

NOVATO SANITARY DISTRICT

Meeting Date: March 12, 2012

The Board of Directors of Novato Sanitary District will hold a regular meeting at 6:30 p.m., Monday, March 12, 2012, at the District Offices, 500 Davidson Street, Novato.

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

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. CONSENT CALENDAR:**

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

- a. Approve regular disbursements.
- b. Approve Sewer Main Extension Plans for Canyon Green Subdivision - Hill Road SME.
- c. Review Accounts Receivable Report.
- d. Approve meeting schedule: April 9th and 23rd, May 14th and Tuesday, May 29th.

- 5. WASTEWATER OPERATIONS:**

- a. Receive progress report on odor control, noise abatement, and visual screening.

- 6. ADMINISTRATION:**

- a. Presentation and review of Strategic Plan.
- b. Presentation and review of Financing Plan Update.

7. SOLID WASTE:

- a. Solid Waste Committee report.

8. STAFF REPORTS:

- a. Bay Area Clean Water Agencies Draft 2011 Mercury Watershed Group Report.
- b. Nutrient monitoring.

9. BOARD MEMBER REPORTS:

- a. North Bay Watershed Association

10. MANAGER'S ANNOUNCEMENTS:

11. ADJOURN IN MEMORY OF FORMER BOARD MEMBER E.A. "SAM" RENATI:

Next resolution no. 3041

Next regular meeting date: Monday, March 26, 2012, 6:30 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.

Novato Sanitary District Operating Check Register

For March 12, 2012

Date	Num	Name	Credit
Mar 12, 12			
3/12/2012	54197	Veolia Water North America, ...	49,565.00
3/12/2012	54161	CALPERS Retirement	23,795.05
3/12/2012	54150	Adamson, Robert D.	8,120.00
3/12/2012	54173	Johnson, Dee	7,867.30
3/12/2012	54153	Aqua Science	6,650.00
3/12/2012	54195	Unicorn Group	3,778.40
3/12/2012	54162	Caltest Analytical Lab Inc.	3,592.20
3/12/2012	54187	Preferred Benefit	2,822.28
3/12/2012	54188	Rauch Communication Cons...	2,343.26
3/12/2012	54199	Verizon California	2,075.22
3/12/2012	54149	3T Equipment Company Inc.	1,675.29
3/12/2012	54175	Marin County Public Health Lab	1,560.00
3/12/2012	54177	North Bay Truck Service	1,540.22
3/12/2012	54166	Comet Building Maintenance,...	1,300.55
3/12/2012	54168	EOA, Inc.	1,253.95
3/12/2012	54180	North Marin Water District Pa...	1,174.00
3/12/2012	54171	IEDA, INC	1,020.00
3/12/2012	54189	RMC Water & Environment, I...	963.75
3/12/2012	54192	Teeters & Schacht Auto Glas...	870.63
3/12/2012	54176	Millipore Corp, Lab H2O Divis...	802.71
3/12/2012	54167	Empire Mini Storage - Novato	730.00
3/12/2012	54170	Grainger	647.78
3/12/2012	54160	California Diesel & Power	633.88
3/12/2012	54163	Cantarutti Electric, Inc	632.50
3/12/2012	54165	Cintas Corporation	627.64
3/12/2012	54198	Verizon	602.42
3/12/2012	54201	VWR International Inc.	563.39
3/12/2012	54200	Vision Service Plan	545.24
3/12/2012	54193	U.S. Bank Card (1)(Bev)	537.21
3/12/2012	54185	Pacific, Gas & Electric	452.57
3/12/2012	54152	Alhambra	298.52
3/12/2012	54154	AT&T Mobility	284.16
3/12/2012	54156	Batteries Plus Inc	281.50
3/12/2012	54194	U.S. Bank Card (2)(June)	231.18
3/12/2012	54203	Zenith Instant Printing, Inc.	230.56
3/12/2012	54202	Wesco Distribution	212.89
3/12/2012	54174	Kentfield Occupational Med C...	207.00
3/12/2012	54158	BoundTree Medical, LLC	203.56
3/12/2012	54172	Jackson's Hardware Inc.	195.27
3/12/2012	54155	Barnett Medical LLC	135.00
3/12/2012	54164	CDPH - OCP	120.00
3/12/2012	54190	SRS Private Investigations, Inc	120.00
3/12/2012	54183	Novato Lock	114.14
3/12/2012	54184	Orkin Pest Control, Inc.	105.45
3/12/2012	54186	Petty Cash	104.91
3/12/2012	54157	Bearings & Hydraulics	86.45
3/12/2012	54182	Novato Disposal-	50.18
3/12/2012	54169	Federal Express	47.28
3/12/2012	54151	Alameda Electrical Distributor...	46.70
3/12/2012	54159	Buck's Saw Service, Inc.	31.40
3/12/2012	54191	T-Mobile	23.16
3/12/2012	54179	North Marin Water District	20.00
3/12/2012	54196	United Parcel Service	18.44
3/12/2012	54181	Novato Car Wash	14.99
3/12/2012	54178	North Marin Auto Parts	8.19
Mar 12, 12			131,933.37

**Novato Sanitary District
Operating Ck Register Detail
March 12, 2012**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
3T Equipment Company Inc.			
	02/17/2012	60150 · Repairs & Maintenance	1,224.80
	02/28/2012	60100 · Operating Supplies	450.49
Total 3T Equipment Company Inc.			<u>1,675.29</u>
Adamson, Robert D.			
	03/01/2012	64010 · Salaries & Wages	8,120.00
Total Adamson, Robert D.			<u>8,120.00</u>
Alameda Electrical Distributors, Inc.			
	02/24/2012	65150 · Repairs & Maintenance	46.70
Total Alameda Electrical Distributors, Inc.			<u>46.70</u>
Alhambra			
	02/16/2012	60100 · Operating Supplies	149.26
	02/16/2012	66100 · Engineering Supplies	149.26
Total Alhambra			<u>298.52</u>
Aqua Science			
	02/21/2012	64100 · Operating Supplies	6,650.00
Total Aqua Science			<u>6,650.00</u>
AT&T Mobility			
	03/01/2012	66193 · Telephone	156.45
	03/01/2012	65193 · Telephone	35.77
	03/01/2012	60193 · Telephone	35.77
	03/01/2012	61000-4 · Water/Permits/Telephone	56.17
Total AT&T Mobility			<u>284.16</u>
Barnett Medical LLC			
	02/06/2012	64170 · Pollution Prevention/Public Ed	135.00
Total Barnett Medical LLC			<u>135.00</u>
Batteries Plus Inc			
	02/29/2012	66124 · IT/Misc Electrical	281.50
Total Batteries Plus Inc			<u>281.50</u>
Bearings & Hydraulics			
	02/22/2012	65150 · Repairs & Maintenance	86.45
Total Bearings & Hydraulics			<u>86.45</u>
BoundTree Medical, LLC			
	02/13/2012	64170 · Pollution Prevention/Public Ed	203.56
Total BoundTree Medical, LLC			<u>203.56</u>
Buck's Saw Service, Inc.			
	02/01/2012	63150 · Repairs & Maintenance	31.40
Total Buck's Saw Service, Inc.			<u>31.40</u>
California Diesel & Power			
	02/22/2012	65150 · Repairs & Maintenance	633.88
Total California Diesel & Power			<u>633.88</u>
CALPERS Retirement			
	02/27/2012	66020 · Employee Benefits	23,795.05
Total CALPERS Retirement			<u>23,795.05</u>
Caltest Analytical Lab Inc.			
	02/17/2012	64160 · Research & Monitoring	3,592.20
Total Caltest Analytical Lab Inc.			<u>3,592.20</u>
Cantarutti Electric, Inc			
	02/23/2012	63150 · Repairs & Maintenance	632.50
Total Cantarutti Electric, Inc			<u>632.50</u>
CDPH - OCP			
	03/01/2012	66080 · Memberships	120.00
Total CDPH - OCP			<u>120.00</u>

**Novato Sanitary District
Operating Ck Register Detail
March 12, 2012**

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
Cintas Corporation			
	03/01/2012	64100 · Operating Supplies	69.67
	03/01/2012	66100 · Engineering Supplies	199.55
	03/01/2012	60100 · Operating Supplies	<u>358.42</u>
Total Cintas Corporation			627.64
Comet Building Maintenance, Inc.			
	02/21/2012	66150 · Repairs & Maintenance	<u>1,300.55</u>
Total Comet Building Maintenance, Inc.			1,300.55
Empire Mini Storage - Novato			
	03/05/2012	66123 · O/S Contractual	<u>730.00</u>
Total Empire Mini Storage - Novato			730.00
EOA, Inc.			
	02/16/2012	64160 · Research & Monitoring	<u>1,253.95</u>
Total EOA, Inc.			1,253.95
Federal Express			
	02/17/2012	66090 · Office Expense	<u>47.28</u>
Total Federal Express			47.28
Grainger			
	02/28/2012	65152 · Small Tools	511.29
	03/01/2012	65150 · Repairs & Maintenance	<u>136.49</u>
Total Grainger			647.78
IEDA, INC			
	03/01/2012	66123 · O/S Contractual	<u>1,020.00</u>
Total IEDA, INC			1,020.00
Jackson's Hardware Inc.			
	02/01/2012	60100 · Operating Supplies	<u>195.27</u>
Total Jackson's Hardware Inc.			195.27
Johnson, Dee			
	03/01/2012	67530 · Used Oil Program	155.42
	03/01/2012	67400 · Consulting Services	1,870.70
	03/01/2012	67400 · Consulting Services	<u>5,841.18</u>
Total Johnson, Dee			7,867.30
Kentfield Occupational Med Center			
	02/27/2012	66090 · Office Expense	<u>207.00</u>
Total Kentfield Occupational Med Center			207.00
Marin County Public Health Lab			
	03/02/2012	64160 · Research & Monitoring	<u>1,560.00</u>
Total Marin County Public Health Lab			1,560.00
Millipore Corp, Lab H2O Division			
	02/14/2012	64150 · Repairs & Maintenance	<u>802.71</u>
Total Millipore Corp, Lab H2O Division			802.71
North Bay Truck Service			
	02/23/2012	60150 · Repairs & Maintenance	<u>1,540.22</u>
Total North Bay Truck Service			1,540.22
North Marin Auto Parts			
	01/30/2012	65100 · Operating Supplies	<u>8.19</u>
Total North Marin Auto Parts			8.19
North Marin Water District			
	02/23/2012	65192 · Water	<u>20.00</u>
Total North Marin Water District			20.00
North Marin Water District Payroll			
	02/21/2012	64010 · Salaries & Wages	<u>1,174.00</u>
Total North Marin Water District Payroll			1,174.00

**Novato Sanitary District
Operating Ck Register Detail
March 12, 2012**

	Date	Account	Amount
Novato Car Wash			
	03/01/2012	60150 · Repairs & Maintenance	14.99
Total Novato Car Wash			<u>14.99</u>
Novato Disposal-			
	03/01/2012	60200 · Other(Garbage Coll)	50.18
Total Novato Disposal-			<u>50.18</u>
Novato Lock			
	02/24/2012	60100 · Operating Supplies	114.14
Total Novato Lock			<u>114.14</u>
Orkin Pest Control, Inc.			
	02/16/2012	66150 · Repairs & Maintenance	105.45
Total Orkin Pest Control, Inc.			<u>105.45</u>
Pacific, Gas & Electric			
	03/01/2012	41140 · Other Revenue	452.57
Total Pacific, Gas & Electric			<u>452.57</u>
Petty Cash			
	03/05/2012	66090 · Office Expense	16.26
	03/05/2012	66170 · Travel, Meetings & Training	84.77
	03/05/2012	64100 · Operating Supplies	3.88
Total Petty Cash			<u>104.91</u>
Preferred Benefit			
	03/01/2012	66020 · Employee Benefits	2,720.92
	03/01/2012	21074 · Health Insurance Payable	101.36
Total Preferred Benefit			<u>2,822.28</u>
Rauch Communication Consultants. Inc.			
	02/20/2012	67500 · Household Hazardous Waste	667.50
	02/20/2012	66123 · O/S Contractual	1,675.76
Total Rauch Communication Consultants. Inc.			<u>2,343.26</u>
RMC Water & Environment, Inc.			
	02/22/2012	64160 · Research & Monitoring	963.75
Total RMC Water & Environment, Inc.			<u>963.75</u>
SRS Private Investigations, Inc			
	02/17/2012	66090 · Office Expense	120.00
Total SRS Private Investigations, Inc			<u>120.00</u>
T-Mobile			
	03/01/2012	65193 · Telephone	23.16
Total T-Mobile			<u>23.16</u>
Teeters & Schacht Auto Glass & Upholstery			
	02/17/2012	65150 · Repairs & Maintenance	381.38
	02/22/2012	60150 · Repairs & Maintenance	489.25
Total Teeters & Schacht Auto Glass & Upholstery			<u>870.63</u>
U.S. Bank Card (1)(Bev)			
	02/01/2012	66060 · Gasoline & Oil	39.49
	02/01/2012	66170 · Travel, Meetings & Training	497.72
Total U.S. Bank Card (1)(Bev)			<u>537.21</u>
U.S. Bank Card (2)(June)			
	03/01/2012	66090 · Office Expense	149.54
	03/01/2012	66150 · Repairs & Maintenance	81.64
Total U.S. Bank Card (2)(June)			<u>231.18</u>
Unicorn Group			
	03/09/2012	66123 · O/S Contractual	3,778.40
Total Unicorn Group		--Postage for mailing	<u>3,778.40</u>

