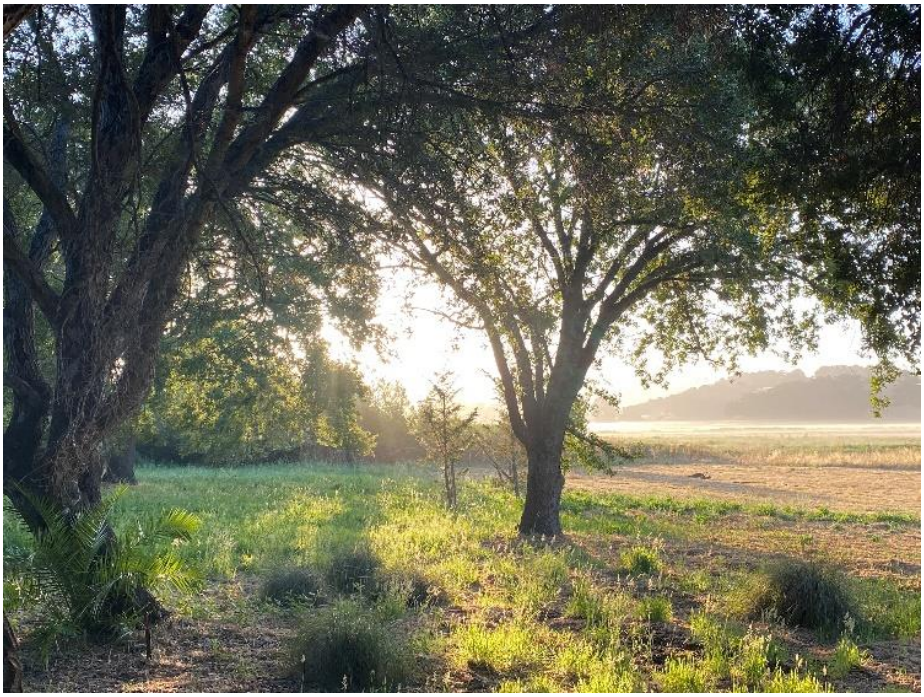
2023 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT



Prepared by:

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February 6, 2024

2023 ANNUAL OPERATIONS AND MAINTENANCE REPORT FOR THE NOVATO SANITARY DISTRICT

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Overview

The continued priorities for 2023 were to maintain a safe working environment with zero lost time accidents, zero Occupational Safety Health Act (OSHA) recordable incidents, and zero treatment plant effluent violations. The 2023 calendar year was Veolia's eleventh consecutive year of zero effluent violations and twelfth year of zero recordable incidents. We continue to 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 included:

- Safety Training
- No Safety Incidents (recordable, lost time, or medical)
- Participation in Veolia *Near Miss and Leading Indicator* Reporting Program
- Regulatory Compliance
- Odor Monitoring
- Reporting (internal and external)
- Records Keeping and Data Base Management
- Facility Energy Management Program
- Employee Education and Certification / Professional Advancement
- Community Outreach and Participation
- Effective Asset Management by using Veolia Asset Management System (VAMS) for Maintenance Tracking, Scheduling, Inventory, and Purchasing
- Operation, Management, and Maintenance
- Oversight of Laboratory and Pretreatment 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*). Table 1.0 describes each of the processes influent flow 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, eggshells, and gravel.

Flow and Loading Measurement

Flow at the NTP is measured using a Parshall flume and HydroRanger™ ultra-sonic flow 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 the raw wastewater. Clarifiers are large tanks that slow the flow of water and allow by force of gravity to remove solids. Heavier solids referred to as "sludge" settle 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/odor that is associated with raw sewage. Air/odor removal is discharged to odor scrubbing biofilters.

Secondary Treatment – Aeration Basins & Secondary Clarifiers

After screening, grit, and primary solids removal, all wastewater receives full secondary treatment. Large rectangular tanks with baffled walls, mechanical mixers, air diffusers, and recirculation pumps make up the aeration basins system. The 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's volume. The anoxic zones convert nitrate and nitrite to nitrogen gas to reduce the level of total nitrogen in the effluent. Secondary clarifiers allow for the separation of the biomass that was created in the aeration basins to settle and allow the wastewater to clarify. The clarified wastewater flows to the ultraviolet disinfection process and the settled biomass is returned to the influent of the aeration basins.

Ultra Violet (UV) Disinfection

Prior to discharging wastewater it must be disinfected. Ultraviolet light disrupts the DNA of pathogens and other life forms leaving them incapable of reproduction.

Effluent Disposal – Bay Discharge / Reclamation / Storage

The District's NPDES Permit (National Pollutant Discharge Elimination System) effective September 1st, 2020 allows for year-round discharge to San Pablo Bay with stringent effluent limits from May 1st through October 31st. However, throughout the historical non-discharge season (May 1st through October 31st), effluent may be stored for future use, primarily for pasture irrigation.

Effluent Reuse – Recycled Water

Tertiary recycled water was produced in 2023 for irrigation of parks, landscaping, and golf courses. Additionally, a portion of the recycled water was provided to a car wash facility. Recycled water receives added treatment (tertiary filtration & chlorine disinfection) in order to comply with stringent Title 22 regulations.

Treatment Plant Performance Tables

The tables that follow provide the summary of the plant's performance, maintenance program, consumables, and energy results for the period of January 1, 2023 through December 31, 2023. The Annual Waste Characteristics & Loading Summaries are provided below in Tables 2.0 – 9.0 and in the attachment section of this report.

Table 2.0

2023 Influent Flows and Loading Summary		
Condition	Value	Unit
Average Daily Flow Rate	5.56	MGD
Average Dry Weather Flow (Jul/Aug/Sept)	3.47	MGD
Peak Wet Weather Flow (Max Day)	25.16	MGD
Max Peak Wet Weather (1-3 Hour)	33.2	MGD
Average Biochemical Oxygen Demand (BOD)	281	mg/L
Average BOD Loading	11,766	lbs/Day
Average Total Suspended Solids (TSS)	301	mg/L
Average TSS Loading	12,753	lbs/Day

Table 3.0

2023 Plant Performance		
Parameter	Value	Unit
Total Volume of Wastewater	2,016.54	Million Gallons
Total Volume of Reclaimed Water (Reclamation and California State Coastal Conservancy)	253.57	Million Gallons
Recycled – Title 22 (Novato Sanitary District, North Marin Water District Deer Island)	134.4	Million Gallons
Flow Discharged to San Pablo Bay	1,762.97	Million Gallons
Average BOD Effluent	5.3	mg/L
Total Pounds of BOD Treated	4,294,620	Lbs
Average TSS Effluent	4.4	mg/L
Total Pounds of TSS Treated	4,654,662	Lbs
Total Pounds of Biosolids Treated	3,039,038	Lbs
Total Cubic Feet of Biogas Produced	26,314,652	Cu Ft

Table 4.0

2023 Violations / Excursions	
Total Number	0
NPDES (Bay Discharge)	0
Waste Discharge Reporting (WDR) (Reclamation)	0

Table 5.0

2023 Plant Effluent		
Parameter	Value	Unit
BOD Removal	98	%
TSS Removal	98	%

Table 6.0

2023 Consumables and Energy Summary	
Total Million Gallons	2,016.54
*Electricity – kWh / Year	3,402,774
Electricity – kWh / MG	1687.5
*Natural Gas – Therms / Year	64,714
Diesel Fuel – Gallons / Year	941

*Excludes Administration Building and Recycled Water Plant

Table 7.0

NPDES Wet Season Limits – When Discharging to San Pablo Bay Discharge - November – April (January 1st – April 24th)* and (November 1st – December 31st)*			
Parameter	Limit	Units	2023 Violations
BOD Weekly	40	mg/L	0
BOD Monthly	25	mg/L	0
TSS Weekly	40	mg/L	0
TSS Monthly	25	mg/L	0
BOD Removal (minimum)	85	%	0
TSS Removal (minimum)	85	%	0
Enterococcus – 6 Week Rolling Geometric Mean	30	Col/100 ml	0
Enterococcus – No More than 10 Percent All Samples	110	CFU/100mL	0
Fecal Coliform - Median	140	mpn/100 ml	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	0
Ammonia – Daily Maximum	21	mg/L	0

Table 7.0 – Wet Season Limits - Continued			
Ammonia - Monthly Average	5.9	mg/L	0
pH – High	8.5	s.u.	0
pH – Low	6.5	s.u.	0
Oil & Grease - Daily Maximum	20	mg/L	0
Oil & Grease - Monthly Average	10	mg/L	0

*Parentheses ( ) provides the dates of discharge to San Pablo Bay.

