

# NOVATO SANITARY DISTRICT

Meeting Date: April 8, 2019

**The Board of Directors of Novato Sanitary District will hold a regular meeting at 5:30 p.m. Monday, April 8, 2019, at the District Offices, 500 Davidson Street, Novato.**

*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.*

## 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 March 18, 2019 special meeting.
- b. Approve minutes of the April 1, 2019 special meeting.

**5. CONSENT CALENDAR:**

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

- a. Ratify/approve regular disbursements, March 25 - April 8, 2019.
- b. Ratify additional payroll and payroll related disbursements, March 2019.
- c. Receive deposit summary, March 2019.
- d. Receive Accounts Receivable (A/R) Summary Report as of March 31, 2019.
- e. Receive copy of 2018 National Association of Clean Water Agencies (NACWA) Peak Performance Award Application as submitted to NACWA (information only).
- f. Approve the General Manager-Chief Engineer to attend the National Association of Clean Water Agencies (NACWA) Utility Leadership Conference and Awards Ceremony in Minneapolis, MN, July 16 - 19, 2019.

**6. PUBLIC HEARING PURSUANT TO CALIFORNIA ELECTIONS CODE 10010 - DISTRICT BOUNDARIES:**

- a. Open public hearing.
- b. Receive "Proposed Timeline for Consideration and Implementation of District-Based Elections", and report(s) from District Counsel, staff, and consultants.
- c. Receive Public comments.
- d. Receive Board comments.
- e. Close public hearing.

**Upon Close of Public Hearing, take the following Actions:**

- f. Adopt the “Proposed Timeline for Consideration and Implementation of District-Based Elections”, and
- g. Provide further direction to District Counsel, staff, and consultants, if any.

**7. PUBLIC HEARING PURSUANT TO SECTION 6514.1 OF THE CALIFORNIA HEALTH AND SAFETY CODE - LEASE AGREEMENT FOR PASTURES (COLLECTIVELY “RANCH”) AT RECLAMATION FACILITY.**

- a. Open public hearing.
- b. Review staff summary report and recommendations.
- c. Receive Public comments.
- d. Receive Board comments.
- e. Close public hearing.

**Upon Close of Public Hearing, take the following Actions:**

- f. Make findings that:
  - i. The term of the lease will not exceed ten (10) years,
  - ii. The property use will be for District compatible uses, and
  - iii. The property use will serve the public interest.
- g. Authorize staff to negotiate a new Reclamation Pastures (“Ranch”) lease agreement with a duration of up to ten (10) years.

**8. WASTEWATER OPERATIONS:**

- a. Receive and accept Wastewater Treatment Facilities Calendar Year (CY) 2018 Annual Operations and Maintenance Report, subject to minor edits.
- b. Approve a consulting services agreement with Woodard & Curran, Inc. in an amount up to \$107,385 for 2020 NPDES Permit renewal assistance, and authorize the General Manager-Chief Engineer to execute it.
- c. Receive Wastewater Operations Report, March 2019:
  - i. Collection Systems
  - ii. Treatment Facilities
  - iii. Reclamation Facilities

**9. CAPITAL PROJECTS:**

- a. *Collection System Improvements, Account No. 72706*: Golden Gate-Rush Creek Sewer Phase I; Grant Final Acceptance of the Project, and authorize staff to file the Notice of Completion (NoC).
- b. Receive Capital Projects Update, March 2019.

**10. ANNUAL BUDGET:**

- a. Set the date of June 10, 2019 for public hearing on individual sewer service charges, and adoption of a resolution confirming report on sewer service charges and collection on county tax rolls.
- b. Receive Schedule of Committee meetings to review Annual Solid Waste, Operating, and Capital Improvements Program (CIP) Budgets.
- c. Workshop overview of anticipated FY 19-20 Preliminary Annual Operating and CIP budgets and budget elements.

**11. BOARD OF DIRECTORS:**

- a. Subsequent to direction provided by the Board at its meeting of March 18, 2019, approve a five percent (+5%) merit adjustment effective January 1, 2019, to the General Manager–Chief Engineer’s base salary, thereby increasing the salary from \$20,121/month to \$21,127/month.

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

- a. North Bay Watershed Association (NBWA) meeting, April 5, 2019.

**13. INFORMATIONAL ITEMS:**

*These items are for information only - no action will be taken on these items as a result of any comments made.*

- a. New York Times article, March 17, 2019: “As Costs Skyrocket, More U.S. Cities Stop Recycling”.
- b. Marin Independent Journal article, March 30, 2019: “Marin supervisors approve 8.9 percent hike in garbage rates”.
- c. Marin Independent Journal article, March 31, 2019: “Mill Valley Refuse seeks vote on double-bin recycling”.
- d. Marin Independent Journal article, March 31, 2019: “Novato creates trust fund to ease pension jam”.

**14. GENERAL MANAGER’S REPORT AND ANNOUNCEMENTS:**

**15. ADJOURN:**

Next Resolution No. 3132.

**Next regular meeting date: Monday, May 13, 2019, 5:30 p.m. at the Novato Sanitary District office, 500 Davidson Street, Novato, CA.**

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

## NOVATO SANITARY DISTRICT

### Board Meeting Minutes

Meeting Date: March 18, 2019

A special meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, March 18, 2019, at the District Office, 500 Davidson Street, Novato.

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

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

ALSO PRESENT: Laura Creamer, Finance Officer, Novato Sanitary District  
Erik Brown, Deputy General Manager, Novato Sanitary District  
John O'Hare, Project Manager, Veolia  
Dale Thrasher, Administrative Services Officer, Novato Sanitary District  
Jeff Boehm, Field Services Manager, Novato Sanitary District  
Dee Johnson, Solid and Household Hazardous Waste Program Coordinator  
Garen Kazanjian, Waste Zero Specialist, Recology  
Celia Furber, Waste Zero Manager, Recology  
Will Rogers, Client Services Coordinator, Public Agency Retirement Services (PARS)  
Andrew Brown, Senior Portfolio Manager, HighMark Capital Management  
Joe Moreno, Collection System, Novato Sanitary District (arrived at 7:32 p.m.)

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

REVIEW OF MINUTES:

- Consider approval of minutes of the February 11, 2019 regular meeting.

*On motion of Director Peters, seconded by Director Miller, and carried unanimously, the February 11, 2019 Board meeting minutes were approved.*

CONSENT CALENDAR:

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

- a. Approve Board member disbursements in the amount of \$1,237.16, capital project disbursements in the amount of \$35,203.37, and regular disbursements in the amount of \$329,701.62. Ratification of February 25<sup>th</sup> capital project disbursements

in the amount of \$31,199.80, and regular disbursements in the amount of \$112,021.17.

- b. Ratification of February payroll and payroll related disbursements in the amount of \$278,561.49.
- c. Receive deposit summary, February 2019.
- d. Receive report on the District's Government Compensation in California (GCC) statement for Calendar Year 2018, as filed with State Controller's Office (SCO).
- e. Receive Proposed Schedule for Approval of Preliminary and Final Budget, Appropriations Limit, and Sewer Service Charges.

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

ADMINISTRATION/FINANCE:

- Approve transfer of \$120,000 from unspent funds in the "Salaries and Benefits" categories of the FY18-19 Operating Budget as of December 31, 2018, to the Net Pension Liability (NPL) sub-account of the District's PARS Trust account. The General Manager stated that at the February 11<sup>th</sup> Board meeting, staff presented the Fiscal Year 2018/19 Second Quarter Financial Report. He stated that one of the items the report identified was that as of December 31, 2018, the "Salaries and Benefits" categories of the Operating Budget were approximately five percent (5%) underspent. He stated that staff recommends that the Board consider transferring \$120,000 from the approximately \$144,000 in unspent "Salaries and Benefits" category to its Public Agency Retirement Services (PARS) Trust account. The General Manager stated that staff recommends that this \$120,000 amount be directed to the Net Pension Liability (NPL) sub-account of the District's PARS Trust account.

*On motion of Director Miller, seconded by Director Peters, and carried unanimously, the Board approved a transfer of \$120,000 from unspent funds in the "Salaries and Benefits" categories of the FY18-19 Operating Budget as of December 31, 2018, to the Net Pension Liability (NPL) sub-account of the District's PARS Trust account*

- Receive update on the District's combined Post-Employment Benefits Trust from Public Agency Retirement Services (PARS) representatives. The General Manager introduced Will Rogers, Client Services Coordinator at PARS, and Andrew Brown, Senior Portfolio Manager with High Mark Capital. Mr. Rogers began his PowerPoint presentation and provided a summary of the District's OPEB (Other Post-Employee Benefits) and Pension plans. He provided details of both plan's contributions, disbursements, and total assets as of February 28, 2019, and concluded his presentation with a discussion of the pension funding status and projected employer contributions. Mr. Brown continued the presentation, discussing highlights and investment objectives of the District's OPEB and Pension funds. He outlined the funds past performance, projected outlook, and asset allocations as of February 28, 2019.

Mr. Rogers and Mr. Brown left the meeting at 6:00 p.m.

## SOLID/HOUSEHOLD HAZARDOUS WASTE (HHW) OPERATIONS:

- Receive Recology – 4<sup>th</sup> Quarter 2018 report. Solid and Household Hazardous Waste Program Coordinator Dee Johnson introduced Garen Kazanjian, Waste Zero Specialist with Recology Sonoma Marin. Mr. Kazanjian reviewed Recology's 4th Quarter Report (2018) and detailed their on-going green waste, food waste, and compost outreach efforts. Celia Furber, Garen Kazanjian, and Dee Johnson responded to questions from the Board.

- Receive verbal report on Marin County JPA and Local Task Force. The Solid and Household Hazardous Waste Program Coordinator discussed her attendance at the Marin County AB939 Local Task Force meeting held on February 6<sup>th</sup>. She also commented on her attendance at the Marin County JPA Board meeting on January 24<sup>th</sup> where issues regarding landfill capacity and the FY2018/19 budget were discussed.

- Receive Disposal/Diversion reports for 2018. The Solid and Household Hazardous Waste Program Coordinator discussed Recology's Disposal and Diversion report for 2018 and a comparative report for 2017 and 2018. She stated that the numbers provided were only those of Recology, and did not include details from the Redwood Landfill or the Marin Resource Recovery Center (MRRC) in San Rafael.

- Receive 2018 Annual HHW and E-waste report. The Solid and Household Hazardous Waste Program Coordinator provided the 2018 Annual HHW and E-waste report. She stated that the facility served a total of 4,400 Novato residents, and that 36 Novato businesses participated. She continued, stating that the HHW facility had a 3% increase in participation from 2017, and a 57% increase overall in the last five years. Ms. Johnson stated that one E-Waste event was held in 2018, and stated that she is working with North Bay Conservation Corps (Corps) to help publicize the Corps free E-Waste pick-up service for Novato residents.

- Receive presentation from Solid/HHW Coordinator Dee Johnson on Senate Bill SB1383 (Lara). Ms. Johnson provided an overview of the SB1383 legislation, noting that this bill was adopted in September 2016. She stated that SB1383 deals with Short Lived Climate Pollutants (SLCP) and Organic Waste Methane Emissions Reductions. She stated that the legislation sets forth State-wide targets to reduce organic waste disposal and methane gas emissions, and to increase edible food waste recovery. She discussed the key implementation dates, and reviewed the CalRecycle collection and planning requirements.

- Article from MSN/The Atlantic: "Is this the end of recycling?" – Information only. The General Manager stated that the article was a topic of current interest and provided for informational purposes only.

At 7:02 p.m., President Dillon-Knutson declared a 10 minute break.

The following individuals left the meeting: Dee Johnson, Garen Kazanjian, Celia Furber, and Laura Creamer.

At 7:10 p.m., President Dillon-Knutson reconvened the meeting.

As part of the Solid Waste discussion, the General Manager provided a PowerPoint slide that presented residential solid waste disposal rates (by Recology and other service providers) of Novato and the surrounding service areas, for informational purposes.

#### WASTEWATER OPERATIONS:

##### - Receive Wastewater Operations Reports, February 2019.

Collection System Report: The General Manager stated that the Collection System Superintendent was on vacation, and therefore Deputy General Manager Erik Brown would provide the Collections System Report for February 2019. Mr. Brown began, stating that the Collection Department cleaned 52,213 lineal feet of sewer pipelines, and that 4,061 feet of sewer main were televised. He noted that CCTV (closed circuit TV) work identified two locations with possible repair needs, and that these locations would be investigated further before being added to the repair lists as needed. He stated that staff completed 306 maintenance work orders, leaving zero (0) work orders outstanding. Furthermore, he noted that staff conducted 159 lift station inspections and completed maintenance inspections on four (4) air relief/vacuum valves.

The Deputy General Manager then outlined the training provided in February, noting that the Collection Department staff attended four (4) safety tailgate meetings. He stated that Collections Staff participated in two specialized training events, and that there were no lost time accidents in the month. He concluded his presentation, stating that there were no sanitary sewer overflows in February. He commended the Collections crew and supporting staff on their diligent efforts during the heavy rain events of the Winter season, keeping sewer mains clear with no overflows.

Treatment Facilities Report: Veolia Project Manager John O'Hare provided the February 2019 Treatment Facilities Monthly Operations Report (MOR). He reviewed the treatment plant performance, stating that the flow for February was high, with an average monthly flow of 12.82 MGD (million gallons per day). He commented that there were 15 days in February when the flow exceeded 10 MGD. He continued, stating that there were no discharge violations in the month, and that the Recycled Water Facility (RWF) produced 0.324 million gallons of recycled water.

The Project Manager stated that Veolia staff participated in weekly tailgates in February, and attended a Fire Prevention & Response and Fire Extinguisher Use training. He reviewed the monthly routine inspections, maintenance activities, and key events for the Novato treatment facility, the Ignacio transfer pump station, and the recycled water facility. He stated that he and Lynda Farmery, Veolia Water Administrative/Safety, attended the Novato Senior Health Day at the Margaret Todd Center on February 20<sup>th</sup>.

The Project Manager discussed pretreatment and pollution prevention activities, and concluded his report, stating that no odor contacts were received in February.

Reclamation Facilities Report: Field Services Manager Jeff Boheim summarized the Reclamation Facilities report for February. He stated that a levee failure near the intersection of Novato Creek and the SMART tracks flooded Sites 2 and 3 with water from Novato creek, and he proceeded to show an aerial video of the flooded areas. He stated

that drainage pump stations No. 3 and 7 pumped approximately 535 million gallons (MG) and 263.4 MG, respectively, in February, and that the pumps operated continuously through the flooding events with no failures. He stated that eucalyptus trees that fell onto ranch roads mid-January during storms were cleared, cut, and piled on February 12<sup>th</sup>. He continued, stating that additional eucalyptus trees have fallen on the roads at Site 2, but cannot be managed until the waters from the levee breach recede.

- Reclamation-Pasture Lease: The General Manager stated that the District currently leases a total of approximately 790 acres of irrigated pasture property to a single rancher who has leased the property for the past 10 years. He noted that this lease expires March 31, 2019, and that the rancher has indicated he is not interested in continuing to lease the property. He stated that the District has determined that the pasture property is not needed for District purposes during the term of a lease equal to or less than 10 (ten) years, and requested that the Board direct staff to schedule a public hearing to consider a new proposed lease agreement with a new lessee.

*On motion of Director Peters, seconded by Director Long, and carried unanimously, the Board determined that the Pasture Property is not needed for District purposes during the term of a lease equal to or less than 10 (ten) years. Furthermore, the Board directed staff to schedule a Public Hearing for April 8, 2019, to consider a proposed lease agreement document.*

#### CAPITAL PROJECTS:

- Collection System Improvements, Account 72706-Bel Marin Keys Boulevard Sewer Rehabilitation; Project No. 72706-2017-09: Review Bids received, and authorize the General Manager-Chief Engineer to award the construction contract to Michels Pipeline Construction, and to execute it in the bid amount of \$279,970. The Deputy General Manager stated that on March 5, 2019, two (2) bids were received for the Bel Marin Keys Blvd. sewer rehabilitation project: Michels Pipeline Construction at \$279,970, and Insituform Technologies, LLC, at \$595,401. He stated that Michels Pipeline, with the apparent low bid, was well below the engineer's estimate of probable cost at \$564,000. He stated that staff had contacted Michels to discuss their bid, and that they were comfortable and confident with the bid amount. Therefore, he recommended that the Board authorize the General Manager-Chief Engineer to award the construction contract to Michels Pipeline Construction, and to execute it in the bid amount of \$279,970.

*On motion of Director Peters, seconded by Director Miller, and carried unanimously, the Board authorized the General Manager-Chief Engineer to award the Bel Marin Keys Boulevard Sewer Rehabilitation; Project No. 72706-2017-09, to Michels Pipeline Construction, for the bid amount of \$279,970.*

- Receive Capital Projects Update, February 2019. The Deputy General Manager provided an update of the current capital projects involved with the Capital Improvement Program (CIP) at the District. He began by reviewing three Collection System Improvement projects that are currently active. He stated that the Lateral Replacement Grant Program continues to be administered, and nine (9) grants have been distributed this fiscal year, for a total of \$18,000. He discussed the Hamilton Wetlands/Outfall Integration project, and stated that

the State Coastal Conservancy (SCC) has indicated that construction of the first phase may advance as early as Summer 2019.

The Deputy General Manager continued his report and provided an update of the District's Cogeneration/Alternative Energy project. He stated that the District's consultant, Woodard and Curran, had submitted a Final Draft Cogeneration Evaluation Technical Memo Update. He stated that staff was currently reviewing the recommendations and expects to present results to the Board in the next few months. He provided an update of the administration building upgrades/maintenance building, noting that two of the three modules have arrived. He anticipated that the units would be ready for move-in by late spring. He concluded his report with a discussion of the Recycled Water Facility (RWF) Expansion at the Novato Treatment plant site, stating that the District had received the final grant reimbursement payment of \$382,987.78 from the North Bay Water Reuse Authority (NBWRA) Title XVI WaterSMART Agreement.

#### BOARD MEMBER REPORTS AND REQUESTS:

- California Association of Sanitation Agencies (CASA) Washington DC Policy Forum, February 25-27, 2019. Director Long discussed his attendance at the CASA Policy Forum. He stated that CASA had once again called on legislators to advocate on several issues including new funding for the State Revolving Funds (SRF), a time extension for NPDES permit renewals, and new funding for infrastructure projects.

The General Manager, who also attended the Forum, commented on proposed NPDES permit extension legislation.

- North Bay Watershed Association (NBWA) meeting, March 1 2019 (cancelled). The General Manager stated that this meeting was cancelled due to the rain event.

- North Bay Water Reuse Authority, Phone Conference, February 27 2019: President Dillon-Knutson discussed her participation in a phone conference where recycled water funding was reviewed.

#### GENERAL MANAGER'S REPORTS AND ANNOUNCEMENTS:

- California Association of Sanitation Agencies (CASA) Washington DC policy Forum, February 25-27, 2019. The General Manager provided an overview of the Policy Forum, noting that the Program Guide from the conference was included in the Board packet, along with talking points on legislative actions. He stated that there was an impressive line-up of speakers as well as the opportunity to engage with Congressional staff on CASA's priority issues.

- Announcements:

- A reminder that all 2018 Form 700 filings are due to the District office by the end of March. Staff will submit the forms to Dan Miller, at the County of Marin Election's office.
- The next Board meeting will be a Regular meeting, held on Monday, April 8<sup>th</sup> at 5:30 p.m.

## PUBLIC EMPLOYEE EVALUATION:

- Receive Revised Survey – March 2019, General Manager Salaries. The General Manager stated that a revised General Manager-Chief Engineer salary survey was presented in the Board packet. He stated that the survey was revised to include Board member comments brought forward at the February 11<sup>th</sup> Board meeting. The General Manager asked that the Board be mindful that surveys of this nature are never meant to serve as an absolute basis for setting salary or compensation levels, but as a guide to inform decisions that the Board makes in meeting equity and compensation type goals across competitive, not comparable, agencies. He continued, stating that if these surveys are expanded across the agency as a whole, they can also serve as a tool to attract and retain employees in a competitive market place. He stated that this current survey considers a diverse list of larger, medium, and smaller agencies that are competitive agencies for the General Manager position. He noted that the survey includes competitive agencies in the Marin, Sonoma, Napa, Solano, and Contra Costa Counties.

The General Manager stated that while he welcomed the opportunity to meet in closed session to discuss his performance, he felt it would not be appropriate or proper for him to participate in discussions on appropriate salary or compensation levels for his position. Accordingly, he stated that he would excuse himself from further discussion on this item.

At 8:16 p.m., President Dillon-Knutson declared a short break.

- Closed Session: Public Employee Evaluation: General Manager-Chief Engineer, (Government Code Section 54957). At 8:25 p.m., President Dillon-Knutson reconvened the Board meeting and the Board immediately went into closed session. Those in attendance for closed session: President Dillon-Knutson, Directors Long, Mariani, Miller, and Peters.

At 8:50 p.m., President Dillon-Knutson announced that the closed session had ended. Those in attendance when the Board meeting resumed:

Board Members present: President Carole Dillon-Knutson, Directors William Long, Jean Mariani, Brant Miller, and Jerry Peters.

Staff present: General Manager-Secretary Sandeep Karkal, and Administrative Secretary Julie Hoover.

Also Present: Joe Moreno, John O'Hare, Dale Thrasher.

- Report from closed session: President Dillon-Knutson stated that there was no reportable action.

- Consider salary adjustment for General Manager-Chief Engineer and provide direction, if any. Director Peters stated that no salary adjustment discussion took place during the closed session. He then proposed a salary adjustment increase of 5% for the General Manager-Chief Engineer, and Director Mariani seconded the motion. Discussion followed, regarding the effective date of the proposed salary increase. Director Mariani stated that she wanted the proposed increase to be effective at the beginning of the current fiscal year,

July 1, 2018. Director Peters proposed the increase begin effective January 1, 2019. Director Mariani withdrew her support of the motion. Director Long expressed his support of the motion with the effective date of January 1, 2019.

*On motion of Director Peters, seconded by Director Long, and carried unanimously, the Board directed staff to prepare a Resolution for a merit/salary increase of 5% (five percent), over-and-above the Cost of Living Adjustment (COLA) increase, for the General Manager-Chief Engineer Sandeep Karkal, with an effective start date of January 1, 2019.*

ADJOURNMENT: There being no further business to come before the Board, President Dillon-Knutson adjourned the meeting at 8:56 p.m.

Respectfully submitted,

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Sandeep Karkal  
Secretary

Julie Hoover, Recording

DRAFT

## NOVATO SANITARY DISTRICT

Board Meeting Minutes

Meeting Date: April 1, 2019

A Special meeting of the Board of Directors of the Novato Sanitary District was held at 5:30 p.m., Monday, April 1, 2019, at the District offices, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Dillon-Knutson, Directors William C. Long, Jean Mariani, and Jerry Peters. Director Brant Miller was absent (excused).

STAFF PRESENT: General Manager-Secretary Sandeep Karkal, District Counsel Robin Donoghue, and Administrative Secretary Julie Hoover.

ALSO PRESENT: Dale Thrasher, Administrative Services Officer, Novato Sanitary District  
Drew McIntyre, General Manager, North Marin Water District

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as presented.

PUBLIC COMMENT: None.

ADMINISTRATION:

- Adopt a Resolution No. 3131 – “Resolution Declaring the Intent to Initiate Procedures to Transition From At-Large Elections to District-Based Elections (By Zone) Pursuant to the California Voting Rights Act and Taking Related Actions”. The General Manager stated that the resolution declares the intent of the District to initiate procedures to transition from at-large elections to district-based elections (by zone) pursuant to the California Voting Rights Act (CVRA). He stated that District Counsel Robin Donoghue was in attendance to discuss the resolution. He then read Resolution No. 3131 in its entirety.

District Counsel stated that various California cities, counties, and school districts have received litigation claims regarding alleged violations of the CVRA. She stated that the Novato Sanitary District has decided to initiate the process of establishing electoral “zones”, and change the method of electing members of the Board, in order to ensure compliance with the CVRA, and to ensure diversity and inclusion with respect to the District’s elections, to take effect commencing with the November 2020 election.

District Counsel then outlined the steps necessary to initiate transition to district-based (by zone) elections at the Novato Sanitary District. She stated that pursuant to California Elections Code Section 10010, the District is required to hold at least five public hearings in connection with the establishment of districts/zones. She stated that these initial hearings provide an opportunity for the public to give input on the criteria for and composition of the proposed districts/zones. She continued, stating that prior to drawing a draft map or maps of the proposed boundaries of the districts/zones, the District would be required to hold at least two public hearings over a period of no more than 30 days, at which time the public would be invited to provide input regarding the composition of the districts/zones.

Furthermore, the District would be required to hold at least two additional public hearings over a period of no more than 45 days, at which time the public would be invited to provide input regarding the content of the draft map or maps and the proposed sequence of elections. District Counsel stated that she would assist in securing an experienced demographer to help the District develop maps for its proposal for a district/zone-based electoral system (by zones), and that the District would be required to publish all versions of the draft map or maps and the proposed election sequencing for at least seven days before adoption.

Discussion continued between Board members, General Counsel, and the General Manager. At the close of discussion, Director Mariani proposed the following modifications to Resolution No. 3131, fourth paragraph:

**WHEREAS**, the District has decided to initiate the process of establishing electoral “zones” and changing the method of electing members of the Board, in order to ensure compliance with the CVRA ~~or, at minimum, avoid the potential for costly litigation under the CVRA;~~ and

*On motion of Director Peters, seconded by Director Long, and carried unanimously by those members present, the Board approved, with edits, Resolution No. 3131: A Resolution Declaring the Intent to Initiate Procedures to Transition From At-Large Elections to District-Based Elections (By Zone) Pursuant to the California Voting Rights Act.*

ADJOURNMENT: There being no further business to come before the Board, President Dillon-Knutson adjourned the meeting at 6:32 p.m.

Respectfully submitted,

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Sandeep Karkal  
Secretary

Julie Hoover, Recording

## Novato Sanitary District Board Fees Check Register

For March 2019

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Date	Num	Name	Credit
<b>Apr 8, 19</b>			
04/08/2019	5995	Dillon-Knutson-, Carole	407.79
04/08/2019	5996	Miller, Brant	
04/08/2019	5997	Long, William C	313.78
04/08/2019	5998	Mariani, Jean M	307.79
04/08/2019	5999	Peters, Arthur Gerald	207.79
<b>Apr 8, 19</b>			<b><u>1,237.15</u></b>

# Novato Sanitary District Operating Check Register

March 25, 2019

Date	Num	Name	Credit
<b>Mar 25, 19</b>			
03/25/2019	62788	PARS-PSRP-Post Employment...	120,000.00
03/25/2019	62787	Pacific, Gas & Electric	83,969.61
03/25/2019	62794	Stericycle	15,598.72
03/25/2019	62773	Citi Visa (Costco)	8,142.29
03/25/2019	62792	Shape Incorporated	2,223.71
03/25/2019	62785	North Marin Water District Payroll	1,718.00
03/25/2019	62777	Harris & Associates, Inc	1,450.00
03/25/2019	62770	Caltest Analytical Lab Inc.	1,330.95
03/25/2019	62789	Rauch Communication Consult...	977.75
03/25/2019	62778	Health Promotions Now	621.57
03/25/2019	62798	Win-911 Software	495.00
03/25/2019	62768	BoundTree Medical, LLC	470.45
03/25/2019	62791	Red Wing Shoe Store	466.24
03/25/2019	62769	Cagwin & Dorward Inc.	461.00
03/25/2019	62771	Cantarutti Electric, Inc	374.00
03/25/2019	62797	WEF Membership	328.00
03/25/2019	62781	Marin Lock and Safe Service Inc	283.08
03/25/2019	62790	Recology Sonoma Marin	276.21
03/25/2019	62774	Claremont EAP, Inc.	250.00
03/25/2019	62772	CDW Government, Inc.	226.85
03/25/2019	62796	U.S. Bank Equipment Finance	218.63
03/25/2019	62795	Stiles Construction Company	217.00
03/25/2019	DD	CALPERS Retirement	200.00
03/25/2019	62766	B.W.S. Distributors, Inc.	197.47
03/25/2019	62780	Marin County Ford	187.39
03/25/2019	62779	IDEXX Distributing Corp.	172.28
03/25/2019	62793	Staples Advantage	165.42
03/25/2019	62786	Orkin Pest Control, Inc.	151.84
03/25/2019	62784	North Marin Water District	128.22
03/25/2019	62776	Grainger	93.22
03/25/2019	62767	Batteries Plus Inc	88.75
03/25/2019	62782	Meyers, Nave, Riback, Silver &...	50.00
03/25/2019	62775	First Alarm	42.34
03/25/2019	62765	Able Tire & Brake Inc.	32.50
03/25/2019	62783	NAPA Auto Parts	4.32
<b>Mar 25, 19</b>			<b><u>241,612.81</u></b>

# Novato Sanitary District Operating Check Register

April 8, 2019

Date	Num	Name	Credit
<b>Apr 8, 19</b>			
04/08/2019	62855	Veolia Water North America, Inc.	179,366.05
04/08/2019	62856	Veolia Water North America, Lab	29,244.98
04/08/2019	62845	PARS-PSRP-Post Employment...	12,084.00
04/08/2019	62834	Johnson, Dee	9,540.00
04/08/2019	62844	PARS-OPEB-Post Employment...	9,125.96
04/08/2019	62857	Veolia Water Recycled Water ...	8,801.03
04/08/2019	62821	Cagwin & Dorward Inc.	3,204.00
04/08/2019	62826	Dearborn National	2,651.67
04/08/2019	62819	Beecher Engineering, Inc	2,340.00
04/08/2019	62831	Frontier California Inc EQ	2,286.21
04/08/2019	62828	DLT Solutions Inc.	2,100.58
04/08/2019	62837	Monterey Mechanical, Inc.	1,800.00
04/08/2019	62829	Environmental Dynamics	1,581.00
04/08/2019	62833	IEDA, INC	1,225.00
04/08/2019	62851	Telstar Instruments Inc	1,195.00
04/08/2019	62836	Marin County Ford	1,190.07
04/08/2019	62823	Custom Tractor Service	1,120.00
04/08/2019	62848	SMART	812.03
04/08/2019	62853	UniFirst Corporation	647.74
04/08/2019	62852	U.S. Bank Equipment Finance	602.63
04/08/2019	62822	Cereske Electric Cable Co.	597.78
04/08/2019	62858	Vision Service Plan	583.59
04/08/2019	62839	North Marin Water District	546.51
04/08/2019	62832	Grainger	434.03
04/08/2019	62849	Steven Engineering Inc.	408.11
04/08/2019	62824	CWEAmembers	376.00
04/08/2019	62843	Oliver Automotive	328.18
04/08/2019	62846	Pini Hardware	318.20
04/08/2019	62814	Able Tire & Brake Inc.	294.00
04/08/2019	62835	Leete Generators	291.00
04/08/2019	62850	T & B Sports, Inc	278.11
04/08/2019	62825	Datco Billing Inc.	253.50
04/08/2019	62820	BoundTree Medical, LLC	197.90
04/08/2019	62817	B.W.S. Distributors, Inc.	197.47
04/08/2019	62815	American Messaging	193.02
04/08/2019	62840	North Marin Water District - Lab	187.00
04/08/2019	62818	Barnett Medical LLC	180.00
04/08/2019	62847	Sebastopol Bearing & Hydraulic	172.57
04/08/2019	62854	United Parcel Service	140.41
04/08/2019	62827	Diego Truck Repair Inc.	128.43
04/08/2019	62813	3T Equipment Company Inc.	119.09
04/08/2019	62816	AT&T Mobility	62.92
04/08/2019	62830	Federal Express	58.80
04/08/2019	62841	Novato Builders Supply	39.01
04/08/2019	62838	NAPA Auto Parts	16.26
04/08/2019	62842	O'Reilly Auto Parts	4.33
<b>Apr 8, 19</b>			<b><u>277,324.17</u></b>

# Novato Sanitary District Capital Projects Check Register

March 25, 2019

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Date	Num	Name	Credit
<b>Mar 25, 19</b>			
03/25/2019	3411	Maggiora & Ghilotti Inc.	137,691.11
03/25/2019	3409	Downtown Ford Sales	30,762.04
03/25/2019	3413	Shape Incorporated	17,303.58
03/25/2019	3415	Vince Sigal Electric	10,940.00
03/25/2019	3412	Pacific Infrastructure Corpo...	4,030.00
03/25/2019	3414	Steven Engineering Inc.	2,383.38
03/25/2019	3408	Citi Visa (Costco)	2,245.00
03/25/2019	3410	Lateral-Calvary Baptist Ch...	2,000.00
03/25/2019	3416	Woodard & Curran formerl...	1,832.55
<b>Mar 25, 19</b>			<b><u>209,187.66</u></b>

# Novato Sanitary District Capital Projects Check Register

April 8, 2019

---

Date	Num	Name	Credit
<b>Apr 8, 19</b>			
04/08/2019	3420	Vince Sigal Electric	4,021.03
04/08/2019	3418	Lateral-Nelson	2,000.00
04/08/2019	3417	Covello Group, The	1,600.00
04/08/2019	3419	Steven Engineering Inc.	801.03
<b>Apr 8, 19</b>			<b><u>8,422.06</u></b>

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

Item 5.b.

Date	Description	Amount
03/29/2019	March Payroll	121,677.81
03/29/2019	United States Treasury	23,457.30
03/29/2019	EDD	7,793.81
03/26/2019	CalPERS Health	29,995.02
03/26/2019	March Retiree Health Benefits	14,840.04
03/26/2019	PARS-OPEB Contribution	9,125.96
03/26/2019	PARS-Pension Contribution	12,084.00
03/26/2019	CALPERS Retirement	11,550.59
03/26/2019	CALPERS Retirement	13,872.69
03/26/2019	CalPers Supplemental Income Plan	3,433.33
03/26/2019	Lincoln Financial Group 457	8,506.85
03/26/2019	Lincoln Financial Group Roth 457	100.00
03/26/2019	Lincoln Financial Group-401a Plan	8,576.90
03/26/2019	Local Union 315	400.00
03/26/2019	California State Disbursement Unit	571.00
03/26/2019	Delta Dental	3,061.68
03/26/2019	ICMA-RC Retiree Health Program	1,503.97
<b>Total for March 2019</b>		<b><u>270,550.95</u></b>

**Novato Sanitary District**  
**Deposit Detail**  
**March 2019**

Item 5.c.  
(Pages 20 to 21)

Type	Date	Name	Account	Amount
<b>11113 · Westamerica - Operations</b>				
<b>Deposit</b>	<b>03/05/2019</b>	CWEA	66080 · Memberships	92.00
		Golden Gate Bridge, Hwy & Trans -	11200 - Accounts Receivable	(1) 1,263.83
		City of Novato-	11200 - Accounts Receivable	(1) <u>29,227.92</u>
TOTAL				30,583.75
<b>Deposit</b>	<b>03/05/2019</b>	H&R Plumbing	72706 · Collection System Improv	20.00
		SMART-	11200 - Accounts Receivable	165.87
		delongh, Dasse-	11200 - Accounts Receivable	520.59
		Bel Marin Keys CDS	11200 - Accounts Receivable	(1) 473.55
		Indian Valley College	11200 - Accounts Receivable	(1) <u>29,304.75</u>
TOTAL				30,484.76
<b>Deposit</b>	<b>03/08/2019</b>	Linscott Engineering	41040 · Permit & Inspection Fee	35.00
		CSRMA-	66070 · Insurance	(2) 27,959.00
		Optical Metal Services	11200 - Accounts Receivable	(3) <u>413.98</u>
TOTAL				28,407.98
<b>Deposit</b>	<b>03/11/2019</b>	AT &T	11200 - Accounts Receivable	(1) 1,245.38
		Novato Children's Center	11200 - Accounts Receivable	(1) 1,085.48
		Novato Unified School District	11200 - Accounts Receivable	(1) <u>104,978.04</u>
TOTAL				107,308.90
<b>Deposit</b>	<b>03/14/2019</b>	CSRMA-	66020 · Employee Benefits	(4) 4,372.00
		Novato Fire Protection	11200 - Accounts Receivable	(1) 8,339.41
		Frontier California, Inc.	11200 - Accounts Receivable	(1) 3,004.28
		Frontier California, Inc.	11200 - Accounts Receivable	(1) 934.80
		Homeward Bound	11200 - Accounts Receivable	(1) 10,513.43
		Marin Municipal Water District-	11200 - Accounts Receivable	(1) 5,328.98
		North Marin Water District-	11200 - Accounts Receivable	(1) 2,619.90
		Novato Charter School	11200 - Accounts Receivable	(1) 2,263.19
		Marin County Free Library	11200 - Accounts Receivable	(1) <u>1,817.33</u>
TOTAL				39,193.32
<b>Deposit</b>	<b>03/18/2019</b>	Magatelli, Mike	41040 · Permit & Inspection Fee	40.00
		Amesos Plumbing	41040 · Permit & Inspection Fee	40.00
		County of Marin	51015 · Property Taxes	2.58
		Peter Levi Plumbing	41040 · Permit & Inspection Fee	40.00
		Comet Building Maintenance, Inc.	41040 · Permit & Inspection Fee	40.00
		Comet Building Maintenance, Inc.	51020 · Connection Charges	7,398.40
		Roy's Sewer Service, Inc.-	11200 - Accounts Receivable	220.10
		Biomarin	11200 - Accounts Receivable	(3) 1,830.32
		Biomarin	11200 - Accounts Receivable	(3) 20,595.88
		Biomarin	11200 - Accounts Receivable	(3) 11,766.86
		Novato Community Hospital	11200 - Accounts Receivable	(1) <u>26,285.10</u>
TOTAL				68,259.24
<b>Deposit</b>	<b>03/19/2019</b>	USCG	11200 - Accounts Receivable	<u>15,886.95</u>
TOTAL				15,886.95

**Novato Sanitary District  
Deposit Detail (cont.)  
March 2019**

<b>Deposit</b>	<b>03/22/2019</b>	Long, William C	66170 · Travel, Meetings & Training	216.63
		Sutter Bay Medical	41040 · Permit & Inspection Fee 5	60.00
		Sutter Bay Medical	1020 · Connection Charges	2,882.50
		Long, William C	66170 · Travel, Meetings & Training	66.53
		First Capitol Auction, Inc.	41142 · Gain/Loss on disposal of assets	39,446.00
		County of Marin	51015 · Property Taxes	232.46
		County of Marin	51015 · Property Taxes	4,012.67
		Indian Valley Golf Course	11200 - Accounts Receivable (1)	7,884.30
		Kleinfelder	11200 - Accounts Receivable (3)	157.28
	<b>TOTAL</b>			<u>54,958.37</u>
		<b>Total Deposits for March 2019</b>	<b>375,083.27</b>	

(1) Collection of non tax roll sewer service charges for second half of FY18-19.  
 (2) Received dividend from CSRMA for Pooled Liability Policy.  
 (3) Collection on receivables for non-domestic discharge permit fees for Optical Metal Services, BioMarin Pharmaceutical and Kleinfelder.  
 (4) Received refund of workers comp premium based on final payroll for FY2017-18.

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Consent Calendar: Accounts Receivable Aging Summary for the Period Ended March 31, 2019.</b>	<b>MEETING DATE: April 8, 2019</b>  <b>AGENDA ITEM NO.: 5.d.</b>
<b>RECOMMENDED ACTION:</b> Receive Accounts Receivable Report as of March 31, 2019.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The attached Accounts Receivable Summary shows the following receivables as of March 31, 2019:</p> <p><b><u>1-45 days - \$29,168:</u></b> Current.</p> <p><b><u>46-120 days - \$0:</u></b> None</p> <p><b><u>120+ days - \$51,039:</u></b> Considered collectible - consists primarily of the receivables for the ranch lease for the last quarter of FY2017/18 and the first quarter of FY2018/19. In addition, includes City of Novato Beverage Grant receivable of \$15,060 for FY2017/18.</p>	
<b>ATTACHMENTS:</b> 1. Accounts Receivable (A/R) Aging Summary.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> lmc, ssk	<b>GENERAL MANAGER:</b> SSK

**Novato Sanitary District**  
**A/R Aging Summary**  
As of March 31, 2019

Item 5.d.  
(Attachment 1)

	<u>Current</u>	<u>46 - 120</u>	<u>&gt; 120</u>	<u>TOTAL</u>
<b>Buck Institute</b>	592.48	0.00	0.00	592.48
<b>City of Novato - Used Oil/Beverage</b>	0.00	0.00	15,404.74	15,404.74
<b>Hayden, Ron</b>	28,566.64	0.00	35,634.00	64,200.64
<b>P,G &amp; E</b>	9.23	0.00	0.00	9.23
<b>TOTAL</b>	<b><u>29,168.35</u></b>	<b><u>0.00</u></b>	<b><u>51,038.74</u></b>	<b><u>80,207.09</u></b>

- (1) Lab monitoring and analysis fees for Buck Institute.
- (2) Billing for Beverage Grant reimbursed through the City of Novato for FY2017/18.
- (3) Rancher's lease fees for the fourth quarter of FY2017/18, the first and second quarter of FY2018/19 and the billing for water usage for FY2018-19.

