

SAUSALITO – MARIN CITY SANITARY DISTRICT

VALUATION OF RETIREE HEALTH BENEFITS

**REPORT OF GASB 75 ACTUARIAL VALUATION
AS OF JULY 1, 2017**

**Prepared by: North Bay Pensions LLC
November 2, 2017**

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Actuarial Certification

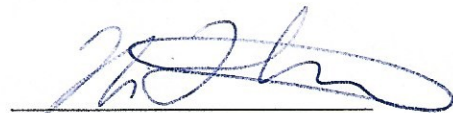
This report presents the determination of benefit obligations under **Statement No. 75 of the Governmental Accounting Standards Board (GASB 75)** as of July 1, 2017 for the retiree health and welfare benefits provided by the Sausalito - Marin City Sanitary District. I was retained by the District to perform these calculations.

GASB Statement 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions", was issued to provide standards for governmental employers to record expense for **Other Postemployment Benefits (OPEB)**. GASB 75 replaces GASB 45 for the District, effective July 1, 2017.

The information contained in this report was based on a participant census as of July 1, 2017 provided to me by the District. The actuarial assumptions and methods used in this valuation were selected by the District after consultation with me. I believe the assumptions and methods are reasonable and appropriate for purposes of actuarial computations under GASB 75.

Actuarial computations under GASB 75 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with my understanding of GASB 75. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Due to the limited scope of my assignment, I did not perform an analysis of the potential range of future measurements.

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



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Summary of Results

Background

The District maintains a program which pays part of monthly medical insurance premiums on behalf of retired former employees, provided that the employee has satisfied certain requirements. As of July 1, 2017, the District has accumulated \$429,019 in the CalPERS CERBT (California Employers' Retirement Benefit Trust) toward the cost of future benefits.

In June 2015, the Governmental Accounting Standards Board (GASB) released Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions". This statement, often referred to as **GASB 75**, requires governmental entities to (1) record annual expense for their OPEB and (2) disclose certain information in their year-end financial statements.

The District has requested this actuarial valuation to determine what its OPEB obligations under the program are, and what the fiscal impact of GASB 75 will be for the 2017-2018 fiscal year.

Actuarial Present Value of Projected Benefit Payments

The Actuarial Present Value of Projected Benefit Payments (APVPBP) for all current and former employees, as of July 1, 2017, is **\$3,156,971**. This is the amount the District would theoretically need to set aside at this time to fully fund all those future benefits.

The total value of \$3,156,971 is the sum of these amounts:

Future benefits of current employees	\$ 1,242,166
Future benefits of current retirees	<u>1,914,805</u>
APVPBP	\$ 3,156,971

This figure may be compared to the Actuarial Present Value of Total Projected Benefits (APVTPB, the GASB 45 term for the same quantity) of \$2,856,474 that was reported in the 2015 valuation report. We would have expected the APVTPB to increase to approximately \$2,943,000 by 2017 as employees continue working and approach retirement age. The difference between the 2015 figure of \$2,856,474 and this year's figure of \$3,156,971 is due to:

• Expected increase in the APVPBP since 2015	\$ 86,947
• Lower medical premiums in 2017 than expected	(152,442)
• Miscellaneous experience gains and losses	<u>365,992</u>
	\$ 300,497

The experience loss of \$365,992 is the combined result of (1) normal demographic effects (i.e., terminations, deaths and retirements different than expected, and new employees); and (2) correction of some errors in the 2015 valuation.

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

Net OPEB Liability

The **Total OPEB Liability** (TOL) is the portion of the APVPBP which has been "earned" by employees based on past years of service (i.e. benefits allocated to past years of service).

The **Plan Fiduciary Net Position** (FNP) is equal to the value of assets that have been accumulated in an irrevocable trust for these benefits.

The **Net OPEB Liability or Asset** (NOL) is the excess of the Total OPEB Liability over the Plan Fiduciary Net Position. At the end of each fiscal year, beginning June 30 2018, the District must show a liability equal to the NOL.

