAND, CA 94612  
TEL: 510.508.3400 FAX: 510.508.3401  
WWW.WOODRODGERS.COM

DRAWN: CAELA BRAZELTON  
DESIGNED: CHARLES WOLFE  
CHECKED: CHENG SOO  
APPROVED: DANIEL MATTHEWS

COUNTY OF MARIN FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
SIMMONS SLOUGH WATER MANAGEMENT SYSTEM DRAINAGE IMPROVEMENTS  
TITLE & SHEET INDEX

REVIEWED: XXXX  
REVIEWED: XXXX  
APPROVAL RECOMMENDED: XXXX

PROJECT NO. **Z1-54**  
DRAWING NO. **G1.0**  
SHEET NO. **1 OF 41**



CIVIL OVERALL SITE, STAGING AREAS, ACCESS & HAUL ROUTES



**LEGEND**

- HAUL ROUTE ONE-WAY
- HAUL ROUTE ONE LANE, TWO-WAY
- TEMPORARY STOCKPILE & STAGING AREA (APPROXIMATE FOOTPRINT)
- CREEK / SLOUGH CENTERLINE
- PROPERTY / EASEMENT BOUNDS
- EXISTING GATE
- # SITE ENTRY / EXIT POINT
- PROJECT SITE

90% SUBMITTAL - INCOMPLETE PLAN

NO.	DESCRIPTION	BY	DATE	APPVD



**WOOD RODGERS**  
 BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
 180 GRAND AVE., SUITE 775  
 DUBLIN, CA 94568-2401

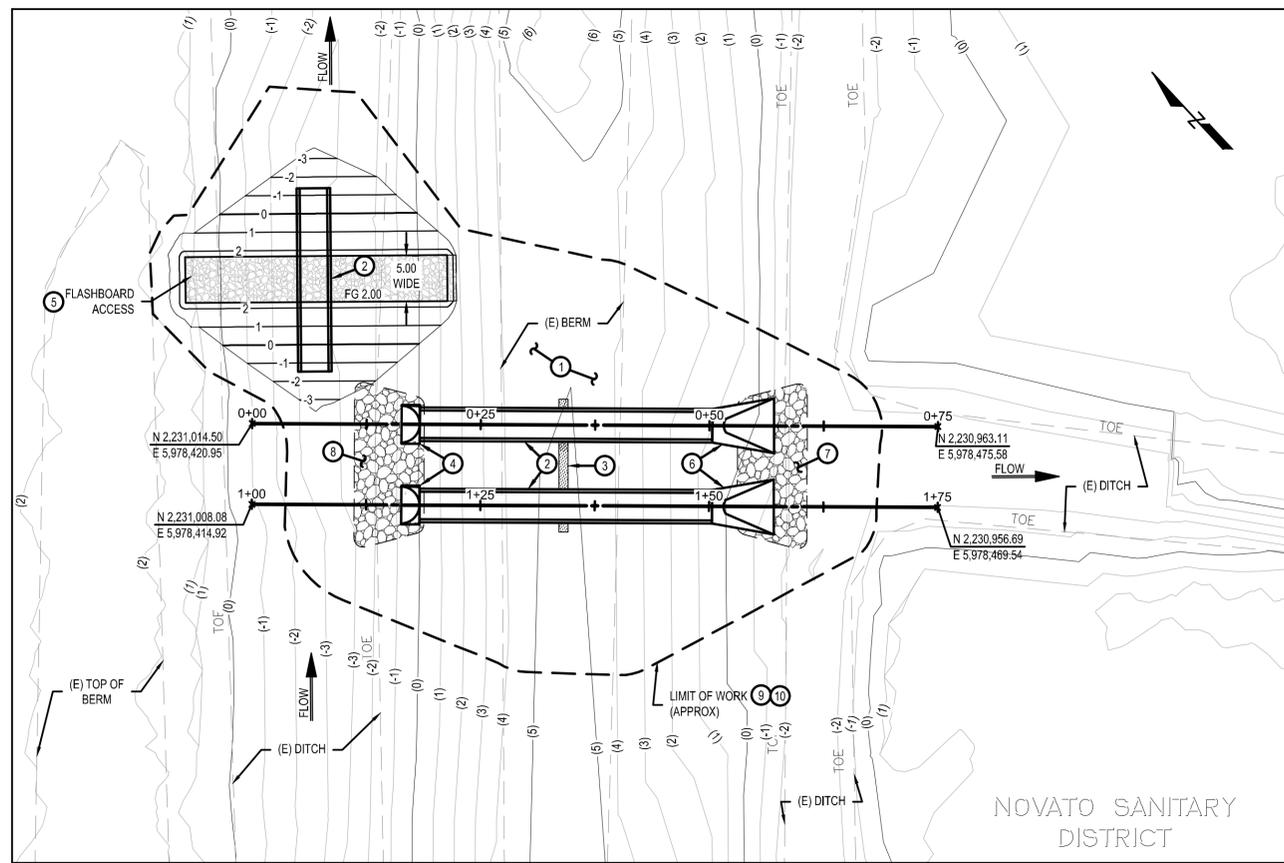
DRAWN: CAELA BRAZELTON  
 DESIGNED: CHARLES WOLFE  
 CHECKED: CHENG SOO  
 APPROVED: DANIEL MATTHEWS

REVIEWED:	XXXX
REVIEWED:	XXXX
APPROVAL RECOMMENDED:	XXXX

COUNTY OF MARIN FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
**SIMMONS SLOUGH WATER MANAGEMENT SYSTEM DRAINAGE IMPROVEMENTS**  
 CIVIL OVERALL SITE, STAGING AREAS, ACCESS & HAUL ROUTES

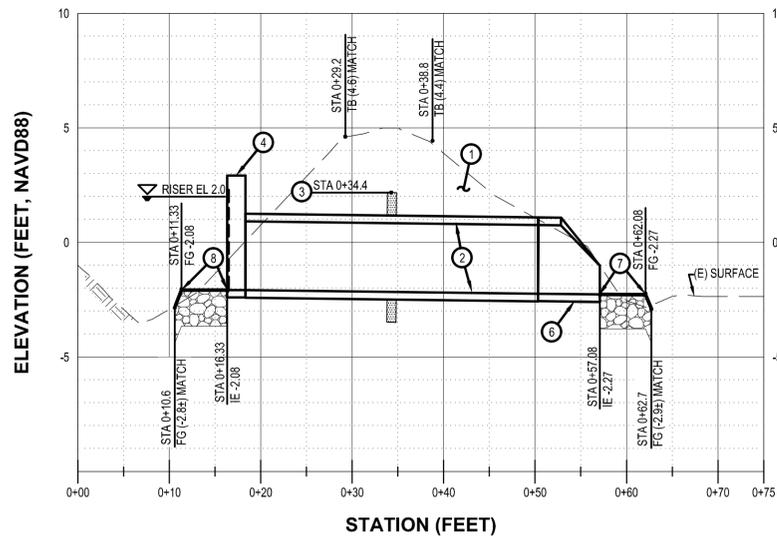
DATE	04/18/2019	SCALE	AS SHOWN
PROJECT NO.	<b>Z1-54</b>		
DRAWING NO.	<b>C0.0</b>		
SHEET NO.	<b>4 OF 41</b>		





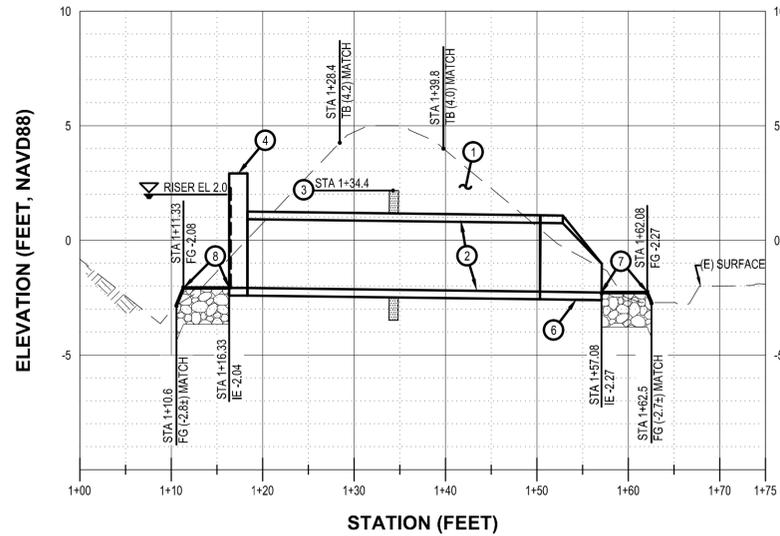
**CIVIL SITE 1 CULVERT IMPROVEMENTS - PLAN**

SCALE: 1" = 10'



**CIVIL SITE 1 CULVERT IMPROVEMENTS PIPE 1 (STA 0+00 TO 0+75) PROFILE**

HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'



**CIVIL SITE 1 CULVERT IMPROVEMENTS PIPE 2 (STA 1+00 TO 1+75) PROFILE**

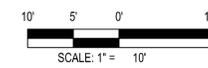
HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'

**CONSTRUCTION NOTES**

- 1 RECONSTRUCT LEVEE TO MATCH EXISTING. SEE DETAIL 3 / C2.2
- 2 INSTALL (N) 36" DIA RCP (CLASS III). SEE DETAIL 1 / C2.0.
- 3 INSTALL (N) ANTI-SEEP CONC COLLAR. SEE DETAIL 2 / C2.1.
- 4 INSTALL (N) PRE-CAST FLASHBOARD RISER W/ STAFF GAGE. SEE DETAIL 3 / C2.0
- 5 INSTALL (N) EARTHEN LEVEE W/ 6" AGGREGATE BASE (CLASS 2). SEE DETAIL 3 / C2.2
- 6 INSTALL (N) PRE-CAST FLARED END. SEE DETAIL 3 / C2.1.
- 7 INSTALL (N) RSP RIP-RAP CLASS II (18" THICK) METHOD B ON GEOTEXTILE FABRIC. SEE DETAIL 1 / C2.1.
- 8 INSTALL (N) RSP RIP-RAP CLASS II (18" THICK) METHOD B ON GEOTEXTILE FABRIC. SEE DETAIL 4 / C2.0.
- 9 INSTALL (N) BIODEGRADABLE FIBER ROLL. SEE DETAIL 1 / C3.0
- 10 RESTORE ALL DISTURBED SURFACES TO MATCH EXISTING CONDITIONS. ESTABLISH (N) VEGETATIVE COVER BY HYDROSEED. SEE NOTES ON C3.0

**GENERAL NOTES**

1. CONTRACTOR TO VERIFY INVERT ELEVATIONS PRIOR TO START OF WORK. IF ELEVATIONS VARY FROM ELEVATIONS SHOWN ON PLAN, CONTRACTOR TO REPORT TO ENGINEER.
2. CONTRACTOR TO INSTALL PIPE, SEEPAGE BARRIER, AND RECONSTRUCT LEVEE PER PROJECT SPECIFICATIONS & GEOTECHNICAL REPORT.
3. MAX EMBANKMENT SLOPE = 2:1 (H:V).
4. ALL ITEMS ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
5. IF IRRIGATION SYSTEM IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY NOVATO SANITARY DISTRICT & REPAIR WITHIN 24 HOURS.



SCALE: 1" = 10'  
SCALE: 1" = 4'

IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT FULL SCALE.

90% SUBMITTAL - INCOMPLETE PLAN

NO.	DESCRIPTION	BY	DATE	APPROV



**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
180 GRAND AVE., SUITE 775 | EL PASO, TEXAS 79902  
DRAUGHTING, SURVEYING, CIVIL ENGINEERING

DRAWN: CAELA BRANZTON  
DESIGNED: CHARLES WOLFE  
CHECKED: CHENG SIO  
APPROVED: DANIEL MATHES

COUNTY OF MARIN FLOOD CONTROL AND WATER CONSERVATION DISTRICT

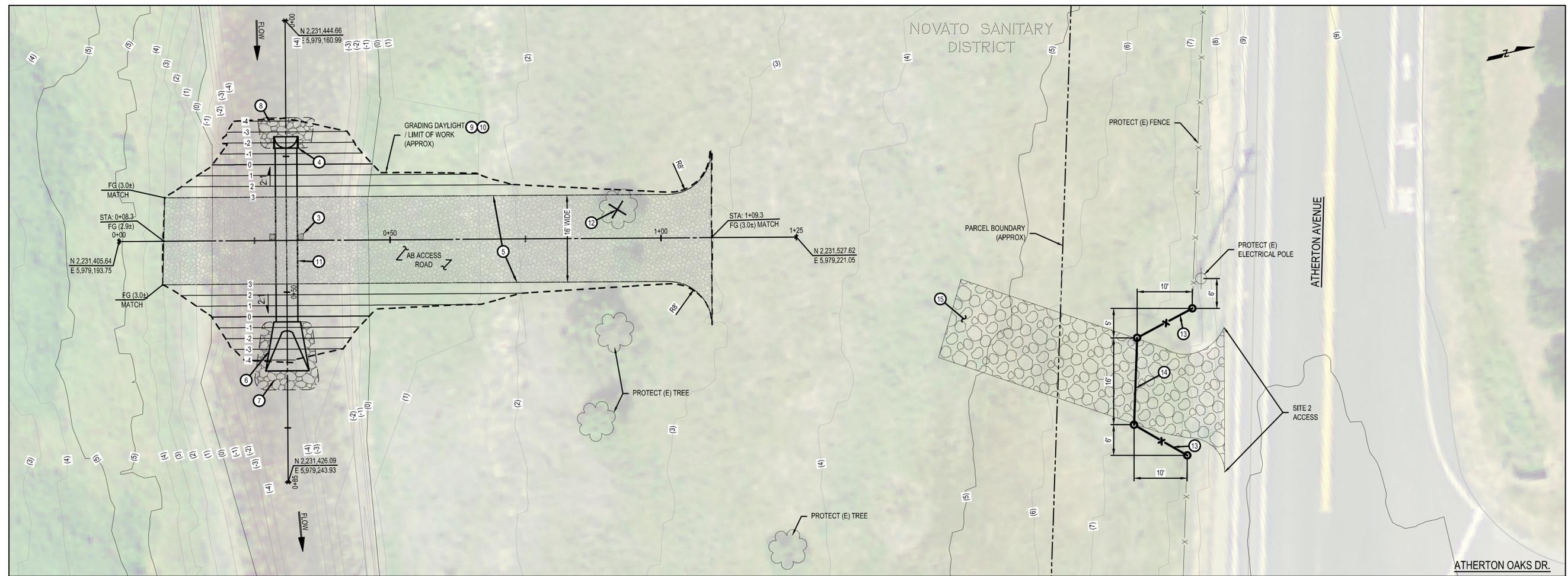
REVIEWED: XXXX  
APPROVAL, RECOMMENDED: XXXX

**SIMMONS SLOUGH WATER MANAGEMENT SYSTEM DRAINAGE IMPROVEMENTS**

**CIVIL SITE 1 CULVERT IMPROVEMENTS**

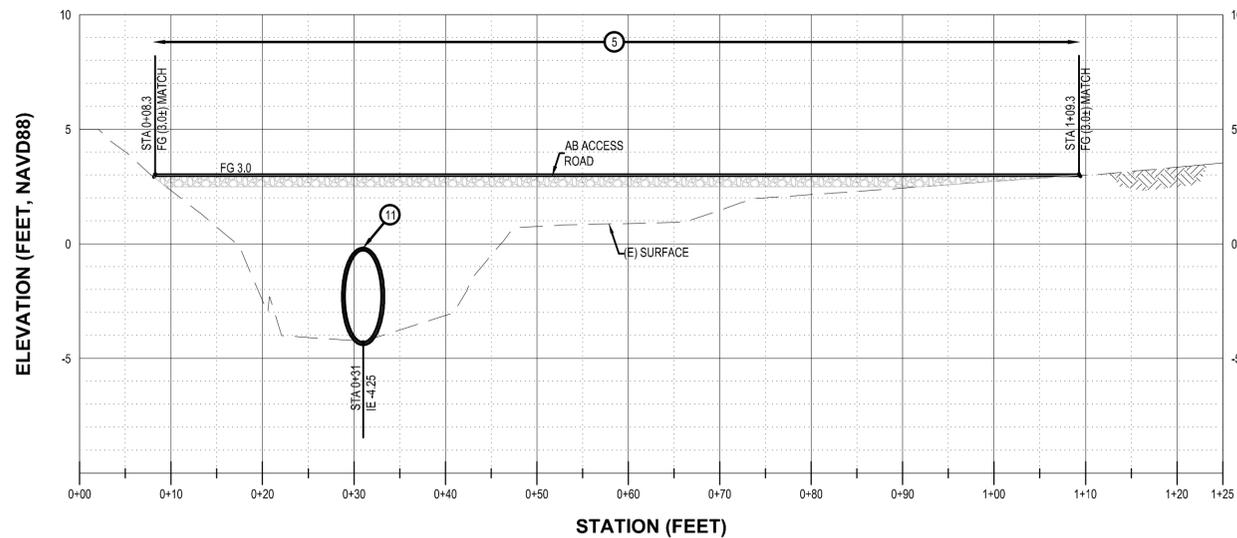
DATE: 04/18/2019	SCALE: AS SHOWN
PROJECT NO: <b>Z1-54</b>	
DRAWING NO: <b>C1.0</b>	
SHEET NO: <b>6 OF 41</b>	





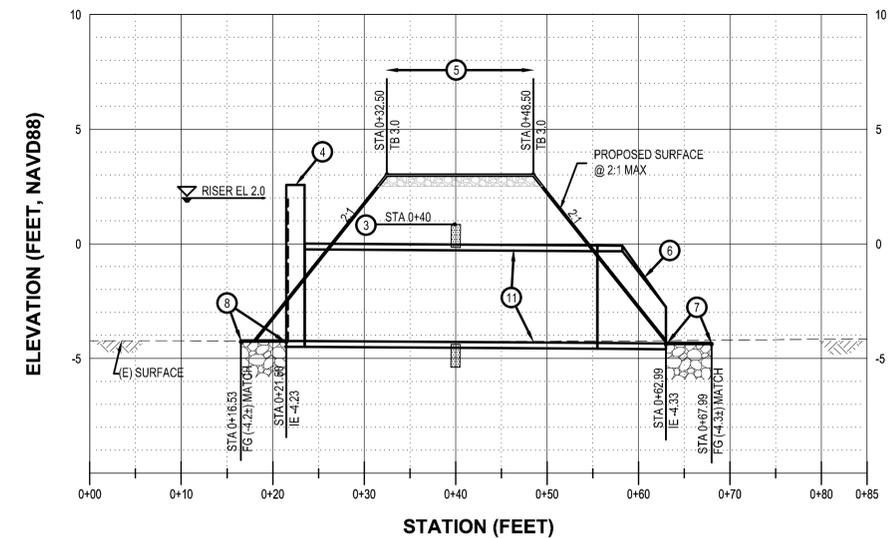
**CIVIL SITE 2 CULVERT IMPROVEMENTS - PLAN**

SCALE: 1" = 10'



**CIVIL SITE 2 ACCESS ROAD - PROFILE**

HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'



**CIVIL SITE 2 CULVERT IMPROVEMENTS - PROFILE**

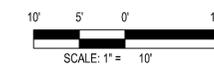
HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'

**CONSTRUCTION NOTES**

- 3) INSTALL (N) ANTI-SLEEP CONC COLLAR. SEE DETAIL 2 / C2.1.
- 4) INSTALL (N) PRE-CAST FLASHBOARD RISER W/ STAFF GAGE. SEE DETAIL 3 / C2.0.
- 5) INSTALL (N) EARTHEN LEEVEE W/ 6" AGGREGATE BASE (CLASS 2). ESTABLISH (N) VEGETATIVE COVER BY HYDROSEED. SEE NOTES ON C3.0.
- 6) INSTALL (N) PRE-CAST FLARED END. SEE DETAIL 3 / C2.1.
- 7) INSTALL (N) RSP RIP-RAP CLASS II (18" THICK) METHOD B ON GEOTEXTILE FABRIC.
- 8) INSTALL (N) RSP RIP-RAP CLASS II (18" THICK) METHOD B ON GEOTEXTILE FABRIC. SEE DETAIL 4 / C2.0.
- 9) INSTALL (N) BIODEGRADABLE FIBER ROLL. SEE DETAIL 1 / C3.0.
- 10) RESTORE ALL DISTURBED SURFACES TO MATCH EXISTING CONDITIONS. ESTABLISH (N) VEGETATIVE COVER BY HYDROSEED. SEE NOTES ON C3.0.
- 11) INSTALL (N) 48" DIA RCP (CLASS III). SEE DETAIL 1 / C2.0.
- 12) REMOVE (E) TREE AS REQUIRED.

**GENERAL NOTES**

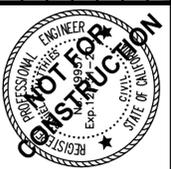
1. CONTRACTOR TO VERIFY INVERT ELEVATIONS PRIOR TO START OF WORK. IF ELEVATIONS VARY FROM ELEVATIONS SHOWN ON PLAN, CONTRACTOR TO REPORT TO ENGINEER.
2. CONTRACTOR TO INSTALL PIPE, SEEPAGE BARRIER, AND RECONSTRUCT LEVEE PER PROJECT SPECIFICATIONS & GEOTECHNICAL REPORT.
3. MAX EMBANKMENT SLOPE = 2:1 (H:V).
4. ALL ITEMS ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
5. IF IRRIGATION SYSTEM IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY NOVATO SANITARY DISTRICT & REPAIR WITHIN 24 HOURS.



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90% SUBMITTAL - INCOMPLETE PLAN

NO.	REVISIONS	DESCRIPTION	BY	DATE	APPROV



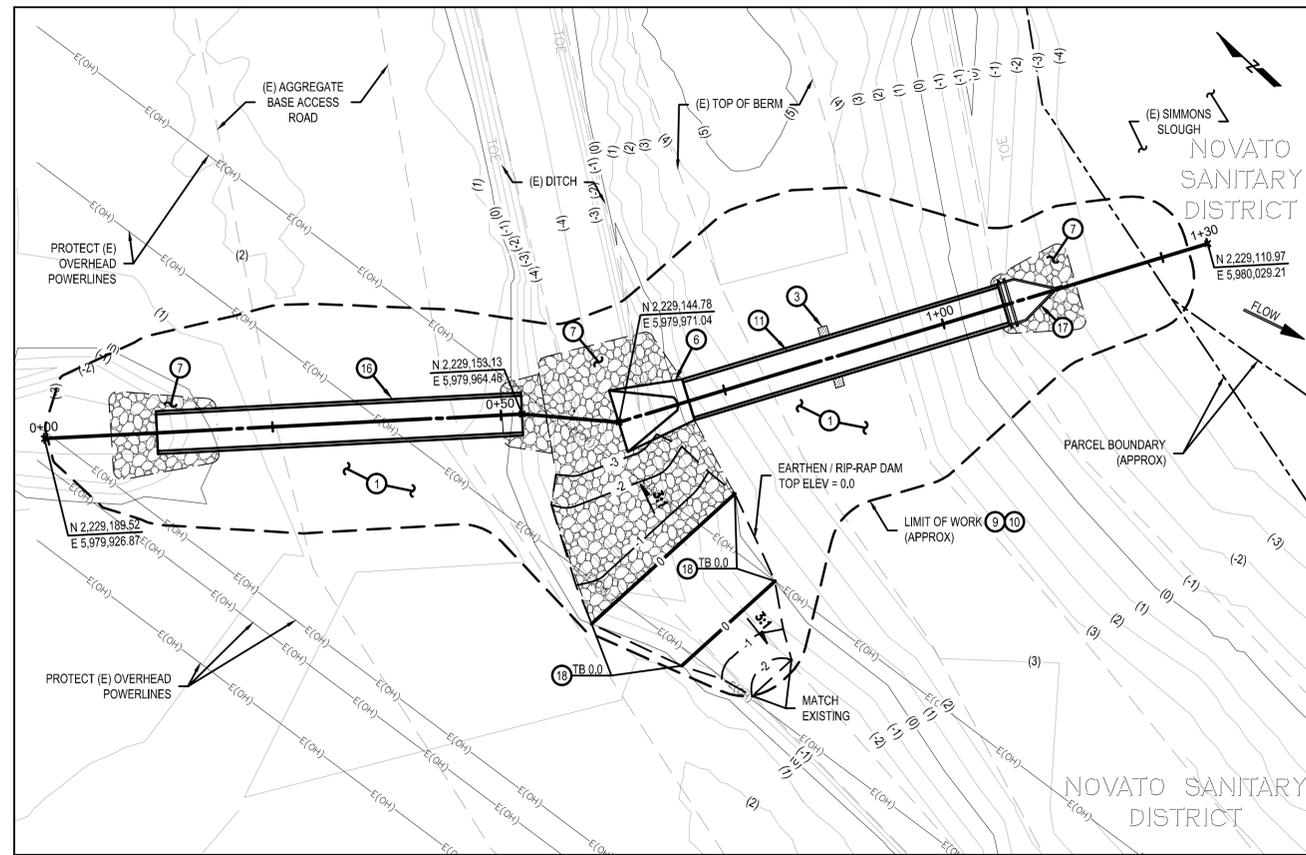
**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
180 GRAND AVE., STE 775 EL 910-208-2400  
DRAWING: CAELA BRAZELTON  
DESIGNED: CHARLES WOLF  
CHECKED: CHENG SOO  
APPROVED: DANIEL MATTHEWS

COUNTY OF MARIN FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
SIMMONS SLOUGH WATER MANAGEMENT SYSTEM DRAINAGE IMPROVEMENTS  
CIVIL SITE 2 CULVERT IMPROVEMENTS

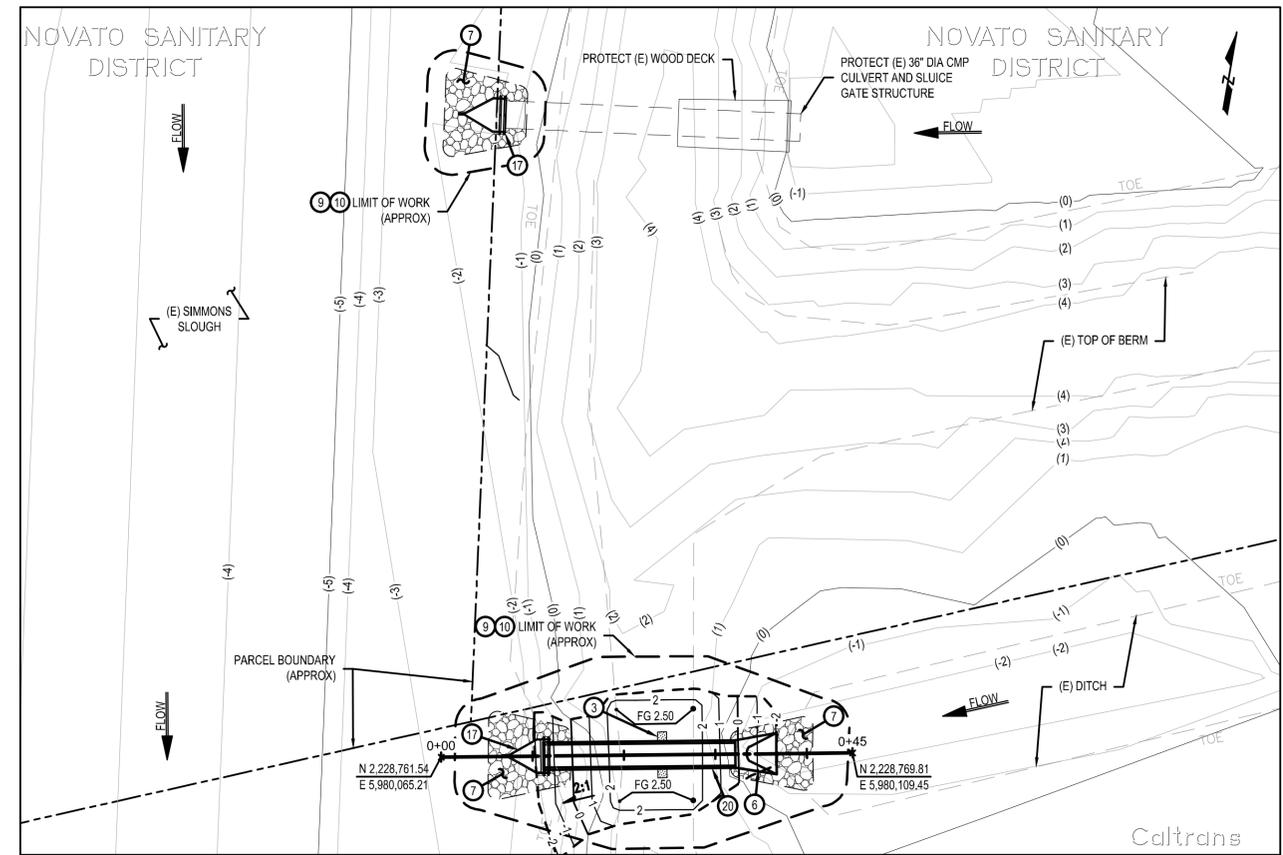
REVIEWER:	XXXX
REVIEWER:	XXXX
APPROVAL RECOMMENDED:	XXXX