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Consent Calendar: National Association of Clean Water Agencies (NACWA) Utility Leadership Conference and Awards Ceremony in Minneapolis, MN, July 16 - 19, 2019.	<b>MEETING DATE:</b> April 8, 2019.  <b>AGENDA ITEM NO.:</b> 5.e.
<b>RECOMMENDED ACTION:</b> Receive copy of 2018 National Association of Clean Water Agencies (NACWA) Peak Performance Award Application as submitted to NACWA ( <u>information only</u> ).	
<b>SUMMARY AND DISCUSSION:</b>  <p>Attached, for informational purposes only, is a copy of the District's summary application to the National Association of Clean Water Agencies (NACWA) for NACWA's Peak Platinum7 Performance Award. The application represents the District's seventh year with no NPDES violations (Peak Platinum7 level). This is the third year in a row that the District has applied for this award; required data on the District, including its NPDES permit requirements are on file with NACWA.</p> <p>As a reminder, only treatment facilities that have no (zero) violations of their National Pollution Discharge Elimination System (NPDES) permits for five (5) years or greater, are eligible to be considered for NACWA's Platinum Awards.</p>	
<b>ATTACHMENT:</b> 1. Copy of 2018 National Association of Clean Water Agencies (NACWA) Peak Performance Award Application.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> jo (Veolia), eb	<b>GENERAL MANAGER:</b> SSK

**2018 NACWA PEAK PERFORMANCE AWARD APPLICATION**  
NPDES PERMIT REQUIREMENTS AND PLANT DISCHARGE PERFORMANCE RESULTS

<p>1. Agency Name: <u>Novato Sanitary District</u></p> <p>2. Facility Name: <u>Novato Wastewater Treatment Plant</u></p> <p>3. Facility Address: <u>500 Davidson Street, Novato, CA 94945</u></p> <p>4. Contact: <u>Erik Brown</u></p> <p>5. Phone/Email: <u>(415) 892-1694 / erikb@novatosan.com</u></p> <p>6. Please Summarize the Facility's Effluent Quality for 2018</p> <table style="margin-left: 20px;"> <tr><td>2018 Average</td><td></td></tr> <tr><td>Flow</td><td><u>4.30 MGD</u></td></tr> <tr><td>BOD</td><td><u>5.97 mg/l</u></td></tr> <tr><td>CBOD</td><td><u>N/A mg/l</u></td></tr> <tr><td>TSS</td><td><u>4.60 mg/l</u></td></tr> <tr><td>Ammonia-Nitrogen</td><td><u>1.24 mg/l</u></td></tr> <tr><td>Phosphorus</td><td><u>N/A mg/l</u></td></tr> </table>	2018 Average		Flow	<u>4.30 MGD</u>	BOD	<u>5.97 mg/l</u>	CBOD	<u>N/A mg/l</u>	TSS	<u>4.60 mg/l</u>	Ammonia-Nitrogen	<u>1.24 mg/l</u>	Phosphorus	<u>N/A mg/l</u>	<p>7. Permit Number: <u>CA0037958</u></p> <p>8. Design Capacity: <u>7.0 mgd</u></p> <p>9. Treatment Level: <u>Secondary</u> <small>(e.g. Secondary, Advanced Secondary, Tertiary)</small></p> <p>10. Application For (circle/highlight one):</p> <ul style="list-style-type: none"> <li>- <b>Platinum Award</b> (see instructions)</li> <li>- Gold Award</li> <li>- Silver Award</li> </ul> <p>11. Total Permit Violations in 2018 <u>0</u></p> <p>12. Total Compliance Points in 2018 (see instructions) <u>841</u></p>
2018 Average															
Flow	<u>4.30 MGD</u>														
BOD	<u>5.97 mg/l</u>														
CBOD	<u>N/A mg/l</u>														
TSS	<u>4.60 mg/l</u>														
Ammonia-Nitrogen	<u>1.24 mg/l</u>														
Phosphorus	<u>N/A mg/l</u>														



Parameter		Permit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	# of
		Limit	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Eff	Vio.
Flow (MGD)			5.14	3.92	6.48	5.45	4.03	3.64	3.50	3.46	3.36	3.58	4.25	4.73	
BOD (mg/L)	Mo. Avg.	30	7.5	5.6	6.8	5.0	6.4	5.2	6.8	6.2	5.2	5.3	6.2	5.4	0
	Wk. Max	45	11.0	7.0	13.0	5.0	10.0		11.0	9.3	5.0	6.0	6.0	6.0	0
BOD % Removal	Min	85	97.5	98.2	96.3	97.9	98.2	98.3	97.4	98.2	98.5	98.1	97.8	98.3	0
TSS (mg/L)	Mo. Avg.	30	9.2	5.0	7.2	3.4	3.9	3.2	3.4	3.7	3.4	3.8	5.2	3.8	0
	Wk. Max	45	14.5	6.0	12.0	5.0	6.0	3.3	4.0	5.0	4.0	4.5	6.0	8.0	0
TSS % Removal	Min	85	97.4	97.7	96.8	98.6	98.6	99.1	98.9	98.7	98.9	99.0	98.1	98.6	0
NH <sub>3</sub> -N (mg/L)	Mo. Avg.	5.9	4.0	0.9	2.8	0.65	1.5				0.27	0.41	0.16	0.45	0
	Daily Max	21	4.0	0.9	2.8	0.65	1.5				0.27	0.41	0.16	0.45	0
Enterococcus	Geo Mean	35	2.7	4.2	7.4	4.7	4.3				2.5	1.3	3.4	1.8	0
Fecal Coliform/100 ml.	Mo. Med	140	23			7.8					17			3	0
	90% ile	430	23			7.8					17			3	0
Total Coliform/100 ml	Mo. Avg.	240					33	62	24	58					0
	Wk. Max	10,000					540	94	79	169					0
pH	Max	8.5	7.0	7.2	7.1	7.1	7.1	7.2	7.1	7.1	7.0	7.0	7.0	7.1	0
	Min	6.5	6.8	7.0	6.7	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	0
Oil & Grease (mg/L)	Mo. Avg.	10	1.4	1.4	2.0	2.7	2.6				1.4	1.4	1.4	2.5	0
	Daily Max	20	1.4	1.4	2.0	2.7	2.6				1.4	1.4	1.4	2.5	0
Dissolved Oxygen mg/L	Mo. Min.	1					3.50	3.0	3.3	3.4					0
Copper (ug/L)	Mo. Avg.	6.9	4.3	5.2	4.0	2.4	4.9	5.1	2.5	3.3	2.2	2.6	2.4	2.1	0
	Daily	13	4.3	5.2	4.0	2.4	4.9	11.0	2.5	3.3	2.2	2.6	2.4	2.1	0
Mercury	Mo. Avg.	0.066	0.0028	0.0020	0.0033	0.0017	0.0039				0.0013	0.0021	0.0014	0.0014	0
	Daily Max	0.072	0.0028	0.0020	0.0033	0.0017	0.0039				0.0013	0.0021	0.0014	0.0014	0
	Load Ann	0.079												0.0099	0
Cyanide (ug/L)	Mo. Avg.	6.6	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.09	0
	Daily	14	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.09	0
Whole Effluent Toxicity	Acute 90	90%	100			100					100			100	0
	Acute 70	70%	100			100					100			100	0

Note: 1) Include all parameters specified in NPDES (or other federal/state) permit (add rows if necessary)  
2) If NPDES (or other federal/state) permit includes seasonal limits, indicate and include

**Mixed Month Bay Discharge May 1-13, Reclamation May 14-31**

**Seasonal Limits / Interim Limits**

Dry Season - Bay Discharge: May, September, & October				
	Mo Avg	Wk Max	% Rem	Notes
BOD	15 mg/L	30 mg/L	85%	
TSS	10 mg/L	20 mg/L	85%	
Oil & Grease	5 mg/L	15 mg/L		

Reclamation Irrigation Storage - Non-Bay Discharge				
	Mo Avg	Wk Max	% Rem	Notes
BOD	40 mg/L	N/L	N/L	
TSS	N/L	N/L	N/L	

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<p><b>TITLE:</b> Consent Calendar: National Association of Clean Water Agencies (NACWA) Utility Leadership Conference and Awards Ceremony in Minneapolis, MN, July 16 - 19, 2019.</p>	<p><b>MEETING DATE:</b> April 8, 2019.</p> <p><b>AGENDA ITEM NO.:</b> 5.f.</p>
<p><b>RECOMMENDED ACTION:</b> Approve the General Manager-Chief Engineer to attend the National Association of Clean Water Agencies (NACWA) Utility Leadership Conference and Awards Ceremony in Minneapolis, MN, July 16 - 19, 2019.</p>	
<p><b>SUMMARY AND DISCUSSION:</b></p> <p>The National Association of Clean Water Agencies (NACWA) Utility Leadership Conference and Awards Ceremony will be held in Minneapolis, MN, July 16 - 19, 2019. Out-of-state travel requires pre-approval by the District Board of Directors.</p> <p>The General Manager-Chief Engineer is on NACWA's Utility &amp; Resource Management Committee and Industry of the Future workgroup.</p> <p>It is recommended that the Board approve the General Manager-Chief Engineer to attend the NACWA Utility Leadership Conference and Awards Ceremony in Minneapolis, MN, July 16 - 19, 2019.</p>	
<p><b>BUDGET INFORMATION:</b> The costs for attendance would be funded from Account No. 66170 – Travel, Meetings and Training, which has a current balance of \$30,764 as of March 31, 2019, with no outstanding encumbrances.</p>	
<p><b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.</p>	
<p><b>DEPT. MGR.:</b> ssk</p>	<p><b>GENERAL MANAGER:</b> SSK</p>

Novato Sanitary District  
 District Secretary  
 500 Davidson Street  
 Novato, CA 94945

### NOTICE OF PUBLIC HEARINGS

The Novato Sanitary District (District) Board of Directors (Board) has initiated the process to change from the District's current at-large election system to by-district elections to conform with the California Voting Rights Act (CVRA). On April 1, 2019, the Board took action to adopt District Resolution No. 3131 – "Resolution Declaring the Intent to Initiate Procedures to Transition From At-Large Elections to District-Based Elections (By Zone) Pursuant to the California Voting Rights Act and Taking Related Actions". The following schedule is proposed to hold the required minimum of five (5) public hearings to transition to district (or zone) elections, but may be subject to change.

#### **NOVATO SANITARY DISTRICT** *Proposed Timeline for Consideration and Implementation of District-Based Elections*

<b>DATE</b>	<b>EVENT</b>	<b>COMMENT</b>
Monday, April 1, 2019	Board adopts Resolution declaring its intention to transition from at-large to by-district (zone) elections (Special Meeting).	
Monday, April 8, 2019	1st Public Hearing (Regular Meeting)	No maps for review, but take public comments on composition of districts (zones) and preference for zone lines.
Monday, April 15, 2019	2nd Public Hearing (Special Meeting)	No maps for review, but take public comments on composition of districts (zones) and preference for zone lines.
By Monday, April 29, 2019	Publish draft map(s) for at least seven (7) days before 3 <sup>rd</sup> public hearing	Publication can be on website and posting in other places
Monday, May 6, 2019	3rd Public Hearing (Special Meeting)  Publish for review any new or amended district election maps and potential sequence of elections.	Take public comments on proposed maps; engage in line drawing as desired.  Maps must be available for review at least 7 days before consideration at the 4th public hearing.
Tuesday, May 28, 2019 (as Monday, Memorial Day, is a District holiday).	4th Public Hearing (Special Meeting)  Publish for review new or amended district election maps (if any) and potential sequence of elections.	Take public comments on proposed maps; final line drawing as desired.  <i>- If selected map is amended, ordinance cannot be adopted until 7 days after amended map is published.</i>
Monday, June 10, 2019	5th Public Hearing (Regular Meeting)	Board adopts ordinance establishing by-district elections

3211332.1

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<p><b>TITLE: Reclamation: Public Hearing - Lease Agreement for Pastures (Collectively “Ranch”) at Reclamation Facility.</b></p>	<p><b>MEETING DATE: April 8, 2019</b></p> <p><b>AGENDA ITEM NOS.: 7.a. through 7.g.</b></p>
<p><b>RECOMMENDED ACTION(S):</b>            Conduct Public Hearing, make findings as recommended, and authorize staff to negotiate a new Reclamation Pastures (“Ranch”) lease agreement for a duration of up to ten (10) years.</p>	
<p><b>SUMMARY AND DISCUSSION:</b></p> <p>The District currently leases a total of approximately 790 acres of irrigated pasture to a single rancher who has leased the property for the past 10 years (since April 1, 2009). The District has a 40-year lease from the Marin County Flood Control District for approximately 640 acres of the property that expires in 2023, with an option to extend the lease for an additional 10 years.</p> <p>The current lease expired March 31, 2019 and the rancher has indicated he is not interested in continuing to lease the property. The District will need to enter into a new lease agreement with a new lessee. District staff has prepared (and District Counsel has reviewed) a draft lease agreement for the leasable property, (See Attachment 1).</p> <p>At its meeting on March 18, 2019 the Board made a determination that the Ranch property is not needed for District purposes during the term of a lease, and set a date for a Public Hearing to consider leasing the Ranch property. A Notice of the Public Hearing was advertised in the Marin IJ on March 25 and April 1.</p> <p>The Public Hearing will afford all persons present an opportunity to be heard with respect to the proposed lease. Additionally, the California State Health and Safety Code states that the Board must make the following findings:</p> <ul style="list-style-type: none"> <li>• The property use will be for its compatible uses, and will serve the public interest, and</li> <li>• The term of the lease will not exceed ten (10) years.</li> </ul> <p>Upon holding the Public Hearing, staff recommends the Board make the recommended findings and authorize staff to negotiate a new Ranch lease agreement for a duration of up to ten (10) years.</p>	
<p><b>ATTACHMENTS:</b></p> <ol style="list-style-type: none"> <li>1. Draft Ranch Lease-Sites 2, 3 and 7.</li> <li>2. Marin Independent Journal - Proof of Publication, Notice of Public Hearing; provided for informational purposes.</li> </ol>	
<p><b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.</p>	
<p><b>DEPT. MGR.:</b> JB, EB</p>	<p><b>GENERAL MANAGER:</b> SSK</p>

**Novato Sanitary District**  
**Wastewater Reclamation Facility**  
**RANCH LEASE – SITES 2, 3, and 7**  
**(DRAFT)**

This lease is made and entered into as of this \_\_\_\_ day of May, 2019, between NOVATO SANITARY DISTRICT, 500 Davidson Street, Novato, CA 94945, hereinafter called "Lessor," or "District" and \_\_\_\_\_, hereinafter called "Lessee."

**WITNESSETH:**

**WHEREAS**, Lessor owns pasture herein referred to as the "Site 2" North of State Highway 37 as said project lands are shown on the map entitled, "Novato Sanitary District, Reclamation Facility," a copy of which is attached hereto as Exhibit "A"; and

**WHEREAS**, Lessor leases from the Marin County Flood Control and Conservation District (MCFCCD) pasture herein referred to as the "Sites 3 and 7" South of State Highway 37 as authorized by Novato Sanitary District Resolution 2231, as said project lands are shown on the map entitled, "Novato Sanitary District, Reclamation Facility," a copy of which is attached hereto as Exhibit "A"; and

**WHEREAS**, Lessor's lease agreement with the Marin County Flood Control and Conservation District is attached hereto as Exhibit "B"; and

**WHEREAS**, the District Board of Directors made a determination that sites 2, 3, and 7 were not needed for other District purposes at a public meeting on March 18, 2019; and

**WHEREAS**, the District published a notice of hearing in a newspaper of record on March 25 and April 1, 2019, to consider leasing the above property; and

**WHEREAS**, the District held a public hearing on April 8, 2019 to consider the lease of the above property; and

**WHEREAS**, the District Board of Directors made the finding at their meeting on April 8, 2019 that the property will be used for District compatible uses and will serve the public interest; and

**WHEREAS**, Lessor and Lessee desire to enter into an arrangement whereby Lessee will lease a portion of said reclamation facility for pasture purposes;

**NOW, THEREFORE**, the parties agree as follows:

## **1.0 Description of Property to be Leased.**

The property involved in this lease, hereinafter called "Ranch," consists of an irrigated pasture site, comprising a total of approximately 790 acres, located on both sides of State Highway 37, between Novato Creek and Atherton Avenue and Black Point, in the City of Novato. Said Ranch is shown as Sites 2, 3, and 7 on Exhibit "A."

## **2.0 Term.**

The initial term of this lease shall commence on May 1, 2019 and end on March 31, 2023, unless sooner terminated in accordance with the provisions of this lease. Subsequent lease years beyond the first year shall begin on April 1<sup>st</sup> of each year. Should Lessor extend its lease with MCFCCD, Lessee will have the option to extend the lease on a year-to-year basis up to a total lease term not to exceed ten (10) years, subject to a six (6) month prior written notice to Lessor from Lessee. If said option is exercised by Lessee, the terms and conditions of the lease shall remain the same, except that the rental rate may be adjusted based on a mutually agreed rent or an independent appraisal establishing fair rent for the extended period.

## **3.0 Purpose and Possession.**

The Ranch is hereby leased only for the purpose of dry weather pasturing of beef cattle and/or non-milking dairy animals, and harvesting of pasture grass (hay) to be utilized for feeding animals. Lessee shall not use the Ranch for other purposes, and shall not pasture other types of animals on the property, without prior written consent of Lessor. Lessee shall have such use, possession and control of the Ranch as shall be necessary for such purposes subject to the other provisions of this lease.

## **4.0 Rent.**

### *4.1 Determination of Rent*

The annual rental of the Ranch shall be determined based on the quantity and price of hay and the total number of Animal-Unit Months (AUMs) as set forth in the Rental Adjustment Table 1. The annual lease rental shall be adjusted from lease year to lease year based on the grazing capacity of the Ranch, the selling price of beef cattle as described in 4.2, the number of tons of hay produced, and the selling price of hay as described in 4.3.

### *4.2 Selling Price of Beef Cattle (PB)*

The average selling price of beef cattle (PB) shall be taken as the average selling price per hundred weight of Medium Frame No. 1 Muscling Steers and

Heifers (600-700 pounds), as reported by Cattlemen's Livestock Market located at Galt, CA, for the month of June of the lease-year in question. In the event that said average sales price of beef cattle is not obtainable in any year, then the average sales price to be used in determining the annual rental shall be obtained from some other authentic source to be selected by Lessor as providing a comparable price for the purpose. It is further mutually understood and agreed that in the event the Federal Government or any agency, and in any manner whatsoever subsidizes the raising of beef cattle, thereby affecting a lower average sales price, the annual rental shall be increased to offset the effect of the subsidy payment on the sale price of cattle.

#### *4.3 Selling Price of Hay (PH)*

The average selling price of hay shall be taken as the selling price of pasture grass hay in Marin County for the week that includes June 1<sup>st</sup> of each year. In the event that said average sales price of hay is not obtainable in any year, then the average sales price to be used in determining the annual rental shall be obtained from some other authentic source to be selected by Lessor as providing a comparable price for the purpose.

#### *4.4 Rent Payment Schedule*

The annual rental is due in advance and is payable by the Lessee in lawful money of the United States in equal quarterly installments due on the first days of April, July, October, and January for each year during the term hereof. Any such rentals if not paid in full when due shall bear interest at the rate of fifteen percent (15%) per annum from the due date until paid, and if not paid within thirty (30) days of the date of demand, Lessee is in breach of this lease agreement and Lessor may at its option place the Lessee on probation in accordance with Section 19.2 or terminate this lease, in which case the provisions of default as set forth in Section 19 of this lease shall apply. Any and all indebtedness, accrued because of such nonpayment of rent, shall become a lien on the Performance Bond or deposit described in Section 20.

#### *4.5 Advanced Payment of Rent*

Since the annual rental for the current lease-year cannot be computed until approximately July 15, the second quarter of said current lease-year, Lessee agrees to pay Lessor an estimated annual rental based on the previous year's rental rate for April and July. The payment for September will then be adjusted to reflect the updated information with the adjustment retroactive to the April and July payments.

#### *4.6 Animal-Unit-Month Defined*

Animal-Unit-Month (AUM) shall be defined as the amount of forage required by a mature cow for a period of one month. For the purpose of computing the consumption of the authorized available forage in AUM's, the relative feed requirements of the various kinds of livestock permitted to be kept on the Ranch Land shall be deemed to be as follows, expressed as an animal-unit conversion factor:

**Table 1**

<b>Type of Livestock</b>	<b>Animal-Unit Conversion Factor</b>
Steer and Heifer (6 months to 2 years up to 850#)	0.65
Cow and Calf (Calf until 6 months)	1.00
Mature Cow	1.00

*4.7 Determination of Annual Rent*

The annual rental of the Ranch shall be determined and payable as follows: For each and every lease-year the annual rental shall be determined in accordance with the formula below:

$$\text{Annual Rent} = [0.2*(PB)*AUM/year] + [0.02*(PH)*(Tons of Hay cut)] - \text{Credit for Work per Section 10}$$

Where:

PB = Selling price of beef cattle as defined in Section 4.2

PH = Selling price of hay as defined in Section 4.3

The annual rental shall be adjusted from lease-year to lease-year depending upon the grazing capacity of the Ranch land, the hay production, the selling price of hay, and the selling price of beef cattle.

### **5.0 *Grazing Capacity and Grazing Period***

Lessee is hereby authorized to graze beef cattle following good range management practices to maintain a healthy stand of grass, avoiding overgrazing which could result in unsightly soil erosion, or compaction, The lessee understands that the Lessor is working with the University of California Extension to identify and implement good grazing practices including the appropriate number of AUMs for each of the parcels.

The Lessor alone, for any or all succeeding lease-years has the option to change each and all of the numbers of AUM's. Written notice of any such change will be given to the Lessee by the District General Manager-Chief Engineer or designee. Unless so changed, said number or numbers for any lease-year shall remain as last authorized by the Lessor.

Pasturing of animals during the winter season will not be allowed. Accordingly, Lessee shall not put animals on the Ranch until after April 1st, and shall remove all animals from the property within a few days after the first rains of the winter season. In any event, the animals shall be removed from the Ranch by November 1st each year. The District General Manager-Chief Engineer or designee shall determine the exact timing of each year's pasture season based on pasture condition and weather.

### **6.0 *Lessee Reports Required***

Lessee shall keep records satisfactory to Lessor regarding tonnage of hay harvested and numbers and types of animals pastured.

#### **6.1 *Grazing Reports***

Lessee agrees to maintain a log of animal use on each parcel by month commencing May 1, 2019, using forms provided by the Lessor and provide this information to the Lessor on a quarterly basis within 30 days of the end of each quarter.

## *6.2 Hay Reports*

Lessee agrees to maintain a record of tonnage of hay cut on each site and provide this information in writing to the Lessor on a quarterly basis within 30 days of the end of each quarter in which hay has been cut.

## *6.2 Inaccurate Grazing Reports and Failure to Comply with Grazing Schedules*

Lessee shall accurately report the actual number of animals on the Ranch. Unreported animals present shall constitute an inaccurate Grazing Report (See Section 6.1) and those unreported animals shall be deemed in trespass. Lessee shall fully comply with Grazing Schedules as set by the District General Manager-Chief Engineer or designee and included in the Annual Grazing Plan. Non-compliance with said Grazing Schedule shall also constitute a trespass. These trespass events shall result in the Lessee being charged progressive payments during the lease year: The first offense shall be twice the AUM rate of the animals not reported or moved according to the schedule, second offense shall be three times, and the third offense shall be four times the AUM rate, etc.

## **7.0 Distribution of Livestock**

### *7.1 Rotation Schedule*

Provision C.8 of the California Regional Water Quality Control Board San Francisco Bay Region Order No. 92-065 requires that: "Sufficient time should be provided between application of reclaimed water and grazing by non-milking animals to allow the wastewater disposal area to dry thoroughly." The lessee is responsible for rotating livestock among the pastures. The irrigation and rotation schedule will be updated annually and included in the Annual Grazing Plan. Furthermore, the Lessor or Lessee may take two fields out of service each year to renovate them. The Annual Grazing Plan will be adjusted to account for the fields that are out of service. The Lessor and Lessee will review any proposed field renovations prior to the beginning of the lease year.

All cross-fences that define a field shall be maintained by the Lessee in such a way that livestock can be effectively confined within the field by merely closing and latching all gates.

### *7.2 Grazing Confined within Lease Boundaries*

Lessee shall at all times prevent livestock from roaming or grazing upon any adjacent lands of Lessor or third parties.

## **8.0 Annual Grazing Plan.**

Lessee shall manage and use the Ranch throughout the term hereof in a good

and proper manner; according to approved methods of range management and grazing practices as established and modified from time to time by Lessor. Lessee shall develop an Annual Grazing Plan. Lessor shall provide the irrigation schedule and the fields out-of-service information to the Lessee for use in preparing the Annual Grazing Plan.

The Annual Grazing Plan shall set forth the proposed method of operation and Grazing Schedule on the area covered by the lease and any additional responsibilities for Long Term Maintenance, Pest and Weed Control, and development of range resources that are warranted by conditions or circumstances deemed significant by the Lessor. The Grazing Schedule will list all fields and haying and grazing periods for each field. This Annual Grazing Plan can be modified with the approval of the District General Manager-Chief Engineer or designee to account for changes in weather or irrigation practices.

#### **9.0 Lessee Obligations for Maintenance.**

Lessee shall operate, maintain, repair, and replace as necessary, all above ground equipment and improvements within the Ranch, except those specifically provided herein to be operated and maintained by Lessor. The improvements to be maintained by the Lessee include:

- Sprinkler heads,
- Sprinkler risers to 12” below grade,
- Interior pasture fencing and gates,
- Cattle walkways and gates,
- NMWD water fed cattle troughs, <sup>1</sup>
- NMWD water risers,
- Interior ditches and culverts
- Corrals (including fencing, gates, loading chutes, sick pens, crowding alleys, and squeeze chutes).

These items listed above and included here in Section 9 are the responsibility of the lessee and shall not be eligible for credit against the lease payment except as noted below.

#### **9.1 Sprinkler Maintenance**

Lessee shall provide at least one person and a vehicle to care for, monitor and maintain all sprinklers on a daily basis on all days when irrigation is in progress. Broken sprinkler risers and damaged sprinkler heads must be repaired/replaced

<sup>1</sup> “NMWD water” refers to Potable water supplied by North Marin Water District.

within five (5) days if the field is being irrigated or prior to starting irrigation if it is not being irrigated. Sprinklers not fixed within the allotted time will be fixed by the Lessor and the Lessee charged \$250/repair. To prevent damage to the pasture, the vehicle used for sprinkler maintenance shall be an all-terrain type with low tire pressure.

Specifications and methods for sprinkler head maintenance and replacement shall be approved by the District General Manager-Chief Engineer or designee. The Lessor shall provide replacement sprinkler heads at no cost to the Lessee.

### *9.2 Weed Control*

Lessee shall be responsible for weed control throughout the Ranch for the term of the lease. In order to prevent damage to sprinkler heads and risers when the crop is being harvested, and to keep grass and weeds clear from sprinkler spray nozzles, Lessee agrees to have a 3-foot radius around each sprinkler head kept free of vegetation.

The Lessee shall also be responsible for keeping the ditches clear of blackberries and other weeds that impair mosquito control.

The Lessee shall be responsible for submitting the weed removal program to the District General Manager-Chief Engineer or designee in writing each year along with the Annual Grazing Plan.

If the Lessee's failure to maintain weed and/or blackberry control to the satisfaction of the Lessor requires the Lessor to perform the weed and/or blackberry control, the Lessee will be charged for the cost of the work plus a 10% administrative fee.

### *9.3 Culvert and Ditch Maintenance*

The Lessee shall be responsible for keeping the culverts clear in the interior drainage ditches. The Lessee shall also be responsible for repairing any damage to the ditches caused by the livestock. Culvert replacement and periodic major ditch maintenance will be credited against the cost of the lease as noted in Section 10.0 below.

### *9.4 Lessee Monitoring and Response*

The Lessee shall be continuously available via mobile phone (including text messaging and email) during grazing and/or irrigation activities. Upon contact from Lessor, Lessee agrees to dispatch qualified personnel to the ranch areas within 45 minutes to resolve any issues that arise during grazing and / or irrigation activities.

### *9.5 Licenses, Permits, Approvals, and Certifications*

Lessee and all lessee affiliates shall possess and maintain all required licenses, permits, approvals, and/or certifications for the full term of the lease (including lease extensions) and shall make such immediately available upon request by the District. In the event a required license, permit, approval, and/or certification lapses, expires, or cannot be reinstated, Lessee agrees to inform the District immediately.

### **10.0 Lessee Obligation to Perform Long Term Maintenance**

In addition to Lessee's maintenance responsibilities as described in Section 9, Lessee shall at its own expense perform such items of Long Term Maintenance as may from time to time be approved in advance or directed by the District General Manager-Chief Engineer or designee as specified by the current Annual Grazing Plan. Lessee shall receive credit against the annual rental for the Ranch for the actual costs incurred in the performance of said items upon satisfactory completion. The credit shall not exceed 50% of the Annual Estimated Rent.

Lessee shall not improve or alter the pasture or any Ranch improvements without the prior written consent of Lessor.

### **11.0 Miscellaneous Lessee Restrictions, Hunting, Camping, Sanitation**

Lessee shall not shoot, hunt, fish, or camp, or permit any shooting, hunting, fishing, or camping upon the leased property, except as noted below in Section 11.1, nor shall Lessee commit, or permit to be committed, any nuisance thereupon or any act whatever in violation of the law, and Lessee shall at all times keep and maintain said premises in a good and sanitary condition to the satisfaction of the Lessor.

#### *11.1 Portable Trailer*

Lessee will be allowed to place a portable trailer at the site, at Lessee's expense, and subject to the following conditions:

1. Lessor will provide 110/240 volt - 50 amp service near gate to site 7 for Lessee's use. Lessee will establish and maintain electrical code compliance on all Lessee supplied / installed equipment.
2. Lessee shall provide and maintain sanitary facilities to the satisfaction of the District General Manager-Chief Engineer, or designee.
3. Location of trailer will be as mutually agreed upon between Lessee and Lessor.

4. Lessee shall be responsible for all maintenance of the trailer.

### **12.0 Lessee Obligation for Utilities.**

**Lessee shall be responsible for the cost of NMWD water for the livestock and NMWD water and electric power for the portable trailer. Lessee agrees to, within 30 days, fully reimburse Lessor for any utility bills paid by the Lessor.**

### **13.0 Lessor Obligations.**

#### *13.1 Recycled Water Provision.*

Lessor shall provide treated wastewater (recycled water) for pasture irrigation at no cost to Lessee.

Lessee understands that Lessor is required, by discharge permit conditions established by the California Regional Water Quality Control Board, to reclaim all of their treated wastewater for recycling during the period beginning June 1st and ending August 31st each year.

Lessee and Lessor agree to be mutually responsible for working out a suitable irrigation schedule that will meet the needs of the pasture grass and Lessee's animal management requirements, while at the same time resulting in compliance with Lessor's discharge permit conditions. However, it is understood that if a conflict arises between the water needs of the Lessee and water use procedures to meet Lessor's discharge requirements, the procedures necessary to meet discharge requirements shall control. Lessee agrees to process and remove hay as soon as is practicable to allow Lessor to begin irrigation.

Lessor will make every reasonable effort to furnish recycled water of appropriate quality and in the amounts and at the times necessary to satisfy the pasture grass irrigation demand. However, Lessor shall in no way be liable to Lessee for any damages that he/she may experience in the event Lessor is unable, for any reason, to furnish water of appropriate quality or quantity. Non-irrigated areas may be used for grazing upon mutual agreement between Lessor and Lessee. Lessee acknowledges that irrigation pumping will generally occur "off peak" (night time) and it is possible that Lessor and Lessee will need to work together at any time to troubleshoot and repair irrigation issues that arise.

#### *13.2 Recycled Water Irrigation and NMWD Water Supply Systems*

Lessor shall be responsible for operation and maintenance of the irrigation pump station, irrigation valve boxes, irrigation control valves and wiring, and the NMWD water animal watering system, exclusive of the watering troughs and risers.

### *13.3 Site Drainage*

Lessor shall operate and maintain the drainage pump stations located on Sites 3 and 7. These pump station have capacity adequate to remove surface drainage water resulting from a normal year's rainfall. However, it is understood that Lessor will not be responsible for damages suffered by Lessee in the event of flooding of the Ranch due to higher than normal year rainfall, pump station failures, capacity limitations, dike failures or overtopping of the dikes.

### **14.0 Compliance With Laws and Regulations.**

Lessee shall comply with all laws, requirements and regulations imposed by regulatory agencies with respect to the use of the Ranch and, particularly, the use of treated wastewater for agricultural operations, including but not limited to the following agencies:

- a) California Regional Water Quality Control Board, San Francisco Bay Region
- b) California Department of Public Health
- c) Marin County
- d) Marin/Sonoma Mosquito Abatement District

Lessee's attention is specifically directed to Order No. 92-065 of the California Regional Water Quality Control Board, a copy of which is attached as Exhibit "C".

### **15.0 Lessee Acceptance and Maintenance of Ranch.**

Lessee hereby certifies that he/she has made a thorough inspection of the Ranch and accepts the Ranch and improvements in the condition existing on the date of this lease. Lessee shall, to the reasonable satisfaction of Lessor, keep and maintain the Ranch pasture and improvements in good condition and substantial repair, and free and clear of rubbish and litter.

On termination of this lease, Lessee shall return possession of the Ranch to Lessor in as good condition as when received, reasonable wear and tear and damage by the elements excepted.

### **16.0 Security.**

Lessee shall be responsible for assisting the Lessor with the security of the Ranch. Ranch gates shall be kept locked at all times to prevent entry of unauthorized persons. Lessee shall maintain "No Hunting or Trespassing" signs every 100 feet along the perimeter fences and on all gates.

### **17.0 Lessor Rights.**

#### *17.1 Lessor Rights to Determine Pest Control Parameters*

Lessor reserves the right to determine any and all parameters of pest species and weed control including, but not limited to the following: species, methods, equipment, chemicals, application rate, timetable, follow-up, and areas needing control.

#### *17.2 Rights of Lessor are Cumulative*

No waiver by Lessor at any time of any of the terms, conditions, covenants or agreements of this lease agreement or any breach thereof shall be deemed to annul or void such term, covenant, condition or agreement, or be taken as a waiver at any time thereafter of the same or any other term, condition, covenant or agreement herein contained or any breach thereof, nor of the strict and prompt performance thereof by Lessee; no notice shall be required to restore time as of the essence of this lease after any waiver or delay of Lessor. The rights, powers, options, and remedies of Lessor under this lease are cumulative and no one of them shall be construed as exclusive of the other or exclusive of any remedies provided by law, and no rights, powers, options, or remedies shall be deemed to be exhausted or discharged by the exercise thereof in one or more instances.

#### *17.3 Lessor Right to Enter and Inspect Ranch*

Lessee shall permit Lessor and its officers, employees, agents, successors, and assigns to enter the demised premises and any and all structures and improvements thereon at all reasonable times to view the state and condition thereof and for any other purposes connected with this lease.

#### *17.4 Lessor Right to Withdraw any Portion of the Ranch Property*

Lessor does hereby reserve the right at any time to withdraw from the operation of this lease the whole or any portion of the Ranch property from the lease which the Lessor may sell or contract to sell or which may be devoted to or required for a public use or purpose upon giving to Lessee ninety (90) days previous notice in writing of its intention so to do; in such event, a proportionate reduction of the rent shall be made from and after the time Lessor obtains possession of the lands so withdrawn, as shall equal the proportion at the time of the withdrawal which grazing capacity (expressed in AUM's) of the land withdrawn bears to the total grazing capacity (expressed in AUM's) of the total lease.

#### *17.5 Rights of Lease are not Transferable by Lessee*

Neither this lease nor any rights or interest hereunder shall be transferred or assigned by Lessee voluntarily or involuntarily, nor shall said premises or any portion thereof be sublet, nor shall Lessee permit the use of the Ranch or any part thereof by any third party or parties for any purpose, nor shall this lease or

any interest therein be assignable by action of law, including bankruptcy (voluntary or involuntary) and no sheriff, trustee, creditor, purchaser at any judicial sale, officer of any court, or receiver shall acquire any rights under this lease or to the use or possession of said Ranch or any part thereof, unless the written consent thereto of Lessor is first obtained. Lessee may, however, on first obtaining the written approval of the District General Manager-Chief Engineer, or designee take for pasturage cattle belonging to a third party or parties. No such consent by Lessor under this paragraph shall constitute a waiver or discharge of the provisions of this paragraph except as to the specific instance covered by such consent.

#### *17.6 Lessor Rights to Use and Develop Ranch*

Lessor does also hereby reserve and retain for itself and all its successors or assigns the right to use or cause to be used all or any portion of said Ranch for purposes including (but not limited to): planting and caring for plant species; irrigation system maintenance; freshwater transmission system maintenance, recycled water pipeline maintenance and construction; wildlife habitat enhancement; soil conservation; erosion control; construction, maintenance, and use of roads, ditches, electric power transmission lines, wind power generation, solar power generation and to occupy such portion thereof as may be suitable or convenient for any of such purposes.

#### *17.7 Lessor Right to Use and Establish Roads*

Lessor does also hereby reserve for the joint use of itself, its officers, officials, employees, agents, permittee successors and assigns, and Lessee, any and all roads, trails, paths, and ways upon or across the Ranch.

#### *17.8 Lessor Right to Examine Lessee Records*

Lessee shall keep accurate records and books of account of its operations on the Ranch and Lessor shall at all times have the right of access to and may inspect, copy and use same records and books of account and the Lessee shall furnish to Lessor at any time upon demand, full, true, and correct copies thereof.

### **18.0 Liens Against Lessee**

The Lessee is specifically prohibited from voluntarily or involuntarily allowing a lien to be levied upon or to attach to any of Lessor's property used by them under this lease.

### **19.0 Breach of Lease**

#### *19.1 Breach of Lease*

Failure to perform any of the conditions of this lease shall be a “breach of lease” whether or not specifically noted heretofore.

#### *19.2 Lessee Probation*

Lessor is expressly authorized to put Lessee on probation for any breach of lease. Should Lessee be found responsible for any subsequent violation during any period when Lessee is on probation, the lease may be immediately terminated. Alternatively, Lessor may terminate the lease in accordance with Section 19.3.

#### *19.3 Lease Termination and Surrender of Ranch for Failure to Perform*

If Lessee defaults in the payment of the rent or any installment or part thereof as provided in Section 4.4, or if Lessee fails, neglects, or refuses to perform, meet or observe any of Lessee’s obligations hereunder, or if Lessee shall abandon or vacate the Ranch, Lessor at any time after providing written notice to Lessee may lawfully terminate this lease and reenter said Ranch or any part thereof, either with or without process of law, and expel or remove Lessee and all persons occupying said Ranch, and may remove all personal property therefrom, using such force as may be necessary to repossess and again enjoy said Ranch as before this lease, without prejudice to any remedies which Lessor might otherwise have to recover for arrears of rent or preceding breach of covenant or condition or any other rights or remedies which Lessor may have, and without liability to any person for damages sustained by reason of such removal.

#### *19.4 Lessee Responsibility for Legal Costs of Lessor*

In the event Lessor brings an action or actions for the recovery of the Ranch or for recovery of any rent or other charges which under the terms of this lease are to be paid by Lessee, or to enforce or protect any interests of Lessor under this lease, or to enforce any of the terms or conditions hereof, or commences a summary action or actions under the unlawful Detainer Act of the State of California for the forfeiture of this lease and/or the possession of said Ranch, then in each said case in which Lessor shall prevail, Lessee shall pay to Lessor on demand Lessor’s reasonable attorney’s fees and expenses, which at Lessor’s option shall become a part of Lessor’s judgment in any such action or actions.

### **20.0 Performance Guarantee.**

Lessee shall provide Lessor a cash deposit or bond amounting to Twenty Five Thousand Dollars (\$25,000.00), to guarantee satisfactory performance of all terms and conditions of this lease. In the case of a cash deposit, Lessor shall pay Lessee, within thirty (30) days of the expiration of each year of the lease, an amount equivalent to the interest the cash deposit would have earned during that

year, assuming it had been invested along with other Lessor funds.

In the event of violation by Lessee of any of the terms and conditions of this lease, Lessor shall notify Lessee in writing of the violation and set forth a reasonable time, considering the nature of the violation, for the Lessee to correct the violation. If the Lessee fails to correct the violation within the time limit specified, Lessor shall have the right to use all or part of the cash performance guarantee to make the necessary corrections.

On termination of this lease, Lessor will return any unused portion of the cash performance guarantee to Lessee.

### **21.0 Hold Harmless.**

Lessee hereby indemnifies the Lessor, its officers, officials, agents and employees and shall save it and them harmless from any damage, penalty, fine, judgment or expense suffered, imposed on, assessed to or incurred by them, including attorney's fees and court costs, arising out of Lessee's use and occupancy of the Ranch, and Lessee shall reimburse Lessor, its officers, agents and employees for any damage, penalty, fine, judgment or expense so suffered, imposed, assessed, or incurred.

### **22.0 Insurance.**

Lessee shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the Lessee's operation and use of the leased premises. The cost of such insurance shall be borne by the Lessee.

#### *22.1 Minimum Scope and Limit of Insurance*

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limits of no less than \$1,000,000 per accident for bodily injury or disease (for Lessee with employees).

3. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), or if Lessee has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
4. **Property insurance** against all risks of loss to any tenant improvements or betterments, at full replacement cost with no coinsurance penalty provision.

If the Lessee maintains broader coverage and/or higher limits than the minimums shown above, the Lessor requires and shall be entitled to the broader coverage and/or higher limits maintained. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Lessor.

#### *22.2 Self-Insured Retentions*

Self-insured retentions must be declared to and approved by the Lessor. At the option of the Lessor, either: the Lessee shall obtain coverage to reduce or eliminate such self-insured retentions as respects the Lessor, its officers, officials, employees, and volunteers; or the Lessee shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Lessor.

#### *22.3 Other Insurance Provisions*

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. Additional Insured Status: **The Lessor, its officers, officials, employees, and volunteers are to be covered as insureds** with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Lessee; and with respect to liability arising out of work or operations performed by or on behalf of the Lessee including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Lessee's insurance (at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).
2. Primary Coverage: For any claims related to this contract, the **Lessee's insurance coverage shall be primary** insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by

the Entity, its officers, officials, employees, or volunteers shall be excess of the Lessee's insurance and shall not contribute with it.

3. Notice of Cancellation: Each insurance policy required above shall state that **coverage shall not be canceled, except with notice to the Lessor.**
4. Waiver of Subrogation: Lessee hereby grants to Lessor a waiver of any right to subrogation which any insurer of said Lessee may acquire against the Lessor by virtue of the payment of any loss under such insurance. Lessee agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the Lessor has received a waiver of subrogation endorsement from the insurer.

#### *22.4 Acceptability of Insurers*

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the Lessor.

#### *22.5 Verification of Coverage*

Lessee shall furnish the Lessor with original certificates and amendatory endorsements or copies of the applicable policy language providing the insurance coverage required above. All certificates and endorsements are to be received and approved by the Entity before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Lessee's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

#### *22.6 Subcontractors*

Lessee shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Lessee shall ensure that Lessor is an additional insured on insurance required from subcontractors.

#### *22.7 Special Risks or Circumstances*

Lessee reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

### **23.0 Possessory Interest.**

Lessee acknowledges that he/she has been informed that under Section 107 of the Revenue and Taxation Code of the State of California, the Marin County Assessor is required to place a value on all possessory interests. Possessory

interest is defined as the right of a private taxable person or Lessor to use property owned by a tax-exempt agency for private purposes. A possessory interest tax may, therefore, be levied by the County Assessor on this property against Lessee as of the lien date, which is March 1st of each year.

**24.0 Time of the Essence.**

Time is of the essence of each and all of the agreements, covenants, and conditions of this Lease.

**25.0 Subletting or Assignment.**

This lease shall be binding upon and shall inure to the benefit of the successors and assigns of the respective parties hereto. However, Lessee shall not sublet the Ranch or any part thereof, nor assign or otherwise transfer this lease or any rights or interest of Lessee hereunder without the advance written consent of Lessor.

**26.0 Incorporation by Reference of Lessor-Flood Control District Lease.**

Lessee explicitly recognizes that it leases Sites 3 and 7 from Lessor subject to Lessor's lease with the Marin County Flood Control and Water Conservation District ("Flood Control District"), dated June 14, 1983, and subject to the rights that have been retained by the Flood Control District by that document. The Lessor-Flood Control District lease is incorporated herein by reference as Exhibit "B."

\* \* \* \* \*

**IN WITNESS WHEREOF**, the parties hereto have executed this lease as of the day and year above stated.

**(LESSEE NAME)**

**NOVATO SANITARY DISTRICT**

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

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

Name Printed: \_\_\_\_\_

Name Printed: Carole Dillon-Knutson

Title: \_\_\_\_\_

Title: President Board of Directors

Date: \_\_\_\_\_

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

Name Printed: Sandeep Karkal

Title: General Manager-Chief Engineer

Date: \_\_\_\_\_

Approved as to Form:  
DISTRICT COUNSEL

By: \_\_\_\_\_  
Robin Donoghue

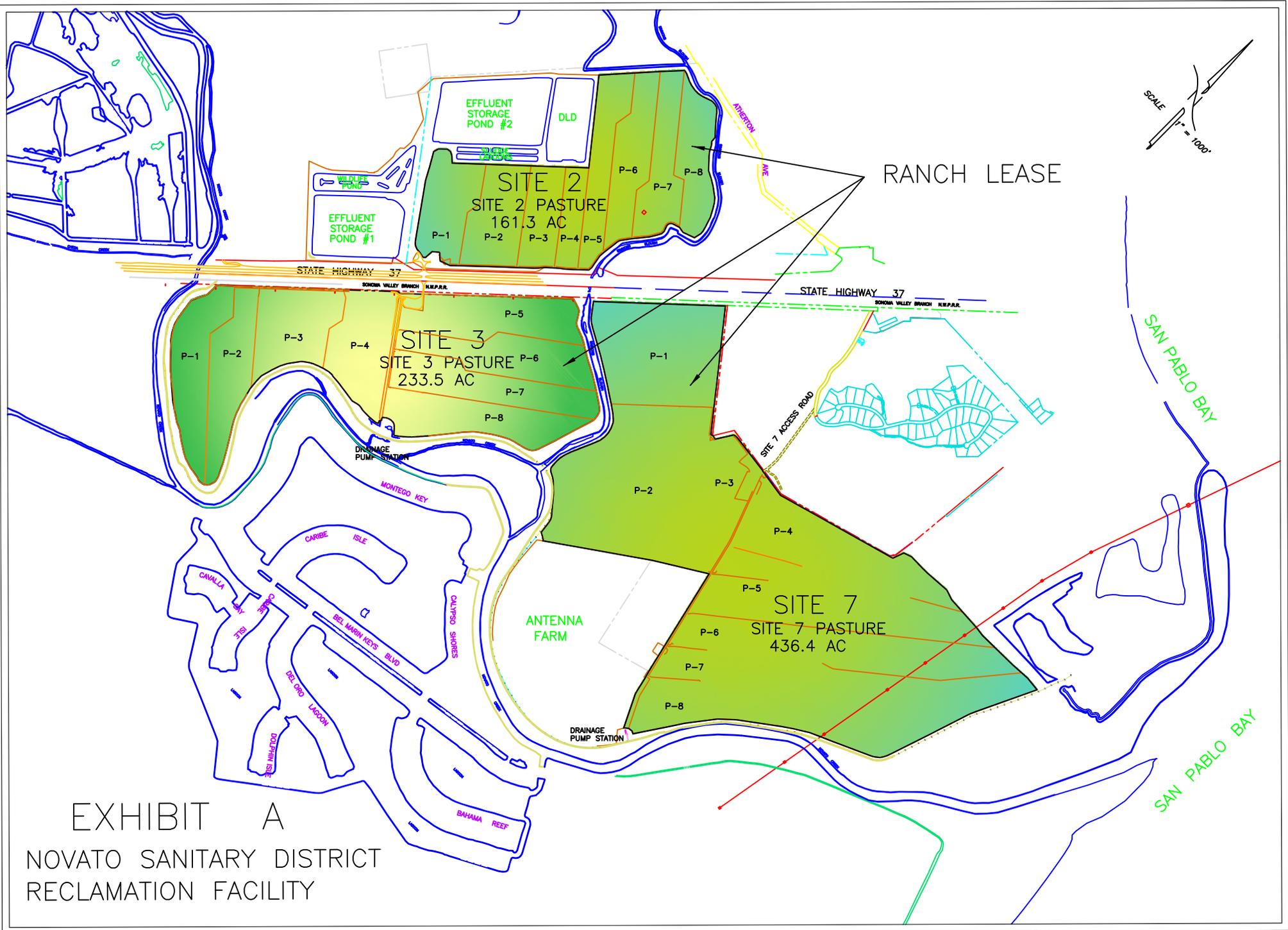


EXHIBIT A  
 NOVATO SANITARY DISTRICT  
 RECLAMATION FACILITY

NOVATO SANITARY DISTRICT  
500 DAVIDSON ST  
NOVATO, CA 94947

83028383

RECORDED AT REQUEST OF

No Fee GC8103

AGENCY SHOWN

JOINT EXERCISE OF POWERS AGREEMENT

1983 JUN 16 AM 11:20

OFFICIAL RECORDS  
MARIN COUNTY CALIFORNIA  
W. BRUCE SHAFER

THIS AGREEMENT is made this 14<sup>th</sup> day of June,

1983, by and between the NOVATO SANITARY DISTRICT, a public corporation, hereinafter referred to as "SANITARY DISTRICT", and the MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, a political subdivision of the State of California, hereinafter referred to as "FLOOD CONTROL DISTRICT".