Table 8.0

NPDES Dry Season Limits – When Discharging to San Pablo Bay - May through October (October 3rd – October 31st)*			
Parameter	Limit	Units	2023 Violations
BOD Weekly	30	mg/L	0
BOD Monthly	15	mg/L	0
TSS Weekly	20	mg/L	0
TSS Monthly	10	mg/L	0
BOD Removal (minimum)	85	%	0
TSS Removal (minimum)	85	%	0
Enterococcus – 6 Week Rolling Geometric Mean	30	Col/100 ml	0
Enterococcus – No More than 10 Percent All Samples	110	CFU/100mL	0
Fecal Coliform - Median	140	mpn/100 ml	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	0
Ammonia – Daily Maximum	21	mg/L	0
Ammonia - Monthly Average	5.9	mg/L	0
pH – High	8.5	s.u.	0
pH – Low	6.5	s.u.	0
Oil & Grease - Daily Maximum	15	mg/L	0
Oil & Grease - Monthly Average	5	mg/L	0

*Parentheses ( ) provides the dates of discharge to San Pablo Bay.

Table 9.0

Waste Discharge Limits / Typical Reclamation Season April-October (April 25th - October 2th)*				
Parameter	Limit	Units	2022 Violations	2023 Violations
BOD Monthly Average	40	mg/L	0	0
Total Coliform – 5 Sample Median	240	mpn/100 ml	0	0
Total Coliform - Maximum	10,000	mpn/100 ml	0	0

Table 9.0 – Waste Discharge Limits - Continued				
pH – High	9.0	s.u.	0	0
pH – Low	6.0	s.u.	0	0

*Parentheses ( ) provides the dates for the Reclamation Season.

Operational Program

Throughout 2023, the majority of the treatment plant equipment operated full time with the exception of the equipment listed below:

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

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

Environmental Services Program and Public Education Activities

Enterococcus

When effluent is discharged to San Pablo Bay, the bacteriological requirement is for *Enterococcus.* A total of 100 samples were taken from January – December 2023. All results were below the regulatory Limits.

Total Coliforms

When effluent is discharged to Reclamation, the bacteriological requirement is for Total Coliform. A total of 21 samples were collected and analyzed. All results were below the regulatory limits.

Retrospective Screening for SARS-CoV-2 in the Bay Area – January-December 2023

During 2023 continued to send three influent composite samples per week to Verily®. Novato data can be found at http://publichealth.verily.com/#Novato,%20CA . All Marin County COVID information can be found at https://coronavirus.marinhhs.org/surveillance#keyindicators (scroll down for the wastewater information). Verily continued to test the influent for Monkey Pox, Influenza A, and RSV. That information can be accessed from the Verily Novato data link above or directly at this location. https://storage.googleapis.com/wastewater-export/mpox.html .

Pretreatment Program

All significant industrial and industrial users were inspected and sampled in 2023 as required by the program. All quarterly and self-monitoring reports were received. All Class I thru Class III discharge permits were current as of December 31, 2023. Pretreatment reports were submitted to SFRWQCB as required by the District's NPDES Permit.

Fats, Oils and Grease (FOG) Program

In 2023, the FOG Program continued to focus on inspection of food service establishments and receiving support documentation confirming compliance with the Districts regulations.

Public Education and Training

Liz Falejczyk, Veolia Water Environmental Services Supervisor, attended Zoom® Marin County Wastewater Agency Public Education Committee Meetings in 2023. Website: https://savrbay.org/ . Liz and Kurt Hawkyard, Veolia Water Laboratory Technician, attended workshops sponsored by the California Environmental Laboratory Accreditation Program virtual training throughout the year for implementation of the TNI 2016 Standards.

Bay Area Clean Water Agencies (BACWA) - 2023

Liz Falejczyk, Veolia Water Environmental Services Supervisor, continued to attend the following virtual meetings; BACWA Laboratory Committee, BACWA Permits Committee, BACWA Pretreatment Committee.

Whole Effluent Toxicity Testing

Quarterly Acute and Chronic Toxicity is required during Bay discharge and both were performed in July for the July through September quarter. The Acute test had 100% survival. The Chronic Toxicity, test results for survival and growth were very good at <1.0 (Toxicity Unit-chronic) TUc each. See historic Chronic Toxicity results below.

Test Date	2/22		4/22		11/22		2/23		4/23		7/23		12/23	
EC_{25} (%)	Survival >100	Growth >100	Survival >100	Growth >100	Survival >100	Growth >100	Survival >100	Growth >100	Survival >100	Growth >100	Survival >100	Growth >100	Survival >100	Growth >100
NOEC (%)	100	100	100	100	100	100	100	100	100	65	100	100	100	100
TUc(100/EC_{25})	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0

Pollution Prevention

The 2023 Annual Pollution Prevention and Minimization Report was submitted as required through the California Integrated Water Quality System (CIWQS).

Recycled Water Reporting

The Annual Recycled Water Report was submitted as required by the new Water Quality Order 2016-0068-DDW. The volumetric reporting of Influent volumes through the final destination (San Pablo Bay, Reclamation, and Recycled Water) of the treated wastewater, including the level of treatment, was uploaded into the GeoTracker® software program.

Discharge Monitoring Report-Quality Assurance (DMR-QA) Study

The DMR-QA Study evaluates the analytical ability of laboratories that routinely perform or support self-monitoring analyses required by NPDES permits. The results include those of NSD and the

contract laboratories utilized by the on-site laboratory. The Veolia laboratory employees successfully completed the study with the results being forwarded to the State of California coordinator as required. The 2023 Certificate is provided below.

Ver. 1
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CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for

WP-339

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 1012 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

Demand
Hardness
pH
Total Residual Chlorine
Turbidity

Craig Huff
Senior Technical Manager

NS83601

California Environmental Laboratory Accreditation Program (ELAP)

The laboratory at the Novato Sanitary District wastewater facility is now certified under the 2016 TNI-2 standards. All certified environmental laboratories were required to make the appropriate changes implemented by the 2016 TNI-2 Standards by January 1, 2024 and to the new analytical methods by February 1, 2024.

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF
ENVIRONMENTAL LABORATORY ACCREDITATION
Is hereby granted to

Novato Sanitary District Laboratory

500 Davidson Street
Novato, CA 94945

Scope of the certificate is limited to the
"Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on compliance with applicable laws and regulations, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1092**
Effective Date: **2/1/2022**
Expiration Date: **1/31/2024**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Program Manager
Environmental Laboratory Accreditation Program

Asset Management Program

Computerized Maintenance Management System (CMMS)

Veolia implemented a new computerized maintenance management system (CMMS) in March 2023, moving from Oracle (OWAM) to Veolia Asset Management System (VAMS) software. Key components of the program include:

- VAMS is a paperless asset management system which provides modules for preventive, predictive, and corrective maintenance, inventory control, asset life cycle cost, as well as scheduling and maintenance tracking tools.
- Work orders can be completed digitally via mobile devices including tablets and mobile phones. Real time uploads of completed items instead of data entry from paper forms.
- Preventive maintenance (PM) is a scheduled maintenance activity generally tied to equipment runtime, time periods, site specific conditions. Frequencies can be set for; daily, weekly, monthly, quarterly, semiannual, and annual.
- Equipment inventory is crucial to all phases of asset management. Equipment at the NTP has been entered into the VAMS data base which is obtained from operation and maintenance manuals, equipment specifications, and worker experience.
- Criticality Assessment is typically performed every 5 years. A new assessment was conducted this year. The next assessment is scheduled for June 2028.

