

NOVATO SANITARY DISTRICT

Meeting Date: April 13, 2020

The Board of Directors of Novato Sanitary District will hold a regular meeting at 5:30 p.m. Monday, April 13, 2020.

NOTE: Consistent with the Governor’s Executive Orders on the Brown Act and the Bagley-Keene Act, this Board meeting will be held via Zoom® conferencing. To participate:

Join Zoom Meeting by clicking the link or copy and paste it into your browser:
<https://zoom.us/j/938463840> When prompted, enter meeting ID: 938 463 840

One tap mobile:

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+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)
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+1 301 715 8592 US
+1 312 626 6799 US (Chicago)
+1 646 558 8656 US (New York)

When prompted, enter meeting ID: 938 463 840

Public comments for this meeting can be submitted via email at info@novatosan.com. The public comment period opens when the agenda is posted online and will close two hours prior to the start of the meeting. Include your name and the item you’d like to provide written comment on. Written comments submitted will be read into the record during the Public Comment period of the Board meeting.

To provide comments during the meeting:

1. If in the Zoom teleconference, use the “raise hand” feature in Zoom. The Host will notify and unmute you when it is your turn to speak.
2. If on a phone, press *9 (“star + 9”), and the Host will notify and unmute you when it is your turn to speak.

If you experience an issue providing comments in the meeting, please email those comments to the District’s Administrative Secretary at julieh@novatosan.com

Materials related to items on this agenda that are public records, are available for public inspection in the District Office, 500 Davidson Street, Novato, during normal business hours. This agenda packet is also available on the District’s website: www.novatosan.com. Note: All times and/or 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. ***There is no public access to District facilities currently due to the COVID-19 emergency.***

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AGENDA

1. ROLL CALL:

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.**

**Note: Use the "raise hand" feature if in Zoom teleconference, or "star + 9" if on phone.*

4. REVIEW OF MINUTES:

- a. Approve minutes of the March 9, 2020 regular meeting.

5. CONSENT CALENDAR:

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

- a. Ratify/approve regular disbursements, March 10 - April 13, 2020.
- b. Ratify additional payroll and payroll related disbursements, March 2020.
- c. Receive deposit summary, March 2020.
- d. Receive Accounts Receivable (A/R) Summary Report as of March 31, 2020.
- e. Receive report on submittal of 2019 National Association of Clean Water Agencies (NACWA) Peak Performance Award Application to NACWA (information only).
- f. Authorize General Manager-Chief Engineer to approve Project Plans for Sewer Main Extension (SME) – Mosey Lane.
- g. Authorize General Manager-Chief Engineer to approve Project Plans for Sewer Main Extension (SME) – 7711 Redwood Blvd.
- h. Authorize General Manager-Chief Engineer to accept Sewer Main Extension (SME) - Atherton Place.

6. SOLID WASTE OPERATIONS (INFORMATION ONLY):

- a. Receive Recology 4th Quarter 2019 reports.
- b. Receive Recology 2019 Disposal/Diversion report.
- c. Receive Per Capita Diversion Calculation report for 2019.
- d. Receive verbal report on Marin County JPA and Local Task Force.
- e. Receive 2019 HHW Annual report.
- f. Receive 2020 Household Hazardous Waste (HHW) and E-Waste report.

7. WASTEWATER OPERATIONS (INFORMATION ONLY):

- a. Receive Wastewater Operations Report, March 2020:
 - i. Collection Systems
 - ii. Treatment Facilities
 - iii. Reclamation Facilities

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8. CAPITAL PROJECTS:

- a. *Collection System Improvements, Account No. 72706 – Redwood Blvd Sewer Rehabilitation Project:* Approve Change Orders in the amount of \$93,510.50, grant Final Acceptance of the Project, and authorize staff to file Notice of Completion (NoC).
- b. *Cogeneration/Alt. Energy, Account No. 72708:* Approve an amended contract with Woodard & Curran, Inc. in the not-to-exceed amount of \$66,000 for engineering services related to a cogeneration system, and authorize the General Manager-Chief Engineer to execute it.
- c. Receive Capital Projects Update, March 2020 (information only).

9. ANNUAL BUDGET:

- a. In light of the COVID-19 emergency, provide direction on implementing an average Sewer Service Charge (SSC) increase of \$21/EDU* from \$636/EDU in fiscal year (FY) 19-20 to \$657/EDU in FY 20-21 as previously set by District Ordinance No. 120 – “An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21”. (*EDU = Equivalent Dwelling Unit).
- b. Set the date of June 8, 2020 for a public hearing on individual sewer service charges, and adoption of a resolution confirming report on sewer service charges and collection on County tax rolls.
- c. Receive Schedule of Committee meetings to review Annual Solid Waste, Operating, and Capital Improvements Program (CIP) Budgets.
- d. Receive overview of updated FY 20-22 Preliminary Capital Improvements Program (CIP).

10. BOARD MEMBER REPORTS AND REQUESTS:

11. GENERAL MANAGER’S REPORT AND ANNOUNCEMENTS:

12. ADJOURN:

Next Resolution No. 3142.

Next regular meeting date: Monday, May 11, 2020, 5:30 p.m.

Meeting location: Novato Sanitary District office, 500 Davidson Street, Novato, CA, (or via Zoom® conferencing, depending on the COVID-19 situation).

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the District at (415) 892-1694 at least 24 hours prior to the meeting. Notification prior to the meeting will enable the District to make reasonable accommodation to help ensure accessibility to this meeting.

NOVATO SANITARY DISTRICT

Board Meeting Minutes

Meeting Date: March 9, 2020

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, March 9, 2020, at the District Office, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: Directors Tim Fuelle, William Long, Jean Mariani, and Jerry Peters. President Carole Dillon-Knutson arrived at 5:35 p.m.

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

ALSO PRESENT: John O'Hare, Project Manager, Veolia
Laura Creamer, Finance Officer, Novato Sanitary District
Dale Thrasher, Administrative Services Officer, Novato Sanitary District
Jeff Boehm, Field Services Manager, Novato Sanitary District
Jeff Andress, Collection System Superintendent, Novato Sanitary District
Mitch Barker, Executive Vice President, Public Agency Retirement Services (PARS)
Angela Tang, Client Services Coordinator, PARS
Andrew Brown, Director & Senior Portfolio Manager, Highmark Capital
Jonathan Kevles, Ameresco

Due to the absence of President Dillon-Knutson, President Pro-Tem William Long began the meeting at 5:30 p.m.

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

REVIEW OF MINUTES:

- Consider approval of minutes of the Feb 10, 2020 regular meeting. Director Fuelle requested that the following changes be made to page 4, paragraph 5, line 2: ...Committee meeting in December as ***well as the January meeting, in which participants reviewed the proposed by-laws, voted and approved the chapter formation.***

On motion of Director Peters, seconded by Director Fuelle, and carried unanimously by those Directors present, the February 10, 2020 Regular Board meeting minutes were approved as amended.

- Consider approval of minutes of the February 13, 2020 special meeting.

On motion of Director Peters, seconded by Director Fvette, and carried unanimously by those Directors present, the February 13, 2020 Special Board meeting minutes were approved.

CONSENT CALENDAR:

President Pro-Tem William Long called for a motion on the Consent Calendar items as follows:

- a. Approve Board member disbursements in the amount of \$2,555.68, capital project disbursements in the amount of \$49,083.02, and regular disbursements in the amount of \$316,677.34. Ratification of February 24th capital project disbursements in the amount of \$216,247.28, and regular disbursements in the amount of \$102,851.23.
- b. Ratification of February payroll and payroll related disbursements in the amount of \$290,436.77.
- c. Receive deposit summary, February 2020.
- d. Receive report on the District's Government Compensation in California (GCC) statement for Calendar Year 2019, as filed with State Controller's Office (SCO).
- e. Receive Proposed Schedule for Approval of Preliminary and Final Budget, Appropriations Limit, and Sewer Service Charges.
- f. Receive and accept Sewer Main Extension (SME) – 801 State Access Road.
- g. Receive and accept Sewer Main Extension (SME) – Oakmont Senior Living (OSL) of Novato, Johnson Street.
- h. Approve promotion of Liam O'Sullivan from Collection System Worker I to Collection System Worker II.
- i. Receive report on payment of \$14,081 to Sonoma County Water Agency (SCWA) as the District's Fiscal Year (FY) 2019-20 share of the cost of the NBWRA Phase 2 Feasibility Study – information only.
- j. Receive report on write-off of uncollectible receivable in the amount of \$51,142.59 from prior lessee on ranch lease – information only.
- k. Authorize the General Manager-Chief Engineer to approve an application from Golden Gate Bridge Highway and Transportation District and issue a one-time, temporary, Class I, non-domestic discharge permit for discharge of groundwater from a groundwater remediation and soil extraction project, at the Novato Bus Maintenance Facility, 801 Golden Gate Place, Novato.

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

President Dillon-Knutson arrived at 5:35 p.m.

ADMINISTRATION/FINANCE:

- Receive update on the District's combined Post-Employment Benefits Trust (PEBT) from Public Agency Retirement Services (PARS) representatives.

- Receive information on the District's outstanding Other Post-Employment Benefits (OPEB) liability and optional additional prefunding of this liability beyond current levels; and provide direction, if any.

The General Manager discussed the District's Other Post-Employment Benefits (OPEB) account balances, the GASB 75 and GASB 68 accounts, providing current 1-year and annualized 3-year investment returns. He stated that as of June 30, 2019, the District had a Net OPEB liability of \$3,134,046. He stated that staff was aware of at least two local Marin County sanitary districts that have decided to fully fund their OPEB or pension liabilities from their available cash balances/reserve funds. The General Manager continued, stating that the District's cash balance/reserve funds are held in its Local Agency Investment Fund (LAIF) account managed by the State Treasurer, and he reported that the account balance as of February 29, 2020 was \$25,526,234.

The General Manager introduced the PARS representatives Mitch Barker and Angela Tang, and High Mark Capital representative Andrew Brown, and stated that they would provide a PowerPoint presentation to further discuss the District's PARS trust account. He suggested the Board query the PARS representatives for PARS' knowledge and experience with PARS agencies that are attempting to fully fund their OPEB accounts, and for any recommendations that PARS would have for the District. The General Manager stated that after the presentation, it was recommended that the Board provide direction, if any, on optional additional funding of the OPEB liability sub-account of the District's PARS-PEBT account beyond current levels.

Mr. Barker and Ms. Tang, began the presentation and provided an overview of the District's OPEB and Pension sub-accounts within the PARS PEBT. Mr. Brown then discussed the portfolios within the sub-accounts, the objectives and asset allocation into individual funds, and highlights of the funds' performance. After the presentation, discussion followed between the Board, the General Manager, the PARS representatives and the High Mark Capital representative. The General Manager discussed the benefits and advantages of fully funding the District's liability accounts. He suggested that the District could approach the funding in two ways: transfer the amount to fully fund the liabilities from the current balance in the District's Local Agency Investment Fund (LAIF) account, or set-up the District's upcoming fiscal year (FY) 20-21 budget to fund the accounts more aggressively over a designated time period. The Board discussed these options with the General Manager and the PARS representatives, and expressed their desire to fully fund the OPEB sub-account in the FY 20-21 budget year. It was also suggested that the PARS representatives and the High Mark Capital representative provide a follow-up presentation at a future Board meeting to review the strategy to move forward with aggressively funding the OPEB sub-account.

On motion of Director Long, seconded by Director Mariani, and carried unanimously, the Board directed the General Manager-Chief Engineer to prepare a Resolution for Board approval to direct the District's prefunding of the Other Post-Employment Benefits (OPEB) liability sub-account of the District's PARS-PEBT account beyond current levels.

At 6:41 p.m., President Dillon-Knutson declared a short recess.

At 6:52 p.m., President Dillon-Knutson resumed the Board meeting.

WASTEWATER OPERATIONS:

- Receive status update on renewal of the District's National Pollution Elimination Discharge System (NPDES) permit ("discharge permit") – information only. The General Manager

provided an overview of the Districts NPDES or “discharge permit”, stating that it is one of the most significant operating permits at the District. He stated that the wastewater treatment facility is currently a seasonal Bay discharger with a dry-season discharge prohibition, and that the San Francisco Bay Regional Water Quality Control Board (SF Water Board) was preparing a draft permit which would shift the District from a seasonal to a year-round discharger. He stated that this would be a very positive move, and spoke to the SF Water Board’s acknowledgement of the treated water quality advances made by the District with its investments in advanced secondary treatment over the past two decades. He stated that this was an informational item.

The General Manager pointed out a typographical error in the summary page for this agenda item (page 42 of Agenda Packet), second paragraph: *In ~~September~~ November 2019, the District submitted...*

- Receive Wastewater Operations Reports, February 2020.

Collection System Report: Collection System Superintendent Jeff Andress provided the Collections System Report for February 2020. He began by stating that the Collection Department cleaned 51,423 lineal feet of sewer pipelines, and televised 10,786 feet of sewer main. He noted that CCTV (closed circuit TV) work did not identify any new structural damages or areas that would require a change in sewer line maintenance operations. He stated that staff completed 272 maintenance work orders, leaving zero work orders outstanding. Further, he noted that staff conducted 157 lift station inspections and completed maintenance inspections on seven (7) air relief/vacuum valves.

The Collection System Superintendent then outlined the training provided in February, noting that the Collection Department staff attended four (4) safety tailgate meetings, and participated in a First Aid/AED/CPR training event. He stated that there were no lost time accidents in the month, and concluded the report, stating that there were no sanitary sewer overflows in February.

Treatment Facilities Report: Veolia Project Manager John O’Hare provided the February 2020 Treatment Facilities Monthly Operations Report (MOR). He reviewed the treatment plant performance, stating that February’s average flow was 4.22 MGD (million gallons per day), and that the Recycled Water Facility (RWF) produced 0.638 million gallons of recycled water. He stated that there was one violation on February 4th when the digester flare temperature fell below the minimum permit temperature of 1,400 degrees for 17 minutes. He stated that the root cause was a reduction in gas flow due to rapid excessive supernating from digester #2.

The Project Manager then outlined training events attended by Veolia staff in February. 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. He discussed pretreatment and pollution prevention activities, and concluded his report, stating that no odor contacts were received in February.

Reclamation Facilities Report: Field Services Manager Jeff Boheim summarized the Reclamation Facilities report for February 2020. He stated that the treatment plant was in bay discharge mode throughout the month, and that District drainage pump stations at Sites

3 and 7 pumped approximately 23 MG (million gallons) combined. He stated that District staff met with Auburn Ravine Ranch on February 20th to discuss the previous and upcoming ranching seasons, and he concluded his report, stating that there were no ranching activities, no irrigation, and no biosolids activities in the District reclamation area in February.

CAPITAL PROJECTS:

- Cogeneration/Alt. Energy, Account No. 72708 – Novato Treatment Plant (NTP) Solar Project: Approve an agreement with Environmental Science Associates (ESA) in the not-to-exceed amount of \$70,074 for CEQA consulting services related to the NTP Solar Project and authorize the General Manager-Chief Engineer to execute it. The General Manager stated that at the Special Board meeting of November 18, 2019, the Board received a presentation from the District's independent energy advisory consultant, TerraVerde Energy LLC (Terra Verde) on opportunities in energy savings, use optimization, and generation through the deployment of Distributed Energy Resources (DERs). He stated that upon discussion at that meeting, the Board gave direction to staff to move forward with the recommended DERs including development of a request for proposals (RFP) to solicit proposals from qualified vendors for a solar PV and battery storage system.

The General Manager continued, stating that Terra Verde had developed a draft RFP for a project which will include up to a 0.95MW solar facility, including approximately 500 kilowatts of battery storage. Subsequently, District staff requested a proposal from Environmental Science Associates (ESA), to provide professional services related to preparing environmental review documents for the proposed project. He stated that ESA submitted a proposal in the amount of \$70,074, and he recommended that the Board authorize the General Manager-Chief Engineer to approve the agreement for professional services.

Director Long asked as to how the current solar project concept integrates with the District's future co-generation project. The General Manager responded that the concepts are separate at this time, but as the District moves forward with the design for the co-gen project, and the RFP for the solar project, the two projects will integrate together. Director Long stated that he wanted to know what the 'pay-back' was for the project: What will our power cost savings be (through PG&E) versus how much will the District need to invest to provide the same amount of power through solar panels. The General Manager noted that while he did not recall that specific information, it had been presented by Terra Verde at the special Board meeting on November 18, 2019, and that Terra Verde had recommended the project as being worthwhile for the District, in terms of the payback for the project.

Director Mariani stated that, as per her recollection, the payback was one issue, but the certainty of not having to rely on PG&E for our power source was also a concern, in light of the PSPS (Public Service Power Shutdown) events. The General Manager stated that having the ability to generate power through a solar project would mean having to rely less on the District's diesel generators during PSPS events.

Director Long questioned at what point the Board sees firm numbers on the cost for the solar battery installation vs. how much the savings will be realized from not using PG&E power. The General Manager stated that a preliminary level, the Board was presented with those numbers during Terra Verde's presentation. He stated that once the District receives the RFPs and proposals, staff would be able to provide a further analysis that is more than

preliminary and that should provide a better picture of any savings. He stated that the information the District has been provided so far indicates that solar power and/or co-generation projects make economic sense for the District. Director Mariani stated that this speaks to the point that there will be periods of time in the future when there is no power from the grid, and at that point, there will be a different cost benefit analysis than if the District always had PG&E power.

Director Long stated that the District could generate a lot of power from the integration of solar energy and co-generation. He stated that if the District's additional power demand was beyond what co-generation could supply, solar energy should be considered, if the costs were nominal. He stated that the proposed solar project was a big price to pay for a little bit of extra capacity if the pay-out period for the solar energy was 15 to 20 years. Director Long stated that he would abstain from the vote because he felt the decision to move forward with the proposed project was premature in the absence of a plan to integrate the proposed solar power system with the co-generation system. He stated that he would like to see a complete program for the District's future power generation.

The General Manager stated that until the final sizing of the co-generation and the solar projects is determined, each project will have its own economic features. Also, he asked, how do you value locally-sourced power when grid power is unavailable, as in a PSPS, and you need power? Separately, he noted that the preliminary work of the cogeneration project Technical Memorandum by Woodard and Curran indicated that the pay-back period was in the 13 to 20 year range, depending on how the cogeneration project was sized.

On motion of Director Peters, seconded by Director Fvette, and carried with the following vote, the Board approved the agreement with Environmental Science Associates (ESA) in the not-to-exceed amount of \$70,074 for CEQA consulting services related to the NTP Solar Project, and authorized staff to execute it. Ayes: Dillon-Knutson, Fvette, Mariani, Peters. Abstain: Long

Director Long abstained, stating that he felt the decision was premature in the absence of a complete program for the District's future power generation.

- Receive Capital Projects Update, February 2020. The General Manager stated that since the Deputy General Manager was absent, he would provide the Capital Projects Update. The General Manager provided an update of the current capital projects involved with the Capital Improvement Program (CIP) at the District.

President Dillon-Knutson requested a tour of the annex building, and the other Directors expressed their interest in a tour as well. The General Manager stated that he would schedule a walk-through of the new modular building for the Directors at a future meeting.

GENERAL MANAGER'S REPORTS AND ANNOUNCEMENTS:

- Receive report on recent meeting with Novato City Manager Adam McGill, subsequent to direction provided by City Council to him to explore a transfer of the District's solid waste franchise to the City – information only. The General Manager stated that this was an informational item, and that the agenda summary provided the details of his recent meeting with Novato City Manager Adam McGill regarding the City Council's desire to transfer the

District's solid waste franchise to the City of Novato. Discussion followed. The General Manager noted that he had suggested to Mr. McGill that it may be helpful for Novato City Manager Adam McGill to make a formal proposal to the Board to clarify details of the City's legal, administrative, and jurisdictional rights and abilities to hold the solid waste franchise. At the close of discussion, the Board directed the General Manager to move ahead with the process, and seek a formal proposal including additional information from the Novato City Manager to clarify if the City of Novato has the legal rights to collect solid waste within the City of Novato.

- BOARD MEMBER REPORTS AND REQUESTS:

- North Bay Watershed Association (NBWA) meeting, March 6, 2020. Director Mariani discussed her attendance at the NBWA meeting, held at the Napa Sanitation District on March 6th. She discussed a presentation that was given by Armando Quintero, Chairman of the California Water Commission. Director Mariani also stated that the NBWA Annual Conference scheduled for April 3rd at the Petaluma Sheraton, may be cancelled due to the current Corona Virus outbreak. She will notify the District's Administrative Secretary if the conference is cancelled.

Director Mariani commented on a water rate increase hearing held at North Marin Water District, stating that the presentation contained very good information.

Director Fuelle stated that he also attended the hearing held at North Marin Water District. He also stated that CSDA (California Special Districts Association) is offering a Core Governance training conference in San Diego, and that he would like to attend it in lieu of attending the California Association of Sanitation Agencies (CASA) summer conference. Directors Long and Mariani said that Director Fuelle should attend both conferences.

Director Long discussed his attendance at the CASA Legislative conference, February 23-26, in Washington DC. He outlined the presentations and discussed the issues that were brought before the congressional body.

GENERAL MANAGER'S REPORTS AND ANNOUNCEMENTS:

- Reports:
 - The District is beginning the FY 20-21 budget approval process, and the regular Standing Committees will be meeting to provide applicable budget review. He asked that the Directors hold open the applicable meeting dates in their individual calendars as referenced in Consent Calendar item 5.e., except that since May 25th is Memorial Day, the Wastewater Operations Committee would meet May 26th.
 - The District is following the COVID-19 situation closely. The District's Safety Officer, Dale Thrasher, and all senior staff are maintaining situational awareness on the issue. The General Manager will retain the ability to modify the District's operations based on information from the County Health Department and other emergency agencies, and State and Federal agencies.

- All Board Members are required to complete a Form 700, which is then to be returned to the District office no later than March 25, 2020, for submission to the Marin County Registrar of Voters by the due date of April 1, 2020.

- Announcements:

- The next regular Board meeting will take place on April 13th, at 5:30 p.m.

ADJOURNMENT: There being no further business to come before the Board, President Dillon-Knutson adjourned the meeting at 8:22 p.m.

Respectfully submitted,

Sandeep Karkal
Secretary

Julie Hoover, Recording

DRAFT

**Novato Sanitary District
Board Fees**
For March 2020

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Apr 10, 20			
04/10/2020	6589	Dillon-Knutson-, Carole	407.79
04/10/2020	6590	Fuette, Timothy G	207.79
04/10/2020	6591	Long, William C	292.79
04/10/2020	6592	Mariani, Jean M	502.58
04/10/2020	6593	Peters, Arthur Gerald	107.79
			<hr/>
Apr 10, 20			<u>1,518.74</u>

Novato Sanitary District Operating Check Register

March 23, 2020

Date	Num	Name	Credit
Mar 23, 20			
03/23/2020	63920	Pacific, Gas & Electric	61,236.18
03/23/2020	63923	Stericycle	58,960.37
03/23/2020	63927	Wedge Roofing Inc.	4,500.00
03/23/2020	63906	Caltest Analytical Lab Inc.	3,053.60
03/23/2020	63919	Pac Machine Company Inc	2,907.80
03/23/2020	63909	DLT Solutions Inc.	2,552.51
03/23/2020	63926	WECO	1,389.73
03/23/2020	63918	North Marin Water District Payroll	1,288.71
03/23/2020	63914	IEDA, INC	1,268.00
03/23/2020	63901	B.W.S. Distributors, Inc.	1,064.88
03/23/2020	63921	Recology Sonoma Marin	681.11
03/23/2020	63912	Frontier California Inc EQ	538.14
03/23/2020	63905	Cagwin & Dorward Inc.	475.00
03/23/2020	63910	Evoqua Water Technologies - ...	338.23
03/23/2020	DD	Fuette, Timothy	322.80
03/23/2020	63908	CWEAmembers	281.00
03/23/2020	63915	McMaster-Carr Supply Co.	260.12
03/23/2020	63903	BoundTree Medical, LLC	259.98
03/23/2020	63907	Cantarutti Electric, Inc	237.00
03/23/2020	63924	UniFirst Corporation	217.37
03/23/2020	63916	Medical Center of Marin-Novato	158.00
03/23/2020	63917	North Marin Water District	133.01
03/23/2020	63925	VWR International Inc.	104.08
03/23/2020	63922	Staples Advantage	92.38
03/23/2020	63913	Grainger	82.63
03/23/2020	63904	Buck's Saw Service, Inc.	54.24
03/23/2020	63902	Barnett Medical LLC	45.00
03/23/2020	63911	First Alarm	42.34
Mar 23, 20			<u>142,544.21</u>

Novato Sanitary District Operating Check Register

April 13, 2020

Date	Num	Name	Credit
Apr 13, 20			
04/13/2020	63968	Veolia Water North America, Inc.	183,398.83
04/13/2020	63969	Veolia Water North America, Lab	30,778.56
04/13/2020	63951	Miksis Services Inc	19,970.00
04/13/2020	63957	PARS-PSRP-Post Employment...	15,056.63
04/13/2020	63935	Citi Visa (Costco)	12,602.41
04/13/2020	63970	Veolia Water Recycled Water ...	8,407.72
04/13/2020	63956	PARS-OPEB-Post Employment...	8,370.51
04/13/2020	63963	SmartCover Systems, Inc.	7,398.22
04/13/2020	63947	Johnson, Dee	7,380.00
04/13/2020	63973	WECO	6,409.03
04/13/2020	63976	Woodard & Curran formerly RMC	6,275.50
04/13/2020	63934	CDW Government, Inc.	4,730.83
04/13/2020	63967	United Rentals	4,262.71
04/13/2020	63942	Eco Promotional Products, Inc	3,466.54
04/13/2020	63941	Delta Dental	2,922.44
04/13/2020	63939	Dearborn Life	2,774.85
04/13/2020	63949	Linscott Engineering Contracto...	2,602.45
04/13/2020	63961	Ross Valley Sanitary District-	2,546.00
04/13/2020	63940	Dell Computers	2,387.88
04/13/2020	63960	Rauch Communication Consult...	2,016.75
04/13/2020	63975	Willdan Financial Services	1,700.00
04/13/2020	63952	North Marin Water District	1,260.65
04/13/2020	63962	Siemens Industry	1,043.77
04/13/2020	63953	North Marin Water District - Lab	982.00
04/13/2020	63945	IDEXX Distributing Corp.	827.57
04/13/2020	63928	Able Tire & Brake Inc.	706.67
04/13/2020	63937	CWEAmembers	665.00
04/13/2020	63974	WEF Membership	664.00
04/13/2020	63929	Alpha Analytical Lab, Inc.	656.00
04/13/2020	63971	Vision Service Plan	548.83
04/13/2020	63965	U.S. Bank Equipment Finance	540.16
04/13/2020	63933	Brown, Erik.	463.32
04/13/2020	63959	Pini Hardware	357.53
04/13/2020	63936	Claremont EAP, Inc.	250.00
04/13/2020	63943	Frontier Communications 897-3...	236.97
04/13/2020	63938	Datco Billing Inc.	234.00
04/13/2020	63966	UniFirst Corporation	224.24
04/13/2020	63932	Bill's of Tiburon	175.00
04/13/2020	63955	O'Reilly Auto Parts	156.39
04/13/2020	63931	Barnett Medical LLC	135.00
04/13/2020	63946	Jim-n-i Rentals Inc.	130.20
04/13/2020	63954	Novato Builders Supply	109.06
04/13/2020	63944	Grainger	103.99
04/13/2020	63950	Marin County Ford	73.69
04/13/2020	63958	Peters, Jerry Brd Member	71.99
04/13/2020	63930	B.W.S. Distributors, Inc.	62.05
04/13/2020	63972	Water Components & Building, ...	58.67
04/13/2020	63964	Staples Advantage	51.94
04/13/2020	63948	Leonardi Automotive & Electric,...	47.96
Apr 13, 20			<u>346,294.51</u>

Novato Sanitary District Capital Projects Check Register

March 23, 2020

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Mar 23, 20			
03/23/2020	3615	Nute Engineering Inc.	7,366.75
03/23/2020	3613	Linscott Engineering Contr...	4,394.24
03/23/2020	3611	Cantarutti Electric, Inc	2,850.00
03/23/2020	3616	World Oil Services	425.00
03/23/2020	3612	Jim-n-i Rentals Inc.	195.30
03/23/2020	3614	NorthBay Reprographics	45.78
Mar 23, 20			<u>15,277.07</u>

Novato Sanitary District Capital Projects Check Register

April 13, 2020

Date	Num	Name	Credit
Apr 13, 20			
04/13/2020	3622	Novato, City	17,250.00
04/13/2020	3618	GHD Inc.	15,056.50
04/13/2020	3621	Marin H2O Inc.-	11,299.82
04/13/2020	3623	Nute Engineering Inc.	11,210.25
04/13/2020	3620	Linscott Engineering Contr...	10,903.39
04/13/2020	3624	Roy's Sewer Service, Inc.	9,800.00
04/13/2020	3625	Shape Incorporated	5,955.18
04/13/2020	3617	Dahl-Beck Electric	5,428.25
04/13/2020	3619	Lateral-Jones	2,000.00
Apr 13, 20			<u>88,903.39</u>

**Novato Sanitary District
Payroll and Payroll Related Disbursements
March - 2020**

Item 5.b.