**Exhibit B**

W I T N E S S E T H

WHEREAS, SANITARY DISTRICT and FLOOD CONTROL DISTRICT are each a "Public Agency" within the meaning of California Government Code Section 6500 and desire to enter into a Joint Exercise of Powers Agreement pursuant to the provisions of California Government Code Section 6502 et seq; and

WHEREAS, FLOOD CONTROL DISTRICT is the owner of real property situated in the Novato Creek Bay Plain, in the City of Novato, County of Marin, State of California, designated as Parcels F-1, F-2 and F-3, as described in Exhibit "A" and depicted on Exhibits "B" and "C", which Exhibits are attached hereto and incorporated herein by reference; and

WHEREAS, FLOOD CONTROL DISTRICT acquired said real property in the Novato Creek Bay Plain for flooding thereon during wet weather months and for future construction, maintenance and operation of flood control facilities as part of a potential Novato Creek Flood Control Project; and

WHEREAS, SANITARY DISTRICT desires to lease from FLOOD CONTROL DISTRICT said Parcels F-1, F-2 and F-3 to construct, maintain and operate an agricultural irrigation reclamation project as a means of disposal of treated wastewater effluent; and

WHEREAS, FLOOD CONTROL DISTRICT desires to lease to SANITARY DISTRICT said Parcels F-1, F-2 and F-3 for said purposes; and

WHEREAS, it is the desire of both SANITARY DISTRICT and FLOOD CONTROL DISTRICT to maintain the capability to construct, maintain and operate compatible sanitary and flood control facilities as necessary on Parcels F-1 and F-2; and

JUN 27 1983

WHEREAS, SANITARY DISTRICT intends to acquire Parcels F-4, F-5 and F-6, as shown on Exhibit "D" attached hereto, from private property owners for use in its planned agricultural irrigation reclamation project; and

WHEREAS, SANITARY DISTRICT intends to construct treated wastewater and sludge storage facilities on said Parcels F-3 and F-4, and said construction will involve placement of earthen dikes which will reduce the total existing drainage ponding capacity in the vicinity; and

WHEREAS, in the construction of said treated wastewater and sludge storage facilities on Parcels F-3 and F-4, SANITARY DISTRICT is required to comply with City of Novato and FLOOD CONTROL DISTRICT flood zoning regulations requiring that arrangements be made to set aside an area of property having three times the drainage ponding volume as that displaced by the intended wastewater and sludge storage facilities, and SANITARY DISTRICT desires to make arrangements with FLOOD CONTROL DISTRICT to satisfy these requirements; and

WHEREAS, it is of mutual benefit to the parties hereto and in the public interest that SANITARY DISTRICT and FLOOD CONTROL DISTRICT enter into a Joint Exercise of Powers Agreement for the considerations and upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, IT IS MUTUALLY UNDERSTOOD AND AGREED as follows:

1. Lease of Parcels F-1, F-2 and F-3

- A. For and in consideration of the rents, covenants and conditions hereinafter set forth, FLOOD CONTROL DISTRICT does hereby lease to SANITARY DISTRICT Parcel F-1, comprising approximately 455 acres of land (Assessor's Parcel No. 157-160-18), Parcel F-2, comprising approximately 250 acres of land (Assessor's Parcel No. 157-160-10), and Parcel F-3, comprising approximately 45 acres of land (Assessor's Parcel Nos. 153-200-41 and 42, and a portion of Assessor's Parcel No. 153-200-36).
- B. FLOOD CONTROL DISTRICT shall retain rights over said Parcels F-1 and F-2 for the following purposes: (1) flowage of waters, (2) construction of flood control and drainage facilities, (3) ponding of waters, (4)

maintenance of flood control and drainage facilities, and (5) related recreational uses along the dikes and levees bordering Novato Creek, as set forth in Paragraph 3.K. hereof.

- C. The FLOOD CONTROL DISTRICT shall have the responsibility of terminating and vacating all existing tenants on Parcels F-1, F-2 and F-3. SANITARY DISTRICT shall be responsible for all costs which may result from vacating said existing tenants and for providing any and all relocation benefits to said tenants as required by law.
- D. The term of the lease shall be for a period of forty (40) years commencing on the date of this agreement and terminating on July 1, 2023. SANITARY DISTRICT is hereby granted an option to extend this lease for an additional ten (10) years subject to a one (1) year prior written notice to FLOOD CONTROL DISTRICT by SANITARY DISTRICT. If said option is exercised by SANITARY DISTRICT, all terms and conditions of the lease shall remain the same, except that the rental rate may be adjusted based on a mutually agreed rent or an independent appraisal establishing fair rent for the extended ten (10) year period.
- E. SANITARY DISTRICT shall pay to FLOOD CONTROL DISTRICT, in advance, the sum of Seven Hundred Forty Five Thousand Three Hundred Dollars (\$745,300.00), which sum shall represent prepaid rent for the entire forty (40) year term of the lease.
- F. SANITARY DISTRICT shall be entitled to assign or sublet all or part of Parcels F-1 and F-2 for agricultural purposes.

2. Drainage Ponding Agreement

In order to protect against the potential flood hazard which may result from reduction in the present drainage ponding capacity of the Novato Creek Bay Plain by reason of placement of fill on Parcels F-3 and F-4 by SANITARY DISTRICT, FLOOD CONTROL DISTRICT covenants and agrees to provide a flood

ponding area over a 66-acre portion of contiguous FLOOD CONTROL DISTRICT land designated as Parcel F-3A on Exhibit "C" and the SANITARY DISTRICT agrees to provide a flood ponding area over a 173-acre portion of contiguous land to be acquired, shown cross-hatched on Exhibit "D" (portions of Parcels F-4 and F-5). FLOOD CONTROL DISTRICT shall not fill or otherwise prevent flood waters from ponding on Parcel F-3A until such time as the ultimate Novato Creek channel improvements, or their equivalent, are constructed to obviate the need for said ponding area. SANITARY DISTRICT shall hold no proprietary interest in said Parcel F-3A. SANITARY DISTRICT shall not fill or otherwise prevent flood waters from ponding on said 173-acre portion of contiguous land until such time as the ultimate Novato Creek channel improvements, or their equivalent, are constructed to obviate the need for said ponding area. In consideration for the ponding agreement affecting the 66-acre Parcel F-3A as provided above, SANITARY DISTRICT agrees to pay FLOOD CONTROL DISTRICT the sum of Forty Six Thousand Seven Hundred Dollars (\$46,700.00).

3. Joint Use of Parcels F-1 and F-2

- A. SANITARY DISTRICT will install facilities necessary to construct, operate and maintain an agricultural irrigation reclamation project on Parcels F-1 and F-2. This project will include construction of treated wastewater storage ponds, installation of irrigation pumping, transmission and sprinkler facilities, construction of fences for management and control of livestock, two new ranch local drainage pump stations, and miscellaneous associated facilities. The project will also include facilities for storage of treated wastewater and stabilized wastewater treatment plant sludge. Plans call for application of the sludge to the agricultural lands as a fertilizer and soil conditioner.
- B. FLOOD CONTROL DISTRICT shall have the right to allow flooding to continue and to construct, operate and maintain drainage and flood control facilities as

provided in Paragraph 1.B. herein as necessary to implement a Novato Creek Flood Control Project on Parcels F-1 and F-2, and flood said lands with runoff waters from the Novato Creek watershed to minimize upstream flooding during periods of prolonged rainfall.

- C. Except as otherwise provided in Paragraph 3.D. below, neither SANITARY DISTRICT nor FLOOD CONTROL DISTRICT will construct facilities or conduct operations which will unreasonably interfere with the use of property by the other agency or be inconsistent with pertinent government regulations or requirements of any other agencies having jurisdiction.
- D. Within Parcel F-2 in the area covered by the existing Novato Creek dikes and a strip of land 200 feet in width inboard thereof, FLOOD CONTROL DISTRICT shall have the right to construct, operate and maintain drainage and flood control facilities. In this area, in design and construction of said facilities, FLOOD CONTROL DISTRICT will make every reasonable effort to avoid conflict with facilities of the SANITARY DISTRICT. However, if relocation of SANITARY DISTRICT facilities is required to accommodate FLOOD CONTROL DISTRICT facilities, SANITARY DISTRICT shall bear the expense of said relocation. It is understood that SANITARY DISTRICT'S obligation to bear the expense of relocation does not apply to the drainage pumping facilities to be constructed on Parcel F-2, or to the SANITARY DISTRICT'S facilities already existing in an easement near the westerly corner of Parcel F-2.
- E. FLOOD CONTROL DISTRICT shall not be responsible for any crop loss which may occur as a result of exercising its rights under Paragraphs 3.B., 3.C., and 3.D. hereinabove. However, FLOOD CONTROL DISTRICT shall take every reasonable step necessary to minimize crop damage during construction and use of drainage or flood control facilities or easements.
- F. In the event that either party hereto plans construction of major new facilities or significant modification of existing facilities, that agency will provide ninety

(90) days advance written notice of such construction or modification to the other agency.

- G. As part of its planned wastewater irrigation reclamation project, SANITARY DISTRICT will phase out existing ranch drainage pump stations on Parcels F-1 and F-2 and construct new local drainage pump stations. The capacity of the new pump stations will be at least equal to the capacity of the existing stations and, upon completion, and for the duration of its lease, the SANITARY DISTRICT will be responsible for local drainage pumping.
- H. Further, as part of its wastewater irrigation reclamation project, SANITARY DISTRICT will finance the rehabilitation or replacement of the Simon's Slough tide gates at Novato Creek in a manner satisfactory to FLOOD CONTROL DISTRICT. In addition, SANITARY DISTRICT will re-establish the channel between the Simon's Slough tide gates and the main Novato Creek channel as part of the dike work described in Paragraph J. herein.
- I. FLOOD CONTROL DISTRICT shall continue to own and maintain and, at its discretion, from time to time operate the existing 16-inch, 5,000 gallon per minute flood control pump located on Parcel F-2, together with the 36-inch diameter culvert and attached sluice gate located on Parcel F-2 at the dike adjacent to Simon's Slough. The flood control pump will obtain power from the SANITARY DISTRICT'S power supply and meter. Accordingly, FLOOD CONTROL DISTRICT agrees to reimburse SANITARY DISTRICT for its costs for power in connection with the operation of said flood control pump.
- J. SANITARY DISTRICT shall be responsible for ordinary maintenance of the dikes and levees on Parcels F-1 and F-2 with respect to normal wear and tear and subsidence. SANITARY DISTRICT will include as part of its planned project maintenance repairs on several sections of the Novato Creek dike bordering Parcels F-1 and F-2 from State Highway 37 to Day's Island. This work will include

"topping off" and raising the existing dike approximately 2 feet throughout its length. FLOOD CONTROL DISTRICT shall be responsible for extraordinary maintenance and repair of dikes and levees along Novato Creek, Simon's Slough, and along the property adjacent to Day's Island.

- K. Under the existing Novato General Plan certain areas along the dikes and levees bordering Novato Creek are designated for potential recreational trail purposes. FLOOD CONTROL DISTRICT shall, by reason of its power to develop incidental recreational uses, have the right to construct trail facilities on such levees that lie within Parcels F-1 and F-2, provided that such facilities do not unreasonably interfere with SANITARY DISTRICT use of adjacent lands.

5. Grant Funding Liabilities

No party to this agreement shall be responsible or liable for the obligations of any other party hereto as a result of that party's use of public grant funds to acquire or dispose of any interest in land or construct or operate any facilities on the lands acquired except to the extent of the obligations set forth in this agreement.

6. Notice

Any notice or demand which the SANITARY DISTRICT or FLOOD CONTROL DISTRICT may desire to serve upon the other party may be served either personally or by depositing the notice or demand in the United States Post Office by registered mail, postage prepaid, with return receipt requested, addressed as follows:

SANITARY DISTRICT

Novato Sanitary District  
500 Davidson Street  
Novato, California 94947  
Attn: District Manager-Engineer

FLOOD CONTROL DISTRICT

Marin County Flood Control and  
Water Conservation District  
c/o County of Marin  
Department of Public Works  
P.O. Box 4186, Civic Center  
San Rafael, California 94903  
Attn: Flood Control Section

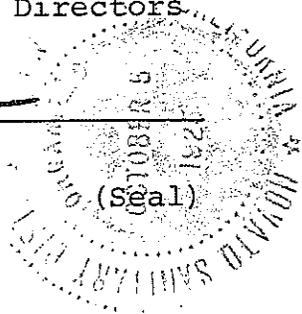
7. This agreement shall run with the land and shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto including without limitations as to subsequent interest.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

NOVATO SANITARY DISTRICT:

*[Signature]*  
President, Board of Directors

*[Signature]*  
Secretary

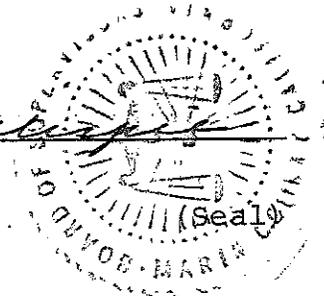


MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT:

*[Signature]*  
Chairman, Board of Supervisors

ATTEST:

*[Signature]*  
Clerk

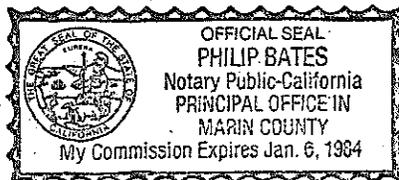


STATE OF CALIFORNIA }  
COUNTY OF MARIN } §

On this 14<sup>th</sup> day of June, 1983, before me, Philip Bates, a Notary Public in and for the said County and State, residing therein, personally appeared Bob Roumiguere, personally known to me (or proved to me on the basis of satisfactory evidence) to be the Chairman of the Board of Supervisors of the Marin County Flood Control and Water Conservation District that executed the within document and acknowledged to me that said Marin County Flood Control and Water Conservation District did execute the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

*[Signature]*  
PHILIP BATES, NOTARY PUBLIC in and for said County and State



Description of Parcel F-1PARCEL "A"

BEGINNING at the most Southerly corner of the parcel of land conveyed to A. G. Raisch, et al, by Deed recorded July 7, 1949 in Book 620 of Official Records at page 141, said point being distant South 45° 25' East 125.00 feet from the Southeasterly line of the Northwestern Pacific Railroad (formerly the San Francisco and North Pacific Railroad), measured along the Southwest line of the Raisch parcel; thence South 45° 25' East 50.00 feet, South 42° 30' West 97.00 feet, South 17° 00' West 305.00 feet, South 27° 00' West 121.00 feet, South 53° 00' West 128.01 feet, South 16° 00' East 195.00 feet, North 52° 30' East 935.00 feet, South 24° 30' East 554.00 feet, South 74° 30' East 185.00 feet, South 32° 00' East 330.00 feet, South 42° 31' 33" West 430.55 feet, North 62° 45' West 471.29 feet, South 87° 10' West 642.00 feet; thence on a nontangent curve to the left, whose center bears South 89° 12' West 422.18 feet through an angle of 15° 12', an arc distance of 112.00 feet; thence tangent to the preceding curve, North 16° 00' West 405.65 feet; thence South 44° 35' West 1822.18 feet TO THE TRUE POINT OF BEGINNING; thence South 40° 58' 40" East 1539.54 feet, North 28° 52' 30" East 310.62 feet, South 83° 50' 40" East 1091.29 feet, North 72° 09' 40" East 1730.18 feet, North 34° 26' 20" East 84.88 feet and North 05° 28' 57" East 288.47 feet to an angle point in the general Northerly line of the parcel of land conveyed to I. Sartori by Deed recorded April 29, 1907 in Book 108 of Deeds at page 354, said point being also on the general Northerly line of the parcel conveyed to Alameda Homes Corporation by Deed recorded May 1, 1964 in Book 1809 of Official Records at page 165; thence along said Northerly line, North 89° 42' 45" East 2759.24 feet to the general Southeasterly line; thence South 22° 09' 22" West 868.64 feet, <sup>526° 03' 30" W</sup> South 15° 31' 30" West 1298.11 feet, South 36° 59' West 269.85 feet, South 63° 49' 30" West 803.29 feet, South 56° 10' 30" West 799.88 feet, South 47° 07' 30" West 599.85 feet, South 34° 01' 30" West 599.74 feet, South 25° 19' 30" West 343.54 feet, South 28° 51' West 434.99 feet and South 22° 58' East 32.55 feet to the most Southerly corner of the Alameda Homes parcel; thence along the general Southwesterly line of said parcel, North 58° 54' West 194.00 feet, North 31° 07' East 85.07 feet, North 28° 54' West 539.91 feet, North 15° 33' West 1948.98 feet, South 56° 00' West 2431.10 feet, North 09° 43' 10" West 269.97 feet, North 45° 08' 20" West 467.70 feet, North 60° 08' 30" West 243.65 feet, North 00° 04' 10" West 265.92 feet, North 19° 59' 10" East 582.83 feet, North 09° 48' West 191.24 feet, North 40° 00' 10" West 186.41 feet,

Description of Parcel F-1 (cont.)

North 58° 44' 50" West 677.30 feet, North 62° 45' 50" West 563.95 feet, North 47° 38' 50" West 224.30 feet and North 14° 00' West 138.23 feet to the Southeasterly line of the parcel conveyed to the State of California by Deed recorded April 24, 1958 in Book 1185 of Official Records at page 222; thence along said Southeasterly line, North 44° 35' East 1821.06 feet to a point that bears North 40° 58' 40" West FROM THE TRUE POINT OF BEGINNING; thence leaving said Southeasterly line, South 40° 58' 40" East 275.83 feet to the true point of beginning.

Subject to the terms and conditions in the Agreement dated March 30, 1976 recorded in Book 3013 of Official Records at page 277, Marin County Records.

PARCEL "B"

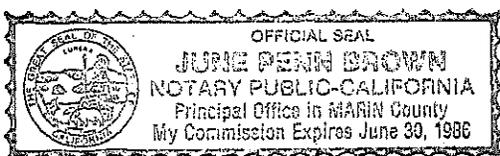
A NON-EXCLUSIVE EASEMENT for roadway access for maintenance, utility and farming related equipment and vehicles for utility purposes over a strip of land 15 feet wide, the centerline of which is described as follows:

BEGINNING at the most Southerly corner of the parcel of land conveyed to A. G. Raisch, et al, by Deed recorded July 7, 1949 in Book 620 of Official Records at page 141, said point being distant South 45° 25' East 125.00 feet from the Southeasterly line of the Northwestern Pacific Railroad (formerly the San Francisco and North Pacific Railroad) measured along the Southw3st line of the Raisch parcel; thence South 45° 25' East 50.00 feet, South 42° 30' West 97.00 feet, South 17° 00' West 305.00 feet, South 27° 00' West 121.00 feet, South 53° 00' West 213.00 feet and North 20° 05' West 304.40 feet to the Southeasterly line of the parcel conveyed to the State of California by Deed recorded April 24, 1958 in Book 1185 of Official Records at page 222, and on the approximate centerline of an existing private road, said point being THE TRUE POINT OF BEGINNING of said strip; thence along the approximate centerline of said private road, South 20° 05' East 354.40 feet, South 16° East 385.00 feet, South 10° 00' East 58.00 feet, South 08° 07' 12" East 57.88 feet, South 09° 20' West 155.04 feet, South 03° 22' East 204.35 feet, South 20° 48' 20" East 53.49 feet, South 28° 46' 50" East 162.01 feet, South 56° 42' East 122.04 feet, South 37° 05' 30" East 102.80 feet, South 10° 53' East 837.05 feet, South 00° 52' West 132.01 feet and South 07° 07' West 112.66 feet to a point in the general Northerly line of the lands described in the Agreement dated March 30th, 1976.

STATE OF CALIFORNIA) )  
 ) ss  
COUNTY OF MARIN )

On June 6, 1983, before me, the undersigned, a Notary Public in and for said State, personally appeared George C. Quesada and Charles A. Joseph, known to me to be the President and Secretary, respectively, of Novato Sanitary District, and known to me to be the person(s) who executed the within instrument on behalf of said corporation, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal this 6th day of June, 1983.



*June Fern Brown*

Description of Parcel F-2

All that certain real property situate in the City of Novato, County of Marin, State of California, described as follows:

BEGINNING at the point of intersection of the Southeastern line of the Sonoma Branch of the Northwestern Pacific Railroad with the Northern Bank of Novato Creek, as said Railroad and Northern Bank existed on April 4, 1905; running thence Northeasterly along said Southeastern line of said right of way to the center of Simon's Slough; thence in a general Southeasterly direction down the center of said Slough and following the Sinousities thereof to the Northerly Bank of Novato Creek; thence up the Northerly and Westerly bank of said creek in a general Southwesterly course and following the sinousities of said creek to the point of beginning.

CONTAINING 250 acres, more or less, and being all of that portion of Division "D" of the Rancho de Novato, lying between the rights of way of the Sonoma Branch of the San Francisco and Northern Pacific Railroad, Simon's Slough and Novato Creek.

EXCEPTING THEREFROM those portions thereof conveyed to the State of California by the following Deeds:

- A. Deed from Mary Ann Richardson, a widow, to the State of California, recorded July 19, 1960 in Book 1383 of Official Records, at page 409, Marin County Records
- B. Deed from Mary Ann Richardson, a widow, to the State of California, recorded July 19, 1960 in Book 1383 of Official Records, at page 413, Marin County Records.
- C. Deed from Mary Anna Richardson, a widow, to the State of California, recorded July 19, 1960 in Book 1383 of Official Records, at page 417, Marin County Records.
- D. Deed from Hiram C. Dustman to the State of California, recorded July 19, 1960 in Book 1383 of Official Records, at page 421, Marin County Records.

ALSO EXCEPTING from all of the above described lands those portions lying within the beds of Novato Creek, Simon's Slough, and in any other filled or unfilled tributary tidal sloughs.

Description of Parcel F-3

A portion of that real property situate in the County of Marin, State of California, conveyed to Marin County Flood Control and Water Conservation District by Deeds recorded February 28, 1975 in Book 2872 at page 159, and February 27, 1976 in Book 2999 at page 226, Marin County Records.

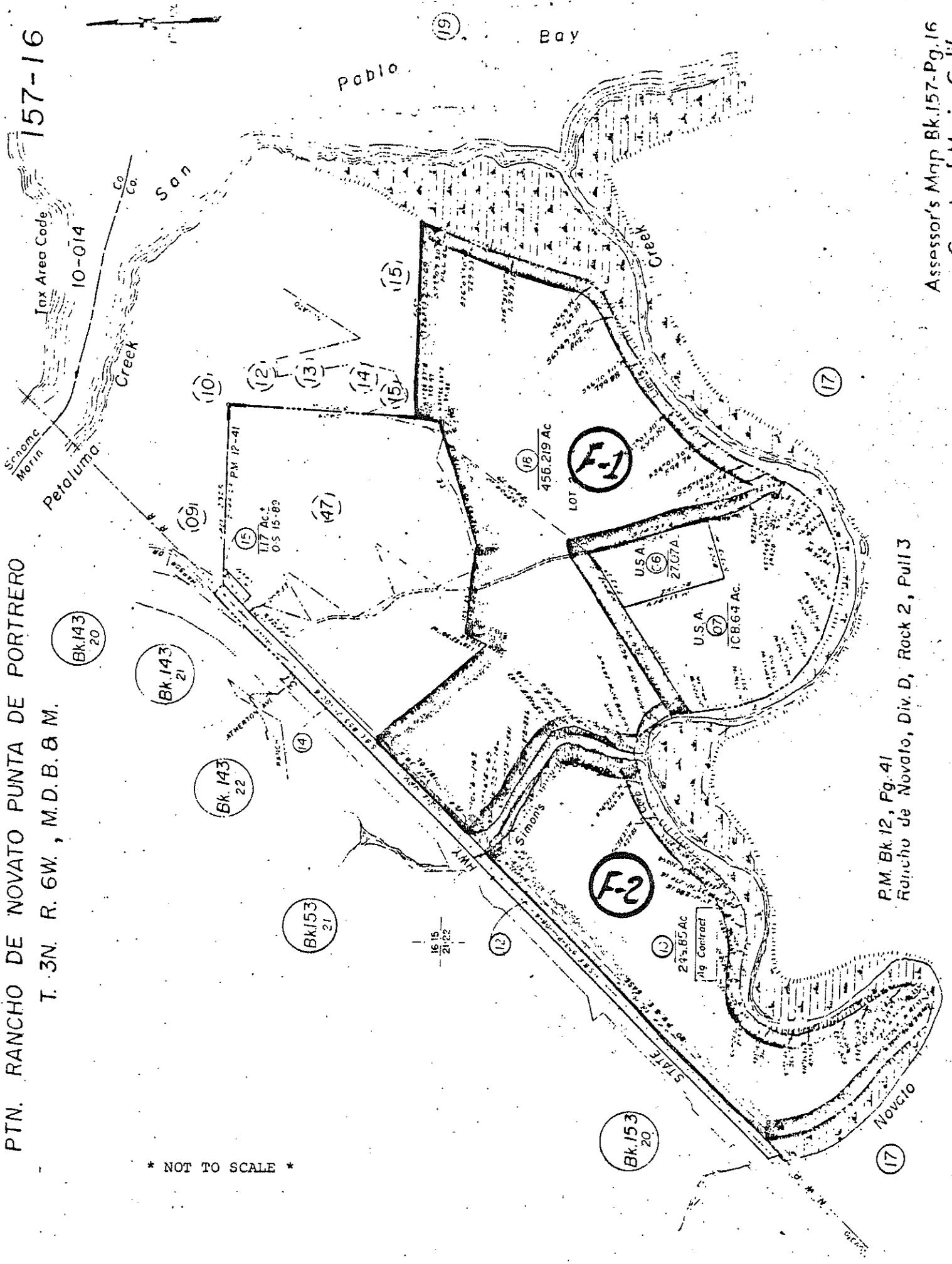
Said portion of land being more particularly described as follows:

BEGINNING at the intersection of the northwesterly line of the lands conveyed to the State of California as Parcel 1 by a Deed recorded October 17, 1959 in Book 1227 of Official Records at Page 44 with the Northeasterly line of the aforementioned lands of Marin County Flood Control and Water Conservation District (2872 OR 159 and 2999 OR 226); running thence from said point of beginning along said Northwesterly line of the State of California property in a southwesterly direction South 45° 38' West 1340.0 feet, thence leaving said Northwesterly line and running thence at right angles to said line in a Northwesterly direction North 44° 22' West to the intersection with the 8.5 foot contour line on the general Southerly slope of Deer Island (said 8.5 foot contour line is defined by the intersection of the presently existing ground surface with a level surface having a height of 8.5 feet above the National Geodetic Vertical Datum of 1929), said contour line being also the boundary of said aforementioned Marin County Flood Control and Water Conservation District lands, running thence easterly and northerly along said boundary defined by the 8.5 foot contour to the northerly line of said lands of the Marin County Flood Control and Water Conservation District; running thence along said boundary Northeasterly and thence Southeasterly to the point of beginning.

Containing 45 acres more or less.

PTN. RANCHO DE NOVATO PUNTA DE PORTERO  
T. 3N. R. 6W., M.D.B. & M.

157-16



\* NOT TO SCALE \*

P.M. Bk. 12, Pg. 41  
Rancho de Novato, Div. D, Rock 2, Full 3

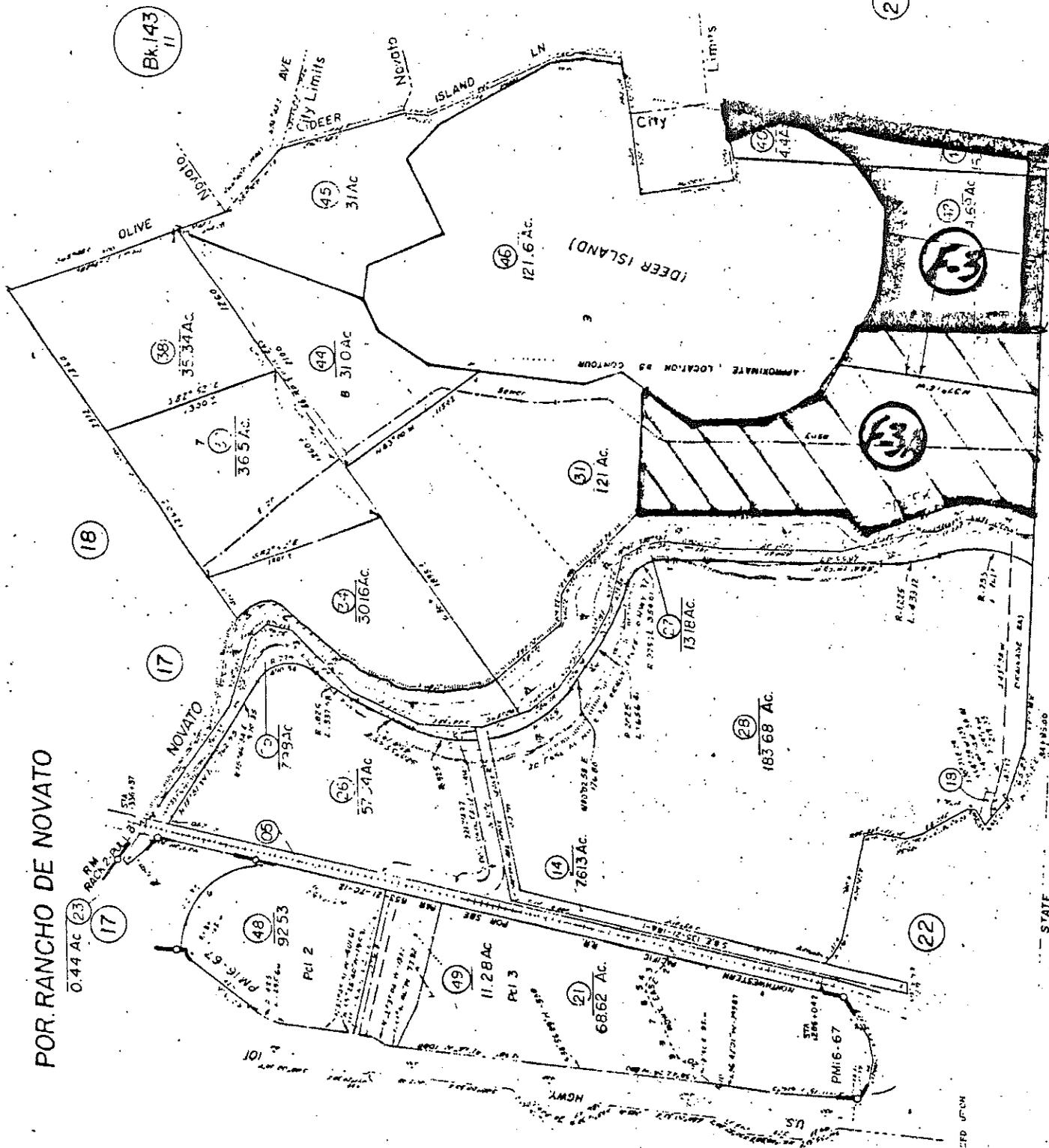
Assessor's Map Bk. 157-Pg. 16  
County of Marin, Calif.

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AND/OR CHECKED	2 26 71	...
	2 28 73	...
	2 28 74	...
	2 27 75	...
	2 28 77	...
	2 28 78	...

Exhibit "B"

153-20

- VD BEAR NG 1243
- 1 52700 W 813
- 2 52700 W 813
- 3 52700 W 813
- 4 52700 W 813
- 5 52700 W 813
- 6 52700 W 813
- 7 52700 W 813
- 8 52700 W 813
- 9 52700 W 813
- 10 52700 W 813



POR. RANCHO DE NOVATO

CITY OF NOVATO  
 Assessor's Map Bk.153-Pg.20  
 County of Marin, Calif.

STATE HIGHWAY 37  
 SONOMA VALLEY BRANCH

Bk.157  
 17

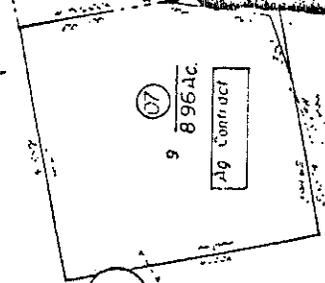
\* NOT TO SCALE \*

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Exhibit "C"

Date	By

(19)



\* NOT TO SCALE \*

12

(19) 228.25 Ac. Ag Contractor

F-4

(20)

(22) M/R SBE 135-21-22-2

(17)

ATHERTON

Bk. 143 19

F-5

F-6

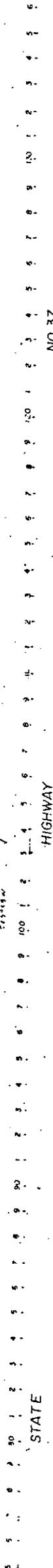
(23) 53.27 Ac.

(20) SBE 135-21-23-1

Bk. 143 22

AVE.

SNOWS



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 92-065  
WATER RECLAMATION REQUIREMENTS FOR:

NOVATO SANITARY DISTRICT  
NOVATO AND IGNACIO PLANTS  
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

1. The Novato Sanitary District (hereinafter discharger) submitted a Report of Waste Discharge to the Board on December 14, 1979, for the use of reclaimed wastewater. Waste discharge requirements were issued on April 15, 1980.
2. The discharger operates two wastewater treatment facilities, the Novato and Ignacio plants in Marin County (see attached map). The discharger presently discharges an average dry weather flow of 4.8 million gallons per day from the Novato and Ignacio plants into San Pablo Bay, a water of the State and United States. The treated wastewater is discharged through an outfall about 950 feet offshore. The wastewater receives biological secondary treatment through the activated sludge process at the Novato facility and biofiltration at the Ignacio facility. Both facilities provide tertiary treatment with nitrification towers and gravity filtration.
3. The discharge does not receive an initial dilution of 10:1 at all times. The discharger's outfall is located in the intertidal zone and is submerged only during tidal heights of at least 4.5 feet. At lower tides the outfall is exposed and the water line can range from 1000 to 2000 feet from the end of the diffuser.
4. The Basin Plan Discharge Prohibition No.1 states "It shall be prohibited to discharge any wastewater which has particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1, or into any nontidal water, dead-end slough, similar confined waters, or any tributary thereof.

Exceptions to the Basin Plan prohibitions may be considered where the discharger can show (1) a net environmental benefit as a result of the discharge, or (2) that the project is part of a reclamation project, or (3), that the discharge will provide equivalent protection.

5. An exception to the Basin Plan Discharge Prohibition No.1 is warranted based on the discharger's operation of a reclamation program described in Finding No.7. The discharger's NPDES permit prohibits discharge to the Bay from June through

August. The three month discharge prohibition insures that approximately 25% of the Average Dry Weather Flow (ADWF) is reclaimed. During the dry weather season, June 1 to August 31, all wastewater is reclaimed by spray irrigation to pasture land which is grazed by cattle.

6. The discharger is not required to use the nitrification towers or deep bed filters to meet effluent limits during the reclamation period. The secondary treatment facilities adequately treat the wastewater.
7. The discharger's wastewater reclamation project is located in Marin County, northeast and northwest of State Highway 37, near the intersection of Highway 37 and Novato Creek (see location map). This project includes an irrigation pump station, a dechlorination system, a wildlife marsh pond, two storage ponds, a spray irrigation system and 820 acres of irrigated pasture. The components of this project are described in Findings No. 8-12.
8. **Irrigation Pump Station:** The irrigation pump station houses three irrigation pumps as well as the wildlife pond drain pump, the sludge lagoon washdown water pump, and the wildlife pond feed pump. From the irrigation pump station, effluent is pumped to the permanent sprinkler system in the pasture and to the wildlife pond.
9. **Dechlorination System:** The dechlorination system is used to dechlorinate the effluent prior to discharge to the wildlife pond. The dechlorination station is located in the irrigation pump station. Dechlorination of water discharged to the wildlife pond is achieved through the injection of liquid sodium bisulfite.
10. **Wildlife Marsh Pond:** The wildlife marsh pond is operated year-round to provide a nesting habitat for water fowl and shorebirds and a protected resting area for wintering waterfowl. A management plan has been developed for the wildlife marsh pond. This plan specifies critical water depth levels which vary seasonally depending on the water requirements of the birds and other wildlife using the ponds.
11. **Storage Ponds:** Two storage ponds with combined storage capacity of 180 million gallons are used to store effluent during the summer months.
12. **Irrigated Pasture:** Effluent is disposed of through spray irrigation of 820 acres of pasture. Effluent is applied to the pasture through a fixed irrigation system. The storage ponds and irrigation system have proved adequate to permit the discharger to meet the no-discharge requirement from June 1 through August 31.
13. From September 1 through May 31, wastewater may be discharged to San Pablo Bay from the treatment plants, or the ponds. This discharge is regulated under a separate set of requirements, Order No. 85-32.
14. The State Water Resources Control Board (State Board) adopted the California Inland Surface Waters Plan and the California Bays and Estuaries Plan on April 11, 1991. These Plans identify water quality objectives for all inland surface waters

and enclosed Bays and estuaries in the state, and strategy for implementation of the objectives.

15. The Board adopted a revised Water quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for San Pablo Bay and contiguous waters.
16. The beneficial uses of San Pablo Bay are:
  - a. Wildlife habitat
  - b. Preservation of rare and endangered species
  - c. Fish migration and spawning
  - d. Water contact and non-contact recreation
  - e. Commercial and sport fishing
  - f. Marine habitat
  - g. Estuarine habitat
  - h. Industrial service supply
  - i. Navigation
  - j. shellfishing
17. Section 13523 of the California Water Code provides that the Regional Board may, after consulting with and receiving the recommendation of the Department of Health Services and determining that such action is necessary to protect the public health, safety, and welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.
18. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health Services, as prescribed in Title 22, Section 60355, California Administrative Code.
19. This Order is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to Section 13389 of the California Water Code.
20. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity for a public hearing and the opportunity to submit their written views and recommendations;
21. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the Discharger shall comply with the following:

**A. Prohibitions**

1. The treatment, storage, or disposal of waste shall not create a nuisance, as defined in Section 13050(m) of the California Water Code
2. Use of reclaimed water on areas not shown on the map which is attached to this order (Attachment A) is prohibited without written authorization from the Executive Officer.
3. The disposal of waste shall not cause degradation of groundwater suitable for domestic water supply or cause an increase in any quality parameter that would render groundwater unsuitable for irrigation use.
4. Reclaimed water shall not be applied to the disposal area during the wet weather season (November 15 through April 15) unless the following conditions are satisfied:
  - Use of reclaimed water for application to the land may be allowed during the period from November 15 through April 15, providing that there has been little or no rainfall during the weeks prior to discharge, and providing that the Executive Officer has approved the management plan as required in Provision 9.

Reclaimed water may be applied during the remainder of the year, except when the ground is saturated or during periods when rainfall or runoff from adjacent land can occur.

5. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.

**B. Discharge Specifications**

1. Waste within one foot of the surface of the wildlife and storage ponds shall meet the following quality limits at all times:

In any grab sample:

dissolved sulfide	0.1 mg/l max
dissolved oxygen	2.0 mg/l min
pH	6 to 9

2. A minimum freeboard of two feet shall be maintained in the storage and wildlife ponds at all times.
3. The storage ponds shall be protected against erosion, washout, and flooding

from a flood having a predicted frequency of once in 100 years.

4. At some point in the treatment process the wastewater shall meet the following limits at all times:

BOD: 40 mg/l/monthly average

Dissolved oxygen: 1.0 mg/l minimum

Dissolved sulfide: 0.1 mg/l maximum

pH: 6.0 minimum. 9.0 maximum

Coliform organisms: Median MPN shall not exceed 240 organisms per 100 ml at some point in the treatment system (median value to be obtained from last 5 samples). The MPN of a single sample shall not exceed 10,000 organisms per 100 ml, when verified by a repeat sample taken within 48 hours.

**C. Reclaimed Wastewater Use Limitations**

1. The use of reclaimed water under provisions of this order shall be limited to irrigation of fodder, fiber, and seed crops or discharge to the wildlife pond.
2. Areas irrigated with reclaimed wastewater shall be fenced and clearly identified with posted notices to the public. The method and form of notification shall be subject to the review and approval of the Executive Officer.
3. Reclaimed wastewater shall be applied to use areas in a manner which will prevent public contact with the wastewater.
4. Any equipment used to transport wastewater shall be clearly identified with warning signs to inform the public that wastewater is present, and that this water is unfit for human consumption.
5. No waste shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray or resurfacing after percolation. The disposal area shall be defined to mean the spray irrigation areas plus the ditch system draining the areas.
6. Reclaimed water shall be applied so as to minimize accumulation of water in the ditch system. Discharge of tailwater collected in the ditch system shall be prohibited from June 1 to August 31, except under written authorization of the Executive Officer. Such authorization shall be granted only on a demonstration by the discharger that discharge is necessary for the control of a nuisance condition, or to maintain the agricultural operations, and that

beneficial uses of receiving water will be protected.

7. Wastewater ponding which could provide a breeding area for mosquitoes shall be prevented.
8. The discharger shall discontinue use of reclaimed water during any period in which there is reason to believe that the limits specified in B.4 are not being met.

C. Provisions

1. This order supersedes Order 80-17, which is hereby rescinded.
2. The discharger shall comply with all sections of this order immediately upon adoption.
3. The discharger shall promote and encourage increased reclamation to reduce the amount of discharge to San Pablo Bay during the period of September 1 to May 31.
4. If the irrigation pasture area differs from that specified on the attached map, the discharger shall submit to the Board ninety days prior to the commencement of wastewater reclamation: maps showing areas to be irrigated, maps showing all wells, and plans as to how these wells will be protected.
5. The discharger shall comply with the self-monitoring program as adopted by this Board and as may be amended by the Executive Officer.
6. The discharger shall include all provisions in the leases with farm operators and landowners needed to assure full compliance with the requirements of this Order.
- 1998  
2003  
2008 7. The discharger shall update its management plan for the wildlife pond every five years, beginning in 1993. The revision, or a letter stating that no revision is necessary shall be submitted by April 15.
8. Milking animals shall be excluded from the wastewater disposal area. Sufficient time should be provided between application of reclaimed water and grazing by non-milking animals to allow the wastewater disposal area to dry thoroughly.
9. If the discharger chooses to dispose of reclaimed wastewater as discussed in Prohibition No.1, then a proposed management plan for the use of reclaimed water during extended dry periods of the wet weather months shall be submitted. This plan shall include criteria that can be used to evaluate whether it is appropriate to irrigate with reclaimed water during the wet weather period.
10. The discharger shall submit a report evaluating the performance of the

*late date  
2004*

*1996  
2000-2002 one was completed  
2003  
2005*

irrigated pasture every three years. The most recent report was submitted September, 1990. The next report is due by September 1, 1993. The purpose of this report shall be to verify that the reclamation site is properly managed such that the site can continue to dispose of the discharger's wastewater during the dry season. For this purpose, an update of the comprehensive 1990 report is adequate. This report will include recommendations by an agronomist or other appropriately certified professional regarding at a minimum the following:

- a. Operation and maintenance of the site regarding soil condition and vegetation
  - b. Appropriate reclaimed water application rates.
11. Fail-safe treatment shall be provided, including backup power facilities as needed, to assure continuous compliance with the no-discharge requirement and effluent limitations specified in this Order. For the purposes of this Order, this signifies that back-up power shall be available to operate the secondary treatment facilities and to insure the transfer of the treated wastewater to the storage ponds.
  12. Sludges and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Division 7.5 of the California Water Code. For the purposes of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Board and which is in full compliance therewith. The discharger's sludge storage and disposal are regulated under Board Order No.84-36. *which has been rescinded in Disch. Requirements*
  13. If someone other than the discharger is responsible for the schedule for applying reclaimed water, then the discharger shall inform that person or persons of these requirements, in a written agreement or other suitable manner.
  14. In reviewing compliance with requirements A.4, the Board will take special note of the difficulties which may be encountered in achieving compliance during entire wet seasons having a rainfall recurrence frequency greater than once in ten years and/or when rainfall events occur which disrupt the normal start-up of the irrigation season.
  15. In accordance with Section 13267 (c) of the California Water Code, the discharger shall permit the Board or its authorized representative :
    - a. Entry upon premises in which an effluent source is located or in which any required records are kept,
    - b. Access to copy any records required to be kept under terms and conditions of this Order,
    - c. Inspection of monitoring equipment records,
    - d. Sampling of any discharge.

16. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change in the character, location, or volume of the discharge.
17. The Board will review this Order periodically and may revise the requirements when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 17, 1992.



STEVEN R. RITCHIE  
Executive Officer

**Attachments:**

Location map and irrigation area map  
Standard Provisions and Reporting  
Requirements, December 1986  
Self-Monitoring Program

[File No. 2159.5022]  
[Originator/LCF]  
[Reviewer/RJC]

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM**

**FOR**

**NOVATO SANITARY DISTRICT**

**MARIN COUNTY**

**ORDER NO. 92 -065**

**CONSISTS OF**

**PART\_A, dated December 1986 (Standard Provisions and Reporting  
Requirements)**

**AND**

**PART\_B (Self Monitoring Program)**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**PART B**

**I. GENERAL**

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. The principal purposes of a self-monitoring program are:

- A. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and
- B. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

**II. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS**

**A. Effluent**

<u>Station</u>	<u>Description</u>
E-001	At any point in the Ignacio outfall following all treatment and prior to discharge (to ponds or reclamation). (1)
E-002	At any point in the Novato plant outfall following all treatment and prior to discharge.(1)
E-003	Combined effluent from the two plants, calculated arithmetically based on the respective flows and pollutant concentrations from each plant.(1)
E-004	At the point where treated wastewater enters the wildlife pond.(2) May be the same as E-003 if effluent is discharged directly to wildlife pond.
E-005	At the point where treated wastewater leaves the wildlife pond.(2)
E-006	This sample station has been eliminated (see Table 1 Notes, #5, for an explanation).

an explanation).