DATE	04/18/2019	SCALE	AS SHOWN
PROJECT NO.	<b>Z1-54</b>		
DRAWING NO.	<b>C1.1</b>		
SHEET NO.	<b>7 OF 41</b>		

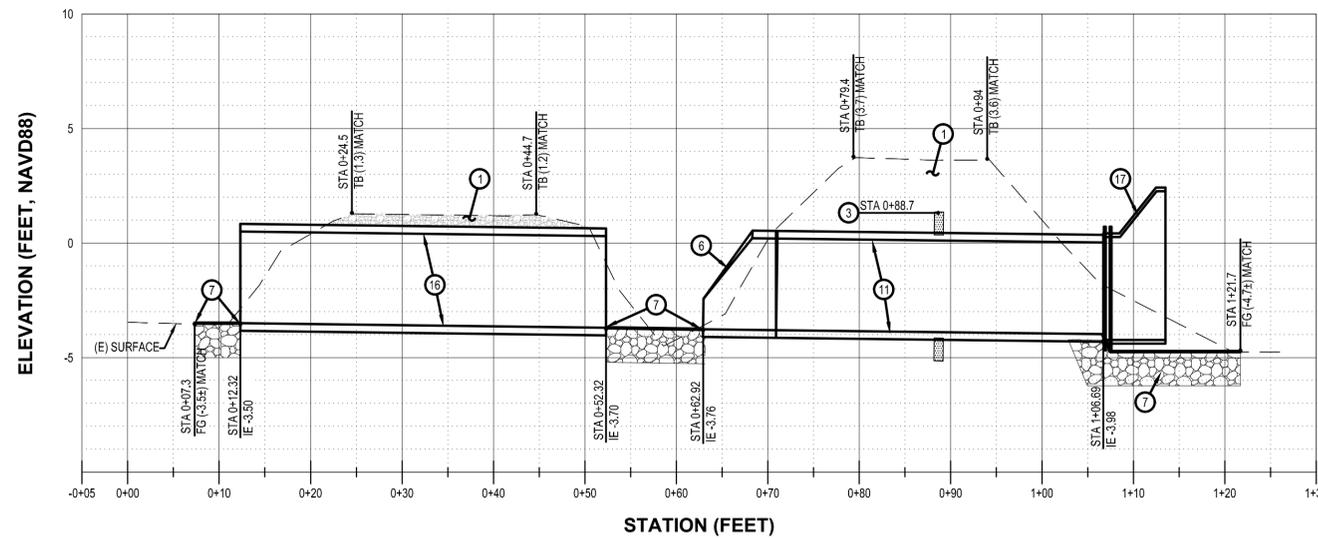




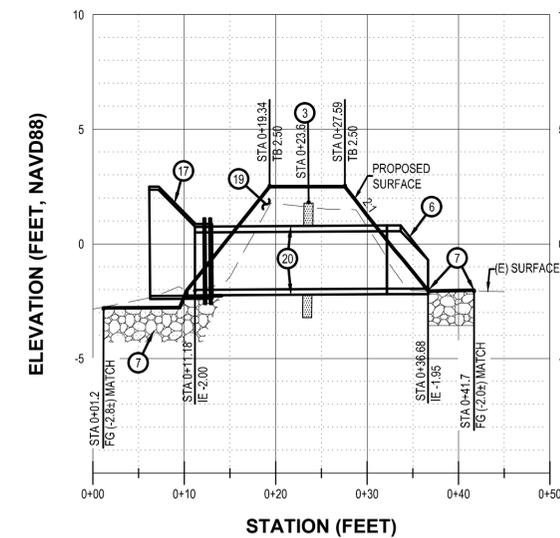
**CIVIL SITE 3 CULVERT IMPROVEMENTS - PLAN**  
HOR SCALE: 1" = 10'



**CIVIL SITE 4 CULVERT IMPROVEMENTS - PLAN**  
HOR SCALE: 1" = 10'



**CIVIL SITE 3 CULVERT IMPROVEMENTS - PROFILE**  
HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'



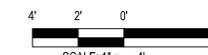
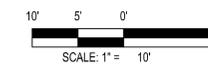
**CIVIL SITE 4 CULVERT IMPROVEMENTS - PROFILE**  
HOR SCALE: 1" = 10'  
VER SCALE: 1" = 4'

**CONSTRUCTION NOTES**

- 1 RECONSTRUCT LEVEE TO MATCH EXISTING. SEE DETAIL 3 / C2.2
- 3 INSTALL (N) ANTI-SEEP CONC COLLAR. SEE DETAIL 2 / C2.1
- 6 INSTALL (N) PRE-CAST FLARED END. SEE DETAIL 3 / C2.1
- 7 INSTALL (N) RSP RIP-RAP CLASS II (18" THICK) METHOD B ON GEOTEXTILE FABRIC. SEE DETAIL 1 / C2.1
- 9 INSTALL (N) BIODEGRADABLE FIBER ROLL. SEE DETAIL 1 / C3.0
- 10 RESTORE ALL DISTURBED SURFACES TO MATCH EXISTING CONDITIONS. ESTABLISH (N) VEGETATIVE COVER BY HYDROSEED. SEE NOTES ON C3.0
- 11 INSTALL (N) 48" DIA RCP (CLASS III). SEE DETAIL 1 / C2.0
- 16 INSTALL (N) PRE-CAST 48" RCB CULVERT W/ PRE-CAST LID. SEE DETAIL 2 / C2.0
- 17 INSTALL (N) DUCKBILL CHECK VALVE (SLIP-ON, FLOAT BOTTOM).
- 18 INSTALL (N) EARTHEN LEVEE EMBANKMENT W/ RIP RAP CLASS II (18" THICK) RSP METHOD B ON GEOTEXTILE FABRIC. SEE DETAIL 3 / C2.2
- 19 INSTALL (N) EARTHEN LEVEE.
- 20 DEMO / REMOVE (E) 36" CMP PIPE & INSTALL (N) 30" RCP (CLASS III) PIPE. SEE DETAIL 1 / C2.0

**GENERAL NOTES**

1. CONTRACTOR TO VERIFY INVERT ELEVATIONS PRIOR TO START OF WORK. IF ELEVATIONS VARY FROM ELEVATIONS SHOWN ON PLAN, CONTRACTOR TO REPORT TO ENGINEER.
2. CONTRACTOR TO INSTALL PIPE, SEEPAGE BARRIER, AND RECONSTRUCT LEVEE PER PROJECT SPECIFICATIONS & GEOTECHNICAL REPORT.
3. MAX EMBANKMENT SLOPE = 3:1 (H:V).
4. ALL ITEMS ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
5. IF IRRIGATION SYSTEM IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY NOVATO SANITARY DISTRICT & REPAIR WITHIN 24 HOURS.



IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT FULL SCALE.

<b>90% SUBMITTAL - INCOMPLETE PLAN</b>		<b>REVISIONS</b>	<b>NO.</b>	<b>DESCRIPTION</b>	<b>BY</b>	<b>DATE</b>	<b>APPROV</b>
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		153	A				
		154	A				
		155	A				
		156	A				
		157	A				
		158	A				
		159	A				
		160	A				
		161	A				
		162					

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Solid Waste: Setting Maximum Solid Waste Rates for Calendar Year (CY) 2020.</b>	<b>MEETING DATE: November 18, 2019</b>  <b>AGENDA ITEM NO.: 6.a.-f.</b>
<b>RECOMMENDED ACTION:</b> Consider recommendation for a Calendar Year (CY) 2020 maximum solid waste rate adjustment of +6.27 percent, conduct public hearing, and consider action to adopt Resolution No. 3141 setting CY 2020 maximum allowable rates for refuse collection and disposal services.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The Solid Waste Committee (Committee) met on September 23, 2019 and reviewed a rate adjustment request for +5.93 percent for CY 2020 from Recology Sonoma Marin (RSM), and a third party report analyzing RSM's request prepared by R3 Consulting Group (R3). The R3 report recommended that the District grant a rate adjustment of +6.32 percent for the reasons listed in the report. Upon review, the Committee concurred with the draft R3 report and recommended that, subsequent to the appropriate public hearing process, the Board consider approval of a CY 2020 maximum solid waste rate adjustment of up to +6.32%. In addition, the Committee directed R3 to perform a final math check of RSM's analysis prior to the presentation to the full Board.</p> <p>Subsequently, R3 issued a revised draft report noting a small mathematical error in RSM's request, and adjusted the R3 recommended rate adjustment to +6.27%, which is slightly less than the Committee's recommended maximum adjustment of up to +6.32%.</p> <p>Accordingly, it is recommended that the Board receive the Committee's recommendation of a maximum rate increase of up to +6.32 percent, with consideration of a proposed actual maximum 6.27% rate adjustment. Also, at its October 14, 2019 Board meeting, the Board set a public hearing to establish the CY 2020 maximum solid waste rates, for a special meeting of Monday, November 18, 2019. Notices of the proposed rate increase and hearing were published in the Marin Independent-Journal on October 17, 2019, and October 31, 2019. Proof of publication of these notices is provided as Attachment 4.</p> <p>It is recommended that the Board receive the proposed actual recommendation of a maximum rate increase of +6.27 percent for CY 2020. It is also recommended that, subsequent to the public hearing, the Board approve the Committee's recommendation of a maximum rate increase of +6.27 percent for CY 2020, and adopt the attached Resolution No. 3141 setting CY 2020 maximum allowable rates for refuse collection and disposal services.</p>	
<b>ATTACHMENTS:</b> <ol style="list-style-type: none"> <li>1. Copy of "Letter Report - Review of Recology Sonoma Marin's Requested Rate Adjustment for Rate Year 2020" by R3 Consulting Group.</li> <li>2. Tables A, B, C, and D.</li> <li>3. Draft Resolution No. 3141 – A Resolution Setting Maximum Solid Waste Service Charges for Recology Sonoma Marin in Novato Sanitary District (including Table 1 – 2020 Refuse Collection Rates).</li> <li>4. Notice of Public Hearing - copy of Proof of Publication for October 17, 2019, and October 31, 2019, Marin Independent Journal.</li> </ol>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), Goal 3 (Alignment and Communications), Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> dlj, ssk	<b>GENERAL MANAGER:</b> SSK

1512 Eureka Road, Suite 220, Roseville, CA 95661  
Tel: 916-782-7821 | Fax: 916-782-7824

2600 Tenth Street, Suite 424, Berkeley, CA 94710  
Tel: 510-647-9674

September 24, 2019

Mr. Sandeep Karkal  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94945

**Re: Review of Recology Sonoma-Marin's Requested Rate Adjustment for Rate Year 2020**

Dear Mr. Karkal:

R3 Consulting Group, Inc. (R3) was engaged by the Novato Sanitary District (District) to assist with a review of Recology Sonoma-Marin's (Company) requested rate adjustment for Rate Year 2020 (January 1, 2020 – December 31, 2020). Specifically, R3 was asked to confirm that the rate adjustment methodology used by the Company is consistent with the Refuse Rate Index (RRI) Rate Adjustment Methodology set forth in Exhibit 2 of the Amended and Restated Franchise Agreement (Agreement), and that the calculation is mathematically accurate. Our review also included reviewing the reasonableness of the Company's requested purchase of four (4) new vehicles and associate rate impact. This Draft Letter Report communicates our findings and recommendations.

## Recommended Rate Adjustment

R3 is recommending a 6.27% rate increase (**Attachment 1**) as compared to the Company's initial requested rate increase of 5.93%, as discussed below.

The Company's Rate Adjustment Application calculated an overall rate increase of 5.93%, consisting of a 4.24% RRI rate increase, and a 1.69% rate increase associated with the purchase of four (4) new vehicles. The Company subsequently provided R3 with an electronic copy of its Rate Adjustment Application that included a correction to the cost associated with the proposed purchase of the four new vehicles. Specifically, increasing the associated depreciation savings (forgone depreciation) related to the older existing vehicles that would be replaced to account for a full year of that savings rather than 9 months as originally projected. The result is that the rate increase associated with the proposed purchase of the new vehicles decreases from 1.69% to 1.61%, with the overall calculated rate increase decreasing from 5.93% to 5.85% (**Attachment 2**).<sup>1</sup>

## Review of RRI Rate Calculated Rate Adjustment

As part of our review, we verified that the Company's financial information, cost category index values, and mathematical formulas were consistent with the RRI methodology included in the Agreement and that its calculation was mathematically accurate. Based on our review, we found the Company's calculated RRI rate adjustment of 4.24% to be correct.

<sup>1</sup> **Note:** The Company's Rate Adjustment Application references a profit margin of 10% on the proposed 4 new vehicles. The actual calculated profit (\$19,304) represents and 11.1% profit margin, consistent with the 90% operating ratio specified in the Agreement.

## Review of Proposed Rate Adjustment for the Purchase of New Vehicles

As referenced above, the Company's Rate Adjustment Application includes a request for four new collection vehicles that would replace existing vehicles that are 12 years old and older. While the RRI methodology does not provide for rate adjustments outside of the calculated indexed adjustments, given the age of the vehicles to be replaced the request does not seem unreasonable. It is anticipated that the Company will propose the replacement of additional older vehicles as part of future rate reviews given the age of the existing fleet that it acquired from North Bay Corporation (North Bay).

The Company's calculated cost and rate impact of its proposed four additional collection vehicles is mathematically accurate based on the information provided. That calculation accounts for the annual cost to finance the purchase of the new vehicles, less the existing annual depreciation expense associated with the older vehicles that Recology is proposing to replace. Recology's calculated offsetting depreciation expense is based on the book value Recology assigned during the audit it conducted at the time it acquired those assets. Those vehicles, however, have already been fully depreciated based on the depreciation schedule that North Bay originally established for those vehicles.

While the use of the depreciation of Recology's assigned book value for these four vehicle reduces the rate impact, as noted above those assets have already effectively been fully depreciated. It is R3's position that any depreciation that Recology presents as part of this and any future rate application should be the actual remaining depreciation on those assets, as established by North Bay rather than based on the assigned book value from the acquisition audit. In that case, the purchase price of the four new vehicles would not be reduced by any associated "foregone depreciation" as there is no depreciation to forego for the four vehicles that are being replaced. Similarly, Recology would not be allowed any depreciation on assets that have already been fully depreciated and paid for by the ratepayers as part of next year's planned detailed rate review.

If we eliminate Recology's forgone depreciation cost there is an increase in the associated annual cost of \$46,591, which increases the rate increase associated with Recology's proposed vehicle purchase from 1.69% to 2.03%, an increase of 0.34%. The overall requested rate increase, including the RRI rate adjustment increases from 5.93% to 6.27%.

## Objectives

- To review the Company's requested rate increase to confirm that:
  - It is consistent with applicable terms and conditions of the Agreement;
  - It is mathematically accurate; and
  - It correctly accounts for the required Balancing Account adjustment to the rates.
- To recommend the appropriate Rate Year 2020 rate adjustment based on the results of our review.

## Background

The Agreement provides for an annual adjustment to the Company's rates based on the specified Refuse Rate Index (RRI), with the option to conduct a detailed rate review not more frequently than once every three (3) years.

As specified in the Agreement, the RRI adjustment is the sum of the weighted average percentage change in the twelve (12) month annual average of the specified indices for each of the following cost categories:

- Labor;
- Fuel;

- Vehicle Replacement;
- All Other.
- Vehicle Maintenance; and

The RRI also provides for adjusting the Disposal Fee and Organic Waste Processing Fee based on the change in the associated tipping fees.

Section 6.3 of the Agreement (RRI Financial Information) states that:

“On or before September 1, 2011, and annually thereafter during the term of this Agreement, the Company shall deliver to the District information for the specific services performed under this Agreement for the preceding Agreement Year. Such financial information shall be in a format as set forth in Exhibit 2, or as may be further revised by the District from time to time. If the Company fails to submit the financial information in the required format by September 1<sup>st</sup>, it is agreed that the Company shall be deemed to have waived the RRI adjustment for that year...”

The Company submitted an electronic copy of its 2019 Rate Adjustment Application to the District on August 29, 2019.

## Proposed New Service Levels and Rates

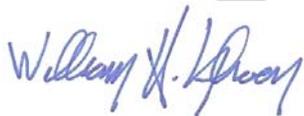
As part of its Rate Application, Recology proposed rates for 1.0 and 1.5 cubic yard commercial organic (food waste) service; rates for those service levels do not currently exist. We reviewed the proposed new rates and Recology’s logic behind the creation of the rates and find the proposed rates to be reasonable. The Company also proposed rates for 15, 20 and 30-yard MSW compactors, which they set the same as the Cleanup Bin rates for the same volume (cubic yards). The Company also set rates for Recycling and Cardboard Compactors and Cart/Bin Cleaning and Bin Replacement. All proposed rates are provided in **Attachment 2**.

\* \* \* \* \*

We appreciate the opportunity to be of assistance to the District. If you have any questions regarding this submittal, please feel free to contact me by phone at (916) 782-7821, or by email at wschoen@r3cgi.com.

Sincerely,

### R3 CONSULTING GROUP



William Schoen | Project Director

### Attachments:

- 1 Recommended Rate Adjustment
- 2 Recology Original Rate Application August 28, 2019 (Updated September 23, 2019)

Novato Request for Rate Increase  
 Summary Page  
 Rates Effective 1/1/2020

Cost Category	AFS FY 2018 RSM Op. Expenses <sup>(1)</sup>	Expense % Weight	Index % Change for July 2017 - June 2018	Weighted Percentage
Labor	\$ 3,652,908	39.05%	3.95%	1.54%
Fuel	574,047	6.14%	12.46%	0.77%
Vehicle Replacement/Lease	726,216	7.76%	4.03%	0.31%
Vehicle Maintenance	394,764	4.22%	4.00%	0.17%
Disposal Fee	1,347,158	14.40%	2.63%	0.38%
Organic Waste Processing Fee	454,595	4.86%	2.63%	0.13%
All Other	2,204,624	23.57%	3.98%	0.94%
<b>Total Allowed Operating Costs</b>	<b>\$ 9,354,314</b>	<b>100.00%</b>		<b>4.24%</b>
Balancing Account Adjustment (Discontinued 2018)				0.00%
<b>Refuse Rate Adjustment</b>				<b>4.24%</b>
Truck Purchase for 2019-2020				2.03%
<b>Adjusted Refuse Rate Adjustment <sup>(1)</sup></b>				<b>6.27%</b>

(1) Rates not currently listed on the table will increase by RRI rate of 6.27%.

Novato New Truck Purchase for Rate Year 2020

	<u>Unit Price</u>	<u>Total Cost</u>
4 Front Loaders	\$ 398,000	\$ 1,592,000
New IC Lease		208,682
Foregone Depreciation		-
<b>Net Annual Truck Costs</b>		<b>\$ 208,682</b>
Profit Margin	10%	23,187
Franchise Fees		NA
<b>Total Required Revenue Increase</b>		<b>\$ 231,869</b>
% Revenue Increase		2.03%



August 28, 2019  
Updated: September 23, 2019

Mr. Sandeep Karkal  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94945

Dear Mr. Karkal,

Per Section 6.2 of the contract, please find attached the requested adjustments to service rates using the refuse rate index for calendar 2020 rates and the appropriate supporting information. When approved, these rates will take effect on January 1, 2020. Based on the district's request last year, this application does not include an element for the recyclable materials balancing account as defined in Exhibit 7 of the contract. Further to discussions last year, Recology will propose an alternative methodology for incorporating changes in the Recycling markets as part of the detailed rate review process, which will be completed for rates to be effective 1/1/21.

We have included in this rate application an additional increase related to the proposed purchase of 4 new trucks. RSM is proposing this purchase to begin putting new trucks in service in the Novato area prior to the detailed rate review process next year to expedite correction of truck issues in Novato. The application presents the rate increase with and without the new truck purchases to enable comparison.

Also, please note the rate table included with this application includes several rates requested by customers for services not previously included on the contract rate chart. In all cases, these rates were developed based on contractual rates. These added rates are designated in blue on the rate chart.

Please contact me or Nikki Burke at 707-586-8233 or [nburke@recology.com](mailto:nburke@recology.com) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'F Stemmler', is written over a light blue horizontal line.

Fred Stemmler  
General Manager  
Recology Sonoma Marin

cc: Dee Johnson  
Nikki Burke

Attached: Novato Rate Increase – Effective 1.1.20-Submitted 8.28.19-Updated 9.23.19

**Novato Request for Rate Increase  
Summary Page  
Rates Effective 1/1/2020**

<b>Cost Category</b>	<b>AFS FY 2018 RSM Op. Expenses <sup>(1)</sup></b>	<b>Expense % Weight</b>	<b>Index % Change for July 2018 - June 2019</b>	<b>Weighted Percentage</b>
Labor	\$ 3,652,908	39.05%	3.95%	1.54%
Fuel	574,047	6.14%	12.46%	0.77%
Vehicle Replacement/Lease	726,216	7.76%	4.03%	0.31%
Vehicle Maintenance	394,764	4.22%	4.00%	0.17%
Disposal Fee	1,347,158	14.40%	2.63%	0.38%
Organic Waste Processing Fee	454,595	4.86%	2.63%	0.13%
All Other	2,204,624	23.57%	3.98%	0.94%
<b>Total Allowed Operating Costs</b>	<b>\$ 9,354,314</b>	<b>100.00%</b>		<b>4.24%</b>
Balancing Account Adjustment (Discontinued 2018)				0.00%
<b>Refuse Rate Adjustment</b>				<b>4.24%</b>
Truck Purchase for 2019-2020				1.69%
<b>Adjusted Refuse Rate Adjustment <sup>(1)</sup></b>				<b>5.93%</b>

(1) Rates not currently listed on the table will increase by RRI rate of 5.93%.

**Novato New Truck Purchase for Rate Year 2020**

	<u>Unit Price</u>	<u>Total Cost</u>
4 Collection Trucks	\$ 398,000	\$ 1,592,000
New IC Lease		208,682
Foregone Depreciation		(34,944)
<b>Net Annual Truck Costs</b>		<b>\$ 173,738</b>
Operating Ratio	10%	19,304
Franchise Fees		NA
<b>Total Required Revenue Increase</b>		<b>\$ 193,042</b>
% Revenue Increase		1.7%
Projected Revenue for 1/1/19 -12/31/19		\$ 11,427,254

**Novato Request for Rate Increase  
Index Change Calculations  
Rates Effective 1/1/2020**

<b>Labor Index</b>													
BLS Series ID: ceu6056210008 Production Workers-Waste Collection													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	July-June Avg.
2017	19.46	19.43	19.31	19.29	19.33	19.43	19.42	19.23	19.56	19.31	19.60	19.50	
2018	19.53	19.41	19.66	19.51	19.76	19.81	19.68	19.76	20.09	20.15	20.03	20.22	19.5250
2019	20.40	20.34	20.68	20.55	20.90	20.75							20.2958
Percentage change			3.95%		Weight	39.05%		Weighted percentage		1.54%			
<b>Fuel</b>													
California No. 2 Ultra Low Sulfur Diesel - Monthly <a href="http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp">http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp</a>													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	July-June Avg.
2017	2.932	2.957	2.935	2.938	2.922	2.895	2.876	2.959	3.168	3.172	3.587	3.559	
2018	3.639	3.680	3.654	3.773	3.941	3.982	3.957	3.940	3.973	4.086	4.018	3.858	3.4992
2019	3.753	3.734	3.789	3.953	4.128	4.035	3.949						3.9353
Percentage change			12.46%		Weight	6.14%		Weighted percentage		0.77%			
<b>Vehicle Replacement</b>													
BLS Series ID: pcu3336211336211 Truck, bus, car and other vehicle bodies, for sale separately.													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	July-June Avg.
2017	238.40	238.40	238.70	239.00	239.30	239.50	240.20	240.40	240.60	240.60	240.70	241.00	
2018	241.90	242.50	243.10	244.10	244.60	245.40	246.30	247.40	248.10	249.30	250.20	250.40	242.0917
2019	253.50	254.50	255.50	255.60	255.70	255.70	258.80						251.8500
Percentage change			4.03%		Weight	7.76%				0.31%			
<b>Vehicle Maintenance</b>													
BLS Series ID: pcu333924333924 Parts and attachments for Industrial work trucks													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	July-June Avg.
2017	240.0	241.0	241.1	241.4	242.7	243.2	243.2	243.2	243.2	243.2	243.2	244.6	
2018	244.2	245.9	247.4	247.5	249.2	249.4	250.3	252.4	254.8	255.1	255.5	255.4	245.3500
2019	256.1	256.5	256.6	256.6	255.8	257.0	256.5						255.1750
Percentage change			4.00%		Weight	4.22%		Weighted percentage		0.17%			
<b>Disposal</b>													
The per-Ton tip fee charged at the Approved Disposal Site.													
						<u>Feb-18</u>		<u>Feb-19</u>					
			Redwood Landfill			\$ 59.97		\$ 61.55					
Percentage change			2.63%		Weight		14.40%	Weighted percentage		0.38%			
<b>Organic Waste Processing Fee</b>													
The per-Ton tip fee charged at the Approved Disposal Site.													
						<u>Feb-18</u>		<u>Feb-19</u>					
			Redwood Landfill			\$ 41.03		\$ 42.11					
Percentage change			2.63%		Weight		4.86%	Weighted percentage		0.13%			
<b>All Other</b>													
Series ID: CUURS49BSA0 Consumer Price Index, All Urban Consumers, All Items, San Francisco-Oakland-Hayward, CA <sup>(1)</sup>													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	July-June Avg.
2017		271.626		274.589		275.304		275.893		277.570		277.414	
2018		281.308		283.422		286.062		287.664		289.673		289.896	280.2782
2019		291.227		294.801		295.259							291.4200
Percentage change			3.98%		Weight	23.57%		Weighted percentage		0.94%			

(1) Note: Series ID CUURA422SA0, contractually defined for All Other RRI increase, was changed by the Bureau of Labor Statistics to CUURS49BSA0 in 2018.