Date	Description	Amount
03/31/2020	Payroll for March	126,523.35
03/20/2020	Retirees Health Reimbursement	13,553.54
03/31/2020	Eft-Federal P/R Taxes	26,610.56
03/31/2020	Eft-State P/R Taxes	8,104.07
03/20/2020	California State Disbursement Unit	571.00
03/20/2020	CalPERS 457 Plan	10,225.00
03/20/2020	CALPERS Retirement	12,471.60
03/20/2020	CalPers Health	30,223.40
03/20/2020	CALPERS Retirement	15,630.46
03/20/2020	Lincoln Financial Group	9,503.69
03/20/2020	Lincoln Financial Group-401a Plan	5,116.20
03/20/2020	Lincoln Financial Group 457 Roth	100.00
03/20/2020	Local Union 315	480.00
03/20/2020	ICMA-RC-Vantagepoint	1,607.89
03/20/2020	Lincoln Financial Group-401a Plan	4,030.55
03/20/2020	PARS-OPEB-Post Employment Benefits Trust	8,370.51
03/20/2020	PARS-PSRP-Post Employment Benefits Trust	15,056.63
Total for March 2020		288,178.45

**Novato Sanitary District
Deposit Detail-March 2020**

Item 5.c.

Type	Date	Name	Account	Amount
Deposit	03/10/2020		11113 · Westamerica - Operations	
		Roto Rooter	41040 · Permit & Inspection Fee	40.00
		County of Marin	51015 · Property Taxes	476.81
		Calvert, Rachel	41040 · Permit & Inspection Fee	40.00
		FP Builders	41030 · Plan Check & Inspection Fee	1,764.00
		FP Builders	51020 · Connection Charges	4,752.00
		Golden Gate Bridge, Hwy & Trans -	41090 · Non-domestic Permit Fees	175.00
		Sewer Connection	41040 · Permit & Inspection Fee	40.00
		Sewer Tek	41040 · Permit & Inspection Fee	40.00
		Peter Levi Plumbing	41040 · Permit & Inspection Fee	40.00
		Long, William C	69170 · Board Travel & Training	21.28
		Novato Fire Protection	11200- Accounts Receivable	(1) 8,143.98
		Novato Charter School	11200- Accounts Receivable	(1) 2,480.39
		Homeward Bound	11200- Accounts Receivable	(1) 11,635.62
TOTAL				29,649.08
Deposit	03/13/2020	USCG	11200-Accounts Receivable	16,431.20
Deposit	03/16/2020	Pipe Spy Marin	41040 · Permit & Inspection Fee	40.00
		EWSF Inc	51020 · Connection Charges	11,880.00
		Sheedy, Patrick	41040 · Permit & Inspection Fee	40.00
		County of Marin	51015 · Property Taxes	106.17
		County of Marin	51015 · Property Taxes	6,907.75
		Indian Valley College	11200- Accounts Receivable	(1) 31,421.58
		Novato Unified School District	11200- Accounts Receivable	(1) 112,432.08
				162,827.58
Deposit	03/17/2020	Marin County Free Library	11200- Accounts Receivable	(1) 1,729.92
		Bel Marin Keys CDS	11200- Accounts Receivable	(1) 429.30
		Marin County Housing Auth	11200- Accounts Receivable	(1) 12,720.00
		P,G & E	11200- Accounts Receivable	(1) 12.72
TOTAL				14,891.94
Deposit	03/24/2020	Sewer Connection	41040 · Permit & Inspection Fee	40.00
		Golden Gate Veterinary Compounding Pharm	11200- Accounts Receivable	(2) 1,719.80
		Frontier California, Inc.	11200- Accounts Receivable	(1) 4,149.90
		Golden Gate Bridge, Hwy & Trans -	11200- Accounts Receivable	(1) 1,011.24
		AT & T	11200- Accounts Receivable	(1) 1,297.44
TOTAL				8,218.38
Deposit	03/27/2020	Novato Children's Center	11200- Accounts Receivable	(1) 1,125.72
		North Marin Water District-	11200 - Accounts Receivable	(1) 2,267.34
		North Marin Water District-	11200- Accounts Receivable	(3) 10,993.79
TOTAL				14,386.85
Deposit	03/31/2020	Alpha Trenchless	41040 · Permit & Inspection Fee	40.00
		Roto Rooter	11200- Accounts Receivable	686.55
		Marin Municipal Water District-	11200- Accounts Receivable	(1) 5,510.94
		Novato Community Hospital	11200- Accounts Receivable	(1) 30,985.92
TOTAL				37,223.41
			Total Deposits for March 2020	267,197.24
(1)	Collection of non-tax roll sewer service charges for second half of FY19-20.			
(2)	Collection of non-domestic permit and discharge fees from Golden Gate Vet Pharmacy.			
(3)	Collection of Recycled Water Facility billing for December and January of FY19/20 from North Marin Water District.			

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: Accounts Receivable Aging Summary for the Period Ended March 31, 2020.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 5.d.
RECOMMENDED ACTION: Receive Accounts Receivable Report as of March 31, 2020.	
SUMMARY AND DISCUSSION: The attached Accounts Receivable Summary shows the following receivables as of March 31, 2020: <u>1-45 days</u> - <u>\$61,844</u> : Current. <u>46-120 days</u> - <u>\$262</u> : Considered collectible. <u>120+ days</u> - <u>\$0</u> : None.	
ATTACHMENTS: 1. Accounts Receivable (A/R) Aging Summary.	
STRATEGIC PLAN INFORMATION: This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
DEPT. MGR.: lmc, ssk	GENERAL MANAGER: SSK

Novato Sanitary District
A/R Aging Summary
As of March 31, 2020

Item 5.d.
Attachment 1

	<u>Current</u>	<u>46 - 120</u>	<u>> 120</u>	<u>TOTAL</u>
Arcadis, U.S.	7,373.47	0.00	0.00	7,373.47 (1)
Biomarin	0.00	250.00	0.00	250.00 (1)
City of Novato	30,728.34	0.00	0.00	30,728.34 (2)
City of Novato - Used Oil Grant	15,060.00	0.00	0.00	15,060.00 (3)
Indian Valley Golf Course	8,357.04	0.00	0.00	8,357.04 (2)
P,G & E	0.00	12.72	0.00	12.72 (2)
Recology	325.00	0.00	0.00	325.00 (4)
TOTAL	<u>61,843.85</u>	<u>262.72</u>	<u>0.00</u>	<u>62,106.57</u>

- (1) Lab permit fees for Biomarin and sewer service discharge and permit fees for Arcadis, U.S.
- (2) Non-tax roll second semi-annual billings of sewer service charges.
- (3) Billing for Used Oil Grant reimbursed through the City of Novato for FY 19-20.
- (4) Billing for reimbursement from Recology for remaining cost of the FY 19-20 rate study.

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: National Association of Clean Water Agencies (NACWA) Peak Platinum8 Award Application.	MEETING DATE: April 13, 2020. AGENDA ITEM NO.: 5.e.
RECOMMENDED ACTION: Receive report on submittal of 2019 National Association of Clean Water Agencies (NACWA) Peak Performance Award Application to NACWA (<u>information only</u>).	
SUMMARY AND DISCUSSION: The District timely submitted its application to the National Association of Clean Water Agencies (NACWA) for NACWA’s Peak Platinum8 Performance Award. The application represents the District’s eighth year with no NPDES violations (Peak Platinum8 level). This is the fourth year in a row that the District has applied for this award; required data on the District, including its NPDES permit requirements are on file with NACWA. As a reminder, only treatment facilities that have no (zero) violations of their National Pollution Discharge Elimination System (NPDES) permits for five (5) years or greater, are eligible to be considered for NACWA’s Platinum Awards.	
STRATEGIC PLAN INFORMATION: This item addresses Goal 1 (Operational Excellence) and Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.	
DEPT. MGR.: jo (Veolia), eb	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: Mosey Lane SME. Approval of Sewer Main Extension project plans.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 5.f.
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RECOMMENDED ACTION: Authorize the General Manager-Chief Engineer to approve Project Plans for a Sewer Main Extension (SME) – Mosey Lane.

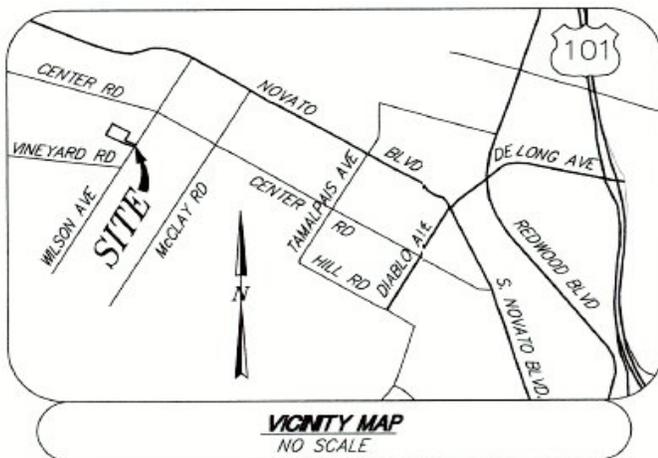
SUMMARY AND DISCUSSION:

This sewer main extension (SME) project is located three parcels West of the intersection of Center Road and Wilson Avenue. The project is a Land Division of an existing 0.83 acre parcel into a three lots with an access driveway.

A new Sanitary Sewer Easement, (SSE) has been provided for on the Land Division's Parcel Map. A separate Grant of Easement will also be provided to the District at a later date. Due to the COVID-19 Shelter-in-Place order, the Project is unable to record any documents with the Marin County Recorder. However, with a signed Grant of Easement, the Board may accept the SSE at any time in the future.

The Construction Elements of the proposed Sewer Main Extension are as follows:

- 1 ea. new standard rodding inlet.
- 1 ea. new standard manhole.
- 245 lineal feet of new 8" PVC Public sewer
- 45 lineal feet of new 4" PVC lateral sewer



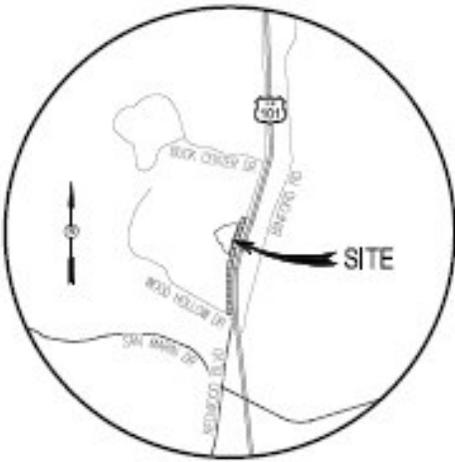
Staff recommends the Board authorize the General Manager-Chief Engineer to approve the Project Plans.

STRATEGIC PLAN INFORMATION: This item addresses Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.

BUDGET INFORMATION: This SME project will increase the District's net assets (exclusive of easements) by approximately \$58,800.

DEPT. MGR.: eb	GENERAL MANAGER: SSK
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NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: 7711 Redwood Blvd – Approve Plans for Sewer Main Extension (SME).	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 5.g.
RECOMMENDED ACTION: Authorize the General Manager-Chief Engineer to approve Project Plans for Sewer Main Extension (SME) - 7711 Redwood Blvd.	
SUMMARY AND DISCUSSION: <p>This sewer main extension (SME) project is located along Redwood Blvd. south of the Redwood Blvd Pump Station.</p> <p>The project proposes to construct an eight-inch sewer main along Redwood Blvd to serve an 80-unit Condo project located at 7711 Redwood Blvd. The proposed sewer main improvements will reside within the public right-of-way of Redwood Blvd.</p> <p>The District created Special Benefit Zone 18 in 2003, which includes the project parcel. The project will pay the SBZ assessment prior to issuance of a SME permit.</p> <p>The construction elements of the installed sewer main extension are as follows:</p> <ul style="list-style-type: none"> • 3 ea. new 48-inch diameter manholes • 733 lineal feet of new 12-inch PVC sewer main • 1 ea. remodeled existing manholes <p>Staff recommends the Board authorize the General Manager-Chief Engineer to approve the Project Plans.</p> <div style="text-align: center; margin: 10px 0;">  <p>VICINITY MAP NOT TO SCALE</p> </div>	
STRATEGIC PLAN INFORMATION: This item addresses Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.	
BUDGET INFORMATION: This SME project will increase the District's net assets by about \$497,450.	
DEPT. MGR.: eb	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: Atherton Place SME Acceptance of Sewer Main Extension.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 5.h.
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RECOMMENDED ACTION: Authorize General Manager-Chief Engineer to accept Sewer Main Extension (SME) - Atherton Place.

SUMMARY AND DISCUSSION:

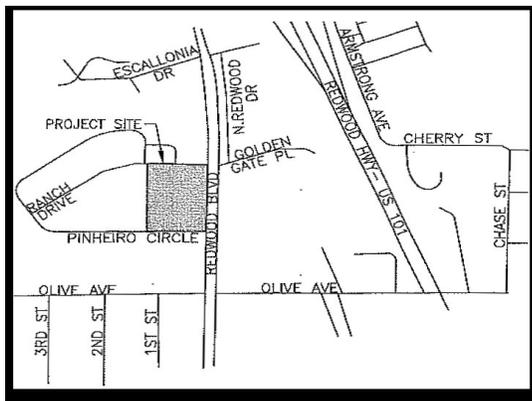
At its June 10, 2019 regular meeting, the Board authorized the General Manager-Chief Engineer to approve Project Plans for the Atherton Place Sewer Main Extension (SME). The SME project proposed to build a 50 unit townhouse project on two parcels on the west side of Redwood Blvd. between Pinheiro Circle and Ranch Drive as shown below in the vicinity map. An existing 8-inch District sewer main crossed through the middle of the Project site. In order to construct the project, the existing sewer main had to be relocated.

The Project relocated the existing sewer main and has dedicated a new sanitary sewer easement to the District. District staff have inspected the new sewer main and have determined it meets District standards. The existing sewer easement will be quit claimed back to the subject property owner by way of a Board resolution at a future Board meeting.

Overall, the construction elements of the proposed Sewer Main Extension (SME) are as follows:

- 6 ea. new Standard Manholes
- 580 lineal feet of new ten-inch PVC sewer main
- 3 ea. Remove existing manholes
- 505 lineal feet of abandon eight-inch sewer main
- Net total asset gain of 75 lineal feet of ten-inch sewer main and 3 additional manholes

Staff recommends the Board authorize the General Manager-Chief Engineer to accept the Sewer Main Extension-Atherton Place.



STRATEGIC PLAN INFORMATION: This item addresses Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.

BUDGET INFORMATION: This SME project will increase the District's net assets by approximately \$66,750.

DEPT. MGR.: eb

GENERAL MANAGER: SSK

Recology Sonoma Marin
Quarterly Report - Novato
Service Period: 10/01/2019 to 12/31/2019

7.2.3 (a&d) Garbage Collection (Tons)	October	November	December	Total
Commercial	914.59	880.46	974.37	2,769.42
Multi Family	301.41	302.28	323.56	927.25
Residential	900.43	889.78	887.33	2,677.54
Roll Off (Debris Box)	93.00	93.40	117.30	303.70
Totals	2,209.43	2,165.92	2,302.56	6,677.91

7.2.3 (b) Recyclable Material Collection (Tons)	October	November	December	Total
Commercial	235.81	243.45	293.23	772.49
Multi Family	32.74	34.59	37.31	104.64
Residential	567.04	584.91	673.82	1,825.77
Roll Off (Debris Box)	476.57	328.60	304.36	1,109.53
Buy-back Center	29.20	32.30	19.60	81.10
Totals	1,341.36	1,223.85	1,328.32	3,893.53

C&D Material (included above) 402.00 276.70 229.20 907.90

Novato had 2,523 tons of incoming mixed recycling. Of these tons, RSM sent 1,941 tons to Pacific Recycling in Ukiah and 648 tons to Greenwaste in San Jose, accounting for 100.0% of incoming mixed recycling from Novato.

RSM is working toward an upgrade to improve recycling processing capabilities at the 3417 and allow the processing of all collected recycling in house. Current plans are to complete the upgrade by or before April 2021.

Recology Sonoma Marin
Quarterly Report - Novato
Service Period: 10/01/2019 to 12/31/2019

Recyclables and Processed	Curbside	Roll Off	Buyback	Total	
Single Stream	369.33	0.15	-	369.48	
Paper	361.92	0.11	-	362.03	
Metal	-	2.20	-	2.20	
Cardboard	1,050.05	35.99	14.20	1,100.24	
Glass	382.42	11.36	40.90	434.68	
Mixed Plastic	425.23	0.56	0.10	425.89	
Plastic-PET	-	-	13.20	13.20	
Plastic-HDPE	-	-	-	-	
Plastic-CHDPE	-	-	-	-	
Tin	51.44	24.54	12.70	88.68	
Tires & Trucks	-	4.63	-	4.63	
Other RCY	-	27.30	-	27.30	
Dry Waste	-	-	-	-	
C&D	62.50	845.40	-	907.90	
Concrete	-	50.50	-	50.50	
Wood Waste	-	12.10	-	12.10	
Dirt	-	106.80	-	106.80	
Yard Waste	3,470.78	453.10	-	3,923.88	
Food Waste	225.15	-	-	225.15	
Total Collected	6,398.83	1,574.73	81.10	8,054.66	
Residual	474.03	492.27	-	966.31	Diversion
Total Diverted	5,924.80	1,082.46	81.10	7,088.35	48.1%

*Single Stream recycling and residuals calculated based on Q2 2019 Characterization study by Recology and Novato Sanitary District.

7.2.3 (c) Green Waste Collection (Tons)	October	November	December	Total
Commercial	93.10	103.45	106.63	303.18
Multi Family	12.63	14.01	19.54	46.18
Residential	950.27	1,029.41	1,366.89	3,346.57
Roll Off (Debris Box)	114.80	158.00	192.40	465.20
Totals	1,170.80	1,304.87	1,685.46	4,161.13
Food Waste (included above)	76.02	74.13	75.00	225.15
Wood Waste (included above)	3.10	3.70	5.30	12.10

Organic waste was processed at Redwood Landfill, W. Contra Costa Sanitary Landfill, and Napa Recycling and Waste Services.

Recology Sonoma Marin
Quarterly Report - Novato
Service Period: 10/01/2019 to 12/31/2019

7.2.3 (e) MSW Accounts by Receptacle Size	Number of Receptacles*						
	Commercial	MFU	Residential	Roll Off	MSW	RCY	OW
20 Gallon	3	1	2,712		2,724		
32 Gallon	127	19	10,484		11,516	1,488	118
64 Gallon	135	18	3,216		3,512	1,044	385
95 Gallon	118	13	416		635	15,696	16,824
1.5 yard						3	1
2 yard	121	13			137	85	24
3 yard	307	63			481	299	11
4 yard	64	5			76	131	2
6 yard	24	6			37	31	4
15 yard				16	16		
20 yard				51	59		
30 yard				19	21		
40 yard							
Compactors				16	24		
Total	899	138	16,828	102	19,238	18,777	17,369

* RO Bins all listed in MSW and exclude on call boxes.

7.2.3 (f) Bulky Waste	October	November	December	Total
No Charge Bulky Item Pick Ups	379	447	347	1,173
Charge Bulky Item Pick Ups	<u>15</u>	<u>11</u>	<u>8</u>	<u>34</u>
Total Bulky Item Pick Ups	394	458	355	1,207

Bulky Items are included with rear loader routes. Recology does not have separate weights and diversion information. Bulky items are included with overall tonnage.

Community Outreach

Attached: Novato 2019-Q4-Education & Outreach

Attached: Recology Novato Holiday 2019 Postcard

Q4 2019 Novato WZ Summary

2019	Total Accounts Touched	Site Audit	Presentation/ Training	Host Table	Gave Outreach Materials	Started Recycling	Increased Recycling	Started Compost	Increased Compost
October	17	21	3	2	9			1	
November	31	39	2	0	26			3	2
December	29	30	3	0	22		2		
	77	90	8	2	57	0	2	4	2

Novato Waste Zero Q4 2019 Highlights

Date	Organization	Organization	Highlight	WZ Employees(s)
4-Oct	Novato	Philanthropic Education Organization	Presentation	Garen
11-Oct	Novato	County of Marin	Updated their tree ad information	Casey
22-Oct	Novato	Novato Sanitary District	Meeting w/ Dee	Celia, Garen
23-Oct	Novato	Bio Marin	Health and Safety Fair Host Table	Lisa, Ambrosia
26-Oct	Novato	Novato Chamber of Commerce	Scream on the Green Table	Garen
14-Nov	Marin County	Marin County	Drawdown Marin Food Waste Meeting	Garen
14-Nov	Novato	Novato Sanitary District	Novato Rate Increase Hearing	Garen, Fred
20-Nov	Marin County	Marin County	Drawdown Marin Workshop	Garen
9-Dec	Novato	Novato Sanitary District	NSD Board Meeting and quarterly presentation	Garen, Celia
13-Dec	Novato	Recology	Coordinated Holiday Postcard Mailings	Casey, Celia
20-Dec	Novato	Recology	Designed educational game board & magnets	Casey

Novato Waste Zero Q4 2019 Report

#	Date(s)	Account Name	Address	City	FRAN Code	Account Type (MFD/ COM / SCH/ GOV)	Notes	Site Audit/ Visit	Present / Training	Gave Outreach Materials/ Tools	Start Recycle	Increase Recycle	Start Compost	Increase Compost
1	10/4/2019	Presbyterian Church	710 Wilson Ave	Novato	NOV	COM	Presentation		1					
2	10/4/2019	Hilltop 1892	850 Lamont Ave	Novato	NOV	COM	AB 1826	2		1				
3	10/7/19	Madison Marquette *Target Account*	5800 Nave Dr	Novato	NOV	COM	Frequent Contamination	2		1				
4	10/7/2019	Republic Services - CVS	2035 Novato Blvd	Novato	NOV	COM	Contaminated	1		1				
5	10/7/19	Indian Valley Golf Club	3035 Novato Blvd	Novato	NOV	COM	AB 1826	2						
6	10/8/2019	Baldwin German Auto Works	400 Enfrente	Novato	NOV	COM	Refused due to cost	1						
7	10/8/2019	City of Novato	1560 Hill Rd	Novato	NOV	GOV	AB 1826	2	1	1			1	
8	10/9/2019	Rackport Healthcare Services	1565 Hill Rd	Novato	NOV	COM	Follow up	1						
9	10/9/2019	Atria Tamalpais Creek	853 Tamalpais Ave	Novato	NOV	COM	Follow up	1						
10	10/15/2019	Olive School	629 Plum Street	Novato	NOV	COM	Presentation	1	1	1				
11	10/16/2019	BioMarin *Target Account*	73 Digital Dr	Novato	NOV	COM	Operations Meeting	1						
12	10/21/2019	The Square Shopping Center *Target Account*	2049 Novato Blvd	Novato	NOV	COM	Contaminated	2		1				
13	10/21/2019	North Bay Childrens Center	932 C Street	Novato	NOV	SCH	Compost	1		1				
14	10/22/2019	Galli Square Associates	350 Ignacio Blvd	Novato	NOV	COM	Contaminated	1						
15	10/22/2019	Mikes Pool and Spa	25 Hamilton Dr	Novato	NOV	COM	Contaminated	1		1				
16	10/22/2019	Allsite Building Supply	166 Hamilton Dr H	Novato	NOV	COM	Contaminated	1		1				
17	10/24/19	Homeowners @ Laurel Creek	1419 Elm Drive	Novato	NOV	MFD	Refused due to cost	1						
18	11/7/2019	Bolinas Peoples Store	14 Wharf Rd	Bolinas	NOV	COM	AB 1826	1		1			1	
19	11/18/2019	Marshall Boat Works	19180 Hwy 1	Marshall	NOV	COM	Want compost	1						
20	11/13/2019	Dolcini Jersey Dairy	10049 Point Reyes-Petaluma Rd	Nicasio	NOV	COM	AB 1826	1		1			1	
21	11/4/2019	Unity In Marin	600 Palm Drive	Novato	NOV	COM	Contam/Education	1		1				
22	11/4/2019	Homeward Bound of Marin	1399 N Hamilton Pkwy	Novato	NOV	COM	Contamination	1		1				
23	11/4/2019	Leslies Pool Supply	220 Vintage Way	Novato	NOV	COM	Contamination	1		1				
24	11/4/2019	Inn Marin	250 Entrada Dr	Novato	NOV	COM	Contamination	3		1				
25	11/6/2019	Autohaus Marin	6979 Redwood Blvd	Novato	NOV	COM	New Business	1						

Novato 2019-Q4 Education Outreach - Details

#	Date(s)	Account Name	Address	City	FRAN Code	Account Type (MFD/ COM / SCH/ GOV)	Notes	Site Audit/ Visit	Present / Training	Gave Outreach Materials/ Tools	Start Recycle	Increase Recycle	Start Compost	Increase Compost
26	11/6/2019	The Square Shopping Center	2049 Novato Blvd	Novato	NOV	COM	Contamination	1		1				
27	11/7/2019	North Bay Childrens Center	932 C Street	Novato	NOV	SCH	Compost Bin	1		1				1
28	11/7/2019	DPW Woodside Novato	7250 Redwood Blvd	Novato	NOV	COM	Compost start and education	3	1	1			1	
29	11/7/2019	Bay Club Stone Tree *Target Account*	9 Stone Tree Ln	Novato	NOV	COM	Contamination/AB1 826	2		1				
30	11/8/2019	Zenbay Real Estate *Target Account*	150 Alameda Del Prado	Novato	NOV	COM	Contamination	1		1				
31	11/8/2019	Professional Financial Investors	1510 Grant Ave	Novato	NOV	COM	Contamination	1		1				
32	11/8/2019	Bay Vista Apartments	5 Hutchins Way	Novato	NOV	MFD	Contamination	1						
33	11/12/2019	Starbucks/Ecova	7514 Novato Blvd	Novato	NOV	COM	Contamination	1		1				
34	11/12/2019	Sycamore Glade	1721 Novato Blvd	Novato	NOV	MFD	Contamination	2		1				
35	11/13/2019	Professional Financial Investors	1701 Novato Blvd	Novato	NOV	COM	Contamination	1		1				
36	11/14/2019	Novato Community Library	1720 Novato Blvd	Novato	NOV	COM	Kids Presentation	1	1	1				
37	11/15/2019	Taqueria Mi Pueblo *Target Account*	905 Grant Ave	Novato	NOV	COM	Contamination	1						
38	11/15/19	Bevmo	104 Vintage Way, 2A	Novato	NOV	COM	Contamination	1		1				
39	11/15/2019	Marin Landscape Materials	7596 Redwood Blvd	Novato	NOV	COM	Contamination	1		1				
40	11/15/2019	Western Oaks Village	1721 Maple Ct	Novato	NOV	MFD	Contamination	1		1				
41	11/18/2019	Quail Hollow Meadow	186 Sandpiper Ct	Novato	NOV	MFD	Contamination	1		1				
42	11/20/2019	Valley Memorial Park	650 Bugeia Way	Novato	NOV	COM	Increase compost	1						1
43	11/21/2019	County of Marin	451 Airport Rd	Novato	NOV	GOV	Contamination	1		1				
44	11/22/2019	Nordby Construction	500 Country Club Dr	Novato	NOV	COM	Contamination	1		1				
45	11/26/2019	Pacheco Plaza	416 Ignacio Blvd	Novato	NOV	COM	Contamination	1		1				
46	11/27/2019	The Meadows	1500 S Novato Blvd	Novato	NOV	MFD	Contamination	1		1				
47	11/22/201	Madison Marquette	5800 Nave Drive	Novato	NOV	COM	Contamination	2		1				
48	11/22/201	McDonalds	5600 Nave Drive	Novato	NOV	COM	Contamination	2		1				
49	12/3/2019	BioMarin	105 Digital Dr	Novato	NOV	COM	Contamination	1						
50	12/9/2019	Marin County Library	1720 Novato Blvd	Novato	NOV	COM	Newsletter	1		1				
51	12/9/2019	Zenbay Real Estate *Target Account*	150 Alameda Del Prado	Novato	NOV	COM	Increase Recycle	1				1		
52	12/9/2019	Madison Marquette *Target Account*	5800 Nave Dr	Novato	NOV	COM	Increase Recycle	1		1		1		
53	12/9/2019	Sherwin Williams	1525 Grant Ave	Novato	NOV	COM	AB 1826	1						

Novato 2019-Q4 Education Outreach - Details

#	Date(s)	Account Name	Address	City	FRAN Code	Account Type (MFD/ COM / SCH/ GOV)	Notes	Site Audit/ Visit	Present / Training	Gave Outreach Materials/ Tools	Start Recycle	Increase Recycle	Start Compost	Increase Compost
54	12/10/2019	Ignacio Liquor & Market	532 Alameda Del Prado	Novato	NOV	COM	Contamination	1		1				
55	12/10/2019	Republic Services - CVS #9947	2035 Novato Blvd	Novato	NOV	COM	AB 1826	1						
56	12/10/2019	Republic Services - CVS #09316	1707 Grant Ave 002	Novato	NOV	COM	AB 1826	1						
57	12/11/2019	Sunrun Installation Services	275 Bel Marin Keys	Novato	NOV	COM	Contamination	1		1				
58	12/11/2019	Olive School	629 Plum St	Novato	NOV	SCHOOL	Presentation	1	1	1				
59	12/11/2019	School - Loma Verde	399 Alameda de la Loma	Novato	NOV	SCHOOL	Contamination	1		1				
60	12/12/2019	Marin Landscape Materials	7596 Redwood Blvd	Novato	NOV	COM	Contamination	1		1				
61	12/12/19	Redwood Crossroads	7599 Redwood Blvd	Novato	NOV	COM	Contamination	1		1				
62	12/13/2019	Nugget Market	470 Ignacio Blvd	Novato	NOV	COM	Contamination	1		1				
63	12/16/2019	Novato Community Hospital *Target Account*	180 Rowland Blvd	Novato	NOV	COM	Contamination	1						
64	12/16/2019	AU Energy LLC	1390 S Novato Blvd	Novato	NOV	COM	Contamination	1		1				
65	12/17/2019	Gilead House	1308 Leafwood Dr	Novato	NOV	COM	Contamination	1		1				
66	12/17/2019	Villa Maria Apts	1304 Leafwood Dr	Novato	NOV	COM	Contamination	1		1				
67	12/17/2019	Keegan & Coppin	19 Digital Dr	Novato	NOV	COM	Contamination	1		1				
68	12/17/2019	School - Novato Unified	1015 7th St	Novato	NOV	SCHOOL	Contamination	2		1				
69	12/19/2019	William Brdley Electric	90 Hill Rd	Novato	NOV	COM	Training	1	1	1				
70	12/19/2019	City of Novato	1560 Hill Rd	Novato	NOV	GOV	Training	1	1	1				
71	12/20/2019	Republic Atria Snr Lvng Grp *Target Account*	853 Tamalpais Ave	Novato	NOV	COM	Contamination	1		1				
72	12/23/2019	Inn Marin	250 Alameda Del Prado	Novato	NOV	COM	Contamination	1		1				
73	12/23/2019	Blue Barn	819 Grant Ave	Novato	NOV	COM	AB 1826	1		1				
74	12/24/2019	El Rey Mexican Bar and Grill *Target Account*	940 Grant Ave	Novato	NOV	COM	Contamination	1		1				
75	12/26/2019	Hilltop 1892	850 Lamont Ave	Novato	NOV	COM	AB 1826	1		1				
76	12/27/2019	Ross Dress for Less	116 Vintage Way	Novato	NOV	COM	Contamination	1		1				
77	12/27/2019	Rancho Elementary	1430 Johnson St	Novato	NOV	SCHOOL	Contamination	1						

2019 Holiday Schedule

Collection Schedule

Recology wishes you a happy holiday season! Please note there will be **NO** Recycle, Compost or Garbage collection service on Christmas Day **Wednesday, December 25, 2019** and New Years Day **Wednesday, January 1, 2020**. If your regular collection day falls on or after the holiday, your service will be **DELAYED BY ONE DAY**. Regular collection service schedule will resume the week of January 6, 2020.

DECEMBER MONDAY 23 Regular Service	DECEMBER TUESDAY 24 Regular Service	DECEMBER WEDNESDAY 25 No Service	DECEMBER THURSDAY 26 Service for Wednesday Customers	DECEMBER FRIDAY 27 Service for Thursday Customers	DECEMBER SATURDAY 28 Service for Friday Customers
DECEMBER MONDAY 30	DECEMBER TUESDAY 31	JANUARY WEDNESDAY 1	JANUARY THURSDAY 2	JANUARY FRIDAY 3	JANUARY SATURDAY 4



Holiday Tree Recycling

Curbside Collection:

Residential customers may place their tree on the curb the night before their regular collection day during the specified time period. Flocked trees will not be collected. Trees over six (6) feet should be cut in half.

Compost Cart:

Trees can always be cut to fit in your compost cart. Make sure the lid is able to close. Flocked trees are not accepted.

Sonoma County Transfer Station Drop-off:

Available from December 26th - January 17th. All transfer stations will accept up to two (2) unflocked trees at no cost.



Cloverdale

Curbside Pick-up

December 30th - January 4th

Tree Drop Off Location

Cloverdale Citrus Fair

Citrus Fair Drive (Washington Entrance)

December 26th - January 17th 8am-4pm

Cotati

Curbside Pick-up

January 6th - January 10th

Tree Drop Off Location

Cotati Fire Station

1 East Cotati Avenue

December 26th - January 17th 8am-4pm

County Areas

Curbside Pick-up

Visit Recology.com/RSMschedules

Tree Drop Off Location

Sonoma County Fairgrounds

1350 Bennett Valley Road

December 26th - January 10th 8am-5pm

Healdsburg

Curbside Pick-up

December 30th - January 10th

Tree Drop Off Location

City Corp Yard

550 Westside Road

December 26th - January 17th 8am-5pm

Petaluma

Curbside Pick-up

January 6th - January 10th

Tree Drop Off Location

Sonoma Marin Fairgrounds

175 Fairgrounds Drive

December 26th - January 17th 8am-5pm

Rohnert Park

Curbside Pick-up

January 6th - January 17th

Tree Drop Off Location

Community Center

5401 Snyder Lane

December 26th - January 17th 8am-4pm

Santa Rosa

Curbside Pick-up

December 30th - January 10th

Tree Drop Off Location

Sonoma County Fairgrounds

1350 Bennett Valley Road

December 26th - January 10th 8am-5pm

Sebastopol

Tree Drop Off Location

City Corp Yard

425 Morris Street

December 26th - January 10th 8am-4pm



<u>RECOLOGY 2019 DISPOSAL/DIVERSION(TONS)</u>	<u>2019</u> <u>1stQ</u>	<u>2019</u> <u>2ndQ</u>	<u>2019</u> <u>3rdQ</u>	<u>2019</u> <u>4thQ</u>	<u>2019</u> <u>TOTAL</u>	<u>VS.</u>	<u>2018</u> <u>TOTAL</u>
Recology Recycled Collected (Curbside & Buyback)	3,183	2,899	2,646	2,829	11,556		11,709
Recology C&D, Wood, Inerts	500	836	980	1,077	3,393		3,176
Recology Green waste & residential food waste for compost	3,485	4,043	3,392	3,924	14,844		14,272
Recology Commercial Food Waste for compost	203	220	221	225	869		250
TOTAL TONS COLLECTED AND PROCESSED FOR RECYCLING	7,372	7,997	7,239	8,055	30,663		29,406
RECYCLING RESIDUALS DISPOSED	-1,131	-1,224	-1,112	-966	-4,432		-4,557
RESIDUALS DISPOSED AS PERCENT OF RECYCLING	15.34%	15.30%	15.36%	11.99%	14.45%		15.50%
TOTAL TONS DIVERTED	6,241	6,774	6,127	7,089	26,231		24,850
GARBAGE DISPOSAL							
MSW & Debris Box	6,151	6,146	6,106	6,678	25,082		25,639
TOTAL GARBAGE TONS DISPOSED	6,151	6,146	6,106	6,678	25,082		25,639
TOTAL DISPOSAL (GARBAGE + RESIDUALS)	7,282	7,370	7,218	7,644	29,514		30,196
TOTAL WASTE GENERATED(DISPOSAL + RESIDUALS + DIVERTED)	13,523	14,144	13,345	14,733	55,745		55,046
PERCENT DIVERTED	46.15%	47.89%	45.91%	48.11%	47.06%		45.14%
PERCENT DIVERTED WITH REDWOOD & MRRC	50.24%	52.21%					

Per Capita Diversion Calculation for 2019 and Measurement System

In 2009, the state adopted SB 1016 which changed the reporting requirements of waste goal measurement from a diversion-based system to a **disposal-based indicator**--the per capita disposal rate. This system uses only 2 factors - a jurisdiction's population and its disposal, as reported by disposal facilities.

In order for CalRecycle and jurisdictions to more properly focus on successful program implementation, SB 1016 shifted from the historical emphasis on using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program implementation.

Overall benefits of the new approach include:

- A focus on PROGRAMS rather than numbers
- Measures disposal as reported by disposal facilities rather than estimating total diversion
- Accounts for population growth
- Eliminates complex calculations and simplifies goal measurement
- CalRecycle evaluates jurisdiction based on how well they are implementing programs as set forth in SRRE and Annual Report

This system still maintains the AB939 requirement of 50% waste diversion. In order to shift to the per capita disposal rate, the state calculated a "50 percent equivalent per capita disposal target method" – an amount of disposal that is approximately equivalent to a jurisdiction's current 50 percent diversion requirement. It is calculated using the average of 2003-2006 per capita generation for each jurisdiction and dividing this generation average in half to determine the 50 percent equivalent per capita disposal target. To reach the per capita disposal target, the jurisdiction needs to dispose of its 50 percent equivalent per capita rate or less. The lower the annual disposal rate, the better.

According to CalRecycle, cities, counties and regional agencies will NOT be compared to each other. Each jurisdiction's target is unique since it is based upon a unique base year target rate.

CalRecycle no longer considers diversion rates as a measurement goal. However, the state recognizes that many cities and counties have relied upon the diversion rate calculation, so an equivalent calculation rate was developed.

Below are the 2019 annual per capita disposal rate, and its equivalent diversion rate for Novato.

**Calculation for Annual per Capita Disposal Rate and Equivalent Diversion rate method

1 First calculate base period target rate:

To calculate base period target rate for City of Novato:

Average 2003 – 2006 generation rates. Divide by 2 to get disposal for jurisdiction if at 50% diversion

Avg. 2003-2006 generation = 139,115 tons/2 = 69,557 tons= disposal at 50%diversion
69,557 tons x 2000pounds/54,115 population*/365 days = **7.04 pounds per person per day disposal target rate**

2. To calculate 2019 Annual Per Capita Disposal Rate

Disposal Tons x 2000 pounds /Population/365 = Pounds per Person per Day Disposed

2019 Disposal Tons = 36,118

36,118 tons x 2000 pounds/54,115 population*/365 = 3.66 Pounds per Person per Day Disposed

To calculate equivalent diversion rate, assume:

1 = (Current year per capita disposal/target per capita disposal *2)

1 = 3.66/7.04*2

1= 3.66/14.08

= 0.26 disposal

vs. 0.74 diversion

74% Equivalent Diversion rate for Novato for 2019

****All Calculations are based on CalRecycle required calculation method**

*All City of Novato populations taken from State of CA Department of Finance statistics

Please note: This equivalent diversion calculation is not used by CalRecycle to measure progress towards disposal/diversion goals. The County JPA reports the total Marin County per capita rate and other program information to CalRecycle, as required, on annual basis. The per capita disposal target is the only numeric goal measurement CalRecycle reviews.

2019 NOVATO HOUSEHOLD HAZARDOUS WASTE FACILITY ANNUAL REPORT

Number of Participants: 5,183 residents

HHW Collected: 449,716 pounds

2019 Summary

In 2019 the Novato Household Hazardous Waste Facility had another productive and record-breaking year. The facility served a total of **5,183** Novato residents, an increase of nearly 18% from 2018. In addition, **18** Novato businesses participated in the business hazardous waste program for conditionally exempt small quantity generators (CESQG), otherwise known as Very Small Quantity Generators (VSQG).

HHW Facility

The household hazardous waste facility is available to Novato residents on a regular monthly basis, 4 days per month. The facility is open from 8:30am – 1:30pm, the first and third consecutive Sundays and Mondays of each month, excluding most holidays. In addition, the Facility is available, by appointment, to Novato businesses who are conditionally exempt small quantity generators (CESQG).

The facility also continues to operate as a BOP – battery, oil and paint collection center – during the Recycling Center’s open hours, Tues – Sun, 10am – 4pm. Used motor oil, oil filters, antifreeze, latex paint, fluorescent tubes, compact fluorescents and household and car batteries are accepted. These materials are then sorted by the HHW technicians, packaged and shipped with the regular household hazardous waste shipments.

Pini’s Hardware also offers a convenient collection point for residents to drop off household batteries and fluorescent bulbs. These items are then delivered by Pini’s staff to the HHW Facility for further packaging and shipment.



The Reuse Center cabinets, located in the front of the Recycling Center, are available anytime the Recycling Center and the HHW Facility is open. With the assistance of Recycling Center staff, our reuse cabinets received a new coat of paint. The cabinets are very well used, with new or nearly new products available to residents for free.

Outreach continues to be conducted through Recology Sonoma Marin semi-annual newsletters, District website, newspaper ads, fliers, hotlines and social media.

A total of **5,183 households** used the HHW facility in 2019. This is an 18% increase from 2018 and our highest participation ever recorded at the HHW facility. (This does not include individuals dropping off waste at the BOP.) Open a total of 47 days in 2019, participation has averaged 110 per day, with Sunday continuing to be the greatest participation.

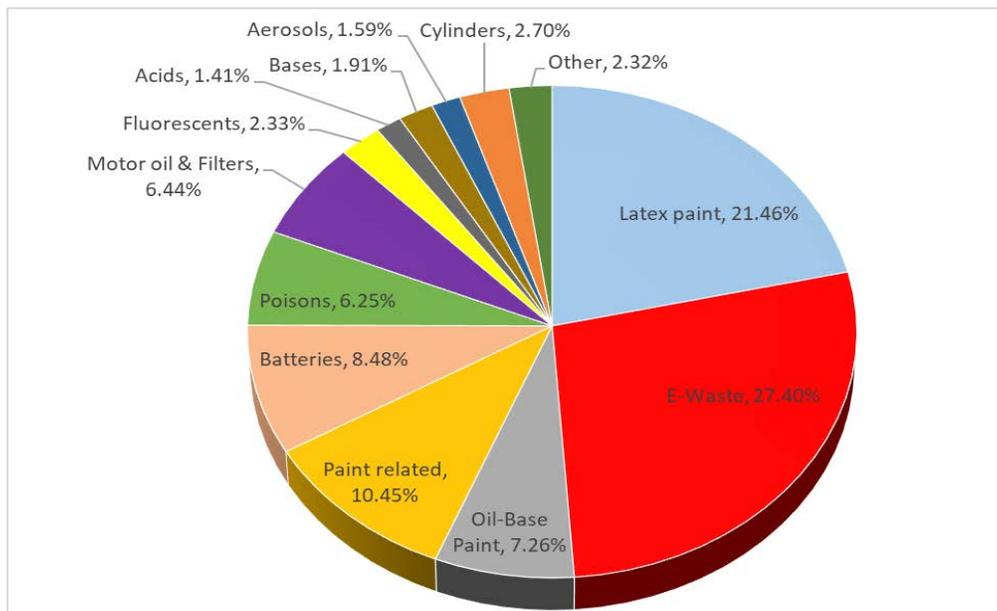


A total of **449,716 pounds** of HHW was collected at the HHW facility in 2019. This is a decrease from 2018 of about 10%. Some of this is a result of additional collection opportunities for electronic waste and paints. Paintcare, the product stewardship organization, has opened several new sites for collection of paint in Marin County, as an alternative to using the HHW Facility. In addition, the Conservation Corps North Bay now offers free home pick up of electronics. Although the drop-off of electronics has increased, by weight the devices are lighter than in the past and we are receiving smaller and less valuable electronics such as hair dryers, vacuums, etc.

Waste Collected By Material Type

The following charts identify waste collected by material type and pounds. The largest category, by weight, continues to be electronics. However, the total of latex, oil base and paint related material is over 38% of all material collected. Of this amount, the Paintcare program accounts for over 28%, which is a very cost-effective method.

HHW Program Waste By Type



**"Batteries" include all household batteries, rechargeables and lead acid batteries
 **"Other" category is detailed in the following table

HHW Waste Collected By Material Type in Pounds		
Waste	Pounds	Percent
Electronics	123,242	27%
Latex Paint	96,500	21%
Paint related	47,000	10%
Oil base paint	32,630	7.2%
Household batteries	28,650	6%
Motor oil & filters	28,950	6%
Poisons	28,100	6%
Cylinders & fire extinguishers	12,125	2.5%
Fluorescents	10,481	2.3%
Auto batteries	9,500	2.1%
Bases	8,600	1.9%
Antifreeze	7,200	1.6%
Aerosols	7,150	1.5%
Acids	6,350	1.4%
Oxidizers	1,560	<1.0%
Asbestos	600	<1.0%
PCB waste	250	<1.0%
Sharps	208	<1.0%
Other/non-classified	620	<1.0%
TOTAL	449,716	

Waste Management Methods

Overall, 77.5% of the waste was recycled, (including the waste sent to Paintcare), 11% used as a supplemental fuel blend, 7.5% sent for destructive incineration, 3.0% for treatment or neutralization and less than 1% was sent to hazardous waste landfill.



HHW Expenditures



The HHW Facility is operated and staffed through a contract with Stericycle Environmental Services and managed by the HHW Program Coordinator. Contractor costs for 2019, including labor, supplies and transport and disposal of the waste amounted to \$234,686.59., a 17% increase from 2018. Labor costs totaled \$88,040.00 (37%), supplies, \$37,821.90 (16%) and waste disposal costs \$109,276.07 (47%). Expenditures remained below budget for FY2018/19 and are expected to remain so for FY2019/2020. Programs are funded through a combination of AB939 fees, a CalRecycle oil grant and reimbursement from the County JPA for Novato self-haul fees.

A Look Ahead

As program participation continues to grow, so do costs. In addition, Stericycle waste fees are expected to increase next year. However, we continue to work with Stericycle and Paintcare to reduce our costs for paint products and build on the Reuse program to distribute new or nearly new products to residents. In addition, Stericycle collects all our electronic waste at no charge, which is a significant benefit.

Recommendations for future programs include:

- Increase promotion on website and social media – Facebook, Twitter, etc.
- Increase promotion of additional opportunities for collection of paint, batteries and fluorescents
- Expand outreach to small businesses
- Investigate opportunities to expand program by increasing open days
- Explore opportunities to move facility to a larger, independent site

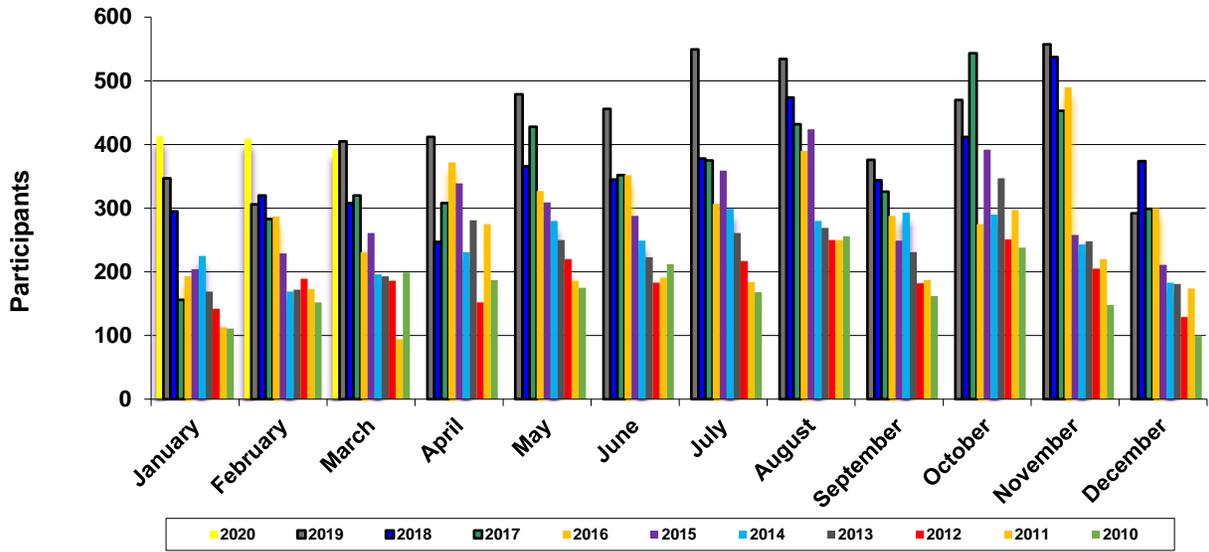
HHW FACILITY SUMMARY 2020	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Total Participants	413	409	393										
Been to events before?(Yes)	361	343	319										
Permanent facility?	329	311	293										
Temporary events?	66	52	34										
First time user?	52	66	74										
Type of waste brought in?													
Antifreeze	20	21	20										
Asbestos	0	5	2										
Auto products	43	49	43										
Batteries, household	150	139	105										
Car batteries	6	8	6										
Computer monitors	21	31	30										
Cements, sealers	39	45	40										
E-Waste(all types)	212	201	175										
Fluorescent tubes& bulbs	71	76	68										
Fuels(gas, kerosene, diesel)	29	36	20										
Household cleaners, polishes	84	91	72										
Latex paint	116	116	140										
Motor oil/filters	60	63	58										
Oil base paint	69	74	97										
Paint thinners, solvents	63	67	65										
Pesticides, herbicides, insecticides	54	53	51										
Pet care products	8	7	3										
Photo chemicals	3	2	1										
Pool Chemicals	8	5	8										
Propane/helium tanks/fire extinguishers	26	34	31										
Sharps	4	5	1										
Spray paints	41	57	46										
Television	30	33	29										
Thermometers/Thermostats	6	5	4										
Wood preservatives, stains	36	39	34										
Other	3	3	8										
Hear about program?													
Recycling Center flier	128	134	145										
Sanitary District newsletter	84	72	41										
Sanitary District website	67	52	54										
Recology newsletter	169	164	128										
Word of mouth	69	89	50										
Other	34	38	38										
Change your own motor oil?													
Yes	69	54	37										
Novato Recycling Center	44	40	27										
O'Reilly's	32	20	15										
Pennzoil	1	1	1										
Other	1	0	1										
If yes, want curbside pickup?	22	16	9										
No	344	355	356										
Comments													
Compliments/Good	130	123	83										
Open more Often	4	4	3										
Wait too long	0	0	0										
Wanted walk-up or curbside service	0	0	0										
More publicity		1	0										
E-Waste ONLY	138	117	81										
Microwaves	11	13	10										

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(Pages 41 to 43)

HHW PARTICIPANTS 2006 - 2020

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>Totals</u>
2020	413	409	393										
2019	347	306	405	412	479	456	549	534	376	470	557	292	5,183
2018	295	320	308	247	366	345	378	474	344	412	537	374	4,400
2017	156	283	320	308	428	352	375	432	326	543	453	299	4,275
2016	193	287	231	372	327	352	307	390	288	275	490	300	3,812
2015	204	229	261	339	309	288	359	424	249	392	258	211	3,523
2014	225	169	196	231	280	249	299	280	293	290	262	183	2,957
2013	169	172	193	281	250	223	261	269	231	347	248	181	2,825
2012	142	189	186	152	220	183	217	250	182	251	205	129	2,306
2011	113	173	94	275	186	191	184	250	187	297	220	174	2,344
2010	111	152	199	187	175	212	168	256	162	238	148	100	2,108
2009	138	102	117	184	146	201	179	237	189	183	170	188	2,034
2008	101	118	155	198	147	132	186	156	187	205	130	121	1,836
2007	96	90	111	110	113	98	129	136	152	133	131	117	1,416
2006	57	118	115	112	140	111	145	120	119	95	106	73	1,311
% Change from 2019	19.02%	33.66%	-2.96%										

HHW Facility Monthly Participation 2010- 2020



NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Operations Report, March 2020.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 7.a.
RECOMMENDED ACTIONS: Receive Wastewater Operations Report for March 2020: <ul style="list-style-type: none">• Collection System• Treatment Facilities• Reclamation Facilities	
SUMMARY AND DISCUSSION: <p>The March 2020 Wastewater Operations Report incorporating operations reports for collections system, wastewater treatment facilities, and the reclamation facilities is attached.</p> <p>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>	
ATTACHMENTS: 1. Wastewater Operations Reports for the month of March 2020.	
STRATEGIC PLAN INFORMATION: This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
DEPT. MGR.: JO (Veolia), JA, JJB	GENERAL MANAGER: SSK

Novato Sanitary District Wastewater Operations - Collection System Operations Report March 2020

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:

- 2.0 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.8 FTE field workers for Pump Station Maintenance
- 0.6 FTE field workers for Closed Circuit Television (CCTV) work
- 0.0 FTE field workers for Underground Service Alert Mark and Locate (USA)
- 1.4 FTE field workers for time spent on data input, training, service calls, overflow response, or any other activity that does not directly relate to the activities listed above, or special activities (for e.g. smoke testing of mainlines), and
- 1.3 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 work orders outstanding. The completed work orders resulted in 62,233 feet of sewer pipelines cleaned by staff.

Closed Circuit Television (CCTV) Performance:

The District's CCTV equipment was in the field for seven (7) working days and televised a total of 7,195 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.

3.0 Pump Station Maintenance:

Collections staff conducted 188 lift station inspections this month. Of these, 46 inspections were generated through the District's JobsCal Plus CMMS system. There are 0 outstanding work orders for the month. A Pump Stations' Work Order Statistics summary is attached.

Collections crew perform an inspection on a pump at Olive Ridge Pump Station



**Novato Sanitary District
Wastewater Operations - Collection System Operations Report
March 2020**

4.0 Air Relief/Vacuum Valves (ARVs):

Staff completed maintenance inspections on six (6) 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 March.

Specialized Training:

- SSO Documentation Training
- Motor Vehicle Training through Target Solutions
- Managers Ethics Training through Target Solutions

Safety performance:

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

COVID-19:

Due to COVID-19 social distancing guidelines issued by the State and County of Marin, the collections and field services staff started a temporary modified split shift (A/B teams) on March 30th. In addition, staff are practicing social distancing to the extent possible during shifts and increased disinfection of commonly touched surfaces at the beginning and end of each shift.

6.0 Miscellaneous Projects:

- New manhole ring and cover installed off Redwood Blvd. This was needed due to heavy corrosion from H₂S.
- A spot repair was completed by a contractor on Cowbarn Ln.
- Parking stops installed in front of the Annex building.
- New pump cord installed at Olive Ridge Pump Station.
- New pump installed at Enfrente Pump Station.
- New Smartcover System sensor installed at Enfrente Pump Station.
- New pump installed at Western Oaks Pump Station.
- Generator at Marin Village has been repaired and is back online.

7.0 Sanitary Sewer Overflows (SSOs):

There were zero (0) sanitary sewer overflows (SSO) in March. The No Spills certification ID is # **2567981**.

Novato Sanitary District
Collection System Monthly Report For March 2020 (as of March 31, 2020)

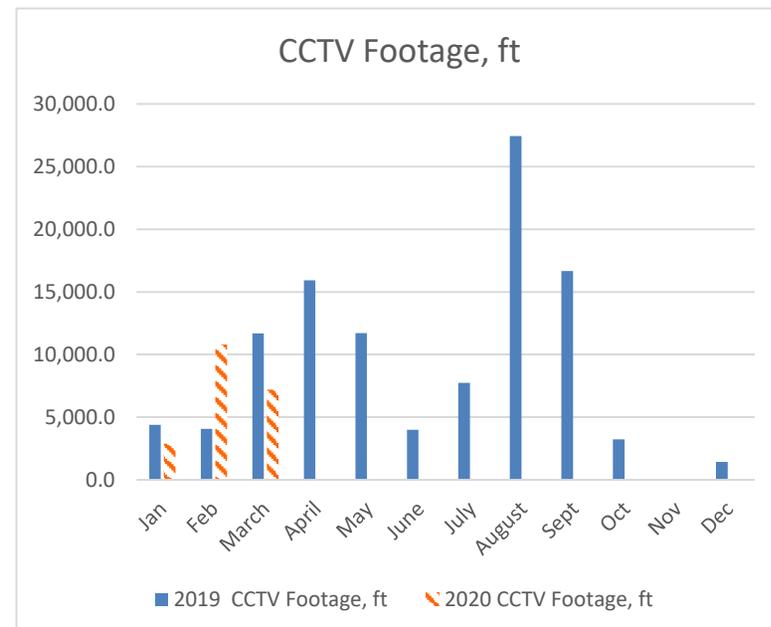
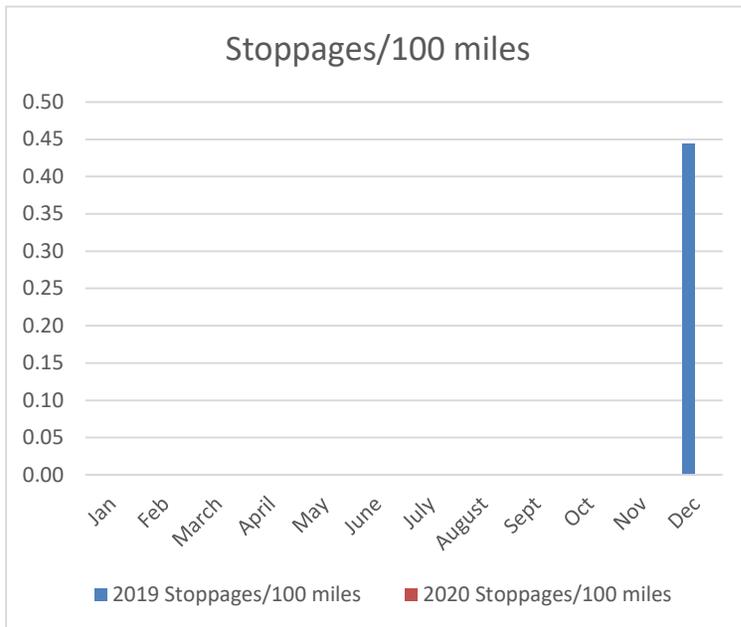
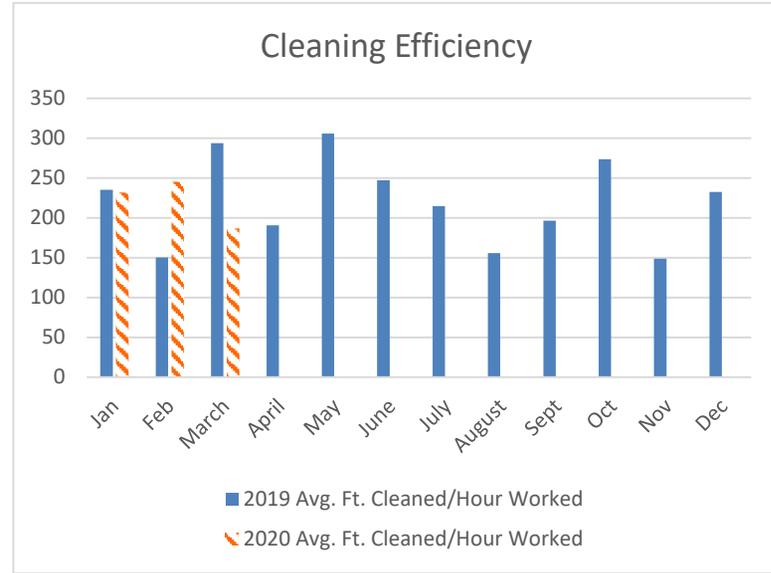
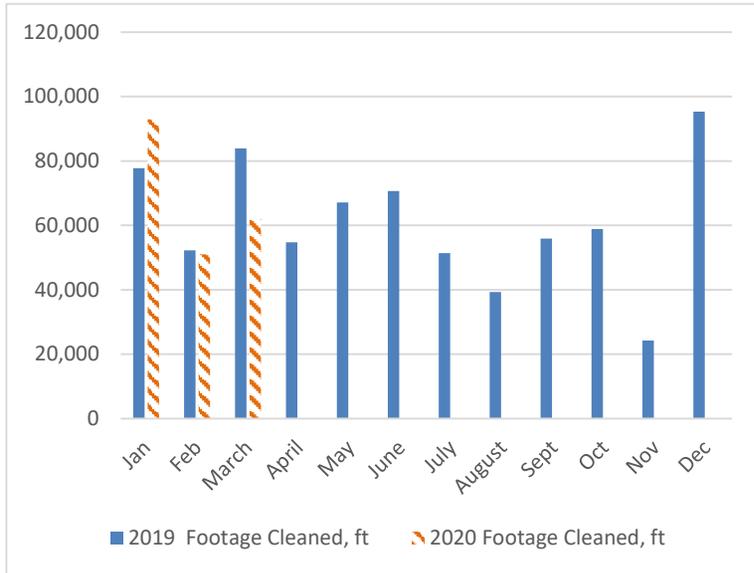
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
A. Employee Hours Worked														
Number of FTEs (main line cleaning)	2.2	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.5
Number of FTEs (other)	1.3	1.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.3
Number of FTEs (USAs)	0.1	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)	0.2	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.1
Total, FTEs	3.8	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.9
Regular Time Worked, (main line cleaning), hrs	401	208	332										941	314
Regular Time Worked on Other, hrs ⁽¹⁾	228	194	235										657	219
Regular Time Worked on USAs	20	0	0										20	7
Regular Time Worked on CCTV (2)	39	77	106										222	74
Total Regular time, worked, hrs	687	479	673	0	0	0	0	0	0	0	0	0	1,839	153
Total Vacation/Sick Leave/Holiday, hrs	319	386	220										925	308
Vacation/Sick Leave/Holiday, FTEs	1.8	2.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.5
Overtime Worked on Coll. Sys., hrs	12	0	5										17	6
Overtime Worked on Other, hrs (1)	7	2	5										14	5
Overtime Worked on USAs, hrs	0	0	0										0	0
Overtime Worked on CCTV ⁽²⁾	0	0	0										0	0
Total Overtime, hrs	19	2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	30	10
B. Productivity														
1. Line Cleaning														
Rodder Work Orders generated	36	40	54										130	43
Rodder 3208 ft. cleaned	6,810	4,994	5,006										16,810	5,603
Rodder - outside services, ft cleaned	0	0	0										0	0
Flusher Work Orders generated	427	232	263										922	307
Truck 3205V ft. cleaned	4,329	0	0										4,329	1,443
Truck 3206V ft. cleaned	36,952	20,521	12,180										69,653	23,218
Truck 3209F ft. cleaned	44,800	25,523	44,760										115,083	38,361
Flusher - outside services, ft. cleaned	0	0	0										0	0
Total Footage cleaned ⁽³⁾	92,891	51,038	61,946	NA	NA	NA	NA	NA	NA	NA	NA	NA	205,875	68,625
Work Orders completed	451	272	317										1,040	347
Work Orders backlog	12	0	0										12	4
2. Closed Circuit Television (CCTV)														
Camera Work Orders generated	0	0	0										0	0
CCTV Truck 3126T, ft. videoed	2,876	10,401	7,195										20,472	6,824
CCTV (hand cam), ft. videoed	0	385	0										385	128
CCTV Inspection - outside services, ft. videoed	0	0	0										0	0
Total CCTV footage ⁽³⁾	2,876	10,786	7,195	NA	NA	NA	NA	NA	NA	NA	NA	NA	20,857	6,952
C. Sanitary Sewer Overflows (SSOs)														
Minor (Category III)	0	0	0										0	NA
Major (Category II)	0	0	0										0	NA
Major (Category I)	0	0	0										0	NA
Overflow Gallons	0	0	0										0	NA
Volume Recovered	0	0	0										0	NA
Percent Recovered	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Service Calls (non-SSO related)														
Service calls, normal hours, #	6	2	5										13	4
Normal hours S.C. response time, mins (avg.)	11.7	12.5	29.6										54	18
Service Callouts, after hours, #	1	0	1										2	1
After Hours S.C. response time, mins (avg.)	3	0	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	33	11
E. Benchmarks														
Average Ft. Cleaned/Hour Worked	232	245	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	221
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	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1
Overtime hours/100 Miles	5	0	2	0	0	0	0	0	0	0	0	0	7.33	1
Overflow Gallons/100 Miles	0	0	0	0	0	0	0	0	0	0	0	0	0	0

⁽¹⁾This category includes time spent on: Data input, Training, Service Calls, Overflow Response, as well as any other activity that does not directly relate to main line cleaning or CCTV work.

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

⁽³⁾Does not include outside services (tracked separately)

Collection System: 2019 & 2020 Graphs



Novato Sanitary District
Pump Station Monthly Report For March 2020 (as of March 31, 2020)

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
Employee Hours Worked													0	
Number of Employees (FTEs)	1.4	1.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	810	0.4
Regular Time Worked on Pump Sta	264	249	298										121	
Overtime Worked on Pump Sta	46	36	39										0	
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
Work Orders														
Number generated in month	39	38	46										123	41
Number closed in month	39	38	46										123	41
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**PUMP STATIONS
WORK ORDER STATISTICS
March 1, 2020-March 31, 2020**

	Open Work Orders Due Prior to 3/1/2020	Open Work Orders 3/1/2020-3/31/2020	Total Open Work Orders
Preventive	0	46	46
Corrective	0	0	0
Total	0	46	46

	Closed Work Orders 3/1/2020 -3/31/2020
Preventive	46
Corrective	0
Total	46

Total Outstanding Work Orders as of 3/31/2020	0
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April 6, 2020

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

Subject: Veolia Water Operations Report – March 2020

Dear Mr. Karkal:

I am pleased to provide the Monthly Operations report for March 2020.

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
March 2020

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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- E: ADMINISTRATION
- F: ODORS & LANDSCAPING
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 - 2) Laboratory Data
 - 3) Recycled Water Report
 - 4) Annual Performance Summary - Graphs
 - 5) Process Control Data / Graphs
 - 6) Neighborhood Complaints Received
 - 7) Jerome Meter Readings and Locations
-

A: TREATMENT PLANT PERFORMANCE SUMMARY – March 2020
National Pollution Discharge Elimination System Permit – Table 1.0

Parameter	Value		Limits	
	Ave	Max		
Flow, MGD (monthly ave/max)	4.06	4.67	N/A	
Influent				
BOD ₅ , lb/day (month ave/max)	9,302	10,061	N/A	
TSS, lb/day (monthly ave/max)	15,866	28,613	N/A	
Effluent				
BOD ₅ , mg/L (monthly ave/max weekly ave)	6	6	15	30
TSS, mg/L (monthly ave/max weekly ave)	<3	4	10	20
BOD ₅ - % Removal, Average	98		85 minimum	
TSS - % Removal, Average	99		85 minimum	
Ammonia, mg/L – (monthly ave/daily max)	1.6	1.6	5.9	21
pH, su (min / max)	7.0	7.3	6.5	8.5
Enterococcus, MPN/100 ml (30 day geo mean)	2.07		35	
Fecal Coliform, MPN/100 ml (monthly median)	N/A		140	
Fecal Coliform, MPN/100 ml (90 th PCTL)	N/A		430	
Total Coliform, MPN/100 ml (5 sample median)	N/A		240	
Total Coliform, MPN/100 ml (monthly maximum)	N/A		10,000	

Peak Instantaneous Rainfall Flow Rate = 11 million gallon per day, March 15, 2020, 12:09 pm
 Total Rainfall = 0.16 inches

Title 22 - Recycled Water Production and Quality – Table 2.0

Description	Units	Value	Limit
Potable Water Provided	Million Gallons	0.328	N/A
Volume Produced	Million Gallons	9.832	N/A
Average Turbidity	NTU	0.5	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	0	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	7.9	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	15	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 Pollutant 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 March 2020.
- Monthly Safety Topics: On Line Training – Fire Prevention and Response, Fire Extinguisher Use

C: OPERATIONS & MAINTENANCE STATUS / REVIEW:

Key events for the period:

Wastewater Treatment Plant Power Outages

- No power outages to report in March 2020.

Novato Wastewater Treatment Plant

- Routine rounds, readings and preventative maintenance.
- Gravity Belt Thickener #1 - Replaced the drive roller and bearings.
- Headwork's Screenings Compactor – JRL Machine refurbished the drive unit.
- Digester Heat Loop Electrical Motor #2 – Calcon Systems replaced the motor starter unit.
- Maintenance Shop – Calcon Systems added an electrical station for charging portable hand tools.
- Digester #1 Mixing Pump – Replaced pump with an in-house refurbished unit.
- Gravity Belt Thickener #2 – Replaced solids thickening belt.
- Digester #1 – Repaired one valve and part of the sludge transfer line.
- Digested Sludge Transfer Pump #1 - Replaced line repaired.
- Polymer Pump #1 – Calcon Systems programmed pump controller.
- Emergency Generator #2 – Replaced diesel engine governor unit.

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

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

Ignacio Transfer Pump Station

- Routine rounds, readings and preventative maintenance.
- Emergency generator rear bearing replacement.

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

- None

Recycled Water Plant (RWP)

- Routine maintenance was performed.

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

- None

Sludge Lagoons (and Reclamation Area)

- Conducted routine checks.
- Exercised the sludge lagoons inlet and outlet valves.

D: ENVIRONMENTAL SERVICES ACTIVITIES SUMMARY

Discharge to San Pablo Bay – March 1 – 31, 2020

Regulatory Programs:

Laboratory Program

Enterococcus

When effluent is discharged to San Pablo Bay the bacterial requirement includes monitoring for the Enterococcus parameter. The recycled water use agreement with the California State Coastal Conservancy requires that Enterococcus data be provided, which continued through March 2020.

Reporting

Liz Falejczyk, Veolia Water Environmental Services Supervisor attended GeoTracker electronic reporting software online training for the new recycled water volumetric reporting requirements.

Pretreatment Program

Discharge Permits

- Received one renewal application from a Non-Significant Categorical Industrial User for a Non-Domestic Discharge Permit.

Enforcement

- One Notice of Violation was issued to a Categorical Significant Industrial User.

E: ADMINISTRATION:

- February 2020 Electronic Discharge Monitoring Report (EDMR-US EPA) and February 2020 Self-Monitoring Report (SMR-State of California) submitted on March 27th.
- 2019 Recycled Water Report was submitted on March 26th.
- 2019 Pretreatment Annual Report was submitted on March 2nd.

F: ODORS & LANDSCAPING:

- Jerome meter (H₂S) parts per million (ppm) readings performed in adjacent neighborhood.
- Values reported averaged 0.0000 ppm which is below the odor threshold.

G: MISCELLANEOUS

- Process Control Management Plan (PCMP) meetings held weekly with the Veolia staff.
- Leadership Novato plant tour March 11th.

Veolia Support Staff On/Off Site (Various Times)

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

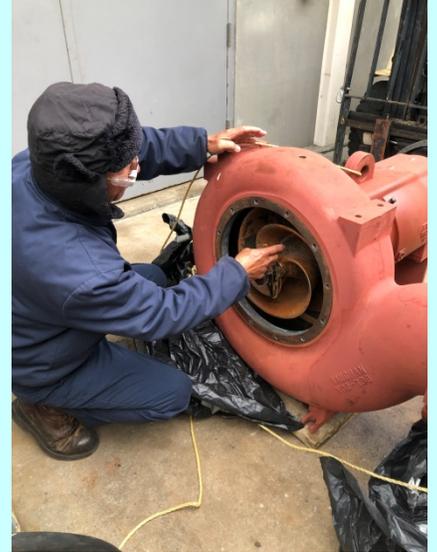
Melissa Sandvold, Veolia West Region VP of Operations

James Loven, Veolia Central/West Technical Director

Joe Hart, Veolia Regional Asset Manager

1) PHOTOS

PLANT OPERATION AND MAINTENANCE MARCH 2020



Above Left and Center – Jeff Hendricks and Alejo Cuntapay, Veolia Mechanics repairing the screens conveyor drive assembly
Above Right – Alejo Cuntapay inspecting the impeller on the digester mixing pump
Below Left – Coast Live Oak Tree at the entryway
Below Right – Leadership Novato Plant Tour March 11th

2) LABORATORY DATA

Novato Sanitary District
BOD/TSS Report



March, 2020

Date	Flow MGD	Influent				Effluent				BOD % Removal PERCENT	TSS % Removal %
		BOD		TSS		BOD		TSS			
		mg/l	lb/d	mg/l	lb/d	mg/l	lb/d	mg/l	lb/d		
03/01/20	3.89										
03/02/20	3.89										
03/03/20	3.78										
03/04/20	3.78										
03/05/20	4.23	260	9,172	283	9,984	5	164	3	99	98.1	98.9
03/06/20	3.75										
03/07/20	3.74										
03/08/20	3.92										
03/09/20	4.13										
03/10/20	3.71										
03/11/20	3.85	260	8,348	433	13,903	6	193	<3	<96	97.7	99.3
03/12/20	4.01							<3	<100		
03/13/20	4.08										
03/14/20	4.10										
03/15/20	4.64										
03/16/20	4.07										
03/17/20	4.55										
03/18/20	4.67										
03/19/20	3.98	290	9,626	862	28,613	5	166	4	133	98.3	99.5
03/20/20	4.07										
03/21/20	3.94										
03/22/20	4.03										
03/23/20	3.79										
03/24/20	4.16	290	10,061	316	10,963	6	190	4	127	97.9	98.7
03/25/20	4.15										
03/26/20	4.06										
03/27/20	3.97										
03/28/20	4.14										
03/29/20	4.47										
03/30/20	4.25										
03/31/20	4.05										
Weekly Averages											
03/07/20	Week 1	260	9,172	283	9,984	5	164	3	99		
03/14/20	Week 2	260	8,348	433	13,903	6	193	3	98		
03/21/20	Week 3	290	9,626	862	28,613	5	166	4	133		
03/28/20	Week 4	290	10,061	316	10,963	6	190	4	127		
	Week 5										
Monthly											
Minimum	3.71	260	8,348	283	9,984	5	164	<3	<96	98	99
Maximum	4.67	290	10,061	862	28,613	6	193	4	133	98	100
Total	125.85										
Average	4.06	275	9,302	474	15,866	6	178	<3	<111	98	99

Novato Sanitary District
Conventional Pollutants Report



March, 2020

Date	INFLUENT - A001			Effluent - E002							
	Flow	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Oil & Grease	Temp	Rainfall
	Total			Fecal	Entero	Total					
	MGD	su	mg/L	MPN/100 mL							
03/01/20	3.89										0.00
03/02/20	3.89	7.6					7.3			18.5	0.00
03/03/20	3.78	7.4				1.0	7.2			19.2	0.00
03/04/20	3.78					5.2	7.2			19.4	0.00
03/05/20	4.23					3.1	7.2			18.8	0.00
03/06/20	3.75						7.1			18.8	0.00
03/07/20	3.74										0.15
03/08/20	3.92										0.00
03/09/20	4.13	7.6				28.2	7.1			18.4	0.00
03/10/20	3.71	7.4				1.0	7.2			18.3	0.00
03/11/20	3.85						7.0			19.3	0.00
03/12/20	4.01	7.6				2.0	7.0	1.60	3.0	18.5	0.00
03/13/20	4.08	7.6					7.0			19.0	0.00
03/14/20	4.10										0.10
03/15/20	4.64										0.16
03/16/20	4.07	6.9				2.0	7.2			17.3	0.01
03/17/20	4.55	7.2				3.5	7.0			17.6	0.02
03/18/20	4.67	7.8				1.0	7.0			17.7	0.12
03/19/20	3.98	7.7					7.0			18.4	0.00
03/20/20	4.07	7.5					7.0			17.8	0.00
03/21/20	3.94										0.00
03/22/20	4.03										0.00
03/23/20	3.79	7.8				1.0	7.2			17.9	0.00
03/24/20	4.16						7.1			18.8	0.11
03/25/20	4.15	7.5				1.0	7.0			18.4	0.02
03/26/20	4.06	7.7				<1.0	7.1			17.6	0.00
03/27/20	3.97	7.4					7.1			17.9	0.00
03/28/20	4.14										0.10
03/29/20	4.47										0.15
03/30/20	4.25	7.4					7.0			18.9	0.00
03/31/20	4.05						7.0			19.1	0.00
Monthly											
Minimum	3.71	6.9				<1.0	7.0	1.60		17.3	0.00
Maximum	4.67	7.8				28.2	7.3	1.60	3.0	19.4	0.16
Total	125.85										0.94
Average	4.06	7.5					7.1	1.60	3.0	18.4	0.03
Geomean						2.07					

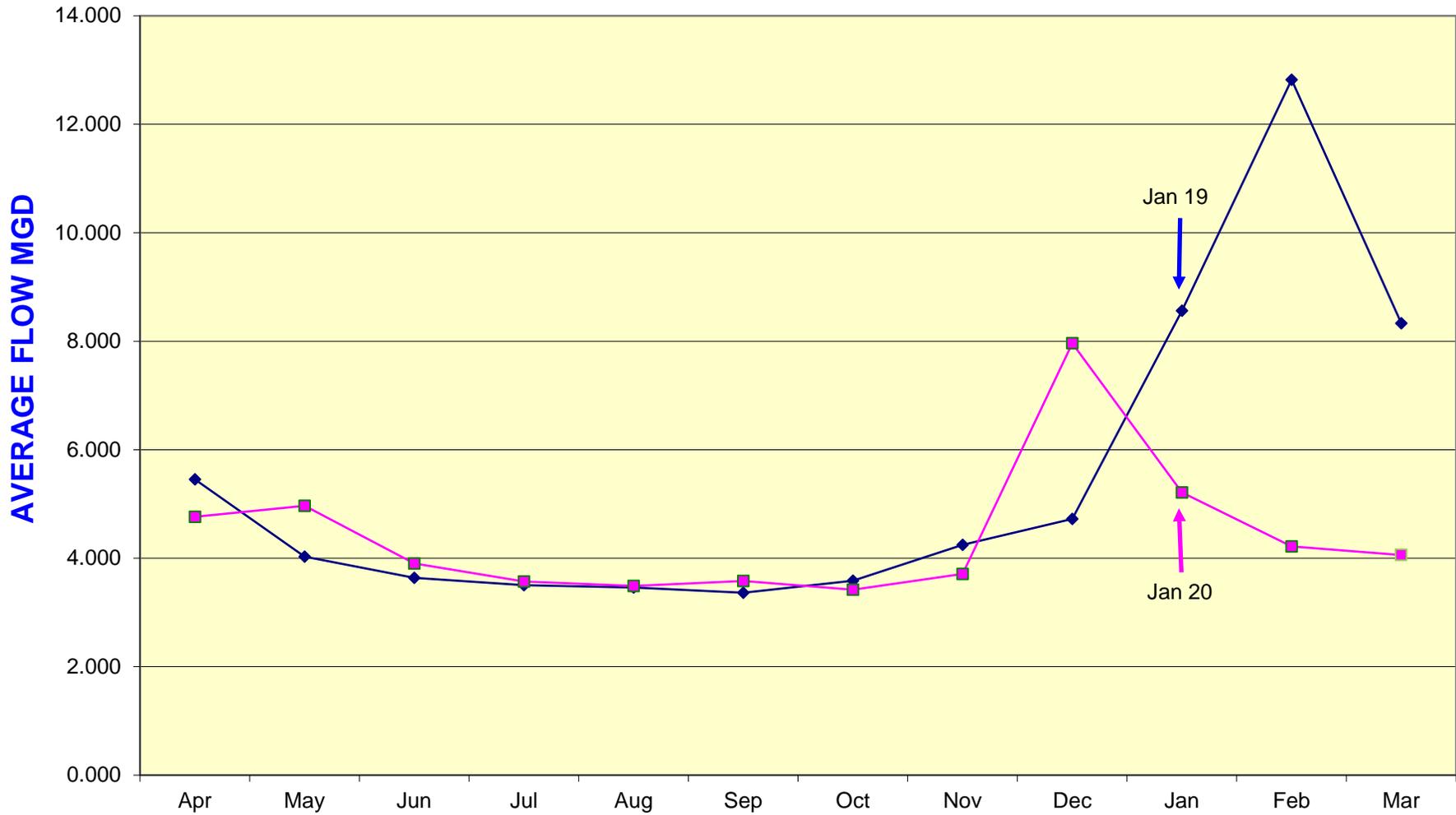
3) RECYCLED WATER REPORT

NOVATO SANITARY DISTRICT
RECYCLED WATER
COMPLIANCE SUMMARY REPORT

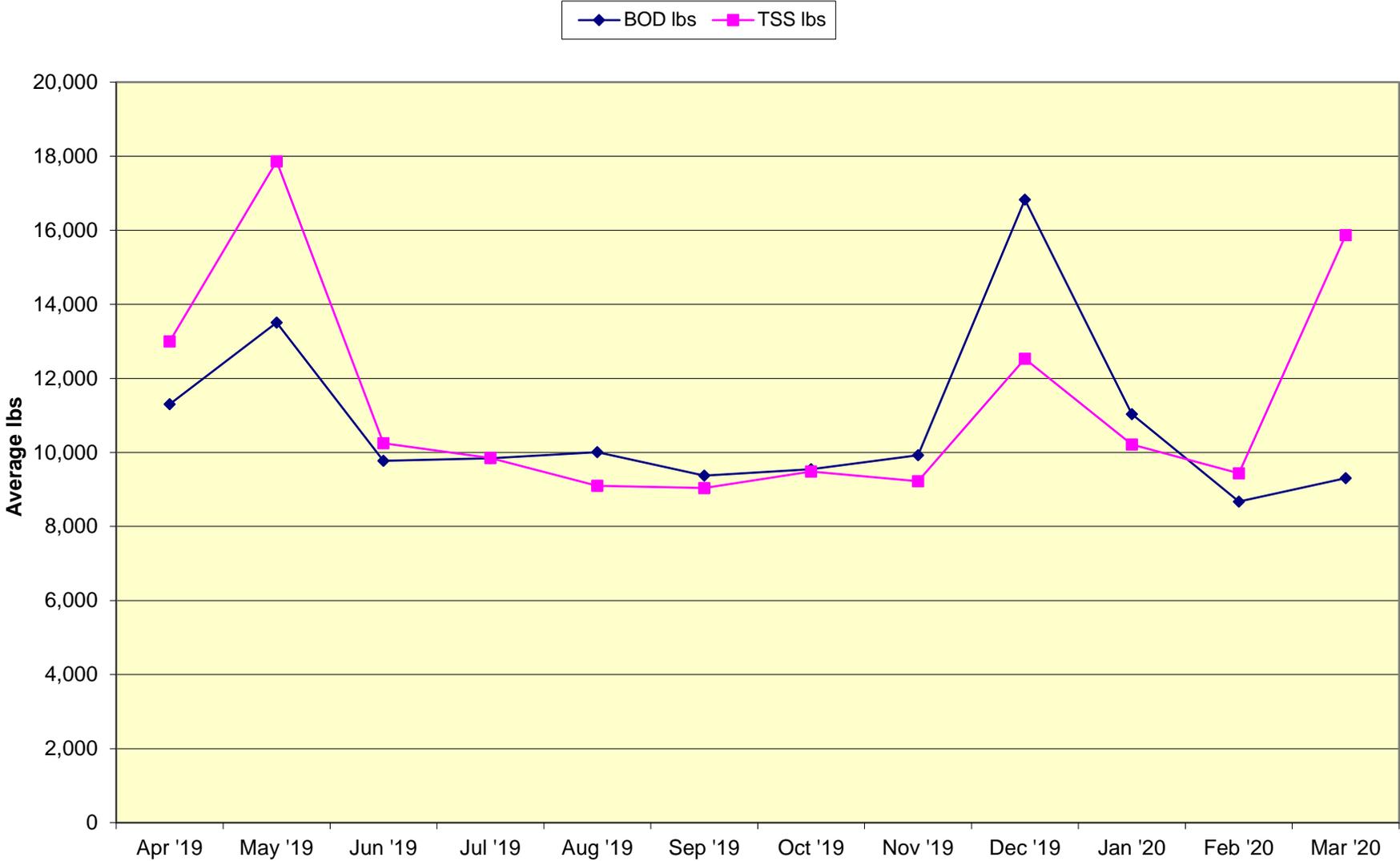
Date	Filter Influent Flow MGD	Recycled Water Flow to Plum St. MGD	Potable Water To Plum St Tank MGD	Recycled Water Influent Turbidity Ave. NTU	Minutes Over 5 NTU Turbidity (m)	Filter Effluent 24 Hr Average Turbidity NTU	Filter Effluent Dissolved Oxygen (mg/l)	Filter Effluent Total Coliform MPN/100ml	Disinfection CT Value mg-min/l
3/1/2020	0.780	0.262			0	0.1	8.8	<1	>450.000
3/2/2020	0.940	0.411			0	0.1	9.0	<1	>450.000
3/3/2020	1.020	0.667			0	0.3	7.9	<1	>450.000
3/4/2020	0.820	0.297			0	0.4		<1	>450.000
3/5/2020	0.970	0.289			0	0.8		<1	>450.000
3/6/2020	0.790	0.060			0	0.4		<1	>450.000
3/7/2020	0.700	0.424			0	0.4		<1	>450.000
3/8/2020	0.800	0.161			0	0.4	9.2	<1	>450.000
3/9/2020	0.770	0.283			0	0.6	9.3	<1	>450.000
3/10/2020	0.730	0.000							
3/11/2020	0.970	0.000							
3/12/2020	0.860	0.000	0.328						
3/13/2020	0.950	0.314			0	1.3	9.1	<1	>450.000
3/14/2020	0.820	0.198			0	1.3		15	>450.000
3/15/2020	0.760	0.000							
3/16/2020	0.730	0.000							
3/17/2020	0.860	0.000							
3/18/2020	1.470	0.453			0	0.7	8.9	<1	>450.000
3/19/2020	0.880	0.001			0	0.2		1	>450.000
3/20/2020	0.850	0.224			0	1.0		<1	>450.000
3/21/2020	0.750	0.000					9.0		
3/22/2020	0.940	0.636			0	0.7		<1	>450.000
3/23/2020	0.940	0.774			0	0.8	9.0	<1	>450.000
3/24/2020	1.040	0.360			0	0.8		<1	>450.000
3/25/2020	1.060	0.770			0	0.3		<1	>450.000
3/26/2020	0.950	0.739			0	0.4		<1	>450.000
3/27/2020	0.850	0.431			0	0.4		<1	>450.000
3/28/2020	0.990	0.762			0	0.8		<1	>450.000
3/29/2020	0.850	0.621			0	0.5	8.7	<1	>450.000
3/30/2020	1.140	0.616			0	0.2	9.2	<1	>450.000
3/31/2020	0.890	0.079			0	0.1	8.6	<1	>450.000
Total	27.870	9.832	0.328						
Minimum	0.700	0.000	0.328		0	0.1	7.9	<1	>450.0
Maximum	1.470	0.774	0.328		0	1.3	9.3	15	>450.0
Average	0.899	0.317	0.328		0	0.5	8.9	<2	>450.0

