

NOVATO SANITARY DISTRICT

Meeting Date: October 8, 2018

The Board of Directors of Novato Sanitary District will hold a regular meeting at 5:30 p.m. Monday, October 8, 2018, at the District Offices, 500 Davidson Street, Novato.

Materials related to items on this agenda are available for public inspection in the District Office, 500 Davidson Street, Novato, during normal business hours. They are also available on the District's website: www.novatosan.com. Note: All times and order of consideration for agenda items are for reference only. The Board of Directors may consider item(s) in a different order than set forth herein.

AGENDA

- 1. PLEDGE OF ALLEGIANCE:**
- 2. AGENDA APPROVAL:**
- 3. PUBLIC COMMENT (PLEASE OBSERVE A THREE-MINUTE TIME LIMIT):**

This item is to allow anyone present to comment on any subject not on the agenda, or to request consideration to place an item on a future agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Board at this time as a result of any public comments made.

- 4. REVIEW OF MINUTES:**
 - a. Approve minutes of the September 17, 2018 special meeting.
- 5. CONSENT CALENDAR:**

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

- a. Approve regular disbursements, September 11 – October 8, 2018.
 - b. Ratify payroll and payroll related disbursements, September 2018.
 - c. Receive Deposit Summary, September 2018.
 - d. Receive report on payment of \$51,532 to Sonoma County Water Agency (SCWA) as the District's FY18-19 share of the cost of the NBWRA Phase 2 Feasibility Study – information only.
 - e. Approve a cost-sharing Agreement with Oakmont of Novato, LLC – Johnson Street Sewer Line Project in the amount of \$55,448, and authorize the Board President and the General Manager-Chief Engineer to execute it.
- 6. SOLID WASTE OPERATIONS:**
 - a. Receive Solid Waste Committee report, meeting of September 25, 2018.
 - b. Receive Solid Waste Committee recommendation for a Calendar Year (CY) 2019 maximum solid waste rate adjustment of +3.35 percent.

7. MARIN CLEAN ENERGY (MCE):

- a. Receive recommendation on switching District electricity accounts from Pacific Gas & Electric Co. (PG&E) to MCE Clean Energy, select desired service option (light green or deep green), and if applicable, adopt Resolution 3128 - A Resolution to Switch From Pacific Gas & Electric Company to MCE Clean Energy utilizing the MCE Deep Green Option.

8. WASTEWATER OPERATIONS:

- a. Receive Wastewater Operations Reports, September 2018:
 - Collection Systems
 - Treatment Facilities
 - Reclamation Facilities

9. CAPITAL PROJECTS:

- a. Receive Capital Projects Update, September 2018.

10. BOARD MEMBER REPORTS AND REQUESTS:

- a. North Bay Watershed Association (NBWA) meeting, October 8, 2018.

11. GENERAL MANAGER'S REPORT AND ANNOUNCEMENTS:

12. ADJOURN:

Next Resolution No. 3129.

Next meeting date: Special meeting*, 5:30 p.m. Tuesday, November 13, 2018, at the Novato Sanitary District office, 500 Davidson Street, Novato, CA.

****As the regular meeting day of November 12, 2018 is Veterans Day, a District holiday.***

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: September 17, 2018

A special meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, September 17, 2018, at the District Office, 500 Davidson Street, Novato.

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

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

ALSO PRESENT: Dee Johnson, Solid and Household Hazardous Waste Program Coordinator
Erik Brown, Deputy General Manager, Novato Sanitary District (NSD)
John O'Hare, Project Manager, Veolia
Jeff Andress, Collection System Superintendent, NSD
Drew McIntyre, General Manager, North Marin Water District
Justin Kudo, Deputy Director of Account Services, MCE Clean Energy
Gary Butler, Novato resident
Jeff Boheim, Field Services Manager, NSD
Ed Mainland, Sustainable Novato
Fred Stemmler, General Manager, Recology Sonoma-Marin
Sarah Loughron, San Rafael resident, Clean Energy advocate
James Lonergan, Consultant, Enovity, Inc.
Garen Kazanjian, Waste Zero Specialist, Recology Sonoma-Marin
William Schoen, Project Director, R3 Consulting Group

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: approved as presented.

PUBLIC COMMENT: Sarah Loughron, a San Rafael resident and Clean Energy advocate, addressed the Board on the topic of 100% renewable energy. President Peters noted that this item was an approved agenda item, and asked that Ms. Loughron hold her comments until this agenda item was addressed.

Ed Mainland, Sustainable Novato, addressed the Board on the topic of using deep green renewable energy sources. President Peters again noted that this item was an approved agenda item, and asked that Mr. Mainland hold his comments until this agenda item was addressed.

REVIEW OF MINUTES:

- Consider approval of minutes of the August 27, 2018 regular meeting.

Director Long requested an *addition* to the August 27th meeting minutes, page 7, second paragraph, as follows:

“Also, on request by Director Long, the Board members agreed to revisit the question of the Board meeting start time again in December. *The General Manager requested that a staff preference for a 4:30pm start time to minimize overtime impacts be considered when the topic is revisited in December.*”

On motion of Director Miller, seconded by Director Dillon-Knutson, and carried unanimously, the August 27, 2018 Regular meeting minutes were approved as modified.

CONSENT CALENDAR:

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

- a. Approve August Board member disbursements in the amount of \$1,430.95.
Approve September 10, 2018 regular disbursements in the amount of \$480,641.83, and capital project disbursements in the amount of \$544,907.70.
- b. Receive deposit summary, August 2018.

On motion of Director Long, seconded by Director Miller, and carried unanimously, the above listed consent calendar items were approved.

SOLID WASTE – INFORMATIONAL ITEMS:

The General Manager stated that the following items were for information only, and were provided as an update on the current recycling markets.

- Marin Independent Journal article dated August 19, 2018: “US-China trade war hits Marin recycling market”.

- Marin Independent Journal article dated August 19, 2018: “China dispute tied to garbage rate hikes”.

- Marin Independent Journal article dated August 23, 2018: “Supervisors back garbage rate hike”.

SOLID WASTE OPERATIONS:

The General Manager stated that item 7.a. and 7.b. would be considered as one item.

- Receive report on Calendar Year (CY) 2019 solid waste rate adjustment from R3 Consulting Group, and its recommendation for a maximum rate increase of 3.35 percent (informational item only – no action at this time).

- Review proposed Schedule, and draft Notice of Intent and Public Hearing, and set public hearing date of November 13, 2018, to consider modifications and establish maximum solid waste service charges for Calendar Year (CY) 2019. The General Manager stated that the District’s Franchise Agreement with Recology Sonoma Marin (RSM) provides for an annual rate adjustment based on changes in the Refuse Rate Index (RRI), and noted that RSM has timely submitted a rate review request for Calendar Year (CY) 2019. He stated that as in previous years, the District had retained R3 Consulting Group, Inc. (R3), to assist with the

rate review and to prepare its own independent analysis for a proposed rate adjustment for CY 2019. The General Manager noted that William Schoen from R3 was in attendance to address any questions. He continued, stating that after their analysis, R3 recommended an RRI rate adjustment of +3.35 percent, which was equal to the rate adjustment amount calculated by RSM in its Rate Adjustment Application.

The General Manager continued, stating that the proposed schedule for establishing the CY 2019 maximum solid waste rates as well as a copy of the proposed Notice of Intent and Public Hearing was included in the packet for Board review. He recommended that the Board receive the R3 report, review the proposed Notice of Intent and Public Hearing language, and set the date for the public hearing to establish the CY 2019 maximum solid waste rates for its meeting on November 13, 2018.

The General Manager stated that as part of the proposed schedule, the Solid Waste Committee would be meeting on September 25, 2018 at 3:00 p.m., to consider the R3 rate review report and make a recommendation to the Board of Directors at their October 8, 2018 regular meeting.

On motion of Director Mariani, seconded by Director Miller, and carried unanimously, the Board set the Public Hearing date of November 13, 2018, to consider modifications and establish maximum solid waste service charges for calendar year 2019.

- Approve termination of Recyclables Material Balancing Account in the District's solid waste franchise agreement with Recology Sonoma-Marín (RSM), approve the draft termination letter as prepared by R3 Consulting Group, Inc., and direct the General Manager-Chief Engineer to transmit the approved termination letter to RSM. The General Manager stated that this item addresses the Recyclables Material Balancing Account in the District's solid waste franchise agreement with RSM. He stated that Article 6.4 of the Amended and Restated Agreement between Novato Sanitary District and Novato Disposal Service (Agreement), which was assigned to RSM, establishes a Recyclable Materials Balancing Account (Balancing Account). He noted that Exhibit 7 of the Agreement (included in the Board packet) provides for termination of the Balancing Account.

The General Manager requested that the Board approve termination of the Balancing Account, review the draft termination letter as prepared by R3, and direct the General Manager to transmit the approved termination letter to RSM. The General Manager introduced William Schoen, R3, and stated that he would discuss this item in more detail.

Mr. Schoen provided an overview and a history of the Recyclables Material Balancing Account. He also discussed current events that are creating a downturn in the recyclable buyback markets. He stated that in the past 6 to 12 months, the Chinese market, which has been the primary market for recycled materials from California and elsewhere, has basically discontinued the flow of mixed paper to their facilities. He noted that mixed paper comprises the majority of the balancing account revenue in terms of the impact. He stated that mixed paper has gone from what had been a very positive net revenue per ton, to a somewhat less than zero, or cost, to get rid of that paper. Mr. Schoen stated that given the uncertainty of those markets in the future, and given the fact that the balancing account is now in a negative deficit for the first time in over ten years, he recommended the District move forward with dissolving the balancing account to protect the ratepayers.

The General Manager stated that Recology's General Manager, Fred Stemmler, and Waste Zero Specialist, Garen Kazanjian, were present to answer any questions.

Discussion followed between William Schoen, Fred Stemmler, and the Board members. After discussing impacts to Novato rate payers and to Recology when/if the Balancing Account is terminated, Mr. Schoen stated that any deficit in future recyclable revenue could potentially be recouped by Recology as a rate adjustment when the next detailed rate review is requested.

On motion of Director Dillon-Knutson, seconded by Director Mariani, and carried unanimously, the Board approved termination of the Recyclables Material Balancing Account in the District's solid waste franchise agreement with Recology Sonoma-Marin (RSM), and directed the General Manager-Chief Engineer to transmit the approved termination letter to RSM.

At 6:21 p.m., President Peters declared a short break.

The following individuals left the meeting: Dee Johnson, Fred Stemmler, Garen Kazanjian, William Schoen, and Drew McIntyre.

At 6:32 p.m., President Peters reconvened the meeting.

MARIN CLEAN ENERGY (MCE):

- Receive presentation from Marin Clean Energy (MCE) staff on switching District electricity accounts from Pacific Gas & Electric Co. (PG&E) to MCE.

- Receive presentation and recommendations from Enovity, Inc. on switching District electricity accounts from PG&E, Inc. to MCE, and provide direction.

The General Manager stated that this item was to examine the District's current electrical energy cost and determine if a cost savings can be realized by switching electricity accounts from PG&E to MCE. He stated that Justin Kudo of MCE would present the results of their recently completed electricity rate comparison study for the District's facilities. He stated that following Mr. Kudo's presentation, the District's consultant, James Lonergan, of Enovity Inc., would present the results of their independent electricity rate comparison study, and make recommendations regarding switching District electricity accounts from PG&E to MCE. The General Manager welcomed Mr. Kudo and Mr. Lonergan to the meeting, and invited Mr. Kudo to make his presentation.

Mr. Kudo stated that to focus on the cost comparison, MCE performed an evaluation of costs between MCE's Light Green program and PG&E's current service. He provided a cost comparison summary, noting that by using MCE's Light Green program, the District could realize an annual savings of \$26,703.42 (3.3%) over PG&E's current service rates. He also discussed MCE's Deep Green program and noted that utilizing the Deep Green option would currently result in an additional cost to the District.

The General Manager then invited Mr. Lonergan to make his presentation.

Mr. Lonergan stated that he had performed an independent analysis of the PG&E and MCE rates. He compared MCE and PG&E's rate schedules for each meter to determine the lowest cost rate, and noted that MCE was cheaper in all cost categories. In closing, he stated that his results supported the previous presentation by MCE and stated that, when looking at the District's accounts and specifically at the main energy use (i.e. the Novato treatment facility), cost savings would be realized by switching to MCE's light green option.

Director Mariani recommended that the Board receive the presentations, and include them in the next Board meeting agenda packet, with an update to include the calculations for "deep green" energy costs. Director Miller requested that the Board receive information comparing the electrical power generation mix for PG&E and by MCE, but not make a decision at this point.

Directors Miller and Long requested that information on MCE's Deep Green option, specifically the difference of carbon intensity of Deep Green and Light Green, and the electric power generation mix for PG&E and MCE, be presented at the next Board meeting. Director Long noted that the Deep Green option will potentially result in an additional cost of about \$19,000/year over MCE's Light Green energy costs. Director Dillon-Knutson stated that she supported the recommendation to receive additional information at the next Board meeting, prior to making a decision to switch electrical providers. She asked if the actual reduction of carbon emissions was adequate to support the cost to the District by going to the Deep Green energy program. Director Mariani stated that she felt the District's cost savings of going to one Board meeting per month would justify the additional cost of the Deep Green program.

President Peters called for public comment.

Sarah Loughron, Clean Energy advocate in Marin, stated that she has been working with colleagues to persuade other public entities to purchase deep green renewable energy. She discussed why other entities have chosen to use Deep Green, and provided the Board with a list of Marin Government Agencies who are currently MCE Deep Green Customers.

Ed Mainland, Sustainable Novato, stated that he hoped the District would use Deep Green energy which would help fulfill the City of Novato's climate change goals. He urged the District to begin implementing solar power production where applicable, as well as the use of the District's biogas for power generation.

Director Miller questioned if switching to MCE would affect the District's efforts in exploring PG&E's On-Bill Financing (OBF) program to finance energy minimization and optimization measures. The General Manager stated that per Enovity, Inc. there would be no impact to the District's eligibility to participate in the OBF program if the District opts to switch to MCE.

On motion of Director Mariani, seconded by Director Miller, and carried unanimously, the Board directed District staff to do the following: provide additional information comparing the MCE Deep Green and Light Green options; include the presentations by MCE and Enovity, Inc. in the October 8th Board agenda packet; and address Board member questions from the meeting in the October 8, 2018 Board meeting agenda packet.

At 7:12 p.m., President Peters declared a short break.

The following individuals left the meeting: Justin Kudo, Ed Mainland, Sarah Loughron, and James Lonergan.

At 7:20 p.m., President Peters reconvened the meeting.

WASTEWATER OPERATIONS:

- Receive Wastewater Operations Reports, August 2018.

Collection System Report: The Collection System Superintendent provided the Collections System Report for August 2018. He stated that the Collection Department cleaned 54,553 lineal feet of sewer pipelines. He stated that staff completed 310 maintenance work orders, leaving zero work orders outstanding, and that 10,170 feet of sewer main were televised using the District's CCTV equipment. He stated that the CCTV work did not identify any new structural damages or areas that would require a change in sewer line maintenance operations. He continued, stating that staff conducted 254 lift station inspections and completed maintenance inspections on seven (7) air relief/vacuum valves.

The Collection System Superintendent then outlined the training provided in August, noting that the Collection Department staff attended three (3) specialized training events, and attended four (4) safety tailgate meetings. He reported that there were no lost time accidents, and no sanitary sewer overflows (SSOs) during the month of August 2018.

Treatment Facilities Report: Veolia Project Manager, John O'Hare, provided the August Treatment Facilities Monthly Operations Report (MOR). He reviewed the treatment plant performance, and noted that the average flow for August was low, at 3.46 million gallons/day. He continued, stating that there were no violations or excursions in August. He stated that the Recycled Water Facility (RWF) was running at peak performance and produced 28.965 million gallons of recycled water during the month. Mr. O'Hare reviewed the monthly routine inspections and maintenance activities for the Novato treatment facility, the Ignacio transfer pump station, and the recycled water facility. He stated that Laboratory Technician Kurt Hawkyard performed troubleshooting of the laboratory drying oven, ordered the replacement parts, and made the final repairs. He stated that this work extended the life of the unit and preclude the need for its immediate replacement. He discussed pretreatment and pollution prevention activities. He concluded his presentation, stating that no odor contacts were received in August.

Reclamation Facilities Report: The Field Services Manager summarized the Reclamation Facilities report for August. He stated that District staff continues to irrigate pastures, and noted that a potable water leak was located and repaired at Site 2. He provided an update of the irrigation pump station, stating that approximately 53.4 MG (million gallons) of reclaimed water were applied to the pastures during August. He concluded his presentation by stating that Veolia laboratory staff performed sludge sampling in preparation for sludge handling services, projected for October.

CAPITAL PROJECTS:

- Recycled Water Facility Expansion, Account No. 73005: Approve a contract amendment in the amount of \$66,201 with Woodard and Curran (W&C) on a time and expense basis to

provide additional Engineering Services During Construction for this project, and increase the overall contract amount to \$279,477; and authorize the General Manager to execute the amendment. The Deputy General Manager stated that at its September 11, 2017 meeting, the District Board approved a contract with Woodard and Curran (W&C) to perform engineering services during construction on the Recycled Water Facility Expansion project. He stated that the original scope of work included four distinct tasks, and that the original contract budget amount was \$213,276. He continued, stating that as the expansion project is nearing completion, the original scope of work needs to be expanded to accommodate additional activities, for an additional cost of \$66,201. The Deputy General Manager stated that he had reviewed W&C's estimate for the additional activities, believed it to be fair, and recommended the Board approve the contract amendment.

On motion of Director Miller, seconded by Director Long, and carried unanimously, the Board approved a contract amendment in the amount of \$66,201 with Woodard and Curran (W&C) on a time and expense basis to provide additional Engineering Services During Construction for the Recycled Water Facility Expansion project; and increased the overall contract amount to \$279,477; and authorized the General Manager-Chief Engineer to execute the amendment.

- Receive Capital Projects Update, August 2018. The Deputy General Manager provided an overview and update of the various Capital Improvement Program capital projects.

BOARD OF DIRECTORS:

- Adopt Resolution No. 3127 to change the District Board of Directors' regular meetings from the second and fourth Mondays of each calendar month to the second Monday of each calendar month, and approve changes to Policy No. 5010 – Board Meetings. The General Manager stated that this item was a follow-up to action taken at the August 27, 2018 Board meeting. He noted that at that meeting, the Board decided to change its meeting dates from the second and fourth Mondays of each calendar month to the second Monday of each calendar month, and directed staff to bring forward the appropriate enabling Resolution and Policy updates. He stated that staff has prepared the draft Resolution and updated Policy No. 5010 for Board approval and adoption.

On motion of Director Long, seconded by Director Dillon-Knutson, and carried unanimously, the Board adopted Resolution No. 3127: A Resolution Changing Date of Meeting of the Board of Directors; and approved updated District Policy No. 5010.

BOARD MEMBER REPORTS AND REQUESTS:

Director Long commented on an article in the Marin Independent Journal on September 17th titled, "Diesel free by 2033". Discussion followed regarding the District's diesel engine vehicles and generators.

GENERAL MANAGER'S REPORTS AND ANNOUNCEMENTS:

- Reports:
 - The General Manager represented the District at the North Bay Watershed Association (NBWA) meeting on September 7, 2018. A presentation was given

by Bruce Wolfe, Executive Officer of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Mr. Wolfe also announced his retirement from the SF Bay RWQCB at the end of the year. Lori Lewis, facilitator of the NBWA strategic planning effort, gave a brief outline of the process she will take the NBWA through over the next two meetings.

- Announcements:

- A Solid Waste Committee meeting will be held on Tuesday, September 25, 2018 at 3:00 p.m. Directors Mariani and Peters are the Committee members.
- The next Regular Board meeting will be held on Monday, October 8, 2018 at 5:30 p.m.

ADJOURNMENT: There being no further business to come before the Board, President Peters adjourned the meeting at 7:59 p.m.

Respectfully submitted,

Sandeep Karkal
Secretary

Julie Hoover, Recording

Novato Sanitary District Board Fees Check Register

For September 2018

Date	Num	Name	Credit
Oct 5, 18			
10/05/2018	5722	Dillon-Knutson-, Carole	407.79
10/05/2018	5723	Long, William C	313.79
10/05/2018	5724	Mariani, Jean M	501.57
10/05/2018	5725	Miller, Brant	
10/05/2018	5726	Peters, Arthur Gerald	207.78
Oct 5, 18			<u>1,430.93</u>

Novato Sanitary District Operating Check Register

September 24, 2018

Date	Num	Name	Credit
Sep 24, 18			
09/24/2018	62222	Veolia Water North America, I...	179,358.13
09/24/2018	62212	Pacific, Gas & Electric	93,263.85
09/24/2018	62192	Bay Area Air Quality	20,025.00
09/24/2018	62224	Veolia Water Recycled Water...	18,661.17
09/24/2018	62195	Calcon Systems, Inc.	14,542.41
09/24/2018	62200	Golden Gate Petroleum, Corp	7,509.50
09/24/2018	62207	Marin/Sonoma Mosquito Dist	3,725.59
09/24/2018	62196	California Diesel & Power	2,822.49
09/24/2018	62202	Harris & Associates, Inc	2,125.00
09/24/2018	62194	Cagwin & Dorward Inc.	1,746.20
09/24/2018	62221	RP Equipment previously MBE	1,706.31
09/24/2018	62209	Meyers, Nave, Riback, Silver ...	1,625.00
09/24/2018	62201	GovInvest Inc.	1,500.00
09/24/2018	62204	Leete Generators	1,496.00
09/24/2018	62216	Rauch Communication Cons...	1,298.65
09/24/2018	62197	Custom Tractor Service	1,225.00
09/24/2018	62203	IEDA, INC	1,225.00
09/24/2018	62220	Rotary Club of Ignacio	1,200.00
09/24/2018	62190	Alpha Analytical Lab, Inc.	1,154.00
09/24/2018	62191	American Society of Civil Eng...	590.00
09/24/2018	62199	Frontier California Inc EQ	570.15
09/24/2018	62218	Reliance Standard Life	475.00
09/24/2018	62223	Veolia Water North America, ...	469.26
09/24/2018	62214	Pitney Bowes Reserve Account	400.00
09/24/2018	62206	Marin Independent Journal - ...	313.52
09/24/2018	62193	BoundTree Medical, LLC	272.55
09/24/2018	62217	Recology Sonoma Marin	267.26
09/24/2018	62211	Nave Motors, Inc	255.56
09/24/2018	62198	Fishman Supply Company	125.06
09/24/2018	62205	Leonardi Automotive & Electri...	71.04
09/24/2018	62210	NAPA Auto Parts	70.19
09/24/2018	62215	Randall Bros. Auto Inc.	60.00
09/24/2018	62213	Petty Cash	54.38
09/24/2018	62219	Rescue Rooter-	40.00
09/24/2018	62208	McMaster-Carr Supply Co.	29.46
Sep 24, 18			<u>360,272.73</u>

Novato Sanitary District Operating Check Register

October 8, 2018

Date	Num	Name	Credit
Oct 8, 18			
10/08/2018	62265	Veolia Water North America,...	178,290.80
10/08/2018	62266	Veolia Water North America,...	59,202.39
10/08/2018	62267	Veolia Water Recycled Wate...	19,418.96
10/08/2018	62259	RedZone Robotics Inc	17,000.00
10/08/2018	62255	PARS-PSRP-Post Employm...	12,084.00
10/08/2018	62254	PARS-OPEB-Post Employm...	9,125.96
10/08/2018	62243	Johnson, Dee	7,290.00
10/08/2018	62226	Aqua Science	5,850.00
10/08/2018	62233	Citi Visa (Costco)	5,778.95
10/08/2018	62249	North Bay Watershed Assoc.	5,507.58
10/08/2018	62251	North Marin Water District - ...	5,379.00
10/08/2018	62262	Unicorn Group	4,632.11
10/08/2018	62245	Marin/Sonoma Mosquito Dist	3,794.29
10/08/2018	62230	Bay Area Air Quality	3,152.00
10/08/2018	62237	Dearborn National	2,679.19
10/08/2018	62242	Johnson Controls, Inc.	2,590.00
10/08/2018	62232	Caltest Analytical Lab Inc.	1,871.90
10/08/2018	62252	North Marin Water District P...	1,439.00
10/08/2018	62244	Marin Mechanical II, Inc.	1,177.00
10/08/2018	62247	NACWA	1,000.00
10/08/2018	62239	Frontier Analytical Laborator...	800.00
10/08/2018	62261	U.S. Bank Equipment Finance	602.36
10/08/2018	62268	Vision Service Plan	572.17
10/08/2018	62263	UniFirst Corporation	567.79
10/08/2018	62241	Jan-Pro Cleaning Systems	558.35
10/08/2018	62260	Telstar Instruments Inc	430.00
10/08/2018	62228	B.W.S. Distributors, Inc.	394.94
10/08/2018	62238	Fisher-Scientific	266.91
10/08/2018	62257	Randall Bros. Auto Inc.	259.55
10/08/2018	62234	Claremont EAP, Inc.	250.00
10/08/2018	62256	Pini Hardware	222.26
10/08/2018	62240	Grainger	199.64
10/08/2018	62236	Datco Billing Inc.	195.00
10/08/2018	62231	BoundTree Medical, LLC	194.01
10/08/2018	62235	CWEAmembers	188.00
10/08/2018	62258	Red Wing Shoe Store	170.80
10/08/2018	62253	Orkin Pest Control, Inc.	151.84
10/08/2018	62250	North Marin Water District	128.00
10/08/2018	62229	Barnett Medical LLC	125.00
10/08/2018	62269	WECO	113.59
10/08/2018	DD	Karkal, Sandeep	73.52
10/08/2018	62264	United Parcel Service	66.80
10/08/2018	62227	AT&T Mobility	62.72
10/08/2018	62225	American Messaging	62.60
10/08/2018	62248	NAPA Auto Parts	55.48
10/08/2018	62246	McMaster-Carr Supply Co.	52.09
Oct 8, 18			<u>354,026.55</u>

Novato Sanitary District Capital Projects Check Register

September 24, 2018

Date	Num	Name	Credit
Sep 24, 18			
09/24/2018	3324	Pacific Infrastructure Corpor...	328,211.70
09/24/2018	3325	Sonoma County Water Agen...	51,532.00
09/24/2018	3327	Downtown Ford Sales	24,325.41
09/24/2018	3323	Pacific Infrastructure Corp - ...	17,274.30
Sep 24, 18			<u>421,343.41</u>

Note: Check 3326 was voided.

Novato Sanitary District Capital Projects Check Register

October 8, 2018

Date	Num	Name	Credit
Oct 8, 18			
10/08/2018	3340	Team Ghilotti, Inc.	325,292.02
10/08/2018	3339	Nute Engineering Inc.	15,464.50
10/08/2018	3341	Woodard & Curran former...	4,919.95
10/08/2018	3342	Lateral-Matlon	2,000.00
10/08/2018	3338	Leak Detection Pros Inc	900.00
10/08/2018	3337	GHD Inc.	210.00
Oct 8, 18			<u>348,786.47</u>

**Novato Sanitary District
Payroll and Payroll Related Disbursements
September - 2018**

Item 5.b.

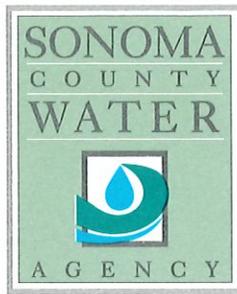
Date	Description	Amount
09/28/2018	September Payroll	120,824.01
09/28/2018	United States Treasury	23,032.43
09/28/2018	EDD	8,208.04
09/21/2018	CalPERS Health	32,683.11
09/21/2018	September Retiree Health Benefits	15,781.82
09/21/2018	Dearborne National	2,641.49
09/21/2018	PARS-OPEB Contribution	9,125.96
09/21/2018	PARS-Pension Contribution	12,084.00
09/21/2018	CALPERS Retirement	11,391.18
09/21/2018	CALPERS Retirement	13,806.88
09/21/2018	CalPers Supplemental Income Plan	2,000.00
09/21/2018	Lincoln Financial Group 457	8,711.41
09/21/2018	Lincoln Financial Group 457 Roth	750.00
09/21/2018	Lincoln Financial Group-401a Plan	8,493.56
09/21/2018	Local Union 315	540.00
09/21/2018	California State Disbursement Unit	571.00
09/21/2018	Delta Dental	3,284.95
09/21/2018	ICMA-RC Retiree Health Program	1,464.91
Total for September 2018		<u>275,394.75</u>

Novato Sanitary District Deposit Detail September 2018

Date	Name	Account	Amount
09/05/2018		11113 · Westamerica - Operations	
	Rojas, Filimon	41040 · Permit & Inspection Fee	40.00
	North Marin Water District-	11200 - Accounts Receivable	(1) <u>24,510.23</u>
TOTAL			24,550.23
09/20/2018		11113 · Westamerica - Operations	
	American Residential Svc	41040 · Permit & Inspection Fee	80.00
	Advanced Trenchless	41040 · Permit & Inspection Fee	40.00
	Hardiman Construction	41040 · Permit & Inspection Fee	40.00
	Rustic Bakery Inc.	41030 · Plan Check & Inspection Fee	25.00
	Rustic Bakery Inc.	51020 · Connection Charges	6,316.50
	Roy's Sewer Service, Inc.-	11200 - Accounts Receivable	(2) <u>837.08</u>
TOTAL			7,338.58
09/21/2018		11113 · Westamerica - Operations	
	USCG	11200 - Accounts Receivable	15,682.60
	USCG-Finance Center	11200 - Accounts Receivable	<u>204.35</u>
TOTAL			15,886.95
09/26/2018		11113 · Westamerica - Operations	
	Situ, Raymond	41040 · Permit & Inspection Fee	60.00
	American Integrated	41040 · Permit & Inspection Fee	60.00
	Hardiman Construction	41040 · Permit & Inspection Fee	40.00
	Doremos, Abel	41040 · Permit & Inspection Fee	40.00
	County of Marin	51015 · Property Taxes	<u>5,291.01</u>
TOTAL			<u>5,491.01</u>
		Total Deposits for September 2018	<u><u>53,266.77</u></u>
<p>(1) Collection of Recycled Water Facility billing for June 2018 from North Marin Water District.</p> <p>(2) Collection of receivables from Septic hauler, Roy's Sewer.</p>			

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Informational Item - North Bay Water Reuse Authority (NBWRA), Account No. 72508.	MEETING DATE: October 8, 2018 AGENDA ITEM NO.: 5.d.
RECOMMENDED ACTION: Receive report on payment of \$51,532 to Sonoma County Water Agency (SCWA) as the District's FY18-19 share of the cost of the NBWRA Phase 2 Feasibility Study – information only.	
SUMMARY AND DISCUSSION: <p>The District is a member agency of the North Bay Water Reuse Authority (NBWRA). FY18-19 will be the fifth year of the multi-year Phase 2 program, including continuing environmental work for approximately over \$75 million in recycled water projects across the NBWRA agencies for funding under the US Bureau of Reclamation Title XVI (WaterSMART) program. Sonoma County Water Agency (SCWA) serves as the NBWRA administrative agency.</p> <p>The District's initial cost commitment to Phase 2 was \$1,134,778. As of June 30, 2018, the District had contributed \$828,466, after accounting for evolving project scopes and refinement of cost allocations between the member agencies, through the study process. At its May 21, 2018 meeting, the NBWRA Board of Directors approved NBWRA's FY2018-19 budget, and SCWA has calculated the District's FY18-19 Phase 2 contribution as \$51,532 (see Attachment 1). Staff will work with SCWA staff to process this payment.</p>	
ATTACHMENTS: 1. Correspondence from SCWA.	
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: The FY18-19 Budget includes \$80,000 in Account No. 72508 to pay the District's FY18-19 share of the cost of the Phase 2 Feasibility Study, with no expenditures to date.	
DEPT. MGR.: esb, ssk	GENERAL MANAGER: SSK



Item 5.d.
Attachment 1
(Pages 19 to 28)

CF/71-700-21.7 Among Parties (Memorandum of Understanding (MOU) for North Bay Water Reuse Authority) TW No (ID 1726)

September 10, 2018

Mr. Sandeep Karkal
General Manager
Novato Sanitary District
500 Davidson Street
Novato, CA 94945-3399

RE: Invoice to Novato Sanitary District for the North Bay Water Reuse Authority, FY 2018/2019 Budget

Dear Mr. Karkal:

The North Bay Water Reuse Authority's (NBWRA) Board of Directors approved the FY 2018/2019 Budget on May 21, 2018. The FY 2018/2019 budget covers Phase 2 and Joint Use work for a total cost of \$505,953 (See Exhibit A).

Member agency cost allocation is specified in NBWRA's Fourth Amended Memorandum of Understanding (MOU). The Fourth Amended MOU states that Phase 2 Support costs be allocated equally among all Phase 2 agencies. Feasibility Study Engineering costs are allocated based on each agency's percentage of Phase 2 projects studied at the feasibility level. EIR/EIS costs are allocated based on each agency's percentage of the total project costs in the Final Phase 2 EIR/EIS. Joint Use costs are shared equally by all Phase 1 and Phase 2 Member Agencies.

Note that the attached invoice takes into account two deviations from the approved budget. The first deviation is due to the fact that the approved budget included a full fiscal year of funding for the Program Development, Federal Advocacy, and State Advocacy Services agreement, but that agreement is currently only effective for the calendar year. Accordingly, Sonoma Water is only invoicing for the period covered under the current term. If the subject agreement is extended, a second invoice will be generated to cover additional costs that may or may not already be approved in the FY 2018/2019 budget. The second deviation was caused by a minor spreadsheet error in the slides approved on May 21, 2018. This resulted in the approved budget shifting roughly \$1,000 in costs amongst the member agencies. The amounts listed below represent the corrected member allocations and the differences between approved and corrected allocation will be discussed at the next board meeting.

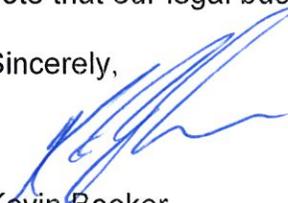
RECEIVED
SEP 12 2018
NOVATO SANITARY DISTRICT

Based upon the approved budget for FY 2018/2019 taking into consideration the note above, Novato Sanitary District's total amount owed is:

Phase 2 – Support	\$ 15,132
Phase 2 – Feasibility Study	\$ 30,400
<u>Joint Use</u>	<u>\$ 6,000</u>
Total	\$ 51,532

Please remit the amount of \$51,532 to NBWRA's Administrative Agency, Sonoma Water. Please note that our legal business name remains Sonoma County Water Agency.

Sincerely,



Kevin Booker
North Bay Water Reuse Authority, Administrative Agency

c: Jake Spaulding, Brad Elliott (Sonoma Water)
Chuck Weir (NBWRA)

mg t:\pinks\09-10-2018\novato fy 1819.docx

SONOMA COUNTY WATER AGENCY
on behalf of North Bay Water Reuse Authority

Chapter 994 of the Statutes of 1949, as Amended

404 Aviation Blvd.
Santa Rosa, CA 95403
Phone: (707) 526-5370

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

INVOICE NO. WTRN-61
ACCOUNT NO. WTR00000255
DATE 09/06/18
PAYMENT DUE DATE 10/07/18

FUND	DEPT.	ACCOUNT	AMOUNT
82440	80250200	12102	\$ 51,532.00

QUANTITY	UNIT	DESCRIPTION	PRICE	AMOUNT
		<u>NORTH BAY WATER REUSE AUTHORITY</u> Invoicing for FY 2018/2019: Phase 2 - Support Phase 2 - Feasibility Study Joint Use		 15,132.00 30,400.00 6,000.00 \$ 51,532.00
Please direct questions to Kevin Booker @ (707) 521-1865				

TOTAL DUE	\$ 51,532.00
-----------	--------------

MAKE CHECKS PAYABLE TO:
Sonoma County Water Agency
404 Aviation Blvd
Santa Rosa, CA 95403

Exhibit A

North Bay Water Reuse Authority's (NBWRA) Board of
Directors approved budget for the FY 2018/2019 and Invoice
Amounts

**North Bay Water Reuse Authority
Board of Directors Meeting
Minutes
May 21, 2018**

1. Call to Order

Chair Rabbitt called the meeting to order at 9:42 a.m. on Monday, May 21, 2018 at the Novato City Hall Council Chambers, 901 Sherman Avenue, Novato, CA. Members, consultants, and others who were unable to attend participated via telephone, 1 (602) 567-4030 (Local dial in). 1-888-227-0011 (Toll Free), access code 1988; and the internet at:

<https://Conferencing2.brwnald.com/conference/1980>

2. Roll Call

PRESENT:	David Rabbitt, Chair	Sonoma County Water Agency
	Jill Techel, Vice Chair	Napa Sanitation District
	Mariam Aboudamous	City of American Canyon
	Jack Baker	North Marin Water District
	Rabi Elias	Las Gallinas Valley Sanitary District
	Jack Gibson	Marin Municipal Water District
	David Glass	City of Petaluma
	Susan Gorin	Sonoma Valley County Sanitation District
	Bill Long	Novato Sanitary District
	Belia Ramos	Napa County
	Dennis Rodoni	Marin County

ABSENT: None

OTHERS

PRESENT:	Chuck Weir, Program Manager	Weir Technical Services
	Mike Ban	Marin Municipal Water District
	Don Berger	West Yost
	Kevin Booker	Sonoma County Water Agency
	Ginger Bryant	Bryant & Associates
	Phil Brun	City of Napa
	Samantha Cohen	Brown & Caldwell
	Lorenzo Corona	Marin County
	Anne Crealock	Sonoma County Water Agency
	Grant Davis	Sonoma County Water Agency
	Chris DeGabriele	Las Gallinas Valley Sanitary District
	Jim Graydon	Woodward & Curran
	Leon Garcia	City of American Canyon
	Rosey Jencks	Brown and Caldwell
	Steve Hartwig	City of American Canyon
	Sandeep Karkal	Novato Sanitary District
	Mike Kirn	City of Calistoga
	Craig Lichty	Kennedy Jenks

Drew McIntyre	North Marin Water District
Mark Millan	Data Instincts
Phillip Miller	Napa County
Jim O'Toole	ESA
Amy Rogers	West Yost
Larry Russell	Marin Municipal Water District
Mike Savage	Brown and Caldwell
Brad Sherwood	Sonoma County Water Agency
Jake Spaulding	Sonoma County Water Agency
Melanie Tan	Kennedy Jenks
Jeff Tucker	Napa Sanitation District
Rocky Vogler	North Marin Water District
Leah Walker	City of Petaluma

3. Public Comments

There were no comments from the public

4. Introductions

Introductions were made for the benefit of new attendees.

5. Board Meeting Minutes of February 26, 2018.

The minutes of the February 26, 2018 meeting were unanimously approved by the Board.

6. Report from the Chair

a. Consultant Progress Reports

The Board reviewed the consultant progress reports for February, March, and April 2018.

b. Financial Reports

The Board reviewed the Financial Reports for Fiscal Year 2017/18 through April 30, 2018.

7. Board Information Requests

A request to consider integrating North Bay WATER and NBWRA was discussed under Item No. 8.

8. Discussion and Direction: Could NBWRA be Integrated Under NorthBay WATER

There have been requests from Board members and others to reduce the number of meetings in an effort to be more efficient and reduce costs. Ginger Bryant presented information as to how NBWRA could be integrated under NorthBay WATER. Board members expressed support for the concepts of NorthBay WATER but were concerned as to how it could be made to work. Chair Rabbitt felt it was premature and that he didn't see how you could fold an existing program into something that does not yet exist. Some board members wondered about integrating NorthBay WATER under NBWRA. Vice Chair Techel asked about the role of the TAC and requested a chart of agencies and their participation. Director Gibson asked how the costs for NorthBay WATER would be impacted by the number of participants. Following discussion, the Board directed the team to report back at the next meeting with actual cost savings and options for integrating the two programs.

9. Approval of the FY2018/19 Budget and Meeting Dates

Mike Savage reviewed the Budget and noted that it was the same as was presented at the February 26, 2018 meeting. The Board unanimously approved the FY2018/19 Budget and meeting dates.

10. Phase 1: Status and Activities

Jake Spaulding gave a report on the status of Phase 1. He noted that USBR has granted a two-year extension for Phase 1. He also noted that at the next meeting he will present a proposal to true up all Phase 1 costs through September 30, 2018, the original agreement end date. If all agencies agreed to the methodology and estimates, the final proposal could be presented for approval at the October 22, 2018 meeting. Phase 1 agencies that still have projects to complete would be responsible for the remaining administrative costs, which are minimal at this point.

11. Phase 2: Status and Activities

Ginger Bryant reported on the Phase 2 Title XVI Program. There are \$72.4 M in projects and they are seeking \$18.1 M for the 25% federal matching share. The federal 2018 Budget includes \$54 M for various Title XVI projects. It is anticipated that a Funding Opportunity Announcement will be issued in July, August, or September. She discussed possible changes in the Title XVI program including changes in USBR administration. There is disagreement as to whether or not Phase 2 is covered in the original legislation. The Board unanimously approved the report on Program Development and Federal Advocacy. In the absence of Pilar Onate Quintana she also briefly covered state advocacy activities.

Mike Savage an update on the status of the Phase 2 Feasibility Report. Files are available on the SharePoint website. They are repackaging individual agency projects for future grant applications. The engineering team continues to provide support for the EIR/EIS.

Jim O'Toole provided a summary of the EIR/EIS public review process. Four public hearings were held and only one member of the public signed in. They anticipate only a few written comments. His team continues with Section 106 consultation and U.S. Fish and Wildlife Section 7 consultation. He provided a summary of key items for completion in the next three months, including response to comments, local agency certification, and issuance of the Record of Decision by USBR in August or September. He also noted that due to the scale of the program they may need a budget amendment in FY18/19. Mike Savage said that they would try to use remaining funds from other tasks.

Mark Millan discussed public outreach and communication issues. His team continually updates the website and coordinated with ESA on the public hearings for the EIR/EIS. He also noted positive comments from Marin County Club on receipt of recycled water from Novato Sanitary District and North Marin Water District.

12. Items for Future Discussion and Action

Items for the next meeting include the following: regular business reports, Phase 1 and 2 Status and Activities, Phase 2 Construction Grant Application and a report on the possible integration of NorthBay WATER and NBWRA.

13. Comments from Chair and Board Members

There were no additional comments.

14. Adjournment

Chair Rabbitt adjourned the meeting at 10:47 a.m. The next meeting will be Monday, July 23, 2018 at 9:30 a.m. at Novato City Hall.

Minutes approved by the Board _____

Charles V. Weir
Program Manager

C:\Users\Chuck\Documents\Weir Technical Services\NBWRA\Agendas\2018\2018-05\2018-05-21_NBWRA_Board_Minutes.docx

APPROVED BUDGET										
Total Budget	LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon
\$505,953	\$6,000	\$66,065	\$66,850	\$65,033	\$67,775	\$6,000	\$6,000	\$83,529	\$67,912	\$70,791
¹REVISED AMOUNTS										
Total Budget	LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon
\$505,953	\$6,000	\$65,942	\$66,664	\$64,957	\$67,546	\$6,000	\$6,000	\$84,569	\$67,742	\$70,533
²TOTAL AMOUNT BEING INVOICED										
Total Budget	LGVSD	Napa SD	Novato SD	SVCSD	SCWA	NMWD	Napa County	Petaluma	MMWD	American Canyon
\$400,028	\$6,000	\$50,810	\$51,532	\$49,825	\$52,415	\$6,000	\$6,000	\$69,436	\$52,610	\$55,400

¹The was minor spreadsheet error in the slides approved on May 21, 2018. This resulted in the approved budget shifting roughly \$1,000 in costs amongst the member agencies. ²Approved budget included a full fiscal year of funding for the Program Development, Federal Advocacy, and State Advocacy Services agreement, but that agreement is currently only effective for the calendar year. Accordingly, Sonoma Water is only invoicing for the period covered under the current term. If the subject agreement is extended, a second invoice will be generated to cover additional costs that may or may not already be approved in the FY 2018/2019 budget.

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: Johnson Street Sewer Agreement	MEETING DATE: October 8, 2018 AGENDA ITEM NO.: 5.e.
RECOMMENDED ACTION: Approve a cost-sharing Agreement with Oakmont of Novato, LLC – Johnson Street Sewer Line Project in the amount of \$55,448, and authorize the Board President and the General Manager-Chief Engineer to execute it.	
SUMMARY AND DISCUSSION: <p>On July 9, 2018, the Board authorized the General Manager-Chief Engineer to approve Project Plans for Sewer Main Extension and adopt Resolution No. 3124 accepting Grant of Sanitary Sewer Easement for Oakmont Senior Living, Novato, Johnson Street Sewer Line Project.</p> <p>The existing ten-inch VCP sewer main within the Easement area, was constructed in 1963, and it would be desirable to replace it given the length of time it has been in service.</p> <p>The proposed project will replace the existing ten-inch sewer main with a twelve-inch sewer main and be constructed within the dedicated sanitary sewer easement. If approved by the Board, the District would enter into a cost sharing agreement (Agreement) with Oakmont of Novato, LLC (Oakmont) to share costs associated with upsizing of the sewer main and extending replacement of the existing sewer main to the nearest upstream and downstream manholes (approximately 130 lineal feet).</p> <p>The District’s share of the Agreement will be \$55,448 for the additional improvements. This work will be funded from Account No. 72706: Collection System Improvements which has a FY 18-19 budget amount of \$2,450,000.</p> <p>Oakmont and its legal counsel have reviewed the terms of a draft Agreement (see Attachment 1) and find it acceptable. District Counsel has reviewed the Agreement, and finds it to be acceptable to the District. Accordingly, District Counsel and staff recommend that the Board approve the Agreement, and authorize the Board President and the General Manager-Chief Engineer to execute it.</p>	
ATTACHMENTS: 1. “Agreement Regarding Cost Sharing for Johnson Street Sewer Line Project”.	
STRATEGIC PLAN INFORMATION: This item addresses Goal 2 (Build and Maintain Facilities that are Safe, Reliable, Environmental, and Efficient) and Goal 3 (Board District and Community Alignment and Communications) of the latest Strategic Plan Update.	
DEPT. MGR.: esb	GENERAL MANAGER: SSK

AGREEMENT REGARDING COST SHARING FOR JOHNSON STREET SEWER LINE PROJECT

This AGREEMENT REGARDING COST SHARING FOR JOHNSON STREET SEWER LINE PROJECT (the "Agreement") is made this ___ day of _____, 2018, by and between the Novato Sanitary District, a Special District of the State of California ("District"), and Oakmont of Novato, LLC, a California limited liability company, here to known as the ("Developer").

WHEREAS, Developer owns that certain real property located in the City of Novato, Marin County, State of California, as more particularly described as 2.8-acre portion of 1461 South Novato Blvd. Novato, California, A.P. number 151-022-04. As further shown on Exhibit 1 attached hereto known as the ("Developer's Property"); and

WHEREAS, Developer intends to develop the Developer's Property into a 36,000 square foot, two story senior living and assisted living project, here to known as the ("Project"); and

WHEREAS, Developer desires to make sewer service available to the Project and has requested such service from the District; and

WHEREAS, in order to make sewer service available to the Project, certain new sewer infrastructure needs to be constructed and a Sanitary Sewer Easement has been created and granted to the District, (Record Document No. 2018-0025621). ("Minimum Improvements"); and

WHEREAS, the District, in order to improve service within its existing service area, desires that (a) the Minimum Improvements be over-sized to provide additional capacity and (b) certain improvements be made to the District's existing sewer infrastructure ("Additional Improvements"); and

WHEREAS, the Developer agrees to install both the Minimum Improvements and the Additional Improvements; and

WHEREAS, because the Additional Improvements will benefit the District, the District agrees to compensate the Developer for the additional work required beyond what the Minimum Improvements would have required.

NOW, THEREFORE, in consideration of the mutual promises and conditions hereinafter declared and entered into hereby by the parties hereto, the parties do covenant and promise as follows:

1. Design Plans. Developer has arranged for the preparation of the necessary plans for the installation of the Minimum Improvements and the Additional Improvements (collectively, the "Sewer Line"), a true and correct copy of which plans are attached hereto as Exhibit 2 ("Plans"). The District has determined that the Plans

have been created in accordance with District rules and regulations and the Plans have been approved by the District's Board of Directors. Any modifications to the Plans must be agreed to in writing by the District's General Manager-Chief Engineer. Notwithstanding the foregoing, Developer has submitted the proposed Architectural plans for the Senior Living portion of the Project, and the parties have estimated the Project's service requirements at the equivalent of forty five and eight/tenths (45.8) family units. The District reserves the right to make changes to this agreement to reflect any additional burden imposed by the Project reflected in any modifications to the final plans above what the parties have estimated as of the date of this agreement.

2. Installation. Developer agrees to complete installation of the Sewer Line in accordance with the Plans and in strict conformance of the Public Sewer Construction Permit issued by the District and with all applicable rules and regulations of the District.

3. Cost of Improvements. Developer's Design Engineer has prepared a cost estimate for the construction of the Additional Improvements to be (\$55,448.00), a true and correct copy of which is attached hereto as Exhibit 3 ("Cost Estimate"). The District has previously approved the Cost Estimate. Extra work costs or overruns in excess of 5% of the Cost Estimate shall be provided to the District for approval, which approval shall not be unreasonably withheld. In no event shall the District be responsible for additional costs incurred by contractor negligence or plan design omissions.

a. Should the contractor encounter any unforeseen circumstances that were not within the contractor's control and that require modification of any work on the Sewer Line, such as unknown subsurface conditions that could not have been discovered through reasonable investigation, Developer shall submit the suggested modifications to the District for review and direction. No extra work will be compensated for unless the District authorizes the extra work and the compensation in writing prior to performance of the work. Costs of extra work approved by the District shall be shared between the parties in the same proportion as the costs for the Sewer Line.

4. Payment of Costs by Developer. Subject to the right of reimbursement set forth in Section 5 below, Developer agrees to pay all costs associated with the installation of the Sewer Line, including the materials, work, inspection, supervision, legal, engineering, and all incidental expenses therefor, to be incurred prior to the District's final acceptance thereof. Such costs shall include all applicable charges at the rates established by District within the time and in the manner provided in the applicable resolutions, ordinances, and order of the District.

5. Payment or Credit. The District shall pay Developer an amount equal to the lesser of (a) the Cost Estimate plus all approved change orders and (b) the actual third party costs incurred in the installation of the Additional Improvements. Such payment shall be made within 30 days after the District's acceptance of the Sewer Line. Alternatively, the District shall credit Developer an equal amount against its connection fees for the District's share of the Sewer Line construction costs. If the work is not

completed, or the completed work is not in full compliance with approved plans and specifications, the District will not accept the Sewer Line and will not provide any payment to Developer.

6. Work Performance and Guarantee. Except as otherwise expressly provided in this Agreement, and excepting only items of routine maintenance, ordinary wear and tear and unusual abuse or neglect, Developer guarantees all work executed by Developer and/or Developer's agents, and all supplies, materials and devices of whatsoever nature incorporated in, or attached to the work, or otherwise delivered to District as a part of the work pursuant to the Agreement, to be free of all defects of workmanship and materials for a period of one (1) year after final acceptance of the entire work by District. Developer further covenants and agrees that when defects in design, workmanship and materials actually appear during the applicable guarantee period, and have been corrected, the guarantee period for such corrected items shall automatically be extended for an additional year to insure that such defects have actually been corrected.

In the event the Developer shall fail to comply with the conditions of the foregoing guarantee within ten (10) working days time, after being notified of the defect in writing, District shall have the right, but shall not be obligated, to repair or obtain the repair of the defect, and Developer shall pay to District on demand all costs and expense of such repair. Notwithstanding anything herein to the contrary, in the event that any defect in workmanship or material covered by the foregoing guarantee results in a condition which constitutes an immediate hazard to the public health, safety, or welfare, District shall have the right to immediately repair, or cause to be repaired, such defect, and Developer shall pay to District on demand all costs and expense of such repair. The foregoing statement relating to hazards to health and safety shall be deemed to include either temporary or permanent repairs which may be required as determined in the sole discretion and judgment of District.

7. Bond. Developer shall post the following surety bonds to secure Developer's obligations to construct and warrant the Sewer Line pursuant to this Agreement:

a. Faithful Performance — (\$150,000.00) to secure faithful performance of Developer's obligation to construct the Sewer Line pursuant to this Agreement; and

b. Labor and Materials — (\$150,000.00) to secure payment by Developer of laborers and materialmen engaged pursuant to this Agreement.

8. Liability. All work will be performed in a proper manner. Developer agrees to indemnify, defend, release, and save harmless District, and each of its elective and appointive boards, agents and employees, from and against any and all loss, claims, suits, liabilities, actions, damages, or causes of action of every kind, nature and

description, directly or indirectly arising from an act or omission of Developer, its employees, agents, or independent contractors in connection with Developer's actions and obligations hereunder ("Claims"); provided, however, such obligation shall not apply to any Claims arising out of District's gross negligence or willful misconduct. The aforesaid hold harmless agreement by Developer shall apply to all damages and claims for damages of every kind suffered, or alleged to have been suffered, by reason of any of the aforesaid operations referred to in this paragraph, regardless of whether or not District has reviewed or approved of plans and/or specifications for the Sewer Line, or regardless of whether or not insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

9. Conveyance of Installation. Full rights, title and interests to said Sewer Line installed pursuant hereto is granted to District, subject to the condition precedent of connection of said Sewer Line to the sewer system of the District and written notice of acceptance thereof by the General Manager-Chief Engineer.

10. Acceptance by District. District hereby agrees to accept said Sewer Line upon completion of the installation thereof, full payment of all costs therefore by Developer, and approval by the General Manager-Chief Engineer that said Sewer Line and all parts are installed in accordance with the Plans.

11. Assignment. This Agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns to the parties hereto.

12. Jurisdiction. This Agreement was made in the State of California, and shall be construed in accordance with California law without regard to the Choice of Law Doctrine. Any action brought to enforce the provision of this Agreement shall be brought in a court of appropriate jurisdiction in and for the County of Marin.

13. Entire Agreement. This Agreement represents and contains the entire agreement and understanding among the Developer and the District with respect to the subject matter of this document, and supersedes any and all prior oral and written agreements and understandings. This Agreement shall not be amended or modified except by in writing signed by all parties. This Agreement shall be construed to have been drafted equally by all parties. If any provision of this Agreement is determined to be invalid or unenforceable, the remaining provisions shall not be affected and shall remain valid and enforceable to the fullest extent permissible.

14. Waiver. The failure of any party to insist on strict performance of any provision in this Agreement shall not be construed as a waiver of the same or any other provision hereunder. Any such waiver must be in writing signed by the parties.

15. Representations. The undersigned parties each certify that they are fully authorized by the party whom they represent to enter into the terms and conditions of this Agreement.

15. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in their names and by the officers duly authorized to execute this Agreement.

NOVATO SANITARY DISTRICT

Dated: _____

By: _____
President

Dated: _____

By: _____
District Secretary

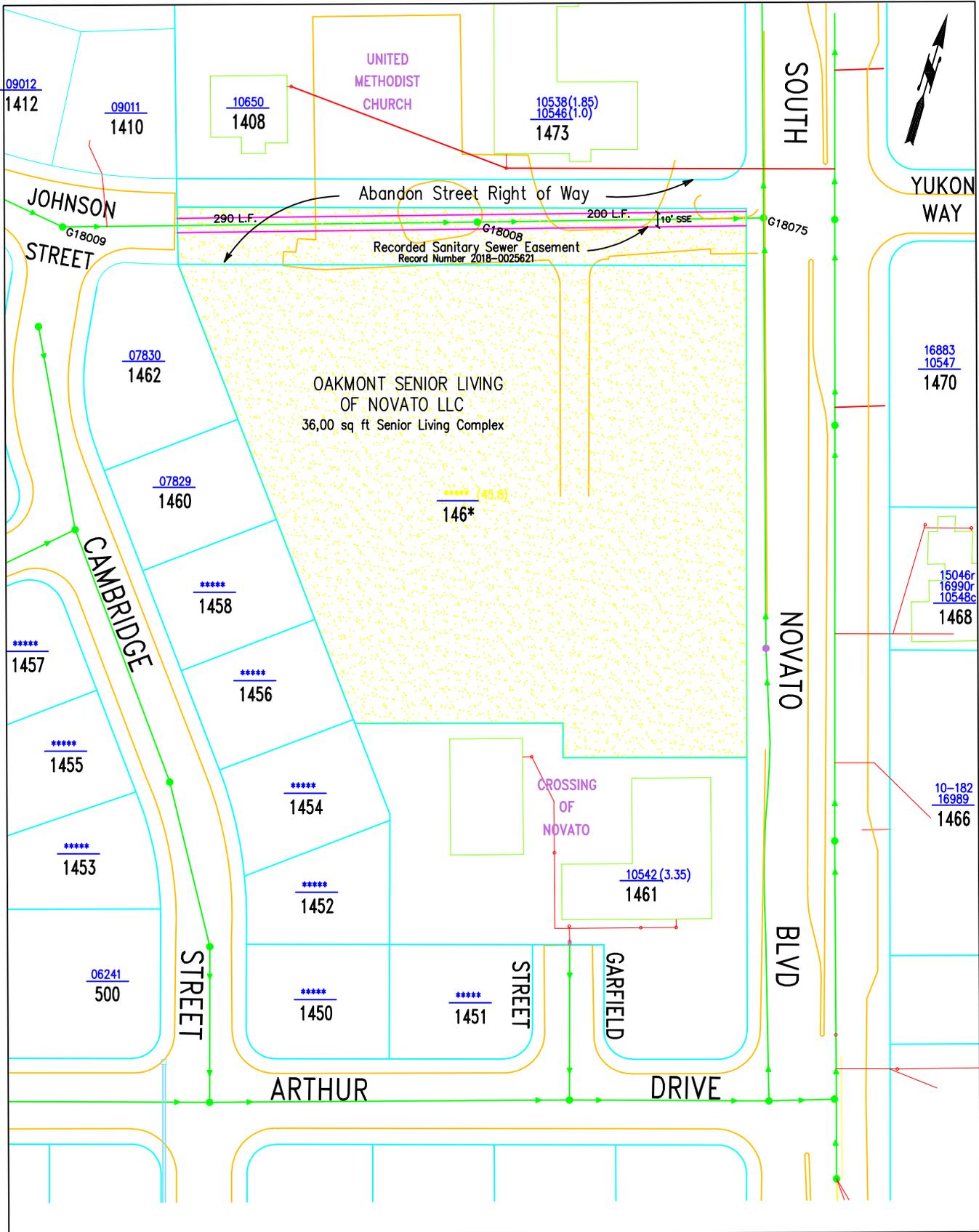
APPROVED AS TO FORM:

Kenton L. Alm, District Counsel

OAKMONT OF NOVATO, LLC.
a California Limited Liability Company

Dated: _____

By: _____
Printed Name: _____
Title: _____



AGREEMENT REGARDING COST SHARING
FOR JOHNSON SREET SEWER LINE PROJECT

EXHIBIT 1 of Agreement

DEVELOPER'S PROPERTY

NSD Board Agenda Packet
October 08, 2018 (Page 35 of 137)
Date - 8-16-18

EXHIBIT 2
PLANS
(Not Attached)

EXHIBIT 3
ENGINEER'S OPINION OF PROBABLE COST
OSL Novato
B&R JOB NO. 3989.02
September 25, 2018

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	AMOUNT
Public Improvements					
Scenario #1 –Sewer replacement per conditions of approval.					
Sewer System Public					
1	Remove and replace 301' of existing 10" sewer main and replace with C-900 PVC DR-18 10" sewer main	301	LF	\$ 180.00	\$ 54,180.00
2	Pipe burst 60' of 10" sewer main and replace with 10" sewer main fusible c-900 PVC DR-18 (no joints)	60	LF	\$ 156.00	\$ 9,360.00
3	48" diameter sewer manholes, per NSD standard SD-2	2	EA	\$ 7,800.00	\$ 15,600.00
4	Trench patch 40sf at the end of Johnson Street per City of Novato Standard 330n	40	SF	\$ 30.00	\$ 1,200.00
5	Remove existing sewer manhole	1	EA	\$ 3,600.00	\$ 3,600.00
TOTAL ESTIMATED SCENARIO #1 COST					\$ 83,940.00
Scenario #2 –Sewer replacement per Novato Sanitary District request for additional sewer replacement and upsize main to 12".					
Sewer System Public					
1	Remove and replace 301' of existing 10" sewer main and replace with C-900 PVC DR-18 12" sewer main	301	LF	\$ 204.00	\$ 61,404.00
2	Pipe burst 60' of 10" sewer main and replace with 12" sewer main fusible c-900 PVC DR-18 (no joints)	60	LF	\$ 156.00	\$ 9,360.00
3	48" diameter sewer manhole, per NSD standard SD-2	1	EA	\$ 7,800.00	\$ 7,800.00
4	Remove and replace 61' of 12" sewer main with c-900 pipe from SSMH 809 to the existing sewer man hole within South Novato Blvd	61	LF	\$ 204.00	\$ 12,444.00
5	Connect to existing sewer manhole in South Novato blvd, break out ex 10" sewer channel, repour portion of base for 12" channel	1	EA	\$ 7,200.00	\$ 7,200.00
6	Remove and replace 70' of 12" sewer main with c-900 pipe from the existing SSMH at the intersection of Johnson and Cambridge streets to 10' west of the western property line	70	LF	\$ 204.00	\$ 14,280.00
7	Connect to existing sewer at the intersection of Johnson and Cambridge streets, break out ex 10" sewer channel, repour portion of base for 12" channel. Raise rim to finish grade	1	EA	\$ 7,200.00	\$ 7,200.00
8	Trench patch 210 sf at the end of Johnson Street per City of Novato Standard 330n	210	SF	\$ 30.00	\$ 6,300.00
9	Additional Engineering Design/Drafting Cost	1	LS	\$ 9,800.00	\$ 9,800.00
10	Remove Existing sewer manhole	1	EA	\$ 3,600.00	\$ 3,600.00
TOTAL ESTIMATED SCENARIO #2 COST					\$ 139,388.00
DIFFERENCE BETWEEN SCENARIO #2 AND #1=					\$ 55,448.00

Opinion of probable cost is based upon improvement plans for OSL Novato dated July 2018. The estimated cost is based on prevailing wage rates. The estimated cost for items 1, 4 & 6 includes surface demolition above the trench, trench backfill, trench shoring and dewatering.