<b>Total Weighted Percentage Increase</b>	<b>4.24%</b>
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**Novato Request for Rate Increase**  
**RRI Financials-Audited Financial Statement FY2018**  
**Rates Effective 1/1/2020**

	<b>AFS FY18</b>		<b>AFS FY18</b>
<b>Total Expenses</b>		<b>Categorized Expenses</b>	
Payroll & Related	\$ 3,552,554	Labor	\$ 3,652,908
Temporary Labor & Subcontractors	100,355	Fuel	574,047
Liability Insurance	107,127	Replacment	726,216
Disposal	1,801,754	Maintenance	394,764
Recycling Processing Fee	767,723	Disposal	1,347,158
Rent & lease	71,729	Organic Processing	454,595
Supplies	131,907	Other	2,204,624
Franchise Fees	263,501		\$ 9,354,314
Repairs & Maintenance	394,764		
Fuel & Oil	574,047		
Buildings & Facilities	32,429	<b>Costs Not Included:</b>	
Licences & Permits	28,249	Franchise Fees	263,501
Utilities	25,604	<b>Total Expenses</b>	\$ 9,617,815
Freight	16,096		
Recycling & COGS	275,637		
Bad Debt	17,535		
Professional Services	66,509		
Travel, meals & entertainment	16,150		
Office expenses	107,106		
Taxes	38,101		
Regional Allocations			
Coporate Allocations	147,530		
Other Operating Expenses	84,826		
Depreciation & Depletion	706,594		
Amortization	270,367		
(Gain)/loss on sale	-		
I/C equipment & property	19,622		
<b>Total Expenses</b>	<b>\$ 9,617,815</b>		

## Novato Request for Rate Increase Rate Table Rates Effective 1/1/2020

Rate Classification	Maximum Monthly Fee <i>Effective 1/1/19</i>	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective 1/1/20</i>
<b>Single Family Residential:</b>			
20 Gal. can collected weekly	\$ 13.26	\$ 0.79	\$ 14.05
32 Gal. can collected weekly	21.20	1.26	22.46
68 Gal. can collected weekly	42.37	2.51	44.88
95 Gal. can collected weekly	63.58	3.77	67.35
Special Trips - Can not set out	\$ 13.22	\$ 0.78	\$ 14.00
Special Rate - Containers >50 feet from street (each 50 feet)	6.11	0.36	6.47
Special Equipment - PAL Truck	13.22	0.78	14.00
Extra Pickups	6.50	0.39	6.89
Additional 95 gl. Green Waste Carts after 2	20.16	1.20	21.36
<b>Multi-family, Mobile Home Parks, Commercial/Industrial:</b>			
<b>32 Gallon:</b>			
1 x week	\$ 22.96	\$ 1.36	\$ 24.32
1 x week - Foodwaste	17.23	1.02	18.25
2 x week	48.98	2.90	51.88
3 x week	74.91	4.44	79.35
6 x week	152.81	9.06	161.87
<b>68 Gallon:</b>			
1 x week	\$ 44.07	\$ 2.61	\$ 46.68
1 x week - Foodwaste	33.05	1.96	35.01
2 x week	93.96	5.57	99.53
3 x week	143.67	8.52	152.19
6 x week	293.12	17.38	310.50
<b>95 Gallon:</b>			
1x week	\$ 66.09	\$ 3.92	\$ 70.01
1 x week - Foodwaste	49.57	2.94	52.51
2 x week	140.91	8.35	149.26
3 x week	215.51	12.78	228.29
6 x week	439.69	26.07	465.76
Extra Pickups	\$ 6.50	\$ 0.39	\$ 6.89

**Novato Request for Rate Increase**  
**Rate Table**  
**Rates Effective 1/1/2020**

Rate Classification	Maximum Monthly Fee <i>Effective</i> 1/1/19	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective</i> 1/1/20
<b>Debris Box Service:</b>			
<b>2 Cu. Yd. Containers:</b>			
1 x week	\$ 218.98	\$ 12.98	\$ 231.96
2 x week	384.35	22.79	407.14
3 x week	549.67	32.59	582.26
4 x week	714.91	42.39	757.30
5 x week	880.18	52.19	932.37
6 x week	1,045.47	61.99	1,107.46
Above rates include container rental as follows:	53.72	3.19	56.91
Extra Pickups	59.79	3.55	63.34
<b>3 Cu. Yd. Containers:</b>			
1 x week	\$ 276.21	\$ 16.38	\$ 292.59
2 x week	480.66	28.50	509.16
3 x week	685.37	40.64	726.01
4 x week	889.79	52.76	942.55
5 x week	1,094.44	64.89	1,159.33
6 x week	1,298.94	77.02	1,375.96
Above rates include container rental as follows:	71.70	4.25	75.95
Extra Pickups	59.79	3.55	63.34
<b>4 Cu. Yd. Containers:</b>			
1 x week	\$ 359.63	\$ 21.32	\$ 380.95
2 x week	630.93	37.41	668.34
3 x week	902.38	53.50	955.88
4 x week	1,173.67	69.59	1,243.26
5 x week	1,445.09	85.68	1,530.77
6 x week	1,716.44	101.77	1,818.21
Above rates include container rental as follows:	71.70	4.25	75.95
Extra Pickups	71.70	4.25	75.95

## Novato Request for Rate Increase Rate Table Rates Effective 1/1/2020

Rate Classification	Maximum Monthly Fee <i>Effective</i> 1/1/19	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective</i> 1/1/20
<b>6 Cu. Yd. Containers:</b>			
1 x week	\$ 526.45	\$ 31.21	\$ 557.66
2 x week	931.47	55.23	986.70
3 x week	1,336.46	79.24	1,415.70
4 x week	1,741.40	103.25	1,844.65
5 x week	2,146.43	127.27	2,273.70
6 x week	2,551.41	151.28	2,702.69
Above rates include container rental as follows:	71.70	4.25	75.95
Extra Pickups	119.58	7.09	126.67
<b>15 Cu. Yd. Containers:</b>			
1 x week	\$ 2,308.97	\$ 136.91	\$ 2,445.88
2 x week	4,623.30	274.13	4,897.43
3 x week	6,932.29	411.04	7,343.33
Above rates include container rental as follows:	71.70	4.25	75.95
Extra Pickups	533.25	31.62	564.87
<b>Debris Box Service - Foodwaste:</b>			
<b>1 Cu. Yd. Containers: (New Rates created 5/20/19)</b>			
1 x week	\$ 121.30	\$ 7.19	\$ 128.49
2 x week	216.03	12.81	228.84
3 x week	310.48	18.41	328.89
4 x week	405.04	24.02	429.06
5 x week	499.45	29.61	529.06
6 x week	594.00	35.22	629.22
<b>1.5 Cu. Yd. Containers: (New Rates created 6/25/19)</b>			
1 x week	\$ 142.77	\$ 8.47	\$ 151.24
2 x week	252.15	14.95	267.10
3 x week	361.37	21.43	382.80
4 x week	470.61	27.90	498.51
5 x week	579.79	34.38	614.17
6 x week	689.06	40.86	729.92
<b>2 Cu. Yd. Containers:</b>			
1 x week	\$ 164.23	\$ 9.74	\$ 173.97
2 x week	288.26	17.09	305.35
3 x week	412.25	24.44	436.69
4 x week	536.19	31.79	567.98
5 x week	660.14	39.14	699.28
6 x week	784.11	46.49	830.60

## Novato Request for Rate Increase Rate Table Rates Effective 1/1/2020

Rate Classification	Maximum Monthly Fee <i>Effective</i> 1/1/19	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective</i> 1/1/20
<b>3 Cu. Yd. Containers:</b>			
1 x week	\$ 207.17	\$ 12.28	\$ 219.45
2 x week	360.50	21.38	381.88
3 x week	514.02	30.48	544.50
4 x week	667.34	39.57	706.91
5 x week	820.83	48.67	869.50
6 x week	974.21	57.76	1,031.97
<b>4 Cu. Yd. Containers:</b>			
1 x week	\$ 269.72	\$ 15.99	\$ 285.71
2 x week	473.20	28.06	501.26
3 x week	676.79	40.13	716.92
4 x week	880.25	52.19	932.44
5 x week	1,083.82	64.26	1,148.08
6 x week	1,287.33	76.33	1,363.66
<b>Cleanup Bins:</b>			
3 yd. - 2 days	\$ 193.02	\$ 11.44	\$ 204.46
3 yd. - weekend	193.02	11.44	204.46
6 yd. - 2 days	325.41	19.29	344.70
6 yd. - weekend	325.41	19.29	344.70
15 - yd. up to 3 tons - one week	533.25	31.62	564.87
20 yd. up to 3 tons - one week	598.42	35.48	633.90
30 yd. up to 4 tons - one week	998.53	59.21	1,057.74
Additional/ton charge for cleanup bins	64.62	3.83	68.45
Occasional or irregular collections per 5 cubic	6.50	0.39	6.89
Special collections other than debris box - plus regular rate	27.54	1.63	29.17
Special collections for debris boxes - plus regular rate	59.83	3.55	63.38
Monthly charge for special collection conditions	12.97	0.77	13.74

## Novato Request for Rate Increase Rate Table Rates Effective 1/1/2020

Rate Classification	Maximum Monthly Fee <i>Effective</i> 1/1/19	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective</i> 1/1/20
<b>MSW Compactor (use clean up bin rates)</b>			
15 yard per haul (including 3 tons MSW)	\$ 533.25		\$ 564.87
20 yard per haul (including 3 tons MSW)	\$ 598.42		\$ 633.90
30 yard per haul (including 4 tons MSW)	\$ 998.53		\$ 1,057.74
<b>RCY &amp; Cardboard Compactors</b>			
15 Yard per haul	\$ 239.11		\$ 242.78
20 Yard per haul	\$ 263.02		\$ 267.06
30 Yard per haul	\$ 289.32		\$ 293.77
<b>Services</b>			
Cart/Bin Cleaning (after 1st free)	\$ 100.00		\$ 100.00
Cart Replacement (1 free/year)			
Bin Replacement (after 1st free)	\$ 159.25		\$ 159.25

New Rates Created 4/22/19

**Bulky Items:**

Residential Customers receive **4 free bulky item pick ups/year**; each pick up limited to 3 cubic yards; no liquids or hazardous waste; charges for freon or excess waste above 3 cu. yds. may apply

**Mattresses**

Twin Bed	\$ 15.71	\$ 0.93	\$ 16.64
Double/Full	18.90	1.12	20.02
Queen	23.84	1.41	25.25
King	27.34	1.62	28.96

**Box Springs**

Twin Bed	\$ 17.45	\$ 1.03	\$ 18.48
Double/Full	22.39	1.33	23.72
Queen	27.34	1.62	28.96

**Furniture**

Bed Frame	\$ 9.30	\$ 0.55	\$ 9.85
Couch (under 6 feet)	56.14	3.33	59.47
Upholstered Chair	23.84	1.41	25.25
Wooden Chair	4.36	0.26	4.62
Dinette Table	25.01	1.48	26.49

**Household Items**

Rug (9' X 12')	\$ 14.25	\$ 0.84	\$ 15.09
Vacuum	6.11	0.36	6.47

## Novato Request for Rate Increase Rate Table Rates Effective 1/1/2020

Rate Classification	Maximum Monthly Fee <i>Effective</i> 1/1/19	RRI Increase <b>5.93%</b>	Maximum Monthly Fee <i>Effective</i> 1/1/20
<b>Bulky Items (cont'd):</b>			
<b>Appliances</b>			
Water Heater (32 Gal)	\$ 25.01	\$ 1.48	\$ 26.49
Water Heater (40-50 Gal)	37.53	2.23	39.76
Water Heater (up to 100 gallons }	56.14	3.33	59.47
Oven	18.90	1.12	20.02
Oven (stove top)	12.52	0.74	13.26
Oven-Stove unit	12.52	0.74	13.26
Microwave	29.08	1.72	30.80
Garbage Compactor	18.90	1.12	20.02
Dishwasher	31.11	1.84	32.95
Refrigerator	98.90	5.86	104.76
Freezer	73.59	4.36	77.95
Air Conditioner	49.73	2.95	52.68
Freon Extraction	23.26	1.38	24.64
Washing Machine	37.53	2.23	39.76
Dryer	24.44	1.45	25.89
Wheelchairs	40.72	2.41	43.13
Bathtub - Fiberglass	23.27	1.38	24.65
Bathtub - Cast Iron	34.90	2.07	36.97
<b>Building Materials</b>			
Household Door	\$ 3.78	\$ 0.22	\$ 4.00
Sink	10.76	0.64	11.40
Toilet	6.40	0.38	6.78
<b>Yard &amp; Garden</b>			
Gas Mower (must be drained)	\$ 11.93	\$ 0.71	\$ 12.64
BBQ	7.57	0.45	8.02
Ping Pong Table	25.01	1.48	26.49
Exercise Bike	18.90	1.12	20.02
Swing Set	17.45	1.03	18.48
Bicycle	9.30	0.55	9.85

**Electronics**

TV & PC Monitors cannot be picked up, they are considered hazardous waste.  
The rest of the PC can be placed into the garbage can.

\* pickups occur on Service Day\*

**Novato Request for Rate Increase  
Vehicle List  
Rates Effective 1/1/2020**

Veh #	Lic #	VIN	Equipment Type	Year Model	Description	Anticipated Replacement	Route	Replacement Costs	New IC Lease Payment	FY 19 Depreciation	Depreciation End Date	Net Costs Increased 1/1/20 Rate
10220	8L20108	5VDCD6BE57H205462	RL	07	07 AUTOCAR CHASSIS	Not Scheduled	58	\$ 316,000	\$ 41,422	\$ 2,442	12/31/2024	
11460	03709Z1	5VDCD6JF88H205614	FL	08	08 AUTOCAR FRONT LOADER	12/31/2022	560	\$ 380,000	\$ 49,811	\$ 9,361	12/21/2020	
11471	07470C2	5VDCD6MF36H202485	FL	06	06 AUTOCAR FRONT LOADER	Not Scheduled	582	\$ 380,000	\$ 49,811	\$ 7,746	12/21/2020	
11475	03710Z1	5VDCD6MFX6H202948	FL	06	06 AUTOCAR FRONT LOADER	Not Scheduled	561	\$ 380,000	\$ 49,811	\$ 7,746	12/21/2020	
13450	8M78387	5VDCD6BE77H205060	SA1	07	07 AUTOCAR SIDELOADER	Replace per John L.	57	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	
13454	8M78383	5VDCD6BE47H205064	SA1	07	07 AUTOCAR SIDELOADER	Replace per John L.	spare	\$ 398,000	\$ 52,170	\$ 11,680	12/21/2020	
13453	8M78384	5VDCD6BE97H205061	SA1	07	07 AUTOCAR SIDELOADER	1/1/2020	55	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	\$ 40,506
13468	7R94374	4V2EC2HEXYN249846	SA1	00	00 VOLVO SIDELOADER	1/1/2020	spare	\$ 398,000	\$ 52,170	\$ 4,901	12/21/2020	\$ 47,269
13486	8N22595	5VDCD6JF88H206195	SA2	07	07 ARATA SIDELOADER	12/31/2022	52	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	
13487	8N22596	5VDCD6JF68H206194	SA2	07	07 ARATA SIDELOADER	12/31/2022	51	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	
13489	8P87160	5VDCD6JF28H206287	SA2	07	07 ARATA SIDELOADER	12/31/2022	50	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	
13499	8A07109	1NPZL00X36D716641	SA2	06	06 PETERBILT SIDELOADER	Not Scheduled	spare	\$ 398,000	\$ 52,170	\$ 18,055	12/21/2020	
13451	8M78386	5VDCD6BE07H205059	SA1	07	07 AUTOCAR SIDELOADER	1/1/2020	56	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	\$ 40,506
13480	42631P1	5VDCD6JF38H205911	SA1	08	08 AUTOCAR SIDELOADER	12/31/2022	53	\$ 398,000	\$ 52,170	\$ 13,028	12/21/2020	
5325	03755Z1	516M1D9B1CH214120	SA2	12	12 AUTOCAR SWEEPER	1/0/1900	N00/spare			\$ 5,909	12/21/2022	
13513	8E51427	49HHBVCY46RW11406	SA2	06	06 STRG SIDELOADER	1/1/2020	OS	\$ 398,000	\$ 52,170	\$ 6,713	12/21/2020	\$ 45,457
13482	8P71910	5VDCD6JF98H206285	FL	07	07 AUTOCAR SIDELOADER	12/31/2022	spare	\$ 398,000	\$ 52,170	\$ 11,665	12/21/2020	
13508	15017S1	5VDCD6MF96H202956	FL	06	06 AUTOCAR SIDELOADER	Not Scheduled	54	\$ 398,000	\$ 52,170	\$ 10,549	12/21/2020	

TABLE A: COMPARISON OF 2019 SOLID WASTE RATES -  
MARIN COUNTY ONLY

	Agency/Area	Residential rate, 32 gal can
1.	<b>a. Novato (2019)</b> <b>b. Novato (2020 - proposed)</b>	<b>\$21.20</b> <b>\$22.53</b>
2.	Almonte	\$35.13
3.	Strawberry	\$36.37
4.	Las Gallinas (unincorporated)	\$37.79
5.	Corte Madera (level)	\$38.44
6.	Ross	\$39.60
7.	Fairfax (level)	\$40.77
8.	San Rafael (level)	\$41.36
9.	Homestead	\$42.72
10.	Sausalito	\$43.00 (30 gl.)
11.	Alto	\$44.12
12.	San Anselmo	\$44.78
13.	Tiburon (level)	\$46.14
14.	Larkspur (level)	\$47.12
15.	Ross Valley South	\$47.18
16.	Ross Valley North Oak Manor	\$47.18
17.	Ross Valley North Sleepy Hollow	\$47.18
18.	Mill Valley (level)	\$48.96*
19.	County #2 (part of Mill Vly. and Tiburon)	\$49.30*
20.	County #1 (part of Mill Valley)	\$49.30*
21.	Belvedere	\$57.43*
22.	County #3 (part of Tiburon)	\$59.50*
23.	Tamalpais CSD	\$60.89 (35 gl.)
24.	County #4 (part of Mill Valley)	\$62.10

\* Slight decrease from 2018. 2018 rates were for a shorter period and adjustment was made in 2019.

TABLE B: RESIDENTIAL & COMMERCIAL COLLECTION RATES – SEPT. 2019  
RATE COMPARISON WITH OTHER AGENCIES

Agency	Franchise Fee, %	Type	Residential 32 gal can/wk	2 yd Bin Weekly Dump Monthly fee	3 yd Bin 1/wk
Corte Madera	20	Level Hill	38.44 41.35	359.62	n/a
Fairfax	10	Level Hill	40.77 47.63	400.79	562.00
Larkspur	10	Level Hill	47.12 50.75	459.83	600.83
Las Gallinas (County/Novato Portion – City now included in San Rafael)	\$25,000		37.79	408.99	547.42
Mill Valley	17 + 3 road impact	Level Hill	48.96 56.17	433.72	n/a
Petaluma	10 plus \$250,000 road impact		18.82	328.40	439.39
San Anselmo	10		44.78	510.20	734.84
San Rafael	10	Level Hill	41.36 46.85	392.54	510.95
Santa Rosa	14		29.14	437.23	537.14
Sausalito	15		43.00 30 gl.	339.80	n/a
Tiburon	14	Level Hill	46.14 54.95	437.33	n/a
<b>Novato: 2019</b>	<b>\$58,210</b> (adjusts with CPI)		<b>21.20</b> (32 gal)	<b>218.98</b>	<b>276.21</b>

Notes:

1. All rates include a charge for recycling, hazardous waste, curbside green waste collection, and food composting.
2. Sausalito rates include street sweeping, 2 clean-ups/yr., and free City services.
3. Corte Madera and Tiburon rates include street sweeping and 4 clean-ups/yr. Mill Valley rates include street sweeping and 2 clean-ups/yr.
4. Santa Rosa rates include street sweeping and 2 bulky item pick-ups/yr. Petaluma rates include street sweeping and 2 bulky item pick-ups/yr.
5. Novato rates include 4 bulky item pick-ups/yr.

TABLE C: HISTORY OF NOVATO SOLID WASTE RATE INCREASES:  
2005 - 2019

DATE	INCREASE	REASON
January 1, 2019	3.35%	Annual adjustment based on changes in Refuse Rate Index (RRI)
January 1, 2018	5.04%	Annual adjustment based on changes in Refuse Rate Index (RRI)
January 1, 2017	1.02%	Annual adjustment based on changes in Refuse Rate Index (RRI)
January 1, 2016	1.33%	Annual adjustment based on changes in Refuse Rate Index (RRI).
January 1, 2015	3.00%	Based on Refuse Rate Index (RRI) adjustment of 1.94% and account migration adjustment of 1.06%.
January 1, 2014	1.63%	Annual adjustment based on changes in Refuse Rate Index (RRI).
2013	None	
January 1, 2012	2.43%	Annual adjustment based on changes in Refuse Rate Index (RRI).
January 1, 2011	3.34%	Annual adjustment based on changes in Refuse Rate Index (RRI).
2010	None	
January 1, 2009	8.00%	Annual adjustment based on changes in Refuse Rate Index (RRI).
July 1, 2008	0.56%	Increase of 1.12% effective July 1, 2008 representing annual increase of 0.56% pro-rated over 6 months. Based on detailed audited financial statements; replacing fleet with split-body trucks; eliminating free service to governmental agencies; reducing debris box fees.
April 1, 2007	7.44%	Increase of 9.92% effective April 1, 2007 representing annual increase of 7.44% pro-rated over 9 months. Based on changes in Refuse Rate Index (RRI).
January 1, 2006	2.94%	Increase in pass-through costs and operating cost increase.
July 1, 2005	1.30%	Increase of 2.60% effective July 1, 2005 representing annual increase of 1.3% pro-rated over 6 months. Based on CPI, increased fuel costs, AB 939, JPA fees.

**TABLE D: REFUSE DISPOSAL RATES**

RATE CLASSIFICATION	3.35% increase			est. 6.27% increase	
	Maximum Monthly Fees Effective 1/1/18	Maximum Monthly Fees Effective 1/1/19	Maximum Monthly Fees Effective 1/1/19	Maximum Monthly Fees Effective 1/1/20	Maximum Monthly Fees Effective 1/1/20
<b>Single Family residential:</b>					
1 20 Gal. can collected weekly	\$ 12.83	\$ 13.26	\$ 14.09		
1 32 Gal. can collected weekly	20.51	21.20	22.53		
1 68 Gal. can collected weekly	41.00	42.37	45.03		
1 95 Gal. can collected weekly	61.52	63.58	67.57		
Special Trips - Can not set out	\$ 12.79	\$ 13.22	\$ 14.05		
Special Rate - Containers more than 50 feet from street (each 50 feet)	5.91	6.11	6.49		
Special Equipment - PAL Truck	12.79	13.22	14.05		
Extra Pickups	6.29	6.50	6.91		
Additional 95 gl. Green Waste Carts after 2	19.51	20.16	21.43		
<b>Multi-family, mobile home parks, commercial/industrial:</b>					
<b><u>32 Gallon</u></b>					
1 x week	\$ 22.22	\$ 22.96	\$ 24.40		
1 x week - Foodwaste		17.23	18.31		
2 x week	47.39	48.98	52.05		
3 x week	72.48	74.91	79.61		
6 x week	147.86	152.81	162.39		
<b><u>68 Gallon</u></b>					
1 x week	\$ 42.64	\$ 44.07	\$ 46.83		
1 x week - Foodwaste		33.05	35.12		
2 x week	90.91	93.96	99.85		
3 x week	139.01	143.67	152.68		
6 x week	283.62	293.12	311.50		
<b><u>95 Gallon</u></b>					
1 x week	\$ 63.95	\$ 66.09	\$ 70.24		
1 x week - Foodwaste		49.57	52.68		
2 x week	136.34	140.91	149.74		
3 x week	208.52	215.51	229.02		
6 x week	425.44	439.69	467.26		
Extra Pickups	6.29	6.50	6.91		
<b>Debris Box Service:</b>					
<b><u>2 Cu. Yd. Containers</u></b>					
1 x week	\$ 211.88	\$ 218.98	\$ 232.71		
2 x week	371.89	384.35	408.45		
3 x week	531.85	549.67	584.13		
4 x week	691.74	714.91	759.74		
5 x week	851.65	880.18	935.37		
6 x week	1,011.58	1,045.47	1,111.02		
The above rates include an allowance for container rental as follows:	51.98	53.72	57.09		
Extra Pickups	57.85	59.79	63.54		

RATE CLASSIFICATION	Maximum Monthly Fees		<b>3.35% increase</b>		<b>est. 6.27% increase</b>	
	Effective 1/1/18		Effective 1/1/19		Effective 1/1/20	
<b><u>3 Cu. Yd. Containers</u></b>						
1 x week	\$	267.26	\$	276.21	\$	293.53
2 x week		465.08		480.66	\$	510.80
3 x week		663.15		685.37	\$	728.34
4 x week		860.95		889.79	\$	945.58
5 x week		1,058.96		1,094.44	\$	1,163.06
6 x week		1,256.84		1,298.94	\$	1,380.39
The above rates include an allowance for container rental as follows:		69.38		71.70	\$	76.20
Extra Pickups		57.85		59.79	\$	63.54
<b><u>4 Cu. Yd. Containers</u></b>						
1 x week	\$	347.97	\$	359.63	\$	382.18
2 x week		610.48		630.93	\$	670.49
3 x week		873.13		902.38	\$	958.96
4 x week		1,135.63		1,173.67	\$	1,247.26
5 x week		1,398.25		1,445.09	\$	1,535.70
6 x week		1,660.80		1,716.44	\$	1,824.06
The above rates include an allowance for container rental as follows:		69.38		71.70	\$	76.20
Extra Pickups		69.38		71.70	\$	76.20
<b><u>6 Cu. Yd. Containers</u></b>						
1 x week	\$	509.39	\$	526.45	\$	559.46
2 x week		901.28		931.47	\$	989.88
3 x week		1,293.14		1,336.46	\$	1,420.26
4 x week		1,684.96		1,741.40	\$	1,850.58
5 x week		2,076.85		2,146.43	\$	2,281.02
6 x week		2,468.71		2,551.41	\$	2,711.39
The above rates include an allowance for container rental as follows:		69.38		71.70	\$	76.20
Extra Pickups		115.70		119.58	\$	127.07
<b><u>15 Cu. Yd. Containers</u></b>						
1 x week	\$	2,234.13	\$	2,308.97	\$	2,453.75
2 x week		4,473.44		4,623.30	\$	4,913.18
3 x week		6,707.59		6,932.29	\$	7,366.95
The above rates include an allowance for container rental as follows:		69.38		71.70	\$	76.20
Extra Pickups		515.97		533.25	\$	566.68
<b><u>Debris Box Service - Foodwaste:</u></b>						
<b><u>1 Cu. Yd. Containers</u></b>						
1 x week			\$	121.30	\$	128.91
2 x week				216.03	\$	229.58
3 x week				310.48	\$	329.95
4 x week				405.04	\$	430.44
5 x week				499.45	\$	530.77
6 x week				594.00	\$	631.24
<b><u>1.5 Cu. Yd. Containers</u></b>						
1 x week			\$	142.77	\$	151.72
2 x week				252.15	\$	267.96
3 x week				361.37	\$	384.03
4 x week				470.61	\$	500.12
5 x week				579.79	\$	616.14
6 x week				689.06	\$	732.26

RATE CLASSIFICATION	Maximum Monthly Fees		<b>3.35% increase</b>		<b>est. 6.27% increase</b>	
	Effective 1/1/18		Effective 1/1/19		Effective 1/1/20	
<b><u>2 Cu. Yd. Containers</u></b>						
1 x week	\$	158.91	\$	164.23	\$	174.53
2 x week		278.92		288.26	\$	306.34
3 x week		398.89		412.25	\$	438.10
4 x week		518.81		536.19	\$	569.81
5 x week		638.74		660.14	\$	701.53
6 x week		758.69		784.11	\$	833.27
<b><u>3 Cu. Yd. Containers</u></b>						
1 x week	\$	200.45	\$	207.17	\$	220.15
2 x week		348.81		360.50	\$	383.10
3 x week		497.36		514.02	\$	546.25
4 x week		645.71		667.34	\$	709.18
5 x week		794.22		820.83	\$	872.29
6 x week		942.63		974.21	\$	1,035.29
<b><u>4 Cu. Yd. Containers</u></b>						
1 x week	\$	260.98	\$	269.72	\$	286.64
2 x week		457.86		473.20	\$	502.87
3 x week		654.85		676.79	\$	719.22
4 x week		851.72		880.25	\$	935.45
5 x week		1,048.69		1,083.82	\$	1,151.78
6 x week		1,245.60		1,287.33	\$	1,368.04
<b><u>Cleanup Bins:</u></b>						
3 yd. - 2 days	\$	186.76	\$	193.02	\$	205.12
3 yd. - weekend		186.76		193.02	\$	205.12
6 yd. - 2 days		314.86		325.41	\$	345.81
6 yd. - weekend		314.86		325.41	\$	345.81
15 yd. up to 3 tons - one week		515.97		533.25	\$	566.68
20 yd. up to 3 tons - one week		579.02		598.42	\$	635.94
30 yd. up to 4 tons - one week		966.16		998.53	\$	1,061.13
Additional/ton charge for cleanup bins		62.53		64.62	\$	68.67
Occasional or irregular collections per 5 cubic ft.		6.29		6.50	\$	6.91
Special collections other than debris box - plus regular rate		26.65		27.54	\$	29.27
Special collections for debris boxes - plus regular rate		57.89		59.83	\$	63.58
Monthly charge for special collection conditions		12.55		12.97	\$	13.78
<b><u>MSW Compactor (use clean up bin rates):</u></b>						
15 yard per haul (including 3 tons MSW)			\$	533.25	\$	566.69
20 yard per haul (including 3 tons MSW)			\$	598.42	\$	635.94
30 yard per haul (including 4 tons MSW)			\$	998.53	\$	1,061.14
<b><u>RCY &amp; Cardboard Compactors:</u></b>						
15 yard per haul			\$	239.11	\$	254.10
20 yard per haul			\$	263.02	\$	279.51
30 yard per haul			\$	289.32	\$	307.46
<b><u>Services:</u></b>						
Cart/Bin Cleaning (after 1st free)			\$	100.00	\$	100.00
Cart Replacement (1 free/year)						
Bin Replacement (after 1st free)			\$	159.25	\$	159.25