District Funded Capital Improvements

Maintenance Repair/Replacement Requests - Year 2023 – Over $10,000			
Vendor	**Repair/Replacement Description**	**Date**	**Invoice Amount**
Shape Inc.	Rotor and Stator (Digested Sludge Pumps #1 & #2)	1/6/2023	$16,368
Shape Inc.	Decant Pump #1 and #2 - Reclamation	3/28/2023	$21,306
Shape Inc.	Influent Pump #1	6/22/2023	$11,110
Shape Inc.	Influent Pump #2	6/22/2023	$20,459
Shape Inc.	Rotor and Stator (Primary Clarifier Scum/Sludge Pumps)	7/26/2023	$11,039
Shape Inc.	New Scum Pump (Secondary Clarifier Pump #1)	7/28/2023	$14,241
Shape Inc.	Flygt Mixer	8/1/2023	$17,723
Shape Inc.	"N" Impeller Unit - Flygt #3306	8/15/2023	$59,401
	Total Cost		$171,647

Novato Wastewater Treatment Plant (NTP), Recycled Water Plant, Sludge Lagoons, and Ignacio Transfer Pump Station:

Daily, Weekly, Monthly, Semi-annual and Annual Tasks: Routine rounds, readings, adjustments, and preventative, predictive and corrective maintenance.

2023 MAINTENANCE ACTIVITIES		
2023		
January	**Equipment**	**Activity**
	Work Orders Completed	A total of 193 work orders were completed in January 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in January 2023 standby generators operation.
	#3 Standby Generator Automatic Voltage Generator Console	Bay Power LLC. reprogrammed the unit and verified #2 Standby Generator Console.
	#2 & #3 Standby Generators	Replaced 16 batteries.
	Ultraviolet Transmittance Meter	Refurbished the instrument.
	Digester Sludge Building Emergency Exit Signage	Replaced two units.
	Digester Hot Water Heat Loop Actuator	Replaced the actuator valve stem connector.
	Ignacio Transfer Pump Station	
	Conveyance Pumps Actuator Valves	Checked and verified the instrument software program.
	Conveyance Pumps Wet well Level Bubbler System	Replaced lead Mercoid Level Switch.
February	**Equipment**	**Activity**
	Work Orders Completed	A total of 55 work orders were completed in February 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in February 2023 standby generators operation.
	Ultraviolet Disinfection System	Replaced ballasts, bulbs, and Harmonic Assemblies.
	Influent Pump #1	Rebuilt in-house and readied for installation.
	Novato Supervisory Control and Data Acquisition	Replaced the backup batteries.
	Supervisory Control and Data Acquisition	Replaced the 48 backup batteries.
March	**Equipment**	**Activity**
	Work Orders Completed	A total of 107 work orders were completed in March 2023.

	Voltus, Inc. /Demand Response Auction Mechanism	Participated in March 2023 standby generators operation.
	Sludge Lagoons (and Reclamation Area)	
	Site Inspections	Conducted routine checks and management of the feed sludge and decant piping.
	Decant Flow Meter	Replaced the unit.
April	**Equipment**	**Activity**
	Work Orders Completed	A total of 71 work orders were completed in April 2023.
	Annual Flow Meter Calibration	Calibrations completed by contracted service (Calcon)
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in April 2023 standby generators operation.
	Primary Sludge and Scum Pump # 2	Drive unit rebuilt in-house.
	Veolia Asset Management System (VAMS)	Training provide to transition to the new Veolia maintenance management system.
	Ignacio Transfer Pump Station	
	Annual Flow Meter Calibrations	Calibrations completed by contracted service (Calcon)
May	**Equipment**	**Activity**
	Work Orders Completed	A total of 98 work orders were completed in May 2023.
	Aeration Basins #1 and #3	Preventive and corrective maintenance performed for startup.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in May 2023 standby generators operation.
	Anaerobic Digester #1 and #2	Startup and shutdown procedures initiated respectively.
	Influent Pump #1	Installed following rebuild.
	Veolia Asset Maintenance Management System	System now being used by Veolia staff.
	Aeration Basins #1 and #3	Preventive and corrective maintenance performed for startup.
June	**Equipment**	**Activity**
	VAMS Work Orders Completed	A total of 89 work orders were completed in June 2023.
	Voltus, Inc./Demand Response Auction Mechanism	Participated in June 7, 2023 standby generator operation.
	Influent Pump #1	Shape® company performed troubleshooting, repairs, and installation planned for July 5, 2023.
	Ferric Pump #2	Replaced the unit.
	Veolia Repair and Maintenance Plan	Scheduled for September 11-15, 2023.

	Gravity Belt Thickener # 2	Replaced the dewatering belt.
July	**Equipment**	**Activity**
	Work Orders Completed	A total of 177 work orders were completed in July 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in July 7, 2023 standby generators operation.
	#3 Water Supply	Replaced the filtering basket.
	Gravity Belt Thickener #2	Replaced the filtering cloth.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in June 7, 2023 standby generator operation.
August	**Equipment**	**Activity**
	Work Orders Completed	A total of 266 work orders were completed in August 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in August 16, 2023 standby generators operation.
	Digester # 1	Shutdown and Cleaning.
September	**Equipment**	**Activity**
	Work Orders Completed	A total of 145 work orders were completed in September 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in September 2023 standby generators operation.
	Emergency Generator #2	Replaced the battery charger.
	Odor Blower at Aeration Basins	Replaced bearings and serviced the unit.
	Administration Standby Generator	Replaced water pump.
	Dry Weather Pump # 4 & 5	Replaced solenoids on seal water.
	Gravity Belt Thickener #1	Replaced dewatering belt.
	Digested Sludge Transfer Discharge Piping	Installed knife gate valve to allow for transfer of digested sludge from Digester #2 to Digester #1.
	Aeration Basin #4	Repaired diffuser blow off connection completed.
	Primary Scum/Sludge Pumps	Serviced check valves.
October	**Equipment**	**Activity**
	Work Orders Completed	A total of 149 work orders were completed in October 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in October 2023 standby generators operation.
	Influent Pumps #1thru #6	Check Valves cleaned and checked for operation.
	Ultraviolet Disinfection	Replaced the Ultraviolet Transmittance Meter flushing pump.
	Secondary Clarifiers #1 & #2	Weir covers cleaned.

	Gravity Belt Thickener #1 & #2	Replaced the belt limit switches.
November	**Equipment**	**Activity**
	Work Orders Completed	A total of 80 work orders were completed in November 2023.
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in November 2023 standby generators operation.
	Influent Pump #2	Installed after complete rebuild.
	Secondary Clarifier #2	Installed new scum pump.
	Utility Pump #3	Removed for inspection and repairs.
	Supervisory Control and Data Acquisition Software	Renewed the annual license.
	Ignacio Pump Station – Emergency Standby Generator	Repaired a coolant leak, replaced valve body
December	**Equipment**	**Activity**
	Work Orders Completed	A total of 80 work orders were completed in December 2023
	Voltus, Inc. /Demand Response Auction Mechanism	Participated in December 2023 standby generators operation.
	Utility Pump #3	Repairs completed, installed unit.
	Digester Flare	Ignition mixing chamber custom fabricated and installed.
	UV Channel #3	80 bulbs, 6 ballasts, 2 DCA units replaced

Safety and Training 2023

OCCUPATIONAL HEALTH AND SAFETY COMMITMENT

Our most valuable resource, and therefore our prime asset, consists of the men and women who make up our company. The ongoing preservation of the health and safety of each and every one of our employees, while protecting our customers and the communities we serve, is our absolute priority: this applies to everyone, without exception.

Our goal is to perform our activities with the lowest possible number of accidents, and without any fatal accident.

Veolia's approach is thus structured around 5 pillars:

1. Involving all our managers, by establishing fundamental prevention rules, applying them and ensuring they are applied;
2. Training and involving all our employees - in order to raise their awareness of the risks associated with each work assignment;
3. Improving communication and dialogue, in order to promote experience sharing and increase synergies between our business lines and geographical areas;

4. Improving the management of risks, by identifying them, assessing and documenting them, in order to avert those which are specific to our activities, with the help of our occupational health and safety management system;
5. Tracking our health and safety performance, through specific indicators and by reinforcing our audits and self-assessments.

In matters of occupational risks, health and safety, we are targeting excellence. This goal requires everyone's full commitment to the values we uphold:

1. This applies to managers at all levels. They are all responsible for putting in place the required measures to ensure the health and safety of their teams.
2. This also applies to all company employees. They are responsible for respecting all safety measures at all times.

   Their behavior must prevent hazardous situations, for themselves and for the people around them.

The implementation of this prevention policy and the use of the required equipment to ensure our employees' physical and mental safety is essential, irrespective of the organizational changes or cost-saving plans underway. No deviation from these rules will be tolerated: Veolia's ethics and its corporate and managerial responsibility are at stake.

Veolia Water has had no incidents from June 1, 2010 to present at the Novato Treatment Plant. 2023 was an incident free year. Each employee continued to receive a cash incentive reward from Veolia Water for the past 13 years with no lost time.

Life Saving Rules – 2023

The Veolia Environmental Health and Safety team has identified and tracked employee activities that are most likely to result in injury or death across the globe. Using this information the EHS team has created a set of 12 Life Saving Rules that are to always be followed by employees engaging in operational and maintenance activities. All Veolia sites are required to complete training, tailgate meetings and sign safety commitments for each one of these rules. Veolia has also established a series of High Risk Management Standards that go into great detail about the dangers and procedures of activities that have been identified as high risk to personnel. These new safety protocols supplement the current monthly individual safety trainings throughout the year to ensure a strong commitment to safety culture. Below is the list of Life Saving Rules that are required to be adhered to by all staff.

Veolia Environmental & Compliance

The Veolia Environmental & Compliance Corporate Team provides technical support and guidance on environmental matters and compliance issues for improving regulatory performance at each of our facilities. The team's objectives are; reduce/mitigate risks, improve environmental performance, and enhance employee awareness of environmental issues. Veolia has developed an Environmental Management System (EMS) to focus on our company's environmental goals and objectives. The corporate criteria down to the project level criteria are listed below.

- Establishing policies and procedures
- Monitoring and tracking environmental issues
- Measuring and controlling environmental impacts
- Conducting assessments and reviewing performance
- Identifying environmental interactions and risks
- Informed on legal requirements
- Addressing compliance issues and system non-conformances
- Setting targets for environmental performance improvement.

VEOLIA

VEOLIA NORTH AMERICA

Environmental Policy Statement

As the global leader in optimized resource management providing solutions in water, waste and energy management, Veolia North America is committed to sustainable development and environmental stewardship. Serving municipal, commercial and industrial customers throughout North America, our environmental policy reflects our responsibility and our challenge toward **"Resourcing the World"** – reinforcing our unique ability to support an interconnected world with limited resources and growing needs.

Environmental compliance and preservation is a commitment shared by all employees at all levels of the organization and as such, is a condition of employment.

We commit to maintain compliance with all applicable environmental laws, regulations and contractual requirements.

We utilize policies, procedures, standards and systems to ensure proper management of our environmental aspects and impacts to reduce, control and prevent pollution and to meet our continual improvement expectations.

We operate under the premise that sustainability is about continuing to grow and prosper while preserving natural resources. This includes being selective in our choice of products, processes and services to ensure that our supply chain reflects our commitment to sustainability. We embrace continual improvement and when safer and more environmentally sound methods are identified, we will move promptly to adopt these practices in a responsible manner whenever possible.

We ensure our employees receive necessary and required training regarding relevant environmental matters and activities. We promote a heightened level of awareness at all times and **a culture of inclusion for proposing, setting and achieving our environmental and sustainability goals, objectives and targets.**

We communicate our environmental commitment to our employees, customers, industry associates, suppliers and the general public.

We count on your commitment, support and involvement.

Veolia North America supports and conforms to the Veolia Sustainable Development Charter, Environmental Policy and Ethics Guide.

We endeavor to actively recycle, reuse materials and eliminate waste to minimize environmental impacts and promote recovery of limited resources. These principles will be integrated into our business decisions.

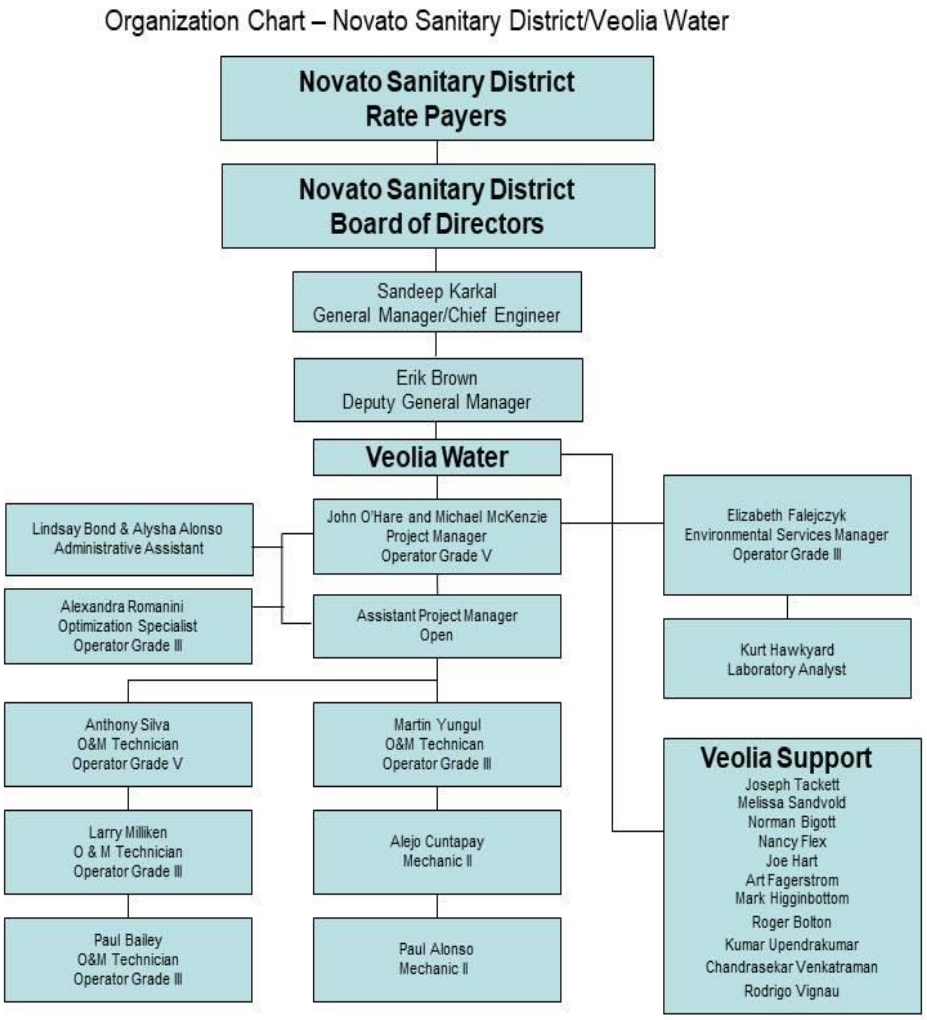
We continuously improve our environmental performance through our environmental management system, technology innovations, process optimization, due diligence and the exchange of global best practices.

Frédéric Van Heems, VNA CEO and President

signed on May, 2023

VEOLIA

Staffing and Organization



Certification Status (Details)

Michael "Mack" Mckenzie – Project Manger
Grade V, SWRCB - California Wastewater Treatment Plant Operator, #42519, November 17, 2025
Grade II, SWRCB - Water Distribution Operator, #50348 June 1, 2024
Grade II, CA SWRCB - Water Treatment Operator, #35767 Sept. 1, 2024
Grade II, CWEA Mechanical Technologist, CWEA #1308232992, October 31, 2024

Alexandra Romanini - Optimization Specialist
Grade III, SWRCB - California Wastewater Treatment Plant Operator, #76269, November 22, 2025

Grade I, SWRCB - Water Treatment Operator, #44994 March 1, 2025
Grade I, CWEA Laboratory Analyst, CWEA #1308233107, March 31, 2024

Anthony M. Silva – Operator III
Grade V, SWRCB - California Wastewater Treatment Plant Operator #10973, December 31, 2026
Grade II, CWEA Collection System Maintenance Technician, CWEA #354, January 31, 2025

Larry Milliken – O&M Technician III
Grade III, CA SWRCB - California Wastewater Treatment Plant Operator #41483, August 12, 2026

Martin Yungul – O&M Technician III
Grade III, CA SWRCB - California Wastewater Treatment Plant Operator #43219, July 17, 2024
Grade II, CA SWRCB - Water Distribution Operator, #48543 January 1, 2026
Grade II, CA SWRCB - Water Treatment Operator, #38976 Sept. 1, 2025

Elizabeth G. Falejczyk – Environmental Services Supervisor
Grade III, CA SWRCB - California Wastewater Treatment Plant Operator #6334, August 17, 2024

Kurt Hawkyard – Laboratory Technician/Pretreatment Programs Inspector
Grade II, CWEA Laboratory Analyst, CWEA #1308212134, June 30, 2024
Grade II, CWEA Industrial Waste, CWEA #1308211129, June 30, 2024
Grade II, CWEA Environmental Compliance Inspector, CWEA#130821437, March 31, 2024

Summary of Shifts - 2023

The facility continued to be manned 8 hours per day, 7 days per week with an on call operator available nights and the weekend.

Additional Veolia Support

- **Veolia Support Staff Onsite/Remote (Various Times)**
- Melissa Sandvold, Veolia West Region, VP of Operations (Remote)
- Michael McKenzie, Veolia Project Manager, Novato, CA (On-Site)
- Norman Bigott, Veolia Water West Technical Director (Remote)
- Art Fagerström, PE, BCEE, Veolia Technical Manager, Corporate Technical Support (Remote)
- Mark Higginbottom, Veolia Energy Efficiency Manager- Rotating Equipment (Remote)
- Nancy Felix, Veolia West Health & Safety Manager (Remote)
- Joe Hart, Veolia, Regional Asset Manager (Remote)
- Roger Bolton, Veolia Regional Asset Manager (Remote)
- Kumar Upendrakumar, Veolia Business Operations Center, Director of Engineering • Technical / Studies / Engineering (Remote)

- Chandrasekar Venkatraman, Veolia Director, Capital Program Management (West) • General Management (Remote)
- Rodrigo Vignau, Veolia Capital Project Construction Manager (Remote)
- Jordan Hamil, Veolia Lead Talent Advisor – West Region (Remote)
- John O'Hare, Veolia Project Manager(Jan-Aug)/Technical Consultant(Sept-Dec) (on-site)

Contract Adjustments

The Amended and Restated Novato Operations and Maintenance Service Agreement was renegotiated and adopted May 10, 2021 based on a fixed fee price contract. Included in the base contract fee are management, operation, and maintenance. 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 5 – Operation of Recycled Water Facility

Equipment Repair in excess of $10,000

Fiscal Year 2022/23 service fee adjustment was 5.0%.

Title 22 – Recycled Water Production Report for 2023

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

In 2023, compliance testing for coliform was performed at the NMWD laboratory, which 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 Plant

Novato Sanitary District 2023 Recycled Water Production Data							
Month	Water Delivered (Million Gal)	Effluent Turbidity (NTU)		Effluent CT Value (mg min/L)		Effluent Coliform (mpn/100 ml)	
Criteria		<2		>450		<2.2	
		Max	Ave	Min	Ave	Max	7 Med
January	N/A	N/A	N/A	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A	N/A	N/A	N/A
April	4.013	1.2	0.8	>450	>450	<1	<1
May	17.436	1.6	0.8	>450	>450	<1	<1
June	22.534	1.8	0.9	>450	>450	<1	<1
July	24.767	1.9	1.0	>450	>450	<1	<1
August	22.986	1.7	0.9	>450	>450	<1	<1
September	18.962	1.9	0.9	>450	>450	<1	<1
October	17.530	1.0	0.4	>450	>450	<1	<1
November	2.016	0.9	0.6	>450	>450	<1	<1
December	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL	130.244	+ Deer Island 4.16 MG = 134.404 MG					

Attachments

Annual Waste Characteristics & Loading Summary

NOVATO SANITARY DISTRICT - VEOLIA

PLANT FLOW

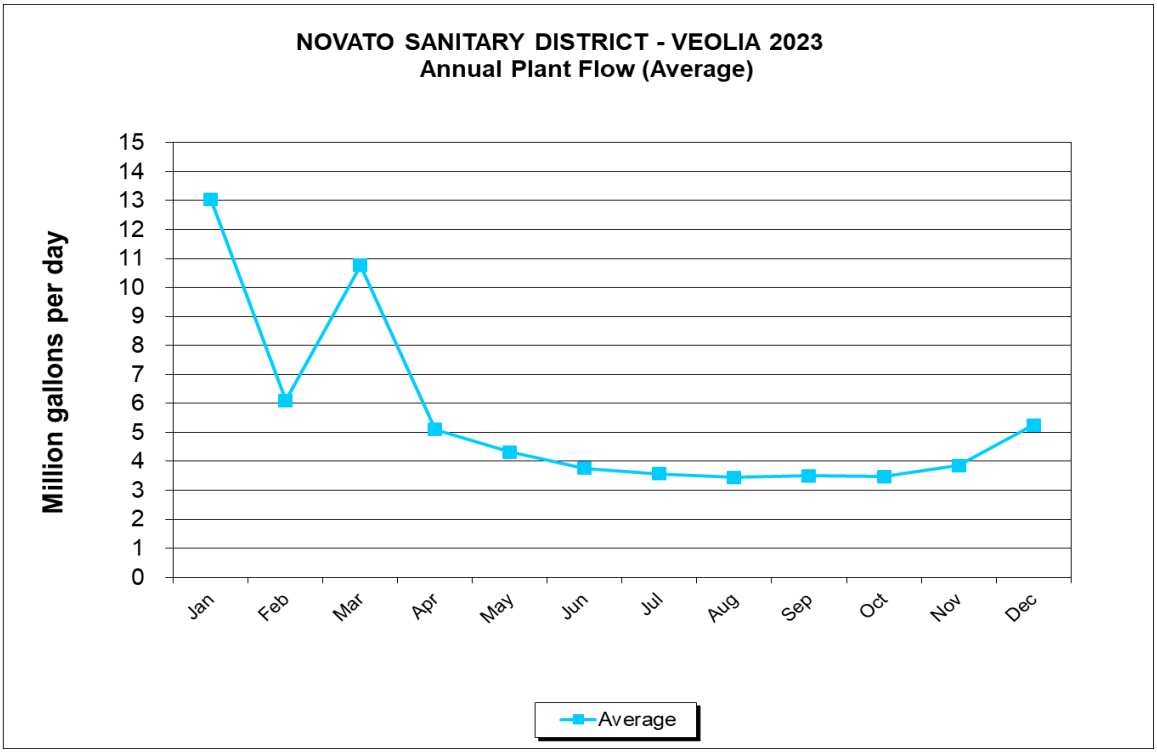
Annual Waste Characteristics & Loading Summary

(IN GALLONS TIMES 1,000,000)

YEAR: 2023

PRINT DATE: 2-Feb-2024

	Total Flow	High	Low	Average		
January	403.81	25.16	5.35	13.03	**Peak Wet Weather Flow (MAX Day)**	25.16
February	170.89	9.91	4.48	6.10	**Max Peak Wet Weather (1-3 Hour)**	33.20
March	333.41	20.92	6.59	10.76		
April	158.02	7.43	4.03	5.10		
May	134.06	5.73	3.49	4.32		
June	112.66	4.15	3.33	3.76		
July	110.52	4.78	3.14	3.57		
August	106.94	3.94	2.52	3.45	**Three month dry weather averages**	3.47
September	105.05	3.86	3.10	3.50	**(July, August, September)**	
October	107.52	3.92	3.11	3.47		
November	115.58	7.08	3.22	3.85		
December	162.90	12.20	3.57	5.25		
ANNUAL TOTAL	2021.36					
ANNUAL MAX.	403.81	25.16				
ANNUAL MIN.	105.05		2.52			
ANNUAL AVG.	168.45			5.51	**Avg. Dry Weather Flow**	



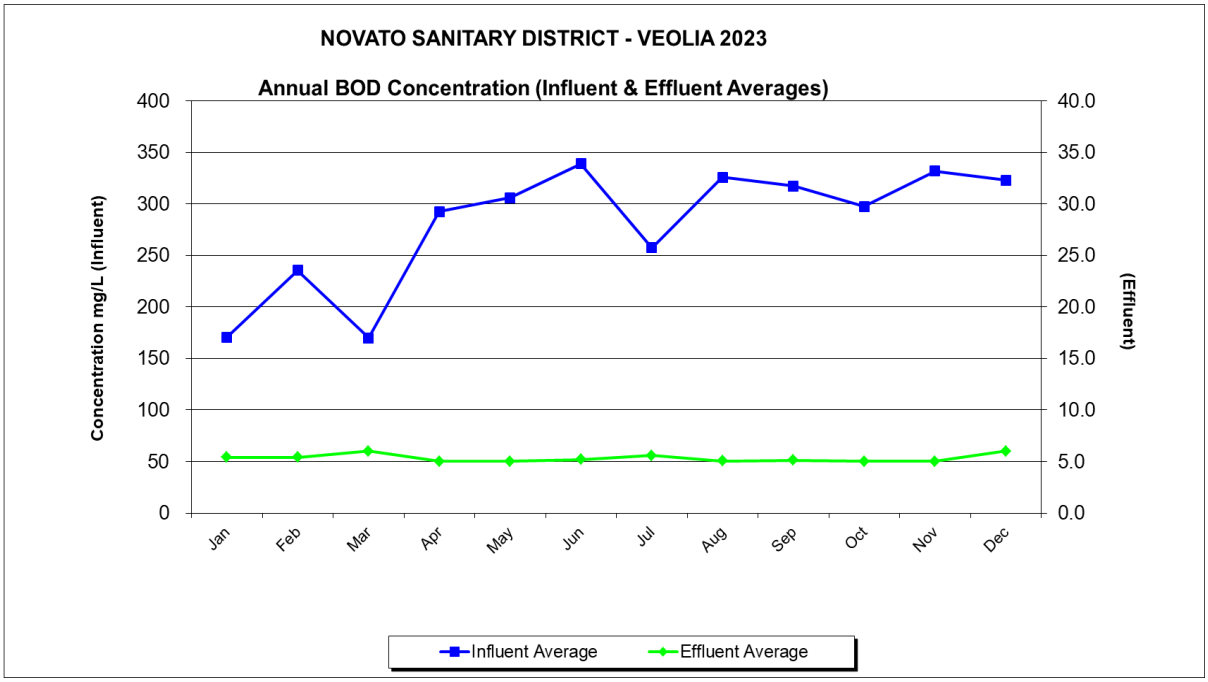
BOD (Influent & Effluent)

Annual Waste Characteristics & Loading Summary

YEAR: 2023

PRINT DATE: 2-Feb-2024

	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	283	60	171	4	29236	8620	18553	6.0	5.0	5.4	5	1169	227	759
February	300	162	236	4	11209	9167	10407	7.0	5.0	5.4	5	324	187	250
March	250	120	170	5	43618	10534	18883	8.0	5.0	6.0	6	1104	357	658
April	340	293	293	4	13526	9302	11959	5.0	6.0	5.0	5	246	172	213
May	450	240	306	5	14186	9087	11358	5.0	5.0	5.0	6	207	139	175
June	390	290	339	4	12004	8731	10431	6.0	5.0	5.2	5	140	110	124
July	340	160	258	4	12477	4524	8373	7.0	5.0	5.6	5	178	102	135
August	390	280	326	5	10994	6305	8712	6.0	5.0	5.1	15	169	105	144
September	350	290	318	4	9983	8151	9102	6.0	5.0	5.1	8	172	141	147
October	320	280	298	4	10035	7940	8757	5.0	5.0	5.0	5	157	142	146
November	420	280	332	4	13241	8325	10050	5.0	5.0	5.0	5	175	125	146
December	410	200	323	4	19666	9794	14608	9.0	5.0	6.0	5	492	149	274
ANNUAL HIGH	450	293	339	5	43618	10534	18883	9.0	6.0	6.0	15	1169	357	759
ANNUAL LOW	250	60	170	4	9983	4524	8373	5.0	5.0	5.0	5	140	102	124
ANNUAL AVG.	354	221	281	4	16681	8373	11766	6.3	5.1	5.3	6	378	163	264



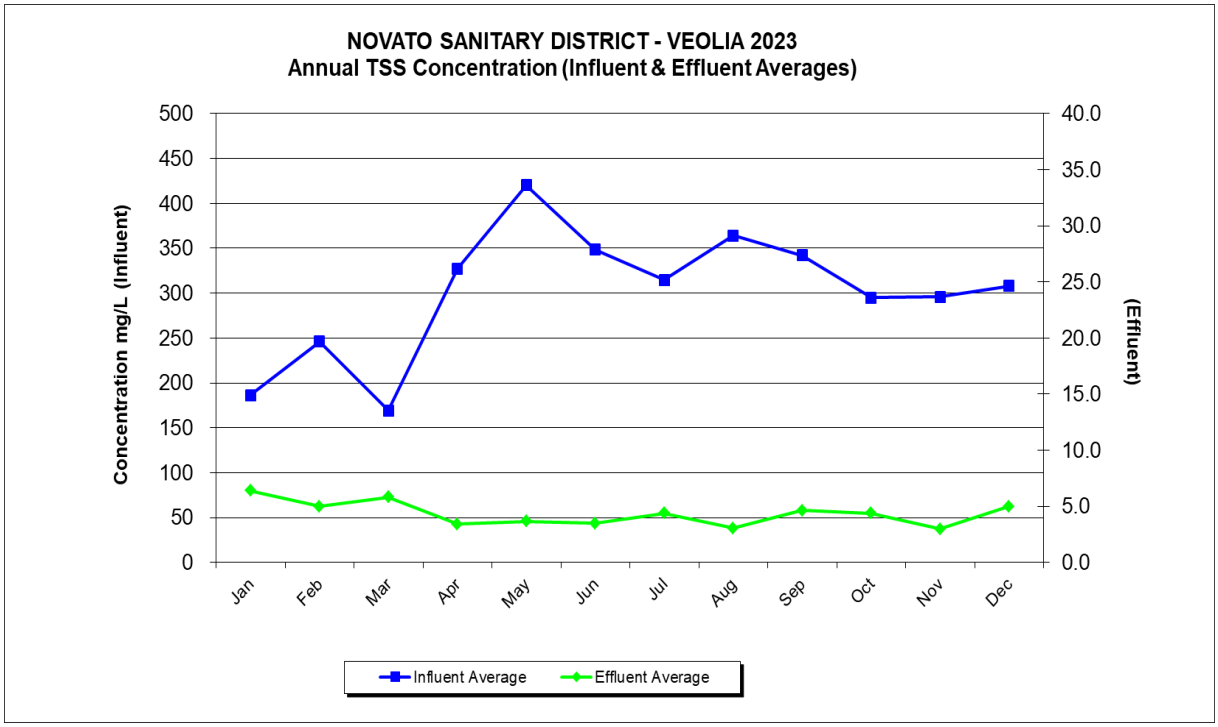
SUSPENDED SOLIDS (Influent & Effluent)

Annual Waste Characteristics & Loading Summary

YEAR: 2023

PRINT DATE: 2-Feb-2024

	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	314	46	187	4	61200	8095	23671	14.0	3.0	6.4	4	2464	227	966
February	280	181	246	4	11890	9640	10985	3.0	3.0	5.0	4	382	135	224
March	224	100	169	5	24775	10720	16936	6.4	3.0	5.8	5	1047	315	627
April	442	216	327	4	16736	10574	13348	5.0	3.0	3.4	4	245	103	147
May	733	267	420	5	23108	10110	15685	0.0	3.0	3.7	5	147	110	125
June	420	261	349	4	11664	8663	10658	0.0	3.0	3.5	4	107	67	85
July	356	275	315	4	13064	8143	10067	0.0	3.0	4.4	4	159	76	102
August	413	302	364	5	11642	8197	9633	4.0	3.0	3.1	5	99	77	87
September	425	265	342	4	12264	7448	9820	9.0	3.0	4.6	4	260	84	133
October	329	253	295	4	10317	7280	8685	6.0	3.0	4.4	4	173	85	128
November	396	220	296	4	12484	6605	8945	3.0	3.0	3.0	6	105	75	88
December	431	200	308	4	23544	8080	14598	8.0	3.0	5.0	5	503	89	243
ANNUAL HIGH	733	302	420	5	61200	10720	23671	14.0	3.0	6.4	6	2464	315	966
ANNUAL LOW	224	46	169	4	10317	6605	8685	0.0	3.0	3.0	4	99	67	85
ANNUAL AVG.	397	216	301	4	19391	8630	12753	4.9	3.0	4.4	5	474	120	246



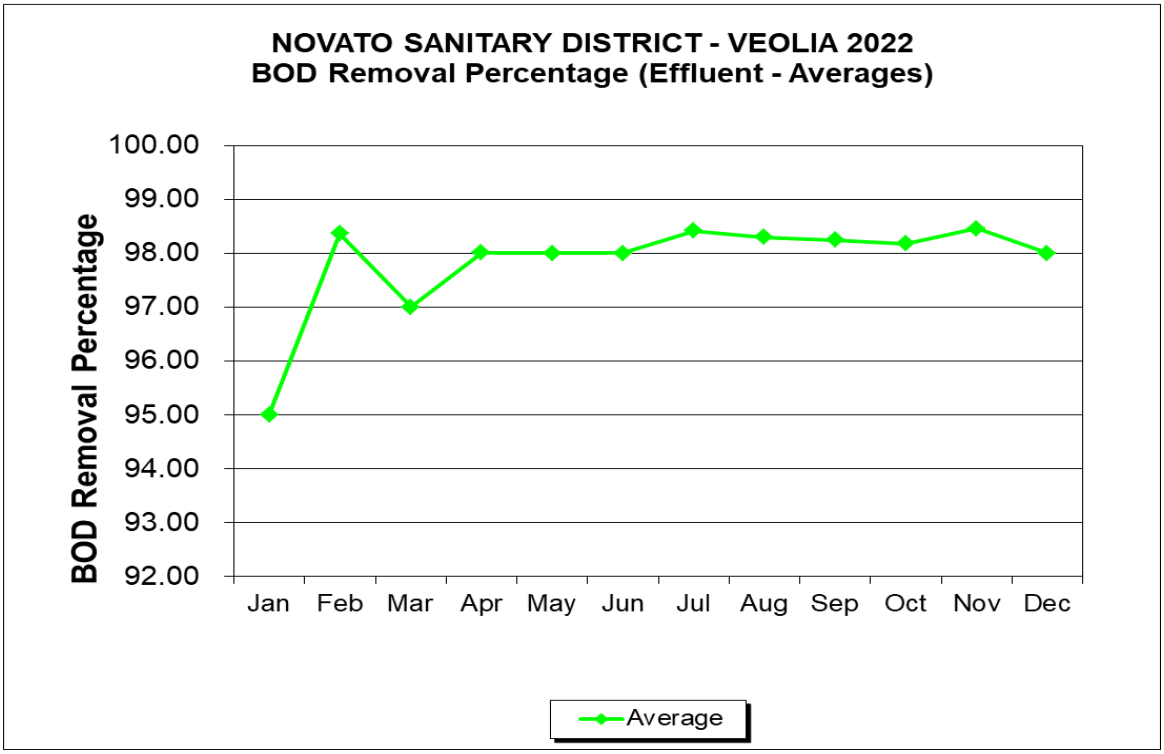
BOD Removal Percentage

Annual Waste Characteristics & Loading Summary

YEAR: 2023

PRINT DATE: 2-Feb-2024

	High	Low	Average	Number of Samples
January	98	90	95	4
February	98	97	98	4
March	98	95	97	5
April	99	97	98	4
May	99	98	98	5
June	99	98	98	4
July	99	96	98	4
August	99	98	98	5
September	99	98	98	4
October	98	98	98	4
November	99	98	98	5
December	99	98	98	4
				Number of Samples Total = 52
ANNUAL MAX.	99	98	98	
ANNUAL MIN.	98	90	95	1st Qtr. 13 2nd Qtr. 13
ANNUAL AVG.	99	97	98	3rd Qtr. 13 4th Qtr. 13