Novato Sanitary District
Operating Ck Register Detail
March 12, 2012

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
United Parcel Service			
	02/25/2012	66090 · Office Expense	18.44
Total United Parcel Service			<u>18.44</u>
Veolia Water North America, Inc.			
	03/01/2012	61000-5 · Gas & Electricity	42,411.00
	03/01/2012	61000-1 · Fixed Fee	7,154.00
Total Veolia Water North America, Inc.			<u>49,565.00</u>
Verizon			
	02/28/2012	65193 · Telephone	602.42
Total Verizon			<u>602.42</u>
Verizon California			
	02/16/2012	65193 · Telephone	892.97
	02/16/2012	61000-4 · Water/Permits/Telephone	282.02
	02/16/2012	66193 · Telephone	900.23
Total Verizon California			<u>2,075.22</u>
Vision Service Plan			
	03/01/2012	66020 · Employee Benefits	545.24
Total Vision Service Plan			<u>545.24</u>
VWR International Inc.			
	02/28/2012	64100 · Operating Supplies	563.39
Total VWR International Inc.			<u>563.39</u>
Wesco Distribution			
	02/20/2012	63150 · Repairs & Maintenance	212.89
Total Wesco Distribution			<u>212.89</u>
Zenith Instant Printing, Inc.			
	02/18/2012	66090 · Office Expense	230.56
Total Zenith Instant Printing, Inc.			<u>230.56</u>
Total expenditures			<u><u>131,933.37</u></u>

03/09/12

Novato Sanitary District Capital Projects Check Register

For March 12, 2012

Date	Num	Name	Credit
Mar 12, 12			
3/12/2012	2263	V&A Consulting Engineers	18,901.00
3/12/2012	2254	Arntz Builders, Inc.	5,300.00
3/12/2012	2258	North Marin Water District Jo...	3,792.11
3/12/2012	2256	Edd Clark & Associates, Inc.	3,560.45
3/12/2012	2260	Pareto Co.	3,245.00
3/12/2012	2257	Exponent, Inc.	1,257.50
3/12/2012	2262	U.S. Bank Card (2)(June)	884.95
3/12/2012	2261	Roy's Sewer Service, Inc.	300.00
3/12/2012	2255	Comet Building Maintenance,...	152.50
3/12/2012	2259	Pacific, Gas & Electric	112.30
Mar 12, 12			37,505.81

Novato Sanitary District
Capital Projects Ck Register Detail
 March 12, 2012

	<u>Date</u>	<u>Account</u>	<u>Amount</u>
Arntz Builders, Inc.			
	02/29/2012	72403 · Pump Station Rehabilitation	5,300.00
Total Arntz Builders, Inc.			<u>5,300.00</u>
Comet Building Maintenance, Inc.			
	02/21/2012	73002 · WWTP Up - Cont D - Rec- ARRA Fu	152.50
Total Comet Building Maintenance, Inc.			<u>152.50</u>
Edd Clark & Associates, Inc.			
	01/31/2012	72706 · 2008 Collection System Improv	3,560.45
Total Edd Clark & Associates, Inc.			<u>3,560.45</u>
Exponent, Inc.			
	02/21/2012	72609 · WWTP Upgrade - Contract B	1,257.50
Total Exponent, Inc.			<u>1,257.50</u>
North Marin Water District Jobsite			
	02/15/2012	72403 · Pump Station Rehabilitation	3,792.11
Total North Marin Water District Jobsite			<u>3,792.11</u>
Pacific, Gas & Electric			
	02/23/2012	72609 · WWTP Upgrade - Contract B	112.30
Total Pacific, Gas & Electric			<u>112.30</u>
Pareto Co.			
	02/22/2012	72403 · Pump Station Rehabilitation	3,245.00
Total Pareto Co.			<u>3,245.00</u>
Roy's Sewer Service, Inc.			
	02/24/2012	72609 · WWTP Upgrade - Contract B	300.00
Total Roy's Sewer Service, Inc.			<u>300.00</u>
U.S. Bank Card (2)(June)			
	03/01/2012	72805 · Annual Trtmt Plnt/Pump St Impr	884.95
Total U.S. Bank Card (2)(June)			<u>884.95</u>
V&A Consulting Engineers			
	02/24/2012	72609 · WWTP Upgrade - Contract B	18,901.00
Total V&A Consulting Engineers			<u>18,901.00</u>
TOTAL			<u><u>37,505.81</u></u>

03/09/12

Novato Sanitary District Board Check Register

For February 2012

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Credit</u>
Mar 9, 12			
3/9/2012	3135	Mariani, Jean M	715.05
3/9/2012	3134	Di Giorgio, Michael	706.60
3/9/2012	3136	Peters, A. Gerald	586.86
3/9/2012	1969	Long, William C	556.68
3/9/2012	3137	Welsh, Dennis J	486.87
Mar 9, 12			<u><u>3,052.06</u></u>

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: Approval of the Canyon Green Subdivision Plans Sewer Main Extension Plan.	MEETING DATE: March 12, 2012 AGENDA ITEM NO.: 4 b
RECOMMENDED ACTION: Staff recommends approval of sewer main extension plans for the Canyon Green Subdivision project.	
SUMMARY AND DISCUSSION: <p>This agenda item is for plan approval for Canyon Green Subdivision - Hill Road SME construction plans. The project proposes to construct twenty five single family homes on the old Novato Community Hospital site, located at the intersection of Hill Road and Canyon Road.</p> <p>District staff has directed the project designer to replace all of the District's sewer mains adjacent to the project parcel within Hill and Canyon Roads. The project will replace 1,143 L.F. of 8" VCP sewer main that was installed in 1964. Five District manholes will also be replaced.</p> <p>The project will construct five additional new manholes and 525 L.F. of new 8" PVC sewer main on site.</p> <p>The items for sewer main extension construction are as follows.</p> <p>5 EA. Standard Manholes 525 L.F. of 8" PVC, 522 L.F. of 4" PVC Lateral Sewer</p> <p>The items for sewer main replacement are as follows.</p> <p>5 EA. Standard Manholes 1,143 L.F. of 8" PVC, Reconnection of 7 existing Lateral Sewers</p>	
ALTERNATIVES: Do not approve the plans for construction.	
BUDGET INFORMATION: Increase of District's assets by \$90,625.00	
DEPT.MGR.:	MANAGER:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Accounts Receivable Aging Summary	MEETING DATE: March 12, 2012 AGENDA ITEM NO.: 4 c.
RECOMMENDED ACTION: Information Only	
SUMMARY AND DISCUSSION: <p>The attached Accounts Receivable Summary shows the following receivables:</p> <p><u>1 – 45 days - \$162,730.03:</u> Not delinquent.</p> <p><u>46 - 90 days - \$0.00:</u> No outstanding balances for this time frame.</p> <p><u>90+ days - \$23,656.00:</u> \$16,128.40 is for Used Oil and Beverage Grant fees. Although the District administers the program through Dee Johnson, AB 939 consultant, the State will only reimburse fees for this program to cities. The city is billed by Dee Johnson and the City of Novato, in turn, reimburses the District. \$6,839.80 is for septic tank hauling fees, \$6,584.33 of which is for one hauler who is no longer permitted to use District dumping facilities until the debt is clear. This hauler has started making monthly payments at the rate of \$1,000/month. So far, the debt has been reduced by \$2,000. Ranch lease payments have been satisfied and therefore do not appear on this Accounts Receivable Summary.</p> <p><u>Summary:</u> Receivables over 90 days old amount to \$23,656.00. This represents 0.264% of the District's total budgeted operating revenue of \$8,954,956.00 for fiscal year 2011/12.</p>	
ALTERNATIVES: N/A – Information only.	
BUDGET INFORMATION: N/A	
DEPT.MGR.:	MANAGER:

1:02 PM
03/05/12

Novato Sanitary District A/R Aging Summary As of March 5, 2012

Name	Description	<u>Current</u>	<u>46 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
AT & T	Semi-Annual Sewer Service Charges	3,049.20	0.00	0.00	3,049.20
Biomarin	Non-Domestic User Monitoring Fees	10,973.94	0.00	0.00	10,973.94
Buck Institute	Non-Domestic User Monitoring Fees	332.07	0.00	0.00	332.07
City of Novato	Used Oil/Beverage Grants	13,943.00	0.00	16,128.40	30,071.40
Indian Valley Golf Course	Semi-Annual Sewer Service Charges	3,719.10	0.00	0.00	3,719.10
Joes Farmers Septic	Septic Tank Hauling	0.00	0.00	6,584.33	6,584.33
Marin County Free Library	Semi-Annual Sewer Service Charges	1,501.50	0.00	0.00	1,501.50
Marin County Housing Auth	Semi-Annual Sewer Service Charges	9,240.00	0.00	0.00	9,240.00
Marin Municipal Water District	Semi-Annual Sewer Service Charges	6,375.60	0.00	0.00	6,375.60
North Marin Water District	Semi-Annual Sewer Service Charges	3,475.59	0.00	0.00	3,475.59
Novato Charter School	Semi-Annual Sewer Service Charges	1,918.22	0.00	0.00	1,918.22
Novato Community Hospital	Semi-Annual Sewer Service Charges	21,023.31	0.00	0.00	21,023.31
Novato Disposal	Quarterly AB 939 Fees	74,396.50	0.00	-160.00	74,236.50
P,G & E	Semi-Annual Sewer Service Charges	113.19	0.00	0.00	113.19
State of California	Annual Use Fuel Tax Refund	0.00	0.00	847.80	847.80
USCG	Monthly Sewer Service Charges	11,973.50	38.50	0.00	12,012.00
Verizon California-	Semi-Annual Sewer Service Charges	695.31	0.00	0.00	695.31
Vineyard Septic	Septic Tank Hauling	0.00	0.00	255.47	255.47
TOTAL		<u>162,730.03</u>	<u>38.50</u>	<u>23,656.00</u>	<u>186,424.53</u>

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Consent Calendar: April and May meeting dates	MEETING DATE: March 12, 2012
	AGENDA ITEM NO.: 4 d.
RECOMMENDED ACTION: Approve meeting schedule: April 9th and 23 rd , May 14 and Tuesday, May 29th.	
SUMMARY AND DISCUSSION: The second Monday in May is Memorial Day so I am suggesting that we schedule the second May Board of Directors meeting on Tuesday, May 29 th .	
ALTERNATIVES: Choose an alternate date or cancel the second May meeting.	
BUDGET INFORMATION: No impact	
DEPT.MGR.:	MANAGER:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

**TITLE: Wastewater Facility Upgrade Project:
Odor Control, Landscaping & Noise**

MEETING DATE: March 12, 2012

AGENDA ITEM NO. : 5 a.

SUMMARY AND DISCUSSION:

The District's current activities to address neighborhood concerns about odors, noise, and visual screening are updated below. Neighborhood comments and complaints since the last board meeting are summarized in the attached tables.

Biofilter Retrofit

All of the covered facilities were ducted through the filters by the completion date of February 29th, Work on the P-traps was completed as of March 9th. The testing period will be between April 1st and May 1st. Air flow is excellent and odors are significantly reduced .

Health Effects

Dr. Scofield is scheduled to conduct a workshop on potential health effects from the odor emissions on Wednesday, March 21, 2012 at 6:30 PM in the District boardroom.

Visual Screening

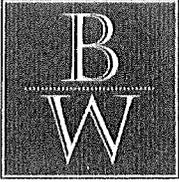
A dozen Pacific Wax Myrtle trees, a native tree, have been planted to improve screening along Lea Drive. Vines were planted just inside the fence to provide additional screening. The new landscaping will be irrigated.

Noise

Fan noise has been reduced as of February 23rd due to lower air pressures and a reduced number of blowers. Veolia installed temporary sound walls around the headworks blower resulting in additional reduction in noise. A failing motor on the primary clarifier drive caused additional noise for a couple of days before it was replaced on March 8th.

DEPT. MGR. :

MANAGER'S APPROVAL:



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Item: 6b.
1889 Alcatraz Avenue
Berkeley, CA 94703
510 653 3399 fax: 510 653 3769
e-mail: bwa@bartlewells.com

TO: Beverly James, General Manager
Novato Sanitary District

FROM: Tom Gaffney

DATE: March 7, 2012

SUBJ: Financing plan update

The District has requested Bartle Wells Associates to update the financing plan to finance the District's capital improvement program as well as provide funding for ongoing operation and maintenance and replacement of existing collection system, pump station and reclamation facilities. This update includes the latest information on borrowing costs, capital costs, replacement costs, and operating expenses. The accompanying tables summarize the plan for ongoing District financing and show the potential impacts to future sewer service charges.