RATE CLASSIFICATION	Maximum Monthly Fees		3.35% increase		est. 6.27% increase	
	Effective 1/1/18		Effective 1/1/19		Effective 1/1/20	
<b>Bulky Items - 4 free pickups per year (per account holder): Up to 3 cu. yds. per pickup</b>						
<b>No liquid waste or hazardous material</b>						
<b>Charges for Freon appliances may apply</b>						
<b>Bulky Items in excess of 4 free pickups:</b>						
<b><u>Mattresses:</u></b>						
Twin Bed	\$	15.20	\$	15.71	\$	16.69
Double/Full		18.29		18.90	\$	20.09
Queen		23.07		23.84	\$	25.34
King		26.45		27.34	\$	29.05
<b><u>Box Springs:</u></b>						
Twin Bed	\$	16.88	\$	17.45	\$	18.54
Double/Full		21.66		22.39	\$	23.79
Queen		26.45		27.34	\$	29.05
<b><u>Furniture:</u></b>						
Bed Frame	\$	9.00	\$	9.30	\$	9.89
Couch (under 6 feet)		54.32		56.14	\$	59.66
Upholstered Chair		23.07		23.84	\$	25.34
Wooden Chair		4.22		4.36	\$	4.63
Dinette Table		24.20		25.01	\$	26.58
<b><u>Household Items:</u></b>						
Rug (9' x 12')	\$	13.79	\$	14.25	\$	15.15
Vacuum		5.91		6.11	\$	6.50
<b><u>Appliances:</u></b>						
Water Heater (32 Gal)	\$	24.20	\$	25.01	\$	26.58
Water Heater (40-50 Gal)		36.31		37.53	\$	39.88
Water Heater (up to 100 Gal)		54.32		56.14	\$	59.66
Oven		18.29		18.90	\$	20.09
Oven (stove top)		12.11		12.52	\$	13.30
Oven-Stove Unit		12.11		12.52	\$	13.30
Microwave		28.14		29.08	\$	30.91
Garbage Compactor		18.29		18.90	\$	20.09
Dishwasher		30.10		31.11	\$	33.06
Refrigerator		95.69		98.90	\$	105.10
Freezer		71.20		73.59	\$	78.20
Air Conditioner		48.12		49.73	\$	52.85
Freon Extraction Charge		22.51		23.26	\$	24.72
Washing Machine		36.31		37.53	\$	39.88
Dryer		23.65		24.44	\$	25.98
Wheelchairs		39.40		40.72	\$	43.27
Bathtub - Fiberglass		22.52		23.27	\$	24.73
Bathtub - Cast Iron		33.77		34.90	\$	37.09
<b><u>Building Materials:</u></b>						
Household Door	\$	3.66	\$	3.78	\$	4.02
Sink		10.41		10.76	\$	11.43
Toilet		6.19		6.40	\$	6.80
<b><u>Yard and Garden:</u></b>						
Gas Mower (must be drained)	\$	11.54	\$	11.93	\$	12.68
BBQ		7.32		7.57	\$	8.04
Ping Pong Table		24.20		25.01	\$	26.58
Exercise Bike		18.29		18.90	\$	20.09
Swing Set		16.88		17.45	\$	18.54
Bicycle		9.00		9.30	\$	9.89

**Electronics:**  
**TV and PC Monitors cannot be picked up. They are considered hazardous waste.**

**RESOLUTION NO. 3141**

**A RESOLUTION SETTING MAXIMUM SOLID WASTE SERVICE CHARGES  
FOR  
RECOLOGY SONOMA MARIN (RSM)  
IN  
NOVATO SANITARY DISTRICT**

**WHEREAS**, pursuant to A.B. 939 and the District's enabling act (California Health and Safety Code Sections 6400 and following) the District has authority to manage, control and supervise the solid waste stream originating from and/or being disposed of within its jurisdictional boundaries; and

**WHEREAS**, the District adopted Ordinance No 110 repealing Ordinance No. 27 and amendments thereto; and

**WHEREAS**, pursuant to Section 27.210 of Ordinance No. 110, the District may set the maximum fees to be charged by the Franchisee; and

**WHEREAS**, the District published a notice of its intention to consider modifications to the maximum solid waste service charges on October 17<sup>th</sup> and October 31<sup>st</sup>, 2019, in the Marin Independent Journal; and

**WHEREAS**, the District held a Public Hearing at 5:30 P.M. on November 18, 2019 to hear all persons desiring to be heard; and

**WHEREAS**, the District finds that: (a) a rate adjustment to cover changes in the annual Refuse Rate Index (RRI) is justified; and (b) the rates listed in Table 1 are justified and appropriate under the Franchise methodology and the facts presented.

**BE IT RESOLVED**, by the Board of Directors of the Novato Sanitary District, Marin County, California, that the service charges that the Franchisee, Recology Sonoma Marin (RSM), may charge for refuse collection services as of January 1, 2020, are limited to the maximum rates as listed in attached Table 1.

**BE IT FURTHER RESOLVED** that these maximum rates shall remain in effect until further action by the Board of Directors.

\* \* \* \* \*

I hereby certify that the foregoing resolution was duly and regularly passed and adopted by the Board of Directors of the Novato Sanitary District, Marin County, California, at a meeting thereof duly held on the 18<sup>th</sup> day of November 2019, by the following vote:

AYES, and in favor thereof, Members: \_\_\_\_\_

NOES, Members: \_\_\_\_\_

ABSENT, Members: \_\_\_\_\_

/s/ Carole Dillon-Knutson

\_\_\_\_\_  
Carole Dillon-Knutson, President,  
Board of Directors  
Novato Sanitary District

ATTEST:

/s/ Sandeep Karkal

\_\_\_\_\_  
Sandeep Karkal,  
Secretary, Board of Directors  
Novato Sanitary District

DRAFT

**TABLE 1 - REFUSE COLLECTION RATES**

<u>RATE CLASSIFICATION</u>	Maximum Monthly Fees Effective 1/1/20	<u>RATE CLASSIFICATION</u>	Maximum Monthly Fees Effective 1/1/20
<b>Single Family residential:</b>		<b><u>4 Cu. Yd. Containers</u></b>	
1 20 Gal. can collected weekly	\$14.09	1 x week	\$382.18
1 32 Gal. can collected weekly	\$22.53	2 x week	\$670.49
1 68 Gal. can collected weekly	\$45.03	3 x week	\$958.96
1 95 Gal. can collected weekly	\$67.57	4 x week	\$1,247.26
Special Trips - Can not set out	\$14.05	5 x week	\$1,535.70
Special Rate - Containers more than 50 feet from street (each 50 feet)	\$6.49	6 x week	\$1,824.06
Special Equipment - PAL Truck	\$14.05	The above rates include an allowance for container rental as follows:	\$76.20
Extra Pickups	\$6.91	Extra Pickups	\$76.20
Additional 95 gl. Green Waste Carts after 2	\$21.43	<b><u>6 Cu. Yd. Containers</u></b>	
<b>Multi-family, mobile home parks, commercial/industrial:</b>		1 x week	\$559.46
<b><u>32 Gallon</u></b>		2 x week	\$989.88
1 x week	\$24.40	3 x week	\$1,420.26
1 x week - Foodwaste	\$18.31	4 x week	\$1,850.58
2 x week	\$52.05	5 x week	\$2,281.02
3 x week	\$79.61	6 x week	\$2,711.39
6 x week	\$162.39	The above rates include an allowance for container rental as follows:	\$76.20
<b><u>68 Gallon</u></b>		Extra Pickups	\$127.07
1 x week	\$46.83	<b><u>15 Cu. Yd. Containers</u></b>	
1 x week - Foodwaste	\$35.12	1 x week	\$2,453.75
2 x week	\$99.85	2 x week	\$4,913.18
3 x week	\$152.68	3 x week	\$7,366.95
6 x week	\$311.50	The above rates include an allowance for container rental as follows:	\$76.20
<b><u>95 Gallon</u></b>		Extra Pickups	\$566.68
1 x week	\$70.24	<b>Debris Box Service - Foodwaste:</b>	
1 x week - Foodwaste	\$52.68	<b><u>1 Cu. Yd. Containers:</u></b>	
2 x week	\$149.74	1 x week	\$128.91
3 x week	\$229.02	2 x week	\$229.58
6 x week	\$467.26	3 x week	\$329.95
Extra Pickups	\$6.91	4 x week	\$430.44
<b>Debris Box Service:</b>		5 x week	\$530.77
<b><u>2 Cu. Yd. Containers</u></b>		6 x week	\$631.24
1 x week	\$232.71	<b><u>1.5 Cu. Yd. Containers:</u></b>	
2 x week	\$408.45	1 x week	\$151.72
3 x week	\$584.13	2 x week	\$267.96
4 x week	\$759.74	3 x week	\$384.03
5 x week	\$935.37	4 x week	\$500.12
6 x week	\$1,111.02	5 x week	\$616.14
The above rates include an allowance for container rental as follows:	\$57.09	6 x week	\$732.26
Extra Pickups	\$63.54	<b><u>2 Cu. Yd. Containers:</u></b>	
<b><u>3 Cu. Yd. Containers</u></b>		1 x week	\$174.53
1 x week	\$293.53	2 x week	\$306.34
2 x week	\$510.80	3 x week	\$438.10
3 x week	\$728.34	4 x week	\$569.81
4 x week	\$945.58	5 x week	\$701.53
5 x week	\$1,163.06	6 x week	\$833.27
6 x week	\$1,380.39	The above rates include an allowance for container rental as follows:	
The above rates include an allowance for container rental as follows:		\$76.20	

<u>RATE CLASSIFICATION</u>	Maximum Monthly Fees Effective 1/1/20
----------------------------	---

Extra Pickups \$63.54

**Debris Box Service - Foodwaste (Cont'd):**

**3 Cu. Yd. Containers:**

1 x week	\$220.15
2 x week	\$383.10
3 x week	\$546.25
4 x week	\$709.18
5 x week	\$872.29
6 x week	\$1,035.29

**4 Cu. Yd. Containers:**

1 x week	\$286.64
2 x week	\$502.87
3 x week	\$719.22
4 x week	\$935.45
5 x week	\$1,151.78
6 x week	\$1,368.04

**Cleanup Bins:**

3 yd. - 2 days	\$205.12
3 yd. - weekend	\$205.12
6 yd. - 2 days	\$345.81
6 yd. - weekend	\$345.81
15 - yd. up to 3 T - one week	\$566.68
20 yd. up to 3 T - one week	\$635.94
30 yd. up to 4 T - one week	\$1,061.13
Additional/ton charge for cleanup bins	\$68.67
Occasional or irregular collections per 5 cubic feet	\$6.91
Special collections other than debris box - plus regular rate	\$29.27
Special collections for debris boxes - plus regular rate	\$63.58
Monthly charge for special collection conditions	\$13.78

**MSW Compactor (use cleanup bin rates)**

15 yard per haul (including 3 tons MSW)	\$566.69
20 yard per haul (including 3 tons MSW)	\$635.94
30 yard per haul (including 4 tons MSW)	\$1,061.14

**RCY & Cardboard Compactors:**

15 yard per haul	\$254.10
20 yard per haul	\$279.51
30 yard per haul	\$307.46

**Services:**

Cart/Bin Cleaning (after 1st free)	\$100.00
Cart Replacement (1 free/year)	
Bin Replacement (after 1st free)	\$159.25

**Bulky Items - 4 free pickups per year (per account holder).**

**Up to 3 cu. yds. per pickup. No liquid waste or hazardous material.**

**Charges for Freon appliances may apply.**

**Bulky Items in excess of 4 free pickups:**

**Mattresses:**

Twin Bed	\$16.69
Double/Full	\$20.09
Queen	\$25.34
King	\$29.05

<u>RATE CLASSIFICATION</u>	Maximum Monthly Fees Effective 1/1/20
----------------------------	---

**Bulky Items (Cont'd):**

**Box Springs:**

Twin Bed	\$18.54
Double/Full	\$23.79
Queen	\$29.05

**Furniture:**

Bed Frame	\$9.89
Couch (under 6 feet)	\$59.66
Upholstered Chair	\$25.34
Wooden Chair	\$4.63
Dinette Table	\$26.58

**Household Items:**

Rug (9' x 12')	\$15.15
Vacuum	\$6.50

**Appliances:**

Water Heater (32 Gal)	\$26.58
Water Heater (40-50 Gal)	\$39.88
Water Heater (up to 100 Gal)	\$59.66
Oven	\$20.09
Oven (stove top)	\$13.30
Oven-Stove Unit	\$13.30
Microwave	\$30.91
Garbage Compactor	\$20.09
Dishwasher	\$33.06
Refrigerator	\$105.10
Freezer	\$78.20
Air Conditioner	\$52.85
Freon Extraction Charge	\$24.72
Washing Machine	\$39.88
Dryer	\$25.98
Wheelchairs	\$43.27
Bathtub - Fiberglass	\$24.73
Bathtub - Cast Iron	\$37.09

**Building Materials:**

Household Door	\$4.02
Sink	\$11.43
Toilet	\$6.80

**Yard and Garden:**

Gas Mower (must be drained)	\$12.68
BBQ	\$8.04
Ping Pong Table	\$26.58
Exercise Bike	\$20.09
Swing Set	\$18.54
Bicycle	\$9.89

**Electronics:**

**TV and PC Monitors cannot be picked up. They are considered hazardous waste.**

NOVATO SANITARY DISTRICT  
500 DAVIDSON ST  
NOVATO, CA 94945-3328

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*Account Number:* 2071871

*Ad Order Number:* 0006412488

*Customer's Reference*  
*/ PO Number:*

*Publication:* Marin Independent Journal

*Publication Dates:* 10/17/2019, 10/31/2019

*Amount:* \$107.72

*Invoice Text:* **NOVATO SANITARY DISTRICT**

**NOTICE OF INTENT AND PUBLIC NOTICE  
TO CONSIDER MODIFICATIONS AND  
ESTABLISH MAXIMUM SOLID WASTE SERVICE CHARGES FOR CALENDAR YEAR (CY) 2020**

NOTICE IS HEREBY GIVEN that it is the intention of the Board of Directors of the Novato Sanitary District to consider modification of the maximum solid waste service charges.

NOTICE IS FURTHER GIVEN that on Monday, November 18, 2019, at 5:30 PM at the regular meeting place of Novato Sanitary District, 500 Davidson Street, Novato, CA 94945, said Board will hear all persons desiring to be heard and shall consider adoption of the maximum solid waste service charges applying within the Novato Sanitary District for Calendar Year (CY) 2020.

BY ORDER OF THE BOARD OF DIRECTORS OF  
THE NOVATO SANITARY DISTRICT

Dated: October 14, 2019

/s/ Sandeep Karkal  
Sandeep Karkal, Secretary  
Novato Sanitary District

No. 1319 October 17 and 31, 2019

# Marin Independent Journal

4000 Civic Center Drive, Suite 301  
San Rafael, CA 94903  
415-382-7335  
legals@marinij.com  
2071871

NOVATO SANITARY DISTRICT  
500 DAVIDSON ST  
NOVATO, CA 94945-3328

## PROOF OF PUBLICATION (2015.5 C.C.P.)

### STATE OF CALIFORNIA County of Marin

I am a citizen of the United States and a resident of the County aforesaid: I am over the age of eighteen years, and not a party to or interested in the above matter. I am the principal clerk of the printer of the MARIN INDEPENDENT JOURNAL, a newspaper of general circulation, printed and published daily in the County of Marin, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Marin, State of California, under date of FEBRUARY 7, 1955, CASE NUMBER 25566; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

**10/17/2019, 10/31/2019**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated this 31th day of October, 2019.



Signature

## PROOF OF PUBLICATION

Legal No. **0006412488**

### NOVATO SANITARY DISTRICT

#### NOTICE OF INTENT AND PUBLIC NOTICE TO CONSIDER MODIFICATIONS AND ESTABLISH MAXIMUM SOLID WASTE SERVICE CHARGES FOR CALENDAR YEAR (CY) 2020

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BY ORDER OF THE BOARD OF DIRECTORS OF  
THE NOVATO SANITARY DISTRICT

Dated: October 14, 2019

/s/ Sandeep Karkal  
Sandeep Karkal, Secretary  
Novato Sanitary District

No. 1319 October 17 and 31, 2019

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Wastewater Operations Report, October 2019.	<b>MEETING DATE:</b> November 18, 2019 <b>AGENDA ITEM NO.:</b> 7.b.
<b>RECOMMENDED ACTIONS:</b> Receive Wastewater Operations Report for October 2019: <ul style="list-style-type: none"><li>• Collection System</li><li>• Treatment Facilities</li><li>• Reclamation Facilities</li></ul>	
<b>SUMMARY AND DISCUSSION:</b> <p>The October 2019 Wastewater Operations Report incorporating operations reports for collections system, wastewater treatment facilities, and the reclamation facilities is attached. District and Veolia staff will be present at the meeting to provide overviews of the reports for their operational areas, and be available to discuss the reports or respond to any questions.</p>	
<b>ATTACHMENTS:</b> 1. Wastewater Operations Reports for the month of October 2019.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> JO (Veolia), JA, JJB	<b>GENERAL MANAGER:</b> SSK

**Novato Sanitary District  
Wastewater Operations - Collection System Operations Report  
October 2019**

**1.0 General:**

The equivalent of about seven (7) full time employees (FTEs) worked on collection system maintenance activities during the month. The breakdown of staff time for the month in terms of equivalent FTE hours utilized, works out approximately as follows:

- 1.1 FTE field workers for Sewer Maintenance (main line cleaning)
- 2.4 FTE field workers for Pump Station Maintenance
- 0.2 FTE field workers for Closed Circuit Television (CCTV) work
- 0.0 FTE field workers for Underground Service Alert Mark and Locate (USA)
- 2.2 FTE field workers for time spent on data input, training, service calls, overflow response, or any other activity that does not directly relate to the activities listed above, or special activities (for e.g. smoke testing of mainlines), and
- 1.1 FTE field workers for vacation, holiday or sick leave.

**2.0 Collection System Maintenance:**

Performance metrics 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:

The sewer system ICOM3 Computerized Maintenance Management System (CMMS) generated 317 work orders for the month. Collections staff completed 317 work orders, leaving zero (0) work orders outstanding. The completed work orders resulted in 58,851 feet of sewer pipelines cleaned by staff.

Closed Circuit Television (CCTV) Performance:

The District's CCTV equipment was in the field for four (4) working days and televised a total of 3,227 feet of sewer main.

CCTV Findings:

- Infrastructure-related: CCTV work did not identify any new structural issues.
- O&M related: CCTV work did not identify any area that would require a change in sewer line maintenance operations.



Screwsucker pump bypass set up at  
Rowland Plaza Pump Station

**3.0 Pump Station Maintenance:**

Collections staff conducted 162 lift station inspections this month. Of these, 39 inspections were generated through the District's JobsCal Plus CMMS system. There are no outstanding work orders for the month.

A Pump Stations' Work Order Statistics summary is attached.

**Novato Sanitary District  
Wastewater Operations - Collection System Operations Report  
October 2019**

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**4.0 Air Relief/Vacuum Valves (ARVs):**

Staff completed maintenance inspections on Ten (10) air relief/vacuum valves this month, no issues were identified.

**5.0 Safety and Training:**

General:

Collections staff attended four (4) safety tailgate meetings in October.

Specialized Training:

- Personal protective equipment training.
- Annual Sewer Summit 2019
- PSPS Simulation training
- Northern Safety Day

Safety performance:

There were no lost time accidents for the month of October.

**6.0 Miscellaneous Projects:**

- Annual Generator maintenance and servicing completed.
- Ignacio force main pigging.



Pressurizing tank for the annual Ignacio pig launching/force main cleaning.

**PSPS Update**

Starting on October 26<sup>th</sup>, the District was notified by PG&E that they were shutting down power to the majority of Novato. The Collections Crew arrived early to prepare for the shutdown. Staff pumped down all pump stations, and set up portable generators at communication and pump station sites. The District established shifts to ensure round the clock coverage for the event. A standby generator had to be taken out of service at Marin Village due to a damaged radiator. Septic haulers were used along with a District Vacuum truck, and a 4" bypass pump, that enabled staff to restore pumping abilities later that afternoon with a mobile generator. In addition, at Rowland PS, we discovered an engulfed drywell disabling that station. Staff was able to re-establish pumping by way of a portable pump later that afternoon. The District continued the 24 hour staffing until Wednesday, October 30<sup>th</sup>. No SSOs during the event can be attributed to a great deal of teamwork, initiative and staff thinking on their feet to find solutions to rapidly evolving challenges.

**7.0 Sanitary Sewer Overflows (SSOs):**

There were no (zero) sanitary sewer overflows in October. The No Spills certification is ID#2557376.

\*\*\*\*\*

**Novato Sanitary District**  
**Collection System Monthly Report For October 2019 (as of October 31, 2019)**

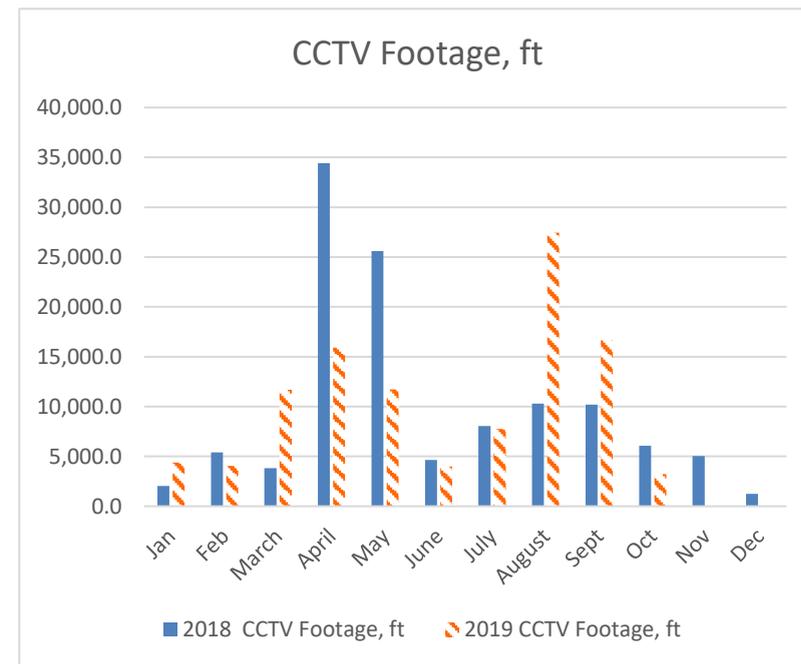
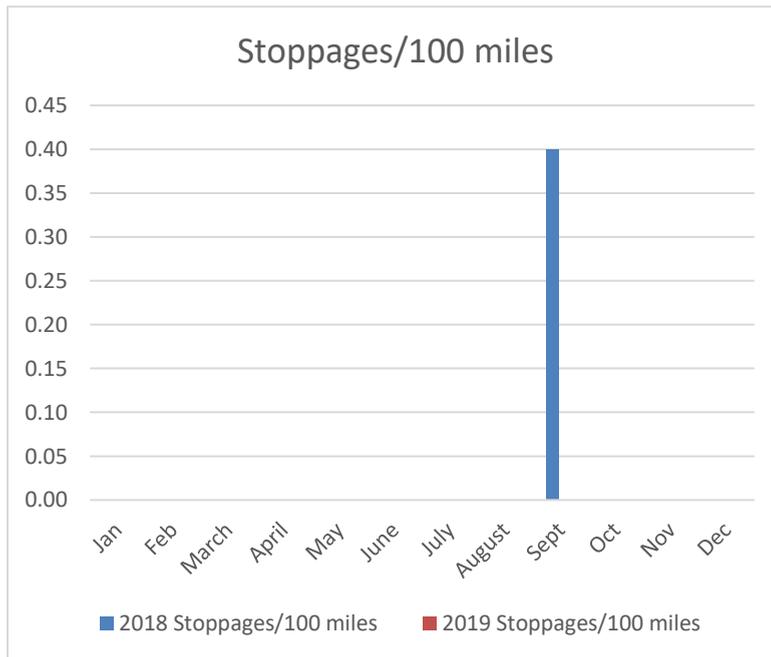
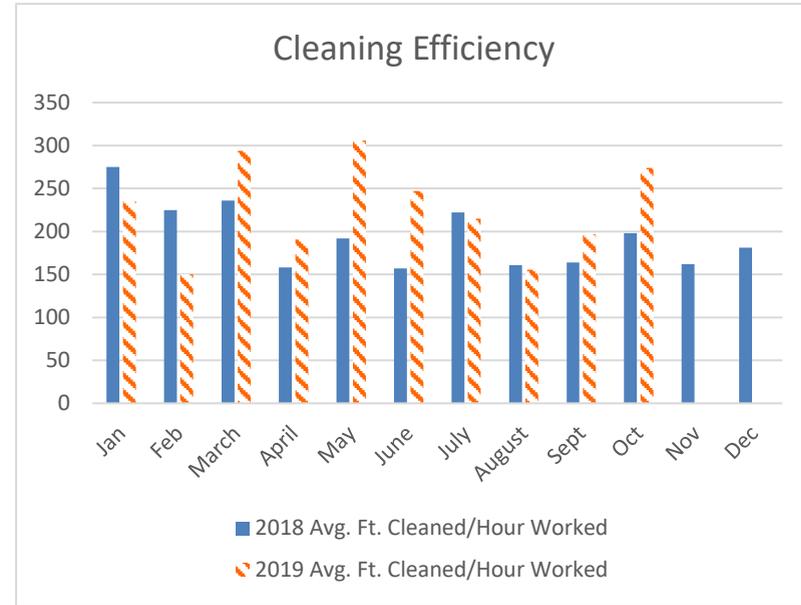
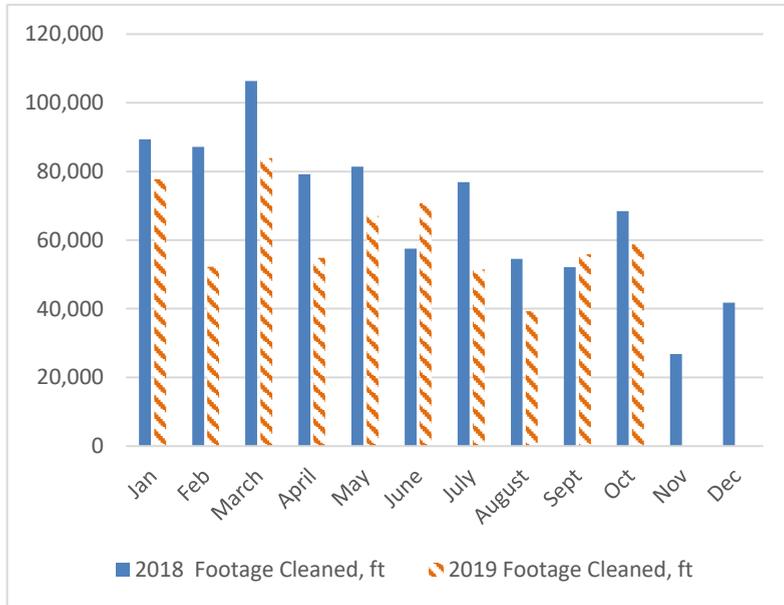
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>A. Employee Hours Worked</b>														
Number of FTEs (main line cleaning)	1.8	2.2	1.7	1.9	1.2	1.8	1.3	1.5	1.7	1.1	0.0	0.0	NA	1.4
Number of FTEs (other)	1.9	2.7	3.0	3.0	3.2	3.4	1.7	2.1	2.1	2.2	0.0	0.0	NA	2.1
Number of FTEs (USAs)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0
Number of FTEs (CCTV)	0.1	0.2	0.2	0.1	0.1	0.1	0.5	1.0	0.7	0.2	0.0	0.0	NA	0.3
Total, FTEs	3.8	5.1	4.9	5.0	4.6	5.3	3.5	4.5	4.5	3.5	0.0	0.0	NA	3.7
Regular Time Worked, (main line cleaning), hrs	331	348	286	288	220	286	240	253	285	215	0	0	2,748	229
Regular Time Worked on Other, hrs <sup>(1)</sup>	355	421	489	458	575	545	311	356	347	410	0	0	4,265	355
Regular Time Worked on USAs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regular Time Worked on CCTV (2)	22	32	33	21	21	15	98	166	124	30	0	0	559	47
Total Regular time, worked, hrs	707	800	807	766	816	846	648	774	755	655	0	0	7,572	631
Total Vacation/Sick Leave/Holiday, hrs	197	164	175	129	238	79	403	159	194	204	0	0	1,940	162
Vacation/Sick Leave/Holiday, FTEs	1.1	1.0	1.1	0.8	1.3	0.5	2.2	0.9	1.3	1.1	0.0	0.0	11.3	0.9
Overtime Worked on Coll. Sys., hrs	24	42	11	4	4	18	5	8	8	0	0	0	123	10
Overtime Worked on Other, hrs (1)	2	2	0	14	9	4	10	3	11	2	0	0	56	5
Overtime Worked on USAs, hrs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Overtime Worked on CCTV <sup>(2)</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Overtime, hrs	26	44	11	18	13	21	15	11	18	2	NA	NA	178	18
<b>B. Productivity</b>														
<b>1. Line Cleaning</b>														
Rodder Work Orders generated	43	33	61	24	23	57	29	59	55	74	0	0	458	38
Rodder 3208 ft. cleaned	1,453	681	5,520	4,872	6,711	9,624	5,408	3,157	4,383	1,028	0	0	42,837	3,570
Rodder - outside services, ft cleaned	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flusher Work Orders generated	338	240	390	366	354	311	347	196	239	243	0	0	3,024	252
Truck 3205V ft. cleaned	0	1,314	352	0	4,154	0	0	1,854	0	0	0	0	7,674	640
Truck 3206V ft. cleaned	14,940	5,330	15,040	13,499	28,015	12,282	5,711	0	2,749	20,920	0	0	118,486	9,874
Truck 3209F ft. cleaned	61,343	44,888	62,994	36,430	28,238	48,810	40,305	34,289	48,772	36,903	0	0	442,972	36,914
Flusher - outside services, ft. cleaned	0	405	0	0	0	34,577	17,861	0	0	0	0	0	52,843	0
Total Footage cleaned <sup>(3)</sup>	77,736	52,213	83,906	54,801	67,118	70,716	51,424	39,300	55,904	58,851	NA	NA	611,969	61,197
Work Orders completed	381	306	451	390	377	543	376	255	294	317	0	0	3,690	308
Work Orders backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>2. Closed Circuit Television (CCTV)</b>														
Camera Work Orders generated	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCTV Truck 3126T, ft. videoed	3,405	3,465	7,839	2,345	3,183	2,063	5,760	24,295	14,662	3,227	0	0	70,244	5,854
CCTV (hand cam), ft. videoed	979	596	3,839	13,582	8,529	1,927	1,982	3,156	2,016	0	0	0	36,606	3,051
CCTV Inspection - outside services, ft. videoed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CCTV footage <sup>(3)</sup>	4,384	4,061	11,678	15,927	11,712	3,990	7,742	27,451	16,678	3,227	NA	NA	106,850	10,685
<b>C. Sanitary Sewer Overflows (SSOs)</b>														
Minor (Category III)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Major (Category II)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Major (Category I)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Overflow Gallons	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Volume Recovered	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Percent Recovered	NA	NA	NA	NA	NA									
<b>D. Service Calls (non-SSO related)</b>														
Service calls, normal hours, #	7	4	6	2	5	0	5	2	5	5	0	0	41	3
Normal hours S.C. response time, mins (avg.)	26.4	18.25	19.83	10	30	0	12.6	8	24	20	0	0	169	14
Service Callouts, after hours, #	0	0	0	4	0	0	1	0	1	0	0	0	6	1
After Hours S.C. response time, mins (avg.)	NA	NA	NA	33	NA	NA	19	NA	27	NA	NA	NA	79	26
<b>E. Benchmarks</b>														
Average Ft. Cleaned/Hour Worked	235	150	294	191	306	247	215	156	196	274	NA	NA	NA	226
Total Stoppages/100 Miles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
Average spill response time (mins)	0	0	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	0
Callouts/100 Miles	0.0	0.0	0.0	1.8	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	2.6	0.2
Overtime hours/100 Miles	11	19	5	2	2	8	2	3	3	0	0	0	54.44	5
Overflow Gallons/100 Miles	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<sup>(1)</sup>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.

