

# NOVATO SANITARY DISTRICT

Meeting Date: December 10, 2012

**The Board of Directors of Novato Sanitary District will hold a closed session at 5:30 PM followed by a regular meeting at 6:00 p.m., Monday, December 10, 2012, at the District Offices, 500 Davidson Street, Novato.**

*Materials related to items on this agenda are available for public inspection in the District Office, 500 Davidson Street, Novato, during normal business hours. They are also available on the District's website: [www.novatosan.com](http://www.novatosan.com).*

## **CLOSED SESSION CONFERENCE WITH LABOR NEGOTIATORS:**

- a. District designated representatives: Beverly James, Sandeep Karkal  
Employee organization: International Brotherhood of Teamsters Local 315.
- b. District designated representative: Beverly James  
Unrepresented employees: Deputy Manager-Engineer, Administrative Services Manager, Finance Officer, Field Services Superintendent, Collection System Superintendent, Senior Engineer, Administrative Secretary.

## **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. Consider approval of minutes of the November 26, 2012 meeting.

### **5. CONSENT CALENDAR:**

The Manager-Engineer has reviewed the following items. To her 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. Approve regular and payroll related disbursements.

**6. FINANCE:**

- a. Finance Committee Report
- b. Presentation of Audited Financial Statements for fiscal year ended June 30, 2012, by Maze & Associates.
- c. Consider approval of revised Policy 3120: Investment Policy.

**7. PERSONNEL:**

- a. Consider approval of Memorandum of Understanding with International Brotherhood of Teamsters Local 315 for the period July 1, 2012 through June 30, 2013.
- b. Consider approval of salaries and benefits for management and confidential personnel effective July 1, 2012.

**8. WASTEWATER OPERATIONS:**

- a. Consider accepting Annual Wastewater Operations Report.
- b. Consider amending Schedule 2 of the contract service agreement so that the annual operation and maintenance reports are due within 60 days of the end of the calendar year rather than the billing year.

**9. CAPITAL PROJECTS:**

- a. Consider accepting a proposal from Nute Engineering to design the replacement/repair of the Olive Avenue force main for a not to exceed amount of \$50,000 and authorize Manager-Engineer to sign the contract.

**10. BOARD MEMBER REPORTS:**

- a. North Bay Water Reuse Authority Washington trip.
- b. North Bay Watershed Association meeting.

**11. MANAGER'S ANNOUNCEMENTS:**

**12. ADJOURNMENT:**

Next resolution no. 3053

**Next regular meeting date: Monday, January 14, 2013, 6:00 PM 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.***

November 26, 2012

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 6:00 p.m., Monday, November 26, 2012, at the District Office, 500 Davidson Street, Novato.

BOARD MEMBERS PRESENT: President Michael Di Giorgio, Members William C. Long, Jean Mariani, Jerry Peters, and Dennis Welsh.

STAFF PRESENT: Manager-Engineer-Secretary Beverly B. James, Deputy Manager-Engineer Sandeep Karkal and Administrative Secretary Julie Swoboda.

ALSO PRESENT: John Bailey, Project Manager, Veolia Water  
Brant Miller, Novato resident  
Bob Guinan, Novato resident

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as written.

PUBLIC COMMENT: None.

REVIEW OF MINUTES:

Consider approval of minutes of the November 13, 2012 regular Board meeting.

*On motion of Member Long, seconded by Member Peters, and carried unanimously, the November 13, 2012 Board meeting minutes were approved.*

CONSENT CALENDAR:

*On motion of Member Mariani, seconded by Member Peters and carried unanimously, the following Consent Calendar items were approved:*

- a. Approval of expenditure and authorization for the Manager-Engineer to execute contracts with Marin Audubon Society for Supplemental Environmental Projects.
- b. Approval of regular disbursements in the amount of \$327,508.65, project account disbursements in the amount of \$230,419.90, and payroll and payroll related disbursements in the amount of \$228,460.59.

ADMINISTRATION:

- Consider procedural rejection of claim from Terry Odetto, 39 Devonshire Drive, Novato, concerning sewer backup on October 22, 2012: The Manager gave an overview of Ms. Odetto's claim which followed a sewer backup incident at her

residence. The Manager clarified that the District's rejection of the claim is an administrative/procedural action that will limit the time that the claimant may file suit for money or damages. She stated that generally a negotiated settlement is reached between the District's claims adjuster, Carl Warren and Co., and the claimant; but in the event of a lawsuit, a claim rejection restricts the claimant's statute of limitations to six months instead of two years. The Manager stated that the matter has been discussed with Carl Warren and Co. and staff recommends procedural denial of the claim from Ms. Odetto.

The Manager stated that once a resolution has been reached, the claim will be brought back to the Board for their approval.

*On motion of Member Peters, seconded by Member Long and carried unanimously, the Board procedurally rejected the claim from Terry Odetto concerning the sewer backup incident at 39 Devonshire Drive, Novato, on October 22, 2012.*

- Review of Quarterly Revenue and Expenditure report: The Manager reviewed the report and gave a summary of revenues and expenditures for the operating and capital funds through the first quarter of Fiscal Year 2012-13. She stated that the operating revenues are approximately 1.7% of the total budget amount with 25% of the year completed and noted that operating income accounts are within normal range for this time of year.

The Manager reviewed the operating expenditures, stating that the expenses are approximately 20.4% of the total budget amount with 25% of the year completed. She reviewed and explained the items that varied significantly from 25% of the budget.

- Review Accounts Receivable report. The Manager reviewed the Accounts Receivable summary and noted that receivables over 90 days old amount to \$5,102.69 or 0.056% of the District's total budgeted operating revenue.

#### DISTRICT CONFLICT OF INTEREST CODE:

- Consider adoption of Resolution No. 3052, revising District Conflict of Interest Code to amend filing requirements for designated employees: The Manager gave an overview of the District's Conflict of Interest Code and stated that the Marin County Elections Department requested a revision to the District's Form 700 filing requirements. She reviewed the changes noting that designated employees will file Form 700 with the District, rather than with the County and that the Form 700 filing for the elected officials must continue to be filed with the County Clerk/Registrar of Voters office and a copy retained by the District.

*On motion of Member Mariani, seconded by Member Peters and carried unanimously, the Board approved Resolution No. 3052: A Resolution Revising the Conflict of Interest Code for the Novato Sanitary District Pursuant to the Provisions of the Political Reform Act of 1974 Set Forth in the California Government Code and Rescinding Resolution No. 2971.*

## COMMITTEE REPORTS:

- Wastewater Operations Committee Report. The Deputy Manager-Engineer introduced John Bailey, Project Manager, Veolia Water. Mr. Bailey gave an overview of the treatment plant performance for the month of October, 2012. He reviewed Veolia's safety training and provided information on progress of the digester cleaning for the Ignacio and Novato No. 2 digesters.

President Di Giorgio congratulated Veolia Water for their outstanding safety record, noting that they have worked accident-free for a total of 882 days.

The Manager stated that the District continues to receive odor issue reports from the Lea Drive neighborhood residents. She discussed the fence and landscaping that is being installed to help solve the odor problem.

Novato resident, Bob Guinan, stated that the odors are continuing. He stated that some of the previous mal-odors have been controlled but that aeration basin odors continue to be experienced in the Lea Drive neighborhood. He stated that although the odor situation continues to improve, he hopes a full resolution will be found soon. Mr. Guinan encouraged the Board to explore the option of covering the aeration basin in the same way that other Districts have done, in order to alleviate this odor source. The Manager stated that if the District were to cover the aeration basins, the work would not be a viable option for at least five years due to budget constraints and to effectiveness of equipment in the basins.

The Manager discussed some of the remedies the District has taken to alleviate mal-odors. She discussed the progress of the fence that is being constructed at Lea Drive to act as a wind/odor diversion and stated that by mid-January she anticipates more fencing to be constructed. The Manager reported that James Joyce, the odor consultant who completed the initial odor assessment, was no longer available for consultation. She stated that she is seeking another odor expert to review the District's facilities.

Member Welsh thanked Mr. Guinan for his continued tracking and reporting of the odors.

The Deputy Manager-Engineer continued with the Wastewater Operations Report and reviewed the Collection Systems and Reclamation Facilities summaries.

## STAFF REPORTS:

- North Bay Water Reuse Authority meeting. The Manager discussed the NBWRA which met on November 19<sup>th</sup>. She noted that the City of Petaluma and Marin Municipal Water District recently became members of NBWRA. She discussed the three potential Novato recycled water projects as identified by the preliminary Scoping study. She

stated that workshops will be scheduled for the Final Phase 2 Scoping Study and that they will coincide with scheduled NBWRA Board meetings. The Board expressed an interest in being notified when the workshops are offered.

- California Special District Association training. The Manager reported on Finance Officer Laura Creamer's recent attendance at a CSDA course titled "Setting Direction/Community Leadership" which took place on November 15<sup>th</sup>. She stated that Ms. Creamer highly recommended the training. The Manager suggested the training could be beneficial for Board members as well.

- California Water Environment Association Redwood Empire Association Awards. The Manager reported that the District received the 2012 CWEA Redwood Empire Section Large Public Education Program award. The award was won by collaboration of six agencies comprised of: Novato Sanitary District, Las Gallinas Valley SD, Central Marin SA, Sanitary District #5 Tiburon/Belvedere, Sausalito/Marin SD, and Sewerage Agency of Southern Marin.

#### BOARD MEMBER REPORTS:

Member Welsh commented that the garbage receptacles at some apartment complexes continue to overflow with garbage. The Manager stated that the mandated recycling program for multi-family residential units is in place but it could take as much as 12 months for the multi-family units to become fully compliant.

#### MANAGER'S ANNOUNCEMENTS:

- Only one Board meeting will be held in December: December 10<sup>th</sup> at 6:00 p.m.
- The Finance Committee meeting will be scheduled for the first week of December.

ADJOURNMENT: There being no further business to come before the Board, President Long adjourned the meeting at 7:26 p.m.

Respectfully submitted,

Beverly B. James  
Secretary

Julie Swoboda, Recording

# Novato Sanitary District Operating Check Register

December 10, 2012

Date	Num	Name	Credit
<b>Dec 10, 12</b>			
12/10/2012	55158	State Water Resources Contr...	5,378,956.19
12/10/2012	55163	Veolia Water North America, ...	158,258.03
12/10/2012	55123	Central Marin Sanitation Distr...	15,492.95
12/10/2012	55153	PSC	14,186.84
12/10/2012	55165	Water & Wastewater Leaders...	11,750.00
12/10/2012	55121	Caltest Analytical Lab Inc.	7,809.35
12/10/2012	55156	RMC Water & Environment, I...	6,758.32
12/10/2012	55116	Aqua Science	6,405.00
12/10/2012	55139	Johnson, Dee	6,299.22
12/10/2012	55155	Real Estate Strategies & Sol...	4,250.00
12/10/2012	55132	EOA, Inc.	3,508.01
12/10/2012	55161	U.S. Bank Card (2)(June)	3,219.10
12/10/2012	55152	Preferred Benefit	3,197.72
12/10/2012	55154	Rauch Communication Cons...	2,875.02
12/10/2012	55128	Dearborn National	2,618.38
12/10/2012	55167	Wedge Roofing Inc.	2,600.00
12/10/2012	55140	Marin County Office	2,080.00
12/10/2012	55144	North Marin Water District - L...	1,768.00
12/10/2012	55141	North Bay Truck Service	1,734.61
12/10/2012	55130	Eaton Corporation	1,500.00
12/10/2012	55125	Comet Building Maintenance,...	1,453.05
12/10/2012	55115	American Express-22062	1,373.73
12/10/2012	55160	U.S. Bank Card (1)(Bev)	1,021.67
12/10/2012	55137	IEDA, INC	1,020.00
12/10/2012	55124	Cintas Corporation	1,002.12
12/10/2012	55119	Cagwin & Dorward Inc.	897.00
12/10/2012	55135	Grainger	833.68
12/10/2012	55122	Cantarutti Electric, Inc	805.00
12/10/2012	55131	Empire Mini Storage - Novato	779.00
12/10/2012	55134	Fisher-Scientific	644.45
12/10/2012	55146	Novato Disposal-	644.43
12/10/2012	55118	Beecher Engineering	600.00
12/10/2012	55162	Unicorn Group	587.22
12/10/2012	55164	Vision Service Plan	524.81
12/10/2012	55120	California Diesel & Power	475.00
12/10/2012	55166	Water Components & Buildin...	464.69
12/10/2012	55136	IDEXX Distributing Corp.	429.13
12/10/2012	55143	North Marin Water District	384.78
12/10/2012	55151	Pini Hardware	261.86
12/10/2012	55157	Siemens Industry Inc. - Lab	257.15
12/10/2012	55142	North Marin Auto Parts	237.16
12/10/2012	55149	Orkin Pest Control, Inc.	232.00
12/10/2012	55117	Barnett Medical LLC	180.00
12/10/2012	55127	CWEAmembers	180.00
12/10/2012	55138	Interstate Batteries	152.20
12/10/2012	55150	Petty Cash	135.47
12/10/2012	55129	Department Of Consumer Aff...	120.00
12/10/2012	55133	Federal Express	107.01
12/10/2012	55148	One Stop Auto Service Inc.	103.73
12/10/2012	55126	Cook Paging	66.30
12/10/2012	55159	T-Mobile	22.91
12/10/2012	55145	Novato Car Wash	21.98
12/10/2012	55147	Novato Lock	17.36
<b>Dec 10, 12</b>			<b><u>5,651,301.63</u></b>

**Novato Sanitary District**  
**Operating Check Register Detail**  
For December 10, 2012

	<u>Date</u>	<u>Account</u>	<u>Debit</u>
<b>American Express-22062</b>			
	12/01/2012	64100 · Operating Supplies	139.95
	12/01/2012	66090 · Office Expense	44.32
	12/01/2012	66170 · Travel, Meetings & Training	546.35
	12/01/2012	21015 · American Express	643.11
Total American Express-22062			<u>1,373.73</u>
<b>Aqua Science</b>			
	11/28/2012	64160 · Research & Monitoring	6,405.00
Total Aqua Science			<u>6,405.00</u>
<b>Barnett Medical LLC</b>			
	11/07/2012	67500 · Household Hazardous Waste	180.00
Total Barnett Medical LLC			<u>180.00</u>
<b>Beecher Engineering</b>			
	11/25/2012	66123 · O/S Contractual	600.00
Total Beecher Engineering			<u>600.00</u>
<b>Cagwin &amp; Dorward Inc.</b>			
	11/30/2012	66150 · Repairs & Maintenance	897.00
Total Cagwin & Dorward Inc.			<u>897.00</u>
<b>California Diesel &amp; Power</b>			
	10/18/2012	65150 · Repairs & Maintenance	475.00
Total California Diesel & Power			<u>475.00</u>
<b>Caltest Analytical Lab Inc.</b>			
	11/16/2012	64160 · Research & Monitoring	7,809.35
Total Caltest Analytical Lab Inc.			<u>7,809.35</u>
<b>Cantarutti Electric, Inc</b>			
	11/27/2012	65153 · TV Inspection	460.00
	11/28/2012	63150 · Repairs & Maintenance	345.00
Total Cantarutti Electric, Inc			<u>805.00</u>
<b>Central Marin Sanitation District</b>			
	11/15/2012	66123 · O/S Contractual	12,058.06
	11/16/2012	64170 · Pollution Prevention/Public Ed	3,190.27
	11/19/2012	66123 · O/S Contractual	244.62
Total Central Marin Sanitation District			<u>15,492.95</u>
<b>Cintas Corporation</b>			
	12/01/2012	64100 · Operating Supplies	115.31
	12/01/2012	66100 · Engineering Supplies	340.64
	12/01/2012	60100 · Operating Supplies	546.17
Total Cintas Corporation			<u>1,002.12</u>
<b>Comet Building Maintenance, Inc.</b>			
	11/21/2012	66150 · Repairs & Maintenance	1,090.00
	11/21/2012	60150 · Repairs & Maintenance	152.50
	11/21/2012	65150 · Repairs & Maintenance	152.50
	11/21/2012	66090 · Office Expense	58.05
Total Comet Building Maintenance, Inc.			<u>1,453.05</u>
<b>Cook Paging</b>			
	12/01/2012	61000-4 · Water/Permits/Telephone	24.00
	12/01/2012	65193 · Telephone	30.83
	12/01/2012	60193 · Telephone	11.47
Total Cook Paging			<u>66.30</u>
<b>CWEAmembers</b>			
	12/01/2012	66080 · Memberships	180.00
Total CWEAmembers			<u>180.00</u>
<b>Dearborn National</b>			
	11/15/2012	66020 · Employee Benefits	2,618.38
Total Dearborn National			<u>2,618.38</u>
<b>Department Of Consumer Affairs</b>			
	12/01/2012	66170 · Travel, Meetings & Training	120.00
Total Department Of Consumer Affairs			<u>120.00</u>
<b>Eaton Corporation</b>			
	11/20/2012	66124 · IT/Misc Electrical	1,500.00

**Novato Sanitary District**  
**Operating Check Register Detail**  
For December 10, 2012

	<u>Date</u>	<u>Account</u>	<u>Debit</u>
Total Eaton Corporation			1,500.00
<b>Empire Mini Storage - Novato</b>			
	12/01/2012	66123 · O/S Contractual	779.00
Total Empire Mini Storage - Novato			<u>779.00</u>
<b>EOA, Inc.</b>			
	11/21/2012	64160 · Research & Monitoring	3,508.01
Total EOA, Inc.			<u>3,508.01</u>
<b>Federal Express</b>			
	11/16/2012	66090 · Office Expense	107.01
Total Federal Express			<u>107.01</u>
<b>Fisher-Scientific</b>			
	11/28/2012	64100 · Operating Supplies	644.45
Total Fisher-Scientific			<u>644.45</u>
<b>Grainger</b>			
	09/21/2012	65100 · Operating Supplies	83.07
	12/04/2012	65150 · Repairs & Maintenance	750.61
Total Grainger			<u>833.68</u>
<b>IDEXX Distributing Corp.</b>			
	11/07/2012	64100 · Operating Supplies	429.13
Total IDEXX Distributing Corp.			<u>429.13</u>
<b>IEDA, INC</b>			
	12/01/2012	66123 · O/S Contractual	1,020.00
Total IEDA, INC			<u>1,020.00</u>
<b>Interstate Batteries</b>			
	12/04/2012	60100 · Operating Supplies	152.20
Total Interstate Batteries			<u>152.20</u>
<b>Johnson, Dee</b>			
	12/01/2012	67400 · Consulting Services	2,067.82
	12/01/2012	67530 · Used Oil Program	155.42
	12/01/2012	67400 · Consulting Services	4,075.98
Total Johnson, Dee			<u>6,299.22</u>
<b>Marin County Office</b>			
	11/14/2012	65201 · Permits & Fees	2,080.00
Total Marin County Office			<u>2,080.00</u>
<b>North Bay Truck Service</b>			
	11/18/2012	60150 · Repairs & Maintenance	637.24
	11/18/2012	65150 · Repairs & Maintenance	384.65
	11/18/2012	60150 · Repairs & Maintenance	712.72
Total North Bay Truck Service			<u>1,734.61</u>
<b>North Marin Auto Parts</b>			
	11/19/2012	65100 · Operating Supplies	30.24
	11/28/2012	65150 · Repairs & Maintenance	190.67
	12/03/2012	60152 · Small Tools	16.25
Total North Marin Auto Parts			<u>237.16</u>
<b>North Marin Water District</b>			
	11/22/2012	61000-4 · Water/Permits/Telephone	46.00
	11/22/2012	65192 · Water	338.78
Total North Marin Water District			<u>384.78</u>
<b>North Marin Water District - Lab</b>			
	12/03/2012	64160 · Research & Monitoring	1,768.00
Total North Marin Water District - Lab			<u>1,768.00</u>
<b>Novato Car Wash</b>			
	11/30/2012	60150 · Repairs & Maintenance	10.99
	11/30/2012	66150 · Repairs & Maintenance	10.99
Total Novato Car Wash			<u>21.98</u>
<b>Novato Disposal-</b>			
	12/01/2012	60200 · Other(Garbage Coll)	644.43
Total Novato Disposal-			<u>644.43</u>
<b>Novato Lock</b>			
	11/28/2012	60100 · Operating Supplies	17.36

**Novato Sanitary District**  
**Operating Check Register Detail**  
For December 10, 2012

	<u>Date</u>	<u>Account</u>	<u>Debit</u>
Total Novato Lock			17.36
<b>One Stop Auto Service Inc.</b>			
	11/29/2012	60150 · Repairs & Maintenance	103.73
Total One Stop Auto Service Inc.			<u>103.73</u>
<b>Orkin Pest Control, Inc.</b>			
	11/15/2012	66150 · Repairs & Maintenance	232.00
Total Orkin Pest Control, Inc.			<u>232.00</u>
<b>Petty Cash</b>			
	12/03/2012	60100 · Operating Supplies	55.94
	12/03/2012	66170 · Travel, Meetings & Training	79.53
Total Petty Cash			<u>135.47</u>
<b>Pini Hardware</b>			
	12/04/2012	65150 · Repairs & Maintenance	52.43
	12/04/2012	65100 · Operating Supplies	159.86
	12/04/2012	60100 · Operating Supplies	49.57
Total Pini Hardware			<u>261.86</u>
<b>Preferred Benefit</b>			
	12/01/2012	66020 · Employee Benefits	3,096.36
	12/01/2012	21074 · Health Insurance Payable	101.36
Total Preferred Benefit			<u>3,197.72</u>
<b>PSC</b>			
	10/30/2012	67500 · Household Hazardous Waste	14,186.84
Total PSC			<u>14,186.84</u>
<b>Rauch Communication Consultants. Inc.</b>			
	11/27/2012	66123 · O/S Contractual	2,875.02
Total Rauch Communication Consultants. Inc.			<u>2,875.02</u>
<b>Real Estate Strategies &amp; Solutions Inc.</b>			
	12/04/2012	66123 · O/S Contractual	4,250.00
Total Real Estate Strategies & Solutions Inc.			<u>4,250.00</u>
<b>RMC Water &amp; Environment, Inc.</b>			
	11/14/2012	64160 · Research & Monitoring	6,758.32
Total RMC Water & Environment, Inc.			<u>6,758.32</u>
<b>Siemens Industry Inc. - Lab</b>			
	11/28/2012	64100 · Operating Supplies	257.15
Total Siemens Industry Inc. - Lab			<u>257.15</u>
<b>State Water Resources Control Bd-SRF Loan</b>			
	10/25/2012	Interest - Capital Projects\	1,946,988.98
	10/25/2012	Principal Payment	3,431,967.21
Total State Water Resources Control Bd-SRF Loan			<u>5,378,956.19</u>
<b>T-Mobile</b>			
	11/17/2012	65193 · Telephone	22.91
Total T-Mobile			<u>22.91</u>
<b>U.S. Bank Card (1)(Bev)</b>			
	12/03/2012	66170 · Travel, Meetings & Training	188.10
	12/03/2012	66150 · Repairs & Maintenance	21.57
	12/04/2012	66170 · Travel, Meetings & Training	812.00
Total U.S. Bank Card (1)(Bev)			<u>1,021.67</u>
<b>U.S. Bank Card (2)(June)</b>			
	12/03/2012	66090 · Office Expense	1,003.40
	12/03/2012	65150 · Repairs & Maintenance	149.38
	12/03/2012	21016 · U.S. Bank Visa	1,726.65
	12/03/2012	66130 · Printing & Publications	181.14
	12/03/2012	64100 · Operating Supplies	158.53
Total U.S. Bank Card (2)(June)			<u>3,219.10</u>
<b>Unicorn Group</b>			
	11/21/2012	66090 · Office Expense	587.22
Total Unicorn Group			<u>587.22</u>

**Novato Sanitary District**  
**Operating Check Register Detail**  
For December 10, 2012

	<u>Date</u>	<u>Account</u>	<u>Debit</u>
<b>Veolia Water North America, Inc.</b>			
	11/05/2012	61000-0 · Contract Operations	158,258.03
Total Veolia Water North America, Inc.			<u>158,258.03</u>
<b>Vision Service Plan</b>			
	11/20/2012	66020 · Employee Benefits	524.81
Total Vision Service Plan			<u>524.81</u>
<b>Water &amp; Wastewater Leadership Center</b>			
	12/03/2012	66170 · Travel, Meetings & Training	11,750.00
Total Water & Wastewater Leadership Center			<u>11,750.00</u>
<b>Water Components &amp; Building, Inc.</b>			
	12/03/2012	60100 · Operating Supplies	464.69
Total Water Components & Building, Inc.			<u>464.69</u>
<b>Wedge Roofing Inc.</b>			
	11/21/2012	66150 · Repairs & Maintenance	2,600.00
Total Wedge Roofing Inc.			<u>2,600.00</u>
			<u><u>5,651,301.63</u></u>

# Novato Sanitary District Capital Project Check Register

December 10, 2012

Date	Num	Name	Credit
<b>Dec 10, 12</b>			
12/10/2012	2457	W.R. Forde	122,924.60
12/10/2012	2454	RMC Water & Environment, I...	68,546.55
12/10/2012	2448	Covello Group, The	40,622.98
12/10/2012	2456	T&T Valve & Instrument, Inc.	18,903.31
12/10/2012	2452	Nute Engineering Inc.	16,872.78
12/10/2012	2449	Custom Tractor Service	6,500.00
12/10/2012	2455	Sound Expressions	4,053.21
12/10/2012	2453	Rauch Communication Cons...	3,453.51
12/10/2012	2450	Lateral-O'Dea	1,500.00
12/10/2012	2451	Linscott Engineering Contrac...	685.74
<b>Dec 10, 12</b>			<b>284,062.68</b>

## Novato Sanitary District Capital Projects

	Date	December 2012	Account	Amount
<b>Covello Group, The</b>				
	12/01/2012		73002 · WWTP Up - Cont D - Rec- ARRA Fu	10,765.64
	12/01/2012		72403 · Pump Station Rehabilitation	29,857.34
Total Covello Group, The				<u>40,622.98</u>
<b>Custom Tractor Service</b>				
	11/12/2012		72804 · Annual Reclamation Fac Imp	6,500.00
Total Custom Tractor Service				<u>6,500.00</u>
<b>Lateral-O'Dea</b>				
	12/01/2012		72706 · 2008 Collection System Improv	1,500.00
Total Lateral-O'Dea				<u>1,500.00</u>
<b>Linscott Engineering Contractors Inc</b>				
	11/30/2012		72803 · Annual Collection Sys Repairs	685.74
Total Linscott Engineering Contractors Inc				<u>685.74</u>
<b>Nute Engineering Inc.</b>				
	11/14/2012		72403 · Pump Station Rehabilitation	11,774.17
	11/14/2012		72706 · 2008 Collection System Improv	75.61
	11/14/2012		72706 · 2008 Collection System Improv	1,623.00
	11/14/2012		72803 · Annual Collection Sys Repairs	3,400.00
Total Nute Engineering Inc.				<u>16,872.78</u>
<b>Rauch Communication Consultants. Inc.</b>				
	11/19/2012		72808 · Strategic Plan Update	3,453.51
Total Rauch Communication Consultants. Inc.				<u>3,453.51</u>
<b>RMC Water &amp; Environment, Inc.</b>				
	11/14/2012		73002 · WWTP Up - Cont D - Rec- ARRA Fu	16,140.66
	11/14/2012		73001 · WWTP Upgrade - Contract C	52,405.89
Total RMC Water & Environment, Inc.				<u>68,546.55</u>
<b>Sound Expressions</b>				
	12/03/2012		73003 · Admin Bldg/Maint.Bldg Upgrades	4,053.21
Total Sound Expressions				<u>4,053.21</u>
<b>T&amp;T Valve &amp; Instrument, Inc.</b>				
	11/30/2012		72805 · Annual Trtmt Plnt/Pump St Impr	18,903.31
Total T&T Valve & Instrument, Inc.				<u>18,903.31</u>
<b>W.R. Forde</b>				
	11/21/2012		72803 · Annual Collection Sys Repairs	4,176.78
	11/28/2012		72403 · Pump Station Rehabilitation	118,747.82
Total W.R. Forde				<u>122,924.60</u>
				<u><u>284,062.68</u></u>

## NOVATO SANITARY DISTRICT

### MEMORANDUM

Date: December 10, 2012  
To: Board of Directors  
From: Finance Committee: Jean Mariani, William Long  
Subject: Finance Committee Report

---

### **Comprehensive Annual Financial Report**

The Finance committee met on December 6, 2012 to review the draft Comprehensive Annual Financial Report for Fiscal years 2010/11 and 2011/12 prepared by Maze and Associates. Their comments on the transmittal letter and the Management Discussion and Analysis are incorporated in the attached Final Draft.

Maze & Associates is reviewing the comments on the Financial sections and will present the final document at the Board meeting.

The transmittal letter provides a brief overview of the District and factors affecting its financial condition. The Management Discussion and Analysis (MD&A) provides an introduction to the financial statements.

### **Investment Policy:**

Novato Sanitary District has had an Investment Policy in place for many years. It is reviewed and updated annually in accordance with State law. It was most recently reviewed and approved at the Board meeting on October 22, 2012. It was noted at that time that the policy contained both policy statements and procedures and that it would be timely to review other investment options besides the Local Agency Investment Fund (LAIF).

**Alternative investment:** The committee evaluated the Marin County Investment Pool. It was rated AAA by Fitch in October 2010 and again in August 2012. The return on investment was 0.245% for September compared to 0.348% for LAIF. Karen Shaw, Investment Officer for the pool, indicated that the Pool is limited to long-term participation. She indicated that the lower returns are due to the fact that 76% of the funds are invested in Federal mortgage instruments. The Committee does not recommend switching from LAIF to the Marin County Investment Pool.

**Investment Policy revisions:** The committee reviewed the revised Investment Policy making a number of recommendations. The changes primarily remove the procedures covered elsewhere and restrict this to a policy document consistent with the CSDA recommendations. A copy of the revised Investment Policy is attached. The Committee recommends adopting the revised Investment Policy 3120.

**Novato Sanitary District**  
**Novato, California**  
**Comprehensive Annual Financial Report**

**For the Fiscal Years Ended June 30, 2012 and 2011**



**NOVATO SANITARY DISTRICT, CALIFORNIA  
COMPREHENSIVE ANNUAL FINANCIAL REPORT  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOVATO SANITARY DISTRICT  
500 Davidson Street  
Novato, California 94945  
(415) 892-1694 – [www.novatosan.com](http://www.novatosan.com)**

**Prepared by:**

*Beverly James, Manager-Engineer  
Laura Creamer, Finance Officer*

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**NOVATO SANITARY DISTRICT**  
**Comprehensive Annual Financial Report**  
**For the Years Ended June 30, 2012 and 2011**

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**NOVATO SANITARY DISTRICT**  
**Comprehensive Annual Financial Report**  
**For the Years Ended June 30, 2012 and 2011**

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# **Introductory Section**

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November 5, 2012

To the Honorable President and Members of the Board of Directors and Customers of the Novato Sanitary District:

State law requires that all general-purpose local governments and special districts publish each fiscal year a complete set of financial statements presented in conformity with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted auditing standards by a firm of licensed certified public accountants. The Comprehensive Annual Financial Report (CAFR) of the Novato Sanitary District (District) for fiscal year ended June 30, 2012 is hereby submitted as required. Maze & Associates, a firm of licensed certified public accountants, has audited the Novato Sanitary District's financial statements.

This report is organized into four sections: (1) Introductory (2) Financial (3) Supplemental Information and (4) Statistical. The introductory section offers general information about the District's organization and current District activities and reports on a summary of significant financial results. The Financial section includes the Independent Auditor's Report, Management's Discussion and Analysis of the District's basic financial statement, and the District's audited basic financial statements with accompanying notes. The Supplemental Information section includes schedules for the purposes of additional analysis. The Statistical section presents un-audited ten-year historical financial, demographic, and statistical information pertinent to the District's operations.

Generally Accepted Accounting Principles (GAAP) require that management provide a narrative introduction, overview, and analysis to accompany the financial statements in the form of the Management's Discussion and Analysis (MD&A) section. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The District's MD&A can be found immediately after the Independent Auditors' Report.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

The goal of the independent audit was to provide reasonable assurance that the financial statements of the Novato Sanitary District for the fiscal year ended June 30, 2012 are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting

principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The independent auditor concluded, based upon the audit, that there was a reasonable basis for rendering an unqualified opinion that the Novato Sanitary District's financial statements for the fiscal year ended June 30, 2012 are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

## **PROFILE OF THE DISTRICT**

The Novato Sanitary District was formed in October 1925 pursuant to the Sanitary District Act of 1923 (California Health and Safety Code, Sections 6400 et seq). Established as an Independent Enterprise Special District, the District is authorized to provide wastewater collection and treatment services, to levy rates and fees to support those services, and to regulate collection of garbage and refuse. The District is located in northern Marin County and is approximately 25 miles north of the city and county of San Francisco.

The District has an upgraded and expanded treatment plant designed for average dry weather flow of 7.1 million gallons per day, providing wastewater service to the sewered areas of the City of Novato as well as developed areas outside the city limits. The District encompasses 24.66 square miles and serves approximately 51,000 residents. Wastewater from the District's service area is transported to the Novato Wastewater Treatment Plant where it is treated to federally mandated standards to protect the public health.

The District also operates a Wastewater Reclamation Facility consisting of some 820 acres of farmland in three separate sites adjacent to Highway 37. This acreage is irrigated with treated wastewater during the summer months for grazing cattle during 5-6 months of the year. Another unique feature of the reclamation facility is a 10-acre wildlife pond utilizing treated wastewater. The pond supports a variety of freshwater aquatic life and grasses, and is a preserve for birds and other forms of wildlife. A third feature of the reclamation facility is the 6 acres of treated sludge storage ponds and 15 acres of dedicated disposal site.

In cooperation with the North Marin Water District, 1.7 million gallons per day of Title 22 recycled water is produced for use for landscape irrigation in Northern and Eastern Novato.

### ***Governance***

The affairs of the District are directed by a five member Board of Directors elected at large by the registered voters residing in the District. The directors are residents of the District and have the same concerns as their constituents. The board members, who serve four-year staggered terms, are responsible for establishing policy and ordinances, adopting the annual budget, and hiring the District's Manager-Engineer. The Manager-Engineer is responsible for carrying out the policies and ordinances of the District board and for overseeing the day-to-day operations of the District.

### ***Mission and Vision***

The mission of the Novato Sanitary District is as follows:

*Novato Sanitary District provides safe and reliable wastewater and solid waste services to its customers in an environmentally and economically sustainable manner. The District communicates openly and works collaboratively for the betterment of the community.*

The District's long-term vision is as follows:

*Novato Sanitary District is a representative local government; its Board and staff are closely aligned with the community through excellent communication and customer service.*

*We strive to attain an ever improving record of environmental protection, safe and efficient operation, and prudent financial management.*

*We deliver regulatory compliant, quality, reliable, and cost-effective services.*

*Our staff is well trained, positively motivated, and has opportunities for self-improvement.*

*Our capital facilities are in excellent condition and cost-effectively maintained.*

*The Board and staff partner seamlessly with other public and private entities to provide high quality and cost-effective wastewater and solid waste services.*

*We innovate and change as opportunities and needs arise.*

### **FACTORS AFFECTING FINANCIAL CONDITION**

The information presented in the financial statements is perhaps best understood when it is considered from the broader perspective of the specific environment within which the Novato Sanitary District operates.

#### ***Local Economy***

The District has a predominantly residential ratepayer base, with residential users accounting for 75% of equivalent dwelling units. The local economy also includes some 2,500 commercial businesses. No major industrial wastewater producers exist within the District's service area. In general, the District's service area is significantly built out with densification anticipated in the downtown area and commercial corridors. Future growth areas are areas zoned very low density residential.

As an independent enterprise special district having the ability to adjust service rates as required, the District's operating revenues are somewhat insulated from the local economy. The District's operating revenues tend to increase with growth periods and stabilize during non-growth periods. As the District reaches build-out, it is anticipated that growth in District revenues will remain stable.

Capacity fees are collected as new units are connected to the District. Minimal growth is anticipated in Novato over the next ten years.

Property taxes accounted for approximately 11.3% and 9.8% of the District's total revenue for FYE 2011 and 2012, respectively. Due to the current conditions in the housing market, property tax revenues are expected to remain flat or decrease in the near future due to reduction in values and reassessments. There is potential for property taxes to be diverted to other agencies which could impact future service charges.

### ***Long-Term Financial Planning***

The District's Board of Directors is aware of the need to ensure the District's financial stability. Through a coordinated strategic process, the Board has established a series of policies and plans to effectively meet the District's anticipated future needs. The cornerstone of these policies is the District's 2011 Comprehensive Financial Plan that forecasts the District's expenditures and revenue needs for the next four years. The District utilizes this information to anticipate future expense obligations and to develop programs to ensure these expense obligations are fully funded.

### ***Operating and Capital Expenditures***

Operating expenditures are highly predictable month to month but are impacted over time by regulatory actions. Capital project expenditures are ongoing but are adjusted based on the availability of funds and flow of revenues for the period.

### ***Long term Debt***

The District currently has an outstanding loan with the State Water Resources Control Board, referred to as the SRF loan in the amount of \$81,307,947. In addition, the District issued Certificates of Participation(COP) in the amount of \$21,750,000. The District's total outstanding long term debt is \$103,057,947 as of June 30, 2012. For more information refer to Footnote 7 in the Basic Financial Statements.

## **RELEVANT FINANCIAL POLICIES**

### ***Reserve Policy***

The District has established a Reserve Fund Policy to anticipate and prepare for future funding requirements as well as for unforeseen events. The Reserve Fund Policy establishes a Rate Stabilization Fund, Emergency Repair Reserve, and Self-Insurance Fund to meet the insurance deductible limit for sewer system overflows.

### ***Investment Policy***

The Investment Policy establishes guidelines for the investment of available funds. The Investment Policy incorporates the "prudent investor" standard as stated in California

Government Code (CGC) Section 53600.3. The primary objectives, in priority order, of the District's investment activities are the following: 1) safety, 2) liquidity, and 3) yield. The District's funds are invested in the State Local Agency Investment Fund, in accordance with California Government Code, as described in Footnote 2 of the Basic Financial Statements.

## **INTERNAL CONTROLS**

The District is responsible for establishing and maintaining an internal control structure designed to ensure that the District's assets are protected from loss, theft, or misuse, and to ensure that adequate accounting data are compiled for the preparation of financial statements in conformity with GAAP. The internal structure is designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that; 1) the cost of control should not exceed the benefits likely to be derived; and 2) the valuation of costs and benefits requires estimates and judgments by management.

## **MAJOR INITIATIVES**

The District has initiated several major projects to upgrade infrastructure and ensure the adequacy of facilities.

- 1) The District recently completed a major upgrade to its wastewater treatment facilities. Financed by a California State Revolving Fund loan the District upgraded and expanded its Novato Treatment Plant to treat the combined flow of two wastewater treatment plants. The new treatment plant replaces two aging facilities with a single new modernized plant. One aging and obsolete plant was replaced by a major new pump station, and its wastewater flow is carried by a new pipeline to the new plant. Improvements include efficient treatment processes that comply with all current standards, re-use of the portions of the plant built since the 1980's that are still usable, and addition of backup facilities in case of equipment failure or emergencies. Debt service payments are paid semi-annually through 2031 at an interest rate of 2.40%.
- 2) The District developed a Sewer System Plan more than a decade ago. Since then much progress has been made. With about 220 miles of sewer pipelines, 6,000 manholes, plus other critical facilities, many of which are 50 or 60 years old, there is more work to do. The District has been investing up to \$5 million each year in sewer upgrades to repair the wear and tear from past decades. Starting in FY 2014-15 the capital investment will be based on a 50 year sewer life resulting in \$2 million per year replacement sewer cost investment.
- 3) A Collection System Improvement and Pump Station Rehabilitation Program is underway to replace aging sewer lines that are reaching the end of their useful lives. The program is designed to meet the District's needs for the next 25 to 50 years. The District is financing a catch up of the backlog of these improvements using some of the COP proceeds.

- 4) The District developed a Sewer System Plan more than a decade ago. Since then much progress has been made. With about 220 miles of sewer pipelines, 6,000 manholes, plus other critical facilities, many of which are 50 or 60 years old, there is more work to do. The District has been investing up to \$5 million each year in sewer upgrades to repair the wear and tear from past decades.
- 5) The District's 2011 Comprehensive Financial Plan Update projects the likely future financial condition of the District and provides guidance in the decision making process.
- 6) Due to the success of the District's Lateral Replacement Program over the past year, the program will continue to provide incentives for ratepayers to repair their private laterals. The program reimburses ratepayers up to \$1,500 for lateral replacement installation. During the fiscal year 2012 the District contributed \$38,321 for the replacement and repair of twenty-six damaged private laterals which is an increase of approximately \$25,000 in contributions and sixteen private laterals from the prior year.
- 7) The District completed construction of a 1.7 million gallons per day Recycled Water Treatment Facility in September 2012. The project is part of a regional recycled water program – North Bay Water Reuse Authority. Twenty-five percent of the cost is covered by a grant from the U.S. Bureau of Reclamation. Five percent is covered by a grant from the California Department of Water Resources. Seventy percent is covered by COP financing at an average interest rate of 4.11%. The recycled water will be distributed by North Marin Water District to irrigate landscaping, cemeteries, and playing fields in Northern and Eastern Novato. The Facility was operational in September of 2012.

## **COLLABORATIVE PARTNERSHIPS**

The District 's success in providing low-cost, high-quality service is due in part to the successful strategy of forming collaborative partnerships with a number of different entities.

**Zero Waste Program.** In addition to franchising garbage collection and disposal with Novato Disposal Service, the District is responsible for meeting mandates of AB 939, the California Integrated Waste Management Act of 1989. A Zero Waste Program with Novato Disposal Service will take recycling to the next level by dramatically reducing what goes to the landfill, without a rate increase beyond inflation. The franchise agreement will extend to 2025 if the zero waste goals are met.

**Specialized Staff Sharing.** The District shares a single full-time safety officer with four other Marin County sanitary agencies. The District and North Marin Water District also have a Mutual Aid Agreement to share highly skilled laboratory staff.

**Cost-Saving Management of Treatment Plant.** The District contracts with Veolia Water North America to operate its newly upgraded treatment facilities, resulting in millions of dollars in savings while obtaining excellent performance from the new treatment plant using local employees.

**Millions in Funding from Collaborative Recycled Water Program.** By working collaboratively with North Marin Water District and other neighboring agencies, the District has helped obtain over \$2.6 million in federal grant funding to expand recycled water use in Novato.

## **RISK MANAGEMENT**

The District is a member of the California Sanitation Risk Management Authority (CSRMA). CSRMA is a public joint powers authority that provides a full service risk management program for public sanitation agencies. The day-to-day operations of CSRMA are governed by its bylaws and other executive policies adopted by its Board of Directors. CSRMA provides comprehensive property, liability and workers' compensation protection to the District.

## **PENSION AND OTHER POST-EMPLOYMENT BENEFITS**

The District is a member of the California Public Employees' Retirement System (CalPERS) and participates in a two tiered defined benefit pension plan. The two tiers are as follows: 2% @ 55 and 2% @ 60 defined benefit pension plans. For more information, please refer to Footnote 11 of the Basic Financial Statements. The District has taken steps to reduce the unfunded liability by reducing benefits for new hires.

The District provides post-employment healthcare benefits to eligible retirees based on a vesting formula adopted by the District Board in July 2008. Depending on years of service and age at retirement, the benefits range from full coverage for retiree and one dependent to 1.5% of base salary to a Medical After Retirement Account (MARA) for employees hired after July 2008. Currently three employees have MARAs. Employees who retired prior to the adoption of the vesting formula in 2008 receive full coverage for retiree and eligible dependents. Twenty-three individuals are currently participating in the District's post-employment health care program.

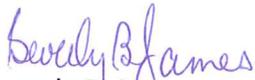
## **INDEPENDENT AUDIT**

The Government Code requires an annual audit of the District's financial records by a Certified Public Accountant. The District selected, through a competitive process, the firm of Maze & Associates to conduct the audit. The auditor report on the financial statements and schedules are included in the financial section of this report.

## ACKNOWLEDGEMENTS

Preparation of this report was accomplished by the combined efforts of District staff. We appreciate the dedicated efforts and professionalism that our staff members bring to the District. A special note of appreciation goes to Laura Creamer, CPA, the District's Finance Officer, for her assistance with developing this report. We would also like to recognize the members of the Board of Directors' Finance Committee, Jean Mariani and William Long. We would also like to thank the members of the Board of Directors for their continued support in the planning and implementation of the Novato Sanitary District's fiscal policies.