Table 1 - Current operation and maintenance expenses. This table shows NSD's actual expenses for 2010/11 and budgeted expenses for fiscal years 2011/12 and 2012/13. These figures are used to project future such expenses in a later table. Note that during the current year a payment of over \$1.2 million was used to retire a CalPERS Side Fund payoff. The side fund was a form of loan for underfunded pension costs at an interest rate of 7.75%. This payoff allows the District to save considerable interest costs over the following eleven years.

Table 2 - Capital expenditures. This table shows the District's capital improvement and major replacement expenses for five years. Including the current year, capital costs total nearly \$30 million. This amount does not include a new lateral sewer replacement program or annual costs related to retiring the outstanding COP issue or SRF loan. For FY 2016/17 and beyond, the financing plan is developed to allow the District to finance about \$2.5 million per year on a pay-as-you-go basis.

Table 3 - State Revolving Fund Loan. Nearly \$82 million of treatment plant project costs were funded by a low-interest SRF loan. These loans are an optimal financing method. Repayment of the loans is over 20 years at 2.4% interest. Annual loan payments begin this year and continue through FY 2030/31.

Table 4 - Wastewater Certificates of Participation. In addition to the SRF loan, the District sold \$21.75 million of COP's to finance collection system, pump station and additional treatment plant improvements. This issue sold for an average interest rate of 4.11% and will be fully retired in twenty years.

Table 5 - Projected operating revenues and expenses. Operating revenues and expenses are projected from their current level through FYE 2016. Expenses are

escalated at a rate of 3 percent annually. Based on the projected expenses, operating service charges are shown to increase at a nominal amount of \$9 annually. CalPERS payments of about \$118,000 annually have been eliminated by the one-time payoff during FY 2011/12.

Table 6 - Projected Capital Cash Flow. Capital expenses include capital improvements, facilities replacement, and borrowing costs. Capital improvement costs are highest in the first two years of the projection and then stabilize at about \$2.5 million annually. Borrowing costs are level at about \$7.1 million for the following nineteen years. Capital revenues include those from capital service charges, property taxes, and connection charges.

The annual capital service charge is projected to increase by \$22 next year. This increase is required to generate debt service coverage at the minimum level of 1.2 times annual debt service. After next year the capital service charge is projected to increase by \$10 annually. By FY 2015/16 the District will be able to fund about \$2.5 million of annual capital improvements on a pay-as-you-go basis. The projection is based on 50 new connections annually, which is less than previous projections. The projection also includes property tax revenues which may come under future possible appropriation because of the State's current financial situation. Loss of property tax revenues would require the District to increase capital service charges by about \$60 annually

Table 7 - Summary of Current and Projected Service Charges. The sum of required capital and operating service charges is shown in Table 7. Beginning in FY 2012/13, total annual service charges for operations and capital are projected to annually increase an estimated \$31 per equivalent dwelling unit (EDU) in FY 2012/13 and \$19/EDU in the following three years.

Service charges have remained constant for the past two years. Projected increases total about 19 percent over the six years. This is equivalent to an average of 3.2 percent over the same period. Over 59 percent of the increase is due to capital related expenses.

Table 8 – Cost Comparison with Neighboring Agencies. Novato Sanitary District will continue to have the lowest rates in Marin County even if the proposed rate increases are approved this year.

Table 1
Novato Sanitary District
Current and Projected Operating Expense

	Actual Expenditures 2010-11	Final Budget 2011-12	Preliminary Budget 2012-13
Collection	\$1,013,092	\$1,156,257	\$1,263,088
Treatment - Contract Operations	2,568,808	2,632,750	2,699,910
Reclamation	382,063	493,787	502,067
Laboratory	689,638	693,008	704,925
Pump Stations	702,446	814,148	777,972
Administration/Engineering	2,734,196	2,507,415	2,493,339
CalPERS Side Fund Payoff	0	1,215,597	0
Retiree Health Benefits	175,001	230,485	246,619
Hazardous Household Waste	307,137	360,601	373,129
Totals	\$8,572,381	\$10,104,048	\$9,061,049

Source: District Budgets

Table 2
Novato Sanitary District
Preliminary Capital Improvements Program 2011-2016 (DRAFT)

Project No.	Project Name	FY2011-12	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2011-16
72110	Drainage PS #3 & #7 Outfall Rehabilitation	-	50,000	-			50,000
72111	SCADA Phase II & IIA	20,000	20,000	20,000	20,000	20,000	100,000
72403	Pump Station Rehab. (BMK & Gormann-Rupp)	1,500,000	1,500,000	-	-	-	3,000,000
72507a	Stonetree Recycled Water	5,000	5,000				10,000
72508	N. Bay Water Recycling Auth.	50,000	50,000	50,000	50,000	50,000	250,000
72509	NTP Soil & Groundwater Invest.	5,000	5,000	-	-	-	10,000
72604	Laboratory Improvements	60,000	10,000	5,000	5,000	5,000	85,000
72607	WWTP Upgrade - Contract A1	15,000	10,000	10,000	-	-	35,000
72608	WWTP Upgrade - Contract A2	10,000	10,000	10,000	-	-	30,000
72609	WWTP Upgrade - Contract B	400,000	50,000	20,000	20,000	20,000	510,000
72611	Bayside Sewer	10,000	25,000	25,000	5,000	3,000	68,000
72612	Southgate Sewer	3,000	10,000	20,000	3,000	3,000	39,000
72706	Collection System Improvements ⁽¹⁾	2,000,000	2,000,000	2,000,000	2,000,000	1,500,000	9,500,000
72707	Hamilton Wetlands/Outfall monitoring & planning	5,000	5,000	5,000	5,000	5,000	25,000
72708	Cogeneration	50,000	700,000	150,000	50,000	10,000	960,000
72801	Annual Minor Projects	25,000	25,000	25,000	25,000	25,000	125,000
72802	Annual Sewer Adj. for City Projects	25,000	30,000	25,000	25,000	25,000	130,000
72803	Annual Collection System Repairs (Spot Repairs)	200,000	200,000	200,000	200,000	200,000	1,000,000
72804	Annual Reclamation Facilities Improvements	400,000	250,000	150,000	150,000	150,000	1,100,000
72805	Annual Treatment Plant & Pump Station Improvements	150,000	150,000	150,000	150,000	150,000	750,000
72808	Strategic Plan Update	50,000	-	-	-	-	50,000
73001	WWTP Facilities Upgrade - Contract C	800,000	3,500,000	250,000	50,000	10,000	4,610,000
73002	WWTP Facilities Upgrade - Contract D - Recycled Water Project	6,500,000	500,000	20,000	10,000	10,000	7,040,000
73003	Admin Building Upgrades	50,000	250,000	-	-	-	300,000
	TOTALS	12,333,000	9,355,000	3,135,000	2,768,000	2,186,000	29,777,000

(1) starting FY11-12, includes an allowance of \$1 million for replacing 4-inch decant line from reclamation to Deer Island, and 4-inch digested sludge transfer line from NTP to reclamation

Table 3
Novato Sanitary District
SRF Loan Payments
Loan Amount - \$81,973,200
Term - 20 years; 2.4% Interest

	Date	Outstanding Principal	Interest Payment	Principal Payment	Total Annual Payment
1	FY 2011/12	\$81,973,200	\$6,064,321	\$0	\$6,064,321
2	FY 2012/13	81,973,200	1,967,000	3,456,064	5,423,064
3	FY 2013/14	78,517,136	1,884,000	3,539,064	5,423,064
4	FY 2014/15	74,978,072	1,799,000	3,624,064	5,423,064
5	FY 2015/16	71,354,008	1,712,000	3,711,064	5,423,064
6	FY 2016/17	67,642,944	1,623,000	3,800,064	5,423,064
7	FY 2017/18	63,842,880	1,532,000	3,891,064	5,423,064
8	FY 2018/19	59,951,816	1,439,000	3,984,064	5,423,064
9	FY 2019/20	55,967,752	1,343,000	4,080,064	5,423,064
10	FY 2020/21	51,887,688	1,245,000	4,178,064	5,423,064
11	FY 2021/22	47,709,624	1,145,000	4,278,064	5,423,064
12	FY 2022/23	43,431,560	1,042,000	4,381,064	5,423,064
13	FY 2023/24	39,050,496	937,000	4,486,064	5,423,064
14	FY 2024/25	34,564,432	830,000	4,593,064	5,423,064
15	FY 2025/26	29,971,368	719,000	4,704,064	5,423,064
16	FY 2026/27	25,267,304	606,000	4,817,064	5,423,064
17	FY 2027/28	20,450,240	491,000	4,932,064	5,423,064
18	FY 2028/29	15,518,176	372,000	5,051,064	5,423,064
19	FY 2029/30	10,467,112	251,000	5,172,064	5,423,064
20	FY 2030/31	5,295,048	127,000	5,296,064	5,423,064

Table 4
Novato Sanitary District
Wastewater Certificates of Participation - 2011
\$21,750,000

Payment Date	Principal	Rate	Interest	Period Debt Svc	Fiscal Year Debt Svc
02/01/12					
08/01/12			442,848.75	442,848.75	
02/01/13	800,000	3.000%	442,848.75	1,242,848.75	1,685,697.50
08/01/13			430,848.75	430,848.75	
02/01/14	830,000	3.000%	430,848.75	1,260,848.75	1,691,697.50
08/01/14			418,398.75	418,398.75	
02/01/15	855,000	3.000%	418,398.75	1,273,398.75	1,691,797.50
08/01/15			405,573.75	405,573.75	
02/01/16	885,000	4.000%	405,573.75	1,290,573.75	1,696,147.50
08/01/16			387,873.75	387,873.75	
02/01/17	905,000	4.000%	387,873.75	1,292,873.75	1,680,747.50
08/01/17			369,773.75	369,773.75	
02/01/18	925,000	4.000%	369,773.75	1,294,773.75	1,664,547.50
08/01/18			351,273.75	351,273.75	
02/01/19	945,000	4.000%	351,273.75	1,296,273.75	1,647,547.50
08/01/19			332,373.75	332,373.75	
02/01/20	970,000	4.000%	332,373.75	1,302,373.75	1,634,747.50
08/01/20			312,973.75	312,973.75	
02/01/21	1,000,000	4.000%	312,973.75	1,312,973.75	1,625,947.50
08/01/21			292,973.75	292,973.75	
02/01/22	1,035,000	4.000%	292,973.75	1,327,973.75	1,620,947.50
08/01/22			272,273.75	272,273.75	
02/01/23	1,065,000	4.000%	272,273.75	1,337,273.75	1,609,547.50
08/01/23			250,973.75	250,973.75	
02/01/24	1,105,000	4.000%	250,973.75	1,355,973.75	1,606,947.50

Table 4
Novato Sanitary District
Wastewater Certificates of Participation - 2011
\$21,750,000

08/01/24			228,873.75	228,873.75	
02/01/25	1,145,000	4.000%	228,873.75	1,373,873.75	1,602,747.50
08/01/25			205,973.75	205,973.75	
02/01/26	1,190,000	4.000%	205,973.75	1,395,973.75	1,601,947.50
08/01/26			182,173.75	182,173.75	
02/01/27	1,235,000	4.250%	182,173.75	1,417,173.75	1,599,347.50
08/01/27			155,930.00	155,930.00	
02/01/28	1,285,000	4.250%	155,930.00	1,440,930.00	1,596,860.00
08/01/28			128,623.75	128,623.75	
02/01/29	1,340,000	4.500%	128,623.75	1,468,623.75	1,597,247.50
08/01/29			98,473.75	98,473.75	
02/01/30	1,395,000	4.500%	98,473.75	1,493,473.75	1,591,947.50
08/01/30			67,086.25	67,086.25	
02/01/31	1,455,000	4.700%	67,086.25	1,522,086.25	1,589,172.50
08/01/31			32,893.75	32,893.75	
02/01/32	1,385,000	4.750%	32,893.75	1,417,893.75	1,450,787.50
Totals	21,750,000		10,736,377.50	32,486,377.50	32,486,377.50

Table 5
Novato Sanitary District
Operation and Maintenance
Projected Revenues and Expenses