<sup>(2)</sup>This category separates time spent on CCTV from other Collection System maintenance activities.

<sup>(3)</sup>Does not include outside services (tracked separately)

# Collection System: 2018 & 2019 Graphs



Novato Sanitary District

Pump Station Monthly Report For October 2019 (as of October 31, 2019)

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>Employee Hours Worked</b>	262	188	203	202	224	236	283	318	288	615	0	0	2,816	
Number of Employees (FTEs)	1.1	0.9	1.1	1.1	1.1	1.2	1.4	1.6	1.4	2.4	0.0	0.0		1.1
Regular Time Worked on Pump Sta	200	149	174	173	199	196	255	274	234	451	0	0	2,304	
Overtime Worked on Pump Sta	62	39	30	29	25	40	28	44	54	164	0	0	512	
After Hours Callouts	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Callout response time (mins)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Work Orders</b>														
Number generated in month	50	46	42	48	38	38	46	41	50	39	0	0	438	37
Number closed in month	50	46	42	48	38	38	46	41	50	39	0	0	438	37
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**PUMP STATIONS  
WORK ORDER STATISTICS  
October 1, 2019-October 31, 2019**

	<b>Open Work Orders Due Prior to 10/1/2019</b>	<b>Open Work Orders 10/1/2019-10/31/2019</b>	<b>Total Open Work Orders</b>
Preventive	0	39	39
Corrective	0	0	0
<b>Total</b>	<b>0</b>	<b>39</b>	<b>39</b>

	<b>Closed Work Orders 10/1/2019 -10/31/2019</b>
Preventive	39
Corrective	0
<b>Total</b>	<b>39</b>

<b>Total Outstanding Work Orders as of 10/31/2019</b>	<b>0</b>
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November 12, 2019

Mr. Sandeep Karkal  
General Manager – Chief Engineer  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94545

**Subject: Veolia Water Operations Report – October 2019**

Dear Mr. Karkal:

I am pleased to provide the Monthly Operations report for October 2019.

As always, please give me a call at 707-292-3022 should you have any questions.

Best regards,

A handwritten signature in blue ink that reads "John P. O'Hare".

John P. O'Hare  
Project Manager, Veolia

MONTHLY OPERATIONS REPORT  
October 2019

Prepared for

NOVATO SANITARY DISTRICT (NSD)  
WASTEWATER TREATMENT PLANT  
500 Davidson Street  
Novato, CA 94945

Prepared by

Veolia Water West Operating Services, Inc. (VWWOS)

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**A: TREATMENT PLANT PERFORMANCE SUMMARY – October 2019**

**National Pollution Discharge Elimination System Permit – Table 1.0**

Parameter	Value		Limits	
	Ave	Max		
Flow, MGD (monthly ave/max)	3.42	3.85	N/A	
<b>Influent</b>				
BOD <sub>5</sub> , lb/day (month ave/max)	9,601	10,917	N/A	
TSS, lb/day (monthly ave/max)	9,481	11,552	N/A	
<b>Effluent</b>				
BOD <sub>5</sub> , mg/L (monthly ave/max weekly ave)	<5	5	15	30
TSS, mg/L (monthly ave/max weekly ave)	<4	4	10	20
BOD <sub>5</sub> - % Removal, Average	98		85 minimum	
TSS - % Removal, Average	99		85 minimum	
Ammonia, mg/L – (monthly ave/daily max)	0.48	0.48	5.9	21
pH, su (min / max)	6.8	7.2	6.5	8.5
Enterococcus, MPN/100 ml (30 day geo mean)	2.28		35	
Fecal Coliform, MPN/100 ml (monthly median)	11		140	
Fecal Coliform, MPN/100 ml (90 <sup>th</sup> PCTL)	11		430	
Total Coliform, MPN/100 ml (5 sample median)	N/A		240	
Total Coliform, MPN/100 ml (monthly maximum)	N/A		10,000	

**Title 22 - Recycled Water Production and Quality – Table 2.0**

Description	Units	Value	Limit
Volume Produced	Million Gallons	19.821	N/A
Average Turbidity	NTU	0.6	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	56	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	8.3	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	<1	240
Maximum Total Coliform 2 Samples 30 days	MPN/100 ml	<1	23
Total Coliform 7 Sample Median	MPN/100 ml	<1	2.2

**Discussion of Violations / Excursions**

- National Pollution Discharge Elimination System Permit (NPDES) Limits - None
- Reclaimed (Recycle) Water - None
- Recycled Water Permit – None
- Bay Area Air Quality Management District - None

**B: SAFETY AND TRAINING:**

- Monthly plant safety inspections for Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station completed
- No safety incidents for the month of October 2019
- Monthly Safety Topics and Online Training: Slips and Trips - Workplace Safety

- Conducted mock earthquake drill on October 17, 2019

## **C: OPERATIONS & MAINTENANCE STATUS / REVIEW:**

### **Key events for the period:**

#### **Novato Wastewater Treatment Plant**

- Novato and Ignacio facilities operated in standby power due to the Pacific Gas & Electric (PG&E) Public Safety Power Shutdown (PSPS) from October 26<sup>th</sup> thru October 28<sup>th</sup>. During this outage there were two notable problems.
  - Turblex Blowers – The 3 blowers did not restart as configured. Blower #3 started following release of air pressure in the header. System returned to normal operation following the outage. On October 31<sup>st</sup> Calcon Systems conducted an initial evaluation of the electrical service. Howden (formally Turblex) was contacted for possible cause(s). Calcon Systems scheduled for November 13<sup>th</sup> to verify Howden's recommendations.
  - Gravity Belt Thickener Chemical Feed System – system shutdown without alarming. System required manual restart. System returned to normal operation following the outage. Equipment checked and no problems detected.
- Gravity Belt Thickener #1 drive roller, bearings, and belt replaced
- #3 Water System basket strainer and limit switches replaced
- Annual Flygt pump service on influent pumps & return activated sludge pumps
- Troubleshooting performed on blower #3 and emergency generator #2 & #3
- On October 10<sup>th</sup> and 11<sup>th</sup> Joe Hart, Veolia Asset Manager performed condition assessment (vibration, ultrasonic, inspection) of the Novato treatment plant and recycled water plant equipment. There were a small number of recommendations which are being addressed. This assessment supports the criticality assessment which has also been updated.

#### **Equipment Out of Service – Due to Planned Servicing, Maintenance, Replacement, Standby**

- Aeration Basin #1 & #3 (standby)
- Primary Clarifier #2 (standby)
- Secondary Clarifier #2 (standby)

#### **Ignacio Transfer Pump Station**

- During the PSPS October 26<sup>th</sup> thru October 28<sup>th</sup> the standby generator voltage regulator failed. This required manual operation of the conveyance pumps until power was restored. The voltage regulator replaced by Leete Generator. Generator returned to normal operation. Also, the diesel engine consumed 7 quarts of engine oil. This situation will be watched closely during future events.
- Routine rounds, readings and preventative maintenance
- Conducted the annual service for the Flygt conveyance pumps
- Assisted with launching the pipeline pigging/scraping device

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

- None

#### **Recycled Water Plant (RWP)**

- Routine rounds and maintenance

- Verified sand levels in each of the 3 treatment filters
- RWP was offline from October 26<sup>th</sup> thru October 28<sup>th</sup> due to the PG&E PSPS
- Repaired the trailer mounted portable air compressor

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

- None

**Sludge Lagoons (and Reclamation Area)**

- Routine maintenance – managing decant and sludge levels
- Refurbished decant telescoping valves #1, #2, #4, and #6.

**D: ENVIRONMENTAL SERVICES ACTIVITIES SUMMARY**

**Discharge to San Pablo Bay – October 1 – 31, 2019**

**Regulatory Programs:**

**Laboratory Program**

**Enterococcus**

When effluent is discharged to San Pablo Bay the bacterial requirement includes monitoring for Enterococcus per the recycled water use agreement with the California State Coastal Conservancy, reporting Enterococcus data to the SSC continued through October.

**Bay Area Clean Water Agencies (BACWA) and Regional Monitoring Program (RMP)**

Liz Falejczyk, Veolia Water Environmental Services Supervisor participated in conference calls for the BACWA Permits, Laboratory and Pretreatment Committee meeting and RMP’s annual meeting.

**Training**

Liz Falejczyk attended the Redwood Empire Section Laboratory Committee training on Chronic Toxicity Reporting and Ethics and Integrity held at the City of Vacaville Easterly Wastewater Treatment Plant on October 16<sup>th</sup>.

**Whole Effluent Toxicity Testing**

Quarterly Acute and Chronic Toxicity is required during Bay Discharge. Testing began on October 16<sup>th</sup>. Both analyses were performed by Aqua Science located in Davis, CA. Acute Toxicity testing results yielded 100% survival. The Chronic Toxicity test results for survival and growth were very good at <1.0 TUc each. See historic Chronic Toxicity results below.

Test Date	1/16	4/16	11/16	1/17	4/17	6/17	10/17	1/18	4/18	9/18	12/18	2/19	6/19	10/19
EC <sub>25</sub> (%)	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100	>100
NOEC (%)	100	100	100	100	100	100	65	100	100	100	100	100	100	100
TUc(100/EC <sub>25</sub> )	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

### **Semi-Annual Sampling:**

Semi-Annual effluent sampling occurred in October 2019 for Polychlorinated biphenyls (as congeners) and the expanded list for metals. The influent semi-annual sampling included the expanded list for metals, phenols, volatile and semi volatile organics, organ phosphorous and chlorinated pesticides.

### **Public Education**

On October 26, 2019, Liz and Joe Falejczk along with John O'Hare, Veolia Water Plant Manager attended the North Bay Science Discovery Day at the Sonoma County Fairgrounds, Santa Rosa, USA.

### **Pretreatment Program**

#### **Discharge Permits**

- One Non-Significant Categorical Industrial User submitted an application for a Non-Domestic Discharge Permit.

#### **Inspections and Sampling**

- Inspected one Significant Industrial User.

#### **Reports**

- Received the Periodic Reports on Continued Compliance from each of the three Significant Industrial Users.

### **Fats, Oils and Grease Program**

#### **Compliance Reporting**

- Received support documentation confirming compliance from 2 Food Services Establishments.

### **E: ADMINISTRATION:**

- September 2019 Electronic Discharge Monitoring Report (EDMR-US EPA) and September 2019 Self-Monitoring Report (SMR-State of California) submitted on October 27, 2019.

### **F: ODORS & LANDSCAPING:**

- Jerome meter (H<sub>2</sub>S) parts per million (ppm) readings performed in neighborhood
- All readings in neighborhood were 0 ppm

### **G: MISCELLANEOUS**

- Process Control Management Plan (PCMP) meetings held weekly with the Veolia staff

### **Veolia Support Staff On/Off Site (Various Times)**

Art Fagerström, PE, BCEE, Technical Manager, Corporate Technical Support

Melissa Sandvold, West Region VP of Operations

James Loven, West Technical Director

Joe Hart, Veolia Asset Manager

## ***1) PHOTOS***

# PLANT OPERATION AND MAINTENANCE OCTOBER 2019



Above left, middle, and right – North Bay Science Discovery Day  
Middle left – Martin Yungul, Veolia Operator, calibrating the recycled water plant turbidity meter  
Middle right – Paul Bailey, Veolia Operator, calibrating the recycled water plant chlorine analyzer  
Below left – reduced visibility to the west due to the Kincadee Fire  
Below right - sunrise over the standby generator at the Ultraviolet Disinfection system

## **2) LABORATORY DATA**

Novato Sanitary District  
BOD/TSS Report



October, 2019

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		
10/01/19	3.85	340	10,917	280	8,991	<5	<144	<3	<86	98.5	98.9
10/02/19	3.47					<5	<111	<3	<67		
10/03/19	3.42							<3	<63		
10/04/19	3.41										
10/05/19	3.32										
10/06/19	3.24										
10/07/19	3.29							5	113		
10/08/19	3.48										
10/09/19	3.45							5	122		
10/10/19	3.39	310	8,765	340	9,613	<5	<95	3	57	98.4	99.1
10/11/19	3.42							3	61		
10/12/19	3.30										
10/13/19	3.43										
10/14/19	3.59										
10/15/19	3.52										
10/16/19	3.23	340	9,159	339	9,132	<5	<105	<3	<63	98.5	99.1
10/17/19	3.51										
10/18/19	3.44										
10/19/19	3.48										
10/20/19	3.65										
10/21/19	3.45										
10/22/19	3.36										
10/23/19	3.38										
10/24/19	3.44	310	8,894	283	8,119	<5	<118	<3	<71	98.4	98.9
10/25/19	3.60										
10/26/19	3.36										
10/27/19	3.23										
10/28/19	2.93										
10/29/19	3.42	360	10,268	405	11,552	7	200	6	171	98.1	98.5
10/30/19	3.54										
10/31/19	3.39										
<b>Weekly Averages</b>											
10/05/19	Week 1	340	10,917	280	8,991	5	128	3	72		
10/12/19	Week 2	310	8,765	340	9,613	5	95	4	88		
10/19/19	Week 3	340	9,159	339	9,132	5	105	3	63		
10/26/19	Week 4	310	8,894	283	8,119	5	118	3	71		
	Week 5										
<b>Monthly</b>											
Minimum	2.93	310	8,765	280	8,119	<5	<95	<3	57	98	99
Maximum	3.85	360	10,917	405	11,552	7	200	6	171	99	99
Total	105.99										
Average	3.42	332	9,601	329	9,481	<5	<129	<4	<87	98	99

Novato Sanitary District  
Conventional Pollutants Report



October, 2019

Date	INFLUENT - A001			Effluent - E002							
	Flow Total	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Oil & Grease	Temp	Rainfall
				Fecal	Entero	Total					
	MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L	Deg C	Inches
10/01/19	3.85				2.9		7.1			23.2	0.00
10/02/19	3.47				1.0		7.1	0.48		23.0	0.00
10/03/19	3.42				3.1		7.0			23.0	0.00
10/04/19	3.41						7.0			23.0	0.00
10/05/19	3.32										0.00
10/06/19	3.24										0.00
10/07/19	3.29			11.0	4.1		7.0			23.9	0.00
10/08/19	3.48				2.0		6.9			23.9	0.00
10/09/19	3.45						6.9			24.3	0.00
10/10/19	3.39				1.8		7.0			23.4	0.00
10/11/19	3.42	7.2					6.9			22.7	0.00
10/12/19	3.30										0.00
10/13/19	3.43										0.00
10/14/19	3.59				<1.0		6.9			22.4	0.00
10/15/19	3.52				1.4		7.0			21.9	0.00
10/16/19	3.23				1.0		7.1			22.5	0.00
10/17/19	3.51						7.1			22.5	0.00
10/18/19	3.44						6.9			22.7	0.00
10/19/19	3.48										0.00
10/20/19	3.65										0.00
10/21/19	3.45	7.3			4.4		7.0			23.0	0.00
10/22/19	3.36						6.9			22.9	0.00
10/23/19	3.38				4.1		7.0			23.0	0.00
10/24/19	3.44				4.1		7.0			23.6	0.00
10/25/19	3.60						6.8			22.6	0.00
10/26/19	3.36	7.3									0.00
10/27/19	3.23										0.00
10/28/19	2.93				1.0		7.0			22.1	0.00
10/29/19	3.42				16.6		6.9			22.1	0.00
10/30/19	3.54	7.1			1.0		7.2			21.9	0.00
10/31/19	3.39	7.5					7.1			21.4	0.00
<b>Monthly</b>											
Minimum	2.93	7.1		11.0	<1.0		6.8	0.48		21.4	0.00
Maximum	3.85	7.5		11.0	16.6		7.2	0.48		24.3	0.00
Total	105.99										0.00
Average	3.42	7.3					7.0	0.48		22.8	0.00
Geomean					2.28						

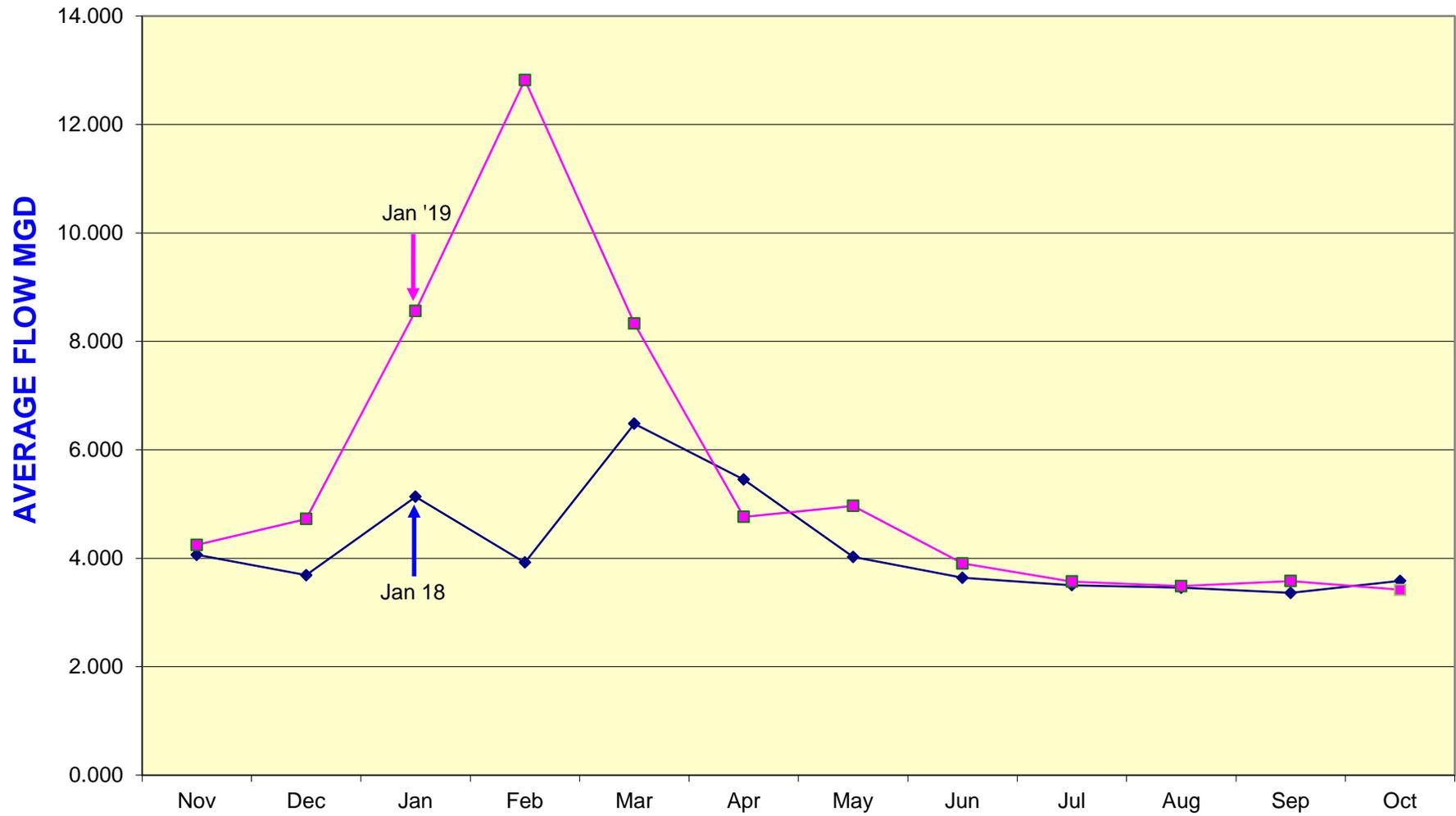
### **3) *RECYCLED WATER REPORT***

NOVATO SANITARY DISTRICT  
RECYCLED WATER  
COMPLIANCE SUMMARY REPORT

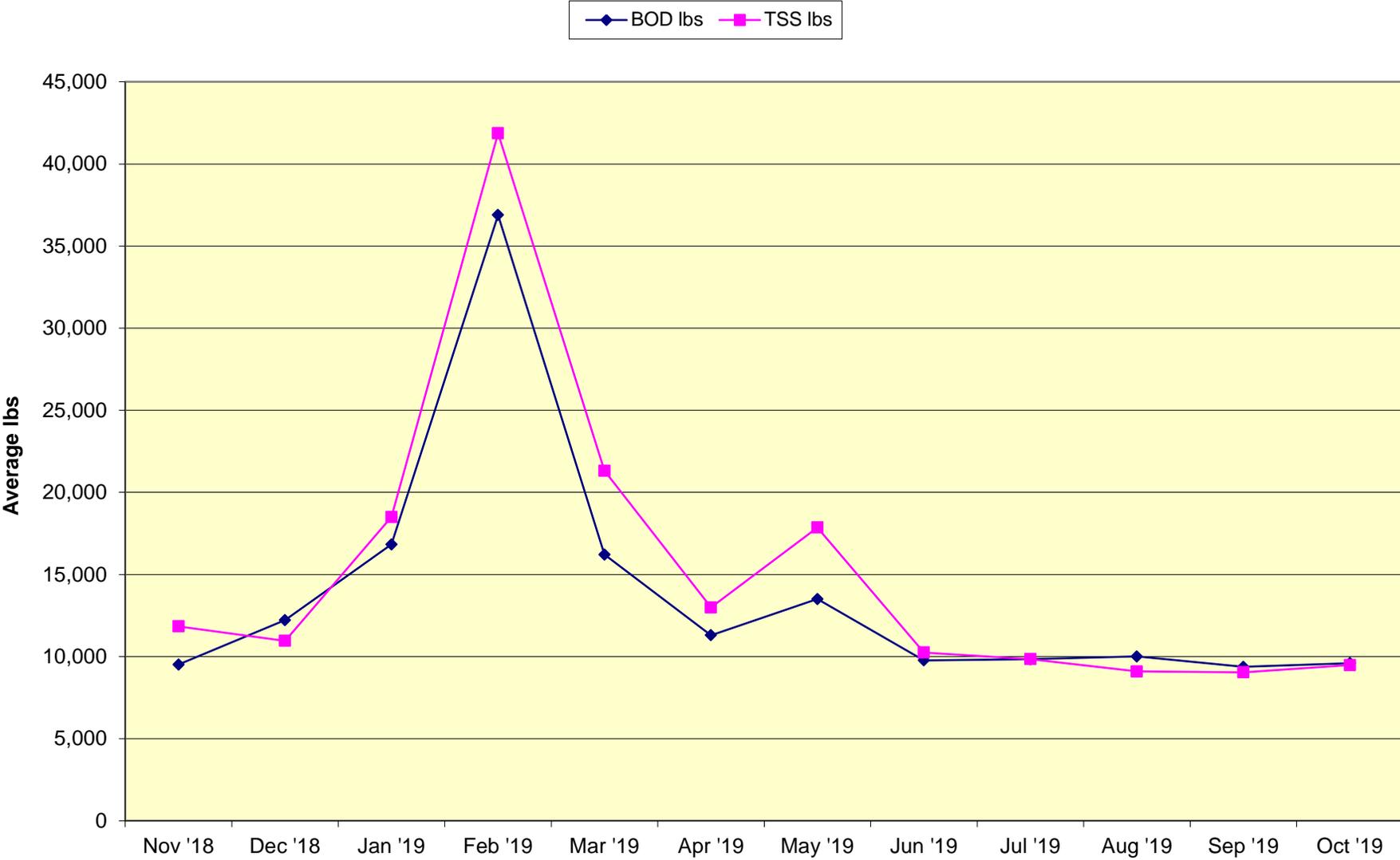
	Filter Influent Flow	Recycled Water Flow to Plum St.	Potable Water To Plum St Tank	Recycled Water Influent Turbidity Ave.	Minutes Over 5 NTU Turbidity	Filter Effluent 24 Hr Average Turbidity	Filter Effluent Dissolved Oxygen	Filter Effluent Total Coliform	Disinfection CT Value
Date	MGD	MGD	MGD	NTU	(m)	NTU	(mg/l)	MPN/100ml	mg-min/l
10/1/2019	0.830	0.397		1.3	0	0.9	8.6	<1	>450.000
10/2/2019	1.080	0.802		0.9	0	0.8		<1	>450.000
10/3/2019	1.180	0.917		1.2	44	1.4		<1	>450.000
10/4/2019	1.360	1.164			0	0.9		<1	>450.000
10/5/2019	1.080	0.781		1.6	0	0.6		<1	>450.000
10/6/2019	1.060	0.985		1.3	0	0.5	8.3	<1	>450.000
10/7/2019	0.840	0.573		1.4	0	0.4	8.6	<1	>450.000
10/8/2019	0.960	0.659		1.0	0	0.3	8.3	<1	>450.000
10/9/2019	1.060	0.527		2.1	0	0.4		<1	>450.000
10/10/2019	1.100	1.109		1.8	0	0.5		<1	>450.000
10/11/2019	1.100	0.994		1.5	5	0.8		<1	>450.000
10/12/2019	0.930	0.443		1.6	0	0.3		<1	>450.000
10/13/2019	0.920	0.316		1.3	0	0.4	8.5	<1	>450.000
10/14/2019	0.590	0.420		1.5	0	0.1	9.1	<1	>450.000
10/15/2019	0.990	0.942		1.8	2	0.3	8.6	<1	>450.000
10/16/2019	0.760	0.711		1.4	0	0.5		<1	>450.000
10/17/2019	0.810	0.782		1.4	0	0.6		<1	>450.000
10/18/2019	0.770	0.545		1.9	0	0.6		<1	>450.000
10/19/2019	0.730	0.358		1.3	0	0.4		<1	>450.000
10/20/2019	0.770	0.472		1.3	9	1.2	8.7	<1	>450.000
10/21/2019	0.720	0.510		2.6	0	0.5		<1	>450.000
10/22/2019	0.800	0.618		0.9	0	0.4	8.5	<1	>450.000
10/23/2019	0.770	0.669		1.9	0	0.6	8.4	<1	>450.000
10/24/2019	0.710	0.610		1.7	0	0.8		<1	>450.000
10/25/2019	1.000	1.106		1.6	0	0.9		<1	>450.000
10/26/2019	0.540	0.326		1.7	0	1.0		<1	>450.000
10/27/2019	0.000	0.000			0	0.0			
10/28/2019	0.000	0.000			0	0.0			
10/29/2019	0.050		0.078		0	0.0			
10/30/2019	1.380	1.349		1.3	7	1.0	8.6	<1	>450.000
10/31/2019	1.050	0.736		0.7	56	1.6	8.4	<1	>450.000
<b>Total</b>	<b>25.940</b>	<b>19.821</b>	<b>0.078</b>						
<b>Minimum</b>	<b>0.000</b>	<b>0.000</b>	<b>0.078</b>	<b>0.7</b>	<b>0</b>	<b>0.0</b>	<b>8.3</b>	<b>&lt;1</b>	<b>&gt;450.0</b>
<b>Maximum</b>	<b>1.380</b>	<b>1.349</b>	<b>0.078</b>	<b>2.6</b>	<b>56</b>	<b>1.6</b>	<b>9.1</b>	<b>&lt;1</b>	<b>&gt;450.0</b>
<b>Average</b>	<b>0.837</b>	<b>0.661</b>	<b>0.078</b>	<b>1.5</b>	<b>4</b>	<b>0.6</b>	<b>8.6</b>	<b>&lt;1</b>	<b>&gt;450.0</b>