Respectfully submitted,



Beverly B. James  
Manager-Engineer

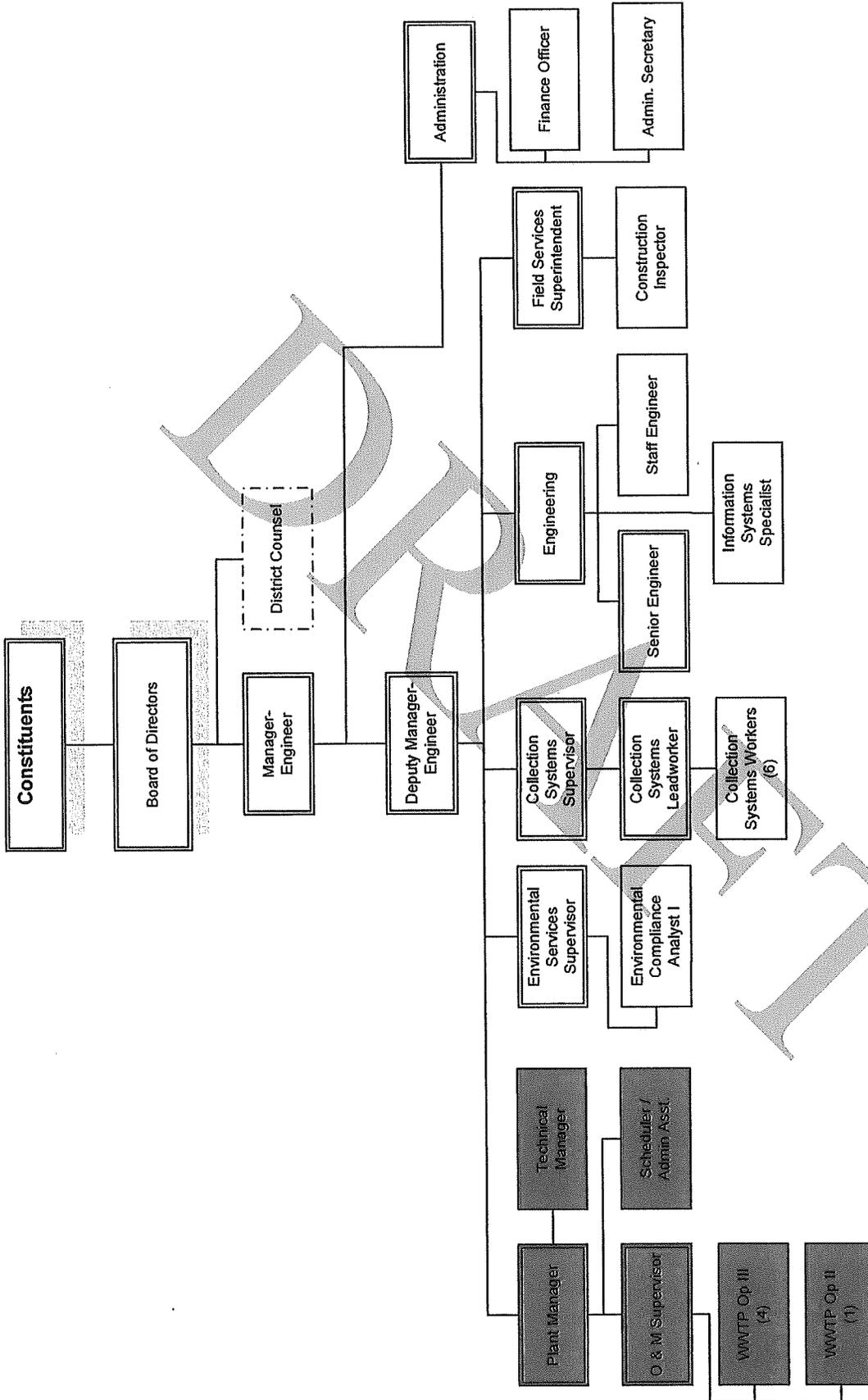
## *Leaders in Protecting the Environment*

Novato Sanitary District provides wastewater collection, treatment, recycling and disposal services for the community of Novato, California. In addition, the District is responsible for refuse disposal, recycling, and greenwaste collection through its franchise collector, Novato Disposal Service.

### **Novato Sanitary District Board of Directors as of June 30, 2012**

<b>Name</b>	<b>Title</b>	<b>Elected/ Appointed</b>	<b>First Seated on Board</b>	<b>Current Term</b>
Michael Di Giorgio	President	Elected	12/2005	12/09-12/13
William C. Long	Director	Elected	12/2001	12/09-12/13
Jean Mariani	Director	Appointed	5/2011	12/11-12/15
Dennis J. Welsh	Director	Elected	12/2009	12/09-12/13
Gerald Peters	Director	Elected	12/2011	12/11-12/15

**Novato Sanitary District  
Beverly James, Manager-Engineer  
500 Davidson Street  
Novato, California 94945  
(415) 892-1694 – [www.novatosan.com](http://www.novatosan.com)**



# Certificate of Achievement for Excellence in Financial Reporting

Presented to

Novato Sanitary District  
California

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Linda C. Davison*

President

*Jeffrey R. Enos*

Executive Director

# Financial Section

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## INDEPENDENT AUDITOR'S REPORT

Board of Directors  
Novato Sanitary District  
Novato, California

We have audited the accompanying financial statements of the Novato Sanitary District (the District) as of and for the year ended June 30, 2012, which collectively comprise the District's basic financial statements as listed in the Table of Contents. These financial statements are the responsibility of the District's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year comparative financial statements were audited by other auditors, who in their report dated September 30, 2011, issued an unqualified opinion.

We conducted our audit in accordance with generally accepted auditing standards in the United States of America and the standards for the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance as to whether the financial statements are free of material misstatement. An audit includes examining on a test basis evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly in all material respects, the respective financial position of the Novato Sanitary District at June 30, 2012 and the respective changes in financial position and cash flows, thereof for the year then ended, in conformity with generally accepted accounting principles in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated DATE 2012 on our consideration of the Novato Sanitary District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the required supplementary information be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the District's financial statements as a whole. The Introductory Section and Statistical Section listed in the Table of Contents are presented for purposes of additional analysis and are not a required part of the financial statements. The Introductory and Statistical Sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

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The following Management's Discussion and Analysis (MD&A) of activities and financial performance of the Novato Sanitary District (District) provides an introduction to the financial statements of the District for the fiscal year ended June 30, 2012 and 2011. The two year presentation is provided for comparative purposes. We encourage readers to consider the information presented here in conjunction with the basic financial statements and related notes, which follow this section.

### **Financial Highlights**

- In 2012, the District's assets increased 11.2% or \$22,138,328 to \$220,256,345 due to the issuance of the Certificates of Participation and the ongoing construction of the Recycled Water Facility. In 2011, the District's assets increased .3% or \$725,394.
- In 2012, the District's net assets increased 2.3% or \$2,580,735 to \$113,052,255. In 2011, the District's net assets decreased 0.8% or \$874,777 to \$110,471,520.
- In 2012, the District's capital contributions increased 365% or \$1,821,696 due to the receipt of grant funding from the American Reinvestment and Recovery Act (ARRA) and the Prop 84 Grant.
- In 2012, the District's operating expenses before depreciation increased 15.3% or \$1,294,222 due primarily to the payoff of the CalPers side fund of approximately \$1.2 million. In 2011, the District's operating expenses before depreciation decreased 12.3% or \$1,190,409 due to the EPA concluding its investigation in fiscal year 2010 and a decrease of \$535,980 in treatment plant operating costs due to the Veolia contract.
- In 2012, the District's interest expense increased 92% or \$2,459,890 due to the first payment on the SRF loan and the interest payments on the newly issued Certificates of Participation.

### **Required Financial Statements**

This annual report consists of a series of financial statements. The Statement of Net Assets, Statement of Revenues, Expenses and Changes in Net Assets and Statement of Cash Flows provide information about the activities and performance of the District using accounting methods similar to those used by private sector companies.

The Statement of Net Assets includes all of the District's investments in resources (assets) and the obligations to creditors (liabilities). It also provides the basis for computing a rate of return, evaluating the capital structure of the District and assessing the liquidity and financial flexibility of the District. All of the current year's revenue and expenses are accounted for in the Statement of Revenues, Expenses and Changes in Net Assets. This statement measures the success of the District's operations over the past year and can be used to determine if the District has successfully recovered all of its costs through its rates and other charges. This statement can also be used to evaluate profitability and credit worthiness. The final required financial statement is the Statement of Cash Flows, which provides information about the District's cash receipts and cash payments during the reporting period. The Statement of Cash Flows reports cash receipts, cash payments and net changes in cash resulting from operations, investing, non-capital financing, and capital and related financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

## Financial Analysis of the District

One of the most important questions asked about the District's finances is, "Is the District better off or worse off as a result of this year's activities?" The Statement of Net Assets and the Statement of Revenues, Expenses and Changes in Net Assets report information about the District in a way that helps answer this question.

These statements include all assets and liabilities using the *accrual basis of accounting*, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid.

These two statements report the District's *net assets* and changes in them. You can think of the District's net assets – the difference between assets and liabilities – as one way to measure the District's financial health, or *financial position*. Over time, *increases or decreases* in the District's net assets are one indicator of whether its *financial health* is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, zoning and new or changed government legislation, such as changes in Federal and State wastewater standards.

## Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 15 through 36.

## Statement of Net Assets

Condensed Statements of Net Assets						
	2012	2011	Change	2010	Change	
<b>Assets:</b>						
Current assets	\$ 26,303,224	10,291,808	16,011,416	14,729,450	(4,437,642)	
Non-current assets	64,004	-	64,004	16,744	(16,744)	
Capital assets, net	193,889,117	187,826,209	6,062,908	182,646,429	5,179,780	
<b>Total assets</b>	<b>220,256,345</b>	<b>198,118,017</b>	<b>22,138,328</b>	<b>197,392,623</b>	<b>725,394</b>	
<b>Liabilities:</b>						
Current liabilities	7,515,697	5,690,488	1,825,209	10,287,583	(4,597,095)	
Non-current liabilities	99,688,393	81,956,009	17,732,384	75,758,743	6,197,266	
<b>Total liabilities</b>	<b>107,204,090</b>	<b>87,646,497</b>	<b>19,557,593</b>	<b>86,046,326</b>	<b>1,600,171</b>	
<b>Net assets:</b>						
Net investment in capital assets	105,262,788	106,497,126	(1,234,338)	102,065,015	4,432,111	
Unrestricted	7,789,467	3,974,394	3,815,073	9,281,282	(5,306,888)	
<b>Total net assets</b>	<b>113,052,255</b>	<b>110,471,520</b>	<b>2,580,735</b>	<b>111,346,297</b>	<b>(874,777)</b>	
<b>Total liabilities and net assets</b>	<b>\$ 220,256,345</b>	<b>198,118,017</b>	<b>22,138,328</b>	<b>197,392,623</b>	<b>725,394</b>	

As noted earlier, net assets may serve over time as a useful indicator of a government's financial position. In the case of the District, assets of the District exceeded liabilities by \$113,052,255 and \$110,471,520 as of June 30, 2012 and June 30, 2011, respectively.

By far the largest portion of the District's net assets (93% and 96% as of June 30, 2012 and 2011, respectively) reflects the District's investment in capital assets (net of accumulated depreciation) less any related debt used to acquire those assets that is still outstanding. The District uses these capital assets to provide services to customers within the District's service area; consequently, these assets are not available for future spending.

At the end of fiscal years 2012 and 2011, the District showed a positive balance in its unrestricted net assets of \$7,789,467 and \$3,974,394, respectively, which may be utilized in future years. See note 9 for further discussion.

### Statement of Revenues, Expenses and Changes in Net Assets

Condensed Statements of Revenues, Expenses and Changes in Net Assets					
	2012	2011	Change	2010	Change
<b>Revenues:</b>					
Operating revenues	\$ 14,225,285	14,316,441	(91,156)	14,071,716	244,725
Non-operating revenues	2,088,099	1,972,683	115,416	2,119,105	(146,422)
<b>Total revenues</b>	<b>16,313,384</b>	<b>16,289,124</b>	<b>24,260</b>	<b>16,190,821</b>	<b>98,303</b>
<b>Expenses:</b>					
Operating expenses	9,758,265	8,464,043	1,294,222	9,654,452	(1,190,409)
Depreciation and amortization	3,238,715	2,306,550	932,165	2,288,892	17,658
Non-operating expenses	3,055,503	6,891,446	(3,835,943)	2,169,519	4,721,927
<b>Total expenses</b>	<b>16,052,483</b>	<b>17,662,039</b>	<b>(1,609,556)</b>	<b>14,112,863</b>	<b>3,549,176</b>
<b>Net income before capital contributions</b>	<b>260,901</b>	<b>(1,372,915)</b>	<b>1,633,816</b>	<b>2,077,958</b>	<b>(3,450,873)</b>
Capital contributions	2,319,834	498,138	1,821,696	1,724,657	(1,226,519)
<b>Change in net assets</b>	<b>2,580,735</b>	<b>(874,777)</b>	<b>3,455,512</b>	<b>3,802,615</b>	<b>(4,677,392)</b>
<b>Net assets, beginning of year</b>	<b>110,471,520</b>	<b>111,346,297</b>	<b>(874,777)</b>	<b>107,543,682</b>	<b>3,802,615</b>
<b>Net assets, end of year</b>	<b>\$ 113,052,255</b>	<b>110,471,520</b>	<b>2,580,735</b>	<b>111,346,297</b>	<b>(874,777)</b>

The statement of revenues, expenses and changes of net assets shows how the District's net assets changed during the fiscal years. In the case of the District, net assets increased by \$2,580,735 and decreased by \$874,777 for the fiscal years ended June 30, 2012 and 2011, respectively. A closer examination of the sources of changes in net assets reveals that:

In 2012, the District's capital contributions increased 365% or \$1,821,696. In 2011, the capital contributions decreased 246.2% or \$1,226,519. These changes are primarily due to the grant funding received by the District in fiscal year ended June 30, 2012.

In 2012, the District's operating expenses before depreciation increased 15.3% or \$1,294,222 due primarily to the payoff of the CalPERS side fund of approximately \$1.2 million. In 2011, the District's operating expenses before depreciation decreased 12.3% or \$1,190,409 due to costs associated with the EPA concluding its investigation in fiscal year 2010 and a decrease of \$535,980 in treatment plant operating costs due to the Veolia contract.

In 2012, the District's non-operating expenses decreased 125.5% or \$3,835,943 due primarily to the \$6.6 million of capital assets written off upon completion of Contract B Wastewater Facility Upgrade Project.

In 2011, the District's non-operating expenses increased 68.5% or \$4,721,927.

## Operating and Non-Operating Revenues

		2012	2011	Change	2010	Change
<b>Operating revenues:</b>						
	Sewer service charges	\$ 13,671,131	13,570,839	100,292	13,462,437	108,402
	Other service charges	227,067	447,577	(220,510)	300,817	146,760
	Permit, inspection and other fees	21,441	9,532	11,909	23,163	(13,631)
	Recycled water facility	8,060	8,000	60	8,000	-
	AB939 – solid waste programs	297,586	280,493	17,093	277,299	3,194
	<b>Total operating revenues</b>	<b>14,225,285</b>	<b>14,316,441</b>	<b>(91,156)</b>	<b>14,071,716</b>	<b>244,725</b>
<b>Non-operating revenue:</b>						
	Property taxes	1,795,489	1,773,877	21,612	1,866,049	(92,172)
	Franchise fees	45,000	45,000	-	45,000	-
	Rental revenue	(18,901)	50,000	(68,901)	-	50,000
	Interest earnings	37,129	30,387	6,742	196,303	(165,916)
	Other non-operating revenues	229,382	73,419	155,963	11,753	61,666
	<b>Total non-operating revenues</b>	<b>2,088,099</b>	<b>1,972,683</b>	<b>115,416</b>	<b>2,119,105</b>	<b>(146,422)</b>
	<b>Total revenues</b>	<b>\$ 16,313,384</b>	<b>16,289,124</b>	<b>24,260</b>	<b>16,190,821</b>	<b>98,303</b>

Total revenues increased by \$24,260 and increased by \$98,303 in fiscal years 2012 and 2011, respectively.

## Operating and Non-Operating Expenses

		2012	2011	Change	2010	Change
<b>Operating expenses:</b>						
	Collection system	\$ 1,274,730	963,487	311,243	828,832	134,655
	Treatment plant	2,560,633	2,566,139	(5,506)	3,102,119	(535,980)
	Wastewater reclamation and disposal	442,266	355,218	87,048	296,268	58,950
	Laboratory and monitoring	621,758	688,238	(66,480)	597,743	90,495
	Sewers and pump stations	758,563	673,344	85,219	540,641	132,703
	Recycled water facility	-	-	-	-	-
	AB939 – solid waste programs	310,890	307,137	3,753	284,999	22,138
	Administrative and engineering	3,789,425	2,910,480	878,945	4,003,850	(1,093,370)
	<b>Total operating expenses</b>	<b>9,758,265</b>	<b>8,464,043</b>	<b>1,294,222</b>	<b>9,654,452</b>	<b>(1,190,409)</b>
	<b>Depreciation and amortization exp.</b>	<b>3,238,715</b>	<b>2,306,550</b>	<b>932,165</b>	<b>2,288,892</b>	<b>17,658</b>
<b>Non-operating expenses:</b>						
	Interest expense	2,669,346	209,456	2,459,890	1,211,880	(1,002,424)
	Deferred charges amortization	10,564	16,744	(6,180)	18,689	(1,945)
	Loss on sale/disposition of assets	367,095	6,634,450	(6,267,355)	909,553	5,724,897
	Other non-operating expenses	8,498	30,796	(22,298)	29,397	1,399
	<b>Total non-operating expenses</b>	<b>3,055,503</b>	<b>6,891,446</b>	<b>(3,835,943)</b>	<b>2,169,519</b>	<b>4,721,927</b>
	<b>Total expenses</b>	<b>\$ 16,052,483</b>	<b>17,662,039</b>	<b>(1,609,556)</b>	<b>14,112,863</b>	<b>3,549,176</b>

Total expenses decreased by \$1,609,556 and increased by \$3,549,176 in fiscal years 2012 and 2011, respectively.

## Capital Asset Administration

Changes in capital assets amounts for 2012 were as follows:						
			<b>Balance</b>		<b>Transfers/</b>	<b>Balance</b>
			<b>2011</b>	<b>Additions</b>	<b>Deletions</b>	<b>2012</b>
Capital assets:						
	Non-depreciable assets	\$	9,713,762	7,850,553	(1,134,204)	16,430,111
	Depreciable assets		215,476,914	2,953,577	(730,491)	217,700,000
	Accumulated depreciation		(37,364,467)	(3,245,189)	368,662	(40,240,994)
	Total capital assets ,net	\$	<u>187,826,209</u>	<u>7,558,941</u>	<u>(1,496,033)</u>	<u>193,889,117</u>
Changes in capital assets amounts for 2011 were as follows:						
			<b>Balance</b>		<b>Transfers/</b>	<b>Balance</b>
			<b>2010</b>	<b>Additions</b>	<b>Deletions</b>	<b>2011</b>
Capital assets:						
	Non-depreciable assets	\$	84,690,638	9,603,701	(84,580,577)	9,713,762
	Depreciable assets		140,462,261	89,097,656	(14,083,003)	215,476,914
	Accumulated depreciation		(42,506,470)	(2,306,550)	7,448,553	(37,364,467)
	Total capital assets ,net	\$	<u>182,646,429</u>	<u>96,394,807</u>	<u>(91,215,027)</u>	<u>187,826,209</u>

At the end of fiscal year 2012 and 2011, the District's investment in capital assets amounted to \$193,889,117 and \$187,826,209 (net of accumulated depreciation), respectively. This investment in capital assets includes land, land improvements, sewer collection and outfall system, buildings and structures, equipment, vehicles and construction-in-process, etc. Major capital assets additions during the year include improvements to portions of the District's sewer collection and treatment system and construction of the Recycled Water Facility. (See note 5 for further details)

## Debt Administration

Changes in long-term debt amounts for 2012 were as follows:						
			<b>Balance</b>		<b>Balance</b>	
			<b>2011</b>	<b>Additions</b>	<b>Deletions</b>	<b>2012</b>
	Loan payable		81,329,083	-	(21,136)	81,307,947
	2011 Certificates Of Participation			21,750,000		21,750,000
	Total long-term debt	\$	<u>81,329,083</u>	<u>21,750,000</u>	<u>(21,136)</u>	<u>103,057,947</u>
Changes in long-term debt amounts for 2011 were as follows:						
			<b>Balance</b>		<b>Balance</b>	
			<b>2010</b>	<b>Additions</b>	<b>Deletions</b>	<b>2011</b>
Long-term debt:						
	Note payable	\$	5,233,207	-	(5,233,207)	-
	Loan payable		75,348,207	5,980,876	-	81,329,083
	Total long-term debt	\$	<u>80,581,414</u>	<u>5,980,876</u>	<u>(5,233,207)</u>	<u>81,329,083</u>

During fiscal year 2012, the District issued new 2011 Certificates of Participation and began making payments on the SRF loan. See note 7 for further details of the District's long-term debt.

## **Subsequent Events**

On April 19, 2011, the State Water Resources Control Board (SWRCB) enforcement officials indicated that they were seeking civil penalties in the amount of approximately \$700,000 relating to alleged violations between 2007 and 2011. The District met with the SWRCB on October 7, 2011 to rebut the factual and legal bases for those civil penalties. That meeting was part of the District's ongoing effort to engage in settlement discussions with the SWRCB with the goals of (1) minimizing penalties relating to this and other events that are the subject of civil enforcement by the SWRCB, and (2) obtaining a global settlement of all pending civil enforcement. The meeting was productive but settlement was not reached until May 18, 2012 when the District signed a settlement agreement with the SWRCB in the amount of \$344,000. However, there was a public request for further review of this settlement. Therefore, it was not until October 16, 2012 that the District received the final settlement paperwork. The payment of the \$344,000 will be allocated as follows: Fines/Penalties - \$203,862 to SWRCB, \$10,240 to Department of Fish and Game, and the remainder to be paid by the District by completing two supplemental environmental projects. (See Note 14 for further details)

## **Conditions Affecting Current Financial Position**

Management is unaware of any conditions which could have a significant impact on the District's current financial position, net assets or operating results based on past, present and future events.

## **Requests for Information**

This financial report is designed to provide the District's funding sources, customers, stakeholders and other interested parties with an overview of the District's financial operations and financial condition. Should the reader have questions regarding the information included in this report or wish to request additional financial information, please contact the District's General Manager at 500 Davidson Street, Novato, California, 94945.

# **Basic Financial Statements**

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NOVATO SANITARY DISTRICT  
STATEMENTS OF NET ASSETS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

ASSETS	2012	2011
<b>CURRENT ASSETS</b>		
Cash and cash equivalents (Note 2)	\$10,331,492	\$6,887,079
Restricted - cash and cash equivalents (Note 2)	14,595,327	161,168
Accrued interest receivable	15,093	14,250
Accounts receivable, net (Note 3)	1,308,499	3,168,841
Prepaid expenses and other deposits	52,813	60,470
Total current assets	26,303,224	10,291,808
<b>NON-CURRENT ASSETS</b>		
Deferred charges, net (Note 4)	64,004	
Capital assets - not being depreciated (Note 5)	16,430,111	9,713,762
Capital assets - being depreciated (Note 5)	177,459,006	178,112,447
Total non-current assets	193,953,121	187,826,209
<b>TOTAL ASSETS</b>	<b>\$220,256,345</b>	<b>\$198,118,017</b>
<b>LIABILITIES</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued expenses	\$1,780,576	\$1,247,827
Payable to other agency	285,000	
Customers deposit and deferred revenue	44,041	13,043
Restricted - special assessment payable	163,708	161,168
Accrued interest payable	971,294	4,230,160
Long-term liabilities - due within one year:		
Compensated absences (Note 6)	39,111	38,290
State Revolving Fund Loan payable (Note 7)	3,431,967	
Certificates of Participation (Note 7)	800,000	
Total current liabilities	7,515,697	5,690,488
<b>NON-CURRENT LIABILITIES</b>		
Long-term liabilities - due in more than one year:		
Compensated absences (Note 6)	117,334	114,870
Other post-employment benefits payable (Note 8)	745,079	512,056
State Revolving Fund Loan payable (Note 7)	77,875,980	81,329,083
Certificates of Participation (Note 7)	20,950,000	
Total non-current liabilities	99,688,393	81,956,009
<b>TOTAL LIABILITIES</b>	<b>107,204,090</b>	<b>87,646,497</b>
<b>NET ASSETS (Note 9)</b>		
Investment in capital assets, net of related debt	105,262,788	106,497,126
Unrestricted	7,789,467	3,974,394
<b>TOTAL NET ASSETS</b>	<b>113,052,255</b>	<b>110,471,520</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>\$220,256,345</b>	<b>\$198,118,017</b>

See accompanying notes to financial statements

NOVATO SANITARY DISTRICT  
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

	<u>2012</u>	<u>2011</u>
<b>OPERATING REVENUES</b>		
Sewer service charges	\$13,671,131	\$13,570,839
Other service charges	227,067	447,577
Permit, inspection and other fees	21,441	9,532
Recycled water facility	8,060	8,000
AB939 - solid waste programs	<u>297,586</u>	<u>280,493</u>
<b>Total operating revenues</b>	<u>14,225,285</u>	<u>14,316,441</u>
<b>OPERATING EXPENSES</b>		
Collection system	1,274,730	963,487
Treatment plant	2,560,633	2,566,139
Wastewater reclamation and disposal	442,266	355,218
Laboratory and monitoring	621,758	688,238
Sewers and pump stations	758,563	673,344
AB939 - solid waste programs	310,890	307,137
Administrative and engineering	<u>3,789,425</u>	<u>2,910,480</u>
<b>Total operating expenses</b>	<u>9,758,265</u>	<u>8,464,043</u>
<b>Operating income before depreciation</b>	4,467,020	5,852,398
<b>Depreciation and amortization</b>	<u>(3,238,715)</u>	<u>(2,306,550)</u>
<b>OPERATING INCOME</b>	<u>1,228,305</u>	<u>3,545,848</u>
<b>NONOPERATING REVENUES (EXPENSES)</b>		
Property taxes	1,795,489	1,773,877
Franchise fees	45,000	45,000
Rental revenue	(18,901)	50,000
Interest income	37,129	30,387
Interest expense	(2,669,346)	(209,456)
Deferred charges amortization	(10,564)	(16,744)
Gain (loss) on sale/disposition of capital assets	(367,095)	(6,634,450)
Other non-operating revenues	229,382	73,419
Other non-operating expenses	<u>(8,498)</u>	<u>(30,796)</u>
<b>Total nonoperating revenues (expenses), net</b>	<u>(967,404)</u>	<u>(4,918,763)</u>
<b>Net income (loss) before capital contributions</b>	<u>260,901</u>	<u>(1,372,915)</u>
<b>CAPITAL CONTRIBUTIONS</b>		
Connection fees	880,541	174,631
Capital contributions	5,732	101,818
Capital grants	<u>1,433,561</u>	<u>221,689</u>
<b>Total capital contributions</b>	<u>2,319,834</u>	<u>498,138</u>
<b>CHANGES IN NET ASSETS</b>	2,580,735	(874,777)
<b>NET ASSETS, BEGINNING OF YEAR</b>	<u>110,471,520</u>	<u>111,346,297</u>
<b>NET ASSETS, END OF YEAR</b>	<u>\$113,052,255</u>	<u>\$110,471,520</u>

See accompanying notes to financial statements

NOVATO SANITARY DISTRICT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

	2012	2011
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Cash receipts from customers for sewer service charges and services	\$14,211,233	\$14,492,292
Cash paid to employees for salaries, wages and benefits	(1,967,391)	(2,073,032)
Cash paid to vendors and suppliers for materials and services	(6,704,120)	(7,413,776)
Net Cash Provided by Operating Activities	5,539,722	5,005,484
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</b>		
Property taxes	1,795,489	1,782,840
Cash Flows from Noncapital Financing Activities	1,795,489	1,782,840
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</b>		
Acquisition and construction of capital assets	(9,668,718)	(14,120,780)
Capital contributions	2,319,834	276,449
Proceeds received from loan payable	2,129,875	6,478,332
Proceeds received from Certificates of Participation	21,750,000	
Principal payments on long-term debt	(21,136)	(5,233,207)
Interest payments on long-term debt	(6,002,780)	1,633,394
Cash Flows from (used for) Capital and Related Financing Activities	10,507,075	(10,965,812)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Interest earnings	36,286	60,908
Cash Flows from Investing Activities	36,286	60,908
<b>NET INCREASE (DECREASE) IN CASH</b>	17,878,572	(4,116,580)
Cash, beginning of year	7,048,247	11,164,827
Cash, end of year	\$24,926,819	\$7,048,247
<b>Reconciliation of cash and cash equivalents to statement of financial position:</b>		
Cash and cash equivalents	\$10,331,492	\$6,887,079
Restricted - cash and cash equivalents	14,595,327	161,168
Total cash and cash equivalents	\$24,926,819	\$7,048,247

(Continued)

NOVATO SANITARY DISTRICT  
STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

Reconciliation of operating income to net cash provided by operating activities:		
Operating income	<u>\$1,228,305</u>	<u>\$3,545,848</u>
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	3,238,715	2,306,550
Other non-operating revenues	255,481	168,419
Other non-operating expenses	(8,498)	(30,796)
Change in assets and liabilities:		
(Increase) decrease in assets:		
Accounts receivable - sewer services	(269,533)	7,432
Prepaid expenses and other deposits	7,657	(1,621)
Increase (decrease) in liabilities:		
Accounts payable and accrued expenses	532,749	(1,126,026)
Payable to other agency	285,000	
Customer deposits and deferred revenue	30,998	(70,605)
Restricted - special assessment payable	2,540	(5,964)
Compensated absences	3,285	(16,573)
Other post-employment benefits payable	<u>233,023</u>	<u>228,820</u>
Total adjustments	<u>4,311,417</u>	<u>1,459,636</u>
Net cash provided by operating activities	<u>\$5,539,722</u>	<u>\$5,005,484</u>
Schedule of Non-Cash Investing and Financing Activities:		
Change in fair market value of investments	\$27,789	\$11,096
Capital contributions	5,732	276,449

See accompanying notes to financial statements

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**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

<b>NOTE 1 – REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES</b>
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**A. *Organization and Operations of the Reporting Entity***

The Novato Sanitary District (District) is a separate governmental unit established as a Special District of the State of California, created in 1925. The District provides sewage collection, treatment, reclamation, and disposal services to an area of about 25 square miles in and around the City of Novato in Marin County, California. Revenues are derived principally from sewer service charges collected from commercial and residential customers within the District's service area. The District is governed by a five-member Board of Directors who serve four year terms.

**B. *Basis of Accounting and Measurement Focus***

Basic Financial Statements are prepared in conformity with accounting principles generally accepted in the United States of America. The Governmental Accounting Standards Board is the acknowledged standard setting body for establishing accounting and financial reporting standards followed by governmental entities in the U.S.A.

The District reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the District is that the costs of providing wastewater service, treatment and collection to its service area on a continuing basis be financed or recovered primarily through user charges (sewer service charges), capital grants and similar funding. Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Operating revenues and expenses, such as sewer service charges as well as treatment and collection charges, result from exchange transactions associated with the principal activity of the District. Exchange transactions are those in which each party receives and gives up essentially equal values. Management, administration and depreciation expenses are also considered operating expenses. Other revenues and expenses not included in the above categories are reported as non-operating revenues and expenses.

The District follows Statements and Interpretations of the Financial Accounting Standards Board and its predecessors that were issued on or before November 30, 1989, in accounting for its business-type activities, unless they conflict with Government Accounting Standards Board pronouncements.

**C. *Use of Estimates***

The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported changes in net assets during the reporting period. Actual results could differ from those estimates.

**NOVATO SANITARY DISTRICT  
 NOTES TO BASIC FINANCIAL STATEMENTS  
 FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

<b>NOTE 1 – REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
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***D. Cash and Cash Equivalents***

Substantially all of the District's cash is invested in interest bearing accounts. The District considers all highly liquid investments with a maturity of three months or less to be cash equivalents.

***E. Investments***

Changes in fair value that occur during a fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in fair value, and any gains or losses realized upon the liquidation or sale of investments.

***F. Accounts Receivable and Allowance for Uncollectible Accounts***

The District extends credit to customers in the normal course of operations. When management deems customer accounts uncollectible, the District uses the allowance method for the reservation and write-off of those accounts.

***G. Property Taxes and Sewer Assessments***

The Marin County Assessor's Office assesses all real and personal property within the County each year. The Marin County Tax Collector's Office bills and collects the District's share of property taxes and assessments. The Marin County Treasurer's Office remits current and delinquent property tax collections to the District throughout the year. Property tax in California is levied in accordance with Article 13A of the State Constitution at one percent (1%) of countywide assessed valuations.

Property taxes receivable at year-end are related to property taxes collected by the Marin County which have not been credited to the District's cash balance as of June 30. The property tax calendar is as follows:

Lien date	March 1
Levy date	July 1
Due dates	November 1 and March 1
Collection dates	December 10 and April 10

***H. Prepaid Expenses***

Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as prepaid items in the basic financial statements.

***I. Deferred Charges***

The deferred charges are from issuance costs on the District's long-term debt that will be amortized over the remaining life of the debt.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

<b>NOTE 1 – REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)</b>
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***J. Capital Assets***

Capital assets acquired and/or constructed are capitalized at historical cost. District policy has set the capitalization threshold for reporting capital assets at \$5,000. Contributed assets are recorded at estimated fair market value at the date of donation and/or historical cost. Upon retirement or other disposition of capital assets, the cost and related accumulated depreciation are removed from the respective balances and any gains or losses are recognized. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets as follows:

- Sewer system improvements - 15 years
- Sewer collection and outfall system - 50 to 100 years
- Buildings and structures - 15 to 50 years
- Sewer facilities equipment - 5 to 35 years
- Equipment - 5 to 35 years

***K. Compensated Absences***

The District's policy is to permit employees to accumulate earned vacation up to a total of 240 hours during their first 15 years of service and 320 hours after 15 years of service. Upon termination of employment, employees are paid all unused vacation and forfeit any unused sick time unless the employee retires from the District in which case unused sick leave is counted 100% towards CalPERS service credits.

***L. Sewer Service Charges***

The majority of sewer service charges are billed annually on the County of Marin's property tax bills.

***M. Capital Contributions***

Capital contributions represent cash and capital asset additions contributed to the District by property owners, granting agencies or real estate developers desiring services that require capital expenditures or connection to the District's system.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 1 – REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING  
POLICIES (Continued)**

**N. Net Assets**

The financial statements utilize a net assets presentation. Net assets are categorized as follows:

- **Net Investment in Capital Assets, net of Related Debt** - This component of net assets consists of capital assets, net of accumulated depreciation and reduced by any outstanding debt against the acquisition, construction or improvement of those assets.
- **Restricted Net Assets** - This component of net assets consists of constraints placed on net assets use through external constraints imposed by creditors, grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- **Unrestricted Net Assets** - This component of net assets consists of net assets that do not meet the definition of *restricted* or *net investment in capital assets*.

**O. Reclassifications**

For the year ended June 30, 2012, certain classifications have been changed to improve financial statement presentation. For comparative purposes, prior year balances have been reclassified to conform to the fiscal year 2012 presentation.

**NOTE 2 – CASH AND INVESTMENTS**

Cash and cash equivalents as of June 30, are classified in the accompanying financial statements as follows:

	2012	2011
Cash and cash equivalents	\$10,331,492	\$6,887,079
Restricted cash and investments	14,595,327	161,168
<b>Total Cash and Investments</b>	<b>\$24,926,819</b>	<b>\$7,048,247</b>

Cash and cash equivalents as of June 30, consist of the following:

	2012	2011
<i>Held by District:</i>		
Cash on hand	\$252	\$719
Deposits with financial institutions	418,582	9,071
Local Agency Investment Fund	10,076,367	7,038,457
<i>Held by Fiscal Agent:</i>		
Cash on hand	1,723,214	
Local Agency Investment Fund	12,708,404	
<b>Total Cash and Investments</b>	<b>\$24,926,819</b>	<b>\$7,048,247</b>

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 2 – CASH AND INVESTMENTS (Continued)**

**A. Investments Authorized by the California Government Code and the District's Investment Policy**

The table below identifies the investment types that are authorized by the District in accordance with the California Government Code (or the District's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the District's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
State and Local Agency Bonds, Notes and Warrants	5 years		100%	None
Registered State bonds, Notes and Warrants	5 years		100%	None
U.S. Treasury Obligations	5 years		100%	None
Federal Agency Securities	5 years		100%	None
Banker's Acceptances	270 days		40%	30%
Prime Commercial Paper	180 days	A-1	25%	10%
Negotiable Certificates of Deposit	5 years	AA	30%	None
Repurchase Agreements	1 year		100%	None
Reverse Repurchase Agreements	92/30 days		20% of base	None
Medium-term Notes	5 years	AA	30 %	None
Money Market Mutual Funds	N/A		15%	10%
Mortgage Pass-through Securities	N/A		30%	None
California Local Agency Investment Fund	N/A		\$40 million per account	None
Passbook Savings Account Demand Deposits	N/A		100%	None

**NOVATO SANITARY DISTRICT  
 NOTES TO BASIC FINANCIAL STATEMENTS  
 FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 2 – CASH AND INVESTMENTS (Continued)**

***B. Investments Authorized by the District’s Debt Issues***

The District must maintain required amounts of cash and investments with trustees or fiscal agents under the terms of certain debt issues. These funds are unexpended bond proceeds or are pledged reserves to be used if the District fails to meet its obligations under these debt issues. The California Government Code requires these funds to be invested in accordance with District resolutions, bond indentures or State statutes. The table below identifies the investment types that are authorized for investments held by fiscal agents. The bond indentures contain no limitations for the maximum investment in any one issuer or the maximum percentage of the portfolio that may be invested in any one investment type. The table also identifies certain provisions related to maturities and credit ratings, where applicable, of these investments:

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality (per S&P)
Federal Securities		
U.S. Agency Securities		A
Interest Bearing Deposit Accounts, including Certificates of Deposit		A or fully insured by the FDIC
Commercial Paper		Highest Short-Term Rating
Federal Funds or Bankers' Acceptances	1 year	Highest Rating Category AAAm-G, AAAm or Aam
Money Market Funds		
Obligations the interest on which is excludable from gross income pursuant to IRS Tax Code Section 103		A
Obligations issued by any corporation organized and operating within the U.S. with assets > \$500 million		A
Municipal Bonds or Notes		Two Highest Categories
Guaranteed Investment Agreements		A
California Local Agency Investment Fund		

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 2 – CASH AND INVESTMENTS (Continued)**

**C. Custodial Credit Risk**

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The California Government Code and the District's investment policy does not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits, other than the following provision for deposits:

The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under State law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. Of the bank balances, up to \$250,000 at June 30, 2012 and 2011 is federally insured and the remaining balance is collateralized in accordance with the Code; however, the collateralized securities are not held in the District's name.

The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The Code and the District's investment policy contains legal and policy requirements that would limit the exposure to custodial credit risk for investments. With respect to investments, custodial credit risk generally applies only to direct investments in marketable securities. Custodial credit risk does not apply to a local government's indirect investment in securities through the use of mutual funds or government investment pools (such as LAIF).

**D. Interest Rate Risk**

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Normally, the longer the maturity of an investment, the greater the sensitivity of its fair value changes in market interest rates. The District generally manages its interest rate risk by holding investments to maturity.

The District is a participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The District reports its investment in LAIF at the fair value amount provided by LAIF, which is the same as the value of the pool share. The balance is available for withdrawal on demand, and is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis. Included in LAIF's investment portfolio are collateralized mortgage obligations, mortgage-backed securities, other asset-backed securities, loans to certain state funds, and floating rate securities issued by federal agencies, government-sponsored enterprises, United States Treasury Notes and Bills, and corporations. At June 30, 2012 and 2011, these investments matured in an average of 268 and 237 days, respectively.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 2 – CASH AND INVESTMENTS (Continued)**

**E. Credit Risk**

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. As of June 30, 2012 and 2011, the Local Agency Investment Fund was not rated.

**F. Concentration of Credit Risk**

The District's investment policy contains no limitations on the amounts that can be invested in any one issuer as beyond that stipulated by the California Government Code. There were no investments in any one issuer that represent 5% or more of total District's investments at June 30, 2012 and 2011, respectively.

**NOTE 3 – ACCOUNTS RECEIVABLE**

The District's accounts receivable at June 30, was as follows:

Description	2012	2011
Sewer services	\$209,489	\$335,664
Governmental agencies	51,874	410,944
Loan proceeds		2,129,975
Capital grant	886,120	221,689
Property tax	122,414	1,823
Other, net of allowance	38,602	68,746
	<u>\$1,308,499</u>	<u>\$3,168,841</u>

**NOTE 4 – DEFERRED CHARGES**

Deferred charges relate to the issuance costs of the District's long-term debt and are being amortized over the length of the debt service.

The balance at June 30, consists of the following:

	2012	2011
Deferred charges	\$74,568	\$91,500
Accumulated amortization	(10,564)	(91,500)
Deferred charges, net	<u>\$64,004</u>	<u>\$0</u>

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 5 – CAPITAL ASSETS**

**A. Capital Assets Activity**

Changes in capital assets for the current fiscal year were as follows:

	<u>Balance June 30, 2011</u>	<u>Additions</u>	<u>Deletions/ Transfers</u>	<u>Balance June 30, 2012</u>
<b>Non-depreciable assets:</b>				
Land and land rights	\$2,774,742			\$2,774,742
Easements	2,112,363	\$5,732		2,118,095
Construction-in-process	4,826,657	7,844,821	(\$1,134,204)	11,537,274
<b>Total non-depreciable assets</b>	<u>9,713,762</u>	<u>7,850,553</u>	<u>(1,134,204)</u>	<u>16,430,111</u>
<b>Depreciable assets:</b>				
Sewer system improvements	159,878,106	2,833,199	(355,594)	162,355,711
Sewer collection and outfall system	46,515,619			46,515,619
Sewer facilities equipment	7,199,641	101,592	(405,544)	6,895,689
Equipment	1,883,548	18,786	30,647	1,932,981
<b>Total depreciable assets</b>	<u>215,476,914</u>	<u>2,953,577</u>	<u>(730,491)</u>	<u>217,700,000</u>
<b>Accumulated depreciation:</b>				
Sewer system improvements	(18,586,610)	(2,507,252)	10,644	(21,083,218)
Sewer collection and outfall system	(12,684,880)	(479,483)		(13,164,363)
Sewer facilities equipment	(5,155,345)	(157,631)	305,666	(5,007,310)
Equipment	(937,632)	(100,823)	52,352	(986,103)
<b>Total accumulated depreciation</b>	<u>(37,364,467)</u>	<u>(3,245,189)</u>	<u>368,662</u>	<u>(40,240,994)</u>
<b>Total depreciable assets, net</b>	<u>178,112,447</u>	<u>(291,612)</u>	<u>(361,829)</u>	<u>177,459,006</u>
<b>Total capital assets, net</b>	<u>\$187,826,209</u>	<u>\$7,558,941</u>	<u>(\$1,496,033)</u>	<u>\$193,889,117</u>

Major capital assets additions during the year include construction of the District's new recycled water facility and other buildings, structures and improvements.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 5 – CAPITAL ASSETS (Continued)**

Changes in capital assets for the prior fiscal year were as follows:

	Balance June 30, 2010	Additions	Deletions/ Transfers	Balance June 30, 2011
<b>Non-depreciable assets:</b>				
Land and land rights	\$2,774,742			\$2,774,742
Easements	1,617,174	\$495,189		2,112,363
Construction-in-process	80,298,722	9,108,512	(\$84,580,577)	4,826,657
<b>Total non-depreciable assets</b>	<b>84,690,638</b>	<b>9,603,701</b>	<b>(84,580,577)</b>	<b>9,713,762</b>
<b>Depreciable assets:</b>				
Sewer system improvements	80,081,277	88,703,074	(8,906,245)	159,878,106
Sewer collection and outfall system	46,495,989	19,630		46,515,619
Sewer facilities equipment	12,115,109	256,908	(5,172,376)	7,199,641
Equipment	1,769,886	118,044	(4,382)	1,883,548
<b>Total depreciable assets</b>	<b>140,462,261</b>	<b>89,097,656</b>	<b>(14,083,003)</b>	<b>215,476,914</b>
<b>Accumulated depreciation:</b>				
Sewer system improvements	(20,701,543)	(1,319,733)	3,434,666	(18,586,610)
Sewer collection and outfall system	(12,205,397)	(479,483)		(12,684,880)
Sewer facilities equipment	(8,754,123)	(410,727)	4,009,505	(5,155,345)
Equipment	(845,407)	(96,607)	4,382	(937,632)
<b>Total accumulated depreciation</b>	<b>(42,506,470)</b>	<b>(2,306,550)</b>	<b>7,448,553</b>	<b>(37,364,467)</b>
<b>Total depreciable assets, net</b>	<b>97,955,791</b>	<b>86,791,106</b>	<b>(6,634,450)</b>	<b>178,112,447</b>
<b>Total capital assets, net</b>	<b>\$182,646,429</b>	<b>\$96,394,807</b>	<b>(\$91,215,027)</b>	<b>\$187,826,209</b>

Major capital assets additions during the year include construction of the District's new wastewater treatment plant and other buildings, structures and improvements.

**B. Construction-In-Process**

The District is involved in various construction projects throughout the year. Once completed, projects are capitalized and depreciated over the life of the asset.

Construction-in-process consists of the following projects as of June 30:

Projects	2010	2011	2012
Wastewater treatment plant upgrade	\$77,056,798	\$1,279,999	\$7,947,232
Collection system improvements	1,752,633	2,015,244	2,119,019
Pump station rehabilitation	783,108	936,614	803,188
North Bay Water Reuse Authority	395,272	475,385	526,016
SCADA System improvements	201,450		
NTP soil and groundwater project	100,273	100,273	
Various other minor projects >\$50,000	9,188	19,142	141,819
<b>Total</b>	<b>\$80,298,722</b>	<b>\$4,826,657</b>	<b>\$11,537,274</b>

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 6 – COMPENSATED ABSENCES**

The changes to compensated absences balances at June 30, were as follows:

<u>Balance 2011</u>	<u>Additions</u>	<u>Deletions</u>	<u>Balance 2012</u>	<u>Due With in One Year</u>
<u>\$153,160</u>	<u>\$4,072</u>	<u>(\$787)</u>	<u>\$156,445</u>	<u>\$39,111</u>
<u>Balance 2010</u>	<u>Additions</u>	<u>Deletions</u>	<u>Balance 2011</u>	<u>Due With in One Year</u>
<u>\$169,733</u>	<u>\$122,569</u>	<u>(\$139,142)</u>	<u>\$153,160</u>	<u>\$38,290</u>

**NOTE 7 – LONG-TERM DEBT**

**A. Long-Term Debt Activity**

Changes in long-term debt amounts for 2011-2012 were as follows:

	<u>Balance June 30, 2011</u>	<u>Additions</u>	<u>Deletions</u>	<u>Balance June 30, 2012</u>	<u>Due within one year</u>
Long-term debt:					
2011 Wastewater Revenue Certificates of Participation		\$21,750,000		\$21,750,000	\$800,000
SRF Loan payable	\$81,329,083		(\$21,136)	81,307,947	3,431,967
Total long-term debt	<u>\$81,329,083</u>	<u>\$21,750,000</u>	<u>(\$21,136)</u>	<u>\$103,057,947</u>	<u>\$4,231,967</u>

Changes in long-term debt amounts for 2010-2011 were as follows:

	<u>Balance June 30, 2010</u>	<u>Additions</u>	<u>Deletions</u>	<u>Balance June 30, 2011</u>	<u>Due within one year</u>
Long-term debt:					
Note payable	\$5,233,207		(\$5,233,207)		
Loan payable	75,348,207	\$5,980,876		\$81,329,083	
Total long-term debt	<u>\$80,581,414</u>	<u>\$5,980,876</u>	<u>(\$5,233,207)</u>	<u>\$81,329,083</u>	

**B. 2011 Wastewater Revenue Certificates of Participation**

The District issued \$21,750,000 in Wastewater Revenue Certificates of Participation on September 27, 2011 to finance the construction of wastewater system improvements and pay issuance costs. The Certificates are payable from net revenues of the District and bear interest rates of 3.00%-4.75%. Interest payments are due February 1 and August 1 of each year, commencing on February 1, 2012. Principal payments are due February 1 of each year commencing February 1, 2013 through 2032.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 7 – LONG-TERM DEBT (Continued)**

The following table summarizes the debt service maturity of the District for the 2011 Certificates of Participation:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2013	\$800,000	\$885,698	\$1,685,698
2014	830,000	861,698	1,691,698
2015	855,000	836,798	1,691,798
2016	885,000	811,148	1,696,148
2017	905,000	775,748	1,680,748
2018-2022	4,875,000	3,318,540	\$8,193,540
2023-2027	5,740,000	2,280,534	\$8,020,534
2028-2032	6,860,000	966,016	\$7,826,016
Total	<u>\$21,750,000</u>	<u>\$10,736,180</u>	<u>\$32,486,180</u>

**C. *Loan Payable - State Water Resources Control Board Loan***

In fiscal year 2008, the District was granted a loan for \$81,329,083 from the California State Water Resources Control Board under the State Revolving Fund (SRF) loan program to upgrade and expand the Novato Treatment Plant to treat the combined flow of the District's wastewater treatment plants. The funds received are Federal funding provided to the State of California under the Federal Clean Water Act.