	Prelim. Budget	Projected		
	2012/13	2013/14	2014/15	2015/16
Number of equivalent connections	29,830	29,880	29,930	29,980
New equivalent connections	50	50	50	50
Annual operating service charge	\$283	\$292	\$301	\$310
Marin County's charge per account	\$2	\$2	\$2	\$2
Total annual operating service charge	\$285	\$294	\$303	\$312
Operating service charge increase	\$9.00	\$9.00	\$9.00	\$9.00
Beginning total operating funds balance	\$8,676,000	\$8,809,000	\$9,034,000	\$9,271,000
Operating revenues				
Operating service charges	\$8,442,000	\$8,725,000	\$9,009,000	\$9,294,000
Other revenues - 1% increase	737,000	744,000	751,000	759,000
Interest @ 1.0%	<u>15,000</u>	<u>88,000</u>	<u>90,000</u>	<u>93,000</u>
Total operating revenues	\$9,194,000	\$9,557,000	\$9,850,000	\$10,146,000
Operating expenses (1)				
Collection	\$1,263,000	\$1,301,000	\$1,340,000	\$1,380,000
Treatment - Contract Operations	2,700,000	2,781,000	2,864,000	2,950,000
Reclamation	502,000	517,000	533,000	549,000
Laboratory	705,000	726,000	748,000	770,000
Pump Stations	778,000	801,000	825,000	850,000
Administration/Engineering	2,493,000	2,568,000	2,645,000	2,724,000
CalPERS Side Fund Payoff	0	0	0	0
Retiree Health Benefits	247,000	254,000	262,000	270,000
Hazardous Household Waste	<u>373,000</u>	<u>384,000</u>	<u>396,000</u>	<u>408,000</u>
Total operating expenses	\$9,061,000	\$9,332,000	\$9,613,000	\$9,901,000
Net annual revenues	\$133,000	\$225,000	\$237,000	\$245,000
Ending fund balance	\$8,809,000	\$9,034,000	\$9,271,000	\$9,516,000
Debt service coverage				

1 - Operating expenses projected to increase by about 3% annually

Table 6
Novato Sanitary District
Projected Capital Cash Flow

	Prelim. Budget	Projected		
	2012/13	2013/14	2014/15	2015/16
Number of equivalent connections	29,830	29,880	29,930	29,980
New equivalent connections	50	50	50	50
Annual capital service charge	\$210	\$220	\$230	\$240
Capital service charge increase	\$22	\$10	\$10	\$10
Connection charge - 4% increase	\$8,950	\$9,310	\$9,680	\$10,070
Beginning capital fund balance	\$17,154,000	\$9,112,000	\$7,804,000	\$7,184,000
Capital revenues				
Capital service charges	\$6,144,000	\$6,574,000	\$6,884,000	\$7,195,000
Property taxes @ 2% after 2011	1,775,000	1,811,000	1,847,000	1,884,000
Connection charges	448,000	466,000	484,000	504,000
Interest income @ 1.0%	25,000	91,000	78,000	72,000
Other revenues	<u>30,000</u>	<u>30,000</u>	<u>30,000</u>	<u>30,000</u>
Annual capital revenue	8,422,000	8,972,000	9,323,000	9,685,000
Reclamation grant proceeds				
Total annual funding	\$8,422,000	\$8,972,000	\$9,323,000	\$9,685,000
Capital expenses				
Treatment plant	\$4,225,000	\$460,000	\$230,000	\$190,000
Collection system	2,265,000	2,270,000	2,233,000	1,731,000
Pump stations	1,550,000	0	0	0
Reclamation system	310,000	205,000	205,000	205,000
Lateral program		30,000	60,000	90,000
Other projects	<u>1,005,000</u>	<u>200,000</u>	<u>100,000</u>	<u>60,000</u>
Subtotal capital projects	9,355,000	3,165,000	2,828,000	2,276,000
SRF Loan pmts (Table 3)	5,423,000	5,423,000	5,423,000	5,423,000
COP debt service (Table 4)	1,686,000	1,692,000	1,692,000	1,696,000
Total annual capital expense	\$16,464,000	\$10,280,000	\$9,943,000	\$9,395,000
Net annual revenues	-\$8,042,000	-\$1,308,000	-\$620,000	\$290,000
Ending fund balance	\$9,112,000	\$7,804,000	\$7,184,000	\$7,474,000
Debt service coverage	1.203	1.293	1.344	1.395

Table 7
Novato Sanitary District
Summary of Projected Sewer Service Charges
Annual Cost per Equivalent Dwelling Unit

	Current	Budget	Projected		
	2011/12	2012/13	2013/14	2014/15	2015/16
Operating	\$276	\$285	\$294	\$303	\$312
% increase	0.0%	3.3%	3.2%	3.1%	3.0%
Capital	188	210	220	230	240
% increase	0.0%	11.7%	4.8%	4.5%	4.3%
Total	\$464	\$495	\$514	\$533	\$552
Annual increase		\$31	\$19	\$19	\$19
% increase	0.0%	6.7%	3.8%	3.7%	3.6%

Table 8
Novato Sanitary District
Annual Sewer Service Charges per Equivalent Dwelling Unit
Cost Comparison with Neighboring Agencies

AGENCY	2011-12	2012-13	2013-14	2014-15	2015-16
Sanitary District No. 5 - Belvedere	\$1,748	\$1,836			
City of Santa Rosa	\$1,098				
Tamalpais Community Service District	\$1,013				
City of Petaluma	\$966				
City of Larkspur	\$864				
Sanitary District No. 5 - Tiburon	\$717	\$825			
City of Rohnert Park	\$679				
Sanitary District No. 1 - Ross Valley	\$638				
San Rafael Sanitation District	\$638				
Sausalito-Marín City Sanitary Dist - Marin City	\$616	\$701			
City of Mill Valley	\$600	\$677			
Las Gallinas Valley Sanitary District	\$590				
Sausalito-Marín City Sanitary District - Sausalito	\$563	\$647			
Town of Corte Madera (S.D. #2)	\$498				
NOVATO SANITARY DISTRICT	\$464	\$495	\$514	\$533	\$552

NOVATO SANITARY DISTRICT BOARD MEETING
March 12, 2012

Solid and Hazardous Waste Programs Update

1. 2011 Program Accomplishments, Zero Waste Programs and 2012 Program Projections
2. Household Hazardous Waste Programs Summary Report
3. Zero Waste Programs Calendar
4. 2011 Disposal and Diversion reports

NOVATO SANITARY DISTRICT BOARD MEETING

March 12, 2012

Update on Solid and Hazardous Waste Programs

Program Accomplishments

- Household and Small Business Hazardous Waste & E-Waste Programs
 - Increased HHW participation by 11% from FY 2010/11 – 80% increase since 2006
 - Waste collected – 440,713 lbs.
 - Paint – 123,000 lbs – 28% of all waste collected
 - Universal Waste – fluorescents, E-Waste & batteries – 55% of all waste collected
 - E-Waste event participation decreased by 15% from 2010
 - Multiple sites for collection of fluorescent tubes & household batteries
 - Medications/pharmaceuticals collected at Novato police Dept. & Costco pharmacy; Sharps/syringes at 8 Novato locations
 - Increased business participation by 63% and assisted with waste audits
- Outreach and Public Information
 - Updated Guides and fliers with current information
 - Participated in public community events promoting programs including: Novato Chamber Business Fair; Farmer's Market; 4th of July parade; Chamber of Commerce Business Fair; Tour of Novato FunFair; Art and Wine Festival; Rancho School tour of HHW Facility and Recycling Center; Pollution Prevention Week
 - Updated District and Novato Disposal websites with HHW, zero waste & waste reduction information
- AB939 Solid Waste Diversion and Zero Waste Programs
 - Maintained Committee administration and support and special reports
 - Attended County AB939 Local Task Force & JPA meetings
 - Compiled data for 2011 disposal/diversion reports – diversion rate at 55%
 - Worked with Novato Disposal on Zero Waste programs

Zero Waste Programs and Calendar/Timetable (Attached)

Program Projections

- Household Hazardous Waste & E-Waste Programs
 - Maintain HHW programs & 2 annual E-Waste events, reducing days from 4 to 3
 - Prepare feasibility study for move of HHW Facility
 - Contract with Paintcare for free transport and disposal of paint collected at HHW facility
- Outreach and Public Information
 - Participate in at least 10 outreach events in 2012
 - Update websites and increase outreach in social media sites, such as Facebook
 - Increase business outreach regarding hazardous waste disposal
- AB939 & Solid Waste Diversion programs
 - Maintain disposal/diversion and per capita disposal reports
 - Continue Committee support; follow legislation & attend JPA and Task Force meetings
 - Develop commercial/multifamily recycling ordinance; conduct outreach & education on mandatory recycling to all multifamily & commercial properties as required by AB32/AB341

SUMMARY REPORT - 2011 NOVATO HAZARDOUS WASTE PROGRAM FOR HOUSEHOLDS AND BUSINESSES (CESQG'S)

Number of Participants –		Waste Collected (in lbs)	
• HHW Facility –	2,344	• HHW & Recycle Facility -	267,173
• E-Waste Events –	<u>1,971</u>	• E-Waste Events	<u>113,273</u>
Total Program Participants –	4,315	Total Waste Collected	440,713

This report summarizes information presented in the **2011 Final Report of Novato Hazardous Waste Programs for Households and Small Businesses** that was presented to the Solid and Hazardous Waste Committee at their meeting on February 7, 2012. This year marked the tenth year of operation for Novato's permanent household hazardous waste facility. The facility is open on the first and third consecutive Sundays and Mondays of each month. In 2011 the facility served a total of 2,344 Novato residents, **an 11.2% increase from 2010**. Since 2006, participation has increased by nearly 80%. In addition, in 2011 36 Novato businesses participated in the business hazardous waste program for conditionally exempt small quantity generators (CESQG), a 63% increase from 2010. Novato also conducted two *E-Waste* events in 2011, serving 1,971 Novato residents.

Since 1996, the household hazardous waste and E-Waste programs sponsored by the Novato Sanitary District have served 38,866 participants and collected over 4,170,043 pounds of waste. In addition, a total of 345 businesses have participated in these programs since 1996. (See Comparative analysis spread sheet)

Waste Collected

A total of 440,713 pounds of waste was collected in 2011. Of this, 28% of the waste was latex or oil-base paints and 55% was Universal Waste – E-Waste, fluorescent tubes & CFL's and household batteries. (See 2011 HHW & E-Waste collected chart)

The chart below compares participation and the amount of waste collected since 1996.

Year	Number of Vehicles	Days Open	Waste Collected (lbs)	Lbs. per vehicle	55 Gal. Drums	< 55 Gal. Drums	Cubic Yard Boxes	Paint Boxes
1996	669	2	28,878	43	101	9	25	N/A
1997	1,159	4	58,602	51	179	22	51	N/A
1998	1,245	4	78,150	63	225	16	47	N/A
1999	1,396	4	104,076	75	252	7	38	2.5 layers
2000	1,198	4	98,795	82	177	15	18	5 layers
2001	1,243	4	113,717	91	228	15	18	5 layers
2002	1,380	32	182,518	132	242	0	11	4 layers
2003	2,253	55	316,685	140	287	0	17	8 layers
2004	2,943	53	356,685	121	307	2	18	8 layers
2005	2,662	53	321,164	121	247	3	18	8 layers
2006	2,625	51	311,230	119	282	3	13	4 layers
2007	3,534	58	386,331	109	214	0	18	8 layers
2008	3,665	56	425,950	116	303	4	20	4 layers
2009	4,139	58	502,164	121	341	25	21	8 layers
2010	4,440	58	444,943	100	340	21	21	4 layers
2011	4,315	58	440,713	102	328	16	22	4 layers

** 2003 - 2011 data includes the *E Waste* events conducted at the Recycling Center. 2008 - 2011 also includes all antifreeze, latex paint, car batteries, motor oil, oil filters, fluorescent tubes & bulbs and household batteries collected at both the BOP and the HHW facility

Publicity and Outreach

Publicity and outreach included the following:

- Household and Small Business Hazardous Waste hotlines
- Newspaper ads
- Fliers and mailers
- Newsletters – Novato Disposal and Sanitary District
- Web sites

Costs

HHW Facility contractor costs for 2011, including labor, set-up and transport and disposal of the waste amounted to \$200,699.27 – a 7% increase from 2010. Labor and materials costs totaled \$89,911.37 (45%) and waste disposal costs, \$114,197.45. (55%). The cost per pound of HHW waste continues to emphasize the cost savings of operating a permanent facility, where waste can be accumulated and shipped off site every couple of months, rather than at each individual event.

E-Waste event costs for 2011 totaled \$13,607.03 - 31% increase from events in 2010. This is due to the significant reduction in CRT reimbursable waste received. In 2011, CRT reimbursement paid to Novato Disposal decreased by 36% from 2010, while printing, mailing and labor costs held steady.