At June 30, 2016 and June 30, 2017, these amounts are:

	<u>June 30, 2016</u>	<u>June 30, 2017</u>
Present value of benefits for employees	\$ 548,086	\$ 657,951
Present value of benefits for retirees	<u>1,972,246</u>	<u>1,914,805</u>
Total OPEB Liability	\$ 2,520,332	\$ 2,572,756
Accumulated assets in the CERBT trust	<u>\$ 278,363</u>	<u>\$ 429,019</u>
Plan Fiduciary Net Position	\$ 278,363	\$ 429,019
Total OPEB Liability	\$ 2,520,332	\$ 2,572,756
Plan Fiduciary Net Position	<u>(278,363)</u>	<u>(429,019)</u>
Net OPEB Liability	\$ 2,241,969	\$ 2,143,737

OPEB Expense under GASB 75

GASB 75 requires that the annual change in the NOL be recognized as OPEB expense, except for certain specific changes which are to be recognized over different periods of time. Changes in actuarial assumptions, and experience gains and losses, are to be recognized over the average of the expected remaining service lives of all employees. As of June 30, 2017, this average for District employees is 12.5 years. Differences between actual and expected investment earnings are to be recognized over 5 years. The unrecognized remaining amounts of assumption changes, experience gains/losses and investment earnings differences are called “deferred outflows and inflows of resources relating to OPEB” (see Exhibit 5).

The OPEB Expense for the fiscal year ending June 30, 2018 is **\$216,863**. A derivation of this amount is shown in Exhibit 4.

Disclosure Information as of June 30, 2018

Amounts to be disclosed in the footnotes to the District’s audited financial statements as of June 30, 2018 are shown in Exhibits 2 through 7 of this report.

Exhibit 8 shows estimated retiree benefits and OPEB expense for the next nine years after that.

Actuarial Assumptions

All actuarial assumptions are unchanged from the July 1, 2015 valuation, and are described in detail in Exhibit 10.

Exhibit 1 - Actuarial Values as of July 1, 2017

The Actuarial Present Value of Projected Benefit Payments (APVPBP) as of July 1, 2017 of all future employer-paid benefits from the program, for all current and former employees, is as follows:

	<u>Actuarial Present Values</u>	<u>Number of Persons</u>
Current employees	\$ 1,242,166	12
Retired former employees	<u>1,914,805</u>	<u>13</u>
Totals	\$ 3,156,971	25

As of July 1, 2017, the District has accumulated \$429,019 in an irrevocable trust toward this liability.

The Total OPEB Liability (TOL) as of June 30, 2017 is the portion of the APVPBP which has been “earned” to date by current and former employees, based on the years of service already completed:

Current employees	\$ 657,951
Retired former employees	<u>1,914,805</u>
Totals	\$ 2,572,756

Summary of Participating Employees as of July 1, 2017

Active Employees

Number	12 employees
Average Age	42.3 years
Average Service	7.1 years

Retired Former Employees and Surviving Spouses

Number	13 persons
Average Age	69.7 years

Exhibit 2 - Net OPEB Liability

The Net OPEB Liability (NOL) is the excess of the Total OPEB Liability (TOL) over the Plan Fiduciary Net Position (FNP). As of June 30, 2016 and June 30, 2017 these are:

	<u>June 30, 2016</u>	<u>June 30, 2017</u>
Total OPEB Liability		
1. Value of benefits for employees	\$ 548,086	\$ 657,951
2. Value of benefits for retirees	<u>1,972,246</u>	<u>1,914,805</u>
3. Total OPEB Liability	\$ 2,520,332	\$ 2,572,756
Plan Fiduciary Net Position		
4. Fair value of accumulated assets in CERBT	<u>\$ 278,363</u>	<u>\$ 429,019</u>
5. Plan Fiduciary Net Position	\$ 278,363	\$ 429,019
6. Net OPEB Liability: 3. minus 5.	\$ 2,241,969	\$ 2,143,737

The Net OPEB Liability has changed from June 30, 2016 to June 30, 2017 in this way:

	<u>TOL</u>	<u>FNP</u>	<u>NOL</u>
8. Values at June 30, 2016	\$ 2,520,332	\$ 278,363	\$ 2,241,969
9. Service cost	72,979		72,979
10. Interest	163,427		163,427
11. Differences between actual and expected experience	0		0
12. Employer contributions		311,200	(311,200)
13. Net investment income		23,597	(23,597)
14. Benefits paid to retirees	(183,982)	(183,982)	0
15. Administrative expense		(159)	159
16. Net changes	\$ 52,424	\$ 150,656	\$ (98,232)
17. Values at June 30, 2017	\$ 2,572,756	\$ 429,019	\$ 2,143,737

Exhibit 3 - Sensitivity of the Net OPEB Liability

The following presents the Net OPEB Liability (NOL) as well as what the NOL would be if it were calculated using a discount rate that is 1-percentage-point higher or lower than the current discount rate, as of June 30, 2017:

	1% Decrease 5.73 %	Discount Rate 6.73 %	1% Increase 7.73 %
Net OPEB Liability (Asset)	\$ 2,474,431	\$ 2,143,737	\$ 1,872,651

The following presents the Net OPEB Liability (NOL) as well as what the NOL would be if it were calculated using healthcare cost trend rates that are 1-percentage-point higher or lower than the current healthcare cost trend rates, as of June 30, 2017:

	1% Decrease 4.0% to 4.5%	Trend Rates 5.0% to 5.5%	1% Increase 6.0% to 6.5%
Net OPEB Liability (Asset)	\$ 1,869,812	\$ 2,143,737	\$ 2,479,171

Exhibit 4 - OPEB Expense for the Fiscal Year Ending June 30, 2018

For the year ending June 30, 2018, the District will recognize OPEB expense of **\$216,863**, computed as follows:

Service cost	\$ 72,979
Interest	163,427
Expected investment return	(18,728)
Administrative expense	159
Change in NOL due to changes in benefits	0
Recognition of difference between actual and expected experience	0
Recognition of changes in assumptions	0
Recognition of difference between projected and actual earnings on investments	<u>(974)</u>
Total	\$ 216,863

Exhibit 5 - Deferred Outflows and Inflows of Resources

The values of deferred outflows and inflows of resources related to OPEB as of June 30, 2017, to be reported as of June 30, 2018, are:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 0	\$ 0
Changes of assumptions	0	0
Net difference between projected and actual earnings on OPEB plan investments	0	3,895
District contributions subsequent to the measurement date	<u>UNKNOWN</u>	<u>0</u>
Total	\$ UNKNOWN	\$ 3,895

The amounts shown above as UNKNOWN are the total amounts contributed by the District to retirees' benefits and to the CERBT trust during the year ending June 30, 2018.

Amounts reported as deferred outflows and inflows of resources related to OPEB as of June 30 2017, to be reported as of June 30, 2018, will be recognized in OPEB expense as follows:

Year Ended June 30	
2019	\$ (974)
2020	(974)
2021	(974)
2022	(973)
2023	0
Thereafter	0

Exhibit 6 - Schedule of Changes in the Net OPEB Liability

Reporting date	<u>6/30/2018</u>
Total OPEB liability	
Service cost	\$ 72,979
Interest	163,427
Changes of benefit terms	0
Differences between actual and expected experience	0
Changes of assumptions	0
Benefits paid to retirees	(183,982)
Net change in Total OPEB liability	52,424
Total OPEB liability – beginning	<u>2,520,332</u>
Total OPEB liability - ending	\$ 2,572,756
Plan fiduciary net position	
Contributions - employer	\$ 311,200
Net investment income	23,597
Benefits paid to retirees	(183,982)
Administrative expense	<u>(159)</u>
Net change in plan fiduciary net position	\$ 150,656
Plan fiduciary net position - beginning	<u>278,363</u>
Plan fiduciary net position - beginning	\$ 429,019
Net OPEB Liability - ending	\$ 2,143,737
Plan fiduciary net position as a percentage of the Total OPEB liability	16.68 %
Covered-employee payroll	\$ 1,336,941
Net OPEB liability as a percentage of covered-employee payroll	160.35 %

Exhibit 7 - Schedule of Contributions

Reporting date	<u>6/30/2018</u>
Actuarially determined contribution	\$ 250,037
Contributions in relation to the actuarially determined contribution	<u>311,200</u>
Contribution deficiency (excess)	\$ (61,163)
Covered-employee payroll	\$ 1,336,941
Contributions as a percentage of covered-employee payroll	23.28 %

Exhibit 8 - Ten-Year Projection of Costs

Shown below are estimates of (a) the benefits expected to be paid to retirees, and (b) the amounts the District is expected to accrue as GASB 75 OPEB expense, for the next ten years. For these estimates, it is assumed that the service cost will increase 3% per year, that all actuarial assumptions and the size of the workforce will remain unchanged, that the promised benefits will remain the same, that the District will fund the retiree benefits each year, and that there are no experience gains or losses.

Fiscal Year Ending:	<u>Benefits To Retirees</u>	<u>GASB 75 OPEB Expense</u>
2018	\$ 194,300	\$ 216,863
2019	173,700	212,200
2020	180,200	213,100
2021	145,400	214,600
2022	166,500	217,200
2023	166,700	221,500
2024	161,200	224,500
2025	151,100	227,800
2026	181,400	232,100
2027	163,900	236,000

Exhibit 9 - Summary of Benefit Provisions

The District contributes toward post-retirement medical benefits for retired employees who satisfy certain eligibility requirements.

