Marin/Sonoma
Mosquito & Vector Control District

Retiree Healthcare Plan
July 1, 2015 Actuarial Valuation

April 2016

Bartel Associates, LLC
411 Borel Avenue, Suite 101
San Mateo, California 94402
Phone: 650/377-1618
Fax: 650/345-8057
Email: moliver@bartel-associates.com

Marin/Sonoma Mosquito Vector Control District
Retiree Healthcare Plan
July 1, 2015 Actuarial Valuation

TABLE OF CONTENTS

The Governmental Accounting Standards Board approved Statement No. 45, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" in 2004. GASB 45 provides accounting standards for non-pension postemployment benefits, primarily postretirement healthcare benefits. Under GASB 45, the Marin/Sonoma Mosquito Vector Control District's obligation for postretirement healthcare benefits is measured on an accrual rather than on a pay-as-you-go basis.

The District provides medical benefits through Marin County's medical plans, paying the 2-party premium for employees who retire directly from the District under the Marin County Employees' Retirement System (MCERA) before July 1, 2009 with 10 years District service. The District pays the retiree-only premium for employees hired on or after July 1, 2009 with 10 years District service. The District does not pay retiree medical premium for employees hired after July 30, 2014. These employees receive contributions into a Health Reimbursement Account while active instead.

The District commenced pre-funding the plan during the 2014/15 fiscal year with contributions that would phase into the full Annual Required Contribution over nine years. Funds are held in the CERBT under Asset Allocation Strategy #1 (57% Global Equity, 27% Fixed Income, 8% Real Estate Investment Trusts, 5% Treasury Inflation-Protected Securities, 3% Commodities).

VALUATION RESULTS

Plan Assets: To be considered Plan Assets for GASB 45 purposes, funds must be set aside in a trust that cannot legally be used for any purpose other than to pay retiree healthcare benefits. The following table shows the asset reconciliation for 2014/15 fiscal year (000's omitted):

	2014/15
■ Market Value of Assets (Beginning of Year)	$ -
• Contributions	121
• Investment Income	(1)
• Benefit Payments	-
• Expense	-
■ Market Value of Assets (End of Year)	120

Funded Status: The funded status of the plan is equal to the Actuarial Accrued Liability less Plan Assets. When assets equal liabilities, a plan is considered on track for funding. The following table summarizes the Plan's funded status for the current valuation and the prior valuation (000's omitted):

	July 1, 2013 Valuation	**July 1, 2015 Valuation**
■ Discount Rate[1]	Select & Ultimate: 4% to 7.25%	Select & Ultimate: 3.75% to 7%
■ Present Value of Benefits (PVB)		
• Actives	$ 8,668	$ 6,411
• Retirees	4,072	4,831
• Total	12,740	11,242
■ Actuarial Accrued Liability (AAL)		
• Actives	5,633	4,389
• Retirees	4,072	4,831
• Total	9,705	9,220
■ Market Value of Assets	-	120
■ Unfunded AAL	9,705	9,100

Annual Required Contribution (ARC): GASB 45 does not require an agency make up any shortfall (unfunded liability) immediately or take an immediate credit for any excess assets (surplus). Instead, the unfunded liability or surplus is amortized over time. An agency's Annual Required Contribution is simply the current employer Normal Cost plus an amortization of the unfunded liability or less an amortization of the excess assets. In other words, the contribution is the value of benefits earned during the year plus an amount to keep the plan on track for funding. For the current valuation, we calculated the 2016/17 ARC as the Normal Cost plus a 23-year amortization (as a level percent of pay) of the Unfunded AAL. ARCs are shown as of the end of the fiscal year for the prior valuation and as of the middle of the fiscal year for the current valuation (000's omitted):