Recommendations

General recommendations and actions for future HHW programs in 2012 include:

- Maintain E-waste events; reduce number of days of each event from 4 to 3
- Contract with Paintcare to collect paint at the HHW facility at no cost.
- Complete the feasibility study to prepare for siting a new HHW facility
- Expand outreach and collection opportunities to small businesses
- Increase outreach in social media sites, events and electronic media

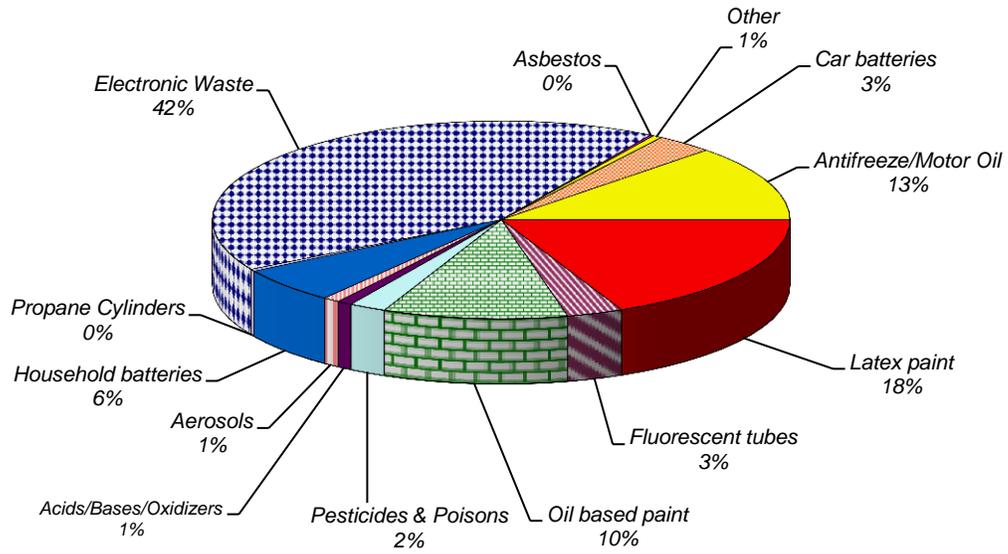
**NOVATO HOUSEHOLD HAZARDOUS WASTE AND E-WASTE EVENTS
COMPARATIVE ANALYSIS**

	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003*</u>	<u>2004*</u>	<u>2005*</u>	<u>2006*</u>	<u>2007*</u>	<u>2008*</u>	<u>2009*</u>	<u>2010*</u>	<u>2011*</u>	
PARTICIPANTS																	
# of vehicles	669	1,159	1,245	1,396	1,198	1,243	1,380	2,253	2,943	2,662	2,625	3,534	3,665	4,139	4,440	4,315	
TOTAL WASTE COLLECTED	28,878	58,602	78,150	104,076	98,795	113,117	182,518	316,685	356,757	321,164	311,230	382,331	425,950	502,164	444,943	440,713	
Pounds per vehicle	43	51	63	75	82	91	132	141	121	121	119	108	116	121	100	102	
# of Drums																	
55 Gallon	101	179	225	252	177	228	132	287	307	247	282	214	303	341	340	328	
30 Gallon	4	5	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
20 Gallon	1	8	0	0	0	0	0	0	0	2	0	0	0	12	5	0	
5 Gallon	4	9	16	7	14	14	0	0	2	1	3	0	4	3	16	16	
Cubic Yard Boxes	25	51	47	38	18	18	11	17	18	18	13	18	20	21	21	22	
Paint Boxes	N/A	N/A	N/A	2.5 layers	5 layers	5 layers	4 layers	8 layers	8 layers	8 layers	4 layers	8 layers	4 layers	8 layers	4 layers	4 layers	
WASTE MANAGEMENT METHOD(lbs)																	
Supplmntl Fuels & Recycling	22,154	47,760	67,010	87,227	84,007	90,297	167,776	287,287	325,772	292,244	282,345	350,281	390,320	464,623	407,519	403,169	
Treatment&Neutralization	1,351	1,587	3,590	5,171	4,615	6,765	5,248	7,496	7,000	6,250	4,900	4,100	4,850	5,058	4,744	5,316	
Destructive Incineration	4,206	7,321	6,215	10,428	7,573	14,855	8,044	11,002	10,335	12,420	8,285	11,850	12,015	12,913	13,690	11,278	
Landfill	1,167	1,934	800	1,250	2,600	1,200	1,450	10,900	13,650	10,250	15,700	16,100	18,765	19,570	18,990	20,950	
WASTE COLLECTED BY CATEGORY(lbs)																	
Oil-Based Paint & related	18,333	38,742	65,720	82,860	82,170	68,350	63,750	67,600	100,750	91,950	56,300	81,850	47,650	81,390	46,170	46,100	
Aerosols	1,589	3,095	4,120	5,830	3,000	4,502	3,956	4,900	4,500	3,519	2,600	2,900	2,900	2,900	4,100	3,010	
Antifreeze/Motor Oil & Filters	895	0	0	0	0	300	N/A	N/A	N/A	840	N/A	N/A	52,061	63,223	54,780	38,821	
Fluorescents	60	0	0	0	0	30	5,960	8,533	7,808	7,601	6,862	9,031	11,380	7,126	13,861	10,163	
Pesticides & Poisons	3,543	5,009	4,810	6,791	5,340	13,931	7,044	10,850	10,200	8,331	7,850	10,950	8,755	8,850	9,150	9,400	
Asbestos	770	805	800	1,250	2,600	1,200	1,450	2,500	1,750	750	900	300	700	960	790	1,000	
Latex paint	0	0	0	0	0	15,200	48,600	50,350	60,400	52,100	68,000	78,400	79,200	73,700	80,240	76,900	
Electronic Waste							22,650	141,107	141,914	134,297	145,078	176,120	157,119	199,589	185,526	210,650	
Compressed Gas Cylinders							12,160	11,854	8,730	4,686	3,655	2,050	3,150	2,490	1,490	3,570	
Household batteries							7,700	8,400	11,900	9,100	14,300	15,800	18,105	18,910	25,750	21,985	
Car batteries													39,950	36,250	14,260	13,095	
Acids/Bases/Oxidizers										6,250	4,350	4,100	4,560	5,058	4,744	5,316	
Other**	3,997	10,953	4,960	7,345	5,685	9,604	9,248	10,591	1,750	1,740	1,335	830	420	1,718	4,082	703	
COSTS																	
HHW Contractor Costs	\$39,439	\$72,461	\$87,167	\$88,096	\$69,758	\$84,294	\$118,954	\$188,397	\$183,309	\$156,563	\$121,255	\$139,647	\$147,687	\$188,601	\$186,809	\$200,699	
Labor/Materials	\$6,395	\$13,500	\$22,920	\$21,350	\$19,780	\$19,780	\$42,528	\$57,579	\$58,298	\$58,461	\$50,166	\$53,975	\$62,252	\$86,141	\$88,720	\$89,911	
Waste Disposal	\$33,044	\$58,961	\$64,247	\$66,746	\$49,978	\$64,514	\$77,507	\$138,165	\$125,010	\$93,472	\$72,120	\$89,674	\$88,161	\$107,219	\$100,973	\$114,197	
E-Waste Contractor Costs											\$13,305	\$17,403	\$14,163	\$14,011	\$10,367	\$13,637	
Labor,Printing,Mailing											\$11,374	\$23,276	\$23,610	\$24,716	\$21,307	\$19,254	
Disposal/Recycling											\$11,744	\$7,181	\$1,646	\$0	\$0	\$0	
Reimbursement(CRT's)											-\$10,735	-\$9,813	-\$13,054	-\$11,093	-\$10,705	-\$10,940	-\$7,007
Price Per Pound of Waste	\$1.14	\$1.01	\$0.82	\$0.64	\$0.51	\$0.57	\$0.42	\$0.44	\$0.35	\$0.25	\$0.23	\$0.22	\$0.18	\$0.19	\$0.20	\$0.24	
CESQG/BUSINESS PROGRAM																	
# of Businesses	2	10	8	11	20	20	19	46	31	26	20	14	25	34	22	36	

* 2003 - 2011 includes data from E-waste events; 2008 - 2011 also includes BOP data

**Other includes Sharps,PCB's,Non-RCRA and mercury-containing waste

2011 HHW & E-Waste Collected



CALENDAR/TIMETABLE FOR ZERO WASTE PROGRAMS IN FRANCHISE AGREEMENT

All items taken from Exhibits 4 through 6 of March 14, 2010 Solid Waste Franchise Agreement

EXHIBIT 4: Zero Waste Community Outreach

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
1. Novato Disposal newsletters	Casey/Bessie	2 times a year	Notify District in Fall for dates of subsequent annual newsletters	1 Zero Waste feature article in each newsletter <i>Zero waste article in spring 2012 newsletter</i>
2. Promote 20 gallon cans	Casey/Bessie	ongoing	ongoing	Promote in newsletters & bill inserts <i>Note: 20 gal can use increased 23% from 4th Q 2010</i>
3. Promote backyard compost bins	Steve/Casey/Bessie	ongoing	Spring 2012	Promote in newsletter, at events & with Backyard Compost classes run by Marin Food Scrap Coalition [or Marin Master Gardeners <i>Workshop at Senior Center Spring 2012</i>
4. 2 additional Outreach Campaigns promoting zero waste, waste reduction and/or other diversion	Steve/Casey	Submit ideas for outreach campaigns to District for approval by 4 th quarter (October) of each year for following year	October of each year to District for approval	<u>2012 Outreach Campaigns:</u> <ol style="list-style-type: none"> 1. Target 95 gallon can customers to reduce can size; 2. Target commercial customers to recycle
5. Promote commercial audits to all businesses of 4 c.y. or greater	Scott/Dee	(see AB32 item)	(see AB32 Item)	Include in AB32 promotions
6. New customer packets to include Zero Waste promotions	Casey/Bessie	ongoing	ongoing	New customer to be directed to website; packets upon request and update annually

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
<p>7. Visit all commercial businesses with 4 c.y. service or more and multi-family complexes of 5 units or more annually</p>	<p>Scott/Dee</p>	<p>(see AB32 item)</p>	<p>(see AB32 item)</p>	<p>Visits to determine service level, contact with owners of business and/or property managers; visits with multi-family also identify resident outreach methods</p>
<p>8. Participate in 10 events annually</p>	<p>Steve/Casey/Bessie/Dee</p>	<p>Submit ideas for events to District by 4th quarter of each year for following year</p>	<p>List submitted to District for 2012 events</p>	<p><u>2012 Events Committed:</u></p> <ul style="list-style-type: none"> • 4th of July Parade– • Chamber Business Fair – April 19 • An Earth Day event – April • Novato’s Clean and Green Day – April • Sr. Center Backyard Compost workshop – April/May • Novato’s Art & Wine Festival – June 9-10 • Novato Farmer’s Markets – May – Sept • Pollution Prevention Week Event – Sept • E-Waste Events handouts Spring & Fall • Rotary presentations – April/May • Sr. Center Health Fair – October • School Tour of Novato – May 5 • Hamilton Harvest Festival – Oct/Nov

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
9. Conduct annual retraining at Novato schools on recycling and Zero Waste; participate in developing Zero waste curricula for schools; offer Zero Waste & recycling programs for school assemblies	Bessie/MCC	(See Ex. 5 School Recycling and Food Waste Program)	(See Ex. 5 School Recycling and Food Waste Program)	Input from Bessie re: school list
10. Annual Waste Audit of City facilities and work with City on Zero Waste goals	Steve/Scott/Dee/City staff	Annual basis before 4 th quarter of each year	Met with City(Jason Nutt) to determine sites and dates for audits	<u>Sites & dates for 2012:</u> <ul style="list-style-type: none"> • City Offices – 2/2/12 • Senior Center – 3/28/12 • Police Dept. – 5/3/12 • Corp. Yard – Fall 2012
11. Bilingual Zero Waste recycling and diversion guides	Casey/Bessie	Initial revisions	Ongoing as needed	Update as needed
12. Paperless billing	Casey	Effective May 2011	Effective May 2011	Promote in newsletter and billing inserts
13. Interactive website with links to Zero waste & reuse options	Casey/Dee	See Exhibit 6	See Exhibit 6	
14. Billing inserts on program updates as needed	Steve/Casey	2 inserts for 2012	March 2012 & December 2012	1 billing insert in March 2012 1 billing insert yr.-end/Dec 2012
15. Annual selective route audits to gauge program success	Steve/ Scott	Annual baseline audit <i>scheduled for November 2012</i>	<i>December 2012</i>	2011 conducted route audit for billing purposes; <i>2012 route audit to determine program participation; truck routes revised to work out of Petaluma yard; program route audits now scheduled for November 2012</i>
16. Corrective action cart hangers	Steve/Route supervisor	As needed	As needed	
17. Work with regional Reuse E-network plan	Casey/Dee	Dependent on JPA	Dependent on JPA	JPA is working with Alameda & San Francisco to update regional database; ND will provide link to database on website

Exhibit 5: School Recycling and Food Waste Program outline

Bessie and MCC will be working on this item; needs more discussion and a separate calendar of goals, tasks and due dates