1. **Eligibility:** Employees hired before 2004 are eligible for medical benefits upon retirement. Employees hired after 2004 must have 10 years of service credit, 5 of which must be with the District, to be eligible for medical benefits upon retirement.
2. **Benefits:** Eligible employees receive benefits for life. An eligible employee's family members are also covered, both during the employee's lifetime and after the employee's death, provided employee has elected a retirement option that provides for continuation of retirement benefits for the spouse. For employees hired before 2004, the District pays the entire premium for employees and family members. Employees hired after 2004 with 10 years of service, 5 of which must be with the District, receive 50% of the District's contribution toward post employment health benefits. The amount of health benefit increases proportionally based on the employee's credited years of service to 100% after 20 years. For employees hired after 2004, the maximum premium paid by the District is the Kaiser premium for family coverage, and eligible employee's family members receive 90% of the retirees health benefit. Retired employees over age 65 are responsible for enrolling in Medicare Parts B and D. Medical benefits are provided through CalPERS.

Exhibit 10 - Summary of Actuarial Assumptions

Actuarial Assumptions: The following assumptions as of July 1, 2017 were selected by the District in accordance with the requirements of GASB 75. These assumptions, in my opinion, are reasonable and appropriate for purposes of determining OPEB costs under GASB 75.

Long-Term Expected Rate of Return on Investments: The long-term expected rate of return on investments was determined to be CERBT's expected long-term mean rate of return on its Investment Strategy #2, 6.73%.

Discount rate: 6.73% per year. The cash flows of the OPEB plan were projected to future years, assuming that the District will contribute an amount at least equal to retirees' benefits plus \$50,000 per year, until the Net OPEB Liability is expected to be \$0, and then small amounts thereafter to keep the NOL at \$0. Under that projection, the plan assets are projected to be adequate to pay all benefits to retirees in all future years,

so the discount rate has been set equal to the long-term expected rate of return on investments, 6.73%. In the 2015 valuation, the discount rate was 6.73%.

Medical Cost Increases (Trend): Actual CalPERS medical premium amounts are used for 2017 and 2018. Premiums are estimated to increase after 2018 as follows:

2019	5.5 %
2020	5.2 %
2021 and later	5.0 %

Payroll Growth: Total payroll is assumed to increase 3.0% per year in the future.

Plan Fiduciary Net Position: The FNP is the fair value of assets on the measurement date.

Coverage Elections: 100% of eligible employees are assumed to elect coverage upon retirement, and to remain covered under District plans for life.

Mortality: Mortality rates are taken from the 2014 CalPERS OPEB Assumptions Model for “public agency miscellaneous”.

Funding Method: The Entry Age actuarial cost method has been used, with normal costs calculated as a level percentage of payroll, as required by GASB 75.

Retirement: Retirement rates are taken from the 2014 CalPERS OPEB Assumptions Model for “public agency miscellaneous 2% at 55”. Sample rates are:

	<u>10 Years Service</u>	<u>20 Years Service</u>	<u>30 Years Service</u>
Age 55	6.4 %	9.4 %	12.7 %
Age 58	6.6 %	9.7 %	13.1 %
Age 61	11.3 %	16.5 %	22.4 %
Age 64	14.8 %	21.6 %	29.4 %

Turnover (withdrawal): Likelihood of termination within the next year is taken from the 2014 CalPERS OPEB Assumptions Model for “public agency miscellaneous”. Sample rates are:

	<u>5 Years Service</u>	<u>10 Years Service</u>	<u>15 Years Service</u>
Age 20	9.46 %		
Age 30	7.90 %	6.68 %	5.81 %
Age 40	6.32 %	5.07 %	4.24 %
Age 50	1.16 %	0.71 %	0.32 %

Disability: Incidence of disability is considered to be included in the rates above, so no explicit recognition of disability benefits has been included.

Inflation: Long-term inflation is assumed to be 2.75% per year.

Age-Specific Medical Claims: The estimated per person medical claims (true costs of coverage) during the 2017-18 fiscal year are as follows (rates are shown for certain ages only):

<u>Age</u>	
40	\$ 6,947
45	8,401
50	10,380
55	12,801
60	14,920
64	16,007

These age-specific rates were developed so as to reproduce in the aggregate the same total premium that would be paid to the carriers for all current employees and all current retirees.