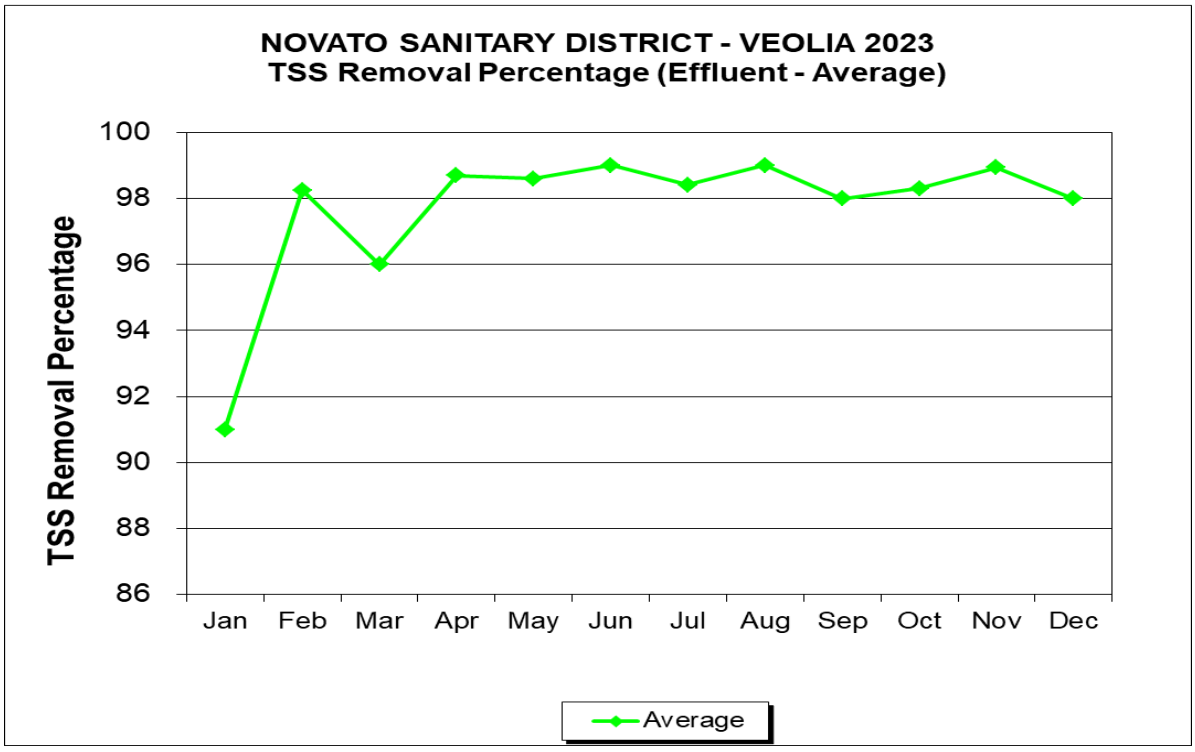
TSS Removal Percentage

Annual Waste Characteristics & Loading Summary

Year 2023

PRINT DATE: 2-Feb-2024

	High	Low	Average	Number of Samples
January	98	70	91	4.0
February	99	96	98	4.0
March	99	94	96	5.0
April	99	98	99	4.0
May	99	98	99	5.0
June	99	99	99	4.0
July	99	97	98	4.0
August	99	99	99	5.0
September	99	97	98	4.0
October	99	98	98	4.0
November	99	99	99	5.0
December	99	97	98	4.0
				Number of Samples Total = 52
ANNUAL MAX.	99	99	99	
ANNUAL MIN.	98	70	91	1st Qtr. 13 2nd Qtr. 13
ANNUAL AVG.	99	95	98	3rd Qtr. 13 4th Qtr. 13



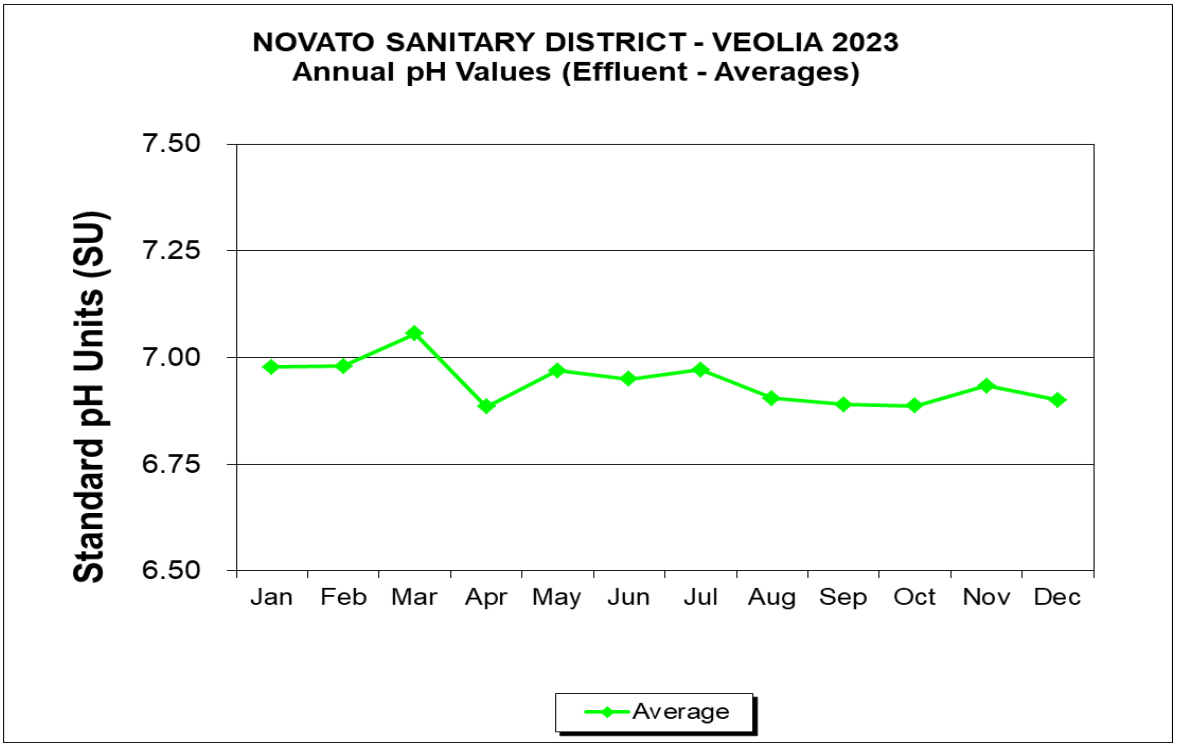
pH (Effluent)

Annual Waste Characteristics & Loading Summary

YEAR: 2023

PRINT DATE: 2-Feb-2024

	High	Low	Average	Number of Samples
January	7.1	6.9	7.0	22
February	7.1	6.9	7.0	20
March	7.3	6.9	7.1	23
April	7.0	6.7	6.9	20
May	7.2	6.8	7.0	23
June	7.0	6.8	7.0	22
July	7.1	6.8	7.0	21
August	7.1	6.7	6.9	23
September	7.0	6.8	6.9	21
October	7.0	6.8	6.9	23
November	7.1	6.7	6.9	21
December	7.0	6.8	6.9	20
				Number of Samples Total = 259
ANNUAL MAX.	7.30	6.90	7.06	
ANNUAL MIN.	7.00	6.70	6.89	1st Qtr. 65 2nd Qtr. 65
ANNUAL AVG.	7.08	6.80	6.94	3rd Qtr. 65 4th Qtr. 64



TEMPERATURE (Effluent)

Annual Waste Characteristics & Loading Summary

YEAR: 2023 PRINT DATE: 2-Feb-2024

	High	Low	Average	Number of Samples
January	17.4	14.9	15.9	22.0
February	17.5	15.5	16.8	20.0
March	16.7	14.8	16.1	23.0
April	20.5	16.0	18.2	20.0
May	21.4	18.8	20.3	23.0
June	23.3	21.1	22.2	22.0
July	24.7	22.1	23.6	21.0
August	25.5	23.6	24.7	23.0
September	26.1	23.6	24.4	21.0
October	25.2	22.1	23.6	23.0
November	23.1	19.7	21.4	22.0
December	21.2	17.9	19.4	21.0
				Number of Samples Total = 261
ANNUAL MAX.	26.1	23.6	24.7	
ANNUAL MIN.	16.7	14.8	15.9	1st Qtr. 65 2nd Qtr. 65
ANNUAL AVG.	21.9	19.2	20.5	3rd Qtr. 65 4th Qtr. 66