## ***4) ANNUAL PERFORMANCE SUMMARY – GRAPHS***

## WASTEWATER INFLUENT FLOW COMPARISON



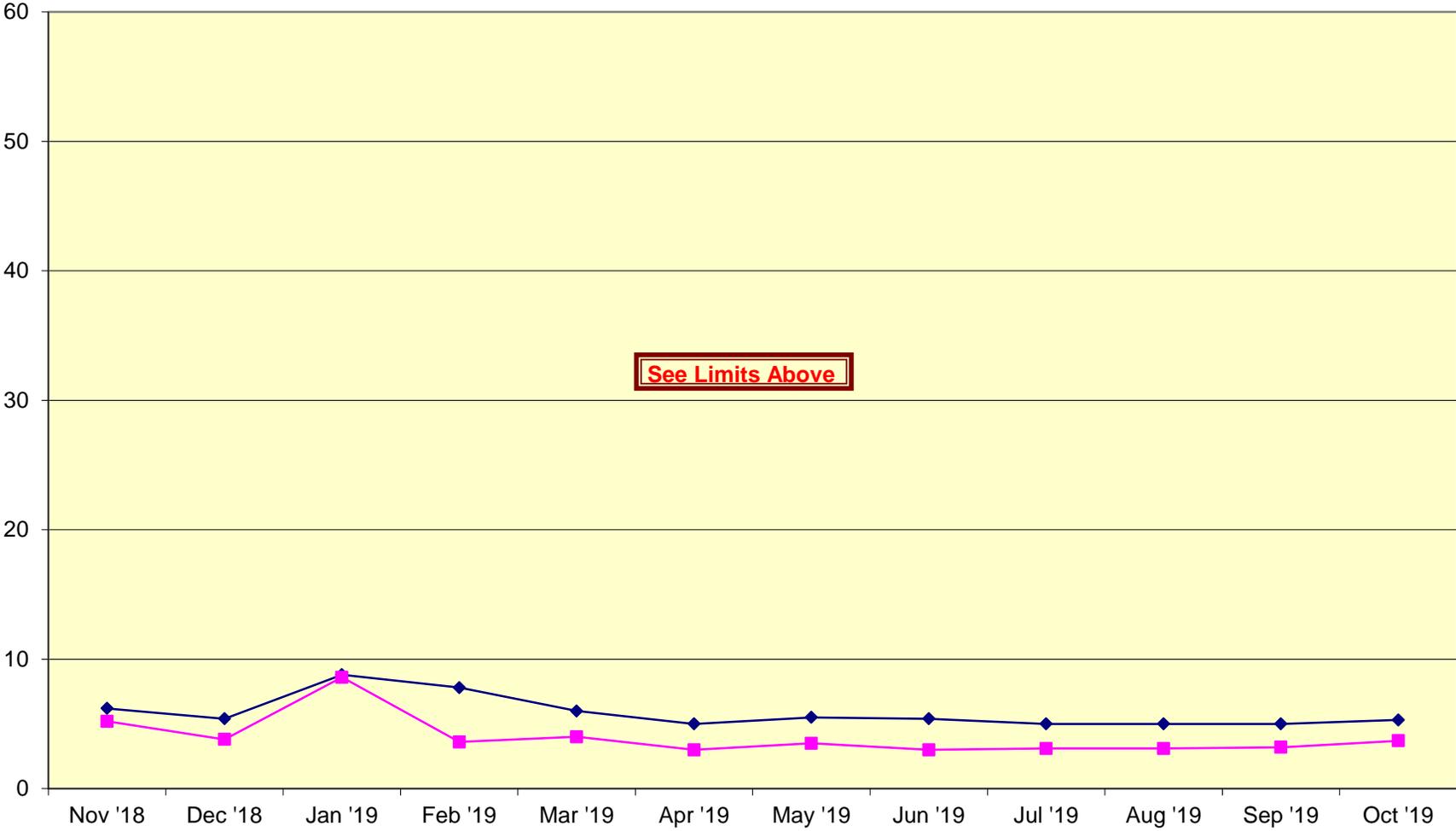
### Influent Load BOD / TSS lbs



# Effluent BOD / TSS Concentration

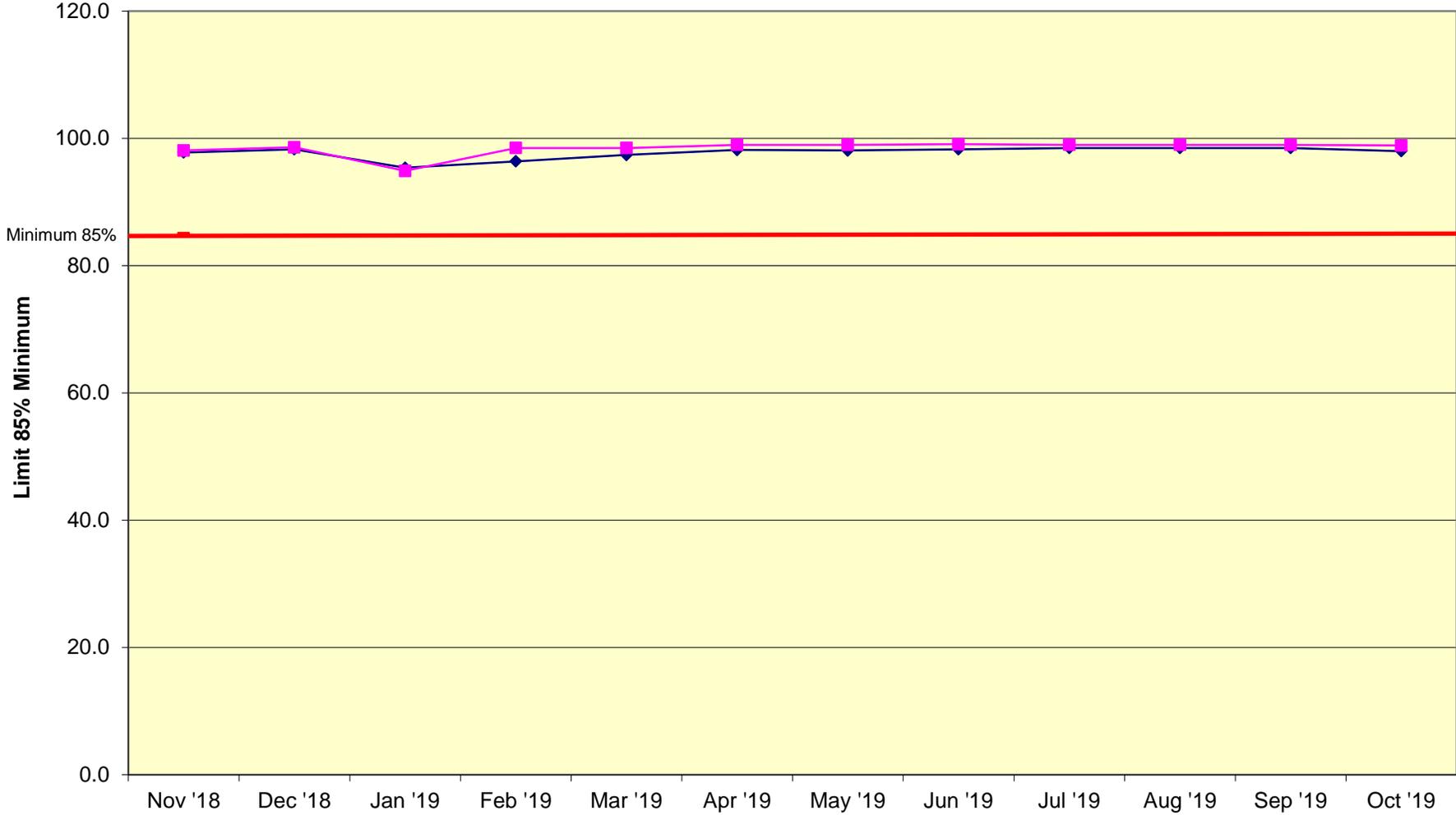
**NPDES LIMITS DRY SEASON**  
BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave  
TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave  
WDR (Waste Discharge Requirements) RECLAMATION  
BOD - 40 mg/L