	July 1, 2013 Valuation		**July 1, 2015 Valuation**	
■ Discount Rate	Select & Ultimate: 4% to 7.25%		Select & Ultimate: 3.75% to 7%	
■ Fiscal Year	2014/15	2015/16	2016/17	2017/18[2]
■ Normal Cost	$ 367	$ 376	$ 238	$ 237
■ UAAL Amortization	601	658	579	620
■ Annual Required Contribution	968	1,034	817	857
■ Estimated Payroll	3,300	3,407	2,887	2,974
■ ARC as a % of estimated payroll	29.3%	30.3%	28.3%	28.8%

[1] See page 9 for more details. During the select period the discount rate increases each year until the ultimate rate is reached. The ultimate rate is then used for all future years.
[2] New accounting standards for pension expense which will not be based on the ARC will apply for the 2017/18 fiscal year. However, ARC amount shown would be appropriate for 2017/18 contributions to the Plan.

Net OPEB Obligation (NOO): An agency's Net OPEB Obligation is the historical difference (from implementation) between actual contributions made and the Annual Required Contributions. If an agency has always funded the Annual Required Contribution, then the Net OPEB Obligation will always equal zero.

Annual OPEB Cost (AOC): GASB 45 requires that the Annual OPEB Cost equal the Annual Required Contribution except when an agency has a Net OPEB Obligation at the beginning of the year. When that happens, the Annual OPEB Cost will equal the ARC, adjusted for expected interest on the Net OPEB Obligation and reduced by an amortization of the Net OPEB Obligation. The purpose of this adjustment is simply to remove amortizations included in the ARC for amounts already expensed but not funded. The amortization period is the same as used in the calculation of the ARC. The following table shows a calculation of the estimated Annual OPEB Cost (000's omitted):

	July 1, 2013 Valuation		**July 1, 2015 Valuation**	
■ Discount Rate	Select & Ultimate: 4% to 7.25%		Select & Ultimate: 3.75% to 7%	
■ Fiscal Year	2014/15	2015/16	2016/17	2017/18[3]
■ Annual Required Contribution	$1,447	$1,034	$817	n/a
■ Interest on Net OPEB Obligation	202	291	323	n/a
■ Amortization of Net OPEB Obligation	(229)	(379)	(426)	n/a
■ Estimated Annual OPEB Cost	1,420	946	714	n/a

The following illustrates the District's estimated Net OPEB Obligation (NOO)/Net OPEB Asset (NOA) (000's omitted):

	July 1, 2013 Valuation		**July 1, 2015 Valuation**	
■ Discount Rate	Select & Ultimate: 4% to 7.25%		Select & Ultimate: 3.75% to 7%	
		Estimate	Estimate	Estimate
■ Fiscal Year	2014/15	2015/16	2016/17	2017/18
■ Beginning of Year NOO	$5,111	$6,168	$6,677	n/a
■ *plus* Annual OPEB Cost	1,420	946	714	n/a
■ *minus* Contributions				
• Estimated Benefits Paid	199	217	235	n/a
• Implied Subsidy Payments for FY[4]	43	51	54	n/a
• Trust Prefunding	121	169	176	n/a
• Total Contributions	363	437	465	n/a
■ End of Year NOO	6,168	6,677	6,926	n/a

The District's actual Net OPEB Obligation may differ from the above because actual contributions may be different from those estimated.

---

[3] Annual OPEB Cost and NOO do not apply under new GASB standard (Statement No. 75) effective for 2017/18 FY.
[4] Through active employee premiums.

Actuarial Gains/Losses:

The gain/loss analysis of Actuarial Accrued Liability for the 2 year period between valuation dates is shown below (000's omitted). Experience over the 2-year period was favorable. In particular premium increases were significantly less than anticipated. In addition, a number of changes were made to the assumptions:

- Assumptions were updated to reflect the 6/30/2014 experience study conducted by the Marin County Employees' Retirement Association (MCERA). This included lowering the assumed inflation rate from 3.25% to 2.75% and changes to demographic and salary increase assumptions. In response to the lowering of the inflation assumption the discount rate and the ultimate medical trend rate were reduced.
- A new scale for future mortality improvement was implemented.
- Employees expected retirement ages were used when such information was available.
- The assumed claims aging curve was updated.

