

# NOVATO SANITARY DISTRICT

Meeting Date: May 13, 2013

**The Board of Directors of Novato Sanitary District will hold a regular meeting at 6:00 p.m., Monday, May 13, 2013, 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).*

## **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 April 8<sup>th</sup> and 22<sup>nd</sup>, 2013 meetings.
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. Receive accounts receivable summary.
  - b. Receive quarterly investment report.
  - c. Approve regular disbursements and ratify April payroll and payroll-related disbursements.
6. **WASTEWATER TREATMENT PLANT:**
  - a. Odor Control and Landscaping Report.
  - b. Review Statement of Qualifications and authorize Manager-Engineer to execute an agreement with Brown & Caldwell to evaluate odor control alternatives.

- c. Review bids and consider acceptance of the lowest responsive bid and authorize the Manager-Engineer to execute the contract for the Wastewater Treatment Plant Upgrade Project 73001 – Contract C.
- d. Consider approval of a contract with The Covello Group (TCG) for construction management services, and authorize the Manager-Engineer to execute an agreement with TCG on a time and materials basis for an amount not-to-exceed \$305,000.

**7. COMMITTEE REPORTS:**

- a. Wastewater Operations Committee report.
- b. Finance Committee Report.
- c. Strategic Plan and New Facilities Committee.

**8. NORTH BAY WATER REUSE AUTHORITY (NBWRA):**

- a. Consider approval of the revised NBWRA Memorandum of Understanding.

**9. ADMINISTRATION:**

- a. Review Quarterly Revenue and Expenditure Report for period ended March 31, 2013.
- b. 2013-14 Budget Workshop.
- c. Authorize an Operating budget amendment to transfer \$47,500 from Collection Account 60201-Permits and Fees –to the Permit and Fee Accounts for the Treatment Plant (\$30,000), Reclamation (\$2,500), and Pump stations (\$15,000).
- d. Authorize a Capital Budget amendment to (a) Reallocate \$665,000 from Account 72706 Collection System Improvements to Account 73002 – Contract D (Recycled Water Facility), Account 72508 - N. Bay Recycling Authority, and Account 72403 – Pump Station Rehabilitation, and (b) Reallocate \$40,000 from Account 72804 – Annual Reclamation Facilities Improvements to Account 72805 - Annual Treatment Plant and Pump Stations.
- e. Receive Single Audit report.
- f. Report on 2013-14 Workers' Compensation Experience Modification Factor.

**10. DISTRICT BOARD MEMBER ELECTION:**

- a. Consider adoption of a resolution proposing an election and requesting the County Elections Department to Conduct Election Services.

**11. STAFF REPORTS:**

- a. Public Outreach events.
- b. California Association of Sanitation Agencies Conference.
- c. California Sanitation Risk Management Authority Board meeting.
- d. California Water Environment Association Annual Conference.

**12. BOARD MEMBER REPORTS:**

- a. California Association of Sanitation Agencies Conference.
- b. North Bay Watershed Association May meeting.
- c. North Bay Water Reuse Authority Workshop.
- d. North Bay Watershed Association Cost of Compliance Forum.

**13. MANAGER'S ANNOUNCEMENTS:**

**14. ADJOURN:**

Next resolution no. 3057

**Next regular meeting date: Monday, June 10, 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.***

April 8, 2013

A regular meeting of the Board of Directors of the Novato Sanitary District was held at 6:00 p.m., Monday, April 8, 2013, 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  
John O'Hare, Veolia Water  
Brant Miller, Novato resident  
Bob Guinan, Novato resident  
Joe Carlomagno, 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 March 11, 2013 meeting.

*On motion of Member Peters, seconded by Member Long, and carried unanimously, the minutes of the March 11, 2013 Board meeting were approved.*

CONSENT CALENDAR:

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

- a. Approval of regular disbursements in the amount of \$215,771.15 and project account disbursements in the amount of \$56,895.03. Ratification of March regular disbursements in the amount of \$95,066.18, March project account disbursements in the amount of \$347,670.86, March payroll and payroll related disbursements in the amount of \$235,103.32, and March Board fees in the amount of \$2,629.60.

COMMITTEE REPORTS:

- Receive Wastewater Operations Committee report for February 2013: The Deputy Manager-Engineer stated that the Committee met on March 18<sup>th</sup> at the District office. John Bailey, Project Manager, Veolia Water, summarized Veolia's Operations report, noting that the treatment facility performed well during the month of February and that water quality performance was excellent. He reviewed the routine operations and maintenance reports for the Novato and Ignacio facilities.

The Deputy Manager-Engineer gave an overview of the Collections and Reclamation reports for February 2013.

The Manager gave a report on odor control and landscaping. She noted that the District has contacted Cagwin and Dorward to control the weeds on the outside of the fence. She stated that in regards to the noise issue, the District perceives that the noise is coming from a blower and that the District's Field Services Superintendent plans on building a permanent structure at that location to conceal the blower noise.

Resident Bob Guinan asked for a status update on the final phase of the landscaping process. The Manager stated that the possibility of installing a berm seems unlikely and that the immediate concern is weed control. She noted that the District intends to get a master plan for the odor control issue.

Resident Joe Carlomagno requested the Manager give a report of the conference she attended in regards to odor control procedures. The Manager gave an overview of her attendance at the IWA Specialized Conference on Odors and Air Emissions jointly held with the conference on Biofiltration for Air Pollution Control on March 4<sup>th</sup> and 5<sup>th</sup>. She stated that available devices which identify atmospheric odors are around \$100,000 and noted that the District prefers to allocate funds for odor resolution instead of odor identification.

NORTH BAY WATER REUSE AUTHORITY:

- Consider authorizing Board President to submit comments on 2013 Water Recycling Act legislation: The Manager stated that the California Water Reuse Association has been working with Assembly Member Hueso on a new Water Recycling Act. She noted that staff has reviewed the proposed legislation and agrees that it will help in the implementation and operation of recycled water projects. She requested the Board authorize President Di Giorgio to submit comments on the legislation.

*On motion of Member Peters, seconded by Member Long and carried unanimously, the Board authorized President Di Giorgio to submit comments on the 2013 Water Recycling Act legislation as provided in sample letter dated April 4<sup>th</sup>.*

COLLECTION SYSTEM IMPROVEMENT, PROJECT 72706:

- Consider making CEQA findings, approving plans and specifications, and authorizing advertising for bids for the Olive Street Pump Station Force Main Rehabilitation Project. The Deputy Manager-Engineer stated that Nute Engineering had completed the plans and specifications for the Olive Street project and that it was ready for bid. He discussed the project specifications and noted that the engineer's estimate was \$840,000. He stated that bids are expected to be received on May 1<sup>st</sup>.

*On motion of Member Peters, seconded by Member Mariani and carried unanimously, the Board made CEQA findings, approved the plans and specifications and authorized advertising for bids for the Olive Street Pump Station Force Main Rehabilitation Project No. 72706.*

ADMINISTRATION:

- Consider approval of the 2013-15 budget schedule. The Manager outlined the schedule for approval of the preliminary and final budget, appropriations limit and sewer service charges. She noted that the budget schedule is very similar to that of schedules in the past.

*On motion of Member Long, seconded by Member Peters and carried unanimously, the Board approved the **Schedule for Approval of the 2013-15 Preliminary and Final Budget, Appropriations Limit, and Sewer Service Charges.***

- Consider adoption of resolution requesting authorization to Conduct a Division of Retirement System for Medicare Coverage. The Manager stated that the District has one employee who was hired before March 31, 1986 who is excluded from Medicare taxes and who does not have the required Medicare credits. She stated that if the District does not adopt the resolution on behalf of this employee, upon retirement the District would be responsible for full health care premiums for life rather than responsible for only the Medicare Supplement premium. She requested the Board adopt the suggested resolution to allow the employee to participate in Medicare coverage.

*On motion of Member Long, seconded by Member Peters and carried unanimously, the Board adopted Resolution No. 3055 adopting authorization to Conduct a Division of Retirement System for Medicare Coverage.*

PRETREATMENT:

- Consider adopting a resolution providing relief on upper pH limit from pH 8.5 to pH 10.5 for The Dye Guy and setting the revised pH limits. The Deputy Manager-Engineer stated that The Dye Guy had received its discharge permit renewal on April 1, 2013 and has since requested continuing relief on the upper limit value from 8.5 pH to 10.5 pH.

He stated that the Board has previously authorized such relief for this business as it requires annual renewal and recommends the Board approve the upper pH limit.

*On motion of Member Long, seconded by Member Peters and carried unanimously, the Board adopted Resolution No. 3056: A Resolution Approving Relief on pH Limits, and Setting Revised pH Limits and Time Limitations for Dye Guy, 46 Digital Dr., #3, Novato.*

#### STAFF REPORTS:

- Medium Treatment Plant of the Year award. The Manager was pleased to announce that Veolia Water earned first place in the Municipal Operational Excellence (OpEx) Medium Plant of the Year Award for their operation of the Novato Sanitary District facility out of a field of more than 300 water and wastewater projects. John Bailey, Veolia Water, presented a commemorative plaque to President Di Giorgio to display at the District. He stated that a press release would be forthcoming.

- Local Agency Formation Commission (LAFCO) 2013-14 Budget. The Manager discussed LAFCO's budget for FY 2013-14 and noted that the District's contribution increased from \$8,967 to \$10,178.

- Water/Wastewater Leadership Center Utility Management Course. The Deputy Manager-Engineer discussed his attendance at the Water and Wastewater Leadership Management Course which took place in Chapel Hill, North Carolina from February 24 - March 8, 2013. He gave a Powerpoint presentation of the program highlights and stated that the course was very edifying and beneficial.

#### BOARD MEMBER REPORTS:

- Member Long discussed his attendance at the North Bay Water Reuse Authority (NBWRA) meeting which was held on March 25<sup>th</sup>. He stated that the third revised Memorandum of Understanding (MOU) is being submitted to all eleven agencies for their signatures. He noted that Member Peters was also in attendance.

- The Manager stated that she attended the North Bay Watershed Association meeting as the alternate in place of Board President Di Giorgio who was unable to attend. She noted that the in-progress Hydraulic Modeling project was reviewed as well as on-going watershed activities. She stated that the FY 2013-14 budget was also discussed.

- Member Long discussed his attendance at an Environmental Forum of Marin (EFM) lecture on the topic of Zero Waste which took place in San Rafael. He stated that the guest speaker discussed pharmaceutical take back programs.

MANAGER'S ANNOUNCEMENTS:

- The North Bay Water Reuse Authority (NBWRA) will hold a Phase 2 Workshop on April 15<sup>th</sup> at 9:30 AM at the Novato City Hall.
- The North Bay Watershed Association (NBWA) will hold a "Cost of Compliance" forum on April 18<sup>th</sup> at 10:00 AM at the Novato City Hall.
- The California Special Districts Association (CSDA) will hold their annual convention, Special Districts Legislative Days, on May 14<sup>th</sup> and 15<sup>th</sup> at the Sacramento Convention Center.
- The California Association of Sanitation Agencies (CASA) will hold their Spring Conference from April 24<sup>th</sup>– 26<sup>th</sup> in Newport Beach.
- The Wastewater Operations Committee (WWOC) will hold their next meeting on Monday, April 15<sup>th</sup> at 2:00 PM at the District office.
- The next Board Meeting will be held on Monday, April 22<sup>nd</sup> at 5:00 p.m.

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

Respectfully submitted,

Beverly B. James  
Secretary

Julie Swoboda, Recording

April 22, 2013

A meeting of the Board of Directors of the Novato Sanitary District was held at 5:00 p.m., Monday, April 22, 2013, at the District Office, 500 Davidson Street, Novato.

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

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

ALSO PRESENT: John Bailey, Project Manager, Veolia Water  
Brant Miller, Novato resident  
Dasse de longh, NSD employee, Novato resident  
Bob Guinan, Novato resident

PLEDGE OF ALLEGIANCE:

AGENDA APPROVAL: The agenda was approved as written.

PUBLIC COMMENT: Bob Guinan, Novato resident, asked if the Board could set time aside at the May 13<sup>th</sup> regular Board meeting to discuss the District odor control plan. The Manager stated that an overview of the April Wastewater Operations Committee report and an odor control plan update will be provided at the May 13<sup>th</sup> board meeting.

STRATEGIC PLANNING WORKSHOP:

Martin Rauch, Rauch Communication Consultants, opened the workshop and provided an outline of the Board's anticipated participation during the Strategic Planning workshop.

The Manager discussed the status of the Strategic Plan goals, objectives and tasks.

Martin Rauch led the Board through discussion and hands-on action items to update and refine the District's 2012 Strategic Plan.

ADJOURNMENT: There being no further business to come before the Board, President Di Giorgio adjourned the meeting at 7:45 p.m.

Respectfully submitted,

Beverly B. James  
Secretary

Julie Swoboda, Recording

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Accounts Receivable Aging Summary</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO.: 5.a.</b>
<b>RECOMMENDED ACTION: Information Only</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>The attached Accounts Receivable Summary shows the following receivables:</p> <p><b><u>1 – 45 days - \$51,078.47:</u></b> Current.</p> <p><b><u>46 - 90 days - \$11,666.60:</u></b> \$10,027.62 is for semi-annual sewer service charges billed to non-taxed entities. Reminder statements have been sent. The remaining \$1,638.98 is for septic tank hauling fees.</p> <p><b><u>90+ days - \$4,321.82:</u></b> \$4,584.33 is for a septic tank hauler whose account is severely delinquent. No payments have been received since October 2012. A letter has been prepared notifying the hauler that legal collection proceedings will be initiated if an effort to clear the account is not made within 30 days. This hauler does not have privileges to use District dumping facilities until the obligation is satisfied.</p> <p>There is a credit of (\$441.26) for Used Oil and Beverage Grant fees paid through the City of Novato to the District. The remaining \$178.75 is for septic hauling fees.</p> <p><b><u>Summary:</u></b> Receivables over 90 days old amount to \$4,321.82. This represents 0.047% of the District's total budgeted operating revenue of \$9,149,171.00 for fiscal year 2012/13.</p>	
<b>ALTERNATIVES: N/A – Information only.</b>	
<b>BUDGET INFORMATION: N/A</b>	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

**Novato Sanitary District**  
**A/R Aging Summary**  
As of May 7, 2013

	Description	Current	46 - 90	> 90	TOTAL
<b>AT &amp; T</b>	Semi-annual Sewer Service Charges	0.00	3,224.22 (1)	0.00	3,224.22
<b>Biomarin</b>	Non-Domestic Discharger Permit	3,657.98	0.00	0.00	3,657.98
<b>Camino Ramon Assoc LLC</b>	Reimbursable Expense - 1625 Hill Road	1,715.49	0.00	0.00	1,715.49
<b>City of Novato - Used Oil</b>	AB 939 Used Oil Grant	0.00	0.00	-441.26	-441.26
<b>Hayden, Ron</b>	Pasture Lease	24,101.66	0.00	0.00	24,101.66
<b>Joes Farmers Septic</b>	Septic Tank Hauling	0.00	0.00	4,584.33 (2)	4,584.33
<b>Marin Municipal Water District-</b>	Semi-annual Sewer Service Charges	0.00	6,803.40 (1)	0.00	6,803.40
<b>Petaluma Septic</b>	Septic Tank Hauling	384.52	0.00	0.00	384.52
<b>Quality Septic Systems</b>	Septic Tank Hauling	5,687.23	1,048.80 (1)	0.00	6,736.03
<b>Roto Rooter</b>	Septic Tank Hauling	1,465.13	0.00	0.00	1,465.13
<b>Roy's Sewer Service, Inc.-</b>	Septic Tank Hauling	957.49	0.00	0.00	957.49
<b>USCG</b>	Sewer Service Charges	12,777.00	0.00	0.00	12,777.00
<b>Vineyard Septic</b>	Septic Tank Hauling	331.97	590.18 (1)	178.75 (1)	1,100.90
<b>TOTAL</b>		<b>51,078.47</b>	<b>11,666.60</b>	<b>4,321.82</b>	<b>67,066.89</b>

(1) Reminder Statements sent 5/6/2013

(2) Not responding to statement reminders, no payment received since October of 2012.

**QUARTERLY INVESTMENT REPORT -- For Quarter Ended March 31, 2013**

INVESTMENT	ACTIVITY	January	February	March	QTR TOTAL
STATE TREASURER'S INVESTMENT FUND	Total deposits/transfers in	836,000	0	1,568,000	<b>2,404,000</b>
	Total transfers out	2,721,000	1,402,000	940,000	<b>5,063,000</b>
	Minimum daily balance	8,731,023	7,329,023	7,329,023	<b>7,329,023</b>
Current Yield 0.285%	Maximum daily balance	10,608,924	8,731,023	7,957,023	<b>10,608,924</b>
	Interest earned			5,884	<b>5,884</b>
<b>TRUST ACCOUNT</b>					
BANK OF NEW YORK MELLON For COP Bond Funds	Total deposits/transfers in	0	0	0	<b>0</b>
	Total transfers out	744,620	0	1,467,000	<b>2,211,620</b>
	Minimum daily balance	10,010,827	10,010,846	10,010,859	<b>10,010,827</b>
	Maximum daily balance	12,213,855	11,477,827	11,477,846	<b>12,213,855</b>
	Interest earned	8,591	19	13	<b>8,623</b>
The LAIF Pooled Money Investment Account Report is attached as specified in California Government Code Section 53646(e)					
<b>CHECKING ACCOUNTS</b>					
Interest Rate	<u>Regular Warrants Account</u>				
0.03%	Total deposits & transfers in	3,623,611	1,509,828	2,611,227	<b>7,744,666</b>
	Total checks & transfers out	3,273,526	1,580,962	2,784,958	<b>7,639,446</b>
	Minimum daily balance	5,493	18,010	47,010	<b>5,493</b>
	Maximum daily balance	1,065,564	936,936	1,609,024	<b>1,609,024</b>
	Interest earned	8	5	8	<b>21</b>
	<u>Payroll Account</u>				
	Total transfers in	126,500	113,500	120,500	<b>360,500</b>
	Total checks & transfers out	126,587	113,495	120,603	<b>360,685</b>
	Minimum daily balance	254	530	427	<b>254</b>
	Maximum daily balance	104,909	101,851	109,236	<b>109,236</b>
	<u>Project Account</u>				
	Total transfers in	1,787,600	841,400	467,000	<b>3,096,000</b>
	Total checks & transfers out	1,788,226	384,238	885,698	<b>3,058,162</b>
	Minimum daily balance	2,585	2,108	2,579	<b>2,108</b>
	Maximum daily balance	1,752,585	499,756	350,179	<b>1,752,585</b>
	Interest earned	10	3	3	<b>16</b>
	<u>ARRA Grant Project Account</u>				
	Total transfers in				<b>0</b>
	Total checks & transfers out				<b>0</b>
	Minimum daily balance	100	100	100	<b>100</b>
	Maximum daily balance	100	100	100	<b>100</b>
	Interest earned				<b>0</b>

NOTES: (1) The above investments are consistent with the annual Statement of Investment Policy approved by the board on an annual basis, most recent approval was October 22, 2012.

The District has the ability to meet six months cash needs.

(2) LAIF interest rate is currently .285% which is a decrease from .32% in December 2012, .35% in September 2012 and .36% in June 2012.

# Bill Lockyer, State Treasurer

## Inside the State Treasurer's Office

### Local Agency Investment Fund (LAIF)



#### PMIA Performance Report

Date	Daily Yield*	Quarter to Date Yield	Average Maturity (in days)
4/15/2013	0.27	0.27	214
4/16/2013	0.26	0.27	219
4/17/2013	0.26	0.27	218
4/18/2013	0.26	0.27	217
4/19/2013	0.26	0.27	215
4/20/2013	0.26	0.27	215
4/21/2013	0.26	0.27	215
4/22/2013	0.26	0.27	212
4/23/2013	0.26	0.27	218
4/24/2013	0.26	0.27	217
4/25/2013	0.26	0.27	215
4/26/2013	0.26	0.27	214
4/27/2013	0.26	0.27	214
4/28/2013	0.26	0.27	214

\*Daily yield does not reflect capital gains or losses

#### LAIF Performance Report

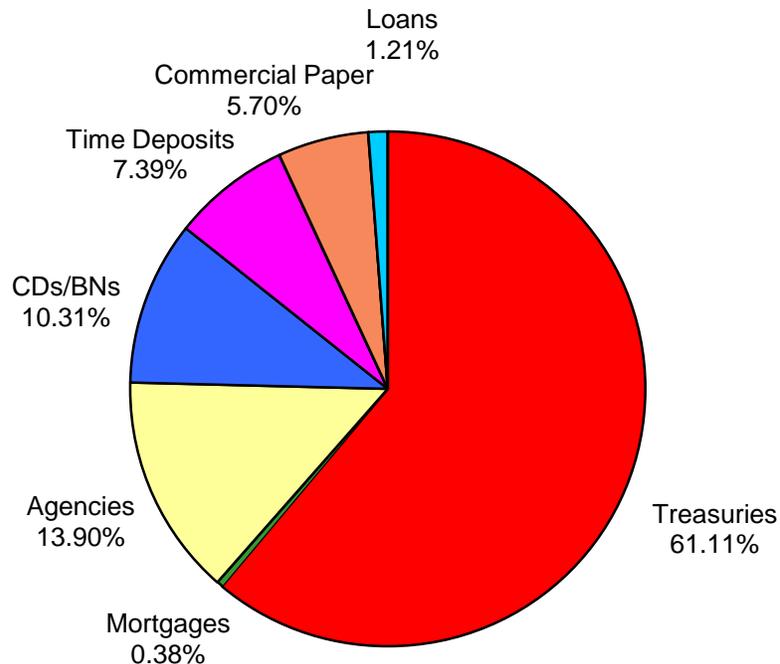
Quarter ending 03/31/2013

Apportionment Rate: 0.28%  
 Earnings Ratio: .00000773831888202  
 Fair Value Factor: 1.0010186  
 Daily: 0.27%  
 Quarter To Date: 0.29%  
 Average Life: 213

#### PMIA Average Monthly Effective Yields

**MARCH 2013 0.285%**  
 FEBRUARY 2013 0.286%  
 JANUARY 2013 0.300%

#### Pooled Money Investment Account Portfolio Composition \$58.7 Billion 03/31/13



**State of California  
Pooled Money Investment Account  
Market Valuation  
3/31/2013**

Description	Carrying Cost Plus		Fair Value	Accrued Interest
	Accrued Interest	Purch.		
United States Treasury:				
Bills	\$ 21,165,387,450.46	\$ 21,181,217,814.80	\$ 21,185,525,200.00	NA
Notes	\$ 14,733,699,502.59	\$ 14,733,469,530.25	\$ 14,770,548,500.00	\$ 16,932,798.50
Federal Agency:				
SBA	\$ 524,324,861.45	\$ 524,322,142.49	\$ 523,724,167.09	\$ 531,099.13
MBS-REMICs	\$ 222,646,880.61	\$ 222,646,880.61	\$ 241,956,434.99	\$ 1,064,470.37
Debentures	\$ 1,050,241,287.46	\$ 1,050,238,537.46	\$ 1,050,972,000.00	\$ 1,745,946.00
Debentures FR	\$ -	\$ -	\$ -	\$ -
Discount Notes	\$ 6,193,549,777.78	\$ 6,197,864,972.34	\$ 6,199,101,000.00	NA
GNMA	\$ 1,353.93	\$ 1,353.93	\$ 1,365.19	\$ 14.06
IBRD Debenture	\$ 399,971,694.00	\$ 399,971,694.00	\$ 400,828,000.00	\$ 583,332.00
IBRD Deb FR	\$ -	\$ -	\$ -	
CDs and YCDs FR	\$ 400,000,000.00	\$ 400,000,000.00	\$ 400,000,000.00	\$ 254,511.11
Bank Notes	\$ -	\$ -	\$ -	\$ -
CDs and YCDs	\$ 5,650,034,759.91	\$ 5,650,016,843.25	\$ 5,647,574,286.13	\$ 1,747,444.45
Commercial Paper	\$ 3,349,197,409.73	\$ 3,349,593,979.26	\$ 3,348,966,798.61	NA
Corporate:				
Bonds FR	\$ -	\$ -	\$ -	\$ -
Bonds	\$ -	\$ -	\$ -	\$ -
Repurchase Agreements	\$ -	\$ -	\$ -	\$ -
Reverse Repurchase	\$ -	\$ -	\$ -	\$ -
Time Deposits	\$ 4,339,640,000.00	\$ 4,339,640,000.00	\$ 4,339,640,000.00	NA
AB 55 & GF Loans	\$ 712,079,191.43	\$ 712,079,191.43	\$ 712,079,191.43	NA
<b>TOTAL</b>	<b>\$ 58,740,774,169.35</b>	<b>\$ 58,761,062,939.82</b>	<b>\$ 58,820,916,943.44</b>	<b>\$ 22,859,615.62</b>

Fair Value Including Accrued Interest

\$ 58,843,776,559.06

Repurchase Agreements, Time Deposits, AB 55 & General Fund loans, and Reverse Repurchase agreements are carried at portfolio book value (carrying cost).

The value of each participating dollar equals the fair value divided by the amortized cost (**1.0010186**).  
As an example: if an agency has an account balance of \$20,000,000.00, then the agency would report its participation in the LAIF valued at \$20,020,371.99 or \$20,000,000.00 x **1.0010186**.

**PAR VALUES MATURING BY DATE AND TYPE**  
**Maturities in Millions of Dollars**

ITEM	1 day to 30 days	31 days to 60 days	61 days to 90 days	91 days to 120 days	121 days to 150 days	151 days to 180 days	181 days to 210 days	211 days to 270 days	271 days to 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 year/out
TREASURY	\$ 3,500	\$ 3,700	\$ 5,700		\$ 1,800	\$ 1,750	\$ 1,545	\$ 3,150	\$ 5,350	\$ 7,350	\$ 2,100		
REPO													
TDs	\$ 1,324	\$ 849	\$ 989	\$ 653	\$ 250	\$ 276							
AGENCY	\$ 524		\$ 6,400				\$ 300	\$ 600	\$ 350	\$ 710	\$ 398		
BAs													
CP	\$ 1,900	\$ 700	\$ 475	\$ 275									
CDs + BNs	\$ 1,650	\$ 450	\$ 2,300	\$ 850	\$ 75	\$ 100		\$ 400	\$ 225				
CORP BND													
<b>TOTAL</b>													
\$ 58,967	\$ 8,898	\$ 5,699	\$ 15,864	\$ 1,778	\$ 2,125	\$ 2,126	\$ 1,845	\$ 4,150	\$ 5,925	\$ 8,060	\$ 2,498	\$ -	\$ -
PERCENT	15.1%	9.7%	26.9%	3.0%	3.6%	3.6%	3.1%	7.0%	10.0%	13.7%	4.2%	0.0%	0.0%

## Notes:

1. SBA Floating Rate Securities are represented at coupon change date.
2. Mortgages are represented at current book value.
3. Figures are rounded to the nearest million.
4. Does not include AB55 and General Fund loans.

# Novato Sanitary District Operating Check Register

April 22, 2013

Date	Num	Name	Credit
<b>Apr 22, 13</b>			
4/22/2013	55609	Pacific, Gas & Electric	94,350.66
4/22/2013	55586	Central Marin Sanitation Distr...	22,189.17
4/22/2013	55606	Novato, City	5,485.35
4/22/2013	55580	American Express-21007	4,917.62
4/22/2013	55599	Maze & Associates	4,050.00
4/22/2013	55583	Caltest Analytical Lab Inc.	3,665.10
4/22/2013	55597	Landing at Hamilton, LLC.	3,500.00
4/22/2013	55594	Harmony Press	3,100.00
4/22/2013	55602	North Marin Water District	2,154.00
4/22/2013	55600	North Bay Pensions	2,000.00
4/22/2013	55582	Cagwin & Dorward Inc.	1,871.50
4/22/2013	55614	Unicorn Group	1,573.68
4/22/2013	55604	North Marin Water District Pa...	1,254.73
4/22/2013	55612	Siemens Industry Inc. - Lab	838.22
4/22/2013	55592	Empire Mini Storage - Novato	779.00
4/22/2013	55603	North Marin Water District - L...	770.00
4/22/2013	55595	Johnson Controls, Inc.	644.00
4/22/2013	55579	3T Equipment Company Inc.	617.83
4/22/2013	55613	Telstar Instruments Inc	612.80
4/22/2013	55616	Verizon EQ	599.77
4/22/2013	55585	CED Santa Rosa, Inc	545.76
4/22/2013	55587	Circle Bank.	500.00
4/22/2013	55610	Ricoh USA, Inc.	486.11
4/22/2013	55598	Marin County Public Health L...	360.00
4/22/2013	55611	Shape Incorporated	327.46
4/22/2013	55607	Occumetric Inc.	325.00
4/22/2013	55619	Zenith Instant Printing, Inc.	311.03
4/22/2013	55588	Claremont EAP, Inc.	295.00
4/22/2013	55591	Datco Billing Inc.	282.10
4/22/2013	55596	Labworks Equipment, Inc.	280.06
4/22/2013	55584	Cantarutti Electric, Inc	246.64
4/22/2013	55615	Verizon - 5143	209.88
4/22/2013	55617	Verizon Wireless-	189.16
4/22/2013	55581	BoundTree Medical, LLC	188.58
4/22/2013	55593	Grainger	170.44
4/22/2013	55590	CWEAmembers	165.00
4/22/2013	55608	Orkin Pest Control, Inc.	116.00
4/22/2013	55618	Water Components & Buildin...	73.77
4/22/2013	55589	Cook Paging	66.30
4/22/2013	55601	North Marin Auto Parts	18.00
4/22/2013	55605	Novato Builders Supply	13.06
<b>Apr 22, 13</b>			<b>160,142.78</b>

# Novato Sanitary District

## Operating Check Register Detail

### For April 22, 2013

	Date	Account	Amount
<b>3T Equipment Company Inc.</b>			
	04/09/2013	60150 · Repairs & Maintenance	617.83
Total 3T Equipment Company Inc.			<u>617.83</u>
<b>American Express-21007</b>			
	04/14/2013	64100 · Operating Supplies	271.92
	04/14/2013	66080 · Memberships	55.00
	04/14/2013	65085 · Safety Expenses	345.00
	04/14/2013	66170 · Travel, Meetings & Training	924.24
	04/14/2013	21015 · American Express	938.68
	04/14/2013	66090 · Office Expense	1,691.41
	04/14/2013	60100 · Operating Supplies	691.37
Total American Express-21007			<u>4,917.62</u>
<b>BoundTree Medical, LLC</b>			
	04/11/2013	67500 · Household Hazardous Waste	188.58
Total BoundTree Medical, LLC			<u>188.58</u>
<b>Cagwin &amp; Dorward Inc.</b>			
	03/26/2013	66150 · Repairs & Maintenance	260.00
	03/29/2013	65150 · Repairs & Maintenance	200.00
	03/31/2013	66150 · Repairs & Maintenance	682.50
	03/31/2013	65150 · Repairs & Maintenance	400.00
	04/01/2013	66150 · Repairs & Maintenance	329.00
Total Cagwin & Dorward Inc.			<u>1,871.50</u>
<b>Caltest Analytical Lab Inc.</b>			
	04/11/2013	64160 · Research & Monitoring	3,665.10
Total Caltest Analytical Lab Inc.			<u>3,665.10</u>
<b>Cantarutti Electric, Inc</b>			
	04/04/2013	66150 · Repairs & Maintenance	246.64
Total Cantarutti Electric, Inc			<u>246.64</u>
<b>CED Santa Rosa, Inc</b>			
	04/18/2013	65150 · Repairs & Maintenance	545.76
Total CED Santa Rosa, Inc			<u>545.76</u>
<b>Central Marin Sanitation District</b>			
	03/09/2013	66123 · O/S Contractual	12,118.13
	04/10/2013	64170 · Pollution Prevention/Public Ed	10,071.04
Total Central Marin Sanitation District			<u>22,189.17</u>
<b>Circle Bank.</b>			
	04/15/2013	21041 · Cash in Lieu of Bond	500.00
Total Circle Bank.			<u>500.00</u>
<b>Claremont EAP, Inc.</b>			
	04/15/2013	66123 · O/S Contractual	295.00
Total Claremont EAP, Inc.			<u>295.00</u>
<b>Cook Paging</b>			
	04/01/2013	61000-4 · Water/Permits/Telephone	24.00
	04/01/2013	65193 · Telephone	30.83
	04/01/2013	60193 · Telephone	11.47
Total Cook Paging			<u>66.30</u>
<b>CWEAmembers</b>			
	04/15/2013	66080 · Memberships	165.00
Total CWEAmembers			<u>165.00</u>
<b>Datco Billing Inc.</b>			
	04/01/2013	66123 · O/S Contractual	282.10
Total Datco Billing Inc.			<u>282.10</u>
<b>Empire Mini Storage - Novato</b>			
	04/01/2013	66123 · O/S Contractual	779.00
Total Empire Mini Storage - Novato			<u>779.00</u>
<b>Grainger</b>			
	04/03/2013	60100 · Operating Supplies	114.84
	04/04/2013	60100 · Operating Supplies	55.60
Total Grainger			<u>170.44</u>

# Novato Sanitary District Operating Check Register Detail

For April 22, 2013

Date	Account	Amount
<b>Harmony Press</b>		
04/03/2013	66130 · Printing & Publications	3,100.00
Total Harmony Press		<u>3,100.00</u>
<b>Johnson Controls, Inc.</b>		
04/02/2013	66150 · Repairs & Maintenance	644.00
Total Johnson Controls, Inc.		<u>644.00</u>
<b>Labworks Equipment, Inc.</b>		
04/05/2013	64100 · Operating Supplies	280.06
Total Labworks Equipment, Inc.		<u>280.06</u>
<b>Landing at Hamilton, LLC.</b>		
04/15/2013	21041 · Cash in Lieu of Bond	3,500.00
Total Landing at Hamilton, LLC.		<u>3,500.00</u>
<b>Marin County Public Health Lab</b>		
03/29/2013	64160 · Research & Monitoring	360.00
Total Marin County Public Health Lab		<u>360.00</u>
<b>Maze &amp; Associates</b>		
04/05/2013	66121 · Accounting & Auditing	4,050.00
Total Maze & Associates		<u>4,050.00</u>
<b>North Bay Pensions</b>		
04/10/2013	66123 · O/S Contractual	2,000.00
Total North Bay Pensions		<u>2,000.00</u>
<b>North Marin Auto Parts</b>		
04/03/2013	60150 · Repairs & Maintenance	18.00
Total North Marin Auto Parts		<u>18.00</u>
<b>North Marin Water District</b>		
04/11/2013	63192 · Water - Reclamation	591.09
04/15/2013	60192 · Water	1,179.53
04/15/2013	65192 · Water	383.38
Total North Marin Water District		<u>2,154.00</u>
<b>North Marin Water District - Lab</b>		
04/03/2013	64160 · Research & Monitoring	770.00
Total North Marin Water District - Lab		<u>770.00</u>
<b>North Marin Water District Payroll</b>		
04/04/2013	64010 · Salaries & Wages	1,254.73
Total North Marin Water District Payroll		<u>1,254.73</u>
<b>Novato Builders Supply</b>		
04/16/2013	60100 · Operating Supplies	13.06
Total Novato Builders Supply		<u>13.06</u>
<b>Novato, City</b>		
03/31/2013	60060 · Gas, Oil & Fuel	2,065.09
03/31/2013	61000-4 · Water/Permits/Telephone	1,862.38
03/31/2013	63060 · Gasoline & Oil	326.07
03/31/2013	64060 · Gasoline & Oil	217.38
03/31/2013	65060 · Gasoline & Oil	362.30
03/31/2013	66060 · Gasoline & Oil	652.13
Total Novato, City		<u>5,485.35</u>
<b>Occumetric Inc.</b>		
04/02/2013	66090 · Office Expense	325.00
Total Occumetric Inc.		<u>325.00</u>
<b>Orkin Pest Control, Inc.</b>		
04/01/2013	66150 · Repairs & Maintenance	116.00
Total Orkin Pest Control, Inc.		<u>116.00</u>
<b>Pacific, Gas &amp; Electric</b>		
04/01/2013	65191 · Gas & Electricity	1.55
04/01/2013	65191 · Gas & Electricity	13.23
04/01/2013	65191 · Gas & Electricity	81.20
04/12/2013	61000-5 · Gas & Electricity	79,597.07
04/12/2013	63191 · Gas & Electricity	2,155.17
04/12/2013	65191 · Gas & Electricity	12,502.44

**Novato Sanitary District**  
**Operating Check Register Detail**  
For April 22, 2013

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
Total Pacific, Gas & Electric			94,350.66
<b>Ricoh USA, Inc.</b>			
	04/04/2013	66090 · Office Expense	486.11
Total Ricoh USA, Inc.			<u>486.11</u>
<b>Shape Incorporated</b>			
	03/31/2013	60100 · Operating Supplies	327.46
Total Shape Incorporated			<u>327.46</u>
<b>Siemens Industry Inc. - Lab</b>			
	04/01/2013	64100 · Operating Supplies	272.00
	04/05/2013	64100 · Operating Supplies	566.22
Total Siemens Industry Inc. - Lab			<u>838.22</u>
<b>Staples Business Adv Inc.</b>			
	02/05/2013	66090 · Office Expense	0.00
Total Staples Business Adv Inc.			<u>0.00</u>
<b>Telstar Instruments Inc</b>			
	03/28/2013	65153 · Outside Services, Electrical	612.80
Total Telstar Instruments Inc			<u>612.80</u>
<b>Unicorn Group</b>			
	04/11/2013	66130 · Printing & Publications	1,573.68
Total Unicorn Group			<u>1,573.68</u>
<b>Verizon - 5143</b>			
	04/10/2013	66193 · Telephone	209.88
Total Verizon - 5143			<u>209.88</u>
<b>Verizon EQ</b>			
	03/28/2013	65193 · Telephone	599.77
Total Verizon EQ			<u>599.77</u>
<b>Verizon Wireless-</b>			
	04/20/2013	60193 · Telephone	67.81
	04/20/2013	65193 · Telephone	45.20
	04/20/2013	66193 · Telephone	76.15
Total Verizon Wireless-			<u>189.16</u>
<b>Water Components &amp; Building, Inc.</b>			
	04/04/2013	65100 · Operating Supplies	73.77
Total Water Components & Building, Inc.			<u>73.77</u>
<b>Zenith Instant Printing, Inc.</b>			
	03/29/2013	66090 · Office Expense	311.03
Total Zenith Instant Printing, Inc.			<u>311.03</u>
<b>TOTAL</b>			<u><u>160,142.78</u></u>

# Novato Sanitary District Capital Project Check Register

April 22, 2013

Date	Num	Name	Credit
<b>Apr 22, 13</b>			
4/22/2013	2508	Covello Group, The	18,743.53
4/22/2013	2509	Daniel Macdonald AIA Archit...	4,263.34
4/22/2013	2511	Miller Pacific Engineering, Inc.	1,956.70
4/22/2013	2510	Marin Independent Journal	762.30
<b>Apr 22, 13</b>			<b><u>25,725.87</u></b>