◆ BOD    ■ TSS

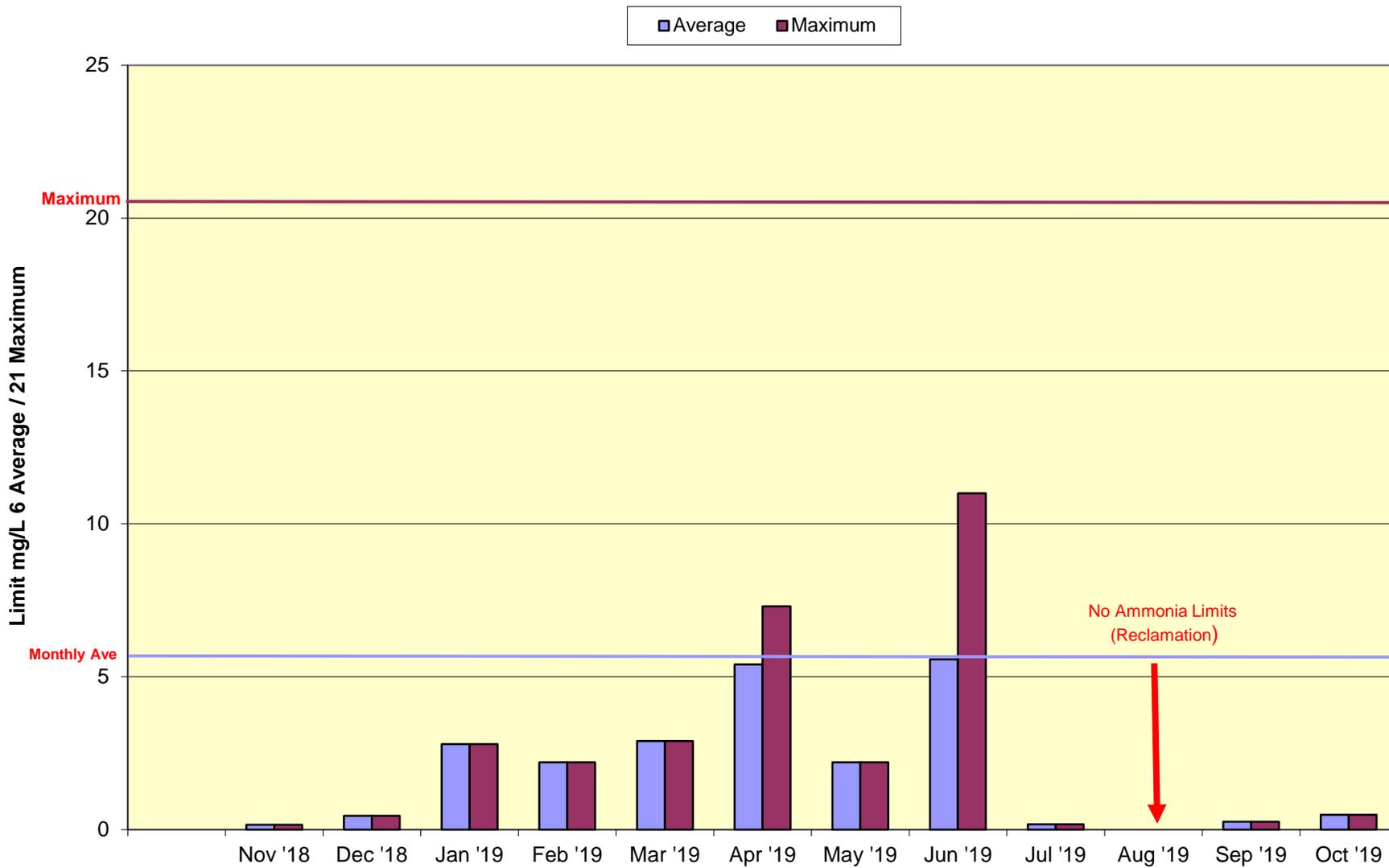


# BOD / TSS Percent Removal

◆ BOD    ■ TSS

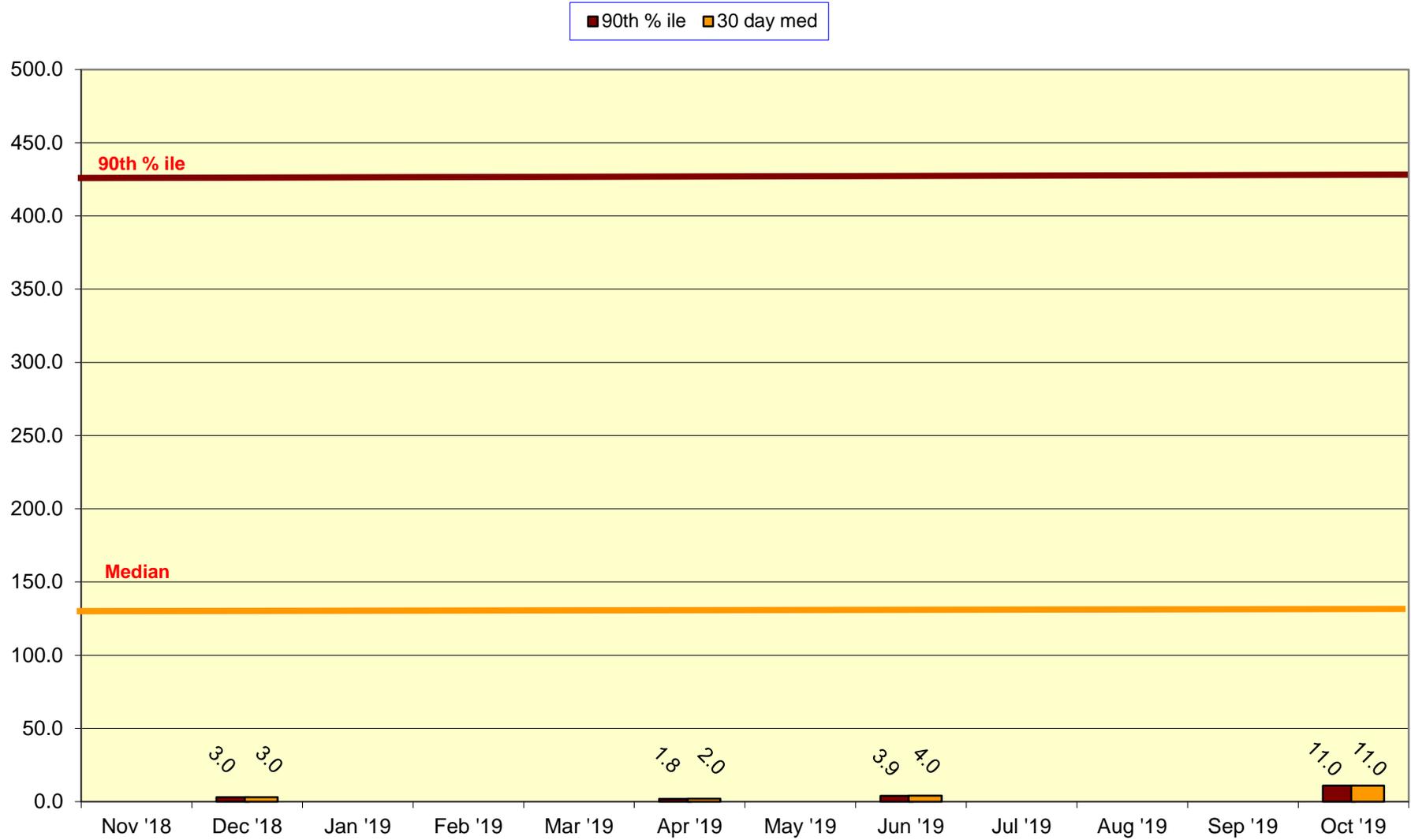


# Effluent Ammonia



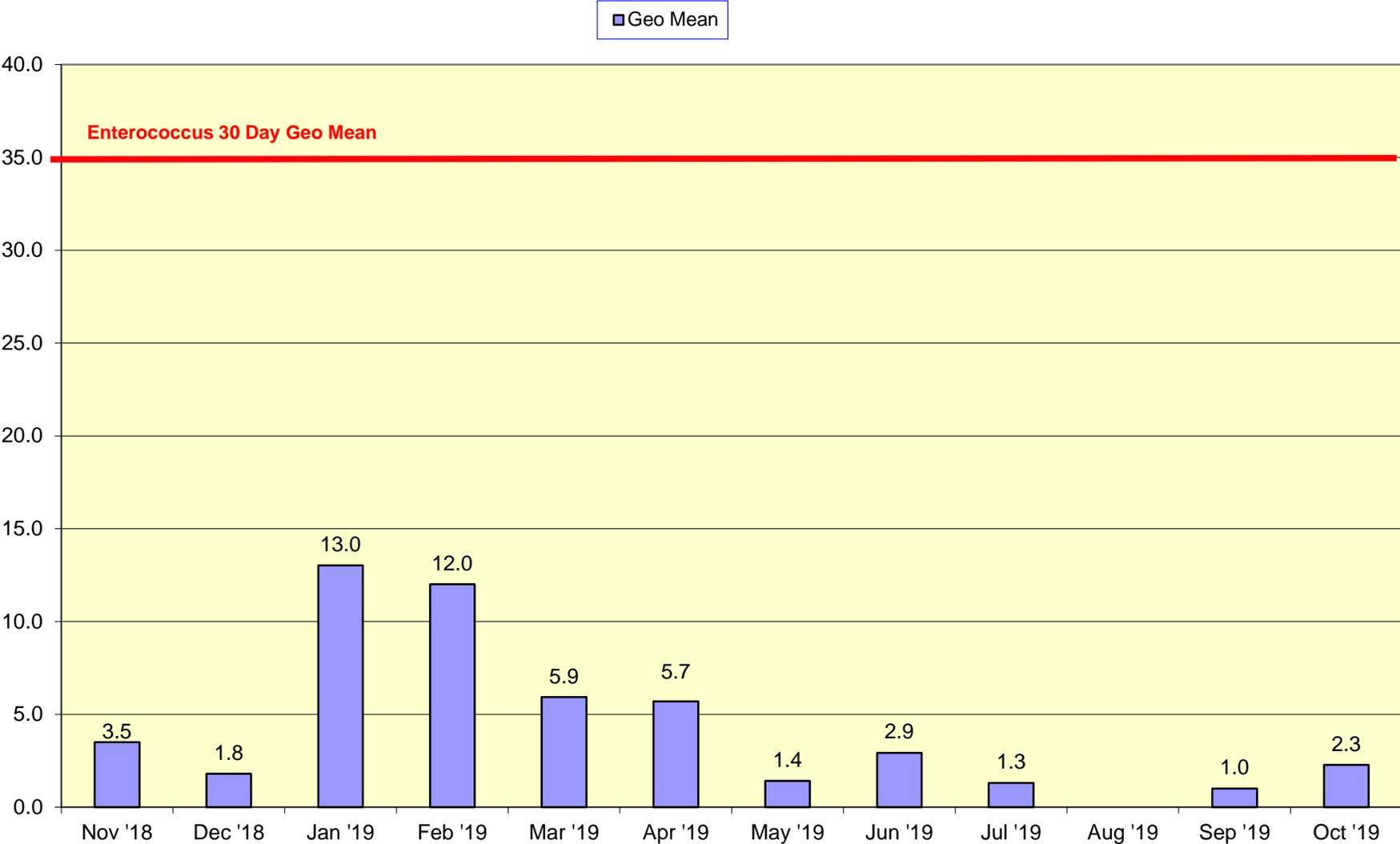
# Disinfection - Fecal Coliform

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

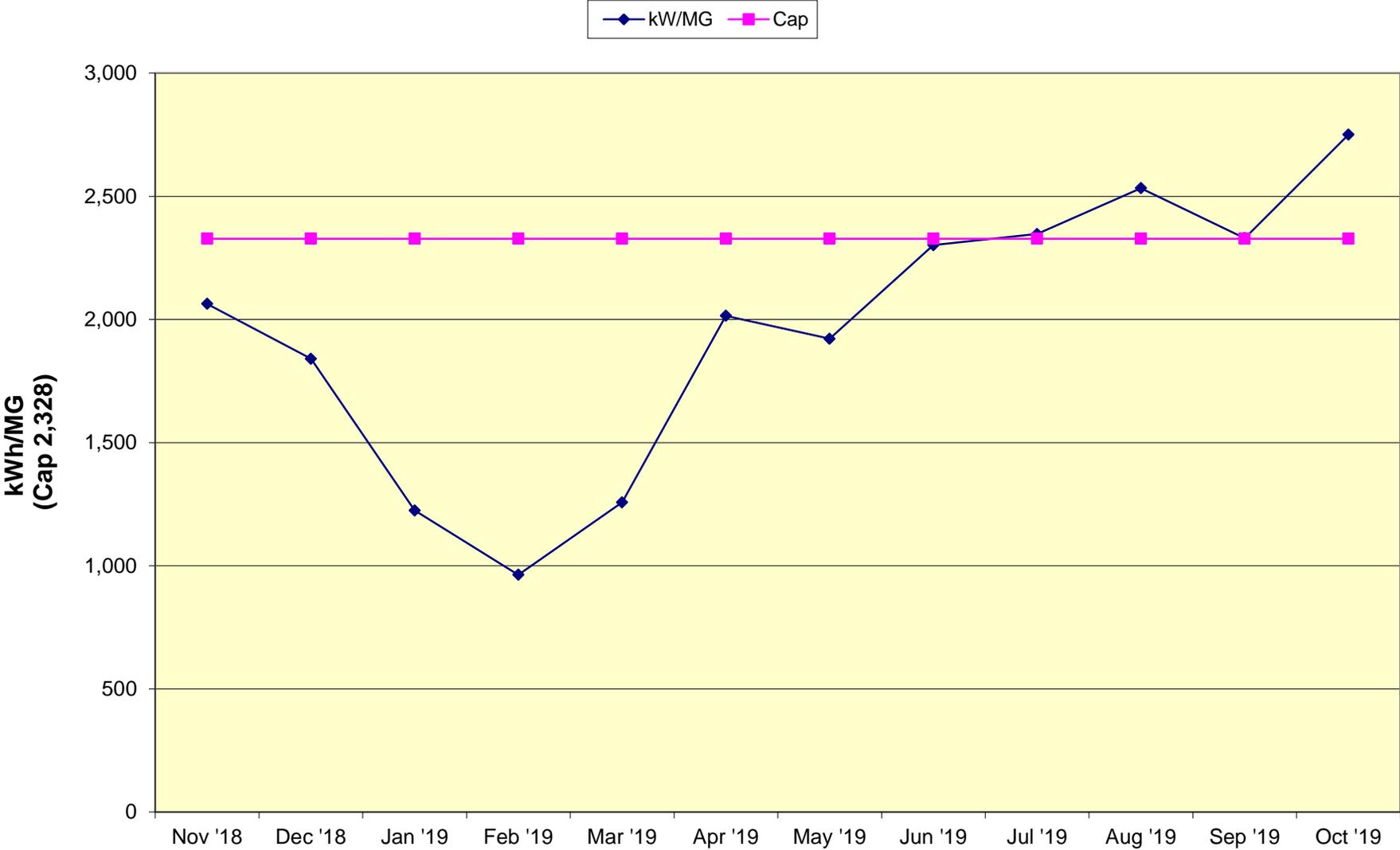


# Disinfection - Enterococcus

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

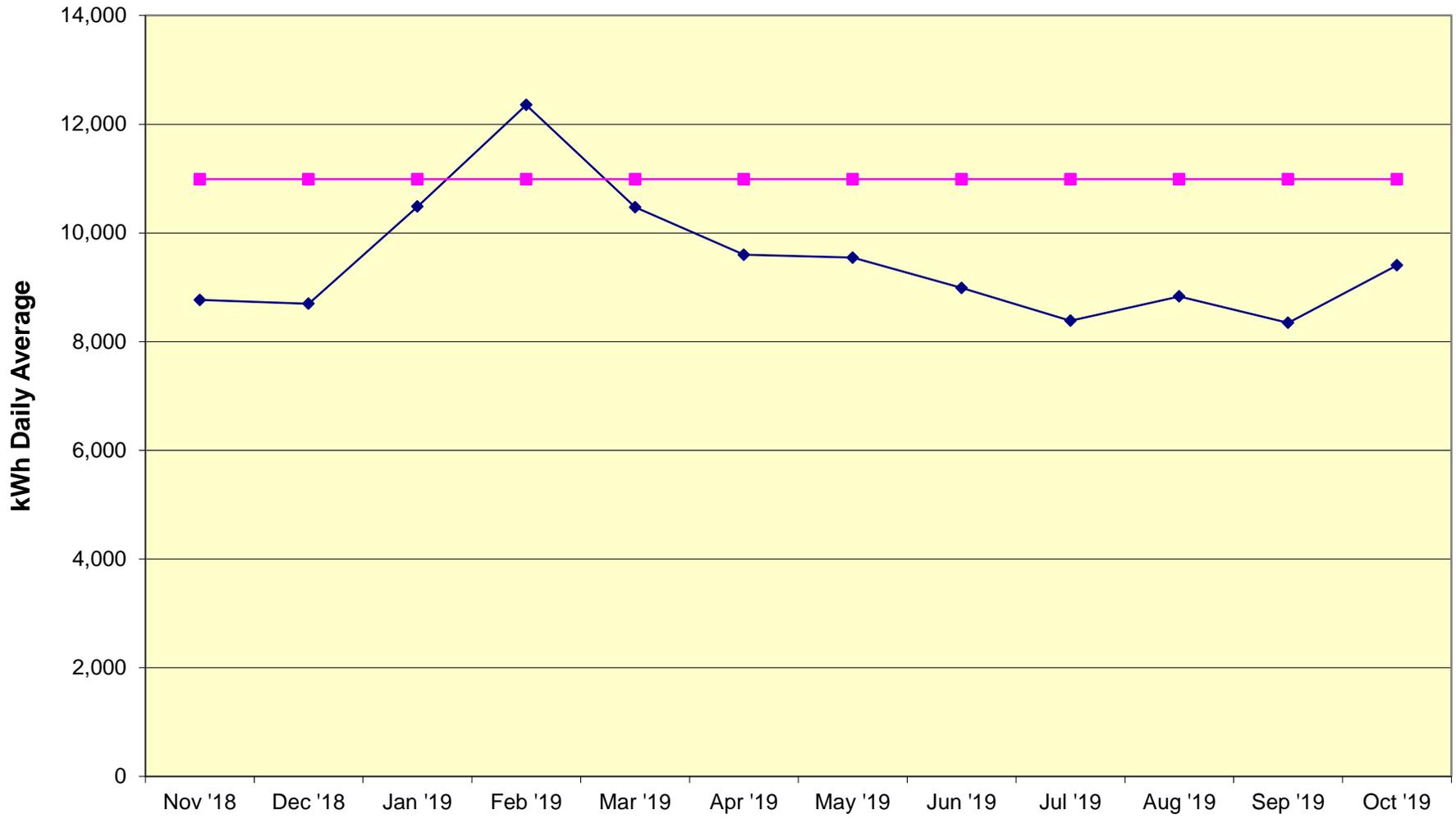


### Energy kWh/MG



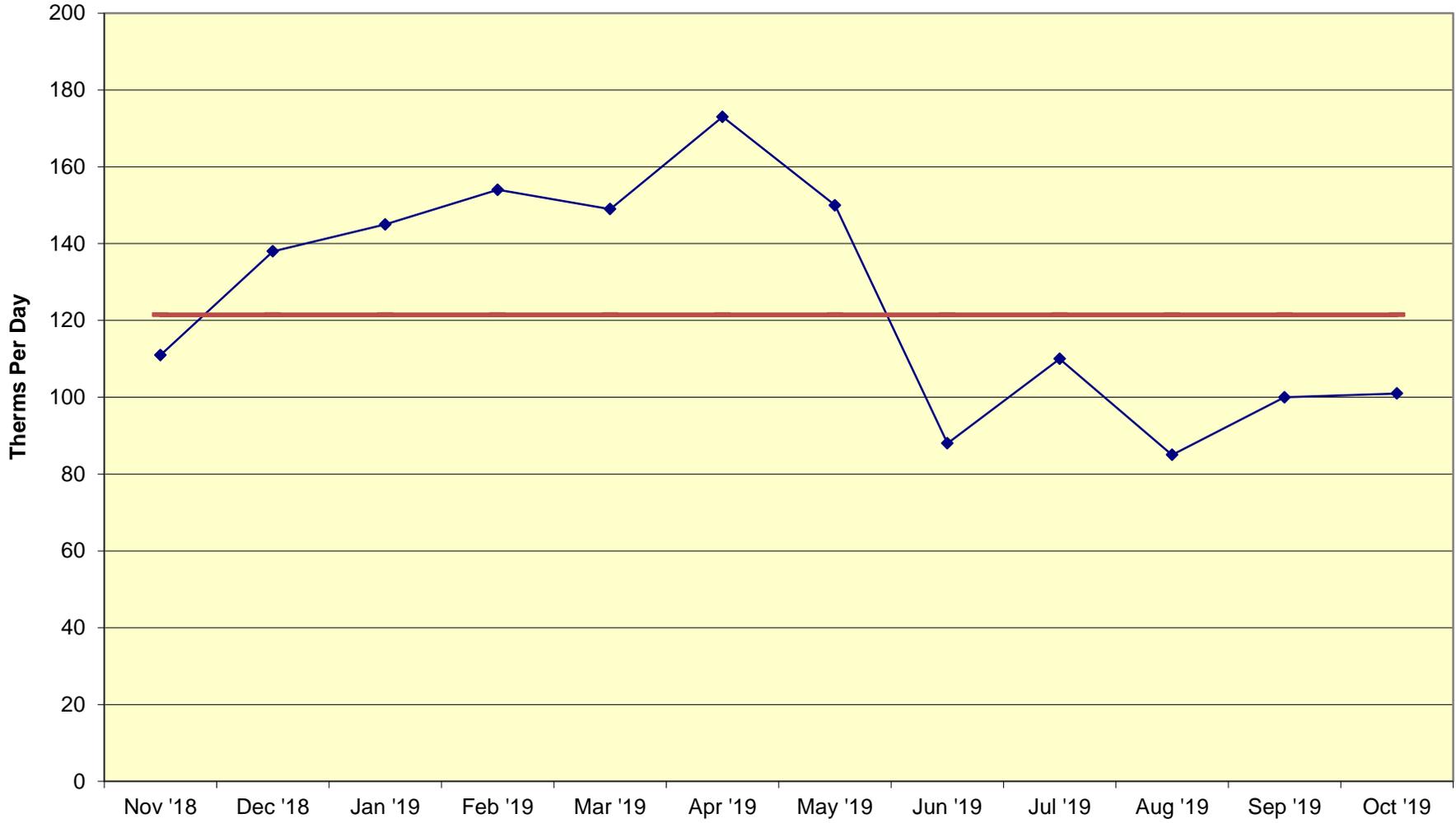
# Energy kWh

◆ kWh    ■ Cap



### Natural Gas Use

◆ Natural Gas — Cap

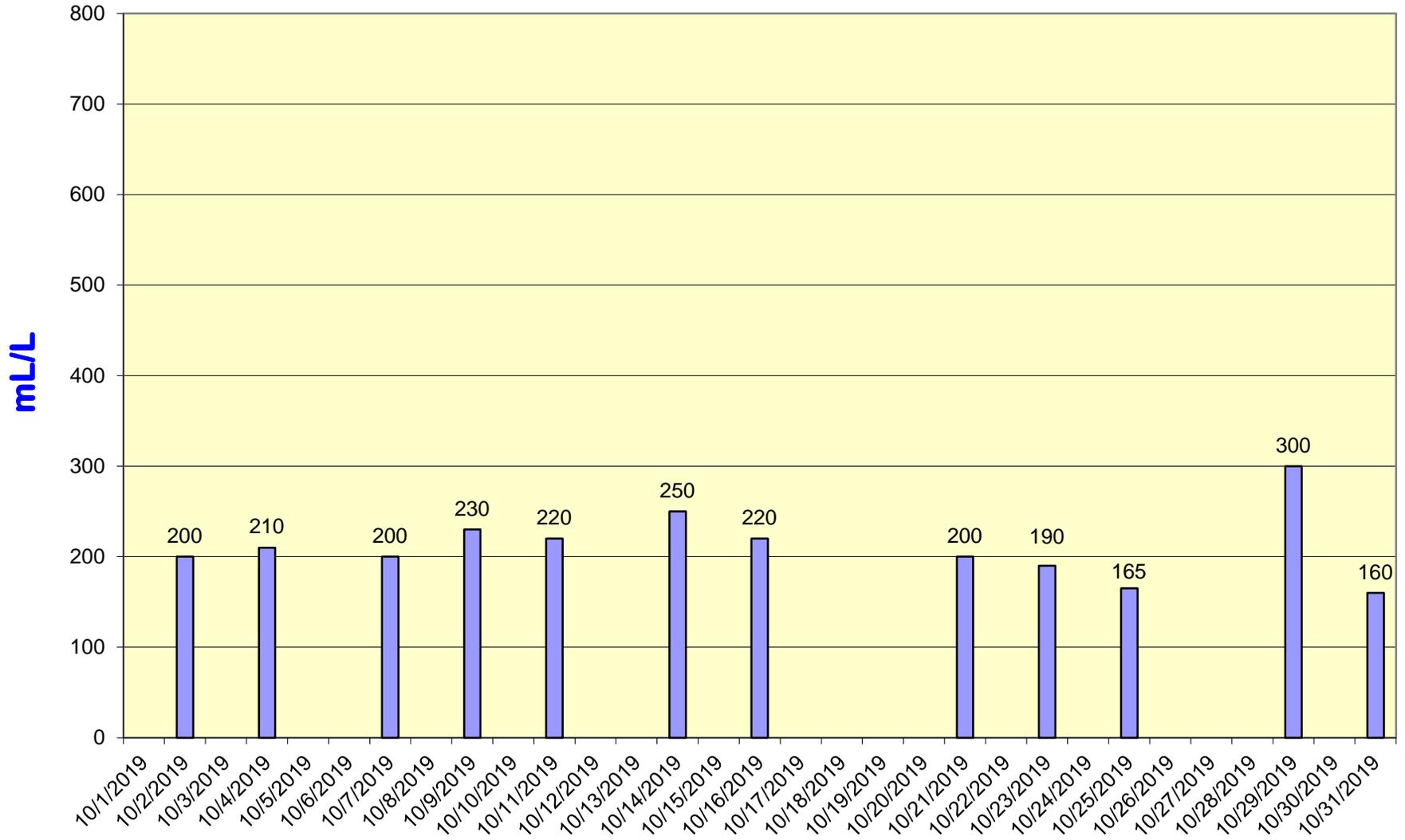


## ***5) PROCESS CONTROL DATA / GRAPHS***

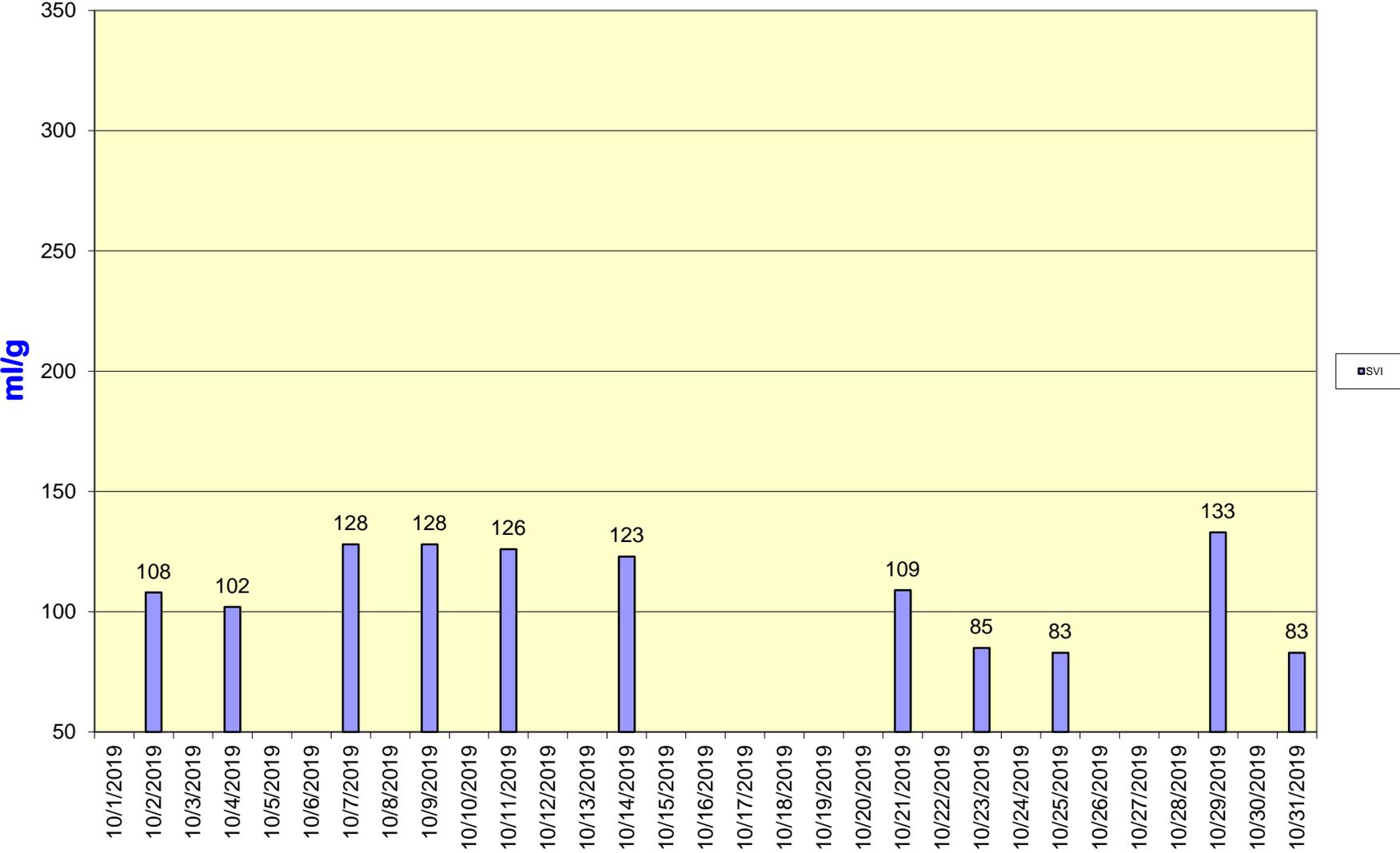
## Process Control Data

	<b>Influent Flow</b>	<b>Settleability</b>	<b>MLSS Concentration</b>	<b>MLSS Inventory</b>	<b>MCRT</b>	<b>SVI</b>
10/1/2019	3.85					
10/2/2019	3.47	200	1,860	33,134	7.4	108
10/3/2019	3.42					
10/4/2019	3.41	210	2,060	36,697	8.0	102
10/5/2019	3.32					
10/6/2019	3.24					
10/7/2019	3.29	200	1,560	27,790	7.0	128
10/8/2019	3.48					
10/9/2019	3.45	230	1,800	32,066	7.7	128
10/10/2019	3.39					
10/11/2019	3.42	220	1,740	30,997	7.1	126
10/12/2019	3.30					
10/13/2019	3.43					
10/14/2019	3.59	250	2,030	36,163	7.8	123
10/15/2019	3.52					
10/16/2019	3.23	220				
10/17/2019	3.51					
10/18/2019	3.44					
10/19/2019	3.48					
10/20/2019	3.65					
10/21/2019	3.45	200	1,840	32,778	9.4	109
10/22/2019	3.36					
10/23/2019	3.38	190	2,230	39,726	7.5	85
10/24/2019	3.44					
10/25/2019	3.60	165	1,980	35,272	7.0	83
10/26/2019	3.36					
10/27/2019	3.23					
10/28/2019	2.93					
10/29/2019	3.42	300	2,260	40,260	6.6	133
10/30/2019	3.54					
10/31/2019	3.39	160	1,920	34,203	6.5	83
Minimum	2.93	160	1,560	27,790	6.5	83
Maximum	3.85	300	2,260	40,260	9.4	133
Total	105.99					
Average	3.42	212	1,935	34,462	7.5	110