	Actuarial Accrued Liability (Gain)/Loss
■ **July 1, 2013 Actual Value**	$ 9,705
■ **July 1, 2015 Expected Value**	10,822
• Demographic & other experience	(288)
• Premium (gain)[5]	(1,577)
• Medical trend rates	(506)
• MCERA demographic / salary increase assumptions	(255)
• Expected retirement age	286
• Mortality projection scale	403
• Discount rate	335
■ **July 1, 2015 Actual Value**	9,220

[5] Includes change in assumed claims aging curve.

Projected Benefit Payments: Following is a 10-year projection of benefit payments starting in 2016/17 (000's omitted):

Year	Cash Payments	Implied Subsidy Payments	Total Benefit Payments	Year	Cash Payments	Implied Subsidy Payments	Total Benefit Payments
2016/17	$235	$54	$289	2021/22	$402	$ 93	$495
2017/18	252	51	303	2022/23	444	113	557
2018/19	289	53	342	2023/24	469	112	581
2019/20	358	73	431	2024/25	504	126	630
2020/21	382	84	466	2025/26	536	129	665

Contributions Projection
The following table illustrates the estimated contribution amounts for the remaining 7-year ARC phase-in starting in 2016/17 (000's omitted):

Year	Benefit Payments	Trust Pre-Funding	Total Contribution	ARC	Payroll	Contribution % Payroll	ARC % Payroll
2016/17	$ 289	$ 176	$ 465	$ 817	$ 2,887	16.1%	28.3%
2017/18	303	246	549	857	2,974	18.5%	28.8%
2018/19	342	307	649	895	3,063	21.2%	29.2%
2019/20	431	326	757	920	3,155	24.0%	29.2%
2020/21	466	361	827	930	3,249	25.5%	28.6%
2021/22	495	410	905	956	3,347	27.0%	28.6%
2022/23	557	419	976	976	3,447	28.3%	28.3%

BASIC DEFINITIONS

Present Value of Benefits (PVB): When an actuary prepares an actuarial valuation, the first step is gathering participant data (including active employees and participants and beneficiaries in payment status) at the valuation date (for example July 1, 2015). Using this data and actuarial assumptions, future benefit payments are projected. (The assumptions predict, among other things, when people will retire, terminate, die or become disabled, as well as what salary increases, general (and healthcare) inflation and investment return might be). Those future benefit payments are discounted, using expected future investment return, back to the valuation date. This discounted present value is the plan's present value of benefits. It represents the amount the plan needs as of the valuation date to pay all future benefits – if all assumptions are met and no future contributions (employee or employer) are made. The District's July 1, 2015 retiree healthcare Present Value of Benefits is $11.2 million using a select & ultimate discount rate (phasing in from 3.75% in 2013/14 to 7% in 2022/23), with $4.8 million of this for former employees who have already retired.

Actuarial Accrued Liability (AAL): This represents the portion of the present value of benefits that participants have earned (on an actuarial, not actual, basis) through the valuation date. The District's July 1, 2015 retiree healthcare Actuarial Accrued Liability is $9.2 million using a select & ultimate discount rate (phasing in from 3.75% in 2013/14 to 7% in 2022/23), with $4.8 million of this for former employees who have already retired.

Plan Assets: This includes funds that have been segregated and restricted in a trust so they can only be used to pay plan benefits. The market value of the District's July 1, 2015 assets is $120,000.

Unfunded Actuarial Accrued Liability (UAAL): This is the difference between the Actuarial Accrued Liability and Plan Assets. This represents the amount of the Actuarial Accrued Liability that must still be funded. As of July 1, 2015, the District has an Unfunded Actuarial Accrued Liability of $9.1 million.

Normal Cost (NC): The Normal Cost represents the portion of the present value of benefits expected to be earned (on an actuarial, not actual, basis) in the coming year. The District's 2016/17 retiree healthcare Normal Cost as of the middle of the fiscal year is $238,000 (8.2% of payroll) using a select & ultimate discount rate (phasing in from 3.75% in 2013/14 to 7% in 2022/23).

Actuarial Cost Method: This determines the method in which benefits are actuarially earned (allocated) to each year of service. It has no effect on the Present Value of Benefits, but has significant effect on the Actuarial Accrued Liability and Normal Cost. The District's July 1, 2015 retiree healthcare valuation was prepared using the Entry Age Normal cost method. Under the Entry Age Normal cost method, the Plan's Normal Cost is developed as a level percent of payroll throughout the participant's working lifetime.

Implied Subsidy: An implied subsidy exists when premiums charged for employees subsidize retiree premiums. This occurs when premiums for retirees are not sufficient to pay anticipated claims.

SUMMARY OF RETIREE HEALTHCARE BENEFITS

Benefit Summary	
■ Eligibility	■ Hired July 30, 2014 or earlier: • Retire directly from the District under Marin County Employees' Retirement Association (Service Retirement at Age 50 or 55 depending on Retirement Tier with 10 years MCERA service, or disability retirement) • 10 years of District service ■ Hired after July 30, 2014: • Not eligible for District payment of retiree medical premiums
■ Medical Benefit	■ Hired July 30, 2014 or earlier: • District pays the full medical and Medicare B premiums for retirees • For retirees hired prior to July 1, 2009, the District also pays the premium for 1 dependent ■ Hired after July 30, 2014: • No District contributions towards retiree medical premiums, but may participate in District medical plans if pays premium[6] • Eligible for Health Reimbursement Account (HRA) contributions after 2 years of service with the District
■ Surviving Spouse Medical Benefit	■ Premium paid for those hired prior to July 1, 2009 ■ Same benefit continues to surviving spouse
■ Dental, Vision & Life	■ None
■ Medical Plans	■ County of Marin Medical Plans

[6] Valuation includes costs of implied subsidy to extent retiree premiums do not reflect full anticipated claims costs.

2015 Monthly Medical Premiums

Actives

Medical Plan	Non Medicare Eligible		
	Single	2-Party	Family
Kaiser Plan L	$ 709.10	$ 1,418.22	$ 1,886.23
Kaiser Plan S	640.33	1,280.67	1,703.29
Anthem Blue Cross PPO	1,046.72	2,120.17	2,686.61

Retirees

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser Plan L	$ 709.10	$ 1,418.22	$ 1,886.23	$395.32	$ 790.64	n/a
Kaiser Plan S	640.33	1,280.67	1,703.29	283.14	566.28	n/a
Anthem Blue Cross PPO	1,089.00	2,044.80	2,829.68	537.05	1,074.10	n/a

2016 Monthly Medical Premiums

Actives

Medical Plan	Non Medicare Eligible		
	Single	2-Party	Family
Kaiser Plan L	$ 707.36	$1,414.72	$1,881.58
Kaiser Plan S	638.75	1,277.51	1,699.09
Anthem Blue Cross PPO	1,078.14	2,183.81	2,767.22

Retirees

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser Plan L	$ 707.36	$1,414.72	$1,881.58	$393.58	$ 787.16	n/a
Kaiser Plan S	638.75	1,277.51	1,699.09	281.14	562.28	n/a
Anthem Blue Cross PPO	1,121.65	2,106.11	2,914.53	563.09	1,126.18	n/a

ACTUARIAL METHODS AND ASSUMPTIONS

Actuarial Methods

The actuarial cost method used for this valuation is the Entry Age Normal ("EAN") cost method. Under the EAN cost method, the Normal Cost for each participant is determined as a level percent of payroll throughout the participant's working career. The actuarial value of assets is market value as of the valuation date. The valuation is a "closed group" valuation, that is, no future hires are assumed.