**Novato Sanitary District**  
**Capital Projects Check Detail**  
 April 22, 2013

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
<b>Covello Group, The</b>			
	04/01/2013	72403 - Pump Station Rehabilitation	17,968.53
	04/01/2013	72706 - 2008 Collection System Improv	425.00
	04/01/2013	73001 - WWTP Upgrade - Contract C	350.00
Total Covello Group, The			<u>18,743.53</u>
<b>Daniel Macdonald AIA Architects, Inc.</b>			
	03/31/2013	72805 - Annual Trtmt Plnt/Pump St Impr	4,263.34
Total Daniel Macdonald AIA Architects, Inc.			<u>4,263.34</u>
<b>Marin Independent Journal</b>			
	03/31/2013	73001 - WWTP Upgrade - Contract C	762.30
Total Marin Independent Journal			<u>762.30</u>
<b>Miller Pacific Engineering, Inc.</b>			
	04/05/2013	72403 - Pump Station Rehabilitation	1,551.70
	04/09/2013	72706 - 2008 Collection System Improv	405.00
Total Miller Pacific Engineering, Inc.			<u>1,956.70</u>
<b>TOTAL</b>			<u><u>25,725.87</u></u>

**Novato Sanitary District**  
**Payroll and Payroll Related Check Register**  
**April 2013**

<u>Date</u>	<u>Description</u>	<u>Amount</u>
04/30/2013	April Payroll	112,419.08
04/19/2013	April Retiree Health Benefits	16,206.97
04/19/2013	CalPers Health	32,493.24
04/19/2013	CALPERS Retirement	21,562.97
04/30/2013	United States Treasury	23,607.80
04/19/2013	CalPers Supplemental Income Plan	6,850.00
04/30/2013	EDD	6,370.72
04/19/2013	Lincoln Financial Group	6,185.21
04/19/2013	Lincoln Financial Group-401a Plan	4,299.06
04/19/2013	Lincoln Financial Group-401a Plan	4,025.12
04/19/2013	CALPERS Retirement	4,822.14
04/19/2013	Local Union 315	640.00
04/19/2013	Marin Employ Federal Credit Union	517.00
04/19/2013	Operating Engineers Local 3 RHSP	373.19
		<b><u>240,372.50</u></b>

# Novato Sanitary District Board Fees

For April 2013

Date	Num	Name	Credit
<b>May 10, 13</b>			
5/10/2013	2557	Long, William C	746.76
5/10/2013	3167	Di Giorgio, Michael	488.51
5/10/2013	2558	Mariani, Jean M	414.82
5/10/2013	2559	Peters, A. Gerald	274.36
5/10/2013	3168	Welsh, Dennis J	103.79
<b>May 10, 13</b>			<b>2,028.24</b>

# Novato Sanitary District Operating Check Register

May 13, 2013

Date	Num	Name	Credit
<b>May 13, 13</b>			
5/13/2013	55657	Roto Rooter-(Inc.)	17,037.00
5/13/2013	55663	Veolia Water North America, ...	10,228.33
5/13/2013	55638	Johnson, Dee	9,486.39
5/13/2013	55631	Eaton Corporation	7,500.00
5/13/2013	55653	Rauch Communication Cons...	7,161.98
5/13/2013	55655	Ricoh USA, Inc.	6,034.25
5/13/2013	55662	U.S. Bank Card (2)(June)	5,268.54
5/13/2013	55652	Preferred Benefit	3,367.60
5/13/2013	55630	Dearborn National	2,699.70
5/13/2013	55656	RMC Water & Environment, I...	2,596.25
5/13/2013	55645	North Marin Water District	1,490.89
5/13/2013	55634	Grainger	1,483.47
5/13/2013	55628	Comet Building Maintenance,...	1,395.00
5/13/2013	55646	North Marin Water District - L...	1,320.00
5/13/2013	55647	North Marin Water District Pa...	1,200.99
5/13/2013	55621	Able Tire & Brake Inc.	1,164.04
5/13/2013	55620	3T Equipment Company Inc.	1,062.08
5/13/2013	55636	IEDA, INC	1,020.00
5/13/2013	55627	Cintas Corporation	976.71
5/13/2013	55643	North Bay Truck Service	953.58
5/13/2013	55640	Marin Mechanical II, Inc.	793.56
5/13/2013	55626	Cantarutti Electric, Inc	743.47
5/13/2013	55664	Verizon EQ	598.32
5/13/2013	55666	Vision Service Plan	545.24
5/13/2013	55625	Cagwin & Dorward Inc.	425.00
5/13/2013	55660	Teeters & Schacht Auto Glas...	398.10
5/13/2013	55637	Jobs Available	315.00
5/13/2013	55661	U.S. Bank Card (1)(Bev)	284.03
5/13/2013	55644	North Marin Auto Parts	265.36
5/13/2013	55654	Restoration Management Co...	247.59
5/13/2013	55667	WEF Membership	228.00
5/13/2013	55635	HACH/American Sigma Inc	226.93
5/13/2013	55633	Fisher-Scientific	216.46
5/13/2013	55665	Verizon Wireless-	206.98
5/13/2013	55650	Pini Hardware	200.40
5/13/2013	55639	Labworks Equipment, Inc.	175.00
5/13/2013	55649	Petty Cash	166.47
5/13/2013	55623	B.W.S. Distributors, Inc.	100.49
5/13/2013	55622	American Water Works Asso...	98.00
5/13/2013	55642	North Bay Portables, Inc.	92.20
5/13/2013	55624	Barnett Medical LLC	90.00
5/13/2013	55641	North Bay Gas & Weld	90.00
5/13/2013	55658	Siemens Industry Inc. - Lab	75.00
5/13/2013	55629	Cook Paging	66.30
5/13/2013	55648	Novato Builders Supply	51.67
5/13/2013	55632	Federal Express	47.57
5/13/2013	55659	T-Mobile	22.97
5/13/2013	55651	Pitney Bowes	12.00
<b>May 13, 13</b>			<b>90,228.91</b>

**Novato Sanitary District**  
**Operating Check Register Detail**  
**For May 13, 2013**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
<b>3T Equipment Company Inc.</b>			
	04/18/2013	21020 · Accounts Payable	
	04/18/2013	60150 · Repairs & Maintenance	438.20
	04/23/2013	21020 · Accounts Payable	
	04/23/2013	60150 · Repairs & Maintenance	482.53
	04/24/2013	21020 · Accounts Payable	
	04/24/2013	60150 · Repairs & Maintenance	141.35
Total 3T Equipment Company Inc.			<u>1,062.08</u>
<b>Able Tire &amp; Brake Inc.</b>			
	04/29/2013	21020 · Accounts Payable	
	04/29/2013	60150 · Repairs & Maintenance	1,164.04
Total Able Tire & Brake Inc.			<u>1,164.04</u>
<b>American Water Works Association</b>			
	05/09/2013	21020 · Accounts Payable	
	05/09/2013	66080 · Memberships	98.00
Total American Water Works Association			<u>98.00</u>
<b>B.W.S. Distributors, Inc.</b>			
	04/17/2013	66100 · Engineering Supplies	100.49
Total B.W.S. Distributors, Inc.			<u>100.49</u>
<b>Barnett Medical LLC</b>			
	04/05/2013	67500 · Household Hazardous Waste	45.00
	04/24/2013	67500 · Household Hazardous Waste	45.00
Total Barnett Medical LLC			<u>90.00</u>
<b>Cagwin &amp; Dorward Inc.</b>			
	04/10/2013	65150 · Repairs & Maintenance	425.00
Total Cagwin & Dorward Inc.			<u>425.00</u>
<b>Cantarutti Electric, Inc</b>			
	04/29/2013	65153 · Outside Services, Electrical	743.47
Total Cantarutti Electric, Inc			<u>743.47</u>
<b>Cintas Corporation</b>			
	05/01/2013	64100 · Operating Supplies	118.72
	05/01/2013	66100 · Engineering Supplies	366.34
	05/01/2013	60100 · Operating Supplies	491.65
Total Cintas Corporation			<u>976.71</u>
<b>Comet Building Maintenance, Inc.</b>			
	04/21/2013	66150 · Repairs & Maintenance	1,090.00
	04/21/2013	60150 · Repairs & Maintenance	152.50
	04/21/2013	65150 · Repairs & Maintenance	152.50
Total Comet Building Maintenance, Inc.			<u>1,395.00</u>
<b>Cook Paging</b>			
	05/01/2013	61000-4 · Water/Permits/Telephone	24.00
	05/01/2013	65193 · Telephone	30.83
	05/01/2013	60193 · Telephone	11.47
Total Cook Paging			<u>66.30</u>
<b>Dearborn National</b>			
	04/15/2013	66020 · Employee Benefits	2,699.70
Total Dearborn National			<u>2,699.70</u>
<b>Eaton Corporation</b>			
	04/23/2013	66123 · O/S Contractual	7,500.00
Total Eaton Corporation			<u>7,500.00</u>
<b>Federal Express</b>			
	04/19/2013	66090 · Office Expense	47.57
Total Federal Express			<u>47.57</u>
<b>Fisher-Scientific</b>			
	05/01/2013	64100 · Operating Supplies	216.46
Total Fisher-Scientific			<u>216.46</u>

**Novato Sanitary District**  
**Operating Check Register Detail**  
**For May 13, 2013**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
<b>Grainger</b>			
	04/22/2013	65150 · Repairs & Maintenance	1,033.00
	04/26/2013	66090 · Office Expense	31.00
	04/26/2013	65085 · Safety Expenses	180.24
	04/26/2013	66090 · Office Expense	16.28
	05/07/2013	65085 · Safety Expenses	85.00
	05/07/2013	66085 · Safety	119.52
	05/07/2013	66085 · Safety	18.43
Total Grainger			<u>1,483.47</u>
<b>HACH/American Sigma Inc</b>			
	03/19/2013	64100 · Operating Supplies	226.93
Total HACH/American Sigma Inc			<u>226.93</u>
<b>IEDA, INC</b>			
	05/01/2013	66123 · O/S Contractual	1,020.00
Total IEDA, INC			<u>1,020.00</u>
<b>Jobs Available</b>			
	05/07/2013	66130 · Printing & Publications	315.00
Total Jobs Available			<u>315.00</u>
<b>Johnson, Dee</b>			
	05/01/2013	67530 · Used Oil Program	155.42
	05/01/2013	67400 · Consulting Services	1,476.49
	05/01/2013	67400 · Consulting Services	7,854.48
Total Johnson, Dee			<u>9,486.39</u>
<b>Labworks Equipment, Inc.</b>			
	04/17/2013	64150 · Repairs & Maintenance	175.00
Total Labworks Equipment, Inc.			<u>175.00</u>
<b>Marin Mechanical II, Inc.</b>			
	05/08/2013	65150 · Repairs & Maintenance	220.00
	05/08/2013	66150 · Repairs & Maintenance	270.00
	05/08/2013	65150 · Repairs & Maintenance	303.56
Total Marin Mechanical II, Inc.			<u>793.56</u>
<b>North Bay Gas &amp; Weld</b>			
	04/30/2013	65100 · Operating Supplies	90.00
Total North Bay Gas & Weld			<u>90.00</u>
<b>North Bay Portables, Inc.</b>			
	04/23/2013	63100 · Operating Supplies	92.20
Total North Bay Portables, Inc.			<u>92.20</u>
<b>North Bay Truck Service</b>			
	04/21/2013	60150 · Repairs & Maintenance	953.58
Total North Bay Truck Service			<u>953.58</u>
<b>North Marin Auto Parts</b>			
	03/06/2013	60150 · Repairs & Maintenance	5.13
	04/01/2013	60150 · Repairs & Maintenance	51.20
	04/04/2013	65150 · Repairs & Maintenance	15.25
	04/10/2013	63150 · Repairs & Maintenance	43.68
	04/10/2013	63150 · Repairs & Maintenance	122.92
	04/16/2013	60150 · Repairs & Maintenance	5.32
	04/16/2013	65150 · Repairs & Maintenance	13.16
	04/26/2013	60100 · Operating Supplies	8.70
Total North Marin Auto Parts			<u>265.36</u>
<b>North Marin Water District</b>			
	04/25/2013	61000-4 · Water/Permits/Telephone	1,373.22
	04/25/2013	65192 · Water	117.67
Total North Marin Water District			<u>1,490.89</u>

**Novato Sanitary District**  
**Operating Check Register Detail**  
**For May 13, 2013**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
<b>North Marin Water District - Lab</b>			
	05/01/2013	64160 · Research & Monitoring	1,320.00
Total North Marin Water District - Lab			<u>1,320.00</u>
<b>North Marin Water District Payroll</b>			
	05/03/2013	64010 · Salaries & Wages	1,200.99
Total North Marin Water District Payroll			<u>1,200.99</u>
<b>Novato Builders Supply</b>			
	05/03/2013	63150 · Repairs & Maintenance	51.67
Total Novato Builders Supply			<u>51.67</u>
<b>Petty Cash</b>			
	05/01/2013	66124 · IT/Misc Electrical	14.99
	05/01/2013	65100 · Operating Supplies	14.68
	05/01/2013	66090 · Office Expense	16.74
	05/01/2013	66170 · Travel, Meetings & Training	82.00
	05/01/2013	66060 · Gasoline & Oil	35.35
	05/01/2013	60100 · Operating Supplies	2.71
Total Petty Cash			<u>166.47</u>
<b>Pini Hardware</b>			
	05/02/2013	65100 · Operating Supplies	83.04
	05/02/2013	65150 · Repairs & Maintenance	82.39
	05/02/2013	60150 · Repairs & Maintenance	34.97
Total Pini Hardware			<u>200.40</u>
<b>Pitney Bowes</b>			
	05/01/2013	66090 · Office Expense	12.00
Total Pitney Bowes			<u>12.00</u>
<b>Preferred Benefit</b>			
	05/01/2013	66020 · Employee Benefits	3,266.24
	05/01/2013	21074 · Health Insurance Payable	101.36
Total Preferred Benefit			<u>3,367.60</u>
<b>Rauch Communication Consultants. Inc.</b>			
	04/23/2013	67500 · Household Hazardous Waste	2,145.00
	04/23/2013	66130 · Printing & Publications	3,217.50
	04/23/2013	64170 · Pollution Prevention/Public Ed	1,799.48
Total Rauch Communication Consultants. Inc.			<u>7,161.98</u>
<b>Restoration Management Company</b>			
	04/30/2013	66071 · Insurance Claim Expense	247.59
Total Restoration Management Company			<u>247.59</u>
<b>Ricoh USA, Inc.</b>			
	04/10/2013	66090 · Office Expense	6,034.25
Total Ricoh USA, Inc.			<u>6,034.25</u>
<b>RMC Water &amp; Environment, Inc.</b>			
	04/25/2013	64160 · Research & Monitoring	2,596.25
Total RMC Water & Environment, Inc.			<u>2,596.25</u>
<b>Roto Rooter-(Inc.)</b>			
	04/25/2013	66123 · O/S Contractual	17,037.00
Total Roto Rooter-(Inc.)			<u>17,037.00</u>
<b>Siemens Industry Inc. - Lab</b>			
	04/13/2013	64100 · Operating Supplies	75.00
Total Siemens Industry Inc. - Lab			<u>75.00</u>
<b>T-Mobile</b>			
	04/22/2013	65193 · Telephone	22.97
Total T-Mobile			<u>22.97</u>

**Novato Sanitary District**  
**Operating Check Register Detail**  
**For May 13, 2013**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
<b>Teeters &amp; Schacht Auto Glass &amp; Upholstery</b>			
	04/09/2013	60150 · Repairs & Maintenance	398.10
Total Teeters & Schacht Auto Glass & Upholstery			<u>398.10</u>
<b>U.S. Bank Card (1)(Bev)</b>			
	05/02/2013	66170 · Travel, Meetings & Training	173.55
	05/02/2013	66090 · Office Expense	110.48
Total U.S. Bank Card (1)(Bev)			<u>284.03</u>
<b>U.S. Bank Card (2)(June)</b>			
	05/02/2013	60100 · Operating Supplies	232.73
	05/02/2013	64100 · Operating Supplies	174.00
	05/02/2013	64170 · Pollution Prevention/Public Ed	1,500.00
	05/02/2013	65152 · Small Tools	551.47
	05/02/2013	66090 · Office Expense	644.26
	05/02/2013	66170 · Travel, Meetings & Training	68.00
	05/02/2013	66124 · IT/Misc Electrical	338.88
	05/02/2013	21016 · U.S. Bank Visa	1,759.20
Total U.S. Bank Card (2)(June)			<u>5,268.54</u>
<b>Veolia Water North America, Inc.</b>			
	04/24/2013	61000-2 · Insurance & Bonds	3,005.83
	05/06/2013	68010 · O & M Services	810.00
	05/06/2013	68010 · O & M Services	90.00
	05/06/2013	68010 · O & M Services	1,170.00
	05/06/2013	68010 · O & M Services	5,152.50
Total Veolia Water North America, Inc.			10,228.33
<b>Verizon EQ</b>			
	04/28/2013	21020 · Accounts Payable	
	04/28/2013	65193 · Telephone	598.32
Total Verizon EQ			<u>598.32</u>
<b>Verizon Wireless-</b>			
	05/06/2013	60193 · Telephone	72.80
	05/06/2013	65193 · Telephone	48.53
	05/06/2013	66193 · Telephone	85.65
Total Verizon Wireless-			<u>206.98</u>
<b>Vision Service Plan</b>			
	04/18/2013	66020 · Employee Benefits	545.24
Total Vision Service Plan			<u>545.24</u>
<b>WEF Membership</b>			
	04/16/2013	66080 · Memberships	228.00
Total WEF Membership			<u>228.00</u>
<b>TOTAL</b>			<u><u>90,228.91</u></u>

**Novato Sanitary District  
Capital Project Check Register**

May 13, 2013

Date	Num	Name	Credit
May 13, 13			
5/13/2013	2517	W.R. Forde	217,333.88
5/13/2013	2515	RMC Water & Environment, I...	39,106.97
5/13/2013	2514	Nute Engineering Inc.	35,990.20
5/13/2013	2512	Arntz Builders, Inc.	1,832.00
5/13/2013	2513	Lateral-Wormood	1,500.00
5/13/2013	2516	Veolia Water North America, ...	1,067.04
May 13, 13			<u>296,830.09</u>

05/09/13

**Novato Sanitary District  
Capital Projects Check Register Detail  
May 13, 2013**

	Date	Account	Amount
<b>Arntz Builders, Inc.</b>			
	04/29/2013	72805 · Annual Trtmt Plnt/Pump St Impr	1,832.00
Total Arntz Builders, Inc.			<u>1,832.00</u>
<b>Lateral-Wormood</b>			
	05/06/2013	72706 · 2008 Collection System Improv	1,500.00
Total Lateral-Wormood			<u>1,500.00</u>
<b>Nute Engineering Inc.</b>			
	04/17/2013	72706 · 2008 Collection System Improv	15,693.60
	04/17/2013	72706 · 2008 Collection System Improv	8,109.00
	04/17/2013	72403 · Pump Station Rehabilitation	8,732.00
	04/22/2013	72403 · Pump Station Rehabilitation	3,455.60
Total Nute Engineering Inc.			<u>35,990.20</u>
<b>RMC Water &amp; Environment, Inc.</b>			
	01/10/2013	73001 · WWTP Upgrade - Contract C	20,927.75
	04/17/2013	73002 · WWTP Up - Cont D - Rec- ARRA Fu	6,593.06
	04/17/2013	73001 · WWTP Upgrade - Contract C	11,586.16
Total RMC Water & Environment, Inc.			<u>39,106.97</u>
<b>Veolia Water North America, Inc.</b>			
	05/06/2013	72805 · Annual Trtmt Plnt/Pump St Impr	1,067.04
Total Veolia Water North America, Inc.			<u>1,067.04</u>
<b>W.R. Forde</b>			
	04/30/2013	72403 · Pump Station Rehabilitation	217,333.88
Total W.R. Forde			<u>217,333.88</u>
<b>TOTAL</b>			<u>296,830.09</u>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Wastewater Treatment Facility: Odor Control and Landscaping Report</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO.: 6.a.</b>
<b>RECOMMENDED ACTION: Information</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>The District has received an increase in odor complaints on May 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> due to maintenance activities at the treatment plant. Two maintenance activities, cleaning the headworks screens and draining an aeration basin during hot weather were determined to be the cause. The work was completed on May 8<sup>th</sup>. Neighbors also questioned the District's commitment to address the three areas of concern to the residents:</p> <ul style="list-style-type: none"> <li>• Odor control</li> <li>• Noise</li> <li>• Landscaping.</li> </ul> <p>The District continues to work diligently to address these issues of concern, spending \$126,000 beyond the substantial investment for odor control included in the original project. This has included noise abatement, visual screening, wind shielding, daily monitoring, and operational changes.</p> <p>District staff have been investigating alternatives for addressing remaining issues with odor control, noise, and landscaping and the following next steps are in process:</p> <ul style="list-style-type: none"> <li>• Landscaping upgrades are scheduled for May and June to replace plants that died and augment the current visual screening. (\$19,000)</li> <li>• An enclosure is being designed for the blowers and piping (\$75,000)</li> <li>• An engineering firm has submitted a proposal for odor control(Agenda Item 6b) (\$34,000).</li> <li>• Include odor control measures in Standard Operating Procedures for sensitive processes.</li> </ul> <p>The Board made it clear in the 2012 Strategic Plan and affirmed it in the 2013 Strategic Plan that being a good neighbor is a priority.</p>	
<b>ALTERNATIVES: N/A.</b>	
<b>BUDGET INFORMATION:</b>	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: WWTP Upgrade Project – Contract B, NTP Upgrade; Project No. 72609; Request for Proposals – Odor Control</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO.: 6.b.</b>
<b>RECOMMENDED ACTION:</b> Review recommendation of the Strategic Planning and New Facilities Committee (Committee), receive proposal from Brown and Caldwell (B&C), and authorize Manager-Engineer to execute a contract with B&C for an initial time and materials budget estimate of \$34,000.	
<b>SUMMARY AND DISCUSSION:</b>  <p>The District has been receiving odor complaints from residents in the Lea Drive neighborhood that the residents associate with the aeration basins at the Novato Treatment Plant (NTP). The District has taken a number of steps recommended by an earlier analysis prepared by Mr. Jim Joyce including operational changes, vegetation planting, and fencing. Since this has not resolved the complaints, staff has been investigating alternatives and looking for odor control specialist(s) with a local presence, that also have a strong understanding of the wastewater treatment process.</p> <p>After considering several local firms that have a strong background and expertise in these areas, staff requested and obtained a Statement of Qualifications (SOQ) from Brown and Caldwell (B&amp;C) that more than meets those criteria. (Note: a web-link copy of the SOQ was also e-mailed to each of the relevant individual residents on May 8, 2013).</p> <p>Staff presented B&amp;C's SOQ to the Board's Strategic Planning and New Facilities Committee (Committee) at its May 6, 2013 meeting, along with a recommendation that staff be authorized to request a proposal from B&amp;C to further investigate the odor issues and make recommendations as needed for improving plant operations and odor control.</p> <p>The Committee reviewed the information presented and concurred with staff's recommendation. Staff then requested and obtained a proposal from B&amp;C that provides a detailed scope of services, along with an initial budgetary estimate that will be further refined as we proceed with the work.</p> <p>Accordingly, it is recommended that the Board consider B&amp;C's proposal and authorize the Manager-Engineer to execute a contract with B&amp;C for an initial time and materials budget estimate of \$34,000, to implement their proposed scope of work.</p>	
<b>ALTERNATIVES:</b> Do not authorize contract.	
<b>BUDGET INFORMATION:</b> The FY2012-13 budget for Contract B is \$50,000. As of April 30, 2013, \$15,821 has been expended from the project budget, for a balance of \$34,179.	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

201 N Civic Drive  
Walnut Creek, CA 94596

T: 925-937-9010  
F: 925-937-9026



May 3, 2013

Mr. Sandeep Karkal  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94949

Subject: Brown and Caldwell Odor Control Services Statement of Qualifications

Dear Sandeep:

Brown and Caldwell is pleased to provide you with a statement of qualifications (SOQ) that briefly describes our company-wide odor control services sector and capabilities. Also attached is a resume for David McEwen, Brown and Caldwell's local odor control specialist, who operates out of the Walnut Creek corporate headquarters. David has been completing odor control studies and designs, much of which is similar to the needs of the District, since 1999.

We are excited about the opportunity to provide Novato Sanitary District with a proposal to help you with your current issues associated with residential complaints that have been associated by the complainants with the plant aeration basins. Working with the District, Brown and Caldwell can produce a targeted study that will provide guidance in addressing the complaints and improving plant operations and odor control as needed, based on the scientific results of the study.

David will work with our principal-in-charge, Dr. Denny Parker, who also works out of our Walnut Creek office, and quality reviews will be provided by Victor Occiano, who is Brown and Caldwell's southern California odor control lead point-of-contact. Dr. Parker's involvement in wastewater treatment plant odor control dates back to the 1970's, and Victor has been completing odor control studies and designs since the 1990's.

We look forward to continued correspondence with you regarding this important work. If you have any questions, please contact me directly at 925-210-2518.

Very truly yours,

**Brown and Caldwell**

A handwritten signature in black ink that reads "David W. McEwen".

David McEwen, Odor Control Engineer and Project Manager  
Walnut Creek, CA

# BC Odor Control Services



Brown and Caldwell (BC) is a leader in solving odor and corrosion problems in existing wastewater facilities, and in preventing odor problems from occurring in new wastewater facilities. We have extensive experience with a wide range of treatment technologies, including chemical scrubbers, carbon absorption, bioscrubbers, biofilters, and liquid-phase chemical injection. Our selection of treatment processes is based on client requirements, odor control goals, treatment effectiveness, and life cycle cost.

We have completed several hundred odor and corrosion control projects in wastewater collection and pumping systems over the past 30 years. In fact, Brown and Caldwell's work in wastewater and biosolids odor assessment and control design is so extensive that organizations have tapped our resources to provide industry wide leadership for solving problems and providing general odor guidance documents.

## BC's History in Odor control

BC's biotrickling filter design technology was based on sound experience gained from our work on wastewater process trickling filters. Dr. Denny Parker has been a leading authority, having invented the trickling filter / solids contact process and the biofilm controlled nitrifying trickling filter.

During the 1970s, in cooperation with researchers in New Zealand, BC developed a biological odor removal system to remove hydrogen sulfide and related odorous gases from foul air. The system consisted of a lightly loaded fixed film biological reactor that employed a high surface area plastic media. While the reactor resembled a plastic media biofilter in some respects, many of its features were specifically figured to improve odor reduction.

This technology pioneered by Dr. Parker and BC has formed the basis for much of the biological odor treatment technologies used today.

Our Strengths	Benefits to You
Knowledge of the best means to contain odorous air and ventilate at appropriate air change rates	Lower air flow rates reduce foul air treatment costs and energy costs associated with fans.
Emphasize benefits to operation and maintenance staff, including work environment and safety.	Improved operator safety and comfort leads to operator buy-in and acceptance of the selected technology; they take pride in maintaining the equipment and seeing it perform at its optimal level.
Use cutting-edge odor measurement technologies to best characterize odors	Speciation of compounds that contribute most significantly to odors helps ensure you invest in the right technology.

BC's odor control engineers are also highly experienced in collecting air samples that are shipped to laboratories for speciation of odorous compounds and also olfactometry analysis by an "odor panel," which uses human characterization of how detectable an odor is in a given sample, and how offensive the odor is.



## Put our Experience to Work for You

BC seamlessly integrates odor and corrosion control with facility and process requirements. We recognize that successful odor control requires accurate characterization of odor and sulfide conditions. Our technical experts test and evaluate odor systems to determine appropriate operational and system parameters for optimal performance.

Following a coordinated evaluation of the cause of foul air and/or corrosion problems, our engineers and technical experts determine cost-effective treatment alternatives. In treatment plants, we focus on source control, improved operating practices, and innovative containment and process design to protect wastewater systems and the surrounding community from the effects of foul air. Our engineers design preventative programs and rehabilitation options for treatment plants, biosolids processing facilities, wastewater collection systems, and pumping stations.

BC uses several field instruments that help characterize odorous air streams at wastewater conveyance and treatment facilities. Very commonly used instruments include those that measure a wide range of hydrogen sulfide concentrations. Hydrogen sulfide is typically the dominant odor-causing compound at wastewater treatment facilities and can be detected by humans at concentrations as low as 1 part per billion by volume. Field equipment is also used for measurement of ammonia, volatile organic compounds, and some organic sulfides, all of which may contribute to odors.

Our Brown and Caldwell team often uses odor data collected in the field or analyzed in the laboratory to produce dispersion model plots. These plots show the influence of plant odor emissions from various sources and the meteorological conditions of the area (typical wind speeds

and directions over the course of a year) on the occurrence of odors beyond a wastewater treatment plant property line. Dispersion modeling is often used in conjunction with the raw odor data to identify the optimal choice of odor reduction technology. This selection often aligns with the client's established goal in bringing odor contours back closer to the plant boundary, or within dedicated buffer zones. Gas-phase odor control units such as biofilters, chemical scrubbers, and activated carbon adsorbers are often identified as preferred technologies, and sometimes the units are aligned in series to produce optimal odor removal, which tends to minimize odor complaints



Dispersion model plots help identify the influence of plant odor emissions.

## Meet Two of BC's Odor Control Experts

**David McEwen, P.E.** is BC's Northern California Odor Control Lead. David has 18 years of environmental engineering experience, most of which has been in odor control planning, studies, and design for wastewater treatment facilities. David has specialized experience in life cycle cost analyses and odor complaint investigations. He has applied a variety of technological odor control solutions, including chemical scrubbers, activated carbon, and biological foul air treatment systems. He has presented papers on odor control applications in numerous conferences.

**Victor Occiano, P.E.**, has 29 years of experience in environmental engineering, including design of wastewater and sludge treatment facilities and wastewater pump stations. He also is Southern California's Odor Control Lead and has completed numerous odor-related studies and designs for that area. Included in his experience are ongoing upgrades for the City of San Diego Metropolitan Biosolids Center, in which he is providing an evaluation of improved ventilation and foul air removal to provide a safe working environment. He also completed a detailed odor source investigation for the City of San Diego Point Loma wastewater treatment plant.

# Odor Investigation

## East Bay Municipal Utility District, California

Following a number of odor complaints from residents near its main plant, EBMUD asked BC whether the increased complaints were due to a new odor source at the plant or failure of an existing odor control system.

BC implemented an odor sampling and analysis program and supplemented laboratory findings with field odor data. Four areas of concern were highlighted in the sampling and analysis program: (1) The septage receiving facility odor control unit, (2) The sludge truck loadout facility, and (3) The primary clarifiers, and (4) The Wood Street Interceptor. Off-site odor monitoring in the locations of complaints as well as other potential sources were also conducted. Jerome Analyzer and Nasal Ranger measurements were taken at these locations.

Brown and Caldwell's odor investigation concluded that the most likely source of the odors that led to the complaints was the plant's septage receiving facility odor control unit, which contained spent carbon and a poorly performing first stage of



treatment during the rash of complaints. The report further indicated that odor emissions from the primary clarifiers could be of concern during low-flow periods, when high sulfide loading from the collection system, in particular the Wood Street Interceptor, is not sufficiently controlled by the existing chemical injection system.

# John's Creek Environmental Campus

## Fulton County, Georgia

As part of a design-build team, Brown and Caldwell provided an extensive odor control system that treats all air that comes in contact with liquid or solids within the new Johns Creek Environmental Campus wastewater treatment facility. Designing such an extensive odor control system required air flow rates of up to 168,000 cubic feet per minute (cfm).

In the operating system, foul air from the more odorous locations (headworks and primary clarifiers) is treated by wet scrubbers and then blended with air from other parts of the facility prior to treatment in seven 30,000 cfm carbon absorbers.

In this project, it was important to be a "good neighbor" during construction, as the Campus is adjacent to a nearby residential community. Maintaining good neighbor status was achieved by mitigating such things as odor emissions from constructed process units, construction and equipment noise, traffic congestion, and spills. Brown and Caldwell also facilitated productive interaction between the



public, Fulton County and the design/build team, providing the community with ownership of the project, including the odor control elements, which were of paramount importance to the public.

Elements of outreach included a project website, email construction updates to stakeholders and neighbors, press kits, public service announcements, community meetings and a 24-hour hotline. The project was constructed with minimal issues and it has received awards for its sound design and treatment capability.

## Experience Summary

David specializes in preparation of odor control technology studies and designs that minimize impacts to communities surrounding wastewater and industrial facilities throughout North America. He has extensive experience in calculation of optimal air withdrawal requirements for odorous processes to properly capture odors and minimize corrosion and selection of the most cost-effective and sustainable air treatment solution for odorous processes. He has completed numerous detailed designs of new and retrofitted odor control systems utilizing all established odor treatment technologies.

### Assignment

*Project Manager*

### Education

*M.S., Environmental Engineering,  
University of Florida (1995)*

*B.S., Environmental Engineering,  
University of Florida (1993)*

### Registration

*Professional Civil Engineer  
014755, Nevada, 2001*

*Professional Civil Engineer 69475,  
California, 2006*

### Experience

*17 years*

### Joined Firm

*June 2008*

## Odor Control Planning and Design

### **P2-92 Solids Handling Odor Control Design, Orange County Sanitation District, Fountain Valley, California**

**Odor Control Design Lead.** David is the design lead for odor control improvements and new odor control facilities for the District's P2-92 Sludge Dewatering and Odor Control at Plant 2 Project. The design consists of a biofilter that will treat foul air from the centrifuge facility, centrate wet well and cake storage silos, and an activated carbon odor control system that will treat odorous air from the truck loading bays. Innovative approaches were used in providing containment for the truck loading facility while not creating a confined space. A comprehensive life-cycle cost analysis identified the optimal approach, which was determined in a group format with District stakeholders. (Est. Design Completion January 2014)

### **Odor Control Design Upgrade, City of San Diego, San Diego, California**

**Design Manager.** David is the design lead for odor control improvements to the City's Metro Biosolids Center. Several upgrades are included in this work, including optimizing current treatment of solids handling units, providing better foul air capture for grit facilities, improving foul air duct routing in several locations to reduce pressure losses, and providing new ventilation to the facility's truck loadout area. The design is based on system wide pressure measurements and targeted odor sampling at key processes, which will ultimately create an optimal system with lower energy requirements and more efficient odor removal. (Est. Design Completion: December 2013)

### **Odor Control Monitoring and Improvements, Republic Services Sunshine Canyon Landfill, Sylmar, California**

**Odor Control Lead.** David is the odor control lead advisor for an independent environmental monitoring program advising Republic Services on detecting off-site odors and complaints that may be associated with the Sunshine Canyon Landfill. David provides feedback on possible causes of complaints and is working with Republic Services to identify the best steps to control odorous emissions from the landfill, minimize complaints and meet regulatory requirements. The project is a team effort that synthesizes the input from odor control experts with solid waste engineers to best advise the client for managing operations and controlling odors. (Est. Completion 2013)

### **Reeside Pump Station Odor Control Study and Design, Monterey Regional Water Pollution Control Agency, California**

**Project Manager.** David completed a study that evaluated options for controlling odorous emissions from the Agency's Reeside Pump Station, which is located in a highly sensitive area along Cannery Row in historic Monterey, CA, and whose foul air emissions are currently unimpeded into the surrounding

environment. The Agency goal is to reduce odors to non-detect levels outside of the pump station. The study identified activated carbon adsorption with potassium permanganate dry media polishing as the ideal technology for odor control. David has completed the design of the odor control system, which is being constructed in 2012, and provided engineering services during construction. (2012)

### **Food Waste Composting System Odor Control Technical Assistance, Confidential Waste System Company, California**

**Lead Engineer.** David is the lead odor control engineer for BC's consulting work with this client, whose goal is minimization of odor emissions from a 75 ton-per-day food and green waste composting facility. BC is helping the client with process-related changes and facility upgrades that will reduce complaints from the compost facility's neighbors. David is responsible for odor monitoring on- and off-site, speciation of odorous compounds from key processes, and prioritization of facility improvements. Importance has been noted for the highly odorous liquid component of the waste stream, and BC is working with the client to remove and treat this liquid to aid in the overall odor control effort. As a result of David's efforts, odorous emissions from the facility have decreased in 2011 and 2012 as compared to previous on-site odor measurements. Verified odor complaints from the surrounding community have also decreased by more than 50 percent since David's involvement in the project. (2012)

### **Odor Control Study and Design, Union Sanitary District, Union City, California**

**Project Engineer and Project Manager.** David led the production of a comprehensive odor study for the District's Alvarado Treatment Plant. He conducted an extensive odor testing program that evaluated 18 existing chemical scrubbers, and led a technological evaluation of the most cost-effective means of upgrading the existing odor control system using dispersion modeling and pilot testing results. He has led the design of physical improvements to existing scrubber stacks and construction of a barrier wall, both of which will promote additional vertical dispersion of scrubber effluent. He completed a design for upgrading the existing hollow vessel chemical scrubbers to new packed tower chemical scrubbers for two of the District's more odorous process areas—the headworks building and the influent pump station. These upgrades require an innovative approach in dealing with large foul air streams and the District's desire to avoid the use of caustic solution for odor control scrubbing. (2012)

### **Sewer System Odor Evaluation and Emissions Control, Orange County Sanitation District, Fountain Valley, California**

**Project Engineer.** David evaluated potential odor emissions from 17,500 linear feet of the District's Santa Ana Trunk Sewer, which BC was inspecting during completion of a system wide condition assessment. Work included completing a baseline odor assessment and a technical memorandum that recommended means of containing odors during field inspections such that nearby neighbors would not be impacted by sewer emissions. The evaluation included a comprehensive approach in which hydrogen sulfide concentrations and manhole air pressures were measured at strategic locations. The final memorandum was praised by the District as being the most thorough and useful plan of its kind that they had seen to date. (2011)

### **Lift Station Improvements Project, City of Foster City, California**

**Odor Control Expert.** BC is designing the rehabilitation of six wastewater lift stations, which includes replacement of stand-by generators, installation of portable generators, replacement of pump control panels, and upgrades to control monitoring equipment for the SCADA systems. David is providing odor control expertise and recommendations for upgrades to individual lift stations on an as-needed basis, with the goal of not increasing off-site odor impacts upon construction of the required improvements. (2011)

### **Odor Control Design, East Bay Municipal Utility District, Oakland, California**

**Project Engineer.** David led the design of two new odor control systems to be installed at the District's main plant—one for the new fats, oils and grease (FOG) storage tanks and one for the sludge blending tanks. The design used innovative principles and a technology mostly used for digester gas conditioning to control anticipated large spikes in hydrogen sulfide and a diverse profile of organic odorous compounds that if not controlled would produce significant impacts to the surrounding neighborhood. (2008)

**Odor Investigation, East Bay Municipal Utility District, Oakland, California**

**Project Engineer and Project Manager.** David conducted a study that investigated potential sources of odorous emissions at the EBMUD Main Wastewater Treatment Plant that could have contributed to off-site odors and associated complaints in the summer of 2010. The study included targeted hydrogen sulfide and odor sampling at potential sources, including the septage receiving facility, headworks, primary clarifiers and truck loading facility. David also reviewed OdoLog data that measured hydrogen sulfide concentrations in key process areas during the time of the complaints. The study concluded that a primary contributor to odorous emissions and potentially the complaints was breakthrough of the carbon odor control system that was controlling foul air from the septage receiving facility. Following the study, EBMUD changed out the carbon media and has since experienced fewer odor complaints. (2010)

**Odor Mitigation Plan, East Bay Municipal Utility District, Oakland, California**

**Project Engineer.** David conducted a study focusing on odor issues at the District's main plant. The study considered odorous emissions from new process units and projected odor contours based on dispersion modeling to assess current off-site impacts. He recommended odor control technology improvements. Data and recommendations were used in the current update to the odor control master plan. (2007)

**Odor Control Design, Gippsland Water Factory, Traralgon, Australia**

**Project Engineer.** David completed a basis of design for a new odor control system at four wastewater pump stations within the new Gippsland Water Factory collection system in southeastern Australia. The odor control system includes combinations of bioscrubbers and activated carbon systems that treat odorous air from various process areas. Odor treatment produces non-detectable odors at the nearest receptors. (2007)

**Odor Control Facilities Plan Update, Central Contra Costa Sanitation District, Martinez, California**

**Project Engineer.** David conducted a thorough evaluation of odorous sources at the District plant and predicted offsite impacts. The study provided new flux chamber sampling data and analysis of odorous emissions from the wastewater treatment facility, along with an update to the odor dispersion modeling. He provided recommendations for optimizing existing odor control units and confirmed success of previous odor control recommendations. (2006)

**Odor Control Master Plan and Design, Delta Diablo Sanitation District, Antioch, California**

**Project Engineer and Project Manager.** David led the engineering analysis for an odor control master plan update that estimated emissions from the wastewater treatment facility and made recommendations for additional odor control at the plant and conveyance system. He managed the subsequent design of a new 52,000 cfm soil biofilter, a hypochlorite liquid-phase treatment system, and bioscrubbers at two pump stations and at plant headworks, all of which are currently on line and providing good treatment. (2007)

**Pond Odor Emissions Analysis, City of Chandler, Arizona**

**Project Engineer.** David analyzed odorous emissions from wastewater evaporation ponds that contained elevated sulfate concentrations. He conducted jar testing and made recommendations for regular injections of ferrous chloride into the ponds. The odor treatment decreased odorous emissions and sharply reduced complaints from the nearby residential community. (2008)

**Pond Odor Control Pilot Study, Nevada Power Company, Las Vegas, Nevada**

**Project Engineer.** David conducted a pilot study that tested recommendations for liquid-phase odor treatment of evaporation ponds operated by the Nevada Power Company at a coal-fired power plant in Southern Nevada. He worked with plant staff to inject bulk doses of iron (ferrous chloride) into the ponds and optimize current hydrogen peroxide dose schemes. He also conducted flux chamber odor sampling on the ponds to evaluate pilot study modifications. (2007)

**Odor Control Preliminary Design, City of Redding, Redding, California**

**Project Engineer.** David completed a basis of design of an odor control system that treats three process areas in the Clear Creek Wastewater Treatment Plant—the headworks, influent pumping station, and two 30-foot-diameter dissolved air flotation thickeners (DAFT). The DAFT odor control included flat covers over the reactor tanks and enclosures over the associated grit classifiers and cyclone. He calculated airflow requirements and evaluated engineered media biofilter systems, incorporating a life-cycle cost analysis and site layout drawings

to achieve optimal and cost-effective solutions. The analysis concluded that two modular bulk media biofilters was the most efficient solution, given the degree of treatment required and footprint constraints.

#### **Odor Control Study and Design, Sausalito-Marin City Sanitary District, Sausalito, California**

**Project Engineer.** David analyzed emissions and odor control alternatives for the District's wastewater treatment plant and collection system. He incorporated results from plant odor emissions and collection system modeling into the design of a bioscrubber odor control system that treats odorous exhaust from the plant primary clarifier, fixed-film reactor and sludge thickener. The bioscrubber is currently on line and functioning well in reducing odors. (2007)

#### **Odor Control Master Plan Update, Dublin San Ramon Services District, Dublin, California**

**Project Engineer.** David led the engineering analysis for master planning work and several additional odor studies that provided new data and analysis of odorous emissions from the wastewater treatment facility. His work included new flux chamber sampling, emissions analysis, and dispersion modeling. Success was determined at public information meetings, at which neighbors of the plant expressed their approval of master planning work and subsequent odor-related improvements. (2007)

#### **Odor Control Master Plan, Sacramento Regional County Sanitation District, Sacramento, California**

**Project Engineer.** David completed the second phase of an odor control master plan that provided information for the District on methods of best containing odorous emissions from the Sacramento Regional Wastewater Treatment Facility and its collection system. He led focus groups for air permitting revisions that involved meetings with the local air district and completed collection system hydrogen sulfide modeling, analysis, and recommendations for system optimization. (2003)

#### **Collection Systems Odor and Corrosion Research, Water Environment Research Foundation**

**Program Coordinator.** David provided project management and coordination for the second phase a research project analyzing the relationship of sewer ventilation with odor production and corrosion. The research additionally seeks to address data gaps concerning the relationship of hydrogen sulfide levels to corrosion and the importance of organic sulfur compounds in sewer odor production. (2008)

#### **Biosolids Odor Research, Water Environment Research Foundation**

**Project Manager and Field Engineer.** David served in a management and engineering role in a three-phase research project analyzing the potential operations and process parameter impacts on odor emissions from biosolids facilities at wastewater treatment plants. He served as the test site coordinator for six facilities and accumulated data for analysis and production of theories as to the origin of biosolids odorous emissions. (2007)

#### **Wastewater Collection System Interceptor Modeling and Analysis, Clark County Water Reclamation District, Las Vegas, Nevada**

**Project Engineer.** David produced a model of hydrogen sulfide fluctuations in three interceptors conveying wastewater into the District's wastewater treatment facility. Using the model, he identified potential locations of hydrogen sulfide outgassing and evaluated potential liquid-phase treatment options for sulfide minimization, which reduces collection system odors and the overall odor loading to the downstream treatment plant. (2000)

#### **Wastewater Treatment Plant Emissions Modeling, Various Clients**

**Project Engineer.** David completed emissions modeling for multiple wastewater utilities, using treatment parameters and process dimensions to generate estimated flux rates off the emitting surfaces. Model output was used for odor studies, permitting and specific process analyses as part of a wastewater treatment plant optimization effort. He also consulted on the development of a new upgraded Windows-based emissions model, including BETA testing and resolution of issues. He frequently uses the Environmental Protection Agency SCREEN3 model to provide rough estimates of point source odor emissions, primarily from exhaust stacks of existing or planned odor control treatment systems.

## Odor Control Quality Control Reviews

### Various Clients in North America

**Odor Control Study and Design QA/QC Lead.** David has provided quality assurance and quality control reviews for odor control documents at various stages of study and design completion for several clients throughout North America. Key goals of these reviews are to provide feedback to the project engineers and design managers from a fresh viewpoint, considering what feedback might be provided by the client or contractor so that issues may be addressed prior before completion of the final design deliverables. He also uses these reviews to confirm consistency between design principles developed in the planning and preliminary design stages and those that comprise the final design deliverables. Some of the larger efforts in which he has been involved in this capacity include work for the City and County of Honolulu (Hawaii), City of Lompoc (California), City of Norfolk (Virginia), Town of Cary (North Carolina), Padre Dam Municipal Water District (California), and the City of San Leandro (California).

## Memberships

Water Environment Federation

California Water Environment Association

## Publications and Presentations

1. "Solids Handling Systems Odor Control: Trends in California," California Water Environment Association Annual Conference, Palm Springs, California. April 2013.
2. "Targeted Odour and Air Toxic Control for Solids Handling Facilities to Meet Strict Public and Regulatory Requirements," International Water Association Conference, San Francisco, California. March 2013.
3. "Odor Dispersion Barrier Walls: Theory and Practical Application," Water Environment Federation and Air & Waste Management Association Odors and Air Pollutants Specialty Conference, Louisville, Kentucky. April 2012.
4. "Incorporating a Green Approach to Chemical Odor Scrubbing," California Water Environment Association Annual Conference, Ontario, California. April 2011.
5. "Pump Station Odor Control in a Tourist Location," Water Environment Federation and Air & Waste Management Association Odors and Air Pollutants Specialty Conference, Charlotte, North Carolina. March 2010.
6. "Innovative Approaches to Upgrading Atomized Mist Scrubbers," Water Environment Federation and Air & Waste Management Association Odors and Air Pollutants Specialty Conference, Charlotte, North Carolina. March 2010.
7. "Odor Control Master Planning and Biotechnology Applications at Delta Diablo Sanitation District," Water Environment Federation and Air & Waste Management Association Odors and Air Emissions Conference. April 2006.
8. "Identifying and Controlling the Municipal Wastewater Odor Environment: Phase 3, Biosolids Processing Modifications for Cake Odor Reduction." Water Environment Research Foundation. 2007.
9. "Identifying and Controlling the Municipal Wastewater Odor Environment: Phase 2, Impacts of In-Plant Operational Parameters on Biosolids Odor Quality." Water Environment Research Foundation. 2003.
10. "The Impact of Ozone on Bromate Formation in Groundwater at the City of Jacksonville." Florida Water Resources Conference. May 1996.

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: WWTP Upgrade Project – Contract C, Solids Handling/Digester No. 2 Upgrades; Project NO. 73001; Construction Contract</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO.: 6.c.</b>												
<b>RECOMMENDED ACTION:</b> Review recommendation of the Strategic Planning and New facilities Committee, authorize contract award to the lowest responsive bidder, R.E. Smith Contractor, Inc., and authorize Manager-Engineer to execute contract													
<b>SUMMARY AND DISCUSSION:</b>  At its March 11, 2013 meeting, the District Board approved plans and specifications and authorized the Manager-Engineer to advertise for bids for this project. On April 23, 2013, the District received six (6) bids for the construction of this project, as follows: <table style="margin-left: 40px; margin-top: 10px;"> <tr><td>1. RE Smith Contractor Inc. (RESC)</td><td style="text-align: right;">\$2,814,928</td></tr> <tr><td>2. West Bay Builders (WBB)</td><td style="text-align: right;">\$3,044,920</td></tr> <tr><td>3. KG Walters Construction</td><td style="text-align: right;">\$3,131,432</td></tr> <tr><td>4. GSE Construction</td><td style="text-align: right;">\$3,177,000</td></tr> <tr><td>5. Monterey Mechanical</td><td style="text-align: right;">\$3,285,000</td></tr> <tr><td>6. Gateway Pacific Construction</td><td style="text-align: right;">\$3,397,862</td></tr> </table> <p>Based on the bids, RESC was identified as the apparent low bidder. However, this apparent low bid was challenged by the apparent second low bidder (WBB), who filed a bid protest letter. In summary, WBB’s protest letter contended that RESC did not possess the required experience specified by the contract documents, and that RESC did not provide the required information on the digester cover manufacturer specified by the contract documents.</p> <p>The District and WBB were then notified by RESC’s legal counsel, whose letter contended that: (a) RESC did in fact possess the requisite experience (and provided the basis therein), and (b) WBB’s claim on the information requirements for the digester cover manufacturer was frivolous.</p> <p>Staff shared the information provided by the bids, WBB’s protest letter, and the letter from RESC’s attorney, with District Counsel Kent Alm of Meyers/Nave. Based upon his review and staff’s review, it was concluded that RESC did have the requisite experience, and was eligible for contract award.</p> <p>This information and staff’s recommendation to award the contract to RESC was presented to the Board’s Strategic Planning and New Facilities Committee (Committee) at its May 6, 2013 meeting. The Committee reviewed the information presented and concurred with staff’s recommendation.</p> <p>Accordingly, the Committee recommends that the Board award the contract to the lowest responsive bidder, R.E. Smith Contractor, Inc., and authorize the Manager-Engineer to execute the contract.</p>		1. RE Smith Contractor Inc. (RESC)	\$2,814,928	2. West Bay Builders (WBB)	\$3,044,920	3. KG Walters Construction	\$3,131,432	4. GSE Construction	\$3,177,000	5. Monterey Mechanical	\$3,285,000	6. Gateway Pacific Construction	\$3,397,862
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<b>ALTERNATIVES:</b> Do not award the project.													
<b>BUDGET INFORMATION:</b> The FY2012-13 budget for Contract C is \$2,500,000. As of April 30, 2013, \$237,654 has been expended from the project budget.													
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>												

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: WWTP Upgrade Project – Contract C, Solids Handling/Digester No. 2 Upgrades; Project N. 73001; Construction Management Services</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO. : 6.d.</b>
<b>RECOMMENDED ACTION:</b> Consider approval of a contract with The Covello Group (TCG) for construction management services, and authorize the Manager-Engineer to execute an agreement with TCG on a time and materials basis for an amount not to exceed \$305,000	
<b>SUMMARY AND DISCUSSION:</b>  <p>At its March 11, 2013 meeting, the District Board approved plans and specifications and authorized the Manager-Engineer to advertise for bids for this project. On April 23, 2013, the District received six (6) bids for the construction of this project, and the Board is separately considering award of the construction phase of the project to the lowest responsive bidder, R.E. Smith Contractor, Inc. (RESC).</p> <p>At this time, staff has also negotiated a fee estimate and scope of services with TCG to provide construction management services on this project. TCG’s estimate provides a base budget amount of \$265,260 (or 9.4% of the construction contract) in direct costs, and a budget allocation of \$39,214 for other direct and indirect costs related to office expenses and speciality inspection such as materials testing, electrical review, and painting and coatings inspections.</p> <p>Accordingly, it is recommended that the Board approve the contract with TCG and authorize the Manager-Engineer to execute an agreement with TCG on a time-and-materials basis in an amount not-to-exceed \$305,000.</p>	
<b>ALTERNATIVES:</b> Do not approve the agreement.	
<b>BUDGET INFORMATION:</b> The FY2012-13 budget for Contract C is \$2,500,000. As of April 30, 2013, \$237,654 has been expended from the project budget.	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE: Wastewater Operations Report  
for March 2013**

**MEETING DATE: May 13, 2013**

**AGENDA ITEM NO.: 7.a.**

**RECOMMENDED ACTION:** Information. Receive report.

## **SUMMARY AND DISCUSSION:**

The March 2013 operations reports for the wastewater treatment, collection, and reclamation facilities are attached.

### **Wastewater Treatment Facility**

The Novato Treatment Plant (NTP) remained in Bay discharge mode through March 2013 and water quality performance was excellent with all parameters well within effluent standards. There were no significant maintenance issues to report. Safety performance was excellent with an accident-free month for a total of 1,033 accident-free days. Routine maintenance activities were performed at the NTP and the Ignacio Transfer Pump Station (ITPS). Odor complaints for the month are summarized in the attached operations report. The NTP plant operation received First Place Operation Excellence Award for 2012 at the 2013 Veolia North America Managers meeting held in Orlando, FL.

### **Collection System**

The Collection System report summarizes the monthly and year-to-date performance, and a comparison of these performances against the prior year.

For March 2013, the crews cleaned and televised a total of 50,565 feet of sewer line versus 57,371 feet for the previous month. The average cleaning rate for February 2013 was 164 feet/hour versus 187 feet/hour for the previous month.

The CCTV van was in the field for a total of 7 working days during the month of March and the department's CCTV production for the month (at 7,075 feet), was below normal production goals. The Collection Systems staff was augmented by the addition of two new employees into the Collection System Worker I (CSW I) class, and staff anticipates catching up to its CCTV production goals.

There were no lost time accidents in March for a total of 59 accident-free days.

The District had no (zero) Sewer System Overflows (SSOs) in March.

### **Reclamation Facility**

There was minimal activity on ranch operation. The Parcels in Site 2 which were flooded by above normal rainfall in December have dried out and all were reseeded. A portion of Parcel 21 and all of Parcel 25 was disked, rolled and seeded with the permanent crop in March. Staff is re-evaluating the repair or replacement of Irrigation Pump 2 to take advantage of any PG&E rebate programs. Staff contacted PG&E to inquire about rebate programs for replacing the pump with a more efficient motor. PG&E requested run time data and staff is currently compiling the data to send off to PG&E. There was no reclamation related activity to report for the sludge handling and disposal facilities.

**DEPT.MGR.:**

**MANAGER-ENGINEER:**

## NOVATO SANITARY DISTRICT

Meeting Date: April 15, 2013

The Wastewater Operations Committee of Novato Sanitary District will hold a meeting at 2:00 PM, Monday, April 15, 2013 at the District offices, 500 Davidson Street, Novato.

### AGENDA

**1. AGENDA APPROVAL:**

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

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

**3. CONSIDER APPROVAL OF MINUTES OF THE MARCH 18, 2013 MEETING**

**4. WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR MARCH 2013:**

- a. Treatment Plant Performance Report.
- b. Maintenance Report.
- c. Safety and training.
- d. Odor control and landscaping progress report.

**5. COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR MARCH 2013:**

- a. Collection System Maintenance.
- b. Pump Station Maintenance.
- c. Collection System Performance.
- d. Safety and Training.

**6. RECLAMATION FACILITY REPORT FOR MARCH 2013**

- a. Ranch Operations.
- b. Irrigation Systems.
- c. Sludge Handling and Disposal.

**7. ADJOURNMENT:**

***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.***

***Materials that are public records and that relate to an open session agenda item will be made available for public inspection at the District office, 500 Davidson Street, Novato, during normal business hours.***

March 18, 2013

A regular meeting of the Wastewater Operations Committee of Novato Sanitary District was held at 2:00 p.m., Monday, March 18, 2013, at the District Office, 500 Davidson Street, Novato.

**MEMBERS PRESENT:** NSD Board Members William Long and Jerry Peters.

**STAFF PRESENT:** Sandeep Karkal, Deputy Manager-Engineer  
Tim O'Connor, Collection Systems Supervisor  
John Bailey, Project Manager, Veolia Water  
Julie Swoboda, Administrative Secretary  
(*Beverly James, Manager-Engineer and Steve Krautheim, Field Services Superintendent were absent.*)

**ALSO PRESENT:** Lynda Rodefer, Veolia Water

**AGENDA APPROVAL:** The agenda was approved as presented.

**PUBLIC COMMENT:** None.

**APPROVAL OF MEETING MINUTES FOR FEBRUARY 19, 2013:** The February 19, 2013 minutes were approved as written.

**WASTEWATER TREATMENT FACILITIES OPERATIONS AND MAINTENANCE REPORT FOR FEBRUARY 2013:**

- **Treatment Plant Performance Report, Maintenance Report and Safety & Training:** John Bailey, Plant Manager, Veolia Water, reported on the treatment plant performance for the month of February. He stated that there were no permit exceedances, violations or excursions and noted that February flows remain low as a dry weather pattern continues. Mr. Bailey discussed the ammonia parameter, noting that although values were higher than previous months, they were well within NPDES permit limits.

Mr. Bailey reported on the key events at the Novato treatment facility, the Ignacio transfer pump station, the recycled water plant and the lagoons. He noted that the treatment facility is in Bay discharge mode and that the Plum Street recycled water reservoir was topped off with recycled water on February 19<sup>th</sup> as requested by North Marin Water District.

He stated that Veolia employees have been accident free for a total of 1,002 days/45,090 hours. He reviewed the treatment plant performance graphs and provided a report on work order statistics.

Mr. Bailey reported that Veolia continues to take Jerome Meter readings in the Lea Drive neighborhood and within the treatment plant.

- Odor control and landscaping progress report: Sandeep Karkal, Deputy Manager-Engineer, provided a summary of the information the Manager-Engineer had presented at the March 11, 2013 Board of Directors meeting, as part of her update on this subject.

**COLLECTION SYSTEM OPERATION AND MAINTENANCE REPORT FOR FEBRUARY 2013:**

Tim O'Connor, Collections System Superintendent, discussed the Collections System Monthly Report for February 2013. He reported that the crew cleaned a total of 54,371 feet of sewer pipeline which translated into a productivity rate of 187 ft per hour for the month. Mr. O'Connor stated that the department completed 252 maintenance work orders which were generated in February. He discussed pump station maintenance and noted that approximately 224 lift station inspections were conducted.

Mr. O'Connor stated that there were no sanitary sewer overflows during February and that safety performance for his department was good with a total of 28 accident-free days. He noted that the number two pump at Marin Village was reinstalled during the month and is now operational. Mr. O'Connor reported that staff issued 11 Standard Operating Procedures (SOP's) during the month.

**RECLAMATION FACILITY REPORT FOR FEBRUARY 2013:**

Deputy Manager-Engineer Sandeep Karkal presented the Reclamation Facilities report in Steve Krauthem's absence. He stated that Parcels 24 and 28 first phase rehabilitation had been completed. He noted that a portion of Parcel 21 and all of Parcel 25 were ripped in preparation for reseeding after these pasture areas were severely damaged due to prolonged flooding. The Deputy Manager-Engineer stated that staff is re-evaluating the repair or replacement of irrigation Pump 2 to take advantage of any PG&E rebate programs.

**ADJOURNMENT:** There being no further business to come before the Committee, the meeting adjourned at 3:07 p.m. The next Wastewater Operations Committee meeting will be held on Monday, April 15<sup>th</sup>.

Respectfully submitted,

Sandeep Karkal  
Deputy Manager-Engineer

Julie Swoboda, Recording



April 9, 2013

Ms. Beverly James  
Manager - Engineer  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94545

**Subject: Veolia Water Operations Report – March 2013**

Dear Ms. James:

We are pleased to provide this updated activity report for March 2013.

As always, please give me a call at 707-208-4491 should you have any questions.

Regards,

A handwritten signature in blue ink that reads "John Bailey".

John Bailey  
Project Manager

**MONTHLY OPERATIONS REPORT**

**March 2013**

Prepared for

**NOVATO SANITARY DISTRICT (NSD)  
WASTEWATER TREATMENT PLANT**

**500 Davidson Street  
Novato, CA 94545**

Prepared by

**Veolia Water West Operating Services, Inc. (VWWOS)**

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**TREATMENT PLANT PERFORMANCE SUMMARY: March 2013:**

**Bay Discharge**

Parameter	Value		Limit	
	Ave	Max	#1	#2
Flow, MGD (monthly ave/max)	4.61	5.44	N/A	N/A
Max Peak Hour, MGD – Daily (Dry Weather)	N/A	8.00	N/A	N/A
Influent BOD <sub>5</sub> , lb/day (month ave/max)	10,450	13,782	N/A	N/A
Influent TSS, lb/day (monthly ave/max)	13,534	18,243	N/A	N/A
Effluent BOD <sub>5</sub> , mg/L (monthly ave/weekly max)	<8	14	30	45
Effluent TSS, mg/L (monthly ave/weekly max)	<6	14	30	45
Effluent BOD <sub>5</sub> - % Removal, Minimum	97	N/A	85	N/A
Effluent TSS - % Removal, Minimum	98	N/A	85	N/A
Ammonia, mg/L – (monthly ave/daily max)	4.57	8.08	6	21
pH, su (min / max)	7.0	7.3	6.5	8.5
Enterococcus, mpn (30 day geo mean)	5.4	N/A	35	N/A
Fecal Coliform, mpn (30 day median)	9.5	N/A	140	N/A
Fecal Coliform, mpn (90 <sup>th</sup> percentile)	23	N/A	430	N/A
<b>Total Permit Exceedances (NPDES)</b>	0			

NA – Not Applicable

Discussion of Violations / Excursions: NONE

**OPERATIONS & MAINTENANCE STATUS / REVIEW:**

**Key events for the period:**

March flow remains low as a dry weather pattern continues.

**Novato**

- Routine rounds, readings and maintenance
- Repaired Channel #1 Grit Collector Blower
- Annual maintenance on Headworks Screen #1
- Replaced Channel Monster Brush Assembly

**Ignacio Transfer Pump Station**

- Routine rounds, readings and maintenance

**Recycled Water Plant**

- Performed plant rounds and maintenance
- Met with North Marin Water District at Stafford Lake for jar testing
- Reviewed Operations Plan for Recycled Water Plant with staff

**Sludge Lagoons**

- Performed daily checks
- Adjusted lagoon feed and decant return as needed

**ADMINISTRATION:**

- Electronic Self Monitoring Report for February submitted on 3/21/13

**SAFETY AND TRAINING:**

- Monthly plant safety inspections for Novato WWTF completed on 3/21/13
- Five Minute Tailgate training is held daily with the O&M staff.
- No safety incidents for the month of March 2013
- Accident Free: 6/1/10 – 3/31/13: 1,033 days/46,485 hours
- Safety Training:
  - Basic Electrical Safety
  - Lockout/Tagout

SOP Review: Operation of High Pressure Wash Down System (Ignacio)

SOP Review: Ignacio Transfer Pump Station Wet Well Scouring

SOP Review: Grit/Screening Building Daily Inspection

**ODORS:**

- Jerome Meter (H2S) readings performed in neighborhood and within treatment plant.

**MISCELLANEOUS**

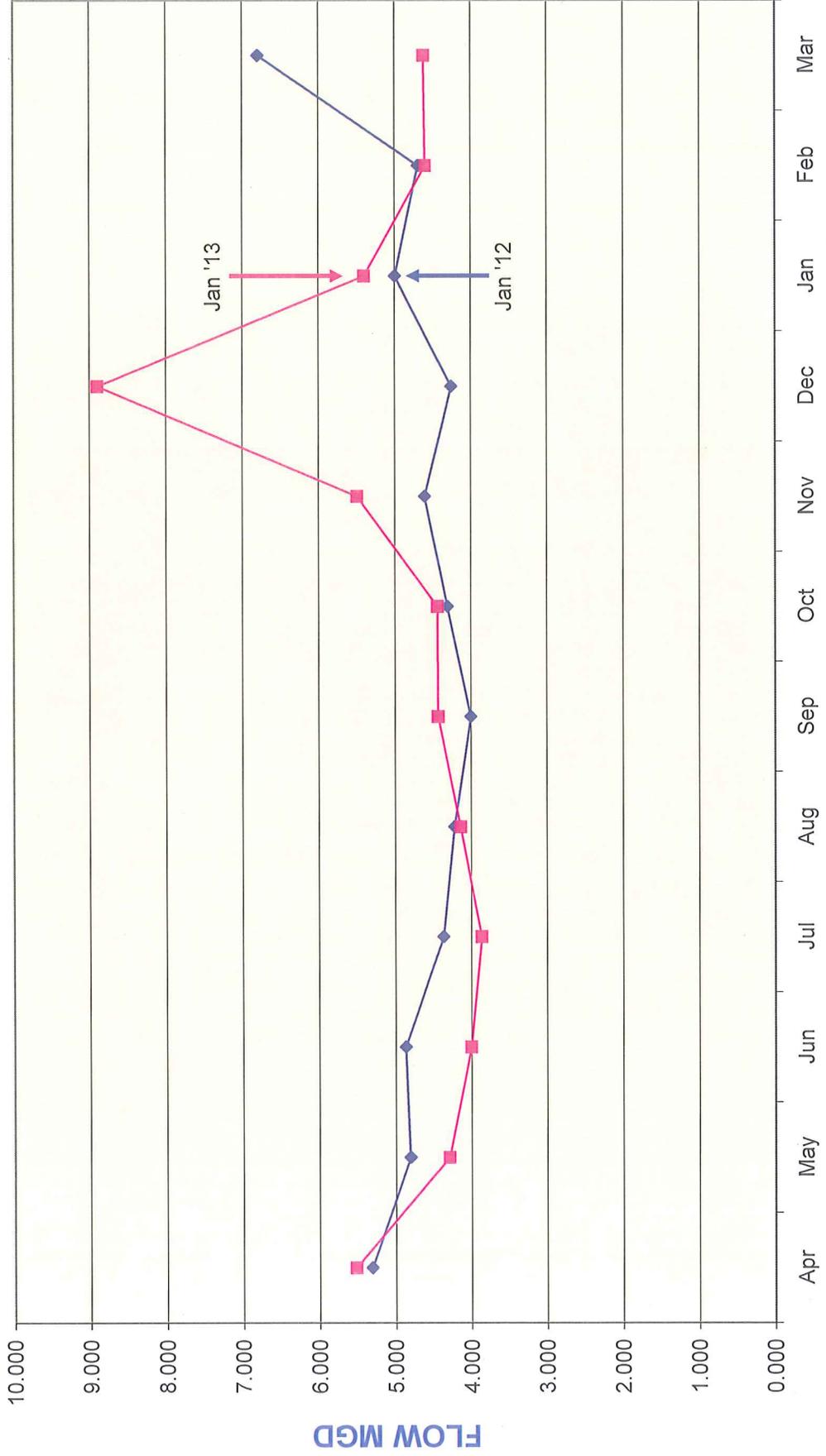
- Process Control Management Plan (PCMP) meetings held regularly
- EMS Manual preparation meeting with Stuart Ostler – Veolia
- The Novato Project received First Place Operations Excellence Award for 2012. The award was presented at the 2013 Veolia Water North America Managers Meeting held in Orlando, Florida.

**Veolia Support Staff On/Off Site (Various Times)**

John O'Hare	Technical Support
Chris McAuliffe	District Manager
John Herron	Northern California Area Manager
Bryce Behnke	Technical Support via conference call & web exchange
Brian Exberger	Electronic Operations and Maintenance Manual Development
Jeremiah Danielson	Environmental, Health, and Safety – Confined Space Training
Mel Demsky	Regional Director of Asset Management
Dan Brown	Asset Manager