EXHIBIT 6: Zero Waste Program Implementation Schedule

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
Food/Green Waste Composting				
1. Single family residential	Steve/Scott/Casey/Bessie/Dee	- I.D. HOA's – Meet with HOA's	Ongoing	Additional work needed for some HOA's who don't have green carts, but have single family service; <i>Dee updating list of Novato HOA's; Scott, Dee & Bessie to meet with HOA's to provide carts for food & green waste</i>
2. Place food waste diversion stickers on food carts and notify re: food scrap pail availability	Steve/Scott/Casey	<i>Stickers mailed week of 1/20/12</i>	<i>Stickers - April 2012</i> <i>Food scrap pails ongoing</i>	Food Waste green can stickers mailed <i>January 2012</i> , asking all households to place on cart; <i>notify re: food scrap pails; NDS to do an audit in April to determine compliance;</i> food scrap pails advertised in newsletter, website,ads; distributed at Farmer's Market & Senior Center
3. Supermarket food waste diversion	Steve/Scott/Casey	<i>Schedule</i>	February 2012	<i>Working with worm composting facility to accept material</i>
4. Restaurant Food waste diversion	Steve/Scott/Casey	<i>Schedule</i>	March 2012	
5. Multi-family food waste diversion	Steve/Scott/Casey	<i>Schedule</i>	July 2012	

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
C&D Recycling, reports & enforcement				
1. Monitor C&D recycling reports & conduct outreach to contractors	Casey/Dee	Ongoing/quarterly reports	Ongoing	NDS provides quarterly C&D recycling reports to City & Dee <i>NOTE: Current City C&D diversion reported by Novato Disposal at 89.2%</i>
2. Enforce C&D recycling thru Solid Waste ordinance	Beverly/Dee	Ongoing	Ongoing	District solid waste ordinance to be enforced and updated
AB32 /AB341/AB818 Multi-family & Commercial mandated recycling				
1. Identify all multifamily & commercial sites & review recent legislation for changes to program	Beverly/Casey/Dee/Scott/Bessie	Staff meeting – 2/1/12		Novato Disposal & District staff meeting on 2/1/12 to discuss databases to obtain accurate site information; develop 1 database to include site name, address, phone, bill payer and/or site owner, level & type of service provided (garbage?; recycling?); site visits; outcome
2. Develop materials for commercial & multifamily residents	Bessie/Dee review	Current – April 2012	April 2012-	Develop materials to mail and handout
3. Make site visits	Scott/Dee/Bessie	April – June 2012	June 2012	Visits to include information on AB32 requirements, waste audit availability; Dee, Bessie & Scott will make site visits

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
4. Participate in workshops for multifamily & commercial property managers	Beverly/Dee/Scott/Bessie	Current – June 2012	May-June 2012	District will be responsible for developing workshops, with Novato Disposal's participation and assistance; contact rental housing associations assistance
5. Provide recycling containers	Steve/Scott	Current – June 2012	June 2012	Following site visits, to determine size & placements, Novato Disposal can begin delivery of recycling containers
6. Implement mandated multifamily & commercial recycling	District & Novato Disposal	July 2012	July 2012	Date mandated by legislation; District to provide ongoing outreach & education
Schools Campaign				
1. Institute food waste recycling	District & Novato Disposal	2010	2010	Program instituted in select schools
2. Monitor food waste & recycling programs; meet with teachers & students	Bessie & MCC	See EX 5	See EX 5	Separate calendar & schedule to be developed
Backyard Composting				
1. Promote backyard composting through compost bin promotion	Steve/Casey/Bessie	Ongoing	Ongoing	See Item EX 4, Item 3
Wet/Dry Route Collections				
1. Discuss feasibility of system & institute if feasible	District & Novato Disposal	2018/2020	2020	Discussions begin in 2018, with system instituted in 2020 if feasible
Discuss feasibility & diversion potential of conversion technology systems	District & Novato Disposal		2025	

ITEM/GOAL	PERSON(S) RESPONSIBLE	TIMELINE	FINAL DUE DATE	OBJECTIVES/ ADDITIONAL ITEMS
Zero waste diversion goals				
1. 60% diversion	Novato Disposal	12/31/15	12/31/15	With 60% diversion required by 12/31/2015, reports will be required within 60 days , or by end of February 2016 to District to prepare final reports
2. 70% diversion	Novato Disposal	12/31/20	12/31/20	With 70% diversion required by 12/31/2020, reports will be required within 60 days , or by end of February 2021 to District to prepare final reports
3. 80% diversion	Novato Disposal	12/31/25	12/31/25	With 80% diversion required by 12/31/2025, reports will be required within 60 days , or by end of February 2026 to District to prepare final reports

CITY OF NOVATO & DISTRICT AB939 DISPOSAL AND DIVERSION MONITORING

Haulers: Novato Disposal
Self Haulers

Reporting period: January - December 2011

A. 2011 DIVERSION	<u>1st Qtr.</u>	<u>2nd Qtr</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>	<u>TOTAL 2011</u>
Novato Disposal Recycled (Curbside & Buyback)	3,577.00	3,461.00	3,405.00	3,701.00	14,144.00
MRRC recovery	293.50	543.55	293.78	382.00	1,512.83
Self haul Inerts Diverted Redwood Landfill	669.38	1,522.10	1,308.17	2,331.15	5,830.80
Redwood Landfill self haul C&D recycled	8.16	9.34	55.42	34.97	107.89
City of Novato C&D diverted(included in Novato Disposal)	N/A	N/A	N/A	N/A	N/A
ADC from MRRC	0.00	0.00	0.00	0.00	0.00
Compost from MRRC	26.96	59.97	44.44	62.37	193.74
Greenwaste From Redwood Landfill self haul/compost	147.96	221.00	230.46	180.41	779.83
Novato Disposal Inerts	640.00	1,263.00	1,098.00	747.00	3,748.00
Novato Disposal Green Waste used for compost	2,975.00	3,840.00	3,188.00	4,073.00	14,076.00
Novato Disposal food waste used for compost	25.00	34.00	22.00	36.00	117.00
2011 TOTAL TONS DIVERTED	8,362.96	10,953.96	9,645.27	11,547.90	40,510.09
B. 2011 DISPOSAL					
MSW& Debris Box/Novato Disposal	7,340.00	7,840.00	7,535.00	6,621.00	29,336.00
MRRC Residuals	211.34	198.33	248.08	229.00	886.75
MRRC Wood/Yard Waste incinerated/transformation	49.70	73.48	61.18	69.00	253.36
Redwood Landfill self haul C&D waste disposed	436.65	663.15	805.35	1,276.72	3,181.87
Novato waste disposed out-of-county	N/A	N/A	N/A	N/A	N/A
2011 TOTAL TONS DISPOSED	8,037.69	8,774.96	8,649.61	8,195.72	33,657.98
C. 2011 TOTAL WASTE GENERATED(TONS)	16,400.65	19,728.92	18,294.88	19,743.62	74,168.07
D. COMPLIANCE WITH AB939 DIVERSION MANDATE	51.29%	55.89%	53.06%	58.84%	54.96%
Percent Diverted Using Generation Based Calculation Method(includes 10% incineration waste)					

REDWOOD LANDFILL SELF HAUL BREAKDOWN (TONS)

	<u>1st Qtr.</u>	<u>2nd Qtr</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>	<u>TOTAL 2011</u>
Inerts/ Diverted	669.38	1,522.10	1,308.17	2,331.15	5,830.80
Greenwaste Diverted/compost	147.96	221.00	230.46	180.41	779.83
C&D/ Disposed	436.65	663.15	805.35	1,276.72	3,181.87
C&D Recycled	8.16	9.34	55.42	34.97	107.89
Total	1,262.15	2,415.59	2,399.40	3,823.25	9,900.39
Percent Redwood self haul diverted	65.40%	72.55%	66.44%	66.61%	67.86%

**NOVATO DISPOSAL SERVICES
DISPOSAL/DIVERSION 2011**

DIVERSION	<u>1stQ</u>	<u>2ndQ</u>	<u>3rd Q</u>	<u>4th Q</u>	<u>TOTAL 2011</u>
Novato Disposal Recycled (Curbside & Buyback)	3,577	3,461	3,405	3,701	14,143
Novato Disposal C&D Waste & Inerts	640	1,263	1,098	747	3,748
Novato Disposal Green/food waste used for compost	2,975	3,840	3,188	4,073	14,076
Food Waste	25	34	22	36	117
TOTAL TONS DIVERTED	7,217	8,598	7,713	8,557	32,085
DISPOSAL					
MSW& Debris Box/Novato Disposal	7,340	7,840	7,535	6,621	29,336
TOTAL TONS DISPOSED	7,340	7,840	7,535	6,621	29,336
TOTAL WASTE GENERATED(TONS)	14,557	16,438	15,248	15,178	61,420
PERCENT DIVERTED	50%	52%	51%	56.38%	52.24%

AB939 NOVATO DISPOSAL AND DIVERSION MONITORING 1997 - 2011

Haulers: Novato Disposal

Self Haulers

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
A. DIVERSION															
Novato Disposal Recycled (Curbside & Buyback)	10,969	10,981	11,028	11,772	12,238	12,095	12,081	8,645	13,647	8,819	10,006	12,472	12,773	13,962	14,144
MRRRC recovery	352	389	428	612	782	999	1,120	1,092	1,196	1,037	1,759	2,050	1,062	1,272	1,513
Wood/Yard Waste Composted	0	128	0	779	556	72	0	0	0	1,252	0	0	0	0	0
Self haul Inerts Diverted Redwood Landfill	7,908	23,946	29,576	29,984	28,337	35,731	51,871	84,829	49,396	40,729	23,813	18,198	8,943	7,654	5,831
Redwood landfill self haul C&D recycled												7	96	43	108
City of Novato C&D diverted(included in Novato Disposal)	0	0	386	0	224	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
ADC from MRRRC	196	101	17	0	35	139	154	413	179	400	236	0	0	0	0
Compost from MRRRC												189	127	186	194
Greenwaste From Redwood Landfill self haul	730	98	1,449	1,617	2,043	1,856	1,828	1,881	1,747	2,333	1,127	1,306	1,040	893	780
Novato Disposal Inerts	5,348	5,766	6,020	5,440	7,406	9,336	11,228	10,247	13,539	13,727	13,104	4,049	5,063	6,371	3,748
Novato Disposal Green waste used for compost											3,343	13,349	12,528	14,974	14,076
Hamilton Diversion	0	0	0		79,866	57,148	29,681	4,742	258	122	0	0	0	0	0
Food Waste															117
TOTAL TONS DIVERTED	21,504	41,280	48,903	50,204	131,487	117,376	107,963	111,848	79,962	68,419	53,387	51,621	41,632	45,354	40,510
B. DISPOSAL															
MSW& Debris Box/Novato Disposal	26,654	31,880	36,272	36,569	39,377	38,126	38,610	37,624	34,224	37,365	34,430	32,824	29,723	31,558	29,336
MRRRC Residuals	634	603	832	926	953	1,253	1,463	1,349	1,504	1,703	1,472	1,387	649	856	887
MRRRC Wood/Yard Waste incinerated	287	348	512	1,138	1,473	1,829	1,367	946	1,055	943	307	433	178	239	253
Redwood Landfill self haul C&D waste disposed	3,898	3,170	5,477	6,307	5,968	6,781	7,534	8,493	5,386	7,999	6,620	4,951	4,530	3,569	3,182
Novato waste disposed out-of-county	153	264	33	17	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
Hamilton AFB/Debris	845	1,140	498	252	24,597	5,063	101	485	67	48	0	0	0	0	0
Renaissance Fair debris	0	2,052	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL TONS DISPOSED	32,471	39,456	43,625	45,209	72,369	53,052	49,076	48,897	42,237	48,058	42,829	39,594	35,080	36,222	33,658
C. TOTAL WASTE GENERATED(TONS)	53,975	80,736	92,527	95,413	203,856	170,427	157,039	160,745	122,198	116,478	96,216	91,215	76,712	81,576	74,168
D. COMPLIANCE WITH AB939 DIVERSION MANDATE															
Percent Diverted Using Generation Based Calculation Method(includes 10% incineration waste)	45%	51%	52.85%	52.74%	64.57%	68.88%	68.75%	69.58%	65.52%	58.82%	55.52%	56.64%	54.29%	55.63%	54.65%

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Staff Report: BACWA Draft 2011 Mercury Watershed Group Report	MEETING DATE: March 12, 2012 AGENDA ITEM NO.: 8 a.
RECOMMENDED ACTION: Information only.	
SUMMARY AND DISCUSSION: The Regional Water Quality Control Board adopted a Mercury Watershed Permit effective March 1, 2008 that established a Group Mass limit of 17kg/year for the 37 participating agencies. Bay Area Clean Water Agencies (BACWA) administers the group and prepares an annual report to the Regional Board with the mercury loading information as well as mercury pollution prevention activities undertaken by each of the agencies. A copy of the draft report is attached. As noted on Pages 5 and 6 of the report the overall average reduction in mercury loadings from municipal wastewater treatment facilities was 20%. The most significant change was for Novato Sanitary District which had a 77% reduction in mercury loading.	
ALTERNATIVES: Information only	
BUDGET INFORMATION: Information only	
DEPT.MGR.:	MANAGER:



Bay Area Clean Water Agencies

DRAFT

2011 Mercury Watershed Permit Group Report

March 1, 2012

Prepared by RMC Water and Environment

Bay Area Clean Water Agencies

2011 Mercury Watershed Permit Group Report

DRAFT - March 1, 2012

Introduction

On November 1, 2007 the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) adopted the mercury watershed permit, also known as National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038849, Regional Water Board Order No. R2-2007-0077. The purpose of the mercury watershed permit was to implement requirements associated with the mercury Total Maximum Daily Load (TMDL), which was adopted by the Regional Water Board in August 2006, approved by the State Water Resources Control Board (State Water Board) in July 2007, and approved by the United States Environmental Protection Agency (USEPA) in February 2008.