4) ANNUAL PERFORMANCE SUMMARY - GRAPHS

WASTEWATER INFLUENT FLOW COMPARISON

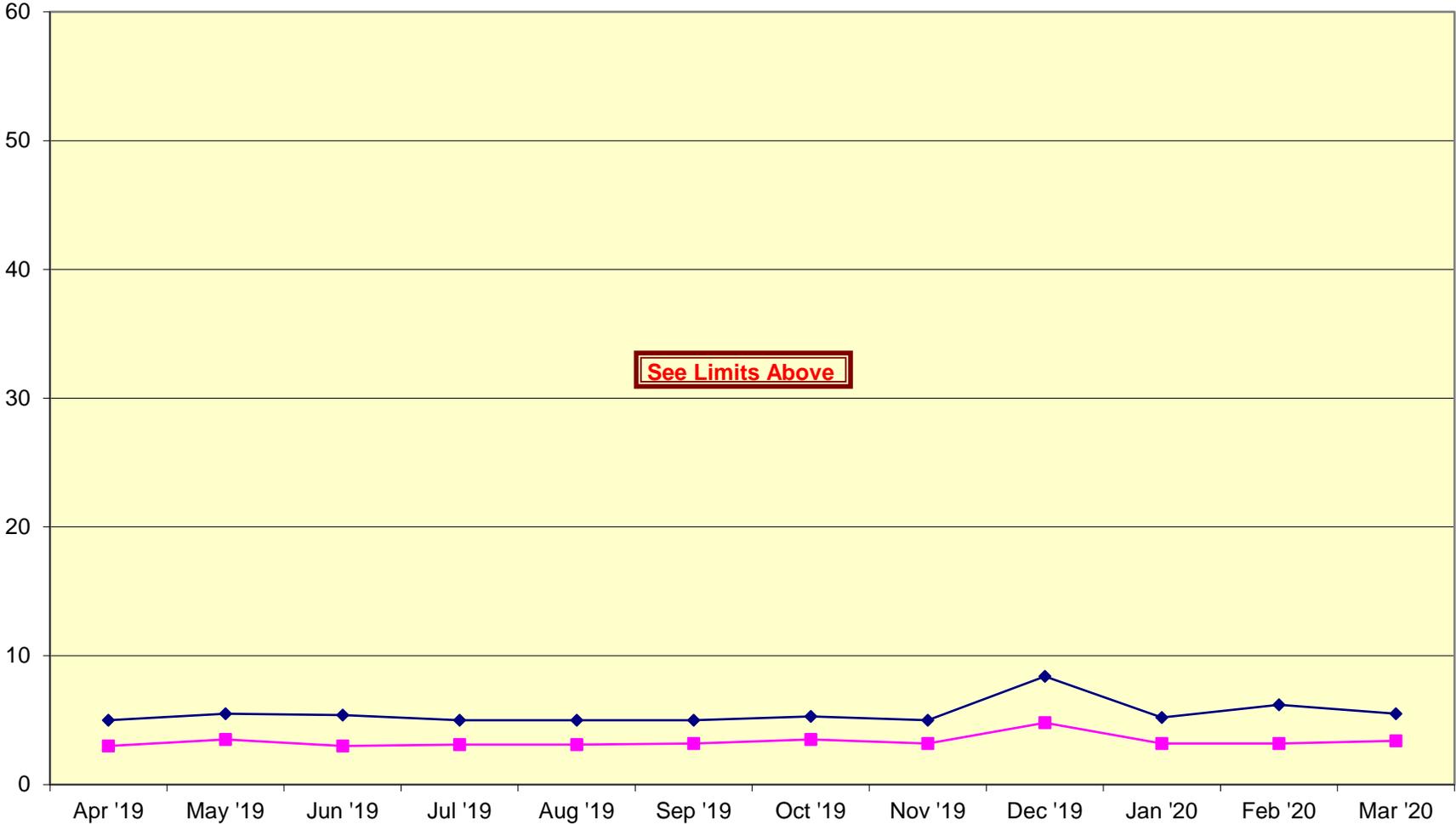


Influent Load BOD / TSS lbs



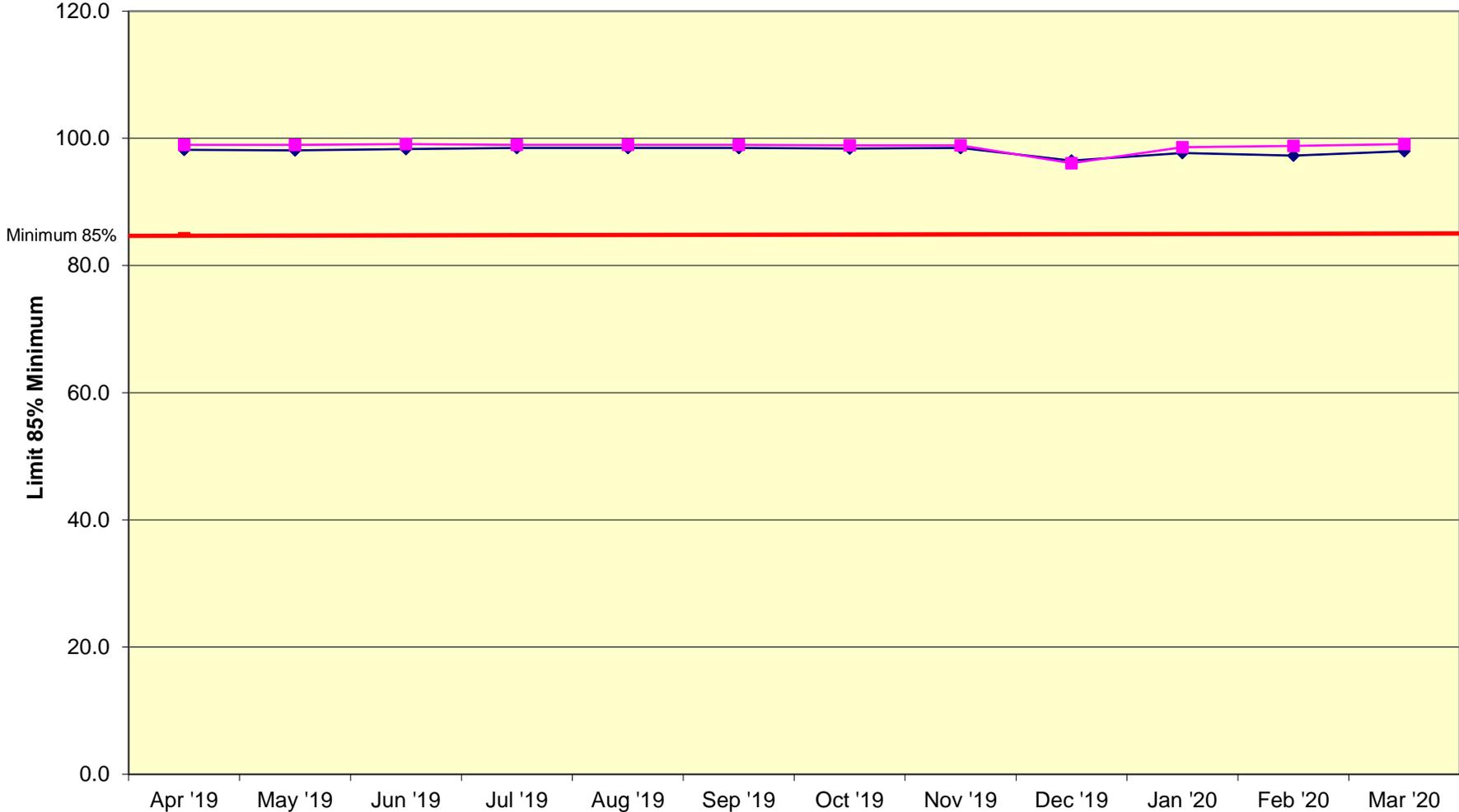
Effluent BOD / TSS Concentration

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

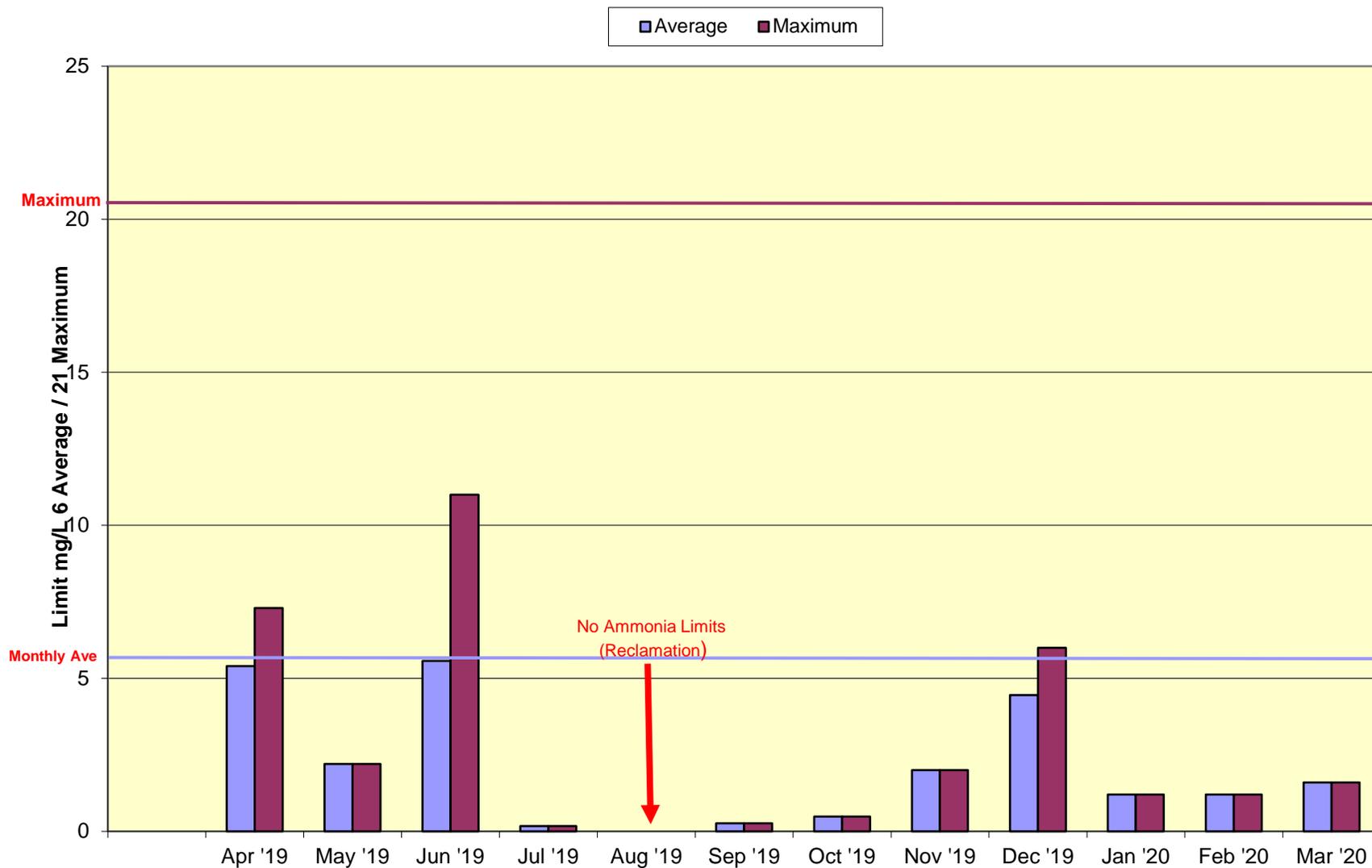


BOD / TSS Percent Removal

◆ BOD ■ TSS

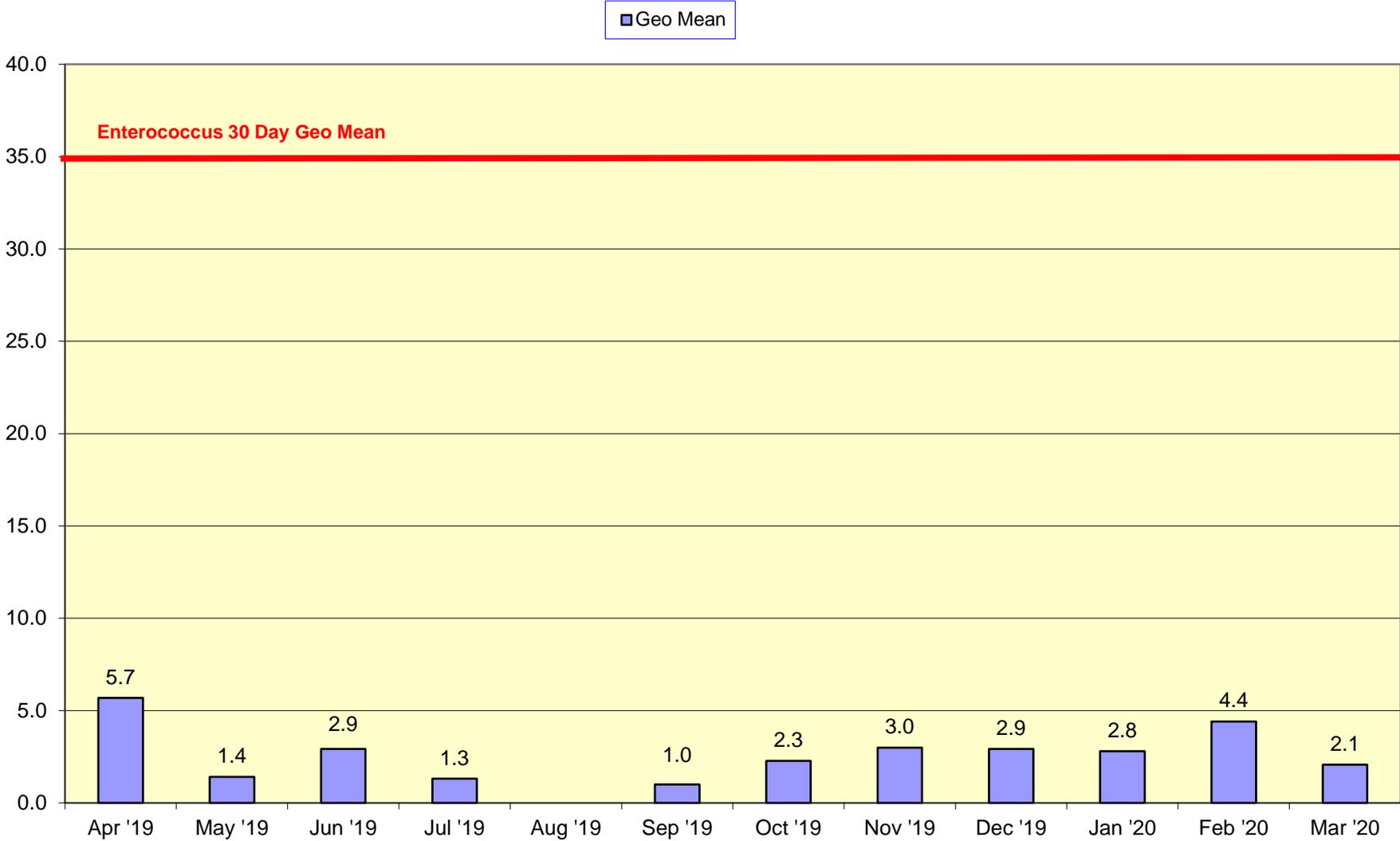


Effluent Ammonia

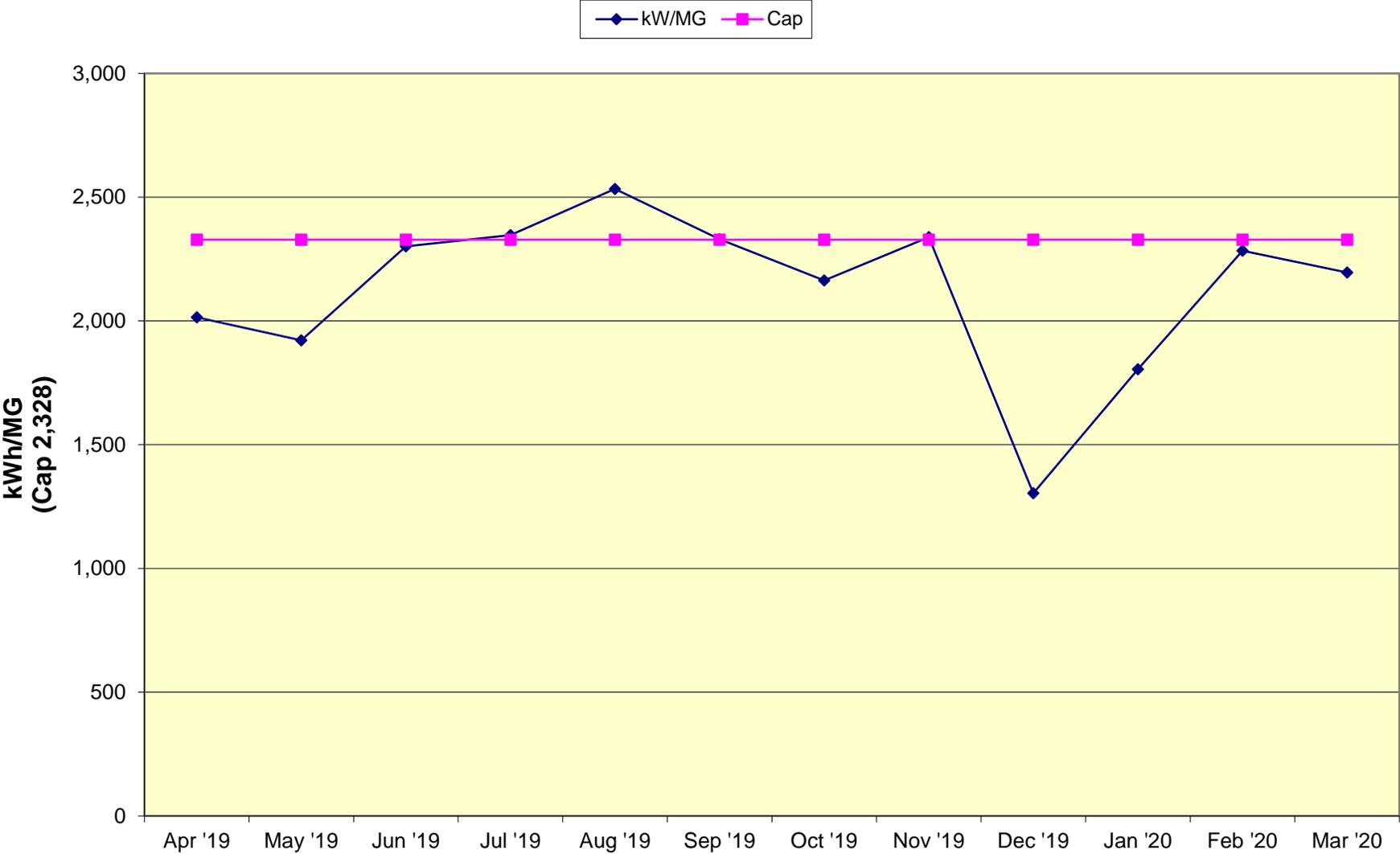


Disinfection - Enterococcus

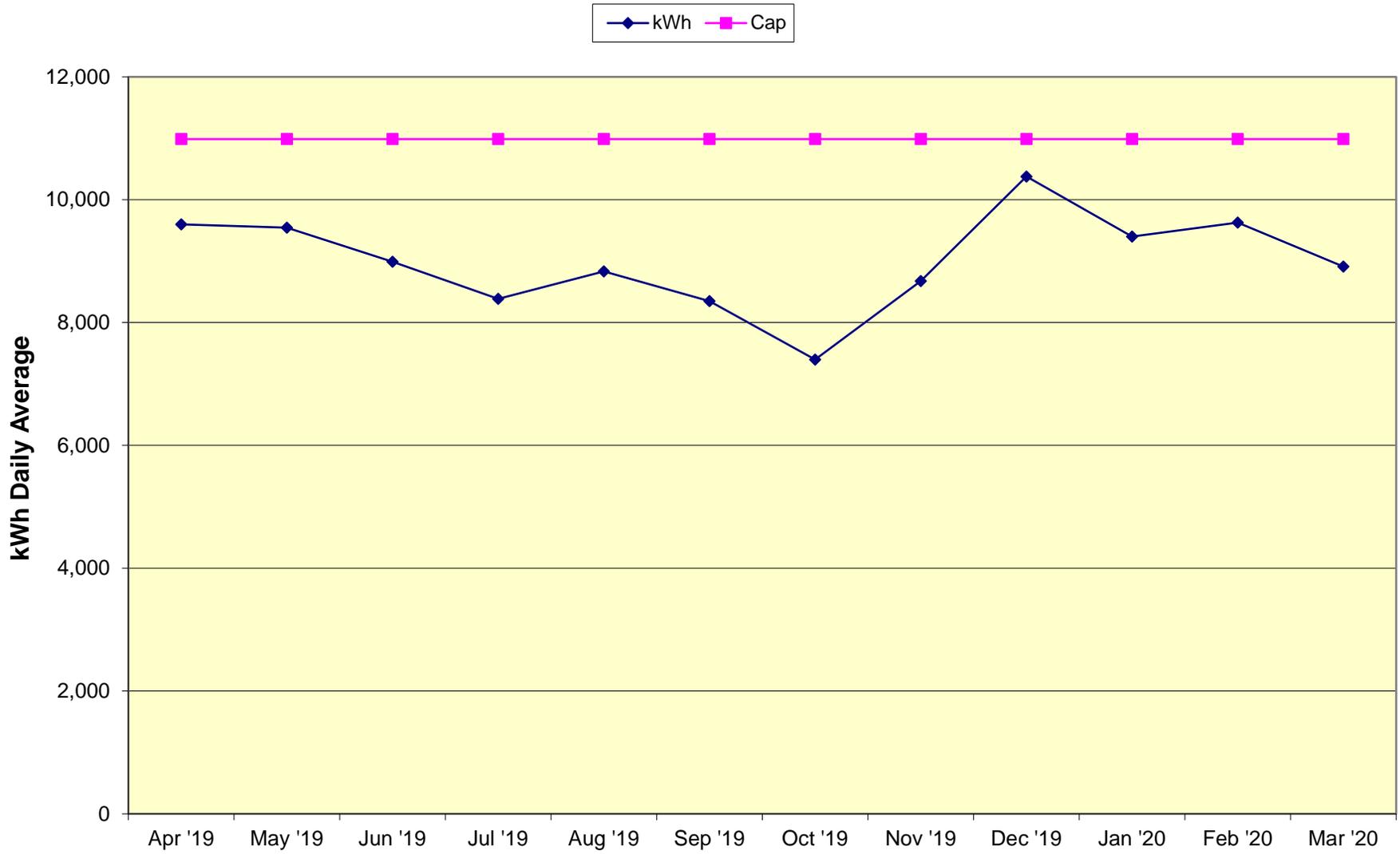
LIMITS - NPDES
Enterococcus 30 day geo mean 35 mpn /100ml



Energy kWh/MG

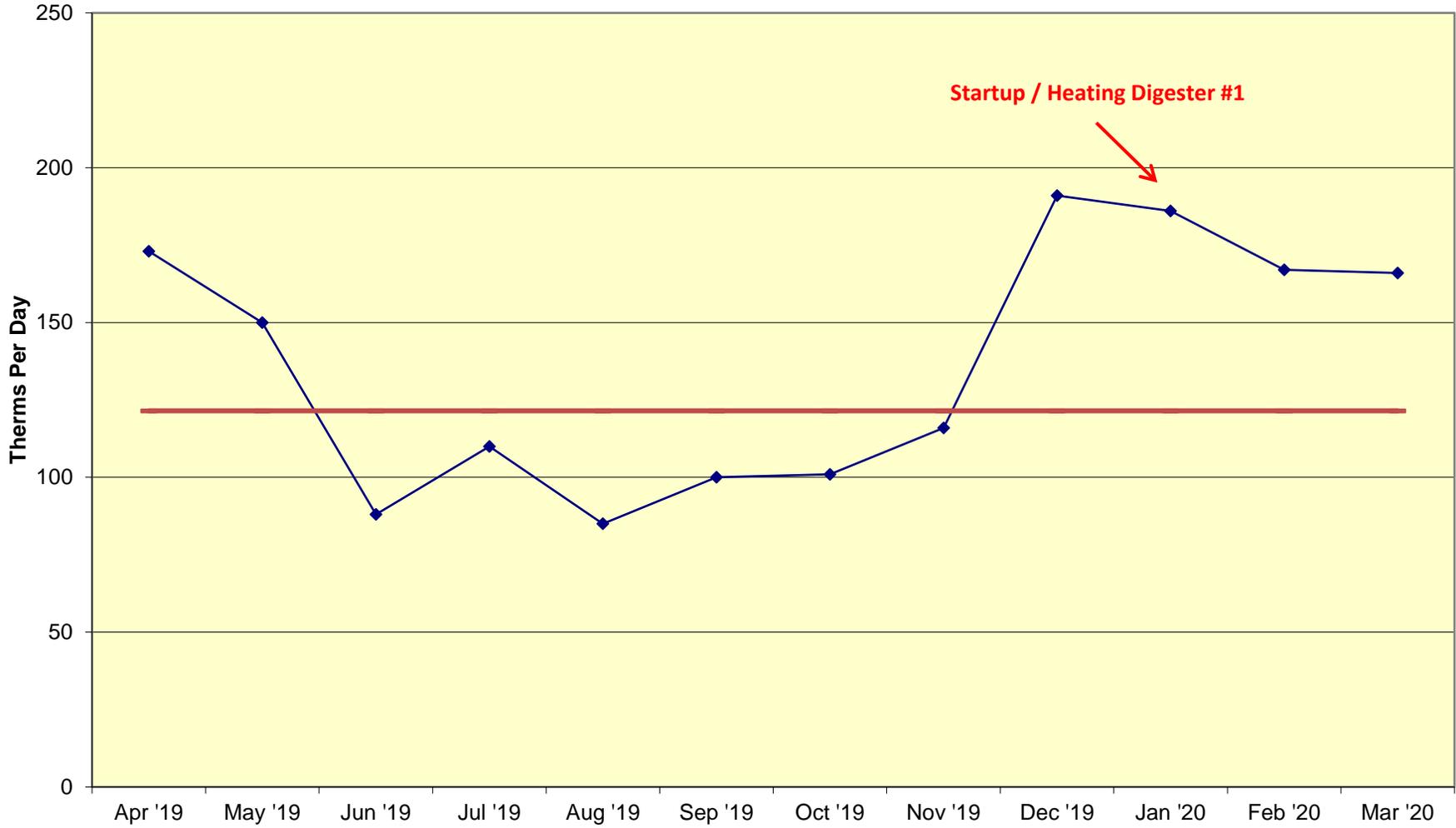


Energy kWh



Natural Gas Use

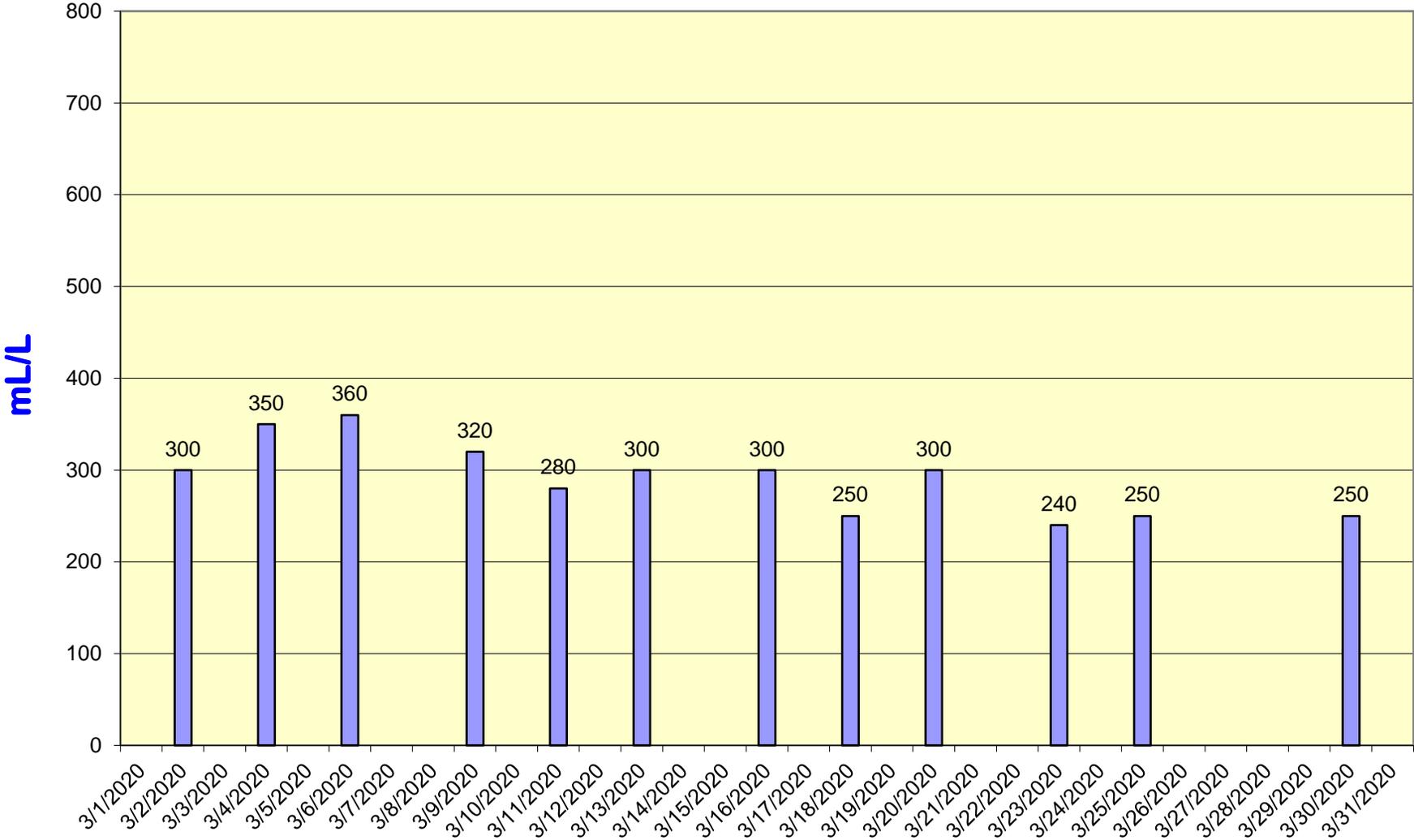
◆ Natural Gas — Cap



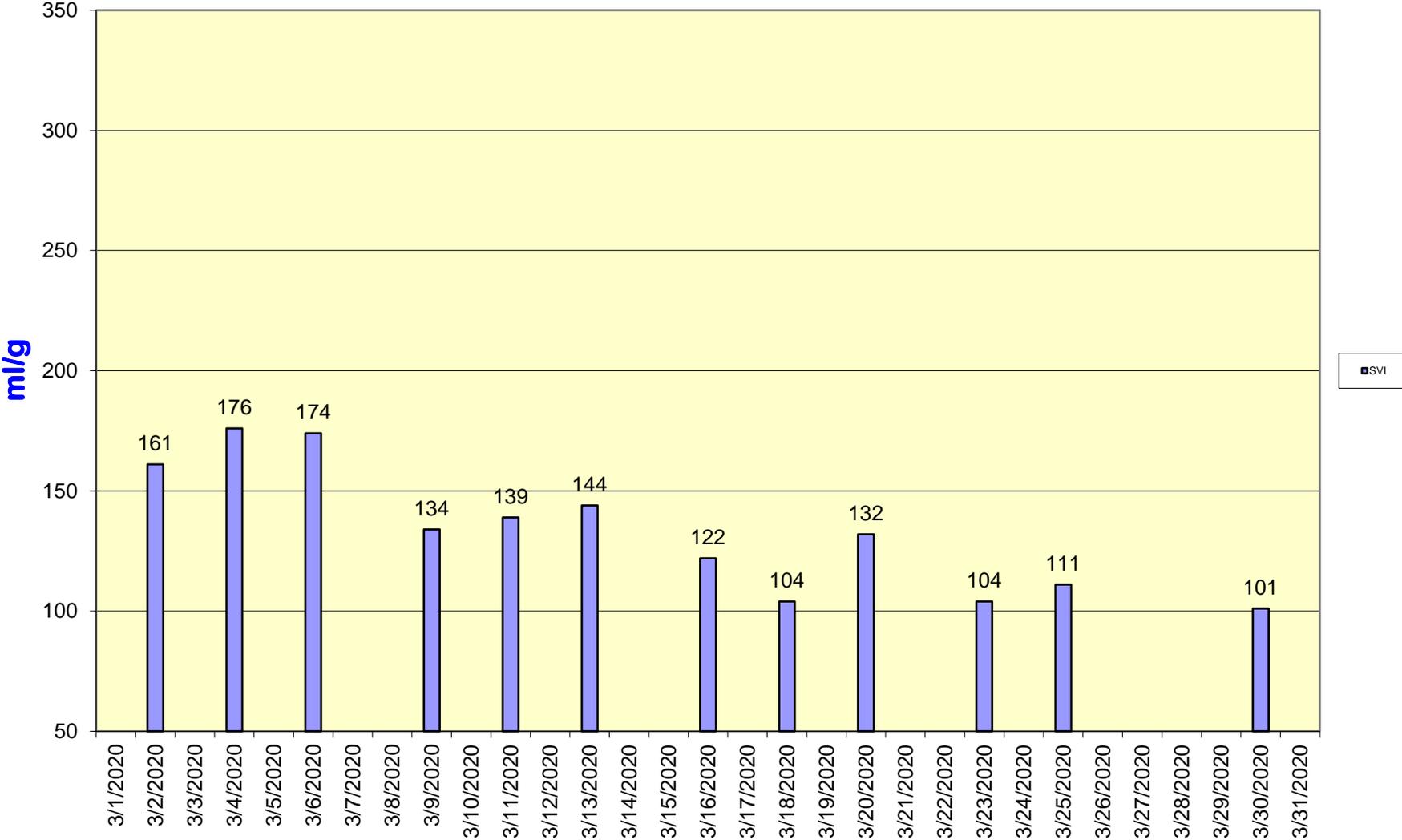
5) PROCESS CONTROL DATA / GRAPHS

Process Control Data						
	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	MCRT	SVI
3/1/2020	3.89					
3/2/2020	3.89	300	1,860	33,134	7.4	161
3/3/2020	3.78					
3/4/2020	3.78	350	1,990	35,450	7.9	176
3/5/2020	4.23					
3/6/2020	3.75	360	2,070	36,875	8.1	174
3/7/2020	3.74					
3/8/2020	3.92					
3/9/2020	4.13	320	2,390	42,576	9.2	134
3/10/2020	3.71					
3/11/2020	3.85	280	2,020	35,985	7.8	139
3/12/2020	4.01					
3/13/2020	4.08	300	2,090	37,232	6.8	144
3/14/2020	4.10					
3/15/2020	4.64					
3/16/2020	4.07	300	2,450	43,645	7.9	122
3/17/2020	4.55					
3/18/2020	4.67	250	2,410	42,932	7.4	104
3/19/2020	3.98					
3/20/2020	4.07	300	2,280	40,616	7.3	132
3/21/2020	3.94					
3/22/2020	4.03					
3/23/2020	3.79	240	2,320	41,329	8.5	104
3/24/2020	4.16					
3/25/2020	4.15	250	2,250	40,082	7.6	111
3/26/2020	4.06					
3/27/2020	3.97		2,030	36,163	3.3	
3/28/2020	4.14					
3/29/2020	4.47					
3/30/2020	4.25	250	2,480	44,179	7.5	101
3/31/2020	4.05					
Minimum	3.71	240	1,860	33,134	3.3	101
Maximum	4.67	360	2,480	44,179	9.2	176
Total	125.85					
Average	4.06	292	2,203	39,246	7.4	134