<u>Station</u>	<u>Description</u>
E-007	At any point in storage pond 1 where a representative sample of treated wastewater can be obtained.(2)
E-008	At any point in storage pond 2 where a representative sample of treated wastewater can be obtained.(2)
E-009	At any point in the reclamation system immediately prior to reclamation (by spray irrigation).(1)

(1) Sampling required whenever reclamation occurs, may extend beyond the June 1 to August 31 period.

(2) Sampling required year-round.

**B. L Stations**

Pond levee stations are to be located at the corners and midpoint of each pond.

Annual reports and self monitoring reports shall contain a map or maps clearly showing the location of these stations.

### **III. SCHEDULE FOR SAMPLING AND OBSERVATIONS**

See Table I and attached notes.

### **IV. REPORTS TO BE FILED WITH THE REGIONAL BOARD**

#### **1. Violations of Requirements**

A report shall be made of any accidental spill of waste. Accidental spills shall be reported to this Regional Board by telephone immediately after it occurs (510)464-1255. The subsequent written report shall be filed within five (5) days and shall contain information relative to:

- A. Nature of waste or pollutant,
- B. Quantity involved,
- C. Cause of spilling,
- D. Estimated size of affected area,
- E. Nature of effects (i.e., fish kill, discoloration of receiving water, etc.), and
- F. Corrective measures that have been taken, or planned, and a

schedule of these activities.

**2. Self-Monitoring Reports**

Written reports shall be filed regularly for each calendar month and submitted by the fifteenth day of the following month. The reports shall be comprised of the following:

**A. Letter of Transmittal**

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications. Monitoring reports and the letter transmitting reports shall be signed by a responsible official. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

**B. Data Results**

All results observed or analyzed in III, including dates and times of sampling and/or observations.

**C. Map**

A map shall accompany the report showing sampling and observation station locations.

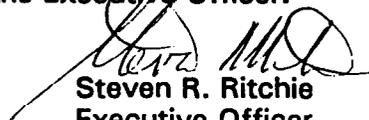
**3. Annual Reports**

An Annual Report for each calendar year shall be submitted to the Board by February 15th of the following year.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 92- 065.
2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.



Steven R. Ritchie  
Executive Officer

Date 6/17/92

**Attachments:**

A: Table 1 and Table 1 Notes

B: Design, Operation and Maintenance, Wildlife Pond, 1981 Report

### Table I Notes

1. Calculated value for combined effluent from both treatment plants. Flow data should be added. A weighted average based on flow should be used for other parameters.
2. The Self Monitoring Program in the previous permit, Order No.80-17, required the following study to be completed:

" The discharger will conduct an initial study of chlorine residual in plant effluent as effluent flows through the storage ponds prior to reaching the wildlife pond, under a range of different operating conditions. This initial study will be completed within three months of start-up of full reclamation activities. If this initial study shows that chlorine is consistently removed prior to the wildlife pond, then the discharger may take weekly grab samples at station E-003 and use the results to demonstrate zero residual entering the wildlife pond."

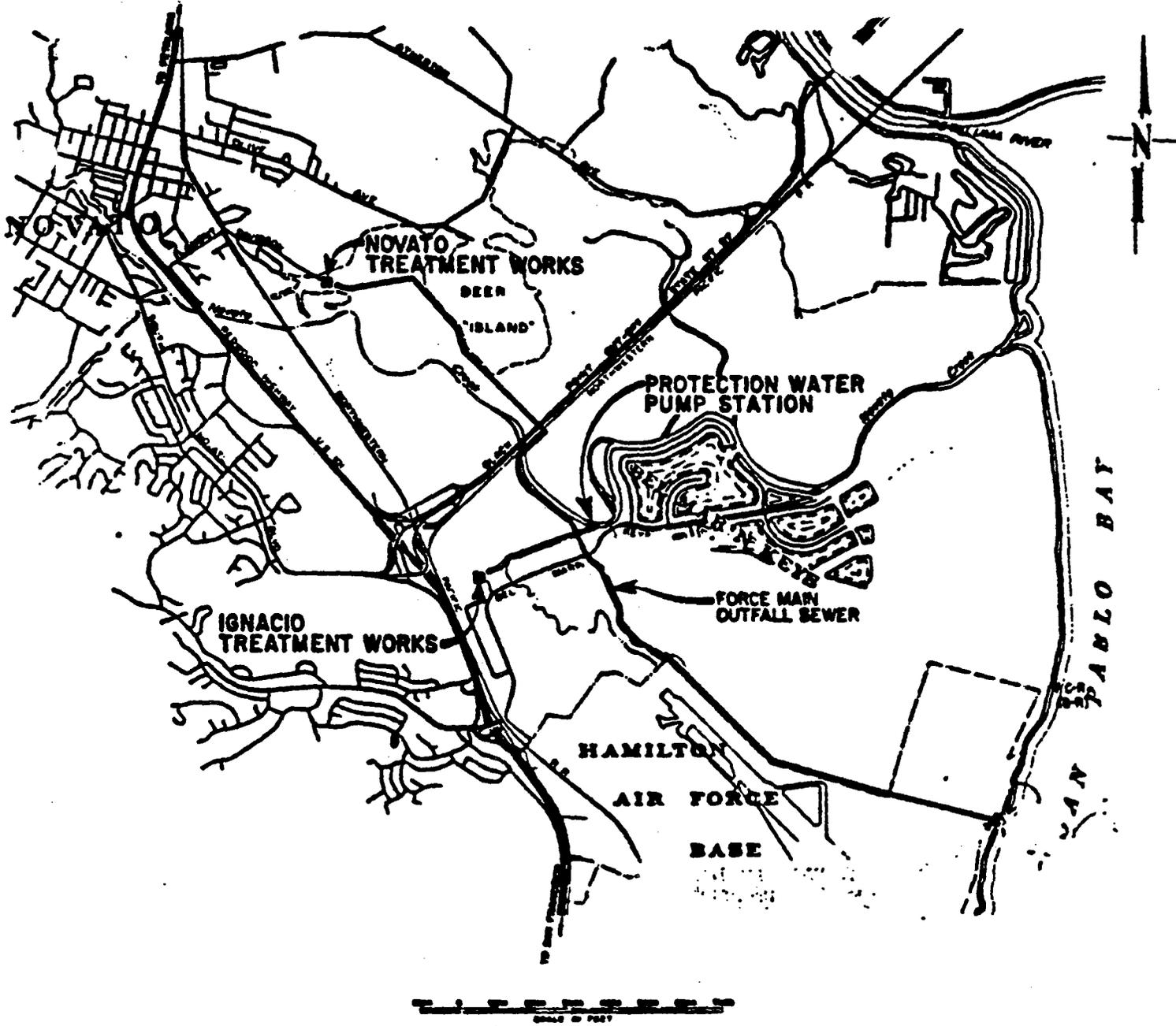
The discharger conducted the study in June, July and August 1986, as the above requirement specified. This study demonstrated that the chlorine residual dissipated prior to entry to the wildlife pond. Thus, weekly grab samples during discharge periods to the pond are now required as specified in Table 1. However, the preferred sampling location for this sample is Station E-004.
3. The median value for the last five analyses shall be used to determine compliance with the 240 MPN/100 ml requirement. Any single value of 10,000 MPN/100 ml occurring for any two consecutive samples shall be reported as a violation. shall be reported as a violation.
4. Pond dike station observations should include:
  - (i) Pond freeboard
  - (ii) Dike condition
  - (iii) Evidence of seepage through the dike
  - (iv) Scum or aquatic plant growth on the pond surface, if any
  - (v) Other weekly inspection items listed in the February, 1981 plan for design, operation, and maintenance of the wildlife pond (Attachment B) and not already required above
5. The Self Monitoring Program in the previous permit, Order No.80-17, required the following study to be completed:

"The discharger has the option of conducting a special study in August-September 1986. If the Executive Officer concludes that the wildlife pond exhibits little or no stratification, then he may delete this monitoring station. At least four samples should be taken on separate days. Samples should be taken in the early morning (before 8:00 a.m.) and following a typical hot summer day."

The discharger conducted the study in August and September of 1986. The study adequately documented that stratification did not occur and this monitoring station has been eliminated.

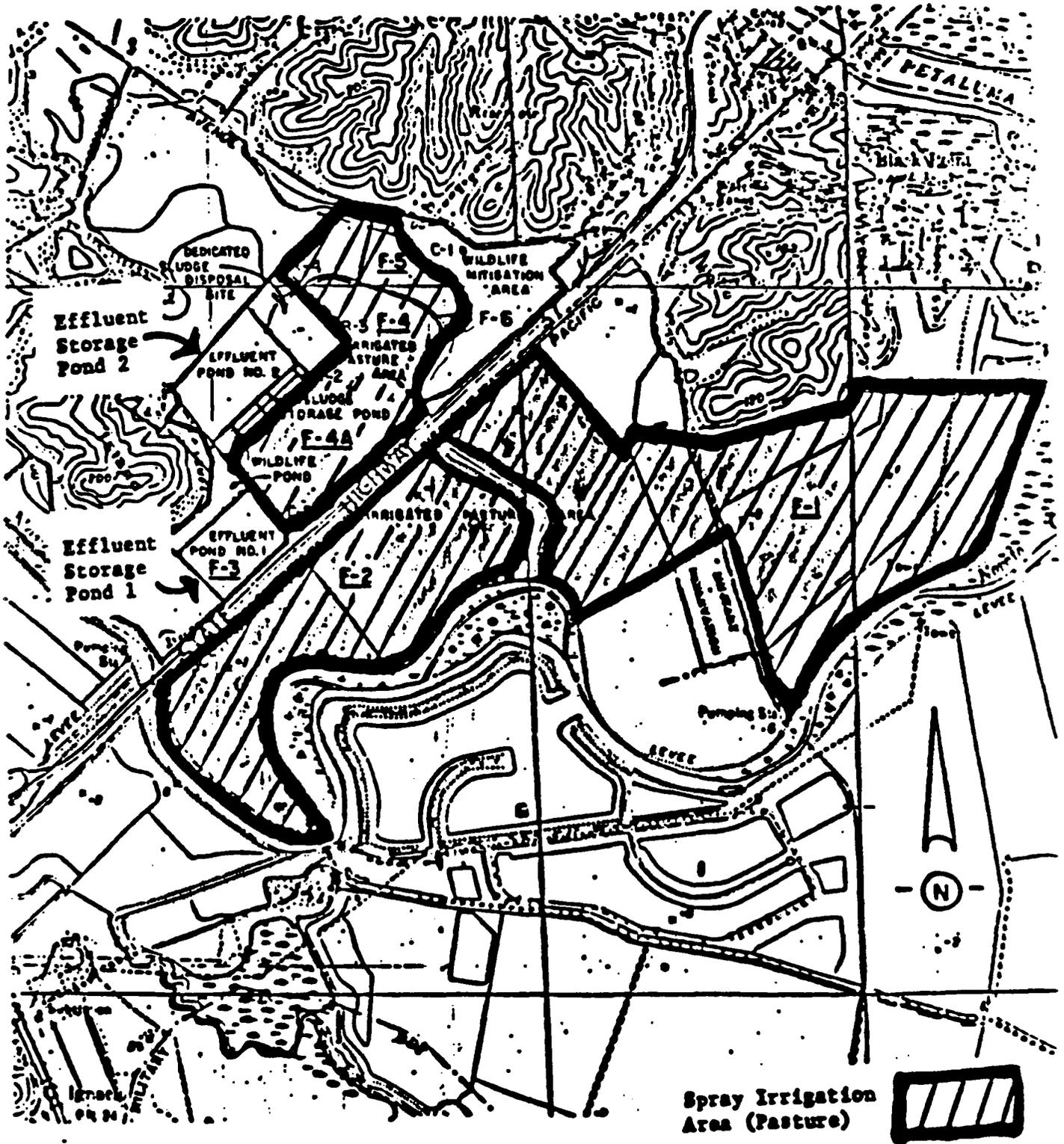
**TABLE 1  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS**

Sampling Station	E-001 & E-002	E-003	E-004	E-005	E-006	E-007	E-008	E-009	L	
TYPE OF SAMPLE	C-24	G	(1)	G	G	(5) G	G	G	C-24	O
Flow Rate (mgd)	D		D							
BOD, 5-day, 20°C or COD (mg/l & kg/day)	3/W		3/W							
Chlorine Residual & Dosage (mg/l & kg/day)				(2) W						
Settleable Matter (ml/l-hr. & cu. ft./day)										
Total Suspended Matter (mg/l & kg/day)	3/W		3/W							
Oil and Grease (mg/l & kg/day)										
Coliform (Total) (MPN/100 ml) per req't		(3) 3/W								
Fish Tox'y 96-hr. TL & Surv'l in undiluted waste										
Ammonia Nitrogen (mg/l & kg/day) (NH <sub>3</sub> -N)										
Nitrate Nitrogen (mg/l & kg/day)										
Nitrite Nitrogen (mg/l & kg/day)										
Total Organic Nitrogen (mg/l & kg/day)										
Total Phosphate (mg/l & kg/day)										
Turbidity (Jackson Turbidity Unit)										
pH (units)	5W			W	W		M	M		
Dissolved Oxygen (mg/l and % Saturation)	5W			W	W		M	M		
Temperature (°C)	5W			W	W		M	M		
Conductivity (mMho/cm)										
Secchi Disc (inches)										
Sulfides (if DO < 5.0 mg/l)										
Total & Dissolved (mg/l)										
Arsenic (mg/l & kg/day)										
Cadmium (mg/l & kg/day)										
Chromium, Total (mg/l & kg/day)										
Copper (mg/l & kg/day)										
Cyanide (mg/l & kg/day)										
Silver (mg/l & kg/day)										
Lead (mg/l & kg/day)										



MS 12-8-72

Map: Novato S.D. Wastewater Reclamation Project



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION  
DECEMBER 1986

STANDARD PROVISIONS AND REPORTING REQUIREMENTS

A. General Provisions

1. All Provisions and Reporting Requirements apply to all regulated discharges unless otherwise noted.
2. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
3. The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this order and permit which has a reasonable likelihood of adversely affecting public health or the environment, including such accelerated or additional monitoring as requested by the Regional Board or Executive Officer to determine the nature and impact of the violation. [40 CFR 122.41(d)]
4. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order.
5. Pursuant to Environmental Protection Agency regulations the discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the limits specified in 40 CFR 122.42(a).
6. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307 (a) of the Clean Water Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in a Board adopted Order, discharger must comply with the new standard or prohibition. the Board will revise or modify the Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
7. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the discharger must comply with the new standard. The Board will revise and modify this Order in accordance with such more stringent standards.
8. The discharge of any radiological, chemical, or biological warfare agent waste is prohibited.

9. Solids storage prior to final disposal shall be maintained to minimize runoff, to prevent leaching, and shall comply with all requirements contained in Title 23, Chapter 3, Subchapter 15 of the California Administrative Code.
10. All facilities used for transport, treatment, or disposal of wastes shall be adequately protected against overflow or washout as the result of a 100-year frequency flood.
11. Collection, treatment, storage and disposal systems shall be operated in a manner that precludes public contact with wastewater, except where excluding the public is inappropriate, warning signs shall be posted.
12. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Chapter 15 of Title 23 of the California Administration Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed or waived by a Regional Water Quality Control Board and which is in full compliance therewith.
13. This Order and Permit does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge or guarantee the discharger a capacity right in the receiving water. [40 CFR 122.41(g)]
14. The Regional Board or its authorized representatives shall be allowed:
  - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the order and permit;
  - b. Access to and copy at reasonable times any records that must be kept under the conditions of the order and permit;
  - c. To inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under the order and permit; and
  - d. To photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with the order and permit or as otherwise authorized by the Clean Water Act any substances or parameters at any locations. [40 CFR 122.41(i)]

15. This Order and Permit may be modified, revoked and reissued, or terminated in accordance with applicable State and/or Federal regulations. Cause for taking such action includes, but is not limited to any of the following:
  - a. Violation of any term or condition contained in the Order and Permit;
  - b. Obtaining the Order and Permit by misrepresentation, or by failure to disclose fully all relevant facts;
  - c. Endangerment to public health or environment that can only be regulated to acceptable levels by order and permit modification or termination; and
  - d. Any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
16. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 122.41(f)]
17. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by its permit. [40 CFR 122.41(h)]
18. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the discharger for plant bypass unless:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- c. The permittee submitted advance notice of the need for a bypass to the Regional Board. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass as required by 40 CFR 122.41(1)(6) (24 hour notice), as required in paragraph C.10.

The permittee may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

**B. Treatment Reliability**

1. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment disposal and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this order and permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The discharger shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this order and permit. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the Regional Board. [40 CFR 122.41(e)]
2. Safeguard to electric power failure:
  - a. The discharger shall, within ninety (90) days of the effective date of this permit, submit to the Regional Board for approval a description of the existing safeguards provided to assure that, should there be reduction, loss, or failure of electric power, the discharger shall comply with the terms and conditions of its Order. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past five years on effluent quality and on the capability of the discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Board.

- b. Should the Regional Board not approve the existing safeguards, the discharger shall, within ninety (90) days of having been advised by the Regional Board that the existing safeguards are inadequate, provide to the Regional Board and the Environmental Protection Agency a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the permittee shall comply with the terms and conditions of this permit. The schedule of compliance shall, upon approval of the Regional Board Executive Officer, become a condition of the Order.
  - c. If the discharger already has approved plan(s), the plan shall be revised and updated as specified in the plan or whenever there has been a material change in design or operation. A revised plan shall be submitted to the Regional Board within ninety (90) days of the material change.
3. POTW facilities subject to this order and permit shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Administrative Code.

C. General Reporting Requirements

1. All reports required by the order and permit and other information requested by the Regional Board or EPA Region 9 shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person. [40 CFR 122.22(b)]
2. All reports signed by a duly authorized representative shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. [40 CFR 122.22(d)]

3. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall promptly submit the missing or correct information. [40 CFR 122.41(1)(8)]

4. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall be subject to enforcement procedures as identified in Section D of these Provisions.
5. This permit is not transferable to any person except after notice to the Regional Board. The Regional Board may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
6. Transfer of control or ownership of a waste discharge facility under an National Pollutant Discharge Elimination System permit must be preceded by a notice to the Regional Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing discharger and proposed discharger containing specific dates for transfer of responsibility, coverage, and liability between them. Whether an order and permit may be transferred without modification or revocation and reissuance is at the discretion of the Regional Board. If order and permit modification or revocation and reissuance is necessary, transfer may be delayed 180 days after the Regional Board's receipt of a complete application for waste discharge requirements and an NPDES permit.
7. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
8. The discharger shall file with the Board, for Executive Officer review and approval within ninety (90) days after the effective date of this Order, a technical report or a statement that the existing plan(s) was reviewed and updated, as appropriate, on preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report or updated revisions should:
  - a. Identify the possible sources of accidental loss, untreated or partially treated waste bypass, and polluted drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
  - b. Evaluate the effectiveness of present facilities and procedures and state when they became operational.
  - c. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

This Board, after review of the technical report or updated revisions, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger. If the discharger already has an approved plan(s) he shall update them as specified in the plan(s).

9. Reports of compliance or noncompliance with, or any progress reports on, interim and final compliance dates contained in any compliance schedule shall be submitted within 10 working days following each scheduled date unless otherwise specified within this order and permit. If reporting noncompliance, the report shall include a description of the reason for failure to comply, a description and schedule of tasks necessary to achieve compliance and an estimated date for achieving full compliance. A final report shall be submitted within 10 working days of achieving full compliance, documenting full compliance
10. Twenty-four hour reporting:
  - (a) The permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five working days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
  - (b) The following shall be included as information that must be reported within 24 hours under this paragraph:
    - (A) Any unanticipated bypass that exceeds any effluent limitation in the permit.
    - (B) Any upset that exceeds any effluent limitation in the permit.
    - (C) Violation of a maximum daily discharge limitation for any of the pollutants listed in this permit to be reported within 24 hours.
  - (c) The Regional Board may waive the above-required written report on a case-by-case basis.

11. All POTWs must provide adequate notice to the Regional Board of:

- (a) Any introduction of new pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.
- (b) Any substantial or material change in the volume or character of pollutants being introduced into that POTW by an input source at the time of issuance of the permit.

Adequate notice shall include information on the quality and quantity of influent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

D. Enforcement

- 1. The provision contained in this enforcement section shall not act as a limitation on the statutory or regulatory authority of the Regional Board.
- 2. Any violation of the permit constitutes violation of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, and is the basis for enforcement action, permit termination, permit revocation and reissuance, denial of an application for permit reissuance; or a combination thereof.
- 3. The Regional Board may impose administrative civil liability, may refer a discharger to the State Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code or federal law for violation of Regional Board orders.
- 4. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order and permit.
- 5. A discharger seeking to establish the occurrence of any upset (See Definitions, E.23) has the burden of proof. A discharger who wishes to establish the affirmative defense of any upset in an action brought for noncompliance shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
  - a. an upset occurred and that the permittee can identify the cause(s) or the upset;
  - b. the permitted facility was being properly operated at the time of the upset;

- c. the permittee submitted notice of the upset as required in paragraph c.10.; and
- d. the permittee complied with any remedial measures required under A.3.

No determination made before an action for noncompliance, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

In any enforcement proceeding, the permittee seeking to establish the occurrence of any upset has the burden of proof. [40 CFR 122.41(n)]

#### E. Definitions

1. Bypass means the intentional diversion of waste streams from any portion of treatment facility.
2. Daily discharge means:
  - a. For flow rate measurements, the average flow rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
  - b. For pollutant measurements, the concentration or mass emission rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.
3. Daily Maximum Limit means the maximum acceptable daily discharge. For pollutant measurements, unless otherwise specified, the results to be compared to the daily maximum limit are based on composite samples.
4. DDT and Derivatives shall mean the sum of the p,p' and o,p' isomers of DDT, DDD (TDE), and DDE.
5. Duly authorized representative is one whose:
  - a. Authorization is made in writing by a principal executive officer or ranking elected official;
  - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general manager in a partnership, manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

- c. Written authorization is submitted to the Regional Board and EPA Region 9. If an authorization becomes no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Regional Board and EPA Region 9 prior to or together with any reports, information, or applications to be signed by an authorized representative.
6. Hazardous substance means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.
7. HCH shall mean the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.
8. Inadequately Treated Waste is wastewater receiving partial treatment but failing to meet discharge requirements.
9. Incompatible pollutants are:
- a. Pollutants which create a fire or explosion hazard in the POTW;
  - b. Pollutants which will cause corrosive structural damage to the POTW, or wastewaters with pH lower than 5.0 pH units, unless the facilities are specifically designed to accommodate such wastewater;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
  - d. Any pollutant, including oxygen-demanding pollutants (e.g., BOD) released into the wastewater system at a flow rate and/or pollutant concentration which will cause interference with the POTW.
  - e. Heat in amounts which will inhibit biological activity in the POTW and result in interference, or heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the works is designed to accommodate such heat or the Regional Board approves alternate temperature limits.
10. Indirect discharger means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.
11. Initial dilution is the process which results in the rapid and irreversible turbulent mixing of wastewater with receiving water around the point of discharge.

12. Mass emission rate is obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.345}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q<sub>i</sub>' and 'C<sub>i</sub>' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples which may be taken in any calendar day. If a composite sample is taken, 'C<sub>i</sub>' is the concentration measured in the composite sample and 'Q<sub>i</sub>' is the average flow rate occurring during the period over which samples are composited. The daily concentration measured over any calendar day of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$C_d = \text{Average daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q' and 'C' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q<sub>t</sub>' is the total flow rate of the combined waste streams.

13. Maximum allowable mass emission rate, whether for a 24-hour, weekly 7-day, monthly 30-day, or 6-month period, is a limitation expressed as a daily rate determined with the formulas in paragraph above, using the effluent concentration limit specified in the order and permit for the period and the specified allowable flow. (Refer to Section C of Part A of Self-monitoring Program for definitions of limitation period)
14. Overflow is defined as the intentional or unintentional spilling or forcing out of untreated or partially treated wastes from a transport system (e.g. through manholes, at pump stations, and at collection points) upstream from the plant headworks caused by excess flow in the transport system.
15. POIW means Publically Owned Treatment Works.

16. POTW Removal efficiency is expressed as the percentage of the ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities. Removal efficiencies of a treatment plant shall be determined using monthly averages of pollutant concentration of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

$$\text{Removal Efficiency (\%)} = 100 \times [1 - (\text{Effluent Conc}/\text{Influent Conc})]$$

When preferred, the discharger may substitute mass loadings and mass emissions for the concentrations.

17. Priority pollutants are those constituents referred to in 40 CFR S122, Appendix D and listed in the EPA NPDES Application Form 2C, (dated 6/80) Items V-3 thru V-9.
18. Sludge means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in wastewater by the unit processes of a treatment system. It also includes but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.
19. Toxic pollutant means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act or under 40 CFR S401.15.
20. Total Identifiable Chlorinated HydroCarbons (TICH) shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, PCBs and other identifiable chlorinated hydrocarbons.
21. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass or overflow. It does not mean economic loss caused by delays in production.
22. Untreated waste is defined as raw wastewater.
23. Upset means an exceptional incident in which there is unintentional temporary noncompliance with effluent technology based permit limitations in the order and permit because of factors beyond the reasonable control of the discharger. It does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

24. Waste, waste discharge, discharge of waste, and discharge are used interchangeably in this order and permit. The requirements of this order and permit are applicable to the entire volume of water, and the material therein, which is disposed of to surface and ground waters of the State of California.

**Marin Independent Journal**

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

**STATE OF CALIFORNIA  
County of Marin**

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

**03/25/2019, 04/01/2019**

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

Dated this 1st day of April, 2019.



Signature

**PROOF OF PUBLICATION**

Item 7.a. - 7.g.  
Attachment 2

Legal No. **0006312519**

**NOTICE OF PUBLIC HEARING  
PASTURE LEASE - RECLAMATION FACILITY  
NOVATO SANITARY DISTRICT**

**NOTICE IS HEREBY GIVEN** that the Board of Directors of the NOVATO SANITARY DISTRICT has stated its intent to conduct a public hearing for the purpose of: (1) considering the lease of approximately 790 acres of irrigated pasture land adjacent to Highway 37 in Novato; (2) making the finding that the property will be used for District compatible uses; and (3) will serve the public interest. The proposed lease term is for a period up to ten (10) years for the purpose of dry weather pasturing of beef cattle and/or non-milking dairy animals, and harvesting of pasture grass to be utilized for feeding animals.

**NOTICE IS FURTHER GIVEN** that on Monday, the 8th day of April, 2019, at the hour of 5:30 p.m. at the regular meeting place of said District, 500 Davidson Street, Novato, California, said Board will hear and consider all protests and objections to the proposed lease.

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

Dated: March 20, 2019

\_\_\_\_\_/s/ Sandeep S. Karkal  
Sandeep S. Karkal, Secretary  
Novato Sanitary District

NO.394 MARCH 25, APRIL 1, 2019



## 2018 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT



**Prepared by:**

**Veolia Water West Operating Services, Inc.  
500 Davidson Street  
Novato, CA 94947**

**March 2019**

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## Overview

The continued priorities for 2018 were to meet the goals of zero lost time incidents or Occupational Safety Health Act recordable incidents and no treatment plant effluent violations. This is a year in and year out objective plainly stated and firmly established throughout Veolia North America (*Veolia*). A term we apply to this end is "Zero Harm". We are very happy and proud to report that both goals were met. 2018 represents our seventh consecutive year of zero effluent violations and eighth year of zero recordable incidents. We celebrate this success with the Novato Sanitary District on its vision and commitment to the protection of water quality and the environment.

Key areas of focus throughout the year include:

- Safety Training
- Regulatory Compliance
- Third Party Facility Reviews – Safety, Management Operations, and Maintenance Audits
- Reporting (internal and external)
- Records Keeping and Data Base Management
- No Safety Incidents (recordable, lost time, or medical)
- Participation in Company *Near Miss* Reporting Program (focused on prevention)
- Employee Education and Certification / Professional Advancement
- Community Outreach and Participation
- Effective Asset Management by using Oracle Work Asset Management System (OWAM) for Maintenance Tracking, Scheduling, Inventory, and Purchasing.
- Operation, Management, & Oversight of Laboratory and Pretreatment Program.
- Facility Energy Management Program.

## Treatment Plant Design Criteria

Wastewater is collected throughout the Novato Sanitary District service area and conveyed by gravity as well as mechanical means (pump stations) to the Novato Treatment Plant (*NTP*). Listed below are the descriptions of each of the processes. Table 1.0 below provides the influent design criteria.

Table 1.0

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

## Preliminary Treatment - Influent Pump Station and Headworks

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

## Flow and Loading Measurement

Flow at the NTP is measured using a parshall flume and hydro ranger™ ultra-sonic level meter in combination.

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

## Primary Treatment – Primary Clarifiers

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

The NTP primary clarifiers are covered to contain air associated with raw sewage, air is removed and discharged to odor scrubbing biofilters.

## Secondary Treatment – Aeration Basins & Secondary Clarifiers

After screening, grit removal, and primary solids removal, all wastewater receives full secondary treatment. Large rectangular tanks with baffle walls, mechanical mixers, air diffusers, and recirculation pumps make up the aeration basins. Four aeration basins, each with a capacity of more than 850,000 gallons provides complete secondary treatment under all flow conditions. Each aeration basin has three anoxic (no dissolved oxygen) zones accounting for almost 25% of the tank volume. The anoxic zones convert nitrate and nitrite to nitrogen gas to reduce the level of total nitrogen in the effluent.

## Ultra Violet (UV) Disinfection

Prior to discharge wastewater must be disinfected. Ultra violet light disrupts the DNA of pathogens and other life forms leaving them incapable of reproduction.

## Effluent Disposal – Bay Discharge / Reclamation / Storage

Discharge to San Pablo Bay (Bay Discharge), is prohibited beginning June 1<sup>st</sup> through August 31<sup>st</sup>. Bay discharge is permitted (with stringent effluent limits) in the months of May, September and October. Throughout the non-discharge season effluent is either stored for future use, specifically for pasture irrigation.

## Effluent Reuse – Recycled Water

Recycled water was produced in 2018 for use to irrigate parks, landscaping, and golf courses. Additionally, a portion of the recycled water is provided to a car wash facility. Recycled water receives added treatment in order to comply with stringent Title 22 regulations.

## Treatment Plant Performance

The tables that follow provide the summary for the plant performance, maintenance program, consumables and energy results for the period January 1, 2018 through December 31, 2018. The Annual Waste Characteristics & Loading Summary is provided in the attachment sections of this report.

2018 INFLUENT FLOWS AND LOADING SUMMARY			
Condition	Value	Unit	Notes
Average Dry Weather Flow	3.44	MGD	Jul / Aug / Sep
Peak Wet Weather Flow (Max Day)	14.9	MGD	
Max Peak Wet Weather (1-3 Hour)	47.0	MGD	
Average BOD Loading	10,569	Lbs/D	
Average TSS Loading	11,046	Lbs/D	

PLANT EFFLUENT 2018		
	Value	Unit
BOD Removal	98	%
TSS Removal	98	%

Total Volume of Wastewater	1569.28	Million Gallons
Total Volume of Reclaimed Water	310.29	Million Gallons
Recycled – Title 22 (included in Water Reclaimed)	165.41	Million Gallons
Flow Discharged to San Pablo Bay	1102.57	Million Gallons
Average Daily Dry Weather Flow	3.44	MGD
Maximum Daily Flow	28.96	MGD
Pounds of BOD Treated	3,952,514	Lbs
Pounds of BOD Removed	3,873,987	Lbs
Percent BOD Removal Efficiency	98	%
Pounds of TSS Treated	4,083,392	Lbs
Pounds of TSS Removed	4,017,953	Lbs
Percent of TSS Removal Efficiency	98	%

Pounds of Bio-solids Treated	2,954,332	Lbs
Cubic Feet of Biogas Produced	24,910,100	Cu Ft
Total Number of Violations / Excursions	0	
NPDES (Bay Discharge)	0	
WDR (Reclamation)	0	

### Maintenance Program Summary

Total Number of Preventive Work Orders	1966
Total Number of Corrective Work Orders	441
Percentage Preventive Maintenance Ratio %	77.57%

### Consumables and Energy Summary

Total Million Gallons	1569.28
Million Gallons Day	51.54
*Electricity – kWh / Year	3,894,254
Electricity – kWh / MG	2,481
*Natural Gas – Therms / Year	43,900
Natural Gas – Therms / MG	27
Diesel Fuel – Gallons / Year	1084
Diesel Fuel – Gallons / MGD	21

\*Excludes Administration Building and Recycled Water Plant

Tables 3.0

Waste Discharge Limits / Reclamation				
Parameter	Limit	Units	# Analysis	Violations
BOD Monthly Average	40	mg/L	3	0
Total Coliform – 5 Sample Median	240	mpn/100 ml	44	0
Total Coliform - Maximum	10,000	mpn/100 ml	48	0
pH – High	9.0	s.u.	66	0
pH – Low	6.0	s.u.	66	0

NPDES Wet Season Limits - November – April				
Parameter	Limit	Units	# Analysis	Violations
BOD Weekly	45	mg/L	25	0
BOD Monthly	30	mg/L	6	0
TSS Weekly	45	mg/L	25	0
TSS Monthly	30	mg/L	6	0
BOD Removal (minimum)	85	%	6	0

TSS Removal (minimum)	85	%	6	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	6	0
Fecal Coliform - Median	140	mpn/100 ml	3	0
Fecal Coliform - 90 <sup>th</sup> Percentile	430	mpn/100 ml	3	0
Ammonia – Daily Maximum	21	mg/L	6	0
Ammonia - Monthly Average	6	mg/L	6	0
pH – High	8.5	s.u.	95	0
pH – Low	6.5	s.u.	95	0
Oil & Grease - Daily Maximum	15	mg/L	6	0
Oil & Grease - Monthly Average	5	mg/L	6	0

NPDES Dry Season Limits - May, September, & October				
Parameter	Limit	Units	# Analysis	Violations
BOD Weekly	30	mg/L	11	0
BOD Monthly	15	mg/L	3	0
TSS Weekly	20	mg/L	11	0
TSS Monthly	10	mg/L	3	0
BOD Removal (minimum)	85	%	3	0
TSS Removal (minimum)	85	%	3	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	4	0
Fecal Coliform - Median	140	mpn/100 ml	1	0
Fecal Coliform - 90 <sup>th</sup> Percentile	430	mpn/100 ml	1	0
Ammonia – Daily Maximum	21	mg/L	3	0
Ammonia - Monthly Average	5.9	mg/L	3	0
pH – High	8.5	s.u.	66	0
pH – Low	6.5	s.u.	66	0
Oil & Grease - Daily Maximum	15	mg/L	3	0
Oil & Grease - Monthly Average	5	mg/L	3	0

## Operational Program

Throughout 2018, the majority of the treatment plant equipment operated full time with the exception of the listed provided below. All of the Ignacio Transfer Pump Station (ITPS) equipment was fully operational during 2018.

### Novato Treatment Plant - Equipment Out of Service – Due to Planned Servicing, Maintenance, or Replacement

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

# Environmental Services Program

## Wildlife Pond and Reclamation Activities

Samples and weekly/monthly observations at the Wildlife pond were taken according to the WDR (Order No. 92-065) throughout the year. Monthly irrigation wet well samples were monitored during the irrigation season.

## NPDES and WDR Permit Monitoring Program

The monthly, quarterly, semi-annual, and annual monitoring and reporting requirements (Electronic Self-Monitoring Report (eSMR), Electronic Discharge Monitoring Report (DMR), Pretreatment Program, Pollution Prevention and Waste Minimum, Recycled Water Reports) were submitted as required. The Biosolids, Pasture, and Reclamation reports were submitted on behalf of the Novato Sanitary District.

## Pasture Soil Sampling and Inspection

Soil sampling and analysis from the pastures was completed in September. The results were included in the 2018 Triennial Irrigated Pasture Report.

Stephanie Larson PhD, Director of University of California Cooperative Extension, Sonoma conducted a tour and inspection of the irrigated pasturelands with Jeff Boheim, Novato Sanitary District Field Services Manager and Liz Falejczyk, Veolia Water Environmental Services Supervisor. Similar to prior occasions, Dr. Larson issued a findings and recommendations report which was also included in the 2018 Triennial Irrigated Pasture Report.

## Public Education

Throughout 2018, Liz Falejczyk, Kurt Hawkyard, Veolia Water Laboratory Technician, and Julie Hoover, Novato Sanitary District Administrative Secretary participated in one or all of the activities listed below.

- Demonstration of wastewater processes and tour of the treatment plant for San Marin High School Applied Chemistry and Biotechnology classes; approximately 40 students participated.
- Microsoft® Power Point slide presentation was created to show how a wastewater treatment operates for use at public education days at the Novato local library.
- Marin County wastewater treatment plant's public education committee activities and meetings.
- Watershed Week for STRAW (Students and Teachers Restoring A Watershed) event sponsored by Point Blue Conservation Science.
- Marin County wastewater agencies public education committee juggler show at the Lu Sutton elementary school.
- North Bay Science Discovery Day.
- After school public awareness presentation at the Novato Public Library for the importance of not using the toilet as a trash can.

- Vintage Oaks Shopping Center businesses and Novato High School; purchase of awareness signage for posting in public restrooms to educate the public to reduce trash being flushed down the toilets.

### Training

Liz Falejczyk (34.7 contact hours) and Kurt Hawkyard (22.5 contact hours) attended the training sessions listed below.

- Liz attended the State of California Environmental Laboratory Accreditation Program TNI 2016 Standard Training Series/Sessions 3, 4 and 5 of 6 trainings.
- Kurt attended the State of California Environmental Laboratory Accreditation Program TNI 2016 Standard Training Series/Session 1, 2 and 3 of 6 trainings.
- The Veolia operated laboratory welcomed a summer intern from a local high school. The internship includes training for basic laboratory safety and techniques.
- Liz attended HACH WIMS™ user group training at the Napa Sanitation District.
- Kurt attended a *Tool Belt Training* in Windsor, CA presented by the California Water Environment Association Pretreatment, Pollution Prevention, Stormwater (P3S) Committee. This training focused on strategies for effective field inspections.

### Whole Effluent Toxicity Testing

Quarterly Acute (96 hours) and Chronic (7 days) Toxicity testing is required during Bay Discharge season. Testing was performed in January, April, September and December in 2018. All 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. Table 5.0 below provides the 2016-2018 results.

Table 4.0 Historical Toxicity Testing 2016-2018

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

### Proficiency Testing

U.S. EPA DMR-QA 38 Proficiency Testing Study was conducted in 2018 and 100% acceptable results were achieved. This was a collaborative effort between Kurt Hawkyard, Liz Falejczyk and Jessica Bena-Nommsen, North Marin Water District Chemist I for the NSD Laboratory. The Certificates of Excellence are provided below. In addition the DMR-QA studies performed by all contract laboratories that routinely perform or support self-monitoring analyses required by National Pollution Discharge Elimination System permit were evaluated for proficiency and submitted to the State Water Board Quality Assurance Officer/State DMR-QA Coordinator.

## CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for  
WP-278

Novato Sanitary District Laboratory

is issued this certificate of achievement by ERA. This laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study which included 1004 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Demand	Hardness
Minerals	pH
Simple Nutrients	Total Residual Chlorine
Turbidity	WasteWatR™ Coliform
	MicrobE™
WasteWatR™ Coliform	
MicrobE™ - SM 9221	



Matthew Seebeck  
Quality Officer

1653931

## CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for  
WS-261

Novato Sanitary District Laboratory

is issued this certificate of achievement by ERA. This laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study which included 736 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Heterotrophic Plate Count  
WS SourceWatR™  
MicrobE™



Matthew Seebeck  
Quality Officer

1653931

### California Environmental Laboratory Accreditation Program

The ELAP certification for the NSD Laboratory was renewed, maintaining all certifications that were in place and adding one method under Field of Testing (FoT) 108 Inorganic Chemistry of Wastewater and one new FoT 101 Microbiology of Drinking Water which enables the laboratory to perform the IDEXX Method for Total Coliform for Recycled water in-house.

### Monitoring Wells

On November 1, 2018, sampling and data collection of the Designated Land Disposal (DLD) site, and former Ignacio Sludge Lagoons groundwater monitoring wells was conducted by Jessica Bena-Nommsen, and Kurt Hawkyard.

### Marin County Stormwater Pollution Prevention Program (MCSTOPPP)

Liz Falejczk attended the quarterly Community Advisory Committee for the MCSTOPPP where she serves as a wastewater advisory member.

### **Bay Area Clean Water Agency (BACWA)**

- January-December 2018, Liz Falejczk attended BACWA Pretreatment, Permits and Laboratory Committee meetings.
- Liz attended BACWA Laboratory Committee Meetings and Nutrient Optimization/Upgrade Study Draft Report Review.
- Liz also attended the 2018 San Francisco Estuary Institute's Regional Monitoring Program Annual Meeting in Berkeley, California.

### **Coordination of Environmental Services with NSD Staff**

Working closely with District staff on the implementation of the Industrial Pretreatment Program in 2018, communication and coordination of activities focused on the goals and objectives below:

- Engineering-coordination of inspections and file review
- Finance-invoicing and tracking of payments
- Public education-support for staffing and emphasizing specific pollutants
- Collections-targeting problem areas for FOG

### **Mutual Assistance**

Liz Falejczyk participated on interview panels for open laboratory positions at the City of Mill Valley/Sewerage Agency of Southern Marin, Central Marin Sanitation Agency, and the Town of Windsor, CA.

## **Asset Management Program**

### **Computerized Maintenance Management System (CMMS)**

Key components of an Oracle Work Asset Management (OWAM) software program include:

- OWAM is a robust multi-layered asset management system which provides modules for purchasing, inventory control, asset life cycle cost, as well as the typical scheduling and maintenance tracking tools.
- Preventive maintenance (PM) is a scheduled maintenance activity generally tied to equipment runtime or time periods (weekly/quarterly).
- Equipment inventory is crucial to all phases of Asset Management. Equipment at the NTP has been entered into the OWAM data base.
- The Criticality Assessment is typically performed every 5 years.

The next scheduled assessment is scheduled for 2019. The assessment will evaluate the processes and equipment and develop a rating for the relative importance. The results of the assessment are used in developing the priorities for equipment replacement and preventative maintenance.

**2018 MAINTENANCE ACTIVITIES OVER \$10,000.00 – DISTRICT FUNDED**

<b>January 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Dry Weather Pump #4	Rebuilt pump and motor

<b>April 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Wet Weather Pump #1	Replaced control unit
	Ignacio Grinder	Replaced cutter cartridge

<b>May 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Digested Sludge Pumps	Replenished stock - rotor and stator

<b>June 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Odor Bed #2	Removal and replacement of woodchip media

<b>August 2018</b>	<b>Equipment</b>	<b>Activity</b>
	UV Transmittance Analyzer	Replaced analyzer

**2018 MAINTENANCE ACTIVITIES OVER \$10,000.00 – VEOLIA FUNDED**

<b>April 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Polymer Tote area	Installed shelter to provide sun/rain protection for totes

<b>May 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Odor Bed #1	Removal and replacement of woodchip media

**2018 MAINTENANCE ACTIVITIES UNDER \$10,000.00**

<b>January 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Emergency Generator #3	Replaced fuel lines
	Blower Building	Replaced condensate motor on HVAC-blower side
	Dodge Truck – Operations	Repair work
	Ignacio – Headworks	Cleaned and vactored headworks – gravel and debris
	Screw Conveyor	Replaced liner
	Aeration Basin Mixer 2C	Replaced mechanical seal
	WAS Pump #1	Replaced impeller

<b>February 2018</b>	<b>Equipment</b>	<b>Activity</b>

<b>March 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Boiler	Replaced UV scanner, UV amp card, actuator and gas valve
	Septage Receiving Station	Replaced motor
	Blower #1	Replaced contactor/main breaker
	Sludge Transfer Pump #1	Replaced stator and motor
	Ignacio Uninterruptable Power Supply	Replaced battery pack

<b>April 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Maintenance Truck	Replaced steering gearbox
	Flare	Temporary modifications to damper
	Jerome Meter	Annual calibration

<b>May 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Digester #2	Replaced gas pressure transmitter
	Gravity Belt Thickener	Replaced HMI (human machine interface)
	Primary Clarifier #1	Replaced drive motor
	Novato WWTP & Ignacio Fire Extinguishers	Annual service/recharge
	Novato WWTP Cranes & Hoists	Annual inspection & certification

<b>June 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Emergency Generators and wet weather pumps – Novato WWTP	Annual fuel filter sampling
	Ignacio Emergency Generator	Annual fuel filter sampling
	Novato WWTP & Ignacio	Annual flow meter calibrations
	HVAC & Roof Top Fans – Novato and Ignacio	Semi-annual service & replaced time relay in electrical building
	Dodge Truck - Operations	Serviced air conditioner
	Novato WWTP & Ignacio	Annual flow meter calibration
	SCADA UPS – Operations Area	Replaced batteries
	Blower #1	Replaced contactor/breaker
	Emergency Generator #3	Repaired voltage regulator
	Boiler	Annual boiler inspection

<b>July 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Emergency Generators and Wet Weather Pumps – Novato WWTP	Annual service
	Emergency Generator – Ignacio	Annual service
	Ignacio Supply Fan	Replaced contactor
	Forklift	Annual service

<b>August 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Emergency Generator #2	Replaced air filters & batteries
	Emergency Generator #3	Replaced air filters & batteries
	Ignacio Emergency Generator	Replaced batteries
	Boiler	Replaced hot water circulation pump motor
	Novato WWTP & Ignacio	Annual thermography
	UV Control Panel	Replaced power supply

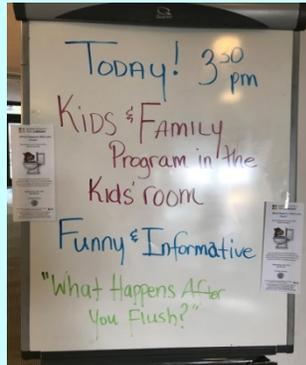
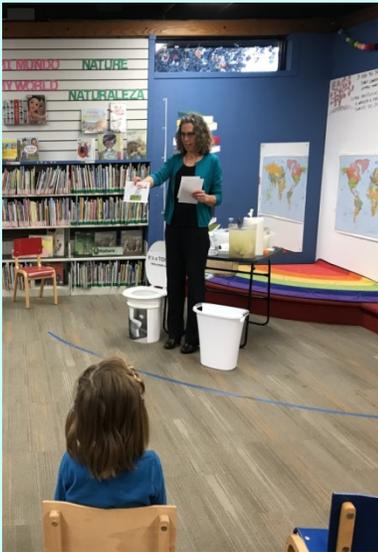
<b>September 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Boiler	Replaced modutrol motor (transformer)
	Sludge Recirculation Pump #4	Replaced mechanical seal
	Digester #2 Thermostat	Replaced thermostat
	Novato WWTP & Ignacio	Annual electrical

<b>October 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Ignacio Emergency Generator Diesel Fuel Tank	Diesel fuel polishing
	Day Tank – Emergency Generator #2 & #3	Diesel fuel polishing
	UV Transmittance Meter	Replaced control board

<b>November 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Flare	Damper modifications
	Flygt Pumps – Novato WWTP	Annual service
	Headworks	Annual service
	Aeration Basin Mixer 2B	Replaced mechanical seal

<b>December 2018</b>	<b>Equipment</b>	<b>Activity</b>
	Flygt Pumps - Ignacio	Annual service
	Novato & Ignacio – HVAC & Roof Top Fans	Semi-annual service
	Odor Bed #3 – Fan #2	Replaced motor

## Veolia Water Safety Week and Outreach 2018



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

Above Right – Liz Falejczk participating in the North Bay Science Discovery Day

Lower – Julie Hoover and Liz Falejczk presenting to participants at the Novato Public Library – The toilet is not a trash can!