The mercury watershed permit became effective on March 1, 2008 and established limitations and requirements on the discharge of mercury from current municipal and industrial NPDES permittees which discharge treated wastewater to San Francisco Bay or its tributaries. The permit superseded all existing mercury requirements in existing individual wastewater permits to ensure consistent, complete, and coordinated implementation of the TMDL's requirements. This group report is for municipal permittees associated with the watershed permit.

Watershed Permit Group Reporting Requirements

One of the requirements indicated in the watershed permit is for agencies to report mercury mass loads and source control activities on an annual basis. The permit allows permittees to report this and other information either individually, or as part of a group. The Bay Area Clean Water Agencies (BACWA) opted to form a group and invite municipal permittees to participate. If permittees desired to participate in a group process, they needed to notify the Regional Water Board by February 1, 2010 (deadline for annual Self-Monitoring Report, or SMR) of this intent.

Electronic forms for BACWA group participants were prepared to facilitate the reporting process for both participants and the organizer. These electronic forms were developed in MS Excel, based on the forms in the watershed permit, and were emailed to potential group participants with a readily available email address on January 3, 2012. The due date for submittal of data under the group reporting program was February 15, 2012.

Data Collection and Compilation

The annual reporting forms were organized into three parts as follows:

- Part 1 – Basic Information
- Part 2 – Mercury Data
- Part 3A – General Source Control Information
- Part 3B – Specific Source Control Checklist

Reporting forms for Part 1 and Part 2 were drawn directly from the mercury watershed permit. The reporting form for Part 3A is identical to mercury watershed permit Part 3. This form was re-numbered in order to incorporate an additional form (Part 3B), which was developed by BACWA and distributed to permittees for the 2011 report in order to obtain more consistent and complete information about source control. The need for this additional form was identified during compilation of the first BACWA Group Report in 2008

Completed forms were received on time from all 37 of the municipal agencies included in the mercury watershed permit. Data were received from group participants by email, fax, and regular mail. Data received by email were in a PDF or MS Excel format. Signed certification pages (in Part 1) were received from all participating agencies by the deadline. The forms received are shown in **Appendix A**. The distribution of participating municipal permittees in the BACWA group is shown in **Table 1**, below.

Table 1. BACWA Group Participants

Municipal Permittees Participating in BACWA Group	Municipal Permittees Not Participating in BACWA Group
<ul style="list-style-type: none"> • American Canyon, City of • Benicia, City of • Burlingame, City of • Calistoga, City of • Central Contra Costa Sanitary District • Central Marin Sanitation Agency • Crockett Community Services District – Port Costa • Delta Diablo Sanitation District • East Bay Dischargers Authority • East Bay Municipal Utilities District • Fairfield-Suisun Sewer District • Las Gallinas Valley Sanitary District • Marin County (Paradise Cove), Sanitary District No. 5 of • Marin County (Tiburon), Sanitary District No. 5 of • Millbrae, City of • Mt. View Sanitary District • Napa Sanitation District • Novato Sanitary District • Palo Alto, City of • Petaluma, City of • Pinole, City of • Rodeo Sanitary District • Saint Helena, City of • San Francisco, City and County of, SF Int'l Airport (sanitary plant) • San Francisco (Southeast Plant), City and County of • San Jose/Santa Clara, Cities of • San Mateo, City of • Sausalito-Marín City Sanitary District • Sewerage Agency of Southern Marin • Sonoma Valley County Sanitation District • South Bayside System Authority • South San Francisco and San Bruno, Cities of • Sunnyvale, City of • US Naval Support Activity, Treasure Island • Vallejo Sanitation and Flood Control District • West County Agency • Yountville, Town of 	<p>None</p>

Data submitted by BACWA group participants included all mercury concentration data collected throughout the 2011 calendar year, which were also averaged by month, as well as daily flow rates for sampling days, and a computed annual mass emission. All computations for group participants were checked for accuracy and usage of proper formulas for calculations, at a minimum. As indicated in the mercury watershed permit, if data were not available for every month that discharge occurred, an estimated annual mass emission was computed by normalizing the available data over applicable discharge months.

Estimated Mercury Mass Loads for 2011

The estimated annual mercury mass emission was determined for all municipal permittees listed in the mercury watershed permit. Results for each permittee and the sum for the group are shown in **Table 2**.

Table 2. Estimated Weighted 2011 Annual Mass Emission for Municipal Permittees

Municipal Permittee	2011 Annual Mass Emission (kg/yr)	Notes on Computations Conducted for This Report
American Canyon, City of	0.0070	Used agency data and calculations.
Benicia, City of	0.0137	Used agency data and calculations.
Burlingame, City of	0.0101	Computed weighted annual mass emission from data provided.
Calistoga, City of	0.0025	Computed weighted annual mass emission from data provided.
Central Contra Costa Sanitary District	0.3746	Used agency data and calculations.
Central Marin Sanitation Agency	0.0726	Used agency data and calculations.
Crockett Community Services District - Port Costa	0.0003	Used agency data and calculations.
Delta Diablo Sanitation District	0.0537	Used agency data and calculations.
East Bay Dischargers Authority	0.5777	Used agency data and calculations.
East Bay Municipal Utility District	0.4832	Used agency data and calculations.
Fairfield-Suisun Sewer District	0.0375	Computed weighted annual mass emission from data provided.
Las Gallinas Valley Sanitary District	0.0307	Computed weighted annual mass emission from data provided.
Marin County (Paradise Cove), Sanitary District No. 5	0.0000264	Used agency data and calculations.
Marin County (Tiburon), Sanitary District No. 5	0.0024	Used agency data and calculations.
Millbrae, City of	0.0176	Used agency data and calculations.
Mt. View Sanitary District	0.0134	Used agency data and calculations.
Napa Sanitation District	0.0166	Used agency data and calculations.
Novato Sanitary District	0.0167	Used agency data and calculations.
Palo Alto, City of	0.0635	Used agency data and calculations.
Petaluma, City of	0.0111	Used agency data and calculations.
Pinole, City of	0.0226	Used agency data and calculations.
Rodeo Sanitary District	0.0126	Computed weighted annual mass emission from data provided.
Saint Helena, City of	0.0016	Computed weighted annual mass emission from data provided.
San Francisco, City and County of, SF Int'l Airport	0.0021	Used agency data and calculations.
San Francisco (Southeast Plant), City and County of	0.2449	Used agency data and calculations.
San Jose/Santa Clara, Cities of	0.2313	Used agency data and calculations.

Municipal Permittee	2011 Annual Mass Emission (kg/yr)	Notes on Computations Conducted for This Report
San Mateo, City of	0.0593	Used agency data and calculations.
Sausalito-Marín City Sanitary District	0.0185	Used agency data and calculations.
Sewerage Agency of Southern Marin	0.0501	Used agency data and calculations.
Sonoma Valley County Sanitation District	0.0055	Used agency data and calculations.
South Bayside System Authority	0.0853	Used agency data and calculations.
South San Francisco and San Bruno, Cities of	0.0461	Used agency data and calculations.
Sunnyvale, City of	0.035	Used agency data and calculations.
US Naval Support Activity, Treasure Island	0.0038	Used agency data and calculations.
Vallejo Sanitation and Flood Control District	0.1451	Used agency data and calculations.
West County Agency	0.0974	Used agency data and calculations.
Yountville, Town of	0.00047	Used agency data and calculations.
TOTAL	2.9	

Interpretation of Estimated Mass Load Results

The estimated annual mass emission for 2011 is 2.9 kg/yr, which is lower than the previous three years and lower than the mass limit of 17 kg/yr. The estimated group emission was 3.9 kg/yr for 2010, 4.6 kg/yr for 2009, and 4.5 kg/yr for 2008. These results are illustrated in **Figure 1**, below.

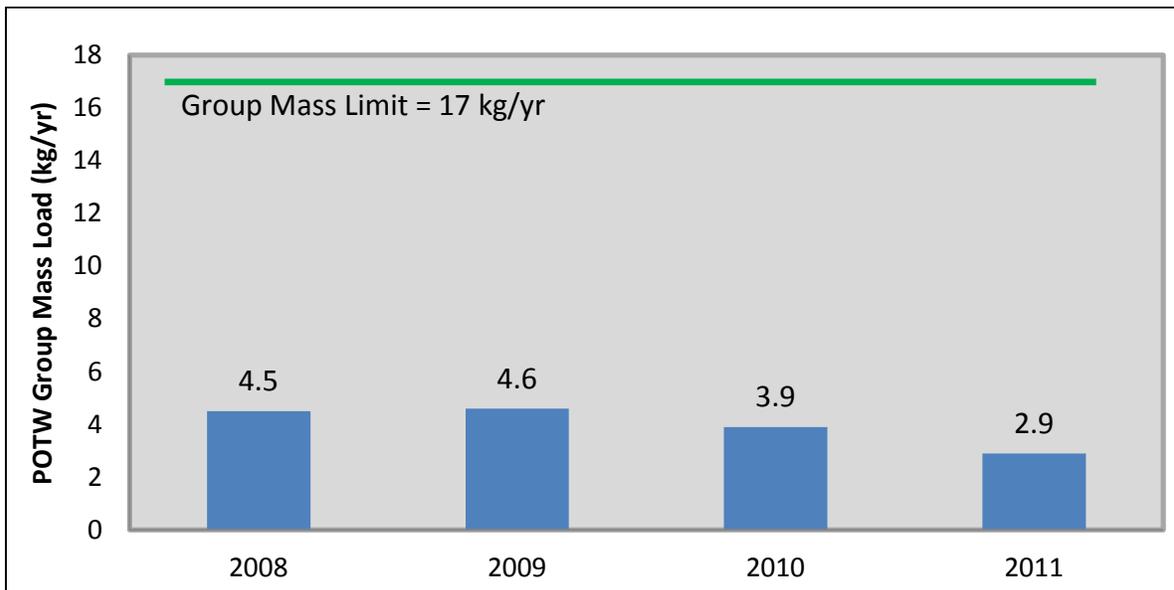


Figure 1. Trend in Estimated Annual Mercury Mass Emissions for Municipal Dischargers to San Francisco Bay Compared to Annual Mass Limit

The total group mass emission for 2011 is lower than the last three years, indicating a currently decreasing trend in mercury concentrations. However, it is uncertain if this trend will continue due to uncertainty in laboratory results and significant one-time treatment plant improvements in 2011.

Overall, the average mercury concentrations reported by BACWA group participants in the 2011 reporting period was approximately 20% lower than the average for the 2010 reporting period, a

significant reduction. By comparison, the reduction from 2009 to 2010 was similar at 19%, but was only 5% from 2008 to 2009.

Approximately 65% of municipal agencies had a lower mercury mass emission and approximately 32% higher, compared to 2010. For mercury concentration, 65% also reported lower average concentrations, while 32% of participating agencies reported higher average concentrations for 2011.

Based on the comparisons of 2010 and 2011 data, it is expected that mercury loads will continue to be variable among agencies from year to year. A number of additional years of data will be needed in order to identify specific trends. It is also of note that of the estimated 1,220 kg/yr of mercury discharged to San Francisco Bay¹, the municipal agency contribution is 2.9 kg/yr, or 0.2% of the total mass emission to the Bay.

In late 2010 and 2011 a few Bay Area municipal agencies completed treatment plant improvements that potentially contributed to the overall decrease in mercury loadings observed during 2011. The most significant change occurred with the Novato Sanitary District, which completed construction of a new treatment plant and brought it online in September 2010. This new treatment plant included significant improvements to all major treatment processes. Novato Sanitary District's data showed a 77% decrease in mercury loadings between 2010 and 2011.

Source Control Activities

Permittees participating in the BACWA group conducted numerous source control activities during the reporting period, as shown in **Table 3** on the following page. Highlights of the source control activities are as follows:

- Dental Amalgam Programs
- Thermometer and/or Thermostat Exchanges
- Fluorescent Light Recycling
- Household Hazardous Waste Collection
- Public Outreach and Education
- Controls for Vehicle Service Facilities
- Battery Recycling
- Environmentally Preferable Purchasing Policy
- Hospital/Medical Clinic Mercury Inspections and/or Related Source Reduction Activities
- HVAC Wholesaler and Demolition Contractor Outreach

A checklist of possible source control activities was developed and provided to group participants as Part 3B of the reporting forms (as described above) in January 2012. This checklist resulted in more consistent reporting of source control activities. A detailed summary of Bay Area municipal mercury reduction activities in 2011 is follows **Table 3**.