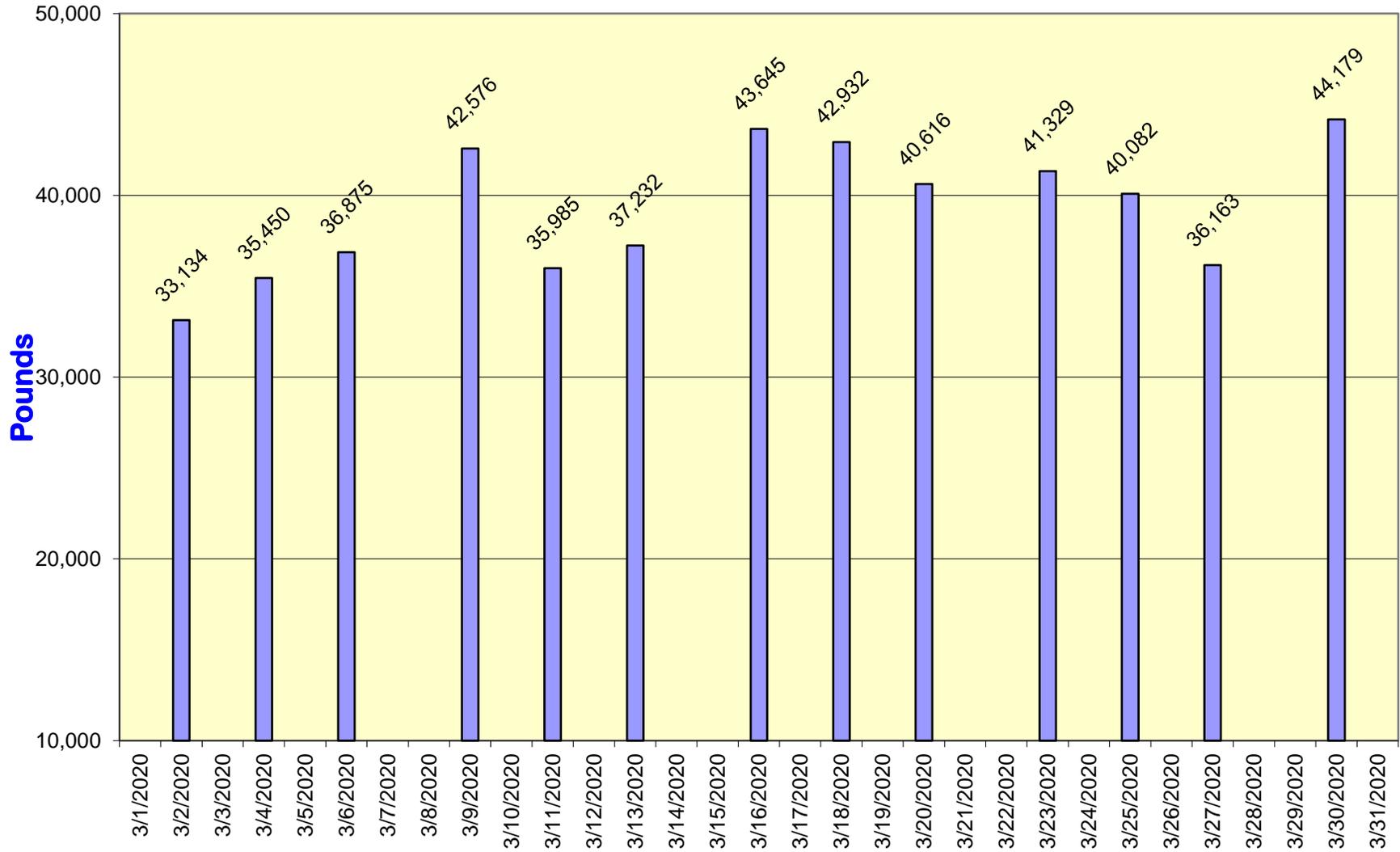
Settleability



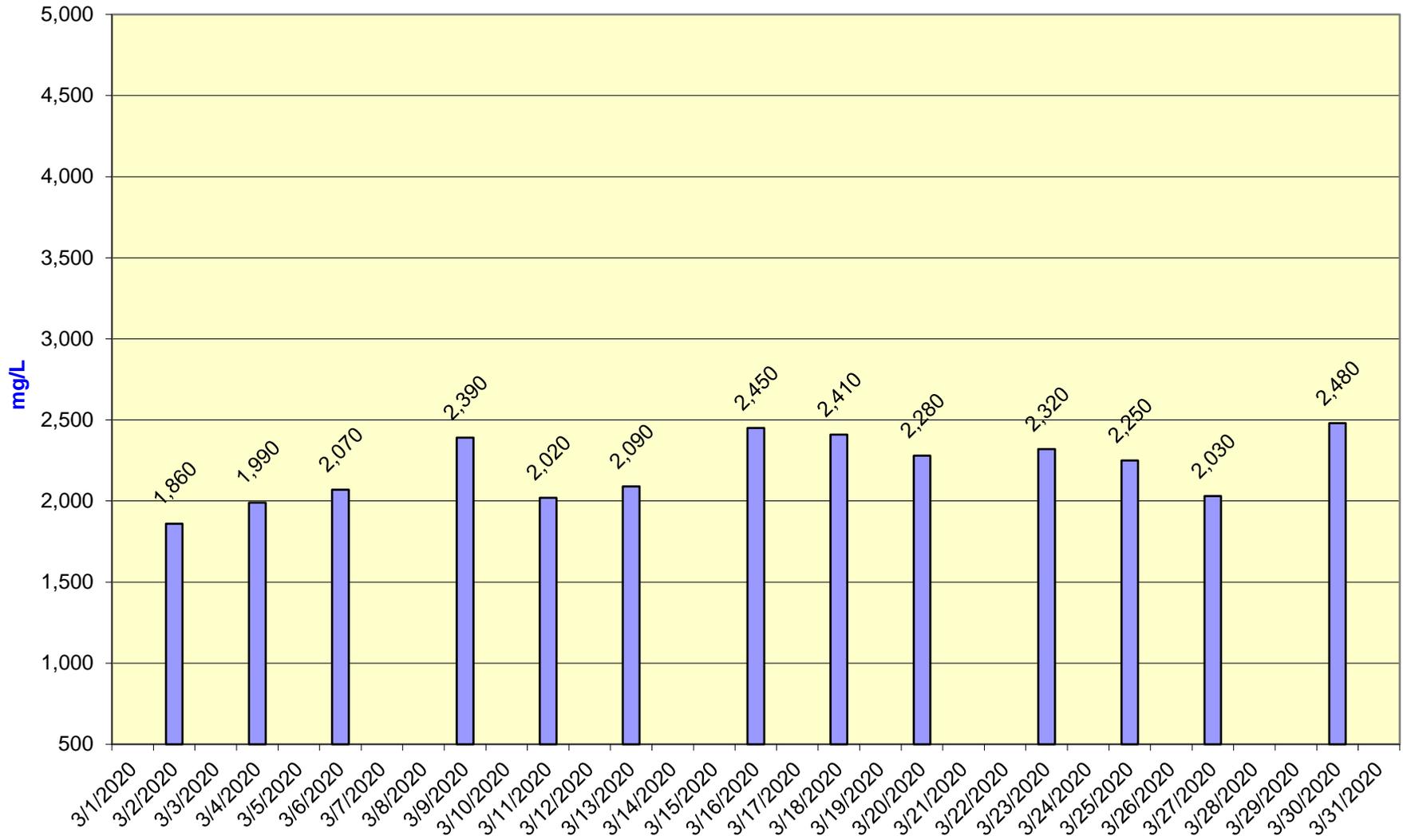
Sludge Volume Index



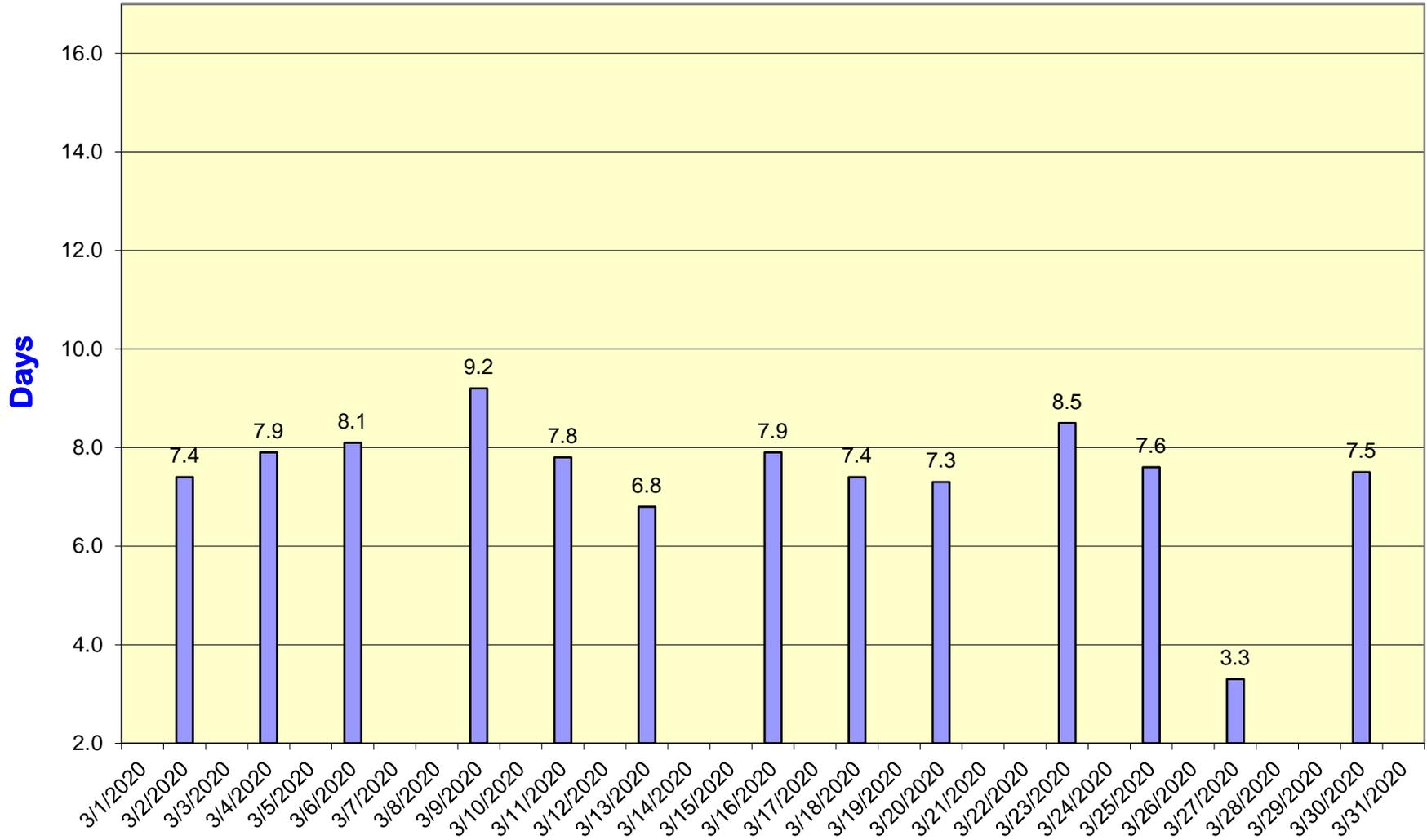
MLSS Inventory



MLSS Concentration

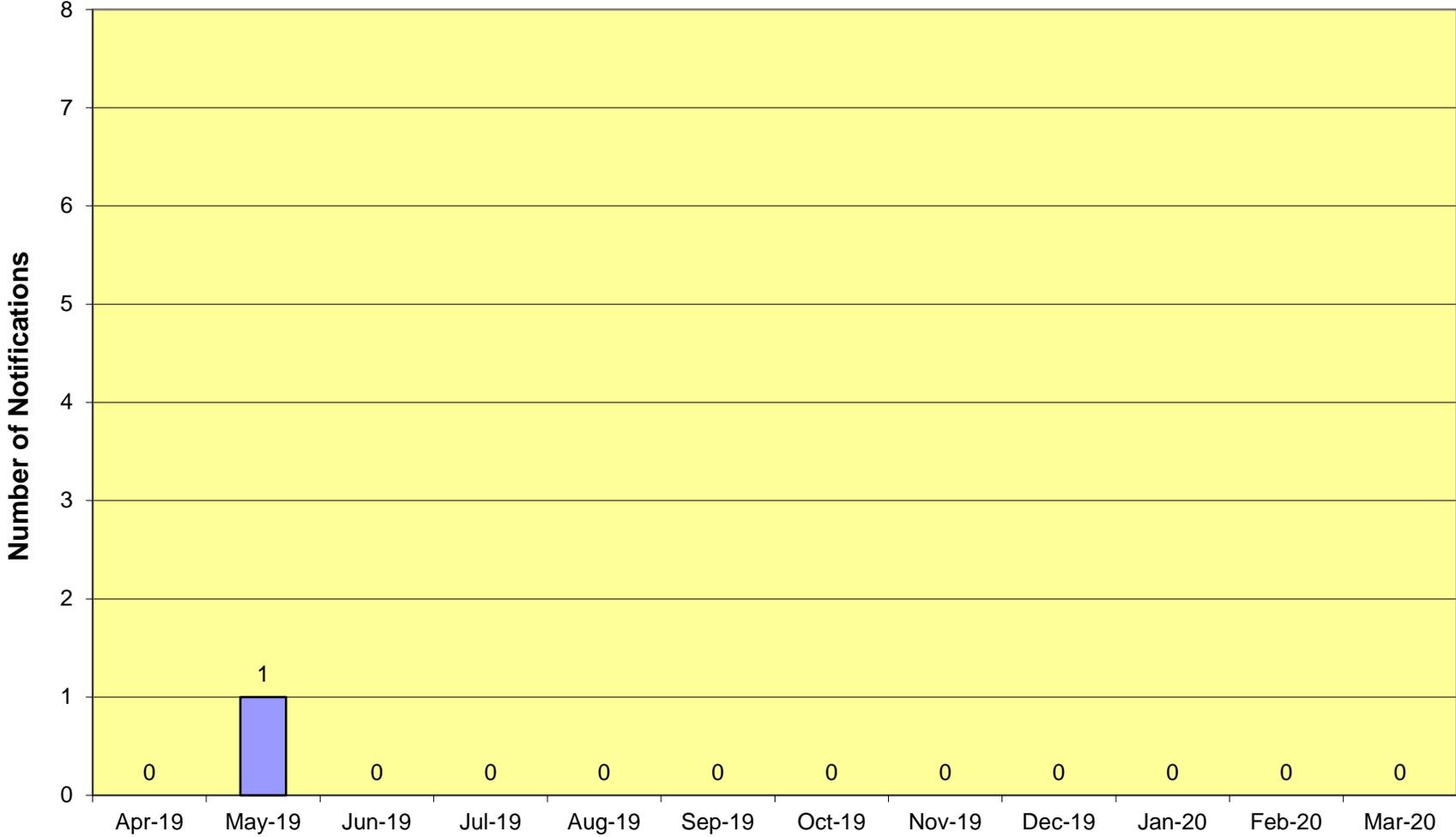


Mean Cell Residence Time



6) NEIGHBORHOOD COMPLAINTS RECEIVED

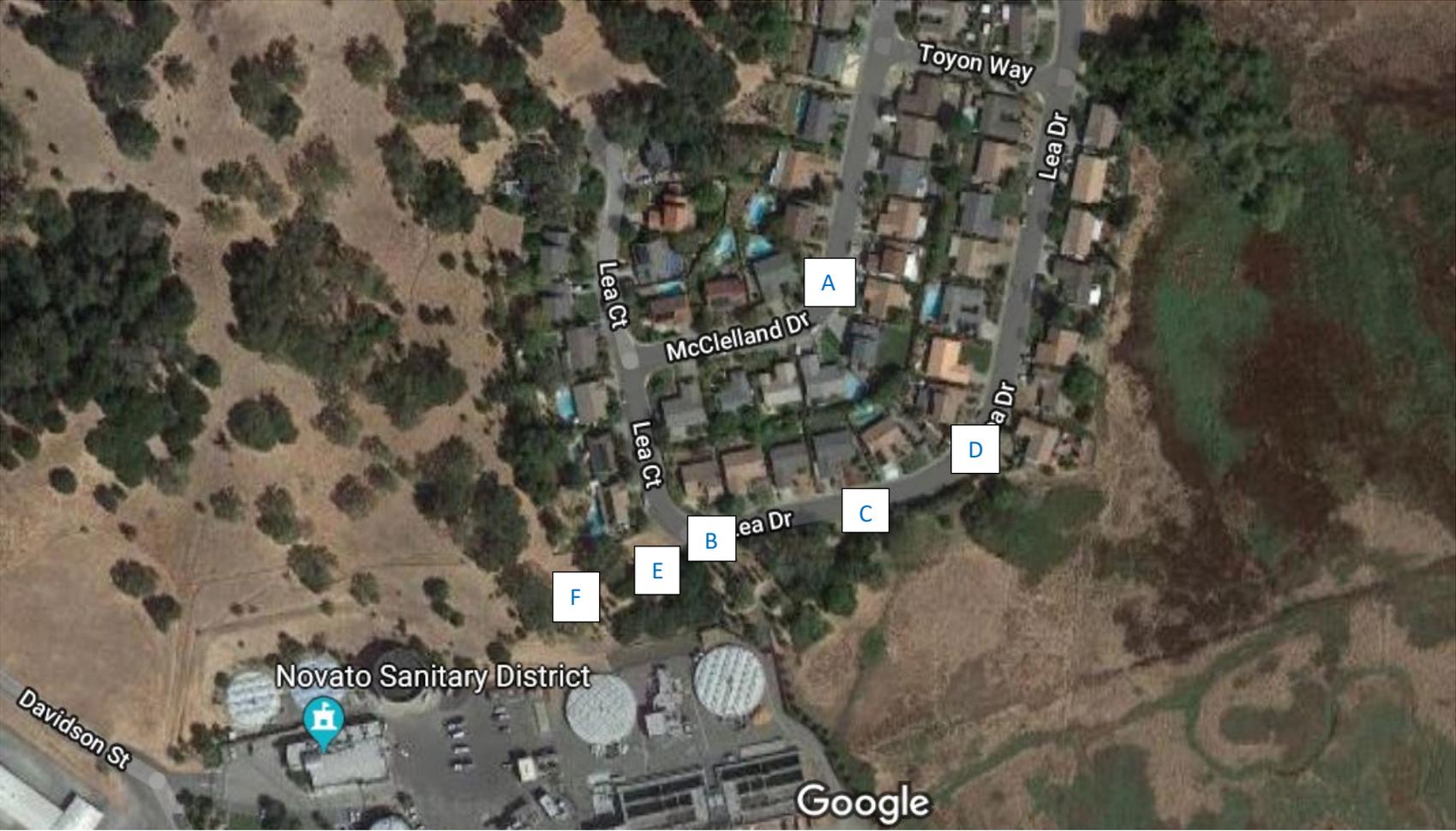
Neighborhood Complaints Received



JEROME METER READINGS - MARCH 2020				
Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.000	0.0000	Neighborhood
B: Lea 1	0.000	0.000	0.0000	Neighborhood
C: Lea 2	0.000	0.000	0.0000	Neighborhood
D: Lea 3	0.000	0.000	0.0000	Neighborhood
E: Lea 4				Neighborhood
F: Lea 5				Neighborhood

7) JEROME METER READINGS & LOCATIONS

NEIGHBORHOOD JEROME METER LOCATIONS – Lea Drive and McClelland Drive



NOVATO SANITARY DISTRICT
Wastewater Operations - Reclamation Facilities Report
March 2020

1.0 Summary:

1.1 During March 2020:

- The treatment plant was in bay discharge mode throughout March 2020.
- District drainage pump stations at Sites 3 and 7 pumped approximately 4.7 MG combined.
- Repairs continued on the discharge piping on Pump #3 at Irrigation Pump Station.

2.0 Ranch Operations:

- 2.1 Drainage Pump Stations No. 3 and 7 pumped 2.3 MG and 2.4 MG, respectively in March.
- 2.2 Staff from Auburn Ravine Ranch were on site to assess pasture conditions and prepare for the upcoming ranching seasons.
- 2.3 There were no other ranching activities during March 2020.

3.0 Irrigation Parcels:

- 3.1 No irrigation occurred in March 2020.

4.0 Irrigation Pump Station:

- 4.1 The Wildlife Pond dropped from 5.4 feet to 5.0 feet March 2020.
- 4.2 Storage pond Nos. 1 and 2 dropped from 3.4 feet to 3.0 feet in March.
- 4.3 Linscott Engineering and Irish Welding installed pipe flanges on the irrigation pump discharge piping at Irrigation Pump Station as part of a pipe corrosion repair project which is nearly complete.



1. Pipe flanges were welded to the discharge piping on Pump 3 at Irrigation Pump Station.

5.0 Biosolids (sludge) Handling & Disposal:

- 5.1 No biosolids activities occurred in March 2020.

NOVATO SANITARY DISTRICT														
Reclamation Facility - Monthly Statistics for Calendar Year 2020, as of March 31, 2020														
	January	February	March	April	May	June	July	August	September	October	November	December	Total Year to Date	Annualized Monthly Average
Irrigation Pump Station														
Plant flow to ponds (MG)	0	0	0										-	
Irrigation (MG)	0	0	0										-	
Irrigation Pump 1 Hours	0	0	0										-	
Irrigation Pump 2 Hours	0	0	0										-	
Irrigation Pump 3 Hours	0	0	0										-	
Washdown Water Pump Hours	0	0	0										-	
Wildlife Feed Pump Hours	0	0	0										-	
Water Circulated through Wildlife Pond (MG)	0	0	0										-	
Strainer No. 1 Hours	0	0	0										-	
Strainer No. 2 Hours	0	0	0										-	
Pond 1 Gauge @ Beginning of Month (feet)	3.5	3.5	3.4											
Pond 1 Gauge @ End of Month (feet)	3.5	3.4	3											
Pond 1 Gallons Stored @ End of Month(MG)	24	23	20											
Pond 2 Gauge @ Beginning of Month (feet)	3.5	3.5	3.4											
Pond 2 Gauge @ End of Month (feet)	3.5	3.4	3											
Pond 2 Gallons Stored @ End of Month(MG)	31	30	25											
Total Irrigation Water Stored (MG)	55	53	45											
Drainage Pump Station No. 3														
Drainage Pump No. 1 Hours	0	61.8	2.2										64	
Drainage Pump No. 2 Hours	266.6	0	0.4										267	
Drainage Pump No. 3 Hours	0	0	5.2										5.2	
Total Gallons Stormwater Pumped (MG)	79.98	18.54	2.34										100.86	33.62
Drainage Pump Station No. 7														
Drainage Pump No. 1 Hours	0	9.6	2.1										11.7	--
Drainage Pump No. 2 Hours	0	0	0										0	--
Drainage Pump No. 3 Hours	85.6	0	3.3										88.9	--
Total Gallons Stormwater Pumped (MG)	38.52	4.32	2.43										45.3	15.1

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Capital Projects: Collection System Improvements, Account No. 72706: Redwood Blvd. Sewer Rehabilitation Project.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 8.a.
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RECOMMENDED ACTIONS: Approve Change Orders in the amount of \$93,510.50, grant Final Acceptance of the Project, and authorize staff to file Notice of Completion.

SUMMARY AND DISCUSSION:

On August 12, 2019, the District’s Board of Directors awarded the Contract for the Redwood Blvd Sewer Rehabilitation Project to KJ Woods Construction, Inc. (Contractor) for a low bid of \$888,000.00. The Notice to Proceed was issued on October 7, 2019 and work achieved substantial completion about January 29, 2020.

During the course of the work several unforeseen conditions were found that resulted in change orders or increased unit cost quantities; the more notable ones are as follows:

Unforeseen Condition	Amount
Additional costs due to nightwork required by the City of Novato after the project was bid:	\$46,004.33
Additional costs due to the removal of cement slurry found over the existing sewer that needed to be removed to complete work:	\$18,932.49
Additional costs to extend the new sewer main across Diablo Avenue due to an unknown storm drain at the tie-in location:	\$7,885.11
Asphalt grinding to recess trench plates required by the City of Novato Encroachment Permit:	\$2,761.57
Balancing Change Order to accommodate for quantity adjustments of bid prices:	\$17,927.00
Total Change Orders	\$93,510.50

As noted above, the bulk of the change order is from a \$46,004.33 item for completing work at night to cross Diablo Avenue required by the Encroachment Permit issued by the City of Novato. Nightwork was not originally noted as a requirement by City staff during the plan check process prior to bidding.

At this time, the Contractor has completed the Contract work and the project is ready for final acceptance. The final cost of the project is \$981,510.50 or \$93,510.50 (10.5%) above the bid amount. Absent the \$46,004.33 for night work mandated by City of Novato staff, the final project cost would have been \$47,506.17 (or 5.3%) above the bid amount.

It is recommended that the Board approve the change orders, grant final acceptance, and authorize staff to file the Notice of Completion (NoC).

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

DEPT. MGR.: EB	GENERAL MANAGER: SSK
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NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Capital Projects: Cogeneration/Alt. Energy, Account No. 72708.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 8.b.
RECOMMENDED ACTION: Approve an amended contract with Woodard & Curran, Inc. in the not-to-exceed amount of \$66,000 for engineering services related to a cogeneration system, and authorize the General Manager-Chief Engineer to execute it.	
SUMMARY AND DISCUSSION: <p>The District and its Consultant, Woodard & Curran, Inc. (Consultant) entered into a Professional Services Agreement (Agreement No. 72708-WC-2017-01 or Agreement) on August 28, 2017. The Agreement provides for the Consultant to perform certain engineering services in relation to evaluation of cogeneration system technologies and recommendations for implementation in the form of a Technical Memo.</p> <p>The Agreement was initially amended on April 16, 2019 for the Consultant to perform additional analysis and evaluate a phased implementation. Amendment 2 (October 15, 2019) provided for additional analysis of a fuel cell system not originally evaluated as part of the Technical memo. As that effort was coming to a close, the fuel cell vendor provided additional information regarding the potential for combined heat & power (CHP). Additional analysis needed to be performed in order to do a true side by side evaluation with the other technologies considered (Amendment 3 dated March 5, 2020). Amendment 4 provides for updating the Technical Memo with the fuel cell vendor's data, reviewing and confirming the analysis results with the fuel cell vendor and District staff and finalizing the technical memo. The cumulative amendments have resulted in a contract total above the General Manager's signing authority.</p> <p>Therefore, it is recommended that the Board approve the amended contract with W&C and authorize the General Manager-Chief Engineer to execute it on a time and expense reimbursement basis amending the not-to-exceed amount from \$56,434 to \$66,000.</p>	
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 Account No. 72708 - Cogeneration/Alt. Energy of the FY 19-20 Budget, which includes \$1,010,000 for this Account.	
DEPT. MGR.: EB	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Capital Projects Update, March 2020.	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 8.c.
RECOMMENDED ACTIONS: Receive Capital Projects Update, March 2020 (<u>information only</u>).	
SUMMARY AND DISCUSSION: The March 2020 Capital Projects Update is attached. District staff will be present during 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.	
ATTACHMENTS: 1. Capital Projects Update, March 2020.	
STRATEGIC PLAN INFORMATION: This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
DEPT. MGR.: EB	GENERAL MANAGER: SSK

**Novato Sanitary District
Capital Improvement Program (CIP)
Capital Projects Update
March 2020**

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: Project to convert the Gorman Rupp style wet well/dry well pump station to submersible pump-type station and new emergency generator.
 - Project currently in design.
 - Estimated start of construction, Summer 2020.
2. Marin Village Pump Station: Project to replace the existing wetwell/drypit type pump station with new submersible pump-type station.
 - Flow studies in progress.
 - Draft site plan submitted and reviewed.
 - Estimated start of construction, Summer 2021.
3. Olive Pump Station: Project to replace the existing natural gas generator with a new diesel generator, and upgrade electrical switchgear and related electrical equipment.
 - District's civil engineering consultant, Nute Engineering and their electrical engineering subconsultant, Beecher Engineering, Inc. are refining the scope of work for the proposal for design services.
 - District has purchased a portable standby generator to be stationed on site until the project can be implemented.

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

The District is a member agency of the North Bay Water Reuse Authority (NBWRA). Fiscal Year (FY) 19-20 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.
 - Staff are reviewing change orders and project closeout.
 - Final paving will be performed during Spring/Summer of 2020 during favorable weather to ensure the best results.
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.
 - Notice of Completion (NOC) for the Project was filed in February 2020.

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.
 - Notice of Completion (NOC) for the Project filed in February 2020.
 - Final paving will be performed under a separate contract in Spring/Summer 2020 during favorable weather to ensure the best results.
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.
 - Staff are working with W&C to refine the scope 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.
 - Work commenced the week of 3/30/2020.
6. Vineyard Creek at Angelica Court Bank Repair:
 - The submittal packages are out for review by the applicable regulatory agencies.
 - May need to reconsider project scope if the results of the hydraulic analysis for creek capacity through the area are not acceptable to regulatory agencies.
7. Del Mar Sewer Replacement: Realignment/replacement of approximately 1,400 lineal feet of 8-inch sewer main with new 10-inch PVC sewer main and appurtenances.
 - Contract to locate laterals at property lines complete.
 - Potholing for verification of utility locations commenced week of 3/30/2020.
 - Geotechnical work scheduled week of 4/13/2020.

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. Twelve grants totaling \$24,000 have been distributed this FY, as of this time.

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 highly treated 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 through November 26th per the Interagency Agreement between the District and SCC for use of reclaimed water executed on September 23, 2019. The Project is currently shut down for the winter but the Contractor has indicated they will be re-mobilizing over the next month.
- When the Project starts back up, the District will continue 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.

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 which has proposed that the District consider their 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. Staff expect the analysis to be wrapped up in early May, 2020. However, this analysis has resulted in an increased level of effort by the Consultant. Request for Approval of a Contract Amendment for this work will be presented under a separate Agenda item.

- At the November Board meeting, TerraVerde Energy, LLC (TerraVerde) presented on opportunities in energy saving, use-optimization, and generation, through the deployment of Distributed Energy Resources (DERs) to the District Board. Per the California Energy Commission (CEC) grant administered by MCE, and per direction from the District Board, TerraVerde is developing Requests for Proposals (RFPs) for the DERs selected by the District including:
 - Solar PV arrays with Battery Storage
 - Replacing Interior Lighting w/ LED Lighting and Occupancy Sensors
 - Replacing Exterior Lighting w/ LED Lighting
 - Virtual Power Plant

NTP Solar/Battery Storage Project-

- A draft RFP for PV/Battery Storage was submitted by TerraVerde in February and has been reviewed by District counsel and staff.
- The contract with the District's environmental consultant ESA for California Environmental Quality Act (CEQA) studies and documentation has been executed and a kickoff meeting was held the week of 3/23/2020 via conference call.
- TerraVerde submitted the Battery Storage portion of the Project for a CPUC Self Generation Incentive Program (SGIP) grant. There may be an opportunity to offset a significant portion of the battery cost with the grant.

Account No. 72803: Annual Collection System Repairs

Collection system repairs are generally reported monthly in the Collection System Operations report, and 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 in the Reclamation Facilities Operations report, and annually in the UPCAAs staff 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 staff 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 has been working with their contractor to schedule the work.

However, due to some operational challenges with Digester No. 2, Veolia determined that Digester No.1 needed to be brought back online, and the District may opt to clean Digester No. 2 instead, or delay the project until FY 20-21.

Account No. 72806: Annual Pump Station Improvements

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

Account No. 72807: Annual Ignacio Facility Improvements

This budget account is intended 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). Projects are generally reported monthly in the Wastewater Operations report, and annually in the UPCA staff report.

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 (MCFCD).

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.

- The last of the remaining leased modular buildings were hauled off by Monterey Mechanical in February. Some site cleanup work remains, then the area will be restored as parking.

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.

- No update this period.

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.

- Project complete.

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.

- Headworks Protective Coating Project- District and Veolia staff attended a 90% design review with the District's consultant, Woodard & Curran in February 2020. Completion of design and advertisement for bids is expected Spring 2020, with construction during the time of lowest influent flows in late summer/early fall of 2020.

Account No. 73090: Vehicle Replacement

This account includes a FY 19-20 (as amended) budget amount of \$605,000 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.
- The Board authorized issuance of a purchase order for two new 30kW portable generators at the November 18, 2019 Board meeting. The purchase order has been issued to Bay City Electric Works in the amount of \$65,773.90.
- Under the General Manager's purchasing authority, District staff issued a purchase order to United Rentals in the amount of \$51,646 for a used 200kW portable generator. The generator will be stationed at the Olive Pump Station to serve as the emergency backup generator until the electrical upgrade project can be implemented.