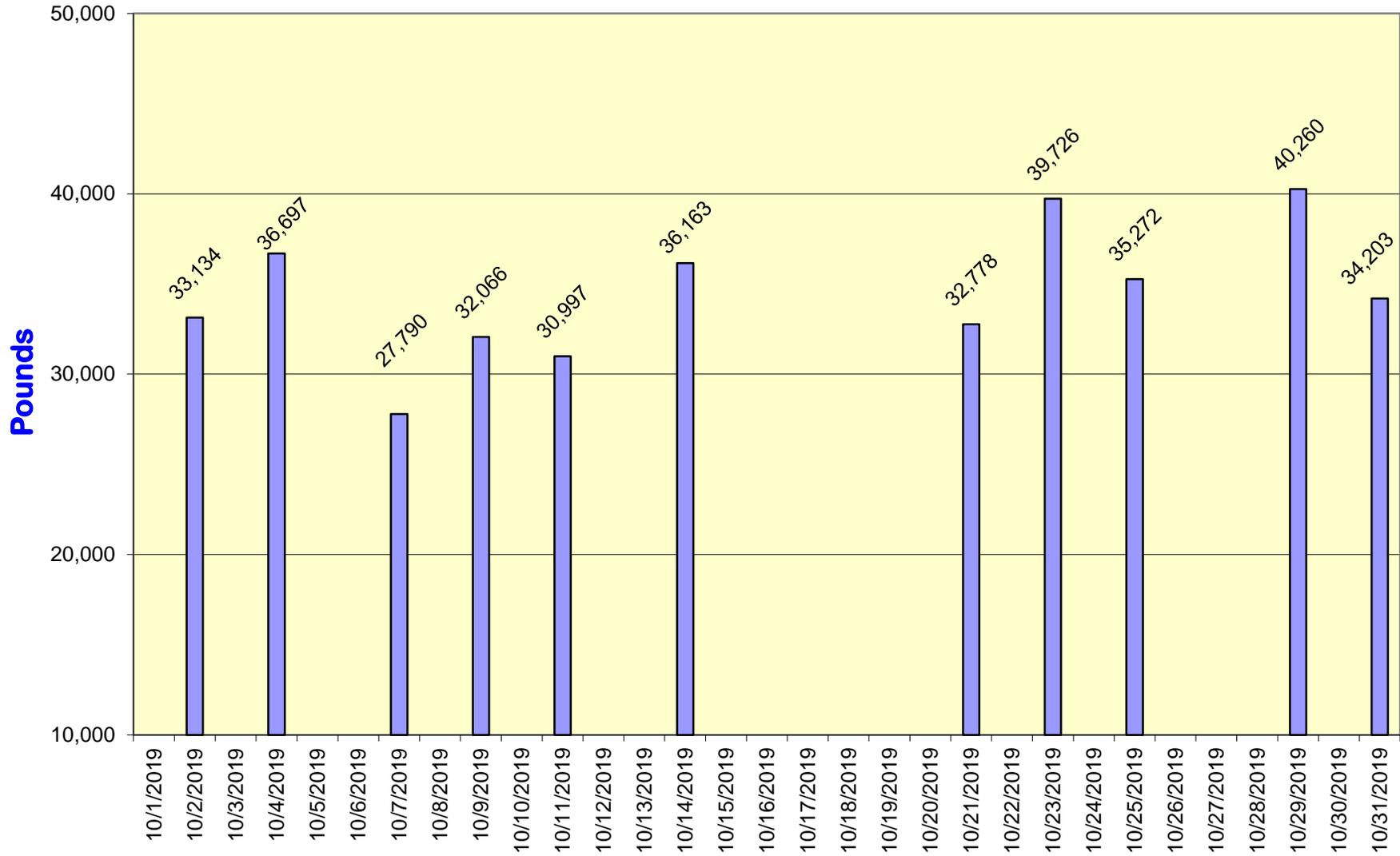
# Settleability



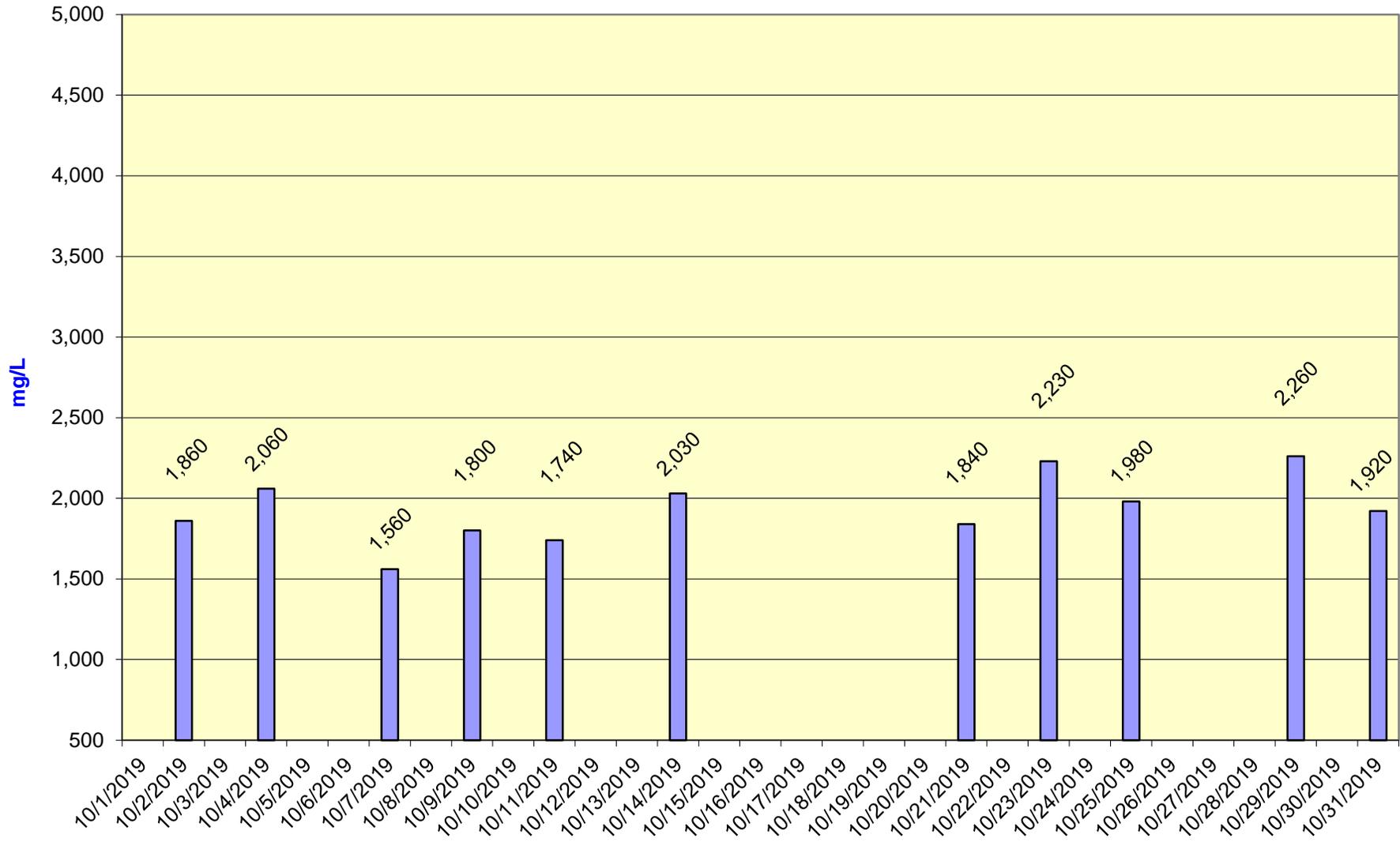
# Sludge Volume Index



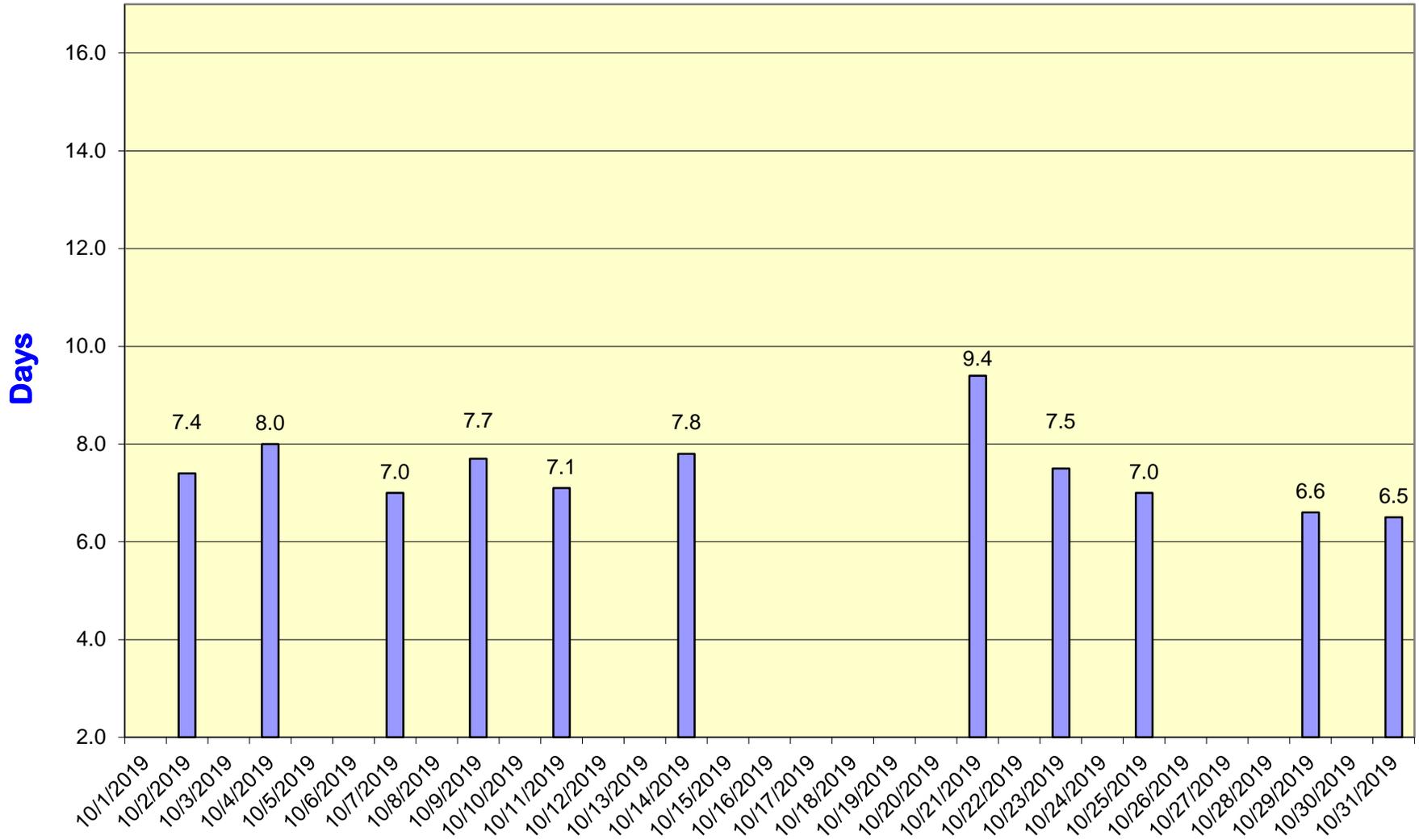
## MLSS Inventory



### MLSS Concentration

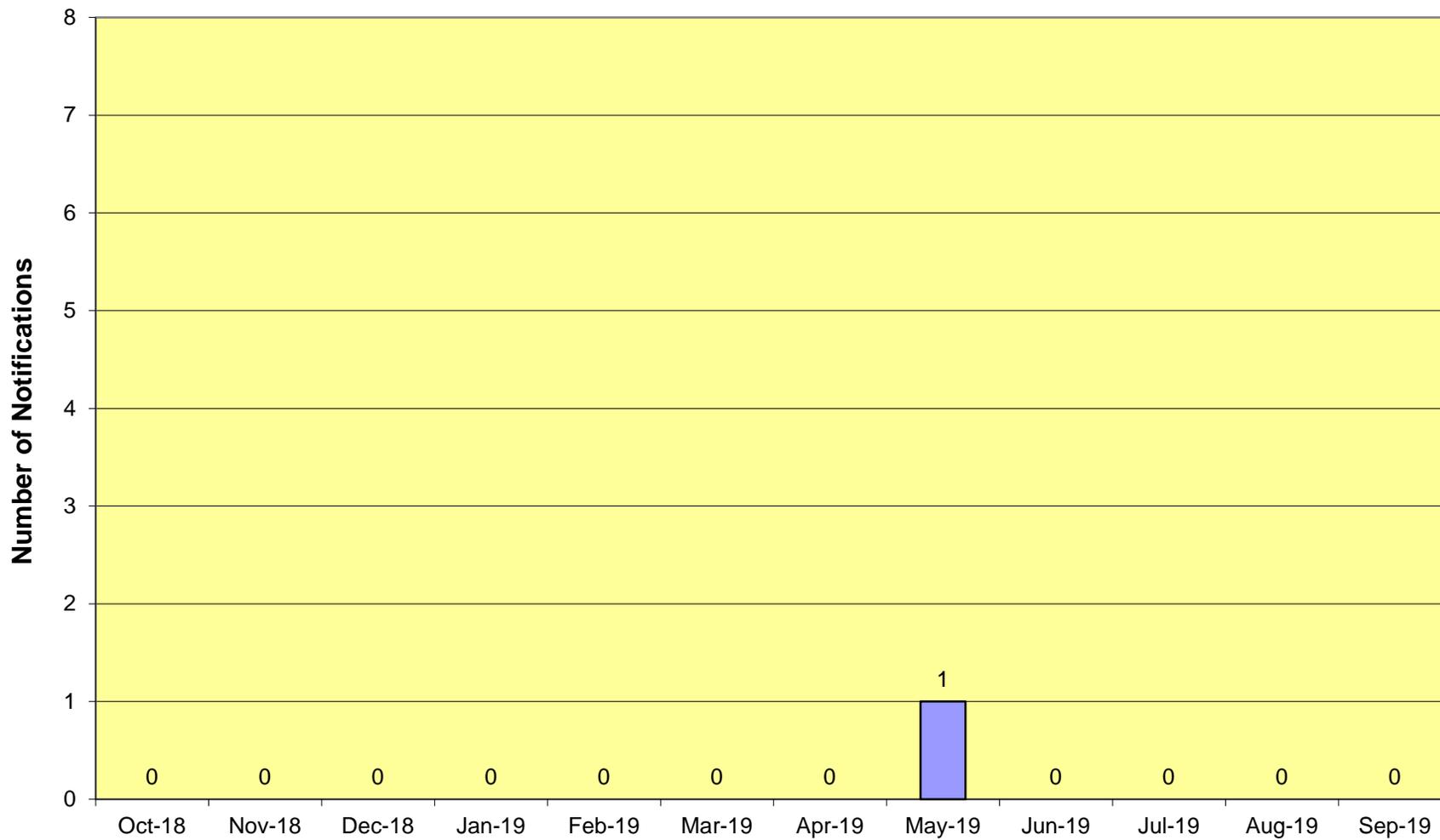


# Mean Cell Residence Time



## ***6) NEIGHBORHOOD COMPLAINTS RECEIVED***

# Neighborhood Complaints Received

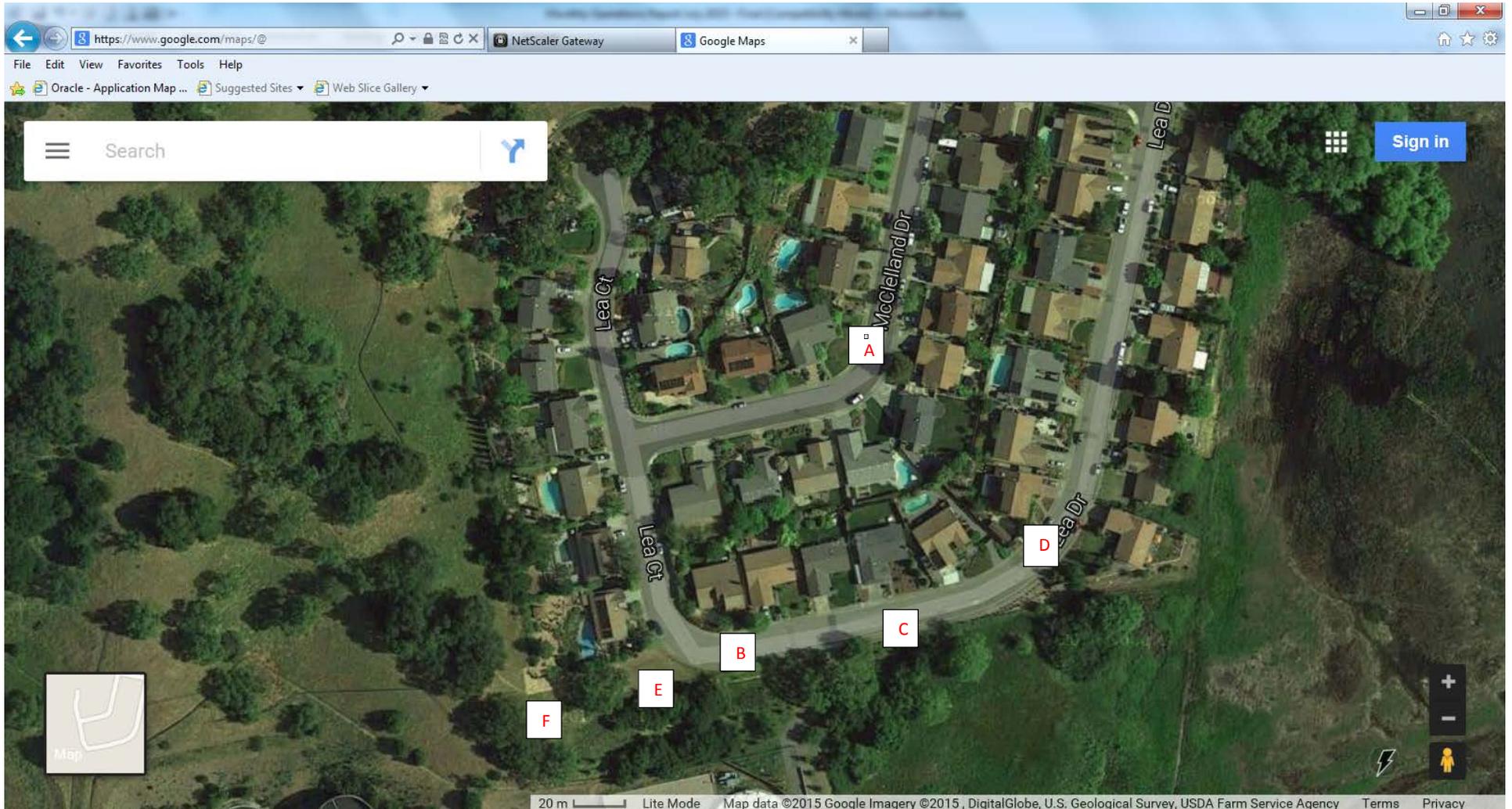


## ***7) JEROME METER READINGS & LOCATIONS***

**JEROME METER READINGS - OCTOBER 2019**

Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.001	0.0007	Neighborhood
B: Lea 1	0.000	0.001	0.0003	Neighborhood
C: Lea 2	0.000	0.001	0.0007	Neighborhood
D: Lea 3	0.000	0.001	0.0007	Neighborhood
E: Lea 4	0.000	0.001	0.0007	Neighborhood
F: Lea 5	0.000	0.000	0.0000	Neighborhood

# NEIGHBORHOOD JEROME METER LOCATIONS – LEA AND McCLELLAND



**NOVATO SANITARY DISTRICT**  
**Wastewater Operations - Reclamation Facilities Report**  
**October 2019**

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**1.0 Summary:**

- 1.1 During October 2019:
- The treatment plant was in bay discharge mode throughout October 2019.
  - The annual biosolids transfer and disposal project was performed and completed in October.

**2.0 Ranch Operations:**

- 2.1 Drainage Pump Stations No. 3 and 7 did not pump any water in October.
- 2.2 Approximately 225 cows and their calves grazed the irrigated pastures at Site 3 and Site 7 throughout October.

**3.0 Irrigation Parcels:**

- 3.1 Parcel irrigation continued through October 3<sup>rd</sup>, 2019. Two irrigation pumps operated for approximately 8 hours each morning resulting in a total of 8.5 MG applied to the pastures in the first 3 days of October.



**Figure 1 Biosolids excavating - lagoon #2.**

**4.0 Irrigation Pump Station:**

- 4.1 The Wildlife Pond level dropped from 5 feet to 4.5 feet during October.
- 4.2 Storage pond Nos. 1 and 2 levels dropped from 3.4 feet to 2.6 feet throughout October as irrigation ended for the 2019 season.

**5.0 Biosolids (sludge) Handling & Disposal:**

- 5.1 Custom Tractor Services worked throughout October 2019 to transfer and dispose of biosolids at the lagoons at Site 2. Initially, the biosolids were pumped from the lagoons to the Dedicated Land Disposal (DLD) site. As the level of biosolids in the lagoons dropped, the biosolids were then excavated, hauled, and deposited into the DLD.

**NOVATO SANITARY DISTRICT**

**Reclamation Facility - Monthly Statistics for Calendar Year 2019, as of October 31, 2019**

	January	February	March	April	May	June	July	August	September	October	November	December	Total Year to Date	Annualized Monthly Average
<b>Irrigation Pump Station</b>														
Plant flow to ponds (MG)	0	0	0	0	0	0	0	69.6	49.6	0				
Irrigation (MG)	0	0	0	0	0	0	0	28.4	80.8	8.5				
Irrigation Pump 1 Hours	0	0	0	0	0	0	0	48	113.3	16.6				
Irrigation Pump 2 Hours	0	0	0	0	0	0	0	48	164.5	17				
Irrigation Pump 3 Hours	0	0	0	0	0	0	0	48	155.7	16.3				
Washdown Water Pump Hours	0	0	0	0	0	0	0	0	0	0				
Wildlife Feed Pump Hours	0	0	0	168	744	720	744	744	0	0				
Water Circulated through Wildlife Pond (MG)	0	0	0	10.6	46.9	45.4	46.9	46.9	0.0	0.0				
Strainer No. 1 Hours	0	0	0	0	0	0	0	18.7	54.3	6.3				
Strainer No. 2 Hours	0	0	0	0	0	0	0	18.7	55.5	3.7				
Pond 1 Gauge @ Beginning of Month (feet)	3	4	5.8	5.8	5.6	5	4.7	3.8	5.5	3.4				
Pond 1 Gauge @ End of Month (feet)	4	5.8	5.8	5.6	5	4.7	3.8	5.5	3.4	2.6				
Pond 1 Gallons Stored @ End of Month(MG)	28	43	43	41	36	34	26	40	23	17				
Pond 2 Gauge @ Beginning of Month (feet)	3	4	5.8	5.8	5.6	5	4.7	3.8	5.5	3.4				
Pond 2 Gauge @ End of Month (feet)	4	5.8	5.8	5.6	5	4.7	3.8	5.5	3.4	2.6				
Pond 2 Gallons Stored @ End of Month(MG)	36	55	55	53	47	44	34	52	30	21				
Total Irrigation Water Stored (MG)	64	98	98	94	83	78	60	92	53	38				
<b>Drainage Pump Station No. 3</b>														
Drainage Pump No. 1 Hours	411.3	639.2	302.1	0	0	0.4	0	0	0	0				
Drainage Pump No. 2 Hours	555.8	666.8	692	359.6	0	1.6	0	0	0	0				
Drainage Pump No. 3 Hours	192.9	478.6	655.3	0	68.8	0	0	0	0	0				
Total Gallons Stormwater Pumped (MG)	348	535.38	494.82	107.88	20.64	0.6	NA	0	0	--	--	--	1507.32	251.22
<b>Drainage Pump Station No. 7</b>														
Drainage Pump No. 1 Hours	39.2	305.1	72.6	0	0	0	0	0	0	0				--
Drainage Pump No. 2 Hours	249.3	276.8	319.6	72.5	41.8	0	0	0	0	0				--
Drainage Pump No. 3 Hours	23.4	1.9	0	0	0	2	0	0	0	0				--
Total Gallons Stormwater Pumped (MG)	140.36	262.71	176.49	32.63	18.81	0.90	NA	0	0	--	--	--	631.89	105.32

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Capital Projects: Cogeneration and Alternative Energy, Account No. 72708</b>	<b>MEETING DATE: November 18, 2019</b>  <b>AGENDA ITEM NO.: 8.a.</b>
<b>RECOMMENDED ACTION:</b> Receive presentation from TerraVerde Energy, LLC, on opportunities in energy saving, use-optimization, and generation through the deployment of Distributed Energy Resources (DERs), and provide direction.	
<b>SUMMARY AND DISCUSSION:</b>  <p>At its May 22, 2017 meeting, the District Board of Directors received an update on progress toward implementing cogeneration/alternative energy projects as part of the FY 17-18 Budget Workshop. Staff presented three primary strategies for working toward achieving the District's energy goals: 1. Cogeneration, 2. Solar generation and battery storage (alternative energy), and 3. Energy efficiency measures (EEMs).</p> <p>District staff has continued to concurrently follow up on each of these strategies, working with various vendors and energy services companies (ESCOs). Specifically, on the solar generation, battery storage and energy efficiency strategies, the District is benefiting from a California Energy Commission (CEC) grant being administered by MCE ("MCE grant"). Under the terms of the MCE grant, MCE's consultant TerraVerde Energy, LLC (TerraVerde) of Larkspur, CA, evaluated the potential for energy savings, use-optimization, and generation through the deployment of Distributed Energy Resources (DERs).</p> <p>TerraVerde will present their findings and recommendations for implementing DERs at the District to the Board, and discuss different funding mechanisms including the benefits of the CEC/MCE grant that will cover some of the upfront project development costs. If the Board is interested in following up on any or all of TerraVerde's recommended DERs, the next step would be to request their assistance with the RFP process to solicit proposals from qualified vendors. Accordingly, staff recommends that the Board consider the information presented by TerraVerde, and provide direction to staff.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 2 (Build and Maintain Facilities that are Safe, Reliable, Environmental and Efficient) and Goal 3 (Alignment and Communications) of the latest Strategic Plan Update.	
<b>DEPT. MGR.: eb</b>	<b>GENERAL MANAGER: SSK</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Capital Projects: Vehicle Replacement, Account No. 73090 - Purchase of Portable Generators</b>	<b>MEETING DATE: November 18, 2019</b>  <b>AGENDA ITEM NO.: 8.b.</b>
<b>RECOMMENDED ACTION: Approve purchase of two 30 kW portable generators, and authorize the General Manager-Chief Engineer to execute a purchase order with Bay City Electric Works in the amount of \$65,773.91.</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>The FY 19-20 budget for Account No. 73090 - Vehicle Replacement, includes funds for the purchase of two (2) portable generators. District Collection System staff worked with other Field Services staff as a team to identify that two 30 kW towable diesel generators are needed. Staff then evaluated generators from 2 different vendors and determined that the Kohler model 35REOZT4 best met the evaluation criteria including technical requirements, ease of operation and maintenance, and reliability.</p> <p>Similar to prior purchases, staff worked with Sourcewell (formerly National Joint Powers Alliance (NJPA)), a public agency serving its members as a municipal contracting agency, similar to the California Department of General Services (DGS) or the Federal General Services Administration (GSA). Sourcewell contracts are nationally solicited, competitively bid, and awarded on behalf of their government and education member agencies (the District is a member).</p> <p>Staff contacted Bay City Electric Works (Livermore, CA), a Sourcewell vendor (Sourcewell contract # 120617-KOH) for equipment of this nature, and requested a proposal to supply the District with a towable 30 kW diesel generator. Although the Sourcewell negotiated price is set, staff found that the District could realize savings of approximately \$2,000 on freight and start-up costs if the District were to purchase two generators at the same time. The District has received a quote from Bay City Electric Works of \$65,773.91 for two (2) 30kW portable generators, including estimated sales tax and fees.</p> <p>The FY19-20 Vehicle Replacement Account No. 73090 has a budget amount of \$580,000 with an encumbrance of \$444,518. Staff recommends approving the purchase of two (2) 30 kW portable generators, and authorizing the General Manager-Chief Engineer to execute a purchase order with Bay City Electric Works in the amount of \$65,773.91.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
<b>BUDGET INFORMATION:</b> The FY 19-20 budget amount for Account No. 73090 - Vehicle Replacement is \$580,000 with an encumbered amount of \$444,518.	
<b>DEPT. MGR.</b> eb, jb	<b>GENERAL MANAGER:</b> SSK

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE: Capital Projects: Collection System Improvements (ARV Improvements), Account No. 72706.**

**MEETING DATE: November 18, 2019**

**AGENDA ITEMS NO.: 8.c.**

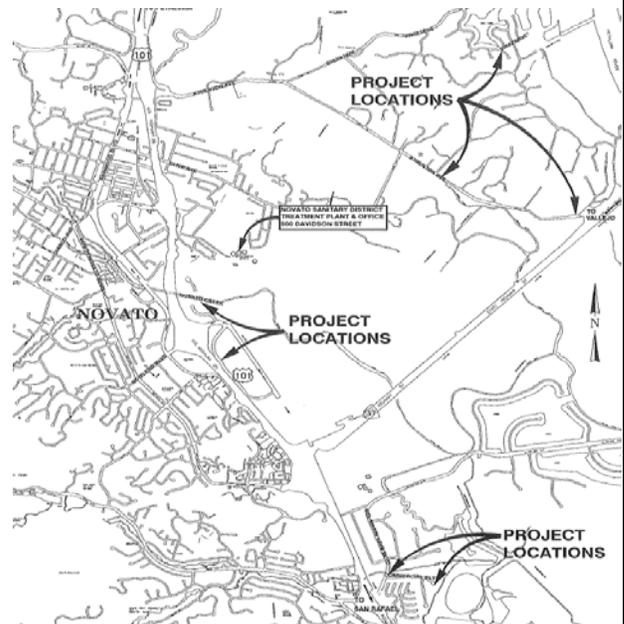
**RECOMMENDED ACTION: Make CEQA findings that the project is categorically exempt; authorize the General Manager-Chief Engineer to accept plans and specifications and advertise for bids – ARV Vault Rehabilitation Project; Project No. 72706-2019-01**

**SUMMARY AND DISCUSSION:**

District staff worked with the District’s consultant Nute Engineering to prepare plans and specifications for this project, and the project is ready for bid. The project consists of removing and replacing eleven (11) Air Relief Valve (ARV) Vaults and appurtenances at various locations throughout Novato. Work at each location includes excavation, traffic control, remove and replace vault, internal piping and ARV, and complete surface restoration. The purpose of this project is to replace the existing underground structures with larger underground structures to allow District staff to adequately maintain the ARV’s inside. Failure to adequately maintain the valve(s) may result in sanitary sewer overflows.

The Engineer’s Estimate for this work is \$350,000. Staff completed the California Environmental Quality Act (CEQA) documentation and determined that the project is categorically exempt. This determination was made because the work is considered a replacement of the existing sanitary sewer facility that will not expand the capacity of the existing sanitary sewer conveyance system.

Staff recommends that the Board authorize the General Manager-Chief Engineer to accept plans and specifications and advertise for bids. Bids are expected to be received on or about January 7, 2020, and will be presented to the Board at a subsequent meeting.



**STRATEGIC PLAN INFORMATION:** This item addresses Goal 1 (Operational Excellence) and Goal 2 (Build and Maintain Safe, Reliable, and Efficient Facilities) of the latest Strategic Plan Update.

**BUDGET INFORMATION:** This work will be funded from the budget for Account No. 72706: Collection System Improvements, which has an FY 19-20 budget amount of \$2,200,000.

**DEPT. MGR.:** eb

**GENERAL MANAGER:** SSK

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Capital Projects Update, October 2019.	<b>MEETING DATE:</b> November 18, 2019 <b>AGENDA ITEM NO.:</b> 8.d.
<b>RECOMMENDED ACTIONS:</b> Receive Capital Projects Update for October 2019.	
<b>SUMMARY AND DISCUSSION:</b>  The October 2019 Capital Projects Update is attached.  District staff will be present at the meeting to provide an overview of the memo, and be available to discuss the status of the various projects or respond to any questions.	
<b>ATTACHMENTS:</b> 1. Capital Projects Update, October 2019.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> EB	<b>GENERAL MANAGER:</b> SSK

**Novato Sanitary District  
Capital Improvement Program (CIP)  
Capital Projects Update  
October 2019**

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**Account No. 72403: Pump Station Improvements**

This ongoing, long-term account provides for replacing the District's underground-type pump stations with submersible pump-type pump stations.

1. Rowland Plaza Pump Station: Conversion of Gorman Rupp style wet well/dry well pump station to submersible pump-type station.
  - Requested proposal from Consultant to update previous plans & specs to include a permanent backup generator.
  - Estimated construction Summer 2020.
  
2. Marin Village Pump Station: Replace wetwell/drypit with new submersible pump-type station.
  - Requested proposal from Consultant for design services.
  - Estimated construction Summer 2021

**Account No. 72508: North Bay Water Reuse Authority (NBWRA)**

The District is a member agency of the North Bay Water Reuse Authority (NBWRA). FY19-20 is the sixth year of the multi-year Phase 2 program, including continuing environmental work for currently over \$75 million in recycled water projects across all NBWRA agencies for funding under the US Bureau of Reclamation Title XVI (WaterSMART) program.

- No update this period.

**Account No. 72706: Collection System Improvements**

2. Redwood Blvd. Sewer Rehab Project: Rehabilitation of about 1,850 feet of 12-inch sewer main along Redwood Blvd. between Lamont Avenue and Diablo Avenue.
  - The majority of the pipe bursting work was complete at the end of October.
  - Diablo Avenue crossing work to be performed at night to minimize impacts will commence mid-November.
  
3. Bel Marin Keys Blvd. Sewer Rehab Project: Rehabilitation of about 900 feet of 10-inch and about 1,410 feet of 8-inch sewer main in Bel Marin Keys Blvd.
  - Project is substantially complete.
  - Notice of Completion (NOC) expected to be filed in December, 2019.
  
4. Golden Gate Place Phase II: Realignment/replacement of approximately 940 feet of 8-inch sewer with new 8-inch and 10-inch PVC sewer.
  - Project approximately 40% complete at the end of October.
  - Substantial completion estimated for early December, 2019.

5. Collection System Master Plan (CSMP): Continuing work associated with the CSMP currently underway by the District's consultant Woodard and Curran (W&C):
  - The CSMP has been finalized.
  - Requested proposal from Consultant for professional services for project verification and implementation planning.
5. ARV Replacement Project: Replacement of Air Relief Valves (ARV) and modifications of their maintenance vaults at 11 separate locations throughout the system.
  - Authorization to advertise for bids for this project is being presented under a separate agenda item.
6. Vineyard Creek at Angelica Court Bank Repair:
  - Received 90% design, staff comments returned to Consultant.
  - Consultant is preparing submittal packages for various regulatory agencies' review.

#### **Account No. 72706-1: Lateral Replacement Program**

The District established this program as a sub-account within Account No. 72706, as part of a long-term approach to reducing infiltration and inflow from private residential laterals into the District's collection system.

- The FY 19-20 final budget for this account is \$60,000. Three grants totaling \$6,000 have been distributed this FY.

#### **Account No. 72707: Hamilton Wetlands/Outfall Integration**

As noted in prior years, the State Coastal Conservancy's (SCC) goal for their project is to utilize the District's effluent as a reliable, long-term fresh water source to establish and maintain a brackish marsh habitat at the SCC's Wetlands project.

- The District continued to supply secondary treated effluent to the Project per the Interagency Agreement between the District and SCC for use of reclaimed water executed on September 23, 2019.
- A groundbreaking ceremony for the project was cancelled in October due to the Kincadee fire and regional PSPS events.

#### **Account No. 72708: Cogeneration/Alt. Energy**

- The Board approved a contract with Woodard & Curran (Consultant) to develop a basis of design for a cogeneration project at the September 9, 2019 Board meeting.

Subsequently, the District has been in discussions with a fuel cell technology company who has proposed that the District consider the technology for cogeneration. Before moving forward with the design contract, the District has asked its Consultant to perform a side by side analysis of fuel cell technology as compared to microturbines and internal combustion (IC) engines that were previously studied as part of the Cogeneration Technical Memorandum.

Terra Verde Energy, LLC will be presenting on opportunities in energy saving, use-optimization, and generation, through the deployment of Distributed Energy Resources (DERs) under a separate agenda item.

**Account No. 72803: Annual Collection System Repairs**

Collection system repairs are generally reported monthly as part of the Collection System Operations report, and reported annually in the Uniform Public Construction Cost Accounting Act (UPCAA) staff report.

**Account 72804: Annual Reclamation Facilities Improvements**

Reclamation facilities improvements are generally reported monthly as part of the Reclamation Facilities Operations report and reported annually in the UPCA report.

**Account No. 72805: Annual Treatment Plant Improvements**

Treatment Plant Improvements are generally reported monthly as part of the Wastewater Operations report and reported annually in the UPCA report.

- Digester No. 1 Cleaning – At its regular meeting of August 12, 2019, the Board approved a contract with Veolia for cleaning of Digester No. 1. Veolia is working with their contractor to schedule the work.

**Account No. 72806: Annual Pump Station Improvements**

Pump station repairs are generally reported monthly as part of the Collection System Operations report, and reported annually in the UPCA report.

**Account No. 72807: Annual Ignacio Facility Improvements**

This budget account was established in FY 17-18 to fund small projects to maintain the Ignacio facility (excluding the Ignacio Transfer Pump Station), or perform demolition/site clean-up work related to the treatment units of the decommissioned Ignacio Treatment Plant (ITP).

**Account No. 72808: Strategic Plan Update:**

- No update this month.

**Account No. 72809: Novato Creek Watershed**

This account and its budget was established as a result of an agreement with the Marin County Flood Control District.

Under this agreement, the District participates in a program with the County of Marin, the City of Novato, and the North Marin Water District to explore alternatives to reduce flooding potential in the lower Novato Creek portion where all of these agencies have facilities that are prone to flood damage.

- No update this period.

### **Account No. 73003: Administration Building Upgrades/Maintenance Building**

This account includes allowances for minor improvements to the Administration Building and work associated with providing a new temporary Maintenance Building.

- Work to install electrical equipment and a power connection from the new modular building to the existing electrical service is ongoing.
- Occupancy expected January 2020.

### **Account No. 73004: Odor and Landscaping Improvements**

This account budgets for further work by District and operations staff and the District's Odor Specialist consultant(s) to address and manage any odor issues raised by the District's neighbors. It also includes an allowance to address any landscaping items.

- Work to remove overgrown vegetation and cleanup of the area around the block wall at the north end of the parking area at 500 Davidson was completed in October.

### **Account No. 73005: RWF Expansion**

This account funds the design and construction of an incremental capacity expansion to the existing Recycled Water Facility (RWF) at the Novato Treatment Plant site. This first expansion was necessitated by the planned expansion by the North Marin Water District (NMWD) of its Central Area Project, which will push NMWD's recycled water distribution pipelines into the Central Novato/Ignacio geographic areas.

- The Notice of Completion (NoC) has been filed, and the Project is in the warranty period.
- District staff are working with NMWD staff for a partial reimbursement for the Project from the Recycled Water Capital Replacement and Expansion Fund per the Third Revised Interagency Agreement for Recycled water between the District and NMWD.

### **Account No. 73006: NTP Corrosion Control**

This account includes funds for corrosion control projects at the Novato Treatment Plant site. As the recently constructed facilities age, the effects of the aggressive nature of wastewater corrosion start to appear and need to be addressed.

- The Headworks Protective Coating Project is at the 90% design level. Completion of design and advertisement for bids is expected Spring 2020, with the work to be conducted during the time of lowest influent flows in the late summer/early fall of 2020.
- Coating of UV channel #1 to begin in November.
- A coatings engineer performed a condition assessment of Primary Clarifier No. 2 in September. The report was received in October and is being reviewed by staff.

### **Account No. 73090: Vehicle Replacement**

This account includes a FY 19-20 budget amount of \$580,000 for the purchase of a combination jetter/vacuum truck (combo unit), two new portable generators, and an allotment of \$40,000 to overhaul one of the District's existing combo units.

- The Board authorized issuance of a purchase order for a new combo unit at the September 9, 2019 Board meeting. The purchase order has been issued to Owen Equipment, Inc., in the amount of \$444,517.87.
- A request to approve the purchase of two new portable generators is being presented under a separate agenda item.

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