¹ Source: *Mercury in San Francisco Bay, Total Maximum Daily Load (TMDL) Proposed Basin Plan Amendment and Staff Report*, California Regional Water Quality Control Board, San Francisco Bay Region, September 2004.

Table 3. Mercury Source Control Activities By Agency for 2011

Municipal Agency Listed in Watershed Permit	Mercury Source Control Projects Underway or Planned, as Reported by Agencies to BACWA a = project was completed or underway in 2011 (and may be continuing) b = project is planned for the near future					
	Dental Amalgam Program	Fluorescent Light Recycling	Household Hazardous Waste Collection	Public Outreach/Education	Thermometer and/or Thermostat Exchange	Vehicle Service Facilities
American Canyon, City of	a,b	a,b	a,b	a,b	a,b	a,b
Benicia, City of	a	a	a	a	a	
Burlingame, City of	a	a	a	a,b		b
Calistoga, City of	a					
Central Contra Costa Sanitary District	a,b	a,b	a,b	a,b	a,b	a,b
Central Marin Sanitation Agency	a,b	a,b		a,b	a,b	a
Crockett Community Services District (Port Costa)		a	a	a	a	
Delta Diablo Sanitation District	a,b	a	a	a	a	a
East Bay Dischargers Authority	a,b	a,b	a,b	a,b	a,b	a,b
East Bay Municipal Utility District	a,b			a	a	a
Fairfield-Suisun Sewer District	a,b	a	a,b	a		a
Las Gallinas Valley Sanitary District	a,b	a,b	a	a,b	a,b	
Marin County (Paradise Cove), San. District No. 5 of	a			a		
Marin County (Tiburon), San. District No. 5	a			a		
Millbrae, City of	a,b	a	a	a	a	a
Mt. View Sanitary District	a,b	a,b	a,b	a,b	a,b	a,b
Napa Sanitation District	a,b	a	a	a,b	a,b	
Novato Sanitary District	a	a	a	a	a	
Palo Alto, City of	a,b	a,b	a,b	a,b	a,b	a,b
Petaluma, City of	a,b	a	a	a		a
Pinole, City of	a,b		a,b	a,b	a,b	a,b
Rodeo Sanitary District	a,b	a		a	a	
Saint Helena, City of	b	a		a	b	
San Francisco, City and County of, SF Int'l Airport		a	a		a	a
San Francisco (Southeast Plant), City and County of	a,b	a,b	a	a	a,b	
San Jose/Santa Clara, Cities of	a	a	a	a	a	
San Mateo, City of	a,b	a	a	a	a	
Sausalito-Marín City Sanitary District	a	a,b	b	a,b	b	
Sewerage Agency of Southern Marin	a,b	a	a,b	a,b	a,b	a
Sonoma Valley County Sanitation District	a,b		a	a		a

Municipal Agency Listed in Watershed Permit	Mercury Source Control Projects Underway or Planned, as Reported by Agencies to BACWA a = project was completed or underway in 2011 (and may be continuing) b = project is planned for the near future					
	Dental Amalgam Program	Fluorescent Light Recycling	Household Hazardous Waste Collection	Public Outreach/ Education	Thermometer and/or Thermostat Exchange	Vehicle Service Facilities
South Bayside System Authority	a,b			a	a	
South San Francisco and San Bruno, Cities of	a,b	a		a	a,b	a
Sunnyvale, City of	a	a	a	a,b	a,b	a
US Naval Support Activity, Treasure Island		a	a	a	a	
Vallejo Sanitation and Flood Control District	a,b	a,b	b	a,b	a,b	a
West County Agency	a	a	a	a	a	a
Yountville, Town of	a	a	a	a		

Dental Amalgam Programs

In 2010, BACWA completed a methodology to assess regional progress on the two dental program metrics in the watershed permit.² The methodology was approved by the Regional Water Board in a letter to BACWA dated March 17, 2011. Because the preliminary results indicated that dental practitioner participation was at 76%, rather than the permit metric of 85%, it was agreed that BACWA would conduct a follow-up survey and present the results by June 2012. A follow-up survey to co-permittees was completed in November 2011. Draft results have been completed and are currently under review by BACWA; final results will be submitted to the Regional Water Board by June 2012.

In the meantime, many agencies reported on the continuing development of their dental amalgam programs in 2011 -- details are provided on the original forms shown in **Appendix A**. Some preliminary quantitative information was also reported this year. For example, the Central Contra Costa County Sanitary District reported a 70% reduction of mercury observed in the treatment plant influent since 2004, prior to implementing the Dental Amalgam Program.

Collection of Other Mercury-Containing Wastes

Many agencies in the Bay Area were involved in the collection of household hazardous and other wastes in 2011, and some were able to quantify the mass of mercury collected. Examples of the specific estimates are as follows:

- The City of San Jose recycled approximately 7,516 lbs (3,416 kg) of fluorescent lights from municipal operations during Fiscal Year 2010-2011.
- The Sewerage Agency of Southern Marin (SASM) collected and recycled 4,440 lbs (2,018 kg) of household batteries from six locations throughout the City of Mill Valley and SASM facilities.
- The City of Sunnyvale recycled approximately 20,902 fluorescent and compact fluorescent lamps; 212 high intensity discharge (HID), metal halide, and mercury vapor lamps; and 48 lbs (21.8 kg) of laboratory waste and mercury switches from City operations.
- The Central Contra Costa Sanitation District collected 109.1 lbs (49.6 kg) of mercury, including 94.3 lbs (42.92 kg) of elemental mercury during 2011. Annual mercury collection is more than seven times the amount of mercury that enters the wastewater treatment plant. In addition, the District has collected an estimated 1,119 lbs (509 kg) of mercury since 2004.
- The Mt. View Sanitary District collected 2,005 mercury thermometers and thermostats and a total of about 81 lbs (36.8 kg) of mercury in 2011. Additionally, the District continued its practice of recycling the mercury-containing lamps used in the UV Disinfection Facility. More than 610 UV lamps were recycled in FY2010/2011.

Public Outreach and Education

Significant public education also occurred during 2011 throughout the Bay Area. For example, the Marin County Stormwater Pollution Prevention Group (which the six wastewater agencies in Marin County participate in) provided 40,000 residents with calendars which included a month titled

² ["Mercury Watershed Dental Permit Metrics"](#) October 1, 2010.

“Help Keep Mercury Out of San Francisco Bay.” The calendar information addressed how to reduce mercury discharge to the sanitary sewer; how to dispose of fluorescent bulbs, thermometers, batteries, and other mercury containing devices; and included information about requesting non-amalgam fillings from dentists.

In addition to efforts by individual agencies, the Bay Area Pollution Prevention Group (BAPPG), a committee of BACWA, continued its coordinated regional dental outreach pollution prevention activities. BAPPG presented mercury pollution prevention information to 259 dental assistant or dental hygiene students via 9 visits to schools around the Bay Area during 2011. The BAPPG outreach effort also included presentations to 278 working professionals through additional presentations to a local branch of the Dental Assistant Association, the state-wide California Dental Assistant Association (CDAA) and the California Dental Association (CDA).

Other Mercury Reduction Activities

In addition to source control activities listed above, some agencies have taken mercury pollution prevention a step further to help prevent future mercury waste. For example, the City of San Leandro converted all outdoor lighting to mercury-free lamps and also implemented an Environmentally Preferable Purchasing Policy (through a city Ordinance) that requires product-substitution for mercury-containing products.

Also, many agencies in the Bay Area recycled their wastewater for irrigation of turf and landscaping, industrial uses, and agriculture. This recycled water does not enter San Francisco Bay, yet most agencies didn't consider this specifically as a source control program in their individual reports.

Mercury Special Studies

The Mercury Watershed Permit requires that permittees conduct or cause to be conducted “studies aimed at better understanding mercury fate, transport, the conditions under which mercury methylation occurs, and biological uptake in San Francisco Bay, its contiguous segments, and tidal areas,” and “studies to evaluate the presence of, or potential for, local effects on fish, wildlife, and rare and endangered species in the vicinity of wastewater discharges.”³

BACWA member agencies have and continue to meet these requirements through support of and participation in the Regional Monitoring Program (RMP) Mercury Strategy, developed in 2007, which articulates a five-year plan for mercury studies and identifies them as a top priority for the RMP.⁴ To date, the RMP Mercury Strategy has resulted in a substantial body of work that includes three years of intensive spatial and temporal monitoring in small fish; a two-year study of mercury isotopes; and a two-year study of passive samplers for aqueous methylmercury. The results of these studies are being synthesized now and will be incorporated into a special journal article featuring synthesis papers for seven major ocean regions as part of the Coastal and Marine Mercury

³ Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay (Order No. R2-2007-0077, NPDES No. CA0038849, Provision V.C.3.).

⁴ More detailed information about the Mercury Strategy is available on the San Francisco Estuary Institute's RMP webpage at <http://www.sfei.org/rmp/mercury>.

Ecosystem Research Collaborative, sponsored by the Dartmouth College Toxic Metals Superfund Research Program.

Risk Reduction

Activities related to risk reduction that have occurred since the BACWA March 1, 2010 progress report include the following: development of a needs assessment from stakeholders; continued meetings of the Stakeholder Advisory Group (SAG); a one-page description of the risk communication framework completed in Spring 2011; a finalized Request for Proposals (RFP) for a grant program to community groups; a convening of a panel to review grant applications; and dissemination of four grants (out of nine applications). A final report is expected in the fall of 2012.

Summary and Conclusions

The weighted annual average mercury mass load for all municipal permittees to San Francisco Bay for 2011 was calculated to be 2.9 kg/yr. This mass load is 27% lower than the mass load estimated for the 2010 calendar year, 3.9 kg/yr. The mass load in 2009 was estimated to be 4.6 kg/yr, and in 2008, 4.5 kg/yr. The 2011 estimated annual mercury mass emission is lower than the 17 kg/yr limit.

Agencies participating in the BACWA group conducted many mercury source control programs, and in some cases quantified the amount of mercury collected. For the collections that were quantified, more than 778 lbs (354 kg) of mercury were collected at household hazardous waste disposal facilities around the region.

BAPPG also continued its coordinated regional dental outreach pollution prevention activities by presenting mercury pollution prevention information to 259 dental assistant or dental hygiene students at nine schools around the Bay Area.

In addition to pollution prevention activities that may have contributed to the reduction in mercury loadings, some Bay Area agencies also completed treatment plant improvements. The new Novato Sanitary District treatment plant, which includes significant improvements to all major treatment processes, was brought online in late 2010 and resulted in a 77% decrease in loadings between 2010 and 2011.

Individual agencies as well as BAPPG plan to continue mercury pollution prevention activities throughout 2012.

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Staff Report: Nutrient Monitoring	MEETING DATE: March 12, 2012 AGENDA ITEM NO.: 8 b.
RECOMMENDED ACTION: Information only.	
SUMMARY AND DISCUSSION: The Regional Water Quality Control Board issued a "13267" Order on March 2 nd requiring all municipal wastewater dischargers to monitor and report on nitrogen and phosphorous concentrations and mass loadings. This information will be used by the Regional Board in developing nutrient water quality objectives for the San Francisco Bay Estuary. The loading from municipal dischargers will be used to compare with loads from other sources and to inform the need for additional wastewater treatment to address nutrients. This order will add ten new parameters for the District to sample for in the treatment plant influent and effluent for the next two years. The effluent will need to be sampled twice/month and the influent twice/year. The estimated additional cost is \$8,000/year.	
ALTERNATIVES: Information only	
BUDGET INFORMATION: The additional sampling will be included in the 2012-13 budget.	
DEPT.MGR.:	MANAGER:

NOVATO SANITARY DISTRICT BOARD AGENDA ITEM SUMMARY

TITLE: Adjournment in memory of Sam Renati	MEETING DATE: 3/12/2012
AGENDA ITEM NO. : 11 a.	
RECOMMENDED ACTION: Adjourn meeting in memory of Sam Renati	
<p>SUMMARY AND DISCUSSION: Sam was appointed to the Board of Directors on May 10, 1993, and elected on June 7, 1994. He served on the Board until November 2005 and regularly attended Board meetings as an interested citizen for several years afterwards. He continued to receive Board meeting agendas and never lost interest in District activities, even during his recent illness.</p> <p>He was a lively and involved Board Member who always had a pleasant comment and smile for everyone who made his acquaintance. Among many other things, we'll remember that it was Sam who took responsibility for the design and construction of the Board Room table which will be utilized by the District Board and others for many years to come.</p> <p>Sadly, Sam passed away on Friday, March 2, 2012, after a lengthy illness. He will be missed by his family and the many friends he made over the years.</p> <p>Sam's family has expressed their desire that his fellow Board Members and friends at the District be notified of Sam's memorial which will be held at 1:00 p.m. on Sunday, April 1, 2012, at the Druids Hall in Novato.</p>	
ALTERNATIVES: N/A	
BUDGET INFORMATION:	
DEPT. MGR. :	MANAGER'S APPROVAL: