

MONTARA WATER & SANITARY DISTRICT

Serving the Communities of Montara and Moss Beach

P.O. Box 370131 8888 Cabrillo Highway Montara, CA 94037-0131 Visit Our Web Site: Tel: (650) 728-3545 Fax: (650) 728-8556

E-mail: mwsd@montara.com

Visit Our Web Site: http://www.mwsd.montara.com

NOTICE OF SPECIAL MEETING (Special Meeting begins at 6:30 p.m.; see Agenda for Special Meeting below)



Regular Meeting District Board of Directors

8888 Cabrillo Highway Montara, California 94037

February 7, 2013 at 7:30 p.m.

(Regular Meeting)

CALL TO ORDER ROLL CALL PRESIDENT'S STATEMENT ORAL COMMENTS (Items other than those on the agenda) PUBLIC HEARING

CONSENT AGENDA

- 1. Approve Minutes for Meeting of January 17, 2013.
- 2. Approve Warrants for February 1, 2013.
- 3. SAM Flow Report for November and December 2012.
- 4. Monthly Review of Current Investment Portfolio.
- 5. Connection Permit Applications Received.
- 6. Monthly Water Production Report for December 2012.
- 7. Rain Report.
- 8. Solar Energy Report.

OLD BUSINESS

- 1. Review and Possible Action Concerning District Reserve Policies.
- 2. Review and Possible Action Concerning Refinancing of PNCEF Lease.
- 3. Review and Possible Action Concerning Award of Bids for Sewer Improvement Project 2013.

NEW BUSINESS

- 1. Review and Possible Action Concerning Filing Notice of Completion for Vallemar Pump Station Engine Generator Set Replacement Project.
- 2. Review and Possible Action Concerning Possible Leak Adjustment for 1171 Cedar St.
- 3. Review and Possible Action Concerning Greywater Systems.
- 4. Review and Possible Action Concerning Cancellation of the Next Regular Scheduled Meeting February 21, 2013.

REPORTS

- 1. Sewer Authority Mid-Coastside Meetings (Harvey)
- 2. MidCoast Community Council Meeting (Slater-Carter)
- 3. ACWA Board of Directors Report (Ptacek)
- 4. CSDA Report (Slater-Carter)
- 5. Integrated Regional Water Management Plan (Ptacek)
- 6. Attorney's Report (Schricker)
- 7. Directors' Reports
- 8. General Manager's Report (Heldmaier)

FUTURE AGENDAS ADJOURN

AGENDA – SPECIAL MEETING (6:30 p.m.)

CALL TO ORDER ROLL CALL ORAL COMMENTS (Items other than those on the agenda) CONVENE IN CLOSED SESSION

CONFERENCE WITH LABOR NEGOTIATORS

(Gov't. Code §54957.6) Agency designated representatives: Clemens Heldmaier, General Manager; Austris Rungis, IEDA

Employee organization: International Union of Operating Engineers AFL-CIO, Stationary Engineers, Local 39

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

(Gov't. C. §54956.9(a)) Names of cases:

(i) <u>Montara Water and Sanitary District v. County of San</u> <u>Mateo,</u> Santa Clara Cnty. Super. Crt. No. 1-07-CV- 088793 (inactive); U.S. Dist. Crt., N.D., San Jose Div. No. CV 08 2814 JF (closed); USCA, 9th Cir. No. 09-15822

 (ii) <u>Montara Water and Sanitary District</u> v. <u>County of San</u> <u>Mateo, etc. et al., Resp.; Big Wave LLC, Real Party in</u> <u>Interest</u>, San Mateo Cnty. Super. Crt. No. CIV 505205

CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Significant exposure to litigation (Gov't. C. §54956.9(b)) Number of cases: 1

RECONVENE IN OPEN SESSION AND ADJOURN TO CONVENE FOR REGULAR MEETING

The District has a curfew of 11:00 p.m. for all meetings. The meeting may be extended for one hour by vote of the Board.

NOTE: In accordance with the Government Code, members of the public may address the Board on specific agenda items when that matter is discussed by the Board. Any other items of interest that is within the subject matter jurisdiction of the District may be addressed during the Oral Comments portion of the meeting. Upon request, this agenda will be made available in appropriate alternative formats to persons with a disability. Request for a disability-related modification or an accommodation in order to participate in the public meeting should be made at (650) 728-3545. Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available in the District Clerk's office during normal business hours. Such documents may also be available on the District's web site (www.mwsd.montara.org) subject to staff's ability to post the documents before the meeting.



MONTARA WATER & SANITARY

DISTRICT BOARD OF DIRECTORS SPECIAL MEETING January 17, 2013

MINUTES

REGULAR SESSION BEGAN AT 7:32 PM.

CALL TO ORDER

ROLL CALL

Directors Present:	Boyd, Harvey, Slater-Carter, Thollaug & Ptacek
Directors Absent:	None
Staff Present:	General Manager Clemens Heldmaier,
	District Clerk, Judy Gromm
Others Present:	District Counsel Herman Fitzgerald
	District Water Engineer, Tanya Yurovsky

PRESIDENT'S STATEMENT – President Slater-Carter wished the community a Happy New Year and noted the District was running smoothly.

ORAL COMMENTS - Bill Kehoe, a Moss Beach resident explained he was very disappointed in the article written in the Half Moon Bay Review regarding the spending on the ribbon-cutting ceremony for the Wet Weather Flow Project. Mr. Kehoe noted all the facts should be presented before any comments are made.

Director Ptacek noted dates needed to be made to meet with Recology of the Coastside and Granada Sanitary District before it gets later in the year. Director Slater-Carter and General Manager Heldmaier will help with this process.

PUBLIC HEARING - None

CONSENT AGENDA -

- 1. Approve Minutes for Meeting of December 6, 2012.
- 3. Approve Warrants for January 3, 2013
- 4. SAM Flow Report for October 2012.
- 5. Monthly Review of Current Investment Portfolio.
- 6. Connection Permit Applications Received.

MWSD Minutes 17th January, 2013

- 7. Monthly Water Production Report for November 2012.
- 8. Rain Report.
- 9. Solar Energy Report.

OLD BUSINESS -

NEW BUSINESS -

1. Review and Possible Action Concerning Award of Bids of Sewer Improvement Project 2013

General Manager Heldmaier reported the Bid opening was originally planned for January 15, 2013. Due to requests of potential bidders the bidding period was extended until January 24. The results will be presented at the next regular scheduled meeting on February 7, 2013.

This was for Board information only.

2. Review and Possible Action Concerning Possible Leak Adjustment for 590 Stetson Street.

General Manager Heldmaier reported the District received a request to consider an adjustment to the water bill and sewer service charge for 590 Stetson Street due to a leak. The leak occurred in December of 2011 when a gardener apparently turned off a hose at the spray nozzle but failed to turn off the hose bib and the hose subsequently burst. The customer was out of town at this time and the leak went undetected for several days. Profile data of the water meter shows a leak during this time period. Usage records show a five year established average of 9 units for January's billing.

After a brief description of the events that took place by the owner, the Board found there was sufficient evidence the water did not go down the sewer.

Director Boyd moved to authorize the General Manager to issue a refund of \$704.35 to the owner of 590 Stetson Street to reflect a sewer service charge flow assessment of 16 HCF for the wet Weather Period of 2011/2012, and an adjustment of \$51.01 to his current water bill. Director Harvey seconded the motion.

All Directors were in favor and the motion passed unanimously.

3. Review and Possible Action Concerning Additional Geotechnical Investigation for New Alta Vista Tank.

General Manager Heldmaier reported the findings adopted by the California Coastal Commission regarding the District's Public Works Plan (PWP) Phase I, include a requirement for additional geotechnical investigations at the Alta Vista Site Prior to the construction of the new Alta Vista Tank No. 2. The PWP findings require the District to consult with the geotechnical engineer to determine the applicability of the existing geotechnical report to the new Alta Vista Tank location as specified in Mitigation measure 3.1-1. The report shall be updated, if appropriate.

In addition to the PWP requirements, new challenges have surfaced in the new Alta Vista Tank No. 2 design. To protect the existing distribution system from higher pressures, prevent main breaks and wear and tear of the pipelines, and to provide for better operational flexibility of the water system, the tank bottom elevation has been lowered to match the existing Alta Vista Tank, which place the tank at an elevation 10 feet deeper than previously designed. In Addition, soil along with other conditions call for a new geotechnical investigation and recommendations.

The District's Water Engineer contacted 3 firms requesting to provide proposals for this work. Staff reviewed the proposal by Geotechnical Consultants, Inc. for \$39,600 and recommends selecting Geotechnical Consultants, Inc. to perform this work based on their expertise and experience with similar projects.

Director Thollaug moved to authorize the General Manager to execute a contract with Geotechnical Consultants, Inc., not –to-exceed \$39,600. Director Boyd seconded the motion.

All Directors were in favor and the motion passed unanimously.

REPORTS

1. Sewer Authority Mid-Coastside Meetings (Harvey) -

Director Boyd reported there was a meeting on closed session items and no action was taken.

2. Midcoast Community Council Meeting (Slater-Carter) – Bill Kehoe reported the following:

The forming of a Hwy 1 Committee with two MCC members to work with county staff to plan public outreach forums for Highway 1 projects was voted down. Mr. Kehoe urges the community to keep informed about this issue and more by viewing the MCC website.

Supervisor Horsley discussed the possibility of changing the schedule for some of the Sam Trans routes. Using similar service but combining routes to lower costs. Anyone interested in these issues, please let any of the MCC members know and they will take your concerns or suggestions to Supervisor Horsley. Coming up on the next meeting will be a discussion regarding Special Events and their impact on the Coastside.

MCC meetings will now be held at GSD Meeting Room, 504 Avenue Alhambra, 3rd floor, El Granada at 7:00.

- 3. ACWA Board of Directors Report (Ptacek)- None
- 4. CSDA Report (Slater-Carter) None
- 5. Integrated Regional Water Management Plan (Ptacek) Director Ptacek reported he is trying to set a date for a meeting in January.
- 6. Attorney's Report (Schricker) None
- 7. Directors' Reports Director Thollaug reported he was invited to go to the Tunnel Event with the Coastal Commission and found the work and dedication to this project very impressive.
- **Director Slater**-Carter reported Montara Water and Sanitary District initiated and worked with many environmental organizations to have a reception for the Coastal Commissioners and Staff at the San Francisco Yacht Club. It turned out to be a very successful event. Director Slater-Carter looks forward to many more supportive events like this in the future.
- 8. General Manager's Report (Heldmaier) None

FUTURE AGENDAS- Director Boyd would like grey water discussed on future agendas.

REGULAR MEETING ENDED at 8:35 P.M.

Respectfully Submitted,

Signed_____

Secretary

Approved on the 7th of February, 2013

Signed____

President

		ARA WATER AND SANITARY STRICT AGENDA
	For I	Meeting Of: February 7, 2013
A	TO:	BOARD OF DIRECTORS
	FROM:	Clemens Heldmaier, General Manager
SUBJECT:	SAM FI 2012	ow Report for November and December

The Sewer Authority Mid-Coastside (SAM) has prepared the following attached reports for the SAM Board of Directors and the California Regional Water Quality Control Board:

- Flow Report for November and December 2012.
- Collection System Monthly Overflow Report November and December 2012.

The Average Daily Flow for Montara was 0.394 MGD in November and 0.602 MGD in December 2012. There was no reportable overflow in November and 1 (one) reportable overflow due to roots in the Montara System. SAM indicates there were 5.59 inches of rain in November and 6.67 inches of rain in December 2012.

RECOMMENDATION:

Review and file.

Attachments

Sewer Authority Mid-Coastside

Monthly Collection System Activity/SSO Distribution Report, November 2012

November 2012

			Number		
22	Total	HMB	GSD	MWSD	SAM
Roots	1	0	1	0	0
Grease	0	0	0	0	0
Mechanical	0	0	0	0	0
Wet Weather	0	0	0	0	0
Other	0	0	0	0	0
Total	1	0	1	0	0
		0%	100%	0%	0%

12 Month Moving Total

			Number			
	Total	HMB	GSD	MWSD	SAM	
Roots	1	0	1	0	0	1
Grease	0	0	0	0	0	
Mechanical	3	0	0	0	3	
Wet Weather	0	0	0	0	0	
Other	11	7	1	3	0	
Total	15	7	2	3	3	
		47%	13%	20%	20%	

Reportable SSOs

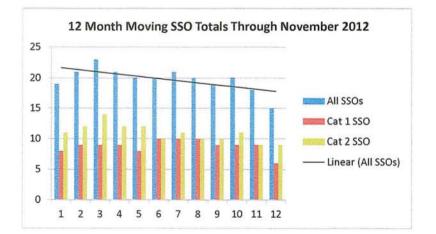
	Number							
_	Total	HMB	GSD	MWSD	SAM			
November 2012	1	0	1	0	0			
12 Month Moving Total	15	7	2	3	З			

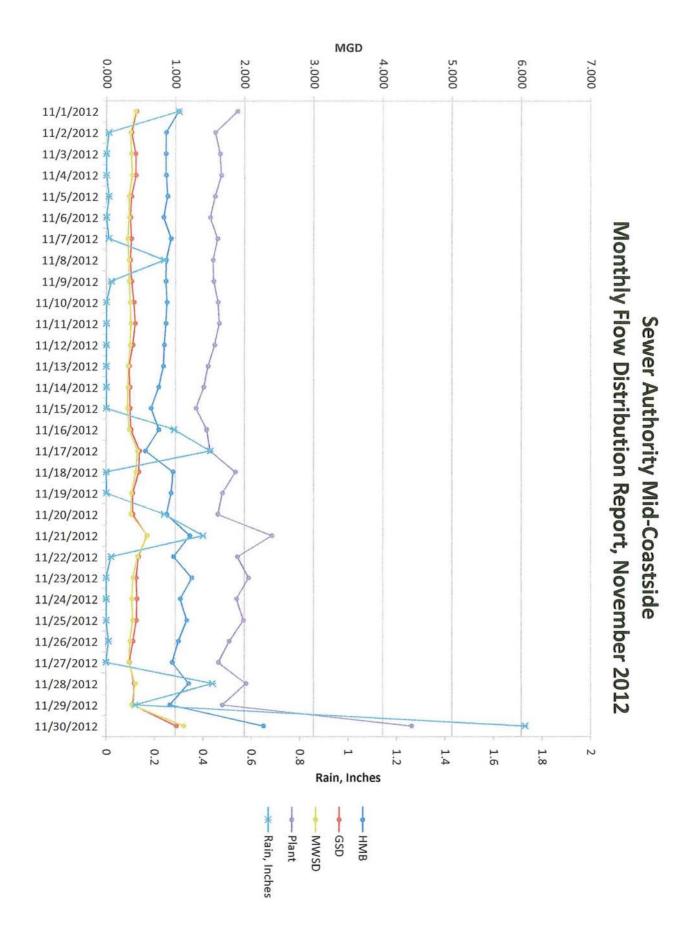
SSOs / Year / 100 Miles

			Number		
	Total	HMB	GSD	MWSD	SAM
November 2012	1.0	0.0	3.0	0.0	0.0
12 Month Moving Total	14.4	18.9	6.0	11.1	41.1
Category 1	5.7	8.1	0.0	3.7	27.4
Category 2	8.6	10.8	6.0	7.4	13.7

12 Month Rolling Total Sewer Cleaning Summary

Month	НМВ	GSD	MWSD	Total Feet	Total Miles	
Dec 11	38,015	282	0	38,297	7.3	
Jan 12	5,406	16,780	20,769	42,955	8.1	
Feb-12	2,251	14,804	18,897	35,952	6.8	
Mar-12	6,928	7,691	29,309	43,928	8.3	
Apr-12	4,233	19,091	21,728	45,052	8.5	
May-12	5,436	26,778	28,572	60,786	11.5	
Jun-12	24,985	23,475	0	48,460	9.2	
Jul-12	26,884	17,883	647	45,414	8.6	
Aug-12	27,679	19,304	1,308	48,291	9.1	
Sep-12	26,704	25,303	1,192	53,199	10.1	T
Oct-12	22,287	14,171	107	36,565	6.9	t
Nov-12	30,283	1,792	1,411	33,486	6.3	Attachment
Annual ft	221,091	187,354	123,940	532,385		nent
Annual Mi.	42	35	23		101	





Sewer Authority Mid-Coastside

Monthly Flow Distribution Report

				········	Plant	Portola	Montara
Date	<u>HMB</u>	<u>GSD</u>	MWSD	<u>Plant</u>	<u>Rain</u>	<u>Rain</u>	<u>Rain</u>
11/1/2012	1.043	0.433	0.423	1.899	0.3	No Data	0.36
11/2/2012	0.864	0.366	0.348	1.579	0.01	No Data	0.01
11/3/2012	0.860	0.425	0.361	1.646	0	No Data	0
11/4/2012	0.865	0.429	0.373	1.667	0	No Data	0.01
11/5/2012	0.884	0.365	0.325	1.574	0.01	No Data	0
11/6/2012	0.826	0.349	0.328	1.504	0	No Data	0
11/7/2012	0.935	0.365	0.312	1.612	0.01	No Data	0.01
11/8/2012	0.867	0.350	0.329	1.546	0.24	No Data	0.05
11/9/2012	0.860	0.366	0.326	1.553	0.02	No Data	0.02
11/10/2012	0.875	0.399	0.343	1.617	0	No Data	0
11/11/2012	0.862	0.419	0.354	1.635	0	No Data	0
11/12/2012	0.840	0.385	0.344	1.569	0	No Data	0
11/13/2012	0.826	0.331	0.317	1.474	0	No Data	0
11/14/2012	0.758	0.340	0.313	1.411	0	No Data	0
11/15/2012	0.647	0.344	0.306	1.297	0	No Data	0
11/16/2012	0.760	0.358	0.333	1.452	0.28	No Data	No Data
11/17/2012	0.568	0.484	0.452	1.504	0.43	No Data	No Data
11/18/2012	0.967	0.475	0.430	1.872	0	No Data	0
11/19/2012	0.935	0.381	0.364	1.680	0	No Data	0
11/20/2012	0.873	0.386	0.357	1.616	0.24	No Data	0.49
11/21/2012	1.210	0.591	0.597	2.398	0.4	No Data	1.01
11/22/2012	0.976	0.469	0.456	1.902	0.02	No Data	0
11/23/2012	1.239	0.436	0.387	2.062	0	No Data	0
11/24/2012	1.070	0.445	0.372	1.887	0	No Data	0
11/25/2012	1.167	0.438	0.384	1.989	0	No Data	0
11/26/2012	1.045	0.392	0.344	1.781	0.01	No Data	0
11/27/2012	0.957	0.339	0.330	1.626	0	No Data	0
11/28/2012	1.193	0.408	0.422	2.023	0.44	No Data	0.52
11/29/2012	0.920	0.389	0.371	1.680	0.12	No Data	0.26
11/30/2012	<u>2.278</u>	<u>1.016</u>	<u>1.123</u>	<u>4.417</u>	<u>1.73</u>	<u>No Data</u>	<u>2.85</u>
Totals	28.970	12.677	11.8 2 4	53.471	4.26	No Data	5.59
Summary							
	HMB	<u>GSD</u>	MWSD	<u>Plant</u>			
Minimum	0.568	0.331	0.306	1.297			
Average	0.966	0.423	0.394	1.782			
Maximum	2.278	1.016	1.123	4.417			

Distribution

54.2%

23.7%

22.1%

100.0%

Attachment A

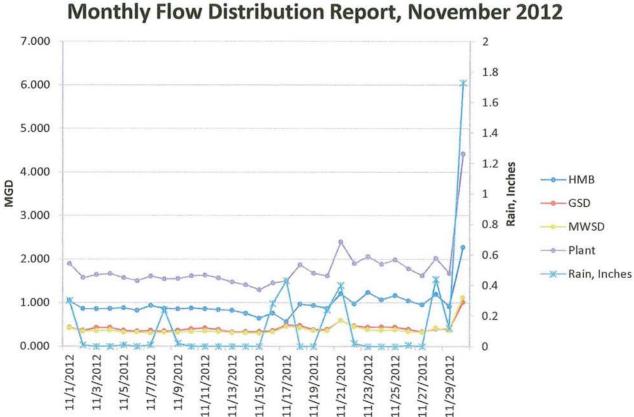
Flow Distribution Report Summary For November 2012

The daily flow report figures for the month of November 2012 have been converted to an Average Daily Flow (ADF) for each Member Agency. The results are attached for your review.

*Influent flow is calculated using the mid-plant flow meter less process water and trucked in waste

The summary of the ADF information is as follows:

	MGD	<u>%</u>
The City of Half Moon Bay	0.966	54.2%
Granada Sanitary District	0.423	23.7%
Montara Water and Sanitary District	<u>0.394</u>	<u>22.1%</u>
Total	1.782	100.00%



Sewer Authority Mid-Coastside Vonthly Flow Distribution Report, November 2012

Sewer Authority Mid-Coastside

Monthly Collection System Activity/SSO Distribution Report, December 2012

December 2012

			Number		
	Total	HMB	GSD	MWSD	SAM
Roots	1	0	0	1	0
Grease	0	0	0	0	0
Mechanical	3	2	1	0	0
Wet Weather	0	0	0	0	0
Other	0	0	0	0	0
Total	4	2	1	1	0
		0%	100%	0%	0%

12 Month Moving Total

			Number			
2	Total	HMB	GSD	MWSD	SAM	
Roots	2	0	1	1	0	
Grease	3	2	0	1	0	
Mechanical	4	0	1	0	3	
Wet Weather	0	0	0	0	0	
Other	9	5	1	3	0	
Total	18	7	3	5	3	
		39%	17%	28%	17%	

Reportable SSOs

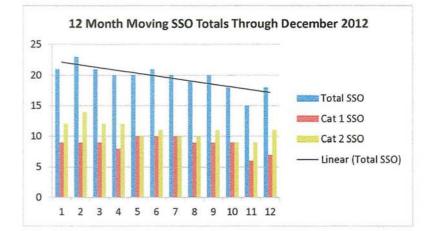
	Number							
	Total	HMB	GSD	MWSD	SAM			
December 2012	4	2	1	1	0			
12 Month Moving Total	18	7	3	5	3			

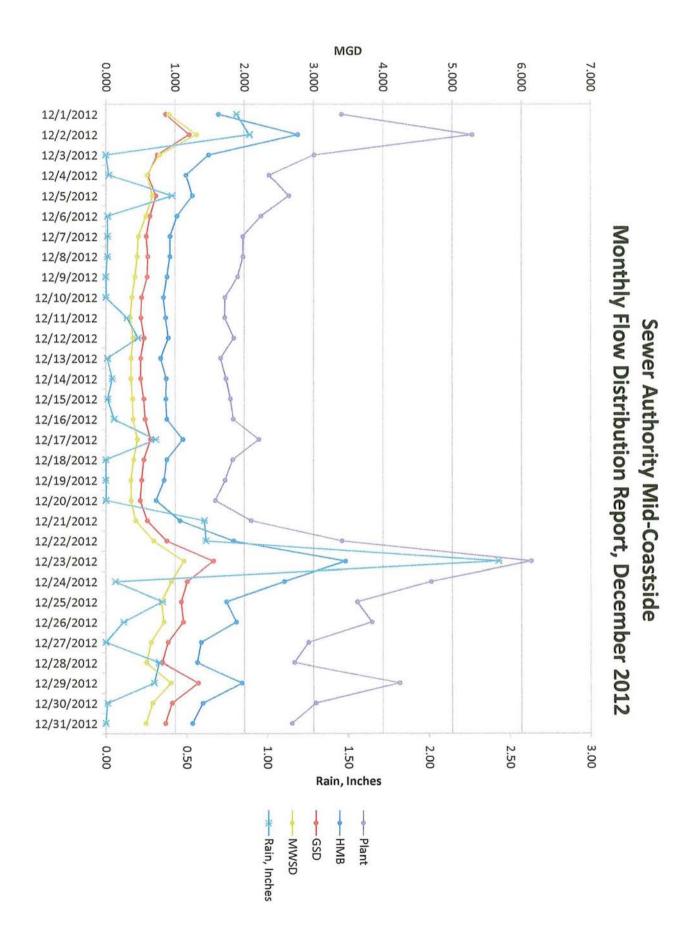
SSOs / Year / 100 Miles

			Number		
	Total	HMB	GSD	MWSD	SAM
December 2012	3.8	5.4	3.0	3.7	0.0
12 Month Moving Total	17.2	18.9	9.0	18.5	41.1
Category 1	6.7	5.4	3.0	7.4	27.4
Category 2	10.5	13.5	6.0	11.1	13.7
Miles of Sewers	104.5	37.0	33.2	27.0	7.3
		35.4%	31.8%	25.8%	7.0%

12 Month Rolling Total Sewer Cleaning Summary

Month	НМВ	GSD	MWSD	Total Feet	Total Miles	
Jan 12	5,406	16,780	20,769	42,955	8.1	1
Feb-12	2,251	14,804	18,897	35,952	6.8	1
Mar-12	6,928	7,691	29,309	43,928	8.3]
Apr-12	4,233	19,091	21,728	45,052	8.5	1
May-12	5,436	26,778	28,572	60,786	11.5	1
Jun-12	24,985	23,475	0	48,460	9.2	1
Jul-12	26,884	17,883	647	45,414	8.6	1
Aug-12	27,679	19,304	1,308	48,291	9.1	1
Sep-12	26,704	25,303	1,192	53,199	10.1	1
Oct-12	22,287	14,171	107	36,565	6.9	
Nov-12	30,283	1,792	1,411	33,486	6.3	
Dec-12	35,498	438	0	35,936	6.8] achr
Annual ft	218,574	187,510	123,940	530,024		Attachment
Annual Mi.	41	36	23		100	





Sewer Authority Mid-Coastside

Monthly Flow Distribution Report

				<u> </u>			
Data		CSD	MIMOD	Diant	Rain Bloot	Rain Bortolo	Rain
<u>Date</u>	<u>HMB</u>	<u>GSD</u>	MWSD	<u>Plant</u>	<u>Plant</u>	<u>Portola</u>	<u>Montara</u>
12/1/2012	1.628	0.864	0.912	3.404	0.81	No Data	0.00
12/2/2012	2.775	1.205	1.309	5.289	0.89	No Data	0.00
12/3/2012	1.488	0.745	0.776	3.009	0.00	No Data	0.00
12/4/2012	1.159	0.604	0.596	2.359	0.02	No Data	0.00
12/5/2012	1.250	0.723	0.671	2.644	0.41	No Data	0.04
12/6/2012	1.028	0.637	0.576	2.241	0.01	No Data	0.02
12/7/2012	0.928	0.585	0.469	1.983	0.01	No Data	0.00
12/8/2012	0.926	0.607	0.453	1.986	0.01	No Data	0.00
12/9/2012	0.885	0.598	0.422	1.905	0.00	No Data	0.00
12/10/2012	0.830	0.516	0.375	1.721	0.00	No Data	0.00
12/11/2012	0.862	0.505	0.351	1.719	0.13	No Data	0.14
12/12/2012	0.903	0.553	0.392	1.849	0.20	No Data	0.18
12/13/2012	0.792	0.504	0.362	1.659	0.01	No Data	0.00
12/14/2012	0.873	0.503	0.361	1.737	0.04	No Data	0.11
12/15/2012	0.866	0.548	0.385	1.799	0.01	No Data	0.01
12/16/2012	0.880	0.568	0.393	1.841	0.05	No Data	0.26
12/17/2012	1.113	0.646	0.455	2.214	0.31	No Data	0.46
12/18/2012	0.881	0.550	0.402	1.833	0.00	No Data	0.00
12/19/2012	0.842	0.519	0.363	1.724	0.00	No Data	0.00
12/20/2012	0.724	0.495	0.361	1.580	0.00	No Data	0.00
12/21/2012	1.071	0.598	0.431	2.100	0.61	No Data	0.51
12/22/2012	1.842	0.880	0.689	3.411	0.62	No Data	0.69
12/23/2012	3.461	1.555	1.127	6.143	2.43	No Data	2.14
12/24/2012	2.579	1.175	0.946	4.700	0.06	No Data	0.00
12/25/2012	1.741	1.088	0.801	3.630	0.35	No Data	0.87
12/26/2012	1.885	1.119	0.838	3.842	0.11	No Data	0.17
12/27/2012	1.378	0.898	0.653	2.930	0.00	No Data	0.00
12/28/2012	1.322	0.818	0.587	2.727	0.33	No Data	0.59
12/29/2012	1.968	1.336	0.941	4.245	0.30	No Data	0.48
12/30/2012	1.400	0.956	0.674	3.031	0.01	No Data	0.00
12/31/2012	<u>1.250</u>	<u>0.861</u>	<u>0.578</u>	<u>2.690</u>	<u>0.00</u>	<u>No Data</u>	<u>0.00</u>
Totals	41.530	23.766	18.649	83.944	7.73	No Data	6.67
Summary							
	<u>HMB</u>	<u>GSD</u>	<u>MWSD</u>	<u>Plant</u>			
Minimum	0.724	0.495	0.351	1.580			
Average	1.340	0.767	0.602	2.708			
Maximum	3.461	1.555	1.309	6.143			
Distribution	49.5%	28.3%	22.2%	100.0%			

Attachment A

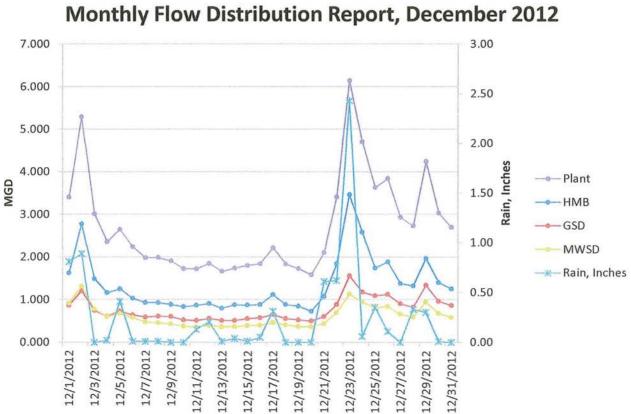
Flow Distribution Report Summary For December 2012

The daily flow report figures for the month of December 2012 have been converted to an Average Daily Flow (ADF) for each Member Agency. The results are attached for your review.

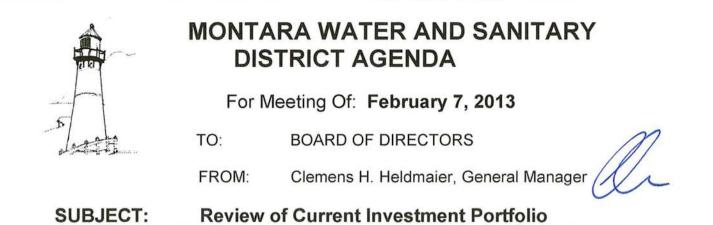
*Influent flow is calculated using the mid-plant flow meter less process water and trucked in waste

The summary of the ADF information is as follows:

	MGD	<u>%</u>
The City of Half Moon Bay	1.340	49.5%
Granada Sanitary District	0.767	28.3%
Montara Water and Sanitary District	0.602	<u>22.2%</u>
Total	2.708	100.00%



Sewer Authority Mid-Coastside Vonthly Flow Distribution Report, December 2012



The District's <u>Investment Policy and Guidelines</u> requires that the Board review the status of the current investment portfolio. The following summarizes the status of these accounts:

- The District has most of its idle sewer funds deposited in the State of California's Local Agency Investment Fund (LAIF). The Monthly Average interest rate for November 2012 was 0.326%.
- The District has set up two checking accounts that are largely backed by Federal securities: Water General Account and the Sewer General Account with Wells Fargo Bank.

RECOMMENDATION:

District staff attempts to cash manage idle funds in LAIF as long as possible before transferring to the Wells Fargo checking accounts for disbursements.



MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: February 7, 2013

TO: BOARD OF DIRECTORS

SUBJECT: Connection Permit Applications Received

As of Feb. 7, 2013 the following new **Sewer Connection Permit** applications were received since the last report:

Date of	Property	Site Address	Home
Application	Owner		Size

As of Feb. 7, 2013 the following new <u>Water (Private Fire Sprinkler) Connection</u> <u>Permit</u> applications were received since the last report:

Date of	Property	Site Address	Home
Application	Owner		Size

As of Feb. 7, 2013 the following new <u>Water Connection Permit</u> applications were received since the last report:

Property Owner	Site Address	Home Size	Type of Connection
			(a) Physical A (a) (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b

RECOMMENDATION:

No action is required. This is for Board information only.



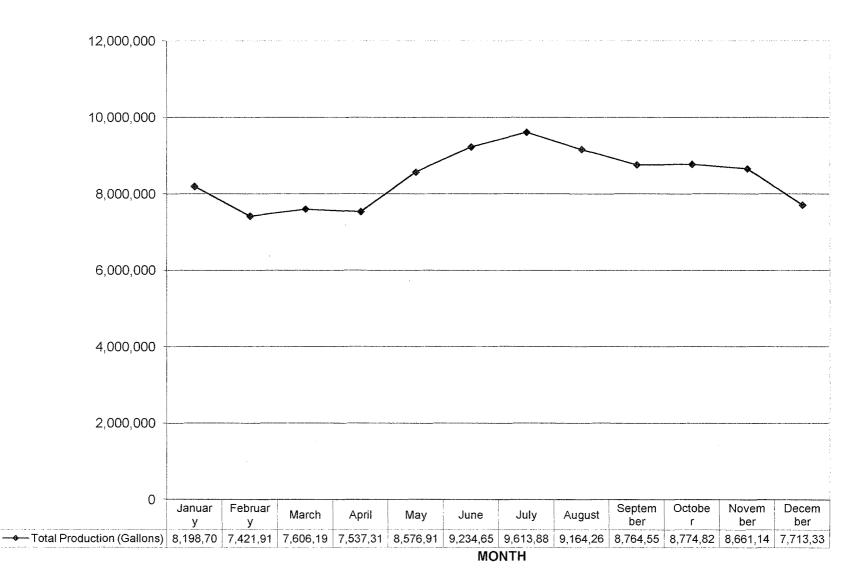
SUBJECT: Monthly Water Production Report

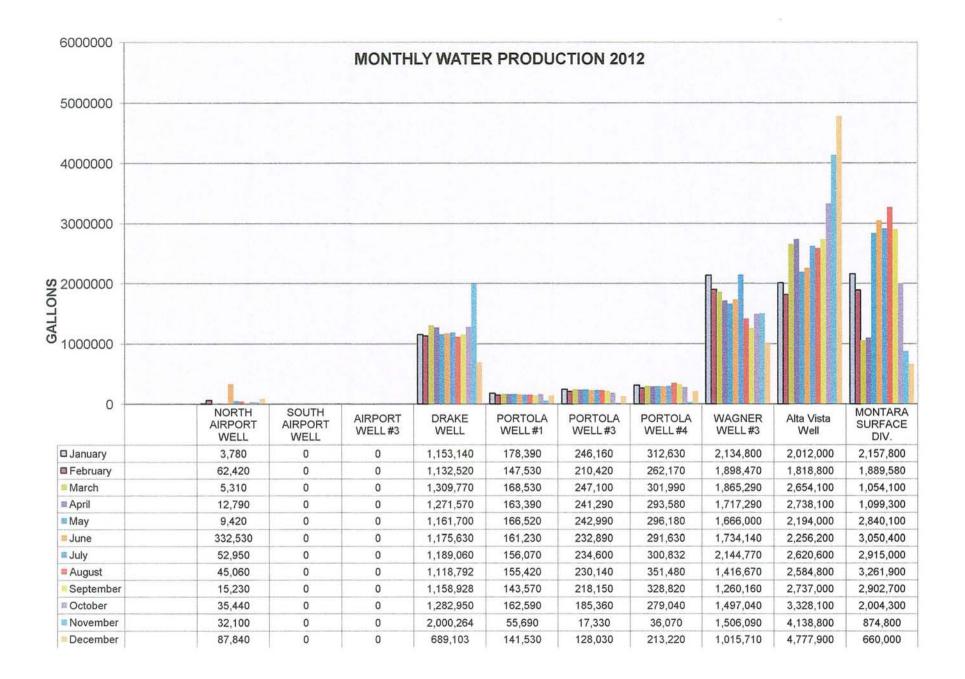
The attached two charts summarize the monthly water production for the District. The first shows a consolidated report from all sources by month. The second shows each water source the District uses, both wells and surface water. The production is shown in gallons of water produced.

RECOMMENDATION:

No action is required. This information is presented for the Board's information only.

Attachments







MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: February 7, 2013

TO: BOARD OF DIRECTORS

U

FROM: Clemens Heldmaier, General Manager

SUBJECT: Rain Report

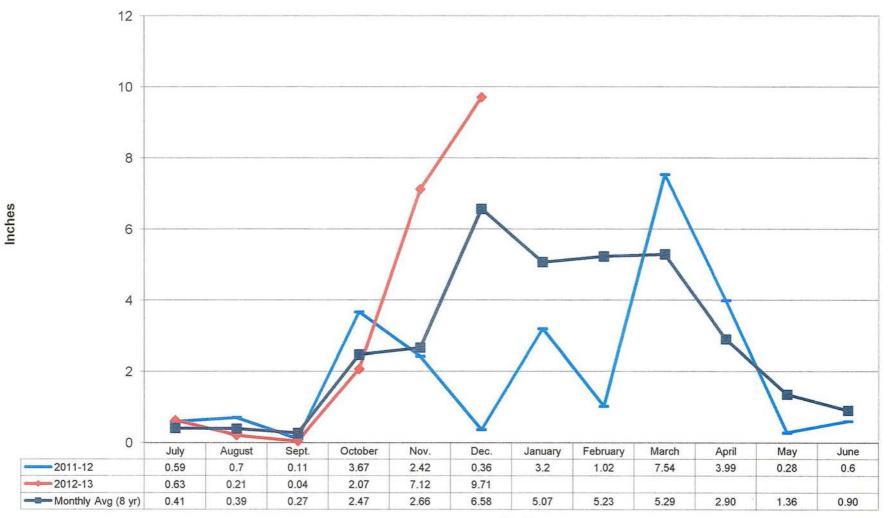
The attached chart shows the monthly rainfall at the Alta Vista Treatment Plant for the current and prior fiscal years along with the seven year average of rainfall.

RECOMMENDATION:

No action is required. This is presented for the Board's information only.

Attachment

RAIN REPORT



Month



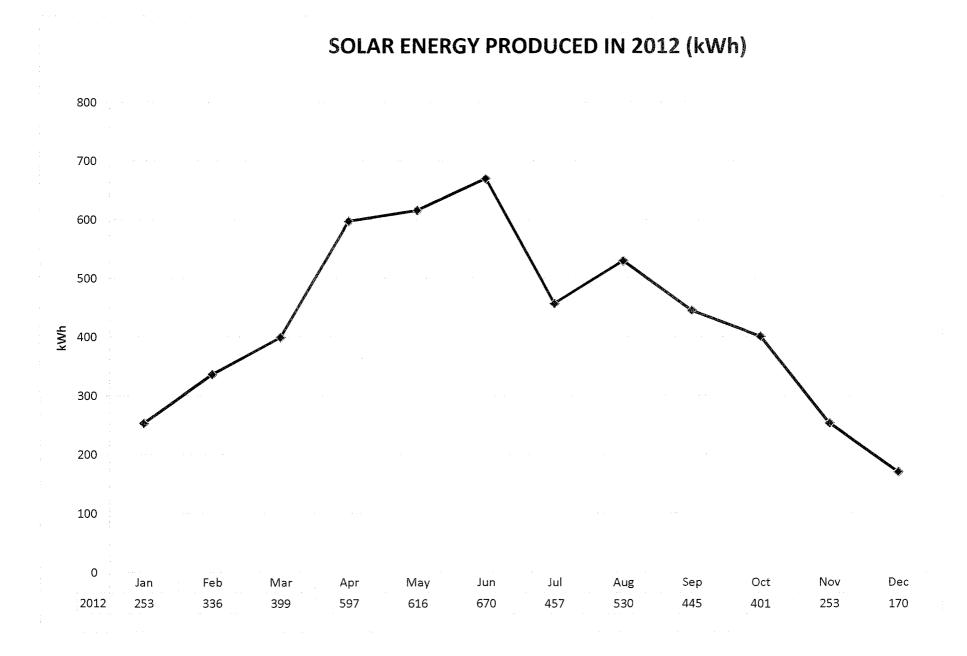
SUBJECT: Monthly Solar Energy Report

The attached chart summarizes the monthly solar production at the Alta Vista Array. Since the installation of the solar panels the District produced 27,910 kWh and saved 47,448 lbs of CO₂.

RECOMMENDATION:

No action is required. This information is presented for the Board's information only.

Attachments





MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: February 7, 2013

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

SUBJECT: Review and Possible Action Concerning District Reserve Policies.

At the December 6 Board meeting the Board adopted a Reserve Policy that sets minimum amounts for operating reserve, capital reserve and connection fee reserve.

The Water checking's account contained on February 6, 2013 \$364,544. The sewer checking's account contained \$549,764. The District's LAIF investment account contained \$3,053,122 of sewer funds. The District's acquisition and improvement account contained \$1,468,866 issued bond moneys that have to be spent within the next two years for water capital improvements. The table below show how the funds apply to the District's sewer reserve policy:

	Sewer minimum target	Sewer maximum target	Sewer operating account	Sewer investment account
Connection Fee Reserve	\$100,000	\$100,000		\$100,000
Operating Reserve	\$241,000	\$1,205,000	\$549,764	
Capital Reserve	\$1,992,000	\$3,495,00		\$2,953,122

The District has currently sufficient funds in reserve for connection fee, operating, and capital reserve on the sewer side.

The table below show how the funds apply to the District's water reserve policy:

	Water minimum target	Water maximum target	Water operating account	Water investment account
Connection Fee Reserve	\$168,500	\$168,500		
Operating Reserve	\$246,000	\$246,000	\$364,544	
Capital Reserve	\$1,203,500	\$2,421,200		



MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: February 7, 2013

TO: BOARD OF DIRECTORS

FROM: Clemens H. Heldmaier, General Manager

The District currently has sufficient funds in the operating reserve. Connection fee reserve and capital reserves do not exist. The District should collect funds over time to hold the recommended amounts in reserve.

RECOMMENDATION:

Authorize Bartle Wells to prepare a water rate study that includes the consideration of the new reserve policy and makes recommendations to increase the District's water reserves over time.

Attachments

Table 2Montara Water & Sanitary DistrictReserve Amounts - Minimum

Reserve	Water Fund	Sewer Fund	
Connection fees reserve	\$168,500	\$100,000	
Fee, connection domestic	112,000	80,000	
Fee, connection domestic remodel	1,500	20,000	
Fees, (private fire protection)	55,000		
Operating reserve	246,000	241,000	
Capital reserve	1,203,500	1,992,000	SAM??
Replacement of collection system		667,000	
Replacement of pump stations		450,000	
System replacements	750,000		
Capital improvement plan	453,500	875,000	
Total cash held in reserve	\$1,618,000	\$2,333,000	

Connection fees reserve equals one year's of revenue, which is spent on expansion-related capital projects caused by new customers.

Operating reserve for water equals two months of current fiscal year budgeted operating expenses. Operating reserve for sewer equals two months of current fiscal year budgeted operating expenses, which includes SAM assessments.

Capital reserve for sewer reflects replacements of collection system, pump stations, and a minimum annual amount of five future years of CIP projects applicable to existing customers. Capital reserve for water reflects replacements of below ground and above ground facilities plus a minimum annual amount of five future years of CIP projects applicable to existing customers.

Table 1 Montara Water & Sanitary District Reserve Amounts - Maximum

Reserve	Water Fund	Sewer Fund	
Connection fees reserve	\$168,500	\$100,000	
Fee, connection domestic	112,000	80,000	
Fee, connection domestic remodel	1,500	20,000	
Fees, (private fire protection)	55,000		
Operating reserve	246,000	1,205,000	
Capital reserve	<u>2,421,200</u>	3,495,000	SAM??
Replacement of collection system		667,000	
Replacement of pump stations		450,000	
System replacements	750,000		
Capital improvement plan	1,671,200	2,378,000	,
Total cash held in reserve	\$2,835,700	\$4,800,000	

Connection fees reserve equals one year's of revenue, which is spent on expansion-related capital projects caused by new customers.

Operating reserve for water equals two months of current fiscal year budgeted operating expenses. Operating reserve for sewer equals ten months of current fiscal year budgeted operating expenses, which includes SAM assessments.

Capital reserve for sewer reflects replacements of collection system, pump stations, and a maximum annual amount of five future years of CIP projects applicable to existing customers. Capital reserve for water reflects replacements of below ground and above ground facilities plus a maximum annual amount of five future years of CIP projects applicable to existing customers.

The second	MONTARA WATER AND SANITARY DISTRICT AGENDA			
	For M	eeting Of: February 7, 2013		
A	TO:	BOARD OF DIRECTORS		
	FROM:	Clemens H Heldmaier, General Manager		
SUBJECT:	Review Refinanc	and Possible Action Concerning ing of PNCEF Lease.		

Staff asked Bartle Wells to provide an analysis to refinance a lease agreement over \$1,786,674 that was obtained in 2006 for a major project with Chevron Energy Solutions. The project focused on energy and operational efficiencies, which consisted of improvements at the Alta Vista well site, SCADA system, emergency and maintenance supplies, installation of variable speed drives at well sites, and replacement of all District water meters. The financing was originally provided by Citibank with a 4.56% interest for a 20 year term and is now held by PNCEF.

Bartle Wells estimated conservatively that the refunding issue could have a rate of 2.60% and also have to cover a 2% prepayment premium and issuance costs.

Total net savings are estimated in at approximately \$174,000 or around 11.1% of the outstanding principal to be refunded. Present value savings are estimated at approximately \$120,000 or 7.6% of the outstanding principal to be refunded.

Savings are well over the 3% industry standard for pursuing a refunding. However, due to the deferred principal repayment structure of the outstanding 2006 lease, the District would have slightly higher payments in for a few years since principal would be paid down quicker with the refunding issue. The outstanding 2006 Lease defers principal payments until later years thereby reducing monthly payments in the early years at the expense of a) slower principal repayment, b) higher interest payments, and c) higher debt service over the longer run. So far the District has paid a total of \$191,151 in principal. Bartle Wells assumes that any refunding issue would need to be structured with level monthly (or annual) debt payments.

At the December 6 meeting the Board authorized Bartle Wells to inquire with PNCEF if a lowering of the interest rate would be considered or to prepare a Request for Proposal to refinance the PNCEF Lease.

PNCEF is proposing an amendment to the existing agreement with a lower interest rate of 2.95% and reduced interest payments. No change to the principal amortization schedule is proposed. This will result in higher savings in the early years, and declining savings in later years. Total gross savings are estimated by



MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: February 7, 2013

TO: BOARD OF DIRECTORS

FROM: Clemens H Heldmaier, General Manager Bartle Wells at \$209,000 and only marginal amendment processing fees of around \$500 would apply. BW assumes that a lower interest rate could be achieved by bidding out the refunding, but the potential additional savings from a lower rate would be more than offset by the additional issuance costs. In addition no inclining principal amortization structure could be achieved through other refinancing. The result would be higher payments in the early years compared to the existing debt and lower payments in the later years.

RECOMMENDATION:

Authorize the General Manger and Bartle Wells to accept the PNCEF offer.

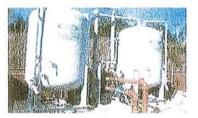
Table 1 Montara Water and Sanitary District Savings with PND Interest Rate Reduction

	Outstanding	Refunding	O
	2006 Lease	lssue	Savings
Principal	\$1,565,582.37	\$1,565,582.37	
Interest Rate	4.56%	2.95%	
Debt Coming by Fingel Vega			
Debt Service by Fiscal Year	# 00.040.00		#0.005.00
2012/13	\$29,940.00	\$23,654.78	\$6,285.22
2013/14	124,559.97	99,951.02	24,608.95
2014/15	129,600.00	105,930.65	23,669.34
2015/16	134,759.99	112,157.77	22,602.22
2016/17	140,160.00	118,761.22	21,398.78
2017/18	145,812.00	125,763.36	20,048.64
2018/19	151,680.03	133,138.94	18,541.09
2019/20	157,679.99	140,814.10	16,865.88
2020/21	164,160.00	149,149.57	15,010.43
2021/22	171,000.00	158,040.64	12,959.36
2022/23	177,600.01	166,897.90	10,702.12
2023/24	184,799.99	176,573.22	8,226.77
2024/25	191,400.00	185,877,73	5,522.27
2025/26	191,399.99	188,767.34	2,632.65
2026/27	<u>63,790.93</u>	<u>63,578.60</u>	212.33
Total	2,158,342.91	1,949,056.84	209,286.07
Average Monthly Payment	\$13,241.37	\$11,957.40	\$1,283.96
Average Annual Payment	\$158,896.41	\$143,488.85	\$15,407.56
Savings Gross Savings Gross Savings as a % of Refu	nded Principal		\$209,286.07 13.37%
Present Value Savings PV Savings as a % of Refunde	\$181,393.49 11.59%		

Montara Water and Sanitary District







REFUNDING ANALYSIS 2006 Municipal Lease/Purchase Agreement

(Assumes Monthly Payments and No Financed Reserve)

DRAFT 11/26/12



BARTLE WELLS ASSOCIATES

Table 1Montara Water and Sanitary DistrictRefunding Analysis Debt Service Comparison

	Outstanding	Refunding	Savings
	2006 Lease	Issue	(2006 Lease - Refi)
Principal	\$1,565,582.37	\$1,670,000.00	
Interest Rate	4.56%	2.60%	
Debt Service by Fiscal Year			
2012/13	\$29,940.00	\$36,959.69	(\$7,019.69)
2013/14	124,559.97	146,061.72	(21,501.75)
2014/15	129,600.00	146,061.72	(16,461.72)
2015/16	134,759.99	146,061.72	(11,301.73)
2016/17	140,160.00	146,061.72	(5,901.72)
2017/18	145,812.00	146,061.72	(249.72)
2018/19	151,680.03	146,061.72	5,618.31
2019/20	157,679.99	146,061.72	11,618.27
2020/21	164,160.00	146,061.72	18,098.28
2021/22	171,000.00	146,061.72	24,938.28
2022/23	177,600.01	146,061.72	31,538.29
2023/24	184,799.99	146,061.72	38,738.27
2024/25	191,400.00	146,061.72	45,338.28
2025/26	191,399.99	146,061.72	45,338.27
2026/27	<u>63,790.93</u>	<u>48,687,24</u>	<u>15,103.69</u>
Total	2,158,342.91	1,984,449.29	173,893.62
Average Monthly Payment	\$13,241.37	\$12,174.54	\$1,066.83
Average Annual Payment	\$158,896.41	\$146,094.43	\$12,801.98
Savings	······································	, , , , , , , , , , , , , , , , , , ,	
Gross Savings Gross Savings as a % of Refur	\$173,893.62		
Gross Savings as a % Of Refur	iueu Enncipai		11.11%
Present Value Savings	\$119,616.90		
PV Savings as a % of Refunde	7.64%		

Montara Water and Sanitary District Comparison of Monthly Debt Service Payments

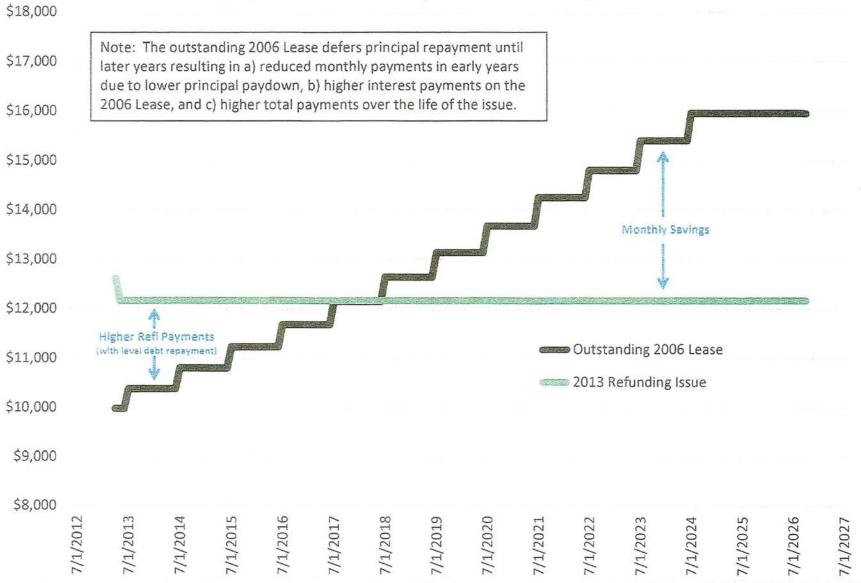


Table 2Montara Water and Sanitary District2006 Lease Payment Schedule

Payment				Total	Fiscal Year	Principal
Date	Principal	Rate	Interest	Debt Svc	Debt Svc	Remaining
						1,565,582.37
04/07/13	4,030.79	4.56%	5,949.21	9,980.00		1,561,551.58
05/07/13	4,046.10	4.56%	5,933.90	9,980.00		1,557,505.48
06/07/13	4,061,48	4.56%	5,918.52	9,980.00	29,940.00	1,553,444.00
07/07/13	4,476.91	4.56%	5,903.09	10,380.00		1,548,967.09
08/07/13	4,493.93	4.56%	5,886.07	10,380.00		1,544,473.16
09/07/13	4,511.00	4.56%	5,869.00	10,380.00		1,539,962.16
10/07/13	4,528.14	4.56%	5,851.86	10,380.00		1,535,434.02
11/07/13	4,545.35	4.56%	5,834.65	10,380.00		1,530,888.67
12/07/13	4,562.62	4.56%	5,817.38	10,380.00		1,526,326.05
01/07/14	4,579.96	4.56%	5,800.04	10,380.00		1,521,746.09
02/07/14	4,597.36	4.56%	5,782.64	10,380.00		1,517,148.73
03/07/14	4,614.83	4.56%	5,765.17	10,380.00		1,512,533.90
04/07/14	4,632.37	4.56%	5,747.63	10,380.00		1,507,901.53
05/07/14	4,649.97	4.56%	5,730.03	10,380.00		1,503,251.56
06/07/14	4,667.64	4.56%	5,712.36	10,380.00	124,559.97	1,498,583.92
07/07/14	5,105.38	4.56%	5,694.62	10,800.00		1,493,478.54
08/07/14	5,124.78	4.56%	5,675.22	10,800.00		1,488,353.76
09/07/14	5,144.26	4.56%	5,655.74	10,800.00		1,483,209.50
10/07/14	5,163.80	4.56%	5,636.20	10,800.00		1,478,045.70
11/07/14	5,183.43	4.56%	5,616.57	10,800.00		1,472,862.27
12/07/14	5,203.12	4.56%	5,596.88	10,800.00		1,467,659.15
01/07/15	5,222.90	4.56%	5,577.10	10,800.00		1,462,436.25
02/07/15	5,242.74	4.56%	5,557.26	10,800.00		1,457,193.51
03/07/15	5,262.66	4.56%	5,537.34	10,800.00		1,451,930.85
04/07/15	5,282.66	4.56%	5,517.34	10,800.00		1,446,648.19
05/07/15	5,302.74	4.56%	5,497.26	10,800.00		1,441,345.45
06/07/15	5,322.89	4.56%	5,477.11	10,800.00	129,600.00	1,436,022.56
07/07/15	5,773.11	4.56%	5,456.89	11,230.00		1,430,249.45
08/07/15	5,795.05	4.56%	5,434.95	11,230.00		1,424,454.40
09/07/15	5,817.07	4.56%	5,412.93	11,230.00		1,418,637.33
10/07/15	5,839.18	4.56%	5,390.82	11,230.00		1,412,798.15
11/07/15	5,861.37	4.56%	5,368.63	11,230.00		1,406,936.78
12/07/15	5,883.64	4.56%	5,346.36	11,230.00		1,401,053.14
01/07/16	5,906.00	4.56%	5,324.00	11,230.00		1,395,147.14
02/07/16	5,928.44	4.56%	5,301.56	11,230.00		1,389,218.70
03/07/16	5,950.97	4.56%	5,279.03	11,230.00		1,383,267.73
04/07/16	5,973.58	4.56%	5,256.42	11,230.00		1,377,294.15
05/07/16	5,996.28	4.56%	5,233.72	11,230.00		1,371,297.87
06/07/16	6,019.07	4.56%	5,210.93	11,230.00	134,759.99	1,365,278.80
07/07/16	6,491.94	4.56%	5,188.06	11,680.00		1,358,786.86
08/07/16	6,516.61	4.56%	5,163.39	11,680.00		1,352,270.25
09/07/16	6,541.37	4.56%	5,138,63	11,680.00		1,345,728.88
10/07/16	6,566.23	4.56%	5,113.77	11,680.00		1,339,162.65
11/07/16	6,591.18	4.56%	5,088.82	11,680.00		1,332,571.47
12/07/16	6,616.23	4.56%	5,063.77	11,680.00		1,325,955.24
01/07/17	6,641.37	4.56%	5,038.63	11,680.00		1,319,313.87
02/07/17	6,666.61	4.56%	5,013.39	11,680.00		1,312,647.26
03/07/17	6,691.94	4.56%	4,988.06	11,680.00		1,305,955.32
04/07/17	6,717.37	4.56%	4,962.63	11,680.00		1,299,237.95
05/07/17	6,742.90	4.56%	4,937.10	11,680.00		1,292,495.05
06/07/17	6,768.52	4.56%	4,911,48	11,680.00	140,160.00	1,285,726.53
07/07/17	7,265.24	4.56%	4,885.76	12,151.00		1,278,461.29
08/07/17	7,292.85	4.56%	4,858.15	12,151.00		1,271,168.44
09/07/17	7,320.56	4.56%	4,830.44	12,151.00		1,263,847.88
10/07/17	7,348.38	4.56%	4,802.62	12,151.00		1,256,499.50
11/07/17	7,376.30	4.56%	4,774.70	12,151.00		1,249,123.20
12/07/17	7,404.33	4.56%	4,746.67	12,151.00		1,241,718.87
01/07/18	7,432.47	4.56%	4,718,53	12,151.00		1,234,286.40
02/07/18	7,460.71	4.56%	4,690.29	12,151.00		1,226,825.69
03/07/18	7,489.06	4.56%	4,661.94	12,151.00		1,219,336.63

Table 2Montara Water and Sanitary District2006 Lease Payment Schedule

Payment				Total	Fiscal Year	Principal
Date	Principal	Rate	Interest	Debt Svc	Debt Svc	Remaining
04/07/18	7,517.52	4.56%	4,633.48	12,151.00		1,211,819.11
05/07/18	7,546.09	4.56%	4,604.91	12,151.00		1,204,273.02
06/07/18	7,574.76	4.56%	4,576.24	12,151.00	145,812.00	1,196,698.26
07/07/18	8,092.55	4.56%	4,547.45	12,640.00		1,188,605.71
08/07/18	8,123.30	4.56%	4,516.70	12,640.00		1,180,482.41
09/07/18	8,154.17	4.56%	4,485.83	12,640.00		1,172,328.24
10/07/18	8,185.15	4.56%	4,454,85	12,640.00		1,164,143.09
11/07/18	8,216.26	4.56%	4,423.74	12,640.00		1,155,926.83
12/07/18	8,247.48	4.56%	4,392.52	12,640.00		1,147,679.35
01/07/19	8,278.82	4.56%	4,361.18	12,640.00		1,139,400.53
02/07/19	8,310.28	4.56%	4,329.72	12,640.00		1,131,090.25
03/07/19	8,341.86	4.56%	4,298.14	12,640.00		1,122,748.39
04/07/19	8,373.56	4.56%	4,266.44	12,640.00		1,114,374.83
05/07/19	8,405.38	4.56%	4,234.62	12,640.00		1,105,969.45
06/07/19	8,437.32	4.56%	4,202.68	12,640.00	151,680.03	1,097,532.13
07/07/19	8,969.38	4.56%	4,170.62	13,140.00		1,088,562.75
08/07/19	9,003.46	4.56%	4,136.54	13,140.00		1,079,559.29
09/07/19	9,037.67	4.56%	4,102.33	13,140.00		1,070,521.62
10/07/19	9,072.02	4.56%	4,067.98	13,140.00		1,061,449.60
11/07/19	9,106.49	4.56%	4,033.51	13,140.00		1,052,343.11
12/07/19	9,141.10	4.56%	3,998.90	13,140.00		1,043,202.01
01/07/20	9,175.83	4.56%	3,964.17	13,140.00		1,034,026.18
02/07/20	9,210.70	4.56%	3,929.30	13,140.00		1,024,815.48
03/07/20	9,245.70	4.56%	3,894.30	13,140.00		1,015,569.78
04/07/20	9,280.83	4.56%	3,859.17	13,140.00		1,006,288.95
05/07/20	9,316.10	4.56%	3,823.90	13,140.00		996,972.85
06/07/20	9,351.50	4.56%	3,788.50	13,140.00	157,679.99	987,621.35
07/07/20	9,927.04	4.56%	3,752.96	13,680.00		977,694.31
08/07/20	9,964.76	4.56%	3,715.24	13,680.00		967,729.55
09/07/20	10,002.63	4.56%	3,677.37	13,680.00		957,726.92
10/07/20	10,040.64	4.56%	3,639.36	13,680.00		947,686.28
11/07/20	10,078.79	4.56%	3,601.21	13,680.00		937,607.49
12/07/20	10,117.09	4.56%	3,562.91	13,680.00		927,490.40
01/07/21	10,155.54	4.56%	3,524.46	13,680.00		917,334.86
02/07/21	10,194.13	4.56%	3,485.87	13,680.00		907,140.73
03/07/21	10,232.87	4.56%	3,447.13	13,680.00		896,907.86
04/07/21	10,271.75	4.56%	3,408.25	13,680.00		886,636.11
05/07/21	10,310.78	4.56%	3,369.22	13,680.00		876,325.33
06/07/21	10,349.96	4.56%	3,330.04	13,680.00	164,160.00	865,975.37
07/07/21	10,959.29	4.56%	3,290.71	14,250.00		855,016.08
08/07/21	11,000.94	4.56%	3,249.06	14,250.00		844,015.14
09/07/21	11,042.74	4.56%	3,207.26	14,250.00		832,972.40
10/07/21	11,084.70	4.56%	3,165.30	14,250.00		821,887.70
11/07/21	11,126.83	4.56%	3,123.17	14,250.00		810,760.87
12/07/21	11,169.11	4.56%	3,080.89	14,250.00		799,591.76
01/07/22	11,211.55	4.56%	3,038.45	14,250.00		788,380.21
02/07/22	11,254.16	4.56%	2,995.84	14,250.00		777,126.05
03/07/22	11,296.92	4.56%	2,953.08	14,250.00		765,829.13
04/07/22	11,339.85	4.56%	2,910.15	14,250.00		754,489.28
05/07/22	11,382.94	4.56%	2,867.06	14,250.00		743,106.34
06/07/22	11,426.20	4.56%	2,823.80	14,250.00	171,000.00	731,680.14
07/07/22	12,019.62	4.56%	2,780.38	14,800.00		719,660.52
08/07/22	12,065.29	4.56%	2,734.71	14,800.00		707,595.23
09/07/22	12,111.14	4.56%	2,688.86	14,800.00		695,484.09
10/07/22	12,157.16	4.56%	2,642.84	14,800.00		683,326.93
11/07/22	12,203.36	4.56%	2,596.64	14,800.00		671,123.57
12/07/22	12,249.73	4.56%	2,550.27	14,800.00		658,873.84
01/07/23	12,296.28	4.56%	2,503.72	14,800.00		646,577.56
02/07/23	12,343.01	4.56%	2,456.99	14,800.00		634,234.55
03/07/23	12,389.91	4.56%	2,410.09	14,800.00		621,844.64
04/07/23	12,436.99	4.56%	2,363.01	14,800.00		609,407.65

Table 2Montara Water and Sanitary District2006 Lease Payment Schedule

Payment				Total	Fiscal Year	Principal
Date	Principal	Rate	Interest	Debt Svc	Debt Svc	Remaining
05/07/23	12,484.25	4.56%	2,315.75	14,800.00		596,923.40
06/07/23	12,531.69	4.56%	2,268.31	14,800.00	177,600.01	584,391.71
07/07/23	13,179.31	4.56%	2,220.69	15,400.00	.,.,	571,212.40
08/07/23	13,229.39	4.56%	2,170.61	15,400.00		557,983.01
09/07/23	13,279,66	4.56%	2,120,34	15,400.00		544,703.35
10/07/23	13,330.13	4.56%	2.069.87	15,400.00		531,373.22
11/07/23	13,380.78	4.56%	2,019,22	15,400.00		517,992.44
12/07/23	13,431.63	4.56%	1,968.37	15,400.00		504,560.81
01/07/24	13,482.67	4.56%	1,917.33	15,400.00		491,078.14
02/07/24	13,533.90	4.56%	1,866.10	15,400.00		477,544.24
03/07/24	13,585.33	4.56%	1,814.67	15,400.00		463,958.91
04/07/24	13,636.96	4.56%	1,763.04	15,400.00		450,321.95
05/07/24	13,688.78	4.56%	1,711.22	15,400.00		436,633.17
06/07/24	13,740.79	4.56%	1,659.21	15,400.00	184,799,99	422,892.38
07/07/24	14,343.01	4.56%	1,606.99	15,950.00	•	408,549.37
08/07/24	14,397.51	4.56%	1,552,49	15,950.00		394,151.86
09/07/24	14,452.22	4.56%	1,497.78	15,950.00		379,699.64
10/07/24	14,507.14	4.56%	1,442.86	15,950.00		365,192.50
11/07/24	14,562.27	4.56%	1,387.73	15,950.00		350,630.23
12/07/24	14,617,61	4.56%	1,332,39	15,950.00		336,012.62
01/07/25	14,673,15	4.56%	1,276.85	15,950.00		321,339.47
02/07/25	14,728.91	4.56%	1,221.09	15,950.00		306,610.56
03/07/25	14,784.88	4.56%	1,165.12	15,950.00		291,825.68
04/07/25	14,841.06	4.56%	1,108.94	15,950.00		276,984.62
05/07/25	14,897,46	4.56%	1,052.54	15,950.00		262,087.16
06/07/25	14,954.07	4.56%	995.93	15,950.00	191,400.00	247,133.09
07/07/25	15,010.89	4.56%	939.11	15,950.00	·	232,122.20
08/07/25	15,067.94	4.56%	882.06	15,950.00		217,054.26
09/07/25	15,125.19	4.56%	824.81	15,950.00		201,929.07
10/07/25	15,182.67	4.56%	767.33	15,950.00		186,746.40
11/07/25	15,240.36	4.56%	709.64	15,950.00		171,506.04
12/07/25	15,298.28	4.56%	651.72	15,950.00		156,207.76
01/07/26	15,356.41	4.56%	593.59	15,950.00		140,851.35
02/07/26	15,414.76	4.56%	535.24	15,950.00		125,436.59
03/07/26	15,473.34	4.56%	476.66	15,950.00		109,963.25
04/07/26	15,532.14	4.56%	417.86	15,950.00		94,431.11
05/07/26	15,591.16	4.56%	358.84	15,950.00		78,839.95
06/07/26	15,650.41	4.56%	299.59	15,950.00	191,399.99	63,189.54
07/07/26	15,709.88	4.56%	240.12	15,950.00		47,479.66
08/07/26	15,769.58	4.56%	180.42	15,950.00		31,710.08
09/07/26	15,829.50	4.56%	120.50	15,950.00		15,880.58
10/07/26	15,880.58	4.56%	60.35	15,940.93	63,790.93	0.00
Total	1,565,582.37		592,760.54	2,158,342.91	2,158,342.91	

Table 3 Montara Water and Sanitary District Refunding Requiremen!

Closing Date	03/02/13
Redemption Date	03/07/13
Refunding Requirement Debt Service Payment Due 03/07/13 Outstanding Principal (after 03/07/13 payment) Prepayment Premium (2%) Refunding Requirement	\$9,980.00 1,565,582.37 <u>31,311.65</u> 1,606,874.02

Table 4

Montara Water and Sanitary District Sources and Uses

Sources

Par amount of 2013 refinancing Debt service payment due 03/07/12 Total sources	1,670,000.00 <u>9,980.00</u> 1,679,980.00
Uses Refunding requirement Issuance costs (estimated) Miscellaneous/contingency Total uses	1,606,874.02 70,000.00 <u>3,105.98</u> 1,679,980.00
Net	0.00

Table 5Montara Water and Sanitary District2013 Refunding Issue

Payment				Total	Fiscal Year	Principal
Date	Principal	Rate	Interest	Debt Svc	Debt Svc	Remaining
						1,670,000.00
04/07/13	8,394.68	2.60%	4,221.39	12,616.07		1,661,605.32
05/07/13	8,571.67	2.60%	3,600.14	12,171.81		1,653,033.65
06/07/13	8,590.24	2.60%	3,581.57	12,171.81	36,959.69	1,644,443.41
07/07/13	8,608.85	2.60%	3,562,96	12,171.81		1,635,834.56
08/07/13	8,627.50	2.60%	3,544.31	12,171.81		1,627,207.06
09/07/13	8,646.19	2.60%	3,525.62	12,171.81		1,618,560.87
10/07/13	8,664.93	2.60%	3,506.88	12,171.81		1,609,895.94
11/07/13	8,683.70	2.60%	3,488.11	12,171.81		1,601,212.24
12/07/13	8,702.52	2.60%	3,469.29	12,171.81		1,592,509.72
01/07/14	8,721.37	2.60%	3,450.44	12,171.81		1,583,788.35
02/07/14	8,740.27	2.60%	3,431.54	12,171.81		1,575,048.08
03/07/14	8,759.21	2.60%	3,412.60	12,171.81		1,566,288.87
04/07/14	8,778.18	2.60%	3,393.63	12,171.81		1,557,510.69
05/07/14	8,797.20	2.60%	3,374.61	12,171.81		1,548,713.49
06/07/14	8,816,26	2.60%	3,355.55	12,171.81	146,061.72	1,539,897.23
07/07/14	8,835.37	2.60%	3,336.44	12,171.81		1,531,061.86
08/07/14	8,854.51	2.60%	3,317.30	12,171.81		1,522,207.35
09/07/14	8,873.69	2.60%	3,298.12	12,171.81		1,513,333.66
10/07/14	8,892.92	2.60%	3,278.89	12,171.81		1,504,440.74
11/07/14	8,912.19	2.60%	3,259,62	12,171.81		1,495,528.55
12/07/14	8,931.50	2,60%	3,240.31	12,171.81		1,486,597.05
01/07/15	8,950.85	2.60%	3,220.96	12,171.81		1,477,646.20
02/07/15	8,970.24	2.60%	3,201.57	12,171.81		1,468,675.96
03/07/15	8,989,68	2.60%	3,182.13	12,171.81		1,459,686.28
04/07/15	9,009.16	2.60%	3,162.65	12,171.81		1,450,677.12
05/07/15	9,028.68	2.60%	3,143.13	12,171.81		1,441,648.44
06/07/15	9,048.24	2.60%	3,123.57	12,171.81	146,061.72	1,432,600.20
07/07/15	9,067.84	2.60%	3,103.97	12,171.81		1,423,532.36
08/07/15	9,087.49	2.60%	3,084.32	12,171.81		1,414,444.87
09/07/15	9,107.18	2.60%	3,064.63	12,171.81		1,405,337.69
10/07/15	9,126.91	2.60%	3,044.90	12,171.81		1,396,210.78
11/07/15	9,146.69	2.60%	3,025.12	12,171.81		1,387,064,09
12/07/15	9,166.50	2.60%	3,005,31	12,171.81		1,377,897.59
01/07/16	9,186.37	2.60%	2,985.44	12,171.81		1,368,711.22
02/07/16	9,206.27	2.60%	2,965.54	12,171.81		1,359,504.95
03/07/16	9,226.22	2,60%	2,945.59	12,171.81		1,350,278.73
04/07/16	9,246.21	2,60%	2,925.60	12,171.81		1,341,032.52
05/07/16	9,266.24	2.60%	2,905.57	12,171.81		1,331,766.28
06/07/16	9,286.32	2.60%	2,885.49	12,171.81	146,061.72	
07/07/16	9,306.44	2.60%		12,171.81	140,001.72	1,322,479.96
08/07/16	9,326.60	2.60%	2,865.37			1,313,173.52
09/07/16	9,346.81	2.60%	2,845.21 2,825.00	12,171.81		1,303,846.92
10/07/16		2.60%	2,825.00	12,171.81		1,294,500.11
	9,367.06		,	12,171.81		1,285,133.05
11/07/16	9,387.36	2.60%	2,784.45	12,171.81		1,275,745.69
12/07/16	9,407.69	2.60%	2,764.12	12,171.81		1,266,338.00
01/07/17	9,428.08	2.60%	2,743.73	12,171.81		1,256,909.92
02/07/17	9,448.51	2.60%	2,723.30	12,171.81		1,247,461.41
03/07/17	9,468.98	2.60%	2,702.83	12,171.81		1,237,992.43
04/07/17	9,489.49	2.60%	2,682.32	12,171.81		1,228,502.94
05/07/17	9,510.05	2.60%	2,661.76	12,171.81		1,218,992.89
06/07/17	9,530.66	2.60%	2,641.15	12,171.81	146,061.72	1,209,462.23
07/07/17	9,551.31	2.60%	2,620.50	12,171.81		1,199,910.92
08/07/17	9,572.00	2,60%	2,599.81	12,171.81		1,190,338.92
09/07/17	9,592.74	2.60%	2,579.07	12,171.81		1,180,746.18
10/07/17	9,613.53	2.60%	2,558.28	12,171.81		1,171,132.65
11/07/17	9,634.36	2.60%	2,537.45	12,171.81		1,161,498.29
12/07/17	9,655.23	2.60%	2,516.58	12,171.81		1,151,843.06
01/07/18	9,676.15	2.60%	2,495.66	12,171.81		

Table 5Montara Water and Sanitary District2013 Refunding Issue

Payment Date	Principal	Rate	Interest	Total Debt Svc	Fiscal Year Debt Svc	Principa Remaining
						<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
)2/07/18	9,697.12	2.60%	2,474.69	12,171.81		1,132,469.79
03/07/18	9,718.13	2.60%	2,453.68	12,171.81		1,122,751.66
04/07/18	9,739.18	2.60%	2,432.63	12,171.81		1,113,012.48
5/07/18	9,760.28	2.60%	2,411.53	12,171.81		1,103,252.20
6/07/18	9,781.43	2.60%	2,390.38	12,171.81	146,061.72	1,093,470.77
7/07/18	9,802.62	2.60%	2,369.19	12,171.81		1,083,668.15
8/07/18	9,823.86	2.60%	2,347.95	12,171.81		1,073,844.29
9/07/18	9,845.15	2.60%	2,326.66	12,171.81		1,063,999.14
0/07/18	9,866.48	2.60%	2,305.33	12,171.81		1,054,132.66
1/07/18	9,887.86	2.60%	2,283.95	12,171.81		1,044,244.80
2/07/18	9,909.28	2.60%	2,262.53	12,171.81		1,034,335.52
1/07/19	9,930.75	2.60%	2,241.06	12,171.81		1,024,404.77
2/07/19	9,952.27	2.60%	2,219.54	12,171.81		1,014,452.50
3/07/19	9,973.83	2.60%	2,197.98	12,171.81		1,004,478.67
4/07/19	9,995.44	2.60%	2,176.37	12,171.81		994,483.23
5/07/19	10,017.10	2.60%	2,154.71	12,171.81	1 10 001 70	984,466.13
6/07/19	10,038.80	2.60%	2,133.01	12,171.81	146,061.72	974,427.33
7/07/19	10,060.55	2.60%	2,111.26	12,171.81		964,366.78
8/07/19	10,082.35	2.60%	2,089.46	12,171.81		954,284.43
9/07/19	10,104.19	2.60%	2,067.62	12,171.81		944,180.24
0/07/19	10,126.09	2.60%	2,045.72	12,171.81		934,054.15
1/07/19	10,148.03	2.60%	2,023.78	12,171.81		923,906.12
2/07/19	10,170.01	2.60%	2,001.80	12,171.81		913,736.11
1/07/20	10,192.05	2.60%	1,979.76	12,171.81		903,544.06
2/07/20	10,214.13	2.60%	1,957.68	12,171.81		893,329.93
3/07/20	10,236.26	2.60% 2.60%	1,935.55	12,171.81		883,093.67
4/07/20	10,258.44	2.60%	1,913.37	12,171.81		872,835.23
5/07/20	10,280.67		1,891.14	12,171.81	140.004 70	862,554.56
6/07/20	10,302.94	2.60%	1,868.87	12,171.81	146,061.72	852,251.62
7/07/20	10,325.26	2.60%	1,846.55	12,171.81		841,926.36
8/07/20	10,347.64	2.60%	1,824.17	12,171.81		831,578.72
9/07/20	10,370.06	2.60%	1,801.75	12,171.81		821,208.66
0/07/20	10,392.52	2.60%	1,779.29	12,171.81		810,816,14
1/07/20	10,415.04	2.60%	1,756.77	12,171.81		800,401.10
2/07/20	10,437.61	2.60% 2.60%	1,734.20	12,171.81		789,963.49
1/07/21	10,460.22 10,482.89	2.60%	1,711.59	12,171.81		779,503.27
2/07/21	,	2.60%	1,688.92	12,171.81		769,020.38
3/07/21	10,505.60		1,666.21	12,171.81		758,514.78
4/07/21	10,528.36	2.60% 2.60%	1,643.45	12,171.81		747,986.42
5/07/21 6/07/21	10,551.17		1,620.64	12,171.81	140 004 70	737,435.25
	10,574.03	2.60%	1,597.78	12,171.81	146,061.72	726,861.22
7/07/21	10,596.94	2.60%	1,574.87	12,171.81		716,264.28
3/07/21	10,619.90	2.60%	1,551.91	12,171.81		705,644.38
9/07/21	10,642.91	2.60%	1,528.90	12,171.81		695,001.47
0/07/21	10,665.97	2.60%	1,505.84	12,171.81		684,335.50
1/07/21	10,689.08	2.60%	1,482.73	12,171.81		673,646.42
2/07/21	10,712.24	2.60%	1,459.57	12,171.81		662,934.18
1/07/22	10,735.45	2.60%	1,436.36	12,171.81		652,198.73
2/07/22	10,758.71	2.60%	1,413.10	12,171.81		641,440.02
3/07/22	10,782.02	2.60%	1,389.79	12,171.81		630,658.00
4/07/22	10,805.38	2.60%	1,366.43	12,171.81		619,852.62
5/07/22	10,828.80	2.60%	1,343.01	12,171.81	440.004.70	609,023.82
6/07/22	10,852.26	2.60%	1,319.55	12,171.81	146,061.72	598,171.56
7/07/22	10,875.77	2.60%	1,296.04	12,171.81		587,295.79
8/07/22	10,899.34	2.60%	1,272.47	12,171.81		576,396.45
9/07/22	10,922.95	2.60%	1,248.86	12,171.81		565,473.50
0/07/22	10,946.62	2.60%	1,225.19	12,171.81		554,526.88
1/07/22	10,970.34	2.60%	1,201.47	12,171.81		543,556.54
2/07/22	10,994.10	2.60%	1,177.71	12,171.81		532,562.44

Table 5Montara Water and Sanitary District2013 Refunding Issue

Payment				Total	Fiscal Year	Principal
Date	Principal	Rate	Interest	Debt Svc	Debt Svc	Remaining
01/07/23	11,017.92	2.60%	1,153.89	12,171.81		521,544.52
02/07/23	11,041.80	2.60%	1,130.01	12,171.81		510,502.72
03/07/23	11,065.72	2.60%	1,106.09	12,171,81		499,437.00
03/07/23	11,089.70	2.60%	1,082.11	12,171.81		488,347.30
04/07/23	11,113.72	2.60%	1,058.09	12,171.81		477,233.58
06/07/23	11,137.80	2.60%	1,034.01	12,171.81	146,061.72	466,095.78
07/07/23	11,161.94	2.60%	1,009.87	12,171.81	140,001.72	454,933.84
08/07/23		2.60%	985.69	12,171.81		434,933.04
09/07/23	11,186.12	2.60%	961.45	12,171.81		432,537.36
	11,210.36	2.60%		•		•
10/07/23	11,234.65		937.16	12,171.81		421,302.71
11/07/23	11,258.99	2.60%	912.82	12,171.81		410,043.72
12/07/23	11,283.38	2.60%	888.43	12,171.81		398,760.34
01/07/24	11,307.83	2.60%	863.98	12,171.81		387,452.51
02/07/24	11,332.33	2.60%	839.48	12,171.81		376,120.18
03/07/24	11,356.88	2.60%	814.93	12,171.81		364,763.30
04/07/24	11,381.49	2.60%	790.32	12,171.81		353,381.81
05/07/24	11,406.15	2.60%	765.66	12,171.81		341,975.66
06/07/24	11,430.86	2.60%	740.95	12,171.81	146,061.72	330,544.80
07/07/24	11,455.63	2.60%	716.18	12,171.81		319,089.17
08/07/24	11,480.45	2.60%	691.36	12,171.81		307,608.72
09/07/24	11,505.32	2.60%	666.49	12,171.81		296,103.40
10/07/24	11,530.25	2.60%	641.56	12,171.81		284,573.15
11/07/24	11,555.23	2.60%	616.58	12,171.81		273,017.92
12/07/24	11,580.27	2.60%	591.54	12,171.81		261,437.65
01/07/25	11,605.36	2.60%	566.45	12,171.81		249,832.29
02/07/25	11,630.51	2.60%	541.30	12,171.81		238,201.78
03/07/25	11,655.71	2.60%	516.10	12,171.81		226,546.07
04/07/25	11,680.96	2.60%	490.85	12,171.81		214,865.11
05/07/25	11,706.27	2.60%	465.54	12,171.81		203,158.84
06/07/25	11,731.63	2.60%	440.18	12,171.81	146,061.72	191,427.21
07/07/25	11,757.05	2.60%	414.76	12,171.81		179,670.16
08/07/25	11,782.52	2.60%	389.29	12,171.81		167,887.64
09/07/25	11,808.05	2.60%	363.76	12,171.81		156,079.59
10/07/25	11,833.64	2.60%	338.17	12,171.81		144,245.95
11/07/25	11,859.28	2.60%	312.53	12,171.81		132,386.67
12/07/25	11,884.97	2.60%	286.84	12,171.81		120,501.70
01/07/26	11,910.72	2.60%	261.09	12,171.81		108,590.98
02/07/26	11,936,53	2.60%	235.28	12,171.81		96,654,45
03/07/26	11,962.39	2.60%	209.42	12,171.81		84,692.06
04/07/26	11,988.31	2.60%	183.50	12,171.81		72,703,75
05/07/26	12,014.29	2.60%	157.52	12,171.81		60,689.46
06/07/26	12,040.32	2.60%	131.49	12,171.81	146,061.72	48,649.14
07/07/26	12,066.40	2.60%	105.41	12,171.81		36,582.74
08/07/26	12,092,55	2.60%	79.26	12,171.81		24,490.19
09/07/26	12,118.75	2.60%	53.06	12,171.81		12.371.44
10/07/26	12,371.44	2.60%	26.80	12,171.81	48,687.24	0.00
Total	1,670,000.00		314,675.72	1,984,449.29	1,984,449.29	

Table 6Montara Water and Sanitary DistrictArbitrage Yield Limit (AYL)

Dated Date:

03/02/13

Payment	Period		PV at AYL on 03/02/13
Date	Debt Svc	Period	2.59851%
04/07/13	12,616.07	1.167	12,584.28
05/07/13	12,171.81	2.167	12,114.90
06/07/13	12,171.81	3.167	12,088.72
07/07/13	12,171.81	4.167	12,062.60
08/07/13	12,171.81	5.167	12,036.54
09/07/13	12,171.81	6.167	12,010.53
10/07/13	12,171.81	7.167	11,984.58
11/07/13	12,171.81	8.167	11,958.68
12/07/13	12,171.81	9.167	11,932.84
01/07/14	12,171.81	10.167	11,907.06
02/07/14	12,171.81	11.167	11,881.33
03/07/14	12,171.81	12.167	11,855.66
04/07/14	12,171.81	13.167	11,830.04
05/07/14	12,171.81	14.167	11,804.48
06/07/14	12,171.81	15.167	11,778.97
07/07/14	12,171.81	16.167	11,753.52
08/07/14	12,171.81	17.167	11,728.12
09/07/14	12,171.81	18.167	11,702.78
10/07/14	12,171.81	19.167	11,677.49
11/07/14	12,171.81	20.167	11,652.26
12/07/14	12,171.81	21.167	11,627.09
01/07/15	12,171.81	22.167	11,601.96
02/07/15	12,171.81	23.167	11,576.89
03/07/15	12,171.81	24.167	11,551.88
04/07/15	12,171.81	25.167	11,526.92
05/07/15	12,171.81	26.167	11,502.01
06/07/15	12,171.81	27.167	11,477.16
07/07/15	12,171.81	28.167	11,452.36
08/07/15	12,171.81	29.167	11,427.61
09/07/15	12,171.81	30.167	11,402.92
10/07/15	12,171.81	31.167	11,378.28
11/07/15	12,171,81	32.167	11,353.70
12/07/15	12,171.81	33.167	11,329.16
01/07/16	12,171.81	34.167	11,304.68
02/07/16	12,171.81	35.167	11,280.26
03/07/16	12,171.81	36.167	11,255.88
04/07/16	12,171.81	37.167	11,231.56
05/07/16	12,171.81	38.167	11,207.29
06/07/16	12,171.81	39.167	11,183.08
07/07/16	12,171.81	40.167	11,158.91
08/07/16	12,171.81	41.167	11,134.80
09/07/16	12,171.81	42.167	11,110.74
10/07/16	12,171.81	43.167	11,086.74
11/07/16	12,171.81	44.167	11,062.78
12/07/16	12,171.81	45.167	11,038.88
01/07/17	12,171.81	46.167	11,015.02
02/07/17	12,171.81	47.167	10,991.22
03/07/17	12,171.81	48.167	10,967.47
04/07/17	12,171.81	49.167	10,943.78
05/07/17	12,171.81	50.167	10,920.13
06/07/17	12,171.81	51.167	10,896.53
07/07/17	12,171.81	52.167	10,872.99
08/07/17	12,171.81	53.167	10,849.50
09/07/17	12,171.81	54.167	10,826.05
10/07/17	12,171.81	55.167	10,802.66
11/07/17	12,171.81	56.167	10,779.32
12/07/17	12,171.81	57.167	10,756.03
01/07/18	12,171.81	58.167	10,732.79
02/07/18	12,171.81	59.167	10,709.59

Table 6 Montara Water and Sanitary District Arbitrage Yield Limit (AYL)

Dated Date:

03/02/13

Poumont	Period		PV at AYL on 03/02/13
Payment Date	Debt Svc	Period	2.59851%
03/07/18	12,171.81	60.167	10,686.45
04/07/18	12,171.81	61.167	10,663.36
05/07/18	12,171.81	62.167	10,640.32
06/07/18	12,171.61	63.167	10,617.33
07/07/18	12,171.81	64.167	10,594.39
08/07/18	12,171.81	65.167	10,571.50
09/07/18	12,171.81	66.167	10,548.66
10/07/18	12,171.81	67.167	10,525.86
11/07/18	12,171.81	68.167	10,503.12
12/07/18	12,171.81	69.167	10,480.42
01/07/19	12,171.81	70.167	10,457.78
02/07/19	12,171.81	71.167	10,435.18
03/07/19	12,171.81	72.167	10,412.63
04/07/19	12,171.81	73.167	10,390.14
05/07/19	12,171.81	74.167	10,367.69
06/07/19	12,171.81	75.167	10,345.28
07/07/19	12,171.81	76.167	10,322.93
08/07/19	12,171.81	77.167	10,300.62
09/07/19	12,171.81	78.167	10,278.37
10/07/19	12,171.81	79.167	10,256.16
11/07/19	12,171.81	80.167	10,234.00
12/07/19	12,171.81	81.167	10,211.88
01/07/20	12,171.81	82.167	10,189.82
02/07/20	12,171.81	83.167	10,167.80
03/07/20	12,171.81	84.167	10,145.83
04/07/20	12,171.81	85.167	10,123.91
05/07/20	12,171.81	86.167	10,102.03
06/07/20	12,171.81	87.167	10,080.21
07/07/20	12,171.81	88.167	10,058.42
08/07/20	12,171.81	89.167	10,036.69
09/07/20	12,171.81	90.167	10,015.00
10/07/20	12,171.81	91.167	9,993.36
11/07/20	12,171.81	92.167	9,971.77
12/07/20	12,171.81	93.167	9,950.22
01/07/21	12,171.81	94.167	9,928.72
02/07/21	12,171.81	95.167	9,907.27
03/07/21	12,171.81	96.167	9,885.86
04/07/21	12,171.81	97.167	9,864.50
05/07/21	12,171.81	98.167	9,843.19
06/07/21	12,171.81	99.167	9,821.92
07/07/21	12,171.81	100.167	9,800.70
08/07/21	12,171.81	101.167	9,779.52 9,758.39
09/07/21	12,171.81 12,171.81	102.167 103.167	9,737.30
10/07/21		104.167	9,716.26
11/07/21	12,171.81 12,171.81	105.167	9,695.27
12/07/21 01/07/22	12,171.81	106.167	9,674.32
	12,171.81	107.167	9,653.42
02/07/22 03/07/22	12,171.81	108.167	9,632.56
04/07/22	12,171.81	109.167	9,611.74
05/07/22	12,171.81	110.167	9,590.98
06/07/22	12,171.81	111.167	9,570.25
07/07/22	12,171.81	112.167	9,570.25
08/07/22	12,171.81	113.167	9,549.57 9,528.94
09/07/22	12,171.81	114.167	9,528.94 9,508.35
10/07/22	12,171.81	115.167	9,508.35 9,487.80
11/07/22	12,171.81	116.167	9,487.80 9,467.30
12/07/22	12,171.81	117.167	•
	12,171.81	117.167	9,446.85
01/07/23 02/07/23	12,171.81	119,167	9,426.44 9,406.07
03/07/23	12,171.81	120.167	9,385.74
	14.1/1.01	120.107	3.000.74

Table 6 Montara Water and Sanitary District Arbitrage Yield Limit (AYL)

Dated Date:

03/02/13

Period Debt Svc 12,171.81	Period	03/02/13
	Period	
12,171.81	1 01100	2.59851%
	121.167	9,365.46
12,171.81	122.167	9,345.23
12,171.81	123.167	9,325.03
12,171.81	124.167	9,304.88
12,171.81	125.167	9,284.78
		9,264.72
		9,244.70
		9,224.72
,		9,204.79
		9,184.90
-		9,165.06
		9,145.25
		9,125.49
		9,125.77
		9,086.10
		9,066.47
		9,046.87
		9,027.33
•		9,007.82
		8,988.36
		8,968.94
-		8,949.56
		8,930.22
12,171.81		8,910.92
12,171.81		8,891.67
12,171.81	146.167	8,872.46
12,171.81	147.167	8,853.28
12,171.81	148.167	8,834.15
12,171.81	149.167	8,815.07
12,171.81	150.167	8,796.02
12,171.81	151.167	8,777.01
12,171.81	152.167	8,758.05
12,171.81	153.167	8,739.12
12,171.81	154.167	8,720.24
12,171.81	155.167	8,701.40
12,171.81	156.167	8,682.60
12,171.81	157.167	8,663.84
		8,645.12
•		8,626.44
-		8,607.80
		8,589.20
		8,570.64
12,171.81	163.167	8,552.12
		1,670,000.00
	12,171.81 12,171.81	12,171.81 $126,167$ $12,171.81$ $127,167$ $12,171.81$ $128,167$ $12,171.81$ $129,167$ $12,171.81$ $130,167$ $12,171.81$ $130,167$ $12,171.81$ $131,167$ $12,171.81$ $132,167$ $12,171.81$ $133,167$ $12,171.81$ $135,167$ $12,171.81$ $135,167$ $12,171.81$ $136,167$ $12,171.81$ $136,167$ $12,171.81$ $136,167$ $12,171.81$ $138,167$ $12,171.81$ $139,167$ $12,171.81$ $140,167$ $12,171.81$ $140,167$ $12,171.81$ $142,167$ $12,171.81$ $144,167$ $12,171.81$ $144,167$ $12,171.81$ $144,167$ $12,171.81$ $144,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $145,167$ $12,171.81$ $152,167$ $12,171.81$ $152,167$ $12,171.81$ $152,167$ $12,171.81$ $152,167$ $12,171.81$ $154,167$ $12,171.81$ $155,167$ $12,171.81$ $155,167$ $12,171.81$ $155,167$ $12,171.81$ $155,167$ $12,171.81$ $155,167$ $12,171.81$ $152,167$ $12,171.81$ $152,167$ $12,171.81$ $152,167$ $12,171.$

Table 7Montara Water and Sanitary DistrictDebt Service Comparison & Savings Calculations

Dated Date of Refunding Issue: 03/02/13

Refunded Principal \$1,565,582

	2	006 Lease Pa			L	2	013 Refundin					Savings		
Payment Date	Period	Debt Service	Fiscal Year Debl Svc	PV at 2.59851%	Payment Date	Period	Debt Service	Fiscal Year Debt Svc	PV at 2.59851%		Gross S Debt Svc	avings Fiscal Yr	PV Sa Period	Fiscal Yr
			Dobrovo					0001010				1.000		
04/07/13 05/07/13	1.17 2.17	9,980.00 9,980.00		9,954.85 9,933.33	04/07/13	1.17 2.17	12,616.07 12,171.81		12,584.28 12,114.90		(2,636) (2,192)	1	(2,629) (2,182)	
06/07/13	3.17	9,980.00	29,940.00	9,911.87	06/07/13	3.17	12,171.81	36,959.69	12,088.72	FY2013	(2,192)	(7,020)	(2,177)	(6,988)
07/07/13	4.17	10,380.00		10,286.86	07/07/13	4.17	12,171.81		12,062.60		(1,792)		(1,776)	
08/07/13	5.17	10,380.00		10,264.64	08/07/13	5.17	12,171.81		12,036.54		(1,792) (1,792)		(1,772) (1,768)	
09/07/13 10/07/13	6.17 7.17	10,380.00 10,380.00		10,242.46 10,220.33	09/07/13	6.17 7.17	12,171.81 12,171.81		12,010.53 11,984.58		(1,792)	ļ	(1,766)	
11/07/13	8.17	10,380.00		10,198.24	11/07/13	8.17	12,171.81		11,958.68		(1,792)		(1,760)	
12/07/13	9.17	10,380.00		10,176.21	12/07/13	9.17	12,171.81		11,932.84		(1,792)		(1,757)	
01/07/14	10.17	10,380.00		10,154.22	01/07/14	10.17	12,171.81		11,907.06		(1,792)	4	(1,753)	
02/07/14	11.17	10,380.00		10,132.28	02/07/14 03/07/14	11.17 12.17	12,171.81 12,171.81		11,881.33		(1,792) (1,792)	1	(1,749)	
03/07/14 04/07/14	12.17 13.17	10,380.00 10,380.00		10,110.38 10,088.54	03/07/14	12.17	12,171.81		11,855.66 11,830.04		(1,792)		(1,745) (1,741)	
05/07/14	14.17	10,380.00		10,066.74	05/07/14	14.17	12,171.81		11,804.48		(1,792)		(1,738)	
06/07/14	15.17	10,380.00	124,559.97	10,044.99	06/07/14	15.17	12,171.81	146,061.72	11,778.97	FY2014	(1,792)	(21,502)	(1,734)	(21,057)
07/07/14	16.17	10,800.00		10,428.85	07/07/14	16.17	12,171.81		11,753.52		(1,372)		(1,325)	
08/07/14	17.17	10,800.00		10,406.32	08/07/14	17.17	12,171.81		11,728.12		(1,372)	ļ	(1,322)	
09/07/14 10/07/14	18.17 19.17	10,800.00 10,800.00		10,383.84 10,361.39	09/07/14	18.17 19.17	12,171.81 12,171.81		11,702.78 11,677.49		(1,372) (1,372)		(1,319) (1,316)	
11/07/14	20.17	10,800.00		10,339.01	11/07/14	20.17	12,171.81		11,652.26		(1,372)		(1,313)	
12/07/14	21.17	10,800.00		10,316.66	12/07/14	21.17	12,171.81		11,627.09		(1,372)		(1,310)	
01/07/15	22.17	10,800.00		10,294.38	01/07/15	22.17	12,171.81		11,601.96		(1,372)	1	(1,308)	
02/07/15	23.17	10,800.00		10,272.13	02/07/15	23.17	12,171.81		11,576.89		(1,372)		(1,305)	
03/07/15 04/07/15	24.17 25.17	10,800.00 10,800.00		10,249.93 10,227.79	03/07/15	24.17 25.17	12,171.81 12,171.81		11,551.88 11,526.92		(1,372) (1,372)	1	(1,302) (1,299)	
04/07/15	25.17 26.17	10,800.00		10,227.79	05/07/15	25.17	12,171.81		11,526.92	1	(1,372)		(1,299) (1,296)	
06/07/15	27.17	10,800.00	129,600.00	10,183.64	06/07/15	27.17	12,171.81	146,061.72	11,477.16	FY2015	(1,372)	(16,462)	(1,294)	(15,708)
07/07/15	28.17	11,230.00		10,566.21	07/07/15	28.17	12,171.81		11,452.36		(942)		(886)	• •
08/07/15	29.17	11,230.00		10,543.38	08/07/15	29.17	12,171.81		11,427.61		(942)		(884)	
09/07/15	30.17 31.17	11,230.00		10,520.60 10,497.87	09/07/15	30.17 31.17	12,171.81 12,171.81		11,402.92		(942) (942)	1	(882) (880)	
10/07/15 11/07/15	32.17	11,230.00 11,230.00		10,497.87	11/07/15	32.17	12,171.81		11,378.28 11,353.70		(942)	((879)	
12/07/15	33.17	11,230.00		10,452.55	12/07/15	33.17	12,171.81		11,329.16		(942)	1	(877)	
01/07/16	34.17	11,230.00		10,429.97	01/07/16	34.17	12,171.81		11,304.68		(942)		(875)	
02/07/16	35.17	11,230,00		10,407.43	02/07/16	35,17	12,171.81		11,280.26		(942)	l	(873)	
03/07/16	36.17	11,230.00		10,384.95	03/07/16	36.17	12,171.81		11,255.88		(942)	1	(871)	
04/07/16 05/07/16	37.17 38.17	11,230.00 11,230.00		10,362.50 10,340.11	04/07/16	37.17 38.17	12,171.81 12,171.81		11,231.56 11,207.29		(942) (942)		(869) (867)	
06/07/16	39.17	11,230.00	134,759.99	10,317.77	06/07/16	39.17	12,171.81	146,061.72	11,183.08	FY2016	(942)	(11,302)	(865)	(10,508)
07/07/16	40.17	11,680.00		10,708.03	07/07/16	40.17	12,171.81		11,158.91		(492)	· · · · · · · · · · · · · · · · · · ·	(451)	(
08/07/16	41.17	11,680.00		10,684.89	08/07/16	41.17	12,171.81		11,134.80		(492)		(450)	
09/07/16	42.17	11,680.00		10,661.80	09/07/16	42.17	12,171.81		11,110.74		(492)		(449)	
10/07/16 11/07/16	43.17 44.17	11,680.00 11,680.00		10,638.77 10,615.78	10/07/16	43.17 44.17	12,171.81 12,171.81		11,086.74 11,062.78		(492) (492)		(448) (447)	
12/07/16	45.17	11,680.00		10,592.84	12/07/16	44.17	12,171.81		11,038.88		(492)		(447) (446)	
01/07/17	46.17	11,680.00		10,569.95	01/07/17	46.17	12,171.81		11,015.02		(492)		(445)	
02/07/17	47.17	11,680.00		10,547.12	02/07/17	47.17	12,171.81		10,991.22		(492)		(444)	
03/07/17	48.17	11,680.00		10,524.33	03/07/17	48.17	12,171.81		10,967.47		(492)	ĺ	(443)	
04/07/17 05/07/17	49.17 50.17	11,680.00 11,680.00		10,501.59 10,478.90	04/07/17	49.17 50.17	12,171.81 12,171.81		10,943.78 10,920.13		(492) (492)	1	(442)	
06/07/17	51.17	11,680.00	140,160.00	10,476.90	06/07/17	51.17	12,171.81	146,061.72	10,896.53	FY2017	(492)	(5,902)	(441) (440)	(5,347)
07/07/17	52.17	12,151.00	110,100.00	10,854.40	07/07/17	52.17	12,171.81	110,001.12	10,872.99	1 12017	(21)	(0,302)	(19)	(0,041)
08/07/17	53.17	12,151.00		10,830.95	08/07/17	53.17	12,171.81		10,849.50		(21)	ł	(19)	
09/07/17	54.17	12,151.00		10,807.54	09/07/17	54.17	12,171.81		10,826.05		(21)		(19)	
10/07/17 11/07/17	55.17 56.17	12,151.00 12,151.00		10,784.19 10,760.89	10/07/17	55.17 56.17	12,171.81		10,802.66		(21)		(18)	
12/07/17	57.17	12,151.00		10,737.64	11/07/17 12/07/17	57.17	12,171.81 12,171.81		10,779.32 10,756.03		(21) (21)		(18) (18)	
01/07/18	58.17	12,151.00		10,714.44	01/07/18	58.17	12,171.81		10,732.79		(21)		(18)	
02/07/18	59.17	12,151.00		10,691.28	02/07/18	59.17	12,171.81		10,709.59		(21)	1	(18)	
03/07/18	60.17	12,151.00		10,668.18	03/07/18	60.17	12,171.81		10,686.45		(21)		(18)	
04/07/18	61.17	12,151.00		10,645,13	04/07/18	61.17	12,171.81		10,663.36		(21)		(18)	
05/07/18 06/07/18	62.17 63.17	12,151.00 12,151.00	145,812.00	10,622.13 10,599.18	05/07/18	62.17 63.17	12,171.81 12,171.81	146,061.72	10,640.32 10,617.33	FY2018	(21) (21)	(250)	(18) (18)	(220)
07/07/18	64.17	12,640.00	1401012.00	11,001.91	07/07/18	64.17	12,171.81	140,001.12	10,594.39	112010	468	(200)	408	(220)
08/07/18	65.17	12,640.00		10,978.13	08/07/18	65.17	12,171.81		10,571.50		468	}	407	
09/07/18	66.17	12,640.00		10,954.41	09/07/18	66.17	12,171.81		10,548.66		468	ļ	406	
10/07/18	67.17	12,640.00		10,930.74	10/07/18	67.17	12,171.81		10,525.86		468	I	405	
11/07/18	68.17 69.17	12,640.00		10,907.13	11/07/18	68.17 60.17	12,171.81		10,503.12		468		404	
12/07/18 01/07/19	69.17 70.17	12,640.00 12,640.00		10,883.56 10,860.04	12/07/18	69.17 70.17	12,171.81 12,171.81		10,480.42 10,457.78		468 468	l	403 402	
02/07/19	71.17	12,640.00		10,836.57	02/07/19	71.17	12,171.81		10,435.18		468	ļ	402	
03/07/19	72.17	12,840.00		10,813.16	03/07/19	72.17	12,171.81		10,412.63		468		401	
04/07/19	73.17	12,640.00		10,789.80	04/07/19	73.17	12,171.81		10,390.14		468		400	
05/07/19	74.17	12,640.00	101 000	10,766.48	05/07/19	74.17	12,171.81	(10.00	10,367.69	Am 1 / A A	468		399	
06/07/19	75.17	12,640.00	151,680.03	10,743.22	06/07/19	75.17	12,171.81	146,061.72	10,345.28	FY2019	468	5,618	398	4,832
07/07/19 08/07/19	76.17 77.17	13,140.00 13,140.00		11,144.05 11,119.97	07/07/19 08/07/19	76.17 77.17	12,171.81 12,171.81		10,322.93 10,300.62		968 968	[821 819	
09/07/19	78.17	13,140.00		11,095.94	09/07/19	78.17	12,171.81		10,300.62		968 968		819 818	
10/07/19	79.17	13,140.00		11,071.97	10/07/19	79.17	12,171.81		10,256.16		968		816	
11/07/19	80.17	13,140.00		11,048.05	11/07/19	80.17	12,171.81		10,234.00		968	1	814	1
12/07/19	81.17	13,140.00		11,024.18	12/07/19	81.17	12,171.81		10,211.88		968		812	
01/07/20	82.17	13,140.00		11,000.35	01/07/20	82.17	12,171.81		10,189.82		968		811	
02/07/20	83,17	13,140.00		10,976.58	02/07/20	83.17	12,171.81		10,167.80		968		809	
03/07/20 04/07/20	84.17 85.17	13,140.00 13,140.00		10,952.87 10,929.20	03/07/20	84.17 85.17	12,171.81 12,171.81		10,145.83 10,123.91		968 968		807 805	
		13,140.00		10.905.58	05/07/20	86.17	12,171.81		10,102,03		968		803	
05/07/20	86.17	13,140.00												

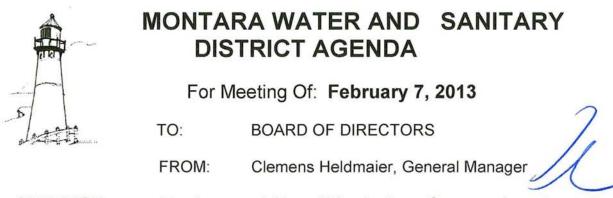
Table 7Montara Water and Sanitary DistrictDebt Service Comparison & Savings Calculations

Dated Date of Refunding Issue: 03/02/13

Refunded Principal

\$1,565,582

		2006 Lease P	ayments			2013 Refunding Issue						Savings		
Payment		Debt	Fiscal Year	PV at	Payment		Debl	Fiscal Year	PV al		Gross S	avings	PV Sa	
Date	Period	Service	Debt Svc	2.59851%	Date	Period	Service	Debt Svc	2.59851%		Debt Svc	Fiscal Yr	Period	Fiscal Y
07/07/20	88.17	13,680.00		11,304.75	07/07/20	88.17	12,171.81		10,058.42		1,508	4	1,246	
08/07/20	89.17	13,680.00		11,280.32	08/07/20	89.17	12,171.81		10,036.69		1,508		1,244	
09/07/20	90.17	13,680.00		11,255.95	09/07/20 10/07/20	90.17 91.17	12,171.81		10,015.00 9,993.36		1,508 1,508		1,241 1,238	
10/07/20 11/07/20	91.17 92.17	13,680.00 13,680.00		11,231.63 11,207.36	11/07/20	91.17 92.17	12,171.81 12,171.81		9,993.30		1,508		1,236	
12/07/20	93.17	13,680.00		11,183.14	12/07/20	93.17	12,171.81		9,950.22		1,508	1	1,233	
01/07/21	94.17	13,680.00		11,158.98	01/07/21	94.17	12,171.81		9,928.72		1,508		1,230	
02/07/21	95.17	13,680.00		11,134.87	02/07/21	95.17	12,171.81		9,907.27		1,508		1,228	
03/07/21	96.17	13,680.00		11,110.81	03/07/21	96.17	12,171.81		9,885.86		1,508		1,225	
04/07/21	97.17	13,680.00		11,086.80	04/07/21	97.17	12,171.81		9,864.50		1,508		1,222	
05/07/21	98.17	13,680.00		11,062.84	05/07/21	98.17	12,171.81		9,843.19		1,508		1,220	
06/07/21	99.17	13,680.00	164,160.00	11,038.94	06/07/21	99.17	12,171.81	146,061.72	9,821.92	FY2021	1,508	18,098	1,217	14,779
07/07/21	100.17	14,250.00		11,474.05 11,449.26	07/07/21 08/07/21	100.17 101.17	12,171.81 12,171.81		9,800.70 9,779.52		2,078 2,078		1,673 1,670	
08/07/21 09/07/21	101.17 102.17	14,250.00 14,250.00		11,449.20	09/07/21	102.17	12,171.81		9,758.39		2,078		1,666	
10/07/21	102.17	14,250.00		11,399.83	10/07/21	103.17	12,171.81		9,737.30		2,078		1,663	
11/07/21	104.17	14,250.00		11,375.20	11/07/21	104.17	12,171.81		9,716.26		2,078		1 659	
12/07/21	105.17	14,250.00		11,350.62	12/07/21	105.17	12,171.81		9,695.27		2,078		1,655	
01/07/22	106.17	14,250.00		11,326.09	01/07/22	106.17	12,171.81		9,674.32		2,078		1,652	
02/07/22	107.17	14,250.00		11,301.63	02/07/22	107.17	12,171.81		9,653.42		2,078		1,648	
03/07/22	108.17	14,250.00		11,277.20	03/07/22	108.17	12,171.81		9,632.56		2,078		1,645	
04/07/22	109.17	14,250.00		11,252.84	04/07/22	109.17	12,171.81		9,611.74		2,078		1,641	
05/07/22	110.17	14,250.00		11,228.52	05/07/22	110.17	12,171.81		9,590.98		2,078		1,638	
06/07/22	111.17	14,250.00	171,000.00	11,204.26	06/07/22	111.17	12,171.81	146,051.72	9,570.25	FY2022	2,078	24,938	1,634	19,843
07/07/22	112.17	14,800.00		11,611.56	07/07/22	112.17	12,171.81		9,549.57		2,628		2,062	
08/07/22	113.17	14,800.00		11,586.47	08/07/22	113.17	12,171.81		9,528.94 9,508.35		2,628		2,058 2,053	
09/07/22	114.17	14,800.00		11,561.44 11,536.45	09/07/22	114.17 115.17	12,171.81 12,171.81		9,487.80	}	2,628 2,628		2,055	
10/07/22 11/07/22	115.17 116.17	14,800.00 14,800.00		11,536.45	11/07/22	116.17	12,171.81		9,467.30	}	2,628		2,045	
12/07/22	117.17	14,800.00		11,486.65	12/07/22	117.17	12,171.81		9,446.85		2,628		2,040	
01/07/23	118.17	14,800.00		11,461.83	01/07/23	118.17	12,171.81		9,426.44		2,628		2,035	
02/07/23	119.17	14,800.00		11,437.07	02/07/23	119.17	12,171.81		9,406.07		2,628		2,031	
03/07/23	120.17	14,800.00		11,412.35	03/07/23	120.17	12,171.81		9,385.74		2,628		2,027	
04/07/23	121.17	14,800.00		11,387.69	04/07/23	121.17	12,171.81		9,365.46		2,628		2,022	
05/07/23	122.17	14,800.00		11,363.09	05/07/23	122,17	12,171.81		9,345.23	1	2,628	1	2,018	
06/07/23	123.17	14,800.00	177,600.01	11,338.53	06/07/23	123.17	12,171.81	146,061.72	9,325.03	FY2023	2,628	31,538	2,014	24,452
07/07/23	124.17	15,400.00		11,772.71	07/07/23	124.17	12,171.81		9,304.88		3,228		2,468	
08/07/23	125.17	15,400.00		11,747.27	08/07/23	125.17	12,171.81		9,284.78		3,228		2,462	
09/07/23	126.17	15,400.00		11,721.89	09/07/23	126.17	12,171.81		9,264.72		3,228		2,457	
10/07/23	127.17	15,400.00		11,696.57	10/07/23	127.17	12,171.81		9,244.70		3,228		2,452	
11/07/23	128.17	15,400.00		11,671.29	11/07/23	128.17	12,171.81		9,224.72		3,228		2,447	
12/07/23	129.17	15,400.00		11,646.07	12/07/23	129.17	12,171.81		9,204.79		3,228		2,441 2,436	
01/07/24	130.17	15,400.00		11,620.91 11,595.80	01/07/24 02/07/24	130.17 131.17	12,171.81 12,171.81		9,184.90 9,165.06		3,228 3,228		2,430	
02/07/24 03/07/24	131.17 132.17	15,400.00 15,400.00		11,595.00	03/07/24	132.17	12,171.81		9,145.25		3,228	1	2,425	
04/07/24	132.17	15,400.00		11,545.74	03/07/24	133.17	12,171.81		9,125.49		3,228		2,420	
05/07/24	134.17	15,400.00		11,520.80	05/07/24	134.17	12,171.81		9,105.77		3,228		2,415	
06/07/24	135.17	15,400.00	184,799.99	11,495.90	06/07/24	135.17	12,171.81	146,061.72	9,086.10	FY2024	3,228	38,738	2,410	29,265
07/07/24	136.17	15,950.00		11,880.74	07/07/24	136.17	12,171.81		9,066.47		3,778		2,814	
08/07/24	137.17	15,950.00		11,855.07	08/07/24	137.17	12,171.81		9,046.87		3,778		2,808	
09/07/24	138.17	15,950.00		11,829.45	09/07/24	138.17	12,171.81		9,027.33		3,778		2,802	
10/07/24	139.17	15,950.00		11,803.89	10/07/24	139.17	12,171.81		9,007.82	1	3,778		2,796	
11/07/24	140.17	15,950.00		11,778.39	11/07/24	140.17	12,171.81		8,988.36	{	3,778		2,790	
12/07/24	141.17	15,950.00		11,752.94	12/07/24	141.17	12,171.81		8,968.94		3,778		2,784	
01/07/25	142.17	15,950.00		11,727.54	01/07/25	142.17	12,171.81		8,949.56		3,778		2,778	
02/07/25	143.17	15,950.00		11,702.20	02/07/25	143.17	12,171.81		8,930.22		3,778		2,772	
03/07/25	144.17	15,950.00		11,676.92	03/07/25	144.17	12,171.81		8,910.92	1	3,778		2,766	
04/07/25	145.17	15,950.00		11,651.68	04/07/25	145.17	12,171.81		8,891.67		3,778		2,760 2,754	
05/07/25 06/07/25	146.17 147.17	15,950.00	191,400.00	11,626.51 11,601.39	05/07/25	146.17 147.17	12,171.81 12,171.81	146,051.72	8,872.46 8,853.28	FY2025	3,778 3,778	45,338	2,754	33,373
05/07/25	147.17	15,950.00 15,950.00	191,400.00	11,576.32	07/07/25	147.17	12,171.81	140,001.72	8,834.15	112020	3,778	40,000	2,740	JJ,J/J
07/07/25	148.17	15,950.00		11,570.32	08/07/25	146.17	12,171.81		8,815.07	{	3,778		2,736	
09/07/25	145.17	15,950.00		11,526.34	09/07/25	150.17	12,171.81		8,796.02		3,778		2,730	
10/07/25	151.17	15,950.00		11,501.44	10/07/25	151.17	12,171.81		8,777.01	l	3,778		2,724	
11/07/25	152.17	15,950.00		11,476.59	11/07/25	152.17	12,171.81		8,758.05		3,778		2,719	
12/07/25	153.17	15,950.00		11,451.79	12/07/25	153.17	12,171.81		8,739.12	1	3,778		2,713	
01/07/26	154.17	15,950.00		11,427.05	01/07/26	154.17	12,171.81		8,720.24	}	3,778		2,707	
02/07/26	155.17	15,950.00		11,402.35	02/07/26	155.17	12,171.81		8,701.40	l	3,778		2,701	
03/07/26	156.17	15,950.00		11,377.72	03/07/26	156.17	12,171.81		8,682.60		3,778		2,695	
04/07/26	157.17	15,950.00		11,353.13	04/07/26	157.17	12,171.81		8,663.84	{	3,778		2,689	
05/07/26	158.17	15,950.00		11,328.60	05/07/26	158.17	12,171.81		8,645.12		3,778		2,683	
06/07/26	159.17	15,950.00	191,399.99	11,304.13	06/07/26	159.17	12,171.81	146,061.72	8,626.44	FY2026	3,778	45,338	2,678	32,518
07/07/26	160.17	15,950.00		11,279.70	07/07/26	160.17	12,171.81		8,607.80		3,778		2,672	
08/07/26	161.17	15,950.00		11,255.33	08/07/26	161.17	12,171.81		8,589.20	ļ	3,778	ļ	2,666	
09/07/26	162.17	15,950.00		11,231.01	09/07/26	162.17	12,171.81		8,570.64		3,778		2,660	
10/07/26	163.17	15,940.93	63,790.93	11,200.36	10/07/26	163.17	12,171.81	48,687.24	8,552.12	FY2027	3,769	15,104	2,648	10,647
Tabul		0 480 040 04	3 150 340 04	1 700 616 00			1 004 440 20	1 094 440 00	1 670 000 00		179 004	173 004	110 017	110 647
Total		2,158,342.91	2,158,342.91	1,789,616.90	ļ		1,984,449.29	1,984,449.29	1,670,000.00		173,894	173,894	119,617	119,617
Caulana as	% of Peri	unded Principal]							11.11%		7.649



SUBJECT: Review and Possible Action Concerning Award of Bids for Sewer Improvement Project 2013

In fiscal year 2011-2012 the Board approved the Capital Improvement Plan for 2012-2013 which included the 2012-2013 Sewer Improvement Project and Spot Repairs. At that time the Board also authorized a construction bid package to be prepared for a project to construct the sewer improvements.

The <u>2012-2013 Sewer Improvement Project and Spot Repairs Project</u> includes furnishing of all labor, materials and equipment for the construction and rehabilitation of sanitary sewer mains and laterals as follows:

<u>George Street between Acacia and Cedar</u>: This 12 inch VCP 620 ft. long section of pipe is the trunk sewer for the Date Harte pump station. The pipe suffers from cracks, poor grade and sags and has been a repeated cleaning problem for SAM. The pipe will be replaced by open trench methods.

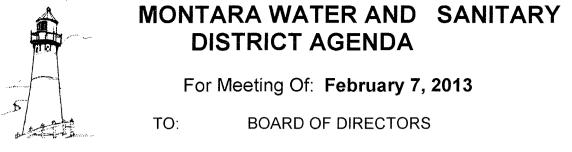
<u>Cypress Street west of Airport Blvd:</u> The existing 6" and 8" VCP pipe on Cypress St. is approximately 520 ft. long and has cracks and roots at joints and has been on the SAM hotspot list. It will be replaced by pipebursting.

<u>Hawthorne Street East of Fir St.</u>: 643 ft of 6" VCP pipe on Hawthorne St. has cracks and roots at joints and has been on the SAM hotspot list. It will be replaced by pipebursting.

<u>Spot Repairs</u>: Five sewer main cracks and offset joints in various locations in the Date Harte neighborhood will be repaired. Additionally 3 joints will be repaired in Seal Cove in advance of a County paving project. Finally two rodholes will be repaired.

Additive Alternate A: Nevada St creek crossing: Last summer soil movement caused a crack in the VCP pipe next to the steel pipe creek crossing on the east end of Nevada St. The pipe will be lined with a cured in place pipe (CIPP).

<u>Additive Alternate B: Manhole Rehabilitation Airport Blvd</u>.: Due to the slow sewer flows and the long times for sewage to travel from Pillar Ridge and Seal Cove, the sewage pumps causes has a high corrosivity due to H_2S gas formation. 12 manholes have been selected for rehabilitation with a buildup of the concrete structure then a lining product.



FROM: Clemens Heldmaier, General Manager

The project was advertised twice in the Half Moon Bay Review as well as builders exchanges and the bids were received on January 24, 2013 at 2 PM. A table showing the individual bids is attached.

The engineers estimate for the base bid of this project was \$450,000.

Nute Engineering has reviewed the bids and the licenses of each bidder and recommends award to the lowest responsible bidder, D'Arcy and Harty Construction, Inc., whose base bid was \$362,734. Their bid for Additive Alternate A was \$46,701 (the B Line on Nevada Street, Plan Sheet 6), and their bid for Additive Alternate B was \$60,480 (Manhole Rehabilitation on Plan Sheet 12). Since their <u>base bid</u> came in under the Engineer's Estimate, it is recommended that the board also award <u>Alternate A</u> for a total award of \$409,435.

The District budgeted a total of \$436,000 for this year's Sewer Improvement Project. If the Board chooses to perform some additional spot repairs or manhole repairs, some money could be taken from the \$60,000 spot repair program.

RECOMMENDATION:

Authorize the 2012-2013 Sewer Improvement Project and Spot Repairs and Adopt RESOLUTION NO. _____, RESOLUTION OF THE MONTARA WATER AND SANITARY DISTRICT ACCEPTING BID FOR THE 2012-2013 SEWER IMPROVEMENT PROJECT AND SPOT REPAIRS TOGETHER WITH ADDITIVE ALTERNATE A, DECLARING LOWEST RESPONSIBLE BIDDER FOR SAID WORK, REJECTING ALL OTHER BIDS, APPROVING AND AUTHORIZING EXECUTION OF AGREEMENT FOR SAID WORK, AND DIRECTING RETURN OF SECURITY DEPOSITS.

Attachments

907 Mission Avenue | San Rafael, CA 94901 | Phone 415-453-4480 | Fax 415-453-0343 | www.nute-engr.com



February 5, 2013

Mr. Clemens Heldmaier, General Manager Montara Water and Sanitary District 8888 Cabrillo Highway PO Box 370321 Montara, CA 94037

Re: 2012-2013 Sewer Improvement Project and Spot Repairs

Dear Clemens:

On January 24th, 2013 seven bids were received for the above-referenced project. A spreadsheet comparing these bids is attached.

The lowest base bid in the amount of \$362,734 was submitted by D'Arcy and Harty Construction, Inc. of San Francisco. The bid for Additive Alternate A (the B Line on Nevada Street, Plan Sheet 6) was \$46,701 and for Additive Alternate B (Manhole Rehabilitation on Plan Sheet 12) was \$60,480. Enclosed are the license details obtained from the Contractor's License Board that show that D'Arcy and Harty Construction, Inc. and his subcontractor have valid Contractor's Licenses.

Since the bids came in under the Engineer's Estimate of \$450,000, it is recommended that along with the base bid the board also award Alternate A for a total award of \$409,435.

Enclosed are the license details obtained from the Contractor's License Board that show that D'Arcy and Harty Construction, Inc. and his subcontractor have valid Contractor's Licenses.

We favorably reviewed their submitted bid package and recommend that the District award the contract to D'Arcy and Harty Construction, Inc. of San Francisco.

Very truly yours,

NUTE ENGINEERING

By <u>Gary E. Robards</u>

MONTARA WATER AND SANITARY DISTRICT 2012-2013 SEWER IMPROVEMENT PROJECT AND SPOT REPAIRS

Bid Opening: 2:00 pm

Design Job Number: \$166 Engineer's Est.: \$450,000

														Est.: \$450,000
			-							•			0	Pipelines
	San F	rancisco	Emerald Hills		Dublin		Oakland		San Rafael		Vallejo		San Francisco	
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	3.00		- 1											\$6,572.00
													•	\$204,600.00
	1				105,00		131.00							\$30,375.00
	98.00	\$26,950.00	65.00	\$17,875.00	100.00	\$27,500.00	131.00	\$36,025.00	66.00	\$18,150.00	94.00	\$25,850.00	124.00	\$34,100.00
	98.00	\$63,014.00	65.00	\$41,795.00	100,00	\$64,300.00	131.00	\$84,233.00	57.00	\$36,651.00	90.00	\$57 , 870.00	124.00	\$79,732.00
	1.000.00	\$1,000.00	5,500.00	\$5,500.00	2,000.00	\$2,000.00	905.00	\$905.00	4,215.00	\$4,215.00	12,000.00	\$12,000.00	1,000.00	\$1,000.00
1 Ea Construct Standard 4' Manhole (George STA A 3+24)	4,000.00	\$4,000.00	4,500.00	\$4,500.00	6,000.00	\$6,000.00	8,885.00	\$8,885,00	6,000.00	\$6,000.00	18,000.00	\$18,000.00	12,000.00	\$12,000.00
2 Ea Install 6" Internal Drop Connections	1,000.00	\$2,000.00	1,360.00	\$2,720,00	1,500,00	\$3,000.00	2,115.00	\$4,230.00	900.00	\$1,800.00	3,000.00	\$6,000,00	500.00	\$1,000.00
1 Ea Remove Existing Rodhole & Install New 4' Manhole	3,000.00	\$3,000.00	3,600.00	\$3,600,00	5,000.00	\$5,000.00	7.885.00	\$7,885.00	6,700 00	\$6,700.00	6,500.00	\$6,500.00	6,500.00	\$6,500.00
3 Ea Remove Existing Rodhole & Install New Rodhole	2,500,00	\$7,500.00	2,950.00	\$8,850.00	1,500.00	\$4,500.00	1,225.00	\$3,675.00	1,600.00	\$4,800.00	1,500.00	\$4,500.00	2,500.00	\$7,500.00
8 Ea Connect To Exist Manhole & Rebuild Manhole Channels	200.00	\$1,600.00	1,200.00	\$9,600.00	1,500.00	\$12,000.00	335.00	\$2,680.00	900.00	\$7,200.00	2,700.00	\$21,600.00	500.00	\$4.000.00
1 Ea Manhole Frame And Cover Replacement	2,000.00	\$2,000.00	1,200.00	\$1,200.00	750.00	\$750.00	2,270.00	\$2,270.00	1,525.00	\$1.525.00	1,200.00	\$1,200.00	750.00	\$750.00
25 Ea Field Locate And Pothole Existing Sewer Laterals	50.00	\$1,250.00	1,150.00	\$28,750.00	250.00	\$6,250.00	220.00	\$5,500.00	350.00	\$8,750.00	500.00	\$12,500.00	800.00	\$20,000.00
25 Ea Install 4" Lateral Cleanout, Relief Valve & Cleanout Box	350.00	\$8,750.00	1,250.00	\$31,250.00	250.00	\$6,250.00	349.00	\$8,725.00	2,000.00	\$50,000.00	950.00	\$23,750.00	500.00	\$12,500.00
634 * LF 4.5" OD HDPE Lower Laterals* installed byPipebursting	10.00	\$6,340.00	70.00	\$44,380,00	25.00	\$15,850.00	3.00	\$1,902.00	121.00	\$76,714.00	72.00	\$45,648.00	85,00	\$53,890.00
100 + LF 4" PVC DR=26 Lower Laterals" installed by Open Trenching	100.00	\$10,000,00	130.00	\$13,000.00	50,00	\$5,000.00	1.00	\$100,00	173.00	\$17,300.00	120.00	\$12,000.00	87.00	\$8,700.0
	3,800,00	\$30,400,00	3.400.00	\$27,200.00	3,500.00	\$28,000.00	5,555.00	\$44,440,00	4,100,00	\$32,800.00	7.200.00	\$57,600,00	6,500,00	\$52,000.00
	1 1	\$6,572.00			F 1) '	\$8,215.00	3.00	\$9,858,00	2.00	\$6,572.00
	20.00	\$500.00								\$1.875.00	200.00	\$5,000.00	100.00	\$2,500.00
	10.000.00				500.00			\$4,555,00	3,000,00	\$3,000.00	14,000,00		1,500.00	\$1,500.00
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141 LF Preliminary Cleaning And Televising	38.00	\$5,358,00	10.00	\$1,410,00	10.00	\$1,410.00	3.00	\$423.00	7.50	\$1,057.50	10.00	\$1,410,00	2.00	\$282.00
Ea Sewer Main Fiberglass Point Repair	10,000.00	\$10,000.00	8,000.00	\$8,000.00	7,500.00	\$7,500.00	7,585.00	\$7,585.00	6,200,00	\$6,200.00	5,000.00	\$5,000,00	18,000.00	\$18,000,00
	120.00	\$16,920.00	80.00	\$11,280,00	1 50.00	\$21,150,00	120.00	\$16,920,00	70.00	\$9,870,00	130.00	\$18,330,00	75.00	\$10,575.0
	12,000.00	\$12,000,00	10.840.00		10.000.00	\$10,000.00	3,185.00	\$3,185,00	8,500,00	\$8,500.00	12,000,00	\$12,000.00	37,400.00	\$37,400.0
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	540.00	\$33,480.00	700.00	\$43,400.00	500,00	\$31,000.00	370.00	\$22,940.00	640.00	\$39,680.00	380.00	\$23,560.00	645.00	\$39,990.0
NHOLE REHABILITATION - PLAN SHEET 12	540.00 4,500.00	\$33,480.00 \$9,000.00	700.00	\$43,400.00 \$4,000.00	500,00 2,500,00	\$31,000.00 \$5,000.00	1	\$22,940.00 \$4,354.00	640.00 2,750.00		1	\$23,560.00 \$3,000.00	645.00 4,200.00	1 ·
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NHOLE REHABILITATION - PLAN SHEET 12 62 VF Mortar Base Coat & Corrosion Barrier Coating	4,500.00	\$9,000.00	2,000.00	\$4,000.00			2,177.00	1	2,750.00	\$5,500.00 \$9,150.00	1,500,00	\$3,000.00	4.200.00	\$39,990.00 \$8,400.00 \$4,500.00 \$6,000.00
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*The quantities of bid items 16 and 17 can change up or down more than 25%. The Contractor agrees to perform the work at this bid price whether or not his quantity is substantially lower or substantially higher.

SUBCONTRACTORS:	Nor-Cal Pipeline Services	Christian Brothers Lining			none		Christian Brothers Lining	Miksis Services	Christian Brothers Lining
		Nor-Cal Pipeline Services	1		1		Roy's Sewer Service	L	Jeffco Painting
Addendum Acknowledge	2	2	r - 1	2	1 [2	2	2	2
Contract Signed	Y	Y		N		Y	Y	Y	Y
Non-Collusion Affidavit	Y	Y		Y		Y	Y	Y	Y
EMR AVG # 3YR (1.1 or less)	0.83	0.827		1.07		0.83	1.41	1	0,896
RIR AVG # 3YR (5.4 or less)	3.89	0		3,83		0	1.45	0	3.02
LTIR AVG # 3YR (3.1 or less)	2.38	0		3.83		0	0.3	0	1.77
Financial	mailed 1/25		w/ bid		1			w/ bid	1

RESOLUTION NO.

RESOLUTION OF THE MONTARA WATER AND SANITARY DISTRICT ACCEPTING BID FOR THE 2012-2013 SEWER IMPROVEMENT PROJECT AND SPOT REPAIRS PROJECT, DECLARING LOWEST RESPONSIBLE BIDDER FOR SAID WORK, REJECTING ALL OTHER BIDS, APPROVING AND AUTHORIZING EXECUTION OF AGREEMENT FOR SAID WORK, AND DIRECTING RETURN OF SECURITY DEPOSITS.

WHEREAS, in response to written requests for sealed bids, bids were received for the construction of the 2012-2013 Sewer Improvement Project and Spot Repairs Project; and

WHEREAS, the bid of D'Arcy and Harty Construction, Inc. constitutes the lowest responsible bid submitted;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF THE MONTARA WATER AND SANITARY DISTRICT, A PUBLIC AGENCY IN THE COUNTY OF SAN MATEO, CALIFORNIA, AS FOLLOWS:

- 1. The bid of D'Arcy and Harty Construction, Inc. received on January 24, 2013 in the amount of Three Hundred Sixty Two Thousand Seven Hundred Thirty Four Dollars (\$362,734.00) is hereby accepted and said bidder is hereby declared to be the lowest responsible bidder for said work.
- 2. Any and all informalities in the aforementioned bid of D'Arcy and Harty Construction, Inc. are hereby waived.
- 3. The President and Secretary of the Board, Montara Water and Sanitary District, are hereby authorized and directed to execute, and to countersign, respectively, that certain agreement for said work by and between D'Arcy and Harty Construction, Inc. and the Montara Water and Sanitary District, a copy of which agreement is on file in the Administrative Office of the District, to which copy reference is hereby made for the full particulars thereof.
- 4. The District Secretary is hereby authorized and directed to return to all unsuccessful bidders the bid security furnished by them, and to return the bid security submitted by of D'Arcy and Harty Construction, Inc. to said bidder upon execution of the agreement described in paragraph 3 hereof by said bidder.

President, Montara Water and Sanitary District

RESOLUTION NO.

RESOLUTION OF THE MONTARA WATER AND SANITARY DISTRICT ACCEPTING BID FOR THE 2012-2013 SEWER IMPROVEMENT PROJECT AND SPOT REPAIRS PROJECT, DECLARING LOWEST RESPONSIBLE BIDDER FOR SAID WORK, REJECTING ALL OTHER BIDS, APPROVING AND AUTHORIZING EXECUTION OF AGREEMENT FOR SAID WORK, AND DIRECTING RETURN OF SECURITY DEPOSITS.

COUNTERSIGNED:

Secretary, Montara Water and Sanitary District

* * * *

I HEREBY CERTIFY that the foregoing Resolution No. _____ was duly and regularly adopted and passed by the Board of the Montara Water and Sanitary District, San Mateo County, California, at a meeting thereof held on the 7th day of February 2013, by the following vote:

AYES, Directors:

NOES, Directors:

ABSENT, Directors:

Secretary, Montara Water and Sanitary District



Contractor's License Detail - License # 474146

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure, a link for complaint disclosure will appear below. Click on the link or button to obtain complaint and/or legal action information.

Per B&P 7071.17, only construction related civil judgments reported to the CSLB are disclosed.

Arbitrations are not listed unless the contractor fails to comply with the terms of the arbitration.

Due to workload, there may be relevant information that has not yet been entered onto the Board's license database.

License Number	474146	Extract Date 1/28/2013				
	DARCY & HAR	TY CONSTRUCTION INC				
Business Information	Business Phone Number: (415) 822-5200					
	1300 CARROL SAN FRANCIS					
Entity	Corporation					
Issue Date	05/29/1985					
Expire Date	05/31/2013					
License Status	ACTIVE					
License outdo	This license i	s current and active. All information below should be reviewed.				
	CLASS	DESCRIPTION				
Classifications	А	GENERAL ENGINEERING CONTRACTOR				
	CONTRACTOR'S BOND					
	This license filed a Contractor's Bond with					
	INTERNATIONAL FIDELITY INSURANCE COMPANY.					
	Bond Number: 0388298					
	Bond Amount: \$12,500					
Bonding	Effective Date: 01/01/2007					
	Contractor's Bond History					
	BOND OF QUALIFYING INDIVIDUAL					
	 The Responsible Managing Officer (RMO) D'ARCY MICHAEL FINTAN certified that he/she owns 10 percent or more of the voting stock/equity of the corporation. A bond of qualifying individual is not required. 					
	Effect	ive Date: 05/29/1985				
Workers' Compensation	WORKERS' (COMPENSATION				

Check a License - License Detail - Contractors State License Board

https://www2.cslb.ca.gov/OnlineServices/CheckLicensell/LicenseDetail....

This license has workers compensation insurance with OLD REPUBLIC GENERAL INSURANCE CORPORATION

Policy Number: A1CG92791204

Effective Date: 10/01/2012

Expire Date: 10/01/2013

Workers' Compensation History

Personnel List

Personnel listed on this license (current or disassociated) are listed on other licenses.

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AGREEMENT

THE MONTARA WATER AND SANITARY DISTRICT, a public agency in the county of San Mateo, California, hereinafter referred to as "District", and D'Arcy and Harty Construction, Inc., of San Francisco, California, hereinafter referred to as "Contractor", for the consideration hereinafter stated, hereby agree as follows:

1. Contractor shall perform everything required to be performed, shall provide and furnish all of the labor, equipment, materials, and tools to perform, within sixty (60) consecutive calendar days after the NOTICE TO PROCEED, the following work: "2012-2013 Sewer Improvement Project and Spot Repairs" including "2012-2013 Sewer Improvement Project and Spot Repairs – Alternate A" and in strict accordance with the Plans, Contract Documents and Specifications pertaining thereto and signed by the District Engineer of Montara Water and Sanitary District, which Plans, Contract Documents and Specifications are incorporated herein and made a part of this Agreement as if herein fully set forth.

2. District shall pay to Contractor, as full consideration for the faithful performance by Contractor of the aforementioned work, the amount of FOUR HUNDRED NINE THOUSAND FOUR HUNDRED AND THIRTY FIVE DOLLARS (\$409,435.00) computed in accordance with Contractor's accepted proposal dated January 24, 2013, which accepted proposal is incorporated herein by reference thereto as if herein fully set forth.

3. All of the work to be done shall be done under the direction and supervision of, and to the approval of, District or its authorized representative, and the work shall

be done in the best workmanlike manner, conforming strictly to the provisions of the Plans, Contract Documents and Specifications therefor.

4. (a) Contractor shall comply with all applicable provisions of Sections 1810 to 1815, inclusive, of the California Labor Code, relating to working hours. Contractor shall, as a penalty to District, forfeit Twenty-Five Dollars (\$25.00) for each worker employed in the execution of the contract by Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of 8 hours at not less than 1¹/₂ times the basic rate of pay.

(b) Pursuant to the provision of California Labor Code, Sections 1770 et seq., Contractor and any subcontractor under him shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Pursuant to the provisions of California Labor Code Section 1773.2, Contractor is hereby advised that copies of the prevailing rate of per diem wages and a general prevailing rate for holidays, Saturdays and Sundays and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker required to execute the contract, are on file in the administrative offices of District, which copies shall be made available to any interested party on request. Contractor shall post a copy of said prevailing rate of per diem wages at each job site.

(c) As required by Section, 1773.8 of the California Labor Code, Contractor shall pay travel and subsistence payments to each worker needed to execute the

work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this Section.

(d) To establish, such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within 10 days after their execution and thereafter shall establish such travel and subsistence payments whenever filed 30 days prior to the call for bids.

(e) Contractor shall comply with the provisions of Section 1775 of the California Labor Code and shall, as a penalty to District, forfeit Twenty-Five Dollars (\$25.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages for each craft, classification, or type of worker needed to execute the contract.

(f) As required under the provisions of Section 1776 of the California Labor Code, Contractor and each subcontractor shall keep an accurate payroll record, showing the name address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Said payroll shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in Paragraph 4 (f), herein, shall be made available for inspection or furnished upon request to District, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in Paragraph 4 (f), herein, shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to subparagraph 4 (f) (2) herein, the requesting party shall, prior to being provided the records, reimburse the costs of preparation by Contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal offices of Contractor.

Contractor and each subcontractor shall file a certified copy of the records, enumerated in Paragraph 4 (f) with the entity that requested the records within 10 days after receipt of a written request. Any copy of records made available for inspection and copies furnished upon request to the public or District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded the contract or performing the contract shall not be marked or obliterated.

Contractor shall inform District of the location of the records enumerated under Paragraph 4 (f), including the street address, city and county, and shall, within 5 working days, provide a notice of change of location and address. In the event of noncompliance with the requirements of Paragraph 4 (f), Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects Contractor must comply with said paragraph. Should noncompliance still be evident after the 10-day, period, Contractor shall, as a penalty to the state or District, forfeit Twenty-Five Dollars (\$25.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. Responsibility for compliance with Paragraph 4 (f) lies with Contractor.

(g) Contractor and any subcontractors shall, when they employ any person in any apprenticeable craft or trade, apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the construction site for a certificate approving Contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected; and shall comply with all other requirements of Section 1777.5 of the California Labor Code. The responsibility of compliance with California Labor Code Section 1777.5 during the performance of this contract rests with Contractor. Pursuant to California Labor Code Section 1777.7, in the event Contractor willfully fails to comply with the provisions of California Labor Code Section 1717.5, Contractor shall be denied the right to bid on any public works contract for one year from the date noncompliance is determined and be assessed civil penalties. (h) In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860), and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the California Labor Code, Contractor is required to secure the payment of compensation to his employees and for that purpose obtain and keep in effect adequate Worker's Compensation insurance. If Contractor, in the sole discretion of District satisfies District of the responsibility and capacity under the applicable Workers' Compensation laws, if any, to act as self-insurer, he may so act, and in such case, the insurance required by this paragraph need not be provided.

Contractor is advised of the provisions or Section 3100 of the California Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and shall comply with such provisions before commencing the performance of the work of this contract.

Before the agreement between District and Contractor is entered into, Contractor shall submit written evidence that it and any subcontractors have obtained for the period of the contract full Workers' Compensation insurance coverage for all persons whom they employ or may employ in carrying out the work under this contract. This insurance shall be in accordance with the requirements of the most current and applicable state Workers' Compensation insurance laws. In accordance with the provisions of Section 1861 of the California Labor Code, the contractor in signing this agreement certifies to District as true the following statement:

[&]quot;I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract."

(I) In accordance with the provisions of Section 1727 of the California Labor Code, District, before making payment to Contractor of money due under a contract for public works, shall withhold and retain therefrom all amounts which have been forfeited pursuant to any stipulation in the contract, and the terms of Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). But no sum shall be withheld, retained or forfeited, except from the final payment, without a full investigation by either the Division of Labor Law Enforcement or by District.

5. The parties hereby agree that in case all work called for under the agreement is not finished or completed on or before the time set forth in this agreement, damage will be sustained by District, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which District will sustain in the event of, and by reason of such delay; it is therefore agreed Contractor will pay to District the sum calculated at the rate of Two Hundred Dollars (\$200.00) per day as liquidated damages for each and every calendar day's delay in finishing the work in excess of the number of calendar days prescribed, and Contractor agrees to pay said liquidated damages as herein provided, and in case the same are not paid, agrees that District may deduct the amount thereof from any monies due or that may become due under this agreement.

It is further agreed that in case the work called for under this agreement is not completed in all its parts and requirements within the number of calendar days specified, District shall have the right to increase the number of calendar days or not, as may seem best to serve the interest of District; and if it is decided to increase the said number of calendar days, District shall further have the right to charge to Contractor, and deduct from the final payment for the work, all or any part, as District may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses of District which are directly chargeable to this agreement, except that the cost of final surveys and the preparation of final estimates shall not be included in such charges to be paid by Contractor.

6. Except as otherwise may be provided herein, Contractor hereby expressly guarantees for one (1) full year from the date of the final completion of the work under this agreement and acceptance thereof by District's Sanitary Board, to repair or replace any part of the work performed hereunder which constitutes a defect resulting from the use of inferior or defective materials, equipment or workmanship. If, within said period, any repairs or replacements in connection with the work are, in the opinion of the District's Engineer, rendered necessary as the result of the use of inferior or defective materials, equipment or workmanship. Contractor agrees, upon receipt of notice from District, and without expense to District, to promptly repair or replace such material or workmanship and/or correct any and all defects therein. If Contractor, after such notice, fails to proceed promptly to comply with the terms of this guarantee, District may perform the work necessary to effectuate such correction and recover the cost thereof from Contractor or his sureties.

Any and all other special guarantees which may be applicable to definite parts of the work under this agreement shall be considered as an additional guarantee and shall not reduce or limit the guarantee as provided by Contractor pursuant to this paragraph during the first year of the life of such guarantee.

7. Contractor hereby agrees to indemnify and save harmless District, it's Sanitary Board, officers, agents, employees and consultants of and from any and all claims, suits or actions of every name, kind and description, which may be brought against District, its Sanitary Board, officers, agents, employees and consultants by reason of any injury to or death of any person or damage suffered or sustained by any person or corporation, caused by, or alleged to have been caused by, any act or omission to act, negligent or otherwise, of Contractor, its officers, agents or employees in the performance of any work required of Contractor by this agreement.

The duty of Contractor to indemnify and save harmless, as set forth herein, shall include a duty to defend as set forth in Section 2778 of the California Civil Code; provided, however, that nothing herein shall be construed to require Contractor to indemnify District, its Sanitary Board, officers, agents, employees and consultants against any responsibility or liability in contravention of Section 2782 of the California Civil Code.

8. Contractor, at its sole cost and expense, shall acquire and maintain in full force and effect throughout the term of this agreement Workers' Compensation, employer's liability, comprehensive general liability, and owned, non-owned and hired automobile liability insurance coverage relating to Contractor's work to be performed hereunder covering District's risks in form subject to the approval of District's Counsel. The minimum amounts of coverage corresponding to the aforesaid categories of insurance per insurable event shall be as follows:

Insurance Category	Minimum Limits
Workers' Compensation:	Statutory minimum
Employer's Liability:	\$1,000,000 per accident for bodily injury or disease
Comprehensive General Liability:	\$1,000,000 per occurrence for bodily injury and property damage
Automobile Liability:	\$1,000,000 per accident for bodily injury and property damage (coverage required to the extent applicable to Contractor's

vehicle usage in performing work hereunder.)

Any deductibles or self-insured retention must be declared to, and approved by, District. In the event District does not approve a deductible amount, at the option of District, either Contractor's insurer shall reduce or eliminate the deductibles or self-insured retention with respect to District, its Sanitary Board, officers, employees, agents and consultants, or Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

Concurrently with the execution of this Agreement, Contractor shall furnish District with certificates and copies of information or declaration pages of the insurance required hereunder and, with respect to evidence of comprehensive general liability and automobile liability insurance coverage, original endorsements:

(a) Precluding cancellation or reduction in coverage before the expiration of thirty (30) days after District shall have received written notification of cancellation or reduction in coverage by certified mail, return receipt-requested;

(b) Providing that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability (cross liability endorsement);

(c) Naming District, its Sanitary Board, officers, employees, agents and consultants as additional insureds; and

(d) Providing that Contractor's insurance shall be primary insurance relating to Contractor's work hereunder with respect to District, its Sanitary Board, officers, employees, agents and consultants and further providing that any insurance or self-insurance maintained by District for itself, its Sanitary Board, officers, employees, agents and consultants shall not be excess of Contractor's insurance and shall not be contributory with it.

9. Contractor shall provide, on the execution of this agreement, a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of amount bid, which bond shall be conditioned upon the faithful performance of all work required to be performed by Contractor under this agreement. Said bond shall be liable for any and all penalties and obligations which may be incurred by Contractor under this agreement.

10. In addition to the bond required under Paragraph 9 hereof, Contractor shall furnish a good and sufficient corporate surety bond in the penal sum of one hundred Percent (100%) of amount of bid, which bond shall conform strictly with the provisions of Chapter 7, Title 15, Part 4, Division 3, of the Civil Code of the State of California, and all amendments thereto.

11. Pursuant to California Public Contract Code Section 7100, the acceptance by Contractor of an undisputed payment made under the terms of the contract shall operate as, and shall he, a release to District, and it's duly authorized agents, from all claim of and/or liability to Contractor arising by virtue of the contract related to those amounts. Contractor may specifically exclude disputed contract claims in stated amounts from the operation of the release.

12. Contractor may substitute securities for the amounts retained by District to ensure performance of the contract in accordance with the provisions of Section 4590 of the Government Code.

13. The representations made herein, including Contractor's licensing information furnished with contractor's bid (and incorporated herein] are made under penalty of

perjury. The undersigned understands that any bid not containing said licensing information, or containing any information. which is subsequently proven false, shall be considered nonresponsive, and shall be rejected by District.

IN WITNESS WHEREOF, the parties hereto have executed this agreement this 7th day of February 2013.

MONTARA WATER AND SANITARY DISTRICT, A public entity of the State of California

ATTEST:

President, Board of Directors

Secretary, Board of Directors

CONTRACTOR:

Ву: ____

......

Signature

Title

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, D'Arcy and Harty Construction, Inc., as Principal, and , organized and existing under the laws of the State of , and authorized to execute bonds and undertaking as sole surety, as Surety, are held and firmly bound unto any and all persons named in California Civil Code Section 3181, whose claim has not been paid by the Contractor, company or corporation in the aggregate total of FOUR HUNDRED NINE THOUSAND FOUR HUNDRED AND THIRTY FIVE DOLLARS (\$409,435.00), (being 100% of the Contract amount) for payment whereof, well and truly to be made, said Principal and Surety bond themselves, their heirs, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that, whereas the above bounden Principal has entered into a Contract dated ______, 20___, with the Montara Water and Sanitary District to perform the following work, to wit: 2012-2013 Sewer Improvement Project and Spot Repairs.

NOW, THEREFORE, if the above bounden Principal or his/her subcontractors fail to pay any of the persons named in Section 3181 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Contractor or his/her subcontractor pursuant to Section 13020 of the Unemployment Insurance Code of the State of California, with respect to such work and labor, the surety will pay for the same, in the amount not exceeding the sum specified in this bond, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court.

This bond shall inure to the benefit of any person named in Section 3181 of the Civil Code of the State of California so as to give a right of action to them or their assignees in suit brought upon this bond.

This bond is executed and filed to comply with the provisions of the act of Legislature of the State of California as designated in Civil Code Section 3247 to 3252, inclusive, and all amendments thereto.

And the said Surety, for value received, hereby stipulates and agrees to waive the provisions of California Civil Code Section 2819 regarding consent to change, extension of time alteration, or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same, shall in any way affect its obligations on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work, or to the Specifications.

In the event the District, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then, in addition to the penal sum hereinabove specified, we agree to pay to the said District, or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this _____ day of _____, 20__, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

Principal Secretary	Principal
(SEAL)	Ву
Witness as to Principal	
Address	Address
Witness to Surety	Surety
Address	Address
	Telephone
	Attorney-in-Fact
If CONTRACTOR is partnership, all partners	

The signature of the Surety on this bond must be acknowledged before a Notary Public.

SECTION 00420

FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that, WHEREAS, the Montara Water and Sanitary District Board, San Mateo County, State of California, has awarded to D'Arcy and Harty Construction, Inc. hereinafter designated as the "Principal," a Contract, the terms and provisions of which Contract are incorporated herein by reference, for constructing the 2012-2013 Sewer Improvement Project and Spot Repairs Project, and

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract;

NOW, THEREFORE, we the Principal, and as surety, are held and firmly bound unto the Montara Water and Sanitary District, San Mateo County. California. in penal the sum of FOUR HUNDRED NINE THOUSAND FOUR HUNDRED AND THIRTY FIVE DOLLARS (\$409,435.00), lawful money of the United States, being one hundred percent (100%) of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, Principal's heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions and agreements in the said Contract and any alterations made as therein provided, on the Principal's part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Montara Water and Sanitary District, its officers and agents, as therein stipulated, then this obligation shall be null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation shall hold good for a period on one (1) year after the completion and acceptance of the said work, during which time, if the above bounden Principal, Principal's heirs, executors, administrators, successors or assigns shall fail to make full, complete and satisfactory repair and replacements or totally protect the said District from loss or damage made evident during said period of one (1) year from the date of acceptance of said work, and resulting from or caused by defective materials or faulty installation, in the prosecution of the work done, the above obligation shall be and remain in full force and virtue.

And the said Surety, for value received, hereby stipulates and agrees to waive the provisions of California Civil Code Section 2819 regarding consent to change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or the Specifications accompanying the same shall in any way affect its obligations on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, or to the work, or to the Specifications.

In the event the District, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then, in addition to the penal sum hereinabove specified, we agree to pay to the said District, or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

In WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this ______ day of ______, 20____, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

Principal Secretary	Principal
(SEAL)	Ву
Witness as to Principal	
Address	Address
Witness to Surety	Surety
Address	Address
	Telephone
	Attorney-in-Fact
	Address

If CONTRACTOR is partnership, all partners must execute the BOND.

The signature of the Surety on this bond must be acknowledged before a Notary Public.

	MONTARA WATER AND SANITARY DISTRICT AGENDA						
	For Meeting Of: February 7, 2013						
A	TO:	BOARD OF DIRECTORS					
	FROM:	Clemens Heldmaier, General Manager					
SUBJECT:	Notice o	Review and Possible Action Concerning Filing Notice of Completion for Vallemar Pump Station Engine Generator Set Replacement Project.					

On June 19, 2012 Pacific Infrastructure, Inc. entered into an agreement with the District for installation of the Vallemar Engine Generator Set in Moss Beach. The attached letter from the District Engineer indicates that the work has now been successfully completed. Gary Roberts with Nute Engineering recommends a Notice of Completion be filed with the County Recorder. After expiration of a 35-day lien period, the 5% retention will be paid to the contractor.

RECOMMENDATION:

Authorize the General Manager to file the attached Notice of Completion with the County Recorder.

Attachments



Mr. Clemens Heldmaier, General Manager Montara Water & Sanitary District P.O. Box 370131 Montara, CA 94037

Re: Vallemar Engine Generator Set Instllation Statement of Completion

Dear George:

Pacific Infrastructure has completed their work on the above referenced project and we recommend that the project be accepted and that the Notice of Completion be filed.

Very truly yours,

NUTE ENGINEERING

By: <u>Jary E. Robards</u>

8162.Statement of Completion.ltr.doc

Recorded at the Request of: Montara Water and Sanitary District

When Recorded Mail to: Montara Water and Sanitary District P. O. Box 370131 Montara, CA 949037

Space above this Line for Recorder's Use

NOTICE OF COMPLETION

MONTARA WATER AND SANITARY DISTRICT SAN MATEO COUNTY, CALIFORNIA

VALLEMAR ENGINE GENERATOR SET INSTALLATION

NOTICE IS HEREBY GIVEN, Pursuant to Section 3093 of the Civil Code of the State of California, that Gary E Robards, for and behalf of Nute Engineering, Engineer for the Montara Water and Sanitary District, San Mateo County, California, on the 24th day of January, 2013, did file with the Secretary of said District a Statement of Completion of the following described work, the contract for doing which was awarded to Pacific Infrastructure, Inc. and entered into on June 19, 2012.

That said work and improvements are public improvements owned and held by said Sanitary District for the benefit of the public, and were actually completed on December 31, 2012. Acceptance of completion of said work was ordered by the District Board on February 7, 2013 and the name of the surety on the contractor's faithful performance bond for said project is Ohio Casualty Insurance Company.

That said work and improvements consisted of the performing of all work and furnishing of all labor, materials, equipment and all utility and transportation services required for the *Vallemar Engine Generator Set Installation*, all as more particularly described in the plans and specifications approved by the Board of Directors of said District.

That the site of the construction and improvements was in and around Vallemar Street at Cabrillo Hwy, Moss Beach, CA.

OWNER: Montara Water and Sanitary District P. O. Box 370131 Montara, CA 94037

Dated: February 7, 2013

Clemens Heldmaier General Manager Montara Water and Sanitary District

8162.8162.Notice of Completion.doc

STATE OF CALIFORNIA)) ss. County of San Mateo)

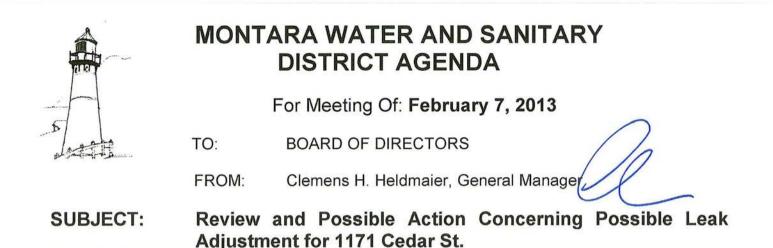
Clemens Heldmaier, General Manager of the Montara Water and Sanitary District, being first duly sworn, deposes and says:

That he is the duly authorized representative for the Montara Water and Sanitary District, San Mateo County, California, that he has read the foregoing Notice of Acceptance of Completion and that the facts therein stated are true of his own knowledge except as to matters therein stated upon information and belief, and as to such matters he believes to be true.

Clemens Heldmaier General Manager Montara Water and Sanitary District

Subscribed and sworn to me this _____ day of ______, 2013.

Notary Public in and for the State of California



The District received a request to consider an adjustment to the water bill and 2012/13 sewer service charge for 1171 Cedar Street due to a leak. The leak extended from October 17, 2012 through December 6, 2012 and occurred on the customer's supply line to the house after the water meter. The leak went undetected due to the rain during this time and because the runoff appeared to follow gopher tunnels. Both the location and flow of the leak were confirmed by staff. Billing records show a customer class average of 12 HCF for December 2012 billing and 9 HCF for February 2013 billing.

The December 2012 and February 2013 water bills (149 HCF and 24 HCF respectively) will be used to assess the sewer service charge for said property. The water consumption measured for the wet weather period is 173 HCF and the excessive usage due to the leak is 153 HCF. If the Board finds sufficient evidence that the leak did not enter the sewer system, the customer's wet weather consumption for this billing period should be reduced to 20 HCF (11 HCF + 9 HCF).

If it cannot be determined that the leak did not enter the sewer system, per the District's refund policy, one third of the excess usage reflected in December's billing covers the cost of treatment (153 HCF / 3 = 51). Using 11 HCF as average for December 2012, and 9 HCF for February 2013, wet weather consumption for the property (51 HCF + 11 HCF + 9 HCF = 71 HCF), the customer should then be assessed for 71 HCF for the current year's sewer service charge billing. The home owner would be eligible for an adjustment of 102 HCF.

The attached spreadsheets show that the customer is eligible for a credit of \$775.24 to his account for the December 2012 water bill, and \$22.47 for the February 2013 water bill.

RECOMMENDATION:

Authorize the General Manager to issue an adjustment of 153 HCF to the owner of 1171 Cedar St. to reflect a sewer service charge flow assessment of 20 HCF for wet weather period 2012/13.

Attachments

					50				
\$	6.80	x	6	units	\$	40.80			
\$	9.07	х	7	units	\$	63.49			
		x	14	units	\$	158.76			
		х	122	units	\$	1,936.14			
					¢	2 400 40			
	44				Ф	2,199.19			
quais	s 138 un	iits							
t:									
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\$	9.07	х	5	units	\$	45.35			
\$	11.34	х	0	units	\$	-			
\$	15.87	х	0	units		-			
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ment	t				\$	1,337.81			
								\$ 2	,199.19
r Adi	ustmen	t					minus		,337.81
		-							861.38
							minus	\$	86.14
						Tota	Adjustment	\$	775.24
Please note: Adjustments to be given once every 5 years only.									
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Daniel Hayes							n an		
1171 Cedar St.									
February 2013 Billing									
Calculation for Water Bill									
Total Units Billed 24									
Tier 1 units 0 - 6	\$		х	6	units	\$	40.80		
Tier 2 units 7 - 13	\$		х	7	units	\$	63.49		
Tier 3 units 14 - 27	1.5	11.34	х	11	units		124.74		
Tier 4 units 28 and over	\$	15.87	х	0	units	\$	-		
Totals for 24 units used						\$	229.03		
Customer class average equ	als	9 units							
Excess usage due to leak ec			ts						
Calculations for Adjustment	:								
Tier 1 units 0 - 6	\$	6.80	х	6	units	\$	40.80		
Tier 2 units 7 - 13	\$	9.07	х	3	units	\$	27.21		
Tier 3 units 14 - 27		11.34	х	0			-		
Tier 4 units 28 and over	\$	15.87	х	0	units	\$	-		
Excess usage at Tier 2 Rate	\$	9.07	х	15	units	\$	136.05		
Total Calulations for Adjustr	nen	t				\$	204.06		
Billed Units								¢	000.00
Minus Total Calculations for	Adi	uetmon	٠				minus	¢ 2	229.03 204.06
	Auj	usunen					minus	\$	204.06
Minus 10% processing fee							minus	\$	24.97
Bill Adjustment Due							Total Adjustment		22.47
Sin Adjustition: Bus							Total Adjustment	Ψ	22. 4 1
Please note: Adjustments to	be	given o	nce e	very 5	years o	nly.			
	-	- Internet and	A Low Test		In the local sector			and loss	

Daniel Hayes & Judith McGarry 1171 Cedar Street Montara, CA 94037-0863

JAN 0 9 2013

3 January 2013

Clemens Heldmaier Montara Water and Sanitary District P.O. Box 370131 Montara, CA 94037

Dear Mr. Heldmaier,

We are responding to our recent water bill of December 5, 2012. Though we understand Montara Water's reasoning, we believe that the amount charged (\$2,269.53) is inappropriate. We are therefore proposing to pay only a portion of the bill: \$700.

In short, we believe that whatever "fairness" exists in Montara Water's billing policy is predicated on "owner responsibility," which assumes that your customers are capable, under normal circumstances, of detecting a leak. In our case, the leak wasn't evident. Furthermore, Montara Water policy suggests not only customer responsibility but its own: communications by employees and official documents (i.e., the Courtesy Leak Detection Notice) imply a measure of oversight on your part, as well.

That the extent of the leak in our case was not obvious, either to us (with a reasonable expectation of our oversight) or to Montara Water (because you really don't "monitor [your] customers' water usage," as claimed, in part because the electronic leak detection equipment doesn't work as described), or even in the eyes of the Simms plumber who performed the repairs—all of this suggests a basic inequity to the water bill we've received and amount of money requested.

Below we provide the details of this case, for your review.

BACKGROUND

We moved to Montara from San Francisco at the end of May 2012. We received our first water bill in June and were surprised by the amount charged, \$309.80. (It seemed like a lot to us.) In August, we received our next water bill, and this time we were charged even more: \$465.09. So we called Montara Water to find out what was going on, whether there was a leak, and whether there was anything we could do to reduce these high bills. We spoke to Judy on the phone. Steve from Montara Water came out to our house the next day and looked over things. He said that (a) there didn't seem to be any leak, and (b) if there was a leak, we'd be notified because there was a "leak detection system," whereby any flow without an hour's cessation in 24-hour period would be noticed by Montara Water. (Steve, by the way, was extremely courteous and helpful.)

We decided, after meeting with Steve, that we needed to reduce our water usage. And so we investigated our irrigation system, performed repairs, and installed an artificial lawn in place of grass (see photos); we stopped using extra rinse cycles on washers; we replaced a shower head with one that conserved more water; and we generally tried to use less water in our daily activities. Even though some of these remedies were performed during the billing period, our October water bill suggested that we were making progress: \$192.99.

We were, in fact, excited about getting our next water bill and finding out whether our efforts, now given a complete billing cycle, might pay off even more.

EVENTS OF DECEMBER 5, 2012

On December 5, we got a knock on the door from Julian of Montara Water. He said that a leak had been detected. We spoke with Julian at length. He suspected that the leak was happening in between the water meter and the house itself. The ground, behind the bushes, was wet (though it had also rained a lot in the days previous); and there was trickle of water running along the gutter that separates our driveway from the street. He suggested that we call Simms Plumbing. The plumber arrived an hour later, turned off the water; and we made plans for the repair to happen the next day. The next day, the repair was done successfully (see copy of receipt).

HOW COULD THIS HAVE HAPPENED WITHOUT OUR KNOWING?

We assumed that this was a small leak, since we hadn't noticed anything. Still, it concerned us and we began to ask questions. The ground to the north side of the driveway, or the part that we could see in front and under the bushes, didn't seem particularly wet. (For a view of the area of the leak, to the side of the driveway, see photos.) We'd actually looked out our front window, on December 4, and seen a slight trickle of water in between the driveway and the street and simply remarked on the oddity of this—water from recent rains still making its way southward.

One of the photographs we supply, taken from our kitchen on December 14, replicates what we saw that day on December 4 and on others: that is, a day when the total precipitation was 0.07 inches (according to wunderground.com), with no rain the day before, and yet the trickle of water between the driveway and the street. In other words, as you probably know, rain water is a big problem on this section of Cedar Street, and it never rains *at all* without water going down the gutters (north to south), nor is it unusual for water to be traveling along these same gutters even after it's stopped raining.

Otherwise, there was no apparent indication of a leak. It rained quite a lot in late November and early December, and so obviously that might've contributed to our not having noticed anything out of the ordinary. The ground was perpetually wet. Here are the rain figures for the eight days before Julian arrived on December 6 at noon:

November 28	0.32 inches	December 2	0.73 inches
November 29	0.11 inches	December 3	0.00 inches
November 30	1.58 inches	December 4	0.01 inches
December 1	0.66 inches	December 5	0.31 inches

Even when the rain stopped, however, there was no clear indication of a leak. We saw nothing, and we drive into and out of the driveway (which is adjacent to where the leak occurred) at least four times a day. The ground was wet, perhaps, but not unusually wet, especially given the weather conditions.

The Simms plumber was surprised himself at seeing the leak and the damaged pipe, once he'd dug it up; that is, he too was scratching his head, wondering where exactly the leaked water had traveled. It was his speculation that the water traveled underground, directly under the driveway, going south; he thought he saw a slight buckle in a region of brick that runs along the south side of the driveway (though we couldn't remember whether that slight buckle had been there all along).

In any case, we felt confident that we'd caught the problem. We were taking care of the leak, and the leak couldn't have been *that* bad, since there hadn't been any sign of water. Furthermore, we knew, from having talked to Steve, about Montara Water's trusty "leak detection system." In other words, we were ready for our bi-monthly water bill to be slightly higher and ready to take financial responsibility for the effect of the leak.

EVENTS OF DECEMBER 8, 2012

We received an envelope from Montara Water in the USPS mail. We first pulled out the "Courtesy Leak Detector Notice" (see copy). It notified us of the leak and spoke of the monitoring system and how the meters are "equipped with electronic leak detection equipment" that "aids our customers in detecting potential leaks that they may have been unaware of." *Actual* would probably be a better word choice than *potential*, but then *potential* suggests that a (potential) problem can be averted. And, in fact, the notice goes on to suggest just that—hoping that the leak detection system "will assist with preventing unwanted water loss as well as helping customers avoid unnecessarily high water bills." Sounds good, we thought.

We were also reassured in reading the explanation in a subsequent paragraph: "Your Water Meter has a built-in sensor that indicates when your meter draws water continuously for 24 hours without a one-hour break." This explanation seemed consistent with what we knew from our discussion with Steve.

Imagine, then, our surprise when next we pulled out of the envelope the actual water bill. \$2,242.53? That's more than 11 times our most recent bill!

HOW COULD THIS HAVE HAPPENED WITHOUT MONTARA WATER KNOWING?

We now know the answer to this question. We visited the offices of Montara Water and talked to Judy and Jeff, who explained the situation. Jeff was, as everyone at Montara Water seems to be, very nice and courteous throughout, but there was some amount of initial miscommunication, if only because we couldn't understand the significance of the "water detection system," and Jeff couldn't understand how so much water could have leaked without our having noticed it. Finally, we came to see what had happened. It turns out that the water detection system does not work as Steve had suggested, or as is written in the "Courtesy Leak Detector Notice" we received. In fact, the official wording, and information provided by Steve, is very misleading. No layperson or customer can read the explanation of the "built-in sensor that indicates...water [flowing] continuously for 24 hours without a one-hour break" without feeling reassured and assuming that any notification would be sent in a timely fashion. The wording strongly suggests this. Why would anyone speak of a "leak detection system" that only worked, say, retroactively, or one that "detected" leaks as long as 60 days following a leak, after the damage had already occurred?

In fact, Julian's visit to our house occurred *not* because of the leak detection system but because our water bill showed that we were being charged an amount roughly 11 times the previous billing period. (Judy explained this to us when we visited the office, and Jeff confirmed this as well.) In other words, the detection system used by Montara Water is a set of eyes that belong to an employee who sees something out of the ordinary, from *billing system information*, and acts accordingly. It has nothing to do with any so-called Leak Detection System.

Two thoughts on this:

(1) Customers of Montara Water need a thorough explanation of the Leak Detection System. As far as we can surmise, the real detection occurs when the bill gets generated. If the system works as it's *now* been explained to us, then customers are required to access their meter, every few days, and write down the numbers and make sure that nothing out of the ordinary indicates a leak. This may be a burden to customers, but it's only reasonable to suggest this as a foolproof method of detecting leaks and therefore not being charged excessive amounts for water usage. To suggest otherwise is misleading. This is not only an issue of unfairness to customers but also a terrible mistake in our collective responsibility to conserve water.

(2) There's got to be a better way! You guys know the technology, and we realize that efforts at smart metering are difficult and sometimes expensive, but couldn't something be done? Couldn't the Leak Detection System be set up to offer a timely alert? If not, couldn't there be some way of someone noticing spikes in usage, or in the amounts billed, *before* the damage is done? If someone is looking at records every 60 days to bill people, and then noticing oddities (i.e., obvious leaks), couldn't this oversight occur in a more timely manner?

OUR PROPOSAL

As mentioned earlier, everyone at Montara Water has been very understanding, and we appreciate that. Jeff has said that it is *our* responsibility to make sure that water is not leaking. He suggested that this responsibility was fairly straightforward: that is, any leak of major consequence could be, and should be, noticed by the customer. Not so, in our case, as described above, and as the photographs show; and we can get affidavits from the plumber who repaired the leak, since he, too, thought the leak was minor, with little indication of water leakage.

Interestingly, Jeff went on to suggest that one way that customers can prevent a problem is to turn off their own water prior to a vacation. This was helpful advice for the future, though it also suggested how these leaks typically happen: someone isn't there to notice evidence of the leak, only to return home and see the obvious. Fair enough—but not applicable in our case, since we we have been here, at home, continuously since moving in at the end of May 2012 and saw nothing out of the ordinary. Also, of course, this preventative strategy only works if the leak occurs *after* the turn-off to the house, not if the leak is in between the water meter and the house (as is our case).

In light of everything we've outlined here, we think we are responsible for \$700 of the bill. We assume, given our history and recent efforts at conservation, that our water bill wouldn't have exceeded \$200 for the period of October 1 to December 5; and we are offering an incremental \$500 for what we see as a reasonable amount in accordance with our responsibility. (We enclose a check for this amount.) We are hoping that this, too, will seem appropriate to you.

Danel Hogy

Daniel Hayes Judith McGarry

Judites Mcomm

SIMMS PLUMBING & WATER EQUIPMENT INC				IN	VOICE
P.O. BOX 9 PESCADERO, CA 94060 CAL LIC. #725194 (650) 879-0739 (650) 879-1823				DATE 12/12/2012	INVOICE # 16787V
BILL TO			JOB ADDRESS		
JUDITH MCGARRY Po Box 370863 Montara. Ca 94037			JUDITH MCGARRY 1171 CEDAR STREET MONTARA. CA 94037		
	P.O. #	TERMS		REP	
		Due on receipt		EM	
Description		Qty	Rate	Amount	
12-07 REPAIRED LEAK ON MAIN WATER L IRRIGATION LINE AS REQUESTED.	INE AND CAPPED)			
 3/4" Copper Female Adapters 3/4" Copper Male Adapters 3/4" Type L Soft Copper Tubing 1 X 3/4 PVC SCH 40 Bushing 1" Pvc SCH 40 Coupling 		1 2 1 1	4.95 3.81 6.32 0.75 0.76		4.95T 3.81T 12.64T 0.75T 0.76T

2.5

A Finance Charge of 1.5% or 18% Annually V	Will Be Added To All Past Due Invoices
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PLUMBER

Sales Tax (8.25%)

\$1.89

312.50

Total

125.00

\$337.30



MONTARA WATER AND

SANITARY DISTRICT

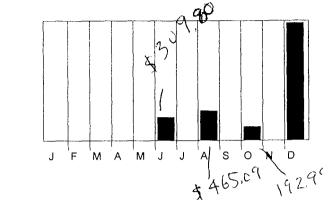
P.O. BOX 638 MONTARA, CA 94037-0638 (650) 728-3358

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MONTARA, CA 94037-0863

DAN HAYES PO BOX 370863

OR PAY AT: (FROM 9:00 AM TO 5:00 PM) 8888 CABRILLO HIGHWAY



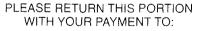
ঽ ACCOUNT NUMBER DATE BILL MAILED SERVICE FROM SERVICE TO DAYS USED DUE DATE 12/04/12 01/10/13 84-0800-3 12/05/12 10/01/12 64 DESCRIPTION PREVIOUS READING PRESENT READING UNITS USED AMOUNT DUE 0.00 149 Previous Balance 581 730 -192.99 11/12/12 PAYMENT 43.34 12/04/12 Basic Service 2,199.19 12/04/12 Res Sales Billed Tier 1: 0 to 6 HCF @ \$6. 80 per unit Tier 2: 6 to 13 HCF @ \$9. 07 per unit Tier 3: 14 to 27 HCF @ \$11. 34 per unit Tier 4: Over 27 HCF @ \$15. 87 Note: One unit = 748 gallons of water AFTER DUE DATE BY DUE DATE AMOUNT SERVICE ADDRESS

149

75

0

KEEP THIS PORTION FOR YOUR RECORDS





MONTARA WATER AND SANITARY DISTRICT 8888 CABRILLO HIGHWAY P.O. BOX 638 MONTARA, CA 94037-0638 (650) 728-3358

1171 Cedar St

DAN HAYES PO BOX 370863 MONTARA, CA 94037-0863



2,242.53

2.269.53

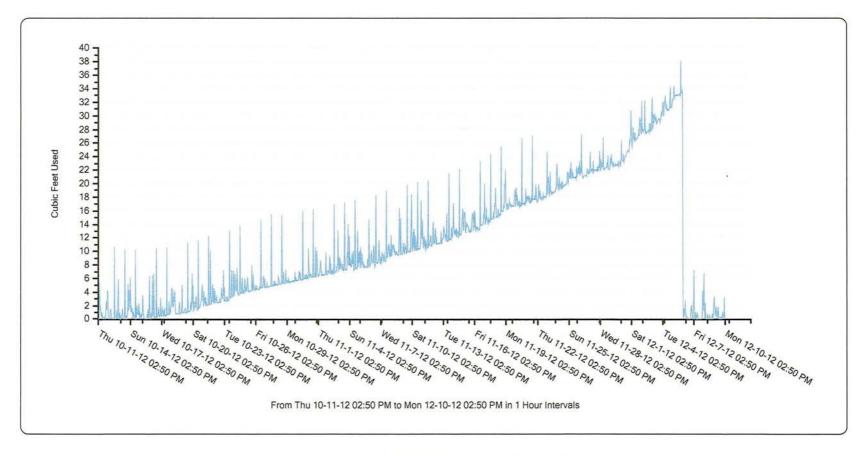
	DUE DATE	ACCOUNT NUMBER
	01/10/13	84-0800-3
ĺ	AFTER DUE DATE	BY DUE DATE
	2,269.53	2,242.53

SERVICE ADDRESS

DUE

1171 Cedar St

ORION Meter Reading Profile Serial # 71254593



Profile Name: 71254593 20121210 1450





5





NEUS

VICW kitchen window

3T)E



Photo taken on Dec. 14 not raining but had been - barely total day precipitation: 0.07 inches







artificial grass (badayard)



our drivener



MONTARA WATER & SANITARY DISTRICT

Serving Montara and Moss Beach

Post Office Box 370131 8888 Cabrillo Highway Montara, CA 94037-0131 Tel: (650)728-3358 Fax: (650)728-8556 <u>mwsd@coastside.net</u>

Courtesy Leak Detector Notice 12/5/2012

As part of Montara Water & Sanitary District's ongoing water conservation efforts, we monitor our customers' water usage for the possibility of leaks through the use of water meters equipped with electronic leak detection equipment. This aids our customers in detecting potential leaks that they may have been unaware of. It is our hope that this equipment will assist with preventing unwanted water loss as well as helping customers avoid unnecessarily high water bills.

Your Water Meter has a built-in sensor that indicates when your meter draws water continuously for 24 hours without a one-hour break. The assumption is that there are times during the day when you do not use any water (i.e. when sleeping, or at work). A water meter registers use only when something on the customer's side of it is drawing water. It cannot run unless water is being pulled through it.

Your meter has recently indicated that type of continuous use. It may be that only a very small amount is being drawn continuously, but even so, this is not normal and we are informing you now so that you may check your home and property for the potential of leaking or running water.

OUTDOORS

Leaks can occur outdoors in your supply system or irrigation system and they can occur indoors in your plumbing system or in fixtures. When the rainy season ceases and the ground is dry, that is a good time to be on the lookout for outdoor leaks in your water system.

Look for wet spots or greener-than-normal places in your yard that do not coincide with intended irrigation. Water accumulating in unusual places, such as near your foundation or driveway or running down the edge of your property near the street should be traced back to its source. Your irrigation system may have a broken emitter or the timer may be off schedule or malfunctioning. There could be a crack or break in your service line between the meter and the house. What might appear as a harmless drip at your hose spigot can waste a lot of water.

INDOORS

Indoors you may have a toilet with a leaky flapper valve or the water level set too high and it is leaking over the top of the overflow tube. This is the most common problem noted by field investigation. The shut-off valve in your self-regenerating water softener or reverse-osmosis water system may be defective. There could be a break in the bottom of your water heater. Dripping faucets should be obvious. Even a small drip can make a difference on your water bill. Contact the MWSD office if you have any questions or concerns at **650-728-3358**.

MONTARA WATER AND SANITARY DISTRICT

GUIDELINES FOR REVIEW OF WATER BILL REFUND REQUESTS

GENERAL POLICY.

The District bills customers on a bi-monthly basis. Water bills are composed from service charges, based on meter size, and the actual water usage determined by the meter reading. No adjustment will be made to water bills, or any refunds permitted, unless the District has made an error in the calculations or application of a particular charge, or a water leak can be confirmed by District staff. In cases where no error has been made by the District, and a water leak cannot be confirmed, however, a customer claims extenuating circumstances, it is understood that refunds are granted at the sole discretion of the Board of Directors. Refunds must comply with District ordinances including the provision that prohibits payments dating back more than four years.

If a customer requests an adjustment to a water bill due to a water leak or other excessive water usage, the District will automatically consider an adjustment to the Sewer Service Charge in accordance with the District Guidelines for Review of Sewer Service Charge Refund Request, even if a refund from the water side cannot be considered. Refunds must comply with District ordinances including the provision that prohibits payments dating back more than four years.

PROCEDURE FOR AUTHORIZING REFUNDS.

The General Manager is authorized to refund a customer in the event a mistake has been made in a particular charge. The water customers seeking an adjustment to their water bill shall submit a request for an adjustment in writing to the General Manager. It is the responsibility of the water customer to provide sufficient justification and documentation to support their request of a refund.

The General Manager is authorized to refund a customer in case of a District staff confirmed leak. The property owner seeking an adjustment to their water bill shall submit a request for an adjustment in writing to the General Manager. Staff shall review such request and consider any available information concerning the request. The District's Automated Meter Reading System (AMR) tracks individual water usage and can be considered. However, it is the responsibility of the water customer requesting the refund to provide sufficient justification and documentation to support their request.

JUSTIFICATION OF REFUNDS.

As a general rule, water customers should provide the following information to support their request for a refund or change to their water bill:

- a. A written request for an adjustment describing the circumstances of the leak, how long the leak lasted, and what immediate action was taken after it was discovered.
- b. Copies of any invoices submitted for plumbing work or other relevant services to fix the leak.
- c. Copies of any invoices that were submitted for plumbing material used to repair the leak. A statement by the plumber or other persons fixing the problem describing the circumstances, what action was taken, and when the repairs were made.

PAYMENT OF REFUNDS.

To determine the excessive water usage due to the leak or other special circumstances a customer's average consumption for the affected month(s) is established. Units of hundred cubic feet (HCF) are used for the calculation. All water metered above the determined average consumption is considered excessive water usage.

In most cases the customer's prior years' average water usage for the affected month(s) is used to establish the customer average consumption. A maximum of five (5) prior year's water usage will be used to calculate the customer average consumption. In cases where no prior year's billing information is available, the district wide customer class average consumption for the affected billing cycle will be applied as customer average consumption.

The established customer average consumption will be billed according to the current tiered water rates. All water consumed above the established prior years' average water consumption will be billed at the current tier 2 rate within the water customer class.

Leak adjustments will only be considered in case of significant impact to the water bill. Therefore, refunds can only be given for District determined excessive water usage of more than 5 HCF. Refunds for each individual property are limited to one every five years.

In cases where there is no error on the Districts part and a refund is granted a processing fee equal to 10% of that given refund, but not to exceed the District's Administrative Fee specified in the Master Fee Schedule, will be applied.

If a refund is granted and the adjusted bill affects the water usage during the wet weather months, the District will consider an adjustment to the sewer service charge.

Adopted May 3, 2012 by Board of Directors

MONTARA WATER AND SANITARY DISTRICT

GUIDELINES FOR REVIEW OF SEWER SERVICE CHARGE REFUND REQUESTS

GENERAL POLICY.

Sewer Service Charges are based on water use data available from the District's water department and are the best estimate of the extent to which a property owner has used the sewer treatment and collection system. It is understood that in any particular year there may be reasons why water use is particularly high or low, but over the long haul it represents the best way to measure the use of the District's sewer system. No refunds or adjustments will be made to the property owner's sewer service charge assessment or refunds permitted unless the District has made an error in the calculations or application of a particular charge, or the property owner clearly establishes extenuating circumstances which justify such a change. In cases where no error has been made by the District, but the property owner claims extenuating circumstance it is understood that refunds are granted at the sole discretion of the Board of Directors. Refunds must comply with District ordinances including the provision that prohibits payments dating back more than four years.

If the property owner validates to the Board's satisfaction that the extra water used did not enter the sewer system the Board may grant a full refund or adjustment. A full refund can be based on prior water consumption at the premise, or current water meter data, reflecting the customer's water consumption without the additional water used.

A temporary spike in water usage that is not sustained for the whole year should not be the basis of a full year's assessment even if there is no clear proof that the water did not enter the system. In any case, the property owner should pay for the treatment of the extra water used and treated at the SAM plant. Instead of including the full amount of the excessive water usage in the entire year's assessment, a partially higher assessment can be utilized to collect the payment of the treatment cost. The sewer service charge should reflect the actual usage of the sewage system and, therefore, be based on normal water consumption plus the additional cost to treat the extra water. The District uses two, or one third, of the six water bills collected every year during the wet weather season to calculate the sewer service charge assessment for the following fiscal year. One third of the excessive water consumption of the wet weather billing cycle in question can be added to the actual water consumed of the same bill to allow for cost recovery of the extra water treated.

PROCEDURE FOR AUTHORIZING REFUNDS.

District staff is authorized to make a change in a Sewer Service Charge in the event a mistake has been made in the particular Charge. However, only the Board may authorize any changes to the Sewer Service Charges for reasons other than mistakes or omissions made by District. The property owner seeking an adjustment to their Sewer Service Charge shall submit a request for an adjustment in writing to the Board of Directors. Staff shall review such request and provide any available information concerning the request. However, it is the responsibility of the property owner requesting the refund to provide sufficient justification and documentation to support their request.

JUSTIFICATION OF REFUNDS.

As a general rule, the property owner should provide the following information to Support their request for a refund or change to their Sewer Service Charge:

- 1. In cases where landscaping was planted and a significant amount of water used to establish it:
- a. Copies of invoices showing the plant material planted and the size of the plant (i.e., 5 gallon, 10 gallon, etc.).
- b. Copies of invoices for services performed to plant the landscaping and other relevant work performed. The dates the work was performed should be clearly shown. The property owner should provide proof of payment for work performed to fix the leak or other problem.
- c. An indication whether any of the plant material is commonly considered xeriscape or requires an especially large amount of water.
- d. Estimate the volume of water used and obtain the District's concurrence.
- 2. In cases where there has been a leak in the plumbing system:
 - a. Copies of any invoices submitted for plumbing work or other relevant services to fix the leak.
 - b. Copies of any invoices that were submitted for plumbing material that was used to repair the leak. A statement by the plumber or other person fixing the problem stating what the problem was, what action was taken and when the repairs were made.
 - c. Any documentation available to show how long the leak lasted.

PAYMENT OF REFUNDS.

As a general rule, the District will not pay a refund unless the property owner can provide proof that the property tax has been paid. Normally, a copy of the check which paid the taxes along with the endorsements on the back of the check to show that the check was received and processed by the County Tax Collector.

If the adjustment has been granted before the District submits the assessment to the County Tax Collector the reduction to the sewer service charge can be made after payment of the processing fee.

In cases where the District did not prepare the Sewer Service Charge in error, the property owner will be charged a processing fee equal to 10% of the refund but not to exceed the District's Administrative Fee, specified in the Master Fee Schedule.

CI RI T	MONTARA WATER AND SANITARY DISTRICT AGENDA						
		For M	eeting Of: F	ebruary 7	7, 2013		
A	TO:	TO: BOARD OF DIRECTORS					
	FROM:	Clem	ens H. Heldm	aier, Genei	al Manager		
SUBJECT:	Review Systems	and	Possible	Action	Concerning	Greywater	

At the January 17, 2013 Board meeting, Director Boyd requested a future agenda item about greywater systems and potential uses in the District. Use of greywater could provide further water conservation in the District's service area and can immediately benefit customers through reduced water consumption charges and reduced sewer service charges that are based on water consumption.

The item has been previously discussed several times at Board level, last in 2009 after the addition of "Non-potable Water Reuse Systems" into Chapter 16A, the California Plumbing Code. Staff now further researched the state of permitting, installations, and other aspects of greywater systems and the District's water engineer prepared a presentation for the Board's consideration and comments. The San Mateo County is the permitting agency for plumbing features on private property. On January 8, 2013, San Mateo County (SMC) Environmental Health added language to the SMC ordinance code acknowledging the potential for gray water system installations.

The presentation addresses the purpose and benefits of greywater systems, risk factors associated with them, and reports on the implementation potential in the District's service area.

RECOMMENDATION:

This is for Board information only

Attachments



MONTARA WATER & SANITARY DISTRICT

Serving the Communities of Montara and Moss Beach

 P.O. Box 370131
 Tel: (650) 728-3545

 8888 Cabrillo Highway
 Fax: (650) 728-8556

 Montara, CA 94037-0131
 E-mail: mwsd@coastside.net

 Visit Our Web Site: http://www.mwsd.montara.com

May 27, 2011

Senator Leland Yee State Capitol, Room 4074 Sacramento, CA 95814

RE: AB 849 (GATTO) WATER USE EFFICIENCY, GRAYWATER BUILDING STANDARDS

Dear Senator Yee,

The Montara Water and Sanitary District supports AB 849. Existing law authorizes a city, county, or other local agency to adopt, after a public hearing and enactment of an ordinance or resolution, building standards that prohibit entirely the use of graywater, or building standards that are more restrictive than the graywater building standards adopted by the Department of Housing and Community Development and published in the California Building Standards Code. This bill would repeal the authority of a city, county, or other local agency to adopt building standards that prohibit entirely the use of graywater and instead authorize the adoption, under specified requirements, of standards that differ from the standards adopted by the department . The bill would require that an ordinance enacted pursuant to this authority include the local climatic, geological, or topographical conditions requiring different building standards.

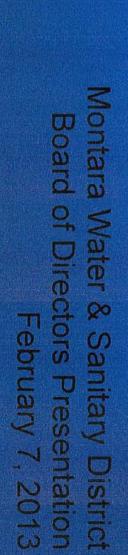
The latest drought in California has been officially declared over. Yet California is still in the midst of a severe water crisis. California's water systems need the help of their customers to achieve required water use reductions by 2020. The use of graywater results in lower fresh water use, needed groundwater recharge, and reduces sewer flows.

The District has encouraged the San Mateo County in the past to revise the building requirements to allow the use of graywater - without success.

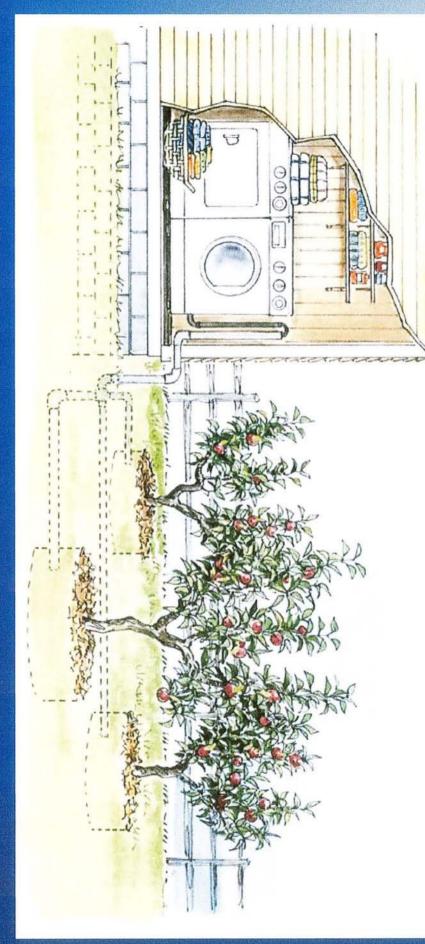
We urge you to vote for this proposal when it is heard!

Sincerely,

Clemens Heldmaier General Manager







A Viable Effort in Conservation

Presentation Overview

- Introduction to Graywater
- Types of graywater systems
- System Requirements
- Permitting
- **Graywater System Benefits**
- Conservation
- Graywater Incentive Programs
- Barriers to Success
- Potential Next Steps

What is Graywater?

- Graywater (or greywater) is water that has been used for household washing.
- In conventionally plumbed houses, graywater is combined with blackwater to be conveyed to the sewage treatment plant.
- Can be used for landscaping or toilet flushing to reduce the use of potable water.



Grey water

Laundry, Kitchen, Bathroom (excluding all organic waste)

Distribution of black and grey water in a household

Recent Advances in Graywater

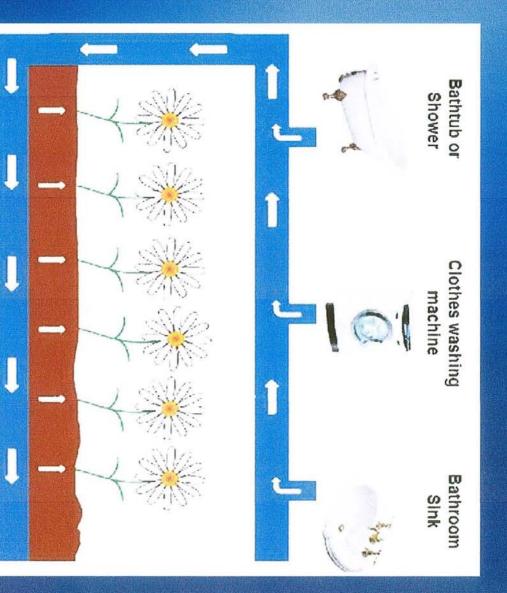
Systems" was added into the California State: Chapter 16A "Nonpotable Water Reuse Plumbing Code in 2009

- Since the adoption, graywater advocates have California permitting and installing systems all over been assisting utilities and individuals in
- Local: On January 8, 2013, San Mateo County potential for graywater system installations. to the SMC ordinance code acknowledging the (SMC) Environmental Health added language

Graywater Waste Streams

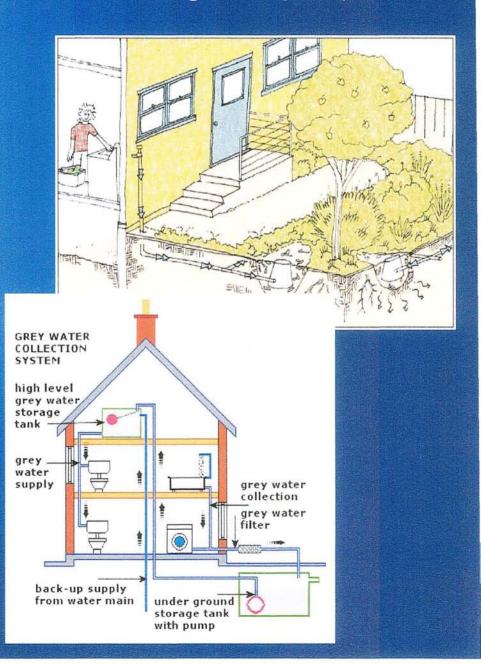
- Waste from the following fixtures is considered graywater:
- Bathtubs
- Showers
- Bathroom washbasins
- Clothes washing machines and laundry tubs

** Waste streams from kitchen sinks and dishwashers are not graywater.



Types of Graywater Systems Definitions based on Chapter 16A, California Plumbing Code (CPC)

- Clothes Washer/"Laundry to Landscape" System (L2L System): only utilizing a single domestic clothes washing machine in a one- or two-family dwelling.
- Simple System: serves a one- or two-family dwelling with a discharge of 250 gallons per day or less.
- Complex System: discharges over 250 gallons per day.
- Treated Graywater System: Nonpotable water is treated onsite suitable for direct beneficial use.



Chapter 16A, "Nonpotable Water Reuse Systems", California Plumbing Code Major Requirements – All Systems

() Graywater must be contained on the site where it was generated

- 2) No spray irrigation or ponding.
- Systems must minimize contact with humans and pets
- Graywater must be diverted to a landscaped area.
- Systems must allow the user to direct the flow to either the graywater use or building sewer.
- An operation and maintenance manual msut be provided.
- System must be in conformance with the plumbing code.

Permitting Requirements

Type of System	State Permit Requirements As per Chapter 16A, "Nonpotable Water Reuse Systems", CPC	County Permit Requirements As per
Clothes Washer/ L2L System	No construction permit is required if conditions in 1603A.1.1 of the CPC are met.	Environmental Health must be notified in writing of any water system or facility, including residences, intending to use reclaimed water, recycled water or graywater, prior to installation of any such system or piping. All components of graywater systems must be designed and installed in accordance with California or local Plumbing Code. (WAITNG ON MORE INFO)
Simple/Complex Systems	Construction permit and plans required unless exempted by Enforcing Agency (SMC).	
Treated System	Construction permit and plans required unless exempted by Enforcing Agency (SMC).	

Benefits of Graywater Systems

Consumer Benefits

- Lower water and wastewater bills
- Financial rebates for installation
- Water conservation: attractive option for a resource conscious population

MWSD/Public Benefits

- Water conservation
- Lower sewer flows to SAM
- Increased available potable water supply



Conservation Effectiveness

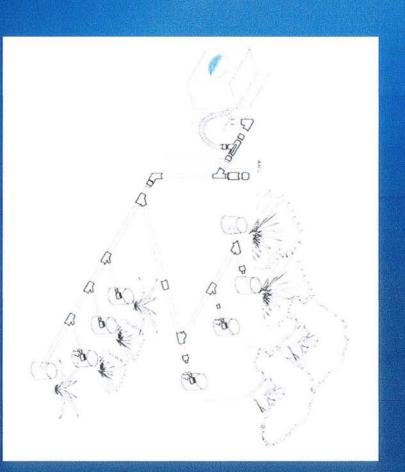
Conservation effectiveness varies, depending on:

- Amount of potable water used for irrigation.
- Amount of graywater produced by the residence.
- If the system uses graywater for toilet flushing
- Potential per capita water conservation:

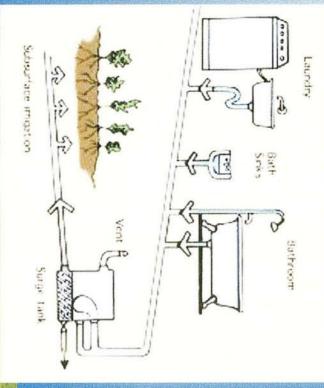
System Type	Approximate Water Savings (Percentage of Daily Use)
L2L	Up to 15%
Simple/Complex	Up to 30%
Treated Water (Indoor Use)	Up to 40%

Graywater Programs for Water Conservation Laundry to Landscape System

- The most viable graywater system to install due to ease of permitting and construction.
- Currently allowed in SMC with proper notifications.
- Limited public health risk.
- No backflow prevention device (BFP) required.



Graywater Programs for Water Conservation Simple and Complex Systems

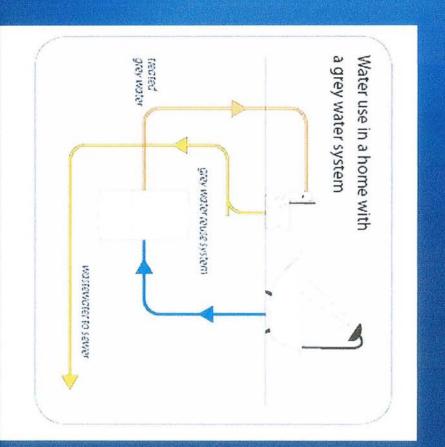




- Potential to conserve more water than L2L systems.
- More difficult to install and permit, additional steps to coordinate with SMC and inspect systems.
- Process for installing systems in SMC is not currently initiated.
- Greater public health risk; backflow prevention devices (BFP) required.

Graywater Programs for Water Conservation I reated Graywater Systems

- Necessary for indoor use of graywater (toilet flushing)
- Highest conservation potential.
- Most difficult to install and permit, additional steps to coordinate with SMC and inspect systems.
- Process for installing treated graywater in SMC is not currently initiated.
- Greater public health risk; backflow prevention devices (BFP) required.



Graywater Incentive Programs

- successful with incentive programs that offer: Water agencies have been
- Fixed cost rebates per system or per tixture
- Rebates based on a established percentage of system cost.



For new construction, enforcing agencies or systems. renovation projects to pre-plumb for graywater utilities have required new construction and major

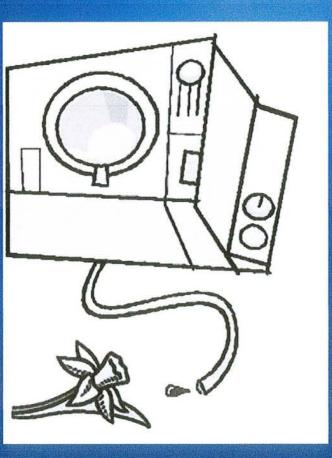
Potential Barriers to Success

- Complacency: Hard to generate participation.
- public's health & safety concerns Public misconception: Difficult to overcome the
- Permitting: permitting of simple, complex, or SMC initiates a permitting process treated graywater systems is not possible until
- Sewer Waste Stream:
- Less graywater in the sewer system = higher BOD in waste stream to SAM
- Higher BOD could potentially warrant a higher sewer charge

Potential Next Steps

systems, L2L systems is the best place to start: If MWSD is interested in encouraging graywater

- Communicate with SMC regarding the initiation of a L2L program.
- Initiate a L2L rebate program for District customers.
- Offer information regarding L2L systems at District offices and website.



MWSD Laundry to Landscape Program

- L2L program. District efforts would be minimal in initiating a
- Responsibilities:
- Pre- and post-inspection
- 1 Potential communication with SMC regarding the installation of a system (also could be the responsibility of the customer)
- Development of informational materials to encourage L2L systems
- Development of application for incentive program, it any
- Issuance of rebate, if any

Graywater Resources

For more information, the following are reliable resources regarding graywater: 2009 California Plumbing Code, Chapter 16A San Francisco Graywater Design Manual

- Greywater Alliance: www.greywateralliance.org
- Greywater Action: www.greywateraction.org

End of Presentation



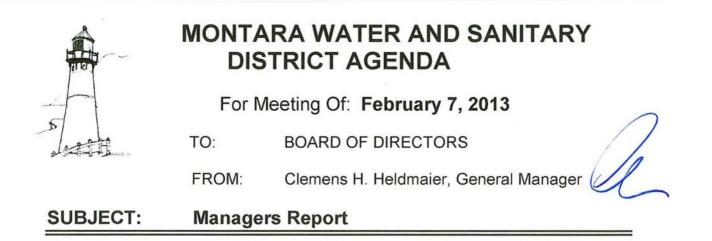


THE T	MONTARA WATER AND SANITARY DISTRICT AGENDA		
	For Meeting Of: February 7, 2012		
A	TO:	BOARD OF DIRECTORS	
	FROM:	Clemens H. Heldmaier, General Manager	
SUBJECT:		ew and Possible Action Concerning cellation of Next Regular Scheduled Meeting uary 21, 2013.	

Staff anticipates the cancellation of the second meeting in November due to a lack of quorum.

RECOMMENDATION:

This is for Board information only.



Attended Meetings: On January 18 the General Manager attended a meeting with the new San Mateo County Airports Manager Gretchen Kelly to discuss the integration of District projects in the airport layout plan and related utility needs of the airport.

On January 24 the General Manager met with the Granada Sanitary District Manager Chuck Duffy, and Half Moon Bay City Manager Lisa Snideman to discuss SAM Collections Contract Services.

In addition, the General Manager attended phone calls and conferences with consultants, directors, and customers.

Manager Leave: The General Manager will be in vacation from February 18-22.

RECOMMENDATION:

This is for Board information only.