The July 1, 2015 Unfunded Actuarial Accrued Liability was amortized as a level percent of payroll over a fixed 23-year period starting in 2016/17.

The Plan is assumed to be ongoing for cost purposes. This does not imply that an obligation to continue the Plan exists.

Actuarial Assumptions

Actuarial assumptions are shown below. Where appropriate the demographic assumptions used by the Marin County Employees' Retirement Association (MCERA) in their June 30, 2014 valuation have been used.

Actuarial Assumptions	July 1, 2013 Valuation	July 1, 2015 Valuation
■ Discount Rate	• 4.00%, no prefunding • 7.25%, pre-funded through CalPERS CERBT Asset Allocation Strategy #1 (66% Global Equity, 18% US Nominal Bonds, 8% Global Public Real Estate, 5% U.S. Inflation Linked bonds, 3% Commodities) • Select & Ultimate rate with 9-year phase-in starting in 2014/15 Year 2013/14 4.00% 2014/15 4.36% 2015/16 4.72% 2016/17 5.08% 2017/18 5.44% 2018/19 5.81% 2019/20 6.17% 2020/21 6.53% 2021/22 6.89% 2022/23+ 7.25%	• 3.75%, no prefunding • 7%, pre-funded through CalPERS CERBT Asset Allocation Strategy #1 (57% Global Equity, 27% Fixed Income, 8% Real Estate Investment Trusts, 5% Treasury Inflation-Protected Securities, 3% Commodities) • Select & Ultimate rate with 9-year phase-in starting in 2014/15 Year 2013/14 3.75% 2014/15 4.11% 2015/16 4.47% 2016/17 4.83% 2017/18 5.19% 2018/19 5.56% 2019/20 5.92% 2020/21 6.28% 2021/22 6.64% 2022/23+ 7.00%
■ General Inflation Rate	• 3.25% per year	• 2.75% per year

Actuarial Assumptions	July 1, 2013 Valuation	July 1, 2015 Valuation
■ Aggregate Payroll Increases	• 3.25% per year • Used to amortize Unfunded AAL	• 3% per year • Used to amortize Unfunded AAL
■ Pay Merit and Longevity Increases	• MCERA 6/30/2011 Experience Study	• MCERA 6/30/2014 Experience Study
■ Mortality, Termination	• MCERA 6/30/2011 Experience Study • In addition, Post-retirement mortality improvement projected fully generational using Scale AA from 2010	• MCERA 6/30/2014 Experience Study • In addition, Post-retirement mortality improvement projected fully generational using Scale MP-14 with convergence to 2022
■ Disability	• MCERA 6/30/2011 Experience Study	• MCERA 6/30/2014 Experience Study
■ Service Retirement	• MCERA 6/30/2011 Experience Study	• MCERA 6/30/2014 Experience Study
■ Participation at Retirement	• 100%	• Hired 7/30/2014 or earlier: 100% • Hired after 7/30/2014: Assumed to be eligible for medical coverage through district plans, 65% assumed to participate
■ Medical Trend	• Increases from prior year: Year 2013 Actual 2013 Premiums 2014 Actual 2014 Premiums 2015 7.50% 2016 7.00% 2017 6.50% 2018 6.00% 2019 5.50% 2020 5.25% 2021+ 5.25%	• Increases from prior year: Year 2013 n/a 2014 n/a 2015 Actual 2015 Premiums 2016 Actual 2016 Premiums 2017 6.50% 2018 6.00% 2019 5.50% 2020 5.25% 2021 5.00% 2022+ 4.75%