## Community Outreach Activities 2018

Veolia Water is proud to be a member of the Novato community and we are committed to supporting local activities. The following are events and organizations supported by Veolia in 2018.

- School Fuel – Tour of Novato – donation of bottled water for participants & Booth Member
- Rotary Club Novato Sunrise (RCNS)
- Member – Novato Chamber of Commerce
- Margaret Todd Senior Center Monthly Birthday Celebrations
- Senior Pharmaceutical Collection
- Senior Health Fair Booth
- North Bay Leadership Council - Algebra Academy
- North Bay Science Fair Booth

## Safety and Training 2018

**GOAL ZERO**  
Leading Safety Together

VEOLIA

**Always Safe Rules - the Path to Goal Zero**  
Management

- SAUNAVS comply with all occupational health and safety rules & regulations.
- SAUNAVS lead by example to openly demonstrate exemplary commitment to health and safety as a company value.
- SAUNAVS ensure that health and safety is the primary consideration in work scheduling and production.
- SAUNAVS ensure that personnel have the proper safety training and the authorization to perform the assigned task or activity.
- SAUNAVS take all reasonable steps to identify and correct any known hazards before allowing personnel to proceed with a work-related task or activity.
- SAUNAVS address risk management through a hierarchy of controls (engineering controls such as substitution or control measures, administrative controls such as signage and warnings), with personal protective equipment as a last defense.
- SAUNAVS empower employees with the authority and responsibility to correct and/or report all unsafe situations, acts, or conditions observed in the workplace – up to and including STOPPING a job when necessary.
- NEVER ask anyone to perform an unsafe act.

**All Employees**

- SAUNAVS comply with all applicable regulatory, company and client occupational health and safety rules, regulations, work instructions, policies, procedures, best practice, and industry standards.
- SAUNAVS wear the required personal protective equipment.
- SAUNAVS perform tasks and activities with proper qualifications, authorization, and pre-task planning.
- SAUNAVS comprehend with the responsibility and obligation to stop any unsafe behavior or activity to report the issue promptly to management, and work together with management toward a safe resolution.
- SAUNAVS work in fit condition – free from the effects of fatigue, drugs, and alcohol.
- SAUNAVS report all work-related injuries/illnesses, unsafe conditions, unsafe work practices, near-miss incidents and hazards.
- NEVER compromise any own health and safety or those around us for profit, production, comfort, or convenience.

**Five Pillars of our Occupational H&S Culture**

Management Leadership & Engagement | Employee Involvement | Competence | Well-Being | High Performance Standards

International Health & Safety Week  
September 19-23, 2018

VEOLIA

**GOAL ZERO**  
Leading Safety Together

alwa's safe

Veolia Water recognizes the importance of an effective health and safety program to the well-being of each employee, the general public, clients/facility owners, and to the overall success of our company. Veolia Water is committed to providing its employees a healthful and safe place of employment. To that end, Veolia Water provides the proper training, materials, and equipment so that work can be performed safely and in compliance with the Occupational Safety and Health Administration (OSHA) Regulations and other applicable standards.

Veolia Water has had no incidents from June 1, 2010 to present at the NTP. This report reflects January – December 2018. In recognition of this achievement - each employee received a cash incentive reward from Veolia Water for 8 years no loss time incidents as a team.

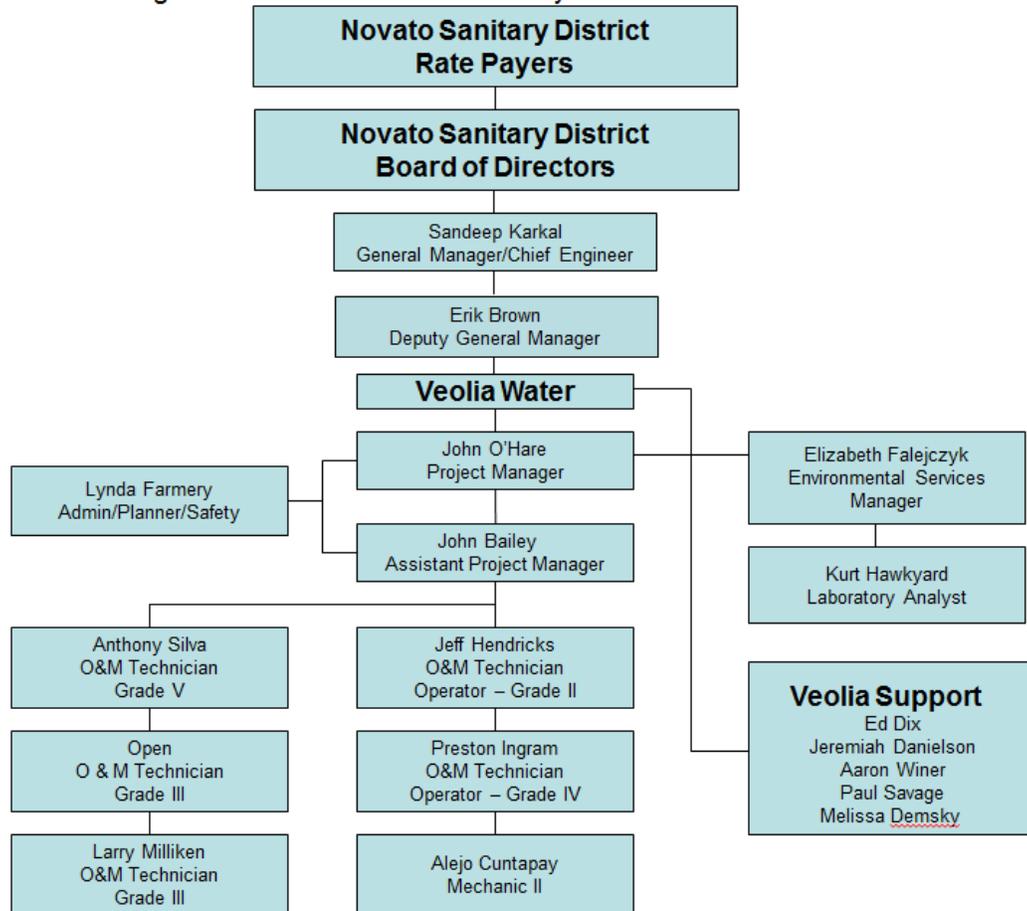
Safety topics referred to as *5-minute Safety Moments* are reviewed and discussed during morning meetings. Subjects range from personal to job related safety topics. Formal monthly training of worksite relevant safety topics are conducted by the Project Manager or Safety Coordinator. Also, on-line training is included in this program. The formal training is conducted based on OSHA standards which includes a final quiz. Below are the monthly and quarterly specific training topics.

## 2018 Safety Training:

January:	HazCom – What You Need To Know
February:	Fire Safety – Extinguishing The Risk EH&S Action Alert - Prevent Injuries with Proactive Measures
March:	Ladder Safety Slip, Trip and Falls Hazards Hearing Protection
April:	Lockout / Tagout VNA EH&S Action Alert - Our Safety Culture VNA EH&S Action Alert - Crushed by Concrete VNA EH&S Alert - Driving Safely
May:	Personal Protective Equipment – Employee Essentials
June:	Confined Spaces – Dangerous Places VNA EH&S Alert - Mental Safety Assessment
July:	NFPA 70E Refresher Training Heat Stress Fall Protection VNA EH&S Action Alert Heat Stress Prevention
August:	NFPA 70E Initial Training Ladder Safety
September:	Respiratory Training
October:	Scaffolding Safety for General Industry
November:	Wellness & Fitness Drug Free Workplace
December:	Bloodborne Pathogens SPCC Plan Ignacio & Novato

# Staffing and Organization

Appendix A  
 Organization Chart – Novato Sanitary District/Veolia Water



## **STAFFING & CERTIFICATION STATUS (Current)**

John P. O'Hare – Project Manger

Grade V California Wastewater Treatment Plant Operator #10669, June 30, 2021

John Bailey – Assistant Project Manager

Grade V California Wastewater Treatment Plant Operator #4123, December 31, 2018

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

Anthony M. Silva – Operator III

Grade V California Wastewater Treatment Plant Operator #10973, December 31, 2020

Grade II Collection System Maintenance Technician, #354, January 31, 2020

Larry Milliken – Operator III

Grade IV California Wastewater Treatment Plant Operator #41483, August 12, 2020

Preston Ingram – Operator III

Grade IV California Wastewater Treatment Plant Operator #10277, June 30, 2020

Jeffrey D. Hendricks – Operator II

Grade II California Wastewater Treatment Plant Operator #II-28377, December 31, 2020

Grade I Plant Maintenance Technologist, #070750011, July 31, 2020

Grade I Collection System Maintenance, #801210049, January 31, 2020

Alejo Cuntapay – Maintenance Technician II

Elizabeth G. Falejczyk – Environmental Services Supervisor

Operator III California Wastewater Treatment Plant Operator #6334, August 17, 2021

Kurt Hawkyard – Laboratory Technician/Pretreatment Programs Inspector

Laboratory Analyst Grade I, #130931002, June 30, 2019

Industrial Waste Grade II, #1308211129, June 30, 2019

Environmental Compliance Inspector, Grade II, 130821437, March 31, 2019

### **Additional Support**

Paul Savage – Vice President of Operations

Aaron Winer, Northern California District Manager

Matt Nausin – Maintenance Supervisor, Richmond Project

Dennis Flosi – Instrumentation and Controls Specialist, Richmond Project

Dave Coffman – Asset Manager, West Region

Ed Dix – Technical Director / Technical Support, West Region

Jeremiah Danielson – Director of Health and Safety, Veolia Municipal and Commercial

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

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

The Amended and Restated Novato Operations and Maintenance Service Agreement adopted February 18, 2014 is a fixed price contract. Included in the base contract fee are operation, maintenance, and management. Exceptions to the fixed price include:

Schedule 13 – Pass through Costs

Section 5.6 – Performance Bond

Schedule 8 – Cost Adjustment and Escalation Indices

Schedule 8 – Flow and Loading Adjustments

Schedule 11 – Usage Caps

- Electrical
- Natural Gas
- Diesel Fuel

Schedule 5 – Operation of Recycled Water Facility

Equipment Repair in excess of \$10,000

Fiscal Year 2018/19 service fee adjustment was 2.725%.

## **Title 22 – Recycled Water Production Report for 2018**

All water produced by the Novato Sanitary District (NSD) Recycled Water Facility was distributed by the North Marin Water District (NMWD).

In 2018, compliance testing for coliform was performed at the NMWD laboratory, NMWD is a State of California Environmental Laboratory Accreditation Program certified facility.

Recycled Water Table 6.0 below provides a summary of the quantity and quality of recycled water produced by NSD.

Table 6.0 Recycled Water

Novato Sanitary District 2018 Recycled Water Production Data							
Month	Water Delivered (Million Gal)	Effluent Turbidity (NTU)		Effluent CT Value (mg min/L)		Effluent Coliform (mpn/100 ml)	
Criteria	1.7 mgd	<2		>450		<2.2	
		Max	Ave	Min	Ave	Max	7Med
January	0.691	1.2	1.1	>450	>450	<1	<1
February	2.142	1.5	1.2	>450	>450	<1	<1
March	0.613	1.2	1.2	-	-	-	-
April	5.084	1.8	1.4	>450	>450	<1	<1
May	16.318	1.8	1.1	>450	>450	<1	<1
June	22.371	1.5	0.9	>450	>450	<1	<1
July	26.860	1.6	0.9	>450	>450	<1	<1
August	28.965	1.6	1.0	>450	>450	<1	<1
September	27.617	1.3	0.7	>450	>450	4	<1
October	15.051	1.5	0.6	>450	>450	<1	<1
November	10.115	1.1	0.6	>450	>450	<1	<1
December	0.587	1.2	0.7	>450	>450	<1	<1
TOTAL	165.414						

## **Attachments**

Annual Waste Characteristics & Loading Summary

**NOVATO SANITARY DISTRICT - VEOLIA  
PLANT FLOW**

Annual Waste Characteristics & Loading Summary

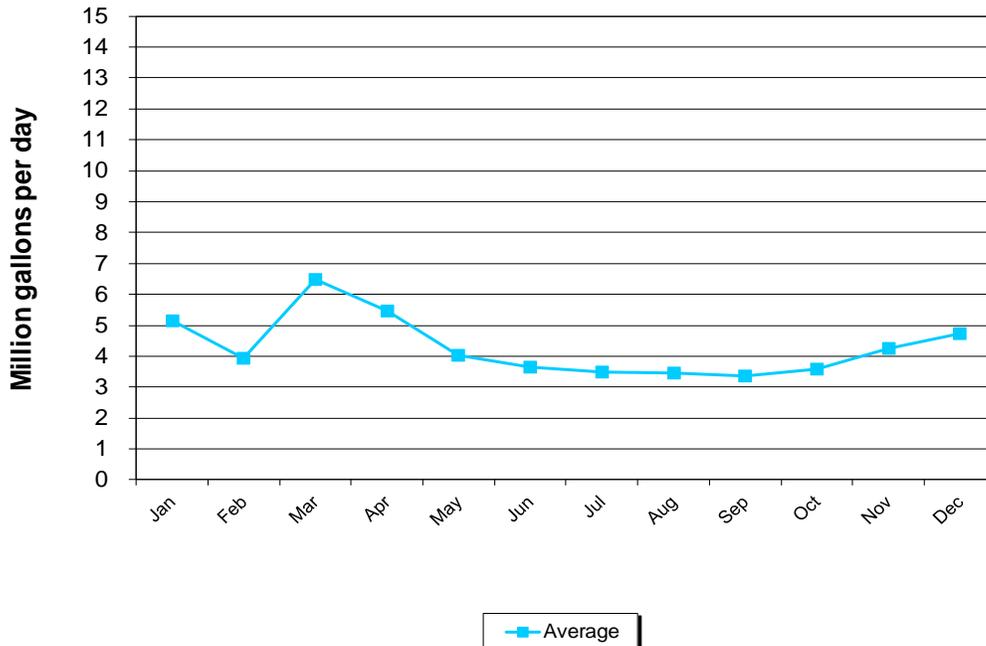
*(IN GALLONS TIMES 1,000,000)*

**YEAR: 2018**

PRINT DATE: 28-Mar-2019

	Total Flow	High	Low	Average		
January	159.21	14.59	3.47	5.14		
February	109.84	4.99	3.08	3.92		
March	200.92	14.22	4.36	6.48		
April	163.58	13.78	3.66	5.45		
May	124.84	4.64	3.60	4.03		
June	109.20	3.94	3.28	3.64		
July	108.59	4.68	2.84	3.50	Three month dry weather averages:	3.50
August	107.19	3.70	3.26	3.46		3.46
September	100.90	3.85	3.11	3.36		3.36
October	111.09	5.41	3.04	3.58		
November	127.45	9.09	3.23	4.25		
December	146.47	7.37	3.40	4.72		
<b>ANNUAL TOTAL</b>	<b>1569.28</b>					
<b>ANNUAL MAX.</b>	<b>200.92</b>	<b>14.59</b>			Max.	<b>3.50</b>
<b>ANNUAL MIN.</b>	<b>100.90</b>		<b>2.84</b>		Min.	<b>3.36</b>
<b>ANNUAL AVG.</b>	<b>130.77</b>			<b>4.30</b>	<b>Avg. Dry Weather Flow</b>	<b>3.44</b>

**NOVATO SANITARY DISTRICT - VEOLIA 2018  
Annual Plant Flow (Average)**



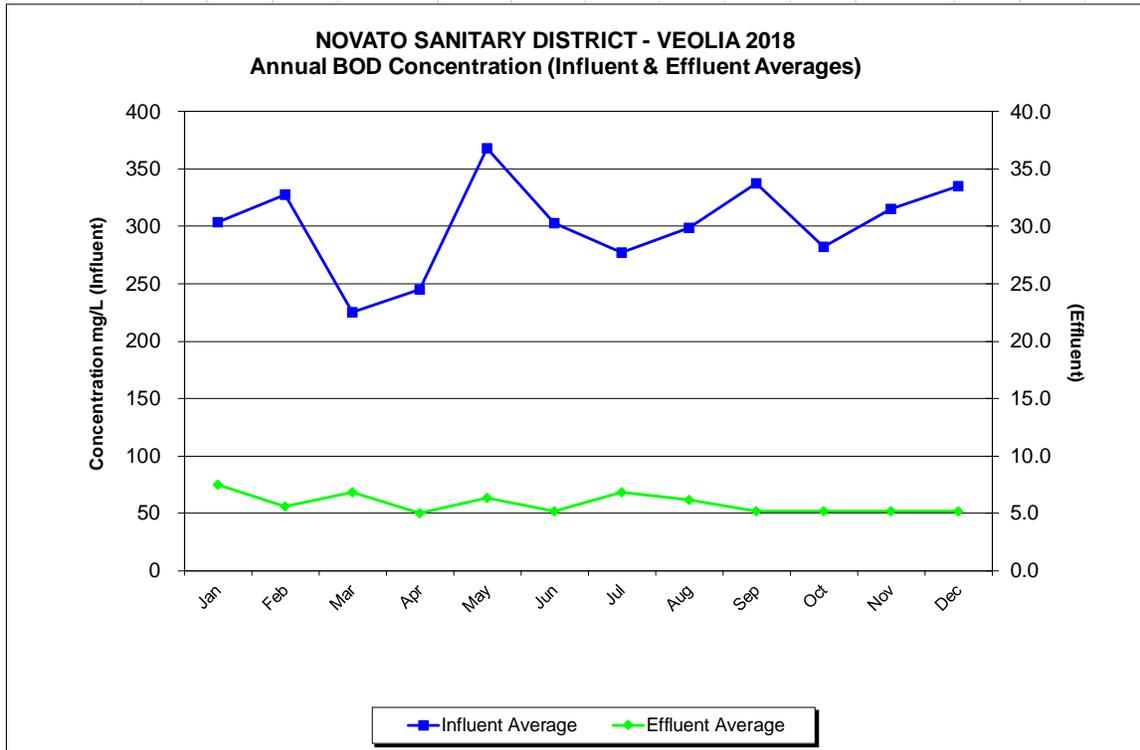
**NOVATO SANITARY DISTRICT - VEOLIA  
BOD (Influent & Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2018

PRINT DATE: 28-Mar-2019

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (lb/day)			Concentration (mg/L)			No. of Samples	Loading (lb/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	450	210	304	5	18670	8887	13520	11.0	5.0	7.5	6	978	178	404
February	360	260	328	4	11890	8348	10391	7.0	5.0	5.6	5	409	209	267
March	300	160	225	4	18081	7514	12462	13.0	5.0	6.8	5	1469	194	471
April	280	220	245	4	11780	8202	10503	5.0	5.0	5.0	4	254	185	215
May	510	280	368	5	17694	9901	12488	10.0	5.0	6.4	11	347	157	226
June	320	270	303	4	10222	8557	9322	6.0	5.0	5.2	12	182	144	158
July	300	240	278	4	8882	5685	7591	15.0	5.0	6.8	12	465	137	199
August	375	260	299	5	10727	7806	8723	15.0	5.0	6.2	15	408	138	179
September	370	320	338	4	10553	8860	9496	6.0	5.0	5.1	7	171	138	145
October	310	230	282	5	8687	7099	8236	6.0	5.0	5.2	10	201	139	154
November	400	250	315	4	18953	8332	11871	8.0	3.0	5.2	5	606	94	225
December	420	260	335	4	13696	10148	12225	6.0	5.0	5.2	5	225	163	195
ANNUAL HIGH	510	320	368	5	18953	10148	13520	15.0	5.0	7.5	15	1469	209	471
ANNUAL LOW	280	160	225	4	8687	5685	7591	5.0	3.0	5.0	4	171	94	145
ANNUAL AVG.	366	247	302	4	13320	8278	10569	9.0	4.8	5.9	8	476	156	237



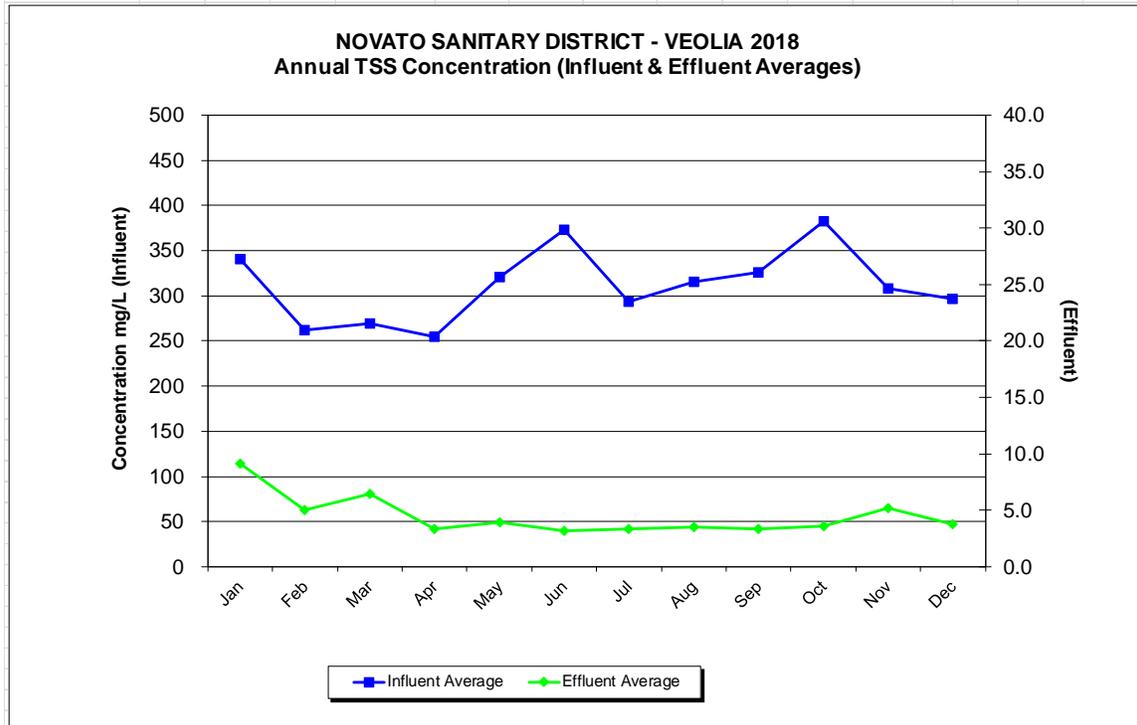
**NOVATO SANITARY DISTRICT - VEOLIA  
SUSPENDED SOLIDS (Influent & Effluent)**

Annual Waste Characteristics & Loading Summary

YEAR: 2018

PRINT DATE: 28-Mar-2019

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (lb/day)			Concentration (mg/L)			No. of Samples	Loading (lb/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
January	487	271	341	5	24093	11331	15540	15.0	5.0	9.2	5	1334	178	508
February	322	180	262	4	9695	5720	8298	7.0	3.0	5.0	4	222	98	159
March	380	192	269	4	21697	8708	14998	12.0	3.0	6.5	4	1356	109	413
April	294	205	255	4	13854	9581	10883	5.0	3.0	3.4	4	185	112	144
May	347	256	321	5	12039	9053	10892	6.0	3.0	3.9	5	208	93	132
June	475	290	373	4	15054	9208	11496	4.0	3.0	3.2	4	118	89	97
July	378	230	293	4	10183	6585	7941	6.0	3.0	3.4	4	181	81	98
August	379	274	315	5	11379	7998	9222	6.0	3.0	3.6	5	175	83	103
September	384	248	326	4	10632	7074	9139	4.0	3.0	3.4	4	111	85	96
October	418	325	383	5	15444	9568	11349	6.0	3.0	3.6	5	222	76	110
November	366	264	308	4	20014	8171	11841	8.0	3.0	5.2	4	606	94	225
December	376	257	297	4	14456	9294	10959	5.0	3.0	3.8	4	187	98	143
ANNUAL HIGH	487	325	383	5	24093	11331	15540	15.0	5.0	9.2	5	1356	178	508
ANNUAL LOW	294	180	255	4	9695	5720	7941	4.0	3.0	3.2	4	111	76	96
ANNUAL AVG.	384	249	312	4	14878	8524	11046	7.0	3.2	4.5	4	409	100	186



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

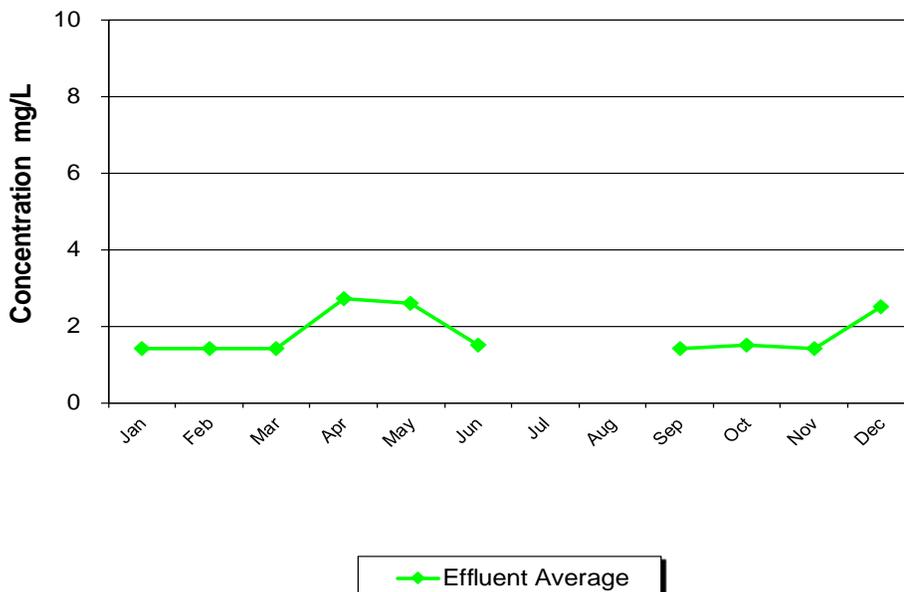
Annual Waste Characteristics & Loading Summary

**YEAR: 2018**

PRINT DATE: 28-Mar-2019

	EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (lb/day)		
	High	Low	Average		High	Low	Average
January	1.4	1.4	1.4	1	72	72	72
February	1.4	1.4	1.4	1	46	46	46
March	1.4	1.4	1.4	1	54	54	54
April	2.7	2.7	2.7	1	116	116	116
May	2.6	2.6	2.6	1	45	45	45
June	1.5	1.5	1.5	0	41	41	41
July*	No Sample			0	No Sample		
August*	Reclamation			0	Reclamation		
September	1.4	1.4	1.4	1	37	37	37
October	1.5	1.5	1.5	1	36	36	36
November	1.4	1.4	1.4	1	44	44	44
December	2.5	2.5	2.5	1	101	101	101
ANNUAL HIGH	2.7	2.7	2.7		116	116	116
ANNUAL LOW	1.4	1.4	1.4		36	36	36
ANNUAL AVG.	1.8	1.8	1.8		59	59	59

**NOVATO SANITARY DISTRICT - VEOLIA 2018  
Annual Oil & Grease Concentration (Effluent Averages)**



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

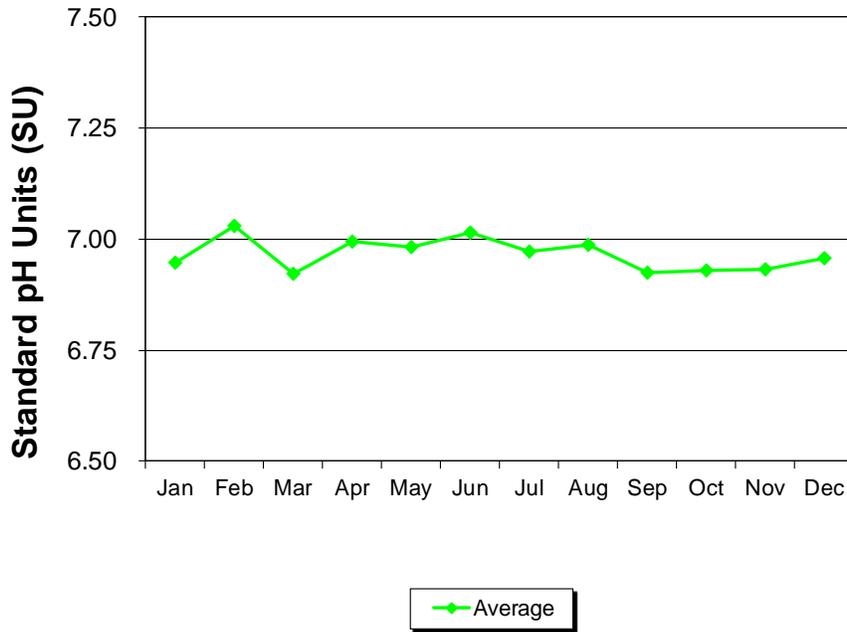
Annual Waste Characteristics & Loading Summary

**YEAR: 2018**

PRINT DATE: 28-Mar-2019

	High	Low	Average	Number of Samples			
January	7.0	6.8	6.9	23			
February	7.2	7.0	7.0	20			
March	7.1	6.7	6.9	22			
April	7.1	6.9	7.0	21			
May	7.1	6.9	7.0	23			
June	7.2	6.9	7.0	21			
July	7.1	6.9	7.0	22			
August	7.1	6.9	7.0	23			
September	7.0	6.8	6.9	20			
October	7.0	6.8	6.9	23			
November	7.0	6.8	6.9	22			
December	7.1	6.8	7.0	21			
				Number of Samples Total =		261	
ANNUAL MAX.	7.20	7.00	7.03				
ANNUAL MIN.	7.00	6.70	6.92	1st Qtr.	65	2nd Qtr.	65
ANNUAL AVG.	7.08	6.85	6.97	3rd Qtr.	65	4th Qtr.	66

**NOVATO SANITARY DISTRICT - VEOLIA 2018  
Annual pH Values (Effluent - Averages)**



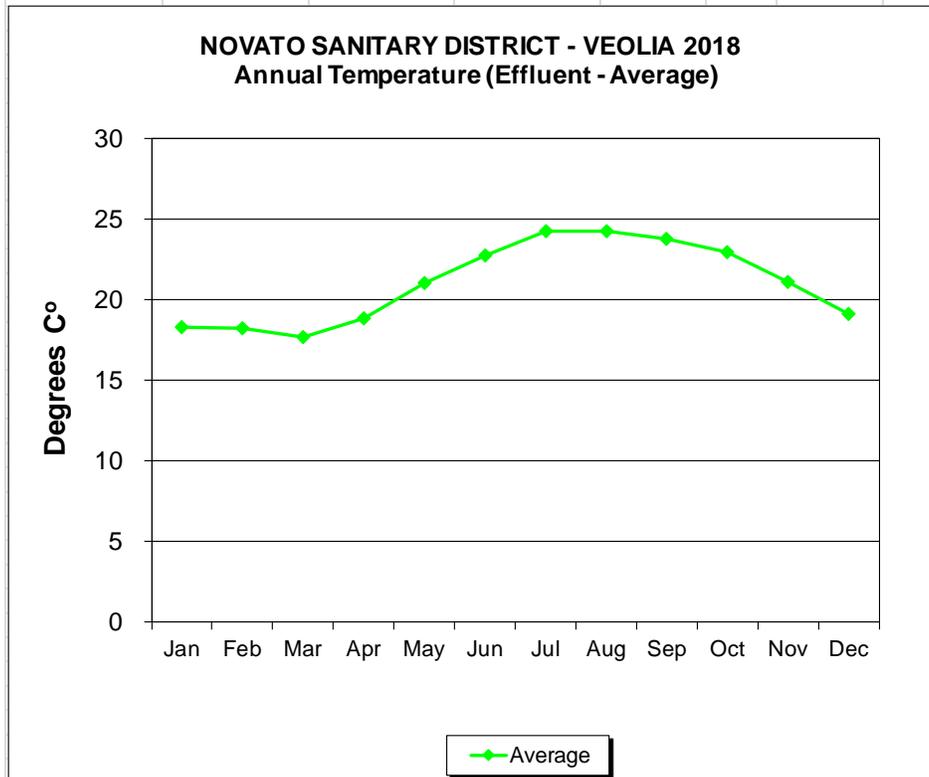
**NOVATO SANITARY DISTRICT - VEOLIA  
TEMPERATURE (Effluent)**

Annual Waste Characteristics & Loading Summary

**YEAR: 2018**

PRINT DATE: 28-Mar-2019

	High	Low	Average	Number of Samples			
January	19.7	16.4	18.3	23.0			
February	19.7	16.9	18.3	20.0			
March	19.0	16.2	17.7	22.0			
April	20.3	17.9	18.9	21.0			
May	22.7	19.5	21.0	23.0			
June	23.6	21.9	22.8	21.0			
July	25.3	22.7	24.3	22.0			
August	24.9	23.7	24.2	23.0			
September	24.9	23.0	23.8	20.0			
October	24.3	22.1	23.0	23.0			
November	23.4	18.7	21.2	22.0			
December	20.0	18.3	19.2	21.0			
				Number of Samples Total =		261	
ANNUAL MAX.	25.3	23.7	24.3				
ANNUAL MIN.	19.0	16.2	17.7	1st Qtr.	65	2nd Qtr.	65
ANNUAL AVG.	22.3	19.8	21.0	3rd Qtr.	65	4th Qtr.	66



# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: NPDES Permit Renewal Assistance, Account No. 66123</b>	<b>MEETING DATE: April 8, 2019</b>  <b>AGENDA ITEM NO.: 8.b.</b>
<b>RECOMMENDED ACTION:</b> Consider approval of a Consulting Services Agreement with Woodard & Curran, Inc. (W&C) in an amount up to \$107,385 for 2020 NPDES Permit renewal assistance, and authorize the General Manager-Chief Engineer to execute the agreement.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The District’s National Pollutant Discharge Elimination System (NPDES) discharge permit renewal application is due to the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) on December 2, 2019. An NPDES permit renewal is a complex regulatory process that requires professional negotiation strategies, knowledge of Regional Water Board practices, and experience in understanding regulatory compliance. District staff requests the assistance and services of Woodard and Curran, Inc. (W&amp;C) to assist in this process.</p> <p>W&amp;C provides extensive permitting assistance services to wastewater agencies in the Bay Area, and they are known to provide their clients with effective expertise in the NPDES area. Their staff functions as technical staff to the Bay Area Clean Water Agencies (BACWA) and the California Water Environment Association (CWEA). W&amp;C (formerly RMC Water &amp; Environment) has assisted the District with its prior NPDES permit negotiations including the 2015 NPDES permit renewal.</p> <p>W&amp;C has submitted a scope of work and cost proposal of \$107,385 for their services in assisting the District with its NPDES renewal process, over an approximately fifteen month period extending into FY 20-21. For comparison purposes, the previous NPDES renewal services in 2014-15 were provided by RMC Water &amp; Environment, at a cost of \$88,560.</p> <p>Staff recommends the Board approve the agreement and authorize the General Manager-Chief Engineer to execute it.</p>	
<b>BUDGET INFORMATION:</b> This work will be funded from Account No. 66123 (O/S Contractual) which has a balance of about \$149,900 as of March 31, 2019, and the FY 19-20 budget for this Account will also include provisions to accommodate this contract.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operation Excellence) and Goal 5 (Effective Governance and Administration) of the latest Strategic Plan Update.	
<b>DEPT. MGR.: EB</b>	<b>GENERAL MANAGER: SSK</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE:** Wastewater Operations Report, March 2019.

**MEETING DATE:** April 8, 2019

**AGENDA ITEM NO.:** 8.c.

**RECOMMENDED ACTIONS:** Receive Wastewater Operations Reports for March 2019:

- Collection System
- Treatment Facilities
- Reclamation Facilities

**SUMMARY AND DISCUSSION:**

The March 2019 Wastewater Operations Report incorporating operations reports for collections system, wastewater treatment facilities, and the reclamation facilities is attached. District and Veolia staff will be present at the meeting to provide overviews of the reports for their operational areas, and be available to discuss the reports or respond to any questions.

**ATTACHMENTS:** 1. Wastewater Operations Reports for the month of March 2019.

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

**DEPT. MGR.:** JO (Veolia), JA, JJB

**GENERAL MANAGER:** SSK

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

Item 8.c.  
Collections System  
Operations Report  
(Pages 126 to 131)

### 1.0 General:

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

- 1.7 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.1 FTE field workers for Pump Station Maintenance
- 0.2 FTE field workers for Closed Circuit Television (CCTV) work
- 0.0 FTE field workers for Underground Service Alert Mark and Locate (USA)
- 3.0 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 451 work orders for the month. Collections staff completed 451 work orders, leaving zero (0) work orders outstanding. The completed work orders resulted in 83,906 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 11,678 feet of sewer main.

#### CCTV Findings:

- Infrastructure-related: CCTV work did not identify any new issues related to infrastructure.
- 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 153 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.



**New portable generator.**

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

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

Staff completed maintenance inspections on seven (7) air relief/vacuum valves this month.

**5.0 Safety and Training:**

General:

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

Specialized Training:

- First Aid/CPR/AED training.
- How to run a collection system by DKF Solutions.
- Bobcat operation and certification.
- BAYWORK Pumps & Pump Systems Workshop 2019
- Chemical Hazard Communication Training

Safety performance:

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

**6.0 Miscellaneous Projects:**

- New pump pull handles installed at Meadow Park PS.
- New Generator arrived after load bank testing.
- Contractor installing fiber optic lines bored through a 10" PVC sewer line on Ignacio Blvd. Collections crew cleaned out debris and prepped for repair. The line was repaired the next morning.



**Damaged 10" pipe from  
directional boring.**

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

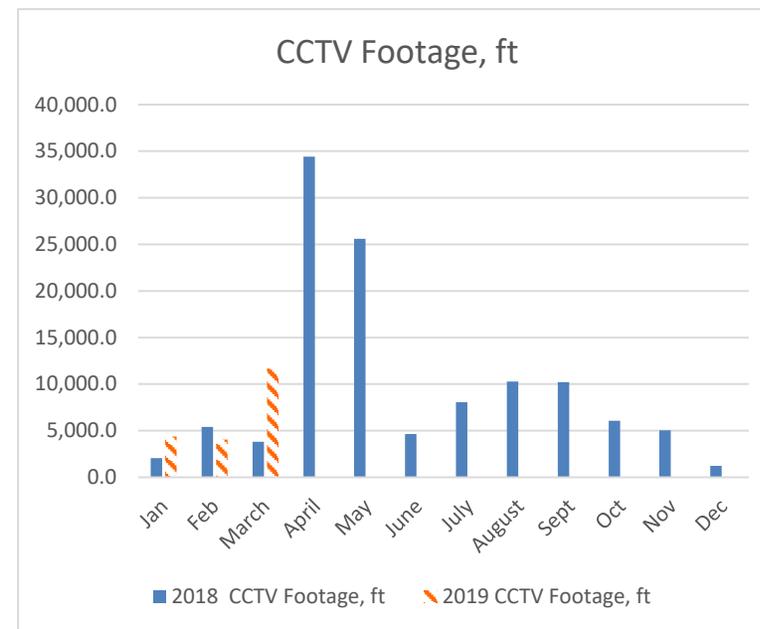
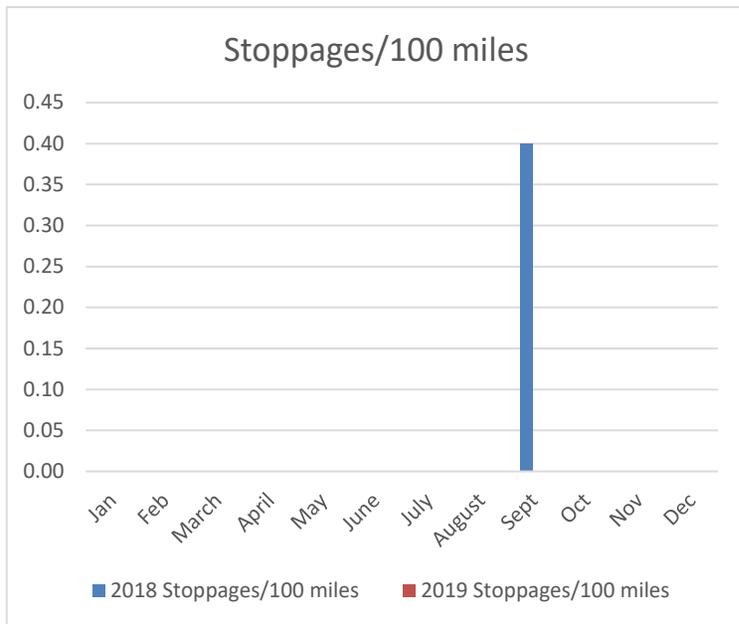
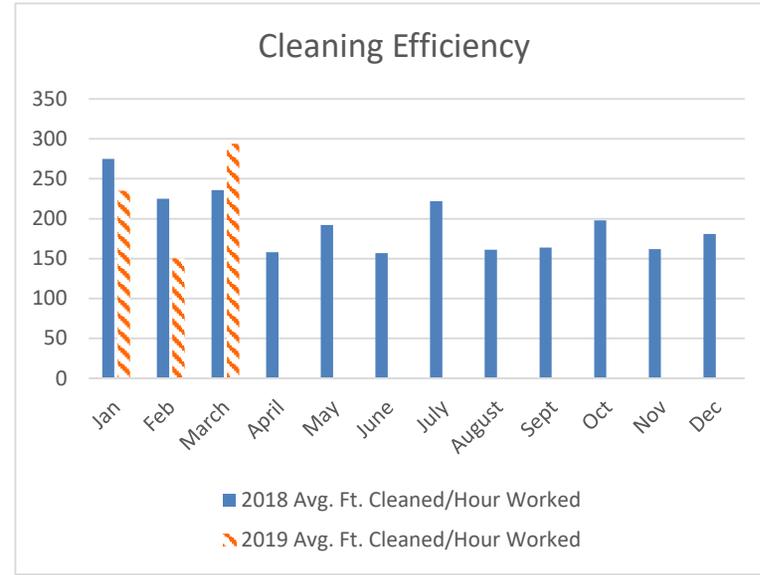
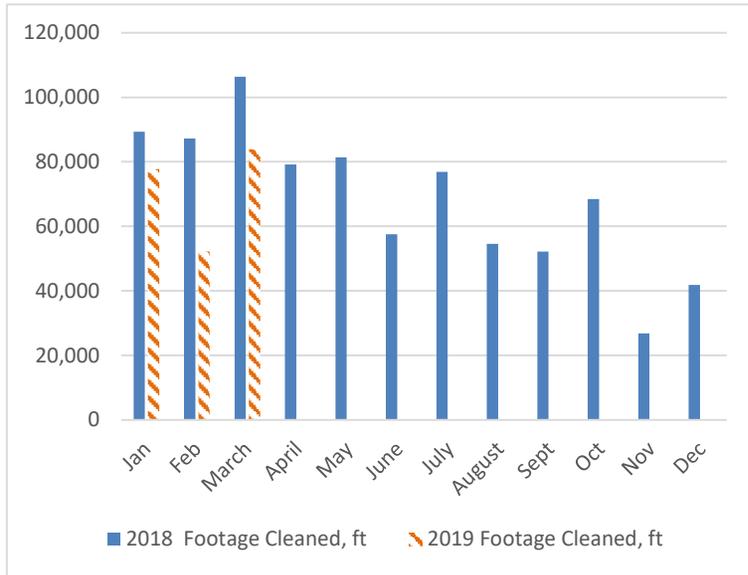
There were no (zero) sanitary sewer overflows in March. The No Spills certification ID is #2540511.