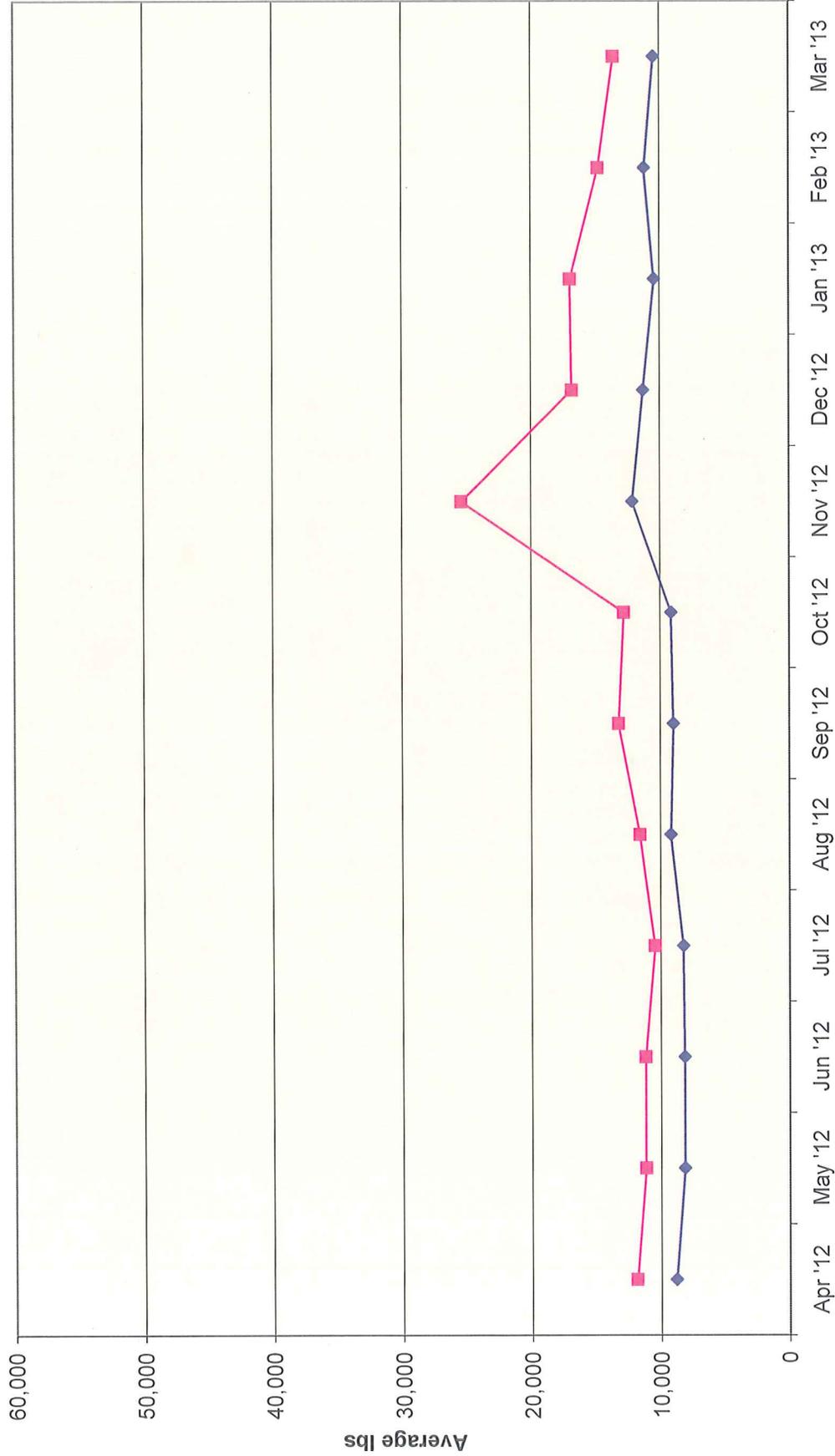
# FLOW COMPARISON

—◆— 2011/12 —■— 2012/13



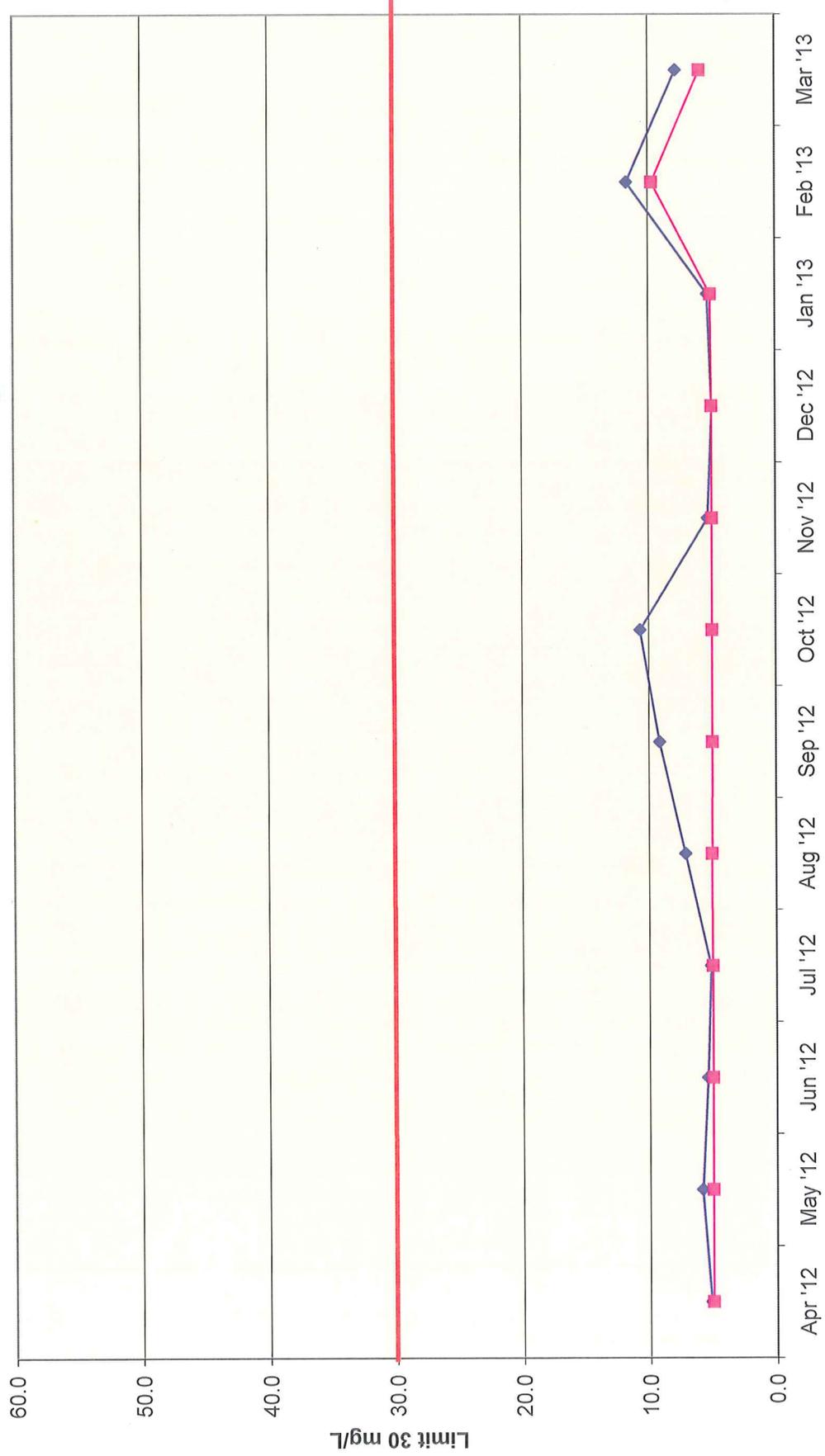
# Influent Load BOD / TSS lbs

—◆— BOD lbs —■— TSS lbs



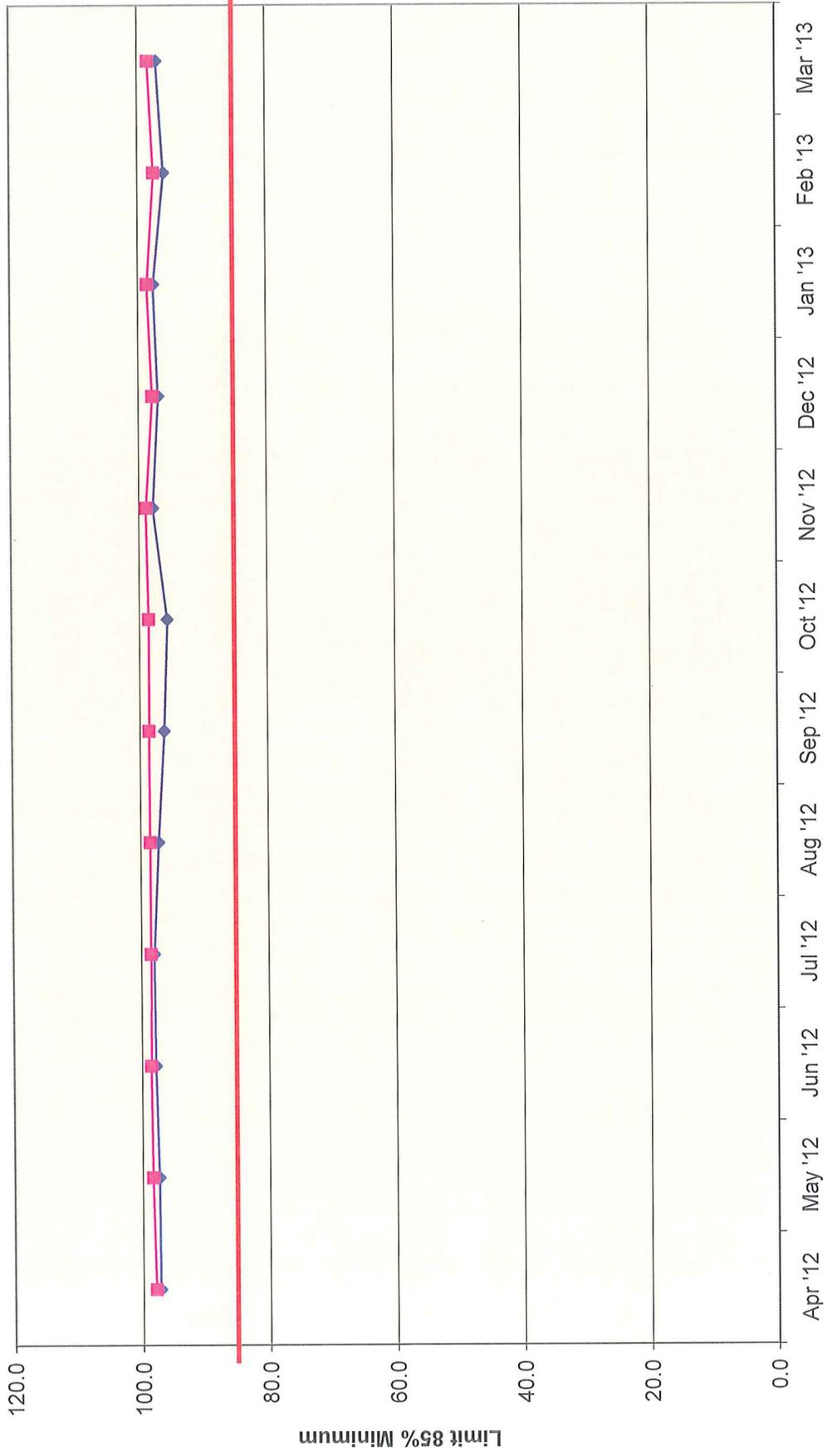
# Effluent BOD / TSS Concentration

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

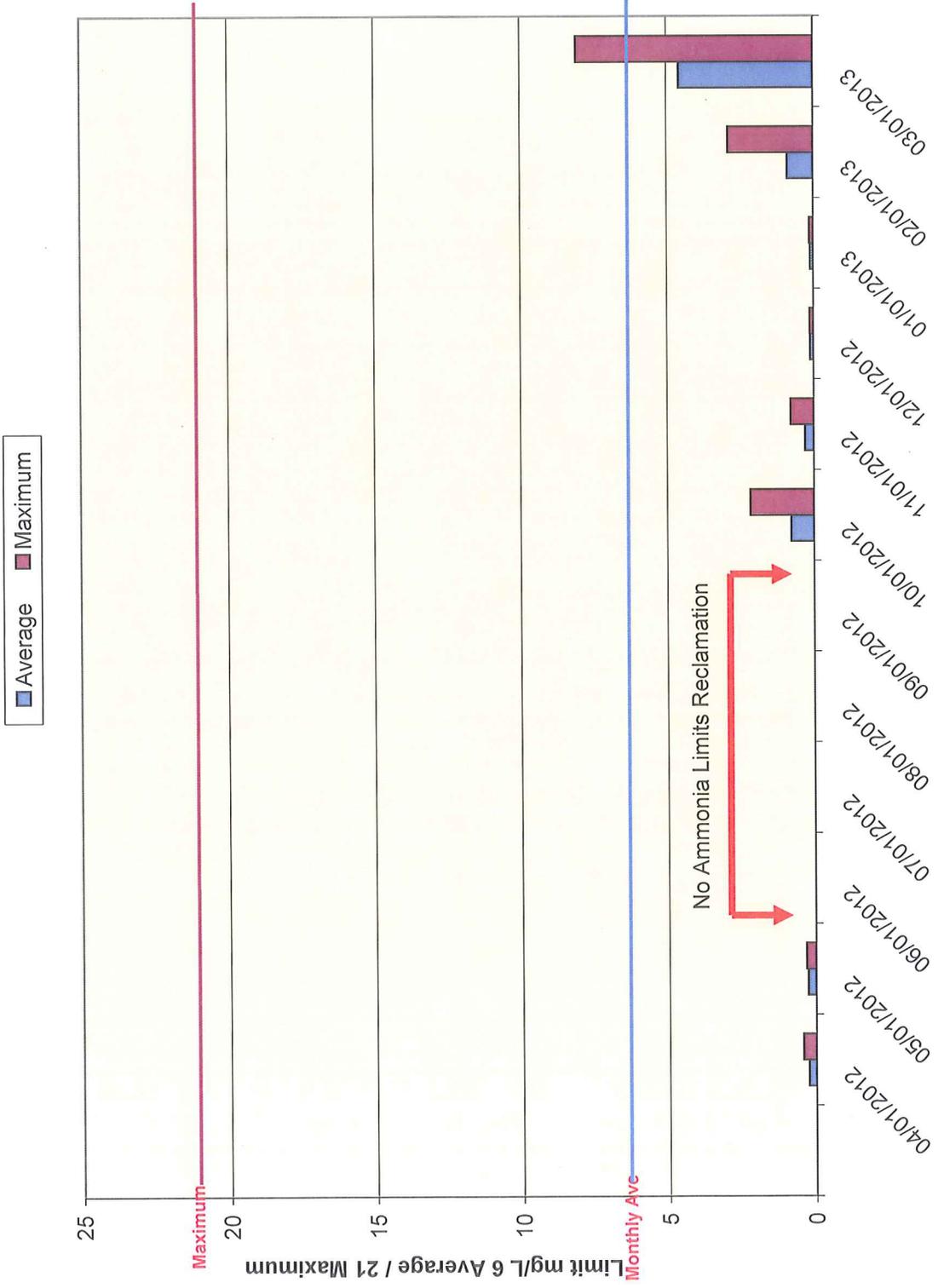


# BOD / TSS Percent Removal

—◆— BOD —■— TSS



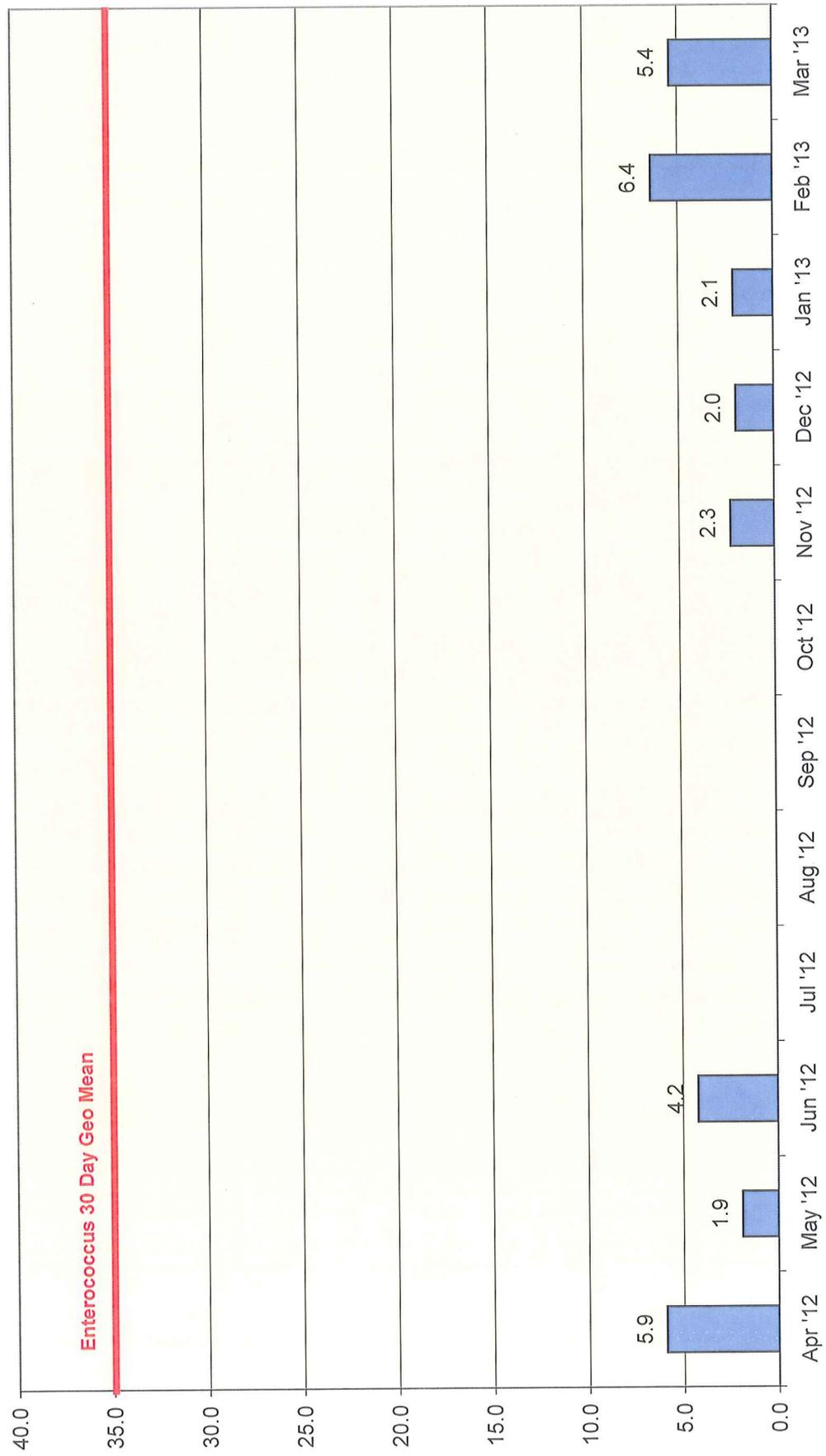
# Effluent Ammonia



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

## Disinfection

■ Enterococcus

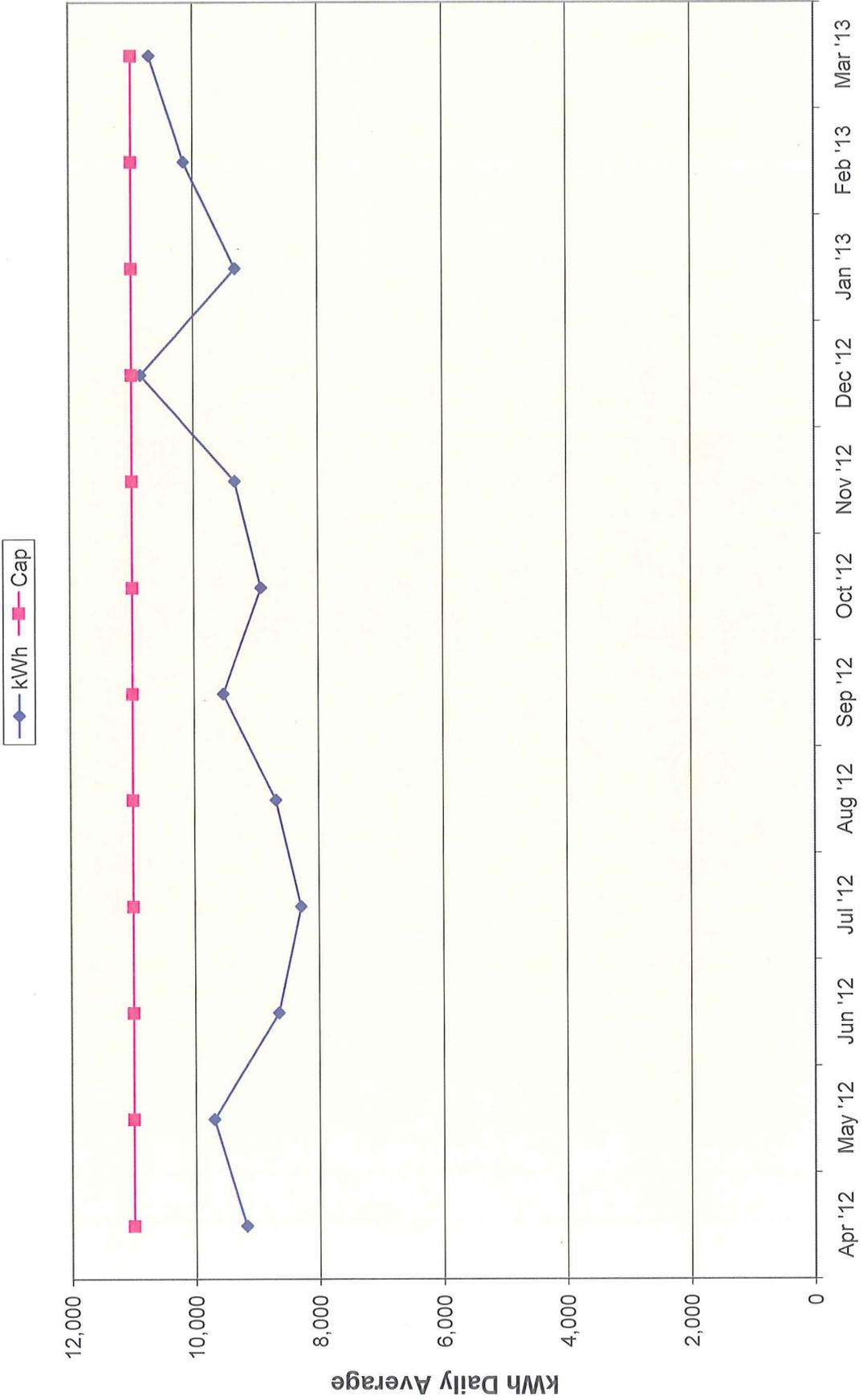


# Disinfection

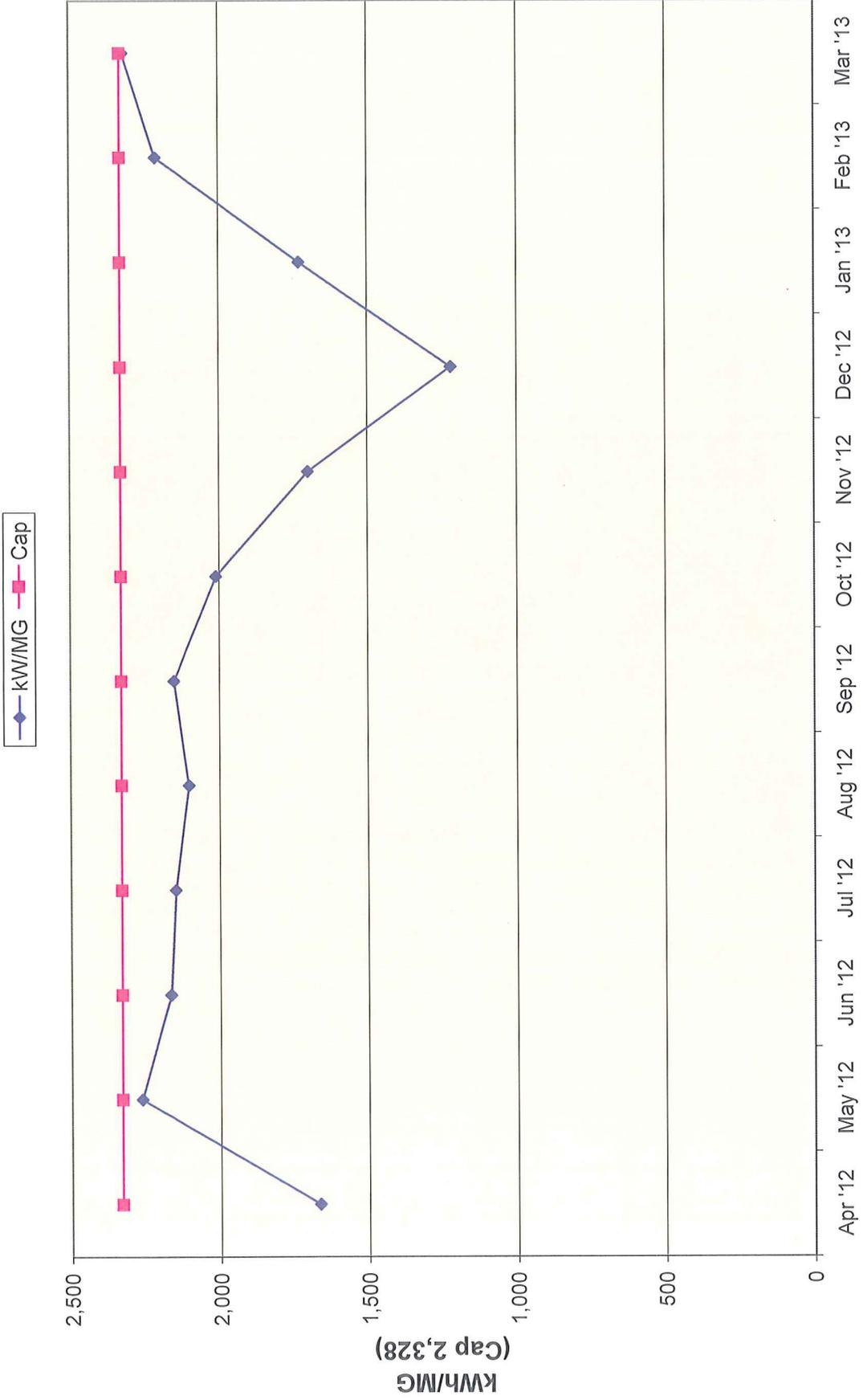
LIMITS - NPDES  
 Fecal 140 mpn monthly median  
 Fecal 430 mpn 90th percentile 30 day



# Energy kWh

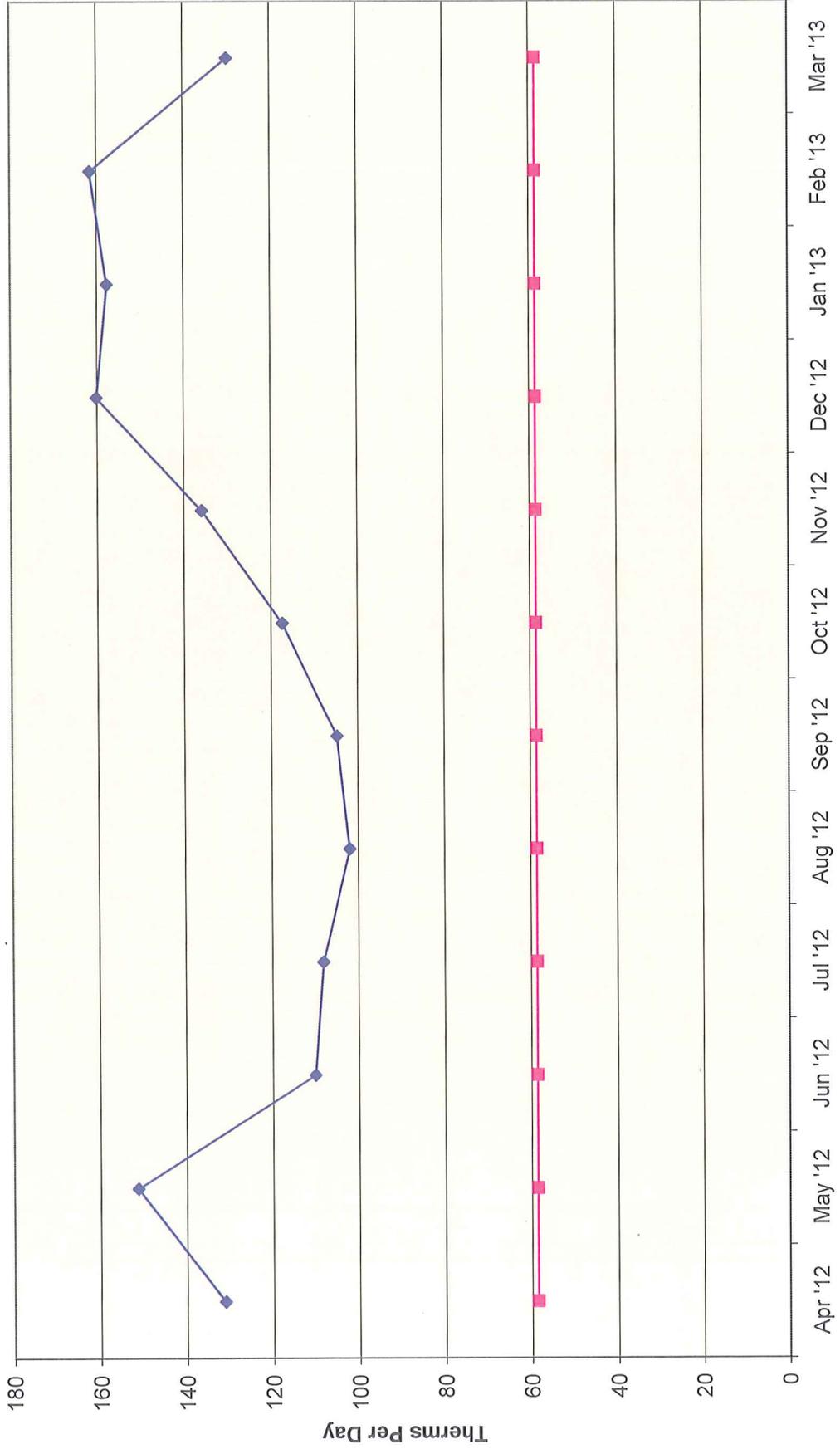


# Energy kWh/MG

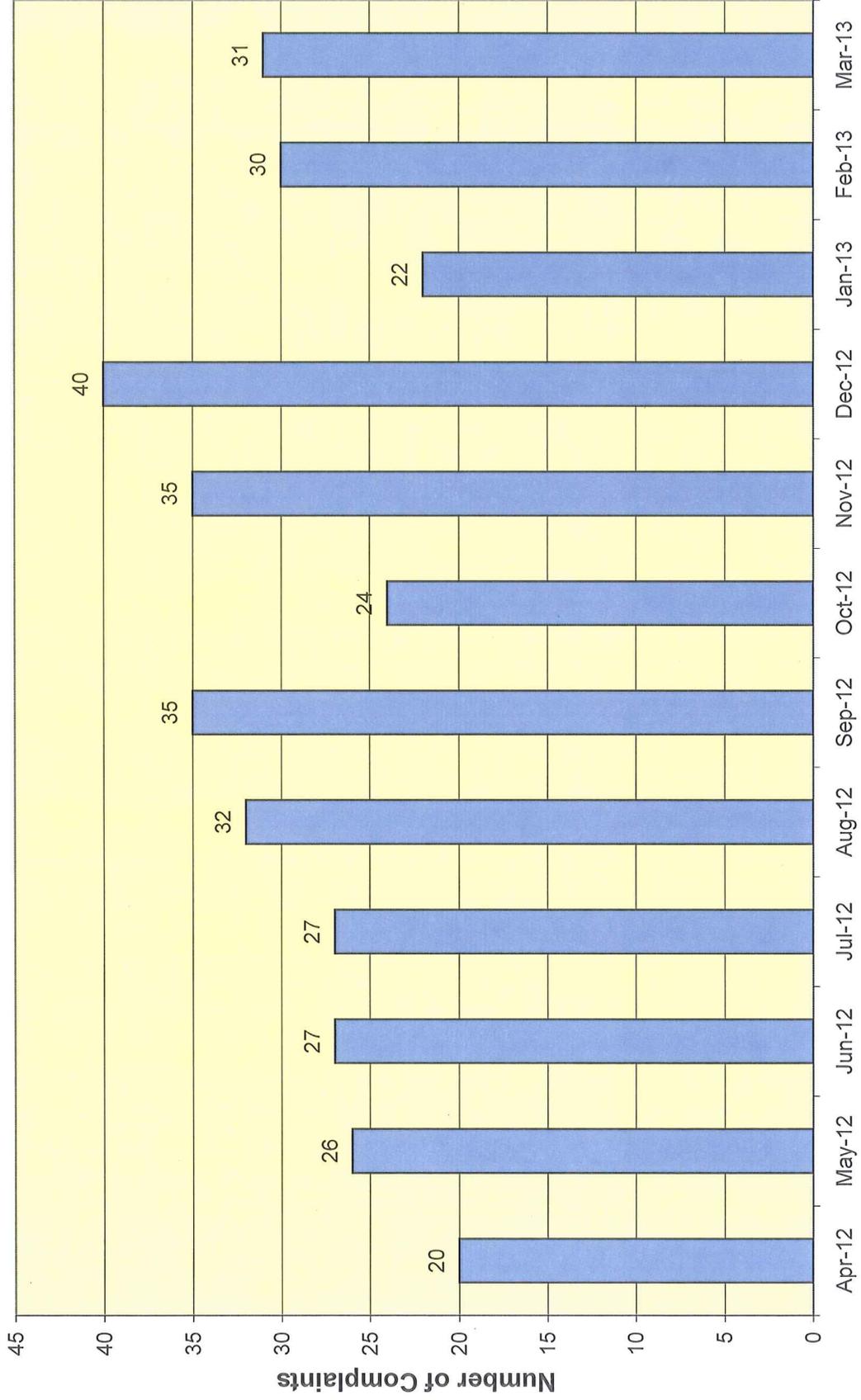


# Natural Gas Use

—◆— Natural Gas —■— Cap



# Complaints Received



**Novato Sanitary District  
Wastewater Operations Committee meeting  
Collection System Operations Report  
March 2013**

**General:**

For March 2013, after accounting for all leaves, the breakdown of Collection System department staff time, in terms of equivalent full-time employee (FTE) hours utilized, works out approximately as follows:

- 1.8 FTE field workers for Sewer Maintenance (main line cleaning)
- 1.8 FTE field workers for Pump Station Maintenance
- 0.5 FTE field workers for CCTV work, and
- 2.4 FTE field workers for time spent on data input, training, service calls, overflow response, or any other activity that does not directly relate to main line cleaning, CCTV work or pump station maintenance.

**Collection System Maintenance:**

A total of 50,565 feet of sewer pipelines were cleaned for the month. Staff completed 286 maintenance work orders generated by the ICOMMM3 CMMS system, with 28 outstanding work orders. The footage cleaned per hour, line cleaned/month, and outstanding work orders are within established parameters for the department. Graphs showing the length of line cleaned/month, footage cleaned/hour worked, along with the overflows/month are attached.

The CCTV van was in the field for a total of 7 working days during the month of March and the department's CCTV production for the month (at 7,075 feet), was below normal production goals. The Collection Systems staff was augmented by the addition of two new employees into the Collection System Worker I (CSW I) class, and, staff anticipates catching up to its productive goals in the near future.

**Pump Station Maintenance:**

The Collection System Department conducted 240 lift station inspections for the month with 116 of the inspection visits generated through the JobCal Plus CMMS system.

The breakdown of these inspections is as follows: 22 Flygt submersible pump stations, 1 time per month, 6 Gorman/Rupp dry well/wet well stations, 1 entry per month, and 4 main stations that are visited daily.

The Bahia Main pump station was inspected by the County of Marin Waste Management Division on 3/26/2013 for hazardous materials storage compliance, and the District Hazardous Materials Business Plan was accepted as submitted. There were no deficiencies noted during the inspection.

A Collection Systems (Pump Stations) Work Order Statistics summary is attached.

**Novato Sanitary District  
Wastewater Operations Committee meeting  
Collection System Operations Report  
March 2013**

**Note:** The JobCal Plus program is not only used for scheduling and tracking pump station related maintenance work orders, it is also used for ladder inspections, reclamation maintenance work orders, SCADA backup scheduling, and vehicle maintenance scheduling.

**Pump Station Rehabilitation:**

As part of the District's continuing multi-year Pump Station Rehabilitation Project (Capital Improvement Project No. 72403), the District accepted as substantially complete the Hangar Pump Station with control of this pump station being returned to District staff while construction is completed. Construction continued on BMK 9 and BMK 10 Pump Stations and control of these stations continued to be the responsibility of the contractor, W.R. Forde, until the project is complete.

**Safety and Training:**

General: The Collection System crew attended weekly safety tailgate meetings.

Specialized training: Worker's Compensation Accident Reporting training on 3/26/2013 was attended by the new CSW I employees, Aaron Hendricks and Bob Stiles.

Safety performance: There were no lost time accidents this month for a total of 59 accident-free days.

**Standard Operating Procedures:**

Collection System staff issued 1 Vehicle Operation and Maintenance SOP for Rodder Operation during the month of March, 2013.

**Sanitary Sewer Overflows (SSOs):**

For the month of March, there were zero (0) SSO's.

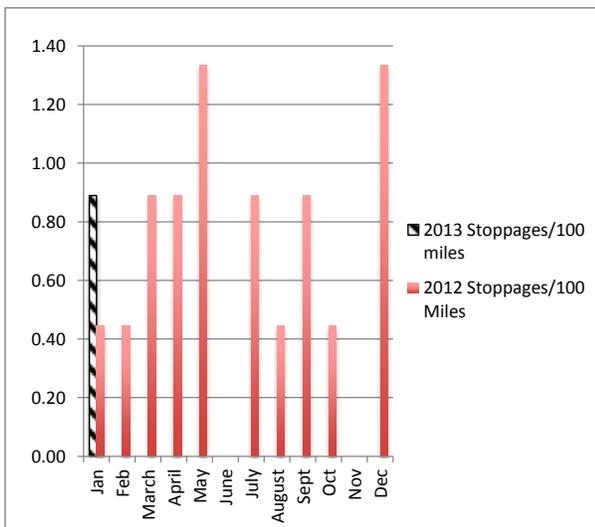
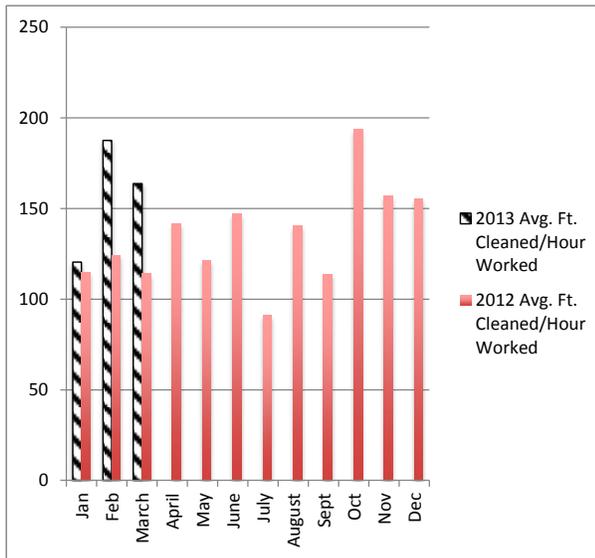
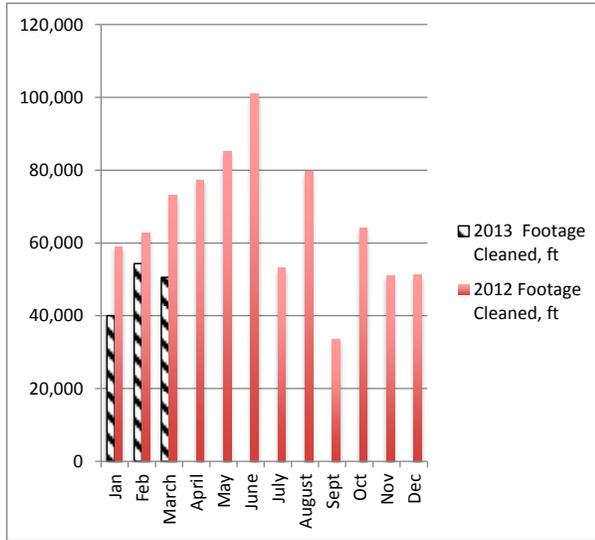
**Novato Sanitary District**  
**Collection System Monthly Report For 2013 (as of March 31, 2013)**

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total Year to Date	Average Year to Date
<b>Employee Hours Worked</b>														
Number of FTEs (main line cleaning), hrs.	1.9	1.7	1.8										NA	1.8
Number of FTEs (other)	1.9	1.4	2.4										NA	1.9
Number of FTEs (CCTV)	0.1	0.3	0.5										NA	0.3
Total, FTEs	3.9	3.4	4.7										NA	4.0
Regular Time Worked, (main line cleaning), hrs	333	290	309										932	311
Regular Time Worked on Other, hrs <sup>(1)</sup>	326	249	415										990	330
Regular Time Worked on CCTV <sup>(2)</sup>	20	46	85										151	50
Total Regular time, worked, hrs	678	585	809										2,072	691
Total Vacation/Sick Leave/Holiday, hrs	204	77	101										382	127
Vacation/Sick Leave/Holiday, FTEs	1.2	0.4	0.6										2.2	0.7
Overtime Worked on Coll. Sys., hrs	6	45	5										56	19
Overtime Worked on Other, hrs <sup>(1)</sup>	3	19	5										27	9
Overtime Worked on CCTV <sup>(2)</sup>	1	3	0										4	1
Total Overtime , hrs	10	67	10										87	29
<b>Productivity</b>														
Rodder Work Orders Generated, ft	14	0	24										38	13
Rodder 3203 Ft. Cleaned	3,138	0	3,856										6,994	2,331
Flusher Work Orders Generated	187	252	290										729	243
Truck 3205V Ft. Cleaned	2,782	5,146	2,755										10,683	3,561
Truck 3206V Ft. Cleaned	34,114	49,225	43,954										127,293	42,431
Camera Work Orders Generated	0	0	0										0	
Camera Ft. Videoed	10,905	4,912	7,075										22,892	7,631
Work Orders Completed	201	252	286										739	246
Work Orders backlog	6	0	28										34	11
Total Footage Cleaned	40,034	54,371	50,565										144,970	48,323
<b>Sanitary Sewer Overflows (SSOs)</b>														
Minor (Category II)	0	0	0										0	NA
Major (Category I)	2	0	0										2	NA
Overflow Gallons	2,200	0	0										2,200	NA
Volume Recovered	880	0	0										880	NA
Percent Recovered	40%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40%	NA
<b>Service Calls (non-SSO related)</b>														
Service calls, normal hours, #	7	5	7										19	6
Normal hours S.C. response time, mins (avg.)	12	15	14										41	14
Service Callouts, after hours, #	1	0	0										1	0
After Hours S.C. response time, mins (avg.)	23	NA	NA										23	23
<b>Benchmarks</b>														
Average Ft. Cleaned/Hour Worked	120	187	164	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	157
Total Stoppages/100 Miles	0.9	0.0	0.0										0.9	NA
Average spill response time (mins)	18	0	0										NA	6
Callouts/100 Miles	0.4	0.0	0.0										0.4	0.1
Overtime hours/100 Miles	3	20	2										25	8
Overflow Gallons/100 Miles	978	0	0										978	326

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

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

## Collection System 2012-13 Graphs





**COLLECTION SYSTEM (Pump Stations)  
WORK ORDER STATISTICS  
March 1, 2012 - March 31, 2012**

	<b>Open Work Orders Due Prior to 3/1/2013</b>	<b>Open Work Orders 3/1/2013 - 3/31/2013</b>	<b>Total Open Work Orders</b>
Preventive	0	107	0
Corrective	0	9	0
<b>Total</b>	<b>0</b>	<b>116</b>	<b>116</b>

	<b>Closed Work Orders 3/1/2013 - 3/31/2013</b>
Preventive	107
Corrective	9
<b>Total</b>	<b>116</b>

<b>Total Outstanding Work Orders as of 3/31/2013</b>	<b>0</b>
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**NOVATO SANITARY DISTRICT  
Wastewater Operations Committee Meeting  
Reclamation Facilities Report  
March 2013**

**Summary:**

There was minimal activity related to the reclamation facilities in the month of March 2013. The irrigated parcels on Site 2 damaged by flood waters were cultivated and seeded. Staff is re-evaluating the repair or replacement of Irrigation Pump 2 to take advantage of any PG&E rebate programs.

**Ranch Operations:**

There were no reportable activities by the rancher this month.

**Irrigation Parcels:**

The Parcels in Site 2 which were flooded for a prolonged period by above normal rainfall in December have dried out and all have been seeded in preparation for spring rains. Parcels 24 & 28 were rolled and seeded last month, and a portion of Parcel 21 and all of Parcel 25 were disked, rolled and seeded with the permanent crop in March. If dry weather persists staff may request permission from the Regional Board to irrigate the seeded parcels in April.

**Irrigation Pump Station:**

Staff is re-evaluating the replacement/repair of Irrigation Pump No. 2. Staff contacted PG&E to inquire about rebate programs for replacing the pump with a more efficient motor. PG&E requested run time data and staff is currently compiling the data to send off to PG&E.

Staff received the new flange coupling adapters for each side of the strainers replaced last year. Installation will be scheduled to be completed either in April or May.

**Sludge Handling & Disposal:**

There was no activity to report.

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# NOVATO SANITARY DISTRICT

## MEMORANDUM

DATE: May 3, 2013

TO: Board of Directors

FROM: Finance Committee  
Jean Mariani  
Bill Long

SUBJECT: Finance Committee Report

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### **BACKGROUND AND DISCUSSION**

The Finance Committee (Committee) met at a publicly noticed meeting at 3:00 PM on May 3, 2013. They reviewed the Reserve Policy, the updated retiree medical actuarial report, and the CalPERS pension plan update.

#### **Reserve Policy**

The current District Reserve Policy was adopted in 2001 and set up the following reserve funds:

<b>Fund</b>	<b>2001 Target Balance</b>
Operating (Working Capital)	6 months minimum balance
Rate Stabilization	\$600,000
Emergency Repairs	\$600,000
Self Insurance Retention	\$200,000
Total Operating Reserve	= Sum of above 4 funds

The District later added the Southgate Reserve Fund, a Vehicle Replacement Fund that don't have a specific Target Balance and a Debt Service Reserve Fund with a legally required balance of \$1,500,000.

The Committee gave guidance to staff and Bartle Wells:

1. Set targets consistent with the District's current revenue and expenditure cash flow.
2. Establish clear, understandable, defensible criteria for the reserve levels.
3. Reserves should be sufficient to meet budgeted cash flow needs for both capital and operating expenses.
4. The District should not build up reserves to make major facility replacements such as a treatment plant upgrade.

5. Consolidate the Self-insurance Reserve Fund into the Operating Reserve.
6. Consolidate the Southgate Reserve Fund, the Vehicle Replacement Fund into a Capital Reserve Fund.
7. Consolidate the Emergency Reserve Fund and Rate Stabilization Reserve Fund into one Rate Stabilization Reserve Fund.
8. Maintain the Debt Service Reserve Fund as required by the Certificate of Participation.
9. Set June 30<sup>th</sup> as the date for calculating reserves.

Staff is working with Bartle Wells to develop target values for the Reserve Funds and will bring a draft policy to the Committee at their next meeting. The draft Reserve Policy would then be first presented to the Board at the June 10<sup>th</sup> meeting.

### Retiree Medical

North Bay Pensions has updated the Retiree Medical Actuarial Report as required under GASB 45. A copy of the updated report is attached. The District currently funds the program on a pay-as-you-go basis. The committee requested that staff investigate setting up a trust so that the program could be funded as the liability is incurred.

The District has taken a number of steps to reduce the GASB 45 liability including limiting benefits for current employees as well as putting post 2008 employees in a defined benefit plan.

The Committee directed staff to investigate setting up a trust to fund the retiree medical liability.

**Table 1 Novato Sanitary District Retiree Medical Liability**

Year	#	Current Retirees	#	Current Employees	Total Liability	Annual Payment	Comment
July 1, 2007					\$12,734,000	\$923,000	Liability before 7/1/2008 employee retiree medical changes
July 1, 2009	22	\$4,279,000	25	\$2,347,000	\$6,626,000	\$473,000	Post medical after retirement changes
July 1, 2010	22	\$3,872,391	22	\$2,239,892	\$6,112,283	\$438,581	Veolia contract implementation
July 1, 2012	23	\$3,863,500	19	\$2,044,705	\$5,908,205	\$386,320	Pre-2008 employees leaving for other jobs

### CalPERS Pension Plan Update

The Board of Directors has been concerned about the actual unfunded liability of the District's CalPERS pension plan given the controversy surrounding the actuarial assumptions used by CalPERS to set contribution rates and report liability.

CalPERS has undertaken some changes in its review of funding levels and risks that clarify both the unfunded liability and the potential increases in employer contribution levels required to sustainably fund the pensions. Attachment 2 was prepared for the CalPERS Board of Administration and focuses on the funding levels and risks.

Most of the District's employees and retirees are in Pool 2, Miscellaneous 2% @ 55. There is one employee in Pool 1, Miscellaneous 2% @ 60, and 2 employees in the new 2% @ 62 plan. As shown in the graph on Page 6, the funded status of Pool 2 is 79% and the funded status of Pool 1 is 85% as of June 2011. The District's reported unfunded liability as of June 30, 2011 was \$2,585,345. Because the District avoided adopting the plans with larger retirement benefits or earlier retirement ages our plan is less susceptible to asset swings.

How much the District might have to pay in the future under different investment return scenarios has been a recurring question and until now, impossible to get. Page 14 shows the estimated rate for Pool 2 for three different scenarios: 2.6%, 7.5%, and 11.9%. It shows the rate going from about 11% in 2014-15 to about 15% in 2017-18 for an investment return of 2.6%.

The District has taken a number of steps over the past four years that reduce the unfunded pension liability as shown in Table 2 below.

**Table 2: Novato Sanitary District CalPERS Contribution History**

Year	Payroll	District CalPERS Cost, \$	District CalPERS,%	Employee CalPERS Cost	Changes
2007/08	\$2,643,503	\$513,239	19.42%	\$0	
2008/09	\$2,658,045	\$516,485	19.43%	\$0	
2009/10	\$2,473,653	\$462,865	18.71%	\$0	Contract Ops
2010/11	\$2,051,137	\$387,784	18.91%	\$0	Contract Ops
2011/12	\$1,949,335	\$344,718	17.68%	\$11,553	Employees pay 1%, paid side fund.
2012/13	\$1,909,938	\$273,018	14.29%	\$42,139	Exist Employees pay 2.5%, New Employees 2@60, pay 7%, post 1/1/2013 2%@62

# NORTH BAY PENSIONS

April 19, 2013

Ms. Laura Creamer  
Finance Officer  
Novato Sanitary District  
500 Davidson Street  
Novato, CA 94945

Nick Franceschine, F.S.A.  
550 Dufranc Avenue  
Sebastopol, California 95472-3341  
(800) 594-4590  
(707) 824-9600  
FAX (707) 823-6189  
nick@northbaypensions.com

**Re: 2012 GASB 45 Actuarial Reports Enclosed**

Laura:

I have completed an actuarial valuation of your retiree medical and life insurance plan as of July 1, 2012. I am enclosing six copies of the report of this valuation, as requested, five bound and one unbound for you to make copies.

I am available to answer questions about the report and its contents. You can reach me at 1-800-594-4590.

Thank you again for the opportunity to work with you. I appreciate your business and look forward to working with you again.

Sincerely,



Nick Franceschine, F.S.A.  
Consulting Actuary

RECEIVED  
APR 22 2013

NOVATO SANITARY DISTRICT

**NOVATO SANITARY DISTRICT**

**VALUATION OF RETIREE HEALTH BENEFITS**

**REPORT OF GASB 45 VALUATION  
AS OF JULY 1, 2012**

**Prepared by: North Bay Pensions  
April 19, 2013**

## Contents of This Report

<b>Actuarial Certification</b>		<b>1</b>
<b>Summary of Results</b>		<b>2</b>
<b>Detailed Exhibits</b>		
Exhibit 1	Actuarial Values as of July 1, 2012	<b>4</b>
Exhibit 2	Annual OPEB Cost	<b>5</b>
Exhibit 3	Five-Year Projection of Costs	<b>6</b>
Exhibit 4	Summary of Plan Provisions	<b>7</b>
Exhibit 5	Summary of Actuarial Assumptions	<b>8</b>

## Actuarial Certification

This report presents the determination of benefit obligations under **Statement No. 45 of the Governmental Accounting Standards Board (GASB 45)** as of July 1, 2012 for the retiree health and welfare benefits provided by the Novato Sanitary District. I was retained by the District to perform these calculations.

GASB Statement 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions", was issued to provide standards for governmental employers to record expense for **Other Postemployment Benefits (OPEB)**. OPEB includes postretirement health and welfare benefits, hence GASB 45 is the appropriate Standard to follow when recording the District's OPEB obligations.

The information contained in this report was based on participant census information provided to me by the District. The actuarial assumptions and methods used in this valuation were selected by the District after consultation with me. I believe the assumptions and methods are reasonable and appropriate for purposes of actuarial computations under GASB 45.

Actuarial computations under GASB 45 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with my understanding of GASB 45. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

To the best of my knowledge, this report is complete and accurate. This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The undersigned is a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and a Member of the American Academy of Actuaries, and meets their continuing education requirements and qualification standards for public statements of actuarial opinion relating to retirement plans. In my opinion, I am qualified to perform this valuation.



4-19-13

Nick Franceschine, F.S.A.

### **North Bay Pensions**

550 Du Franc Avenue

Sebastopol, CA 95472

1-800-594-4590

FAX 707-823-6189

[nick@northbaypensions.com](mailto:nick@northbaypensions.com)

## Summary of Results

### Background

The District maintains a program which pays part or all of monthly medical insurance premiums on behalf of retired former employees, provided that the employee has satisfied certain requirements. This program is being funded on a pay-as-you-go basis. As of July 1, 2012, the District has funded \$0 in a secure trust toward the cost of future benefits.

In June 2004, the Governmental Accounting Standards Board (GASB) released Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions". This statement, often referred to as GASB 45, requires governmental entities to (1) record annual expense for their OPEB and (2) disclose certain information in their year-end financial statements.

The District has requested this actuarial valuation to determine what its OPEB obligations under the program are, and what the fiscal impact of GASB 45 will be for the 2012-2013 and 2013-2014 fiscal years.

### Present Value of Future Benefits

The **Actuarial Present Value of Total Projected Benefits (APVTPB)** as of July 1, 2012, is **\$5,908,205**. This is the amount the District would theoretically need to set aside at this time to fully fund all future benefits for all current and former employees and their beneficiaries.

This figure of \$5,908,205 can be compared to the corresponding figure of \$6,112,283 as of July 1, 2010. The main reason for the decrease is that more employees have left employment than anticipated.

The total value of \$5,908,205 is the sum of these amounts:

Future benefits of current employees	\$ 2,044,705
Future benefits of current retirees	<u>3,863,500</u>
Total present value of all future benefits	\$ 5,908,205

These figures are computed by (1) estimating the OPEB benefits that will be paid to each current and former employee and their beneficiaries, upon the employee's retirement from the District, (2) estimating the likelihood that each payment will be made, taking into consideration the likelihood of remaining employed until retirement age and the likelihood of survival after retirement, and (3) discounting each expected future payment back to the present date at an assumed rate of investment return.

### **“Annual OPEB Cost” Under GASB 45**

GASB 45 requires that the cost of the program be recognized in a systematic manner over the working careers of employees. There are six different budgeting methods, called “actuarial funding methods”, that can be used to determine what the annual operating expense (called the **Annual OPEB Cost**) will be. The District has elected to use the Entry Age Normal actuarial funding method with a closed 30-year level dollar amortization of the unfunded actuarial accrued liability.

The actuarial funding method is used to compute the **Annual Required Contribution (ARC)**. The ARC is equal to the sum of (1) the value of benefits earned by employees in the current year, plus (2) an amortization of the value of benefits earned by employees in prior years. Annual OPEB Cost is equal to the sum of (a) the ARC, and (b) interest on any unfunded OPEB operating expense from prior years, less (c) an adjustment to reflect the amortization of unfunded OPEB which is already included in the ARC.

For the fiscal year beginning July 1, 2012, the District’s Annual OPEB Cost is **\$386,320**. For the 2013-2014 fiscal year, Annual OPEB Cost will be \$393,026.

Over the next 3 years, the total benefits that the District is expected to pay to retired employees and their beneficiaries, and the GASB 45 operating expense, are as follows:

	<u>Expected Benefits</u>	<u>Operating Expense</u>
2012-2013 Fiscal Year	\$ 212,088	\$ 386,320
2013-2014 Fiscal Year	228,301	393,026
2014-2015 Fiscal Year	226,568	399,327

Exhibit 3 shows a 5-year projection of expected benefits and GASB 45 operating expense.

### **Actuarial Assumptions**

The calculations of the program’s obligations involve various estimates of future events. These estimates are called “actuarial assumptions”. The assumptions are described in detail in Exhibit 5 of this report. The calculated results are highly dependent on the assumptions selected.

## Exhibit 1 - Actuarial Values as of July 1, 2012

The Actuarial Present Value of Total Projected Benefits as of July 1, 2012 of all future benefits from the program, for all current and former employees, is as follows:

	<u>Actuarial Present Values</u>	<u>Number of Persons</u>
Current employees	\$ 2,044,705	19
Retired former employees	<u>3,863,500</u>	<u>23</u>
Totals	\$ 5,908,205	42

### Data Averages as of July 1, 2012

#### Active Employees

Number	19 employees
Average Age	45.4
Average Service	8.8

#### Retired Former Employees and Surviving Spouses

Number	23 persons
Average Age	66.6

### Source of Information

A census of all eligible District employees and retirees as of July 1, 2012 was provided to me by the District.

## Exhibit 2 - Annual OPEB Cost

In the Entry Age Normal method, the cost of each individual's OPEB benefits is amortized on a straight-line basis over his/her working career. For each employee, a "normal cost" is computed, the amount which, if accumulated during each year of employment, will at retirement be sufficient to fund the expected benefits for that individual. The sum of all the individual normal costs for all employees is called the Normal Cost. The accumulated value of all normal costs attributed to prior years, including the full value of benefits for all currently retired employees, is called the Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability is amortized over a period of future years. The ARC is the sum of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability.

The Annual OPEB Cost for the 2012-2013 year is computed in this way:

1.	Normal Cost for the 2012-13 fiscal year	\$ 74,686
2.	Actuarial Accrued Liability at July 1, 2012	5,347,276
3.	Value of Plan Assets	0
4.	Unfunded Actuarial Accrued Liability: 2. minus 3.	5,347,276
5.	Level-dollar Amortization of 4. over 27 years	327,459
6.	<b>Annual Required Contribution (ARC): 1. plus 5.</b>	<b>\$ 402,145</b>
7.	Net OPEB Obligation at beginning of year	745,079
8.	One year's interest on 7.	29,803
9.	ARC Adjustment: amortization of 7. over 29 years	(45,628)
10.	<b>Annual OPEB Cost: 6. plus 8. plus 9.</b>	<b>\$ 386,320</b>

### Exhibit 3 - Five-Year Projection of Costs

Shown below are estimates of the way in which Annual OPEB Cost might be expected to increase over the next five years. In this illustration, it is assumed that the Normal Cost will increase 0% per year, that all actuarial assumptions will remain unchanged, and that the District will continue to fund the plan on a pay-as-you-go basis.

Fiscal Year:	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>
<b>ARC</b>					
Normal cost	\$ 74,686	\$ 74,686	\$ 74,686	\$ 74,686	\$ 74,686
Amortization	<u>327,459</u>	<u>339,087</u>	<u>350,671</u>	<u>363,414</u>	<u>377,542</u>
Total ARC	\$ 402,145	\$ 413,773	\$ 425,357	\$ 438,100	\$ 452,228
Plus interest	29,803	36,772	43,361	50,272	57,558
Less ARC adjustment	<u>(45,628)</u>	<u>(57,519)</u>	<u>(69,391)</u>	<u>(82,429)</u>	<u>(96,854)</u>
<b>Annual OPEB Cost</b>	<b>\$ 386,320</b>	<b>\$ 393,026</b>	<b>\$ 399,327</b>	<b>\$ 405,943</b>	<b>\$ 412,932</b>
<b>Funding by the District</b>					
Benefits paid to retirees	\$ 212,088	\$ 228,301	\$ 226,568	\$ 223,791	\$ 232,413
Additional funding	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Funding</b>	<b>\$ 212,088</b>	<b>\$ 228,301</b>	<b>\$ 226,568</b>	<b>\$ 223,791</b>	<b>\$ 232,413</b>
<b>Increase in net OPEB</b>					
Obligation	174,232	164,725	172,759	182,152	180,519
<b>Net OPEB Obligation at</b>					
beginning of year	\$ 745,079	\$ 919,311	\$ 1,084,036	\$ 1,256,795	\$ 1,438,947
<b>Net OPEB Obligation at</b>					
<b>end of year</b>	<b>\$ 919,311</b>	<b>\$ 1,084,036</b>	<b>\$ 1,256,795</b>	<b>\$ 1,438,947</b>	<b>\$ 1,619,466</b>

How to read this chart:

- Annual OPEB Cost: Each year's operating expense.
- Total Funding: Amount the District will contribute each year, equal to the amount paid to retired employees.
- Net OPEB Obligation at end of year: The amount on the District's balance sheet at the end of each year, as an unpaid liability.

## Exhibit 5 - Summary of Actuarial Assumptions

**Actuarial Assumptions:** The following assumptions as of July 1, 2012 were selected by the District in accordance with the requirements of GASB 45. In my opinion, these assumptions are reasonable and appropriate for purposes of determining OPEB costs under GASB 45.

**Discount rate:** 4.0% per year.

**Medical Cost Increases (Trend):** Medical premiums for plans offered by CalPERS are assumed to increase as follows:

2014	7.0 %
2015	6.0 %
2016 and later	5.0 %

The CalPERS minimum contribution is assumed to increase 5.0% per year after 2013.

**Mortality:** Mortality rates used in the most recent CalPERS valuation for "Public Agency Miscellaneous", projected on a generational basis using Scale BB to approximate future increases in life expectancy.

**Coverage Elections:** All eligible employees are assumed to elect coverage under a CalPERS medical plan upon retirement, and to remain covered for life.

**Retirement:** Retirement rates used in the most recent CalPERS valuation for miscellaneous public employees with 2.0% at 55 retirement. Sample rates are:

<b>Years of Service:</b>	<b>10 Years</b>	<b>20 Years</b>	<b>30 Years</b>
Age 50	2.00 %	2.90 %	3.90 %
Age 55	6.40 %	9.40 %	12.70 %
Age 60	9.20 %	13.40 %	18.20 %
Age 62	16.20 %	23.70 %	32.20 %
Age 65	22.10 %	32.30 %	43.90 %
Age 70	17.60 %	25.70 %	34.90 %

**Turnover (withdrawal):** Likelihood of termination within the next year is taken from the most recent CalPERS valuations for miscellaneous public employees. Sample rates are:

	<u>5 Years Service</u>	<u>10 Years Service</u>	<u>15 Years Service</u>
Age 30	7.90 %	6.68 %	5.81 %
Age 35	7.11 %	5.87 %	5.03 %
Age 40	6.32 %	5.07 %	4.24 %
Age 45	5.54 %	4.27 %	3.47 %
Age 50	1.16 %	0.71 %	0.32 %

**Baseline Medical Costs:** The CalPERS medical plans are considered to be “community rated”, so there are no subsidized premiums to be valued.

**Family Status:** All employees are assumed to have the same family status (married, single) after retirement that they have now, and to be married to the same spouse at retirement.

**CalPERS Administrative Charge:** The administrative charge that CalPERS levies on all premium payments is assumed to remain 0.25%.



# **Annual Review of Funding Levels and Risks**

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## Executive Summary

This report is intended to assist the CalPERS Board of Administration in assessing the funded status of the Public Employees Retirement System and its overall soundness and sustainability. It focusses on the funding levels and risks associated with the funding of the system.

The report shows that the current funding levels are generally between 65 and 80 percent funded, significantly below the ideal level of 100%.

The report notes that payments toward the unfunded liability (UAL) are generally less than the interest on the unfunded liability. This shows that employer contribution rates will need to increase in the future.

Overall, the report highlights that employers are exposed to a considerable amount of contribution rate volatility and a risk of further changes in funded status. Contribution rates are expected to remain high for an extended period unless there is a period of exceptional returns in the markets.

This analysis of funding levels and risks points out that CalPERS current actuarial policies, actuarial assumptions and investment policies have considerable embedded risk. Changes to our assumptions and policies would be needed if the risk to our members and our participating employers is to change significantly.

The Board is currently engaged in a process of reviewing the risk levels in the system. It should continue examining its comfort level with the inherent risks in the system and determine whether it wishes to take additional steps to de-risk the funding of the system. In order to reduce the level of funding risk, it would be necessary to adopt changes to actuarial and/or investment policies. Such changes would result in increased employer contribution levels (at least in the short term). Given the impact on employers and the financial strain they are under due to the current economic environment, it may be appropriate to make any changes to our actuarial and investment policies gradually.

## Introduction

This is the second annual report on funding levels and risk measures. It is intended to assist the CalPERS Board of Administration in assessing the funded status of the Public Employees Retirement System and its overall soundness and sustainability.

This report has benefited greatly from the work that has been done in the last year on developing the Asset Liability Decision Making Framework that was presented at both the July 2012 and January 2013 Board offsite meetings. That model has been designed to bring the risks of funding the retirement system into sharp focus. It is

intended as a decision making tool and specifically to permit the Board to see the impact of its decisions with respect to actuarial and investment policy on the risks of funding the system. It is also an excellent tool to supplement the risk information that was presented in the first annual report on funding levels and risks.

In this report, we focus on the three key risk considerations that are used in the Asset Liability Decision Making Framework as well as five other measures: current funded status, volatility indexes, where we are in the asset smoothing corridor & investment return sensitivity, amortization payment toward the unfunded liability and hypothetical termination liability. In addition, we introduced external risk factors that have emerged in the pension environment over the past year.

Any attempt to present an overview of funding levels and risks for a system such as CalPERS has an inherent difficulty; the system is composed of many plans, and several risk sharing pools that are funded separately. As a result, it is not sufficient to look at the funded status or various risk measures for the system as a whole. Instead, we need to look at the breakdown of the various measures for each of the non-pooled public agency plans, the nine public agency risk pools and the state and schools plans. Given the number of non-pooled public agency plans, we will focus on presenting the distribution of results with additional analysis of the outliers.

## Changes in the Pension Environment

Since the last report on funding levels and risks, there have been three changes in the pension environment that should be considered when assessing funding risks. They are the bankruptcy filings of three public agencies, the passage of pension reform legislation and the issuance of new pension accounting standards.

### Employer Bankruptcies

In the last year, three CalPERS participating employers have declared bankruptcy. They are the cities of Stockton and San Bernardino and the town of Mammoth Lakes. These bankruptcies represent an added area of risk.

The California Public Employees' Retirement Law (PERL) imposes statutory and other legal obligations on participating employers. CalPERS in turn has obligations to provide retirement benefits to the employers' employees and retirees in accordance with the provisions of the PERL. Under the PERL, employees have earned pension benefits attributable to services performed and will continue to earn additional benefits as service is performed for the employer. . Each day an employee works, that employee earns additional service credit, which increases the value of the benefit that CalPERS must ultimately pay to that employee.

The participating employers' contributory obligations to CalPERS are determined on an actuarial basis taking into account investment returns, employee life expectancy, projected retirement date and projected compensation. The benefits under CalPERS

are pre-funded. Instead of allocating money at or near the time that benefits become due, a pre-funded plan relies upon an orderly schedule of contributions well in advance of benefit requirements. These contributions are then invested and the investment returns are used to fund the cost of pension benefits. If a participating employer does not timely make its required payments, the actuarial soundness of the fund will be negatively impacted. The actuarial calculations are premised on the fact that contributions will be made when required and invested when made.

When contributions are delayed beyond the required date, the plan falls out of actuarial balance and actuarial soundness is put in jeopardy. By not making timely contributions, the asset base is not being increased as projected while at the same time, the liabilities are continuing to increase as employees continue to earn service credit.

The bankruptcy of the town of Mammoth Lakes was triggered by a judgment in a lawsuit against the town. The town has successfully negotiated with its primary creditor, the plaintiff in the lawsuit, and has exited bankruptcy protection. This case no longer represents a special risk but is worth considering as it demonstrates that employers are subject to external pressures that can affect their ability to pay the required contributions to the system. These external factors thus have implications for the funding of the system.

The bankruptcy proceedings for the cities of Stockton and San Bernardino are significantly different. Those cities have yet to emerge from bankruptcy and the cases are being litigated at the present time.

During the decade of 2000, the price of homes climbed at an unsupportable rate. This created a temporary boom for the City of Stockton as revenues and expenses dramatically increased during this boom. With the downturn in the market, median house prices fell by more than 60 percent over a five-year period and city revenues plummeted. The combination of high unemployment, widespread home foreclosures and a collapsing tax base resulted in general fund deficits for several years depleting the city's reserves. When the reserves dried up, the city entered bankruptcy. Nevertheless, the city has continued to make timely employer contributions to CalPERS.

The economic downturn has also severely impacted the City of San Bernardino. San Bernardino filed for bankruptcy protection in August of 2012 citing a \$46 million deficit and limited capacity to make its payroll and day-to-day operating expenses. The city unilaterally suspended employer bi-monthly contributions of \$1.2 million to CalPERS while it prepares a re-structuring plan.

Municipal bankruptcies pose a substantial risk to the system. Unsecured creditors of the cities of Stockton and San Bernardino have argued that the cities' state law obligations to CalPERS and to the members are pre-empted by federal bankruptcy law. Under this reading of the law, the bankruptcy court could treat these obligations like other unsecured obligations of the debtor and impair them irrespective of the requirements of state law. CalPERS is taking appropriate steps to protect the integrity of

the system and the retirement security of its members; however, significant legal risk remains. Should the bankruptcy court rule that a city's pension plan need not be funded consistent with state law, other struggling CalPERS public agencies could be tempted to alter their actuarially required contributions through bankruptcy proceedings.

## **Pension Reform**

On September 12, 2012 the Governor signed pension reform AB 340 into law and the Public Employees' Pension Reform Act (PEPRA) became effective January 1, 2013. PEPRA created a new defined benefit formula of 2 percent at age 62 for all new miscellaneous members with an early retirement age of 52 and a maximum benefit factor of 2.5% at age 67. It also created three new defined benefit formulas for new safety members with an early retirement age at 50 and a maximum benefit factor at age 57. These lower benefit formulas will ultimately reduce employer costs and in turn have lower contribution rate volatility risk since asset to payroll ratios will decrease over time.

## **Accounting Standards**

The Governmental Accounting Standards Board approved new statements for pension accounting (Statement No. 67 and Statement No.68). These new standards will not affect current pension funding but will impact employers required accounting disclosures for its pension liabilities. It is unclear whether the new disclosures will influence the ratings agencies assessment of public agency credit worthiness. There is a potential risk that the new GASB requirements may affect the ability of public agencies to borrow money in the credit markets. This is an emerging area of risk and it is unclear whether public agencies will be less willing to take risk in providing retirement benefits.

## **Funding Levels**

The discussion below looks at funding levels in two different contexts. First, we examine the funding levels on an on-going plan basis. That is, we look at the funded status using our regular funding assumptions assuming that the plan is on-going with service being accrued by members, salary increases occurring normally and so on. The second context is that of a hypothetical termination basis where we look at what the funded status would have been had the employer sponsoring the plan elected to terminate their contract with CalPERS.

## **Going Concern Basis**

It is not required, nor necessarily desirable, to have accumulated assets sufficient to cover the total present value of benefits until every member has left employment. Instead, the actuarial funding process calculates a regular contribution schedule of employee contributions and employer contributions (called normal costs) that are designed to accumulate with interest to equal the total present value of benefits by the

time every member has left employment. As of each June 30, the actuary calculates the “desirable” level of plan assets as of that point in time by subtracting the present value of scheduled future employee contributions and future employer normal costs from the total present value of benefits. The resulting “desirable” level of assets is called the accrued liability.

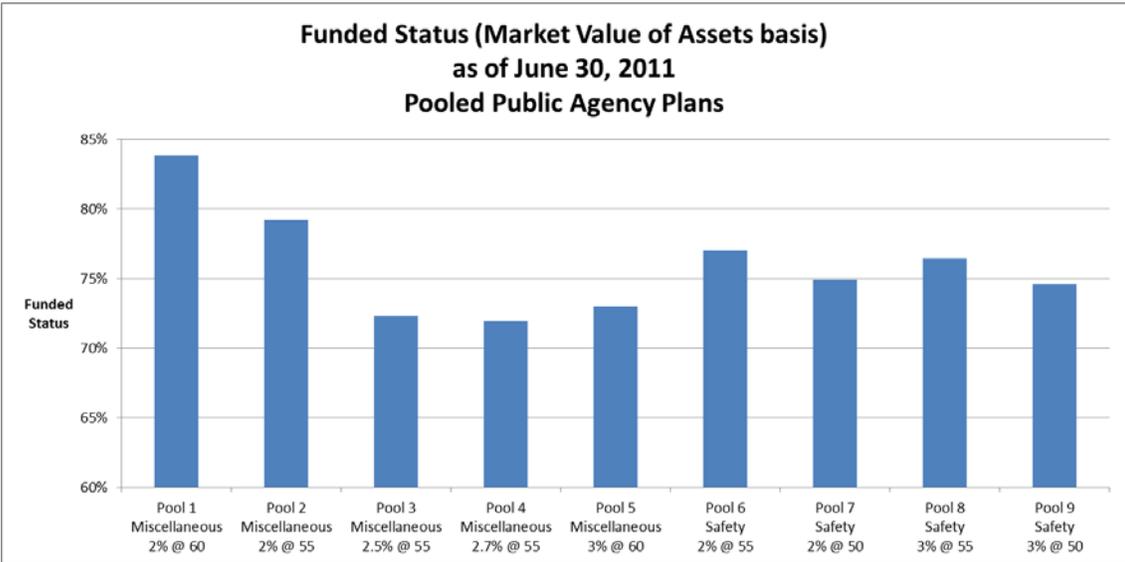
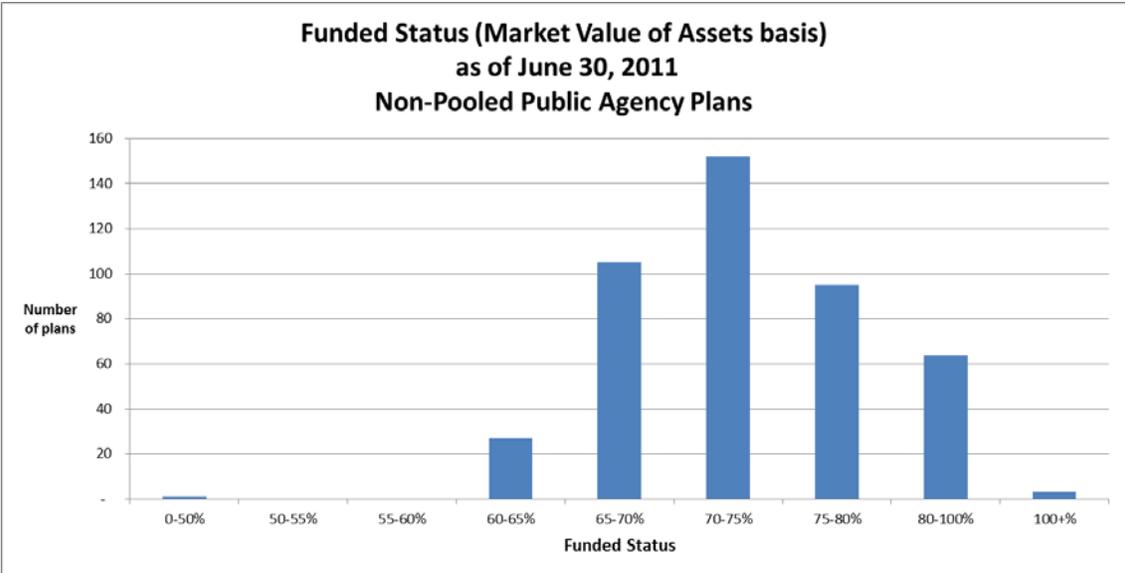
A plan with assets exactly equal to the plan’s accrued liability is simply “on schedule” in funding that plan, and only future employee contributions and future employer normal costs are needed. A plan with assets below the accrued liability is “behind schedule”, or is said to have an unfunded liability, and must temporarily increase contributions to get back on schedule. A plan with assets in excess of the plan’s accrued liability is “ahead of schedule”, or is said to have excess assets, and can temporarily reduce future contributions. Of course, events such as plan amendments and investment or demographic gains or losses can change a plan’s condition from year to year.

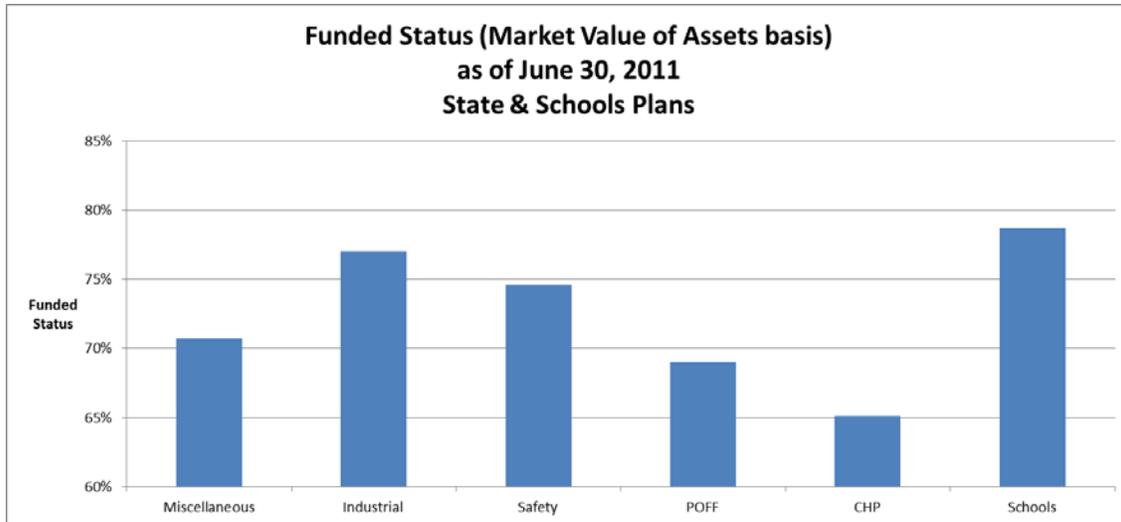
The funded status of a pension plan is defined as the ratio of assets to a plan’s accrued liabilities. This measure when below a certain level along with other risk measures like net cash flow and period of amortization of unfunded liabilities indicates whether a plan is at risk of not meeting future benefit obligations.

The funded status shown in the following summary and charts is based on the market value of assets. As of June 30, 2011, the PERF was 73.6 percent funded on a market value basis. This number is an average of all plans that participate with CalPERS. June 30, 2011 is the most recent figure available since the June 30, 2012 actuarial valuations for all plans will not be completed until fall 2013. As a result of the 0.1 percent investment return in 2011-12, we estimate the funded status on a market value basis for the PERF to be about 70.2 percent as of June 30, 2012<sup>1</sup>. When looking at the funding risk, one needs to look at all plans individually and not only the PERF as a whole. Below are charts of the funded status of the PERF system, as of June 30, 2011 broken down by various groups.

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<sup>1</sup> The estimated funded status as of June 30, 2012 is prior to any changes to actuarial assumptions or gains and losses other than the known investment gain in 2011-2012.





The vast majority of plans (including all but one of the risk pools and all of the State and Schools plans) were between 65 and 80 percent funded as of June 30, 2011. Only a tiny fraction of plans were more than 100 percent funded on this date. Being less than 100 percent funded means that employer contributions need to be higher than the employer normal cost.

There is one non-pooled plan that has a funded status below 50 percent. The plan has just recently contracted with CalPERS with 100 percent past service so a low funded status is to be expected.

There are three non-pooled plans that have funded statuses over 100 percent, these plans also have recently joined CalPERS and have contributed more than their liabilities (0 percent past service) since inception. There are 64 non-pooled plans that are between 80 percent and 100 percent funded, these plans have had either good experience or have been making contributions above those that are required but none indicated that Pension Obligation Bonds were the source of the extra contributions.

The funded status risk measure does not appear to indicate an immediate risk, but will continue to be monitored closely. As stated earlier, being less than 100 percent funded means that employer contributions need to be higher than the employer normal cost – although not necessarily higher than the current contribution level<sup>2</sup>.

Another aspect to keep in mind is the actuarial assumptions used in determining the funded status. The funded status information reported in this report is based on the actuarial assumptions that were in place for the June 30, 2011 actuarial valuations and incorporate the board adopted reduction of the discount rate from 7.75 percent to 7.5 percent.

<sup>2</sup> However, see the discussion on the Smoothing Corridor/Investment Return Sensitivity which does imply that contributions need to be higher than the current level.

It should also be noted that if the assets of a plan have dropped to a level that is significantly below a 100 percent funding level on a market value basis due to poor investment performance and that plan has negative cash flows (i.e. benefits being paid out of the fund versus employer and member contributions coming in are negative) the funded status of such plans could be very slow to progress toward 100 percent unless contributions are increased. In February 2010, the CalPERS Board adopted a policy that requires more aggressive funding for plans where the negative cash flows were preventing adequate progress towards being 100 percent funded. The policy in place requires that if in 30 years, 1) a plan's funded status is not projected to improve by 15 percent or 2) a funded status of 75 percent is not projected, the amortization period for gains and losses will be shortened to ensure the satisfaction of both criteria.

### Hypothetical Termination Basis

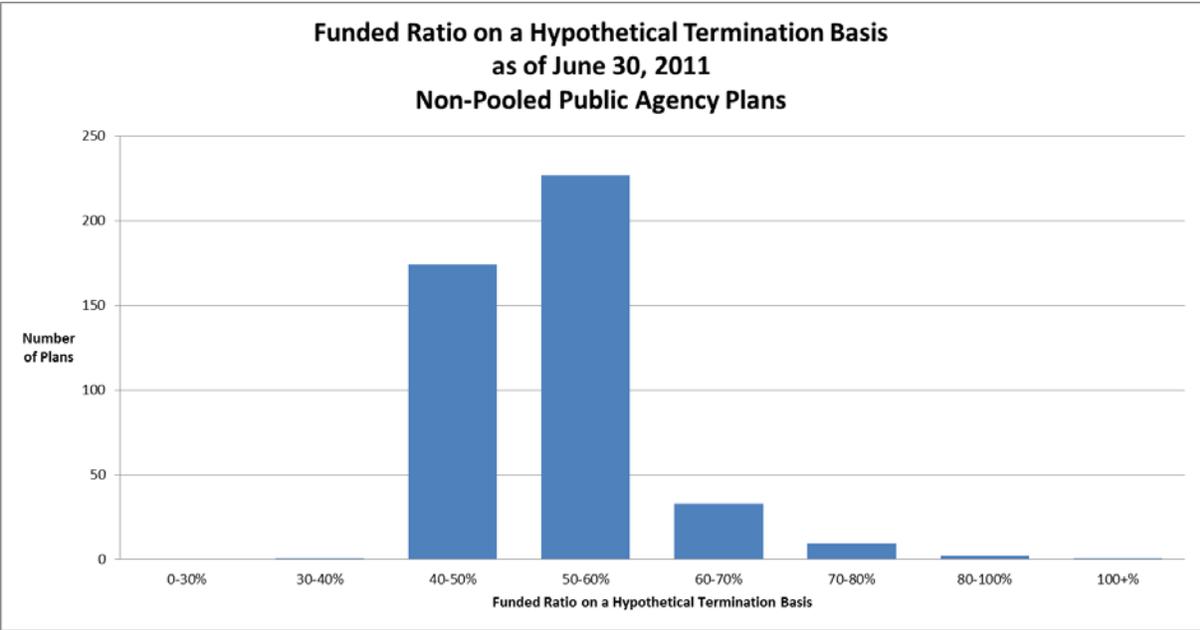
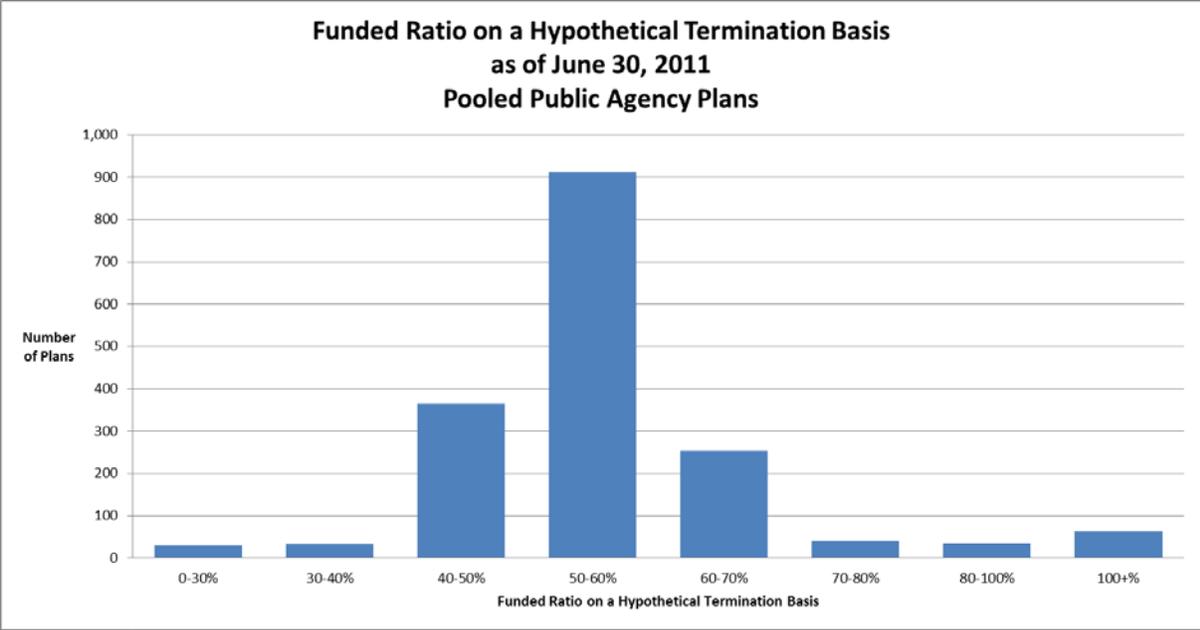
In August 2011, the CalPERS Board adopted an investment policy and asset allocation strategy for the Terminated Agency Pool that more closely reflects expected benefit payments from that pool. With this change, CalPERS increased benefit security for members while limiting its funding risk.

The assumptions used, including the discount rate, take into account the yields available in the US Treasury market on the valuation date and the mortality load for contingencies. The discount rate is duration weighted and is not necessarily the rate that would be used for a given plan if it were to terminate. The discount rate for each plan's termination liability would depend on the duration of the liabilities of the plan. For purposes of this estimate, the discount rate used, 4.82 percent, is the June 30, 2011 30-year US Treasury Stripped Coupon Rate. Please note, as of June 30, 2012 the 30-year US Treasury Stripped Coupon Rate was 2.87 percent. On this basis the hypothetical termination funded status for most plans is in the 40 percent to 60 percent range.

Below are charts of the hypothetical termination funded status of the public agency plans<sup>3</sup>:

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<sup>3</sup> Legislation does not permit State & Schools Plan to be terminated.



## Risk Measures

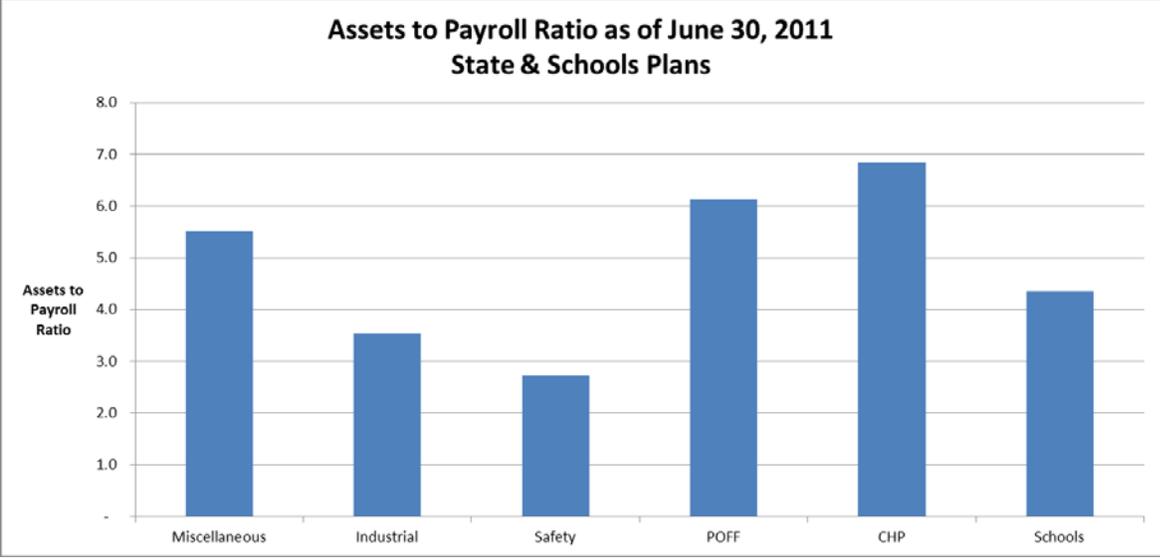
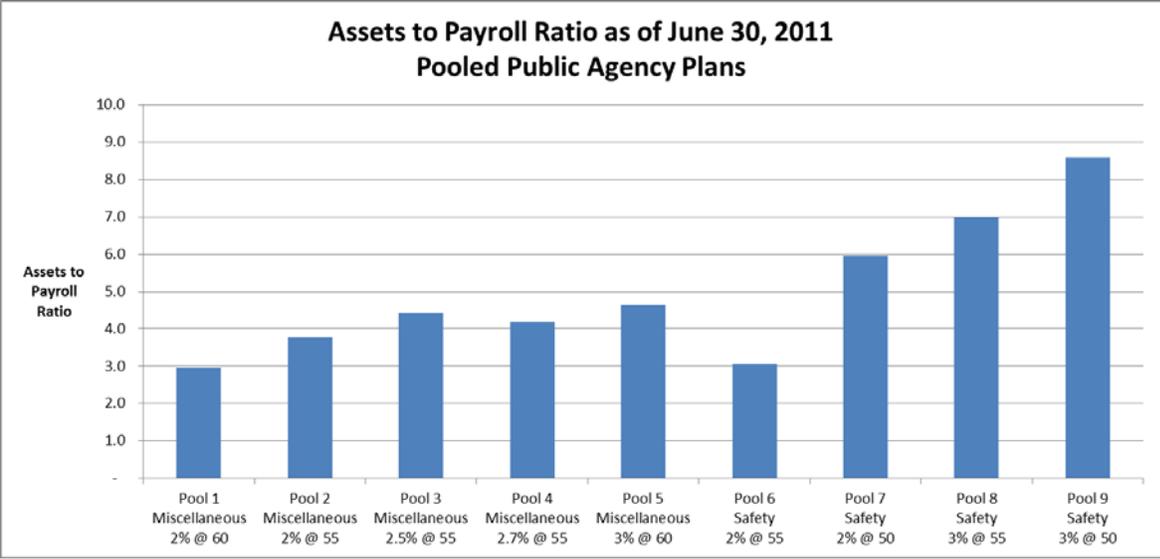
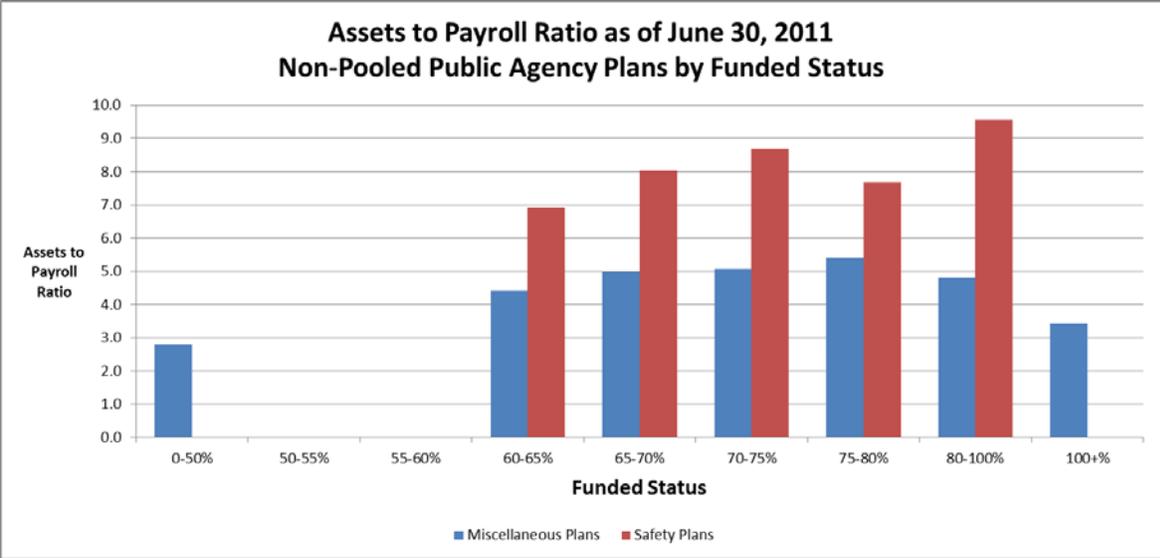
### Volatility

The volatility in annual employer rates may be affected by the accumulation of assets. Higher benefits and earlier retirement ages require the accumulation of more assets per member earlier in their career. Rate volatility is heavily influenced by the ratio of plan assets to active member payroll. Higher asset to payroll ratios produce more volatile employer rates. To see this, consider two plans, one with assets that are 4 times active member payroll, and the other with assets that are 8 times active member payroll. In a given year, let's see what happens when assets rise or fall 10 percent above or below the actuarial assumption. For the plan with a ratio of 4, this 10 percent gain or loss in assets is the same in dollars as 40 percent of payroll. For the plan with a ratio of 8, this is equivalent to 80 percent of payroll. If this gain or loss is spread over 20 years (and we oversimplify by ignoring interest on the gain or loss), then the first plan's rate changes by 2 percent of payroll while the second plan's rate changes by 4 percent of payroll.

Plans with relatively larger benefits and earlier retirement ages need to accumulate assets at a faster rate than their counterparts. Such plans tend to have a higher ratio and are more susceptible to larger asset gains or losses. These asset gains or losses are, by current Board policy, amortized over a rolling 30 years (with the exception of the 3-year phase-in of the 2009 losses) as a level percentage of payroll. Thus larger ratios combined with large asset gains or losses translate into larger contribution changes relative to payroll.

It should also be noted that these ratios tend to stabilize as the plan matures. That is, all plans with no past service start their lives with zero assets and zero accrued liability – and so asset to payroll ratio and liability to payroll ratio equal zero. However, as time goes by these ratios begin to rise and then tend to stabilize at some constant amount as the plan matures. Higher benefit levels and earlier expected retirements produce higher constant future ratios. For example, our miscellaneous plan pools have ratios that range from 2.9 for the “2 percent at 60” pool to a ratio of 4.6 for the “3 percent at 60” pool. For safety pools, the ratios range from 3.1 for the “2 percent at 55” pool to a ratio of 8.6 for the “3 percent at 50” pool. These ratios are also known as the Volatility Index.

The following charts of the asset to payroll ratios of the PERF system broken down by various groups:



This risk measure is descriptive in nature. That is, there is nothing to “fix” if the Volatility Index is high. A high Volatility Index simply indicates that there is a lot of money invested for the plan--a good thing in the overall scheme of a pension plan. It should, however, serve as a reminder that the more money invested, the more impact investment gains and losses have. It should also be noted that this Volatility Index only considers volatility related to investment returns and, to a lesser extent, payroll. Other gains and losses affect the liability and are therefore not taken into account in the determination of the index.

As shown in the charts above, the average asset to payroll ratio is between 4 and 5 but there are a significant number of plans with ratios above this level. Given the expected level of investment volatility, plans with an asset to payroll ratio of 4 are expected to experience a gain or loss in excess of 50 percent of the sponsoring employer’s payroll in about one third of future years. Plans with higher asset to payroll ratios are expected to experience even greater levels of investment volatility.

### Smoothing Corridor / Investment Return Sensitivity

In 2005, the CalPERS Board adopted rate smoothing policies that included a new set of parameters for the establishment of the actuarial value of assets. In order to minimize contribution rate changes from year to year, actuaries often use an actuarial value of assets instead of the market value of assets to set required contribution rates in a pension plan.

In 2005, CalPERS adopted a revision to its asset smoothing method that included the following:

- Investment gains and losses are spread over a 15 year period
- Actuarial value of assets is subject to a 80 percent -120 percent “corridor”

The corridor adopted by the Board means that in any given year the actuarial value of assets cannot be less than 80 percent of the market value of assets or greater than 120 percent of the market value of assets. This corridor was deemed necessary at the time because investment gains and losses are spread over a 15 year period. A wider or even no corridor would be acceptable only if the period over which investment gains and losses are spread is shortened.

The use of a corridor can lead to the inability to smooth the impact of investment experience when the actuarial value of assets is near the corridor. For example, if the actuarial value of assets is equal to the market value of assets i.e. 100 percent then the smoothing method can absorb and smooth out a gain or a loss of about 20 percent above or below the expected return. In this example, the smoothing methods in place today would be able to smooth out over 15 years the impact of returns ranging between -12 percent and +28 percent if the actuarial value of assets is 100 percent of the market value of assets.

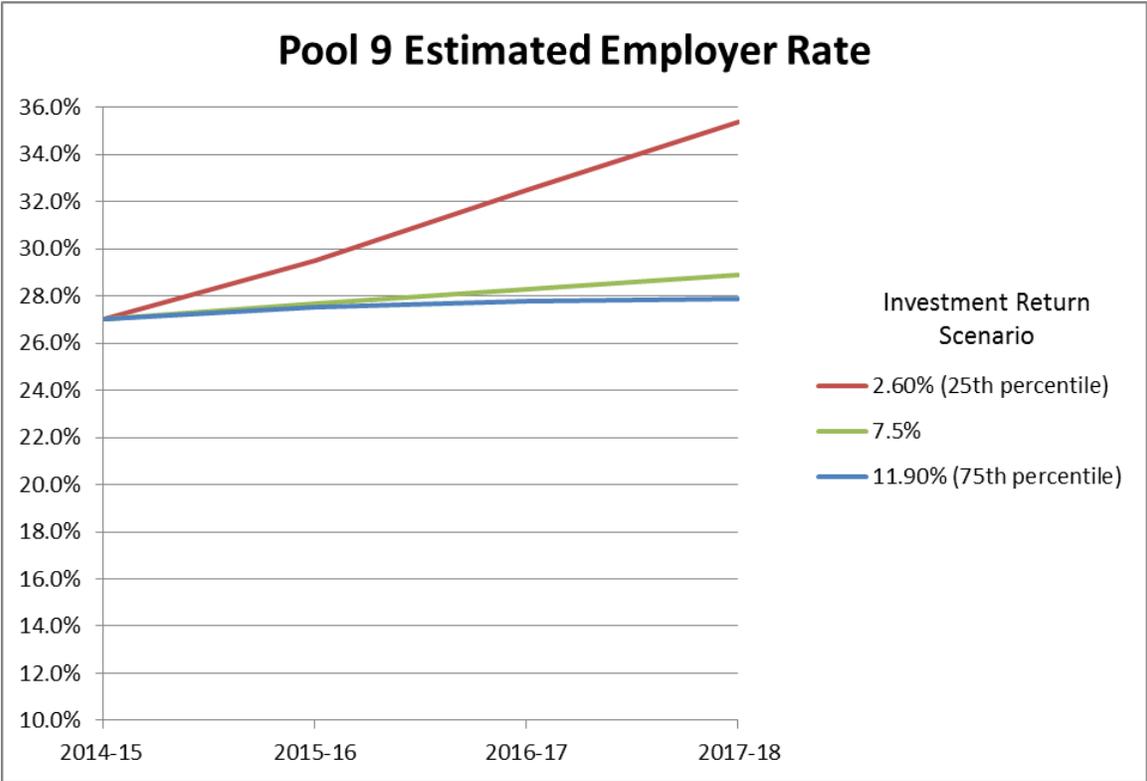
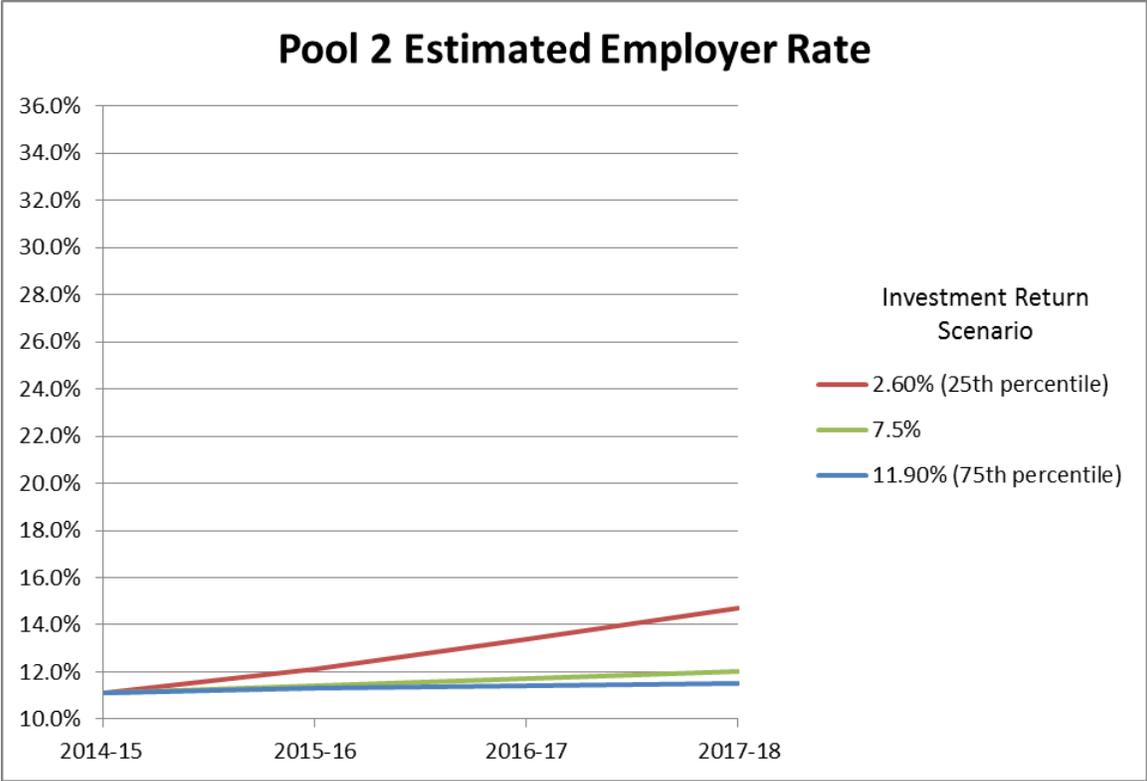
Below is a chart comparing the actuarial value of assets to the market value of assets for the PERF since the implementation of the new smoothing methods in 2005. The methods applied for the first time in the June 30, 2004 actuarial valuations.

Valuation Date	Ratio of Actuarial Value to Market Value of Assets
June 30, 2004	102%
June 30, 2005	97%
June 30, 2006	94%
June 30, 2007	86%
June 30, 2008	98%
June 30, 2009	137%
June 30, 2010	127%
June 30, 2011	112%

In 2009, in order to further dampen the impact of the -24 percent investment return in 2008-09, the CalPERS Board adopted a three year phase-in of this investment loss. The phase-in was achieved by widening the corridor over a 3 year period. For the 2009 valuation, the corridor was widened to 60 percent - 140 percent. For the 2010 valuations it was reduced to 70 percent - 130 percent. For the 2011 valuations and later, the corridor is back to its original 80 percent - 120 percent. This widening of the corridor can be seen in the above table.

For the 2012 valuation, the actuarial value of assets is anticipated to be between 118 and 120 percent. This means that there will be little space left for smoothing a potential investment loss in 2012-13 fiscal year.

As a result, plans at CalPERS are currently more at risk if investment markets do not perform well. A return 10 percent below the funding assumption will see contributions rise significantly. In contrast, a return 10 percent above the funding assumption would result in rates remaining stable. The Actuarial Office began in the June 30, 2010 actuarial valuation reports to disclose this potential risk in the form of an investment return sensitivity analysis. This sensitivity analysis includes the impact on rates over the next 5 years under various investment return scenarios. These projections show that rates are more likely to increase in the event of a poor investment performance. Below we show how contribution rates would be affected under different investment return scenarios. Pool 2 is representative of Miscellaneous Plans and Pool 9 is representative of Safety Plans. Copies of all valuation reports can be found on the CalPERS website.



## Amortization Payment toward the Unfunded Liability

As mentioned earlier, plans do not necessarily have to be fully funded at all times. When a plan is “behind schedule”, the unfunded accrued liability (UAL) is amortized over time. The CalPERS Board has adopted Board policy ACT-96-05E regarding amortization of unfunded liabilities.

Actuarial Policy ACT-96-05E specifies that all changes in liability due to plan amendments, changes in actuarial assumptions, or changes in actuarial methodology are amortized separately over a 20-year period. In addition, all gains or losses are tracked and the net unamortized gain or loss is amortized as a rolling 30-year amortization with the exception of gains and losses in fiscal years 2008-09, 2009-10 and 2010-11 in which each year's gains or losses will be isolated and amortized over fixed and declining 30 year periods (as opposed to the current rolling 30 year amortization). Also, if a plan's accrued liability exceeds the actuarial value of assets, the annual contribution with respect to the total unfunded liability may not be less than the amount produced by a 30-year amortization of the unfunded liability.

There are two primary sources of potential risk when it comes to the amortization payment schedule. The first is the 30 year rolling amortization of gains and losses. This rolling 30 year amortization is done as a level percentage of expected payroll and results in a payment that represents 5.8 percent of accumulated net gains and losses (which equals the outstanding UAL, excluding the portions due to changes in benefits, assumptions or methods). The UAL in the meantime increases at 7.5 percent each year. This means that any gain or loss that occurs in a particular year may never actually be paid off unless these gains and losses offset each other over time.

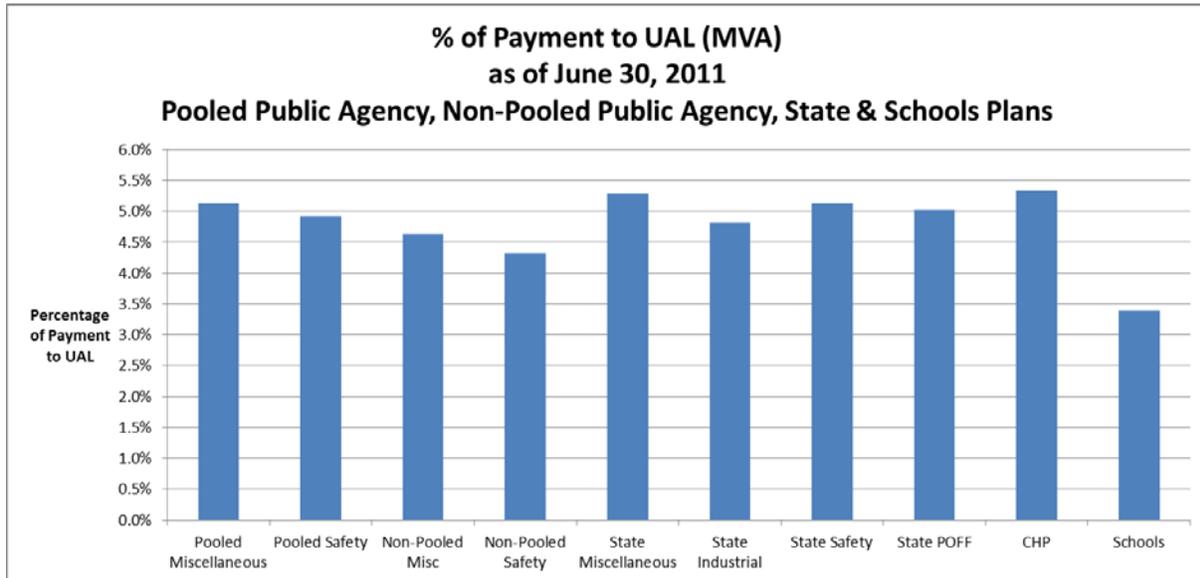
Note that for plans that are growing, the proportion of the UAL to the overall plan's accrued liability will decrease (or funded status will increase) over time and the potential risks due to the rolling amortization are probably not significant. However for those plans that have no growth and a declining membership this is not the case and the UAL could become a larger proportion of the plans' accrued liability in the absence of offsetting experience.

The second source of risk is the asset smoothing we use to determine the actuarial value of assets. The actuarial value of assets is the asset value we use to set contribution rates. In order to keep contribution rates stable, the required payment toward the UAL is based on the plan's actuarial value of assets rather than the plan's market value of assets. In times when plans have a UAL and the actuarial value of assets exceeds the market value of assets (as is currently the case), employers are making payments based on a UAL that is smaller than the one calculated using the market value of assets.

As pointed out in previous sections, if our long-term estimate of investment returns is accurate, then it is expected that there will be other times when the payments will be higher using the actuarial value of assets than under a market value (as was the case in the first few years of the policy).

Accordingly, plans that are currently paying off their UAL on a market value of assets basis will sooner be better able to handle future market downturns and be better able to meet their future obligations.

Below are listings of the amortization payment percentages of the total unfunded liabilities on a market value of asset basis for the PERF system:



As you can see from the above tables, only a very small portion of the UAL on a market value of assets basis is being paid in the current year. Most plans are paying between 4 percent and 5.5 percent toward their unfunded liability each year. Given that the discount rate assumption is currently 7.5 percent, this measure shows that employers are generally paying less than the interest on the unfunded liability and that contributions are likely to increase in the future. This is a result of the smoothing policies that we have in place currently combined with the experience of the last few years. It is an indication that contributions amounts will generally have to increase in the future.

## Asset Liability Management

Over the last year, actuarial and investment staff have developed the Asset Liability Decision Making Framework (ALM Framework) to help bring the issue of funding risk into the evaluation of actuarial and investment decisions. This tool has proved very useful in bringing risk issues into the foreground.

The ALM Framework focusses on three measures of risk over an extended period of time. The measures are:

1. The probability of low funded status which is an indication of risk to the members in the event that the employer does not continue funding.

2. The probability of high levels of employer contribution rates which is an indication of financial strain on the employers and could lead to employers being unable to continue funding the benefits.
3. The probability of a large increase in employer rates in a single year, which is another indication of financial strain on the employers.

At the present time, the ALM framework is only able to provide information on a limited set of plans. Currently these plans are:

- State Miscellaneous Plan
- State Peace Officer/Firefighter Plan (State POFF)
- California Highway Patrol Plan
- The Schools Pool
- A sample (very large) public agency miscellaneous plan
- A sample (very large) public agency safety plan

The probabilities of the funded status of these plans falling below various levels at any point in the next 30 years are shown below.

Plan Name	Probability of Falling Below Given Funding Level (at any point in next 30 years)		
	30%	40%	50%
State Misc.	14%	34%	59%
Schools	11%	27%	51%
PA Misc.	10%	26%	50%
CHP	7%	27%	59%
State POFF	9%	26%	54%
PA Safety	9%	27%	54%

Because of the demands of safety jobs, safety plans are designed to accommodate earlier retirement. As such, they generally have higher required contribution levels. For this reason, we show the high contribution levels and large single year increases for safety and miscellaneous plans at different levels. The table below shows the probability of plans exceeding a specified contribution level at some point in the next 30 years.

Plan Name	Probability of Employer Contribution Rates Exceeding Given Level (at any point in next 30 years)		
	30% of Payroll	35% of Payroll	40% of Payroll
State Misc.	57%	33%	13%
Schools	11%	1%	0%
PA Misc.	24%	6%	1%
	50% of Payroll	55% of Payroll	60% of Payroll
CHP	47%	31%	17%
State POFF	18%	8%	2%
PA Safety	30%	16%	7%

Finally, the table below shows the probability of an increase in the employer contribution level above a specified level at some point in the next 30 years.

Plan Name	Probability of Employer Contribution Rates Increasing by More Than a Given Level (at any point in next 30 years)		
	3% of Payroll	5% of Payroll	7% of Payroll
State Misc.	82%	59%	29%
Schools	78%	43%	15%
PA Misc.	78%	47%	19%
	5% of Payroll	7% of Payroll	9% of Payroll
CHP	80%	62%	41%
State POFF	73%	52%	31%
PA Safety	79%	62%	41%

The tables above show that there is considerable risk in the funding of the system. Unless changes are made, it is likely that there will be a point over the next 30 years where the funded status of many plans will fall below 50%. There is a not insignificant probability that we will see funded statuses below 40%. It is likely that we will see employer contribution rates for the State Miscellaneous plan in excess of 30% of pay at some point in the next 30 years. There is almost a 50% chance of the employer contribution to the CHP plan will exceed 50% of pay over the same time period. Finally, the probability of large single year increases in employer contribution rates at some point ranges from 15% to 82% depending on the plan and the size of the increase.

If these risk levels are not acceptable, some change would be needed in the actuarial assumptions, actuarial methods or the investment policies. Any changes will impact contribution levels and other risk parameters as well.

## Conclusion

The various risk measures that were analyzed all give a different perspective on the risk associated with the funding of the system. When looked at together, these risk measures show that there is considerable risk in the funding of the system.

In the short term there will be upward pressure on contribution rate levels as is indicated by the discussion about asset smoothing corridor and investment return sensitivity and the review of amortization payments relative to interest on the unfunded liability. The rates may remain high for an extended period as is shown by the current funding levels on a going concern basis. Employers are currently under significant financial stress as is shown by the unprecedented occurrence of three bankruptcies in the same year. The impact of higher contribution levels and their continuance for an extended period will be difficult for employers to bear.

As is outlined in the discussion of the volatility index, the level of assets relative to employers payroll, when combined with an investment return volatility at the levels implied by our current asset allocation, means that employers are exposed to significant gains and losses that will result in significant contribution volatility.

Pension reform will afford employers some relief in the longer term both as to level and volatility of contributions but this will be minimal in the short term.

Changes to accounting standards may affect employers' willingness to accept the current level of risks associated with the sponsoring of a defined benefit pension plan. This may result in pressure to change their risk profile by making changes to actuarial or investment policies and/or benefit levels.

The work on Asset Liability Management has shown that there remains considerable risk in the funding of the system. There is a substantial risk that, at some point over the foreseeable future, there will be periods of low funded status and high employer contribution rates. Should this coincide with a period of financial weakness for

employers or if such a period occurs before we recover from the current funding shortfall, the consequences could be very difficult to bear.

Combined, the measures discussed above indicate that employers will be under continuing financial stress for many years unless there is a period of exceptional returns in the markets.

Should this stress result in employers electing to terminate their contracts with CalPERS, there could be significant or even devastating consequences to our members as is shown by the funded status on a hypothetical termination basis. Most plans are in the 40 percent to 60 percent range on this basis.

Currently, CalPERS actuaries are reviewing and monitoring these measures on a plan by plan basis and taking appropriate action, where needed, by adjusting the funding schedule. However, changes may be needed to our actuarial policies, actuarial assumptions and/or investment policies if the risk to our members and our participating employers is to change significantly.

The Board is currently engaged in a process of reviewing the risk levels in the system. It should continue examining its comfort level with the inherent risks in the system and determine whether it wishes to take additional steps to de-risk the funding of the system. In order to reduce the level of funding risk, it would be necessary to adopt changes to actuarial and/or investment policies. Such changes would result in increased employer contribution levels (at least in the short term). Given the impact on employers and the financial strain they are under due to the current economic environment, it may be appropriate to make any changes to our actuarial and investment policies gradually.

# NOVATO SANITARY DISTRICT

## MEMORANDUM

DATE: May 3, 2013

TO: Board of Directors

FROM: Strategic Planning and New Facilities Committee  
Jean Mariani  
Mike DiGiorgio

SUBJECT: Strategic Planning and New Facilities Committee Meeting Report

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### **BACKGROUND AND DISCUSSION**

The Strategic Planning and New Facilities Committee (Committee) met at a publicly noticed meeting at 3:00 PM on May 6, 2013. They discussed the 2013 Strategic Plan update, solar power at the Reclamation Facility, the bids for the Digester Rehabilitation, Project, and odor control.

#### **2013 Strategic Plan Update**

The Committee reviewed the notes from the Strategic Plan Workshop and pre-Workshop interviews. They gave direction to staff with regard to the Mission, Vision, Values, Goals, and Objectives. Staff will work with Martin Rauch to complete a draft plan that will come back to the committee for review and then go to the board for review and adoption.

#### **Reclamation Facility Solar Power**

The District has received a proposal from Danlin Rep Energy Services (Danlin) of San Rafael, CA, for Danlin to provide a photovoltaic (PV) solar facility for the District at the District's Reclamation Facilities.

Danlin has proposed that the District install "floating type" solar panels inside the District's Effluent Storage Pond (ESP) No. 1 at the Reclamation facility. They have provided concept level siting alternatives and pricing analysis for a 360 KW facility located in Effluent Storage Pond No.1. Danlin has identified two pricing alternatives:

1. Alternative 1 - Power Purchase Agreement (PPA): to purchase power at a fixed cost of \$0.115 per kWh for a period of 20 years, with a cost escalation of 2% per year.
2. Alternative 2 - Purchase: The District would pay all capital costs for a turn-key installation of the new 360 KW PV system at a cost of about \$1.0 million by Danlin.

Staff has not independently verified any of the analyses or cost/savings projections provided in the Danlin proposal. Also, at this time, the District's 5-year Capital Improvements Program (CIP) does not include provisions a project of this nature.

Board of Directors

Date: May 13, 2013

Subject: Strategic Planning and New Facilities Committee Report

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The Committee discussed the proposal and directed staff to table it for now due to higher priority capital projects but to consider including roof-mounted solar panels in the construction of the proposed maintenance facility.

### **Digester Rehabilitation Project**

The Committee reviewed the bids, the bid protest, and response and recommends the Board award the contract to RE Smith Contractors (RESC). The Manager-Engineer has included this as an action item on the May 13<sup>th</sup> board agenda and more information about the bids is included in the report for the Agenda Item 6.c.

### **Aeration Basin Odor Control**

The Committee reviewed the Statement of Qualifications from Brown & Caldwell to investigate the remaining treatment plant odors and to develop conceptual designs and cost estimates of alternative remediation as needed. Given Board's priority to resolve the odor complaints the Committee directed staff to request a proposal from Brown & Caldwell for the consideration at the next board meeting. Agenda Item 6.a.b. has more discussion of this item.

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE:</b> North Bay Water Reuse <b>Authority:</b> Memorandum of Understanding	<b>MEETING DATE:</b> May 13, 2013  <b>AGENDA ITEM NO.:</b> 8.a.
<b>RECOMMENDED ACTION:</b> Approve the North Bay Water Reuse Authority Third Revised Memorandum of Understanding (MOU) and authorize the President of the Board to sign the MOU	
<b>SUMMARY AND DISCUSSION:</b>  <p>The second amended MOU was adopted on November 5, 2010 and is scheduled to expire on November 4, 2013. A number of changes in membership and the timing of projects led to the need to revise the MOU to accommodate the changes. The redline/strikeout of the revisions are shown in the attached MOU. The significant changes are summarized below:</p> <ul style="list-style-type: none"> <li>• Adding a non-voting associate membership</li> <li>• Incorporating new members for Phase 2</li> <li>• Clarified voting procedures</li> <li>• Specifically identifying Phase 1 and Phase 2 participants</li> <li>• Added new definitions to reflect current budget and cost sharing practices</li> <li>• Clarified initiation of membership, including the initiation fee calculation methodology</li> <li>• Clarified termination of membership</li> <li>• Extended the term of the MOU from three to five years.</li> </ul> <p>The staff and attorneys of each of the participating agencies reviewed the MOU. The Board of Directors of NBWRA approved it at their meeting on March 25, 2013. District staff recommends approval.</p>	
<b>ALTERNATIVES:</b> N/A.	
<b>BUDGET INFORMATION:</b> No budget impact.	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

# NORTH BAY WATER REUSE AUTHORITY

~~SECOND~~THIRD AMENDED

## MEMORANDUM OF UNDERSTANDING

Supersedes

Memorandum of Understanding

March 15, 2005

First Amended Memorandum of Understanding

September 24, 2008

Second Amended Memorandum of Understanding

November 3, 2010

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**MEMORANDUM OF UNDERSTANDING**  
**ESTABLISHING THE**  
**NORTH BAY WATER REUSE AUTHORITY**

This Memorandum of Understanding (“MOU”) establishes the North Bay Water Reuse Authority (“NBWRA”) for the purposes described herein. This MOU is made and entered into by and between the parties that are signatories to this MOU. The MOU was first approved March 15, 2005. The first amendment to the MOU was approved September 24, 2008. The second amendment to the MOU was approved November 3, 2010. This is the ~~second~~third amendment of the MOU that originally established the NBWRA. This ~~second~~third amendment to the MOU supersedes all previous versions of the MOU.

**Recitals**

WHEREAS, each of the parties to this MOU is a local government entity functioning within the North Bay Region, as depicted in **Exhibit A** attached hereto and incorporated by reference; and

WHEREAS, the parties desire to enter into an MOU to explore the feasibility of coordinating interagency efforts to expand the beneficial use of recycled water in the North Bay Region thereby promoting the conservation of limited surface water and groundwater resources; and

WHEREAS, the parties do not intend to create a separate public agency pursuant to Government Code §6500 et seq. through this MOU and no provision of this MOU should be so construed; and

WHEREAS, the parties hereto may later explore the feasibility of changing their organizational structure by establishing a Joint Powers Authority in a separate agreement that would advance the purpose and goals of the NBWRA, if construction projects are to be undertaken jointly or if such changes are necessary in order to receive federal or state funds; and

WHEREAS, the parties hereto recognize the value of using common resources effectively; and

WHEREAS, the parties hereto desire to be proactive on regulatory issues affecting the North Bay Region that transcend the traditional political boundaries of the parties; and

WHEREAS, the parties hereto desire to inform communities and the public in the North Bay Region about the importance of water conservation and the benefits of water reuse; and

WHEREAS, the parties hereto wish to coordinate their consideration and review of local, state and federal policies and programs related to the expansion of existing recycled water programs and the development of new recycled water programs in the North Bay Region; and

WHEREAS, the parties hereto find that promoting the stewardship of water resources in the North Bay Region is in the public interest and for the common benefit of all within the North Bay Region; and

WHEREAS, the parties recognize that there are current and future regulatory requirements which apply to water resources in the North Bay Region affecting one or more of said parties, and that these multiple regulatory requirements may be better addressed on a regional basis, and in a collaborative manner, and the parties wish to investigate more effective ways to share information and coordinate efforts to comply with said regulatory requirements; and

WHEREAS, the parties intend that participation in this MOU be entirely voluntary; and

WHEREAS, it is understood that the primary purpose of this MOU is to provide a governance structure, led by a Board of Directors consisting of members of the governing boards from the Member Agencies, for the successful completion of recycled water projects in the North Bay Region~~the projects described in Phase 1, of the EIR/EIS.~~

WHEREAS, the parties previously applied for federal funds to assist them with implementing their projects; and

WHEREAS, the parties did receive funding, which is part of a program ~~that was~~ authorized for construction in PL 111-11 that was signed into law in March 2009. The program can receive appropriations through the United States Bureau of Reclamation's Title XVI program which can include funds from the American Recovery and Reinvestment Act of 2009 and the U.S. Department of Interior, Bureau of Reclamation's Title XVI Program, including the WaterSMART Grant Program.

WHEREAS, Phase 1 includes receipt of the full \$25,000,000 federal authorization, and WHEREAS, the parties are currently conducting Scoping Studies for potential additional projects that are known as Phase 2. The magnitude of Phase 2 projects has not yet been determined, but would be determined by a Feasibility Study should the parties choose to conduct one. The results of a Feasibility Study may lead to additional modifications of this MOU.

WHEREAS, the parties understand that reallocation of costs described herein, can be made with the approval of the parties as provided herein.

NOW, THEREFORE, the parties hereto do hereby enter into this Memorandum of Understanding, as follows:

**Memorandum of Understanding**

**1. Definitions.** As used in this MOU, the following words and phrases shall have the meanings set forth below unless the context clearly indicates otherwise.

- (a) “MOU” shall mean this third ~~second~~-amended Memorandum of Understanding.
- (b) “NBWRA” shall mean the unincorporated, cooperative group of public agencies organized through this MOU and otherwise referred to as the North Bay Water Reuse Authority.
- (c) “Board of Directors” shall mean the governing body composed of members of the governing boards of the Member Agencies established pursuant to this MOU.
- (d) “Technical Advisory Committee” shall mean the administrative body established at the discretion of the Board of Directors pursuant to this MOU.
- (e) “Member Agency” or “Member Agencies” shall mean the local and/or regional public agencies regulated under the Clean Water Act, 33 U.S.C. § 1251 et seq., the federal Safe Drinking Water Act, 42 U.S.C. § 300f et seq., and/or the state Safe Drinking Water Act, Health & Safety Code § 116275 et seq., that operate within or have jurisdiction over any area within the North Bay Region, and that are signatories to this MOU. Member Agencies are entitled to one voting member on the Board of Directors and Technical Advisory Committee as defined herein.
- (f) “North Bay Region” shall mean the four counties identified in the North San Pablo Bay watershed as defined in PL 111-11, Section 9110, Title XVI; 43 U.S.C.390h-34: Marin, Napa, Solano, and Sonoma. ~~shall mean the~~ Said area is depicted on the map attached hereto and incorporated herein as **Exhibit A.**
- (~~f~~)(g) “Associate Member” shall mean a local and/or regional public agency as described in Section 1(e) or other organizations interested in the Purpose and Objectives of NBWRA.

Associate Members may not sponsor current projects in Phase 1 or Phase 2 but may partner with Member Agencies. Associate Members are entitled to appoint one non-voting representative to the Board of Directors and to the Technical Advisory Committee.

~~(g)~~(h) “Administrative Agency” shall mean that Member Agency authorized pursuant to Section 12 to enter into contracts and perform other administrative functions on behalf of the NBWRA.

~~(h)~~(i) “EIR/EIS” shall mean the Environmental Impact Report/Environmental Impact Statement, prepared by Environmental Science Associates, that was certified and or approved by the Member Agencies during December 2009 and January 2010 and which serves as the basis of the projects to be partially funded by USBR.

~~(i)~~(j) “USBR” shall mean the United States Bureau of Reclamation.

~~(j)~~(k) “Phase 1” shall mean the projects described as Phase 1 of Alternative 1 of the EIR/EIS. It is understood that minor modifications to said projects may occur as actual design and construction occurs and that the individual agencies are responsible for possible modifications to the requirements of the EIR/EIS. Phase 1 participating Member Agencies include: Las Gallinas Valley Sanitary District, Novato Sanitary District, North Marin Water District, Sonoma Valley County Sanitation District, Sonoma County Water Agency, Napa Sanitation District, and Napa County.

(l) “Phase 2” shall mean the remaining projects in the EIR/EIS Alternative 1 that are not included in Phase 1. Phase 2 shall also mean those potential projects described in the Final Report – Phase 2 Project Definition Scoping Study Report, prepared by CDM Smith. It is understood that those projects may change through the completion of a Final Phase 2

Scoping Study and will not be finalized until a full Feasibility Study is completed. Phase 2 participating Member Agencies include: Las Gallinas Valley Sanitary District, Novato Sanitary District, Sonoma Valley County Sanitation District, Sonoma County Water Agency, Napa Sanitation District, Marin Municipal Water District, and City of Petaluma.

(m) “Construction Project” shall mean a project described in either the Phase 1 EIR/EIS or the Phase 2 EIR/EIS should one be completed.

(n) “Phase 1 Costs” shall mean those ~~support~~ costs associated with engineering and environmental analysis associated with the construction of projects described in “Phase 1”, above.

(o) “Phase 2 Costs” shall mean those costs associated with efforts to conduct Scoping Studies, Workshops, Feasibility Studies, or obtaining federal funding for support of said studies for projects as described in “Phase 2”, above.

~~(k)~~(p) “Joint Use Costs” shall mean those costs that are not easily differentiated between Phase 1 and Phase 2 since they benefit the entire program and not just a particular set of projects. These costs may include but not be limited to program management and program development costs; costs of efforts to obtain federal funding; federal authorization and appropriations; state funding and legislation; outreach and community support; and administrative agency management and oversight in support of the program.

- 2. Purpose.** The purpose of NBWRA is to provide recycled water for agricultural, urban, and environmental uses thereby reducing reliance on local and imported surface water and groundwater supplies and reducing the amount of treated effluent released to San Pablo Bay and its tributaries.

**3. Objectives.** NBWRA projects will promote the expanded beneficial use of recycled water in the North Bay ~~Region~~ to:

- (a) Offset urban and agricultural demands on ~~potable water~~ surface water and groundwater supplies;
- (b) Enhance local and regional ecosystems;
- (c) Improve local and regional water supply reliability;
- (d) Maintain and protect public health and safety;
- (e) Promote sustainable practices;
- (f) Give top priority to local needs for recycled water, and
- (g) Implement recycled water facilities in an economically viable manner.

**4. Establishment of the NBWRA.** There is hereby established the North Bay Water Reuse Authority ("NBWRA"). The geographic boundaries of the NBWRA shall be the North Bay Region. (See **Exhibit A**). The NBWRA is an unincorporated association. By entering into this MOU, the parties do not intend to form a Joint Powers Authority pursuant to Government Code §6500 et seq.

**5. NBWRA Membership.** Any local and/or regional public agency regulated under the Clean Water Act, 33 U.S.C. § 1251 et seq., the federal Safe Drinking Water Act, 42 U.S.C. § 300f et seq., and/or the state Safe Drinking Water Act, Health & Safety Code § 116275 et seq., that operates within or has jurisdiction over any area within the North Bay Region may be a Member Agency or Associate Member of the NBWRA. Each Member Agency must be a signatory to this MOU. Member Agencies are voting members of the Board of Directors. Associate Members ~~are~~ may appoint non-voting members of the Board of Directors.

**6. Governance.** NBWRA governance structure shall consist of a Board of Directors. The composition and responsibilities of the Board of Directors is detailed in Section 7.

**7. Board of Directors**

- (a) Membership. The Board of Directors of the NBWRA shall consist of one voting representative from each Member Agency and may include one non-voting representative from each Associate Member. Such representative shall be a member of the governing board of the Member Agency or Associate Member. The Member Agency or Associate Member shall designate one representative and alternate(s) each of whom shall be members of the governing board of the Member Agency or Associate Member. In the event that a Member Agency's ~~the~~ governing body representative and alternate(s) are unavailable for a particular meeting, the Member Agency's representative on the Technical Advisory Committee may serve as an alternate.
- (b) Voting and Authorization Requirements. Each Member Agency representative on the Board of Directors shall have one vote. Except as set forth in subsections (i) and (iii) below and as otherwise specified herein, the affirmative vote of ~~the~~ majority of ~~all~~ the voting members of the Board of Directors is required and is sufficient to approve any item.
- (i) An affirmative vote representing two-thirds of all Member Agencies ~~of members of the Board of Directors representing two-thirds of all Member Agencies~~ shall be required to adopt or modify the budget. The budget may not be increased by more than fifteen percent (15%) annually, without the unanimous approval of the members of the Board of Directors representing all Member Agencies ~~of the Board of Directors.~~
- (ii) Votes ~~of members of the Board of Directors~~ to approve the budget may not be

unreasonably withheld.

(iii) Approval by the governing bodies of two-thirds of all Member Agencies shall be required to modify this MOU.

(c) Quorum. Representatives or alternates from a majority of the Member Agencies shall constitute a quorum for purposes of transacting business, except that less than a quorum may vote to adjourn a meeting or to set a date for the next meeting.

(d) Open Meetings. The Board of Directors will comply with the Ralph M. Brown Act in conducting ~~holding~~ its meetings.

(e) Adding Associate Members ~~Representatives of~~ ~~The Member Agencies can add~~ Associate Members may be added to the Board of Directors without modifying this MOU by a majority vote of the Board of Directors~~Member Agencies~~.

## 8. Technical Advisory Committee

(a) Purpose. The Board of Directors may create a Technical Advisory Committee as needed for the month-to-month management of budget, schedule, and scopes of work for the NBWRA. Typical duties of a Technical Advisory Committee include recommending contracting for a program manager; working through technical details of work scopes and products; authorizing the administrative agency to enter into, modify, or accept work under any contract that is consistent with the budget approved by the Board of Directors, and reviewing and recommending courses of action to the Board of Directors for their consideration. The Board of Directors may create or dissolve the Technical Advisory Committee at any time for any purpose, and may adopt a set of rules governing the Technical Advisory Committee as it determines necessary to achieve the purpose and

objectives stated herein. The Technical Advisory Committee may create subcommittees for specific purposes, including, but not limited to, budget and financial issues, and modification of the MOU~~-modification issues~~.

- (b) Membership. ~~If created by the Board of Directors,~~ The Technical Advisory Committee shall consist of one representative, not from the governing body, from each Member Agency. Such representative shall be the general manager or a designated ~~suitable~~ staff member of the Member Agency. In the event that the general manager or staff member is unavailable for a meeting, he or she may designate an alternate. Associate Members may appoint a non-voting representative to the Technical Advisory Committee.
- (c) Voting and Authorization Requirements: Each Member Agency representative on the Technical Advisory Committee ~~from a Member Agency~~ shall have one vote. An ~~The~~ affirmative vote of ~~a~~the majority of all voting members of the Technical Advisory Committee is required and sufficient to approve any item.
- (d) Quorum. Representatives or alternates from a majority of the Member Agencies shall constitute a quorum for purposes of transacting business, except that less than a quorum may vote to adjourn a meeting or to set a date for the next meeting.

**9. Terms of Office.** Each representative on the Board of Directors shall serve for as long as he or she is a member of the governing board of his or her Member Agency and is designated by the Member Agency to act as its representative. If at any time a vacancy occurs on the Board of Directors, a replacement shall be appointed by the Member Agency to fill the unexpired term of the previous representative within ninety (90) days of the date that such position becomes vacant.

**10. Alternates.** Alternate representatives to the Board of Directors or its Technical Advisory Committee shall be empowered to cast votes in the absence of the regular representative or, in the event of a conflict of interest preventing the regular representative from voting, to vote because of such a conflict of interest.

**11. Officers of the NBWRA.** The Board of Directors of the NBWRA shall elect a Chair, a Vice-Chair and such other officers annually on the first meeting of the calendar year. The Chair and Vice-Chair shall be selected from among the Member Agency representatives. The Board of Directors may choose to adopt a policy that requires the rotation of the Chair, by Member Agency, on an annual basis. The duties of the Chair and Vice-Chair are as follows:

- (a) Chair. The Chair shall direct the preparation of agendas, call meetings of the Board of Directors to order and conduct other activities as deemed appropriate by the Board of Directors. Any member of the Board of Directors may place an item on the NBWRA agenda.
- (b) Vice-Chair. The Vice-Chair shall serve as the Chair in the absence of the regularly-elected Chair. In the event both the Chair and Vice-Chair are absent from a meeting which would otherwise constitute a quorum and a temporary Chair was not designated by the Chair at the last regular meeting, any voting Board member may call the meeting to order, and a temporary chair may be elected by majority vote to serve until the Chair or Vice-Chair is present.

**12. Administrative Agency.** The Member Agencies hereby designate the Sonoma County Water Agency to act as the Administrative Agency for the purpose of carrying out the provisions of this MOU. The authority delegated herein to the Administrative Agency shall be subject to the

restrictions upon the manner of exercising power applicable to the Administrative Agency, including but not limited to the purchasing ordinances and purchasing procedures of the Administrative Agency. Within these limits, the Board of Directors may direct the Administrative Agency's actions with respect to this MOU. The Administrative Agency, for the benefit of the NBWRA Members, shall:

- (a) Award, execute in its own name, and administer such contracts on behalf of the NBWRA, as may be authorized as set forth in Sections 7 and 8.
- (b) Through its controller and treasurer, act as the financial officer or functional equivalent and be the depositor and have custody of all money of the NBWRA from whatever source. The Administrative Agency shall draw warrants to pay demands for expenditures authorized by the Board of Directors or by its authorized representative pursuant to any delegation of authority authorized by the Board of Directors. The Administrative Agency will strictly account for all NBWRA funds, and will hold the funds in trust in a segregated account.
- (c) Provide budget analyses, warrant lists and other financial documents as required by the Board of Directors. The Administrative Agency's financial activities with regards to the NBWRA shall be subject to an outside audit at any time at the request of the Board of Directors. As a matter of course, the Administrative Agency will provide a separate annual audit of NBWRA funds to the Board of Directors.
- (d) Determine charges to be made against the NBWRA for the Administrative Agency's services. Payment of these charges shall be subject to the approval of the Board of Directors.

- (e) Prepare the reports identified in Section 20 if the Board of Directors has not designated another party or person to complete that task.
- (f) Enter into contracts with values up to \$15,000 without the approval of the Board of Directors or the Technical Advisory Committee, if consistent with the budget approved by the Board of Directors.

The Administrative Agency may resign its position as Administrative Agency upon 120 days written notice to all Member Agencies, and shall, before the effective date of its resignation, transfer all funds held on behalf of the NBWRA to any designated successor Administrative Agency. The Board of Directors may designate a successor Administrative Agency by majority vote. Should no other party be designated to act as Administrative Agency by the effective date of the resignation, the MOU shall terminate and the Administrative Agency shall distribute all property held on behalf of the NBWRA pursuant to Section 23.

**13. Staff and Consultants.** Subject to the approval and procedural provisions of Sections 7 and 12, the Administrative Agency may employ or contract for any staff or consultants as may be reasonably necessary to carry out the purposes of this MOU. Such persons may include legal counsel, administrative executives and other types of specialists. If an employee from any Member Agency performs staff or consulting work for the NBWRA, the governing body of that Member Agency may determine the charges to be made against the NBWRA for the services of that employee. Payment of these charges by the Administrative Agency on behalf of the NBWRA shall be subject to the approval of the Board of Directors, which approval shall not be unreasonably withheld.

**14. Sharing of Costs and Resources.**

- (a) The Board of Directors may assess annual dues of \$5,000 for membership in the NBWRA for Associate Members, ~~not to exceed \$5,000.~~ Dues shall be used to offset Joint Use Costs for the Member Agencies.
- (b) The Board of Directors shall assess each Member Agency for costs associated with paying the Administrative Agency, staff or consultants and the funding of approved projects, under agreements approved by the Technical Advisory Committee pursuant to Section 8, or the Administrative Agency as provided in Section 12, or as authorized by the budget adopted by the Board of Directors as set forth in Section 7. Further, legal liabilities may arise out of actions of the Member Agencies (including the Administrative Agency) taken pursuant to this MOU. The activities of the NBWRA are part of a regional program that provides benefit to all agencies. Therefore, as described more particularly below, all Member Agencies that participate in Phase 1 construction projects shall pay a portion of ongoing Phase 1 costs equally and the remaining Phase 1 costs shall be based on approved project costs for Phase 1 of Alternative 1, as described in the ~~C~~certified EIR/EIS or as amended pursuant to Sections 14(e) and 16. The costs and liabilities will be allocated among each of the Member Agencies as follows:
- (i) one quarter (25%) of costs and liabilities shall be allocated equally among each of the Member Agencies; and
- (ii) three quarters (75%) of costs and liabilities shall be allocated among Member Agencies in proportion to the benefit to each Member Agency of participating in the NBWRA, in the form of federal funding that is described in applications for federal funding that have been submitted to the USBR as of April 15, 2010 or as modified pursuant to

- Sections 14 (e) and 16 herein. The Sonoma County Water Agency shall pay its pro-rata share of the quarter of costs allocated under subsection (i) above, but shall not pay any costs allocated under subsection (ii), as it does not have any individual projects to be funded.
- (c) The parties hereto agree that the criteria set forth in subsection (b)(ii) produce the allocations listed in **Exhibit B**, attached hereto, and incorporated by reference. The parties agree that **Exhibit B** may be modified pursuant to Sections 14 (e) and 16.
- (d) Member Agencies ~~shall~~were~~be~~ afforded the opportunity to receive reimbursement for previously allocated Phase 1 C costs and liabilities that were not based on benefits received during the period from the ~~date this Second Amended MOU becomes effective~~ end of Fiscal Year 2010-2011 back to Fiscal Year 2005-2006 (the “Reimbursement Period”). Reimbursements ~~shall be~~were equal to (i) the actual costs paid by a Member Agency during the Reimbursement Period minus (ii) the amount of costs that ~~would have been~~were allocated to that Member Agency during the Reimbursement Period if the percentages defined in **Exhibit B** had been in effect. The final determination of costs and reimbursements subject to this subsection (d) ~~shall be~~was approved by a majority of the Board of Directors on May 21, 2012. ~~Notwithstanding the foregoing, a Member Agency's ability to pay and the timing of benefits received may be taken into consideration when determining the respective allocation of costs pursuant to this subsection (d). It is understood that said reimbursement shall occur as soon as practicable following issuance of the Record of Decision by USBR and receipt of federal funds pursuant to agreements with~~

~~USBR.~~No further or subsequent reimbursement for Phase 1 Costs as described in this section shall be contemplated.

(e) Two or more Member Agencies can agree to reallocate project costs for Phase 1 among themselves, as long as the combined total for those agencies before and after reallocation are the same as the combined total for those agencies in the project schedule, subject to the approval of the Board of Directors. Such approval shall not be unreasonably withheld.

(f) (1) In the case of non-contractual liabilities arising out of the activities of the parties under this MOU, the Member Agencies specifically repudiate the division of liability outlined in Government Code sections 895.2 *et seq.* and instead agree to share liability based on the relative fault of the parties.

(2) Notwithstanding the foregoing paragraph, each Member Agency agrees that it is solely responsible for, and agrees to indemnify and defend the other Member Agencies from and against, any claims, liabilities, or losses relating to or arising out of the design, construction, inspection, operation, or maintenance of its separate project. Each Member Agency agrees that nothing in this MOU shall create, impose, or give rise to any liability, obligation, or duty of the Member Agency to the other Member Agencies or to any third party with respect to the manner in which the Member Agency designs, constructs, inspects, operates, or maintains its separate project.

(g) A ~~S~~separate agreement between the Administrative Agency and the Member Agencies ~~will be~~has been developed based on the requirements of the American Recovery and Reinvestment Act and Title XVI. A similar agreement may be established for Phase 2.

~~(h) Some Member Agencies may choose to pursue Phase 2 or other non-Phase 1 projects.~~

~~Should this occur, the budget will be split into Phase 1 and Phase 2/other non-Phase 1~~

~~tasks and their appropriate costs. Costs for Phase 1 tasks shall be allocated and assessed~~

~~as described in Sections 14 (b) and (c), herein. Costs for Phase 2/other non-Phase 1 tasks~~

~~shall be allocated and assessed by a method agreed upon by those Member Agencies~~

~~choosing to participate in Phase 2/other non-Phase 1 tasks.~~

(h) For those agencies choosing to participate in Phase 2 as defined herein, they shall share

equally in all Phase 2 Costs as defined herein. Should member agencies choose to

construct projects as part of Phase 2, there will be an opportunity to receive

reimbursement for previously allocated costs and liabilities that were not based on benefits

received. Said reimbursement shall be calculated in a manner similar to that described in

Paragraph (d), above. Expenses for Phase 2 Scoping Studies shall not be eligible for

reimbursement.

(i) All Member Agencies shall pay an equal share of Joint Use Costs as defined herein.

(ii) If a Member Agency that chooses to opt out of Phase 2/other non-Phase 1 tasks then later

decides to participate, it will be subject to a buy-in fee approved by the Board of

Directors. Said fee may include applicable costs plus interest from the inception of Phase

2/other non-Phase 1 tasks until such time that they decide to participate. Costs shall be

based on the approved annual budget. Interest shall be based on the annual change in the

Consumer Price Index - All Urban Consumers for San Francisco-Oakland-San Jose as

determined by the Bureau of Labor Statistics, United States Department of Labor.

## 15. Distribution of Funds Received.

- (a) Distribution of funds received from USBR for Phase 1 projects shall be based on the Phase 1 project schedule as described in applications for federal funding submitted to USBR as of April 15, 2010 or as modified pursuant to Sections 14 (e) and 16, herein. Those percentages are based on the \$25,000,000 federal funding authorization for projects totaling \$100,000,000 and are detailed in **Exhibit C**, attached hereto, and incorporated by reference. The parties agree that **Exhibit C** may be modified pursuant to Sections 14 (e) and ~~16~~7. Once a Member Agency has received federal funds for a project, that Member Agency is required to remain a participant in the NBWRA and a signatory to this MOU throughout the term of this MOU as described in Section 22. Should State funding become available to the NBWRA, its distribution shall also be as described in this Section. It is acknowledged that the Member Agencies may receive ~~s~~State funding from programs on an individual basis, and (i) this Section shall not apply to such individual State funding and (ii) the allocations set forth in this Section shall not be affected by the receipt of any State funding.
- (b) Should NBWRA be designated to receive federal funds for Phase 2/other non-Phase 1 tasks, this MOU will be modified accordingly.

**16. Initiation of Membership.** If an eligible agency as defined in Section 5 requests to join the NBWRA as a new Member Agency, the Board of Directors shall establish a membership initiation fee to such agency as a condition of joining the NBWRA. For the purposes of this revision of the MOU, the new Member Agencies shall include Marin Municipal Water District and City of Petaluma. The purpose of the initiation fee is to allow the Phase 1 Member Agencies to recover ~~some~~a portion of their investment costs in obtaining federal authorization

for construction projects. The ~~total~~ initiation fee for each new member agency shall be equal to 0.6% of the ~~total~~ new Member Agency project costs as determined upon completion of the Phase 2 Scoping Study. The initiation fee shall be paid in a two-step process. Step one shall be a payment of \$25,000 by June 30, 2013. Step two shall be a payment of the remaining initiation fee by June 30, 2014. The collected initiation fees shall be distributed ~~returned~~ to the Phase 1 participating agencies according to the percentages specified in **Exhibit B**.

Cost allocations as described in **Exhibits B** and **C** may be revised upon the addition of additional Member Agencies, subject to the approval of a majority of the existing Member Agencies at that time. By virtue of becoming a signatory agency to this MOU pursuant to this Section 16, a new Member Agency is subject to all provisions of this MOU, including Section 17 below.

- 17. Termination of Membership.** Member Agencies that participate in Phase 1 and have received federal monies for Phase 1 construction projects may not terminate their membership in the NBWRA before the completion of all Phase 1 construction projects or before the termination of this MOU as defined herein, whichever comes first. Member Agencies that participate in Phase 2 and have received federal monies for Phase 2 construction projects may not terminate their membership in the NBWRA before the completion of all Phase 2 construction projects or before the termination of this MOU as defined herein, whichever comes first. Phase 2 participants may voluntarily withdraw from the NBWRA prior to the receipt of federal monies for Phase 2 construction projects.
- ~~expiration of three (3) years from the effective date of this MOU.~~

- (a) Notwithstanding the above a Member Agency may petition the Board in writing for withdrawal from the NBWRA and may withdraw with the approval of two-thirds of the members of the Board of Directors representing Member Agencies.
- ~~(b) Causes. Notwithstanding the above, a Member Agency's membership in the NBWRA and participation in this MOU shall terminate on the occurrence of any of the following:~~
- ~~(i) The nonpayment of dues or assessments, subject to the limitations set forth in subsection (c) below; or~~
  - ~~(ii) The occurrence of an event which renders an entity no longer eligible for membership under Section 5 of this MOU, as determined by the Board of Directors.~~
  - ~~(iii) If a Member Agency decides to implement no Phase 1 projects and has received no federal funds, that agency may voluntarily terminate its membership in the NBWRA as set forth in subsection (b), below.~~
- ~~(b) Resignation by Giving Notice. The membership of any Member Agency of the NBWRA shall terminate after the delivery of such Member Agency's written notice of resignation to the Chair of the Board of Directors. Such notice shall be given at least thirty (30) days before the effective date of such resignation. Refunds of any dues or assessments upon such resignation shall be based on a signed, negotiated agreement between the resigning Member Agency and the Member Agencies that remain signatory to this MOU.~~
- ~~(c) Nonpayment of Dues or Allocated Costs. The membership of any Member Agency of the NBWRA may be terminated if the Member Agency fails to pay its dues or allocated costs within one hundred and twenty (120) days after such dues or costs are due. Termination shall be effective upon the majority vote of all members of the Board of Directors. Member~~

~~Agencies shall be given thirty (30) days prior written notice of a threatened termination and the reasons thereof. The notice may be delivered in person or by first-class certified mail, fax or e-mail to the Member Agency's representative on the Board of Directors.~~

~~(d)~~ Effect of Termination. All rights of a Member Agency under this MOU shall cease on the termination of such Member Agency's membership. Termination shall not relieve the Member Agency from any obligation for charges, costs or liabilities incurred or arising from acts or omissions before the date of termination. The terminating Member Agency's responsibility for such charges, costs or liabilities shall be determined in a manner consistent with the allocations set forth in Section 14. Likewise, termination shall not preclude the Member Agency from any benefits that fully accrue before the date of termination. However, a resigned or terminated agency has no right to receive a portion of surplus funds at the termination of the NBWRA.

**18. Procedures.** The Board of Directors may adopt bylaws, rules of conduct for meetings and operating procedures for the NBWRA. To facilitate such efforts, the NBWRA may adopt the administrative procedures and policies of a Member Agency.

**19. Meetings.** The Board of Directors and the Technical Advisory Committee shall provide for meetings, as necessary.

**20. Reports to Member Agencies.** Each year the NBWRA shall submit a written report to the governing body of each of the Member Agencies. This report shall describe the financial activities of the NBWRA during the preceding year.

**21. Offices.** For the purposes of forming the NBWRA and for initial operation, the principal office of the NBWRA shall be located at the Administrative Agency. The Board of Directors may change

said principal office from one location to another after providing thirty (30) days notice of such a change. The Chair shall notify each Member Agency in writing of the change.

**22. Term.** This MOU shall terminate ~~five~~three years from ~~its the~~ effective date ~~of this MOU~~, unless extended by some or all of the parties. This MOU shall also be terminated if the Administrative Agency has resigned pursuant to Section 12 and no other Member Agency has been designated to act as the Administrative Agency prior to the effective date of the resignation.

**23. Disposition of Property and Surplus Funds.** At the termination of this MOU, any and all property, funds, assets, and interests therein held by the Administrative Agency on behalf of the NBWRA shall become the property of and be distributed to the then-Member Agencies. Money collected from Member Agencies and held in reserve by the Administrative Agency for payment of the costs of programs shall be allocated among Member Agencies in proportion to each Member Agency's contributions to such reserves. All other property, funds, assets, and interests shall be distributed by the Administrative Agency to Member Agencies in proportion to each Member Agency's contributions to the NBWRA for dues and allocated costs. However, liabilities of the NBWRA in excess of those assets held by the Administrative Agency on behalf of the NBWRA at the time of termination shall be assessed against the Member Agencies and said Member Agencies shall be responsible for such liabilities. The allocation of responsibility for the payment of such liabilities shall be determined in a manner consistent with the provisions of Section 14.

**24. Minutes.** A secretary or clerk shall be appointed by the Board of Directors. The secretary or clerk shall cause to be kept minutes of all meetings of the Board of Directors and the

Technical Advisory Committee, and shall cause a copy of the minutes to be forwarded to each Member Agency.

**25. Effective Date.** This revision to the MOU shall become effective ~~and the NBWRA shall be established~~ when ~~at least five (5)~~ two-thirds of the Member Agencies listed in Exhibit B have authorized its execution.

**26. Counterparts.** This revision to the MOU may be executed in counterpart and each of these executed counterparts shall have the same force and effect as an original instrument and as if all of the parties to the aggregate counterparts had signed the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as set forth below.

**Sonoma County Water Agency**

**Napa Sanitation District**

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

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

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

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

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

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

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

**Sonoma Valley County Sanitation District**

**Novato Sanitary District**

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

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

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

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

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

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

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

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as set forth below.

**Las Gallinas Valley Sanitary District**

**North Marin Water District**

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

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

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

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

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

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

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

**County of Napa**

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

Print Name: \_\_\_\_\_

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

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

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as set forth below.

**Marin Municipal Water District**

**City of Petaluma**

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

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

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

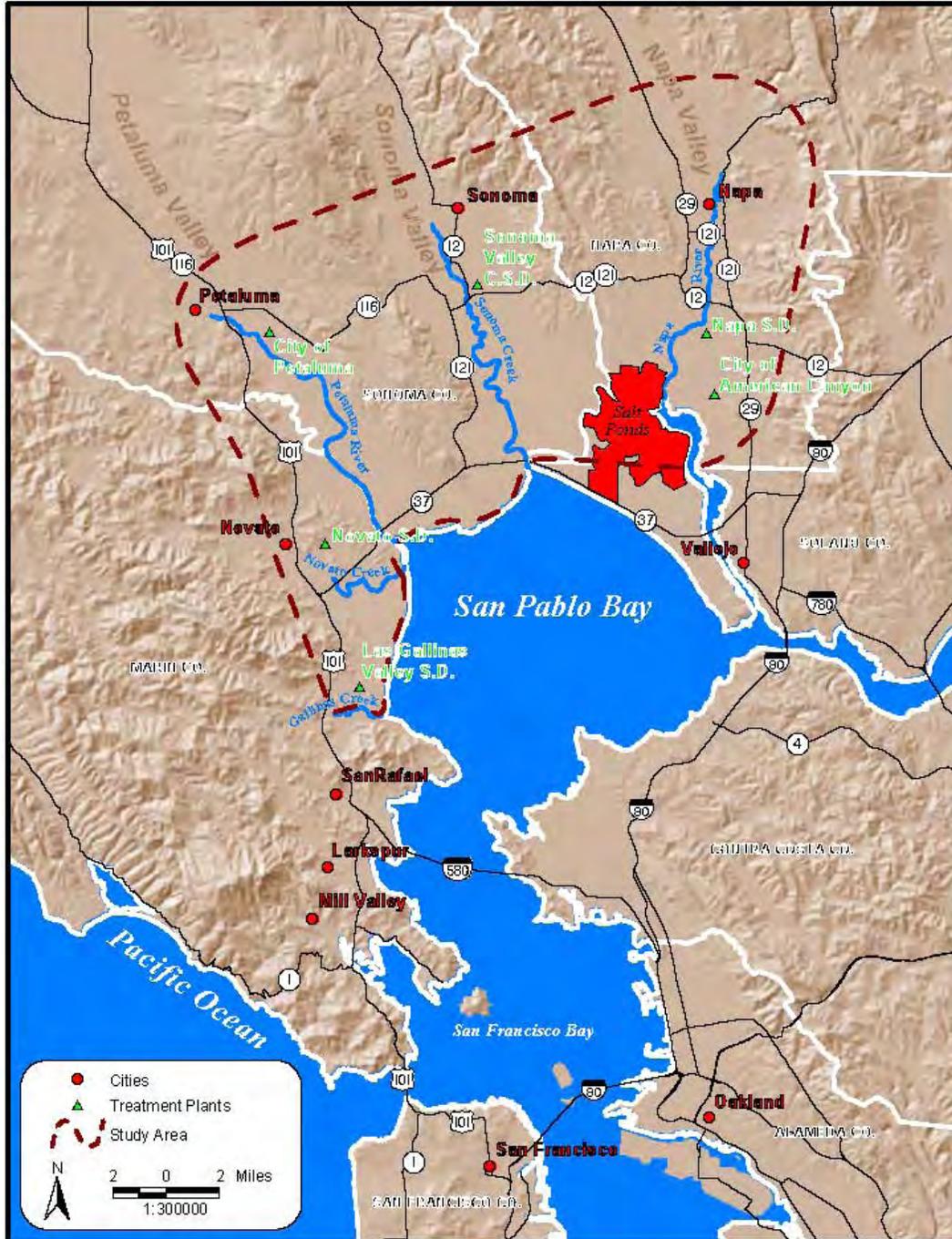
Title: \_\_\_\_\_

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

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

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

### Exhibit A



**Exhibit A**  
**Study Area**

North Bay Water Reuse Authority - MOU



## Exhibit B

### Percentages for Ongoing Phase 1 NBWRA Costs

Agency	25% Split Equally	Federal Authorization, Phase 1	Percentage of Remaining 75%	Total of Percentages
<b>Las Gallinas Valley Sanitary District</b>	3.57%	\$1,222,473	3.67%	7.24%
<b>Novato Sanitary District</b>	3.57%	\$1,679,893	5.04%	8.61%
<b>North Marin Water District</b>	3.57%	4,689,504	14.07%	17.64%
<b>Sonoma Valley County Sanitation District</b>	3.57%	\$7,967,134	23.90%	27.47%
<b>Sonoma County Water Agency</b>	3.57%	<u>\$0.00-</u>	0.00%	3.57%
<b>Napa Sanitation District</b>	3.57%	\$9,440,996	28.32%	31.89%
<b>Napa County</b>	3.57%	<u>\$0.00-</u>	<u>0.00%</u>	3.57%
<b><u>Marin Municipal Water District</u></b>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>	<u>0.00%</u>
<b><u>City of Petaluma</u></b>	<u>0.00%</u>	<u>\$0.00</u>	<u>0.00%</u>	<u>0.00%</u>
<b>TOTALS</b>	25.00%	\$25,000,000	75.00%	100.00%

Notes:

1. Percentages may be revised pursuant to the provisions of this MOU based on adding additional signatory members, revisions to the projects in Phase 1, or continuation beyond Phase 1, subject to the approval of the parties.
2. The above schedule only includes costs and percentages related to Phase 1. Should member agencies choose to implement Phase 2 projects this schedule will be modified or a new schedule will be developed to detail cost sharing for Phase 2.

### Exhibit C

#### Percentages for Distribution of Phase 1 Federal Funds Received

Agency	Federal Authorization, Phase 1	Percentage
Las Gallinas Valley Sanitary District	\$1,222,473	4.89%
Novato Sanitary District	\$1,689,893	6.72%
North Marin Water District	\$4,689,504	18.76%
Sonoma Valley County Sanitation District	\$7,967,134	31.87%
Sonoma County Water Agency	-	-
Napa Sanitation District	\$9,440,996	37.76%
Napa County	<u>\$0.00-</u>	<u>0.00%-</u>
<u>Marin Municipal Water District</u>	<u>\$0.00</u>	<u>0.00%</u>
<u>City of Petaluma</u>	<u>\$0.00</u>	<u>0.00%</u>
<b>TOTALS</b>	\$25,000,000	100.00%

Notes:

1. ~~p~~Percentages may be revised pursuant to the provisions of this MOU based on adding additional signatory members, revisions to the projects in Phase 1, or continuation beyond Phase 1, subject to the approval of the parties.
2. The above schedule only includes costs and percentages related to Phase 1. Should member agencies choose to implement Phase 2 projects this schedule will be modified or a new schedule will be developed to detail cost sharing for Phase 2.

May 13, 2013

MEMORANDUM

TO: District Board of Directors

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

SUBJECT: Revenue and Expenditure Report for Quarter Ended March 2013  
Debt Service Schedule as of March 31, 2013

This memo presents a summary of revenues and expenditures for the operating and capital funds through the third quarter of Fiscal Year 2012-13 (see attached detail). The report also presents a brief analysis of items that vary significantly from the final budget.

**OPERATING FUND**

**OPERATING REVENUE**

	<b>YTD Balance Received</b>	<b>Annual Budget</b>	<b>Budget Remaining</b>	<b>Pct. Received</b>
<b>Total Operating Revenues</b>	\$5,178,278	\$9,149,171	\$3,970,893	56.6%

**Discussion**

Overall, operating revenues are approximately 56.6% of the total budget amount with 75% of the year complete. The operating income accounts are within normal range for this time of year, since our primary revenues are received in December and April.

**OPERATING EXPENDITURES**

	<b>YTD Balance</b>	<b>Annual Budget</b>	<b>Budget Unused</b>	<b>Pct. Used</b>
<b>Total Operating Expenses</b>	\$ 6,074,707	\$9,316,303	\$3,241,596	65.2%

**Discussion**

Overall, operating expenses are approximately 65.2% of budget at 75% of the year complete. The following explains significant variances in expense accounts.

### **Collection System (62.4%)**

The Collection System expenditures are trending below budget primarily to delays in replacing staff. The one remaining opening should be filled this month.

Gasoline & Oil. 79.3%. Per review of account, the consistent rise in the cost of gasoline continues to place this item over budget for all of our departments. We will continue to monitor the gas and oil accounts for each department; a budget amendment may be advisable if costs continue to rise.

Safety 0.%. Expenditures for this account expected in May of 2013.

Outside Services. 2.7%. Planned root abatement services have been scheduled for late May.

### **Treatment Facilities - Contract Operations (66.6%)**

Major Repair/Replacement 0%. These are scheduled or on order but had not been paid for by March 31<sup>st</sup>. Annual expenditures are anticipated to match the budget.

Permits & Fees. 101.6%. Significant variance due to the allocation of the State Water Resources Control Board fines that were originally budgeted to the Collection Department. See proposed budget amendment.

### **Reclamation/Disposal Facilities (73.6%)**

Gasoline & Oil. 78.9%. Please see explanation under Collection System department.

Operating Supplies. 87.5%. The significant variance is due to the fact that most of the expenditures occur in the dry months or the first two quarters of the year. There are no anticipated expenditures in the next quarter thus expenditures will be under budget for the fiscal year.

Sludge Disposal. 84.7%. Sludge disposal expenditures are completed for the fiscal year.

Ditch/Dike Maintenance. 33.8%. Further expenditures are expected due to recent and planned ditch cleaning activities.

Permits & Fees. 111.5%. Please see explanation under Treatment Facilities – Contract Operations.

### **Laboratory/Monitoring (63.0%)**

Gasoline & Oil. 80.9%. Please see explanation under Collection System department.

Repairs & Maintenance. 35.3%. This account is low due to lack of any significant lab equipment repairs in the past three quarters. The only expenditures have been for normal maintenance costs, thus keeping this item well within budget.

Permits & Fees. 78.6%. Permits and fees fully paid for lab for this fiscal year.

### **Pump Stations (58.1%)**

General This has trended under budget due in part to the reconstruction of three pump stations which were operated by the contractor during construction, as well as, the reduced repairs and maintenance needed for the renovated pump stations. The 2013-14 budget will be adjusted to reflect this experience.

Gasoline & Oil. 82.2%. Please see explanation under Collection System department.

Operating Chemicals. 27.4%. Expenditures expected in the later part of the fiscal year when the weather is warmer.

Telephone. 84.4%. Per review of account, no significant items noted account expected to stay within budget for the fiscal year.

Permits & Fees. 123.4%. Please see explanation under Treatment Facilities – Contract Operations.

### **Administration and Engineering (69.2%)**

Retiree Health Benefits. 82.5%. Per review of account, there were no significant items noted.

Gasoline & Oil. 86.4%. Please see explanation under Collection System department.

Insurance. 87.5% Insurance premiums have been paid for the current fiscal year.

Agency Dues. 96.7%. Agency dues have been paid for current fiscal year.

Attorney's fees. 56%. Attorney's fees are lower than anticipated due to the favorable final settlement of the outstanding legal issues.

Outside Contractual 55.5%. Outside Contractual is lower than anticipated due to the lower permit-related consulting required.

Accounting & Auditing. 95.0%. Variance appears reasonable based on the progress of the audit, our annual audit is complete and we have just completed both of our Single Audits for June 30, 2012. Since we had two single audits, instead of just one, the budget is expected to be about 14% over anticipated expenditures for the current fiscal year.

Repairs & Maintenance. 81.3%. Per review of detailed expenditures, no significant items noted expected to stay within budget for current fiscal year.

Travel & Training. 99.8%..Most of the travel and training for the year were completed by March 31<sup>st</sup>. This item may be under-budgeted given the training required to implement succession planning and to train new employees.

**Solid Waste (57.2%)**

The variance is due to the invoice cycles of the consultant and hazardous waste company.

**Recycled Water (19.3%)**

O & M Services. 29%. This department is new and has not yet been billed to the water district. Billing will go out this month and these expenditures will be reimbursed to the District.

**CAPITAL FUND**

**CAPITAL REVENUE**

Capital Revenue	YTD Balance Received	Annual Budget	Over/(Under)Budget	Pct. Received
<b>Sewer Service Charges</b>	\$3,344,083	\$6,149,430	(\$2,805,347)	54.4%
<b>Property Taxes</b>	\$1,013,682	\$1,780,000	(\$ 766,318)	56.9%
<b>Connection Charges</b>	\$ 105,331	\$ 447,500	(\$ 342,169)	23.5%
<b>Collector sewer/Special Equalization Charges</b>	\$ 32	\$ 6,000	(\$ 5,968)	.8%
<b>Interest</b>	\$ 37,798	\$ 20,000	\$ 17,798	188.9%
<b>Other Revenue</b>	\$ 449,353	\$ 300,440	\$ 148,913	149.6%
<b>Grant Revenue</b>	\$ 601,119	\$ 601,370	(\$ 251)	99.9%
<b>Total Revenue</b>	<b>\$5,551,398</b>	<b>\$9,304,740</b>	<b>(\$3,753,342)</b>	<b>59.7%</b>

Overall capital revenues are 59.7% of budget at the close of the third quarter.

**CAPITAL EXPENDITURES**

	<b>YTD Balance</b>	<b>Annual Budget</b>	<b>Budget Unused</b>	<b>Pct. Used</b>
<b>Capital Expenditures</b>	\$10,703,152	\$15,073,469	(\$4,370,317)	71.0%

The list of capital projects is shown in the attached report. Overall expenses are 71.0% of budget.

**Novato Sanitary District**  
**Revenues & Expenditures Budget vs. Actual**  
 July 2012 through March 2013

	<u>Jul '12 - Mar 13</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
<b>Income</b>				
<b>41000 · OPERATING INCOME</b>				
41010 · Sewer Service Charges	4,806,068.64	8,345,700.00	(3,539,631.36)	57.59%
41030 · Plan Check & Inspection Fee	0.00	500.00	(500.00)	0.0%
41040 · Permit & Inspection Fee	6,741.50	7,500.00	(758.50)	89.89%
41060 · Interest Income	9,033.85	12,500.00	(3,466.15)	72.27%
41080 · Engineering & Admin Charges	0.00	175,000.00	(175,000.00)	0.0%
41090 · Non-domestic Permit Fees	23,601.85	15,000.00	8,601.85	157.35%
41100 · Garbage Franchise Fees	1,170.00	47,370.00	(46,200.00)	2.47%
41105 · AB 939 Collector Fees	223,189.50	297,586.00	(74,396.50)	75.0%
41107 · Oil/Bev/Tire Grants	38,283.00	63,015.00	(24,732.00)	60.75%
41130 · Ranch Income	50,301.18	60,000.00	(9,698.82)	83.84%
41135 · Recycle Water Facility Revenue	0.00	75,000.00	(75,000.00)	0.0%
41140 · Other Revenue	19,388.77	40,000.00	(20,611.23)	48.47%
41142 · Loss on disposal of assets	500.00	10,000.00	(9,500.00)	5.0%
<b>Total 41000 · OPERATING INCOME</b>	<u>5,178,278.29</u>	<u>9,149,171.00</u>	<u>(3,970,892.71)</u>	<u>56.6%</u>
<b>Total Income</b>	<u>5,178,278.29</u>	<u>9,149,171.00</u>	<u>(3,970,892.71)</u>	<u>56.6%</u>
<b>Expense</b>				
<b>60000 · COLLECTION SYSTEM</b>				
60010 · Salaries & Wages	383,761.57	583,833.00	(200,071.43)	65.73%
60020 · Employee Benefits	175,523.81	277,512.00	(101,988.19)	63.25%
60060 · Gas, Oil & Fuel	19,834.66	25,000.00	(5,165.34)	79.34%
60085 · Safety	0.00	5,000.00	(5,000.00)	0.0%
60091 · Software Maint	18,539.58	25,000.00	(6,460.42)	74.16%
60100 · Operating Supplies	20,311.91	30,000.00	(9,688.09)	67.71%
60150 · Repairs & Maintenance	59,225.02	82,000.00	(22,774.98)	72.23%
60152 · Small Tools	560.20	1,000.00	(439.80)	56.02%
60153 · Outside Services	2,025.00	75,000.00	(72,975.00)	2.7%
60192 · Water	4,171.47	6,000.00	(1,828.53)	69.53%
60193 · Telephone	1,347.17	2,000.00	(652.83)	67.36%
60200 · Other(Garbage Coll)	694.61	1,000.00	(305.39)	69.46%
60201 · Permits & Fees	214,689.30	291,000.00	(76,310.70)	73.78%
60290 · Vehicle Replacement	0.00	40,000.00	(40,000.00)	0.0%
<b>Total 60000 · COLLECTION SYSTEM</b>	<u>900,684.30</u>	<u>1,444,345.00</u>	<u>(543,660.70)</u>	<u>62.36%</u>
<b>61000 · TREATMENT FACILITIES</b>				
<b>61000-0 · Contract Operations</b>				
61000-1 · Fixed Fee	1,424,322.27	1,945,000.00	(520,677.73)	73.23%
61000-2 · Insurance & Bonds	34,756.15	55,000.00	(20,243.85)	63.19%
61000-3 · Major Repair/Replacement	0.00	104,000.00	(104,000.00)	0.0%
61000-4 · Water/Permits/Telephone	71,127.41	70,000.00	1,127.41	101.61%
61000-5 · Gas & Electricity	296,403.29	570,000.00	(273,596.71)	52.0%
<b>Total 61000-0 · Contract Operations</b>	<u>1,826,609.12</u>	<u>2,744,000.00</u>	<u>(917,390.88)</u>	<u>66.57%</u>

**Novato Sanitary District**  
**Revenues & Expenditures Budget vs. Actual**  
 July 2012 through March 2013

	<u>Jul '12 - Mar 13</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
<b>63000 · RECLAMATION/DISPOSAL</b>				
63010 · Salaries & Wages	24,214.40	30,758.00	(6,543.60)	78.73%
63020 · Employee Benefits	8,005.39	12,655.00	(4,649.61)	63.26%
63060 · Gasoline & Oil	3,156.89	4,000.00	(843.11)	78.92%
63085 · Safety	0.00	1,000.00	(1,000.00)	0.0%
63091 · Software Maintenance	0.00	2,000.00	(2,000.00)	0.0%
63100 · Operating Supplies	1,750.01	2,000.00	(249.99)	87.5%
63115 · Sludge Disposal	182,000.00	215,000.00	(33,000.00)	84.65%
63150 · Repairs & Maintenance	54,405.27	80,000.00	(25,594.73)	68.01%
63152 · Small Tools	722.25	1,000.00	(277.75)	72.23%
63157 · Ditch/Dike Maintenance	6,762.50	20,000.00	(13,237.50)	33.81%
63191 · Gas & Electricity	76,840.98	120,000.00	(43,159.02)	64.03%
63192 · Water - Reclamation	6,394.69	10,000.00	(3,605.31)	63.95%
63201 · Permits & Fees	23,409.60	21,000.00	2,409.60	111.47%
63290 · Vehicle Replacement	0.00	7,000.00	(7,000.00)	0.0%
<b>Total 63000 · RECLAMATION/DISPOSAL</b>	<b>387,661.98</b>	<b>526,413.00</b>	<b>(138,751.02)</b>	<b>73.64%</b>
<b>64000 · LABORATORY/MONITORING</b>				
64010 · Salaries & Wages	135,986.60	201,512.00	(65,525.40)	67.48%
64020 · Employee Benefits	49,929.68	79,328.00	(29,398.32)	62.94%
64060 · Gasoline & Oil	2,021.90	2,500.00	(478.10)	80.88%
64085 · Safety	0.00	1,000.00	(1,000.00)	0.0%
64091 · Software Maintenance	7,360.00	23,000.00	(15,640.00)	32.0%
64100 · Operating Supplies	12,099.72	25,000.00	(12,900.28)	48.4%
64150 · Repairs & Maintenance	3,526.99	10,000.00	(6,473.01)	35.27%
64160 · Research & Monitoring	191,953.70	290,000.00	(98,046.30)	66.19%
64170 · Pollution Prevention/Public Ed	20,850.72	40,000.00	(19,149.28)	52.13%
64201 · Permits & Fees	2,359.00	3,000.00	(641.00)	78.63%
64290 · Vehicle Replacement	0.00	1,400.00	(1,400.00)	0.0%
<b>Total 64000 · LABORATORY/MONITORING</b>	<b>426,088.31</b>	<b>676,740.00</b>	<b>(250,651.69)</b>	<b>62.96%</b>
<b>65000 · PUMP STATIONS</b>				
65010 · Salaries & Wages	183,609.95	331,138.00	(147,528.05)	55.45%
65020 · Employee Benefits	87,297.94	164,724.00	(77,426.06)	53.0%
65060 · Gasoline & Oil	3,287.14	4,000.00	(712.86)	82.18%
65085 · Safety Expenses	763.38	2,000.00	(1,236.62)	38.17%
65091 · Software Maintenance	6,591.35	10,000.00	(3,408.65)	65.91%
65100 · Operating Supplies	3,845.50	9,000.00	(5,154.50)	42.73%
65101 · Operating Chemicals	13,677.49	50,000.00	(36,322.51)	27.36%
65150 · Repairs & Maintenance	72,061.36	115,000.00	(42,938.64)	62.66%
65152 · Small Tools	101.00	2,000.00	(1,899.00)	5.05%
65153 · Outside Services, Electrical	36,607.57	70,000.00	(33,392.43)	52.3%
65191 · Gas & Electricity	57,376.33	90,000.00	(32,623.67)	63.75%
65192 · Water	3,522.46	5,000.00	(1,477.54)	70.45%
65193 · Telephone	16,881.02	20,000.00	(3,118.98)	84.41%
65201 · Permits & Fees	51,834.17	42,000.00	9,834.17	123.42%
65290 · Vehicle Replacement	0.00	10,000.00	(10,000.00)	0.0%
<b>Total 65000 · PUMP STATIONS</b>	<b>537,456.66</b>	<b>924,862.00</b>	<b>(387,405.34)</b>	<b>58.11%</b>

**Novato Sanitary District**  
**Revenues & Expenditures Budget vs. Actual**  
July 2012 through March 2013

	<u>Jul '12 - Mar 13</u>	<u>Budget</u>	<u>\$ Over Budget</u>	<u>% of Budget</u>
<b>66000 · ADMIN/ENGINEERING</b>				
66010 · Salaries & Wages	704,880.54	994,388.00	(289,507.46)	70.89%
66020 · Employee Benefits	292,680.89	399,308.00	(106,627.11)	73.3%
66021 · Retiree Health Benefits	161,508.70	195,847.00	(34,338.30)	82.47%
66030 · Director's Fees	29,475.00	45,000.00	(15,525.00)	65.5%
66060 · Gasoline & Oil	6,914.03	8,000.00	(1,085.97)	86.43%
66070 · Insurance	126,891.07	145,000.00	(18,108.93)	87.51%
66071 · Insurance Claim Expense	0.00	45,000.00	(45,000.00)	0.0%
66075 · Agency Dues	40,625.21	42,000.00	(1,374.79)	96.73%
66080 · Memberships	7,071.36	7,500.00	(428.64)	94.29%
66085 · Safety	542.07	1,000.00	(457.93)	54.21%
66090 · Office Expense	18,349.28	30,000.00	(11,650.72)	61.16%
66100 · Engineering Supplies	4,044.34	9,000.00	(4,955.66)	44.94%
66121 · Accounting & Auditing	19,948.00	21,000.00	(1,052.00)	94.99%
66122 · Attorney Fees	89,569.60	160,000.00	(70,430.40)	55.98%
66123 · O/S Contractual	121,985.55	220,000.00	(98,014.45)	55.45%
66124 · IT/Misc Electrical	15,037.86	50,000.00	(34,962.14)	30.08%
66130 · Printing & Publications	9,815.57	15,000.00	(5,184.43)	65.44%
66150 · Repairs & Maintenance	32,506.40	40,000.00	(7,493.60)	81.27%
66170 · Travel, Meetings & Training	49,878.40	50,000.00	(121.60)	99.76%
66193 · Telephone	9,896.29	15,000.00	(5,103.71)	65.98%
66202 · County Fees - Property Taxes	12,547.00	31,000.00	(18,453.00)	40.47%
66203 · County Fees - Sewer Service Chg	21,555.76	30,000.00	(8,444.24)	71.85%
66250 · Service Charge Sys Exp	0.00	5,000.00	(5,000.00)	0.0%
66290 · Vehicle Replacement	0.00	5,600.00	(5,600.00)	0.0%
<b>Total 66000 · ADMIN/ENGINEERING</b>	<u>1,775,722.92</u>	<u>2,564,643.00</u>	<u>(788,920.08)</u>	<u>69.24%</u>
<b>67000 · AB 939 SOLID WASTE PROGRAMS</b>				
67400 · Consulting Services	59,308.52	106,764.00	(47,455.48)	55.55%
67500 · Household Hazardous Waste	131,721.55	207,500.00	(75,778.45)	63.48%
67520 · Outreach/Publicity/Education	6,005.85	8,500.00	(2,494.15)	70.66%
67530 · Used Oil Program	2,137.03	13,536.00	(11,398.97)	15.79%
67540 · Beverage Container Grant	6,810.92	9,000.00	(2,189.08)	75.68%
67600 · Other	0.00	5,000.00	(5,000.00)	0.0%
67610 · City AB 939 Admin Services	0.00	10,000.00	(10,000.00)	0.0%
<b>Total 67000 · AB 939 SOLID WASTE PROGRAMS</b>	<u>205,983.87</u>	<u>360,300.00</u>	<u>(154,316.13)</u>	<u>57.17%</u>
<b>68000 · Recycled Water</b>				
68010 · O & M Services	14,500.00	50,000.00	(35,500.00)	29.0%
68100 · Operating Supplies	0.00	1,000.00	(1,000.00)	0.0%
68101 · Operating Chemicals	0.00	15,000.00	(15,000.00)	0.0%
68150 · Repairs & Maintenance	0.00	5,000.00	(5,000.00)	0.0%
68191 · Gas & Electricity	0.00	3,000.00	(3,000.00)	0.0%
68201 · Permits & Fees	0.00	1,000.00	(1,000.00)	0.0%
<b>Total 68000 · Recycled Water</b>	<u>14,500.00</u>	<u>75,000.00</u>	<u>(60,500.00)</u>	<u>19.33%</u>
<b>Total Expense</b>	<u>6,074,707.16</u>	<u>9,316,303.00</u>	<u>(3,241,595.84)</u>	<u>65.21%</u>
<b>Net Income(loss)</b>	<u>(896,428.87)</u>	<u>(167,132.00)</u>	<u>(729,296.87)</u>	<u>536.36%</u>

# Novato Sanitary District Revenues & Expenditures - Capital

July 2012 through March 2013

	Jul '12 - Mar 13	Budget	\$ Over Budget	% of Budget
<b>Income</b>				
<b>51000 · CAPITAL IMPROVEMENT INCOME</b>				
51010 · Sewer Service Charges	3,344,082.73	6,149,430.00	(2,805,347.27)	54.38%
51015 · Property Taxes	1,013,682.48	1,780,000.00	(766,317.52)	56.95%
51020 · Connection Charges	105,331.65	447,500.00	(342,168.35)	23.54%
51030 · Collector Sewer Charges	0.00	2,000.00	(2,000.00)	0.0%
51040 · Special Equalization Charge	31.50	4,000.00	(3,968.50)	0.79%
51060 · Interest	37,797.56	20,000.00	17,797.56	188.99%
51070 · Other Revenue	449,353.00	300,440.00	148,913.00	149.57%
51072 · Grant Revenue - ARRA	601,119.00	601,370.00	(251.00)	99.96%
<b>Total 51000 · CAPITAL IMPROVEMENT INCOME</b>	<b>5,551,397.92</b>	<b>9,304,740.00</b>	<b>(3,753,342.08)</b>	<b>59.66%</b>
<b>72000 · CAPITAL IMPROVEMENT PROJECTS</b>				
72110 · Drainage PS 3&7 Outfall Rehab	0.00	50,000.00	(50,000.00)	0.0%
72111 · SCADA Phase II	0.00	10,000.00	(10,000.00)	0.0%
72403 · Pump Station Rehabilitation	1,415,589.53	1,600,000.00	(184,410.47)	88.47%
72508 · N. Bay Water Recycling Auth	395,140.50	380,440.00	14,700.50	103.86%
72604 · Laboratory Improvements	0.00	10,000.00	(10,000.00)	0.0%
72607 · WWTP Upgrade-Contract A1	0.00	10,000.00	(10,000.00)	0.0%
72609 · WWTP Upgrade - Contract B	15,821.14	50,000.00	(34,178.86)	31.64%
72611 · Bayside Sewer	0.00	3,000.00	(3,000.00)	0.0%
72612 · Southgate Sewer-	0.00	1,000.00	(1,000.00)	0.0%
72706 · 2008 Collection System Improv	181,647.66	900,000.00	(718,352.34)	20.18%
72707 · Hamilton Wetlands/Outfall Monit	0.00	50,000.00	(50,000.00)	0.0%
72708 · Cogeneration	0.00	50,000.00	(50,000.00)	0.0%
72802 · Annual Sewer Adj. for City Proj	1,900.00	25,000.00	(23,100.00)	7.6%
72803 · Annual Collection Sys Repairs	192,390.74	200,000.00	(7,609.26)	96.2%
72804 · Annual Reclamation Fac Imp	185,458.90	300,000.00	(114,541.10)	61.82%
72805 · Annual Trtmt Plnt/Pump St Impr	483,460.22	500,000.00	(16,539.78)	96.69%
72808 · Strategic Plan Update	4,113.51	10,000.00	(5,886.49)	41.14%
73001 · WWTP Upgrade - Contract C	236,823.27	2,500,000.00	(2,263,176.73)	9.47%
73002 · WWTP Up - Cont D - Rec- ARRA Fund	964,948.31	1,250,000.00	(285,051.69)	77.2%
73003 · Admin Bldg/Maint.Bldg Upgrades	4,053.21	250,000.00	(245,946.79)	1.62%
78500 · Principal/Interest - Capital Projects	6,621,804.94	6,924,029.00	(302,224.06)	95.64%
<b>Total 72000 · CAPITAL IMPROVMNT PROJECTS</b>	<b>10,703,151.93</b>	<b>15,073,469.00</b>	<b>(4,370,317.07)</b>	<b>71.01%</b>
<b>Total Expense</b>	<b>10,703,151.93</b>	<b>15,073,469.00</b>	<b>(4,370,317.07)</b>	<b>71.01%</b>
<b>Net Income(Loss)</b>	<b>(5,151,754.01)</b>	<b>(5,768,729.00)</b>	<b>616,974.99</b>	<b>89.31%</b>

**Novato Sanitary District  
State Revolving Fund Loan Payable  
and  
COP Bond Payable Balances**

**State Revolving Fund Loan**

SRF Loan Payable Balance 6/30/12 .....	81,307,946
Principal Payment 2012-13	(3,431,967)
Interest payments 2012-13	(1,946,989)
	1,946,989
 SRF Loan Payable Balance 3/31/13.....	 77,875,979

**COP Bond Financing Issued October 2011**

COP Payable BALANCE 6/30/12 .....	21,750,000
Principal Payment 2012-13	(800,000)
Interest payments 2012-13	(885,698)
	885,698
 COP Payable Balance at 3/31/13 .....	 20,950,000

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Administration: Operating Budget Revision</b>	<b>MEETING DATE: 5/13/13</b>  <b>AGENDA ITEM NO.: 9.c.</b>
<b>RECOMMENDED ACTION:</b> Authorize a budget amendment to transfer \$47,500 from Collection Account 60201-Permits and Fees –to the Permit and Fee Accounts for the Treatment Plant (\$30,000), Reclamation (\$2,500), and Pump stations (\$15,000).	
<b>SUMMARY AND DISCUSSION:</b>  <p>As of March 31, 2013, the Collection account-60201-Permits and Fees has a surplus while the same accounts for the Treatment Plant, Reclamation and Pump Stations are over on their budgets for the same time period.</p> <p>Since we were unaware of the exact allocation of the State Water Resources Board fine, we budgeted most of them under the Collection line item for Permits and Fees when we prepared the current fiscal year budget. Thus we would like to request a reallocation of the surplus budget funds in the Collection account 60201-Permits and Fees in the following manner:</p> <ul style="list-style-type: none"> <li>• Treatment Plant Account 61000-4- \$30,000,</li> <li>• Reclamation Account 63201 - \$2,500,</li> <li>• Pump Station Account 65201 - \$15,000</li> </ul>	
<b>ALTERNATIVES:</b> n/a	
<b>BUDGET INFORMATION:</b> Individual Budget Account Line items would change as noted. The overall budget for expenditures would stay the same	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Administration: Budget Revision – Capital Improvement Budget</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO.: 9.d.</b>
<b>RECOMMENDED ACTION:</b> Authorize a budget amendment to: (a) Reallocate \$665,000 from Account 72706 Collection System Improvements to Account 73002 – Contract D (Recycled Water Facility), Account 72508 - N. Bay Recycling Authority, and Account 72403 – Pump Station Rehabilitation, and (b) Reallocate \$40,000 from Account 72804 – Annual Reclamation Facilities Improvements to Account 72805 - Annual Treatment Plant and Pump Stations.	
<b>SUMMARY AND DISCUSSION:</b>  <p>Previously, at its January 14, 2013 meeting, the Board authorized an amendment to the Capital Improvement Budget to increase the budget amount for Account 73002 - Contract D (Recycled Water Facility) in amount of \$350,000 from \$900,000 to \$1,250,000. At that time, staff had informed the Board that this amount would be balanced by projected under-expenditures on other capital projects.</p> <p>Also, as of April 30, 2013, Account 72706 - Collection System Improvement and Account 72804 – Annual Reclamation Facilities Improvements have a projected surplus, while Accounts 72508 - N. Bay Recycling Authority, Account 72403 – Pump Station Rehabilitation and Account 72805 - Annual Treatment Plant and Pump Stations are over on their budgets for the same time period.</p> <p>To balance the over and under expenditures, staff would like to request the following reallocations from Account 72706 – Collection System Improvement to “true up” the various accounts:</p> <ul style="list-style-type: none"> <li>• Account 73002 – Contract D (Recycled Water Facility): \$350,000</li> <li>• Account 72508 - N. Bay Recycling Authority: \$15,000</li> <li>• Account 72403 – Pump Station Rehabilitation: \$300,000</li> </ul> <p>In addition, staff would like to request a reallocation of \$40,000 from Account 72804 – Annual Reclamation Facilities Improvements to Account 72805 - Annual Treatment Plant and Pump Stations for “true up” purposes.</p> <p>Note that these budget reallocations will not result in any net change to the overall FY12-13 Capital Improvement Budget amount of \$15,023,469.</p>	
<b>ALTERNATIVES: n/a</b>	
<b>BUDGET INFORMATION: Individual Budget Account Line items in the Capital Improvement Budget would change as noted. The overall budget for Capital expenditures would stay the same.</b>	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>



**NOVATO SANITARY DISTRICT**

**SINGLE AUDIT REPORT**

**FOR THE YEAR ENDED JUNE 30, 2012**

NOVATO SANITARY DISTRICT

SINGLE AUDIT REPORT  
For The Year Ended June 30, 2012

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**NOVATO SANITARY DISTRICT**

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
For The Year Ended June 30, 2012**

**SECTION I—SUMMARY OF AUDITOR’S RESULTS**

**Financial Statements**

Type of auditor’s report issued: Unqualified

Internal control over financial reporting:

- Material weakness(es) identified?            Yes       X       No
- Significant deficiency(ies) identified?            Yes       X       None Reported

Noncompliance material to financial statements noted?            Yes       X       No

**Federal Awards**

Type of auditor’s report issued on compliance for major programs: Unqualified

Internal control over major programs:

- Material weakness(es) identified?            Yes       X       No
- Significant deficiency(ies) identified?            Yes       X       None Reported

Any audit findings disclosed that are required to be reported in accordance with section 510(a) of OMB Circular A-133?            Yes       X       No

Identification of major programs:

<u>CFDA#(s)</u>	<u>Name of Federal Program or Cluster</u>
<u>66.458</u>	<u>ARRA – Capitalization Grants for Clean Water – State Water Resource Fund</u>
<u>15.504</u>	<u>ARRA – Water Reclamation &amp; Reuse Program</u>

Dollar threshold used to distinguish between type A and type B programs: \$300,000

Auditee qualified as low-risk auditee?       X       Yes            No

## **SECTION II – FINANCIAL STATEMENT FINDINGS**

Our audit did not disclose any significant deficiencies, or material weaknesses or instances of noncompliance material to the basic financial statements.

## **SECTION III – FEDERAL AWARD FINDINGS AND QUESTIONED COSTS**

Our audit did not disclose any findings or questioned costs required to be reported in accordance with section 510(a) of OMB Circular A-133.

## **SECTION IV - STATUS OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS – Prepared by Management**

### **Financial Statement Prior Year Findings**

There were no prior year Financial Statement Findings reported.

### **Federal Award Prior Year Findings and Questioned Costs**

There were no prior year Federal Award Findings and Questioned Costs reported.

**NOVATO SANITARY DISTRICT**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
For the Fiscal Year Ended June 30, 2012**

<u>Federal Grantor/ Pass-Through Grantor/Program or Cluster Title</u>	<u>Federal CFDA Number</u>	<u>Pass-Through Identifying Number</u>	<u>Federal Expenditures</u>
Department of Interior Bureau of Reclamation:			
Pass-Through From Sonoma County Water Agency			
ARRA - Water Reclamation and Reuse Program			
North San Pablo Restoration and Reuse Project	15.504	09/10-158-NovatoSD	<u>\$1,124,811</u>
Total Department of Interior Bureau of Reclamation			<u>1,124,811</u>
U.S. Environmental Protection Agency:			
Pass-Through From California State Water Resource Control Board			
ARRA - Capitalization Grants for State Revolving Funds Program			
Novato Wastewater Treatment Plant Upgrade Project	66.458	07-824-550-0	<u>2,129,875</u>
Total U.S. Environmental Protection Agency			<u>2,129,875</u>
Total Expenditures of Federal Awards			<u><u>\$3,254,686</u></u>

See Accompanying Notes to Schedule of Expenditures of Federal Awards

**NOVATO SANITARY DISTRICT**

**NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
For The Year Ended June 30, 2012**

**NOTE 1-REPORTING ENTITY**

The Schedule of Expenditure of Federal Awards (the Schedule) includes expenditures of federal awards for the Novato Sanitary District, California, as disclosed in the notes to the Basic Financial Statements.

**NOTE 2-BASIS OF ACCOUNTING**

Basis of accounting refers to *when* revenues and expenditures or expenses are recognized in the accounts and reported in the financial statements, regardless of the measurement focus applied. All proprietary funds are accounted for using the accrual basis of accounting. Expenditures of Federal Awards reported on the Schedule are recognized when incurred.

**NOTE 3-DIRECT AND INDIRECT (PASS-THROUGH) FEDERAL AWARDS**

Federal awards may be granted directly to the District by a federal granting agency or may be granted to other government agencies which pass-through federal awards to the District. The Schedule includes both of these types of Federal award programs when they occur.

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL  
OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE  
WITH *GOVERNMENT AUDITING STANDARDS***

Board of Directors  
of the Novato Sanitary District, California

We have audited the financial statements of the Novato Sanitary District as of and for the year ended June 30, 2012, and have issued our report thereon dated December 7, 2012. We conducted our audit in accordance with generally accepted auditing standards in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

***Internal Control over Financial Reporting***

Management of the District is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the District's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the District's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

***Compliance and Other Matters***

As part of obtaining reasonable assurance about whether the District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance and other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of Board of Directors, management, and federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

*Maze & Associates*

December 7, 2012

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE  
WITH REQUIREMENTS THAT COULD HAVE A DIRECT AND MATERIAL  
EFFECT ON EACH MAJOR PROGRAM AND ON INTERNAL CONTROL  
OVER COMPLIANCE IN ACCORDANCE WITH OMB CIRCULAR A-133**

Board of Directors  
of the Novato Sanitary District, California

***Compliance***

We have audited Novato Sanitary District's compliance with the types of compliance requirements described in the *OMB Circular A-133 Compliance Supplement* that could have a direct and material effect on each of the District's major federal programs for the year ended June 30, 2012. The District's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs is the responsibility of District's management. Our responsibility is to express an opinion on the District's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the District's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the District's compliance with those requirements.

In our opinion, the District complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2012.

***Internal Control Over Compliance***

Management of the District is responsible for establishing and maintaining effective internal control over compliance with the requirements of laws, regulations, contracts, and grants applicable to federal programs. In planning and performing our audit, we considered the District's internal control over compliance with the requirements that could have a direct and material effect on a major federal program to determine the auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the District's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be *material weaknesses*, as defined above.

### ***Schedule of Expenditures of Federal Awards***

We have audited the financial statements of the business-type activities of the District as of and for the year ended June 30, 2012, and have issued our report thereon dated December 7, 2012 which contained an unqualified opinion on those financial statements. Our audit was performed for the purpose of forming our opinions on the financial statements that collectively comprise the District's financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain other procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the financial statements as a whole.

This report is intended solely for the information and use of management, Board of Directors, federal awarding agencies, and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

*Maze & Associates*

February 23, 2013

## NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: Staff Report:</b> <b>Workers' Compensation Insurance Report</b>	<b>MEETING DATE: May 13, 2013</b>  <b>AGENDA ITEM NO. : 9.f.</b>
<b>RECOMMENDED ACTION: None - information only</b>	
<b>SUMMARY AND DISCUSSION:</b>  <p>We have been informed by our Workers' Compensation Insurance carrier, CSRMA, that there will be a <b>decrease</b> in the District's Experience Modification Factor for policy year 2013-14, from 1.95% to 1.29%.</p> <p>Experience modification is a factor that is applied to the workers' compensation insurance premium and is based on loss experience. Each covered entity starts out with a neutral experience modifier of 1.0 and adjustments are made depending on experience. An experience modification factor lower than 1.0 means losses lower than industry average and a modification factor higher than 1.0 means the opposite. Therefore, the District's loss experience is 29% higher than industry average, a significant decrease from last year's loss experience which was 95% higher than industry average.</p> <p>Experience Rating is based on an "Expected Loss Rate" as a percentage of the prior 3 years payroll. The District's "Expected Loss Rate" based on payroll for fiscal years 2009-10 through 2011-12 was \$67,792.00. The total Actual Incurred Losses for that time period amounted to \$99,750.00.</p> <p>A copy of CSRMA's Experience Rating Form for the District is attached.</p> <p>Workers' compensation rates for 2013-14 have not yet been published so we are unaware of actual costs at this time.</p>	
<b>ALTERNATIVES: N/A</b>	
<b>BUDGET INFORMATION:</b> The 2013-14 Preliminary budget will reflect an estimated premium based on projected payroll. Actual premium will be included in the Final budget to be adopted in August 2013.	
<b>DEPT. MGR. :</b>	<b>MANAGER'S APPROVAL:</b>

Experience Rating Form

Novato Sanitary District

Member Agency

	Class Code	2009-10 Payroll	2010-11 Payroll	2011-12 Payroll	Total Payroll (3-years)	Expected Loss Rate	Expected Losses (payroll x rate) (d)	D Ratio	Primary Expected Losses (expected x ratio) (e)	Expected Excess (d) - (e) (f)
	<b>EXPECTED</b>	7580	1,288,739	952,559	788,806	3,030,104	2.06	62,420	0.18	11,236
8810		518,184	499,729	512,070	1,529,983	0.19	2,907	0.23	669	2,238
6307						4.19		0.16		
8742		379,822	388,632	405,285	1,173,739	0.21	2,465	0.20	493	1,972
0251						2.30		0.19		
7520						1.70		0.22		
9424						3.77		0.22		
8601						0.18		0.20		
	<b>Total</b>	<b>2,186,745</b>	<b>1,840,920</b>	<b>1,706,161</b>	<b>5,733,826</b>		<b>67,792</b>		<b>12,397</b>	<b>55,395</b>

	Claim Number	2009-10 Actual Incurred Losses	2009-10 Primary Actual Losses	2009-10 Excess Actual Losses	2010-11 Actual Incurred Losses	2010-11 Primary Actual Losses	2010-11 Excess Actual Losses	2011-12 Actual Incurred Losses	2011-12 Primary Actual Losses	2011-12 Excess Actual Losses
	<b>ACTUAL</b>	1	485	485	0	3,070	3,070	0	63	63
2		673	673	0	17,170	7,000	10,170			
3		1,136	1,136	0	20,387	7,000	13,387			
4		3,341	3,341	0	53,425	7,000	46,425			
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
		<b>Total</b>	<b>5,635</b>	<b>5,635</b>	<b>0</b>	<b>94,052</b>	<b>24,070</b>	<b>69,982</b>	<b>63</b>	<b>63</b>

Total Actual Incurred Losses (3-years)	Total Actual MLV Limited Losses (b) + (c)	Total Actual Primary Losses (3-years)	Total Actual Excess Losses (3-years)
	(a)	(b)	(c)
99,750	99,750	29,768	69,982

Rating Procedure

Primary Expected Losses (3-years) (e)	Excess Expected Losses (3-years) (f)	Primary Actual Losses (3-years) (b)	Excess Actual Losses (3-years) (c)	Credibility Primary Value Cp	Credibility Excess Value Ce	Cred Wtd Primary Losses Cp x (b) + (1 - Cp) x (e)	Cred Wtd Excess Losses Ce x (c) + (1 - Ce) x (f)	Cred Wtd Total Actual Losses (g)
12,397	55,395	29,768	69,982	1.00	0.17	29,768	57,875	87,643

<b>Total Expected Losses (3-years) (d)</b>
67,792

<b>Experience Modification (g) / (d) (h)</b>
129%

**WORKERS' COMPENSATION INSURANCE FUND  
1995-96 to 2013-14**

Year	Payroll	Premium	Exp Mod	Prior Years' Retroactive Adjustment	Modified Premium
<b>Estimated</b>					
2013-14	1,870,451	42,109	129%		54,321
<b>2012-13 based on projected payroll - will be adjusted with actual payroll at end of FY</b>					
2012-13	1,825,902	41,204	195%	(1,144)	79,204 <sup>(1)</sup>
2011-12	1,706,161	37,413	176%		65,877
2010-11	1,840,920	41,981	149%		62,552
2009-10	2,186,745	49,906	126%	(7,495)	55,387
2008-09	2,489,894	65,461	85%		55,643
2007-08	2,441,064	66,639	77%	(15,841)	35,471
2006-07	2,278,153	75,870	71%	(35,719)	18,152
2005-06	2,229,966	91,423	77%	(22,620)	47,775
2004-05	2,057,343	96,667	90%	(323)	86,677
2003-04	1,840,411	74,600	104%	(472)	77,112
2002-03	1,749,389	54,291	98%	13,590	66,795
2001-02	1,673,027	38,399	79%	15,475	45,810
2000-01	1,463,445	34,353	84%	(8,354)	20,503
1999-00	1,436,374	45,589	90%	(7,729)	33,301
1998-99	1,449,179	38,109	96%	(9,033)	27,552
1997-98	1,357,457	34,472	94%	(5,480)	26,927
1996-97	1,321,804	32,538	92%	(8,022)	21,914
1995-96	1,287,163	36,004	80%		28,803

**NOTES:**

- (1) We are required to submit estimated payroll for workers' compensation policy renewal in February of each year. Therefore, the estimated premium of \$79,204 is based on existing payroll at that time, with current employees, and that is the amount we are billed. Any adjustments will be made after the end of the 2012-13 fiscal year following the final premium audit.

The District receives retrospective adjustments on future premiums based on the District's experience. Dividend calculations are performed at 18 months following expiration of the program year. For the past two years dividends have been applied to the District's Wellness Program and employee safety awards.

WORKERS' COMPENSATION INSURANCE COSTS

Policy Year	Rates	Payroll	Annual Premium	Exp Mod	Addl Premium/ Retro Adjust	Modified Premium
FY 2013-14		Estimated				
Sanitation	4.3279710	880,677	38,115			
O/S Sales	0.4034549	423,238	1,708			
Clerical	0.3594417	566,536	2,036			
Public Officials			250			
		1,870,451	42,109	129%		54,321
FY 2012-13		Estimated				
Sanitation	4.3279710	861,723	37,295			
O/S Sales	0.4034549	438,917	1,771			
Clerical	0.3594417	525,261	1,888			
Public Officials			250			
		1,825,901	41,204	195%	(1,179)	79,204
FY 2011-12		Actual				
Sanitation	4.3228430	788,806	34,099			
O/S Sales	0.3682750	405,285	1,493			
Clerical	0.3068950	512,070	1,572			
Public Officials			250			
		1,706,161	37,413	176%		65,877
FY 2010-11		Actual				
Sanitation	3.9883256	952,559	37,991			
O/S Sales	0.4608732	388,632	1,791			
Clerical	0.3899696	499,729	1,949			
Public Officials			250			
		1,840,920	41,981	149%		62,552
FY 2009-10		Actual				
Sanitation	3.5896597	1,288,739	46,261			
O/S Sales	0.4148050	379,822	1,576			
Clerical	0.3509890	518,184	1,819			
Public Officials			250			
		2,186,745	49,906	126%	(7,495)	55,387
FY 2008-09		Actual				
Sanitation	3.760	1,617,240	60,808			
O/S Sales	0.544	378,866	2,061			
Clerical	0.474	493,788	2,341			
Board			250			
		2,489,894	65,461	85%	2,336	57,979
FY 2007-08		Actual				
Sanitation	3.903	1,565,717	61,115			
O/S Sales	0.645	415,878	2,682			
Clerical	0.564	459,469	2,591			
Board			250			
		2,441,064	66,639	77%	(15,841)	35,471
FY 2006-07		Actual				
Sanitation	4.622	1,499,728	69,320			
O/S Sales	0.837	374,714	3,138			
Clerical	0.783	403,711	3,161			
Board			250			
		2,278,153	75,870	71%	(35,719)	18,152
FY 2005-06		Actual				
Sanitation	5.357	1,565,767	83,870			
O/S Sales	1.148	352,999	4,052			
Clerical	1.044	311,200	3,249			
Board			250			
		2,229,966	91,423	77%	(22,620)	47,775
FY 2004-05		Actual				
Sanitation	5.968	1,483,547	88,538			
O/S Sales	1.438	314,272	4,519			
Clerical	1.275	259,524	3,309			
Board			300		4,449	
		2,057,343	96,667	90%	(4,773)	86,677

**WORKERS' COMPENSATION INSURANCE COSTS**

Policy Year	Rates	Payroll	Annual Premium	Exp Mod	Addl Premium/ Retro Adjust	Modified Premium
FY 2003-04		Actual				
Sanitation	5.15	1,295,700	66,703			
O/S Sales	1.50	227,314	3,414			
Clerical	1.32	317,397	4,183			
Board			300			
		1,840,411	74,600	104%	(472)	77,112
FY 2002-03		Actual				
Sanitation	3.91	1,234,706	48,314			
O/S Sales	1.19	307,911	3,667			
Clerical	0.97	206,772	2,010			
Board			300			
		1,749,389	54,291	98%	13,590	66,795
FY 2001-02		Actual				
Sanitation	2.88	1,190,662	34,291			
O/S Sales	0.85	295,099	2,494			
Clerical	0.70	187,266	1,315			
Board			300			
		1,673,027	38,399	79%	15,475	45,810
FY 2000-01		Actual				
Sanitation	2.92	1,066,578	31,144			
O/S Sales	0.76	278,116	2,114			
Clerical	0.67	118,751	796			
Board			300			
		1,463,445	34,353	84%	(8,354)	20,503
FY 1999-00		Actual				
Sanitation	3.94	1,056,896	41,589			
O/S Sales	1.05	222,523	2,334			
Clerical	0.87	156,955	1,366			
Board			300			
		1,436,374	45,589	90%	(7,729)	33,301
FY 1998-99		Actual				
Sanitation	3.47	975,148	33,828			
O/S Sales	0.90	240,299	2,165			
Clerical	0.78	233,732	1,816			
Board			300			
		1,449,179	38,109	96%	(9,033)	27,552
FY 1997-98		Actual				
Sanitation	3.33	916,055	30,523			
O/S Sales	0.87	235,005	2,049			
Clerical	0.78	206,397	1,600			
Board			300			
		1,357,457	34,472	94%	(5,480)	26,927
FY 1996-97		Actual				
Sanitation	3.17	914,971	29,037			
O/S Sales	0.83	212,986	1,770			
Clerical	0.74	193,847	1,432			
Board			300			
		1,321,804	32,538	92%	(8,022)	21,914
FY 1995-96		Actual				
Sanitation	3.66	882,377	32,332			
O/S Sales	1.05	220,587	2,318			
Clerical	0.73	184,199	1,353			
Board			300			
		1,287,163	36,004	80%		28,803
Comparison with previous year:						
	07-01-12	07-01-11	Change			
	4.328	4.322	0.14%			
	0.403	0.368	8.68%			
	0.359	0.307	14.48%			

# NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

<b>TITLE: :</b> District Board of Directors: November 2013 election	<b>MEETING DATE:</b> May 13, 2013  <b>AGENDA ITEM NO.:</b> 10.a.
<b>RECOMMENDED ACTION:</b> Adopt a Resolution proposing that an election be held and that it be consolidated with other elections.	
<b>SUMMARY AND DISCUSSION:</b>  The terms for three seats on the District's Board expire in 2013. In order to be included in the general election to be held on November 5, 2013, the District Board must adopt the attached resolution and submit it to the Marin County Registrar of Voters by May 31, 2013.  The filing period is July 15 to August 9, 2013. If all incumbents do not file, the filing period is extended to August 14, 2013 for non-incumbents only.	
<b>ALTERNATIVES:</b> NA	
<b>BUDGET INFORMATION:</b> The cost of the election is approximately \$1.50 - \$2.50 per registered voter and will be included in the 2013-14 budget. There are approximately 30,500 registered voters in the District.	
<b>DEPT.MGR.:</b>	<b>MANAGER:</b>