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Annual Budget: Sewer Service Charges – Provide Directions on Rates, and Set Public Hearing	MEETING DATE: April 13, 2020. AGENDA ITEMS NO.: 9.a.&b.
RECOMMENDED ACTION(S): <p>9.a. - In light of the COVID-19 emergency, provide direction on implementing an average Sewer Service Charge (SSC) increase of \$21/EDU* from \$636/EDU in fiscal year (FY) 19-20 to \$657/EDU in FY 20-21 as previously set by District Ordinance No. 120 – “An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21”. (*EDU = Equivalent Dwelling Unit).</p> <p>9.b. - Set the date of June 8, 2020 for a public hearing on individual sewer service charges, and adoption of a resolution confirming report on sewer service charges and collection on County tax rolls.</p>	
SUMMARY AND DISCUSSION: <p>After completing the appropriate Proposition 218 requirements, the District Board, at its meeting of June 13, 2016, held a public hearing on, and thereafter adopted, Ordinance No. 120 – “An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21”.</p> <p>Each year thereafter, as the District implements the previously set rates, it holds a public hearing to set individual customer SSCs, and adopts a resolution to collect these individual SSCs on the County tax rolls. This hearing is separate from, and in addition to, the June 13, 2016 Proposition 218 hearing.</p> <p>Also, each April, staff verifies individual customer rates for the following fiscal year with the Board. This allows staff to calculate individual SSCs and have a computerized database available at the public hearing (proposed for June 8, 2020). Customers can then ask what their individual SSC will be in the coming year, and have an opportunity to protest it. Subsequently, staff can timely transmit this information prior to the County’s deadline for agencies such as the District (typically about July 1st).</p> <p>Given the current COVID-19 emergency, staff seeks Board direction on implementing the average \$21/EDU rate increase for FY 20-21 as set by Ordinance No. 120. A \$21/EDU increase will result in the average SSC increasing from \$636/EDU in FY 19-20 to \$657/EDU in FY 20-21. For informational purposes, a “Comparison of SSC Increase/No Increase Scenarios” is provided in Attachment 2.</p> <p>Note that even if the Board decides to forgo the preset rate increase, or modifies it to be less than \$21, a public hearing is still required: (a) To allow individuals to protest their charge, and (b) So that the Board can adopt a resolution confirming the report on SSCs and their collection on the County tax rolls. Procedurally, the public hearing will be “noticed” twice in the Marin IJ. Thereafter, on June 8, 2020, following the public hearing, the Board will consider adoption of the resolution to set the sewer service charges and collect them on the County tax rolls. Similar to previous years, the content of the resolution will be as previously specified by the County of Marin.</p>	
ATTACHMENTS: <ol style="list-style-type: none"> 1. Comparison of Sewer Service Charge Increase/No Increase Scenarios, FY 20-21. 2. Draft Notice of Public Hearing Notice – Sewer Service Charges 2020-21. 	
STRATEGIC PLAN INFORMATION: This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook), Goal 1 (Operational Excellence), and Goal 3 (Alignment and Communications) of the latest Strategic Plan Update.	
DEPT. MGR.: ssk	GENERAL MANAGER: SSK

Comparison of Sewer Service Charge Increase/No Increase, FY 20-21

Table 1-A: Summary, Scenario A - Revenues & Expenditures for FY 19-20 vs. FY20-21⁽¹⁾

	FY 19-20 Adopted Budget	FY 20-21 Draft Preliminary Budget⁽²⁾⁽³⁾	Change, \$ FY 19-20 to FY 20-21	Change, % FY 19-20 to FY 20-21
Operating Revenues	\$11.53M	\$11.72M	\$0.19M	1.6%
Capital Revenues	\$11.42M	\$11.69M	\$0.27M	2.4%
TOTAL REVENUES	\$22.95M	\$23.41M	\$0.46M	2.0%
Operating Expenditures	\$11.42M	\$11.72M	\$0.30M	2.6%
Debt Service	\$6.83M	\$6.53M	-\$0.03M	-4.4%
CIP expenditures	\$5.90M	\$8.20M	\$2.30M	39.0%
TOTAL EXPENDITURES	\$24.15M	\$26.45M	\$2.30M	9.5%

⁽¹⁾ Preliminary, and as of February 2020.

⁽²⁾ Assumes average Sewer Service Charge (SSC) **increase of \$21/EDU** in FY 20-21.

⁽³⁾ Assumes 55%/45% allocation of SSCs to Operating/Capital.

Table 1-B: Summary, Scenario B - Revenues & Expenditures for FY 19-20 vs. FY20-21⁽¹⁾

	FY 19-20 Adopted Budget	FY 20-21 Draft Preliminary Budget⁽²⁾⁽³⁾	Change, \$ FY 19-20 to FY 20-21	Change, % FY 19-20 to FY 20-21
Operating Revenues	\$11.53M	\$11.76M	\$0.23M	2.0%
Capital Revenues	\$11.42M	\$10.96M	-\$0.46M	-4.0%
TOTAL REVENUES	\$22.95M	\$22.72M	-\$0.23M	-1.0%
Operating Expenditures	\$11.42M	\$11.72M	\$0.30M	2.6%
Debt Service	\$6.83M	\$6.53M	-\$0.30M	-4.4%
CIP expenditures	\$5.90M	\$8.20M	\$2.3M	39.0%
TOTAL EXPENDITURES	\$24.15M	\$26.45M	\$2.30M	9.5%

⁽¹⁾ Preliminary, and as of February 2020.

⁽²⁾ Assumes **no SSC increase**.

⁽³⁾ Assumes 57%/43% allocation of SSCs to Operating/Capital.

Table 2-A: Scenario A - Annual Ending Fund Balances⁽¹⁾

	Adopted Budget 2019-20	Projected Rev/Exp 2019-20	Proposed Budget 2020-21⁽²⁾⁽³⁾	Preliminary Budget 2021-22⁽²⁾⁽³⁾
Operating Fund Balances at the End of Each Year	\$ 12,609,398	\$ 13,139,336	\$ 11,583,230	\$ 9,683,925
Capital Improvement Fund Balances at the End of Each Year	9,846,066	\$ 12,586,028	\$ 10,971,011	\$ 9,334,989

⁽¹⁾ Preliminary, and as of February 2020.

⁽²⁾ Assumes average Sewer Service Charge (SSC) increase of \$21/EDU in FY 20-21.

⁽³⁾ Assumes 55%/45% allocation of SSCs to Operating/Capital.

Table 2-B: Scenario B - Annual Ending Fund Balances⁽¹⁾

	Adopted Budget 2019-20	Projected Rev/Exp 2019-20	Proposed Budget 2020-21⁽²⁾⁽³⁾	Preliminary Budget 2021-22⁽²⁾⁽⁴⁾
Operating Fund Balances at the End of Each Year	\$ 12,609,398	\$ 13,139,336	\$ 11,628,052	\$ 10,149,225
Capital Improvement Fund Balances at the End of Each Year	9,846,066	\$ 12,586,028	\$ 10,244,888	\$ 7,442,842

⁽¹⁾ Preliminary, and as of February 2020.

⁽²⁾ Assumes **no SSC increase**.

⁽³⁾ Assumes 57%/43% allocation of SSCs to Operating/Capital.

⁽⁴⁾ Assumes 59%/41% allocation of SSCs to Operating/Capital.

**NOVATO SANITARY DISTRICT
NOTICE OF PUBLIC HEARING
SEWER SERVICE CHARGES 2020-21**

NOTICE IS HEREBY GIVEN that pursuant to Section 5474 et seq. of the Health and Safety Code of the State of California, the Board of Directors of the NOVATO SANITARY DISTRICT has, by ordinance, adopted its sewer service charges through fiscal year 2020-21 and stated its intent to collect its charges on the tax roll in the same manner as its general taxes. The NOVATO SANITARY DISTRICT has caused to be filed with its Secretary a written report containing a description of each parcel of real property receiving sanitary sewerage service from said District and the anticipated amount of charges for each such parcel.

NOTICE IS FURTHER GIVEN that on Monday, the 8th day of June, 2020, at the hour of 5:30 p.m. at the regular meeting place of the District, Novato Sanitary District, 500 Davidson Street, Novato, California, said Board will hear and consider all protests and objections to said report.

By order of the Board of Directors of the Novato Sanitary District.

Dated: April 13, 2020

Sandeep Karkal
Secretary, Novato Sanitary District

Publish: May 18 and May 25, 2020

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: ANNUAL BUDGET: Anticipated FY 19-20 Preliminary Budget	MEETING DATE: April 13, 2020 AGENDA ITEM NO.: 9.c.&d.
RECOMMENDED ACTION(S): <p style="margin-left: 20px;">9.c. - Receive Schedule of Committee meetings to review Annual Solid Waste, Operating, and Capital Improvements Program (CIP) Budgets, and</p> <p style="margin-left: 20px;">9.d. - Workshop overview of anticipated FY 20-21 Preliminary Annual Operating and CIP budgets and budget elements.</p>	
SUMMARY AND DISCUSSION: <p>The Board traditionally reviews each of the Solid Waste, Operating, and Capital Improvement Program budgets by Committee. The Budget schedule presented at the March 9, 2020 Board meeting included the following review schedule for the individual Committees (all meetings at 3:00 pm unless otherwise noted):</p> <ol style="list-style-type: none"> 1. Solid Waste Budget review: Solid Waste Committee – Monday, May 18, 2020, (Directors Mariani and Peters). 2. Operating Budget review: Wastewater Operations Committee – Tuesday, May 26, 2020, (Directors Dillon-Knutson and Fvette). 3. Capital Improvement Program (CIP) budget review: Capital Improvements Committee – Monday, June 1, 2020 (Directors Long and Dillon-Knutson). <p>Note that if the current COVID-19 shelter-in-place orders are still in effect at the time of these meetings, the meetings will be held by teleconference or similar (relevant information will be provided prior to the meetings).</p> <p>Also, the District annually prepares a Capital Improvements Program (CIP) budget based on an anticipated level of project work. This anticipated project work is summarized in a memorandum from staff to the Board (Attachment 1: FY 20-22 Preliminary CIP Budget – Summary of Anticipated Project Work). The memorandum functions as a roadmap for the capital work, and as a tool to inform capital-spending needs for the upcoming budget year.</p> <p>Staff will be present at the meeting to provide an overview of the anticipated preliminary budget, discuss the staff memo, and respond to any questions.</p>	
ATTACHMENTS: <p>1. FY 20-22 Preliminary CIP Budget – Summary of Anticipated Project Work.</p>	
STRATEGIC PLAN INFORMATION: This item addresses Goal 1 (Operational Excellence), Goal 3 (Alignment and Communications), and Goal 4 (Well Planned Finances with a Long Range Outlook), of the latest Strategic Plan Update.	
DEPT. MGR.: eb, ssk	GENERAL MANAGER: SSK

Novato Sanitary District

MEMORANDUM

TO: District Board of Directors

FROM: Sandeep Karkal, General Manager-Chief Engineer
Erik Brown, Deputy General Manager

BOARD MEETING DATE: April 13, 2020

SUBJECT: FY 20-22 Preliminary Capital Improvements Program (CIP) Budget
– Summary of Anticipated Project Work.

Introduction

This memo presents a summary of the potential or anticipated scope of work for projects and project work included within the various Accounts of the Capital Improvements Program (CIP) budget for FY 20-22.

A copy of the draft preliminary two-year FY 20-22 capital improvement expenditures is included as Table 1: Capital Improvement Budget – CIP Expenditures.

Account No. 72112: Network and SCADA Upgrades

This new account was established to address the need for significant upgrades to the network and Supervisory Control and Data Acquisition (SCADA) systems. The account provides for an Information Technology (IT) Assessment/Master Planning study to commence in the first half of FY 20-21. Subsequently, computer network and SCADA upgrades will commence in the last half of FY 20-21, extending into FY 21-22.

Account No. 72403: Pump Station Rehabilitation

This ongoing, long-term account provides for replacing the District's underground-type pump stations with submersible pump-type pump stations. The lift stations that had remained to be rehabilitated include the two Vintage Oaks Pump Stations and the Rowland Plaza Pump Station.

However, the District experienced a multiple day power outage in October 2019 due to the Public Safety Power Shutoffs (PSPS) implemented throughout the region. The PSPS events have highlighted the need for several short- and long-term projects to assure resiliency of District operations, including the following four major capital projects:

1. Rowland Plaza Pump Station: Project to convert the Gorman Rupp style wet well/dry well pump station to submersible pump-type station and new emergency generator. Engineering design work commenced in FY 19-20 with construction anticipated the first half of FY 20-21.
2. Marin Village Pump Station: Project to replace the existing wetwell/drypit type pump station with new submersible pump-type station. Engineering design work commenced in FY 19-20 with construction anticipated in the last quarter of FY 20-21, extending into FY 21-22.
3. Ignacio Transfer Pump Station: Project to replace the generator and upgrade switchgear. Engineering design work will commence in FY 20-21 with construction anticipated in FY 21-22, extending into FY 22-23.
4. Olive Pump Station: Project to replace the existing natural gas generator with a new diesel generator and upgrade electrical switchgear and related electrical equipment. Engineering design work will commence in FY 19-20 with construction anticipated in FY 20-21, extending into FY 21-22.

The rehabilitation schedule for the Vintage Oaks pump stations will be impacted by potential development in the Hanna Ranch and Vintage Oaks area, and work is being deferred until the development plans for the area become clearer.

Account No. 72508: North Bay Water Reuse Authority

The District is a member agency of the North Bay Water Reuse Authority (NBWRA). FY 20-21 will be the seventh year of the multi-year Phase 2 NBWRA program, including continuing 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.

For FY 20-21, the District expects its future Phase 2 participation to be limited to a programmatic level, at least until further recycled water demands are identified by the North Marin Water District (NMWD). Also, any effort to transition the NBWRA program to a more comprehensive North Bay Water Program, would result in a limited role for the District. Therefore, it is anticipated that the District's future participation in this expanded program will occur at a very modest level. Accordingly, the District's preliminary FY 20-22 CIP budget includes only a "placeholder" budget amount of \$25,000 for each of these years.

Account No. 72706: Collection System Improvements

This account includes budget amounts for continuing work on rehabilitating the District's collection system. This fiscal year's project work includes:

1. Closeout work including final paving for the Redwood Blvd Sewer Rehabilitation Project. This Project included the rehabilitation of about 1,850 feet of 12-inch sewer main along Redwood Blvd. between Lamont Avenue and Diablo Avenue. The construction contract was completed in FY 19-20. However, the District decided to complete the final paving as a separate contract that will commence in late FY 19-20, extending into FY 20-21.
2. Continuing work on the rehabilitation of 10-inch sewer main in Bel Marin Keys Blvd. This project was bid in FY 18-19 and the lining work was completed in FY 19-20. Approximately 300 feet of the 10-inch sewer main was unable to be lined due to its condition. This account provides for the removal and replacement of this line with new PVC sewer main using traditional cut and cover construction.
3. The rehabilitation of about 150 feet of 6-inch sewer main between Midway Blvd. and Ridgeview Ct. and about 235 feet of 8-inch sewer between S. Novato Blvd. and Cambridge Street. Project design will commence in FY 20-21 with construction anticipated in FY 21-22.
4. Final paving for the Golden Gate Place to Rush Creek Place Sewer Replacement Phase II. The construction contract was completed in FY 19-20. However, the District decided to complete the final paving as a separate contract that will commence in late FY 19-20, extending into FY 20-21.
5. Replacement of about 1,500 feet of 10-inch sewer main with new 18-inch PVC sewer main on Center Road from Western Dr. to Eucalyptus Ave. This is the first phase of a multi-phase capacity improvement project identified in the preliminary Collection System Master Plan (CSMP) that will result in rerouting a portion of the sanitary sewer flow from Vineyard Road to Center Road via Eucalyptus Ave. Engineering design work will occur in FY 20-21, with construction potentially occurring in FY 21-22.
6. Replacement of about 560 feet of 6-inch sewer between Elm Drive and East Court. This is a structural rehabilitation project identified as a high priority rating in the preliminary CSMP. Engineering design work will occur in FY 20-21 with construction potentially occurring in FY 21-22.
7. The replacement of about 2,000 feet of sewer main in Del Mar Ave., Hotchkin Dr., and Diablo Ave., with new 10-inch PVC pipe from Hill Rd. to Center Rd. This is a capacity improvement project identified in the preliminary CSMP. Engineering design work will occur in FY 19-20 with construction potentially occurring in FY 20-21.
8. Replacement and modification of eleven (11) air-relief valve (ARV) structures at various locations throughout the District. Construction commenced in FY 19-20 and will be completed in FY 20-21.
9. Follow up work associated with the Collection System Master Plan (CSMP) in the Project Verification and Implementation Planning effort.

10. An allowance for the initial design of the Novato Boulevard Trunk Sewer between Diablo Avenue and Grant Avenue (if the City of Novato revives the Novato Boulevard street widening project).

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 program seeks to incentivize individual homeowners financially to replace the entire sewer lateral between their residence and the sewer main, and currently provides a grant for half of the replacement cost up to \$2,000 to replace a residential sewer lateral in the District's service area. In FY 19-20, the District budgeted an overall budget amount of \$60,000 for this program.

The level of participation for the lateral replacement program in FY 19-20 has been on track with and is likely to exceed participation for the previous year. It is expected that more than half of the budget funds will be expended in FY 19-20. As word continues to get out about the replacement program, staff expect the same or increased level of participation in FY 20-21. Therefore, the District's share, i.e. the maximum individual grant amount will remain at \$2,000 and the overall budget for the program will remain \$60,000 in FY 20-21.

As in prior years, the District will continue to monitor and modulate the maximum individual grant and budget amounts on a yearly basis, based on its ongoing experience, and its goal of incentivizing lateral replacement.

Account No. 72707: Hamilton Wetlands/Outfall Integration

Previously, the District cooperated with the California State Coastal Conservancy (SCC) in a study to examine alternatives for a long-term SCC project to integrate the District's outfall into the SCC's Hamilton Wetlands project.

As noted in prior years, the SCC's 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.

SCC has started construction on Phase I of the BMK Unit V Wetland Restoration Project (Project). The District has entered into an Agreement with SCC to provide reclaimed water for the purposes of soil moisture conditioning, compaction, dust control, and plant irrigation. While all funding to implement this project will be provided by the SCC, this account will continue to retain nominal budget amounts in FY 20-22 to meet any minor or unanticipated District expenses for coordination work with SCC staff.

Account No. 72708: Cogeneration/Alternative Energy

This account will fund the design and construction of a cogeneration project that will utilize digester gas produced in the anaerobic digestion process to produce power that may result in an offset to the District's utility power purchases.

Additionally, this account will fund alternative energy (battery storage and/or solar) and energy efficiency projects. The District also anticipates pursuing grant-funding opportunities for these projects, and the FY 20-21 budget includes funds for initial engineering studies and design, California Environmental Quality Act (CEQA) related work, and assistance with securing grant funding.

Note that the budgeted amounts do not include any potential grants that may be received through programs such as the Clean Water State Revolving Fund Green Project Reserve (GPR), or rebates through the California Public Utility Commission's Self Generation Incentive Program (SGIP).

Account No. 72802: Annual Sewer Adjustment for City Projects

The budget in this account is established annually to compensate the City of Novato or County of Marin for work performed on District facilities through City or County Capital Improvement Projects.

An example of work funded through this account would be a City or County street paving or repaving project, wherein District manholes are raised to grade.

Account No. 72803: Annual Collection System Repairs

This account is established annually primarily to fund smaller projects to repair District collection system facilities, primarily point and spot repairs, or to replace short reaches of sewer main(s).

The Collection system staff generates the repair list during routine maintenance activities including sewer cleaning and CCTV work. The Field Services Manager then tracks and prioritizes repair projects in conjunction with the Collection System Superintendent, the Deputy General Manager, and the Construction Inspector.

Account 72804: Annual Reclamation Facilities Improvements

The budget in this account is established annually to fund small projects to repair District facilities at the Reclamation Area.

The work typically includes irrigation system repairs for lines larger than 4-inch in diameter, parcel rehabilitation work, and other miscellaneous repairs.

Also included in the budget for this year is the removal of fallen eucalyptus trees, repairs to Drainage Pump stations nos. 3 and 7, and initial engineering studies for rehabilitating the access road from Deer Island Lane to Site 2.

Account No. 72805: Annual Treatment Plant Improvements

This budget account is established to fund small projects to repair District treatment related facilities at the Novato Treatment Plant.

This account is anticipated to fund minor mechanical & electrical work, water line repairs, pavement repairs, painting, and any other small repairs or improvements.

Cleaning of Digester 1 will be performed in FY 19-20. Cleaning of Digester 2 will be funded from the Solids Management Account No. 73007 in FY 20-21.

Account No. 72806: Annual Pump Station Improvements

This budget account was established to fund small projects to repair District pumping facilities at the various pump stations throughout the District.

This account is anticipated to fund minor mechanical & electrical work, water line repairs, pavement repairs, painting, and any other small repairs or improvements at District pump stations. Additionally, this account will fund transitioning from flowchart recorders to SCADA monitoring, and installation of security cameras at various pump stations.

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 some of the abandoned treatment units of the decommissioned Ignacio Treatment Plant (ITP).

Account No. 72808: Strategic Plan Update:

The District's Strategic Plan document was most recently updated in FY 16-17. While no specific updates have been identified or are expected for FY 20-21, this account is established to serve as a "placeholder" account if the need to make any potential updates to the District's Strategic Plan document arise during the fiscal year.

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.

The budgeted amounts are a minimal amount and function as a “placeholder”, or to meet minimal District commitments to potential, previously unidentified studies, through FY 20-21. Future work (beyond FY 20-21) arising out of these studies may require increased funding, but potential costs are unknown at this point.

Account No. 73003: Administration Building Upgrades/Maintenance Building

This account includes allowances for minor improvements to the Administration and Annex Buildings.

This account also includes funds for relocating the Admin building HVAC units from the roof to ground level, re-roofing the laboratory portion of the Administration Building and installing electronic FOB entry points to enhance building security.

Account No. 73004: Odor and Landscaping Improvements

This account budgets 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.

It is anticipated that this account will see budgeting of funds on an ongoing basis. Significant cleanup/removal of the District’s landscaping was completed in FY 19-20 and this work as well as odor bed management work will continue in FY 20-21.

Account No. 73005: RWF Expansion

This account funded the design and construction of an incremental capacity expansion to the existing Recycled Water Facility (RWF) at the Novato Treatment Plant site. The RWF expansion was needed due to the expansion by the North Marin Water District (NMWD) of its Central Area Project, which pushed NMWD’s recycled water distribution pipelines into the Central Novato/Ignacio geographic areas.

The expansion project achieved final completion in FY18-19. No funds will be budgeted for this account in FY 20-21.

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. It is anticipated that this account will see budgeting of funds on an ongoing basis.

One of the three UV channels was coated in FY 19-20. The two remaining channels will be coated in FY 20-21. Engineering design work for addressing corrosion issues at the Headworks Channels and Effluent Box will be completed in FY 19-20 with the corrective work budgeted in FY 20-21. Also, engineering design work for addressing corrosion of the metal work in primary clarifier No. 2 is budgeted for FY 20-21.

Account No. 73007: Solids Management

This new account includes funds to address major maintenance or capital projects associated with the District's solids processing.

Cleaning of Digester 2 will be funded in FY 20-21. Additionally, a "placeholder" amount will be budgeted for FY 21-22 to potentially initiate studies to investigate the feasibility of processing the District's biosolids further to create a Class A fertilizer or similarly marketable product.

Account No. 73090: Vehicle Replacement

This account includes a budget amount for the purchase a portable 100 kW generator, a portable bypass pump, 2 light-to-medium duty pickup trucks and 1 passenger vehicle. This account also includes an allowance for an overhaul of an existing combination vac/flusher. Replacement of additional portable generators, 1 light duty truck and a utility truck is anticipated in FY 21-22.

**Novato Sanitary District
2020-22 Preliminary Budget
Table 1: Capital Improvement Budget - CIP Expenditures**

	Adopted	Adopted ⁽¹⁾	Expenditures	Projected	Previous ⁽¹⁾		
Capital Improvements	Budget	Budget	through	Exp	Preliminary	Proposed	Preliminary
Cost Centers - 72000 & 73000	2018-19	2019-20	February 2020	2019-20	Budget	Budget	Budget
					2020-21	2020-21	2021-22
Accounts							
72112 · Network and SCADA Upgrades ⁽²⁾	0	0	0	0	0	225,000	75,000
72403 · Pump Station Rehabilitation	50,000	515,000	19,052	250,000	1,000,000	1,650,000	3,050,000
72508 · North Bay Water Reuse Authority (NBWRA)	80,000	25,000	14,081	25,000	25,000	25,000	25,000
72706 · Collection System Improvments	2,450,000	2,790,000	2,153,908	2,920,000	2,130,000	2,940,000	2,320,000
72706-1 · Lateral Replacement Program	80,000	60,000	22,000	50,000	60,000	60,000	60,000
72707 · Hamilton Wetlands/Outfall Integration	10,000	10,000	4,427	10,000	10,000	10,000	10,000
72708 · Cogeneration/Alt. Energy	350,000	1,010,000	1,828	85,000	3,100,000	1,075,000	1,500,000
72802 · Annual Sewer Adj. for City Proj	25,000	25,000	19,320	25,000	30,000	30,000	30,000
72803 · Annual Collection Sys Repairs	225,000	100,000	26,403	75,000	110,000	105,000	110,000
72804 · Annual Reclamation Fac Improvements	175,000	200,000	61,057	75,000	830,000	355,000	145,000
72805 · Annual Treatment Plant Improvements	300,000	350,000	1,027	215,000	400,000	100,000	100,000
72806 · Annual Pump Station Improvements	140,000	175,000	35,224	80,000	175,000	240,000	220,000
72807 · Annual Ignacio Facility Improvements	50,000	50,000	28,767	50,000	75,000	75,000	75,000
72808 · Strategic Plan Update	20,000	20,000	0	0	20,000	20,000	20,000
72809 · Novato Creek Watershed	5,000	5,000	0	0	5,000	5,000	5,000
73003 · Admin Building Upgrade/Maint. Building	350,000	150,000	94,082	120,000	130,000	350,000	130,000
73004 · Odor Control and NTP Landscaping	100,000	50,000	26,683	30,000	52,000	50,000	50,000
73005 · RWF Expansion (2)	2,020,000	(295,000)	(293,979)	(293,979)	0	0	0
73006 · NTP Corrosion Control	233,000	55,000	34,739	50,000	370,000	380,000	100,000
73007 · Solids Management	0	0	0	0	0	175,000	10,000
73090 · Vehicle Replacement	140,000	605,000	52,250	580,000	270,000	330,000	265,000
Subtotal before Debt Service	6,803,000	5,900,000	2,300,869	4,346,021	8,792,000	8,200,000	8,300,000
78500 · Interest - SRF Loan	1,427,123	1,332,279	140,629	140,629	1,235,159	0	0
78500 · Principal - SRF Loan	3,951,833	4,046,677	0	0	4,143,797	0	0
78500 · Interest - 2017 Rev. Refunding Bond	670,500	631,000	631,000	631,000	590,000	590,000	547,500
78500 · Principal - 2017 Rev. Refunding Bond	790,000	820,000	820,000	820,000	850,000	850,000	890,000
78500 · Interest - 2019 Refunding Bond	0	0	1,091,536	1,091,536	0	2,084,350	1,934,100
78500 · Principal - 2019 Refunding Bond	0	0	3,480,000	3,480,000	0	3,005,000	3,155,000
Subtotal for Debt Service	6,839,456	6,829,956	6,163,165	6,163,165	6,818,956	6,529,350	6,526,600
Totals	13,642,456	12,729,956	8,464,034	10,509,186	15,610,956	14,729,350	14,826,600

Comments:

⁽¹⁾ As amended by Board action of 12/09/2019 to accommodate Public Safety Power Shutdown (PSPS) and Cogen/Alt Energy Related Projects.

⁽²⁾ New account.

⁽³⁾ Reflect disbursement of \$305,711 by North Marin Water District (NMWD) from joint District/NMWD RWF Capital Replacement and Expansion Fund.