The District constructed the Ignacio Transfer Pump Station at the site of the Ignacio Treatment Plant along with the Ignacio Conveyance Force Main to convey flow from the Ignacio Transfer Pump Station to the Novato Treatment Plant. Upon completion of the upgrade to the Novato Treatment Plant, the Ignacio Treatment Plant will be phased out of service and flows from the Ignacio Plant will be pumped to the Novato Plant for treatment.

As of June 30, 2012, the District has received \$81,329,083 from the SRF loan program. Interest accrues on the obligation at a rate of 2.40% compounded annually. The first debt service payment was paid on December 31, 2011 and each December 31st thereafter through fiscal year 2031. The following table summarizes the debt service maturity of the District for this loan as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2013	\$3,431,967	\$1,946,989	\$5,378,956
2014	3,509,933	1,869,024	5,378,957
2015	3,594,171	1,784,785	5,378,956
2016	3,680,431	1,698,525	5,378,956
2017	3,768,762	1,610,195	5,378,957
2018-2022	20,244,768	6,650,013	26,894,781
2023-2027	22,793,581	4,101,199	26,894,780
2028-2031	20,284,334	1,231,490	21,515,824
Total	<u>\$81,307,947</u>	<u>\$20,892,220</u>	<u>\$102,200,167</u>

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 7 – LONG-TERM DEBT (Continued)**

**D. Note Payable – Revolving Credit Line**

On May 10, 2006, the District secured a revolving credit line with Zions National Bank. Under the terms of the agreement for the revolving credit line the District could borrow up to \$30 million to provide interim financing for the acquisition and construction of improvements to the wastewater collection, treatment, and disposal facilities of the District. The revolving credit line was secured by a pledge of and lien against the net revenues of the District’s wastewater system. The maturity date of the revolving credit line obligation was April 1, 2011. The revolving credit line obligation accrued interest at a variable rate, defined in the agreement as a rate of interest equal to 85% of the one-year Seattle Federal Home Loan Bank rate which was .75% as of June 30, 2010. Interest was payable semi-annually on October 1 and April 1. The outstanding note payable balance of \$5,233,207 was repaid by the District before April 1, 2011.

**NOTE 8 – POST EMPLOYMENT BENEFITS PAYABLE**

The District implemented the provisions of Governmental Accounting Standards Board Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This Statement establishes uniform financial reporting standards for employers providing postemployment benefits other than pensions (OPEB). Required disclosures are presented below.

**A. Plan Description – Eligibility**

The District pays a portion of the cost of health insurance for retirees under any group plan offered by CalPERS, subject to certain restrictions as determined by the District.

Membership in the OPEB plan consisted of the following members as of June 30:

	2012	2011	2010
Active plan members	20	20	25
Retirees and beneficiaries receiving benefits	23	24	22
Separated plan members entitled to but not yet receiving benefits			
Total plan membership	43	44	47

NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

**NOTE 8 – POST EMPLOYMENT BENEFITS PAYABLE (Continued)**

**B. *Single-Employer Plan - Description of Benefits***

The District offers post employment medical benefits to retired employees who satisfy the eligibility rules. Spouses, surviving spouses and eligible dependents are also eligible to receive benefits. Retirees may enroll in any plan available through the District's CalPERS medical plan. The contribution requirements of Plan members and the District were adopted by the Board of Directors in July 2008 as follows:

The District contributes toward post-retirement benefits for employees who retire after age 50 with at least 5 years of service. For those employed prior to July 1, 2008, who retire after age 55 with at least 10 years of service, the District will pay the full monthly premiums for medical coverage for the retired employee, but not more than the Kaiser Northern California amount. If the retiree is at least age 60 with at least 15 years of service, the premium for the employee's one eligible spouse is paid. Coverage is for the lives of the retired employee and spouse. Medical coverage is provided under any plans offered by CalPERS.

For all other employees, hired on or after July 1, 2008, who retire after age 50 with at least 5 years of service, the District will pay the minimum CalPERS medical benefit. In 2012 and 2011, respectively, this minimum amount was \$112 and \$108 per month. This benefit is paid for as long as the retiree or spouse is living, provided he/she is covered under the CalPERS medical plans.

**C. *Funding Policy***

The District is required to contribute the *Annual Required Contribution (ARC) of the Employer*, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The current ARC rate is 14.028% of the annual covered payroll.

The District will pay 100% of the cost of the post-employment benefit plan for those employees employed prior to July, 1, 2008 and meet the required service years. The District will pay the minimum CalPERS medical benefit for all other employees who do not meet the previously noted service requirements. The District funds the plan on a pay-as-you-go basis and maintains reserves (and records a liability) for the difference between pay-as-you-go and the actuarially determined ARC cost.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 8 – POST EMPLOYMENT BENEFITS PAYABLE (Continued)**

***D. Actuarial Assumptions***

The annual required contribution (ARC) was determined as part of a July 1, 2010 actuarial valuation using the entry age normal cost method. This is a projected benefit cost method, which takes into account those benefits that are expected to be earned in the future as well as those already accrued. The actuarial assumptions included (a) 4.0% investment rate of return, (b) 0.0% projected annual salary increase, (c) 4.0% inflation rate and (d) health care cost trend rates from 5.0% to 7.0% for medical benefits. The actuarial methods and assumptions used include techniques that smooth the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets. Actuarial calculations reflect a long-term perspective and actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to revision at least tri-ennially as results are compared to past expectations and new estimates are made about the future. The District's OPEB unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll using a 30 year amortization period on a closed basis.

***E. Funding Progress and Funded Status***

The District's Net OPEB Obligation (NOO) is recorded in the Statement of Net Assets and is calculated as follows:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
Annual OPEB expense:			
Annual required contribution (ARC)	\$458,282	\$443,883	\$473,000
Interest on net OPEB obligation	20,777	11,233	
Adjustment to annual required contribution	<u>(31,172)</u>	<u>(16,535)</u>	
Total annual OPEB expense	447,887	438,581	473,000
Change in net OPEB payable obligation:			
Age adjusted contributions made	<u>(214,864)</u>	<u>(209,761)</u>	<u>(189,764)</u>
Total change in net OPEB payable obligation	233,023	228,820	283,236
OPEB payable - beginning of year	<u>512,056</u>	<u>283,236</u>	
OPEB payable - end of year	<u>\$745,079</u>	<u>\$512,056</u>	<u>\$283,236</u>

The actuarial accrued liability (AAL) representing the present value of future benefits as of June 30, 2012 amounted to \$6,112,283 per the actuarial study dated July 1, 2010.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 8 – POST EMPLOYMENT BENEFITS PAYABLE (Continued)**

The Plan's annual required contributions and actual contributions for fiscal years ended June 30, is set forth below:

*Three-Year History of Net OPEB Obligation*

Fiscal Year Ended	Annual OPEB Cost	Age Adjusted Contribution	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation Payable
2012	\$447,887	\$214,864	47.97%	\$745,079
2011	438,581	209,761	47.83%	512,056
2010	473,000	189,764	40.12%	283,236

The Schedule of Funding Progress presents trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. Trend data from the last three actuarial studies are presented below:

*Required Supplemental Information - Schedule of Funding Progress*

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/2010	\$0	\$6,112,283	\$6,112,283	0.00%	\$2,000,000	305.610%
7/1/2009	0	5,554,000	5,554,000	0.00%	2,350,000	236.340%

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 9 – NET ASSETS**

Calculation of net assets as of June 30, were as follows:

	2012	2011
<i>Net Investment in capital assets:</i>		
Capital assets - not being depreciated	\$16,430,111	\$9,713,762
Capital assets, net - being depreciated	177,459,006	178,112,447
SRF Loan Payable	(81,307,947)	(81,329,083)
Certificates of Participation	(21,750,000)	
Unspent proceeds	14,431,618	
Total investment in capital assets, net of related debt	105,262,788	106,497,126
<i>Unrestricted net assets:</i>		
Non-spendable net assets:		
Prepaid expenses and deposits	52,813	60,470
Deferred charges, net	64,004	
Total non-spendable net assets	116,817	60,470
Spendable net assets are designated as follows:		
Undesignated net assets reserve	7,672,650	3,913,924
Total spendable net assets	7,672,650	3,913,924
Total unrestricted net assets	7,789,467	3,974,394
Total net assets	\$113,052,255	\$110,471,520

**NOTE 10 – DEFERRED COMPENSATION SAVINGS PLAN**

The District's employees may participate in two 457 Deferred Compensation Programs (Programs). The Programs are available to all District employees and are entirely voluntary. The purpose of these Programs is to provide deferred compensation for public employees that elect to participate in these Programs. Generally, eligible employees may defer receipt of a portion of their salary until termination, retirement, death or unforeseeable emergency. Until the funds are paid or otherwise made available to the employee, the employee is not obligated to report the deferred salary for income tax purposes. The District makes no matching contributions to the Programs.

Federal law requires deferred compensation assets to be held in trust for the exclusive benefit of the participants. Accordingly, the District is in compliance with this legislation. Therefore, these assets are not the legal property of the District, and are not subject to claims of the District's general creditors. Market value of all Program assets held in trust by the District's two deferred compensation programs at June 30, 2012 and 2011 amounted to \$2,064,124 and \$1,810,005, respectively.

NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011

**NOTE 10 – DEFERRED COMPENSATION SAVINGS PLAN (Continued)**

The District has implemented GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. Since the District has little administrative involvement and does not perform the investing function for this plan, the assets and related liabilities are not shown on the statement of net assets.

The District also offers a 401(a) Plan (Plan) to management and confidential employees. The District contributes 2.5% of base salary for all qualified employees, with the exception of the Manager-Engineer and Deputy Manager. The District's contribution for the Manager-Engineer is equivalent to the maximum of a 457 plan's annual contribution, and the District's contribution for the Deputy Manager is 8% of his base salary. Employees contributions to this Plan are mandatory for qualified employees. Market value of all Plan assets held in trust by the District's 401(a) Plan at June 30, 2012 amounted to \$402,885.

**NOTE 11 – DEFINED BENEFIT PENSION PLAN**

**A. Plan Description**

The Agency contributes to the California Public Employees Retirement System (CalPERS), a cost-sharing multi-employer defined benefit pension plan. CalPERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public agencies within the State of California. Benefit provisions and all other requirements are established by state statute and the Agency. Copies of CalPERS annual financial report may be obtained from their executive Office: 400 P Street, Sacramento, CA, 95814.

**B. Funding Policy**

The District has two tiers of employees for determining retirement benefits – Tier I is for those employees hired prior to January 1, 2012, and the Tier II is for those employees hired on or after January 1, 2012.

The employee contribution rate for Tier I plan members in the 2.0% at 55 Risk Pool Retirement Plan with CalPERS, is 7% of their annual covered salary of which the employee pays 1% and the District pays 6%. The contribution rate for Tier II plan members in the 2% at 60 Risk Pool Retirement Plan with CalPERS, is 7% of their annual covered salary of which the employee pays the entire 7%. The District makes these contributions required of District employees on their behalf and for their account.

Also, the District is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members. The required employer contribution rates are equal to the annual pension costs (APC) percentage of payroll for fiscal years 2012, 2011 and 2010 as noted below. The contribution requirements of the plan members are established by State statute, and the employer contribution rate is established and may be amended by CalPERS. For fiscal years 2012, 2011 and 2010, the District's annual contributions for the CalPERS plan were equal to the Agency's required and actual contributions for each fiscal year as follows:

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 11 – DEFINED BENEFIT PENSION PLAN (Continued)**

*Three Year Trend Information:*

<u>Fiscal Year</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>	<u>APC Percentage of Payroll</u>
2009-2010	\$301,129	100%	\$0	13.033%
2010-2011	251,631	100%	0	12.937%
2011-2012	215,351	100%	0	14.028%/10.059% *

\* The required contribution percentage for the District was adjusted after the pay-off of the Side Fund.

**NOTE 12 – RISK MANAGEMENT**

The District is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District is a member of the California Sanitation Risk Management Authority (CSRMA), an intergovernmental risk sharing joint powers authority currently operating as a common risk management and loss prevention program for sixty California sanitation districts. The District pays an annual premium to CSRMA for its public liability and workers compensation risk coverage. The Agreement for formation of the CSRMA provides that CSRMA will be self-sustaining through member premiums and will provide specific excess insurance through commercial companies. The CSRMA is allowed to make additional assessments to its members based on a retrospective premium adjustment process. At June 30, 2012, the District participated in the self insurance programs of the CSRMA as follows:

- General and automotive liability, including errors and omissions and employment practices liability (EPL): The District is self-insured through the CSRMA up to \$15,500,000 with a \$25,000 deductible (\$25,000 for EPL, \$25,000 for sewer backup, and \$2,500 for E&O) per occurrence. Excess liability insurance is purchased above the \$15,500,000 self-insured layer to \$25,550,000 through CSRMA.
- Workers' compensation and employer's liability: The District is self-insured through the CSRMA up to \$750,000 with a deductible of \$0 per claim. The District purchased through CSRMA, additional excess workers' compensation coverage and excess employer's liability coverage of \$1,000,000.

In addition to the above, the District also has the following insurance coverage:

- Employee dishonesty coverage up to \$1,000,000 per loss for public employee dishonesty, forgery or alteration, computer fraud, coverage of up to \$100,000 for faithful performance and coverage up to \$10,000 for theft, with a deductible of \$10,000 per claim.
- Special form property coverage up to \$63,331,652 with a deductible of \$25,000 per claim.
- Public entity physical damage up to \$1,408,089 total value, with a \$2,000/\$5,000 deductible.

**NOVATO SANITARY DISTRICT  
NOTES TO BASIC FINANCIAL STATEMENTS  
FOR THE YEARS ENDED JUNE 30, 2012 AND 2011**

**NOTE 12 – RISK MANAGEMENT (Continued)**

Settled claims have not exceeded any of the coverage amounts in any of the last three fiscal years and there were no reductions in the District's insurance coverage during the years ending June 30, 2012, 2011 and 2010. Liabilities are recorded when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated net of the respective insurance coverage. Liabilities include an amount for claims that have been incurred but not reported (IBNR). There were no IBNR claims payable as of June 30, 2012, 2011 and 2010.

**NOTE 13 – COMMITMENTS AND CONTINGENCIES**

**A. Local Improvement District Bonds**

Within the District's boundaries, there exists Assessment District No. 2001 (Novato Heights) which was formed for the sole purpose of financing sewer system improvements. The District is not liable for repayment of any bonds issued to finance these local improvements. The District acts as the agent for the property owners within the assessment district by collecting assessments, forwarding collections to bondholders, and initiating foreclosure procedures if appropriate. The outstanding balance on these bonds was \$1,350,000, as of June 30, 2012.

**B. Construction Contracts**

The District has a variety of agreements with developers and private parties relating to the installation, improvement or modification of transmission facilities and distribution systems within its service area. The financing of such improvements is provided primarily from advances for construction and the District's capital replacement reserve. The District has committed to approximately \$2,617,077 of open construction contracts as of June 30, 2012.

**C. Grant Awards**

Grant funds received by the District are subject to audit by the grantor agencies. Such audits could lead to requests for reimbursements to the grantor agencies for expenditures disallowed under terms of the grant. Management of the District believes that such disallowances, if any, would not be significant.

**D. Litigation**

In the ordinary course of operations, the District is subject to claims and litigation from outside parties. After consultation with legal counsel, the District believes the ultimate outcome of such matters, if any, will not materially affect its financial condition.

**NOTE 14 – SUBSEQUENT EVENT**

In October 2012, the District reached a settlement agreement with the State Water Resources Control Board over a civil dispute for alleged violations between 2007 and 2011. The settlement agreement calls for the District to pay \$203,862 to the State Water Resources Control Board, \$10,240 to the Department of Fish and Game, and to complete two supplemental environment projects. The estimated total cost of the settlement agreement is \$354,000.

DRAFT

**Required Supplementary Information**

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**Novato Sanitary District**  
**Schedule of Funding Status – Other Post-Employment Benefits Obligation**  
**For the Years Ended June 30, 2012 and 2011**

*Funded Status and Funding Progress of the Plan*

*Required Supplemental Information - Schedule of Funding Progress*

Actuarial Valuation Date	Actuarial Value of Plan Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/2010	\$0	\$6,112,283	\$6,112,283	0.00%	\$2,000,000	305.610%
7/1/2009	0	5,554,000	5,554,000	0.00%	2,350,000	236.340%

The most recent valuation (dated July 1, 2010) includes an Actuarial Accrued Liability and Unfunded Actuarial Accrued Liability of \$6,112,283. There are no plan assets because the District funds on a pay as-you-go basis. The covered payroll (annual payroll of active employees covered by the plan) for the year ended June 30, 2012 was estimated at \$2,000,000. The ratio of the unfunded actuarial accrued liability to annual covered payroll is 305.61 %.

***Actuarial Methods and Assumptions***

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of each valuation and the pattern of sharing of costs between the employer and plan members to that point. Consistent with the long-term perspective of actuarial calculations, actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities for benefits.

The following is a summary of the actuarial assumptions and methods:

Valuation date	July 1, 2010
Actuarial cost method	Entry age normal cost method
Amortization method	Level percent of payroll amortization
Remaining amortization period	30 Years as of the valuation date
Asset valuation method	30 Years smoothed market
Actuarial assumptions:	
Discount rate	4.00%
Projected salary increase	District expected COLA
Inflation – discount rate	4.00%

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**Statistical Information Section**

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**Novato Sanitary District  
Statistical Section**

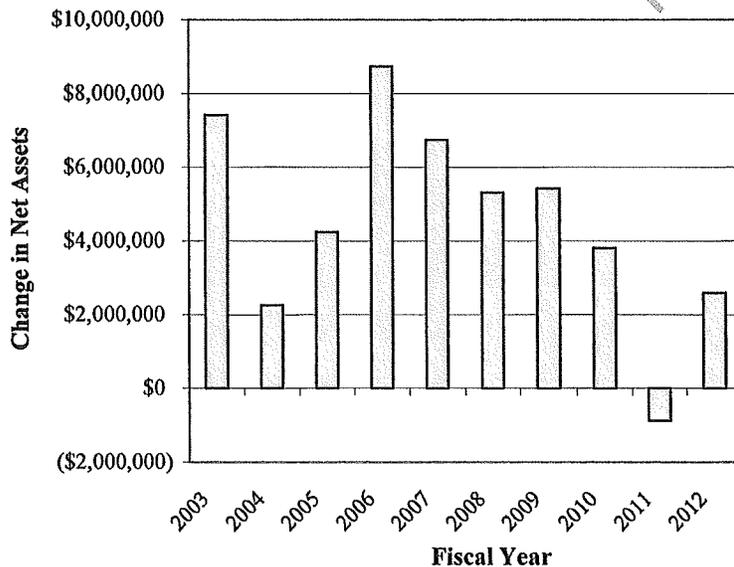
This part of the District's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the District's overall financial health.

**Table of Contents**

	<b><u>Page No.</u></b>
<b>Financial Trends</b>	40-43
These schedules contain information to help the reader understand how the District's financial performance and well-being have changed over time.	
<b>Revenue Capacity</b>	44-48
These schedules contain information to help the reader assess the District's most significant own-source revenue, sewer service charges.	
<b>Debt Capacity</b>	49-50
These schedules present information to help the reader assess the affordability of the district's current levels of outstanding debt and the District's ability to issue additional debt in the future.	
<b>Demographic Information</b>	51
This schedule offers demographic indicators to help the reader understand the environment within which the District's financial activities take place.	
<b>Operating Information</b>	52-53
This schedule contains service and infrastructure data to help the reader understand how the information in the District's financial report relates to the service the District provides.	

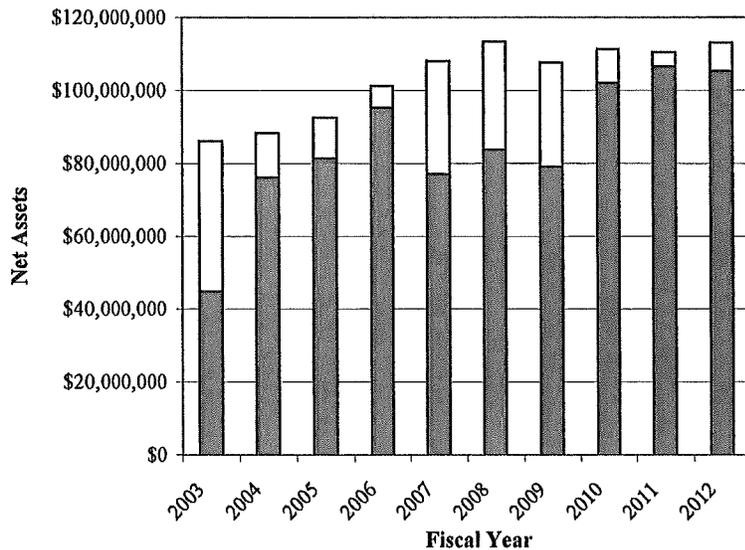
**Novato Sanitary District**  
**Changes in Net Assets and Net Assets by Component**  
**Last Ten Fiscal Years**

	Fiscal Year			
	2003	2004	2005	2006
<b>Changes in net assets:</b>				
Operating revenues (see Schedule 2)	\$4,803,853	4,626,891	8,339,963	9,937,511
Operating expenses (see Schedule 3)	(4,865,811)	(5,220,170)	(5,656,823)	(5,848,165)
Depreciation and amortization	(754,664)	(810,357)	(871,142)	(912,921)
<b>Operating income(loss)</b>	<b>(816,622)</b>	<b>(1,403,636)</b>	<b>1,811,998</b>	<b>3,176,425</b>
<b>Non-operating revenues (expenses)</b>				
Property taxes	1,344,630	1,392,792	1,279,567	1,385,156
Interest	339,528	196,824	254,031	330,052
Interest expense	(100,407)	(71,863)	(43,064)	(20,687)
Connection Fees	1,088,551			
Special Equalization Charges	6,120	15,267	18,339	437
Franchise fees/Rental Income	117,517	117,517	117,517	122,517
Deferred Charges Amortization				
Gain/(Loss) on sale/disposition of assets	(174,180)	(822,873)	(111,529)	(101,481)
Other revenue/(expense), net	(2,293)	(1,112)	(875)	(11,911)
<b>Total non-operating revenues (expenses), net</b>	<b>2,619,466</b>	<b>826,552</b>	<b>1,513,986</b>	<b>1,704,083</b>
<b>Net income before capital contributions</b>	<b>1,802,844</b>	<b>(577,084)</b>	<b>3,325,984</b>	<b>4,880,508</b>
Connection Fees		1,460,645	675,451	511,830
Capital contributions	5,609,290	1,374,674	242,866	3,342,124
Capital Grant				
<b>Changes in net assets</b>	<b>\$7,412,134</b>	<b>2,258,235</b>	<b>4,244,301</b>	<b>8,734,462</b>
<b>Net assets by component:</b>				
Invested in capital assets, net of related debt	\$44,869,544	76,163,663	81,353,813	95,265,483
Unrestricted	41,266,400	12,176,517	11,230,668	6,053,460
<b>Total net assets</b>	<b>\$86,135,944</b>	<b>88,340,180</b>	<b>92,584,481</b>	<b>101,318,943</b>



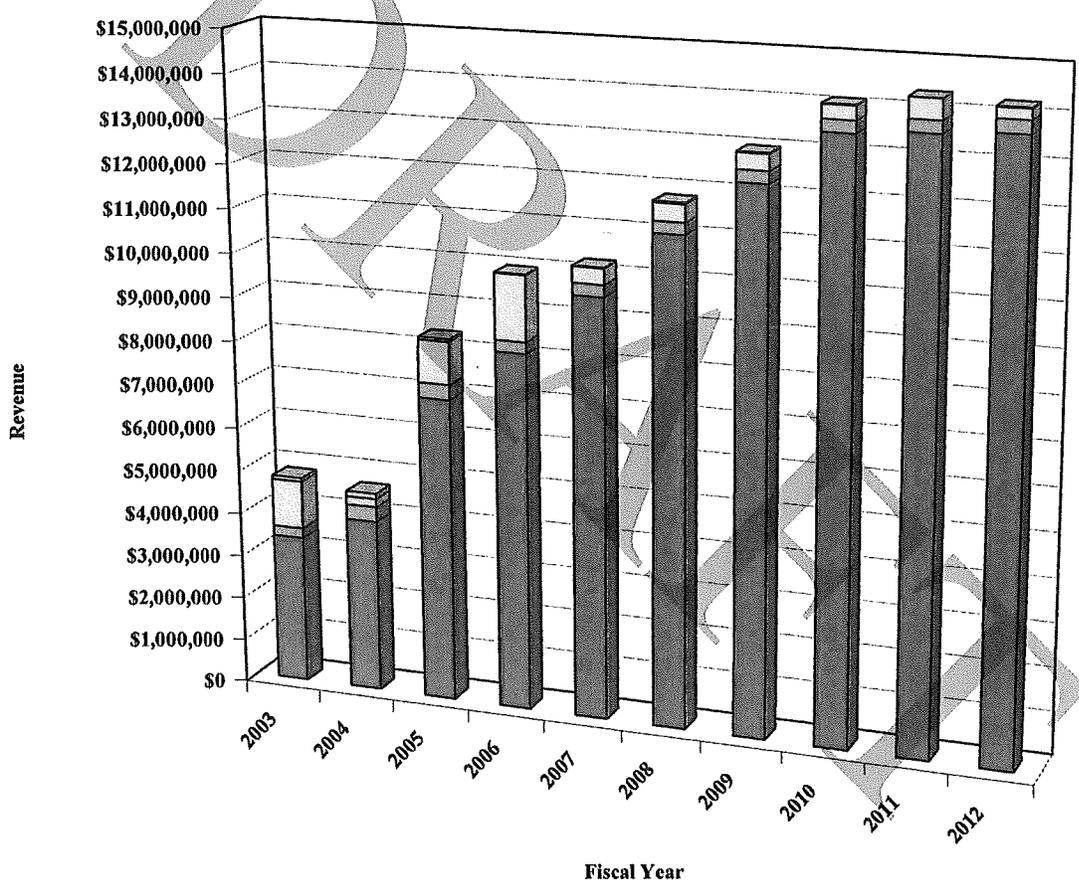
Source: Novato Sanitary District Accounting Department

Fiscal Year					
2007	2008	2009	2010	2011	2012
10,226,728	11,768,650	12,948,148	14,071,716	14,316,441	14,225,285
(6,919,638)	(7,464,243)	(7,685,390)	(9,654,452)	(8,464,043)	(9,758,265)
(967,449)	(1,326,027)	(2,227,627)	(2,288,892)	(2,306,550)	(3,238,715)
2,339,641	2,978,380	3,035,131	2,128,372	3,545,848	1,228,305
1,796,003	1,995,120	1,928,207	1,866,049	1,773,877	1,795,489
657,453	1,081,073	702,002	196,303	30,387	37,129
(383,161)	(1,305,067)	(1,302,270)	(1,211,880)	(209,456)	(2,669,346)
527	2,908				
127,517	127,517	127,517	45,000	95,000	26,099
(453,852)	(221,920)	(18,689)	(18,689)	(16,744)	(10,564)
		(83,842)	(909,553)	(6,634,450)	(367,095)
		(2,022)	(17,644)	42,623	229,382
1,744,487	1,679,631	1,350,903	(50,414)	(4,918,763)	(958,906)
4,084,128	4,658,011	4,386,034	2,077,958	(1,372,915)	269,399
2,325,277	316,609	647,101	1,277,790	174,631	880,541
333,885	338,915	395,702	446,867	101,818	5,732
				221,689	1,433,561
6,743,290	5,313,535	5,428,837	3,802,615	(874,777)	2,589,233
77,039,741	83,754,794	79,067,990	102,065,015	106,497,126	105,262,788
31,022,492	29,620,974	28,475,692	9,281,282	3,974,394	7,789,467
108,062,233	113,375,768	107,543,682	111,346,297	110,471,520	113,052,255



**Novato Sanitary District  
Operating Revenue By Source  
Last Ten Fiscal Years**

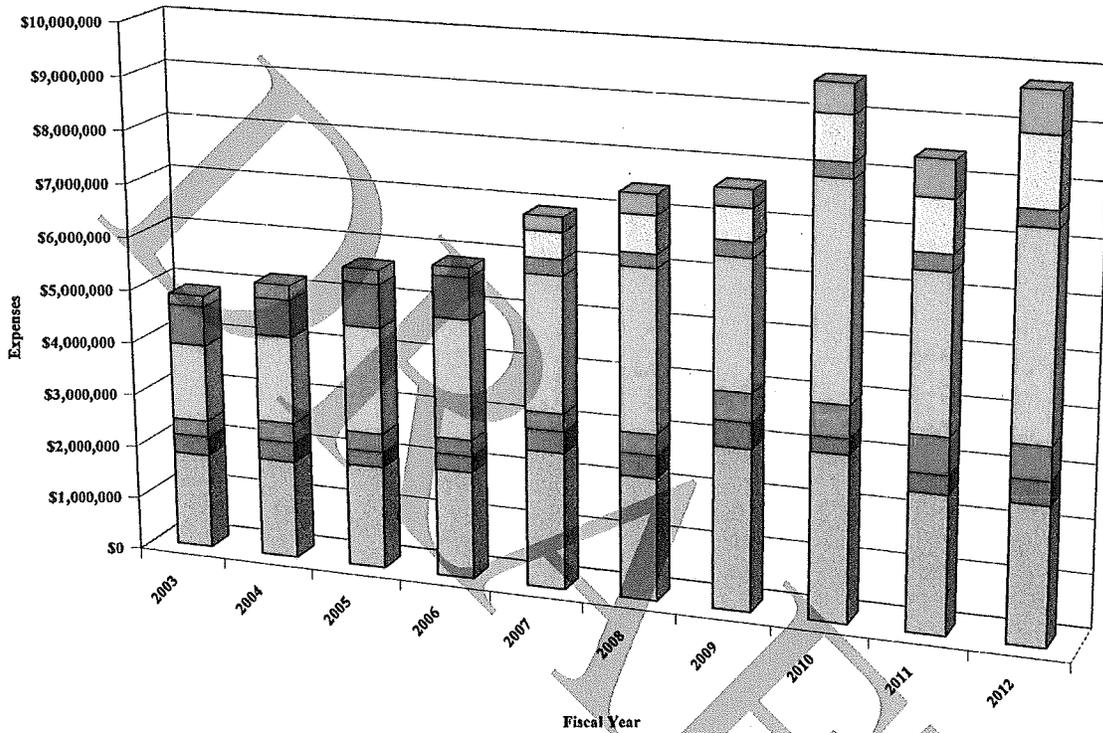
<b>Fiscal Year</b>	<b>Wastewater Service Charges</b>	<b>Permits, Inspections and Other Fees</b>	<b>AB 939 Solid Waste Program</b>	<b>Other Operating Revenue</b>	<b>Total Operating Revenue</b>
2003	\$3,390,898	\$81,702	\$229,866	\$1,101,387	\$4,803,853
2004	3,966,670	127,888	341,509	190,824	4,626,891
2005	6,961,866	61,562	345,215	971,320	8,339,963
2006	8,161,755	15,146	264,378	1,496,232	9,937,511
2007	9,573,338	20,063	271,378	361,949	10,226,728
2008	11,063,829	39,291	271,862	393,668	11,768,650
2009	12,286,426	27,408	271,862	362,452	12,948,148
2010	13,462,437	23,163	277,299	308,817	14,071,716
2011	13,570,839	9,532	280,493	455,577	14,316,441
2012	13,671,131	21,441	297,586	235,127	14,225,285



Source: Novato Sanitary District Accounting Department

**Novato Sanitary District  
Operating Expenses by Activity  
Last Ten Fiscal Years**

Fiscal Year	Collection System	Wastewater Treatment	Wastewater Reclamation/Disposal	Laboratory & Monitoring	Pump Stations	Sewer and Pump Stations	AD939 -Solid Waste Programs	Administration & Engineering	Total Operating Expenses
2003		\$1,791,250	\$360,607	\$304,278		\$737,685	\$214,267	\$1,457,724	\$4,865,811
2004		1,843,595	380,532	366,882		709,261	278,422	1,641,478	5,220,170
2005		1,930,880	290,195	350,754		821,807	266,646	1,996,541	5,656,823
2006		2,020,955	307,605	303,287		784,996	181,886	2,249,436	5,848,165
2007	\$493,029	2,569,632	411,564	331,627	\$280,028		297,396	2,536,362	6,919,638
2008	694,147	2,289,718	426,492	389,036	383,503		249,797	3,031,550	7,464,243
2009	599,787	3,017,245	486,514	537,069	332,808		286,682	2,425,285	7,685,390
2010	828,832	3,102,119	296,268	597,743	540,641		284,999	4,003,850	9,654,452
2011	963,487	2,566,139	355,218	688,238	673,344		307,137	2,910,480	8,464,043
2012	1,274,730	2,560,633	442,266	621,758	758,563		310,890	3,789,425	9,758,265



**Notes:**  
Beginning in 2007, Collection and Pump Stations were separate departments previously classified under the Sewer and Pump Stations department.

**Source:** Novato Sanitary District Accounting Department

**Novato Sanitary District  
Assessed Value of Taxable Property  
Last Ten Fiscal Years**

<u>Fiscal Year</u>	<u>Assessed Value</u>	<u>Percent Change</u>
2003	\$6,472,321,272	
2004	7,093,625,831	9.60%
2005	7,910,248,923	11.51%
2006	8,838,973,455	11.74%
2007	9,491,627,231	7.38%
2008	9,829,812,081	3.56%
2009	9,580,325,664	-2.54%
2010	9,432,410,765	-1.54%
2011	9,349,746,271	-0.88%
2012	9,245,463,186	-1.12%

**Source: County of Marin Tax Assessor**

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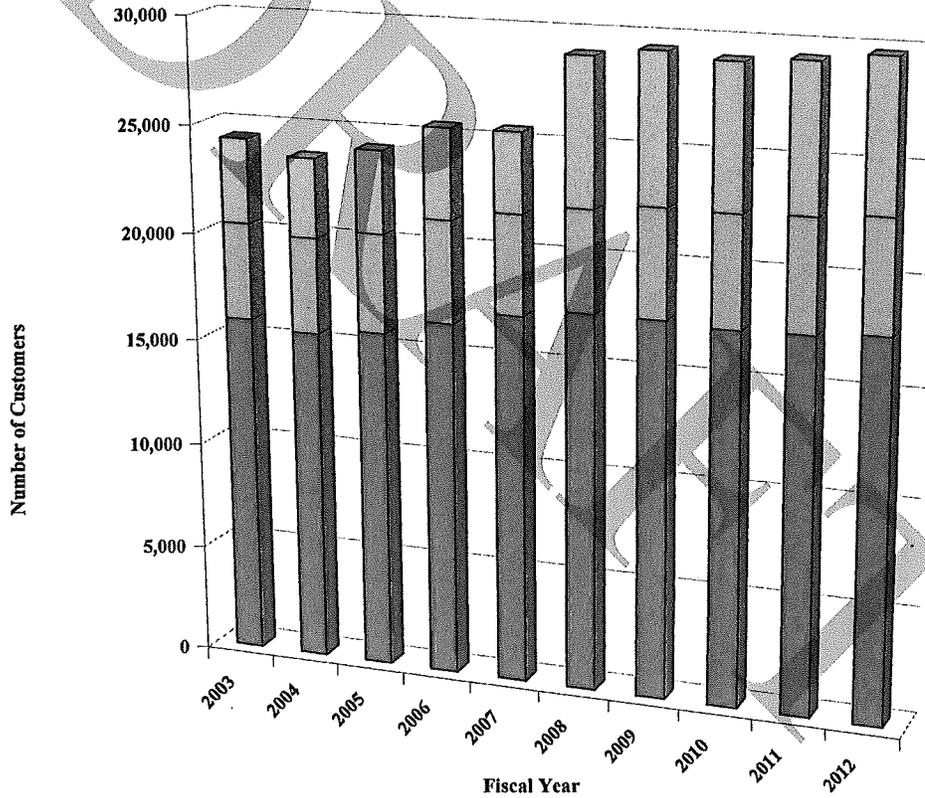
**Novato Sanitary District  
Property Tax Levies and Collections  
Last Ten Fiscal Years**

<b>Fiscal Year</b>	<b>Current Tax Levy</b>	<b>Current Tax Collections</b>	<b>Percent of Current Taxes</b>	<b>Prior Year Tax Collections,</b>	<b>Percent of Current Taxes</b>	<b>Net Collections</b>
2003	\$1,301,929	\$1,301,929	100.0%	\$2,148	0.2%	\$ 1,304,077
2004	1,369,201	1,369,201	100.0%	1,016	0.1%	1,370,217
2005	1,274,602	1,274,602	100.0%	2,460	0.2%	1,277,062
2006	1,436,617	1,436,617	100.0%	1,096	0.1%	1,437,713
2007	1,760,488	1,760,488	100.0%	1,745	0.1%	1,762,233
2008	1,999,824	1,999,824	100.0%	2,202	0.1%	2,002,026
2009	1,926,506	1,926,506	100.0%	1,701	0.1%	1,928,207
2010	1,724,197	1,724,197	100.0%	1,752	0.1%	1,725,949
2011	1,773,877	1,771,181	99.8%	2,696	0.2%	1,773,877
2012	1,793,101	1,793,101	100.0%	2,066	0.1%	1,795,167

Source: Novato Sanitary District Accounting Department

**Novato Sanitary District  
Equivalent Dwelling Units by Type at Fiscal Year-End<sup>(1)</sup>  
Last Ten Fiscal Years**

Fiscal Year	Customer Type			Total
	Single Family Residential	Multi family Residential	Commercial	
2003	15,933.20	4,484.80	3,924.74	24,342.74
2004	15,519.20	4,457.00	3,690.88	23,667.08
2005	15,816.80	4,598.60	3,820.10	24,235.50
2006	16,559.00	4,735.60	4,165.15	25,459.75
2007	17,193.00	4,608.20	3,681.99	25,483.19
2008	17,572.20	4,696.60	6,745.96	29,014.76
2009	17,568.60	5,016.20	6,811.97	29,396.77
2010	17,407.40	5,133.40	6,576.55	29,117.35
2011	17,471.40	5,186.20	6,677.08	29,334.68
2012	17,705.80	5,184.20	6,814.04	29,704.04



**Notes:**

The District charges its customers a flat rate per equivalent dwelling unit (EDU) and the fee appears on the customers' annual property tax bill Number of customers as of June 30 of fiscal year.  
Multi family residential includes apartments and condominiums.

**Source: Novato Sanitary District Operations Department**

**Novato Sanitary District  
Wastewater Service Charges  
Last Ten Fiscal Years**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Price per EDU per year	\$ 155	\$ 262	\$ 302	\$ 342	\$ 382	\$ 422	\$ 462	\$ 462	\$ 462	\$ 462
Price per EDU per month	\$ 12.92	\$ 21.83	\$ 25.17	\$ 28.50	\$ 31.83	\$ 35.17	\$ 38.50	\$ 38.50	\$ 38.50	\$ 38.50

**EDUs**

Single Family  
Apartments, Condominiums, Duplexes and Townhouses  
Motor Home or Trailer Park  
Guest House with kitchen and bedroom  
Guest House without kitchen

**EDU Factors**

1  
1 per living unit  
1 per space  
1 per living unit  
0 per living unit

**Non Residential**

	<i>Charge per square foot</i>	<i>Charge per HCF water use</i>
Base Charge/ Unspecified	\$ 0.19	\$ 2.52
Auditoriums theaters	\$ 0.19	\$ 2.52
Auto service stations	\$ 0.19	\$ 2.52
Churches	\$ 0.19	\$ 2.52
Gymnasium w/ showers	\$ 0.19	\$ 2.52
Office	\$ 0.19	\$ 2.52
Public office	\$ 0.19	\$ 2.52
Retail	\$ 0.19	\$ 2.52
School classrooms/administration	\$ 0.19	\$ 2.52
Meeting halls with kitchens	\$ 0.19	\$ 3.53
Mortuary	\$ 0.19	\$ 5.48
Supermarkets	\$ 0.19	\$ 5.48
Dental offices	\$ 0.25	\$ 2.52
Hospitals	\$ 0.25	\$ 2.52
Medical offices	\$ 0.25	\$ 2.52
Veterinary offices	\$ 0.25	\$ 2.52
Bakeries	\$ 0.38	\$ 5.48
Cafeteria/dining area	\$ 0.38	\$ 5.48
Delicatessens	\$ 0.38	\$ 5.48
Ice Cream/yogurt shops	\$ 0.38	\$ 5.48
Restaurants cafes	\$ 0.38	\$ 5.48
Laundry and Laundromats	\$ 0.57	\$ 3.53
Warehouse or Storage not live/work	\$ -00	\$ -00

**Notes:**

Rates as of July 1 of each year

**Source: Novato Sanitary District Engineering Department**

**Novato Sanitary District  
Principal Customers  
Current Fiscal Year and Ten Years Ago**

<b>Customer</b>	<b>2012</b>		<b>2003</b>	
	<b>EDU's</b>	<b>Percentage of Total</b>	<b>EDU's</b>	<b>Percentage of Total</b>
Fireman's Fund	367	1.24%	392	1.61%
Novato Unified School District	397	1.34%	127	0.52%
Vintage Oaks Shopping Center ( not including Costco or Target	285	0.96%	324	1.33%
BioMarin	197	0.66%	114	0.47%
Hamilton Hangars (3-10)	173	0.58%	-	0.00%
Nave Bros	164	0.55%	120	0.49%
Novato Community Hospital	91	0.31%	52	0.21%
City Of Novato	57	0.19%	38	0.16%
Condiotti Enterprises Inc.	128	0.43%	71	0.29%
Novato Fair Shopping Center	118	0.40%	130	0.53%
<b>Total EDUs: Principal customers</b>	<b>1,977</b>	<b>6.66%</b>	<b>1,368</b>	<b>5.61%</b>
<b>Total Equivalent Dwelling Units (EDUs)</b>	<b>29,704</b>	<b>100.00%</b>	<b>24,350</b>	<b>100.00%</b>

**Source: Novato Sanitary District Engineering Department**

**Novato Sanitary District  
Debt Coverage  
Last Ten Fiscal Years**

<b>Fiscal Year</b>	<b>Net Revenues</b>	<b>Operating Expenses<sup>(1)</sup></b>	<b>Net Available Revenues</b>	<b>Principal</b>	<b>Debt Service Interest</b>	<b>Total</b>	<b>Coverage Ratio</b>
2003	\$7,523,726	(\$4,865,811)	\$2,657,915	\$425,000	\$100,407	\$525,407	5.06
2004	6,985,951	(5,220,170)	1,765,781	450,000	71,863	521,863	3.38
2005	10,572,464	(5,656,823)	4,915,641	300,000	43,064	343,064	14.33
2006	12,174,111	(5,848,165)	6,325,946	300,000	20,687	320,687	19.73
2007	14,679,653	(6,919,638)	7,760,015	325,000	383,161	708,161	10.96
2008	14,753,348	(7,464,243)	7,289,105		1,305,067	1,305,067	5.59
2009	16,248,422	(7,685,390)	8,563,032		1,302,270	1,302,270	6.58
2010	16,510,972	(9,654,452)	6,856,520	24,773,024	1,211,880	25,984,904	0.264
2011	10,003,454	(8,464,043)	1,539,411	5,233,207	209,456	5,442,663	0.283
2012	15,380,957	(9,758,265)	5,622,692	21,136	2,669,346	2,690,482	2.090

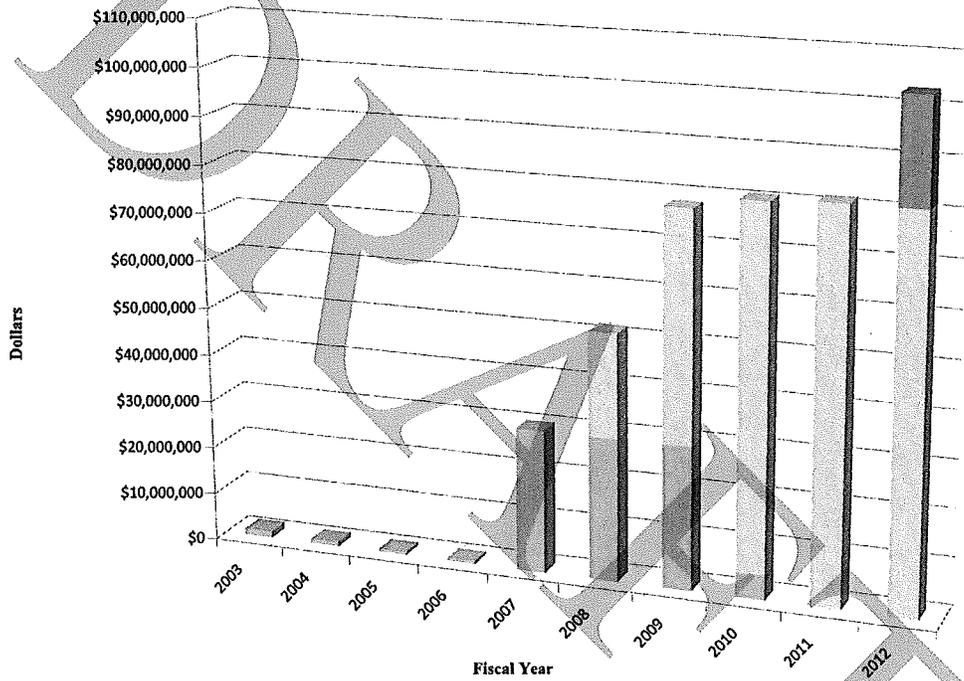
**Notes:**

(1) Operating expenses exclude depreciation expense.

**Source: Novato Sanitary District Accounting Department**

**Novato Sanitary District  
Ratios of Outstanding Debt by Type  
Last Ten Fiscal Years**

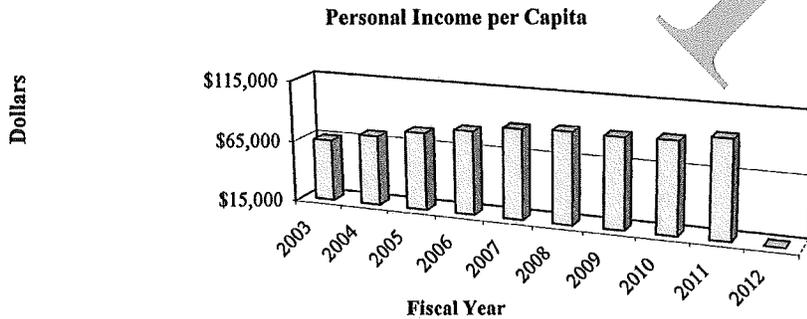
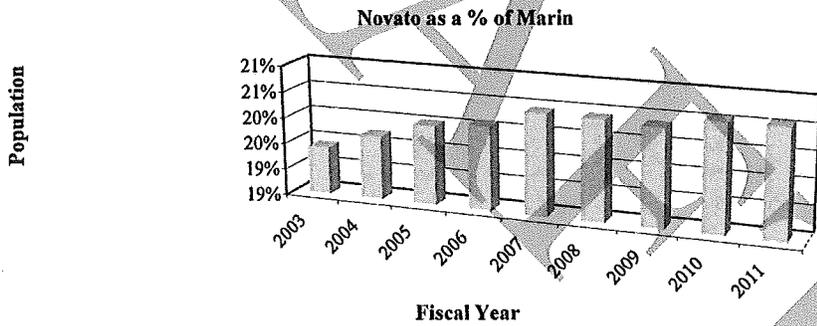
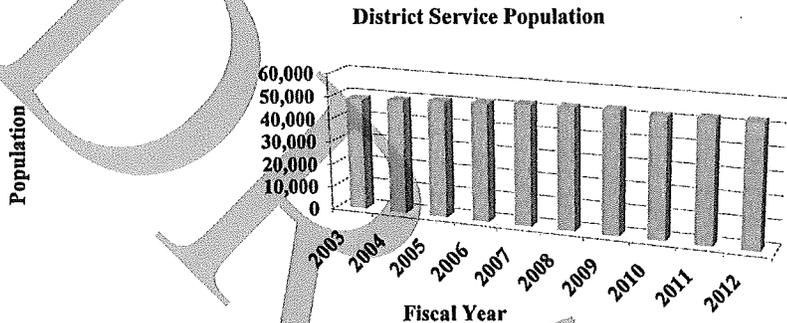
Fiscal Year	General Obligation Bonds Payable	Credit Line	SRF Loan Payable	Certificates of Participation Bond Payable	Total		
					Debt	Per Capita	As a Share of Personal Income
2003	\$1,375,000				\$1,375,000	\$28.25	0.04%
2004	925,000				925,000	18.67	0.03%
2005	625,000				625,000	12.39	0.02%
2006	325,000	\$191,500			516,500	10.12	0.01%
2007		30,006,231			30,006,231	575.66	0.65%
2008		30,006,231	\$21,691,826		51,698,057	983.75	1.09%
2009		30,006,231	47,989,587		77,995,818	1,473.82	1.65%
2010		5,233,207	75,348,207		80,581,414	1,552.51	1.72%
2011			81,329,083		81,329,083	1,550.42	1.63%
2012			81,307,947	\$21,750,000	103,057,947	1,953.71	n/a



Source: Novato Sanitary District Accounting Department

**Novato Sanitary District  
Demographics and Economic Statistics  
Last Ten Calendar Years**

Year	District Service Population	(1) Novato as a % of Marin	County of Marin <sup>(2)</sup>			
			Unemployment Rate	Population	Personal Income (thousands of dollars)	Personal Income per Capita
2003	48,670	19%	4.9%	250,804	\$16,340,714	\$65,153
2004	49,533	20%	4.5%	251,202	18,114,794	72,112
2005	50,464	20%	4.0%	252,116	19,763,926	78,392
2006	51,037	20%	4.6%	253,818	21,184,396	83,463
2007	52,125	20%	4.4%	255,080	22,600,000	88,600
2008	52,552	20%	5.5%	257,406	23,200,000	90,130
2009	52,921	20%	9.4%	259,772	23,156,000	89,140
2010	51,904	21%	9.8%	252,409	22,800,000	90,330
2011	52,456	21%	9.5%	255,031	24,300,000	95,283
2012	52,750	n/a	n/a	n/a	n/a	n/a



**Notes:**

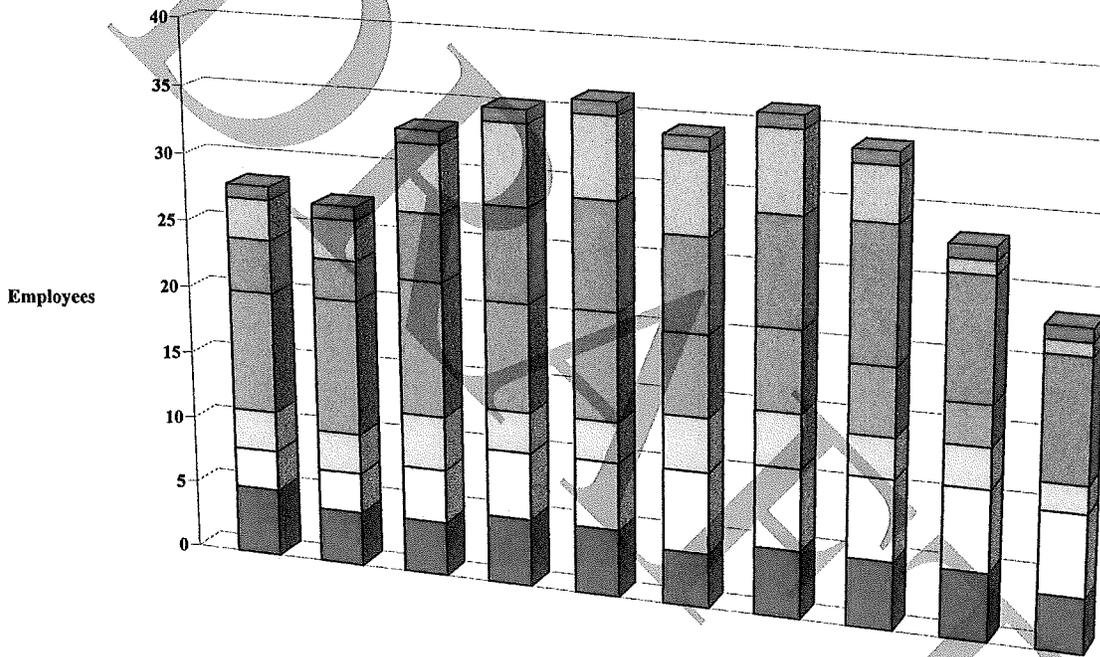
- (1) Approximate population of Novato Sanitary District
- (2) Only County data is updated annually. Therefore, the District has chose to use its data since the District believes that the County data is representative of the conditions and experience of the District.

**Sources: California Department of Finance, County of Marin, quickfacts.census.gov, North Marin Water District 2011 Annual Report.**

**Novato Sanitary District  
Operating and Capacity Indicators  
Last Ten Fiscal Years**

**Employees**

Department	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Administration	5	4	4	5	5	4	5	5	5	4
Engineering	3	3	4	5	5	6	6	6	6	6
Lab Services	3	3	4	3	3	4	4	3	3	2
Operations	9	10	10	8	8	6	6	5	3	0
Collections	4	3	5	7	8	7	8	10	9	9
Maintenance	3	3	5	6	6	6	6	4	1	1
Safety	1	1	1	1	1	1	1	1	1	1
<b>Total</b>	<b>28</b>	<b>27</b>	<b>33</b>	<b>35</b>	<b>36</b>	<b>34</b>	<b>36</b>	<b>34</b>	<b>28</b>	<b>23</b>



**Notes:**

The decrease in operators in 10/11 due to Treatment Plant Operations contract with Veolia Water.

The three employees were only NSD employees for 1 month of 2010/11.

The Safety resource is a Central Marin Sanitation Employee and is a shared service position among several public utilities.

Source: Novato Sanitary District Records

**Novato Sanitary District  
Operating and Capacity Indicators  
Last Ten Fiscal Years**

**Other Operating and Capacity Indicators**

Fiscal Year	Miles of Sewer Lines	Number of Pump Stations	Average Dry Weather Flow (MGD)		Treatment Capacity (MGD)		Total Annual Treatment (MG)
			Novato	Ignacio	Novato	Ignacio	
2003	213	37	2.87	1.66	4.53	2.02	1,653
2004	220	38	2.53	1.81	4.53	2.02	1,584
2005	220	40	3.55	1.64	4.53	2.02	1,894
2006	222	41	3.54	1.470	4.53	2.02	1,829
2007	225	42	3.47	1.340	4.53	2.02	1,756
2008 *	225	42	4.04	0.000	6.55	0	1,475
2009	225	42	4.89	0.000	6.55	0	1,785
2010	226	42	4.23	0.000	7.05	0	1,544
2011	226	42	4.20	0.000	7.05	0	1,955
2012	226	42	4.00	0.000	7.05	0	n/a

**Notes:**

N/A - Data not available for these years

MG - Millions of Gallons

MGD - Millions of Gallons per Day

\*In 2008, all waste water was transferred from our new Ignacio Pump Transfer Station to the Novato Treatment Plant where it was treated. All waste water is treated solely at the Novato site as of completion of the Ignacio Pump Transfer Station in 2009.

**Source: Novato Sanitary District Operations and Accounting Departments**

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# Novato Sanitary District

## **POLICY HANDBOOK**

**POLICY TITLE:** Investment of District Funds

**POLICY NUMBER:** 3120

**ADOPTED/REVISED:** December 10, 2012

### **3120.1 PREMISE**

The legislature of the State of California has declared that the deposit and investment of public funds by local officials and local agencies is an issue of statewide concern (California Government Code (CGC) 53600.6 and 53630.1)

CGC Sections 5921 and 53601, et seq., allow the legislative body of a local agency to invest surplus monies not required for the immediate necessities of the local agency; and,

The fiscal officer of a local agency is required to annually prepare and submit a statement of investment policy and such policy, and any changes thereto, is to be considered by the local agency's legislative body at a public meeting (CGC 53646(a))

For these reasons, and to ensure prudent and responsible management of the public's funds, it is the policy of the Novato Sanitary District (District) to invest funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands of the District and conforming to all statutes governing the investment of District funds.

~~The Statement of Investment Policy for Novato Sanitary District includes the revised California Government Code Section 53600 effective January 1, 1996.~~

### **Funds Management 3120.2 SCOPE**

This investment policy applies to all financial assets of Novato Sanitary District, including Operating Funds, Capital Improvement Funds and Bond Funds.

**3120.2.1 Regular Warrants Account:** As cash is received, it is deposited in the District's Money Market Checking Account with Westamerica Bank. Cash on hand is reviewed daily and all inactive or reserve funds above the minimum balance are wire transferred periodically to the State Local Agency Investment Fund (LAIF), or invested locally in certificates of deposit. When the District writes checks, for whatever purpose, funds are withdrawn from LAIF to cover the checks written.

**3120.2.2 Payroll Account:** The District's payroll is prepared in-house. All pay checks and pay vouchers (for direct deposit) are processed through the District's Payroll Account with Westamerica Bank. After the checks and vouchers are reconciled, funds to cover payroll are transferred from the Operating Account to the Payroll Account.

**3120.2.3 Petty Cash Account:** The District maintains a Petty Cash account with a balance not to exceed \$1,000.00. This account is for small purchases.

## Statement of Investment Policy

Revision Adopted 12/10/12

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**3120.2.4 Capital Projects Account:** This account is used to track capital project expenditures throughout the year. Any excess balance above the minimum balance is wire transferred to LAIF. When the District writes checks for project expenses funds are withdrawn from LAIF to cover the checks written. Funds are transferred from the regular warrants account after this account has been funded by LAIF, for operating and project expenses.

**3120.2.5 ARRA Grant Project Account:** This account is established to receive grant funds under the American Reinvestment and Recovery Act for partial financing of the District's Recycled Water Project. The project is part of the regional recycled water project administered by the North Bay Water Reuse Authority.

**3120.2.6 Local Agency Investment Account:** Operating, Cash flow, and Capital reserves are invested in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The balance is available for withdrawal on demand.

**3120.2.7 Certificates of Participation (COP) Bond Fund:** The District must maintain the unspent proceeds of the COP with trustees or fiscal agents under the terms of the debt issue. The COP proceeds are administered by the Bank of New York Mellon and are invested with LAIF.

**3120.2.8 Excluded investments:** Funds not included in the policy include deferred compensation funds since the assets of the plan are held for the exclusive benefit of plan participants and their beneficiaries and the individual plan participants are responsible for the investment of these accounts.

### **3120.3 PRUDENCE**

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs; not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived. The standard of prudence to be used by investment officials shall be the "prudent investor" standard as stated in CGC Section 53600.3 and shall be applied in the context of managing an overall portfolio. Investment officers acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

### **3120.4 OBJECTIVES**

As specified in CGC Section 53600.5, when investing, reinvesting, purchasing, acquiring, exchanging, selling and managing public funds, the primary objectives, in priority order, of the investment activities shall be:

**3120.4.1 Safety:** Safety of principal is the foremost objective of the investment program. Investments of the District shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, diversification is required in order that potential losses on individual securities do not exceed the income generated from the remainder of the portfolio.

**3120.4.2 Liquidity:** The investment portfolio will remain sufficiently liquid to enable the District to meet all operating requirements which might be reasonably anticipated.

**3120.4.3 Return on Investments:** The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the

investment risk constraints and the cash flow characteristics of the portfolio.

**3120.5 DELEGATION OF AUTHORITY**

Authority to manage the investment program is derived from CGC Sections 53600, et seq. Management responsibility for the investment program is hereby delegated to the Treasurer, Beverly B. James, who shall establish written procedures for the operation of the investment program consistent with this investment policy. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. The following employees are authorized to telephone instructions for deposits and withdrawals from the District bank account to the State Treasurer and vice versa:

Beverly B. James, Manager-Engineer, Treasurer  
Laura M. Creamer, Finance Officer

No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Treasurer. The Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials. Under the provisions of CGC 53600.3, the Treasurer is a trustee and a fiduciary subject to the prudent investor standard. The District maintains a public officials' surety bond in the amount of \$200,000.

**3120.6 ETHICS AND CONFLICTS OF INTEREST**

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution of the investment program, or which could impair their ability to make impartial investment decisions.

**3120.7 AUTHORIZED FINANCIAL INSTITUTIONS AND DEALERS**

The Treasurer will maintain a list of financial institutions, selected on the basis of credit worthiness, financial strength, experience and minimal capitalization authorized to provide investment services. In addition, a list will also be maintained of approved security broker/dealers selected by credit worthiness who are authorized to provide investment and financial advisory services in the State of California. No public deposit shall be made except in a qualified public depository as established by state laws.

For brokers/dealers of government securities and other investments, the Treasurer shall select only broker/dealers who are licensed and in good standing with the California Department of Securities, the Securities and Exchange Commission, the National Association of Securities Dealers or other applicable self-regulatory organizations.

Before engaging in investment transactions with a broker/dealer, the Treasurer shall have received from said firm a signed Certification Form. This form shall attest that the individual responsible for the District's account with that firm has reviewed the District's Investment Policy and that the firm understands the policy and intends to present investment recommendations and transactions to the District that are appropriate under the terms and conditions of the Investment Policy.

Designated depositories for the deposit of inactive funds are:

~~Local Banks: Bank of America, Wells Fargo Bank and Westamerica Bank.~~

~~Local Savings and Loan Associations: Citbank and Chase Bank.~~

## Statement of Investment Policy

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~~State Treasurer's Local Agency Investment Fund (LAIF). The LAIF is made up of pooled funds from California local agencies which are invested by the State Treasurer. The maximum deposit allowed per agency is \$50,000,000 (effective 11/15/09). There is no minimum investment period and interest is earned daily. Money can be withdrawn within 24 hours.~~

### 3120.8 AUTHORIZED AND SUITABLE

It is the practice of the District to invest inactive operating and capital improvement funds only with the State Treasurer's Local Agency Investment Fund and/or with local banks and savings and loans. *Prohibited Investments.* Under the provisions of CGC Section 53601.6 and 53631.5, the District shall not invest any funds covered by this Investment Policy in inverse floaters, range notes, interest-only strips derived from mortgage pools or any investment that may result in a zero interest accrual if held to maturity.

### 3120.9 COLLATERALIZATION

All certificates of deposit must be collateralized by U.S. Treasury Obligations. Collateral must be held by a third party trustee and valued on a monthly basis. The percentage of collateralization on repurchase and reverse repurchase agreements will adhere to the amount required under CGC Section 53601(i)(2).

### 3120.10 SAFEKEEPING AND CUSTODY

All security transactions entered into by the District shall be conducted on delivery-versus-payment (DVP) basis. All securities purchased or acquired shall be delivered to the District by book entry, physical delivery or by third party custodial agreement as required by CGC Section 53601.

### 3120.11 DIVERSIFICATION~~Diversification~~

The District will diversify its investments by security type and institution. It is the policy of the District to remit money not required for immediate needs to LAIF for purposes of investment. Assets in the pooled money account are diversified to eliminate the risk of loss resulting from over concentration of assets in a specific maturity, a specific issuer or a specific class of securities.

### 3120.12 REPORTING~~Reporting~~

In accordance with CGC Section 53646(b)(1), Treasurer shall submit to each member of the Board of Directors a quarterly investment report. The report shall include a complete description of the portfolio, the type of investments, the issuers, maturity dates, par values and the current market values of each component of the portfolio, including funds managed for the District by third party contracted managers. The report will also include the source of the portfolio valuation. As specified in CGC Section 53646(e), if all funds are placed in LAIF, FDIC-insured accounts and/or in a county investment pool, the foregoing report elements may be replaced by copies of the latest statements from such institutions.

The report must also include a certification that (1) all investment actions executed since the last report have been made in full compliance with the Investment Policy and, (2) the District will meet its expenditure obligations for the next six months as required by CGC Section 53646(b)(2) and (3) respectively. The Treasurer shall maintain a complete and timely record of all investment transactions.

### 3120.13 INVESTMENT POLICY REVIEW~~Investment Policy Adoption~~

The Policy shall be reviewed on an annual basis, and modifications must be approved by the Board of

Statement of Investment Policy

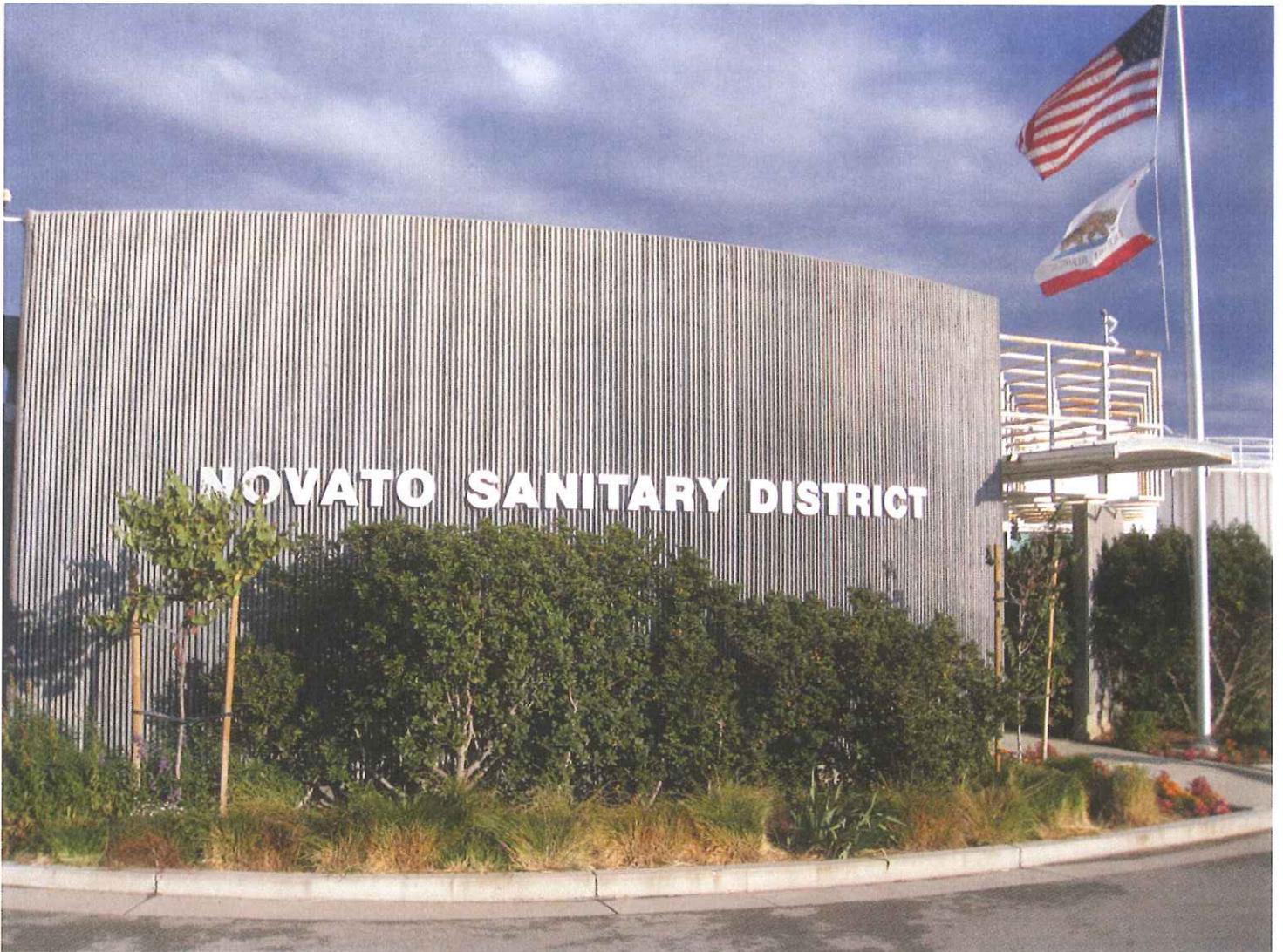
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Directors.



NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

#### SECTION

- 1 Overview
- 2 Treatment Plant Performance
- 3 Electronic Operations and Maintenance (eO&M) Manual  
Standard Operating Procedures  
Hach Water Information Management System (WIMS)
4. Asset Management
  - a. Maintenance
  - b. Repairs
    - Minor – Less than \$10,000
    - Major – Greater than \$10,000
- 5 Safety and Training
- 6 Staffing and Organization
- 7 Budget
  - a. Incentives and Adjustments

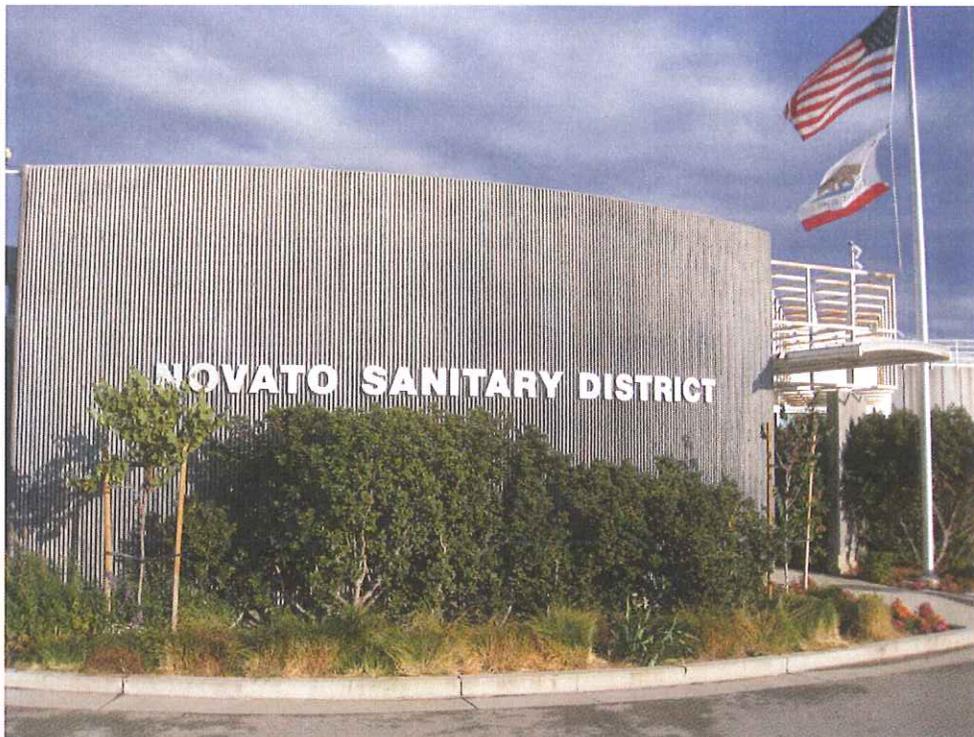
#### ATTACHMENTS

- 1 Data and Graphs
- 2 Criticality Report



NOVATO SANITARY DISTRICT  
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AUGUST 2011 – JULY 2012

**SECTION 1**



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

## Section 1 Overview

The following summary provides an overview of plant performance and activities for the period August 1, 2011 through July 31, 2012.

Total Volume of Water Processed	1,693.38	Million Gallons
Total Volume of Water Reclaimed	551.08	Million Gallons
Total Volume of Water Discharged	1,142.30	Million Gallons
Average Daily Dry Weather Flow	3.99	MGD
Maximum Daily Flow	11.97	MGD
Pounds of BOD Treated	3,409,436	
Pounds of BOD Removed	3,298,065	
Percent BOD Removal Efficiency	97%	
Pounds of TSS Treated	4,504,557	
Pounds of TSS Removed	4,422,175	
Percent of TSS Removal Efficiency	98%	
Pounds of Bio-solids Treated	3,169,887	
Cubic Feet of Biogas Produced	26,320,988	
Total Number of Violations / Excursions	2	
NPDES (Bay Discharge)	1	BOD Wkly Ave
WDR (Reclamation)	1	Total Coliform

### Maintenance

Total Number of Work Orders Issued	3471	
Total Number of Work Orders Closed	3444	
Percentage Preventive Maintenance	90%	
Average Completion	5.06	Days

### Consumables

Electricity – kWh / Year	3,264,734	
Electricity – kWh / MG	1,928	
*Natural Gas – Therms / Year	42,078	
Natural Gas – Therms / MG	25	
Diesel Fuel – Gallons / Year	1,625	
Diesel Fuel – Gallons / MGD	0.96	

\*Excludes Administration Building and Flare Pilot.

**ANNUAL OPERATIONS REPORT**  
**August 2010 – July 2011**  
**Veolia Water West Operating Services Novato**

**Key Events**

**August 2011 – July 2012**

**August 2011:**

- Replaced Compactor brushes on Grinder
- Repaired RAS Bubbler Panel
- Turblex on-site to investigate blower motor vibration
- Repaired High pressure water pumps @ GBT
- Pulled Decant Pump #6, removed struvite buildup

**September 2011:**

- Repaired #3 water leak on Primary Clarifier #2
- Triple rinsed old Ferric Tank for re-use
- Repaired leak on chlorine feed pumps
- Repaired cooling water discharge line - Dry weather effluent pump #5
- Replaced Mercoid limit switch on Secondary Clarifier #2

**October 2011:**

- Decant Pump #6 to Flygt for repair
- Installed new blast tube on Primary Digester Boiler
- Repaired #3 water leak on Aeration Basin #4
- Installed new UPS battery at Headworks Screenings Grinder/Compactor
- Annual Flow Meter Calibrations performed

**November 2011:**

- Installed new stem and adapter for Pond #2 – Reclamation
- Performed Annual Service on Filter Screen – Channel #2
- Repaired 2 ton hoist
- Installed new stem and adaptor for Pond #2 – Reclamation
- Replaced Mag Flow Meter on Primary #2

### **December 2011:**

- Repaired Aeration Basin #3 Influent Flow Control Gate
- Pumping out water intrusion of all Electrical Vaults
- Performed Annual Service on Filter Screen – Channel #1
- Repaired Coffing Hoist
- Repaired overspeed on Novato Generator #3
- Cleaned and greased telescoping valves at sludge lagoons #4 & #5 – Reclamation Area
- Replaced heater hoses on Administration Emergency Generator
- Repaired grit dumpster turnbuckle
- Block Heater Repaired on UV Generator

### **January 2012:**

- Decant Pump #5 pulled and sent to Flygt for repair
- Decant pump returned from Flygt and re-installed
- Decant Pump #6 Pulled and sent to Shape for repair
- Decant pump returned from Flygt and re-installed
- Pumping out water intrusion of all Electrical Vaults
- Fabricate aluminum chute for bin on channel #2 Grit Vortex & Channel #1 Grit Vortex
- #3 water line repair Channel #2 Grit Vortex
- Optic Fuel Clean inspected, cleaned filtered, polished and removed water, bacterial sludge and rust particles to waste drums from Diesel Fuel tanks at Ignacio and Novato

### **February 2012:**

- Drained Primary Clarifier #1, switched to Primary Clarifier #2
- Installed sampler enclosure at E-002
- Submitted Annual SMR
- Repaired motor control panel at Decant
- Wear Ring replacement on all 3 sewage pumps @ Ignacio
- Pumping out water intrusion of all Electrical Vaults

### **March 2012:**

- Repaired electrical panel/breaker @ Generator Bldg – Novato – outside contractor
- Primary Clarifier #1 electrical repair – outside contractor
- Changed out decant pump for struvite scaling
- Replaced flow meter on Primary Clarifier
- Pumping out water intrusion of all Electrical Vaults
- Installed compressor in Maintenance shop – Outside Contractor
- Replaced sample pump at UV
- Flushed Decant Line

**April 2012:**

- Reset guide tube @ Reclamation
- Performed annual maintenance on secondary scum pumps
- Annual service on Flygt pump
- Drained Primary Clarifier #2, Put Primary Clarifier #1 back in service
- Repaired Torque Switch on Primary Clarifier #1
- Annual Crane Inspection and Quadrennial Testing
- Annual Jerome Meter Recalibration

**May 2012:**

- Pumping out water intrusion of all Electrical Vaults
- Replaced solenoid valve Screenings Washer Compactor
- Annual Forklift Service
- Annual Fire Extinguisher Service
- Installed new batteries and charger for Gem Cart
- Replaced UPS battery – GBT #1 Main Panel
- Back flushed Sewage Pump #3 @ Ignacio to clear blockage

**June 2012:**

- EMS presentation to Board
- Annual service on Flygt pumps
- Replaced Bearing on #1 Odor Scrubber Fan
- Repaired water leaks on #3 water spray system in aeration basin
- Flushed Decant line
- Performed combustion test on Boiler
- HVAC repair in UV Building – warranty work – Outside Contractor
- Transitioned from Bay Discharge to Reclamation / Storage

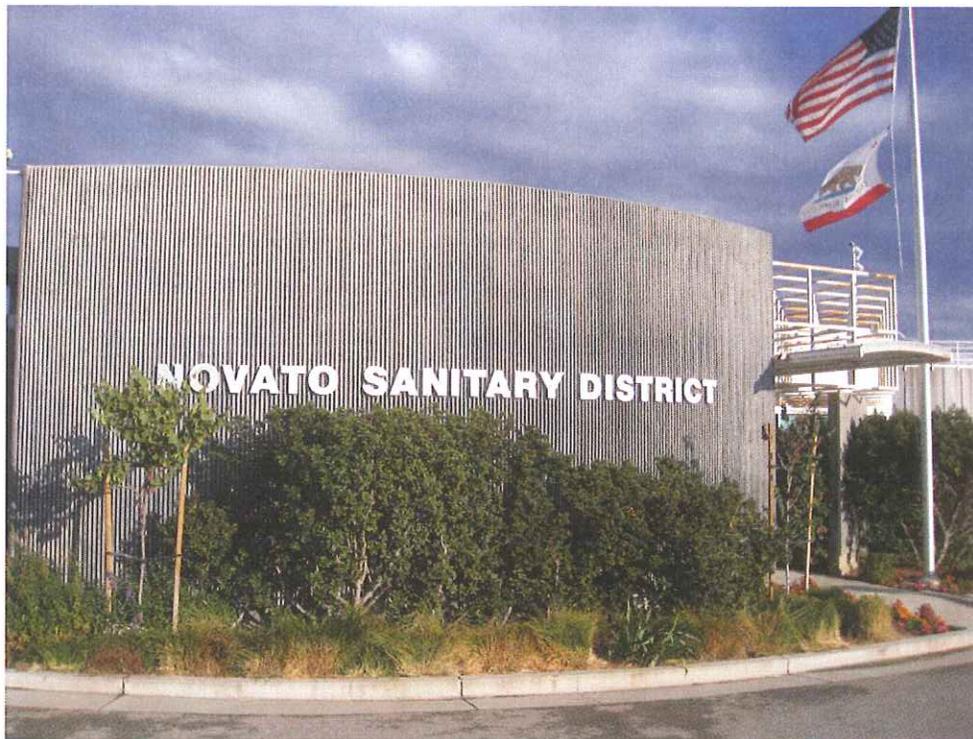
**July 2012:**

- Annual Service on Flygt Mixers
- Replaced fuel gauge - Novato above Ground Fuel Tank
- Seal failure. Pump sent to Flygt for repair, returned and installed Raw Sewage Pump #2 @ Ignacio
- Flushed Decant Line



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**SECTION 2**



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

## Section 2. Treatment Plant Performance Compliance Summary

Throughout the reporting period, August 2011 through July 2012, there was one NPDES violation and one WDR violation.

On August 3, 2011, a high total coliform value resulted in an exceedance of the 5 sample median requirement of 240 mpn/100 ml. The cause was ferric chloride buildup on the quartz sleeves on the ultra violet disinfection lamps. Ferric was fed to the influent pump station for odor control in the primary clarifiers and hydrogen sulfide control in the digesters.

In October 2011 a weekly BOD violation occurred. This was the result of a single high value (37 mg/L) on October 5<sup>th</sup> due to plant upset.

A more complete discussion of the violations follows the compliance summary tables below. The compliance summary table is broken down by constituent and discharge season.

Waste Discharge Limits / Reclamation				
Parameter	Limit	Units	Analysis	Violations
BOD Monthly Average	40	mg/L	5	0
Total Coliform - 5 Sample Median	240	mpn/100 ml	56	1
Total Coliform - Maximum	10,000	mpn/100 ml	56	0
pH – High	9.0	s.u.	99	0
pH – Low	6.0	s.u.	99	0

NPDES Wet Season Limits - November - April				
Parameter	Limit	Units	Analysis	Violations
BOD Weekly	45	mg/L	26	0
BOD Monthly	30	mg/L	6	0
TSS Weekly	45	mg/L	26	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	6	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	6	0
Ammonia – Daily Maximum	21	mg/L	83	0
Ammonia - Monthly Average	6	mg/L	6	0
pH – High	8.5	s.u.	132	0
pH – Low	6.5	s.u.	132	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	7	1
BOD Monthly	15	mg/L	2	0
TSS Weekly	20	mg/L	7	0
TSS Monthly	10	mg/L	2	0
BOD Removal (minimum)	85	%	2	0
TSS Removal (minimum)	85	%	2	0
Enterococcus - 30 Day Geo Mean	35	Col/100 ml	2	0
Fecal Coliform - Median	140	mpn/100 ml	2	0
Fecal Coliform - 90th Percentile	430	mpn/100 ml	2	0
Ammonia – Daily Maximum	21	mg/L	12	0
Ammonia - Monthly Average	6	mg/L	2	0
pH – High	8.5	s.u.	33	0
pH – Low	6.5	s.u.	33	0
Oil & Grease - Daily Maximum	15	mg/L	2	0
Oil & Grease - Monthly Average	5	mg/L	2	0

**\*TREATMENT PLANT PERFORMANCE SUMMARY:**

**VIOLATIONS FOR AUGUST 2011**

NPDES VIOLATION (DISCHARGE)	PARAMETER	RESULT	DATE
NONE			

WDR VIOLATION (RECLAMATION)	PARAMETER	RESULT	DATE
E-002	Total coliform: 5- day moving median 240 MPN/100mL	280 MPN/100mL	8/3/11
E-007	pH	9.1 su	8/24/2011
E-008	pH	9.5 su	8/24/2011

**EVALUATION OF VIOLATIONS FOR AUGUST 2011**

A 5-day moving median total coliform violation occurred on August 3<sup>rd</sup>. The violation appears to be the result of ferric chloride buildup on the ultra violet (UV) quartz sleeves. The ferric buildup prevented adequate UV light intensity in the water column. Ferric chloride was applied to the influent for H<sub>2</sub>S and odor control. Ferric chloride feed has been discontinued.

**VIOLATIONS FOR OCTOBER 2011**

NPDES VIOLATION (DISCHARGE)	PARAMETER	RESULT	DATE
Instantaneous Chlorine Residual	Chlorine	0.3 mg/L	10/5/2011
Maximum Weekly BOD	BOD	17 mg/L	10/2 – 10/8/2011

WDR VIOLATION (RECLAMATION)	PARAMETER	RESULT	DATE
E-004	pH	9.1	10/13/2011
E-007	pH	9.3	10/5/2011
E-008	pH	9.2	10/5/2011

## EVALUATION OF VIOLATIONS FOR OCTOBER 2011

### **Chlorine Residual and Weekly BOD, NPDES – E002:**

On October 4<sup>th</sup> sodium hypochlorite was overfed to the influent junction structure. This in turn resulted in a chlorine residual at our effluent monitoring station and a high effluent BOD value (37 mg/L).

The cause of overfeed was a preset under tensioning of a back pressure valve on the sodium hypochlorite feed pumps. The back pressure valve prevents product from flowing (siphoning) by gravity through the pump. The feed pumps had previously been used to feed sodium hypochlorite to the No. 3 water system. The No. 3 system operates at a system pressure of 75 psi. This 75 psi system pressure essentially acts as a backpressure on the hypochlorite feed pumps and masked the under-tensioning of the backpressure valve. To address the odor issues, the feed pumps were switched over and used to feed hypochlorite for odor control at the Influent Junction Structure (IJS). The head differential (backpressure) between the (full) sodium hypochlorite tank and the IJS is approximately negative 20 feet, versus the positive 75 psi system backpressure from the No. 3 water system. The lack of backpressure set up a siphon allowing product to flow at a high rate from the hypochlorite tank to the IJS.

A chlorine residual of 0.3 mg/L was measured at our effluent monitoring station, E002. A sample taken downstream at the old dechlorination station in Ignacio showed no chlorine present. Upon discovering the problem all flow was directed to the reclamation ponds and flow to the Bay was halted. It is believed that no chlorine reached the receiving waters. We are reporting this finding for possible future consideration by the Regional Board with regard to mandatory minimum penalties (MMP).

An ***Unregulated Discharge*** of less than 1,000 gallons occurred on October 19, 2011. The discharge of fully treated final effluent happened when a contractor, Gateway Pacific Inc., working on site pumped the treated effluent off site into an adjacent pasture. Regulatory notifications were made to:

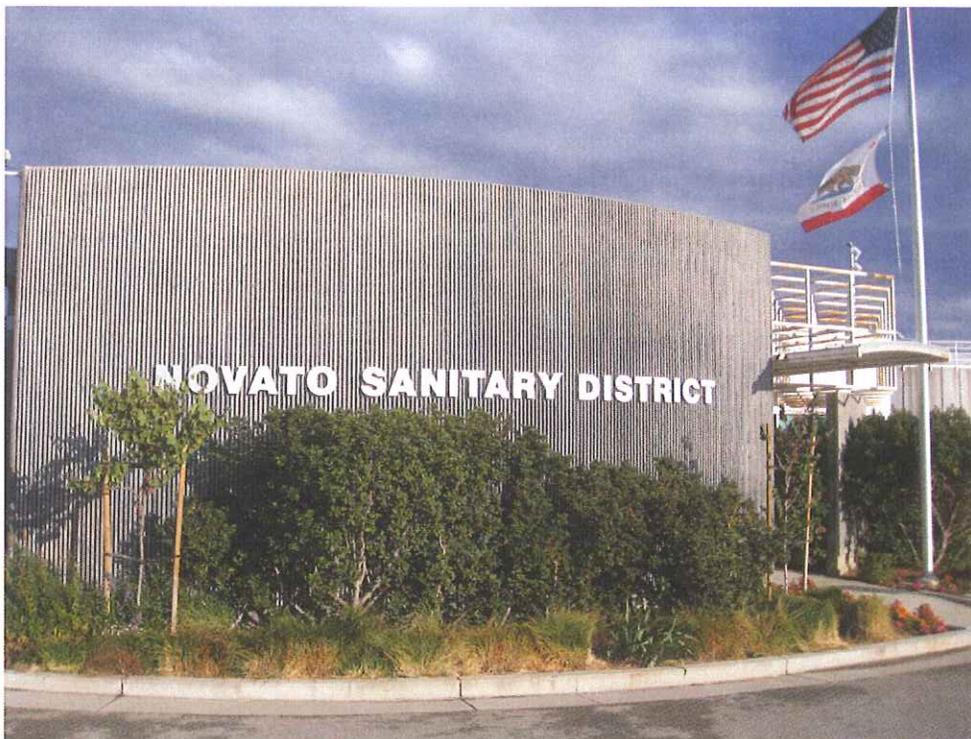
- Marin County Environmental Health Services
- Office of Emergency Services
- San Francisco Regional Water Quality Control Board
- California Department of Fish and Game

\*Descriptions taken from August 2011 and October 2011 Monthly Operational Reports (MOR)



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**SECTION 3**



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

## Section 3 O&M Manual, SOP, and Hach WIMS

### Electronic Operation and Maintenance (eO&M) Manual

An electronic operations and maintenance (eO&M) manual was developed by HDR Engineering as part of the recent treatment facility upgrade. The eO&M provides facility descriptions, operating scenarios, troubleshooting information, and much more. The manual also provides links to equipment operations and maintenance manuals, design information, diagrams, schematics, and other relevant information. The eO&M manual is a living document that will be updated as needed.

### Standard Operating Procedures (SOP)

The eO&M manual is supplemented by SOP. The SOP provides specific instruction on performing tasks. The general SOP layout is as follows:

- description of the work to be performed
- safety considerations
- personal protective equipment required
- lockout Tagout or other special requirements
- step by step instructions on completing the work

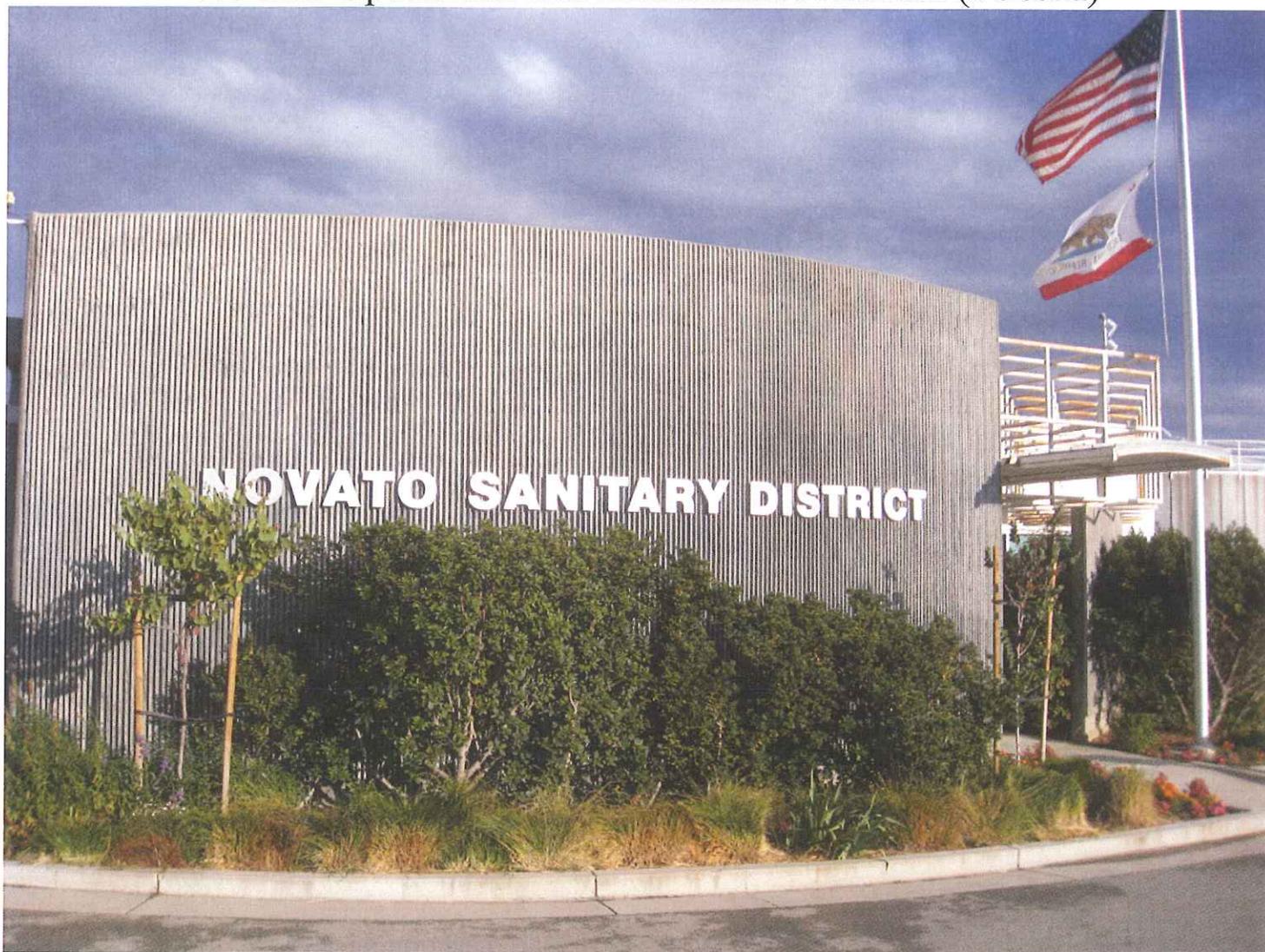
### Hach WIMS (Water Information Management System)

Like Hach Job Plus Hach WIMS is an off-the-shelf non-proprietary software system used to store and access data. Operational and laboratory information is entered into the data base. WIMS provides preformatted reports as well as wizards that allow the user to build customized reports.

The following pages offer examples of the eO&M, Hach WIMS, and SOP.



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Electronic Operations and Maintenance Manual (eO&M)



## Process Summary

### Purpose

The plant operates under National Pollutant Discharge Elimination System (NPDES) permit CA0037958, which allows discharge to San Pablo Bay only during the months of September through May. The plant effluent is discharged to San Pablo Bay through an outfall and multipoint diffuser located in the intertidal zone adjacent to the former Hamilton Air Force Base. When plant effluent is discharged to the Bay, it must be oxidized, nitrified and clarified to meet the effluent BOD, ammonia, and suspended solids limits. The treatment processes required for discharge to the Bay include screening, grit removal, primary treatment, secondary treatment including nitrification, and disinfection. The permit prohibits effluent discharge to San Pablo Bay between June 1 and August 31. During this period the plant effluent is discharged to a 15-acre wildlife pond and to storage ponds for subsequent pasture land irrigation. Nitrification is not required when the effluent is used for irrigation. Additionally, tertiary treatment is provided for a portion of the plant effluent that is then used for golf course irrigation.

### Ignacio Transfer Pump Station

The former Ignacio Wastewater Treatment Plant was converted to a pump station and flow equalization facility in 2008. The pump station capacity is 5 mgd. The station serves the Ignacio Service Zone and pumps wastewater through a forcemain to the Novato Wastewater Treatment Plant. The forcemain crosses under Highway 37, runs behind the Vintage Oaks Shopping Center, behind the theaters, and under the recreational trail behind the Novato Community Hospital, where it connects to a gravity line that runs to the Novato Wastewater Treatment Plant.

### Ignacio Flow Equalization

Four storage ponds located at the Ignacio Pump Station provide flow equalization of peak wet weather flows. The total capacity of the four storage ponds is 3 million gallons. This volume can accommodate a 5.0-mgd flow for up to 14 hours. Peak flows greater than the Ignacio Pump Station's capacity of 5 mgd are pumped to the storage ponds by a separate set of pumps. After the peak flow event, the storage ponds drain by gravity back to the Ignacio Pump Station wetwell for pumping to the plant. Flow equalization reduces the plant peak influent flow from 52 mgd down to 47 mgd. The two secondary clarifiers will accommodate the maximum 3-hour peak flow of 47 mgd; thus, additional flow equalization is not provided at the plant. The third clarifier can be added in the future if performance of the clarifiers during peak wet weather flows indicates a necessity.

### Plant Influent Pumping

Raw wastewater from the conveyance system enters the Influent Pump Station and is pumped by six variable speed submersible pumps to the Headworks. The wetwells are covered and ventilated to an odor control system.

### Headworks - Screening

Two automatic, self-cleaning screens remove debris to protect downstream equipment from plugging. A manually cleaned bar rack is installed as a backup. Screenings drop into a shaftless screw conveyor for transport to a washer compactor. Washed and dewatered screenings are discharged into a dumpster for landfill disposal. The screened wastewater flows into the grit removal basins.

### Headworks - Grit Removal/Flow Measurement

Two, forced vortex, grit removal basins remove sand and other coarse material to protect downstream equipment from abrasion and damage. Grit pumps deliver the grit slurry to hydrocyclones and classifiers. The clean, dry grit is discharged to a dumpster for landfill disposal.

### Primary Treatment

Two primary clarifiers provide removal of settleable solids and floatables. Primary sludge and scum are pumped to the anaerobic digestion system for solids reduction and stabilization. The primary clarifiers are covered and ventilated to an odor control system. The primary effluent flows by gravity to the biological treatment process.

### Aeration Basins/Blowers

The biological treatment process consists of four aeration basins, two secondary clarifiers, three return activated sludge pumps and three aeration blowers. The aeration basins provide oxidation of primary effluent BOD, nitrification of ammonia to nitrate and denitrification of nitrate to nitrogen gas. The aeration basins can be operated in either the normal (plug) flow mode or the contact stabilization flow mode. In the normal flow mode, the biological process can be operated to provide BOD removal only or to provide nitrification. In the contact stabilization mode, the biological process is operated to provide nitrification. One multi-stage and two, single-stage centrifugal blowers are installed to provide aeration air. Fine bubble, rubber membrane, aeration diffusers are provided in the aeration basin. One, positive displacement, rotary lobe blower provides mixed liquor channel aeration to prevent solids from settling.

### Secondary Clarifiers/RAS Pumping

Mixed liquor flows from the aeration basins to the two circular secondary clarifiers. The aeration basin mixed liquor splitter box has provisions for a future third secondary clarifier that will be built when influent flows increase to the point that an additional secondary clarifier is needed. Mixed liquor solids settle in the secondary clarifier and the clarified effluent flows to the effluent disinfection system. Settled solids are removed by a rotating scraper on the bottom of the clarifier and flow to the return activated sludge (RAS) wet well. The RAS flow rate out of each clarifier to the wet well is controlled by a modulating valve. The three variable speed RAS pumps, pump the settled solids from the RAS wet well back to the aeration basin influent splitter box.

### Effluent Disinfection

Secondary effluent is disinfected by ultraviolet (UV) light. The secondary effluent flows through three UV channels where it is exposed to the UV light. The number of channels and the number of UV lamps in each channel that are placed into service are flow paced to provide adequate disinfection at a minimum energy cost. The UV bulbs are cleaned in place by an air scouring system. In addition, an automatic wiper system activates on a timed cycle to clean the UV bulbs. If necessary, manual cleaning can be performed by first removing the UV lamp module from the channel using the overhead bridge crane and then wiping each bulb with a cleaning solution.

### Effluent Pumping

Normally, plant effluent flow by gravity to the outfall diffuser or to reclamation. Under high tide and/or high plant flow conditions, the effluent must be pumped. An effluent pumping station is located adjacent to the UV disinfection basin. The effluent pumping station contains two dry weather pumps and provisions for two future wet weather pumps. The two dry weather pumps can accommodate the effluent pumping up to a plant flow of 20 MGD. Plant flows greater than 20 MGD pass through the effluent flow equalization basin to an existing wet weather effluent pump station.

### **Effluent Reclamation**

The NPDES permit prohibits effluent discharge to San Pablo Bay between June 1 and August 31. During this period the plant effluent is discharged to a 15-acre wildlife pond and to reclaimed water storage ponds. The reclaimed water irrigates 820 acres of pasture lands adjacent to State Route 37. In addition, a 0.5-mgd Recycled Water Facility, located adjacent to the reclaimed water storage ponds, provides irrigation water to the Stone Tree Golf Course in Novato. The recycled water is treated to meet California Department of Public Health Title 22 requirements for unrestricted bodily contact. This project is a first step to introduce and expand the use of recycled water within the Novato Service Area. The facility will offset approximately 85 million gallons per year of potable water demand for landscape irrigation, reduce dependence on imported water supply from the Russian River, and reduce wastewater discharge into the San Pablo Bay.

### **Waste Activated Sludge Thickening**

Waste activated sludge (WAS) from the secondary treatment process is thickened with gravity belt thickeners. The WAS thickening system removes excess water from the WAS, thus reducing the volume sent to the anaerobic digester system. The gravity belt thickeners thicken the WAS from 0.7% total solids to approximately 5% total solids. WAS thickening improves digester operation by reducing the hydraulic loading, decreasing the heating demand, and increasing the sludge retention time.

### **Anaerobic Digestion**

Two mesophilic anaerobic digesters provide solids stabilization. Anaerobic digestion is a series of biological processes in which bacteria break down biodegradable material in the absence of oxygen. The process is widely used to treat wastewater solids because it reduces the feed solids volume and mass and produces digester gas containing approximately 65% methane that is usable as a fuel. The digester gas is compressed for use as a fuel source to fire the hot water boiler and microturbine cogeneration system and a gas-fired engine generator. Excess digester gas is flared off.

### **Biosolids Storage**

Anaerobically digested biosolids are transferred to the biosolids storage lagoon as required to maintain sufficient operating room in the digesters for proper treatment. The biosolids are held within the biosolids storage lagoons a sufficient time to provide additional treatment and to concentrate the solids. After sufficient treatment the biosolids are removed from the lagoon and applied to the District's dedicated disposal site.

### **Odor Control**

Foul air from the influent pump station, septage receiving, headworks, primary clarifiers, aeration basins influent splitter box, gravity belt thickeners and anaerobic digester sump and draw-off boxes is exhausted to a mineral soil bed treatment system. Foul air is forced through the soil bed, where hydrogen sulfide and other gases are absorbed on the soil filter media where microbial degradation of the absorbed gas compounds occurs.

**Process Overview - Design Influent Loading**

Constituent	Value
Design Year	2025
<b>Design Flows (mgd)</b>	
Average Dry Weather (ADWF)	7.0
Average Annual (AAF)	7.8
Average Wet Weather (AWWF)	10.3
Peak Week	17.7
Peak Wet Weather Flow, Max Day (PWWF)	30.7
<b>Design Loadings (pounds/day)</b>	
Average BOD Loading	14,600
Average TSS Loading	17,600

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## Process Overview - Design Influent Loading

Constituent	Value
Design Year	2025
Design Flows (mgd)	
Average Dry Weather (ADWF)	7.0
Average Annual (AAF)	7.8
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Peak Week	17.7
Peak Wet Weather Flow, Max Day (PWWF)	30.7
Design Loadings (pounds/day)	
Average BOD Loading	14,600
Average TSS Loading	17,600

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## Ignacio Pump Station and Flow Equalization Overview

### Purpose

The former Ignacio Wastewater Treatment Plant was converted to a pump station and flow equalization facility in 2008. The pump station capacity is 5 MGD. The station serves the Ignacio Service Zone and pumps wastewater through a force main to the Novato Wastewater Treatment Plant.

### Theory of Operation

#### Pumping and Equalization

The Ignacio Pump Station and Flow Equalization Facility is designed to handle up to 10 MGD. This capacity is available utilizing the 5-MGD pumping capacity while also utilizing the 5-MGD storage capacity located at the site. Under normal conditions, the pump station conveys all flow to the Novato Wastewater Treatment Plant.

Three 2,300-gpm submersible sewer pumps with variable frequency drives (VFDs) are installed. The VFDs control the speed of the individual pumps to maintain a pre-set wet well level. As the flow into the pump station increases, the speed of the pumps increases. If the online pump(s) cannot keep up with the flow, additional pumps are called into service to meet the influent demand.

Proper operation and control of the pump station will enhance operation at the Novato Wastewater Treatment Plant. Surges at the pump station may cause decreased process performance at the plant. Examples are an increased inert carryover at the grit basins; decreased detention time at the primary and secondary clarifiers, resulting in less settleable solids removal; and varying hydraulic surges through the UV chambers, resulting in a reduction in disinfection.

To minimize the impacts of flow surges, flow equalization is used. A portion of the influent flow is diverted to storage and subsequently reintroduced back into the system as capacity becomes available.

Centrifugal pumps deliver a variable flow rate depending upon system head. The discharge flow rate from a centrifugal pump is inversely proportional to the discharge pressure it is pumping against. As discharge pressure rises, flow rate from the pump drops. This relationship continues until shutoff head for that pump is reached. Shutoff head is the maximum pressure that a pump can produce. With most pumps, the fluid being pumped also acts as a cooling medium for the pump internals. If a centrifugal pump discharge pressure approaches the shutoff head, the flow approaches zero and the pump may overheat. Refer to Centrifugal Pump Theory for a more detailed explanation.

#### Variable Frequency Drives

The pump motors are driven by a variable frequency drive (VFD). With increasing costs of energy, decreasing energy consumption is expected by the ratepayer. One efficient and practical way to do this is installing VFDs on electric motors.

The speed equation for a 3-phase electric motor is:  $\text{Speed} = (120 \times \text{Frequency}) / \text{Number of poles}$ , where 120 = a constant, F = electrical power frequency, and the number of poles is determined at motor construction, i.e., a 2-pole, 4-pole, or 6-pole machine. If we look at a 2-pole machine and 60-Hz supply, the speed calculates out to 3,600 rpm. The only way to vary the speed is to change the frequency (F) in the equation. We can accomplish this with a VFD.

### Components

The Ignacio Pump Station and Equalization Facility includes the following components:

- ▣ Transfer Pumps
- ▣ Equalization Pump
- ▣ Grinder and Manual Bar Rack
- ▣ Equalization Tanks
- ▣ Odor Control Facility
- ▣ Motorized Valves and Gates
- ▣ 3W Water System
- ▣ Standby Power
- ▣ Process Atmosphere Monitoring

### Description

Flows from the East Hamilton Pump Station and Bel Marin Keys No. 5 Pump Station discharge into the Force Main Diversion Structure. Under normal conditions, this flow discharges into the Influent Structure to join with flow from the gravity collection system. As the level in the diversion structure increases, a portion of the influent is fed by gravity to Diversion Structure No. 1. The flow is gravity-fed back into the diversion structure when flow is reduced. If flow equalization is required, the Force Main Diversion Gate modulates closed to back up flow in the diversion structure, causing the level to raise and forcing additional flow to the equalization basins.

Once flow enters the influent channel, it travels through the grinder and into the pump station wet well. The grinder operates continuously. If the grinder fails or flow exceeds the pump station discharge capability, the level in the influent channel raises and flows over the bypass weir through a manually- cleaned bar rack. A discharge gate on the bypass channel is forced open if the bypass channel is needed.

Three submersible sewage pumps pump the sewage to the Novato Wastewater Treatment Plant. The variable speed pumps operate

in a Lead/Lag/Standby configuration. The speed and number of pumps in service is determined based on wet well level. The flow of the pump station is monitored via an inline magnetic flow meter.

During high flow periods (>5 mgd), equipment malfunction, or if the District wishes to reduce the influent flow to the treatment plant, flow equalization and/or storage is necessary. Under these conditions, a portion of the flow is either diverted via gravity or pumped to the equalization basins.

The diverted flow is conveyed to Equalization Basin 1. The level in Equalization Basin 1 rises and overflows to the equalization diversion structure. As the water level continues to rise, it starts flowing into Equalization Basins 2, 3, and 4. The levels in Equalization Basin 1 and in the Basin Diversion Structure are monitored at all times.

As flows decrease and the level drops, flows from Equalization Basin 1 and the basin diversion structure flow back into the pump station wetwell. In order to drain Equalization Basins 2, 3, and 4, an operator must manually open the diversion structure gates. This may be accomplished remotely via SCADA.

### Transfer Pumps

#### P-2921-1, P-2921-2, P-2921-3

Three submersible sewage pumps located in the pump station wetwell pump sewage from the Ignacio service area to the Novato Wastewater Treatment Plant. The speed of each pump is VFD-controlled. Motor temperature and moisture alarms are provided to protect the pump. The pumps are configured to operate in a Lead/Lag/Standby mode. Speed of the pumps is controlled by the level in the wetwell.

A position switch on each pump check valve alarms if the pump is called to run and the valve does not open. A motorized plug valve is provided to isolate the valve from service when needed. A pressure indicator is available to check pump performance.

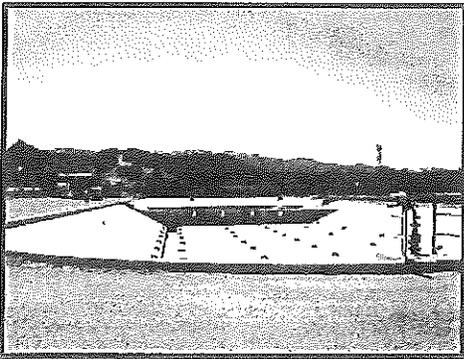
### Equalization Pump

#### P-2922-1

A flow equalization pump provides up to 5 mgd of pumping capacity to the equalization facility. The speed of the pump is VFD-controlled. Motor temperature and moisture alarms are provided to protect the pump. A position switch on the pump check valve alarms if the pump is called to run and the valve does not open. A pressure indicator is available to check pump performance.

The pump discharges into SSMH4 and then into EQ Basin 1.

### Equalization Tanks

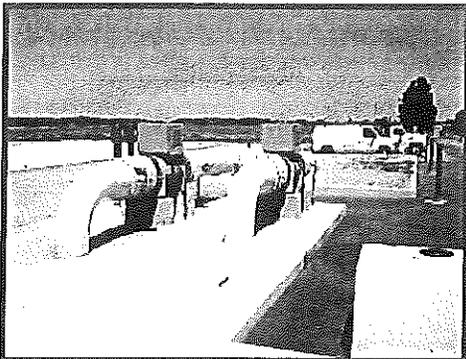


Four equalization tanks are available to store and release water to the system. The level in EQ Basin 1 raises and lowers to provide water to the transfer pumps. EQ Basin 1 acts to buffer the flow into the pump station wetwell. As the flow from East Hamilton and Bel Marin Keys No. 5 pump stations rise, some of the flow is diverted to EQ Basin 1. As the flow decreases, this flow is diverted back to the pump station wetwell.

Equalization Basins 2, 3, and 4 store sewage when the conveyance line is above capacity. These tanks are manually drained back to the pump station wetwell.

### Odor Control Facility

#### EF-2980-10.01, EF-2980-20.01



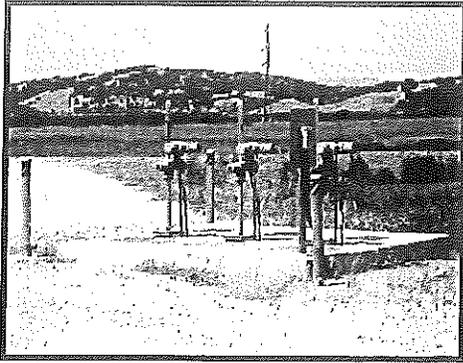
Foul air is pulled from the pump station wetwell and pushed to a mineral soil bed by two foul air exhaust fans.

A damper controls the airflow into the foul air ducting and a backdraft damper minimizes the possibility of short-circuiting the system. Each fan is equipped with a pressure indicator and a low flow switch to indicate problems with the system.

The soil bed is equipped with an irrigation system to ensure that the media stays moist. Allowing the system to dry out could lead to unwanted odors.

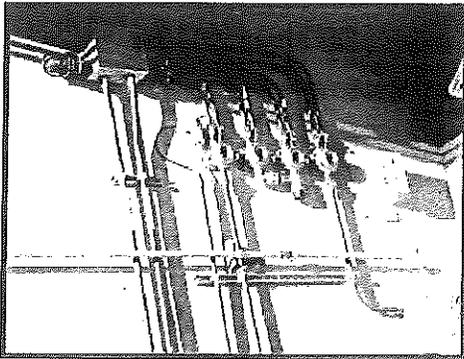
### Motorized Valves and Gates

Numerous motorized control valves and gates are utilized to operate the pump station correctly. Gates are used for equipment isolation and flow control purposes.



See Controls/Procedures for additional information on this equipment.

### Atmospheric Monitoring ▾

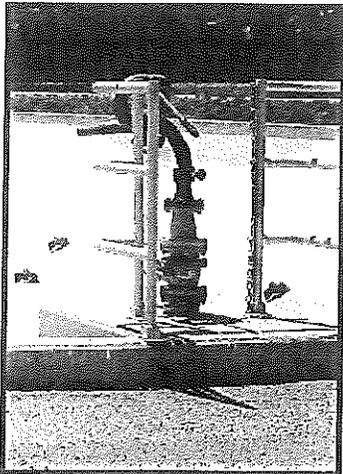


The pump station wetwell is continuously ventilated and the atmosphere monitored for combustible gases. If the atmosphere meets the requirement of NFPA 820, the wetwell status may be reduced from a Class 1 Division 1 to a Class 1 Division 2 classification.

In addition, the influent channel is monitored for combustible gases, oxygen deficiency, and H<sub>2</sub>S concentration.

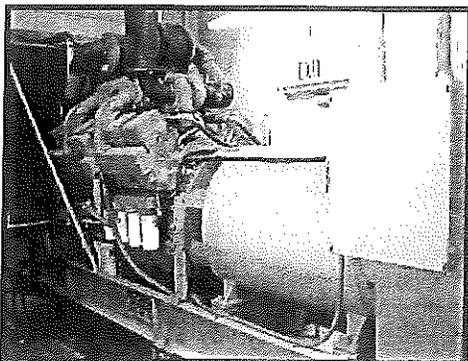
Go/No Go indications are provided in the vicinity of the influent channel and pump station wetwell. No Go is displayed if there is a loss of ventilation or a high concentration of combustible gas, or if low oxygen or high H<sub>2</sub>S is encountered.

### 3W Water System ▾



A 3W water system is provided at the Ignacio Pump Station and Equalization Facility to assist in equalization basin hose down activities.

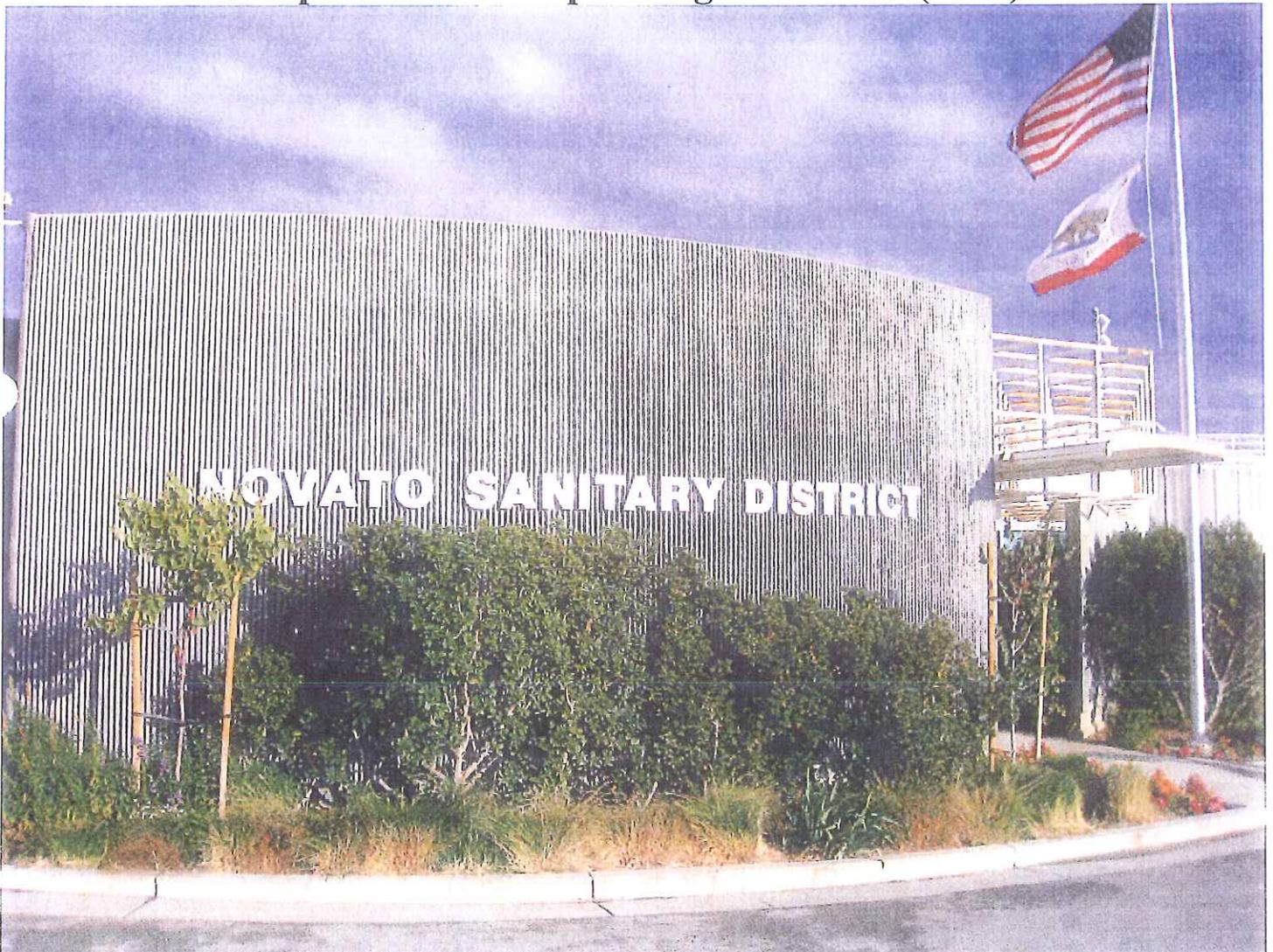
### Standby Generator ▾



The old Ignacio Treatment Plant Standby Generator provides standby power for the Ignacio Pump Station.



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Sample Standard Operating Procedure (SOP)





**Facility Name:** Novato Sanitary District

**Title:** RAS Pumping Procedure for Bubbler Failure

**Date:** 8/24/11

**Author:** Ed Mann

**References:** Operation and Maintenance Manual

**Introduction and Purpose:** When determining actions involved in the RAS system the basics of the system must be fully understood:

1. RAS is not pumped directly from the clarifiers
2. RAS flows from the clarifier by gravity into the RAS /WAS sump
3. It is not possible to over flow the sump because the sump deck is higher than the Secondary Clarifier water surface.
4. RAS flow is controlled by butterfly modulating valves, not RAS pump speed.
5. RAS pump speed is a function of water level in the sump and level set-points.
6. RAS pumps may cycle, however RAS flow under normal conditions will remain constant.

**Trigger:** In the event of failure of the RAS Bubbler or any other components of the level control system, it will become necessary operate the Return Activated Sludge System manually. The following procedure will determine and define actions required during such failure.

**Equipment:** Secondary Clarifier(s) RAS/WAS Pit

**SAFETY EQUIPMENT REQUIRED:** Hard Hat, Safety Glasses, Gloves, Steel Toed Shoes

**SAFETY PRECAUTIONS:** Perform MSA and JSA

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**Procedure:**

**Manual RAS System Operation:**

1. Place RAS Modulating Butterfly Valve(s) in Manual and Set at 100% Open (BFV-1331-06.02 for Secondary #1, BFV-1331-06.04 for Secondary #2).
2. Place all RAS pumps in Local "OFF"
3. Allow time for the clarifiers(s) to equalize with the RAS/WAS sump.
4. Once RAS Flow Meter(s) indicate "0" flow ( FE-1331-08.01 for Secondary #1 and FE-1331-08.03 for Secondary #2 ), the units are equalized.
5. Select any RAS pump (1 through 3) place it in "Manual" and set speed control at 66%. Start the unit.
6. Allow a few minutes for a differential to develop in the RAS/WAS sump. Observe the RAS flow Meters until they stabilize.
7. Adjust pump speed using the Following formula:  
  
Daily "Q" X RAS % / .00144  
  
Example:  
  
 $4.5 \text{ MGD} \times .50 / .00144 = 1,562.5 \text{ GPM}$
8. If more than one Secondary Clarifier is in service the sum of the flows from all clarifiers should equal this amount.

**Restoration of Service:**

1. Upon restoration of bubbler function turn the operating RAS pump "OFF".
2. Place the RAS Modulating Butterfly Valve in "AUTO" (BFV-1331-06.02 for Secondary #1, BFV-1331-06.04 for Secondary #2).
3. Place RAS control in flow pace mode at the desired percentage.

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4. Place all RAS pumps in "AUTO".
5. Observe pumping operation until the system has stabilized.

**Equipment Listing:**

**Quality Control:**

It will take at least one hour to complete a re-start of the listed plant equipment and typically as much as four hours on-site to ensure that the plant has returned to the desired "steady state" operation.

**Safety:**

Follow all facility safety, health and environmental policies and procedures while using these procedures. Take all personnel safety precautions during the start-up and operation. All personnel are required to stop and report to their supervisor any job which they feel may be unsafe or could cause an environmental incident.

**Contacts:**

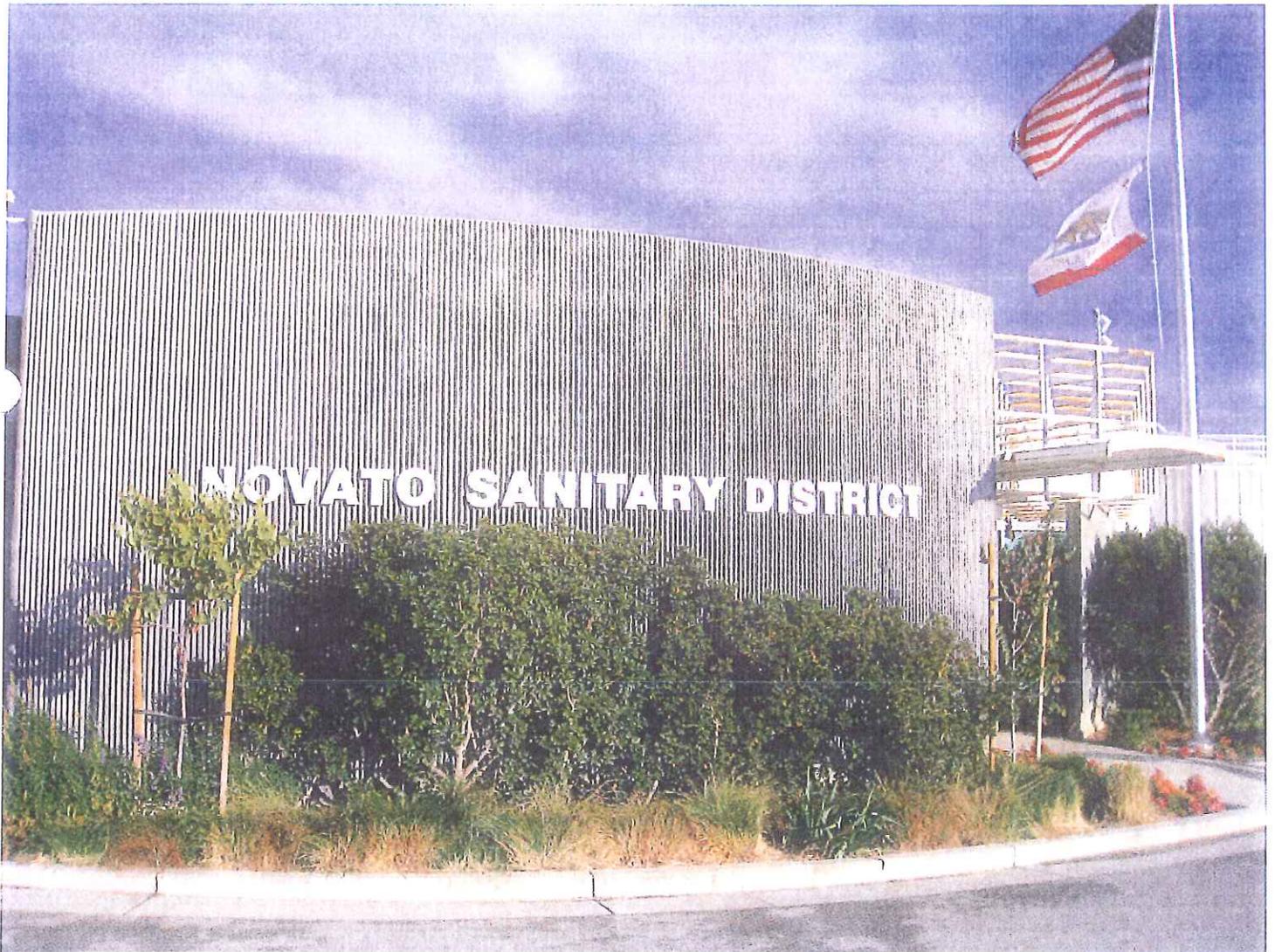
Plant Manager – John Bailey  
Operations Manager – Ed Mann  
Administrative Assistant – Lynda Rodefer  
Laboratory Director – Linda Candelaria

C:\mydocuments\novato\sops\RAS pumping procedure for bubbler failure 8-24-11

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**Hach WIMS**



# Aerati Basins Unit Process Report

Start Date: 06/01/12  
End Date: 06/30/12

Report Date: 11/15/12

#	Parameter	Units	Total	Average	Min	Max	Trend	Flag	LCL	LWL	Target	UWL	UCL	# Samples
1021	Aeration Basin #1 MLSS	mg/L	10,498	1,312	1,283	1,349	1		800	1100	2000	2500	3000	8
1022	Aeration Basin #2 MLSS	mg/L	36,832	1,754	1,311	2,056	31		800	1100	2000	2500	3000	21
1023	Aeration Basin #3 MLSS	mg/L	32,643	1,554	1,199	1,888	34		800	1100	2000	2500	3000	21
1024	Aeration Basin #4 MLSS	mg/L	37,167	1,770	1,299	2,127	34		800	1100	2000	2500	3000	21
1025	Aeration Basin #1 MLVSS	mg/L	4,335	1,084	1,071	1,098	5		700	900	1700	2200	2300	4
1026	Aeration Basin #2 MLVSS	mg/L	15,771	1,434	1,075	1,652	47		700	900	1700	2200	2300	11
1027	Aeration Basin #3 MLVSS	mg/L	14,091	1,281	1,004	1,486	55		700	900	1700	2200	2300	11
1028	Aeration Basin #4 MLVSS	mg/L	16,201	1,473	1,204	1,765	50		700	900	1700	2200	2300	11
1050	Aeration Basin #1 MLSS Inventory	lbs	93,507	11,688	11,428	12,016	7		8000	13000	16000	19000	20000	8
1051	Aeration Basin #2 MLSS Inventory	lbs	328,067	15,622	11,677	18,313	276		8000	13000	16000	19000	20000	21
1052	Aeration Basin #3 MLSS Inventory	lbs	290,755	13,845	10,680	16,817	300		8000	13000	16000	19000	20000	21
1053	Aeration Basin #4 MLSS Inventory	lbs	331,051	15,764	11,570	18,945	303		8000	13000	16000	19000	20000	21
1112	Aeration Basin #1 SVI	mL/g	768	110	90	125	2		50	75	120	200	250	7
1113	Aeration Basin #2 SVI	mL/g	1,991	100	74	130	1		50	75	120	200	250	20
1114	Aeration Basin #3 SVI	mL/g	2,249	112	85	143	1		50	75	120	200	250	20
1115	Aeration Basin #4 SVI	mL/g	1,977	99	71	122	1		50	75	120	200	250	20
1071	Aeration Basin #1 F:M Ratio	Ratio	0.53	0.13	0.10	0.14	0.01		.08	.10				4
1072	Aeration Basin #2 F:M Ratio	Ratio	0.94	0.13	0.09	0.17	0.01		.08	.10				7
1073	Aeration Basin #3 F:M Ratio	Ratio	1.06	0.15	0.10	0.18	0.01		.08	.10				7
1074	Aeration Basin #4 F:M Ratio	Ratio	0.91	0.13	0.09	0.16	0.01		.08	.10				7
							0							
							0							
1085	Aeration Basin #1 Sludge Age		58	15	12	16	1							4
							0							
							0							
							0							

Notes / Comments:

Process Control Signature: \_\_\_\_\_

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



# Novato Solids handling

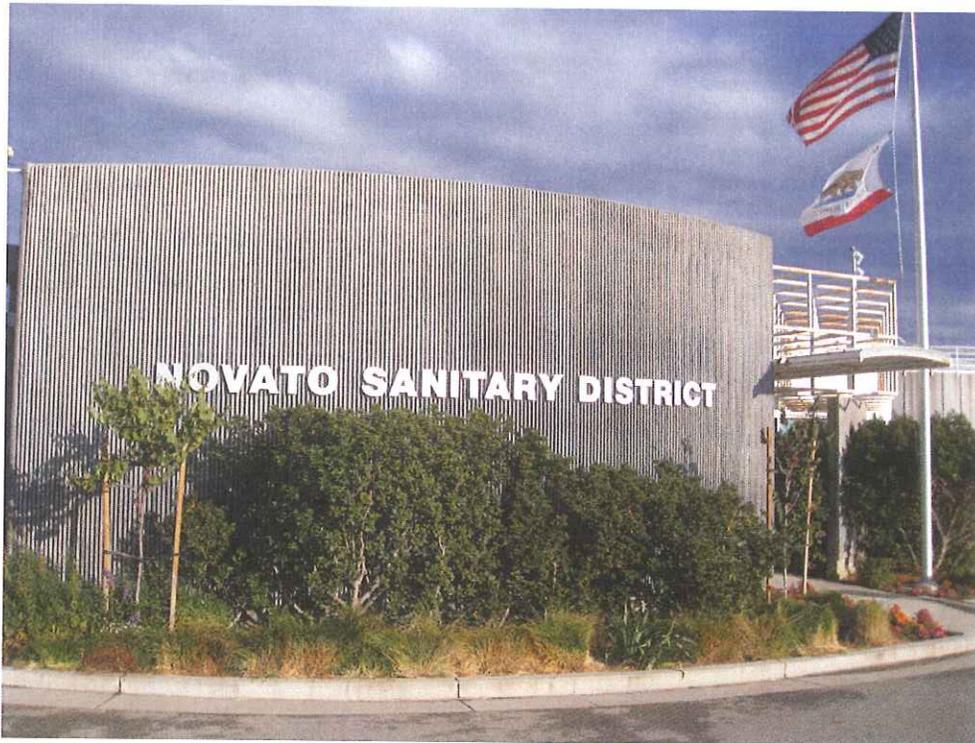
Start Date 5/1/2012  
 End Date 5/31/2012  
 Forecast 60.00

Parameter	Average	Min	Max	Trend	Forecast	Target
Digester 1 Feed Flow (GPD)	21,746	15,628	25,569	60	24,450	
Digester 1 Detention Time (Days)	26	22	37	-0	22	
Digester 1 Volatile Solids Load (lbs/day)	0.08	0.07	0.09	0	0	
Digester 1 Feed % TS (%)	4.2	4.0	4.5	-0.1	-1.4	
Digester 1 VS Ld/1,000ft3 (lbs/day)	95.11	82.23	102.25	0	123	
Digester 1 Feed TS Pounds (lbs/day)	7,732	7,092	8,132	19	8,835	
Digester 1 Feed % VS (%)	3.49	3.08	3.66	-0.07	-0.66	
Digester 1 Feed VS Pounds (lbs/day)	6,357	5,497	6,834	32	8,209	
Digester 1 Temperature (Deg F)	97.8	96.1	98.2	-0.0	97.7	
Digester 1 pH (SU)	7.8	7.7	8.0	-0.1	4.9	
Digester 1 Volatile Acids (mg/L)	372.5	274.0	564.0	89.8	5,536.0	
Digester 1 Alkalinity (mg/L)	3,962.5	3,875.0	4,085.0	-71.0	-130.0	
Digester 1 Vol Acids Alkalinity Ratio (ratio)	0.09	0.07	0.15	0.02	1.50	
Digester 1 Eff % TS (%)	2.33	2.23	2.56	0.01	3.19	
Digester 1 Eff %VS (%)	1.68	1.67	1.71	0.00	1.86	
Digester 2 Feed Flow (GPD)				0		
Digester 2 Detention Time (Days)				0.0		
Digester 2 Volatile Solids Load (lbs/day)				0.00		
Digester 2 VS Ld/1,000ft3 (lbs/day)				0.00		
Digester 2 Feed % TS (%)				0.0		
Digester 2 Feed TS Pounds (lbs/day)				0		
Digester 2 Feed % VS (%)				0.00		
Digester 2 Feed VS Pounds (lbs/day)				0		
Digester 2 % TS ((%))				0.0		
Digester 2 TS Pounds (lbs)				0		
Digester 2 % VS ((%))				0.0		
Digester 2 VS Pounds (lbs)				0.0		
Digester 2 Temperature (Deg F)				0.0		
Digester 2 pH (SU)				0.0		
Digester 2 Volatile Acids (mg/L)				0		
Digester 2 Alkalinity (mg/L)				0		
Digester 2 Vol Acids Alkalinity Ratio (ratio)				0.00		
Digester 2 Eff % TS (%)				0.00		
Digester 2 Eff %VS (%)				0.00		
Waste Gas Flow (SCFM)	67,388	51,706	77,818	-3	67,188	
Boiler Gas Flow (SCFM)	0	0	0	0		
Total Gas Flow (SCFM)	67,388	51,706	77,818	-3	67,188	



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**SECTION 4**



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

#### Section 4.A. Asset Management

Key components of an Asset Management Program include:

- Computerized Maintenance Management System
- Preventive, Predictive, and Corrective Maintenance
- Equipment Inventory
- Reliability / Criticality Assessment (Hierarchy of Equipment Priority)
- Condition Assessment
- Replacement Program
- Recommended Capital Improvements

##### Computerized Maintenance Management System

Veolia uses *Job Cal Plus*<sup>™</sup> (Job Plus) as the basis for scheduling and tracking maintenance and repairs at Novato. Job Plus is an off-the-shelf, non proprietary software program available from Hach. Job Plus uses the Micro Soft Access data base platform to store information. A description of Job Plus can be found at the end of this section.

##### Preventive, Predictive, and Corrective Maintenance

Preventive maintenance (PM) is a scheduled maintenance activity generally tied to equipment run time (500 hours) or period schedule (weekly / quarterly). Routines such as lubrication, oil change, filter change fall into the category of PM. Predictive maintenance (PdM) is performed to determine when maintenance might be required and or to assess condition. Tasks such as vibration, temperature, and oil analysis are types of PdM. Corrective maintenance is maintenance initiated when a deficiency is found.

##### Equipment Inventory

An accurate equipment inventory is crucial to all phases of Asset Management. Equipment at the Novato facility has been entered into the Job Plus data base. The equipment inventory is a dynamic process with additions and deletions over time. An accurate equipment inventory is an essential component when planning for equipment replacement.

##### Reliability / Criticality Assessment (Hierarchy of Equipment Priority)

A Criticality Assessment was performed at the Novato facility in August 2010. The assessment evaluates processes and equipment rates the relative importance. The evaluation process looks at consequences and likelihood of failure and redundancy. The product helps the user prioritize replacement and maintenance. A portion of the Criticality Assessment is included as Attachment Section 2.

## HACH - JOB CAL PLUS COMPUTERIZED MAINTENANCE MANAGEMENT SOFTWARE SYSTEM

### Introduction and Overview

JOB Plus is a computerized maintenance management program that assists you in your maintenance operations. The Calendar is the heart of the JOB Plus system. It displays all the work to be done, completed work, overdue work, and skipped work for a 52-week period. Jobs can be closed, rescheduled, deleted, and created using the calendar.

### General Theory

JOB Plus is a scheduling program that displays **jobs (work orders)** on a calendar on the date they need to be done. The terms **work order** and **job** is interchangeable. A **job** is a **task** (work to be done) on a specific piece of equipment for a specific date. A **task** is a function to be performed; for example, changing oil would be a **task**. **Equipment** is an object that you want to perform tasks on.

Once you have a **task** set up, you assign pieces of **equipment** to the task. For example, you could assign a truck and a car to the **task** "Change Oil". When you assign equipment to a task, you set up a schedule of when you want the task performed on that equipment. For example, the truck could be scheduled every 5000 miles and the car could be scheduled every 90 days. Now that you have accomplished this, the system automatically generates work orders for the task and updates the calendar.

When work orders are placed on the calendar they can be marked as closed (completed), rescheduled, modified, skipped, etc. Work orders can also be printed. The closed job information is placed in a history file and can be accessed at any time. You can produce reports from this data to give you historical information.

PREVENTATIVE vs. CORRECTIVE Job types

Preventative Jobs are scheduled work orders for tasks that occur regularly. JOB Plus then places these jobs on your calendar. For example, changing the oil in a truck every three months is Preventative Maintenance.

There are 3 methods to schedule Preventative Jobs:

- **Schedule By Days**
- **Schedule By Meter**
- **Schedule By Days/Meter**

**Schedule By Days.** This method generates work orders by using dates only. (JOB Plus uses this as its default schedule. An estimated task is based on the Days).

Schedule by Days allows you to choose between **fixed** or **floating** as the schedule type. For example;

If a job is **fixed** and is scheduled every 30 days, JOB Plus would schedule jobs on June 22<sup>nd</sup>, July 22<sup>nd</sup>, August 22<sup>nd</sup>, etc...If the first work order is closed on June 29<sup>th</sup> (7 days late), the other work orders won't be affected because they are fixed in place.

If a job is **floating** JOB Plus automatically adjusts the calendar. For example; The first work order was closed 7 days later than it was due, the other work orders will have their due dates changed to be 7 days later because the jobs float (i.e. the next job would be due on July 29<sup>th</sup> instead of July 22<sup>nd</sup>).

**Schedule By Meter.** This method generates work orders by using meter readings only. In order to schedule a job by Meter or Days/Meter the equipment must be metered (the Metered checkbox must be checked on the equipment record). If there has been a meter reading entered there will either be 1 open job and 1 estimated job or else just 1 estimated job on the screen for any task and equipment combination. JOB Plus automatically monitors the meter readings and if the meter reading comes due, the task is scheduled (changed from estimated to scheduled) and a new estimated job is also created. With this method the only schedule type is floating.

**Schedule By Days/Meter.** This generates a work order based on the "which ever comes first" rule. With this method the only schedule type is floating. For example;

If the task is floating and the first work order was closed 7 days later than it was due, the other work orders would have their due dates changed to be 7 days later because the jobs float (i.e. the next job would be due on July 29<sup>th</sup> instead of July 22<sup>nd</sup>).

**Should a task be fixed or floating?** It depends on the task. The following examples illustrate when to use **fixed** and **floating**.

**Fixed Example:**

Hanging Christmas lights. The task is scheduled for Dec 10th. If you do not hang the lights until Dec 24th this year, you would still want the job scheduled for Dec 10th the next year.

**Float Example:**

Change Oil every 60 days. The job is scheduled for June 5th, August 4th, etc... If you change the oil on July 10th instead of June 5th you would not want to change the oil again on August 4th. If the task is float, JOB Plus will automatically adjust the August 4th due date to September 9th.

**Corrective Jobs** are one-time or emergency work such as changing a flat tire on a truck. Corrective information is often entered for the purpose of keeping a good equipment record file.

## Section 4.B. Asset Management Repairs – Less than \$10,000

Date	Equipment	Task Description
Aug-11	4100 - Decant Pump Station	Decant Pump #6 - Motor base has struvite buildup. Removed buildup of struvite and other material on motor base
	ME-1031-2 - Screening Washer Compactor	Worked with JWC to replace compactor brushes
	RAS/WAS Pump Station	RAS Bubbler Panel not operating. Tested different outlets and circuits and determined the Mercoid pressure switch is not working. Ordered replacement switch. Repaired
	B-1221 - Turblex Blower	High Vibration Readings. Assist Turblex Service Technician - Warranty
	CP-1631-1 - High Pressure Water Pump #1 - GBT	GBT - High Pressure Water Pump #1 - Pump pressure not going over 80 PSI - troubleshot, cleared plug.
Sep-11	ME-1031-2 - Screening Washer Compactor	Excessive splashing from the hopper where the screenings dump. Fabricated a plastic shield to protect motor from water
	P-1011-2 - Novato WW #1 Influent Pump #2	Check valve will not close. Removed lid and cleaned. Repositioned limit switch
	PC-1110-2 - Primary Clarifier #2	Line developed a leak at the tee. Cut out line and reassembled with new parts.
	1721 - Primary Digester Boiler	Spare boiler parts purchased for stock
Oct-11	4100 - Decant Pump Station	Decant Pump #7 - Installed pump into decant wet well.
	4100 - Decant Pump Station	Decant Pump #6 Pump delivered to Flygt, repaired, picked up and reinstalled.
	1721 - Primary Digester Boiler	Blast Tube replacement - outside contractor

Oct-11	5100 - Reclamation	Reclamation Pond #6 valve operator. Valve is frozen. Dismantled valve and found bearing corroded. Replaced with new crank handle.
	ME-1030-1 - Headwork's Screenings Screw Conveyor	Replaced battery
	AB-1214 - Aeration Basin #4	#3 Water line developed a leak at the tee. Cut out section of piping and installed new one.
	ME-1010-1 - Septic Receiving Station Compactor	Entire offloading line was plugged with solids, grit and rocks. Cleaned out entire system, cleaned up surrounding area.
	ME-1031-2 - Headwork's Screenings Grinder/Compactor	System lost power. Checked all resets, fuses and wiring. Determined the battery to the UPS went bad. Ordered new battery, installed
	Annual Flow Meter Calibrations	Outside Contractor
Nov-11	5100 - Reclamation	Install new stem and adapter for Pond #2
	1980 - Novato Micro Turbine	Assisted District with repairs
	2 Ton Electric Hoist	Tried to dislodge without success. Repaired
	UV/EPS-AE-1571-10 - UV Influent Transmitter Analyzer	Fabricated box for UV Meter
	Bi-Annual Service on Jerome Meter	Replaced filters and tubing
	Annual Filter Screen Service - Channel #2	Annual Service
Dec-11	5100 - Reclamation	Ponds #3 & #4 telescoping valves. Plugged, valve not operating. Greased valves and cleaned out the center of both valves.
	AB/G-1213-07.02 - Aeration Basin #3 Influent Flow Control Gate	Valve gear box stuck in manual operation and will not operate in auto mode. Repaired
	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps

Dec-11	ME-1061-2 - Grit Cyclone #1	Extended dump chute from classifier unit into grit bin. Fabricated system to disburse grit throughout bin so the operator does not have to overextend themselves while raking grit
	UV/EPS-GEN-1920-01	Checked generator block heater not working properly. Needs new block heater, exhaust y pipe and all gaskets. Also emergency stop switch wired incorrectly. Outside contractor to repair. Warranty
	1920 - Novato Emergency Generator #3	Metal shavings in mag pick up - cleaned and reinstalled - Outside Contractor
	2910 - Igancio Emergency Generator	Checked overspeed - Outside Contractor
	Annual Filter Screen Service - Channel #1	Annual Service
Jan-12	4100 - Decant Pump Station	Decant Pump #5 & #6 - pumps tripped out . Tested and pulled pumps. Determined they need to be sent in for repair. Pump #5 to Shape. Pump #6 to Flygt
	4100 - Decant Pump Station	Decant Pump #5 & #6- thermal protection on motor starter coil. Sent to Flygt for repair
	4100 - Decant Pump Station	Decant Pump #5 - attempted to install pump #6 with Flygt Rep. Pump #5 stopped operating. We removed #5 and found struvite buildup had stopped the pump. Switched motors and reinstalled.
	4100 - Decant Pump Station	Pumps 5 & 6 Tripping, amped both pumps.
	P-1012-2 - Novato WW #2 Influent Pump #2	Wet Well #2, Influent Pump #5 - Ragged up. Removed check valve lid and de ragged pump. Replaced check valve cover and put pump back in service.
	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps

Jan-12	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps
	ME-1042-1 -Channel #2 Grit Vortex	Fabricate aluminum chute for bin - eliminate back strain hazard by raking grit in bin
	ME-1041-1 - Channel #1 Grit Vortex	Fabricate aluminum chute for bin - eliminate back strain hazard by raking grit in bin
	ME-1042-1 - Channel #2 Grit Vortex	#3 water feed cracked and leaking. Replaced fitting.
	B-1020-1 - Headwork's Channel Air Blower	Wrap piping with insulated blanket to reduce noise levels per Client for neighborhood
	2001 Dodge 1/2 Ton Pickup - Ops	Serpentine belt replacement and air filter replacement
	2006 Dodge Crew Cab - Ops/Ed	Oil Change, wheel hub assembly replacement, U-Joints
	1929 - Novato Above Ground Diesel Tank	Optic Fuel Clean inspected, cleaned filtered, polished and removed 265 gallons water, bacterial sludge and rust particles to waste drums
	2925 - Ignacio Above Ground Fuel Tank	Optic Fuel Clean inspected, cleaned, filtered, polished and removed 72 gallons water, bacterial sludge and rust particles to waste drums.
	ITPS-3900 - Ignacio Transfer Pump Station	Replaced UPS at Ignacio
	ME-2910-10 - Channel Grinder	Pull grinder for inspection - failed over weekend. Removed rags & grease accumulated around float. Verified no grease buildup in channel
	ME-2910-10 - Channel Grinder	Pulled and cleaned unit with pressure washer.
Feb-12	4100 - Decant Pump Station	Decant Pump #5, pump tripped Removed pump from wet well, installed the pump that was cleaned and cleaned up the newly removed pump
	4100 - Decant Pump Station	Heaters on pumps 5 & 6 oversized, purchased correct heaters and installed

Feb-12	G-1012-07.01 - Wetwell #2 Influent Gate	Influent wet well #2 gate actuator will not open in manual or remote. Outside contractor repaired - warranty
	PC-1110-1 - Primary Clarifier #1	Troubleshoot clarifier #1 control panel - Outside Contractor
	PC-1110-1 - Primary Clarifier #1	Primary clarifier #1 wash spray trigger. Switch was off. Reattached
	DIG-HX-1741-3 - Digester #1 Heat Exchanger	Heat Exchanger #2 - Piping continues to get plugged. Removed covers, opened door, re-pipped probe to prevent debris from getting caught on it.
	AB-1212 - Aeration Basin #2	Zone 2D Valve not functioning. Blower signal for zone 2D on valve closure - no air flow readout for zone 4D. Outside Contractor traced wires and repaired
	2910 - Ignacio Emergency Generator	Assist outside Contractor
	P-2921-2 - Raw Sewage Pump #2	Wear Ring Replacement. Keypad voltage supply-Siemens
	P-2921-3 - Raw Sewage Pump #3	Wear Ring Replacement
	P-2921-1 - Raw Sewage Pump #1	Wear Ring Replacement
Mar-12	4100 - Decant Pump Station	Pulled pump, installed working pump, removed struvite
	PC/FE-1122-20.06	Replaced Flow Meter
	Sec-1311-1 - Secondary Clarifier #1	Installed replacement motor purchased
	DIG-CP-1733-1 - Digester #1 Mixing Pump	Digester #1 Mixing Pump making noise. Removed guard and tightened belt. 2 jacking legs are not able to move so shimmed
	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps
	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps

Mar-12	2006 Dodge	New tires and brakes for truck
	1910 - Novato Emergency Generator	Battery charger tripped out. Return fuel tank not operating. Block heater not working. Found blown fuse. Repalced fuses, Outside Contractor performed electrical evaluation and provided parts.
	UV/EPS-UV-1512 - UV Channel #2, UV Bank #4	Cleaned UV Channel
	UV/EPS-UV-1512 - UV Channel #2, UV Bank #1	Cleaned UV Channel
	UV/EPS-UV-1512 - UV Channel #2, UV Bank #3	Cleaned UV Channel
	UV/EPS-UV-1512 - UV Channel #2, UV Bank #2	Cleaned UV Channel
	UV/EPS-UV-1511-UV Channel #1, UV Bank #4	Cleaned UV Channel
	UV/EPS-UV-1511-UV Channel #1, UV Bank #1	Cleaned UV Channel
	UV/EPS-UV-1511-UV Channel #1, UV Bank #2	Cleaned UV Channel
	UV/EPS-UV-1511-UV Channel #1, UV Bank #3	Cleaned UV Channel
	UV/EPS-UV-1513- UV Channel #3, UV Bank #1	Cleaned UV Channel
	UV/EPS-UV-1513- UV Channel #3, UV Bank #2	Cleaned UV Channel
	UV/EPS-UV-1513- UV Channel #3, UV Bank #4	Cleaned UV Channel
	UV/EPS-UV-1513- UV Channel #3, UV Bank #3	Cleaned UV Channel
	B-1020-1 - Headwork's Channel Air Blower	Sound Enclosure Construction per clients request
Apr-12	4100 - Decant Pump Station	Decant Pump #6 - Pump rail became disconnected. Reattached rail and installed pump
	P-1012-3 - Novato	Influent Pump #6- Received no flow alarm at night. Unit cleaned
	P-1011-2 - Novato WW #1 Influent Pump #2	Influent Wet Well #1, Pump #2 Pump not pumping. Removed check valve cover and cleaned out rags and debris.

Apr-12	PC-1110-1 - Primary Clarifier #1	Torque switch on Primary Clarifier #1 will not shut down motor to moving arm. Assisted Outside Contractor with repair
	PC-1110-1 - Primary Clarifier #1	PC #1 - Cover has to be secured to decking. Picked up strip of aluminum, prepped and fastened strip to decking
	DIG-CP-1733-1 - Digester #1 Mixing Pump	Replaced belts -
	AB-1200 - Aeration Basins	Covers grating to help with odors in neighborhood
	Pumping out water intrusion of all Electrical Vaults	Water inflow into sumps possibly affecting electrical lines. Pumped out sumps
	P-2921-3 - Raw Sewage Pump #3	Pump #3 Check Valve will not completely close. Deragged pump
	UV-Building-Grounds	Cleaned UV Channel
	2005 Chevrolet 1/2 ton - OPS	U-Joint Repair
	UV/EPS-T-1920-01	Fuel line leak repaired by outside contractor
	Annual Crane Inspection and Quadrennial Testing	UV, Blower, GBT Filtrate
	Annual Jerome Meter Recalibration	Outside Contractor
May-12	Pumping out water intrusion of all Electrical Vaults	Inspected - no water removed
	Pumping out water intrusion of all Electrical Vaults	Spot check vaults no water to be removed. no rain, no water removed
	ME-1031-2 Screenings Washer Compactor	Replaced solenoid valve
	UV/EPS-GEN-1920-01	Repaired battery charger - warranty
	GEM Electric Vehicle #1 - GEM Cart	New batteries and charger
	Annual Forklift Service	Outside Contractor
Jun-12	4100 - Decant Pump Station	Decant Pump #5 - Struvite Buildup on pump - removed, Reassembled pump and tested troubleshoot pump in wet well.

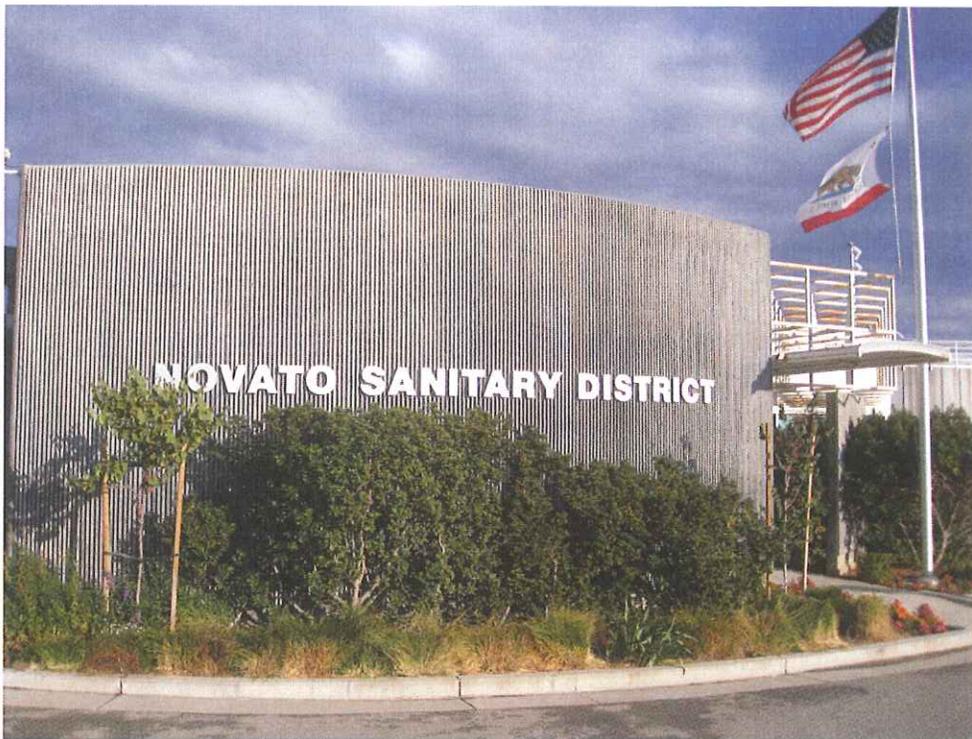
Jun-12	M-1010 - Novato	Assisted Xylem (flygt) personnel in performing annual checks on influent pumps.
	1721 - Primary Digester Boiler	Diablo Boiler performed combustion test
	5100 - Reclamation	Wet well return line - Line became plugged. Unplugged line
	AB-P-1214-4 - Aeration Basin #4 Mix Liquor Recycle Pump	MLR Pump #4 - high moisture alarm light - Performed electrical resistance test and determined that it needed to be removed and dropped off @ Flygt for service
	Pumping out water intrusion of all Electrical Vaults	Spot checked no water to pump out - no rain
	PC/EF-1190-10.01 - Odor Control Fan #1- Primary (N)	Odor control blower making loud noises. Tightened belts and secured guard. Checked alignment and tension, Replaced both bearings.
	Rooftop High Efficiency Heat Pump - UV Building	During Annual inspection it was determined the HVAC was not operating correctly. Outside Contractor out to troubleshoot provided quote for replacement of Compressor (warranty item), parts and labor
	Annual Aeration Basion Diffuser Inspeyton	
Jul-12	AB-P-1214-4 - Aeration Basin #4 Mix Liquor Recycle Pump	Picked up pump from Flygt and reinstalled
	AB-P-1211-4 - Aeration Basin #1 Mix Liquor Recycle Pump	During annual inspection determined plug in seal failure. Pump sent to flygt for repair
	AB-1200 – Aeration	Assisted Xylem (Flygt) personnel with annual inspection. Annual Inspection
	AB-MX-1211-3 -	Cable that lifts mixer was cut - Entered basin and reattached cable.
	1929 - Novato Above Ground Fuel Tank	Gauge is not functioning on diesel fuel tank. Replaced with new gauge

Jul-12	Pumping out water intrusion of all Electrical Vaults	Spot checked all electrical vaults
	P-2921-2 - Raw Sewage Pump #2	During Annual inspection determined seal failure. Pump sent to flygt for repair, returned and installed



NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012

**SECTION 5**



# ANNUAL OPERATIONS REPORT

## August 2011 – July 2012

### Veolia Water West Operating Services Novato

## Section 5 Safety and Training

Veolia Water North America (VWNA) 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. VWNA is committed to providing its employees a healthful and safe place of employment. To that end, VWNA will provide proper training, materials, and equipment so that work can be performed safely and in compliance with the Occupational Safety and Health Administration regulations (OSHA) and other applicable standard. In turn, each employee is responsible to participate in a cooperative effort to maintain an effective health and safety program. Adherence to company policies and work proactive guidelines is an essential part of this responsibility. By maintaining an effective program, we reduce the risk of personal injury, operational interruptions, regulatory fines, and maintain the company's reputation as a world leader in environmental management.

Our highest duty - to ensure health, safety and security for all. It is our highest duty, essential business priority, and the individual responsibility of each of us to ensure that at all time and in all of our operations, the health, safety and security of the general public, our customers, subcontractors and our fellow employees are protected. We allow for no compromise in this matter, and we strive to proactively identify potential risks and take diligent corrective and preventative actions to reduce and eliminate them. In the same spirit, we support, advise and encourage our fellow employees to maintain good personal health, as well as to develop positive practices and behaviors in that respect.

VWNA Novato has obtained a zero harm safety record from reinstatement of the Operations Contract. We have had no incidents from 6/1/10 to present. This reporting period from 8/1/11 - 7/31/12 resulting in 366 days - accident/incident free. In recognition of this achievement - staff celebrated at a luncheon with gifts of appreciation. Each employee received a cash incentive reward from the Company for 1 year no loss time incidents as a group and also as individual achievements.

Listed Below are highlights of 2011 - 2012:

- Staff conducted monthly internal safety inspections
- Monthly Safety Report submitted to corporate
- Facility underwent corporate safety audit
- Participated in the Great California Shake Out earthquake simulation/drill

## It's a Culture, Not a Campaign



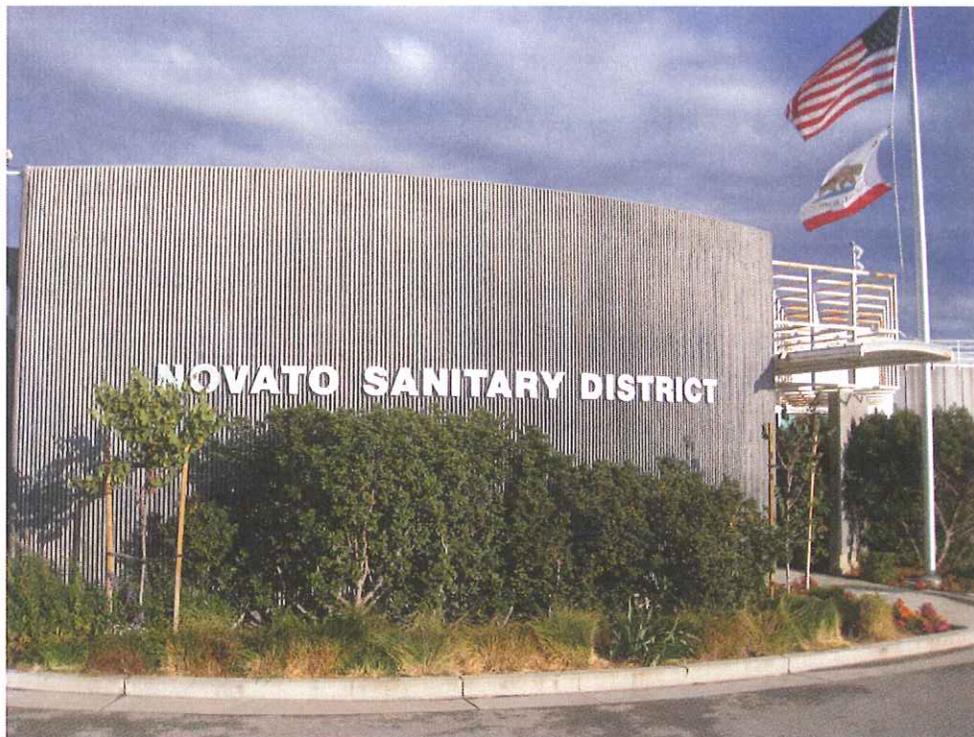
VVNA Novato provides job specific safety training for employees. The following is training provided from August 1, 2011 through July 31, 2012.

<b>Safety Training</b>	
<b>Date</b>	<b>Topic</b>
Aug. 2011	Hot Work
Sept. 2011	Preventing Back Injuries
Oct. 2011	Cranes and Hoists - Overhead Monorail and Chain Hoist
Nov. 2011	Powered Industrial Trucks
	Container Re-Use
Dec. 2011	Hearing Protection
	Spill Prevention Control and Countermeasures (SPCC) Plan
Jan. 2012	Hazard Communication
Feb. 2012	Veolia Management Commitment & General Policy
Mar. 2012	General Electrical Safety
	Lockout/Tag out
Apr. 2012	Overexertion - Sprains and Strains
May. 2012	Good Housekeeping
	Preventing Heat Stress and Heat Exhaustion
	Fire Extinguisher Use
Jun. 2012	Bloodborne Pathogens
Jul. 2012	Emergency Action Plan
	Hot Work – and Hot Work Permits



NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012

**SECTION 6**



**ANNUAL OPERATIONS REPORT**  
**August 2011 – July 2012**  
**Veolia Water West Operating Services Novato**

**Section 6. Staffing and Organization**

**STAFFING & CERTIFICATION STATUS**

John Bailey – Project Manager  
Grade V California Wastewater Treatment Plant Operator #V-4123, December 31, 2012  
Grade T2 Water Treatment Operator #18030, June 1, 2014

Edward M. Mann – Assistant Project Manager / Operations Manager  
Grade V California Wastewater Treatment Plant Operator #V-4850, June 30, 2013

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

Anthony M. Silva – Operator III  
Grade V California Wastewater Treatment Plant Operator #10973, December 31, 2013  
Grade II Collection System Maintenance Technician, 354, January 31, 2013

Dean B. Heffelfinger – Operator III  
Grade III California Wastewater Treatment Plant Operator #III-27610, June 30, 2013

Christian R. Williams – Operator III  
Grade IV California Wastewater Treatment Plant Operator #28555, June 30, 2013  
Grade II Plant Maintenance Technologist, 080151005, January 31, 2013

Peter M. Delaney – Operator III  
California Wastewater Treatment Plant Operator #III-10941, June 30, 2013

Jeffrey D. Hendricks – Operator II  
California Wastewater Treatment Plant Operator #II-28377, December 31, 2013  
Grade I Collection System Maintenance Technician, 0801210049, January 31, 2012  
Grade I Plant Maintenance Technologist, 070750011, July 31, 2012

Ralph Loveless – Maintenance Technician

### **Additional Support**

John Herron – Area Manager

Christopher McAuliffe – District Manager, Grade V Wastewater Treatment Plant Operator

John O'Hare – Technical Director

Grade V, Wastewater Treatment Plant Operator, California, # 10669 (2005)

Grade IV, Wastewater Treatment Plant Operator, Association of Boards of Certification, # S40011R (2004)

Grade IV, Collection Systems, Massachusetts, #866 (1986)

Grade VII, Wastewater Treatment Plant Operator, Massachusetts, # 977 (1977)

Grade I, Environmental Compliance Inspection, California, CWEA # 04074112 (2004)

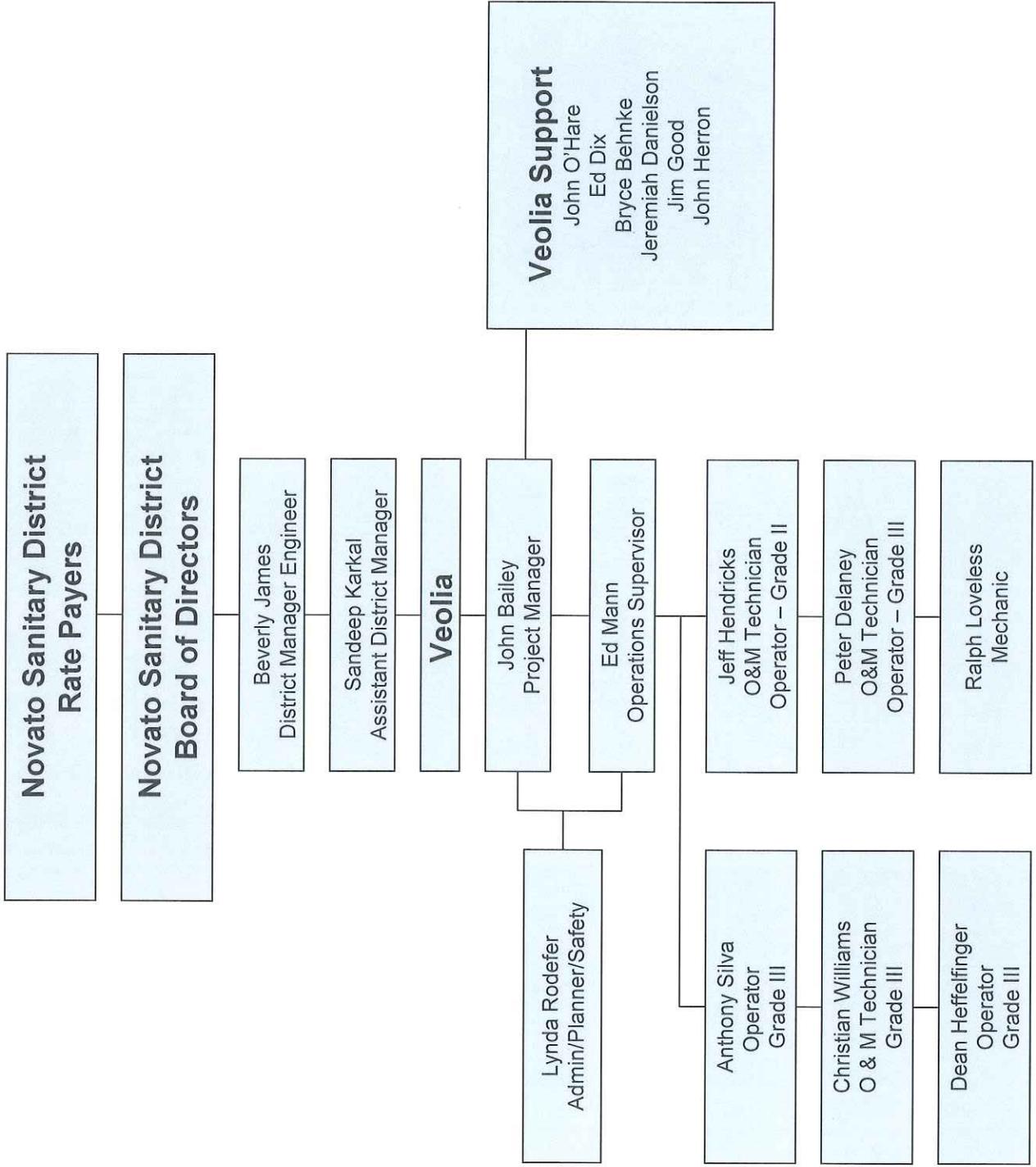
Grade I, Laboratory Analyst, California, # 05013114 (2005)

Grade I, Plant Maintenance Technologist, California, CWEA # 05075101 (2005)

Grade I, Collection System Maintenance, California, CWEA # 070121088 (2007)

Grade I, Water Distribution Operator, California Department of Public Health, #34234 (2008)

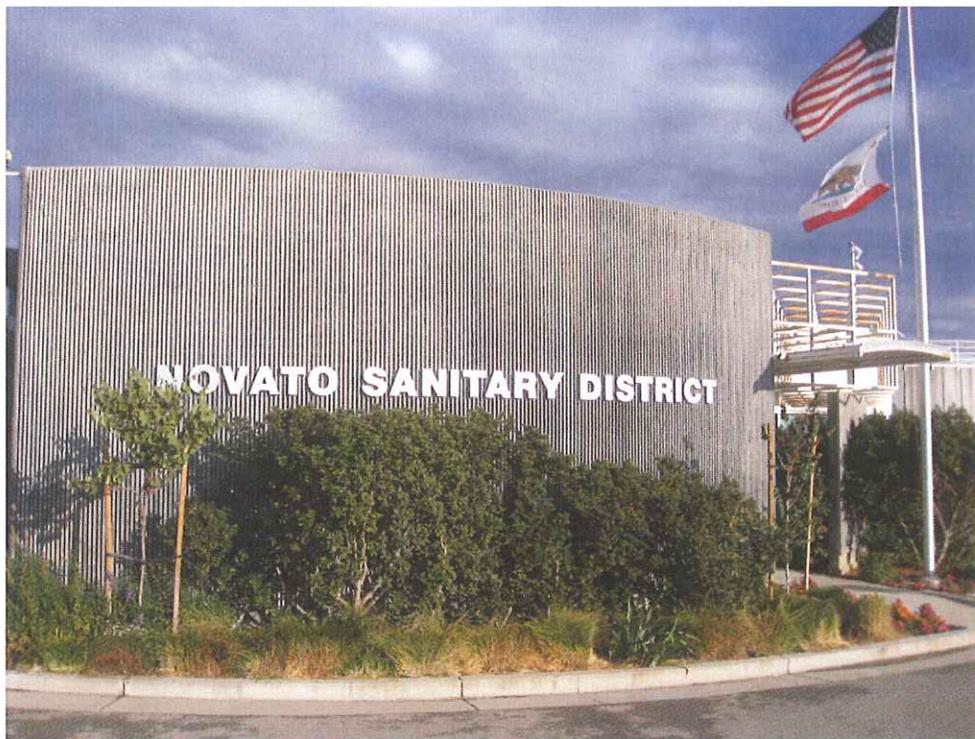
Organization Chart –  
 Veolia Water/Novato Sanitary District





**NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012**

**SECTION 7**



**ANNUAL OPERATIONS REPORT**  
**August 2011 – July 2012**  
**Veolia Water West Operating Services Novato**

**Section 7      Budget**

The Novato Operations and Maintenance Service Agreement dated September 24, 2009 is a fixed price contract. Normal operations, maintenance, and management are included in the contract price. Variables to the fixed price include:

Schedule 7 & Schedule 13 – Pass Through Costs

- Performance Bond
- Insurance Cost

Schedule 8 – Cost Adjustment and Escalation Indices

Schedule 8 – Flow and Loading Adjustments

Schedule 11 – Utility Caps

- Electrical
- Natural Gas
- Diesel Fuel
  - Cap A – With Ignacio Wastewater Treatment Plant in service
  - Cap B – Ignacio Wastewater Treatment Plant decommissioned

Equipment Repairs in excess of \$10,000.

**Novato Sanitary District  
2011-12 Treatment Facility Operations Annual Adjustments**

Parameter	Notes	Contract Value - low	Contract Value - high	Actual Value	Basis	Annual Credit to Veolia
Flow, mgd, 12-month average, August 1, 2010 to July 31, 2011		4.36	6.54	4.6	\$12,711/mgd	\$0
BOD, lbs/day 12-month average, August 1, 2010 to July 31, 2011		6,700	10,050	9,315	\$1.952/ lb/day	\$0
TSS, lbs/day 12-month average, August 1, 2010 to July 31, 2011		8,504	12,756	12,308	\$2.071/lb/day	\$0
Electricity, kWh/year 8/1/2010 - 7/31/2011 (Note 1)	Note 1		4,010,087	3,264,734	1/2 of \$0.12/kwh	\$44,721
Electricity, kWh/mgd 8/1/2010 - 7/31/2011			2,328	1,928		\$0
Natural Gas, therms/year 10/1/2009 - 7/31/2012	Note 2		See Backup Documentation			
Natural Gas, therms/mgd 10/1/2009 - 7/31/2012			See Backup Documentation			
Diesel fuel, gal/year 8/1/2010 - 7/31/2012			2,595	1,625	none	\$0
Diesel fuel, gal/mgd 8/1/2010 - 7/31/2012			1.6	0.96		\$0
NPDES Permit Violations			0	1		\$0
Staff Grade III certifications obtained (\$200 credit/certificate)				0	\$200	\$0
Staff Grade IV certifications obtained	Note 3			2		\$400
Lost Time Accidents (\$200 credit/employee)		0		0		\$1,800
Odor Complaints		0		0		\$0
<b>Total</b>						<b>\$19,892</b>

Note 1: Average Electrical cost = \$0.12/kwh for year.

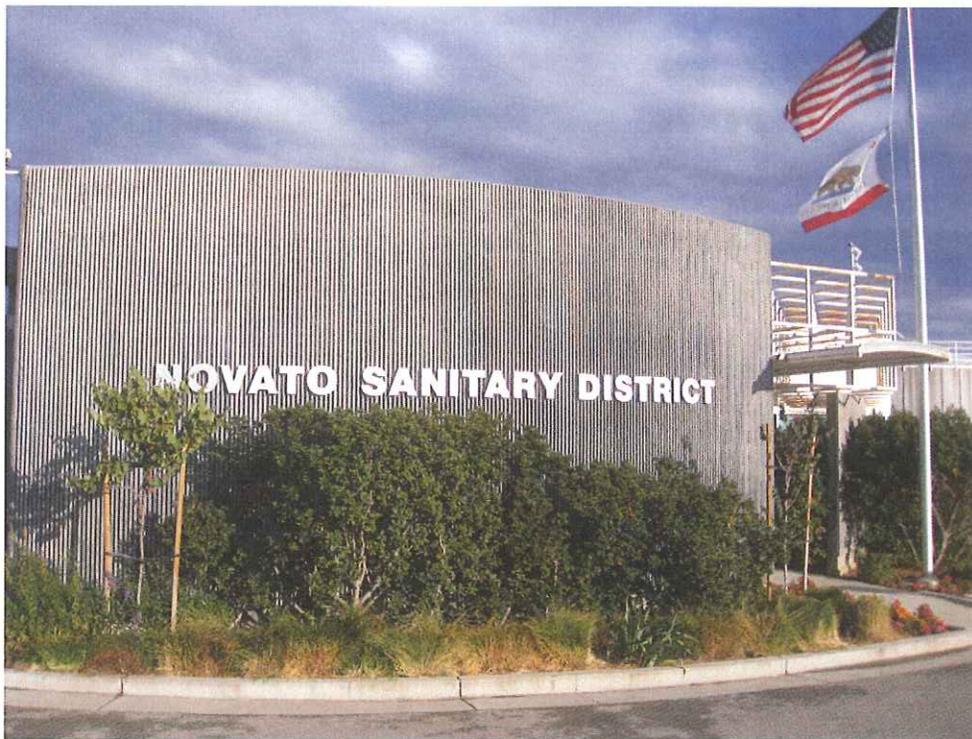
Note 2: True Up Period October 2009 - July 2012 (excluding time not under full contract)

Note 3: Tony Silva Grade V / Christian Williams Grade IV



NOVATO SANITARY DISTRICT  
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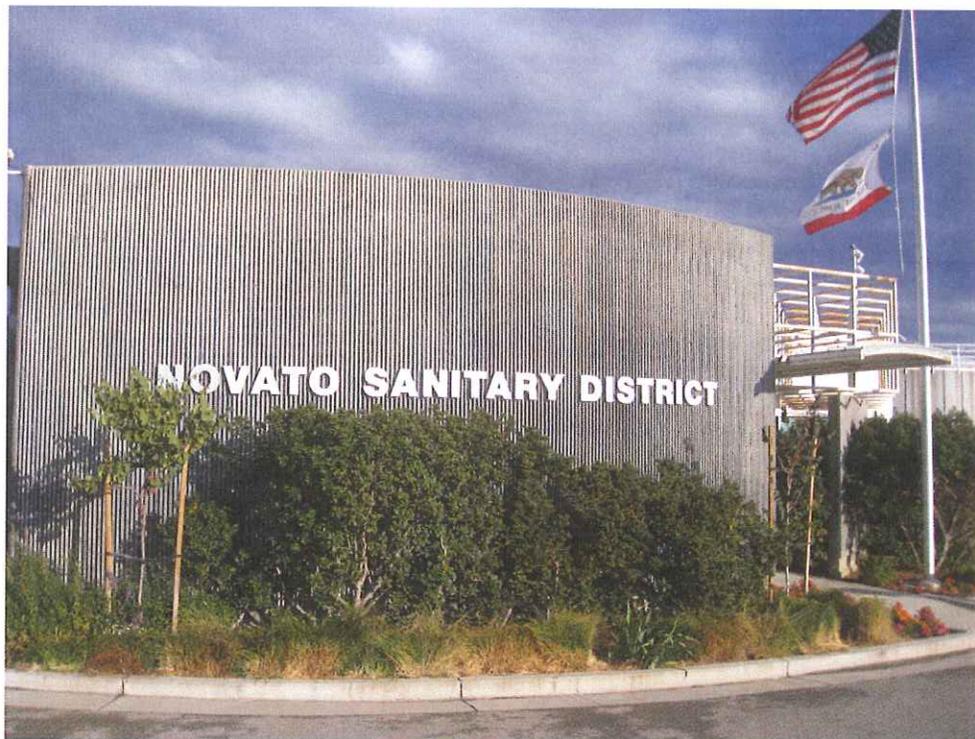
**ATTACHMENTS**





NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012

**ATTACHMENT #1**



**NOVATO SANITARY DISTRICT - VEOLIA  
PLANT FLOW**

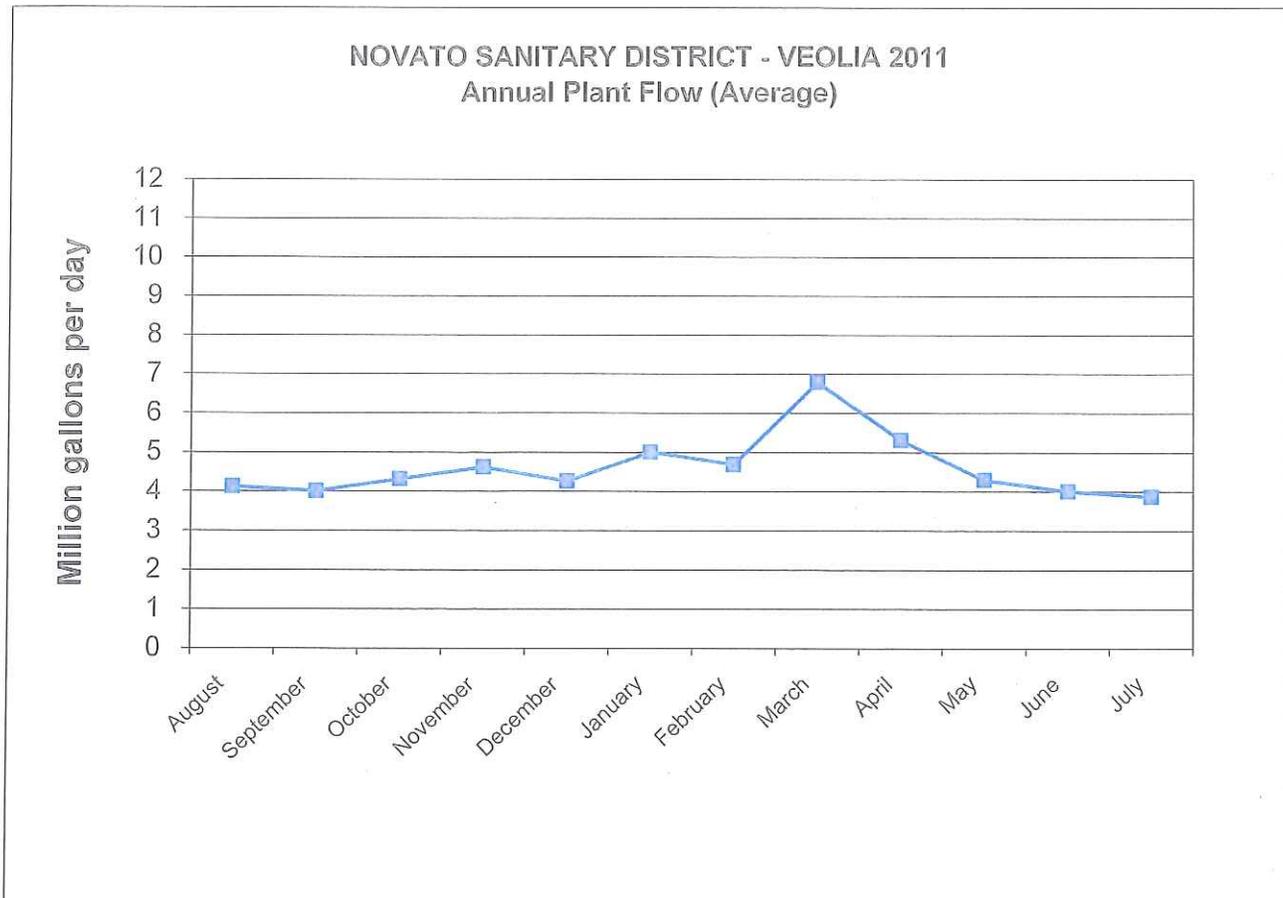
Annual Waste Characteristics & Loading Summary

(IN GALLONS TIMES 1,000,000)

August 2011 - July 2012

PRINT DATE: 9-Nov-2012

	Total Flow	High	Low	Average		
August	127.65	5.05	1.00	4.12	Three month dry weather averages:	4.12
September	119.99	4.48	3.77	4.00		4.00
October	133.53	5.46	3.93	4.31		
November	138.10	6.02	3.99	4.60		
December	131.90	4.42	3.99	4.25		
January	150.00	10.31	3.83	5.00		
February	136.01	5.58	4.16	4.69		
March	210.54	11.97	4.30	6.79		
April	159.22	6.77	4.61	5.31		
May	132.93	4.72	3.91	4.29		
June	119.89	4.33	3.83	4.00		
July	119.59	4.19	3.55	3.86		
ANNUAL TOTAL	1679.35					
ANNUAL MAX.	210.54	11.97			Max.	4.12
ANNUAL MIN.	119.59		1.00		Min.	3.86
ANNUAL AVG.	139.95			4.601	Avg. Dry Weather Flow	3.99



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

Annual Waste Characteristics & Loading Summary

August 2011 - July 2012

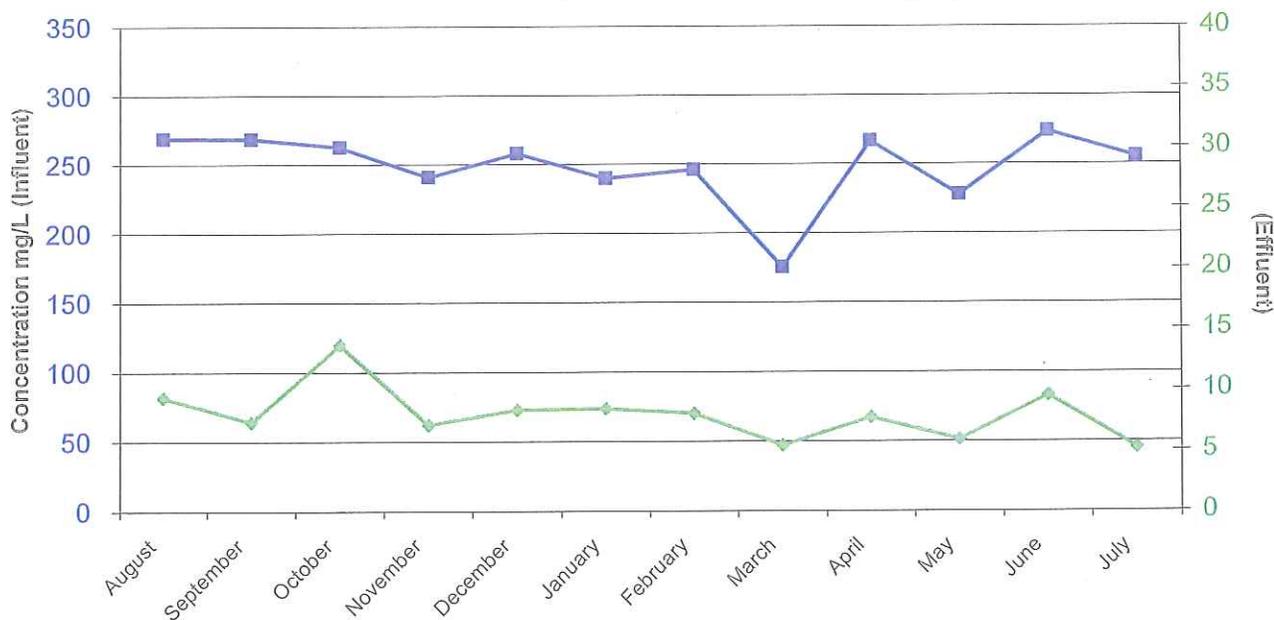
PRINT DATE: 9-Nov-2012

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
August	386	207	269	14	6326	3204	4219	32	5	9	14	517	76	148
September	340	208	268	10	5083	3023	4058	14	9	7	12	210	73	117
October	551	210	262	12	9135	3307	4298	37	5	14	12	758	78	236
November	341	187	241	15	5460	3348	4056	14	5	7	15	224	76	119
December	389	87	258	13	6243	1423	4124	15	5	8	13	237	79	133
January	319	109	240	12	8312	2508	4564	17	5	8	12	255	77	155
February	332	172	246	15	5554	2875	4380	32	5	8	15	557	79	143
March	285	94	175	13	5850	2616	4215	7	4	5	13	258	80	142
April	373	213	267	12	7596	4358	5239	14	5	8	12	265	96	150
May	267	141	228	15	4440	2204	3703	14	5	6	15	248	77	96
June	386	229	274	13	6034	3328	4136	32	5	9	13	481	73	144
July	331	231	255	12	4786	3322	3741	6	5	5	12	87	71	76
ANNUAL HIGH	551	231	274	15	9135	4358	5239	37	9	14	15	758	96	236
ANNUAL LOW	267	87	175	10	4440	1423	3703	6	4	5	12	87	71	76
ANNUAL AVG.	358	174	248	13	6235	2960	4228	20	5	8	13	341	78	138

**NOVATO SANITARY DISTRICT - VEOLIA 2011**

**Annual**

**BOD Concentration (Influent & Effluent Averages)**



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

Annual Waste Characteristics & Loading Summary

August 2011 - July 2012

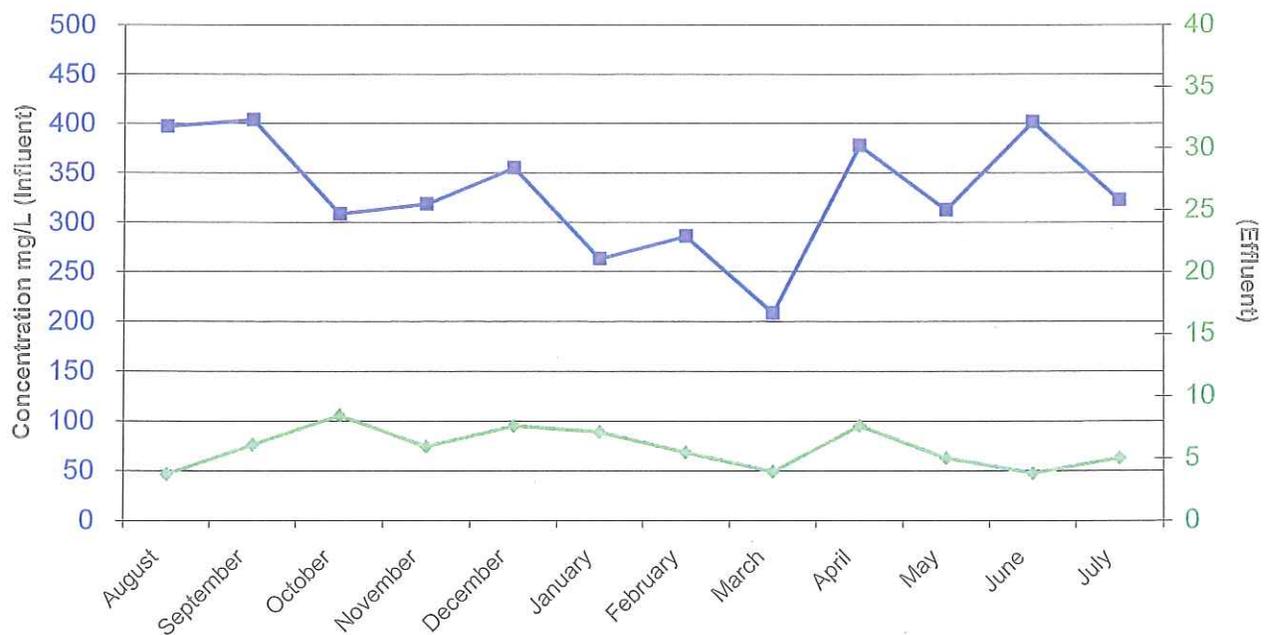
PRINT DATE: 9-Nov-2012

	INFLUENT							EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)			Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average	High	Low	Average		High	Low	Average
August	533	332	397	15	8251	5140	6314	13	1	4	15	210	16	59
September	504	361	404	12	7631	5523	6175	11	3	6	12	165	45	90
October	401	267	308	12	7617	4088	5083	18	3	8	12	307	45	144
November	402	200	318	15	7656	3187	5423	12	3	6	15	198	54	101
December	627	201	355	12	10252	3188	5669	12	6	8	12	195	92	122
January	370	104	263	13	8632	2393	4740	11	5	7	13	390	74	141
February	451	223	286	15	7477	3892	5068	10	2	5	15	173	31	99
March	361	88	209	13	14566	2681	5255	6	2	4	13	258	33	108
April	680	224	378	13	12895	4163	7431	12	5	8	13	248	96	150
May	612	220	312	15	9474	3897	5051	5	5	5	15	89	77	81
June	533	340	402	14	7888	5109	6088	13	1	4	14	195	16	57
July	421	251	322	12	5992	3639	4730	5	5	5	12	79	69	73
ANNUAL HIGH	680	361	404	15	14566	5523	7431	18	6	8	15	390	96	150
ANNUAL LOW	361	88	209	12	5992	2393	4730	5	1	4	12	79	16	57
ANNUAL AVG.	491	234	329	13	9028	3908	5586	11	3	6	13	209	54	102

**NOVATO SANITARY DISTRICT - VEOLIA 2011**

**Annual**

**TSS Concentration (Influent & Effluent Averages)**



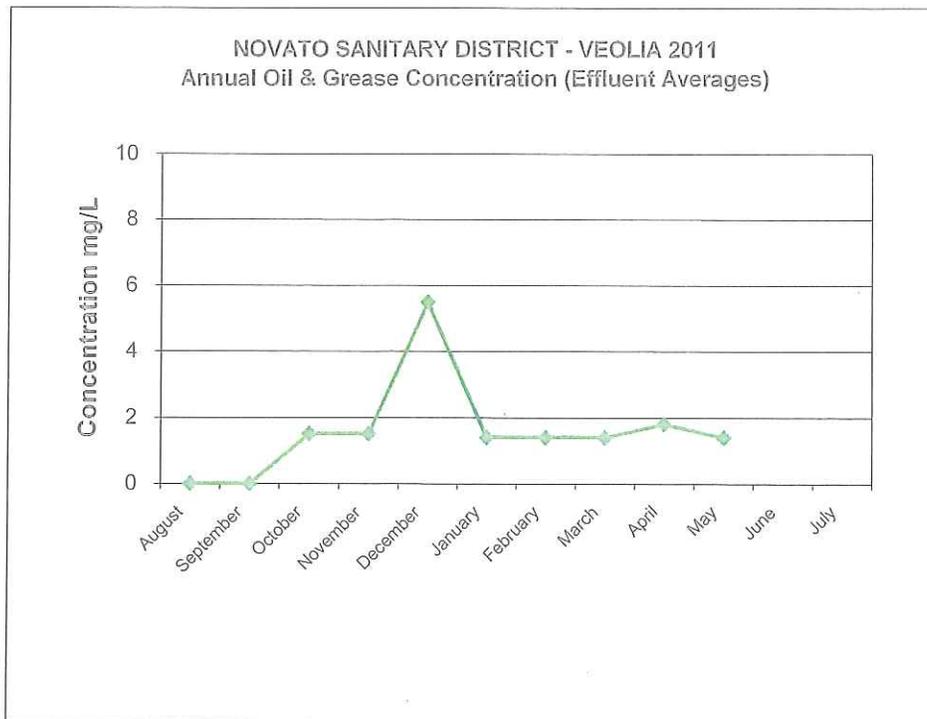
**NOVATO SANITARY DISTRICT - VEOLIA  
OIL & GREASE (Effluent)**

Annual Waste Characteristics & Loading Summary

August 2011 - July 2012

PRINT DATE: 9-Nov-2012

	EFFLUENT						
	Concentration (mg/L)			No. of Samples	Loading (kg/day)		
	High	Low	Average		High	Low	Average
August	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0
October	2	2	2	1	23	23	23
November	2	2	2	1	24	24	24
December	6	6	6	1	88	88	88
January	1	1	1	1	22	22	22
February	1	1	1	1	26	26	26
March	1	1	1	1	60	60	60
April	2	2	2	1	34	34	34
May	1	1	1	1	23	23	23
June	0	0		0	0	0	
July	0	0		0	0	0	
ANNUAL HIGH	6	6	6	1	88	88	88
ANNUAL LOW	0	0	0	0	0	0	0
ANNUAL AVG.	1	1	2	1	25	25	30



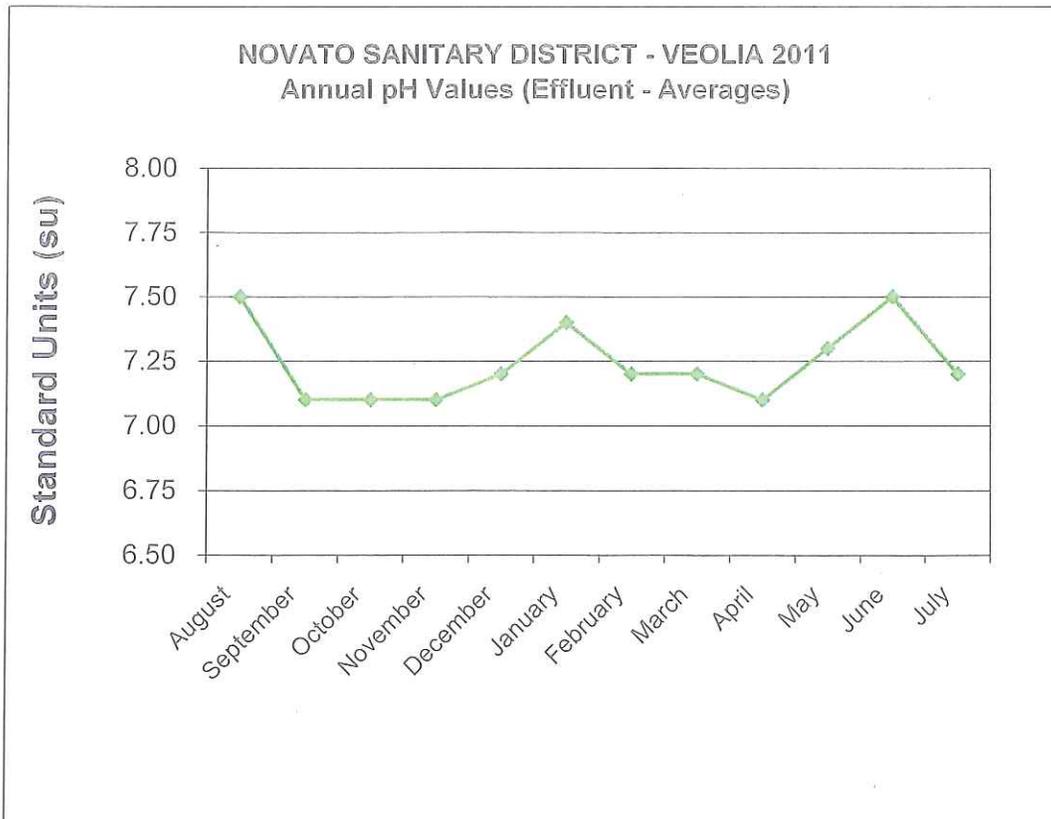
**NOVATO SANITARY DISTRICT - VEOLIA  
pH (Effluent)**

Annual Waste Characteristics & Loading Summary

August 2011 - July 2012

PRINT DATE: 9-Nov-2012

	High	Low	Average	Number of Samples			
August	7.5	7.1	7.3	23			
September	7.1	6.7	6.8	21			
October	7.1	6.7	6.8	21			
November	7.1	6.9	7.0	22			
December	7.2	7.0	7.1	23			
January	7.4	6.8	7.1	21			
February	7.2	6.9	7.0	20			
March	7.2	6.8	7.1	22			
April	7.1	6.6	6.8	21			
May	7.3	7.2	7.2	23			
June	7.5	7.1	7.3	22			
July	7.2	7.1	7.2	22			
				Number of Samples Total = 261			
ANNUAL MAX.	7.50	7.20	7.33	1st Qtr.	65	2nd Qtr.	66
ANNUAL MIN.	7.10	6.60	6.80	3rd Qtr.	63	4th Qtr.	67
ANNUAL AVG.	7.24	6.91	7.06				



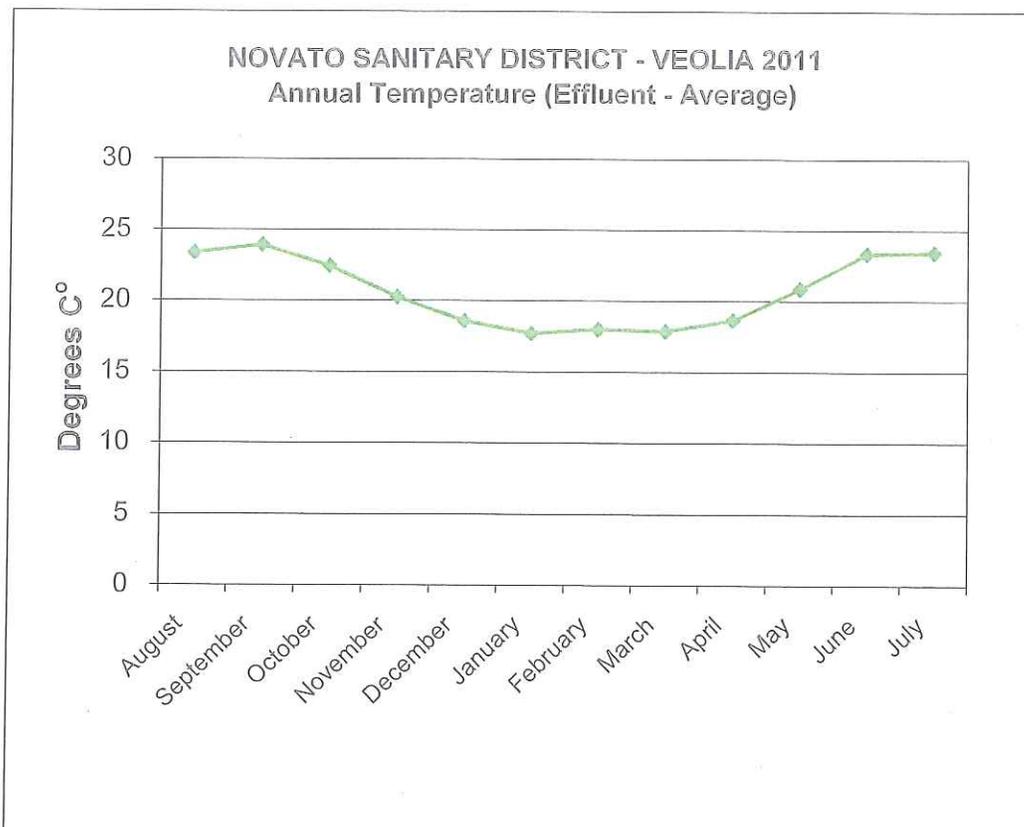
**NOVATO SANITARY DISTRICT - VEOLIA  
TEMPERATURE (Effluent)**

Annual Waste Characteristics & Loading Summary

August 2011 - July 2012

PRINT DATE: 9-Nov-2012

	High	Low	Average	Number of Samples			
August	24.1	22.4	23.3	23.0			
September	24.4	23.3	23.9	21.0			
October	23.4	20.9	22.4	21.0			
November	21.8	19.2	20.2	22.0			
December	20.5	17.0	18.6	22.0			
January	18.7	16.2	17.7	21.0			
February	19.2	17.4	18.0	20.0			
March	18.6	16.9	17.8	22.0			
April	19.4	17.4	18.6	21.0			
May	21.8	19.4	20.9	23.0			
June	24.1	22.4	23.3	22.0			
July	24.2	22.7	23.4	22.0			
ANNUAL MAX.	24.4	23.3	23.9	Number of Samples Total = 260			
ANNUAL MIN.	18.6	16.2	17.7	1st Qtr.	65	2nd Qtr.	65
ANNUAL AVG.	21.7	19.6	20.7	3rd Qtr.	63	4th Qtr.	67



NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: AUGUST 2011  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL EFFLUENT % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	PH EFFLUENT	TEMP C° EFFLUENT	
1	4.20																7.40	22.7	
2	4.24																7.40	22.8	
3	4.07	262	4036	95	12.00	185	394	6070	99	2	31						7.40	23.1	
4	4.33	386	6326	96	17.00	279	438	7178	100	1	16						7.40	23.2	
5	4.34	239	3926	98	5.00	82	407	6686	100	1	16						7.40	22.5	
6	4.21																		
7	4.48																		
8	3.96																7.30	23.0	
9	4.19																7.30	23.5	
10	5.05																7.40	23.6	
11	4.21	229	3648	97	6.00	96	362	5768	99	4	64						7.30	23.3	
12	4.14	362	5673	99	5.00	78	369	5782	99	3	47						7.30	23.3	
13	1.00																		
14	4.26																		
15	4.03	257	3920	98	5.00	76	358	5461	99	3	46						7.50	23.7	
16	4.01																		
17	4.02	279	4245	98	5.00	76	467	7106	99	3	46						7.40	23.6	
18	4.09																		
19	4.08	267	4133	98	5.00	77	533	8251	99	3	46						7.40	23.2	
20	4.06																7.20	23.6	
21	4.29																		
22	4.30																		
23	4.50																		
24	4.07	270	4159	95	13.00	200	389	5993	98	8	123						7.30	23.1	
25	4.27	268	4170	88	32.00	517	340	5495	96	13	210						7.10	23.8	
26	4.05	251	3846	98	5.00	77	382	5656	99	3	46						7.30	24.1	
27	4.37																		
28	4.44																		
29	4.26	243	3918	98	6.00	97	378	6095	99	3	48						7.20	23.7	
30	4.03	263	3859	97	7.00	107	404	6182	99	3	46						7.30	22.4	
31	4.09	207	3204	96	8.00	124	332	5140	99	3	46						7.20	23.6	
TOTAL FLOW	127.65																		
MAXIMUM	5.05	386	6326	99	32	517	533	8251	100	13	210						7.50	24	
MINIMUM	1.00	207	3204	88	5	76	332	5140	96	1	16						7.10	22	
AVERAGE	4.12	269	4219	97	9	148	397	6314	99	4	59						7.32	23	
COUNT	31	14	14	14	14	14	15	15	15	15	15						23	23	

Kg/day 3.785  
Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: SEPTEMBER 2011  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT (Mg/l)	BOD INFLUENT (Kg/day)	BOD EFFLUENT (Mg/l)	BOD EFFLUENT (Kg/day)	BOD % REMOVAL	SUSPEND MATTER 24 HR C INFLUENT (Mg/l)	SUSPEND MATTER 24 HR C INFLUENT (Kg/day)	TSS % REMOVAL	SUSPEND MATTER 24 HR C EFFLUENT (Mg/l)	SUSPEND MATTER 24 HR C EFFLUENT (Kg/day)	GREASE & OIL INFLUENT (Mg/l)	GREASE & OIL INFLUENT (Kg/day)	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT (Mg/l)	GREASE & OIL EFFLUENT (Kg/day)	pH	TEMP
1	3.66																7.10	23.7
2	3.94																7.00	24.0
3	3.97																	
4	3.77																	
5	4.48																	
6	4.07																	
7	3.95	340	5083	11	164	97	484	7236	99	3	45						6.90	23.3
8	4.08	307	4741	9	139	97	409	6316	99	3	46						6.80	23.8
9	3.96	228	3417	14	210	94	389	5831	99	4	60						7.00	23.6
10	4.08																6.80	23.6
11	4.07																	
12	3.99																	
13	3.96	269	3882	10	150	96	393	5891	97	11	165						6.80	24.1
14	3.90	288	4251	5	74	98	388	5727	98	6	89						6.80	24.3
15	3.92																6.80	23.8
16	3.84	208	3023	5	73	98	380	5523	99	5	73						6.90	23.4
17	3.82																6.70	23.8
18	3.89																	
19	4.14																	
20	4.02																	
21	4.00	280	4239	5	76	98	412	6238	99	6	91						6.80	23.4
22	4.05	283	4338	5	77	98	374	5733	98	7	107						6.80	24.3
23	3.95	279	4171	7	105	97	376	5621	98	7	105						6.70	23.8
24	4.11																6.70	24.3
25	4.26																	
26	3.97																	
27	3.86																6.70	23.8
28	4.00	227	3437	7	106	97	504	7631	98	8	121						6.70	24.3
29	4.04	244		5			361			6							6.70	24.4
30	4.05	278		5			374			7							6.80	24.3
																	6.70	24.0
TOTAL FLOW	119.99																	
MAXIMUM	4.48	340	5083	14	210	98	504	7631	99	11	165			0	0	0	7.10	24
MINIMUM	3.77	208	3023	5	73	94	361	5523	97	3	45			0	0	0	6.70	23
AVERAGE	4.00	268	4058	7	117	97	404	6175	99	6	90			0	0	0	6.80	24
COUNT	30	12	10	12	10	10	12	10	10	12	10			0	0	0	21	21

kg/day 3.765

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: OCTOBER 2011  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	PH	TEMP
1	4.14																
2	4.19															6.80	23.4
3	4.66															6.80	22.9
4	5.46															7.10	22.3
5	5.41	219	4484	83	37	758	372	7617	96	15	307					6.90	22.0
6	4.95	253	4740	93	18	337	288	5396	94	16	300					6.70	22.3
7	4.36	224	3697	92	17	281	401	6618	96	18	297					6.70	22.3
8	4.31																
9	4.37																
10	4.68																
11	4.38	551	9135	98	12	199	330	5471	98	6	99					6.80	22.8
12	4.39	213	3539	89	23	382	281	4659	96	10	166					7.00	22.7
13	4.34															6.90	23.3
14	4.03	228	3478	96	8	122	268	4088	99	4	61					6.70	23.4
15	4.20															6.80	23.4
16	4.37																
17	4.11																
18	4.00															6.80	23.0
19	4.03	263	4012	97	9	137	308	4698	98	5	76					6.70	23.0
20	4.10	234	3631	88	5	78	280	4345	99	3	47			2	23	6.70	21.8
21	3.93	253	3763	96	10	149	287	4269	99	3	45					6.70	21.7
22	4.01															6.70	22.3
23	4.19																
24	4.28	259	4196	97	9	146	328	5314	98	8	130					6.90	22.6
25	4.11															6.80	21.6
26	4.16	210	3307	96	8	126	267	4204	97	7	110					6.90	21.7
27	4.10															7.10	20.9
28	3.94	241	3594	97	8	119	289	4310	98	6	89					7.00	21.6
29	4.11																
30	4.25																
31	3.97															6.90	22.3
TOTAL FLOW	133.53																
MAXIMUM	5.46	551	9135	98	37	758	401	7617	99	18	307			2	23	7.10	23
MINIMUM	3.93	210	3307	83	5	78	267	4088	94	3	45			2	23	6.70	21
AVERAGE	4.31	262	4298	94	14	236	308	5063	97	8	144			2	23	6.84	22
COUNT	31	12	12	12	12	12	12	12	12	12	12			1	1	21	21

Kg/day 3,785

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: NOVEMBER 2011  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR C INFLUENT Mg/l	SUSPEND MATTER 24 HR C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR C EFFLUENT Mg/l	SUSPEND MATTER 24 HR C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP	
1	5.80																6.90	21.8	
2	3.99	260	3927	98	5	76	300	4531	98	6	91						7.00	21.6	
3	4.23	255	4083	95	14	224	280	4483	96	6	96						7.00	20.9	
4	4.04	221	3379	98	5	76	360	5505	99	4	61						7.10	20.0	
5	5.62																		
6	5.10	214	4131	98	5	97	330	6370	98	5	97						7.00	20.2	
7	4.69																7.00	20.4	
8	4.19																7.00	20.5	
9	4.21	327	5211	97	11	175	360	5737	98	6	96						7.10	20.3	
10	4.21	218	3474	98	5	80	200	3187	98	4	64						7.10	20.3	
11	4.51																7.10	20.3	
12	4.34																		
13	4.47																		
14	4.26	208	3370	98	5	81	240	3870	98	5	81						7.10	20.6	
15	4.18																7.10	21.5	
16	4.23	341	5460	98	5	90	333	5332	99	4	64			2	24	24	7.00	20.7	
17	4.35																7.10	20.8	
18	4.19	227	3600	97	6	95	348	5519	99	4	63						7.10	20.3	
19	4.89																		
20	6.02	203	4825	98	5	114	336	7656	98	6	137						7.00	19.2	
21	4.87																7.10	19.4	
22	4.73	187	3348	97	6	107	402	7197	99	5	90						7.00	19.6	
23	4.72	240	4288	97	7	125	251	4484	99	3	54						7.00	19.7	
24	5.19																7.00	19.4	
25	4.49																		
26	4.66																		
27	4.63																		
28	4.53	270	4829	97	9	154	350	6001	97	9	154						7.00	19.6	
29	4.49	214	3637	96	9	153	349	5931	97	10	170						7.00	19.4	
30	4.35	223	3672	96	9	148	337	5549	96	12	198						7.10	19.2	
31																			
TOTAL FLOW	138.10																		
MAXIMUM	6.02	341	5460	99	14	224	402	7656	99	12	198				2	24	7.10	22	
MINIMUM	3.99	187	3348	95	5	76	200	3187	96	3	54				2	24	6.90	19	
AVERAGE	4.60	241	4056	97	7	119	318	5423	98	5	101				2	24	7.04	20	
COUNT	30	15	15	15	15	15	15	15	15	15	15				1	1	22	22	

kg/day 3.765

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: DECEMBER 2011  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	% REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP
1	4.23																7.10	19.2
2	3.99																7.10	20.5
3	4.23																	
4	4.36																	
5	4.29	216	3507	97	7	114	266	4319	95	12	195						7.10	19.2
6	4.29	389	6243	97	11	177	375	6018	97	10	160						7.20	18.8
7	4.24	389	6243	97	11	177	375	6018	97	10	160						7.10	18.4
8	4.21																7.10	18.3
9	4.16	250	3936	96	6	94	473	7448	98	10	157						7.10	18.2
10	4.30																7.10	
11	4.41																	
12	4.29	225	3653	97	7	114	309	5017	98	7	114						7.10	18.5
13	4.17																7.10	18.4
14	4.23	236	3778	98	5	80	292	4675	98	6	96			88	6		7.00	18.5
15	4.35																7.10	19.2
16	4.19	208	3289	96	5	79	201	3188	97	6	95						7.00	18.8
17	4.28																	
18	4.27	269	4348	97	9	145	303	4837	98	7	113						7.10	19.0
19	4.33																7.10	18.5
20	4.32	87	1423	92	7	114	627	10252	99	8	98						7.10	18.4
21	4.36																7.00	18.2
22	4.26	261	4206	97	8	129	313	5047	98	7	113						7.00	18.2
23	4.41																7.00	17.0
24	4.39																	
25	4.00																	
26	4.18	344	5443	96	15	237	533	8433	#VALUE!								7.10	17.4
27	4.42	300	5019	97	8	134				8	134						7.10	18.2
28	4.03	323	4927	97	10	153	263	4012	98	6	92						7.00	18.3
29	4.22																7.10	18.4
30	4.13	245	3830	96	10	156	302	4721	98	6	94						7.10	19.0
31	4.34																	
TOTAL FLOW	131.90																	
MAXIMUM	4.42	389	6243	96	15	237	627	10252	#VALUE!	12	195				6	88	7.20	21
MINIMUM	3.99	87	1423	92	5	79	201	3188	#VALUE!	6	92				6	88	7.00	17
AVERAGE	4.25	258	4124	97	8	133	355	5639	#VALUE!	8	122				6	88	7.08	19
COUNT	31	13	13	13	13	13	12	12	11	12	12				1	1	23	22

Kg/day 3.785

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: JANUARY 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD EFFLUENT % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL EFFLUENT % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	PH	TEMP
1	3.83																	
2	4.49																7.40	18.5
3	3.99	275	4153	95	13	196	246	3715	96	11	166						7.00	18.3
4	4.09	288	4149	97	8	124	348	5387	98	7	108						7.00	18.4
5	4.19																7.10	18.7
6	3.97	236	3546	97	7	105	286	4298	98	7	105						7.00	18.3
7	4.10																	
8	4.12																	
9	4.14	293	4591	97	6	125	200	3134	96	8	125						7.10	18.1
10	3.91																7.20	18.1
11	4.08	319	4826	98	5	77	370	5714	99	5	77	1	22				7.00	17.9
12	3.96								#VALUE!								7.10	18.1
13	3.92	278	4125	96	6	89	245	3635	98	5	74						7.10	17.8
14	4.06																	
15	4.03																	
16	4.23																7.10	17.1
17	3.97	236	3546	93	17	255	299	4493	97	9	135						7.10	17.3
18	4.00	232	3512	96	9	136	318	4815	98	7	106						7.10	17.1
19	4.41																7.10	17.7
20	8.51	247	7956	96	6	193	268	8632	98	5	161						7.10	17.0
21	6.88																	
22	10.31	213	8312	98	5	185	130	5073	92	10	390							
23	9.05																	
24	6.08	109	2508	95	5	115	104	2393	94	6	138						6.90	16.2
25	5.83																6.80	16.2
26	5.35	170	3442	93	12	243	235	4759	98	5	101						6.90	17.4
27	5.23																7.00	17.7
28	5.13																7.00	17.8
29	5.30																	
30	4.82																7.00	17.8
31																		

TOTAL FLOW	150.00																	
MAXIMUM	10.31	319	8312	98	17	255	370	8632	#VALUE!	11	390	1	22				7.40	19
MINIMUM	3.83	109	2508	93	5	77	104	2393	#VALUE!	5	74	1	22				6.80	16
AVERAGE	5.00	240	4564	96	8	155	263	4740	#VALUE!	7	141	1	22				7.05	18
COUNT	30	12	12	12	12	12	13	13	12	12	12	1	1				21	21

kg/day 3,785

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: FEBRUARY 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP
1	4.78	243	4396	96	10	181	267	4831	98	6	109						7.10	17.6
2	4.60	279	4858	89	32	557	301	5241	98	5	87						6.90	18.0
3	4.53	265	4544	97	8	137	290	4872	98	7	120						6.90	17.6
4	4.69																	
5	4.78	208	4165	98	5	100	223	4465	96	8	160						7.00	17.5
6	5.29																	
7	5.58																7.00	17.9
8	4.95	172	3223	97	6	112	260	4871	97	7	131	1.4	26				7.00	17.9
9	4.77																7.00	18.5
10	4.57	238	4117	98	5	86	349	6037	97	10	173						7.00	18.3
11	4.73																	
12	4.96	252	4731	98	5	94	284	5332	97	8	150							
13	4.85																	
14	4.69																7.20	17.5
15	4.59	213	3700	97	7	122	224	3882	97	6	104						7.10	17.8
16	4.51																7.10	17.4
17	4.42	332	5564	98	5	84	268	4484	99	3	50						7.00	18.1
18	4.50																	
19	4.46																	
20	4.49																	
21	4.38	260	4310	98	6	99	451	7477	99	3	50						7.10	17.6
22	4.22	180	2875	97	5	80	289	4616	99	2	32							
23	4.29																	
24	4.16	275	4330	98	5	79	285	4487	99	2	31						7.20	19.1
25	4.43																7.00	19.2
26	4.50																7.00	17.9
27	4.52	244	4174	98	6	103	268	4585	98	5	86						7.10	17.8
28	5.23	267	5285	97	8	158	258	5107	98	5	99						7.00	17.7
29	5.54	259	5431	97	7	147	288	5620	98	5	105						7.00	17.9
30																		
31																		
TOTAL FLOW	136.01																	
MAXIMUM	5.58	332	5554	98	32	557	451	7477	99	10	173				1	26	7.20	19
MINIMUM	4.16	172	2875	89	5	79	223	3882	96	2	31				1	26	6.90	17
AVERAGE	4.69	246	4380	97	8	143	266	5068	98	5	99				1	26	7.04	18
COUNT	29	15	15	15	15	15	15	15	15	15	15				1	1	20	20

kg/day 3.795

Enter kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: MARCH 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD REMOVAL %	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C Mg/l	SUSPEND MATTER 24 HR.C Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP
1	5.29															7.00	17.2
2	4.89															7.20	17.5
3	4.86																
4	4.95																
5	4.56	237.00	4091	98	5	86	198	3417	98	3	52					7.10	18.5
6	4.56	261.00	4436	96	5	85	314	5336	99	2	34					7.00	18.0
7	4.49	265.00	4757	98	7	117	312	5208	99	2	33					7.00	18.6
8	4.30																18.2
9	4.41																
10	4.50																
11	4.65																
12	4.73	236.00	4225	98	5	90	312	5566	99	3	54					7.10	18.1
13	10.49																
14	11.37	135.00	5810	96	6	256	127	5466	95	6	258			1	60	7.00	18.3
15	8.05	94.00	2864	95	5	152	86	2881	95	4	122					6.90	17.7
16	10.65	145.00	5850	97	5	202	361	14566	99	3	121					7.10	17.6
17	8.74																
18	7.40	136.00	3809	96	5	140	148	4145	98	3	84						
19	6.19																
20	5.95	172.00	3880	96	7	159	162	3654	97	5	113					7.20	17.4
21	5.15																
22	5.26	205.00	4101	96	4	80	224	4460	98	5	100					7.10	17.8
23	4.99																
24	9.06																
25	8.99																
26	6.98	99.00	2616	95	5	132	132	3487	96	5	132					7.20	18.2
27	11.97																
28	9.42	139.00	4956	96	6	214	178	6347	97	5	178					7.10	17.1
29	7.67																
30	6.75	133.00	3398	96	5	128	155	3960	97	5	128					7.20	18.5
31	9.25																
TOTAL FLOW	210.54																
MAXIMUM	11.97	285	5850	96	7	258	361	14566	99	6	258			1	60	7.20	19
MINIMUM	4.30	94	2616	95	4	80	86	2881	95	2	33			1	60	6.80	17
AVERAGE	6.79	175	4215	97	5	142	209	5255	98	4	108			1	60	7.07	18
COUNT	31	13	13	13	13	13	13	13	13	13	13			1	1	22	22

kg/day 3,795

Enter kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: APRIL 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP	
1	6.77																6.90	18.6	
2	6.66																		
3	6.51																6.90	18.2	
4	6.09																6.80	18.6	
5	6.23																6.90	18.1	
6	5.62	271.00	5970	97	7	154	443	9759	98	10	220					7.00	17.5		
7	5.89	218.00	4860	98	5	111	383	8538	98	7	155					6.90	17.4		
8	5.46	239.00	4939	97	7	145	352	7274	97	12	248								
9	5.54																		
10	5.52	213.00	4450	96	8	167	300	6268	98	6	125								
11	4.70																6.80	18.4	
12	5.03																6.90	18.2	
13	5.00	262.00	4958	95	14	265	320	6056	97	9	170					6.80	17.9		
14	4.91						224	4163	97	7	130						7.10	18.0	
15	4.65	249.00	4382	96	9	158	306	5396	97	8	141					6.80	18.8		
16	4.77																		
17	5.07																		
18	5.01	254.00	4817	97	7	133	680	12895	99	8	152					6.60	19.3		
19	5.05																6.70	19.0	
20	4.97	295.00	5549	96	6	113	398	7487	97	10	188	1.8	34			6.70	19.2		
21	4.88																6.70	19.0	
22	4.93	300.00	5596	97	10	187	412	7688	99	6	112					6.70	18.9		
23	5.08																		
24	5.36																		
25	4.84																6.90	18.4	
26	5.05	226.00	4358	96	5	96	360	6881	99	5	96					6.70	19.2		
27	5.38	373.00	7596	96	6	122	426	8675	99	5	102					6.80	19.3		
28	4.86																6.90	19.3	
29	4.78	298.00	5392	97	8	145	306	5536	98	6	109					6.90	18.9		
30	4.61																		
31																			
TOTAL FLOW	159.22																		
MAXIMUM	6.77	373	7596	96	14	265	680	12895	99	12	248				2	34	7.10	19	
MINIMUM	4.61	213	4358	96	5	96	224	4163	97	5	96				2	34	6.60	17	
AVERAGE	5.31	267	5239	97	8	150	378	7431	98	8	150				2	34	6.82	19	
COUNT	30	12	12	12	12	12	13	13	13	13	13				1	1	21	21	

Kg/day 3.785

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: MAY 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	SUSPEND MATTER 24 HR C INFLUENT Mg/l	SUSPEND MATTER 24 HR C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR C EFFLUENT Mg/l	SUSPEND MATTER 24 HR C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP
1	4.55																7.20	20.7
2	4.72	180.00	3216	97	5	89	224	4002	98	5	89						7.20	19.7
3	4.54	205.00	3523	98	5	86	303	5207	98	5	86						7.20	19.4
4	4.88	202.00	3578	93	14	248	220	3897	98	5	89						7.20	19.4
5	4.54																	
6	4.50																	
7	4.13	141.00	2204	96	5	78	255	3986	98	5	78						7.50	21.1
8	4.27																7.20	21.0
9	4.39	230.00	3822	98	5	83	251	4171	98	5	83						7.20	20.9
10	4.28																7.20	21.0
11	4.21	262.00	4175	98	5	80	379	5039	99	5	80						7.20	21.1
12	4.27																	
13	4.41	266.00	4440	98	5	83	296	4941	98	5	83						7.30	21.0
14	4.54																7.20	20.7
15	4.39	249.00	4137	98	6	100	250	4154	98	5	83						7.20	20.9
16	4.25																7.20	20.7
17	4.08	226.00	3490	98	5	77	264	4077	98	5	77						7.20	21.2
18	4.26																7.20	21.2
19	4.10																	
20	4.22																	
21	4.32	237.00	3875	98	5	82	261	4268	98	5	82						7.20	20.9
22	4.14																7.30	21.6
23	4.12	224.00	3493	98	5	78	346	5396	99	5	78						7.20	21.2
24	4.09																7.20	20.9
25	4.09	256.00	3963	98	5	77	612	9474	99	5	77						7.20	20.8
26	4.13																	
27	3.91																	
28	4.30																7.20	20.9
29	4.15	287.00	4194	98	6	94	348	5466	99	5	79						7.20	21.1
30	4.08	221.00	3413	97	7	108	329	5081	98	5	77						7.20	21.7
31	4.27	249.00	4024	98	5	81	347	5608	99	5	81						7.20	21.8
TOTAL FLOW	132.93																	
MAXIMUM	4.72	267	4440	98	14	248	612	9474	99	5	89						7.30	22
MINIMUM	3.91	141	2204	93	5	77	220	3897	98	5	77						7.20	19
AVERAGE	4.29	228	3703	97	6	96	312	5051	98	5	81						7.21	21
COUNT	31	15	15	15	15	15	15	15	15	15	15						23	23

Kg/day 3.785

Enter Kg/day or lbs/day on Input 1 Tab Cell D5

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: JUNE 2012  
PRINT DATE: 11/9/2012

DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	BOD % REMOVAL	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP
1	4.07																7.40	22.7
2	4.06																7.40	22.8
3	4.17	262	4135	12	189	95	394	6219	99	2	32						7.40	23.1
4	4.13	366	6034	17	266	96	438	6847	100	1	16						7.40	23.2
5	4.33	239	3817	5	82	98	407	6670	100	1	15						7.40	22.5
6	3.95																	
7	4.10																	
8	4.07																	
9	4.00																7.30	23.0
10	4.14																7.30	23.5
11	3.84	229	3328	6	87	97	401	6284	99	3	47						7.40	23.6
12	3.87	362	5303	5	73	99	362	5261	99	4	58						7.30	23.3
13	3.92																7.30	23.3
14	3.99																	
15	3.92	257	3813	5	74	98	358	5312	99	3	45						7.50	23.7
16	3.83																7.40	23.6
17	3.94	279	4161	5	75	98	467	6954	99	3	45						7.30	23.6
18	4.04																7.40	23.2
19	3.91	267	3951	5	74	98	533	7888	99	3	44						7.20	23.6
20	3.97																	
21	3.95																	
22	4.02																	
23	4.03																7.30	23.1
24	3.97	270	4057	13	195	95	386	5845	96	8	120						7.30	23.9
25	3.97	258	3877	32	481	88	340	5109	96	13	195						7.10	23.8
26	3.98	251	3761	5	75	98	382	5755	99	3	45						7.30	24.1
27	3.94																7.30	23.4
28	3.87																	
29	3.98	243	3661	6	90	98	378	5694	99	3	45						7.20	23.7
30	3.91	253	3744	7	104	97	404	5979	99	3	44						7.30	22.4
31																		
TOTAL FLOW	119.89																	
MAXIMUM	4.33	386	6034	32	481	99	533	7888	100	13	195				0	0	7.50	24
MINIMUM	3.83	229	3328	5	73	88	340	5109	96	1	16				0	0	7.10	22
AVERAGE	4.00	274	4136	9	144	97	402	6068	99	4	57				#DIV/0!	#DIV/0!	7.33	23
COUNT	30	13	13	13	13	13	14	14	14	14	14				0	0	22	22

Kg/day 3.785

Enter Kg/day or lbs/day on Input 1 Tab Cell D6

NOVATO SANITARY DISTRICT - VEOLIA  
Wastewater Treatment Plant

INFLUENT & EFFLUENT DATA

MONTH: JULY 2012  
PRINT DATE: 11/19/2012

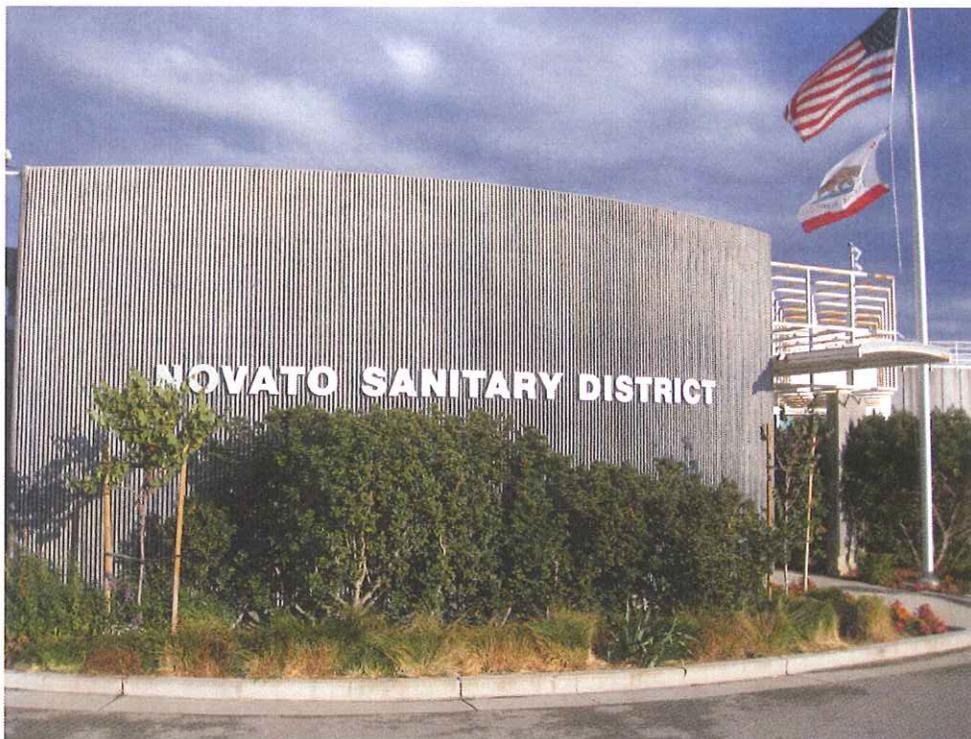
DATE	TOTAL PLANT FLOW x 1,000,000	BOD INFLUENT Mg/l	BOD INFLUENT Kg/day	BOD % REMOVAL	BOD EFFLUENT Mg/l	BOD EFFLUENT Kg/day	BOD % REMOVAL	SUSPEND MATTER 24 HR.C INFLUENT Mg/l	SUSPEND MATTER 24 HR.C INFLUENT Kg/day	TSS % REMOVAL	SUSPEND MATTER 24 HR.C EFFLUENT Mg/l	SUSPEND MATTER 24 HR.C EFFLUENT Kg/day	GREASE & OIL INFLUENT Mg/l	GREASE & OIL INFLUENT Kg/day	GREASE & OIL % REMOVAL	GREASE & OIL EFFLUENT Mg/l	GREASE & OIL EFFLUENT Kg/day	pH	TEMP	
1	4.02																			
2	3.79	256	3701	98	5	72	99	383	5494	99	5	72						7.20	23.1	
3	3.83	232	3363	97	6	87	98	251	3639	98	5	72						7.20	23.1	
4	3.67																	7.20	23.2	
5	3.86																	7.20	23.4	
6	3.76	273	3886	98	5	71	99	421	5992	99	5	71						7.10	22.9	
7	3.7																			
8	3.87	282	3838	98	5	73	98	273	3999	98	5	73						7.20	23.1	
9	3.92																	7.10	23.0	
10	4.08	257	3959	98	5	77	99	387	5976	99	5	77						7.20	23.8	
11	3.85																	7.10	23.8	
12	3.8	231	3322	98	5	72	96	296	4257	96	5	72						7.10	23.7	
13	3.86																			
14	3.82																	7.10	23.7	
15	3.88																			
16	4.01	252	3625	98	5	76	98	291	4417	98	5	76						7.20	23.3	
17	4.11																	7.20	23.1	
18	4.19	246	3901	98	5	79	98	296	4694	98	5	79						7.10	22.7	
19	3.55																	7.20	23.7	
20	3.75	236	3350	98	5	71	98	296	4201	98	5	71						7.10	23.5	
21	3.73																			
22	3.8																			
23	3.67	251	3487	98	6	83	98	282	3917	98	5	69						7.20	23.8	
24	3.91																	7.20	23.7	
25	3.96	231	3462	98	5	75	98	298	4467	98	5	75						7.10	23.4	
26	3.89																	7.10	23.3	
27	3.82	331	4786	96	5	72	99	395	5711	99	5	72						7.10	23.9	
28	3.75																			
29	3.87																			
30	3.92																	7.10	23.5	
31	3.95																	7.10	24.2	
TOTAL FLOW	119.99																			
MAXIMUM	4.19	331	4786	98	6	87	99	421	5992	99	5	79				0	0	7.20	24	
MINIMUM	3.55	231	3322	97	5	71	96	251	3639	96	5	69				0	0	7.10	23	
AVERAGE	3.86	255	3741	96	5	76	98	322	4730	98	5	73				#DIV/0!	#DIV/0!	7.15	23	
COUNT	31	12	12	12	12	12	12	12	12	12	12	12				0	0	22	22	

kg/day 3.785  
Enter Kg/day or lbs/day on Input 1 Tab Cell D6



NOVATO SANITARY DISTRICT  
VEOLIA WATER WEST OPERATING SERVICES  
ANNUAL OPERATIONS AND MAINTENANCE REPORT  
AUGUST 2011 – JULY 2012

**ATTACHMENT #2**



# Relative Criticality Ranking Report of Novato's Treatment Plant Systems



Performed by:

Veolia Novato Staff &  
WLLC Asset Management Team

August 16<sup>th</sup> – 18<sup>th</sup>, 2010

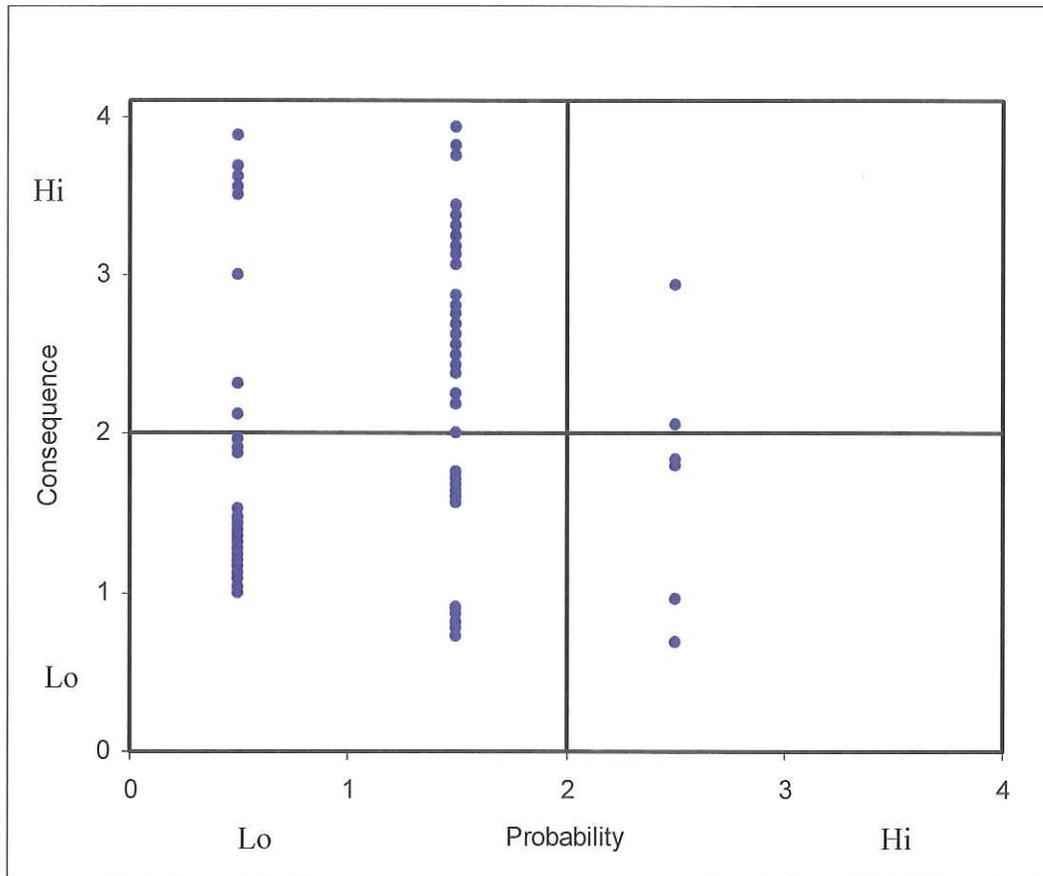
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## 1. Criticality Process Overview:

A systematic relative criticality review was completed for the Novato Treatment Facility. A criticality ranking process allows identification and prioritization of assets based on rankings from a standardized scale for consequence and likelihood of worst case failure scenarios. The ranking is useful in selecting between preventative and condition based services, prioritization of corrective work orders, and prioritization for condition assessment of assets. Additional benefits include increased understanding of causes and effects of failures, staff training on plant failure scenarios, and documentation of institutional knowledge. Further in-depth Reliability Centered Maintenance (RCM) studies can be prioritized based on critical systems. Graph 1 pictorially demonstrates the relationship between consequence and likelihood of failure. Systems that fall to the upper right of the graph are high priority systems and systems that fall to the lower left of the graph are low priority systems.

**Graph 1. Criticality System Ranking Results**



In a workshop with the plant staff and the Asset Management group, key criteria for each system were evaluated: Safety, Capacity, Environmental, Operating Cost, Stakeholder Impact, and Collateral Impact. Appendix A defines the criteria and the ratings for each key criteria. Using a VVNA proprietary tool, each system was ranked relative to the rest of the systems.

## 2. Criticality Ranking Results:

The results of the ranking are presented in Table 1 below. The criticality ranking has both a numeric and an alpha portion.

The numeric portion is listed as X:X:X:X and describes the severity of failures. The left most number is the summary number of key criteria that fall in the unacceptable category, the second number is criteria in the major category, the third number is criteria in the undesirable category, and the fourth number is criteria in the minor category. The higher the number rankings further to the left, the more critical the system.

The alpha portion is listed as A, B, C, or D and describes the frequency of failures. A stands for Common, B for Probable, C for Uncommon, and D for Rare. The higher the frequency of failure, then the more critical the system.

The combination of the numeric and alpha portions creates the final criticality ranking. This criticality ranking is then utilized to prioritize work orders, condition assessment and RCM studies. A complete listing of the failure scenarios identified for each system can be found in Appendix B.

**Table 1. Criticality System Ranking Results**

Description	Consequence	Probability	CMMS Ranking
STP00PRE00PMP00 - Influent Raw Sewage Pumping System	2:2:1:1	C	5
STP00PEF00PMP03 - Plant Effluent Wet Weather Pumping System	2:2:1:1	D	5
SCS00PST01GNR00 - Ignacio Generator System	2:2:0:2	C	5
SCS00PST01PMP01 - Ignacio Pumping/Wetwell System	2:2:0:2	C	5
SCS00PST01ELE00 - Ignacio Electrical Systems	2:2:0:2	D	5
STP00PWR00ELE00 - Motor Control Center System	2:1:0:3	D	5
STP00PWR00GNR01 - Standby Generators 1 & 2 System	2:1:0:3	D	5
STP00PWR00GNR02 - UV Area Emergency Generator System	2:1:0:3	D	5
SCS00PST01PMP02 - Ignacio Equalization Pumping System	2:0:2:2	C	5
STP00PEF00PMP02 - Utility Water Pumping & Filtration System	2:0:2:2	C	5
STP00DGS00GAS00 - Digester Gas System	1:2:1:2	C	5
STP00BCB00STL02 - Secondary Clarification System	1:1:2:2	C	5
STP00PEF00TSP01 - UV Influent Channel System	1:1:1:3	C	5
STP00PEF00TSP02 - UV Effluent Channel System	1:1:1:3	C	5
STP00PEF00UYD00 - UV Disinfection System	1:1:1:3	C	5
STP00PWR00TNS00 - Main Utility Switchgear System	0:3:1:2	D	5

STP00CST00SCA00 - SCADA and Network System	0:2:2:2	B	3
STP00CST00CTR00 - PLC and Remote I/O System	0:2:2:2	C	3
STP00SED00STL01 - Primary Settling System	0:2:2:2	C	3
STP00BCB00TSP01 - Aeration Splitter Box System	0:2:1:3	C	3
STP00BCB00TSP02 - Secondary Clarifier Splitter Box System	0:2:1:3	C	3
STP00PRE00TSP00 - Raw Sewage Distribution Box & Metering System	0:2:1:3	C	3
STP00CST00MNT01 - Fire Safety Monitoring System	0:1:3:2	C	3
STP00SED00PMP00 - Primary Scum/Sludge Pumping System	0:1:3:2	C	3
STP00DGS00HTG00 - Hot Water Heating & Circulation System	0:1:2:3	C	3
STP00DGS00PMP02 - Digester Recirculation Pump & Heating System	0:1:2:3	C	3
STP00DGS00MBL00 - Digesters & Mixing System	0:1:2:3	D	3
STP00BCB00AER01 - Aeration Blower System	0:1:1:4	C	3
STP00BCB00PMP02 - RAS Pumping System	0:1:1:4	C	3
SCS00PST01STR00 - Ignacio Equalization Basins & Diversion Structure	0:1:1:4	D	3
STP00SPS00SAF00 - Safety Equipment System	0:1:0:5	B	3
STP00CHM00CHF04 - Generator Fuel Bulk Tank System	0:0:5:1	C	3
STP00BGR00GRN00 - Facility Site System - Grounds	0:0:4:2	D	2
STP00PEF00STR00 - Flow Equalization Pond System	0:0:4:2	D	2
STP00PWR00GNR03 - Admin Building Generator System	0:0:4:2	D	2
STP00BCB00MBL00 - Aeration Basins System	0:0:3:3	B	2
STP00SLC00PMP02 - Sludge Storage Lagoon Decant Pumping System	0:0:3:3	B	2
STP00BCB00PMP03 - WAS Pumping System	0:0:3:3	C	2
STP00DGS00PMP01 - Digested Sludge Pumping System	0:0:3:3	C	2
STP00PRE00SCR00 - Bar Screen System	0:0:3:3	C	2
STP00SLC00STR01 - Sludge Storage Lagoon System	0:0:3:3	C	2
STP00SLL00PMP02 - TWAS Pumping System	0:0:3:3	C	2
STP00SLL00PMP03 - GBT Filtrate Pumping System	0:0:3:3	C	2
SCS00PST01BLD01 - Ignacio Control Building	0:0:3:3	D	2
SCS00PST01BLD02 - Ignacio Generator Building	0:0:3:3	D	2
SCS00PST01GRN00 - Ignacio Grounds System	0:0:3:3	D	2
STP00BGR00BLD01 - Headworks/Generator Building	0:0:3:3	D	2
STP00BGR00BLD02 - Grit Bin Building	0:0:3:3	D	2
STP00BGR00BLD03 - Aeration/Electrical Building	0:0:3:3	D	2
STP00BGR00BLD04 - UV Building	0:0:3:3	D	2
STP00BGR00BLD05 - Wet Weather Pumping Building	0:0:3:3	D	2

STP00BGR00BLD06 - Main Electrical Room Building	0:0:3:3	D	2
STP00BGR00BLD07 - GBT Building	0:0:3:3	D	2
STP00BGR00BLD08 - Solids Processing Building	0:0:3:3	D	2
STP00BGR00BLD09 - Administration Building	0:0:3:3	D	2
STP00SLL00THK00 - Gravity Belt Thickener System	0:0:3:3	D	2
STP00SPS00GAS00 - Natural Gas Feed System	0:0:3:3	D	2
STP00CHM00CHF03 - Polymer Dosing System	0:0:2:4	B	1
SCS00PST01FLT00 - Ignacio Odor Control System	0:0:2:4	C	1
STP00PRE00GRT00 - Grit Removal System	0:0:2:4	C	1
STP00PWR00GNR04 - Micro Turbine System	0:0:2:4	C	1
STP00SLL00PMP01 - High Pressure Washwater Pumping System	0:0:2:4	C	1
STP00SPS00FLT02 - Odor Bed Odor Control System	0:0:2:4	C	1
STP00PRE00SPT00 - Septage/Vactor Disposal System	0:0:1:5	B	1
STP00SPS00SMP00 - Sampling Equipment System	0:0:1:5	B	1
SCS00PST01CTR00 - Ignacio Control Systems	0:0:1:5	C	1
SCS00PST01TSP00 - Ignacio Influent Channel/Grinder System	0:0:1:5	C	1
STP00CHM00CHF01 - Ferric Chloride Dosing System	0:0:1:5	C	1
STP00CHM00CHF02 - Sodium Hypochlorite Dosing System	0:0:1:5	C	1
STP00PEF00PMP01 - Plant Effluent Dry Weather Pumping System	0:0:1:5	D	1
STP00CST00NET00 - Administrative Computer Network	0:0:0:6	B	1
STP00SPS00HTL00 - Maintenance Handtools System	0:0:0:6	B	1
STP00BCB00AER02 - Mixed Liquor Channel Blower System	0:0:0:6	C	1
STP00BCB00PMP01 - Mixed Liquor Recycle Pumping System	0:0:0:6	C	1
STP00BCB00PMP04 - Secondary Scum Pumping System	0:0:0:6	C	1
STP00BCB00PMP05 - Secondary Drainage Pumping System	0:0:0:6	C	1
STP00CST00CMM00 - Plant Communications System	0:0:0:6	C	1
STP00PEF00AER02 - UV Channel Aeration Blower System	0:0:0:6	C	1
STP00SPS00RSK00 - Service Vehicle System	0:0:0:6	C	1

### 3. Items of Interest:

Items of interest are items that were identified as operational controls or redesign considerations that if implemented would increase the reliability of the system. Incorporation of these items could result in lowering of the criticality of the system. Table 2. identifies the operational controls recommendations and Table 3 identifies the redesign considerations.

**Table 2. Operational Controls Recommendations**

	Systems	Criticality		Operational Controls Suggestions
<b>Ignacio Pump Station</b>				
	SCS00PST01TSP00 - Ignacio Influent Channel/Grinder System	0:0:1:5:C	1	Recommend 5 year concrete inspection PM.
	SCS00PST01PMP01 - Ignacio Pumping/Wetwell System	2:2:0:2:C	5	Recommend 5 year concrete inspection.
	SCS00PST01CTR00 - Ignacio Control Systems	0:0:1:5:C	1	Ensure PM's for alarm verification of the back-up float system.
<b>Preliminary Treatment Process</b>				
	STP00PRE00PMP00 - Influent Raw Sewage Pumping System	2:2:1:1:C	5	Recommend 5 year concrete inspection PM.
	STP00PRE00SCR00 - Bar Screen System	0:0:3:3:C	2	Recommend 5 year PM for concrete inspection. Review spares for screw conveyor.
	STP00PRE00GRT00 - Grit Removal System	0:0:2:4:C	1	Recommend 5 year concrete inspection PM.
	STP00PRE00TSP00 - Raw Sewage Distribution Box & Metering System	0:2:1:3:C	3	Recommend 5 year concrete inspection PM.
<b>Primary Sedimentation Process</b>				
	STP00SED00STL01 - Primary Settling System	0:2:2:2:C	3	Recommend 5 year concrete inspection PM.
<b>Secondary Treatment Process</b>				
	STP00BCB00TSP01 - Aeration Splitter Box System	0:2:1:3:C	3	Recommend 5 year concrete inspection PM.
	STP00BCB00MBL00 - Aeration Basins System	0:0:3:3:B	2	Recommend 5 year concrete inspection PM.
	STP00BCB00TSP02 - Secondary Clarifier Splitter Box System	0:2:1:3:C	3	Recommend 5 year concrete inspection PM.
	STP00BCB00STL02 - Secondary Clarification System	1:1:2:2:C	5	Recommend 5 year concrete inspection PM.
	STP00BCB00PMP02 - RAS Pumping System	0:1:1:4:C	3	Recommend investigating spare RAS pump stock.
<b>Plant Effluent Process</b>				
	STP00PEF00TSP01 - UV Influent Channel System	1:1:1:3:C	5	Recommend 5 year concrete inspection PM.
	STP00PEF00TSP02 - UV Effluent Channel System	1:1:1:3:C	5	Recommend 5 year concrete inspection PM.
<b>Digestion Process</b>				
	STP00DGS00PMP01 - Digested Sludge Pumping System	0:0:3:3:C	2	Investigate contingency plan for solids hauling. Options for sludge trucking - location to open and ability to get solids into a truck and truck companies.
<b>Power Systems Process</b>				
	STP00PWR00TNS00 - Main Utility Switchgear System	0:3:1:2:D	5	Recommend review of PM's for critical electrical components.
	STP00PWR00ELE00 - Motor Control Center System	2:1:0:3:D	5	Recommend review of PM's for critical electrical components.

**Table 3. Redesign Considerations**

	Systems	Criticality	Redesign Considerations
<b>Sludge Storage Process</b>			
	STP00SLC00PMP02 - Sludge Storage Lagoon Decant Pumping System	0:0:3:3:B	2
			'System is aged and potentially corroded from weather/H2S. Recommend condition assessment review of system and capital plan development (guide rails, pumps, valves).

**APPENDIX A – Ranking Criteria**

**Introduction:**

The following guidelines are provided for use when evaluating criticality of systems in preparation for RCM analysis or other purposes. Users are encouraged to review and revise these as appropriate for each site and/or use. However, use caution to ensure that these scales are of RISK, not value. In other words, it may be tempting to place dollar values on operating cost scales or seriousness of injury on safety scales, but as soon as either costs are actually increased, or injury actually occurs, unacceptable results have taken place. As a specific example, say a handrail mounting rots out. Until someone is in the specific location and leans on the rail in a way that depends on the rail, there are no measurable safety consequences. However, risk has increased considerably.

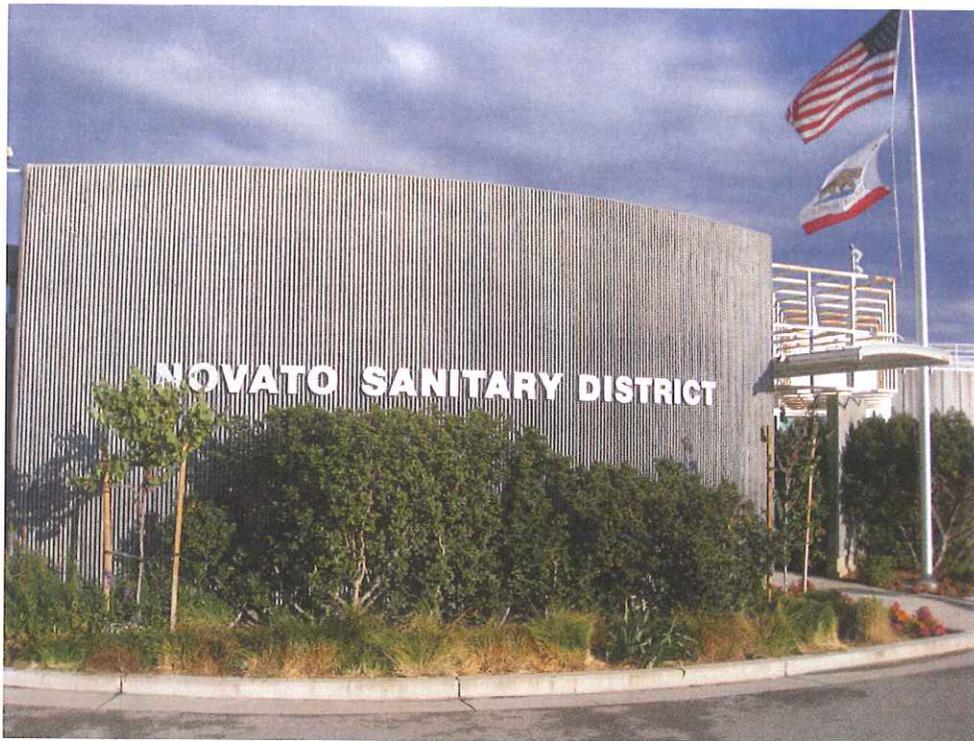
**Safety**

- Unacceptable Failure virtually assures injury, fine, or citation. The danger of likelihood of injury is immediate and there is little or no way to discover and mitigate the danger following failure. Examples might include chlorine leaks or liquid polymer spills.
- Major Risk of injury, fine, or citation is very high. The danger or likelihood of injury could be significantly mitigated only if almost immediately detected and actions taken following failure. Examples might include dry polymer spills or hypochlorite, caustic, or other aggressive chemical spills.
- Undesirable Risk of injury, fine, or citation is increased. The danger or likelihood of injury can be significantly mitigated if there are secondary or indirect means or detecting and responding to the failure. Examples might include non-aggressive chemical leaks, visibly or easily observed missing or damaged protective devices such as gratings or handrails, etc.
- Minor Risk of injury, fine, or citation is not significantly affected. There is little increased safety risk due to failure



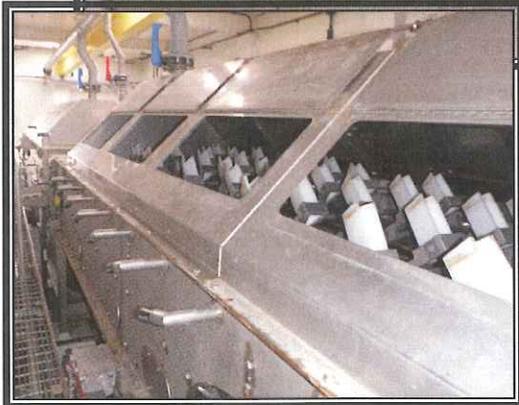
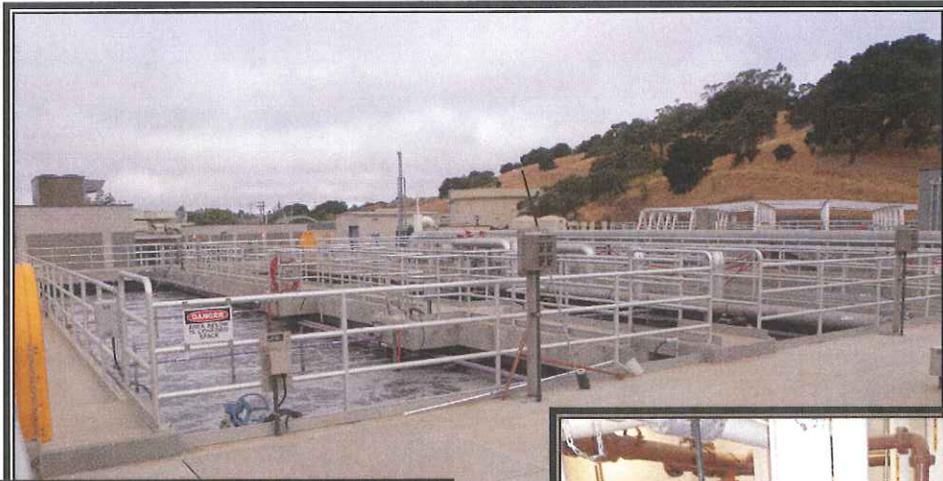
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**ATTACHMENT #3**



# 2012 Five Year Capital Plan Report

## for the Novato Water Reclamation Facility



Prepared by:

**Veolia Water Operating Services**

April, 2012



# **2012 Five Year Capital Plan Report**

## **Novato Water Reclamation Facility**

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- 1. Methodology**
- 2. Capital Projects and Cost Summaries**
- 3. Capital Improvement Project Details**

# 2012 Five Year Capital Plan Report

## Novato Water Reclamation Facility

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### SECTION 1 - METHODOLOGY

The following is a five year forecast of capital improvement project recommendations for the Novato Water Reclamation Facility. Recommendations for capital improvement projects were derived through a comprehensive equipment/application assessment based on factors including:

- Criticality Analysis
- Condition Assessment
- Projected Remaining Equipment Life

Operational history is accounted for in the recommendations with a focus on projects that will improve operational efficiency and reliability. This document is to be updated periodically to coincide with the annual Capital Planning requirements of Veolia's service agreement with the Novato Sanitary District.

Tasks completed during the review conducted by Veolia included:

#### Criticality

A systematic relative criticality review was completed for the water reclamation facility. A criticality ranking process allows identification and prioritization of assets based on rankings from a standardized scale for consequence and likelihood of worst case failure scenarios. The ranking is useful in selecting between preventative and condition based services, prioritization of corrective work orders, and prioritization for condition assessment of assets. Additional benefits include increased understanding of causes and effects of failures, staff training on plant failure scenarios, and documentation of tribal knowledge. Further in-depth Reliability Centered Maintenance (RCM) studies can be prioritized based on critical systems. In a workshop with the Novato facility staff and the Asset Management group, key criteria for each system were evaluated: Safety, Capacity, Environmental, Operating Cost, Stakeholder Impact, and Collateral Impact. Using a VVNA proprietary tool, each system was ranked relative to the rest of the systems. The Criticality Assessment Report was performed in August of 2010.

#### Condition Assessment

A condition assessment was completed for all major plant assets. The condition assessment is intended to be a "snap shot" of the condition of an asset and give it a ranking number based on deficiency scoring where 1 is new and 5 is failed. Higher numerical values represent worse condition, based on deficiency scoring. In other words, evidence of defects, wear, or aging is necessary to give a lower value score. If an asset is in an advanced state of wear or aging, an end-of-life can be predicted. The purpose of developing a ranking number is to prioritize where maintenance and capital should be focused to increase reliability of system functions. Each asset was ranked in multiple areas such as performance, appearance, vibration, reliability, safety, etc.

# 2012 Five Year Capital Plan Report

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### Long Range Plan

The Long Range Plan is the development of the expected life cycle for each asset and determination of the remaining useful life. The Expected Life Tool is built on the concept that by grouping assets with similar failure modes it is possible to determine and apply statistical life expectancy for the group of assets. The life cycle data is built on studies conducted on life expectancy by different groups of asset types by the Veolia Environment Paris Technical Group. These asset types were further expanded on by published information and failure mode analysis of asset data from Veolia Water North America.

The concept is further expanded by breaking the life expectation down into three general stress related groupings to identify the expected life of the asset – light (non-corrosive), medium, and heavy (corrosive) duty for improved accuracy.

After the stress type is identified and an expected life span assigned, the years in service is calculated as the difference between the current date and the installation date for the asset. Finally, the remaining expected life is calculated as the difference between the years in service and the expected life span.

### Capital Planning

Based on the assessment briefly described above, capital improvement tasks have been categorized based on the year in which the improvement is projected to be required. This projection has been limited to a five year 'window' to maximize accuracy. Estimated cost to complete each task was established using data from Veolia's corporate data base as well as locally established repair cost projections. Note that all capital improvement costs are based on present day (i.e. 2012) dollars. Section 2 provides a summary of the projects and costs in this Capital Plan Report. Following Section 2, Figure 2 graphically presents the annual cost burden for the required capital improvements. Section 3 then offers a more detailed description of the work suggested to be performed each year.

## 2012 Five Year Capital Plan Report

### Novato Water Reclamation Facility

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#### SECTION 2 – CAPITAL PROJECTS AND COST SUMMARIES

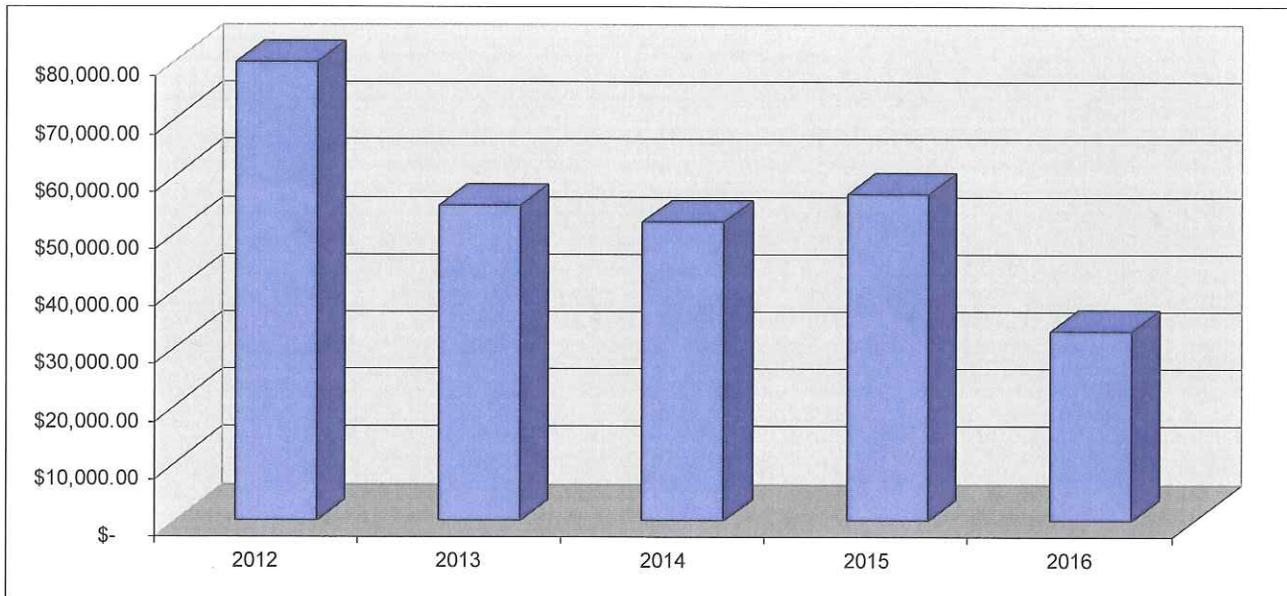
The table below is a cost summary of the recommended capital improvement projects. Note the project costs are estimates and each project will require a more detail cost analysis prior to initiation of the projects. All costs are present-day dollar estimates.

Year	Project	Estimate	Year Sum
<b>2012</b>			
	Replacement of Ignacio Standby Emergency Generator Control Unit	\$ 15,000	
	Overhaul of Ignacio Influent Channel Grinder	\$ 10,000	
	Primary Clarifier Corrosion Review	\$ 10,000	
	Sound Proofing Acoustic Panels Around Plant	\$ 10,000	
	Outer Wall Perimeter Upgrade for Surge Protection	\$ 15,000	
	Addition of Boiler Water Conditioning	\$ 10,000	
	Alternative Diesel Pumps Water Source Piping	\$ 10,000	
	<b>Year Sum</b>		<b>\$ 80,000</b>
<b>2013</b>			
	Ignacio Odor Control Bed Media Replacement	\$ 13,000	
	Novato Wet Weather Influent Pump #1 Rebuild	\$ 10,000	
	John Deere Tractor/Boom Overhaul and Repairs	\$ 12,000	
	Digester #1 Rehab Project		
	Primary Clarifier Corrosion Coating Repairs	\$ 20,000	
	<b>Year Sum</b>		<b>\$ 55,000</b>
<b>2014</b>			
	Novato Odor Bed By Hypochlorite Tank Media Replacement	\$ 13,000	
	Novato Odor Bed By Aeration Basins Media Replacement	\$ 13,000	
	Novato Odor Bed By Ferric Chloride Tank Media Replacement	\$ 13,000	
	Novato Odor Bed By Clarifiers Media Replacement	\$ 13,000	
	<b>Year Sum</b>		<b>\$ 52,000</b>

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<b>2015</b>			
	Fine Bubble Diffuser Aeration Membrane Overhaul and Partial Diffuser Change-out	\$ 27,000	
	TWAS Pump #1 Rebuild	\$ 15,000	
	TWAS Pump #2 Rebuild	\$ 15,000	
	<b>Year Sum</b>		<b>\$ 57,000</b>
<b>2016</b>			
	Overhaul of Ignacio Influent Channel Grinder	\$ 10,000	
	Novato Wet Weather Influent Pump #2 Rebuild	\$ 10,000	
	Ignacio Odor Control Bed Media Replacement	\$ 13,000	
	<b>Year Sum</b>		<b>\$ 33,000</b>

**Figure 2. Projected Capital Expenditure**



**SECTION 3 - CAPITAL IMPROVEMENT PROJECTS**

- **Overhauls and Replacement Based on Expected Life (Estimated Cost: \$Various)**

Various overhauls and replacements based on expected life projections. The table below summarizes these projects.

2012	Replacement of Ignacio Standby Emergency Generator Control Unit	\$ 15,000
2012	Overhaul of Ignacio Influent Channel Grinder	\$ 10,000
2013	Novato Wet Weather Influent Pump #1 Rebuild	\$ 10,000
2013	John Deere Tractor/Boom Overhaul and Repairs	\$ 12,000
2015	Fine Bubble Diffuser Aeration Membrane Overhaul and Partial Diffuser Change-out	\$ 27,000
2015	TWAS Pump #1 Rebuild	\$ 15,000
2015	TWAS Pump #2 Rebuild	\$ 15,000
2016	Overhaul of Ignacio Influent Channel Grinder	\$ 10,000
2016	Novato Wet Weather Influent Pump #2 Rebuild	\$ 10,000

- **Primary Clarifier Corrosion Control (Estimated Cost: \$10,000 Study and \$20,000 Repairs)**

It is known that some corrosion exists in the primary clarifiers due to initial operating conditions of the covered clarifiers. It is recommended that a review be completed by Corrosion Probe to provide a comprehensive plan to treat the corrosion and prevent further corrosion from occurring. Early prevention and correction will extend the life of the equipment.

- **Installation of Sound Proofing Acoustic Panels (Estimated Cost: \$50,000)**

Recommend installation of acoustical panels in strategic locations throughout the facility for noise control to outside the fence line including odor control fans and the micro turbine.

- **Perimeter Upgrade for Off Site Spill Protection (Estimated Cost: \$15,000)**

Recommend installation of additional barrier or possible regarding to provide protection for any off-site runoff from the facility. Intent is to provide full containment of the facility.

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- **Addition of Boiler Water Conditioning (Estimated Cost: \$10,000)**

Recommend the installation of water conditioning equipment for boiler feed water. This conditioning will extend the life of the boiler and provide better operating conditions.

- **Alternative Diesel Water Source Piping (Estimated Cost: \$10,000)**

Recommend installation of an alternative water source in addition to plant water for the diesel pumps such that in the event operation of the pumps is required, they can be operated with an alternative water source should plant water be unavailable.

- **Biofilter Media Replacement (Estimated Cost: \$75,000)**

Rehabilitation of biofilter media at Ignacio Transfer Pump Station. Use the biofilters at Novato as a model.

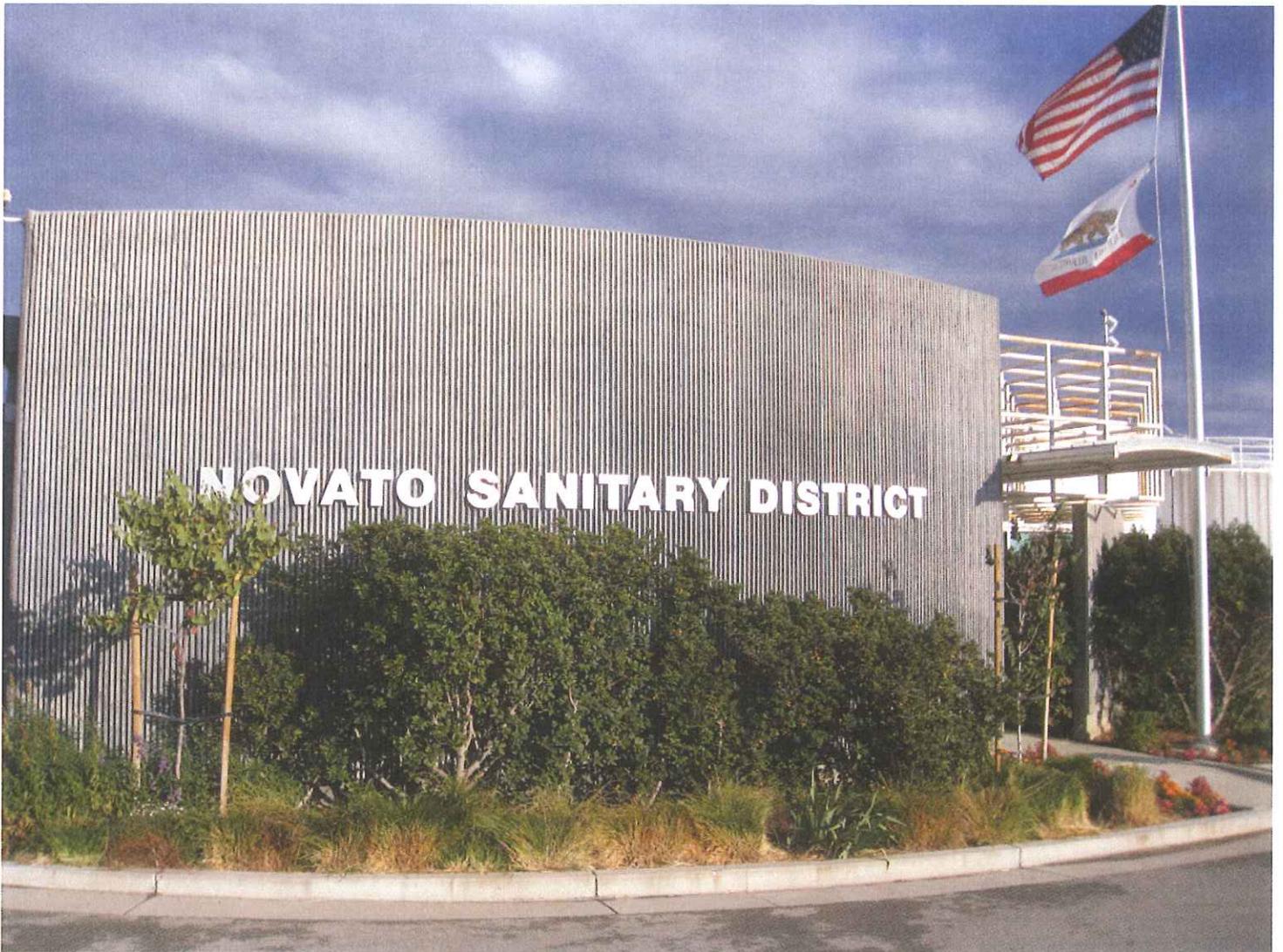
- **Digester #1 Rehabilitation Project (This work will be included in Contract "C")**

The rehabilitation of Digester #1 is scheduled for 2013. Expected rehabilitation includes:

- New pump mixing system
- New hear recirculation pumps
- New dome
- Structural upgrades as needed
- New electrical and controls



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# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> Collection System Improvements; Olive Street Force Main Rehabilitation Project No. 72706; Phase I	<b>MEETING DATE:</b> December 10, 2012  <b>AGENDA ITEM NO.:</b>
<b>RECOMMENDED ACTION:</b> Consider approval of a contract with Nute Engineering in the amount of \$50,000 and authorize the Manager-Engineer to execute such contract.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The Olive Street Force Main is a pressure pipe that receives discharge from the District's Olive Street Pump Station (OSPS). It is 27" in diameter and runs south from the pump station (just north of the intersection of Olive and Railroad Avenues) in Railroad Avenue before discharging into a manhole just to south of the intersection of Railroad and Grant Avenues. The force main was constructed in 1972 and is primarily fiberglass reinforced plastic mortar pipe commonly known as Techite. Techite was commonly used in the 1970s but has proved to be fragile and difficult to repair when it is damaged or when a leak occurs.</p> <p>Given its age (40 years), its original construction materials (Techite), and its history of damage and leaks, it is recommended that the Olive Force Main be rehabilitated or replaced. Nute Engineering (Nute) has prepared an analysis for the District which includes an evaluation of rehabilitation and replacement alternatives. Nute's analysis includes a capacity evaluation of the OSPS which demonstrates that influent flows to the OSPS are currently significantly lower than anticipated by its original design. Therefore, Nute recommended rehabilitating the 27" Techite force main pipe by slip-lining it with a 24" outside diameter (21" inside diameter) HDPE pipe. The basis for the smaller pipe size is that with a lower projected peak flow to the pump station, the force main diameter can be reduced to reflect the lower projected peak flows that will be needed to be pumped through it.</p> <p>Nute's analysis was presented to the Board's Strategic Planning and New Facilities Committee (Committee) at its November 1, 2012 meeting. The Committee directed staff to request a proposal for design services from Nute to implement the recommendations of their analysis. Nute has provided such a proposal and staff has evaluated it for adequacy. Accordingly, staff recommends that the Board consider approval of a contract with Nute Engineering in the amount of \$50,000 to provide design services for the Olive Street Force Main rehabilitation, and authorize the Manager-Engineer to execute such contract.</p>	
<b>Alternatives:</b> Do not approve the contract.	
<b>BUDGET INFORMATION:</b> This design work will be funded from the budget for Collection System Improvements, Project 72706. The FY12-13 amount of for this budget is \$1,250,000 of which \$92,041 has been expended as of November 30, 2012.	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

A Comprehensive Governance Series for Elected and Appointed Directors/ Trustees.

*PROGRAM PARTICIPANTS ATTEND FOUR SIX-HOUR MODULES: MODULES DO NOT NEED TO BE TAKEN IN ORDER*

CSDA's Special District Leadership Academy is a groundbreaking and curriculum-based continuing education program that recognizes the necessity for the board and general manager to work closely toward a common goal. If you are a special district professional, you must include this training in your schedule. It is important. It is your responsibility. Completion of the Leadership Academy training program marks a hallmark in your special district career. This training is the signature of professionalism for special district leadership and special district governance.

**AGENDA (SAME FOR EACH MODULE.)**

8:30 – 9:00 a.m.	Registration
9:00 a.m. – 12:00 p.m.	Workshop
12:00 – 1:00 p.m.	Lunch on your own
1:00 – 4:00 p.m.	Workshop

**COST PER CLASS**

\$225	CSDA Member
\$375	Non-member

**SIGN UP FOR ALL FOUR ACADEMY COURSES AND SAVE MONEY!**

\$800	CSDA Member
\$1,400	Non-member

**Module 1  
Governance Foundations**

*Earn SDRMA Credit Incentive Points*

- 1** **SAN DIEGO – February 21, 2013**  
Vista Irrigation District  
1391 Engineer Street, Vista, CA 92083-8836
- 2** **SACRAMENTO – March 28, 2013**  
Hilton Sacramento Arden West  
*In conjunction with SDRMA Safety Claims Day*  
**SPECIAL RATE**  
*Free: SDRMA members \$125 CSDA Members*  
2200 Harvard Street, Sacramento, CA 95815
- 3** **MONTEREY – September 16, 2013**  
*Special pre-conference workshop*  
Monterey Marriott  
350 Calle Principal, Monterey, CA 93940

Governance Foundations, the first of four modules and the core of the Special District Leadership Academy series, provides the basic information needed by board members, general managers and staff to build an effective and functional governance team. This course teaches the foundational knowledge and skills that identify and define the essential building blocks of a successful board:

- Effective Trustees
- Individual/Team Standards
- Board's Role and Responsibilities
- Structure, Process and Protocols

**Directors/Trustees will learn to:**

- Develop a unity of purpose.
- Understand the board's role in the district.
- Build a strong, positive, functional board culture.
- Organize the formal structure of the board.



“Clear, concise, relevant materials and dialogue with examples. Extremely useful.”

**Module 2  
Setting Direction/Community Leadership**

*Earn SDRMA Credit Incentive Points*

- 1** **SAN DIEGO – August 8, 2013**  
Vista Irrigation District  
1391 Engineer Street, Vista, Ca 92083-8836
- 2** **SACRAMENTO – May 13, 2013**  
California District Attorneys Association  
921 11th Street, Suite 300, Sacramento, CA 95814
- 3** **MONTEREY – March 19, 2013**  
Monterey Regional Waste Management District  
14201 Del Monte Blvd. Marina, CA 93933

To understand the board's responsibility in setting the direction of the district, this presentation provides a step-by-step discourse of the board and senior management's position in establishing the vision, mission and strategic goals of the district. It will define and investigate the success indicators used by districts to measure performance. Participants will:

- Discuss why the process of setting direction is important and how it benefits the district.
- Understand the importance of being future-oriented and to think strategically.
- Learn to transition from individual board members to members of a governance team.
- Understand the sequence of steps needed to set the direction of the governance team.

This module will also address the importance of board leadership and duty to provide information to the public on the essential services offered by the special district in its community.



“Complete program was informative. Time went fast because we were kept involved.”

**Module 3  
Board's Role In Finance and Fiscal Accountability**

*Earn SDRMA Credit Incentive Points*

- 1** **SAN DIEGO – August 9, 2013**  
Vista Irrigation District  
1391 Engineer Street, Vista, Ca 92083-8836
- 2** **SACRAMENTO – June 6, 2013**  
California District Attorneys Association  
921 11th Street, Suite 300, Sacramento, CA 95814
- 3** **MONTEREY – June 18, 2013**  
Monterey Regional Waste Management District  
14201 Del Monte Blvd. Marina, CA 93933

The third module in the series takes a close look at how the special district board carries out its fiduciary responsibilities. A fundamental discussion of district budgets, arguably the most significant policy document in a special district, shows how district goals are conveyed in their budgets and why boards must do more than just adopt budgets, but must also monitor them; receive and evaluate audit reports; and understand the principles of facility development. Now, more than ever, special district boards must understand and fulfill fiscal supervision and oversight in a responsible manner.

**This course will focus on how to:**

- Develop a method for approving the district's annual budget.
- Communicate budget information to the public.
- Establish financial goals for the district.
- Review district finances.
- Develop and analyze capital improvement plans and reserve guidelines.



“Excellent. Instructor was very practical with hands-on experience in the real world.”

**Module 4  
Board's Role In Human Resources**

*Earn SDRMA Credit Incentive Points*

- 1** **SAN DIEGO – June 14, 2013**  
Vista Irrigation District  
1391 Engineer Street, Vista, Ca 92083-8836
- 2** **SACRAMENTO – April 9, 2013**  
California District Attorneys Association  
921 11th Street, Suite 300, Sacramento, CA 95814
- 3** **MONTEREY – March 18, 2013**  
Monterey Regional Waste Management District  
14201 Del Monte Blvd. Marina, CA 93933

The Board's Role in Human Resources, the fourth and final module in the CSDA Leadership Academy series, puts the spotlight on how special district boards interface with district personnel. This module addresses the board's ongoing relationship with the general manager, a key employee hired by the board; senior staff; and other district staff. It discusses the board's role in evaluating support personnel and the rules and practices regulating its relations with its human resources.

**Participant will learn:**

- To develop guidelines for assessing the performance of the general manager.
- To determine a protocol for approving personnel policies.
- To create a process for approving job descriptions and organizational structure.
- The confidentiality and legal liabilities of a district board member.



“Enjoyed content, very useful. Good presentation and very good organization/sequence of materials.”