\*\*\*\*\*

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

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>A. Employee Hours Worked</b>														
Number of FTEs (main line cleaning)	1.8	2.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.5
Number of FTEs (other)	1.9	2.7	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.6
Number of FTEs (USAs)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0
Number of FTEs (CCTV)	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0
Total, FTEs	3.8	5.1	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA	1.1
Regular Time Worked, (main line cleaning), hrs	331	348	286	0	0	0	0	0	0	0	0	0	964	80
Regular Time Worked on Other, hrs (1)	355	421	489	0	0	0	0	0	0	0	0	0	1,264	105
Regular Time Worked on USAs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regular Time Worked on CCTV (2)	22	32	33	0	0	0	0	0	0	0	0	0	87	7
Total Regular time, worked, hrs	707	800	807	0	0	0	0	0	0	0	0	0	2,314	193
Total Vacation/Sick Leave/Holiday, hrs	197	164	175	0	0	0	0	0	0	0	0	0	536	45
Vacation/Sick Leave/Holiday, FTEs	1.1	1.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.2
Overtime Worked on Coll. Sys., hrs	24	42	11	0	0	0	0	0	0	0	0	0	77	6
Overtime Worked on Other, hrs (1)	2	2	0	0	0	0	0	0	0	0	0	0	4	0
Overtime Worked on USAs, hrs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Overtime Worked on CCTV (2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Overtime, hrs	26	44	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	27
<b>B. Productivity</b>														
<b>1. Line Cleaning</b>														
Rodder Work Orders generated	43	33	61	0	0	0	0	0	0	0	0	0	137	11
Rodder 3208 ft. cleaned	1,453	681	5,520	0	0	0	0	0	0	0	0	0	7,654	638
Rodder - outside services, ft cleaned	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flusher Work Orders generated	338	240	390	0	0	0	0	0	0	0	0	0	968	81
Truck 3205V ft. cleaned	0	1,314	352	0	0	0	0	0	0	0	0	0	1,666	139
Truck 3206V ft. cleaned	14,940	5,330	15,040	0	0	0	0	0	0	0	0	0	35,310	2,943
Truck 3209F ft. cleaned	61,343	44,888	62,994	0	0	0	0	0	0	0	0	0	169,225	14,102
Flusher - outside services, ft. cleaned	0	405	0	0	0	0	0	0	0	0	0	0	405	
Total Footage cleaned(3)	77,736	52,213	83,906	NA	NA	NA	NA	NA	NA	NA	NA	NA	213,855	71,285
Work Orders completed	381	306	451	0	0	0	0	0	0	0	0	0	1,138	95
Work Orders backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>2. Closed Circuit Television (CCTV)</b>														
Camera Work Orders generated	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCTV Truck 3126T, ft. videoed	3,405	3,465	7,839	0	0	0	0	0	0	0	0	0	14,709	1,226
CCTV (hand cam), ft. videoed	979	596	3,839	0	0	0	0	0	0	0	0	0	5,414	451
CCTV Inspection - outside services, ft. videoed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CCTV footage(3)	4,384	4,061	11,678	NA	NA	NA	NA	NA	NA	NA	NA	NA	20,123	6,708
<b>C. Sanitary Sewer Overflows (SSOs)</b>														
Minor (Category III)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Major (Category II)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Major (Category I)	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Overflow Gallons	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Volume Recovered	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
Percent Recovered	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>D. Service Calls (non-SSO related)</b>														
Service calls, normal hours, #	7	4	6	0	0	0	0	0	0	0	0	0	17	1
Normal hours S.C. response time, mins (avg.)	26.4	18.25	19.83	0	0	0	0	0	0	0	0	0	64	5
Service Callouts, after hours, #	0	0	0	0	0	0	0	0	0	0	0	0	0	0
After Hours S.C. response time, mins (avg.)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	#DIV/0!
<b>E. Benchmarks</b>														
Average Ft. Cleaned/Hour Worked	235	150	294	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	226
Total Stoppages/100 Miles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA
Average spill response time (mins)	0	0	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	0
Callouts/100 Miles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overtime hours/100 Miles	11	19	5	0	0	0	0	0	0	0	0	0	34.22	3
Overflow Gallons/100 Miles	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# Collection System: 2018 & 2019 Graphs



Novato Sanitary District

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

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>Employee Hours Worked</b>	262	188	203	0	0	0	0	0	0	0	0	0	652	
Number of Employees (FTEs)	1.1	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.3
Regular Time Worked on Pump Sta	200	149	174	0	0	0	0	0	0	0	0	0	522	
Overtime Worked on Pump Sta	62	39	30	0	0	0	0	0	0	0	0	0	130	
After Hours Callouts	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average Callout response time (mins)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Work Orders</b>														
Number generated in month	50	46	42	0	0	0	0	0	0	0	0	0	138	12
Number closed in month	50	46	42	0	0	0	0	0	0	0	0	0	138	12
Backlog	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

	<b>Open Work Orders Due Prior to 3/1/2019</b>	<b>Open Work Orders 3/1/2019-3/31/2019</b>	<b>Total Open Work Orders</b>
Preventive	0	42	42
Corrective	0	0	0
<b>Total</b>	<b>0</b>	<b>42</b>	<b>42</b>

	<b>Closed Work Orders 3/1/2019 -3/31/2019</b>
Preventive	42
Corrective	0
<b>Total</b>	<b>42</b>

<b>Total Outstanding Work Orders as of 3/31/2019</b>	<b>0</b>
--	----------



April 3, 2019

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

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

Dear Mr. Karkal:

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

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

Best regards,

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

John P. O'Hare  
Project Manager, Veolia

MONTHLY OPERATIONS REPORT  
March 2019

Prepared for

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

Prepared by

Veolia Water West Operating Services, Inc. (VWWOS)

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-

## A: TREATMENT PLANT PERFORMANCE SUMMARY – March 2019

### National Pollution Discharge Elimination System Permit

Parameter	Value		Limits	
	Ave	Max		
Flow, MGD (monthly ave/max)	8.33	14.11	N/A	
<b>Influent</b>				
BOD <sub>5</sub> , lb/day (month ave/max)	16,213	25,583	N/A	
TSS, lb/day (monthly ave/max)	21,315	24,150	N/A	
<b>Effluent</b>				
BOD <sub>5</sub> , mg/L (monthly ave/max weekly ave)	<6	10	30	45
TSS, mg/L (monthly ave/max weekly ave)	<4	6	30	45
BOD <sub>5</sub> - % Removal, Average	97		85 minimum	
TSS - % Removal, Average	99		85 minimum	
Ammonia, mg/L – (monthly ave/daily max)	2.9	2.9	5.9	21
pH, su (min / max)	6.8	7.0	6.5	8.5
Enterococcus, MPN/100 ml (30 day geo mean)	5.93		35	
Fecal Coliform, MPN/100 ml (monthly median)	N/A		N/A	
Fecal Coliform, MPN/100 ml (90 <sup>th</sup> PCTL)	N/A		N/A	
Total Coliform, MPN/100 ml (5 sample median)	N/A		N/A	
Total Coliform, MPN/100 ml (monthly maximum)	N/A		N/A	

Peak Rainfall Flow Rate = 18.7 million gallon per day, March 6, 2019, 6:36am-8:36am (2 hours)

Total Rainfall = 4.22 inches

### Title 22 - Recycled Water Production and Quality

Description	Units	Value	Limit
Volume Produced	Million Gallons	0.278	N/A
Average Turbidity	NTU	0.5	2.0
Turbidity > 5 NTU (in 24 hour)	Minutes	0	72
Minimum CT (disinfection)	mg-min/L	>450	450 minimum
Minimum Dissolved Oxygen (DO)	mg/L	9.5	2 mg/L minimum
Maximum Total Coliform	MPN/100 ml	<1	240
Maximum Total Coliform 2 Samples 30 days	MPN/100 ml	<1	23
Total Coliform 7 Sample Median	MPN/100 ml	<1	2.2

### Discussion of Violations / Excursions

- National Pollution Discharge Elimination System Permit (NPDES) Limits - None
- Recycled Water Permit – None

### B: SAFETY AND TRAINING:

- Monthly plant safety inspections for Novato Wastewater Treatment Plant and Ignacio Transfer Pump Station completed
- Five minute tailgate training held during weekly meetings
- No safety incidents for the month of March 2019

- Corporate monthly Health and Safety call 3/11/19
- Monthly Safety Topics and Training: Lock Out / Tag Out classroom training on 3/20/19

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

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

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

- Routine rounds, readings and maintenance
- Blower #3 – replaced CT (current transformer) ring
- WAS pump #1 – removed for repair and spare installed
- RAS flow meter replaced the microchip on the control circuit board
- HVAC leak in main electrical building sealed
- Recirculation pumps #3 & #4 – rebuilt entire cutter assembly
- DI water faucet in laboratory repaired
- UV transmittance pump - replaced

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

- Aeration basin #3 (standby)

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

- Routine rounds, readings and preventative maintenance
- Conveyance pump #1 VFD – replaced contactor
- Conveyance pump #3 check valve dampener rebuilt
- Hypochlorite tank piping leak repaired
- Icecube unit for MCC in operations building replaced

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

- None

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

- Routine rounds and maintenance
- Topped off Plum Street tank 3 times this month with potable water

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

- None

#### **Sludge Lagoons (and Reclamation Area)**

- Performed routine rounds and inspection – Daily inspections and Decant pump monitoring due to access being blocked resulted in walking from Deer Island to Decant Pump Station (approx. 1 hours walking distance) twice daily
- Access blocked by Caltrans – had to perform fuel transfer from excavator to trailered pump (with the assistance of owner of excavator)

## D: ENVIRONMENTAL SERVICES ACTIVITIES SUMMARY

Discharge to San Pablo Bay NPDES Permit – March 1 - 31, 2019

### Regulatory Programs:

#### Public Education

On March 19, 2019, provided a tour for the San Marin High School Applied Chemistry and Biotechnology classes of approximately 40 students. Before the tour a demonstration of how toilet paper breaks down with the comparison of tissues, flushable and non-flushable wipes was provided.

#### Bay Area Clean Water Agencies (BACWA)

Liz Falejczk, Veolia Water Environmental Services Supervisor attended the monthly laboratory and pretreatment committee meetings.

#### Whole Effluent Toxicity Testing

Quarterly Acute and Chronic Toxicity is required during Bay Discharge. Testing began on December 5, 2018. Both analyses were performed by Aqua Science located in Davis, CA. Acute Toxicity testing results yielded 100% survival. The Chronic Toxicity test results for survival and growth were very good at <1.0 TUc each. See historic Chronic Toxicity results below.

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

### Industrial Pretreatment Program

#### Discharge Permits

- Received one Industrial User survey
- Issued two Class III permit renewals

#### Inspections and Sampling

- Inspected five food service establishments (FSEs)
- Received support documentation confirming compliance from 2 FSEs
- Inspected two commercial laboratories and one production industry

### E: ADMINISTRATION:

- February 2019 Electronic Discharge Monitoring Report (EDMR-US EPA) and February 2019 Self-Monitoring Report (SMR-State of California) submitted on March 26, 2019
- February 2019 Recycled Water Self-Monitoring (SMR) Report submitted on March 26, 2019
- Annual 2018 Recycled Water Self-Monitoring (SMR) Report submitted on March 14, 2019

### F: ODORS & LANDSCAPING:

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

- No contacts with the adjacent neighborhood

**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

Bill Hanley, West Region Capital Projects Director

Paul Savage, West Region VP of Operations

Aaron Winer, Area Manager Northern California

## ***1) PHOTOS***

# SLUDGE DIGESTION AND ACCESS TO SLUDGE LAGOONS MARCH 2019



Above Left and Right – Rebuilding the anaerobic sludge digester sludge heating recirculation pumps  
Below Center – Limited access to the sludge lagoons due to flooding

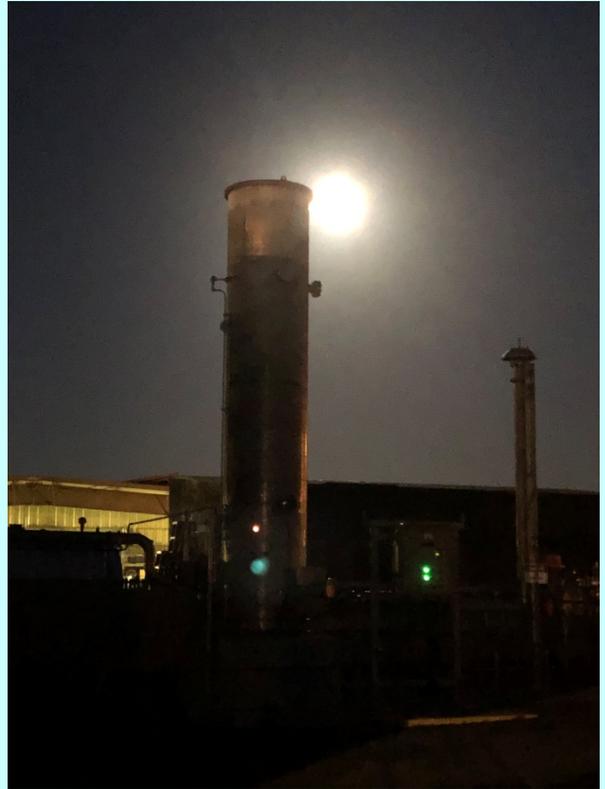
## SAN MARIN HIGH SCHOOL TOUR MARCH 2019



Above – Liz Falczyk, Veolia Water Environmental Services Supervisor and Kurt Hawkyard, Veolia Water Laboratory Technician preparing for a demonstration of the wastewater treatment process and what not to flush

Below – Liz providing instruction to the attendees

PLANT EFFLUENT AND FLARE STACK  
MARCH 2019



Above Left – Wastewater treatment plant effluent  
Above Right – Digester flare stack

## **2) *LABORATORY DATA***

Novato Sanitary District  
BOD/TSS Report



March, 2019

Date	Flow MGD	Influent				Effluent				BOD % Removal PERCENT	TSS % Removal PERCENT
		BOD		TSS		BOD		TSS			
		mg/l	lb/d	mg/l	lb/d	mg/l	lb/d	mg/l	lb/d		
03/01/19	12.45										
03/02/19	12.85										
03/03/19	11.20										
03/04/19	9.70										
03/05/19	12.27	250	25,583	236	24,150	10	998	8	798	96.0	96.6
03/06/19	14.11					<5	<588	<3	<353		
03/07/19	10.47										
03/08/19	8.88										
03/09/19	10.53										
03/10/19	11.62										
03/11/19	9.38										
03/12/19	8.31										
03/13/19	7.18	170	10,180	361	21,617	<5	<299	<3	<180	97.1	99.2
03/14/19	6.57										
03/15/19	6.41										
03/16/19	6.12										
03/17/19	6.10										
03/18/19	5.52										
03/19/19	6.08										
03/20/19	6.27										
03/21/19	5.66	330	15,577	449	21,195	<5	<236	<3	<142	98.5	99.3
03/22/19	7.55										
03/23/19	7.11										
03/24/19	6.32										
03/25/19	6.60										
03/26/19	6.75	240	13,511	325	18,296	<5	<281	<3	<169	97.9	99.1
03/27/19	7.99										
03/28/19	8.41										
03/29/19	6.89										
03/30/19	7.26										
03/31/19	5.67										
<b>Weekly Averages</b>											
03/02/19	Week 1	250	61,111	347	84,823	15	3,667	4	978		
03/09/19	Week 2	250	25,583	236	24,150	8	793	6	576		
03/16/19	Week 3	170	10,180	361	21,617	5	299	3	180		
03/23/19	Week 4	330	15,577	449	21,195	5	236	3	142		
03/30/19	Week 5	240	13,511	325	18,296	5	281	3	169		
<b>Monthly</b>											
Minimum	5.52	170	10,180	236	18,296	<5	<236	<3	<142	96	97
Maximum	14.11	330	25,583	449	24,150	10	998	8	798	98	99
Total	258.23										
Average	8.33	248	16,213	343	21,315	<6	<481	<4	<328	97	99

Novato Sanitary District  
Conventional Pollutants Report



March, 2019

Date	INFLUENT - A001			Effluent - E002							
	Flow	pH	Ammonia	Coliform / Bacteria			pH	Ammonia	Oil & Grease	Temp	Rainfall
	Total			Fecal	Entero	Total					
MGD	su	mg/L	MPN/100 mL			su	mg/L	mg/L	Deg C	Inches	
03/01/19	12.45						6.8			15.9	0.00
03/02/19	12.85										0.61
03/03/19	11.20										0.00
03/04/19	9.70				6.6		6.9			16.7	0.09
03/05/19	12.27				7.5		6.9			16.4	0.50
03/06/19	14.11				6.1		6.8	2.90	<1.4	16.5	0.56
03/07/19	10.47						6.9			15.6	0.00
03/08/19	8.88	7.0					6.9			16.2	0.00
03/09/19	10.53										0.55
03/10/19	11.62										0.21
03/11/19	9.38						6.9			16.4	0.01
03/12/19	8.31				1.0		6.9			16.3	0.00
03/13/19	7.18				<1.0		6.9			16.3	0.00
03/14/19	6.57				9.7		6.9			16.8	0.00
03/15/19	6.41	7.4					6.9			17.1	0.00
03/16/19	6.12										0.00
03/17/19	6.10										0.00
03/18/19	5.52				<1.0		7.0			17.7	0.00
03/19/19	6.08						7.0			18.7	0.00
03/20/19	6.27				22.1		6.9			17.6	0.30
03/21/19	5.66	7.4			2.0		6.9			17.5	0.00
03/22/19	7.55						6.9			17.2	0.48
03/23/19	7.11										0.02
03/24/19	6.32										0.00
03/25/19	6.60						7.0			17.9	0.13
03/26/19	6.75						6.9			17.9	0.16
03/27/19	7.99				26.4		6.9			17.6	0.28
03/28/19	8.41				37.3		7.0			17.8	0.30
03/29/19	6.89	7.3			14.8		7.0			17.1	0.02
03/30/19	7.26										0.00
03/31/19	5.67										0.00
<b>Monthly</b>											
Minimum	5.52	7.0			<1.0		6.8	2.90		15.6	0.00
Maximum	14.11	7.4			37.3		7.0	2.90	<1.4	18.7	0.61
Total	258.23										4.22
Average	8.33	7.3					6.9	2.90	<1.4	17.0	0.14
Geomean					5.93						

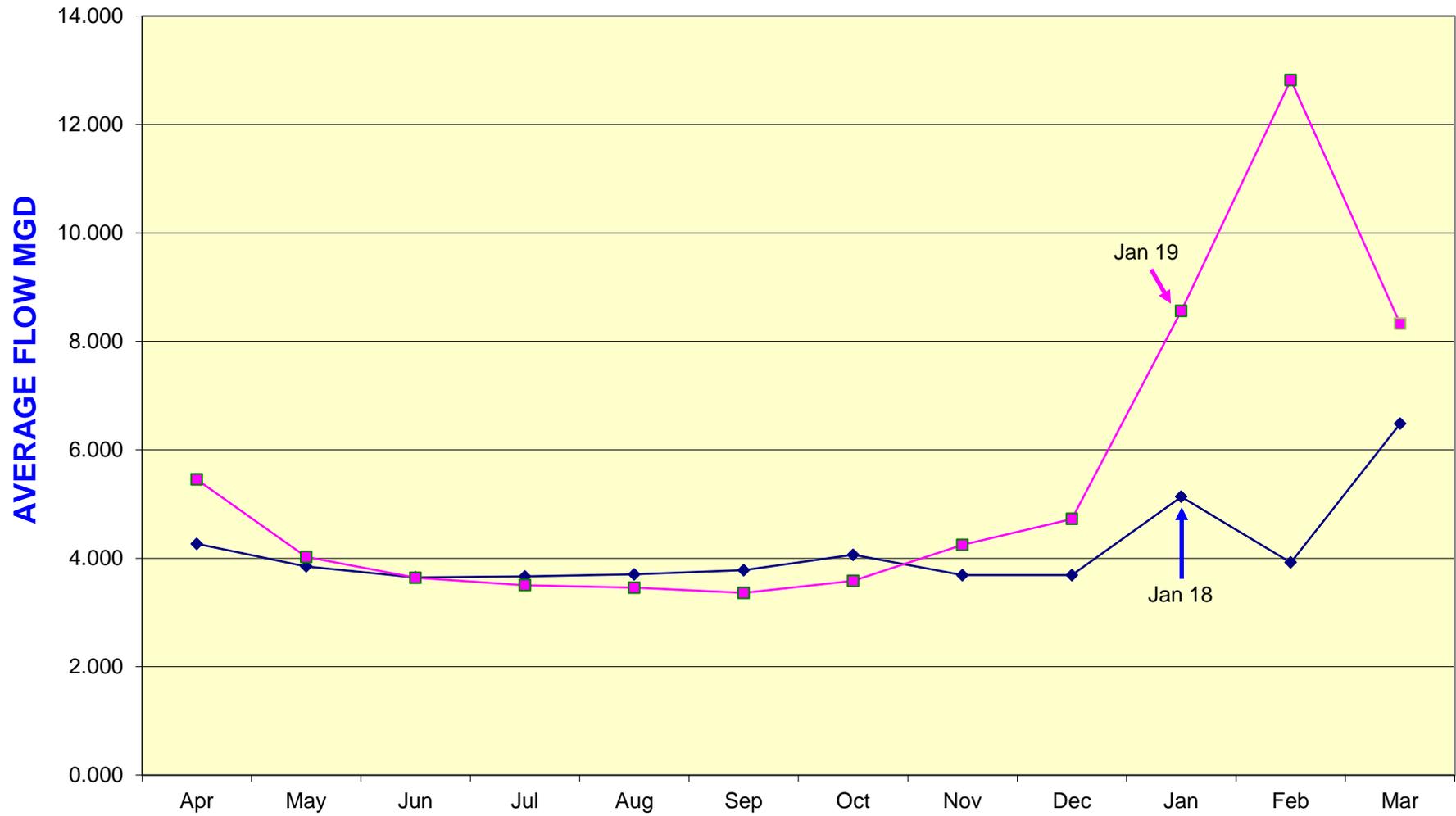
### **3) *RECYCLED WATER REPORT***

NOVATO SANITARY DISTRICT  
RECYCLED WATER  
COMPLIANCE SUMMARY REPORT

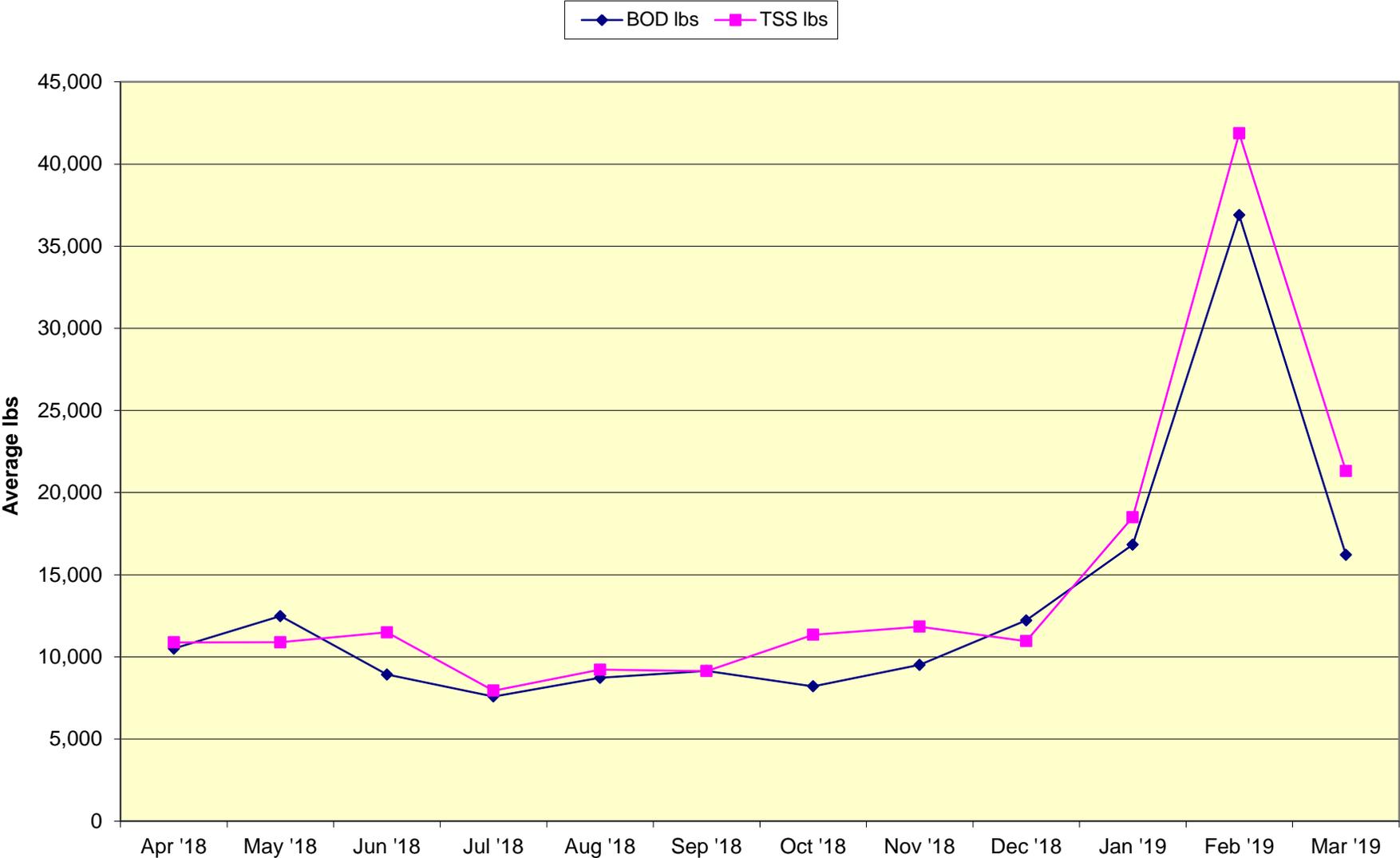
Date	Filter Influent Flow	Recycled Water Flow to Plum St.	Potable Water To Plum St Tank	Recycled Water Influent Turbidity Ave.	Minutes Over 5 NTU Turbidity	Filter Effluent 24 Hr Average Turbidity	Filter Effluent Dissolved Oxygen	Filter Effluent Total Coliform	Chlorint Contact Time
	MGD	MGD	MGD	NTU	(m)	NTU	(mg/l)	MPN/100ml	Minutes
3/1/2019	0.000	0.000							
3/2/2019	0.000	0.000							
3/3/2019	0.000	0.000							
3/4/2019	0.000	0.000							
3/5/2019	0.490	0.308		1.1	0	0.5	9.5	<1	>450.000
3/6/2019	0.000	0.000							
3/7/2019	0.000	0.000							
3/8/2019	0.000	0.000							
3/9/2019	0.000	0.000							
3/10/2019	0.000	0.000							
3/11/2019	0.000	0.000							
3/12/2019	0.000	0.000							
3/13/2019	0.000	0.000							
3/14/2019	0.000	0.000							
3/15/2019	0.000	0.000							
3/16/2019	0.000	0.000							
3/17/2019	0.000	0.000							
3/18/2019	0.000	0.000							
3/19/2019	0.000	0.000	0.066						
3/20/2019	0.000	0.000							
3/21/2019	0.000	0.000							
3/22/2019	0.000	0.000							
3/23/2019	0.000	0.000	0.212						
3/24/2019	0.000	0.000							
3/25/2019	0.000	0.000							
3/26/2019	0.000	0.000							
3/27/2019	0.000	0.000							
3/28/2019	0.000	0.000							
3/29/2019	0.000	0.000							
3/30/2019	0.000	0.000							
3/31/2019	0.000	0.000	0.170						
<b>Total</b>	0.490	0.308	0.278						
<b>Minimum</b>	0.000	0.000	0.066	1.1	0	0.5	9.5	<1	>450.0
<b>Maximum</b>	0.490	0.308	0.212	1.1	0	0.5	9.5	<1	>450.0
<b>Average</b>	0.016	0.010	0.149	1.1	0	0.5	9.5	<1	>450.0