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Solid Waste Operations: Solid Waste Committee Report and Calendar Year (CY) 2019 Maximum Solid Waste Rates.	MEETING DATE: October 8, 2018 AGENDA ITEM NO.: 6.a.& 6.b.
RECOMMENDED ACTION(S): a. Receive Solid Waste Committee report, meeting of September 25, 2018, and b. Receive Solid Waste Committee recommendation for a Calendar Year (CY) 2019 maximum solid waste rate adjustment of +3.35 percent.	
SUMMARY AND DISCUSSION: <p>The Solid Waste Committee (Committee) met on September 25, 2018 and reviewed the attached agenda packet. As noted, the Committee received the following items of information:</p> <ul style="list-style-type: none"> a. Recology Sonoma Marin (RSM) – 1st Quarter 2018 (restated) and 2nd Quarter 2018 reports. b. Disposal/Diversion reports for 2018 and 2018/2017 comparison. c. Update - Marin County JPA and Local Task Force. d. Update - Novato Climate Action Roundtable & Committees. e. Household Hazardous Waste (HHW) program report <p>The Committee also reviewed a rate adjustment request for +3.35 percent for CY 2019 from Recology Sonoma Marin (RSM), and a third party report analyzing RSM's request prepared by R3 Consulting Group (R3). The R3 report concurs with RSM's request and recommends that the District grant a rate adjustment of +3.35 percent.</p> <p>Upon review, the Committee concurs with the R3 report and recommendation. Further, the Committee recommends that, subsequent to the appropriate public hearing process, the Board consider approval of a CY 2019 solid waste rate adjustment of +3.35 percent.</p> <p>At this time, it is recommended that the Board receive the Committee's recommendation of a maximum rate increase of +3.35 percent. A public hearing to set the rates is required if the Board considers adjusting rates consistent with the Committee's recommendation. At its September 17, 2018 meeting, the Board received the proposed schedule for establishing the CY 2019 maximum solid waste rates, approved publication of the Notice of Intent and Public Hearing, and set a public hearing date of Tuesday, November 13, 2018.</p>	
ATTACHMENTS: 1. Solid Waste Committee Agenda packet, meeting of September 25, 2018 (including R3 Consulting Group's Letter Report - Review of Recology Sonoma-Marin's Requested Rate Adjustment for Rate Year 2019).	
STRATEGIC PLAN INFORMATION: This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update. The item also addressess other goals of the Strategic Plan including Goal 1 (Operational Excellence), and Goal 3 (Alignment and Communications).	
DEPT. MGR.: dlj, ssk	GENERAL MANAGER: SSK

NOVATO SANITARY DISTRICT Solid Waste Committee

Meeting Date: September 25, 2018

The Solid Waste Committee of Novato Sanitary District will hold a meeting at 3:00 p.m., Tuesday, September 25, 2018 at the District offices, 500 Davidson Street, Novato CA.

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. They are 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 Committee may consider item(s) in a different order than set forth herein.

AGENDA

1. AGENDA APPROVAL:

2. PUBLIC COMMENT: (PLEASE OBSERVE A THREE MINUTE TIME LIMIT)

This item is to allow anyone present to comment on any subject not on the agenda, or to request consideration to place an item on a future agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Board at this time as a result of any public comments made.

3. UPDATES/ROUTINE BUSINESS ITEMS:

- a. Receive Recology Sonoma Marin (RSM) – 1st Quarter 2018 report (restated), and 2nd Quarter 2018 report.
- b. Receive Disposal/Diversion reports for 2018 and 2018/2017 comparison.
- c. Receive verbal update - Marin County JPA and Local Task Force.
- d. Receive verbal update - Novato Climate Action Roundtable & Committees.
- e. Receive Household Hazardous Waste (HHW) program report.

4. CALENDAR YEAR (CY) 2019 SOLID WASTE RATE ADJUSTMENT:

- a. Review report and make recommendation to District Board.

5. ADJOURN:

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.

Recology Sonoma Marin
Restated Quarterly Report - Novato
 Service Period: 1/1/2018 to 3/31/2018

7.2.3 (c) Green Waste Collection (Tons)	January	February	March	Total
Commercial	5.92	4.18	5.29	15.39
Multi Family	12.66	8.94	11.31	32.91
Residential	1,076.12	868.14	876.63	2,820.89
Roll Off (Debris Box)	178.88	101.30	124.82	405.00
Totals	1,273.58	982.56	1,018.05	3,274.19
Food Waste (included above)	16.54	13.12	16.60	46.26
Wood Waste (included above)	19.7	3.58	2.56	25.84

Organic waste was processed at Blake's Landing Farms, Laguna Treatment Plant, W. Contra Costa Sanitary Landfill and Napa Recycling and Waste Services.

7.2.3 (e) Accounts by Receptacle Size	Number of Receptacles				
	Commercial	MFU	Residential	Roll Off	Total
20 Gallon	2	9	2,563	-	2,574
32 Gallon	209	359	10,847	-	11,415
64 Gallon	156	122	3,137	-	3,415
95 Gallon	159	34	383	-	576
1.5 yard	112	16	2	-	130
2 yard	360	121	-	-	481
3 yard	60	6	-	-	66
4 yard	26	10	-	-	36
6 yard	1	-	-	-	1
15 yard	11	-	-	6	17
Compactors	243	224	18	-	485
Total Receptacles	1,339	901	16,950	6	19,196

Ongoing service audits in Q1 and continuing at least through Q2 have resulted in more dramatic than normal changes in accounts.

7.2.3 (f) Bulky Waste

741 Bulky Item pick up requests in Q1 2018.

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: Recology-Novato Newsletter Q1 2018
- Attached: Recology-Novato Education and Outreach Q1
- Attached: Recology Outreach Materials Summary Q1 2018

Recology Sonoma Marin
Quarterly Report - Novato
Service Period: 4/1/2018 to 6/30/2018

7.2.3 (a&d) Garbage Collection (Tons)	April	May	June	Total
Commercial	900.14	1,016.22	947.32	2,863.67
Multi Family	303.25	342.36	319.15	964.75
Residential	764.16	862.71	804.22	2,431.09
Roll Off (Debris Box)	60.85	68.70	64.04	193.59
Totals	2,028.40	2,289.98	2,134.72	6,453.10

7.2.3 (b) Recyclable Material Collection (Tons)	April	May	June	Total
Commercial	242.12	258.91	241.05	742.09
Multi Family	33.09	35.39	32.94	101.42
Residential	632.50	676.35	629.70	1,938.55
Roll Off (Debris Box)	393.08	290.18	332.55	1,015.81
Buy-back Center	8.40	9.79	9.98	28.17
Totals	1,309.19	1,270.62	1,246.23	3,826.04

C&D Material (included above) 203.19 218.35 194.51 616.05

Recyclables and Processed	Curbside	Roll Off	Buyback	Total	
Single Stream	692.37	-	-	692.37	
Paper	910.99	-	-	910.99	
Metal	7.46	6.40	0.06	13.92	
Cardboard	452.89	6.69	-	459.58	
Glass	532.03	25.41	0.00	557.44	
Mixed Plastic	134.90	6.35	10.90	152.16	
Plastic-PET	-	-	4.80	4.80	
Plastic-NHDPE	-	-	0.06	0.06	
Plastic-CHDPE	-	-	-	-	
Tin	51.42	5.02	12.35	68.78	
Other RCY	-	205.74	-	205.74	
Dry Waste	-	-	-	-	
C&D	-	616.05	-	616.05	
Concrete	-	144.15	-	144.15	
Wood Waste	-	14.77	-	14.77	
Dirt	-	-	-	-	
Yard Waste	3,706.99	301.91	-	4,008.89	
Food Waste	49.88	-	-	49.88	
Total Collected	6,538.93	1,332.49	28.17	7,899.58	
Residual	633.91	522.91	-	1,156.83	Diversion
Total Diverted	5,905.01	809.57	28.17	6,742.76	47.0%

Recology Sonoma Marin
Quarterly Report - Novato
Service Period: 4/1/2018 to 6/30/2018

7.2.3 (c) Green Waste Collection (Tons)	April	May	June	Total
Commercial	31.77	34.21	24.81	90.79
Multi Family	24.25	26.10	18.93	69.28
Residential	1,258.74	1,355.25	982.81	3,596.80
Roll Off (Debris Box)	87.69	148.39	80.59	316.68
Totals	1,402.45	1,563.95	1,107.14	4,073.54
Food Waste (included above)	16.40	16.59	16.89	49.88
Wood Waste (included above)	3.43	6.32	5.02	14.77

Organic waste was processed at Blake's Landing Farms, Laguna Treatment Plant, W. Contra Costa Sanitary Landfill, and Napa Recycling and Waste Services.

7.2.3 (e) Accounts by Receptacle Size	Number of Receptacles				
	Commercial	MFU	Residential	Roll Off	Total
20 Gallon	3	1	2,595	-	2,607
32 Gallon	127	20	10,770	-	11,812
64 Gallon	139	18	3,110	-	3,425
95 Gallon	113	10	366	-	562
2 yard	118	13	-	-	134
3 yard	319	67	-	-	462
4 yard	60	5	-	-	70
6 yard	25	4	-	-	39
15 yard	-	-	-	1	1
Compactors	11	-	-	6	17
Total Receptacles	915	138	16,841	7	19,129

Ongoing service audits in Q2 and continuing into Q3 have resulted in more dramatic than normal changes in accounts.

7.2.3 (f) Bulky Waste	April	May	June	Total
No Charge Bulky Item Pick Ups	336	381	348	1,065
Charge Bulky Item Pick Ups	22	21	15	58
Total Bulky Item Pick Ups	358	402	363	1,123

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: Recology-Novato-2018-Q2-Waste Zero Highlights & Detail

Attached: Recology Needle Stick Insert

Attached: Recology National Sword Advertisement

Attached: Recology National Sword Flyer

Novato Waste Zero Q2 Highlights

Date	Organization	Highlight	WZ Employees(s)
April 9, 2018	Novato Sanitary District	NSD Board Meeting/Fred Presentation	Celia, Garen, Fred
April 12, 2018	Novato Chamber	Novato Business Expo Table	Garen
April 20, 2018	San Jose Middle School	Engaging with really smart kids	Garen
April 21, 2018	Novato Sanitary District	Largest E-Waste event ever for NSD	Garen, Emily
May 2, 2018	RSM	Finalized Inserts for Needle Sticks, and National Sword	Casey
May 2, 2018	Marin County AB 939 Local Task Force	Attended Organics Subcommittee meeting	Garen
May 5, 2018	Novato Sanitary District/Novato School Fuel	Hosted table at childrens/biking event	Garen
May 9, 2018	City of Novato	Novato Climate Change Roundtable	Garen
May 29, 2018	Novato Sanitary District	NSD Board Meeting	Garen
June 6, 2018	RSM	Completed "What Goes Where" search tool for website	Casey
June 9, 2018	Art & Wine Festival	Community education tabling event	Cheri, Casey, Garen, Lisa
June 10, 2018	Art & Wine Festival	Community education tabling event	Anita, Emily, Celia, Garen
June 14, 2018	CalRecycle	Novato CalRecycle Visit	Garen
June 21, 2018	Marin County Board Supervisors Meeting	Meeting w/Marin Activists and 9th graders	Garen

Novato Waste Zero Q2 Report

Month	Total Account	Site Audit	Presentation/	Host Table	Gave	Started Recycling	Increased Recycling	Started	Increased	Decreased
April	11	12	0	0	8	0	0	1	0	0
May	11	9	1	1	10	0	1	3	0	1
June	12	9	0	1	7	0	0	4	0	1
TOTALS	34	30	1	2	25	0	1	8	0	2

#	Date(s)	Account Name	Address	City	Franchise Code	Purpose of visit/call	Outcome
1	4/3/18	Chick-Fil-A	35 Rowland Way	Novato	NOV	Check food waste levels.	Site audit. Documented food waste.
2	4/3/18	Chevy's	128 Vintage Way	Novato	NOV	Check food waste levels.	Site audit. Documented food waste.
3	4/9/18	Novato Builder's Supply	800 Sweetser Ave	Novato	NOV	Follow up on CS Ticket	Gave outreach materials. Site Audit.
4	4/10/18	Dapper Lighting	12 Pamaron Way Unit G	Novato	NOV	Follow up on Contamination Tag	Followed up on contamination tag. Site Audit. Gave outreach material.
5	4/11/18	Nativity of Christ Greek Orthodox Church	1110 Highland Ave	Novato	NOV	Start compost	Started compost. Followed up on service change. Site audit.
6	4/17/18	Moylan's Brewery	15 Rowland Way	Novato	NOV	Check food waste levels. Schedule training.	Site audit. Documented food waste. Scheduled mgrs. Meeting.
7	4/18/18	Savemor Liquor	2001 Novato Blvd	Novato	NOV	Contamination	Followed up on contamination tag. Site Audit. Gave outreach materials. Educated complex and spoke with owner.
8	4/19/18	Ignacio Mini Storage	394 Bel Marin Keys	Novato	NOV	Contamination Tag	Followed up on contamination tag. Site Audit. Gave outreach material. Educated regarding shredding.
9	4/19/18	G & C Auto Body	14 Galli Dr	Novato	NOV	Contamination	Followed up on contamination tag. Site Audit. Gave outreach materials. Educated complex. Cleaned and service as recycle.
10	4/19/18	Hopmonk Tavern	224 Vintage Way	Novato	NOV	Check food waste levels.	Site audit. Documented food waste.
11	4/26/18	Animal Kind Vet Hospital	833 Vallejo Ave	Novato	NOV	Contamination Tag	Followed up on contamination tag. Site Audit. Gave outreach material. Educated regarding shredding.
12	5/1/18	Sports Basement		Novato	NOV	Audit location to start service	Conducted site audit. Gave outreach materials.
13	5/3/18	Homeward Bound of Marin	1399 So Novato Blvd	Novato	NOV	Audit Location to start compost	Conducted site audit. Gave outreach materials. Increased recycling. Hosted table.
14	5/8/18	Starbucks	Redwood Ave	Novato	NOV	Compost service	Trained manager. Conducted site audit. Gave outreach material. Started Compost
15	5/11/18	Our Lady of Loretto		Novato	NOV	Presentation	Gave presentation. Discussed setting up compost and recycle for school.
16	5/14/18	Starbucks	San Marin Ave	Novato	NOV	Compost service	Trained manager. Conducted site audit. Gave outreach material. Started Compost

#	Date(s)	Account Name	Address	City	Franchise Code	Purpose of visit/call	Outcome
17	5/18/18	Novato High School		Novato	NOV	Site audit	Conducted site audit. Gave outreach material.
18	5/18/18	Wildfox		Novato	NOV	Waste Audit	Site Audit. Gave outreach materials. Trained management. Started compost. Decreased garbage.
19	5/24/18	San Marin High School		Novato	NOV	Site audit	Conducted site audit. Gave outreach material.
20	5/29/18	Healthcare	4 Hamilton Landing	Novato	NOV	Ticket requesting stickers	Gave outreach material
21	5/29/18	Franklin Plumbing		Novato	NOV	Respond to contamination tag	Followed up on contamination tag. Conducted site audit. Gave outreach material.
22	5/30/18	Moylan's Brewery		Novato	NOV	Meeting	Met w/ managers. Site audit. Gave outreach material. Scheduled compost start for June
23	6/6/18	Silver Penny RV Park	7060 Redwood Blvd	Novato	NOV	Site visit	Site Audit. Gave outreach material.
24	6/9/18	Novato Art and Wine Festival		Novato	NOV	Tabling	Hosted table. Gave outreach materials.
25	6/11/18	City of Novato	922 Machin	Novato	NOV	CalRecycle	Site audit. Gave outreach Materials. Started compost service.
26	6/13/18	Kiosk	750 Grant Ave	Novato	NOV	Requested compost	Site audit. Started compost service. Gave outreach materials. Followed up on service change.
27	6/14/18	Greek Orthodox Church	1110 Highland Ave	Novato	NOV	CalRecycle	Site audit.
28	6/14/18	Harvest Market	155 San Marin Drive	Novato	NOV	CalRecycle	Site audit.
29	6/14/18	United Methodist Church	1473 S Novato Blvd	Novato	NOV	Needed slim jim	Gave outreach materials
30	6/19/18	Wildfox	225 Alameda Del Prado	Novato	NOV	new service	Site Audit. Follow up on new service change.
31	6/19/18	The Square Shopping Center	Novato Blvd	Novato	NOV	Contamination Tag	Site audit. Follow up on contamination tag.
32	6/19/18	Hopmonk Tavern	224 Vintage Way	Novato	NOV	AB 1826 Compliance	Site Audit. Gave outreach materials. Started Compost. Decreased Garbage. Follow up on new service change.
33	6/26/18	Novato Healthcare Center	1565 Hill Rd	Novato	NOV	Site Visit	Site audit. Gave outreach materials.
34	6/26/18	Moylan's Brewery & Restaurant	15 Rowland Way	Novato	NOV	Start Compost Service	Started compost service.

Recycle Sorters Say NO To Needles And Sharps



DO NOT dispose of needles, syringes, or lancets in garbage, recycling, or compost bins.

They are extremely dangerous to sanitation workers and must be disposed of properly.

HOW TO SAFELY DISPOSE OF SHARPS

Sharps can be safely disposed of at the locations listed below. They must be packaged in FDA approved red sharps containers, which are also available at the collection locations listed.

Drop-off syringes, needles, and lancets at:

Kaiser Novato
97 San Marin Drive
415.899.7470

Safeway Pharmacy
5720 Nave Drive
415.881.9260

Pharmaca Integrative Pharmacy
7514 Redwood Boulevard
415.892.3700

Novato HHW Facility
7576 Redwood Boulevard
415.892.7344



For more information, please go to the Novato Sanitary District website at www.novatosan.org and follow the link to the "Green Pages".

BE TRUE TO YOUR BLUE

China Tightens Recycling Import Rules

Did you know that 60% of the recyclable materials collected in the U.S. go to China to be recycled into new products?

Historically, China accepted up to 5% non-recyclable contaminants (garbage or food waste) in bales of recyclable materials. As of March 2018, the Chinese government is now enforcing a policy called National Sword, which severely restricts the import of recyclable plastics and paper. China will only accept bales containing less than 1% contamination and will return any shipments that fail to meet that standard.

This is a big change and has had a crippling effect on recycle markets around the globe. **We need your help!**



WHAT CAN YOU DO?

- Keep your recycling clean and free of contaminants.
- Food containers, like pasta sauce jars or yogurt cups should be empty and dry. Use dish water to swish, or a used napkin to wipe them out (napkins are compostable).
- Do not place recyclables in plastic bags. They will not be opened at our sorting facility. This means they will be sent to the landfill as garbage.
- Plastic bags, film plastics, coffee cups, and Styrofoam belong in the garbage.
- Greasy pizza boxes and other food soiled paper should be placed in your green compost cart, not the recycling cart.
- Don't be a hopeful recycler. Visit our website, send us an email, or give us a call. When in doubt, check it out!

KEEP YOUR RECYCLING CLEAN

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Recology.com/SonomaMarin
RecologySonomaMarin@recology.com

800.243.0291

<u>RECOLOGY 2018 DISPOSAL/DIVERSION(TONS)</u>	RESTATED				
	<u>1stQ</u>	<u>2ndQ</u>	<u>3rdQ</u>	<u>4thQ</u>	<u>TOTAL</u>
Recology Recycled Collected (Curbside & Buyback)	2,827	3,066			
Recology C&D, Wood, Inerts & Bulky waste	690	775			
Recology Green waste & residential food waste for compost	3,228	4,009			
Recology Commercial Food Waste for compost	46	50			
TOTAL TONS COLLECTED AND PROCESSED FOR RECYCLING	6,791	7,900			
RECYCLING RESIDUALS DISPOSED	(977)	(1,157)			
RESIDUALS DISPOSED AS PERCENT OF RECYCLING	14.39%	14.65%			
TOTAL TONS DIVERTED	5,814	6,743			
GARBAGE DISPOSAL					
MSW & Debris Box	6,410	6,453			
TOTAL GARBAGE TONS DISPOSED	6,410	6,453			
TOTAL DISPOSAL (GARBAGE + RESIDUALS)	7,387	7,610			
TOTAL WASTE GENERATED(DISPOSAL + RESIDUALS + DIVERTED)	13,200	14,353			
PERCENT DIVERTED	44.05%	46.98%			
PERCENT DIVERTED WITH REDWOOD & MRRC	51.63%				

DISPOSAL/DIVERSION 2018 vs. 2017 (TONS)

	RESTATED RECOLOGY 2018 <u>1st Q</u>	NOVATO DISPOSAL 2017 <u>1st Q</u>	RECOLOGY 2018 <u>2ND Q</u>	NOVATO DISPOSAL 2017 <u>2nd Q</u>
Recology Recycled Collected (Curbside & Buyback) <i>Novato Disposal Recycling Shipped(Curbside and Buyback)</i>	2,827	3,458	3,066	3,082
Recology C&D, Wood, Inerts & Bulky waste <i>Novato Disposal C&D,Wood,Inerts & Bulky Waste</i>	690	420	775	563
Recology Green waste & residential food waste for compost <i>Novato Disposal Green Waste & residential food waste for compost</i>	3,228	3,823	4,009	4,026
Recology Commercial Food Waste for compost <i>Novato Disposal Commercial Food Waste for Compost</i>	46	93	50	94
RECOLOGY TOTAL TONS COLLECTED AND PROCESSED FOR RECYCLING	6,791	7,794	7,900	7,765
NOVATO DISPOSAL TOTAL TONS SHIPPED FOR RECYCLING				
RECOLOGY RECYCLING RESIDUALS DISPOSED	(977)		(1,157)	
TOTAL TONS DIVERTED(For Recology, total Recycling minus residuals)	5,814	7,794	6,743	7,765
TOTAL DISPOSAL				
Recology MSW& Debris Box & residuals <i>Novato Disposal MSW& Debris Box& residuals</i>	7,387	7,189	7,610	7,135
TOTAL TONS DISPOSED	7,387	7,189	7,610	7,135
TOTAL WASTE GENERATED(DISPOSAL + RESIDUALS + DIVERTED)	13,201	14,983	14,353	14,900
PERCENT DIVERTED	44.04%	52.02%	46.98%	52.11%

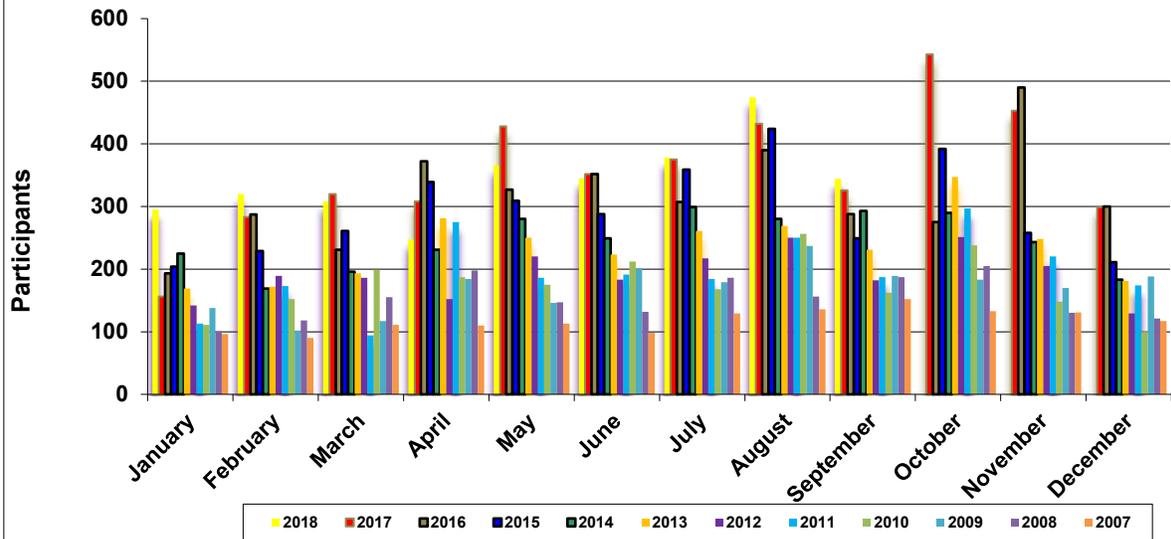
Solid Waste Committee
Item 3.e.

HHW FACILITY SUMMARY 2018	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Total Participants	295	320	308	247	366	345	378	474	344				3,077
Been to events before?(Yes)	253	274	247	219	304	288	309	399	279				2,572
Permanent facility?	223	224	204	211	261	245	271	346	240				2,225
Temporary events?	42	59	50	24	59	62	53	76	56				481
First time user?	42	46	61	28	62	56	69	75	65				504
Type of waste brought in?													
Antifreeze	18	20	16	11	25	21	22	17	19				169
Asbestos	2	3	0	3	0	8	0	0	4				20
Auto products	38	42	36	43	51	50	57	54	46				417
Car batteries	13	9	45	54	92	95	93	121	81				603
Computer monitors	10	17	12	10	7	9	7	4	8				84
Cements, sealers	25	31	19	9	3	16	13	24	16				156
E-Waste(all types)	110	109	66	36	48	43	47	54	32				545
Fluorescent tubes& bulbs	54	57	75	50	77	90	96	161	99				759
Fuels(gas, kerosene, diesel)	18	27	35	28	51	50	65	63	51				388
Household batteries	72	61	53	31	29	38	38	41	34				397
Household cleaners, polishes	79	86	64	62	108	101	112	107	90				809
Latex paint	96	104	93	95	120	141	138	156	122				1,065
Motor oil/filters	43	53	47	51	74	63	63	78	61				533
Oil base paint	56	63	62	40	80	91	74	104	79				649
Paint thinners, solvents	51	57	63	58	102	94	91	100	86				702
Pesticides, herbicides, insecticides	38	54	44	42	69	77	67	83	66				540
Pet care products	11	7	11	4	8	6	11	13	5				76
Photo chemicals	2	1	2	0	0	2	0	2	0				9
Pool Chemicals	7	8	5	6	10	6	6	13	10				71
Propane/helium tanks/fire extinguishers	23	28	19	24	36	28	41	50	37				286
Sharps	3	5	2	5	3	5	5	0	5				33
Spray paints	32	44	38	38	55	61	55	86	59				468
Television	50	39	28	28	20	32	27	36	26				286
Thermometers/Thermostats	4	5	4	0	4	3	3	4	4				31
Wood preservatives, stains	30	35	28	22	35	47	46	56	39				338
Other	14	7	3	4	14	16	8	17	7				90
Hear about program?													
Recycling Center flier	102	108	105	122	153	132	149	212	123				1,206
Sanitary District newsletter	61	58	62	48	94	84	80	97	68				652
Sanitary District website	49	39	47	28	48	42	42	63	59				417
Novato Disposal newsletter	107	125	104	92	114	107	120	147	110				1,026
Word of mouth	36	46	49	43	55	63	52	84	51				479
Other	18	17	24	19	21	15	20	28	29				191
Change your own motor oil?													
Yes	41	54	41	48	60	46	61	78	45				474
Novato Recycling Center	27	37	34	36	52	39	44	65	36				370
O'Reilly's	13	21	12	19	21	14	23	22	17				162
Pennzoil	2	0	1	0	1	0	1	5	4				14
Other	1	1	3	0	0	0	1	1	2				9
If yes, want curbside pickup?	17	31	15	19	26	17	26	34	17				202
No	254	266	267	199	306	299	317	396	299				2,603
Comments													
Compliments/Good	90	97	90	89	130	120	100	152	106				974
Complaints	2	0	2	2	4	3	1	11	3				28

HHW PARTICIPANTS 2006 - 2018

	<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>
2018	295	320	308	247	366	345	378	474	344				
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 open 3 days in April, 6 days in August
2014	225	169	196	231	280	249	299	280	293	290	262	183	2,957 open 3 days in April
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 August 6 days
2009	138	102	117	184	146	201	179	237	189	183	170	188	2,034 August 6 days
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 2017	89.10%	13.07%	-3.75%	-19.81%	-14.49%	-1.99%	0.80%	9.72%	5.52%				

HHW Facility Monthly Participation 2007- 2018



NOVATO SANITARY DISTRICT

MEMORANDUM

Meeting Date: September 25, 2018

To: Board Solid Waste Committee – Jean Mariani, Jerry Peters

From: Sandeep Karkal, General Manager-Chief Engineer
Dee Johnson, Solid/HHW Consultant

Subject: Calendar Year (CY) 2019 Solid Waste Rate Adjustment.

The Solid Waste Franchise Agreement (Agreement) between Novato Disposal Service and the District (as assigned to Recology Sonoma Marin or RSM), provides for an annual adjustment to RSM's rates based on the changes in the specified Refuse Rate Index (RRI), and any other relevant or applicable factors.

In CY 2016, CY 2017, and CY 2018, the rate adjustments were +1.94 percent, +1.02 percent, and +5.04 percent respectively, based on either: (a) Changes in the RRI (CY 2016 and CY 2017); or (b) A combination of changes in the RRI, and Balancing Account adjustments (CY 2018).

For CY 2019, RSM timely submitted an overall rate adjustment of +3.35 percent based on a change in the RRI.

As in prior years, the District engaged R3 Consulting Group (R3) to review RSM's CY2019 rate adjustment request. R3 completed their analysis and submitted the attached report to the District. Based on their review, R3 agrees with RSM's calculation and calculation methodology and is recommending a total rate adjustment of +3.35 percent based on the RRI change.

Based on the R3 report, staff recommends that the Solid Waste Committee accept R3's recommendation, and recommend a CY 2019 maximum solid waste rate adjustment of +3.35 percent to the District Board for its approval.

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

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

627 S. Highland Avenue, Suite 300, Los Angeles, CA 90036
Tel: 323-559-7470

September 11, 2018

Mr. Sandeep Karkal
Novato Sanitary District
5000 Davidson Street
Novato, CA 94945

Re: Letter Report – Review of Recology Sonoma-Marin’s Requested Rate Adjustment for Rate Year 2019

Dear Mr. Karkal:

R3 Consulting Group, Inc. (R3) was engaged by the Novato Sanitary District (District) to assist with a review of Recology Sonoma-Marin’s (Company) requested rate adjustment for Rate Year 2019 (January 1, 2019 – December 31, 2019). Specifically, R3 was asked to confirm that the rate adjustment methodology used by the Company is consistent with the Refuse Rate Index (RRI) Rate Adjustment Methodology set forth in Exhibit 2 of the Amended and Restated Franchise Agreement (Agreement) and that the calculation is mathematically accurate. This Draft Letter Report communicates our findings and recommendations.

Recommended Rate Adjustment

The Company’s Rate Adjustment Application calculated a 3.35% rate increase (**Attachment 1**) As part of our review, we verified that the Company’s financial information, cost category index values, and mathematical formulas were consistent with the RRI methodology included in the Agreement. Based on our review, we found the Company’s calculated adjustment of 3.35% to be correct.

Objectives

- To review the Company’s requested rate increase to confirm that:
 - It is consistent with applicable terms and conditions of the Agreement;
 - It is mathematically accurate; and
 - It correctly accounts for the required Balancing Account adjustment to the rates.
- To recommend the appropriate Rate Year 2019 rate adjustment based on the results of our review; and
- To confirm the current Balancing Account balance.

Background

The Agreement provides for an annual adjustment to the Company’s rates based on the specified Refuse Rate Index (RRI), with the option to conduct a detailed rate review not more frequently than once every three (3) years. A copy of Article 6 of the Agreement (Company’s Compensation and Rates) is provided as **Attachment 2**.