Actuarial Assumptions	July 1, 2013 Valuation	July 1, 2015 Valuation
■ Medicare B Trend	• Increases from prior year: Year 2013 Actual 2013 Premium 2014 6.75% 2015 6.50% 2016 6.25% 2017 6.25% 2018 6.00% 2019+ Same as medical trend	• Increases from prior year: Year 2013 n/a 2014 n/a 2015 Actual 2015 Premium 2016 Actual 2016 Premium 2017 6.25% 2018 6.00% 2019+ Same as medical trend
■ Medicare Eligibility Rate for those hired before Medicare Contributions Required (4/1/1986)	• 50% where unable to estimate eligibility	• Current pre-Medicare retirees: 50% where unable to estimate eligibility • Current employees: None hired before 4/1/1986
■ Medical Plan at Retirement	• Same plan as current election	• Same
■ Marital Status	• Based on current medical coverage election	• Same
■ Spouse Participation	• 100%, if benefit paid by the District • 50%, if benefit not paid by the District	• Same
■ Surviving Spouse Participation	• 100%	• Same
■ Implied Subsidy	• Valued	• Same
■ Kaiser Senior Advantage Methodology	• Based on projected claims	• Same

Monthly Claims Costs

The AHP Cost Model™, which is based on Axene Health Partners, LLC's proprietary claims database, was used in the determination of age/ gender/ plan specific claims factors. Blue Cross and Kaiser Plans offered by Marin County were run through the cost model to determine benefit values by age and gender. These benefit values were then used to develop the corresponding age / gender-based claims factors for the valuation.

The same AHP Cost Model was used to determine the benefit value of Medicare for purposes of reflecting coordination in the projected claims costs for Medicare participants. The model was run using the 2015 Medicare benefits for Part A and Part B for individuals aged 65 and older. The resulting benefit value was then subtracted from the non-Medicare benefit value at each age over 65 to develop the claims cost value for participants receiving Medicare.

Premium rates for each health plan were used in the claims cost projections. Current (CY 2015 and CY 2016) premiums, as reported by Segal Consulting on behalf of County of Marin, were reviewed and deemed reasonable relative to benefits offered and the covered populations; however, these premiums were not audited against actual claims and we do not attest herein to their adequacy.

It is Kaiser's policy not to release any demographic information summaries for its Northern California Senior Advantage pool. Public agency client enrollment data for entities covered by CalPERS Northern California Kaiser Senior Advantage was used for determination of age-gender based claim costs for the Kaiser Medicare plans.

For Kaiser plans outside California, age-gender based claim costs were developed using the County's Kaiser Plan L plans as a proxy. This assumption has negligible impact due to the relatively small proportion of enrollees outside California.

	2015 Age/Gender Claims Costs			
	Kaiser Plan L Non-Medicare		Kaiser Plan L Medicare	
Age	Male	Female	Male	Female
30	$349	$610	n/a	n/a
35	379	603	n/a	n/a
40	427	616	n/a	n/a
45	500	643	n/a	n/a
50	607	691	n/a	n/a
55	782	795	n/a	n/a
60	1,035	954	n/a	n/a
65	1,158	1,005	$300	$259
70	1,304	1,095	366	307
75	1,586	1,308	445	367
80	1,906	1,561	535	438
85	2,241	1,835	629	514

Age	2015 Age/Gender Claims Costs			
	Kaiser Plan S Non-Medicare		Kaiser Plan S Medicare	
	Male	Male	Male	Female
30	$312	$550	n/a	n/a
35	339	544	n/a	n/a
40	383	555	n/a	n/a
45	450	579	n/a	n/a
50	548	624	n/a	n/a
55	708	719	n/a	n/a
60	940	864	n/a	n/a
65	1,052	911	$216	$185
70	1,186	993	263	219
75	1,441	1,186	320	262
80	1,733	1,416	385	312
85	2,036	1,664	452	367

Age	2015 Age/Gender Claims Costs			
	Anthem Blue Cross PPO Non-Medicare		Anthem Blue Cross PPO Medicare	
	Male	Female	Male	Female
30	$389	$699	n/a	n/a
35	423	690	n/a	n/a
40	479	706	n/a	n/a
45	566	739	n/a	n/a
50	695	799	n/a	n/a
55	910	929	n/a	n/a
60	1,231	1,128	n/a	n/a
65	1,387	1,192	$407	$340
70	1,562	1,298	496	402
75	1,900	1,550	603	480
80	2,283	1,851	725	573
85	2,684	2,175	852	673