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

## WASTEWATER INFLUENT FLOW COMPARISON

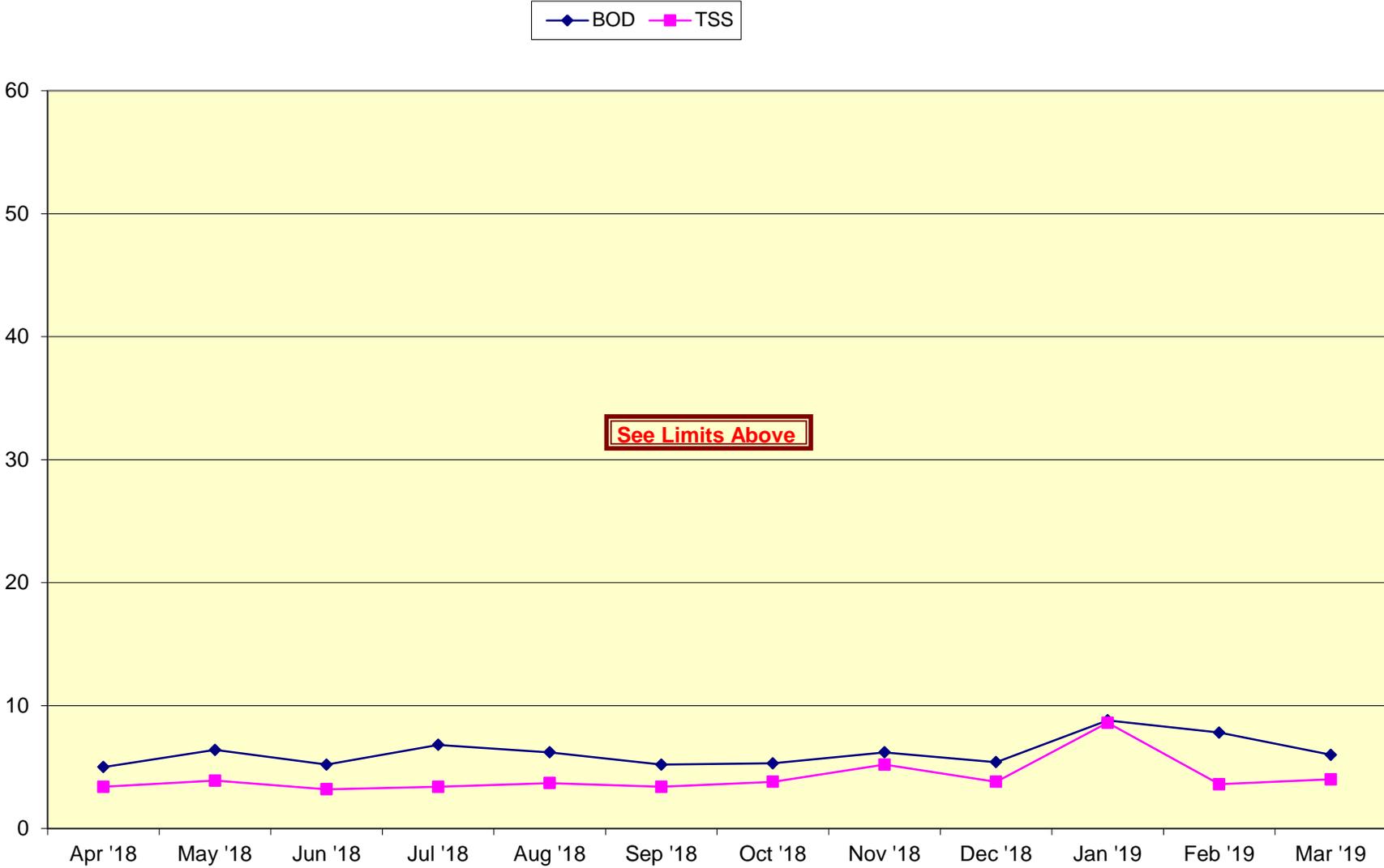


### Influent Load BOD / TSS lbs



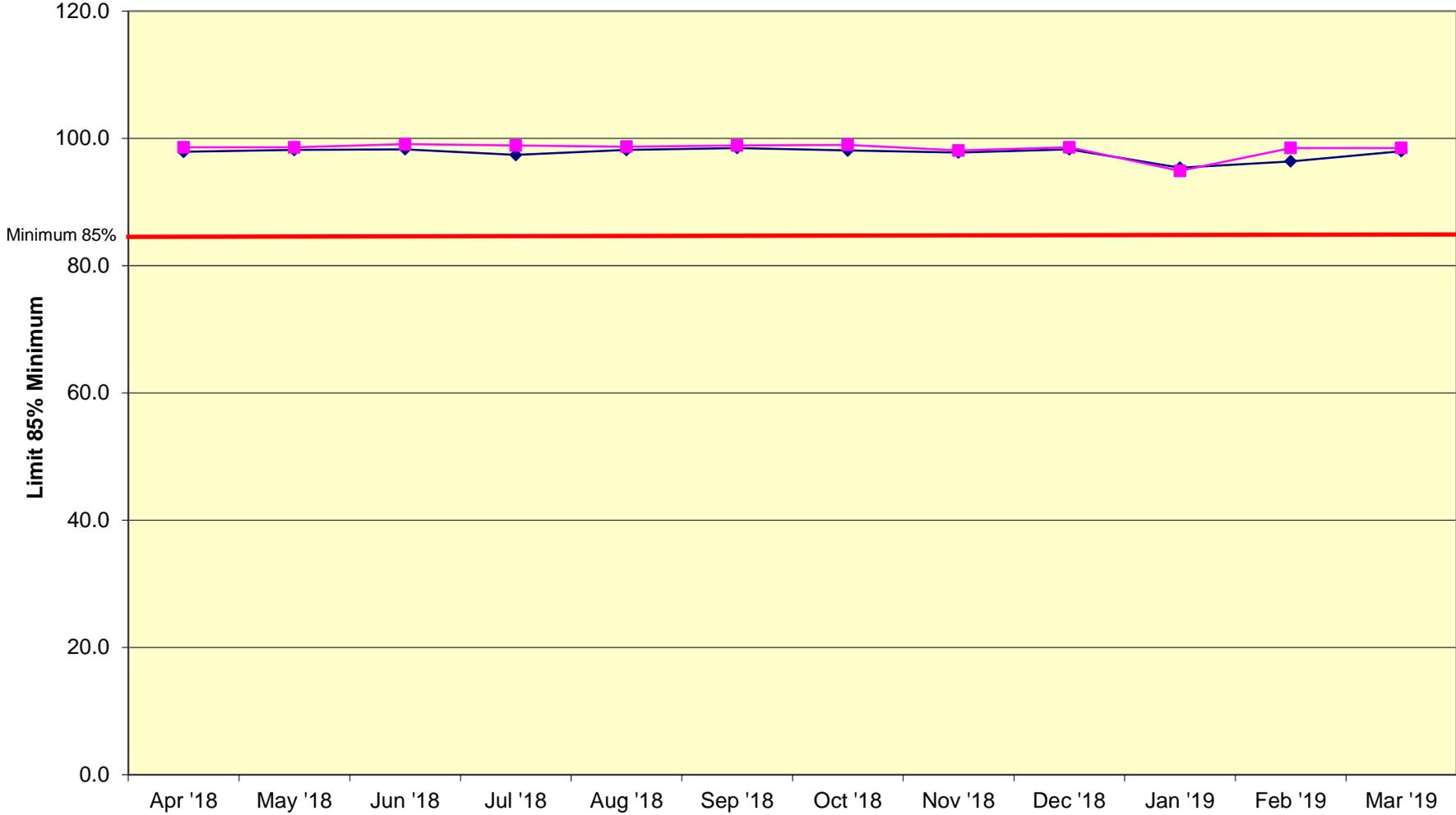
# Effluent BOD / TSS Concentration

NPDES LIMITS WET SEASON  
BOD & TSS - 30 mg/L Monthly Ave, 45 mg/L Weekly Ave

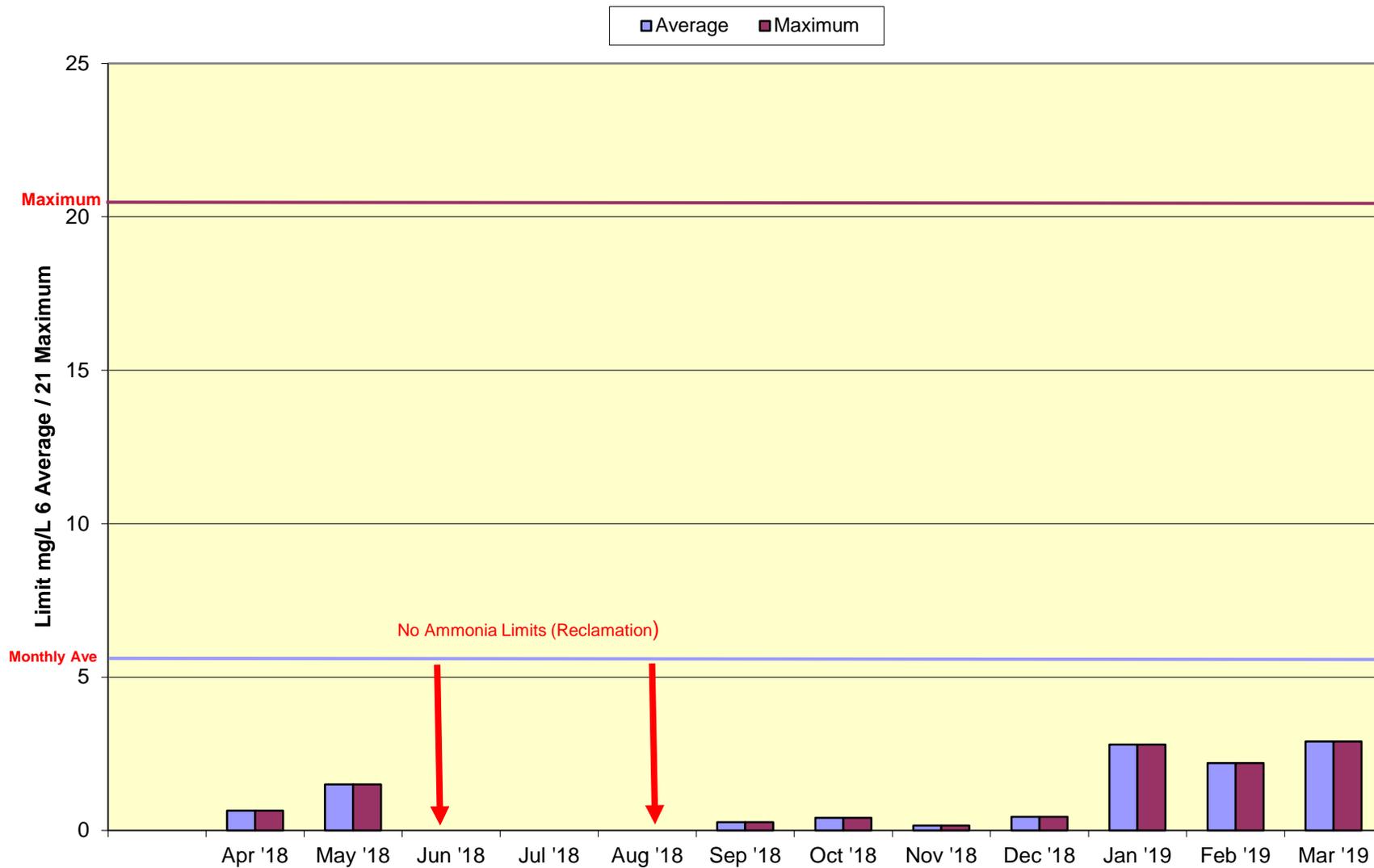


# BOD / TSS Percent Removal

◆ BOD ■ TSS

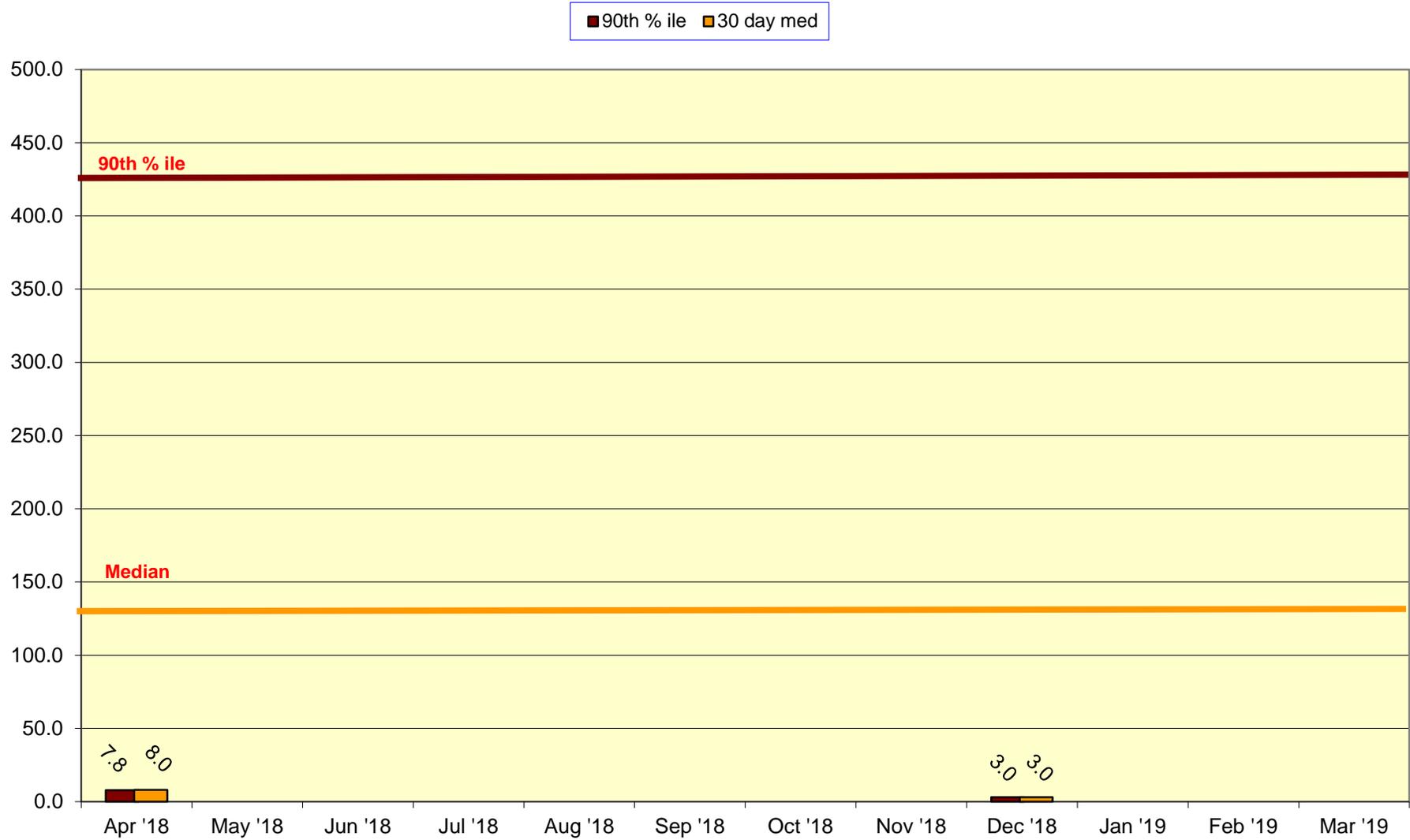


# Effluent Ammonia



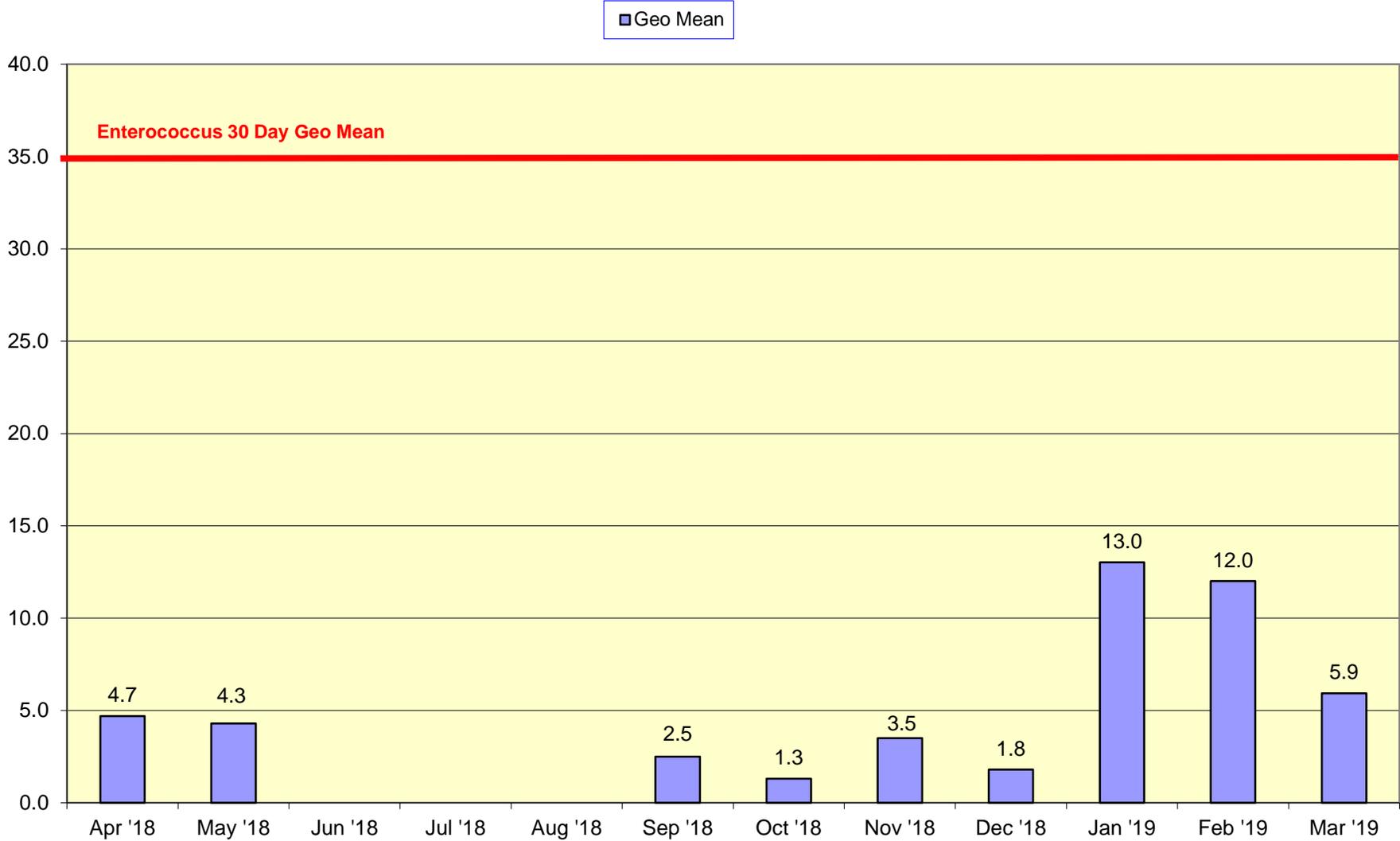
# Disinfection - Fecal Coliform

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



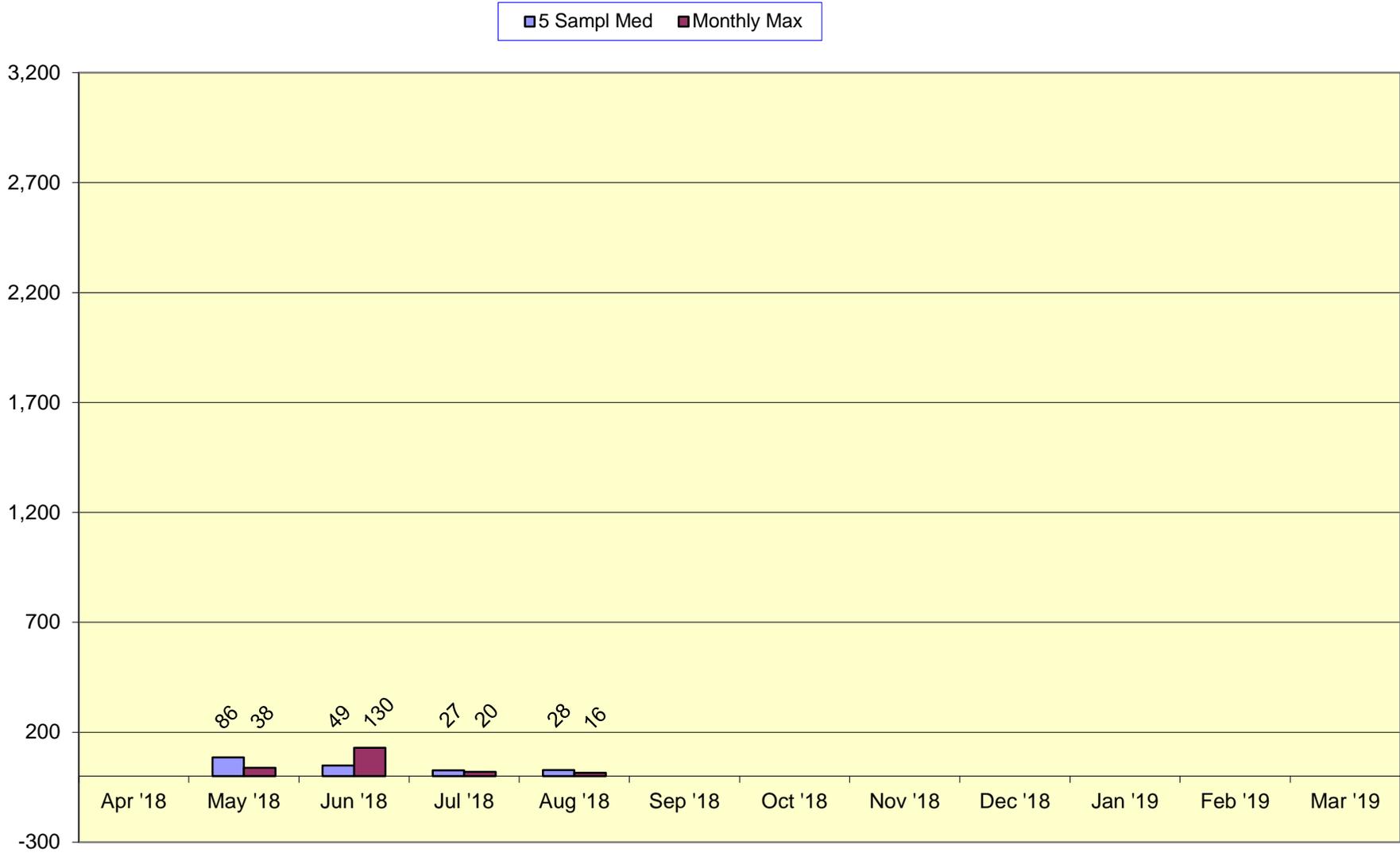
# Disinfection - Enterococcus

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

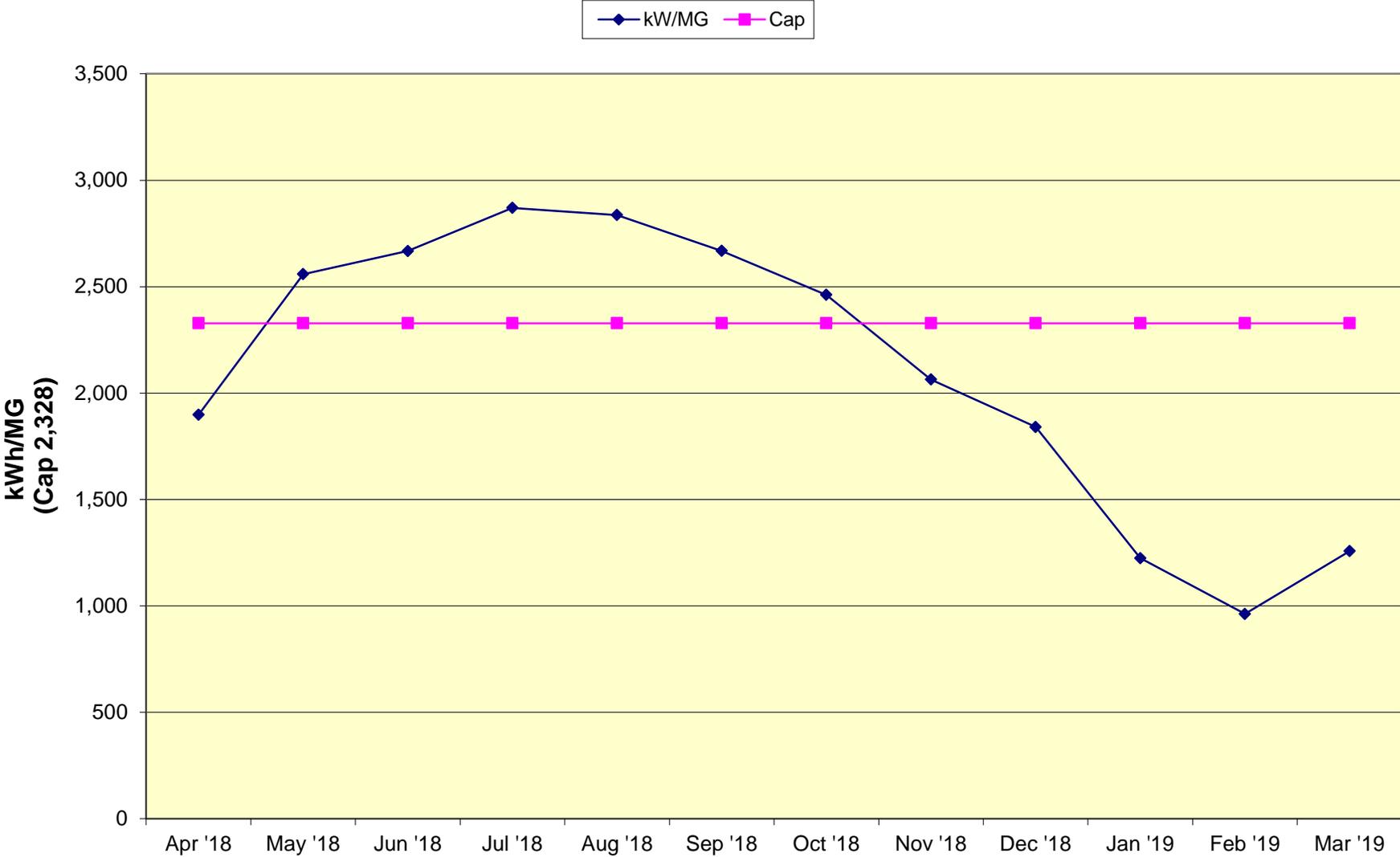


# Disinfection - Total Coliform

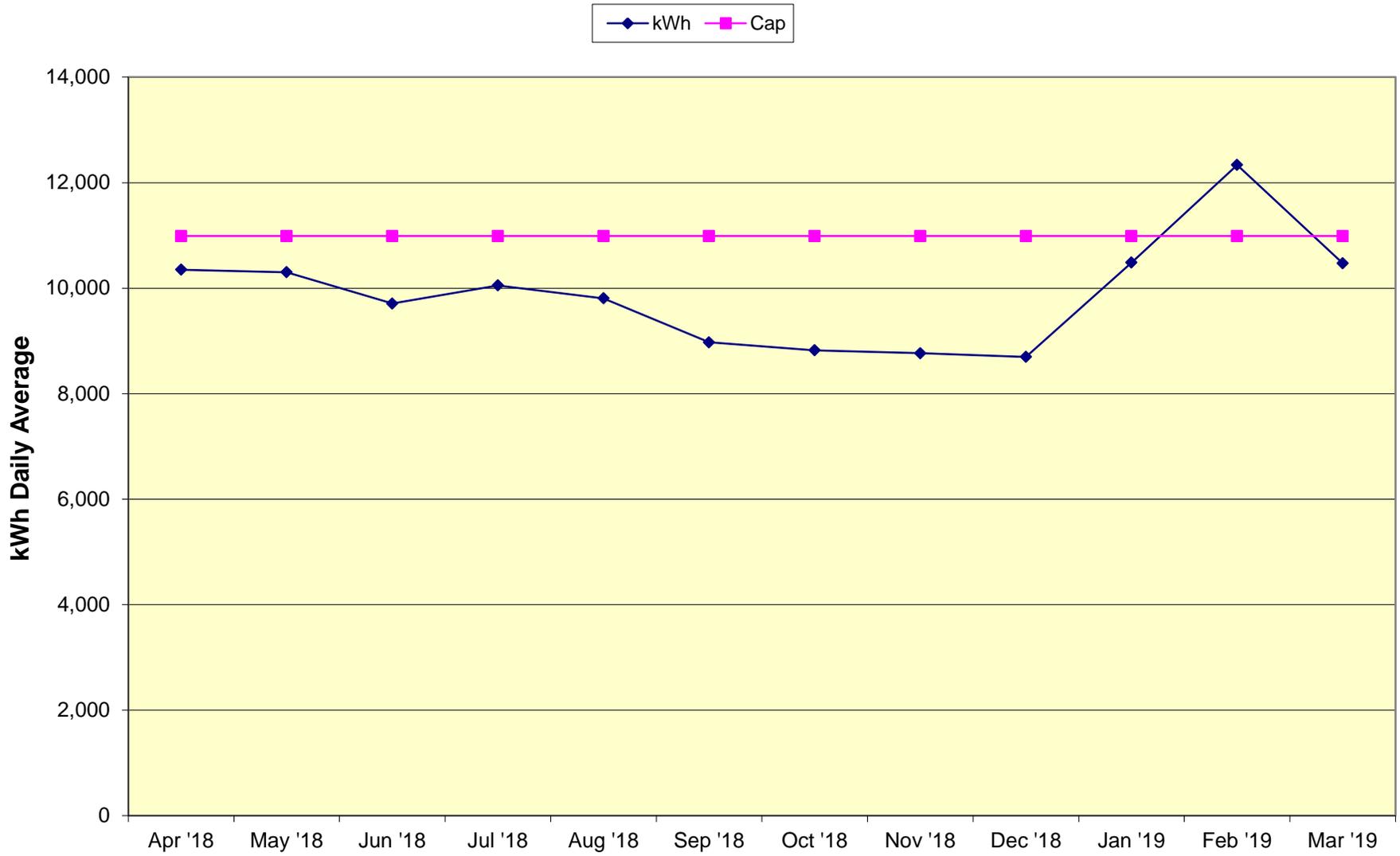
**TOTAL COLIFORM LIMITS - WDR**  
**5 Sample Median - 240 mpn /100 ml**  
**Maximum - 10,000 mpn/100 ml**



### Energy kWh/MG

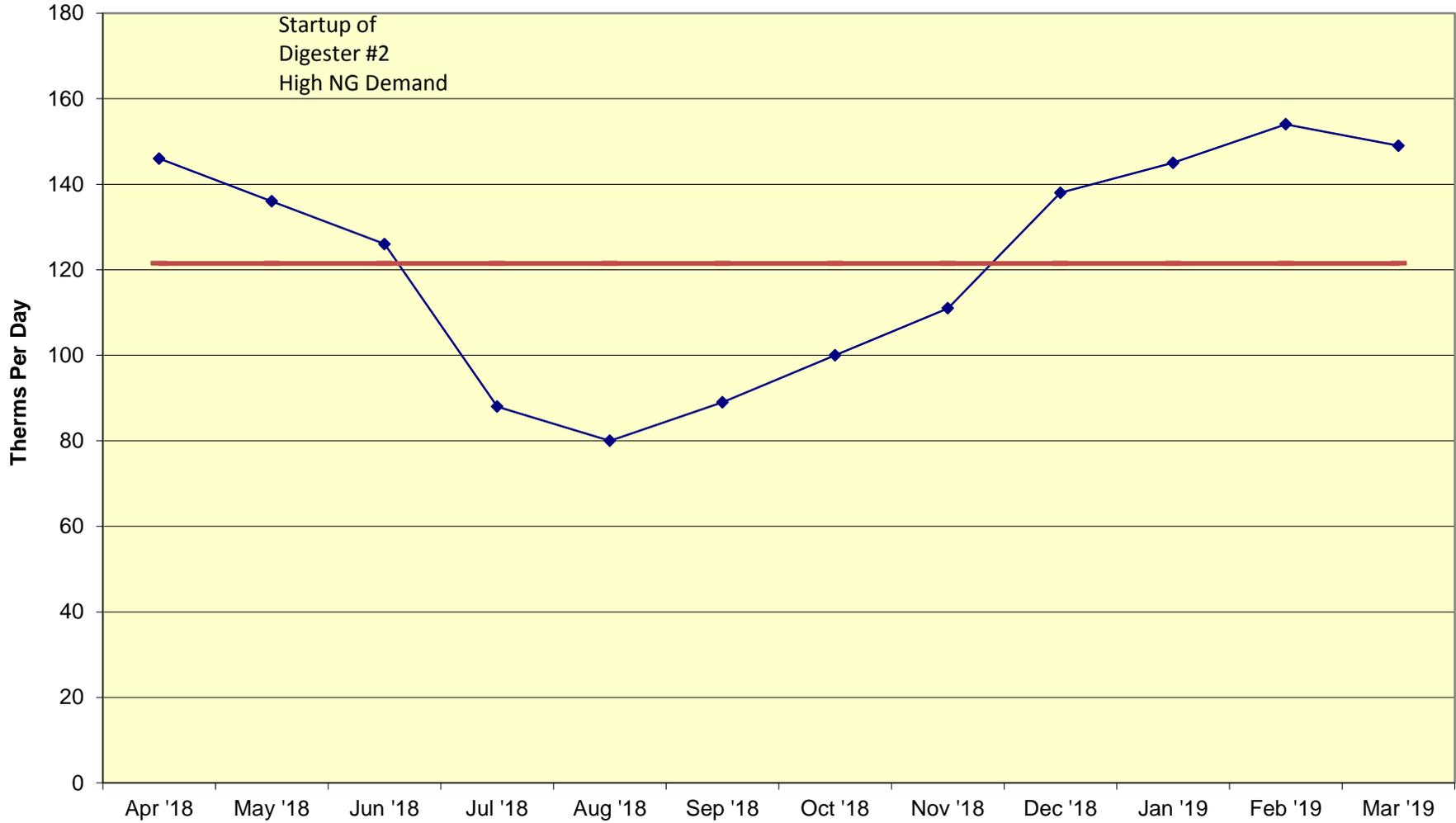


# Energy kWh



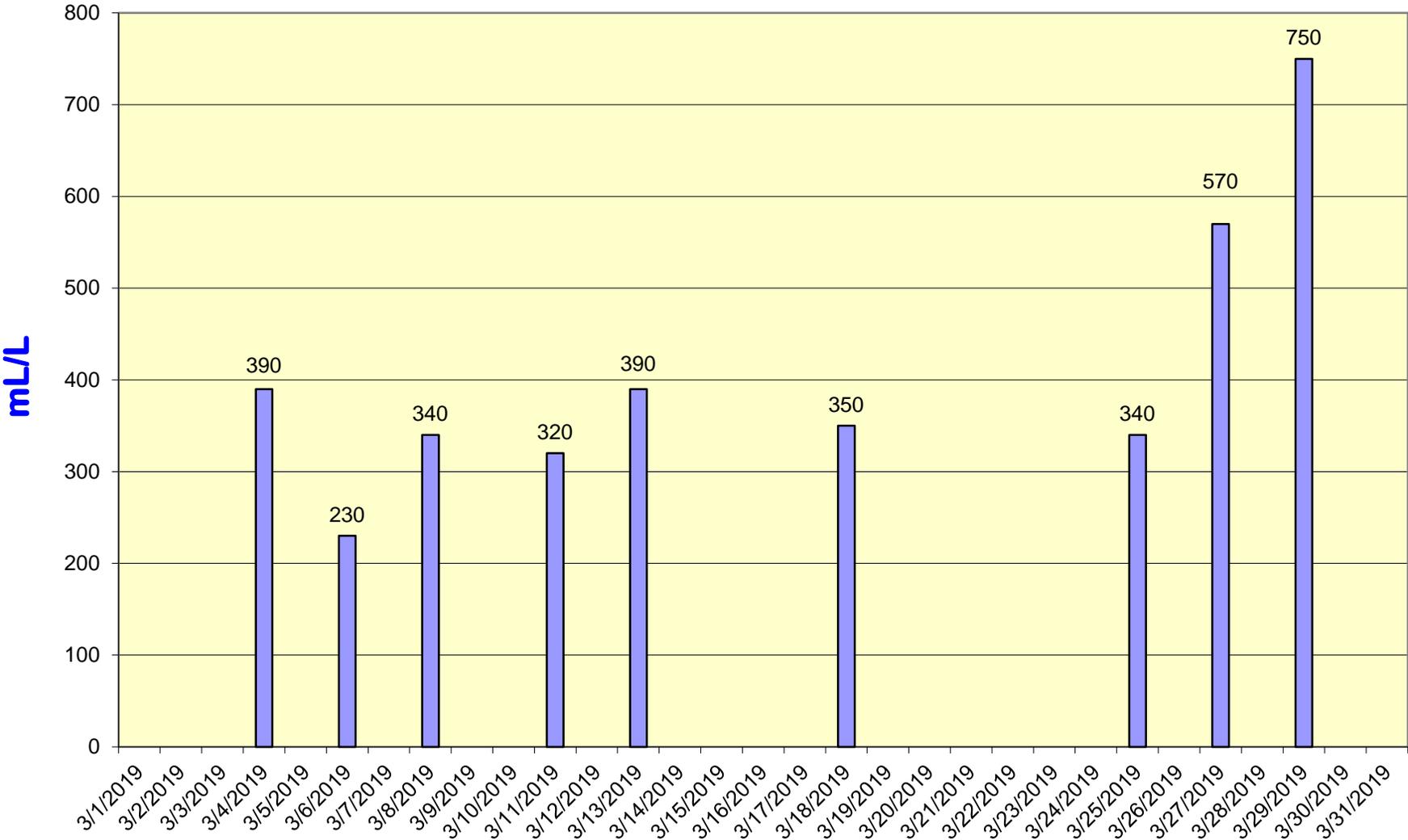
### Natural Gas Use

◆ Natural Gas — Cap

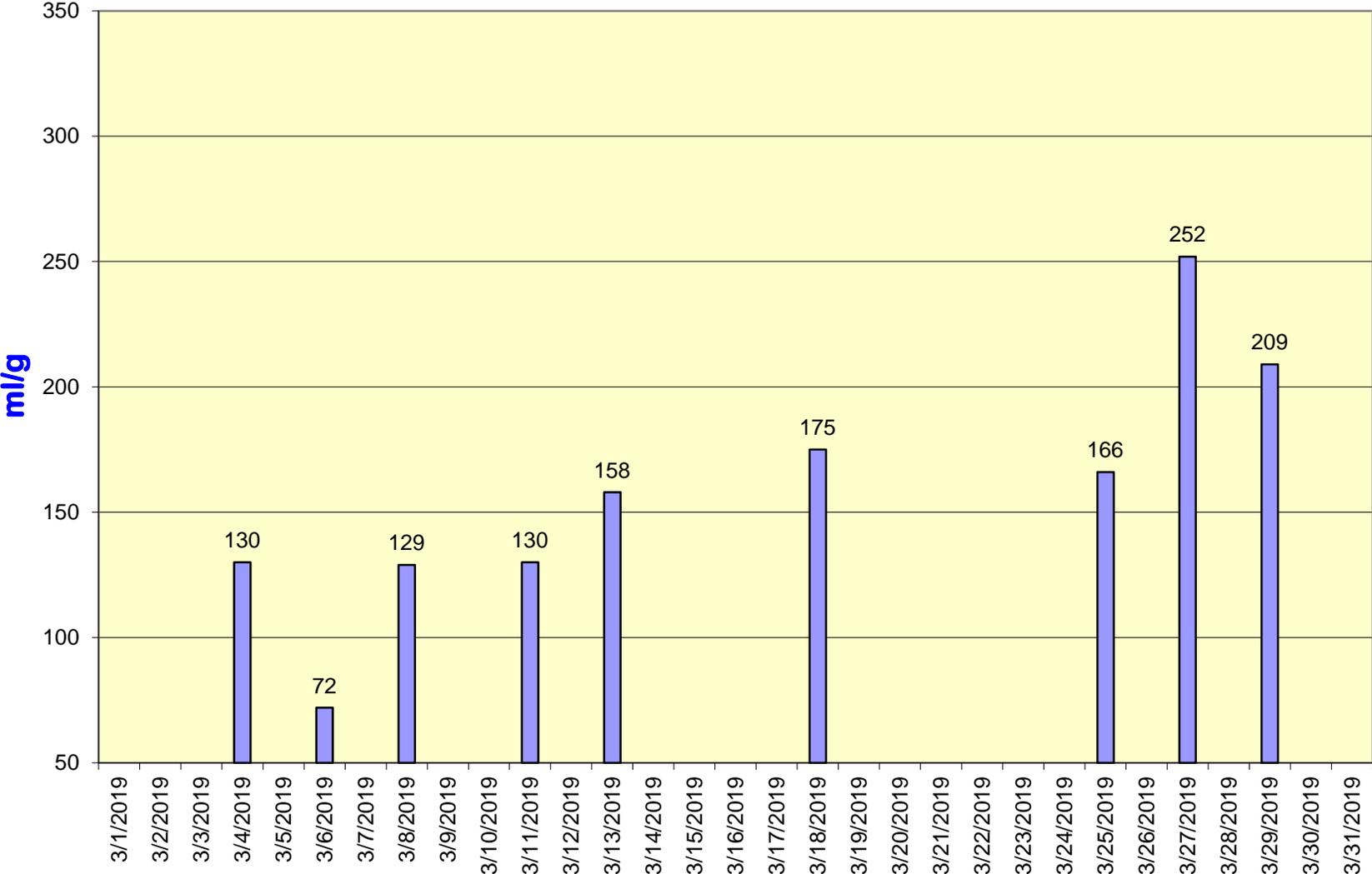


## ***5) PROCESS CONTROL DATA / GRAPHS***

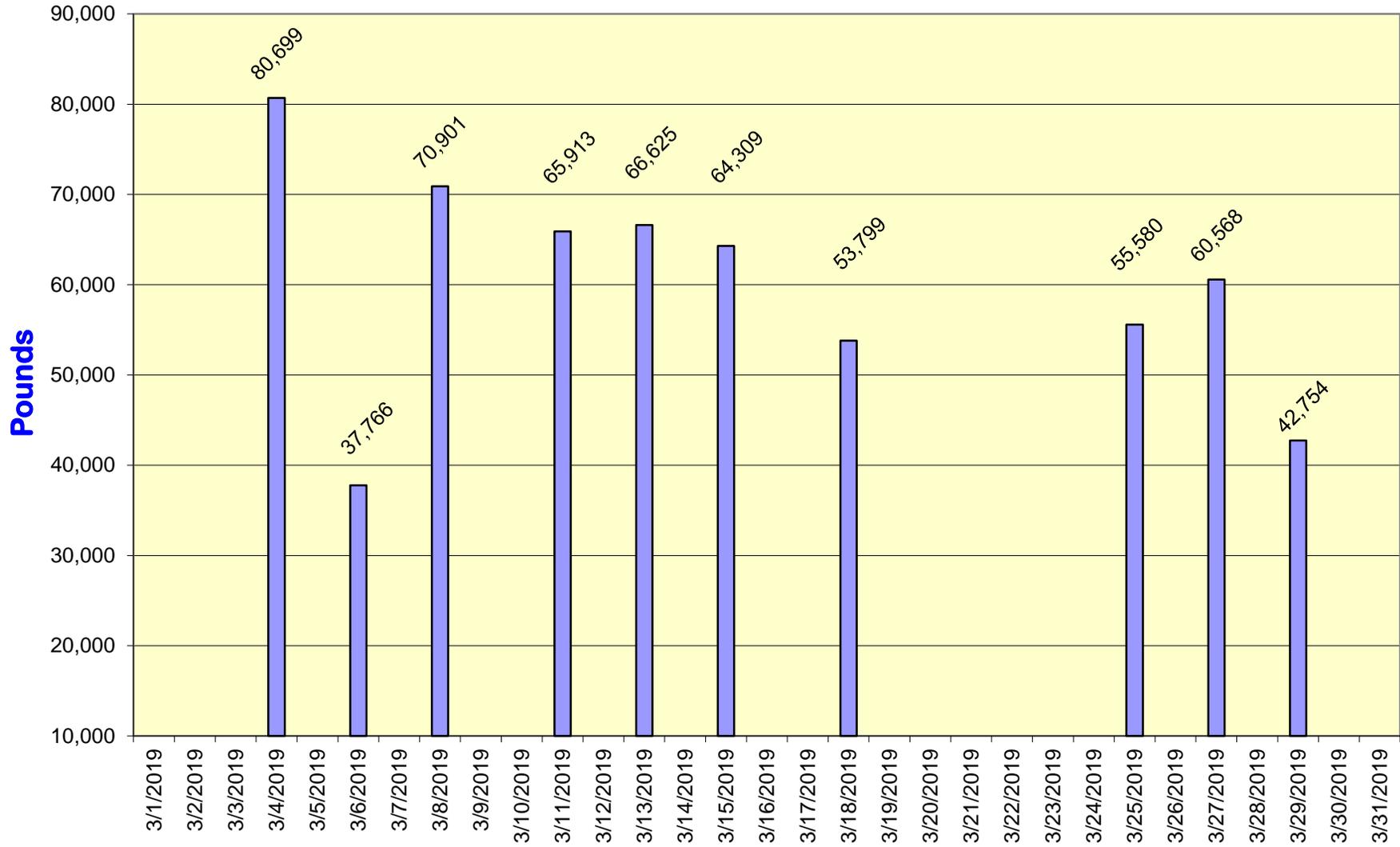
# Settleability



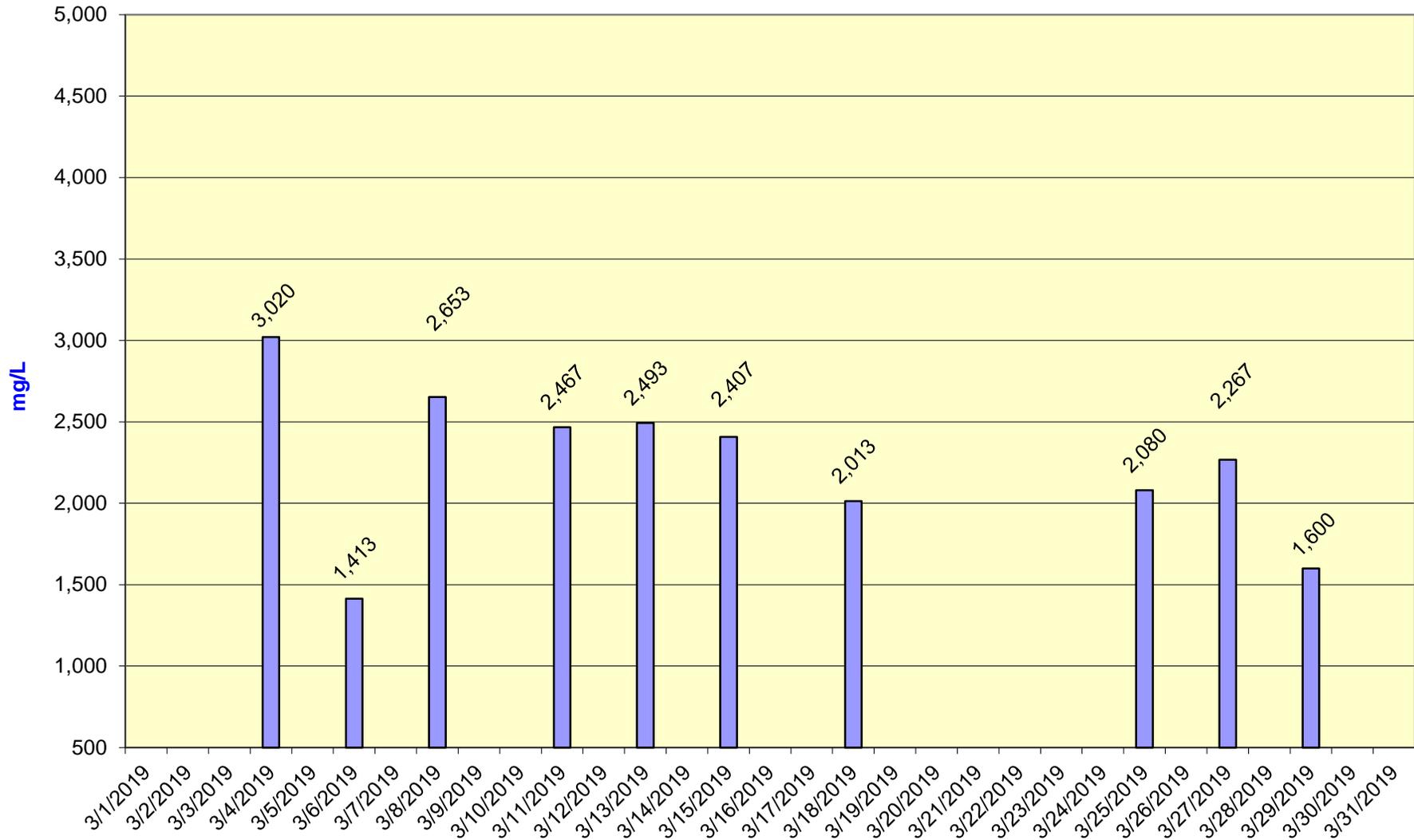
# Sludge Volume Index



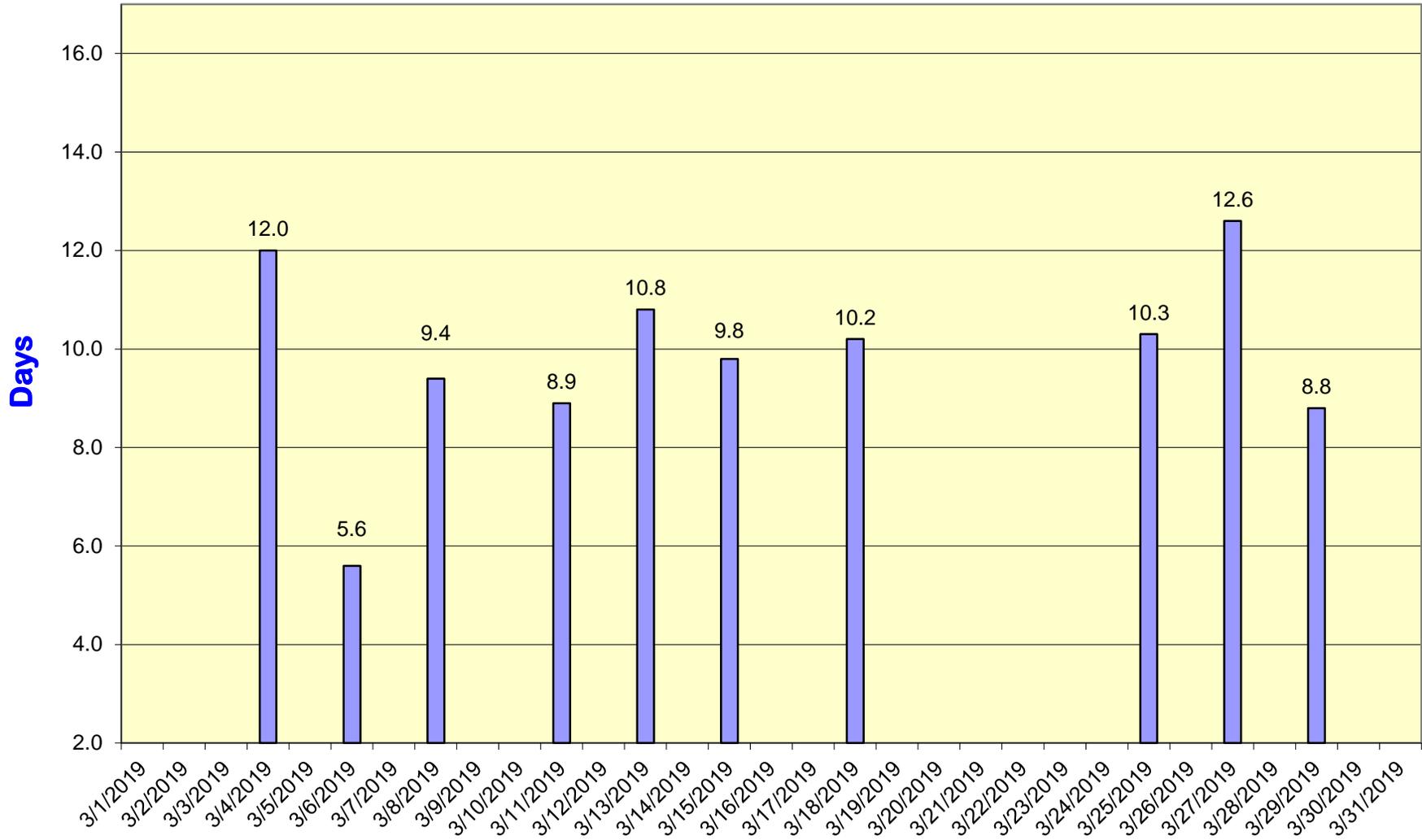
## MLSS Inventory



### MLSS Concentration



# Mean Cell Residence Time

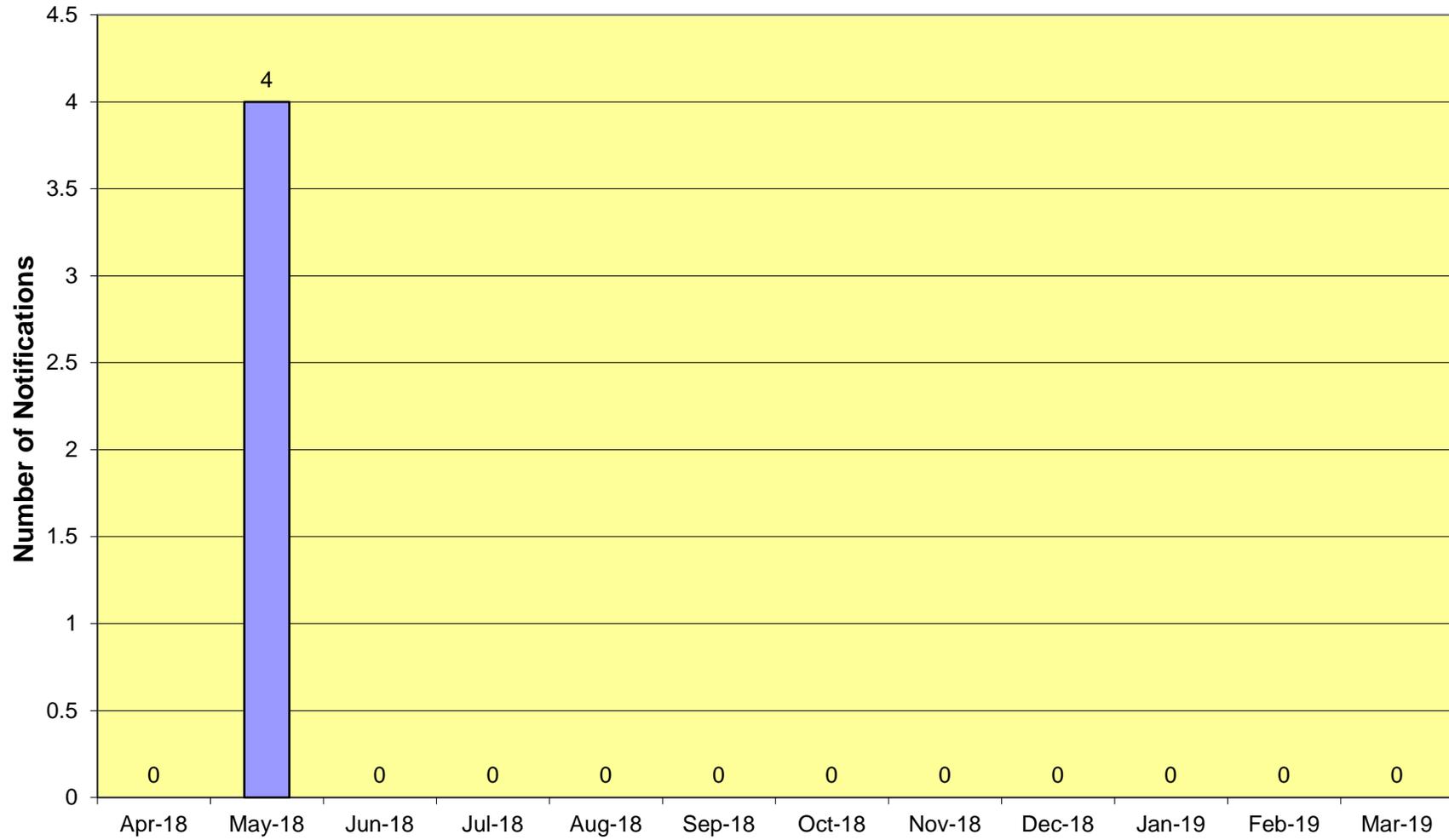


## Process Control Data

	Influent Flow	Settleability	MLSS Concentration	MLSS Inventory	MCRT	SVI
3/1/2019	12.45					
3/2/2019	12.85					
3/3/2019	11.20					
3/4/2019	9.70	390	3,020	80,699	12.0	130
3/5/2019	12.27					
3/6/2019	14.11	230	1,413	37,766	5.6	72
3/7/2019	10.47					
3/8/2019	8.88	340	2,653	70,901	9.4	129
3/9/2019	10.53					
3/10/2019	11.62					
3/11/2019	9.38	320	2,467	65,913	8.9	130
3/12/2019	8.31					
3/13/2019	7.18	390	2,493	66,625	10.8	158
3/14/2019	6.57					
3/15/2019	6.41		2,407	64,309	9.8	
3/16/2019	6.12					
3/17/2019	6.10					
3/18/2019	5.52	350	2,013	53,799	10.2	175
3/19/2019	6.08					
3/20/2019	6.27					
3/21/2019	5.66					
3/22/2019	7.55					
3/23/2019	7.11					
3/24/2019	6.32					
3/25/2019	6.60	340	2,080	55,580	10.3	166
3/26/2019	6.75					
3/27/2019	7.99	570	2,267	60,568	12.6	252
3/28/2019	8.41					
3/29/2019	6.89	750	1,600	42,754	8.8	209
3/30/2019	7.26					
3/31/2019						
Minimum	5.52	230	1,413	37,766	5.6	72
Maximum	14.11	750	3,020	80,699	12.6	252
Total	252.56					
Average	8.42	409	2,241	59,891	9.8	158

## ***6) NEIGHBORHOOD CONTACTS***

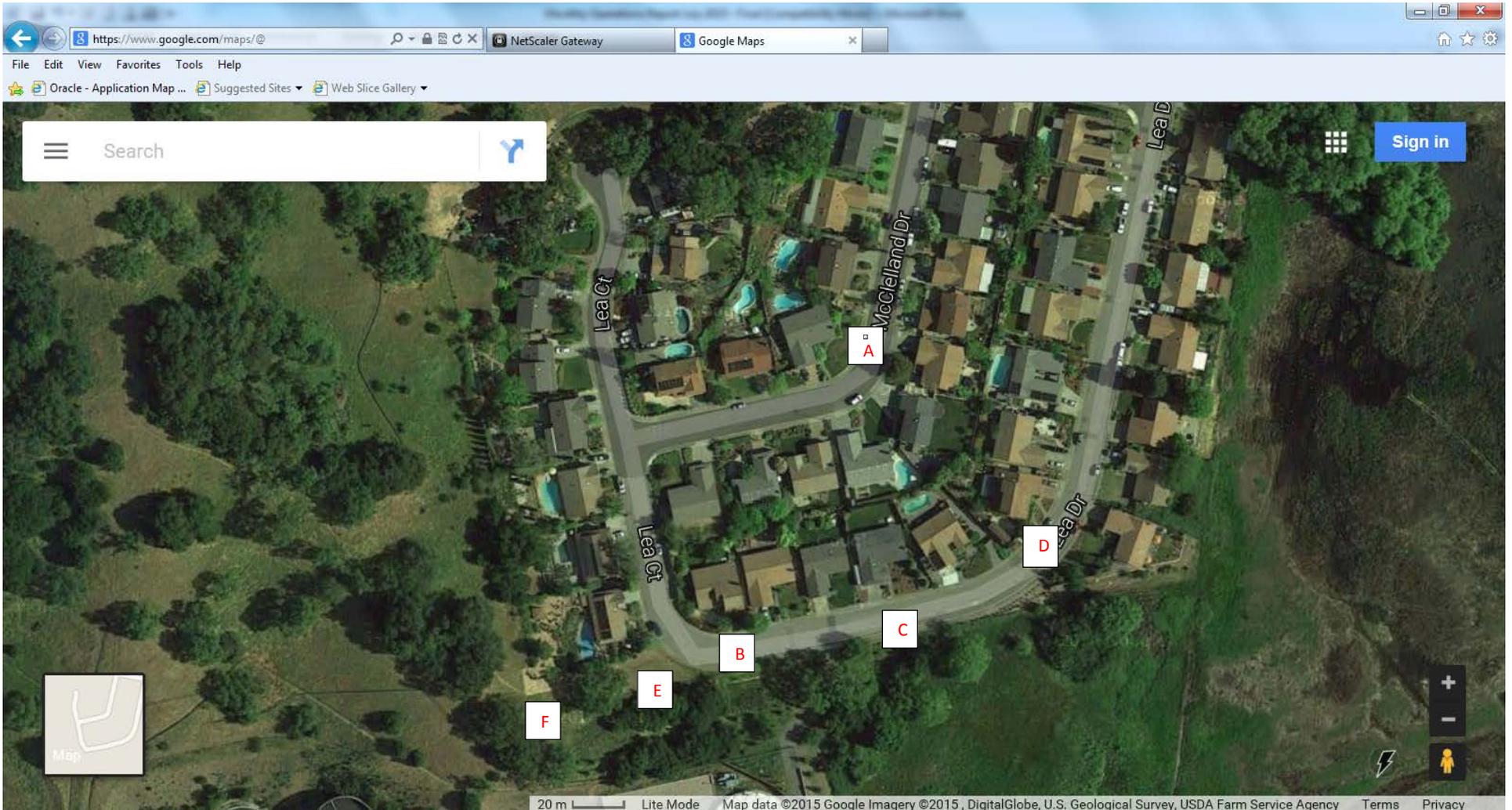
## Neighborhood Contacts Received



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

JEROME METER READINGS - March 2019				
Sample Location	Min	Max	Ave	NOTES / COMMENTS
A: McLelland	0.000	0.000	0.000	Neighborhood
B: Lea 1	0.000	0.000	0.000	Neighborhood
C: Lea 2	0.000	0.000	0.000	Neighborhood
D: Lea 3	0.000	0.000	0.000	Neighborhood
E: Lea 4				Neighborhood
F: Lea 5				Neighborhood
Lea 4 & 5 Not Measured Due to				
Accessibility Issues (Weather Related)				

# NEIGHBORHOOD JEROME METER LOCATIONS – LEA AND McCLELLAND



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

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**1.0 Summary:**

1.1 During March 2019:

- Plant effluent was discharged to the bay.
- Flood waters at Site 3 were pumped down through the first weeks of March 2019 which has restored vehicular access to Drainage Pump Station 3.
- CalTrans removed concrete barricades and restored vehicular access to Site 2 over the weekend of 3/23 and 3/24.

**2.0 Ranch Operations:**

2.1 Drainage Pump Stations No. 3 and 7 pumped approximately 495 MG and 176 MG, respectively this month. These pumps operated continuously through the flooding events with no failures.

2.2 Significant flooding that occurred throughout February 2019 inundated nearly all of the irrigated pastures at Site 2 throughout much of March 2019. Site 2 access continued to be by foot via Deer Island Lane until 3/25/2019.

2.3 During a visit to Site 2 from Deer Island Lane on March 4<sup>th</sup>, District staff noticed that a large Eucalyptus tree had fallen onto and damaged a wooden pier at storage pond #2. The tree has been moved aside and the dock will be repaired during the dry season.

2.4 Fahy Tree was on site on 3/26/2019 and will provide a proposal on additional Eucalyptus tree cleanup work.



**Figure 1: Eucalyptus Tree on Pond #2 Pier**

**3.0 Irrigation Parcels:**

3.1 No irrigation of any parcels occurred in March 2019.

3.2 Marin Sonoma Mosquito and Vector Control sprayed various flooded areas of District reclamation land.

**4.0 Irrigation Pump Station:**

4.1 The Wildlife Pond pump is stopped for the winter season.

4.2 Storage pond Nos. 1 and 2 levels stayed at 5.8 feet throughout March 2019.

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

5.1 No biosolids handling or disposal was performed in March 2019.

**NOVATO SANITARY DISTRICT**  
**Reclamation Facility - Monthly Statistics for Calendar Year 2019, as of March 31, 2019**

	January	February	March	April	May	June	July	August	September	October	November	December	Total Year to Date	Annualized Monthly Average
<b>Irrigation Pump Station</b>														
Plant flow to ponds (MG)	0	0	0											
Irrigation (MG)	0	0	0											
Irrigation Pump 1 Hours	0	0	0											
Irrigation Pump 2 Hours	0	0	0											
Irrigation Pump 3 Hours	0	0	0											
Washdown Water Pump Hours	0	0	0											
Wildlife Feed Pump Hours	0	0	0											
Water Circulated through Wildlife Pond (MG)	0	0	0											
Strainer No. 1 Hours	0	0	0											
Strainer No. 2 Hours	0	0	0											
Pond 1 Gauge @ Beginning of Month (feet)	3	4	5.8											
Pond 1 Gauge @ End of Month (feet)	4	5.8	5.8											
Pond 1 Gallons Stored @ End of Month(MG)	28	43	43											
Pond 2 Gauge @ Beginning of Month (feet)	3	4	5.8											
Pond 2 Gauge @ End of Month (feet)	4	5.8	5.8											
Pond 2 Gallons Stored @ End of Month(MG)	36	55	55											
Total Irrigation Water Stored (MG)	64	98	98											
<b>Drainage Pump Station No. 3</b>														
Drainage Pump No. 1 Hours	411.3	639.2	302.1											
Drainage Pump No. 2 Hours	555.8	666.8	692											
Drainage Pump No. 3 Hours	192.9	478.6	655.3											
Total Gallons Stormwater Pumped (MG)	348	535.38	494.82	NA	NA	NA	NA	0	--	--	--	--	1378.2	459.40
<b>Drainage Pump Station No. 7</b>														
Drainage Pump No. 1 Hours	39.2	305.1	72.6											--
Drainage Pump No. 2 Hours	249.3	276.8	319.6											--
Drainage Pump No. 3 Hours	23.4	1.9	0											--
Total Gallons Stormwater Pumped (MG)	140.36	262.71	176.49	NA	NA	NA	NA	0.00	--	--	--	--	579.56	193.19

**NOVATO SANITARY DISTRICT  
BOARD AGENDA ITEM SUMMARY**

<b>TITLE: Collection System Improvements Project, Account No. 73006</b>	<b>MEETING DATE: April 8, 2019</b>  <b>AGENDA ITEM NO.: 9.a.</b>
<b>RECOMMENDED ACTION:</b> Grant Final Acceptance of the Project, and authorize staff to file the Notice of Completion.	
<b>SUMMARY AND DISCUSSION:</b>  <p>In accordance with the provisions of the Uniform Public Cost Accounting Act (UPCCAA), on November 14, 2018, the General Manager-Chief Engineer awarded the contract for the Golden Gate Rush Creek Sewer Phase I Project to Maggiora &amp; Ghilotti Inc. (M&amp;G) of San Rafael, CA, for a low bid amount of \$146,810. Work on the project began November 19, 2018 and substantial completion was achieved on January 24, 2019.</p> <p>At this time, the contract work is complete and ready for final acceptance. The final cost of the project is \$210,114.04 or \$63,304.04 (43%) over the bid amount as a result of five (5) total contract change orders (CCOs) over the course of the project. As reported in previous capital project updates to the Board, the project encountered multiple challenges including poor soil conditions, conflicting utilities, and the need for additional asphalt concrete to match the existing 12-inch road section.</p> <p>It is recommended that final acceptance be granted, and staff be authorized to file the Notice of Completion.</p>	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence) and Goal 2 (Reliable and Efficient Facilities) of the latest Strategic Plan Update.	
<b>DEPT. MGR.: EB</b>	<b>GENERAL MANAGER:SSK</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE:** Capital Projects Update,  
March 2019.

**MEETING DATE:** April 8, 2019

**AGENDA ITEM NO.:** 9.b.

**RECOMMENDED ACTIONS:** Receive Capital Projects Update for March 2019.

**SUMMARY AND DISCUSSION:**

The March 2019 Capital Projects Update is attached.

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

**ATTACHMENTS:** 1. Capital Projects Update, March 2019.

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

**DEPT. MGR.:** EB

**GENERAL MANAGER:** SSK

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

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

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

- 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.
  - The Project has been reevaluated for pipe size and construction method. Construction method will remain pipe bursting with a one-size diameter increase.
  - 100% design anticipated in Spring, 2019.
2. Bel Marin Keys Blvd. Sewer Rehab Project: Rehabilitation of about 900 feet of 10-inch and about 1,410 feet of 8-inch sewer main in Bel Marin Keys Blvd.
  - Contract awarded to Michels Pipeline Construction, March 18, 2019.
  - Substantial completion expected August 2019.
3. Golden Gate Place: Realignment/replacement of approximately 1,000 feet of 8-inch sewer with new 10-inch PVC sewer.
  - Staff is seeking Board authorization to grant final acceptance and file the Notice of Completion (NoC) for Phase I of the project by separate Board Agenda item.
  - Phase II project at 65% design level.
  - Estimated Phase II construction, Summer 2019.
4. Collection System Master Plan (CSMP): Continuing work associated with the CSMP currently underway by the District's consultant Woodard and Curran (W&C):
  - The District received a draft report on January 30<sup>th</sup>. Staff is currently reviewing comments with the consultant, Woodard & Curran (W&C).

**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 3/31/19, ten (10) grants have been distributed for a total of \$20,000. The FY 18-19 account balance is \$60,000.

#### **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.

- SCC has indicated that construction of the first phase may advance as early as Summer 2019.

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

- The District's Consultant, Woodard and Curran (W&C) has submitted a Final Draft Cogeneration Evaluation Technical Memo Update. Staff is currently reviewing the recommendations and expects to present results to the Board in the next few months.
- District and Veolia staff are working with Enovity, Inc. (Consultant), an energy services company, which is evaluating optimization/energy savings measures/projects eligible for PG&E's on bill financing (OBF) program. The Consultant presented several proposed energy efficiency measures (EEMs) to the Board at its regular meeting of February 11, 2019. Staff is currently reviewing a design-build proposal for implementing EEMs and a draft agreement.

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

- FY 18-19 Budget for this account is \$50,000 with a balance of approximately \$16,000.

**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.

- The District has issued a purchase order in the amount of \$256,388.74 for a modular building system in December 2018.
- The modulars were delivered in March 2019. Occupancy expected late Spring/early 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.

- No update this month.

**Account No. 73005: RWF Expansion**

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

- The Notice of Completion (NoC) has been filed, and the Project is in the warranty period.

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

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

- The Headworks Protective Coating Project is at the 90% design level. Completion of design and advertisement for bids is expected Spring 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 45kw portable generator and replacement of up to four light duty trucks. Purchase orders for the following have been issued to date:

- 1- Nissan Frontier 4x4: \$25,264
- 2- F250 Crew Cab 4x4: \$64,035 (1 of 2 received March, 2019)
- 1- 45kW Towable Generator: \$43,336 (Received March, 2019)

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# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Annual Budget: Sewer Service Charges - Set Public Hearing</b>	<b>MEETING DATE: April 8, 2019.</b>  <b>AGENDA ITEMS NO.: 10.a.</b>
<b>RECOMMENDED ACTION:</b> Set the date of June 10, 2019 for a public hearing on individual sewer service charges, and adoption of a resolution confirming report on sewer service charges and collection on county tax rolls.	
<b>SUMMARY AND DISCUSSION:</b>  <p>Each year the District must hold a public hearing in order to determine individual rates and collect the sewer service charges on the tax rolls. This is separate from the Proposition 218 hearing that is held prior to making changes to the rates.</p> <p>As a reminder, after completing the appropriate Proposition 218 requirements, the District Board, at its meeting of June 13, 2016, held a public hearing on, and thereafter adopted, Ordinance No. 120 – “An Ordinance of the Novato Sanitary District Establishing Sewer Service Charges for Fiscal Years 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21”.</p> <p>At this time, it is necessary to determine the individual customer rates for fiscal year FY 19-20 prior to the proposed June 10, 2019 hearing, so that District staff has time to calculate the rates for each customer. District staff will have a computerized database available at the meeting of June 10<sup>th</sup> so that anyone may request to know what their individual rate will be in the coming year and have an opportunity to protest their individual rate.</p> <p>The public hearing will be “noticed” twice in the Marin IJ. Following the public hearing, the Board will consider adoption of a resolution to collect the sewer service charges on the county tax rolls. Similar to previous years, the content of the resolution will be as specified by the County of Marin, which collects the District’s sewer service charges for the District on the county tax rolls.</p>	
<b>ATTACHMENTS:</b> 1. Draft Notice of Public Hearing Notice – Sewer Service Charges 2019-20.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 4 (Well Planned Finances with a Long Range Outlook), Goal 1 (Operational Excellence), and Goal 3 (Alignment and Communications) of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> ssk	<b>GENERAL MANAGER:</b> SSK

NOVATO SANITARY DISTRICT  
NOTICE OF PUBLIC HEARING  
SEWER SERVICE CHARGES 2019-20

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

**NOTICE IS FURTHER GIVEN** that on Monday, the 10<sup>th</sup> day of June, 2019, at the hour of 5:30 p.m. at the regular meeting place of the District, Novato Sanitary District, 500 Davidson Street, Novato, California, said Board will hear and consider all protests and objections to said report.

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

Dated: April 8, 2019

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Sandeep Karkal  
Secretary, Novato Sanitary District

**Publish: May 20 and May 27, 2019**

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: ANNUAL BUDGET: Anticipated FY19-20 Preliminary Budget</b>	<b>MEETING DATE: April 8, 2019</b>  <b>AGENDA ITEM NO.: 10. b. &amp; c.</b>
<b>RECOMMENDED ACTION(S):</b> <b>10.b. - Receive Schedule of Committee meetings to review Annual Solid Waste, Operating, and Capital Improvements Program (CIP) Budgets, and</b> <b>10.c. - Workshop overview of anticipated FY 19-20 Preliminary Annual Operating and CIP budgets and budget elements.</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>The Board traditionally reviews each of the Solid Waste, Operating, and Capital Improvement Program budgets by Committee. The Budget schedule presented at the March 18, 2019 Board meeting included the following review schedule for the individual Committees (all meetings at 3:00 pm unless otherwise noted):</p> <ol style="list-style-type: none"> <li>1. Solid Waste Budget review: Solid Waste Committee – Monday, May 20, 2019 (Directors Mariani and Peters).</li> <li>2. Operating Budget review: Wastewater Operations Committee – Tuesday, May 28, 2019 (Directors Dillon-Knutson and Miller).</li> <li>3. Capital Improvement Program (CIP) budget review: Capital Improvements Committee – Monday, June 3, 2019 (Directors Long and Dillon-Knutson).</li> </ol> <p>Also, the District annually prepares a Capital Improvements Program (CIP) budget based on an anticipated level of project work. This anticipated project work is summarized in a memorandum from staff to the Board (Attachment 1: FY 19-21 Preliminary CIP Budget – Summary of Anticipated Project Work). The memorandum functions as a roadmap for the capital work, and as a tool to inform capital-spending needs for the upcoming budget year.</p> <p>Staff will be present at the meeting to provide an overview of the anticipated preliminary budget, discuss the staff memo, and respond to any questions.</p>	
<b>ATTACHMENTS:</b> 1. FY 19-21 Preliminary CIP Budget – Summary of Anticipated Project Work.	
<b>STRATEGIC PLAN INFORMATION:</b> This item addresses Goal 1 (Operational Excellence), Goal 3 (Alignment and Communications), and Goal 4 (Well Planned Finances with a Long Range Outlook), of the latest Strategic Plan Update.	
<b>DEPT. MGR.:</b> eb, ssk	<b>GENERAL MANAGER:</b> SSK

# Novato Sanitary District

## MEMORANDUM

**TO:** District Board of Directors

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

**BOARD MEETING DATE:** April 8, 2019

**SUBJECT:** FY 19-21 Preliminary Capital Improvements Program (CIP) Budget  
– Summary of Anticipated Project Work.

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### Introduction

This memo presents a summary of the potential or anticipated scope of work for projects and project work included within the various Accounts of the Capital Improvements Program (CIP) budget for FY 19-21.

A copy of the proposed two-year FY 19-21 capital improvement expenditures is included as Table 1: 2019-21 Preliminary Budget, Anticipated Capital Improvement Expenditures.

### **Account No. 72403: Pump Station Rehabilitation**

This ongoing, long-term account provides for replacing the District's underground-type pump stations with submersible pump-type pump stations. The lift stations that remain to be rehabilitated include the two Vintage Oaks Pump Stations and the Rowland Plaza Pump Station. The rehabilitation schedule for these pump stations will be impacted by potential development in the Hanna Ranch and Vintage Oaks area, and work is being deferred until the development plans for the area become clearer.

Therefore, construction work is not anticipated during FY 19-20. However, design work on the remaining pump stations may be initiated depending on how development plans for these areas evolve, and a placeholder amount is included in the account to initiate any needed design work.

### **Account No. 72508: North Bay Water Reuse Authority**

The District is a member agency of the North Bay Water Reuse Authority (NBWRA). FY 19-20 will be the sixth year of the multi-year Phase 2 NBWRA program, including continuing work for currently over \$75 million in recycled water projects across all NBWRA agencies for funding under the US Bureau of Reclamation Title XVI (WaterSMART) program.

At this time, the District expects its future Phase 2 participation to be limited to a more programmatic level, at least until further recycled water demands are identified by the North Marin Water District (NMWD). There are also ongoing discussions to transition the NBWRA program into a more comprehensive North Bay Water Program, where the District would have a limited role. Therefore, it is anticipated that the District's future participation in this expanded program will occur at a very modest level. Accordingly, the District's preliminary FY 19-21 CIP budget includes only a "placeholder" budget amount of \$25,000 for each of these years.

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

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

1. The rehabilitation of about 1,850 feet of 12-inch sewer main along Redwood Blvd. between Lamont Avenue and Diablo Avenue. This project was originally budgeted for construction in FY 18-19. It is anticipated that this project will be bid in FY 18-19 and constructed in the first half of FY 19-20.
2. Continuing work on the rehabilitation of about 900 feet of 10-inch and about 1,400 feet of 8-inch sewer main in Bel Marin Keys Blvd. This project was bid in FY 18-19. It is expected that construction will extend into FY 19-20.
3. The rehabilitation of about 150 feet of 6-inch sewer main between Midway Blvd. and Ridgeview Ct. and about 235 feet of 8-inch sewer between S. Novato Blvd. and Cambridge Street.
4. The installation of about 780 feet of new 10-inch sewer main that will result in rerouting the main sewer from Golden Gate Place to Rush Creek Place via Redwood Drive. The first phase of this project was completed in FY 18-19.
5. Replacement of about 1,500 feet of 10-inch sewer main with new 18-inch PVC sewer main on Center Road from Western Dr. to Eucalyptus Ave. This is the first phase of a multi-phase capacity improvement project identified in the preliminary Collection System Master Plan (CSMP) that will result in rerouting a portion of the sanitary sewer flow from Vineyard Road to Center Road via Eucalyptus Ave. Engineering design work will occur in FY 19-20, with construction potentially occurring in FY 20-21.
6. Replacement of about 560 feet of 6-inch sewer between Elm Drive and East Court. This is a structural rehabilitation project identified as a high priority rating in the preliminary CSMP. Engineering design work will occur in FY 19-20 with construction potentially occurring in FY 20-21.
7. The replacement of about 2,000 feet of sewer main in Del Mar Ave., Hotchkin Dr., and Diablo Ave., with new 10-inch PVC pipe from Hill Rd. to Center Rd. This is a capacity improvement project identified in the preliminary CSMP. Engineering design work will occur in FY 19-20 with construction potentially occurring in FY 20-21.

8. Replacement and modification of eleven (11) air-relief valve (ARV) structures at various locations throughout the District.
9. Closing out the study and follow up work associated with the Collection System Master Plan (CSMP) currently underway for the District.
10. An allowance for the initial design of the Novato Boulevard Trunk Sewer between Diablo Avenue and Grant Avenue (if the City of Novato revives the Novato Boulevard street widening project).

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

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

The program seeks to incentivize individual homeowners financially to replace the entire sewer lateral between their residence and the sewer main, and currently provides a grant for half of the replacement cost up to \$2,000 to replace a residential sewer lateral in the District's service area. In FY 18-19, the District budgeted an overall budget amount of \$80,000 for this program.

The District did not observe the level of participation for the lateral replacement program in FY 18-19 and the previous FY 17-18 compared with previous fiscal years, with approximately half of the budget funds being expended in FY 17-18 and an estimated half of the budget funds being expended in FY 18-19. Based on the District's experience with the program over the last FYs, the District's share, i.e. the maximum individual grant amount will remain at \$2,000 and the overall budget for the program will be reduced to \$60,000 in FY 19-20.

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

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

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

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

While all funding to implement this project will be provided by the SCC, this account will continue to retain a "placeholder" status with nominal budget amounts in FY 19-21 to meet any minor or unanticipated District expenses for coordination work with SCC staff.

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

This account will fund the design and construction of a cogeneration project that will utilize digester gas produced in the anaerobic digestion process to produce power that may result in an offset to the District's utility power purchases. Additionally, this account will fund alternative energy (solar and battery storage) and energy efficiency projects.

The District also anticipates pursuing grant-funding opportunities for these projects, and the FY 19-20 budget includes funds for initial engineering studies and design, potential California Environmental Quality Act (CEQA) related work, and assistance with securing grant funding.

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

### **Account No. 72802: Annual Sewer Adjustment for City Projects**

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

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

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

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

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

### **Account 72804: Annual Reclamation Facilities Improvements**

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

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

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

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

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

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

An allowance is also made this fiscal year for work associated with the cleaning of Digester No. 1. This allowance was originally budgeted for FY 18-19. Due to operational considerations, this work will be performed in FY 19-20.

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

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

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

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

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

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

The District's Strategic Plan document was most recently updated in FY 16-17. While no specific updates have been identified or are expected for FY 19-20, this account is established to serve as a "placeholder" account if the need to make any potential updates to the District's Strategic Plan document arise during the fiscal year.

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

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

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

The budgeted amounts are a minimal amount and function as a “placeholder”, or to meet minimal District commitments to potential, previously unidentified studies, through FY 19-20. Future work (beyond FY 19-20) arising out of these studies may require increased funding, but potential costs are unknown at this point.

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

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

In FY 18-19 the District procured a temporary modular maintenance building. For FY 19-20, this account includes funds for building appurtenance such as office furnishings and installation of communication lines. This account also includes funds for re-roofing the laboratory portion of the Administration Building and installing electronic FOB entry points to enhance building security.

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

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

It is anticipated that this account will see budgeting of funds on an ongoing basis. Removal of existing, and installation of new media, in two odor control beds was completed in FY 18-19 and this work will continue in FY 19-20.

**Account No. 73005: RWF Expansion**

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

The expansion project achieved final completion in FY18-19. The FY 19-20 budget includes nominal funds for any follow-up tasks during the warranty period.

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

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

It is anticipated that this account will see budgeting of funds on an ongoing basis. The budgeted funds for FY 19-20 will focus on addressing corrosion issues at the Headworks Channels and Effluent Box as well as design work associated with coating of the UV channels.

**Account No. 73090: Vehicle Replacement**

This account includes a budget amount for the purchase a combination vac/flusher and a portable “Screwsucker” pump. This account also includes an allowance for an overhaul of an existing combination vac/flusher. Replacement of three additional light trucks and a utility truck is anticipated in FY 20-21.

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**Novato Sanitary District  
2019-21 Preliminary Budget  
Capital Improvement Budget - CIP Expenditures**

Capital Improvements	Adopted	Adopted	Projected	Proposed	Preliminary
Cost Centers - 72000 & 73000	Budget	Budget	Exp	Budget	Budget
	2017-18	2018-19	2018-19	2019-20	2020-21
<b>Accounts</b>					
72403 · Pump Station Rehabilitation	150,000	50,000	0	50,000	250,000
72508 · North Bay Water Reuse Authority (NBWRA)	100,000	80,000	80,000	25,000	25,000
72706 · Collection System Improvments	1,700,000	2,450,000	1,152,000	2,200,000	1,900,000
72706-1 · Lateral Replacement Program	80,000	80,000	44,000	60,000	60,000
72707 · Hamilton Wetlands/Outfall Integreation	10,000	10,000	5,000	10,000	10,000
72708 · Cogeneration/Alt. Energy	350,000	350,000	75,000	400,000	550,000
72802 · Annual Sewer Adj. for City Proj	40,000	25,000	0	25,000	30,000
72803 · Annual Collection Sys Repairs	200,000	225,000	100,000	100,000	110,000
72804 · Annual Reclamation Fac Improvements	175,000	175,000	110,000	600,000	830,000
72805 · Annual Treatment Plant Improvements	300,000	300,000	250,000	300,000	100,000
72806 · Annual Pump Station Improvements	100,000	140,000	140,000	175,000	175,000
72807 · Annual Ignacio Facility Improvements	50,000	50,000	45,000	50,000	75,000
72808 · Strategic Plan Update	20,000	20,000	0	20,000	20,000
72809 · Novato Creek Watershed	5,000	5,000	0	5,000	5,000
73003 · Admin Building Upgrade/Maint. Building	350,000	350,000	400,000	150,000	50,000
73004 · Odor Control and NTP Landscaping	50,000	100,000	100,000	50,000	52,000
73005 · RWF Expansion	1,460,000	2,020,000	1,500,000	10,000	0
73006 · NTP Corrosion Control	150,000	233,000	25,000	300,000	100,000
73090 · Vehicle Replacement	390,000	140,000	140,000	580,000	230,000
<b>Subtotal before Debt Service</b>	<b>5,680,000</b>	<b>6,803,000</b>	<b>4,166,000</b>	<b>5,110,000</b>	<b>4,572,000</b>
78500 · Interest - SRF Loan	1,519,744	1,427,123	1,427,123	1,332,279	1,235,159
78500 · Principal - SRF Loan	3,859,212	3,951,833	3,951,833	4,046,677	4,143,797
78500 · Interest - COP Bond/Rev. Refunding Bond	739,548	670,500	670,500	631,000	590,000
78500 · Principal - COP Bond/Rev. Refunding Bond	925,000	790,000	790,000	820,000	850,000
<b>Subtotal for Debt Service</b>	<b>7,043,504</b>	<b>6,839,456</b>	<b>6,839,456</b>	<b>6,829,956</b>	<b>6,818,956</b>
<b>Totals</b>	<b>12,723,504</b>	<b>13,642,456</b>	<b>11,005,456</b>	<b>11,939,956</b>	<b>11,390,956</b>

Comments:

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# The New York Times

## As Costs Skyrocket, More U.S. Cities Stop Recycling

With China no longer accepting used plastic and paper, communities are facing steep collection bills, forcing them to end their programs or burn or bury more waste.



By **Michael Corkery**

March 16, 2019

Recycling, for decades an almost reflexive effort by American households and businesses to reduce waste and help the environment, is collapsing in many parts of the country.

Philadelphia is now burning about half of its 1.5 million residents' recycling material in an incinerator that converts waste to energy. In Memphis, the international airport still has recycling bins around the terminals, but every collected can, bottle and newspaper is sent to a landfill. And last month, officials in the central Florida city of Deltona faced the reality that, despite their best efforts to recycle, their curbside program was not working and suspended it.

Those are just three of the hundreds of towns and cities across the country that have canceled recycling programs, limited the types of material they accepted or agreed to huge price increases.

"We are in a crisis moment in the recycling movement right now," said Fiona Ma, the treasurer of California, where recycling costs have increased in some cities.

Prompting this nationwide reckoning is China, which until January 2018 had been a big buyer of recyclable material collected in the United States. That stopped when Chinese officials determined that too much trash was mixed in with recyclable materials like cardboard and certain plastics. After that, Thailand and India started to accept more imported scrap, but even they are imposing new restrictions.

The turmoil in the global scrap markets began affecting American communities last year, and the problems have only deepened.

*[These are six items that are commonly put into recycling bins by mistake.]*

With fewer buyers, recycling companies are recouping their lost profits by charging cities more, in some cases four times what they charged last year.

Amid the soaring costs, cities and towns are making hard choices about whether to raise taxes, cut other municipal services or abandon an effort that took hold during the environmental movement of the 1970s.



Eric Griffin on a recycling collection route in Sunrise, where the mayor questioned the severity of contamination from regular garbage. Scott McIntyre for The New York Times



Into the truck in Sunrise. “Recycling has been dysfunctional for a long time,” said Mitch Hedlund, executive director of Recycle Across America. Scott McIntyre for The New York Times

“Recycling has been dysfunctional for a long time,” said Mitch Hedlund, executive director of Recycle Across America, a nonprofit organization that pushes for more standardized labels on recycling bins to help people better sort material. “But not many people really noticed when China was our dumping ground.”

Perhaps counterintuitively, the big winners appear to be the nation’s largest recyclers, like Waste Management and Republic Services, which are also large trash collectors and landfill owners.

Recycling had been one of the least lucrative parts of their business, trailing hauling and landfills. Analysts say many waste companies had historically viewed recycling as a “loss leader,” offering the service largely to win over a municipality’s garbage business.

That equation is starting to change. While there remains a viable market in the United States for scrap like soda bottles and cardboard, it is not large enough to soak up all of the plastics and paper that Americans try to recycle. The recycling companies say they cannot depend on selling used plastic and paper at prices that cover their processing costs, so they are asking

municipalities to pay significantly more for their recycling services. Some companies are also charging customers additional “contamination” fees for recycled material that is mixed in with trash.

The higher recycling fees, analysts say, will help bolster the largest companies’ already booming businesses. Waste Management reported strong operating profits in 2018, while Republic reported increased revenue driven by its waste business.

Most of the industry’s landfill increases were driven by economic growth: The more Americans consume, the more garbage they generate. But at least some of the higher volume were recyclables that could not be sold and repurposed, analysts say.

Some municipal leaders say they are growing wary of companies that control virtually every aspect of the waste and recycling system.

“Are these contamination rates truly high, or is it about benefiting their corporate interest?” asked Mike Ryan, the mayor of Sunrise, Fla. “We can’t afford to have inspectors constantly looking over their shoulders.”



Sunrise's mayor, Mike Ryan, said of the shift to energy-generating incineration: "It's not what most people think of as recycling, but it is better than the alternative." Scott McIntyre for The New York Times

Unable to afford the higher costs, Sunrise decided to burn its recycling in a facility that turns waste into energy rather than send it to a landfill.

"It's not what most people think of as recycling, but it is better than the alternative," Mr. Ryan said.

For cities like Philadelphia, recycling had long been a point of pride. Over the last decade, Philadelphia went from having one of the lowest recycling rates among big cities to one of the best.

When China was buying cardboard and plastics, recycling made money for the city some years. But last year, Philadelphia was hit with an "outrageously high" price increase, a city spokeswoman said in a statement.

The city came up with what it says will be a temporary solution. It identified the neighborhoods with the most contamination in its recycling bins and started sending their material to an incinerator in nearby Chester, Pa. The rest still send their material to a recycling facility.

The incinerator converts the waste to energy, which can be sold back to the electrical grid, said Carlton Williams, Philadelphia's streets commissioner. But that has done little to alleviate many residents' environmental angst and concerns about increased air pollution in Chester.

"Residents say, 'You are taking all our recycling efforts, and you are burning it?'" Mr. Williams said. "They hear the word 'burn' and they think it is an environmental disaster."

City officials are working to negotiate a more affordable contract that would restore recycling to all of Philadelphia this year.

In Deltona, higher costs were not the only factor behind the decision last month to stop recycling. Even if the city agreed to pay the additional \$25,000 a month that its recycling company was charging, there was no assurance that all the plastic containers and junk mail would be turned into something new, Mayor Heidi Herzberg said.

"We all did recycling because it was easy, but the reality is that not much was actually being recycled," Ms. Herzberg said.

The troubles with recycling have amplified calls for limiting waste at its source. Measures like banning plastic bags and straws, long pushed by environmental groups, are gaining traction more widely.



The waste-to-energy facility in Davie, Fla. Like Sunrise, Philadelphia is using an incinerator, but for the recycling from only about half its residents. Scott McIntyre for The New York Times

This month, a lobbying group for Connecticut municipalities, citing the chaos in local recycling programs, urged the governor to focus on restricting plastic bags, straws and packaging.

“The sooner we accept the economic impracticality of recycling, the sooner we can make serious progress on addressing the plastic pollution problem,” said Jan Dell, an engineer who leads Last Beach Cleanup. It’s an advocacy group that works with investors and nonprofits to reduce plastic pollution.

Some large waste producers are still going through the motions of recycling, no matter how futile.

Across Memphis, large commercial enterprises have had to stop recycling for now because of contamination problems. But the airport is keeping its recycling bins in place to preserve “the culture” of recycling among passengers and employees, a spokesman said.

“We want to ensure that we are able to have a seamless transition if and when single-stream recycling returns to the Memphis area,” the spokesman, Glen Thomas, said in an email.

Michael Corkery is a business reporter who covers the retail industry and its impact on consumers, workers and the economy. He joined The Times in 2014 and was previously a reporter at the Wall Street Journal and the Providence Journal. @mcorkery5

A version of this article appears in print on March 16, 2019, on Page A1 of the New York edition with the headline: As Costs Surge, Cities' Recycling Becomes Refuse

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NEWS > LOCAL NEWS

# Marin supervisors approve 8.9 percent hike in garbage rates



A loader moves garbage around as water jets in the ceiling keep dust down at Marin Recycling, San Rafael. (Frankie Frost – Marin IJ) 2003

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By **ADRIAN RODRIGUEZ** | [arodriguez@marinij.com](mailto:arodriguez@marinij.com) | Marin Independent Journal

March 30, 2019 at 5:13 pm

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Marin Sanitary Service customers in unincorporated Ross Valley and Central Marin will soon be paying 8.9 percent more for garbage collection and recycling.

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The rate hike approved by the Marin County Board of Supervisors Tuesday was largely in response to the collapsing recycling market in China. Supervisor Katie Rice cautioned that while that may be true, citizens of the U.S. are to blame for increasing consumption patterns.

“We can point to China for not taking our recyclables anymore,” Rice said. “That makes it sound like China’s the problem but actually we’re the problem.”

Patty Garbarino, president of Marin Sanitary, said Rice is correct: “All the stuff about global warming, that’s our responsibility and we need to change our consumption as well.”

Garth Schultz, of the Oakland-based R3 Consultants, presented the rate study, which included increases for all Marin Sanitary customers. He said rates are expected to continue to rise countywide and statewide, due to state mandates regarding organics, increasing consumption patterns and the labor market.

The rate hike approved Tuesday applies to what are called Central Marin Franchise Areas 1-6, or the Ross Valley North and Ross Valley South franchise areas. Neighborhoods included are unincorporated parts of Bayside Acres, Country Club Estates, Bret Harte, Point San Quentin, Lucky Drive, Greenbrae Boardwalk, Kentfield, Greenbrae, Kent Woodlands, Del Mesa Heights, Sleepy Hollow and Oak Manor.

Residents of those areas will see the cost of a standard 32-gallon can increase by \$3.86 a month from \$43.32 to \$47.18.

One of the biggest contributors to rate hikes is the increased cost of recycling. China, once a major market for U.S. plastic, metals and other materials, has in recent months refused to accept all materials except for the most sanitized items.

China implemented its new customs inspection program, dubbed “National Sword,” in February 2017. Bales of recyclables can now only contain only 0.5 percent contamination, whereas historically, China would accept recyclables with up to 5 percent contamination.

Prior to that, a third of all recyclable material generated in California was being exported to foreign markets and 62 percent of that was going to China.

Garbarino touted dual-stream recycling, which involves separating plastics, paper and glass, and said that plastics are a major challenge.

Marin Sanitary Service is advocating to move the recycling markets, including paper mills and metal plants, back to the United States to reduce the carbon footprint and create jobs, she said.

Board President Kate Sears said she believes “we do need to think more broadly about a new strategy” to address the consumption and disposal issue.

“Go out and move the markets in the way that they need to be moved,” Sears told Garbarino, “and we’ll help move the people.”

Tags: [Marin Sanitary Service](#), [newsletter](#), [Waste management](#)



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### Adrian Rodriguez

Adrian Rodriguez covers transportation, San Rafael and the Ross Valley for the Marin IJ. He also writes the weekly business column Movers & Shakers, which appears in Friday's paper.

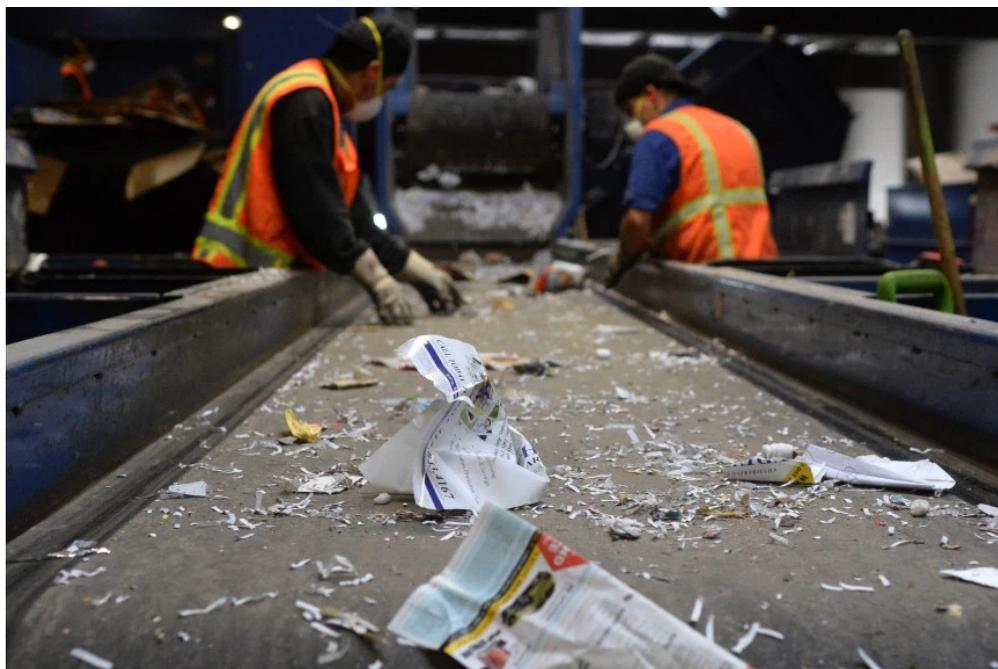
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NEWS > LOCAL NEWS

# Mill Valley Refuse seeks vote on double-bin recycling



If Mill Valley Refuse implements a double-bin system, it will truck the cleaner material to the Marin Resource Recovery Center, above, in San Rafael. (Alan Dep/Marin Independent Journal)

By **MATTHEW PERA** | mpera@marinij.com |

PUBLISHED: March 31, 2019 at 12:36 pm | UPDATED: April 1, 2019 at 6:25 am

Southern Marin’s primary waste hauler will soon face the daunting task of asking its customers to change their routines.



The change isn't mandatory. The company is allowing each of the jurisdictions it serves to decide for themselves whether they'll take on the new system.

If everybody agrees, customers will be given second recycling bins. One bin will hold paper and cardboard, and the other will hold all other recyclables. The bins will be picked up curbside in alternating weeks.

The system will help the waste company keep processing costs down in the face of China's crackdown on contaminated loads of recycling, which has hurt the bottom line for many U.S. waste management companies.

But the plan will be tough to implement if the eight jurisdictions the company services can't all agree to make the switch, said Jim Lavarone, a managing partner.

"The potential is there for some to say, 'Yes, let's do it,' and others to say, 'No,'" Lavarone said. "It's really hard to imagine not making it unanimous one way or the other. We have too many routes that cross jurisdictional lines. A route in Mill Valley also goes into Homestead and Almonte at times, and routes in Tiburon cross into Belvedere."

Before he begins to iron out that potential kink, Lavarone wants to gauge his customers' reactions. He's just released a rate hike application and a report on a recent trial of the new recycling system to officials from each jurisdiction, who will vote on the proposals this summer. He plans to present his plans to each jurisdiction at public meetings.

Late last year, roughly 1,800 customers tried out the new system during a three-month trial. A survey of those customers revealed [mixed results](#).

Of the 680 people who responded to the survey, 46 percent said switching to the new system was easy, while 54 percent said it was difficult. The biggest hiccup customers reported was storing recyclables for two weeks, which 83 percent of respondents said was a hassle.

But Lavarone hopes to combat the issue by giving out second bins, which the company didn't do during the trial.

Switching to the new system will include a minor cost savings for customers over maintaining the current, single-bin option. The refuse company is proposing a 4.21 percent rate increase if its customers opt for single-bin collection and a 3.7 percent increase to switch to the new system. A typical monthly bill currently runs

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lavarone worries that the cost savings isn't enough to incentivize many customers to go for the switch. The survey asked whether customers would be willing to pay up to \$5 more on their monthly bills to maintain a single-stream recycling system. Roughly 52 percent said they'd pony up for the sake of convenience, while 48 percent said they wouldn't.

"There are those who are very gung-ho about recycling and interested in the environment, and they're easy to get on board because they're open to new ideas that work better than the old ways of doing things," lavarone said. "But the majority of people just want convenience."

Other haulers that ask customers to sort recyclables provide double-sided bins. Those allow customers to stuff paper products into one portion of the bin and other recyclables into another. But keeping those recyclables separate during collection requires trucks with split compartments, which would be a major investment for Mill Valley Refuse.

A new fleet of trucks would cost the company roughly \$4 million, according to lavarone, which he said isn't financially feasible. Providing second bins for customers will cost the company around \$675,000, and that's a cost that might be worthwhile to incur, he said.

China has become increasingly reluctant to accept low-quality, contaminated recyclables. The country implemented a new customs inspection program in February 2017. Loads of recyclables can now contain only 0.5 percent contamination, whereas historically, China would accept recyclables with up to 5 percent contamination. If loads don't meet the new standard, they are shipped back to the U.S. to be tossed in landfills.

Prior to the new restrictions, a third of all recyclable material generated in California was being exported to foreign markets, and 62 percent of that was going to China. Since the change, waste management companies have struggled to find new markets.

The tighter regulations are driving up fees for garbage collectors, especially for those like Mill Valley Refuse, which doesn't have its own processing facility.

Mill Valley Refuse dumps its loads at the Redwood Landfill in Novato, which ships them to San Jose. The double-bin collection system would allow Mill Valley Refuse trucks to dump the cleaner material at the Marin Resource Recovery Center, part of Marin Sanitary Service in San Rafael, for a reduced fee.

“The one thing that’s become clear after a year or two of this whole recycling fiasco with China is that the cleaner the material you’re collecting, the better off you’ll be as far as being able to sell it,” he said. “If that’s the future, I think that’s an argument to bite the bullet and switch.”

lavarone presented his dual-bin idea to the Strawberry Recreation District this month. The district’s board of directors will eventually vote on whether to implement the system for residents in their jurisdiction. Leanne Kreuzer, the district manager, said she hasn’t heard any feedback yet from the community, but she hopes to hear from residents before a decision is made.

“We’re inviting the public to be part of the conversation,” she said.

Bonner Beuhler, manager for the Homestead Valley Sanitary District, also hasn’t received any comment from residents in his area. After reading survey responses from those who tried the system, he’s sympathetic toward lavarone’s concerns.

“It’s going to be tough to get a consensus,” he said. “It looks to be about 50-50. ... What happens when, say, three of the agencies want to keep single stream? It’s kind of an all-or-nothing proposal.”

Prior to the district’s directors voting on the system, Beuhler said he wants to discuss it with residents at public meetings and possibly send out a separate survey.

lavarone said he’s wrestled with the idea of forcing the change on customers, which would make matters simpler for the company. But he’s ultimately decided against it.

“It’s a difficult path, but I still think it’s probably the right thing to do,” he said. “Even though we have contracts and could theoretically impose our way of doing things on customers, we still like to be a service-oriented company, and we still want to take our customers’ wishes and desires into account.”

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Tags: [newsletter](#)



## How to Tackle the Untamed Road Like Never Before

By Honda



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### Matthew Pera

NEWS > LOCAL NEWS

# Novato creates trust fund to ease pension jam

By **WILL HOUSTON** | [whouston@marinij.com](mailto:whouston@marinij.com) |

PUBLISHED: March 31, 2019 at 2:45 pm | UPDATED: April 1, 2019 at 6:24 am

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Facing \$47 million in unfunded pension liabilities to the California Public Employees' Retirement System, the Novato City Council has created a trust fund to pay down the mounting costs.

The council this month chose the Newport Beach-based Public Agency Retirement Services, or PARS, to administer the new Section 115 trust fund. Tuesday's unanimous vote established the trust fund. The next step for the council is figuring out how to fund it.

The city's Citizen Finance Advisory and Oversight Committee is expected to begin discussing various funding options in April, according to Assistant City Manager Michael Antwine. The council would then start discussing recommendations from the committee in early May as it moves through the 2019-20 budgeting process.

ADVERTISING

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The new trust fund will be consolidated with another city trust fund already administrated by PARS for the city's other post-employment benefits, which are non-pension. The two accounts would still be managed separately. The idea behind putting both accounts under one trust is to reduce the amount of fees the city would have to pay on the trust to PARS, U.S. Bank and High Mark Capital Management Inc. for managing and acting as trustees of the trust fund.

Total fees are expected to be at a rate of 1 percent annually, according to city staff.

Mayor Eric Lucan questioned what funding strategies the city can consider. Some suggestions he had were to look at whether to sit on the trust for longer so as to get a better return on investments or to intermittently use the trust fund to pay down the city's unfunded liability, thereby reducing interest payments on the liabilities through time.

"It might make sense to pay down certain debts we already have and we know exactly the return we're going to get on it by paying those down as opposed to funding a pot and potentially getting a higher rate of return," Lucan said during the meeting.

Another option that Lucan said he hopes will be looked at is leveraging the city's nearly \$33 million Hamilton Trust Fund to pay off the city's 30-year pension obligation bonds. The bonds, created in 2006, have a lower interest rate than the rate CalPERS charges.

In an interview last week, Lucan said the idea behind this proposal would be to reduce interest payments by paying down the bonds using money borrowed from the Hamilton Trust. The borrowed money would have to be returned to the Hamilton Trust, but he said the interest payments on that borrowed money would all go back to the city based on how the Hamilton Trust is set up.

CalPERS has also been [lowering its discount rate since 2017](#). The discount rate essentially indicates how much CalPERS investments of employer and employee pension payments are expected to earn in the future. The rate is being lowered

Novato’s annual payments to the pension system are expected to increase by about 64 percent from the current fiscal year to the 2023-24 fiscal year, from about \$4.5 million to about \$7.3 million respectively, according to the city’s five-year forecast.

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Tags: [newsletter](#), [Novato City Council](#), [Pension reform](#), [pensions](#)



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**Will Houston**