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

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

The RRI also provides for adjusting the Disposal Fee and Organic Waste Processing Fee based on the change in the associated tipping fees. A copy of Exhibit 2 – Refuse Rate Index is provided as **Attachment 3**.

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

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

The Company submitted an electronic copy of its 2019 Rate Adjustment Application to the District on August 29, 2018.

Balancing Account Calculation

The balancing account was established to provide a mechanism for distributing recyclable material sales revenues between the Company and the District’s ratepayers. Recycling revenues have been calculated for each year, starting with 2008 using the specified methodology, and each calculated amount is compared to the “base” projected revenue amount. The difference between projected revenues and the established “base” revenue amount is accounted for in the Balancing Account as either revenue due to the District (if calculated recycling revenues are higher than the projected amount), or revenue due to the Company (if calculated recycling revenues are lower than the projected amount). The balancing account amount is factored into the rate adjustment every five years, most recently as part of the 2018 RRI rate adjustment. The Balancing Account balance due to the District for the five-year period ending December 31, 2017 was \$81,887 or \$16,378 annually. This was equivalent to a 0.15% rate reduction, which was spread across the five-year period from 2018 to 2022. The next balancing account adjustment will be made as part of setting the rates for 2023.

Attachment 4 provides the language in the Agreement related to the Balancing Account. The referenced OBM index stopped reporting newspaper (ONP #8) prices as of July 2018, which precludes the ability to calculate the balancing account monthly revenues starting July 2017 based on the specified methodology.

Attachment 5 includes the 2017 balancing account balance of approximately \$138,000 due the Company, assuming no revenues for newspaper for July through December 2017. **Attachment 5** also includes a calculated balancing account balance of approximately \$64,000 due the District, assuming a net revenue per ton for newspaper for July through December 2017 equal to the average newspaper price for January through June 2017, which may be more representative of actual newspaper prices for that period. The 2017 balancing account calculation does not impact the current rate adjustment; however, a determination will need to be made as to how to project newspaper revenues to finalize the 2017 balancing account balance.

Note: *Mixed paper prices through August of 2018 are significantly lower than those reported for 2017, which will have a material impact on the calculated balancing account balance for 2018.*

Mr. Sandeep Karkal
September 11, 2018
Page 3 of 3

Cardboard prices are also lower, although the impact of cardboard prices on the balancing account balance is significantly less than that of mixed paper.

* * * * *

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

Sincerely,

R3 CONSULTING GROUP



William Schoen | Principal

Attachments:

- 1 Company's and R3's Adjusted Calculation
- 2 Exhibit 2 – Refuse Rate Index
- 3 Article 6 – Company's Compensation and Rates
- 4 Exhibit 7 – Recyclable Materials Balancing Account
- 5 Balancing Account Calculations

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Attachment 1

ARTICLE 6 COMPANY'S COMPENSATION AND RATES

6.1 General

The Company's compensation provided for in this article shall be the full, entire, and complete compensation due to the Company for all labor, equipment, materials, and supplies, taxes, insurance, bonds, overhead, disposal, profit, and all other things necessary to perform all the services required by this Agreement in the manner and at the times prescribed.

The Company will not look to the District for payment of any sums under this Agreement. The Company will perform the responsibilities and duties described in this Agreement in consideration of the right to charge and collect from Customers for services rendered at rates fixed by the District from time to time.

6.2 Refuse Rate Index Adjustments to Service Rates

6.2.1 Adjustments to Service Using the Refuse Rate Index (RRI). Beginning on January 1, 2012, and annually thereafter, the Company shall, subject to compliance with all provisions of this Article, shall receive an annual adjustment in of the Service Rates as set forth in Exhibit 1 of this Agreement.

6.2.2 RRI Adjustment. Beginning on January 1, 2012, and annually thereafter during the term of this Agreement, the Service Rates set forth in Section 6.2.1 above shall be adjusted by the RRI adjustment set forth below. In any year that the calculation of the RRI results in a negative number, there shall be no adjustment of the Service Rates. Instead, the negative RRI number shall be added to the result of the subsequent years RRI calculation and the result shall be the RRI adjustment for that subsequent year.

6.2.3 12-Month Annual Average. The RRI adjustment shall be the sum of the weighted percentage change in the twelve (12) month annual average of each RRI index number between the base year, which shall be the prior preceding fiscal year ending June 30th and the preceding fiscal year ending June 30th as contained in the most recent release of the source documents listed in Exhibit 2, ("REFUSE RATE INDEX") which is attached to and included in this Agreement. Therefore, the first Service Rate adjustment will be based on the percentage changes between the twelve (12) month Annual Average of the RRI indices for the fiscal year ending June 30, 2010 and the Annual Average of the RRI indices for the fiscal year ending June 30, 2011. The RRI shall be calculated using the RRI methodology included in Exhibit 2.

6.3 RRI Financial Information

On or before September 1, 2011, and annually thereafter during the term of this Agreement, the Company shall deliver to the District financial information for the specific services performed under this Agreement for the preceding Agreement Year. Such financial information shall be in the format as set forth in Exhibit 2, or as may be further revised by the District from time to time. If the Company fails to submit the

Attachment 1

1 financial information in the required format by September 1st, it is agreed that the
2 Company shall be deemed to have waived the RRI adjustment for that year. The
3 Company's failure to provide the financial information shall not preclude the District
4 from applying the RRI using the prior year's financial data, or pro forma data if no prior
5 year financial data is available, if that application would result in a negative RRI.

6 **6.3.1** Annual Adjustments shall be made only in units of one cent (\$0.01). Fractions of
7 less than one cent (\$0.01) shall not be considered in making adjustments. The
8 indices shall be truncated at four (4) decimal places for the adjustment
9 calculations.

10 **6.3.2** If the Company's failure to submit the financial information required under
11 Section 6.3 is the result of extraordinary or unusual circumstances as
12 demonstrated by the Company to the satisfaction of the District Manager-
13 Engineer, the District at its sole discretion, may consider the request for the
14 annual RRI rate adjustment.

15 **6.3.3** As of November 15, 2011, and annual thereafter during the term of this
16 Agreement, the District Manager-Engineer shall notify the Company of the RRI
17 adjustment to the affected service rates to take place on the subsequent January
18 1st.

19 **6.4 Recyclable Materials Balancing Account**

20 Because of the variation of Recyclable Materials commodity prices, the District and the
21 Company agree to use the Recyclable Materials Balancing Account as described in
22 Exhibit 7.

23 **6.5 District or Company Requested Detailed Rate Review**

24 The District or the Company may request a Detailed Rate Review to be conducted
25 following the procedures as specified in Exhibit 8. However, a Detailed Rate Review
26 shall not be conducted more than once every three (3) Agreement years. A request for a
27 Detailed Rate Review shall be made in writing at least six months prior to the January 1st
28 rate adjustment period for the year in which the results for the Detailed Rate Review are
29 to be applied. The Company shall pay the cost for the Detailed Compensation Review,
30 and the cost of such a Detailed Rate Review is an allowable pass-through cost.

31

Attachment 2

EXHIBIT 2 Refuse Rate Index

The "Refuse Rate Index" adjustment shall be calculated in the following manner:

1. The expenses of providing Collection Services in the Service Area for the designated fiscal period (July to June) shall be prepared in the format set forth in the Operating Cost Statement - Description on the following page of this Exhibit.
2. The expenses of providing Collection Services in the Service Area shall be broken down into one of the following seven cost categories: Labor; Fuel; Vehicle Replacement; Maintenance, Disposal Fee, Organic Waste Processing fee, and All Other. Each cost category is assigned a weighted percentage factor on that cost category's proportionate share of the total of the costs shown for all cost categories.
3. The following indices are used to calculate the adjustment for each cost category of the Service Rates. The change in each index is calculated on a twelve-month fiscal period (July to June). The twelve-month average index from July 2010 to June 2011 will serve as the "First Year Index".

<u>Cost Category</u>	<u>Index</u>
Labor	Series ID: ceu6056210008 Production Workers-Waste Collection
Fuel	California No 2 Diesel Ultra Low Sulfur (0-15 ppm) http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp
Vehicle Replacement	Series ID: pcu336211336211 Truck, bus, car and other vehicles bodies, for sale separately.
Vehicle Maintenance	Series ID: pcu333924333924 Parts and attachments for Industrial work trucks.
Disposal Fee	The per ton tip fee charged at the Disposal Facility.
Organic Waste Processing Fee	The per ton tip fee charged at the approved Organic Waste Processing Facility.
All Other	Consumer Price Index, Series ID: CUURA422SA0 CPI-All Urban Consumers, All Items, San Francisco,

4. The percentage weight for each cost category is multiplied by the change in each appropriate index to calculate a weighted percentage for each cost category. The weighted percentage changes for each cost category are added together to calculate the Refuse Rate Index for the Service Rates in Exhibit 1.

Attachment 2

EXHIBIT 2 Refuse Rate Index

Operating Costs

Operating Cost Statement - Description

Labor:	List all administrative, officer, operation and maintenance salary accounts. List payroll tax accounts directly related to the above salary accounts.
Fuel:	List all fuel and oil accounts.
Vehicle	
Replacement:	List all Collection and Collection related vehicle depreciation accounts. List all vehicle lease or rental accounts related to Collection or Collection related vehicles.
Vehicle	
Maintenance:	List all Collection or Collection related vehicle parts accounts.
Disposal Fee:	List all Landfill Disposal related accounts.
Organic Waste Processing Fee:	List all Organic Waste Processing related accounts.
All Other:	List all other expense accounts related to the services provided under this Contract. This category includes all insurance including general liability, fire, truck damage, extended coverage and employee group medical and life; rent on property, truck licenses and permits; real and personal property taxes; telephone and other utilities; employee uniforms; safety equipment; general yard repairs and maintenance; office supplies; postage; trade association dues and subscription; advertising; employee retirement or profit sharing contributions; and miscellaneous other expenses.

Attachment 3

Cost Category	2019 Adjustment			
	2018 Operating Category Total	Weighted Percent of Annual Total	Index Percent Change	Weighted Adjustment Percentage
Labor Index	\$2,272,937	37.300%	0.500%	0.190%
Fuel Index	\$447,303	7.340%	22.340%	1.640%
Vehicle Replacement Index	\$244,423	4.010%	1.530%	0.060%
Vehicle Maintenance Index	\$441,471	7.250%	2.310%	0.170%
Disposal Index	\$1,033,877	16.970%	2.640%	0.450%
Organic Waste Processing Index	\$359,221	5.900%	2.630%	0.160%
All Other	\$1,294,196	21.240%	3.220%	0.680%
Total	\$6,093,428	100.01%		3.350%

Exhibit 7
Recyclable Materials Balancing Account

1. Recyclable Material Per Ton Net Revenue Amount.

Fair Market Value - For purposes of forecasting recyclable material net revenues for 2008, the Company shall use the calculated fair market value of recyclable material revenues for 2006, which shall equal the annual total of the fair market value for such material for each month times the associated monthly tonnage collected or received by the Company for calendar year 2006, times any applicable growth rate (the 2006 Projected Revenues). A similar methodology will be used for purposes of forecasting recyclable material sales revenues for subsequent years. That fair market value shall be calculated as follows:

- a. The fair market value of net revenue paid by related parties to the Company for recyclable materials net of processing costs, and any and all other costs (the Per Ton Net Revenue Amount), shall initially be set at \$44.85 per ton effective July 2005. This initial Per Ton Net Revenue Amount will be adjusted on a monthly basis, as described below.
- b. The prior month Per Ton Net Revenue Amount shall be adjusted for purposes of establishing the Per Ton Net Revenue Amount for the current month based on changes to the Official Board Markets Transacted Paper Stock Prices (OBM Index Prices) as reported for "San Francisco" as follows:
 - i. The starting point for the Per Ton Net Revenue Amount shall be \$44.85 per ton effective July 2005.
 - ii. The Per Ton Net Revenue Amount shall be adjusted monthly based on changes to the OBM Index Prices for Mixed Paper, #8 Newspaper and OCC as reported in the first weekly OBM issue of each month. The OBM Index Prices for each of these commodities shall be set at the average of the high and low prices reported each month, which are \$67.50, \$87.50 and \$87.50 respectively for July 2005.
 - iii. The weighted average percentages for Mixed Paper, #8 Newspaper and OCC for purposes of applying the OBM Index Prices shall be 46%, 46% and 8% respectively.
 - iv. Every month, one hundred percent (100%) of the weighted average O.B.M. index price adjustment (up or down) compared to the previous month shall be added or subtracted from the prior month Per Ton Revenue Amount for purposes of establishing the Per Ton Revenue Amount for each month.
- c. Example: The OBM Index Price adjustments from July 2005 to August 2005 for Mixed Paper, #8 Newspaper and OCC were -\$10/ton, -\$5/ton and -\$10/ton respectively. Applying the above referenced weighted average by material type, the price change July to August is -\$9.00/ton. The Per Ton Net Revenue Amount for July 2005 would decrease from \$44.85 to \$35.85 which is the Per Ton Net Revenue Amount for August 2005.

Exhibit 7
Recyclable Materials Balancing Account

- d. The calculated Per Ton Net Revenue Amount for each month shall be applied to all tonnages collected or received by the Company through the recycling program and delivered to related parties for processing for that month, including any and all processing residue, contaminants, non-processable or other material tonnages.
- e. Notwithstanding any provision of this Agreement to the contrary, at no time shall the Per Ton Net Revenue Amount paid by a related party be less than \$10 per ton (The Floor Price) nor more than \$80 per ton (The Ceiling Price) – The Floor Price and Ceiling Price shall be adjusted for the full impact of any change in the CRV value as provided for below.
- f. In the event of any future changes to the California Redemption Value (CRV) paid by the State of California, the Per Ton Net Revenue Amount shall be adjusted to account for that relative impact on the Per Ton Net Revenue Amount. That impact shall be determined by multiplying the total applicable CRV tons for the prior 12 months times the applicable net change in CRV per ton revenue to project the total additional annual CRV revenue. This total additional annual CRV revenue shall then be divided by the total tonnage collected or received by the Company through the recycling program for the prior 12 months to determine the net additional per ton revenue amount that shall be added to the calculated Per Ton Net Revenue Amount going forward. The parties agree that should the CRV value be adjusted on or after July 1, 2007, as provided for in the California Beverage Container Recycling and Litter Reduction Act, allowances will be made to the rates that are set for 2008 and beyond to fully account for this change, notwithstanding any provision of this Agreement to the contrary.

2. Balancing Account Calculation for Recyclable Materials.

Because of the potential volatility of recyclable material prices, the District and the Company agree to establish a Balancing Account for recyclable material sales revenue. The Balancing Account amount will be based on the difference between the projected revenues for each year (as calculated using the above methodology) and the calculated revenues for that year (i.e., the annual total of the actual monthly tonnage times the calculated Per Ton Revenue Amount for each month using the methodology described above).

- a. For purposes of tracking the Balancing Account amount, the Company shall provide the District with an annual report that includes:
 - i. A copy of the OBM Index Prices as reported in the first issue of each month;
 - ii. The total commingled recyclable tonnage delivered to any related party for processing;
 - iii. The calculated current month Per Ton Revenue Amount and the calculation used to determine that amount;
 - iv. The total monthly Calculated Revenue equal to the total tonnage collected or

Attachment 4

Exhibit 7 Recyclable Materials Balancing Account

- received by the Company through the recycling program and delivered to the related parties for processing times the calculated monthly Per Ton Revenue Amount); and
- v. All prior year to date monthly figures for the calendar year for items (ii) through (iv) above.
- b. The net cumulative Balancing Account amount for 2008 through 2011 shall be accounted for in full in setting the rates for Calendar Year 2013 as follows:
 - i. The net cumulative Balancing Account will be divided by five (to account for rates in 2013, 2014, 2015, 2016 and 2017) (the annualized Balancing Account amount);
 - ii. The Company's fiscal year 2011 audited financial statement rate revenue will be divided by the annualized Balancing Account amount to calculate the annualized Balancing Account rate adjustment; and
 - c. The calculated RRI rate adjustment for 2013 will be adjusted up (if the Balancing Account amount is due to the Company) or down (if the Balancing Account amount is due to the District) by the annualized Balancing Account rate adjustment, which shall be carried forward through rate year 2016.
 - d. The net cumulative Balancing Account amount for 2012 through 2016 shall be accounted for in full in setting the rates for Calendar Year 2018 by dividing that amount by five (to account for rates in 2018, 2019, 2020, 2021 and 2022) and applying the same rate adjustment methodology specified for Calendar Year 2013 in Section 6.6.6.2.2 above.
 - e. The net cumulative Balancing Account amount for 2017 through 2021 shall be accounted for in full in setting the rates for Calendar Year 2023 by dividing that amount by three (to account for rates in 2023, 2024 and 2025) and applying the same rate adjustment methodology specified for Calendar Year 2013 in Section 6.6.6.2.2 above.
 - f. The cumulative balancing account amount for Calendar Years 2022 through 2025 shall be paid by the applicable party to the other party in no less than equal annual payments over a period of no more than four years starting January 1, 2026, without interest.
 - g. In the event that a Detailed Rate Review is conducted the impact of the Balancing Account will be factored into the associated rate adjustment for that year in the same manner specified for Calendar Year 2013 in Section 6.6.6.2.2 above.
 - h. Exit Clause. -The parties agree that the proposed methodology is intended to provide a reasonable projection of the fair market value of revenues paid by third parties to the Company. Recyclable material commodity prices can, however, be extremely volatile and factors other than those accounted for in the proposed methodology may impact the fair market value of revenues. To provide a contingency for such potential

Exhibit 7
Recyclable Materials Balancing Account

events, each party shall have the right to terminate the use of the methodology for establishing the monthly Per Ton Revenue Amount described in this Section at any time during the term of this Agreement at either party's sole discretion. The notification shall be in writing and shall be effective thirty calendar days after receipt. The exercising of said option shall not remove either party's obligation to the other party for any Balancing Account balance at the time said option is exercised and becomes effective.

- i. In the event that either party exercises its option to terminate the methodology for establishing the Per Ton Revenue Amount, the parties agree to negotiate a new methodology that is acceptable to both parties. In the event that the parties cannot agree on acceptable changes to the methodology, the fair market value will be based on a review of actual related recyclable material sales revenues and related processing expenses.

1

	A	B	E	I	J	M	N	N	O	P	Q	R	S	T	V	AI	AJ	AI				
13	San Francisco OBM Prices (average of high & low) ⁽¹⁾																					
	Per Ton Net Revenue Amount										Mixed Paper				Price Adjustment							
14											#8 NP				OCC				100%			
15	weighted %=										46%				8%							
297	2017																					
298	Jan	\$71.19	\$97.50	\$100.00	\$100.00	\$120.00	\$2.30	\$2.30	\$0.80	\$5.40	1,114	\$	79,338									
299	Feb	\$78.54	\$100.00	\$110.00	\$140.00	\$1.60	\$1.60	\$1.60	\$1.60	\$7.35	1,002	\$	78,705									
300	Mar	\$80.94	\$100.00	\$110.00	\$170.00	\$0.00	\$0.00	\$2.40	\$2.40	\$2.40	899	\$	72,790									
301	Apr	\$55.14	\$72.50	\$87.50	\$135.00	-\$12.65	-\$10.35	-\$2.80	-\$2.80	-\$25.80	1,001	\$	55,173									
302	May	\$55.14	\$72.50	\$87.50	\$135.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	838	\$	46,179									
303	Jun	\$61.74	\$77.50	\$92.50	\$160.00	\$2.30	\$2.30	\$2.30	\$2.30	\$6.60	979	\$	60,458									
304	Jul	\$10.00	\$0.00	\$0.00	\$165.00	-\$35.65	-\$42.55	\$0.40	\$0.40	-\$77.81	889	\$	8,893									
305	Aug	\$10.00	\$0.00	\$0.00	\$155.00	\$0.00	\$0.00	-\$0.80	-\$0.80	-\$2.00	907	\$	9,072									
306	Sep	\$10.00	\$0.00	\$0.00	\$130.00	\$0.00	\$0.00	-\$2.00	-\$2.00	-\$2.00	937	\$	9,372									
307	Oct	\$10.00	\$0.00	\$0.00	\$67.50	\$0.00	\$0.00	-\$5.00	-\$5.00	-\$5.00	760	\$	7,602									
308	Nov	\$10.00	\$0.00	\$0.00	\$110.00	\$0.00	\$0.00	\$3.40	\$3.40	\$3.40	908	\$	9,083									
309	Dec	\$10.00	\$0.00	\$0.00	\$110.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	858	\$	8,576									
310																						
311	(1) First weekly OBM issue of each month																					
312	Floor per ton = \$10.00 Max = \$80.00 (to be adjusted fr																					
313																						
314																						
315																						
316																						
317																						
318																						
319																						
320																						

2017 Balancing Account Calculated Revenues = **\$ 445,242**

2017 Projected Recyclable Materials Revenue = 542,420

July 1, 2007 CRV Adjustment = 40,664

Total 2017 Balancing Account Projected Revenues = **583,084**

2017 Balancing Account Due to District (Company) = **(137,842)**

NET BALANCING ACCOUNT FOR 2017-2017 DUE TO DISTRICT (COMPANY) = (137,842)

Note: Calculated value of (\$137,842) does not include estimated #8 NP values, July-Dec 2017. Adjusted estimated amount incorporating these values is provided on next page.

	A	B	E	I	J	M	N	O	P	Q	R	S	T	V	AI	AJ	AT
13	San Francisco OBM Prices (average of high & low) ⁽¹⁾																
	Price Adjustment																
14	Variance vs. Prior Month																
15	Per Ton Net Revenue Amount																
297	2017																
298	Jan	\$71.19	\$97.50	\$100.00	\$120.00	\$2.30	\$2.30	\$0.80	\$5.40	1,114	\$	79,338					
299	Feb	\$78.54	\$100.00	\$110.00	\$140.00	\$1.15	\$1.60	\$1.60	\$7.35	1,002	\$	78,705					
300	Mar	\$80.94	\$100.00	\$110.00	\$170.00	\$0.00	\$2.40	\$2.40	\$2.40	899	\$	72,790					
301	Apr	\$55.14	\$72.50	\$87.50	\$135.00	-\$12.65	-\$10.35	-\$2.80	-\$25.80	1,001	\$	55,173					
302	May	\$55.14	\$72.50	\$87.50	\$135.00	\$0.00	\$0.00	\$0.00	\$0.00	838	\$	46,179					
303	Jun	\$61.74	\$77.50	\$92.50	\$160.00	\$2.30	\$2.30	\$2.00	\$6.60	979	\$	60,458					
304	Jul	\$66.93	\$82.50	\$97.92	\$165.00	\$2.30	\$2.49	\$0.40	\$5.19	889	\$	59,521					
305	Aug	\$56.93	\$62.50	\$97.92	\$155.00	-\$9.20	\$0.00	-\$0.80	-\$10.00	907	\$	51,644					
306	Sep	\$54.93	\$62.50	\$97.92	\$130.00	\$0.00	\$0.00	-\$2.00	-\$2.00	937	\$	51,481					
307	Oct	\$31.53	\$22.50	\$97.92	\$67.50	-\$18.40	\$0.00	-\$5.00	-\$23.40	760	\$	23,971					
308	Nov	\$39.53	\$32.50	\$97.92	\$110.00	\$4.60	\$0.00	\$3.40	\$8.00	908	\$	35,907					
309	Dec	\$37.23	\$27.50	\$97.92	\$110.00	-\$2.30	\$0.00	\$0.00	-\$2.30	858	\$	31,927					
310	2017 Balancing Account Calculated Revenues = \$ 647,095																
311	2017 Projected Recyclable Materials Revenue = 542,420																
312	July 1, 2007 CRV Adjustment = 40,664																
313	Total 2017 Balancing Account Projected Revenues = 583,084																
314	2017 Balancing Account Due to District (Company) = 64,010																
315	NET BALANCING ACCOUNT FOR 2017-2017 DUE TO DISTRICT (COMPANY) = 64,010																

⁽¹⁾ First weekly OBM issue of each month
Floor per ton = \$10.00 Max = \$80.00
(to be adjusted for any change in CRV)

Jan-Jun Average = **\$97.92**

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Marin Clean Energy (MCE)	MEETING DATE: October 8, 2018
AGENDA ITEM NO.: 7.a.	
<p>RECOMMENDED ACTIONS: Receive recommendation on switching District electricity accounts from Pacific Gas & Electric Co. (PG&E) to MCE Clean Energy (MCE), select desired service option (light green or deep green), and if applicable, adopt Resolution 3128 - A Resolution to Switch From Pacific Gas & Electric Company to MCE Clean Energy utilizing the MCE Deep Green Option.</p>	
<p>SUMMARY AND DISCUSSION:</p> <p>At the September 17, 2018 Board meeting, MCE staff presented the results of their recently completed electricity rate comparison study for the District's facilities. An updated copy of the PowerPoint presentation by MCE staff from that meeting is provided as Attachment 1. Also, the District's consultant, Enovity, Inc. presented the results of its independent electricity rate comparison study (Attachment 2), which supports switching District electricity accounts from PG&E to MCE's Light Green option on a cost basis.</p> <p>In summary, MCE's and Enovity's studies support the District moving its electricity accounts from PG&E to MCE. If the District moves its accounts to MCE, selecting MCE's Light Green option will potentially result in a <u>savings</u> of about \$27,000/year, while selecting MCE's Dark Green option will potentially result in an additional <u>cost</u> of about \$22,000/year.</p> <p>Separately, Board members requested that the Board receive information on differences in carbon intensity between the two options, and the electrical power generation mix for PG&E and MCE. Attachment 3 ("PG&E – MCE Comparison"), as excerpted from PG&E's website includes this information. A Board member also asked if switching to MCE would affect the District's efforts in exploring PG&E's On-Bill Financing (OBF) program to finance energy minimization and optimization measures. Enovity serves as PG&E's consultant to the OBF program, and anticipates no impact to the District's eligibility to participate in the OBF program if the District opts to switch to MCE.</p> <p>Accordingly, staff recommends that as a minimum, the Board approve switching the District's accounts from PG&E to MCE's Light Green option, and authorize the General Manager-Chief Engineer to execute agreements as required to make the switch.</p> <p>Further, if the Board wishes to utilize the Deep Green option even though it may not be as cost effective to do so at this time, District Legal Counsel and staff are not currently aware of any statutory reasons that preclude the Board from doing so for other valid, non-economic reasons. Accordingly, District Legal Counsel and staff have prepared a draft Resolution (Attachment 4) if the Board wishes to adopt the MCE Deep Green option. Additionally, it is noted that similar agencies to the District within Marin County have recently selected the Deep-Green option where it was not the most cost effective option for them to do so, including Central Marin Sanitation Agency (CMSA), Las Gallinas Valley Sanitary District (LGVSD), and Ross Valley Sanitary District (RVSD).</p>	
<p>ATTACHMENTS:</p> <ol style="list-style-type: none"> 1. Copy of MCE presentation of September 17, 2018 (updated to reflect "deep-green" option). 2. Copy of Enovity, Inc. presentation of September 17, 2018. 3. Copy of document on electric power generation mix titled "PG&E – MCE comparison". 4. Resolution 3128 – A Resolution to Switch From Pacific Gas & Electric Company to MCE Clean Energy utilizing the MCE Deep Green Option. 	
<p>STRATEGIC PLAN INFORMATION: This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.</p>	
DEPT. MGR.: esb, ssk	GENERAL MANAGER: SSK

Item 7.a.
Attachment 1
(Pages 71 to 74)



MCE

A local, not-for-profit electricity provider

Focus of the Cost Comparison

- Novato Sanitary District request: an evaluation of costs between MCE's Light Green and PG&E's current service
- MCE staff examined several months across last year, using current MCE and PG&E rates
- MCE performed this analysis in two parts:
 - Cost comparison for 43 commercial accounts and one agricultural account
 - Examination of Peak Day Pricing program costs

Peak Day Pricing

- Peak Day Pricing (PDP) is a PG&E program which NSD currently participates in, and is unavailable to MCE accounts
- PDP is a default PG&E program and can be mandatory
- Participation provides a mix of credits and added charges
 - ***Finding:*** during the 12-month comparison period, PDP charges for NSD exceeded credits by approximately \$1,372
 - ***Recommendation:*** adjust participation in or discontinue PDP

Summary of Cost Comparison

	57% renewable MCE	33% renewable PG&E	100% renewable MCE
Commercial	\$722,778.81	\$749,245.38	\$768,015.40
Agricultural	\$56,270.52	\$ 56,507.37	\$59,493.78
Total	\$779,049.33	\$805,752.75	\$827,509.18
Difference	(\$26,703.42) 3.3% Savings		\$21,756.43 2.7% Additional

Additionally, discontinuing PDP (Peak Day Pricing) due to MCE enrollment would reduce estimated energy costs by \$1,372 (based on CY 2017 data).

Total cost savings for Light Green 57% renewable and no PDP: \$28,075.42 less costly than PG&E 33% renewable.

Total additional cost for Deep Green 100% renewable and no PDP: \$20,384.43 more costly than PG&E 33% renewable

Novato Sanitary District Utility Rate Analysis

Main Plant and Large Pump Stations

Prepared for:

Novato Sanitary District Board

Prepared by:

James Lonergan, PE

9/17/2018



A Veolia company
NSD Board Agenda Packet

October 08, 2018 (Page 75 of 137)

Analysis Methodology

- ▶ May utility bills and 2 years demand data for the main plant were the basis for comparison
- ▶ MCE and PG&E rate schedules for each meter were compared to determine the lowest cost rate
- ▶ Tariff documentation was used alongside the central plant bill to verify the accuracy of the MCE comparison tool outputs
 - Particularly in how the transmission and other CCA charges are accounted for
 - Tool is accurate to within the unknown bill items, such as Power Factor (PF) charge.

MCE E19 vs. PG&E E19

E19, Medium General Service

Summer - Service from May 1 through October 31	Secondary	Primary	Transmission
Peak	\$0.105/kWh	\$0.097/kWh	\$0.060/kWh

Updated 6/26/2018

Part-Peak	\$0.065/kWh	\$0.058/kWh	\$0.048/kWh
Off-Peak	\$0.040/kWh	\$0.035/kWh	\$0.034/kWh
Winter - Service from November 1 through April 30			
Part-Peak	\$0.059/kWh	\$0.053/kWh	\$0.050/kWh
Off-Peak	\$0.045/kWh	\$0.040/kWh	\$0.038/kWh

Demand Charges			
Summer Peak Demand	\$12.60/kW	\$11.25/kW	\$12.40/kW
Summer Part-Peak Demand	\$3.10/kW	\$2.75/kW	\$3.10/kW

Time of Use Periods:

Summer - Service from May 1 through October 31:

Peak:	12:00 noon to 6:00 p.m. Monday through Friday (except holidays)
Partial-peak:	8:30 a.m. to 12:00 noon Monday through AND 6:00 p.m. to 9:30 p.m. Friday (except holidays)
Off-peak:	9:30 p.m. to 8:30 a.m. Monday through Friday. All day Saturday, Sunday, and holidays

Winter - Service from November 1 through April 30:

Partial-Peak:	8:30 a.m. to 9:30 p.m. Monday through Friday (except holidays)
Off-Peak:	9:30 p.m. - 8:30 a.m. Monday through Friday (except holidays). All day Saturday, Sunday, and holidays

MCE is cheaper in all cost categories for this rate

UNBUNDLING OF TOTAL RATES

Charge Rates: Customer and meter charge rates provided in the Total Rates section above rely to the unbundled distribution component.

Demand Rates by Components (\$ per kW)	Secondary Voltage	Primary Voltage
Generation:		
Maximum Peak Demand Summer	\$13.86 (I)	\$12.37 (I)
Maximum Part-Peak Demand Summer	\$3.42 (I)	\$3.01 (I)
Maximum Demand Summer	\$0.00	\$0.00
Maximum Part-Peak Demand Winter	\$0.00	\$0.00
Maximum Demand Winter	\$0.00	\$0.00
Distribution**:		
Maximum Peak Demand Summer	\$5.79 (R)	\$5.12 (R)
Maximum Part-Peak Demand Summer	\$1.98 (R)	\$1.71 (R)
Maximum Demand Summer	\$9.99 (R)	\$6.95 (R)
Maximum Part-Peak Demand Winter	\$0.12	\$0.14 (R)
Maximum Demand Winter	\$9.99 (R)	\$6.95 (R)
Transmission Maximum Demand*	\$7.46 (I)	\$7.46 (I)
Reliability Services Maximum Demand*	\$0.29 (I)	\$0.29 (I)

* Transmission, Transmission Rate Adjustments, and Reliability Service charges are combined for presentation on customer bills.

** Distribution and New System Generation Charges are combined for presentation on customer bills.

San Francisco, California

ELECTRIC SCHEDULE E-19 MEDIUM GENERAL DEMAND-METERED TOU SERVICE

Sheet 6

3. Rates: (Cont'd.)

UNBUNDLING OF TOTAL RATES (Cont'd.)	Secondary Voltage	Primary Voltage	Transmission Voltage
Energy Charges by Components (\$ per kWh)			
Generation:			
Peak Summer	\$0.13786 (I)	\$0.12751 (I)	\$0.09006 (I)
Part-Peak Summer	\$0.05094 (I)	\$0.05046 (I)	\$0.07009 (I)
Off-Peak Summer	\$0.00002 (I)	\$0.00043 (I)	\$0.05780 (I)
Part-Peak Winter	\$0.08715 (I)	\$0.07978 (I)	\$0.07893 (I)
Off-Peak Winter	\$0.07112 (I)	\$0.06511 (I)	\$0.06442 (I)
Distribution**:			
Peak Summer	\$0.00000	\$0.00000	\$0.00000
Part-Peak Summer	\$0.00000	\$0.00000	\$0.00000
Off-Peak Summer	\$0.00000	\$0.00000	\$0.00000
Part-Peak Winter	\$0.00000	\$0.00000	\$0.00000
Off-Peak Winter	\$0.00000	\$0.00000	\$0.00000
Transmission Rate Adjustments* (all usage)			
Public Purpose Programs (all usage)	\$0.02189 (R)	\$0.01173 (R)	\$0.01170 (R)
Nuclear Decommissioning (all usage)	\$0.00020 (R)	\$0.00020 (R)	\$0.00020 (R)
Competition Transition Charge (all usage)	\$0.00083 (R)	\$0.00083 (R)	\$0.00083 (R)
Energy Cost Recovery Amount (all usage)	(\$0.00005) (R)	(\$0.00005) (R)	(\$0.00005) (R)
DWR Bond (all usage)	\$0.00549	\$0.00549	\$0.00549
New System Generation Charge (all usage)**	\$0.00155 (R)	\$0.00155 (R)	\$0.00155 (R)
California Climate Credit (all usage - E-19v only)***	\$0.00000 (I)	\$0.00000 (I)	\$0.00000 (I)

* Transmission, Transmission Rate Adjustments, and Reliability Service charges are combined for presentation on customer bills.

** Distribution and New System Generation Charges are combined for presentation on customer bills.

*** Only customers that qualify as Small Businesses - California Climate Credit under Rule 1 are eligible for the California Climate Credit.

PG&E has higher generation charges, and peak day charges

Additional Charges for CCA Utilities

Direct Access (DA) and Community Choice Aggregation (CCA) Customers purchase energy from their non-utility provider and continue receiving delivery services from PG&E. Bills are equal to the sum of charges for transmission, transmission rate adjustments, reliability services, distribution, public purpose programs, nuclear decommissioning, New System Generation Charges, the franchise fee surcharge, and the applicable CRS. The CRS is equal to the sum of the individual charges set forth below. Exemptions to the CRS are set forth in Schedules DA CRS and CCA CRS.

	<u>DA / CCA CRS</u>
Energy Cost Recovery Amount Charge (per kWh)	(\$0.00005) (R)
DWR Bond Charge (per kWh)	\$0.00549
CTC Charge (per kWh)	\$0.00083 (R)
Power Charge Indifference Adjustment (per kWh)	
2009 Vintage	\$0.01752 (I)
2010 Vintage	\$0.01992 (I)
2011 Vintage	\$0.02067 (I)
2012 Vintage	\$0.02125 (I)
2013 Vintage	\$0.02131 (I)
2014 Vintage	\$0.02109 (I)
2015 Vintage	\$0.02099 (I)
2016 Vintage	\$0.02104 (I)
2017 Vintage	\$0.02104 (I)
2018 Vintage	\$0.02104 (N)

		E19P (COM-19P)	MCE			PG&E	Overall	
		Season	MCE Gen.	PG&E Delivery	PG&E Fees	Effective Rate	PG&E Rate	% Diff.
Non-Seasonal	All Usage							
Non-TOU	Summer							
Non-TOU	Winter							
TOU Usage	Summer Peak	\$0.09700	\$0.02193	\$0.02128	\$0.14021	\$0.14944		-6.18%
TOU Usage	Summer Partial Peak	\$0.05800	\$0.02193	\$0.02128	\$0.10121	\$0.10739		-5.75%
TOU Usage	Summer Off Peak	\$0.03500	\$0.02193	\$0.02128	\$0.07821	\$0.08036		-2.68%
TOU Usage	Winter Peak							
TOU Usage	Winter Partial Peak	\$0.05300	\$0.02193	\$0.02128	\$0.09621	\$0.10171		-5.41%
TOU Usage	Winter Off Peak	\$0.04000	\$0.02193	\$0.02128	\$0.08321	\$0.08704		-4.40%
Demand	Summer Peak	\$11.25000	\$5.12000		\$16.37000	\$17.49000		-6.40%
Demand	Summer Partial Peak	\$2.75000	\$1.71000		\$4.46000	\$4.72000		-5.51%
Demand	Summer Maximum		\$14.70000		\$14.70000	\$14.70000		0.00%
Demand	Winter Off Peak							
Demand	Winter Partial		\$0.14000		\$0.14000	\$0.14000		0.00%
Demand	Winter Maximum		\$14.70000		\$14.70000	\$14.70000		0.00%
Ag. HP Load	Conn. Load Sum.							
Ag. HP Load	Conn. Load Win.							

Other Fees (above) account for the difference between listed rate and billed rate

MCE tool breaks out the Generation, Transmission and Fees, and for E19 MCE is still less cost in all categories

Main Plant Results

Total Cost Summary

Service Options	Total Charges
MCE Light Green (50%)	\$57,339.46
MCE Deep Green (100%)	\$60,992.50
MCE Local Sol	\$90,892.20
PG&E Standard	\$59,951.82
PG&E Solar Choice (50%)	\$60,866.90
PG&E Solar Choice (100%)	\$61,781.99

MCE Tool analysis (left) vs. my own analysis (below). Tool is accurate less unknown bill charges applicable at either rate (Power Factor Charge etc.)

	Demand	PG&E Transmission*	PG&E Generation	MCE Generation	PCIA**	MCE Rate	PG&E rate	cost on MCE	cost on PG&E	
peak kW	633.6	\$ 5.12	\$ 12.37	\$ 11.25	\$ -	\$ 16.37	\$ 17.49	\$10,372.03	\$ 11,081.66	
part peak kW	614.4	\$ 1.71	\$ 3.01	\$ 2.75	\$ -	\$ 4.46	\$ 4.72	\$ 2,740.22	\$ 2,899.97	
max kW	633.6	\$ 14.70	\$ -	\$ -	\$ -	\$ 14.70	\$ 14.70	\$ 9,313.92	\$ 9,313.92	
	Energy					0				
peak kWh	61920	\$ 0.021930	\$ 0.127510	\$ 0.097000	\$0.020670	\$0.139600	\$ 0.149440	\$ 8,644.03	\$ 9,253.32	
part peak kWh	73728	\$ 0.021930	\$ 0.085460	\$ 0.058000	\$0.020670	\$0.100600	\$ 0.107390	\$ 7,417.04	\$ 7,917.65	
off peak kWh	229656	\$ 0.021930	\$ 0.058430	\$ 0.035000	\$0.020670	\$0.077600	\$ 0.080360	\$17,821.31	\$ 18,455.16	
								\$57,356.24	\$ 59,969.37	
		* aggregate of charges shown in unbundled energy rates						PG&E extra cost	\$ 2,613.13	
		** determined from same charge, on the irrigation pump station bill (2011 vintage)								
	meter rate		32.85421	1051.33472						
	PF credit		-109.59							
	tax		105.94							

Results for all Meters

- ▶ Bulk of cost savings at Plant
- ▶ Irrigation is already on MCE, and bills indicate savings over PG&E
- ▶ Some savings switching Hamilton pump station to MCE
- ▶ All other stations considered are already on the cheapest rate, A10/A6 Peak Day Pricing

Site	Base Rate	PG&E Cost	MCE cost	\$ difference may	estimated summer avg. save PG&E	estimated winter avg save PG&E	Est. annual savings on PGE	Recommendations
Plant	E19P	\$59,969.36	\$57,356.23	\$ 2,613.13	\$ (18,291.91)	\$ (9,242.40)	\$ (27,534.31)	Switch to MCE
Hamilton	A10 SX PDP	\$ 2,020.54	\$ 2,069.25	\$ (48.71)	\$ 110.96	\$ (323.63)	\$ (212.67)	Switch to MCE due to lower winter month rates, and limited PDP savings
Olive	A6 PDP	\$ 1,990.89	\$ 2,150.26	\$ (159.37)	\$ 959.89	\$ (390.65)	\$ 569.24	Stay on A6 PDP provided may is typical of pumping ops in the summer may net out on MCE over winter months, non PDP A6 has a cost of \$2239.89
Irrigation	MCE AG-5C	\$15,021.46	\$14,323.11	\$ 698.35	?			MCE is a better rate in all cost categories.
Marin Vil.	A6 PDP	\$ 1,031.21	\$ 1,109.92	\$ (78.71)	\$ 238.00	\$ (201.43)	\$ 36.57	Stay on A6 PDP provided may is typical of pumping ops in the summer may net out on MCE over winter months non PDP PG&E costs \$1,156
Bahia	A6 PDP	\$ 1,049.00	\$ 1,123.93	\$ (74.93)	\$ 373.74	\$ (207.30)	\$ 166.44	Stay on A6 PDP provided may is typical of pumping ops in the summer may net out on MCE over winter months non PDP PG&E costs \$1171.18
Ignacio	No bill							

Final Thoughts

- ▶ More municipalities switch to CCA each year
- ▶ If trend continues Transmission charges likely to increase
- ▶ Makes sense to switch now, however with rates as variable as they are, changes should be monitored to ensure optimal rate schedule



Enovity
A Veolia company



PG&E – MCE Comparison

Electric Power Generation Mix*

Specific Purchases	Percent of Total Retail Sales (kWh)			
	PG&E	PG&E Solar Choice	MCE Light Green	MCE Deep Green
Renewable	33%	100%	61%	100%
• Biomass & Biowaste	4%	0%	6%	0%
• Geothermal	5%	0%	0%	0%
• Eligible hydroelectric	3%	0%	7%	0%
• Solar electric	13%	100%	9%	50%
• Wind	8%	0%	27%	50%
Coal	0%	0%	0%	0%
Large Hydroelectric	18%	0%	26%	0%
Natural Gas	20%	0%	5%	0%
Nuclear	27%	0%	0%	0%
Other	0%	0%	0%	0%
Unspecified Sources of Power **	2%	0%	6%	0%
Total	100%	100%	100%	100%

* As reported to the California Energy Commission's Power Source Disclosure Program. PG&E data is subject to an independent audit and verification that will not be completed until October 1, 2018. The figures above may not sum up to 100 percent due to rounding.

**Unspecified sources of power refers to electricity that is not traceable to a specific generating facility, such as electricity traded through open market transactions. Unspecified sources of power are typically a mix of all resource types, and may include renewables.

Source: PG&E website: https://www.pge.com/pge_global/common/pdfs/customer-service/other-services/alternative-energy-providers/community-choice-aggregation/MCE_ElectricPowerGenerationMix.pdf

RESOLUTION NO. 3128

**A RESOLUTION TO SWITCH
FROM PACIFIC GAS & ELECTRIC COMPANY TO MCE CLEAN ENERGY
UTILIZING THE MCE DEEP GREEN OPTION**

NOVATO SANITARY DISTRICT

RESOLVED, by the Board of Directors of Novato Sanitary District, Marin County, California that:

WHEREAS, the District exists to safeguard public health and protect the environment;

WHEREAS, consistent with its roles as a public health guardian and environmental steward, the District recognizes it is necessary and appropriate for the District to minimize its carbon footprint through the use of non-fossil fuel, renewable energy sources; and

WHEREAS, the District recognizes that: (a) while it may not be a lower cost option at this time to utilize a generally accepted source of 100 percent renewable energy as its primary power supplier, (b) there are valid public interest and environmental stewardship reasons for the District to do so;

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

The District hereby determines that it is in the District's and its customers best interest to switch its electricity accounts from Pacific Gas and Electric Company (PG&E) to MCE Clean Energy utilizing the MCE Deep Green option, as soon as practicable, and that the District General Manager-Chief Engineer is authorized to execute agreements as required to make such switch.

* * * * *

I hereby certify that the foregoing resolution was duly and regularly passed and adopted by the Board of Directors of Novato Sanitary District, Marin County, California, at a meeting thereof held on the 8th day of October 2018, by the following vote:

AYES, and in favor thereof, Members: _____

NOES, Members: _____

ABSENT, Members: _____

A. Gerald Peters,
President, Board of Directors
Novato Sanitary District

ATTEST:

Sandeep Karkal,
Secretary, Board of Directors
Novato Sanitary District

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Wastewater Operations Report, September 2018.

MEETING DATE: October 8, 2018

AGENDA ITEM NO.: 8.a.

RECOMMENDED ACTIONS: Receive Wastewater Operations Reports for September 2018:

- Collection System
- Treatment Facilities
- Reclamation Facilities

SUMMARY AND DISCUSSION:

The September 2018 Wastewater Operations Report incorporating operations reports for collections system, wastewater treatment facilities, and the reclamation facilities is attached.

District and Veolia staff will be present at the meeting to provide overviews of the reports for their operational areas, and be available to discuss the reports or respond to any questions.

ATTACHMENTS: 1. Wastewater Operations Reports for the month of September 2018.

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, JB

GENERAL MANAGER: SSK

**Novato Sanitary District
Wastewater Operations - Collection System Operations Report
September 2018**

1.0 General:

The equivalent of about six (6) full time employees (FTE) worked on collection system maintenance activities during the month. One collection system worker left to pursue another employment opportunity, and the District is currently in the recruitment process for a replacement. The breakdown of staff time for the month in terms of equivalent FTE hours utilized, works out approximately as follows:

- 2.1 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.3 FTE field workers for Pump Station Maintenance
- 0.4 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
- 1.1 FTE field workers for vacation, holiday or sick leave.

2.0 Collection System Maintenance:

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

Line Cleaning Performance:

The sewer system ICOM3 Computerized Maintenance Management System (CMMS) generated 254 work orders for the month. Collections staff completed 254 work orders, leaving zero (0) work orders outstanding. The completed work orders resulted in 52,137 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 10,197 feet of sewer main.

CCTV Findings:

- Infrastructure-related: CCTV work did not identify any new structural damages.
- 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 151 lift station inspections this month. 42 of the inspections were generated through the District's JobsCal Plus CMMS system. There are no outstanding work orders for the month. A Pump Stations Work Order Statistics summary is attached.



Photo #1-Extracted Pump at Hamilton Meadows for inspection.

Novato Sanitary District Wastewater Operations - Collection System Operations Report September 2018

4.0 Air Relief/Vacuum Valves (ARVs):

Staff completed maintenance inspections on six (6) air relief/vacuum valves this month.

5.0 Safety and Training:

General:

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

Specialized Training:

- Collections staff attended a CWEA tour of a Mare Island facility.
- The Collections System Superintendent attended the Annual Tri-State Seminar 3-day event.

Safety performance:

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

6.0 Miscellaneous Projects:

Two bollards were installed at Meadow Park Pump Station to prevent any further residential parking at the facility.

Collections staff assisted a contractor in conducting the annual checkup on the generators. All generators are in good working condition.

7.0 Sanitary Sewer Overflows (SSOs):

There was one (1) sanitary sewer overflow in September. This was a Category 3 event, of approximately 750 gallons. The California Integrated Water Quality System (CIWQS) Spill Event ID number is 851445, and the Certification number is 548030.

The event occurred on September 24th, 2018. The District received a call at about 9am from the superintendent of an in-construction Ryder Homes, Inc. housing development on Hamilton Parkway, that the District manhole on their construction site was overflowing.

District Collections staff responded within 15 minutes and began to alleviate the blockage. After sending in the CCTV camera to inspect the cause of the blockage, they discovered a solid column of concrete through the District's pipe, likely as a result of the construction of a foundation column for a retaining wall being placed over the pipe. District staff took photographs and field measurements, and carried out flow calculations, and estimated to be about 750 gallons, all contained on the dirt pad of the construction site. Collections staff cleaned up and recovered approximately 500 gallons. The backup was pumped down and level alarms were set up to monitor levels until a repair could be made.

Subsequently, two days later, a Ryder Homes contractor made the required repairs, a CCTV repair inspection was made to verify that the District's pipeline had been adequately repaired, and flow was restored.

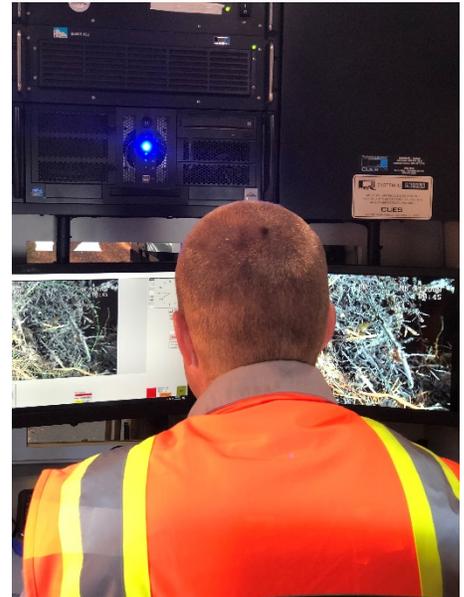


Photo #2 - Collections staff conducting a pipeline inspection - finding and documenting root intrusion from a lateral using the CCTV Camera Van.

Novato Sanitary District
Collection System Monthly Report For September 2018 (as of September 30, 2018)

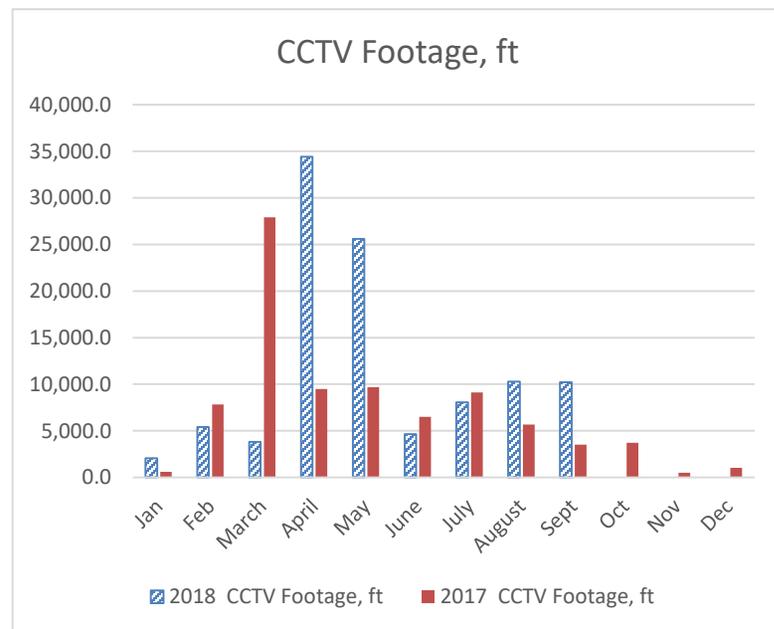
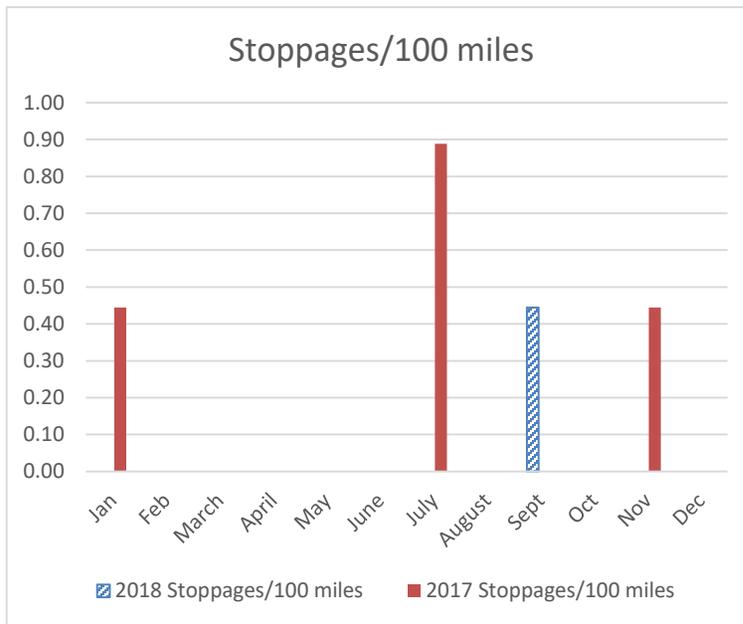
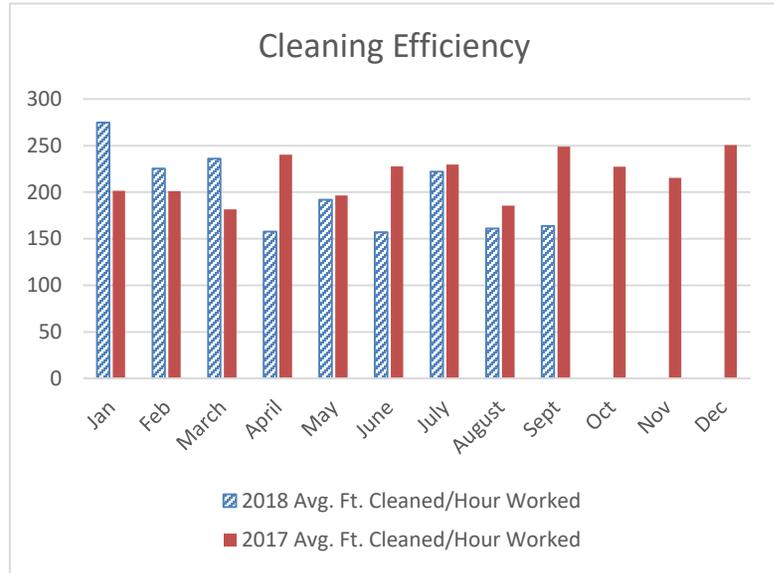
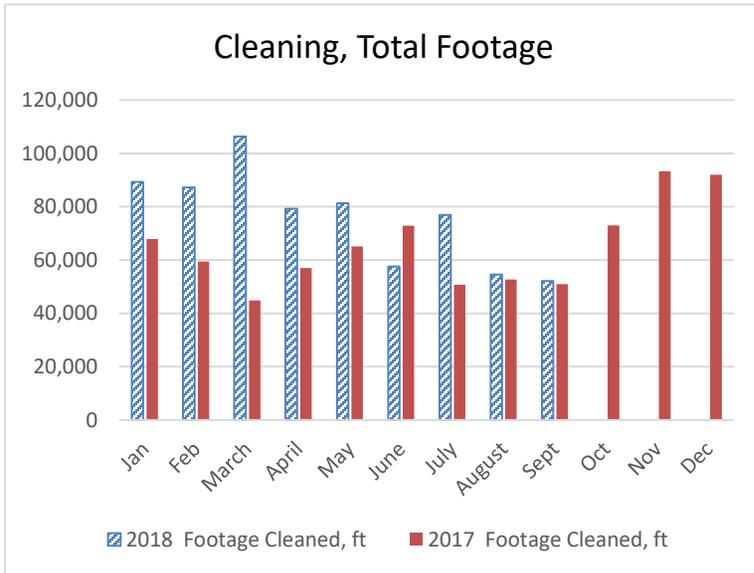
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
A. Employee Hours Worked														
Number of FTEs (main line cleaning), hrs.	1.8	2.4	2.5	3.0	2.3	2.1	1.9	1.9	2.1	0.0	0.0	0.0	NA	1.7
Number of FTEs (other)	1.8	1.9	1.9	1.7	1.4	1.7	1.7	1.5	1.4	0.0	0.0	0.0	NA	1.3
Number of FTEs (USAs)	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.1	0.0	0.0	0.0	0.0	NA	0.3
Number of FTEs (CCTV)	0.2	0.2	0.2	0.3	0.8	0.3	0.1	0.5	0.4	0.0	0.0	0.0	NA	0.3
Total, FTEs	4.0	4.9	4.8	5.4	4.7	4.4	4.0	3.9	3.9	0.0	0.0	0.0	NA	3.3
Regular Time Worked, (main line cleaning), hrs	325	387	451	502	425	367	347	339	319	0	0	0		
Regular Time Worked on Other, hrs (1)	324	303	352	288	263	298	306	276	218	0	0	0		
Regular Time Worked on USAs	51	59	41	53	49	43	45	12	0					
Regular Time Worked on CCTV (2)	32	40	40	57	149	51	18	94	65	0	0	0		
Total Regular time, worked, hrs	732	788	882	900	885	758	851	721	601	0	0	0	7,116	593
Total Vacation/Sick Leave/Holiday, hrs	216	106	123	70	186	156	396	335	167	0	0	0	1,752	146
Vacation/Sick Leave/Holiday, FTEs	1.2	0.7	0.7	0.4	1.0	0.9	2.2	1.8	1.1	0.0	0.0	0.0	10.0	0.8
Overtime Worked on Coll. Sys., hrs	11	7	3	6	11	20	11	13	17	0	0	0	98	8
Overtime Worked on Other, hrs (1)	4	0	0	0	4	1	10	7	10	0	0	0	35	3
Overtime Worked on USAs, hrs	0	0	0	0	0	0	0	0	0					
Overtime Worked on CCTV (2)	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Total Overtime, hrs	15	7	3	6	15	22	21	20	27	NA	NA	NA	134	15
B. Productivity														
1. Line Cleaning														
Rodder Work Orders generated	28	33	65	65	28	1	61	39	58	0	0	0	378	32
Rodder 3208 ft. cleaned	6,241	6,875	12,729	10,481	4,023	301	7,502	3,965	10,972	0	0	0	63,089	5,257
Rodder - outside services, ft cleaned	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flusher Work Orders generated	401	413	472	403	404	305	422	271	196	0	0	0	3,287	274
Truck 3205V ft. cleaned	22,719	28,924	43,973	2,861	0	12,920	145	2,328	0	0	0	0	113,870	9,489
Truck 3206V ft. cleaned	60,376	51,396	18,896	28,966	6,896	41,633	22,236	16,159	22,570	0	0	0	269,128	22,427
Truck 3209F ft. cleaned	0	0	30,733	36,879	70,447	2,664	46,994	32,102	18,595	0	0	0	238,414	19,868
Flusher - outside services, ft. cleaned	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Footage cleaned(3)	89,336	87,195	106,331	79,187	81,366	57,518	76,877	54,554	52,137	NA	NA	NA	684,501	76,056
Work Orders completed	429	446	537	616	432	506	483	310	254	0	0	0	4,013	365
Work Orders backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Closed Circuit Television (CCTV)														
Camera Work Orders generated	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCTV Truck 3126T, ft. videoed	2,048	5,420	3,805	0	20,712	4,233	0	10,170	10,197	0	0	0	56,585	4,715
CCTV (hand cam), ft. videoed	0	0	0	34,429	4,893	408	8,059	120	0	0	0	0	47,909	
CCTV Inspection - outside services, ft. videoed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CCTV footage(3)	2,048	5,420	3,805	34,429	25,605	4,641	8,059	10,290	10,197	NA	NA	NA	104,494	
C. Sanitary Sewer Overflows (SSOs)														
Minor (Category III)	0	0	0	0	0	0	0	0	1	0	0	0	1	NA
Major (Category II)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Major (Category I)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Overflow Gallons	0	0	0	0	0	0	0	0	750	0	0	0	750	NA
Volume Recovered	0	0	0	0	0	0	0	0	500	0	0	0	500	NA
Percent Recovered	NA	NA	NA	NA	NA	NA	NA	NA	67%	NA	NA	NA	NA	NA
D. Service Calls (non-SSO related)														
Service calls, normal hours, #	8	4	2	2	0	4	3	3	4	0	0	0	30	3
Normal hours S.C. response time, mins (avg.)	39	29.25	17	18.5	0	18	66.3	15	30.25	0	0	0	233	19
Service Callouts, after hours, #	1	0	0	0	0	0	0	0	2	0	0	0	3	0
After Hours S.C. response time, mins (avg.)	37	NA	NA	NA	NA	NA	NA	NA	30	NA	NA	NA	67	34
E. Benchmarks														
Average Ft. Cleaned/Hour Worked	275	225	236	158	192	157	222	161	164	NA	NA	NA	NA	199
Total Stoppages/100 Miles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	NA
Average spill response time (mins)	0	0	0	NA	NA	NA	NA	NA	NA	NA	0	NA	NA	0
Callouts/100 Miles	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.3	0.1
Overtime hours/100 Miles	5	3	1	3	5	9	5	6	8	0	0	0	43.33	4
Overflow Gallons/100 Miles	0	0	0	0	0	0	0	0	326	0	0	0	326	27

(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: 2018 & 2017 Graphs



Novato Sanitary District

Pump Station Monthly Report For September 2018 (as of September 30, 2018)

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
Employee Hours Worked	372	254	212	251	276	266	185	254	222	0	0	0	2,290	
Number of Employees (FTEs)	1.8	1.4	1.2	1.2	1.3	1.3	0.8	1.2	1.3	0.0	0.0	0.0		0.9
Regular Time Worked on Pump Sta	325	226	212	197	238	231	136	224	192	0	0	0	1,979	
Overtime Worked on Pump Sta	47	28	32	54	38	35	50	30	30	0	0	0	342	
After Hours Callouts	3	1	1	1	1	0	9	1	0	0	0	0	17	
Average Callout response time (mins)	36	28	6	9	8	0	24	28	0	0	0	0	139	12
Work Orders														
Number generated in month	95	89	77	85	71	56	68	45	42	0	0	0	628	52
Number closed in month	95	89	77	85	71	56	68	45	42	0	0	0	628	52
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**PUMP STATIONS
WORK ORDER STATISTICS
September 1, 2018-September 30, 2018**

	Open Work Orders Due Prior to 9/1/2018	Open Work Orders 9/1/2018-9/30/2018	Total Open Work Orders
Preventive	0	42	42
Corrective	0	0	0
Total	0	42	42

	Closed Work Orders 9/1/2018 -9/30/2018
Preventive	42
Corrective	0
Total	42

Total Outstanding Work Orders as of 9/30/2018	0
--	----------



October 3, 2018

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

Subject: Veolia Water Operations Report – September 2018

Dear Mr. Karkal:

I am pleased to provide the Monthly Operations report for September 2018.

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
September 2018

Prepared for

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

Prepared by

Veolia Water West Operating Services, Inc. (VWWOS)

TABLE OF CONTENTS

- A: TREATMENT PLANT PERFORMANCE SUMMARY
- B: SAFETY AND TRAINING
- C: OPERATIONS AND MAINTENANCE STATUS / REVIEW
- D: ENVIRONMENTAL SERVICES ACTIVITIES SUMMARY
- E: ADMINISTRATION
- F: ODORS & LANDSCAPING
- G: MISCELLANEOUS

ATTACHMENTS

- 1) Photos
 - 2) Laboratory Data
 - 3) Recycled Water Report
 - 4) Annual Performance Summary - Graphs
 - 5) Process Control Data / Graphs
 - 6) Neighborhood Contacts (Odor / Noise)
 - 7) Jerome Meter Readings and Locations
-

A: TREATMENT PLANT PERFORMANCE SUMMARY – September 2018

National Pollution Discharge Elimination System Permit

Parameter	Value		Limits	
	Ave	Max		
Flow, MGD (monthly ave/max)	3.36	3.85	N/A	
Influent				
BOD ₅ , lb/day (month ave/max)	9,143	9,443	N/A	
TSS, lb/day (monthly ave/max)	9,139	10,632	N/A	
Effluent				
BOD ₅ , mg/L (monthly ave/max weekly ave)	<5	5	15	30
TSS, mg/L (monthly ave/max weekly ave)	<3	4	10	20
BOD ₅ - % Removal, Average	98		85	
TSS - % Removal, Average	99		85	
Ammonia, mg/L – (monthly ave/daily max)	0.27	0.27	5.9	21
pH, su (min / max)	6.8	7.0	6.5	8.5
Enterococcus, MPN/100 ml (30 day geo mean)	2.5		35	
Fecal Coliform, MPN/100 ml (monthly median)	17		140	
Fecal Coliform, MPN/100 ml (90 th PCTL)	17		430	
Total Coliform, MPN/100 ml (5 sample median)	N/A		N/A	
Total Coliform, MPN/100 ml (monthly maximum)	N/A		N/A	

Title 22 - Recycled Water Production and Quality

Description	Units	Value	Limit
Volume Produced	Million Gallons	27.617	N/A
Average Turbidity	NTU	0.7	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	2	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	7.5	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	4	240
Maximum Total Coliform 2 Samples 30 days	MPN/100 ml	<1	23
Total Coliform 7 Sample Median	MPN/100 ml	<1	2.2

Discussion of Violations / Excursions

- National Pollution Discharge Elimination System Permit (NPDES) Limits - None
- Recycled Water – None
- Bay Area Air Quality Management District (BAAQMD) – One incident on September 25th due to low flare temperature and failure to restart during allowable timeframe, being resolved with BAAQMD.

B: SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato WWTP and Ignacio Transfer Pump Station completed.
- Five minute tailgate training held during weekly morning meetings.
- No safety incidents for the month of September 2018.
- Monthly Safety Topics and Training: Respiratory Protection Program



- International Health and Safety Week September 17-21, 2018
- Veolia Corporate Monthly Health and Safety webinar
- Recology Sonoma Marin composting/recycling tailgate with NSD staff

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

- Routine rounds, readings and maintenance
- Replaced batteries on emergency generators #2 & #3
- Replaced modulating motor on the digester heating boiler
- Replaced thermostat on digester #2 heat exchanger
- Replaced #2 control switch on ultraviolet disinfection system

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

- Aeration basin #1 & #3 (standby)
- Primary clarifier #2 (standby)
- Secondary clarifier #1 (standby)

Ignacio Transfer Pump Station

- Routine rounds, readings and preventative maintenance
- Replace batteries on emergency generator

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

- None

Recycled Water Plant (RWP)

- Routine rounds and maintenance
- Continued to assist the contractor's needs and bring new equipment online during the upgrade to the RWP
- Assisted contractor with shut downs & other needs

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

- None

Sludge Lagoons (and Reclamation Area)

- Performed routine rounds and inspection

D: ENVIRONMENTAL SERVICES ACTIVITIES SUMMARY**Discharge to San Pablo Bay NPDES Permit - September 1 - 30, 2018****Sludge Sampling**

Annual sludge sampling initiated in August and completed in September for reporting in the Annual Pretreatment and EPA Biosolids Annual Reports.

Pasture Soil Sampling

Soil sampling and analysis from the pastures was completed in September and the results will be included in the 2018 triennial Irrigated Pasture Report.

Whole Effluent Toxicity Testing

Quarterly Acute and Chronic Toxicity testing is required during Bay Discharge season. Testing was initiated on September 12, 2018. Both tests were performed by Aqua Science (Davis, CA), and results reported in compliance with the NPDES permit. The Acute Toxicity testing results yielded 100% survival. The Chronic Toxicity test results for survival and growth were reported as <1.0 TUc. See below.

Historical Toxicity Testing

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

Training

Liz Falejczyk attended the State of California Environmental Laboratory Accreditation Program (ELAP), TNI 2016 Standard Training Series/Session 4 of 6 trainings, and Kurt Hawkyard, Veolia Water Laboratory Technician attended Session 2 of 6.

BACWA

Liz attended the September 2018 Bay Area Clean Water Agencies (BACWA) Laboratory Committee meeting and workshop on affects of low flows on wastewater collection and treatment systems.

Regulatory Programs

Fats, Oils, and Greases – Inspection and Sampling

- Continued monitoring one Food Service Establishment (FSE) for grease removal several times per week. The FSE is installing a grease interceptor which will reduce the frequency of inspection in the future.

Pretreatment Program – Inspection and Sampling

- Renewed one waste hauler discharge permit
- Received one temporary discharge permit application
- Received one renewal application for a discharge permit from a significant industrial user.

Pollution Prevention

- Liz Falejczyk, Veolia Water Environmental Services Supervisor attended the Public Education Committee meeting.



E: ADMINISTRATION:

- August 2018 Electronic Discharge Monitoring Report (DMR) submitted on September 30, 2018
- August 2018 Self-Monitoring Report (SMR) submitted on September 30, 2018

F: ODORS & LANDSCAPING:

- Jerome meter (H₂S) parts per million (ppm) readings performed in neighborhood
- All readings in neighborhood were 0 ppm

G: MISCELLANEOUS

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

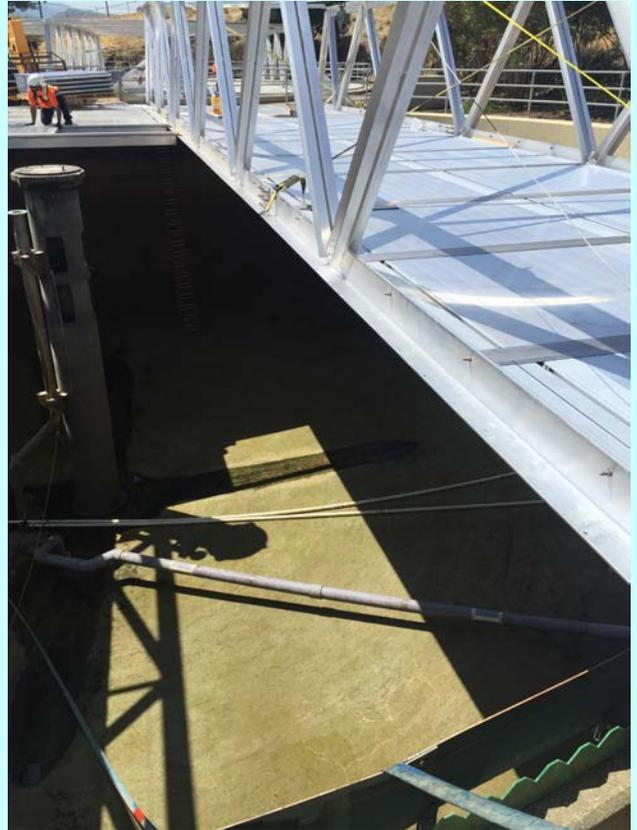
Veolia Support Staff On/Off Site (Various Times)

Ed Dix, West Region Technical Director

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

1) PHOTOS

RECYCLED WATER PLANT SEPTEMBER 2018



Above Right – Recycled Water Plant clear well cover installation
Above Left – Recycled Water Plant Upgrade Project

INTERNATIONAL SAFETY WEEK SEPTEMBER 2018



Above Right – John O'Hare, Preston Ingram, Kurt Hawkyard, Martin Yungul during the training session

Above Left – John O'Hare, John Bailey, and Lynda Famery promoting the safety week

WASTEWATER TREATMENT PLANT
SEPTEMBER 2018



Above - Mallard Ducks enjoying the secondary clarifier

2) *LABORATORY DATA*

Novato Sanitary District
BOD/TSS Report



September, 2018

Date	Flow MGD	Influent				Effluent				BOD % Removal PERCENT	TSS % Removal PERCENT
		BOD		TSS		BOD		TSS			
		mg/l	lb/d	mg/l	lb/d	mg/l	lb/d	mg/l	lb/d		
09/01/18	3.28										
09/02/18	3.17										
09/03/18	3.56										
09/04/18	3.43										
09/05/18	3.32	320	8,860	384	10,632	<5	<89	4	71	98.4	99.0
09/06/18	3.40					<5	<99	<3	<59		
09/07/18	3.17										
09/08/18	3.37										
09/09/18	3.50										
09/10/18	3.28										
09/11/18	3.33	340	9,443	348	9,665	<5	<112	4	90	98.5	98.9
09/12/18	3.52										
09/13/18	3.23										
09/14/18	3.24										
09/15/18	3.68										
09/16/18	3.85										
09/17/18	3.62										
09/18/18	3.42	320	9,127	248	7,074	<5	<94	<3	<57	98.4	98.8
09/19/18	3.31										
09/20/18	3.30										
09/21/18	3.22										
09/22/18	3.38										
09/23/18	3.54										
09/24/18	3.24										
09/25/18	3.42			322	9,184			<3	<67		99.1
09/26/18	3.35										
09/27/18	3.17										
09/28/18	3.20										
09/29/18	3.29										
09/30/18	3.11										
Weekly Averages											
09/01/18	Week 1	260	7,806	379	11,379	5	118	3	79		
09/08/18	Week 2	320	8,860	384	10,632	5	94	4	65		
09/15/18	Week 3	340	9,443	348	9,665	5	112	4	90		
09/22/18	Week 4	320	9,127	248	7,074	5	94	3	57		
09/29/18	Week 5			322	9,184			3	67		
Monthly											
Minimum	3.11	320	8,860	248	7,074	<5	<89	<3	<57	98	99
Maximum	3.85	340	9,443	384	10,632	<5	<112	4	90	99	99
Total	100.90										
Average	3.36	327	9,143	326	9,139	<5	<99	<3	<69	98	99

Novato Sanitary District
Conventional Pollutants Report



September, 2018

Date	INFLUENT - A001			Effluent - E002							
	Flow Total	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Oil & Grease	Temp	Rainfall
				Fecal	Entero	Total					
	MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L	Deg C	Inches
09/01/18	3.28										0.00
09/02/18	3.17										0.00
09/03/18	3.56						7.0			24.3	0.00
09/04/18	3.43			17.0	9.7		6.9			24.1	0.00
09/05/18	3.32				7.5		6.9			23.8	0.00
09/06/18	3.40				2.0		6.9	0.27	<1.4	23.6	0.00
09/07/18	3.17						6.9			24.9	0.00
09/08/18	3.37										0.00
09/09/18	3.50										0.00
09/10/18	3.28	7.4			<1.0		6.9			24.4	0.00
09/11/18	3.33				<1.0		6.9			24.4	0.00
09/12/18	3.52				<1.0		6.9			23.6	0.00
09/13/18	3.23	7.3					6.9			23.9	0.00
09/14/18	3.24						6.9			23.5	0.00
09/15/18	3.68										0.00
09/16/18	3.85										0.00
09/17/18	3.62				2.0		7.0			23.6	0.00
09/18/18	3.42						7.0			23.4	0.00
09/19/18	3.31	7.7			3.0		6.8			23.5	0.00
09/20/18	3.30				5.1		6.8			24.2	0.00
09/21/18	3.22						7.0			24.1	0.00
09/22/18	3.38										0.00
09/23/18	3.54										0.00
09/24/18	3.24				13.2		6.9			23.5	0.00
09/25/18	3.42				<1.0		7.0			23.0	0.00
09/26/18	3.35						7.0			23.4	0.00
09/27/18	3.17				<1.0		6.9			23.6	0.00
09/28/18	3.20	7.5					7.0			23.6	0.00
09/29/18	3.29										0.00
09/30/18	3.11										0.00
Monthly											
Minimum	3.11	7.3		17.0	<1.0		6.8	0.27	<1.4	23.0	0.00
Maximum	3.85	7.7		17.0	13.2		7.0	0.27	<1.4	24.9	0.00
Total	100.90										0.00
Average	3.36	7.5					6.9	0.27	<1.4	23.8	0.00
Geomean					2.5						

3) *RECYCLED WATER REPORT*

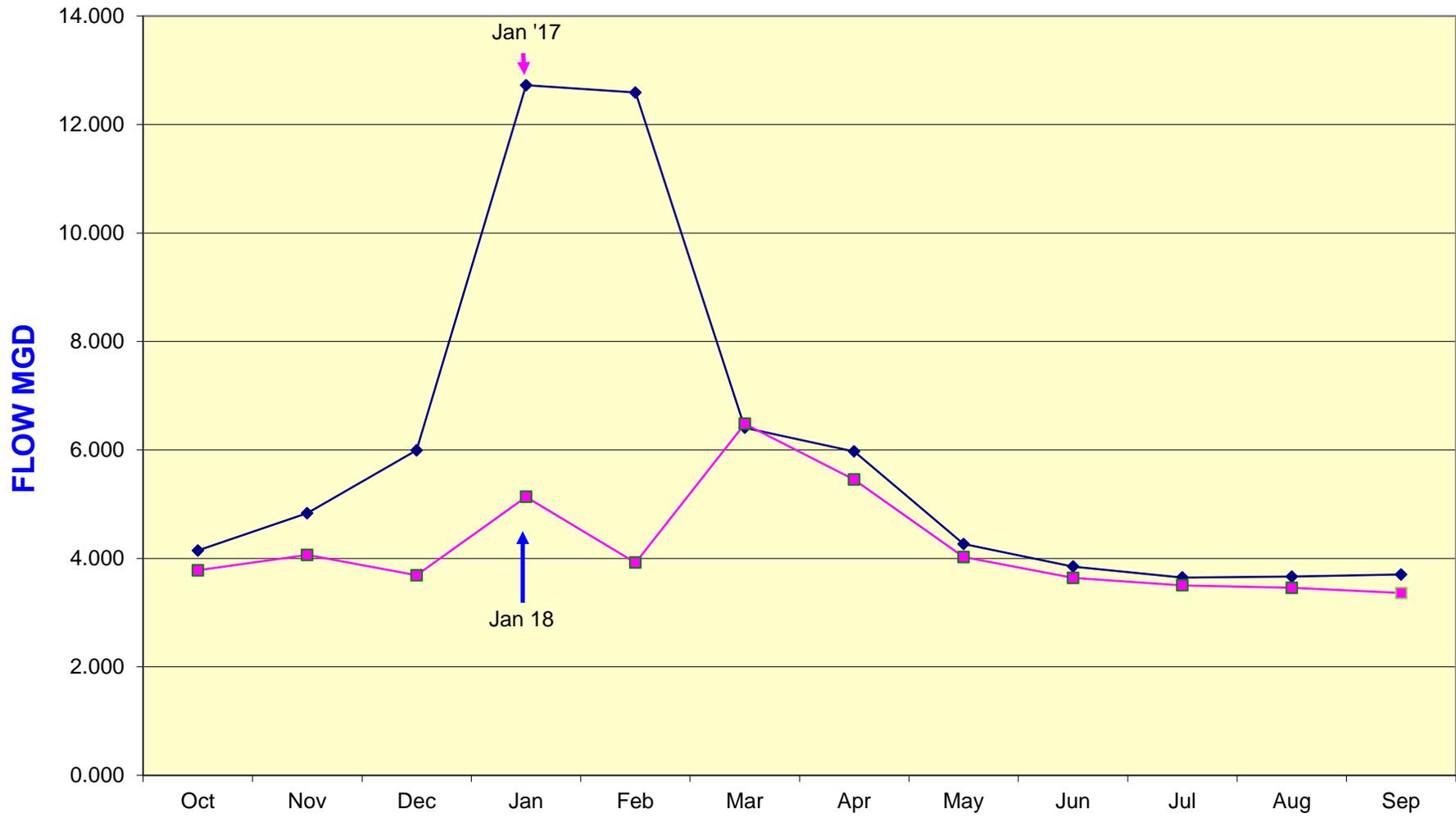
**NOVATO SANITARY DISTRICT
RECYCLED WATER
COMPLIANCE SUMMARY REPORT**

Filter Influent Flow	Recycled Water Flow to Plum St.	Recycled Water Influent Turbidity Ave.	Minutes Over 5 NTU Turbidity	Filter Effluent 24 Hr Average Turbidity	Filter Effluent Dissolved Oxygen	Filter Effluent Total Coliform	Chlorint Contact Time
----------------------------	--	--	---------------------------------------	---	---	---	-----------------------------

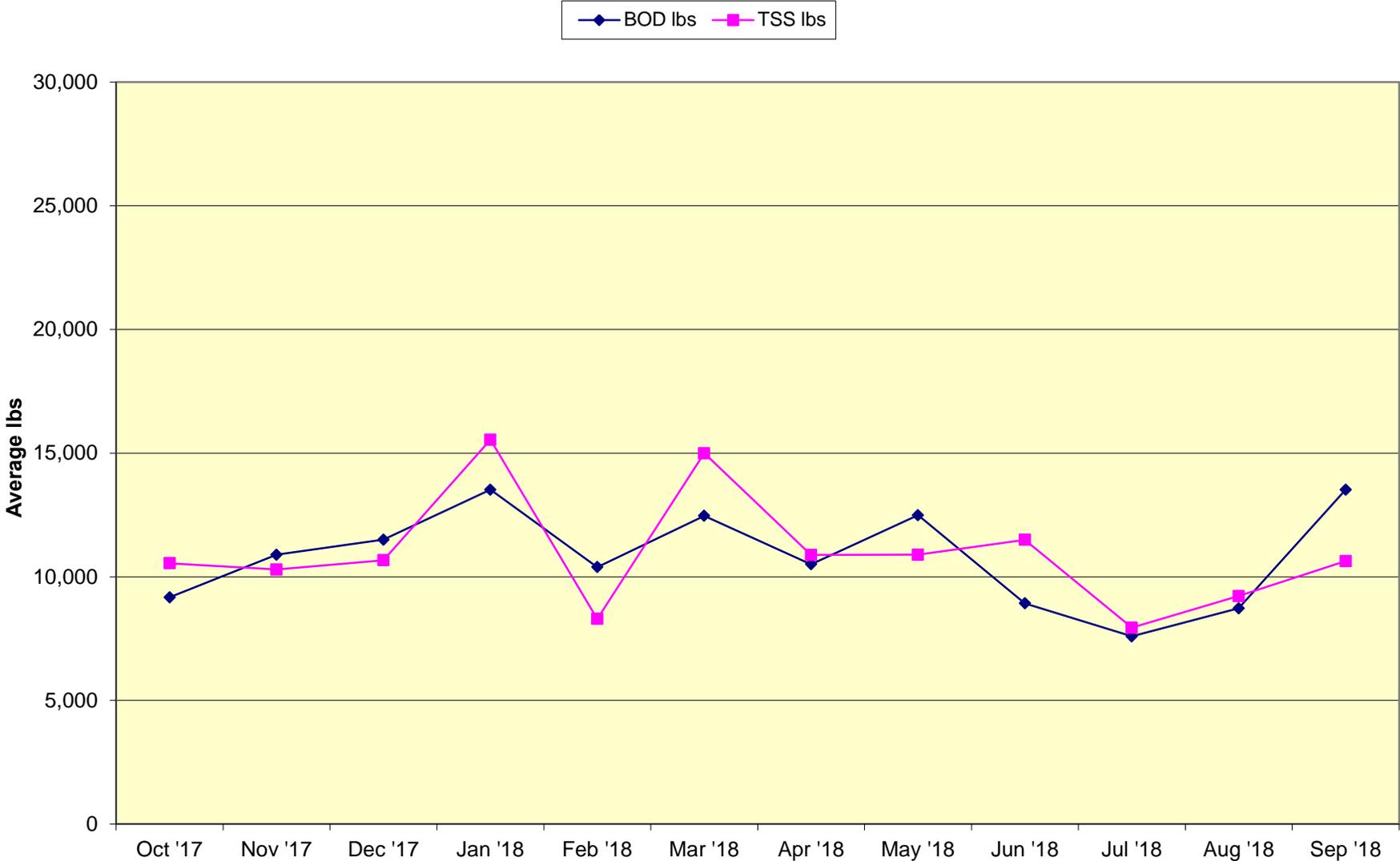
Date	MGD	MGD	NTU	(m)	NTU	(mg/l)	MPN/100m	Minutes
9/1/2018	1.080	0.765	2.0	0	0.5		<1	>450.000
9/2/2018	1.230	1.187	2.8	0	0.5	8.3	<1	>450.000
9/3/2018	1.060	0.806	1.9	0	0.6	8.5	<1	>450.000
9/4/2018	1.100	1.038	2.2	0	0.8	8.7	<1	>450.000
9/5/2018	1.550	1.186	2.5	0	0.9		<1	>450.000
9/6/2018	1.390	1.037	2.4	0	0.9		<1	>450.000
9/7/2018	0.710	0.749	1.6	0	0.7		<1	>450.000
9/8/2018	1.440	1.296	1.2	0	0.4		<1	>450.000
9/9/2018	1.180	0.903	1.6	0	0.9	8.9	<1	>450.000
9/10/2018	1.230	0.879	1.3	0	0.7	8.7	<1	>450.000
9/11/2018	0.790	0.636	1.9	0	0.8	8.7	<1	>450.000
9/12/2018	0.890	0.596	2.0	0	0.8		<1	>450.000
9/13/2018	0.960	0.910	2.0	0	0.9		<1	>450.000
9/14/2018	1.050	0.893	2.8	0	1.3		<1	>450.000
9/15/2018	0.810	0.520	1.7	0	1.2		<1	>450.000
9/16/2018	0.810	0.737	2.0	0	1.0	7.8	<1	>450.000
9/17/2018	1.500	1.440	2.5	0	1.0	7.7	<1	>450.000
9/18/2018	1.490	1.159	2.4	2	0.8	7.7	4	>450.000
9/19/2018	1.150	0.834	1.9	0	0.7		<1	>450.000
9/20/2018	1.250	1.058	1.5	0	0.7		<1	>450.000
9/21/2018	1.110	0.885	1.6	0	0.7		<1	>450.000
9/22/2018	1.230	1.212		0	0.7		<1	>450.000
9/23/2018	1.190	0.844	7.2	0	0.7	7.7	<1	>450.000
9/24/2018	0.950	0.958	1.4	0	0.8	7.8	<1	>450.000
9/25/2018	0.860	0.756	1.3	0	0.8	7.7	<1	>450.000
9/26/2018	0.910	0.734	1.4	0	0.4		<1	>450.000
9/27/2018	1.230	0.904	1.2	0	0.3		<1	>450.000
9/28/2018	1.030	0.847	2.5	0	0.5		<1	>450.000
9/29/2018	1.160	1.004	1.9	0	0.5		<1	>450.000
9/30/2018	1.140	0.844	3.0	0	0.6	7.5	<1	>450.000
Total	33.480	27.617						
Minimum	0.710	0.520	1.2	0	0.3	7.5	<1	>450.0
Maximum	1.550	1.440	7.2	2	1.3	8.9	4	>450.0
Average	1.116	0.921	2.1	0	0.7	8.1	<1	>450.0

4) ANNUAL PERFORMANCE SUMMARY – GRAPHS

WASTEWATER INFLUENT FLOW COMPARISON

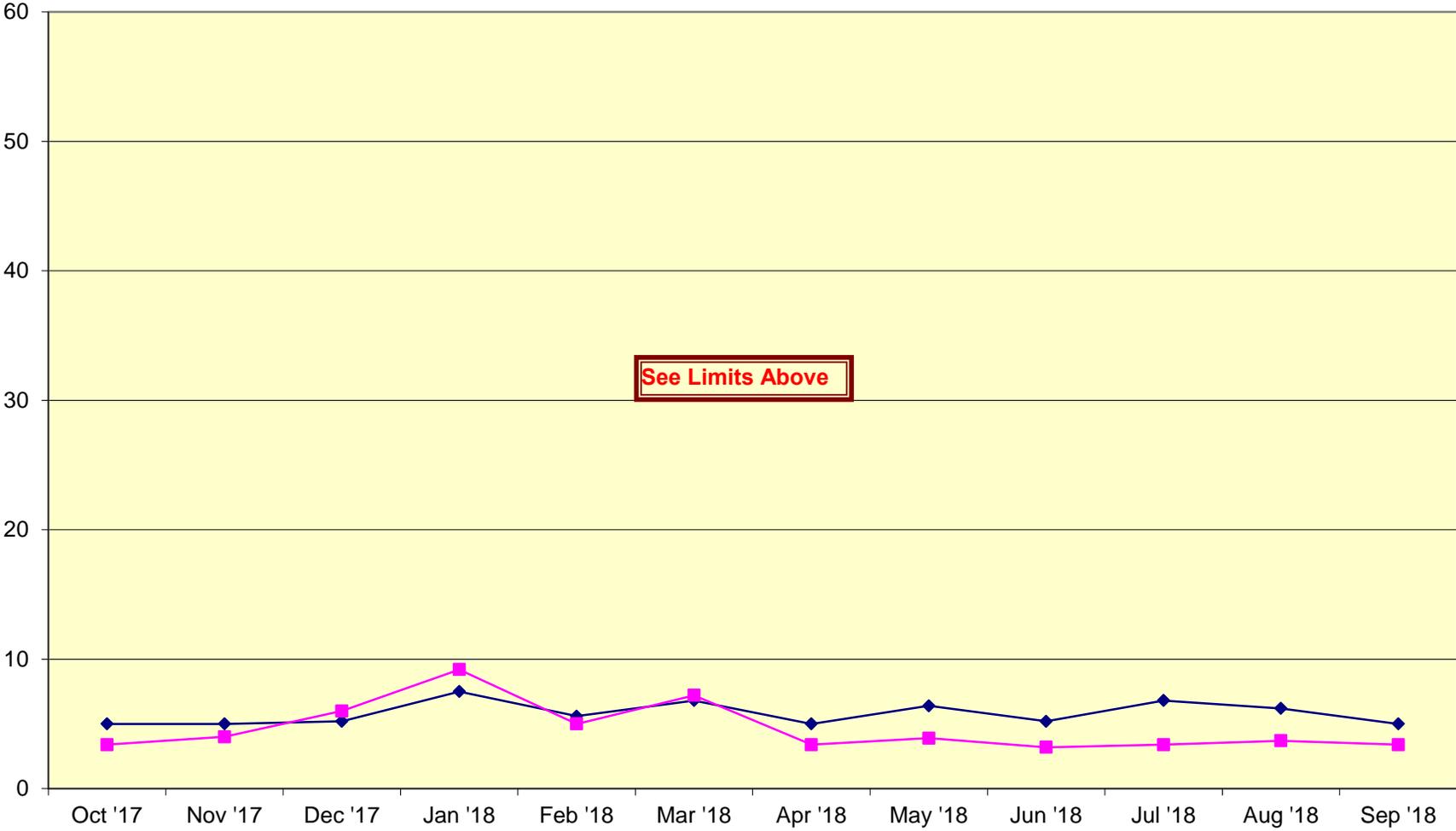


Influent Load BOD / TSS lbs

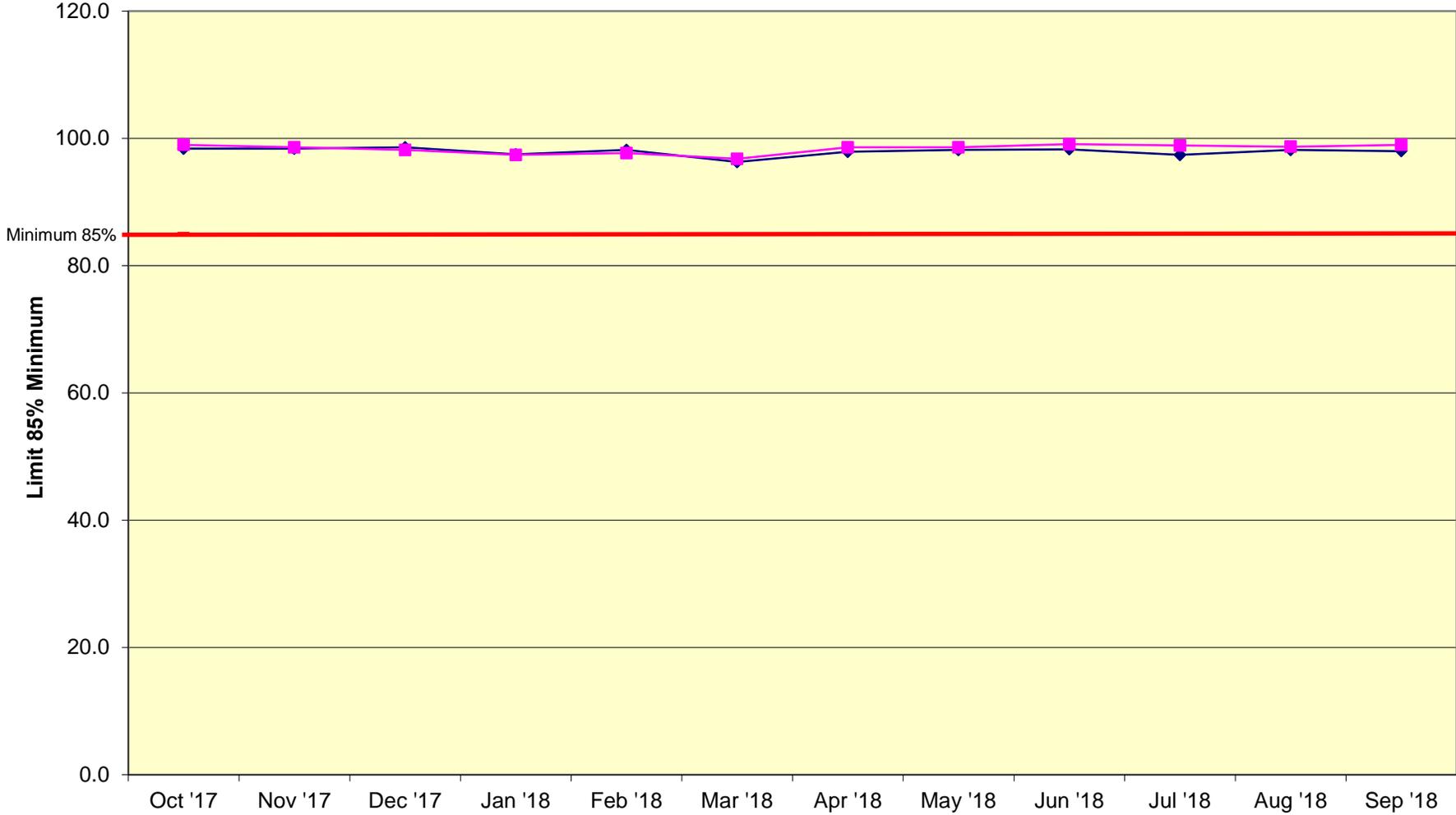


Effluent BOD / TSS Concentration

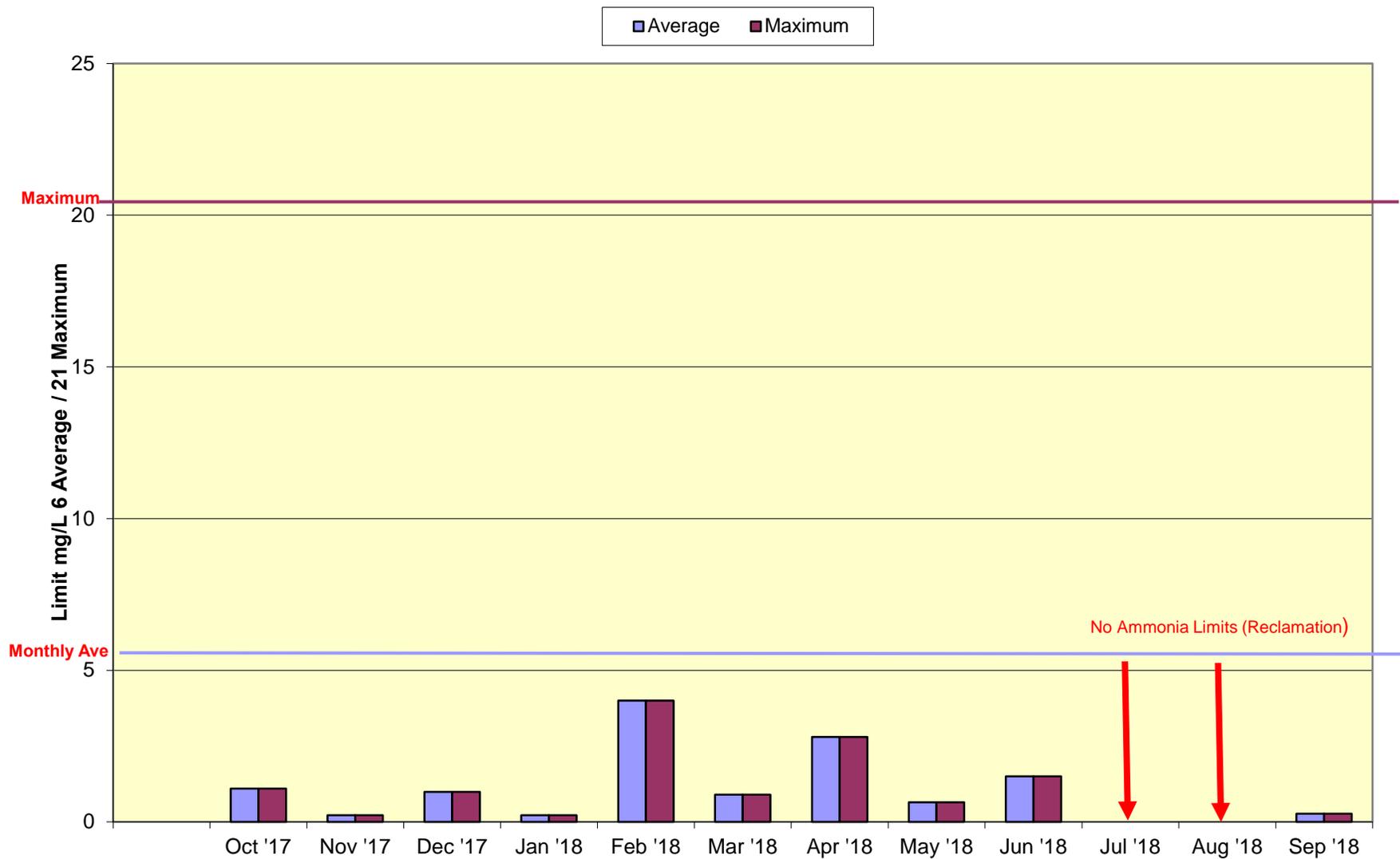
NPDES LIMITS WET SEASON
 BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave
NPDES LIMITS DRY SEASON
BOD - 15 mg/L Monthly Ave, 30 mg/L Weekly Ave
TSS - 10 mg/L Monthly Ave, 20 mg/L Weekly Ave
 WDR (Waste Discharge Requirements) RECLAMATION
 BOD - 40 mg/L



BOD / TSS Percent Removal

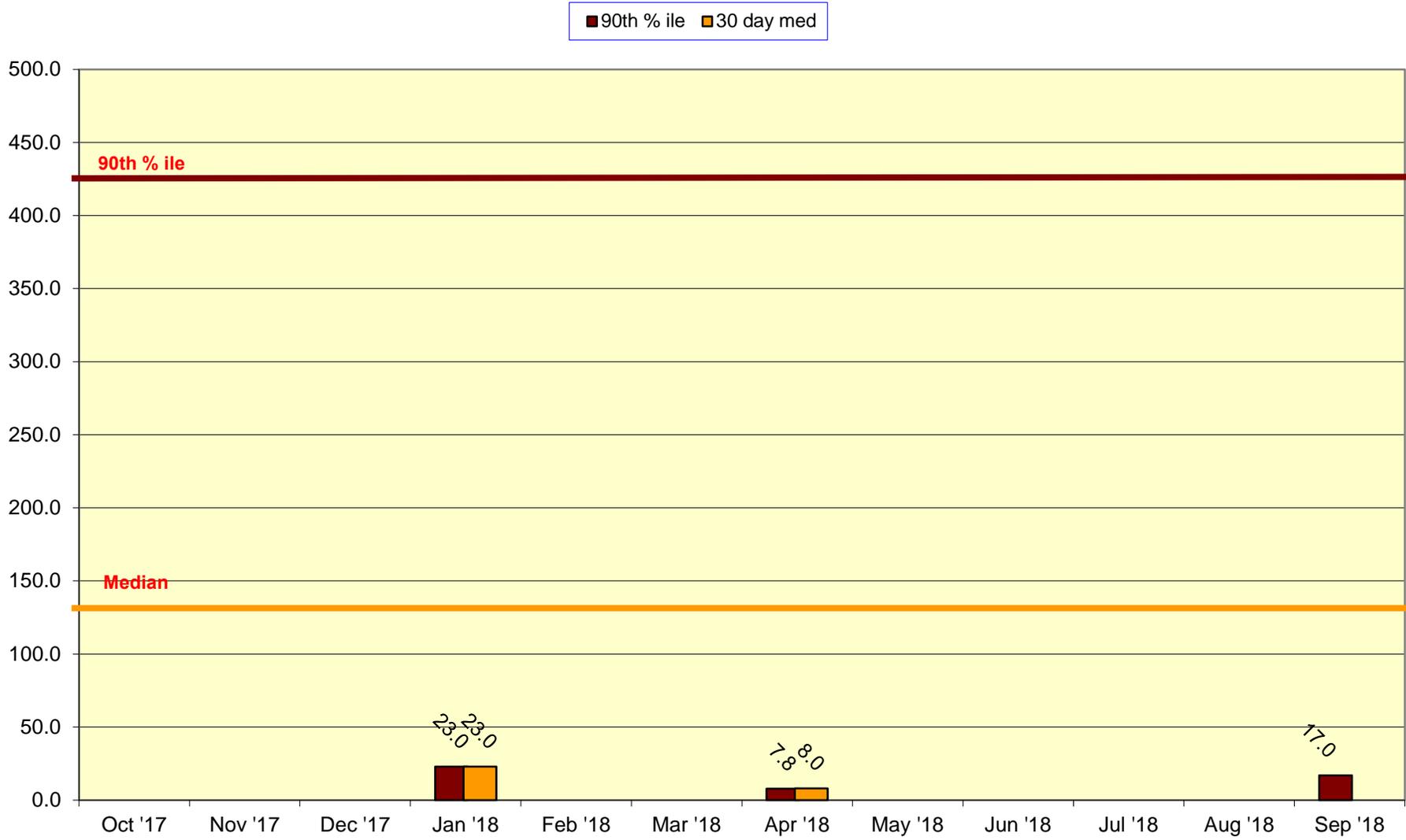


Effluent Ammonia



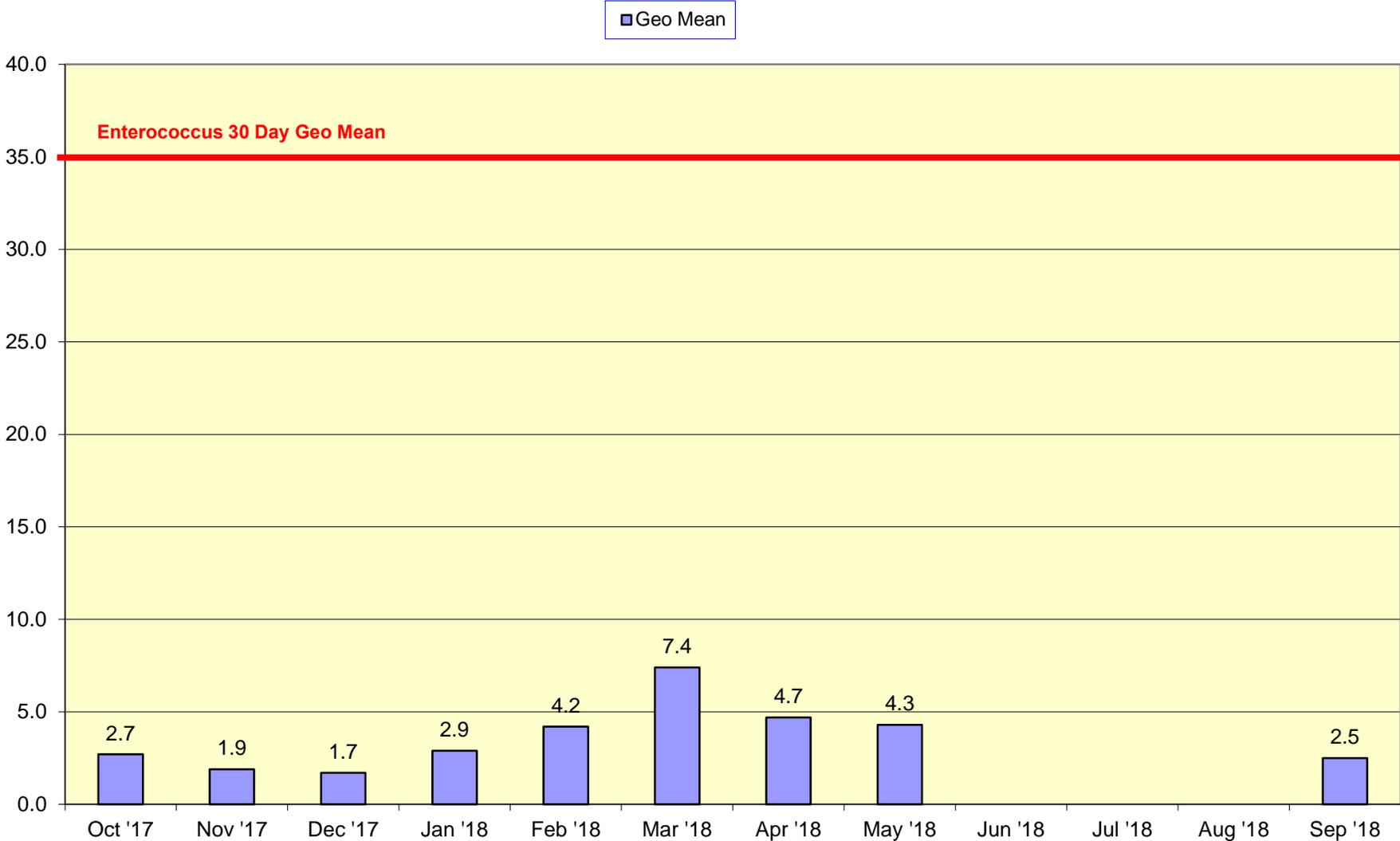
Disinfection - Fecal Coliform

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

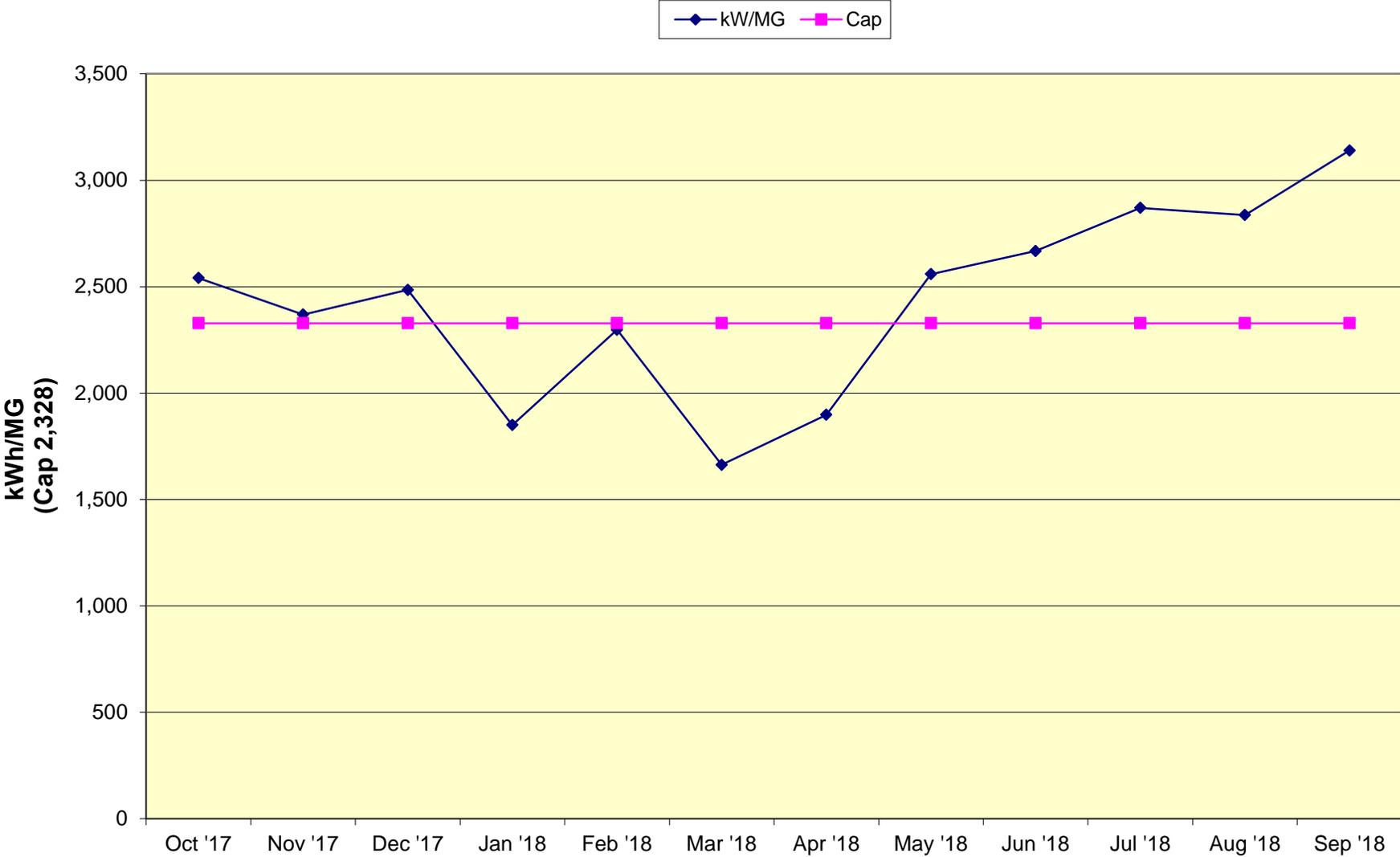


Disinfection - Enterococcus

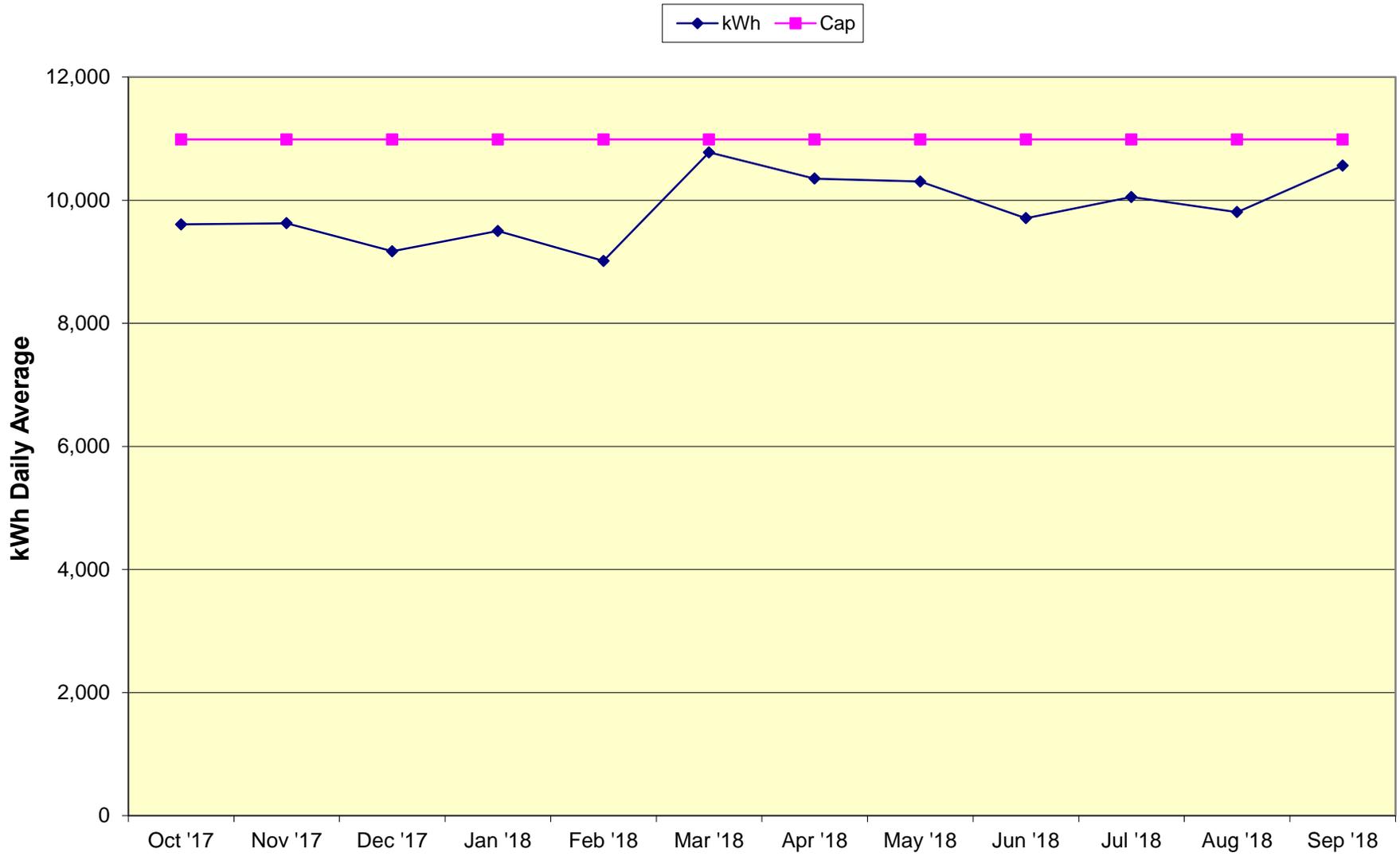
LIMITS - NPDES
Entero 30 day geo mean 35 mpn /100ml



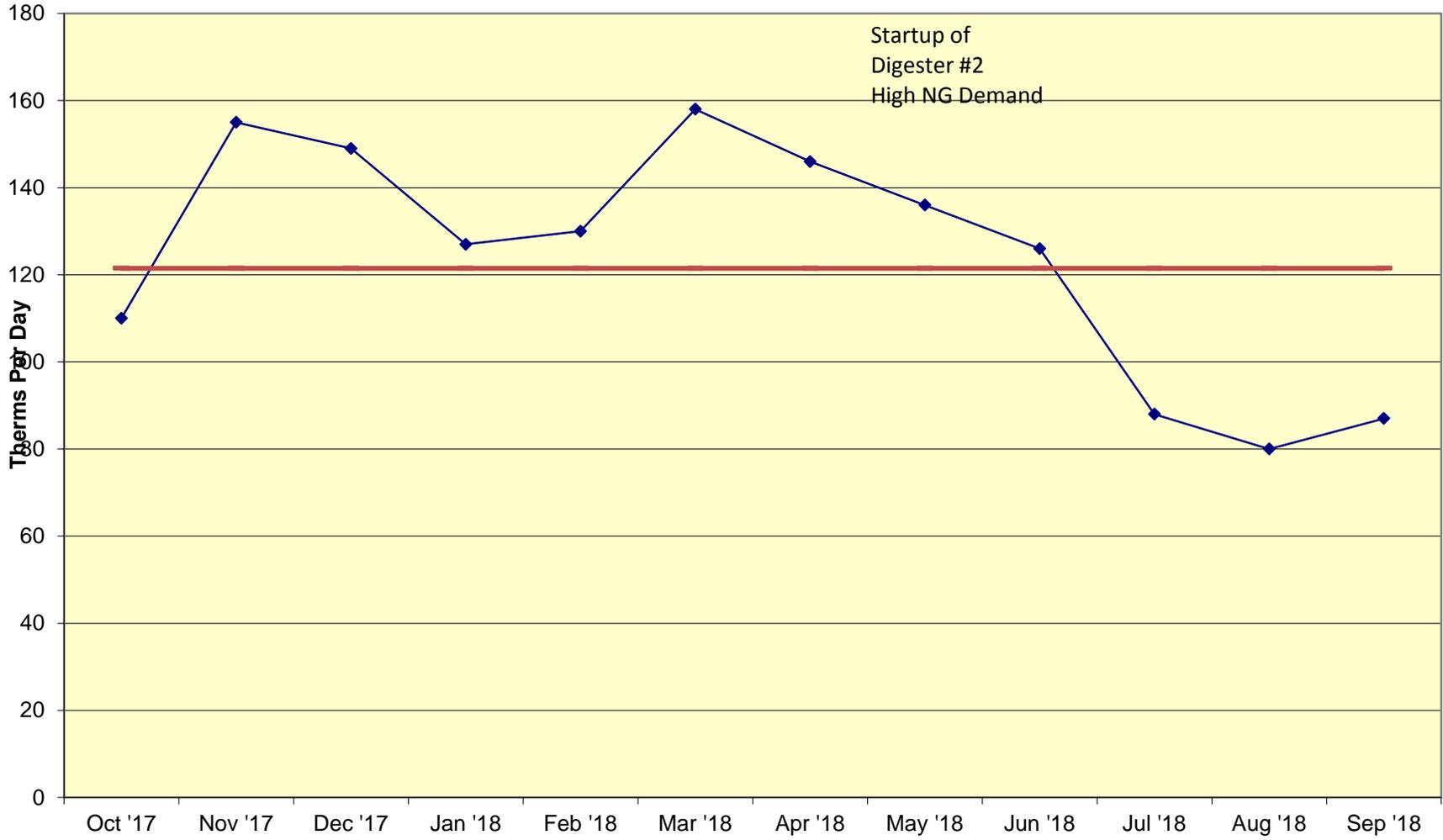
Energy kWh/MG



Energy kWh

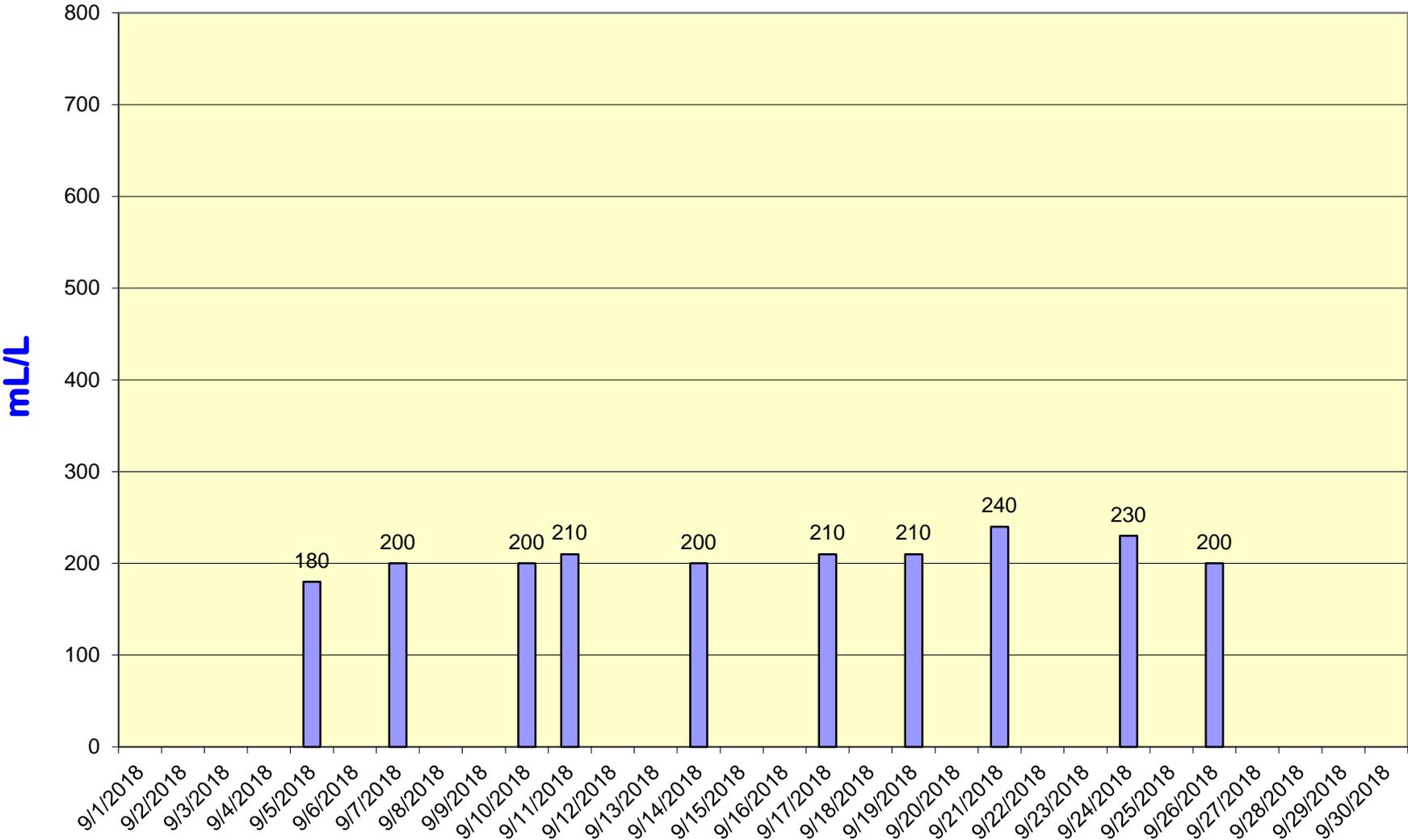


Natural Gas Use

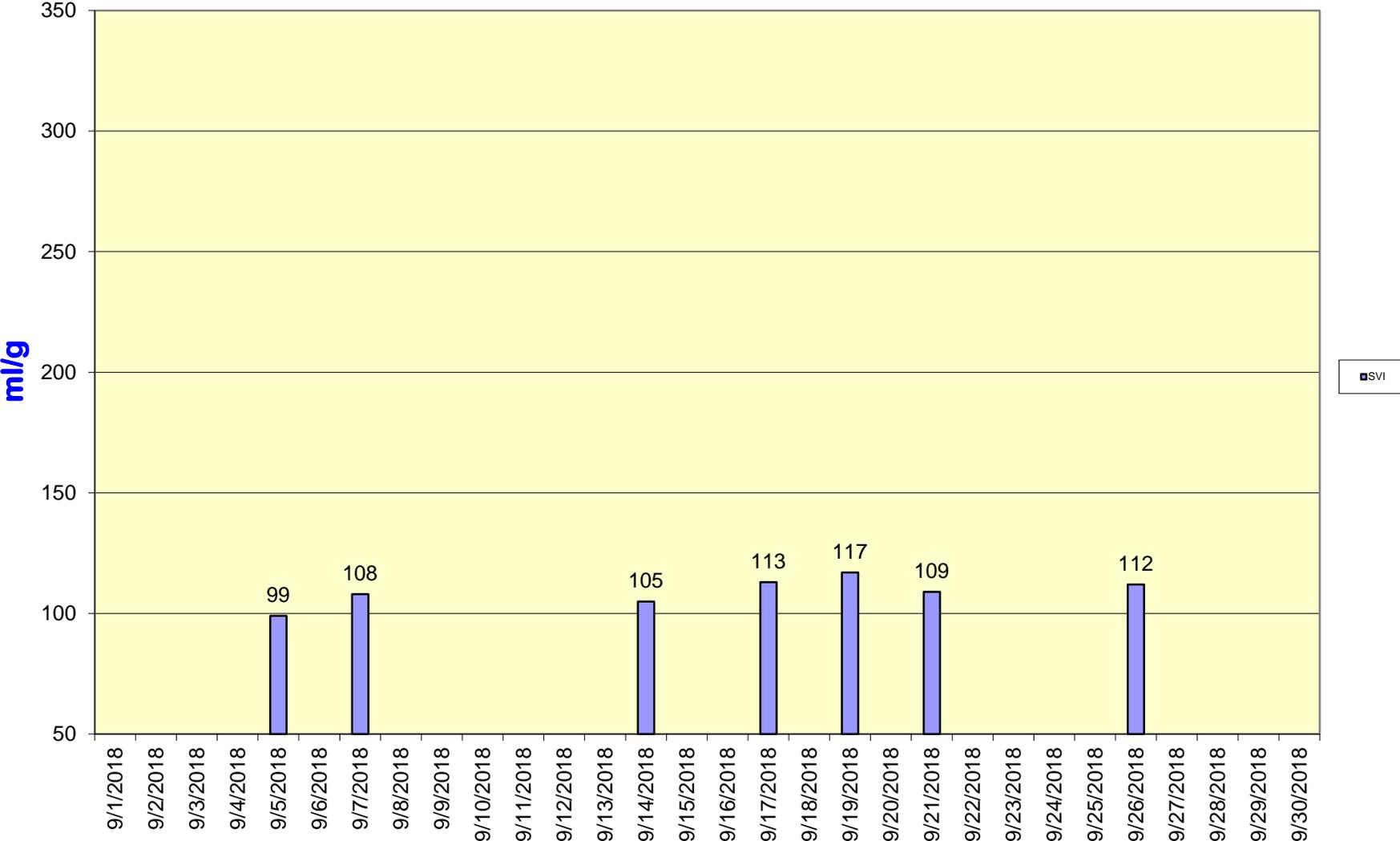


5) PROCESS CONTROL DATA / GRAPHS

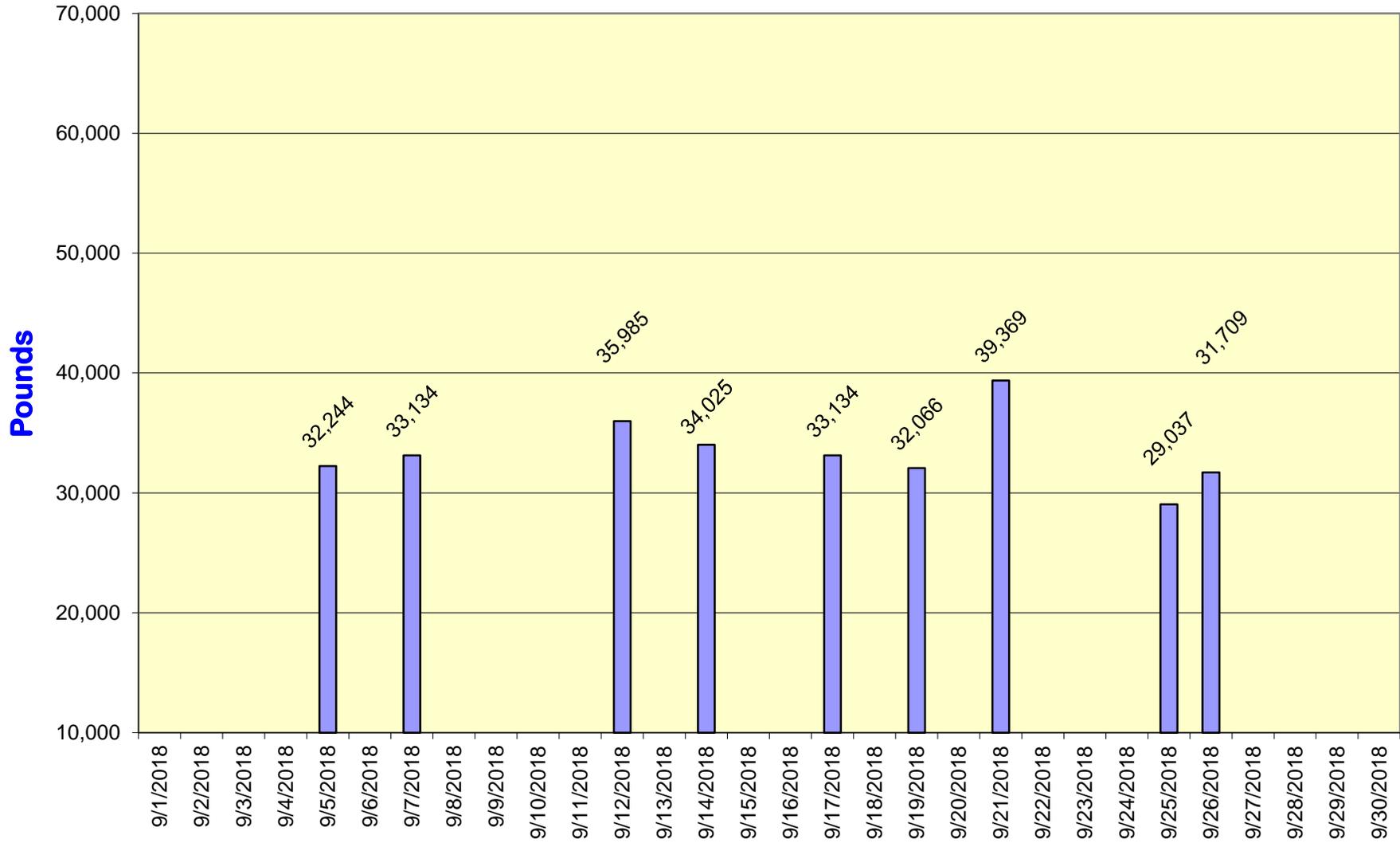
Settleability



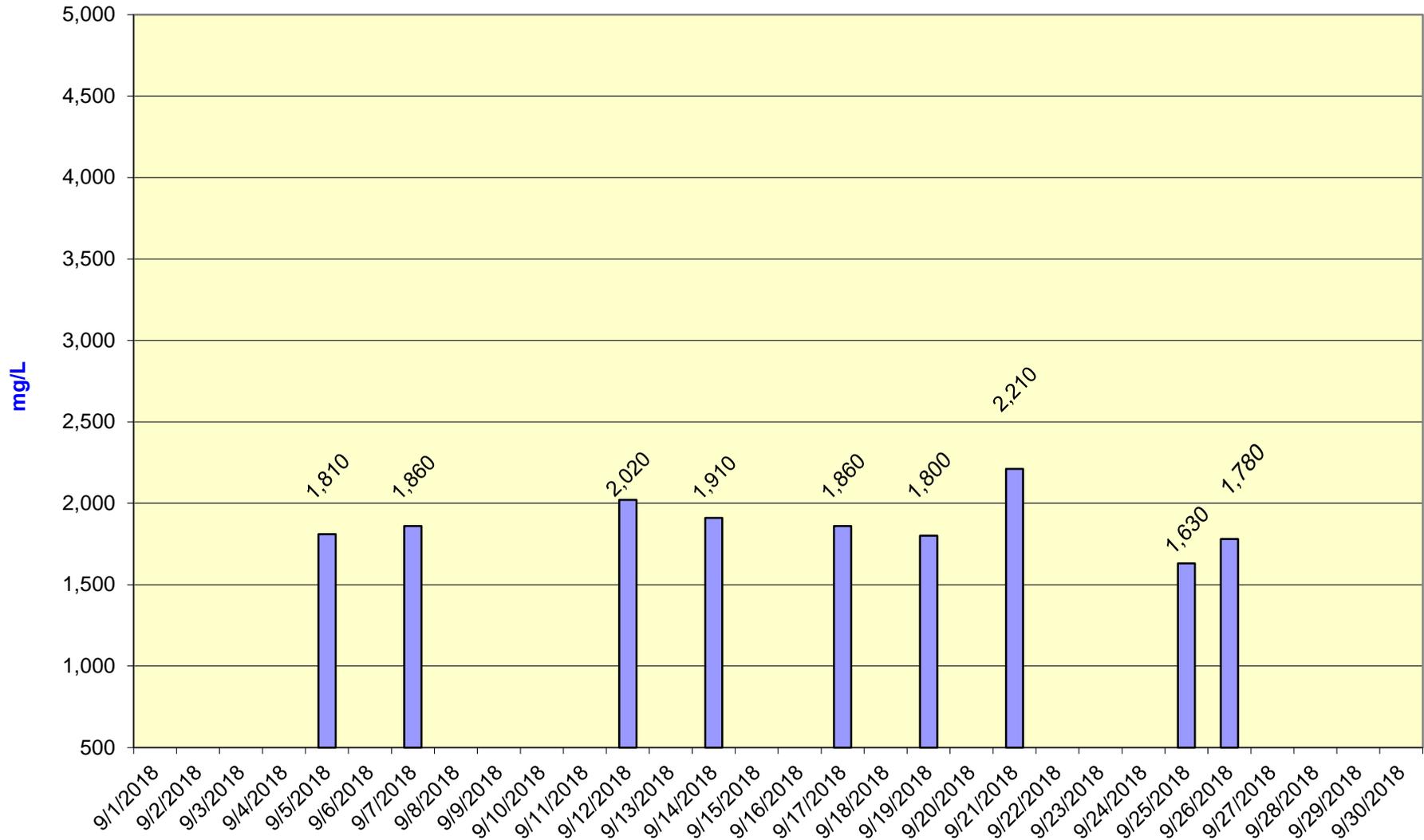
Sludge Volume Index



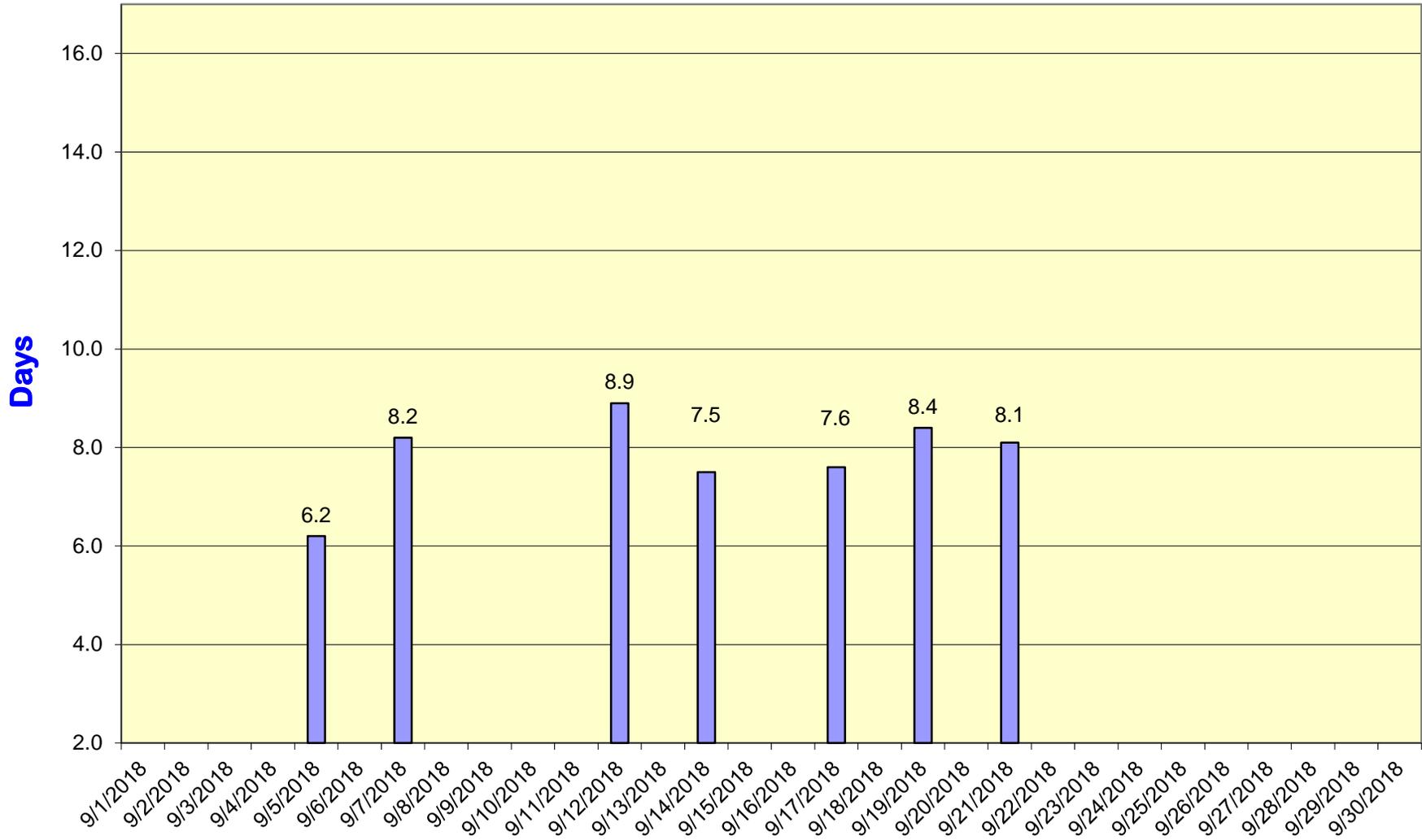
MLSS Inventory



MLSS Concentration



Mean Cell Residence Time

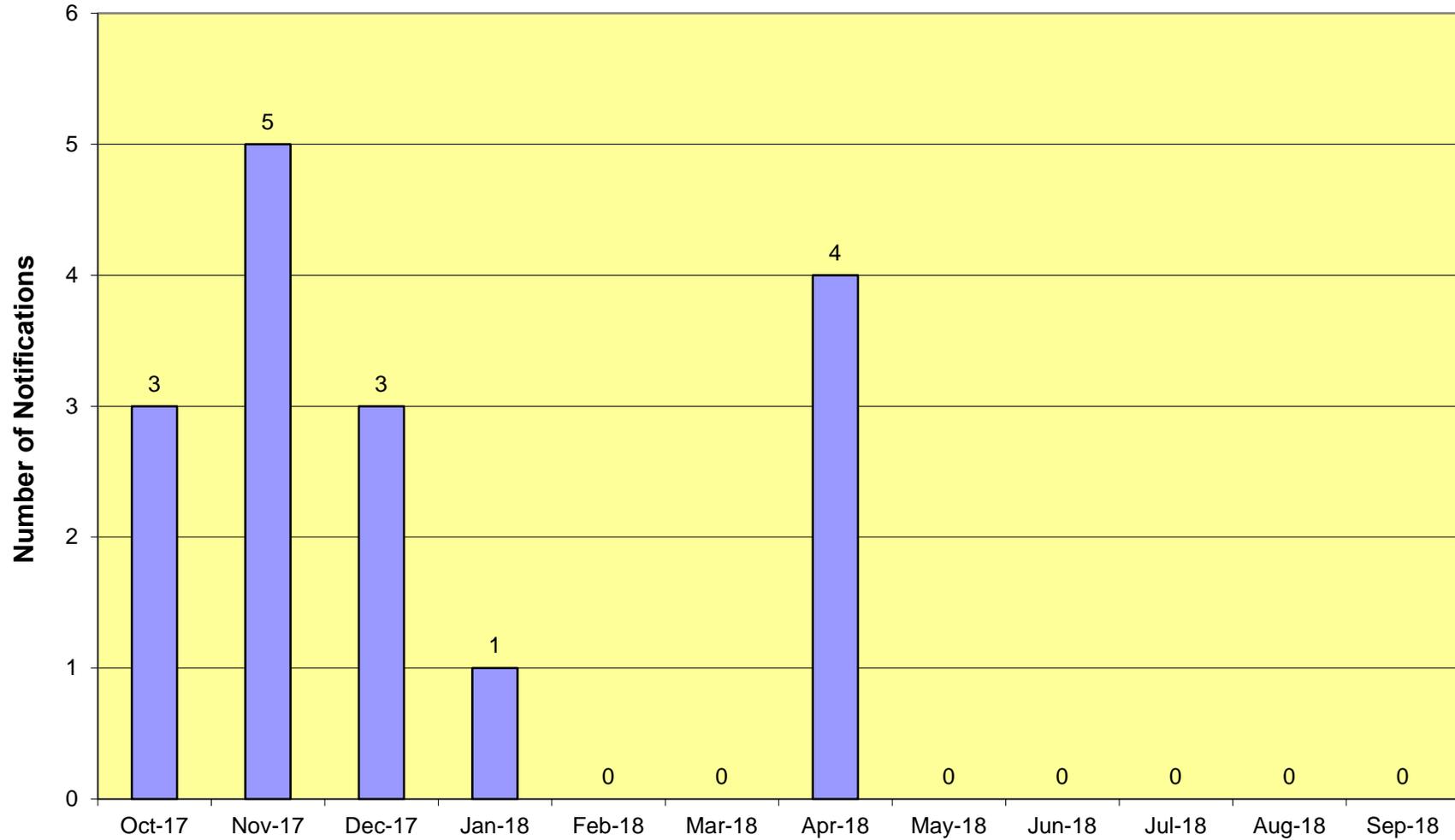


Process Control Data

	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	MCRT	SVI
9/1/2018	3.28					
9/2/2018	3.17					
9/3/2018	3.56					
9/4/2018	3.43					
9/5/2018	3.32	180	1,810	32,244	6.2	99
9/6/2018	3.40					
9/7/2018	3.17	200	1,860	33,134	8.2	108
9/8/2018	3.37					
9/9/2018	3.50					
9/10/2018	3.28	200				
9/11/2018	3.33	210				
9/12/2018	3.52		2,020	35,985	8.9	
9/13/2018	3.23					
9/14/2018	3.24	200	1,910	34,025	7.5	105
9/15/2018	3.68					
9/16/2018	3.85					
9/17/2018	3.62	210	1,860	33,134	7.6	113
9/18/2018	3.42					
9/19/2018	3.31	210	1,800	32,066	8.4	117
9/20/2018	3.30					
9/21/2018	3.22	240	2,210	39,369	8.1	109
9/22/2018	3.38					
9/23/2018	3.54					
9/24/2018	3.24	230				
9/25/2018	3.42		1,630	29,037		
9/26/2018	3.35	200	1,780	31,709		112
9/27/2018	3.17					
9/28/2018	3.20					
9/29/2018	3.29					
9/30/2018	3.11					
Minimum	3.11	180	1,630	29,037	6.2	99
Maximum	3.85	240	2,210	39,369	8.9	117
Total	100.90					
Average	3.36	208	1,876	33,411	7.8	109

6) NEIGHBORHOOD CONTACTS

Neighborhood Contacts Received

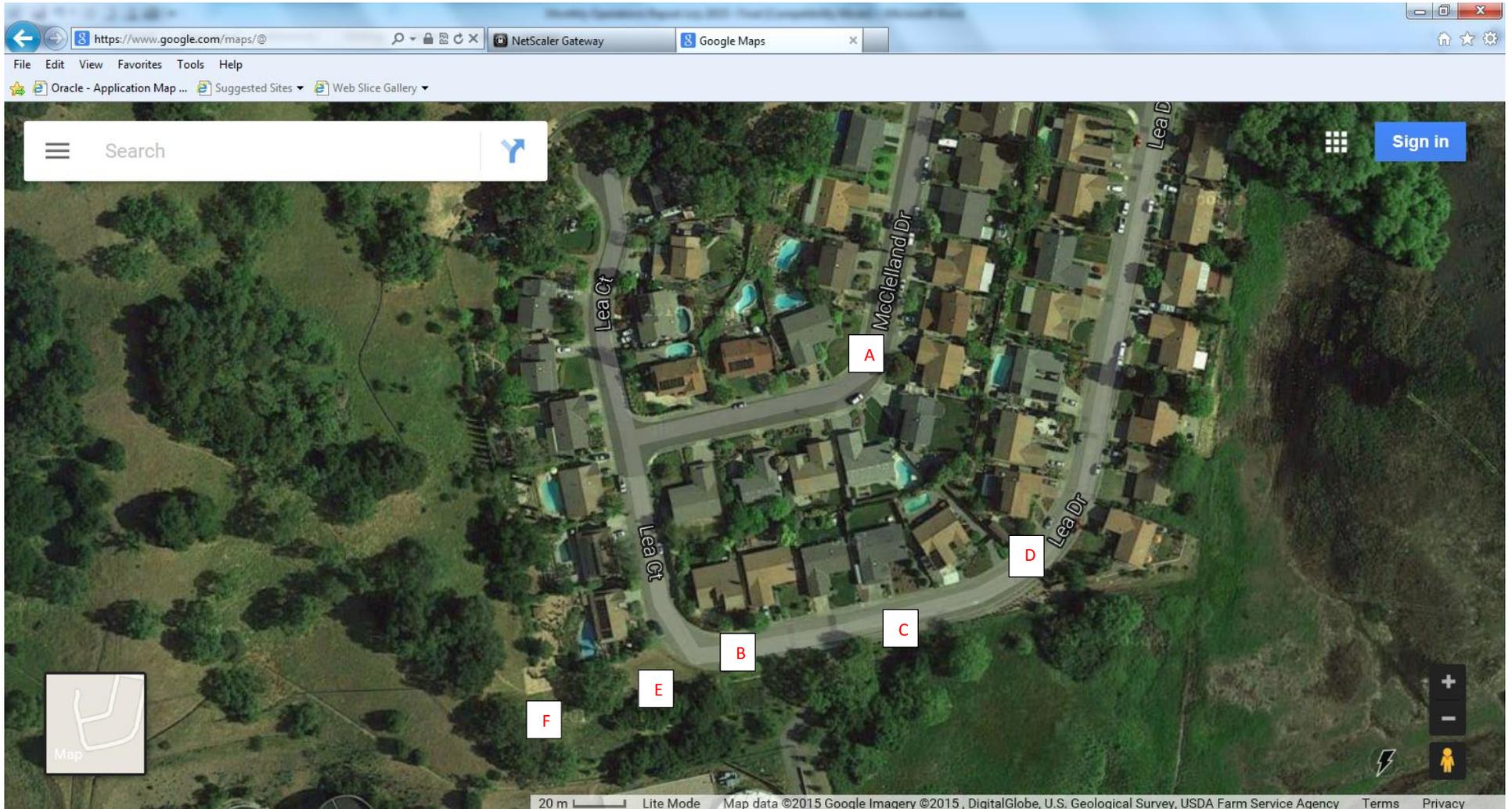


7) JEROME METER READINGS & LOCATIONS

JEROME METER READINGS -SEPTEMBER 2018

Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.003	0.0015	Neighborhood
B: Lea 1	0.000	0.002	0.0010	Neighborhood
C: Lea 2	0.002	0.002	0.0020	Neighborhood
D: Lea 3	0.003	0.003	0.0030	Neighborhood
E: Lea 4	0.002	0.002	0.0020	Neighborhood
F: Lea 5	0.002	0.002	0.0020	Neighborhood

NEIGHBORHOOD JEROME METER LOCATIONS – LEA AND McCLELLAND



NOVATO SANITARY DISTRICT
Wastewater Operations - Reclamation Facilities Report
September 2018

1.0 Summary:

1.1 During Sept. 2018:

- Transition from Reclamation Storage to Bay Discharge 9/1/18.
- Pasture irrigation continued until 9/21/2018.
- District Staff continued to work with Mosquito Control to reduce runoff.
- Calves that had reached maturity were removed from pastures.
- Sludge sampling was performed in preparation for sludge transfer to the Dedicated Land Disposal site (DLD).
- Bulldozer levelling was performed in the DLD.
- Davey Tree (funded and required by PG&E) removed 6 large Eucalyptus trees near the Irrigation Pump Station PG&E power lines.

2.0 Ranch Operations:

- 2.1 Ranching operations are going well this season. As many as 700 head of cattle are consuming significant fresh grass and appear to be very healthy. The rancher continues to replace sprinkler heads to improve irrigation effectiveness and minimize runoff.
- 2.2 As District staff see high potable water use, staff contacts the rancher to locate and repair leaks in and around the cattle water troughs. In September, several instances of high water use were minimized through routine monitoring.
- 2.3 The District's contractor, Custom Tractor Service performed additional road and side mowing to control vegetation and improve access.

3.0 Irrigation Parcels:

- 3.1 District staff have been meeting regularly with Marin-Sonoma Mosquito Vector Control District staff to discuss adjustments to the irrigation system to reduce ponding and ditch water. The recommended adjustments appear to have improved conditions. Approximately 27.7 MG of irrigation water was applied to the pastures in September.
- 3.2 Electrical power and control system repairs made to the District's in-ground irrigation valve control system enabled nearly complete automated control of the District's irrigation system.

With the in-ground wiring and the control systems complete and functional, District staff were able to identify electric actuators that need replacement prior to next irrigation season.

NOVATO SANITARY DISTRICT
Wastewater Operations - Reclamation Facilities Report
September 2018

4.0 Irrigation Pump Station:

- 4.1 The Wildlife Pond circulation pump continues to circulate water in the wildlife pond. The wildlife pond level is being maintained at 6 feet with the telescoping valve. Storage ponds 1 and 2 were at approximately 4.6 feet at the beginning of September, and 2.5 feet on September 21st when irrigation pumping was stopped for this season.
- 4.2 On September 26, 2018, Davey Tree Co. (on behalf of PG&E), removed six large Eucalyptus trees that were leaning towards the power lines that supply power to Site 2 and the Irrigation Pump Station.



Figure 1 - Davey Tree near Irrigation Pump Station

5.0 Sludge Handling & Disposal:

- 5.1 Veolia laboratory staff performed sludge sampling in preparation for sludge handling services projected to be carried out by Custom Tractor Service in October.
- 5.2 Custom Tractor Services used a small bulldozer to regrade the surface of the Dedicated Land Disposal (DLD) site, which tends to build up on its eastern side.



Figure 2 - Custom Tractor Service re-grading the DLD

NOVATO SANITARY DISTRICT														
Reclamation Facility - Monthly Statistics for Calendar Year 2018, as of Sept. 30, 2018														
	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)	--	--	--	--	63.5	86.8	80.6	78.2	0	--	--	--	309.1	25.76
Irrigation (MG)	--	--	--	--	7.3	29.34	125.9	53.4	27.7	--	--	--	243.6	20.30
Irrigation Pump 1 Hours	--	--	--	--	11.6	36.8	103	82.2	48.7	--	--	--	282.3	23.53
Irrigation Pump 2 Hours	--	--	--	--	12.8	33.9	195.6	93.4	48.4	--	--	--	384.1	32.01
Irrigation Pump 3 Hours	--	--	--	--	1.3	36.9	194.2	83.9	45.7	--	--	--	362.0	30.17
Washdown Water Pump Hours	--	--	--	--	--	--	--	--	--	--	--	--	-	0.00
Wildlife Feed Pump Hours	0	0	0	688	744	720	744	744	720				4,360.0	363.33
Water Circulated through Wildlife Pond (MG)	--	--	--	43.344	46.9	45.4	46.9	46.9	45.36	--	--	--	274.7	22.89
Strainer No. 1 Hours	0	0	0	0	0	11.1	61.7	32.6	17.4	--	--	--	122.8	10.23
Strainer No. 2 Hours	0	0	0	0	0	11.3	62	33	17.6	--	--	--	123.9	10.33
Pond 1 Gauge @ Beginning of Month (feet)	2.5	3.2	3	3.5	3.2	6	7.9	4.5	4.6	--	--	--	--	--
Pond 1 Gauge @ End of Month (feet)	3.2	3	3.5	3.2	6	7.9	4.5	4.6	2.5	--	--	--	--	--
Pond 1 Gallons Stored @ End of Month(MG)	22	20	24	22	45	59	32	33	16				--	--
Pond 2 Gauge @ Beginning of Month (feet)	2.5	3.2	3	3.5	3.2	6	7.9	4.5	4.6	--	--	--	--	--
Pond 2 Gauge @ End of Month (feet)	3.2	3	3.5	3.2	6	7.9	4.5	4.6	2.5	--	--	--	--	--
Pond 2 Gallons Stored @ End of Month(MG)	27	25	31	27	57	76	41	42	20				--	--
Total Irrigation Water Stored (MG)	49	45	55	49	102	135	73	75	36	--	--	--	--	--
Drainage Pump Station No. 3														
Drainage Pump No. 1 Hours	0	0	0.1	0	0	0	0	0	0	--	--	--	0.1	--
Drainage Pump No. 2 Hours	11.1	5.8	83.9	297.8	6.6	0	0	0	0	--	--	--	405.2	--
Drainage Pump No. 3 Hours	31.9	0	0	18.6	0	0	0	0	23.1	--	--	--	73.6	--
Total Gallons Stormwater Pumped (MG)	12.9	1.74	25.2	94.92	1.98	NA	NA	0	6.93	--	--	--	143.67	23.95
Drainage Pump Station No. 7														
Drainage Pump No. 1 Hours	14.8	0	0.3	27.1	2	0	0	0	1.6	--	--	--	45.8	--
Drainage Pump No. 2 Hours	0	0	69.5	10.1	0	0	0	0	1.7	--	--	--	81.3	--
Drainage Pump No. 3 Hours	10.7	11.7	20.8	0	0	0	0	0	0.6	--	--	--	43.8	--
Total Gallons Stormwater Pumped (MG)	11.48	5.27	40.77	16.74	0.90	NA	NA	0.00	1.76	--	--	--	76.91	12.82

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Capital Projects Update,
September 2018.

MEETING DATE: October 8, 2018

AGENDA ITEM NO.: 9.a.

RECOMMENDED ACTIONS: Receive Capital Projects Update for September 2018.

SUMMARY AND DISCUSSION:

The September 2018 Capital Projects Update is attached.

District staff will be present at the meeting to provide an overview of the memo, and be available to discuss the status of the various projects or respond to any questions.

ATTACHMENTS: 1. Capital Projects Update, September 2018.

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
September 2018**

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.

- No update this month.

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

The District is a member agency of the North Bay Water Reuse Authority (NBWRA). FY18-19 will be the fifth 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 month.

Account No. 72706: Collection System Improvements

1. 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.
 - Currently at 95% Design
 - Advertise for Bids Late Fall/Early Winter 2018,
 - FY 18/19 Budget: \$850,000.
2. Bel Marin Keys Blvd. Sewer Rehab Project: Rehabilitation of about 950 feet of 10-inch and about 1,350 feet of 8-inch sewer main in Bel Marin Keys Blvd.
 - Advertise for Bids Late Fall/early Winter 2018 for work in 2019.
 - FY 18/19 Budget: \$700,000.
3. Golden Gate Place: Realignment/replacement of approximately 1,000 feet of 8-inch sewer with new 10-inch PVC sewer.
 - Project at 65% design level.
 - Estimated construction Summer 2019.
 - A portion of the project (approx. 165 feet) will be constructed prior to winter 2018. Informal Bid out to prequalified contractors October for construction in November, 2018.
4. Collection System Master Plan (CSMP): Continuing work associated with the CSMP currently underway for the District.

5. **Birdie Drive Sewer Main Replacement**: Relocation of about 700 feet of 8-inch sewer main.

- Awarded July 9 to Team Ghilotti for Bid Amount of \$386,603.
- As of Sep. 30, the work is considered substantially complete with \$342,413 of the \$386,603 contract invoiced for progress payment. No change orders have been submitted to date.

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.

- As of 9/30/18, 3 grants have been distributed for a total of \$6,000. The FY 18-19 account balance is \$74,000.

Account No. 72707: Hamilton Wetlands/Outfall Integration

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

- No update this month.

Account No. 72708: Cogeneration/Alt. Energy

- The District's Consultant, Woodard and Curran has submitted the Draft Cogeneration Evaluation Technical Memo Update. District staff are currently evaluating the recommendations.
- District and Veolia staff are working with Enovity (Consultant), an energy services company who are evaluating optimization/energy savings measures/projects eligible for PG&E's on bill financing (OBF) program. The Consultant is currently in the data gathering stage.

Account No. 72803: Annual Collection System Repairs

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

Account 72804: Annual Reclamation Facilities Improvements

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

Account No. 72805: Annual Treatment Plant Improvements

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

Account No. 72806: Annual Pump Station Improvements

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

Account No. 72807: Annual Ignacio Facility Improvements

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

- FY 18-19 Budget for this account is \$50,000.
- Staff are reviewing quotes from qualified contractors for the demolition/backfill of the old filter backwash area.

Account No. 72808: Strategic Plan Update:

- No update this month.

Account No. 72809: Novato Creek Watershed

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

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

- No update this month.

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.

- Staff is working on procurement documents for a modular building, and expects to issue an RFQ in late October with project completion in summer 2019.

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.

- Removal of existing, and installation of new media in the large odor control bed serving the Headworks is expected to be complete by the end of October 2018.

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 is 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.

- As of 8/31/18 the project is approximately 83% complete with \$1,609,108 of progress payments issued or in process for the original \$1,940,122 contract. There are 6 construction change orders totaling \$26,419, to date. A progress payment request for September has not been received to date.
- Substantial completion of the project is expected mid-October.

Account No. 73006: NTP Corrosion Control

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

- The Headworks Protective Coating Project is at the 90% design level. Completion of design and advertisement for bids is expected early 2019, with the work to be conducted during the time of lowest influent flows in the late summer/early fall of 2019.

Account No. 73090: Vehicle Replacement

This account includes a FY 18-19 budget amount of \$140,000 for the purchase a 40kw portable generator and replacement of up to four light duty trucks.

- A light duty 2WD truck was received by the District in late September. This vehicle was procured under the FY-17-18 budget.