Age	2016 Age/Gender Claims Costs			
	Kaiser Plan L Non-Medicare		Kaiser Plan L Medicare	
	Male	Female	Male	Female
30	$348	$609	n/a	n/a
35	378	602	n/a	n/a
40	426	614	n/a	n/a
45	499	641	n/a	n/a
50	606	690	n/a	n/a
55	780	794	n/a	n/a
60	1,033	952	n/a	n/a
65	1,155	1,002	$299	$258
70	1,301	1,092	365	305
75	1,582	1,305	443	365
80	1,902	1,558	533	436
85	2,235	1,831	626	512

Age	2016 Age/Gender Claims Costs			
	Kaiser Plan S Non-Medicare		Kaiser Plan S Medicare	
	Male	Male	Male	Female
30	$311	$549	n/a	n/a
35	338	542	n/a	n/a
40	382	553	n/a	n/a
45	449	578	n/a	n/a
50	547	622	n/a	n/a
55	706	717	n/a	n/a
60	938	862	n/a	n/a
65	1,050	909	$214	$184
70	1,183	990	261	217
75	1,438	1,183	318	260
80	1,728	1,412	382	310
85	2,031	1,660	449	365

	2016 Age/Gender Claims Costs			
	Anthem Blue Cross PPO Non-Medicare		Anthem Blue Cross PPO Medicare	
Age	Male	Female	Male	Female
30	$403	$724	n/a	n/a
35	439	716	n/a	n/a
40	497	731	n/a	n/a
45	587	766	n/a	n/a
50	721	828	n/a	n/a
55	944	963	n/a	n/a
60	1,276	1,169	n/a	n/a
65	1,438	1,236	$422	$352
70	1,619	1,345	514	416
75	1,969	1,607	625	498
80	2,366	1,918	752	594
85	2,781	2,254	883	698

SUMMARY OF PARTICIPANT DATA

Participant Statistics

Statistic	July 1, 2013		July 1, 2015	
	Actives	Retirees	Actives	Retirees
■ Count	36	13	32	15
■ Average Age	48.5	65.9	50.1	65.3
■ Average Retirement Age				
• Service	n/a	57.6	n/a	57.2
• Disability	n/a	48.7	n/a	48.7
■ Average Service	11.7	n/a	12.9	n/a
■ Payroll				
• Total	$ 3,145,000	n/a	$ 2,803,000	n/a
• Average	$ 87,362	n/a	$ 87,605	n/a

Participant Medical Coverage Elections
July 1, 2015

Medical Plan	Actives				
	Single	2-Party	Family	Employee+ Child(ren)	Total
Anthem Blue Cross	1	1	-	-	2
Kaiser Plan L	6	8	11	5	30
Total	7	9	11	5	32

Medical Plan	Retirees				
	Single	2-Party	Family	Employee+ Child(ren)	Total
Anthem Blue Cross	2	2	-	-	4
Kaiser Plan L	3	7	-	-	10
Kaiser Northwest	1	0	-	-	1
Total	6	9	-	-	15

ACTUARIAL CERTIFICATION

This report presents the Marin/Sonoma Mosquito Vector Control District Retiree Healthcare Plan ("Plan") July 1, 2015 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 July 1, 2015 Benefit Obligations,
- Determine the Plan's July 1, 2015 Funded Status, and
- Calculate the 2016/17 and 2017/18 Annual Required Contributions.

The report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the District for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and asset information provided by the District as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principals and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 43 and 45. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

Marilyn Oliver	Catherine A. Wandro
Marilyn Oliver, FSA, MAAA, EA, FCA	Catherine A. Wandro, ASA, MAAA, FCA
Vice President	Assistant Vice President
Bartel Associates, LLC	Bartel Associates, LLC
April 25, 2016	April 25, 2016