

SAUSALITO – MARIN CITY SANITARY DISTRICT

VALUATION OF RETIREE HEALTH BENEFITS

**REPORT OF GASB 75 ACTUARIAL VALUATION AS OF
JUNE 30, 2021**

**Prepared by: North Bay Pensions LLC
June 9, 2022**

Contents of This Report

Actuarial Certification		1
Summary of Results		2
Detailed Exhibits		
Exhibit 1	Actuarial Values as of June 30, 2021	5
Exhibit 2	Net OPEB Liability	6
Exhibit 3	Sensitivity of the Net OPEB Liability	7
Exhibit 4	OPEB Expense for the Fiscal Year Ending 6-30-2022	8
Exhibit 5	Deferred Outflows and Inflows of Resources	9
Exhibit 6	Schedule of Changes in the Net OPEB Liability	11
Exhibit 7	Ten-Year Projection of Costs	12
Exhibit 8	Summary of Benefit Provisions	12
Exhibit 9	Summary of Actuarial Assumptions	13

Actuarial Certification

This report presents the determination of benefit obligations under **Statement No. 75 of the Governmental Accounting Standards Board (GASB 75)** as of June 30, 2021 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)**.

The information contained in this report was based on a participant census as of June 30, 2021 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.



Nick Franceschine, F.S.A.

6-9-22

North Bay Pensions LLC

550 Du Franc Avenue
Sebastopol, CA 95472
707-824-9600

nick@northbaypensions.com

Summary of Results

Background

The District maintains a program which pays part or all of monthly medical insurance premiums on behalf of retired former employees, provided that the employee has satisfied certain requirements. As of June 30, 2021, the District has accumulated \$2,856,724 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 impact of GASB 75 will be for the 2021-2022 year. This report also includes GASB 75 results that were accrued and disclosed by the District during the 2020-2021 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 June 30, 2021, is **\$4,639,970**. 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 \$4,639,970 is the sum of these amounts:

Future benefits of current employees	\$ 2,596,639
Future benefits of current retirees	<u>2,043,331</u>
APVPBP	\$ 4,639,970

This figure may be compared to the APVPBP of \$4,454,359 that was shown in the 2019 valuation report. We would have expected the APVPBP to increase to approximately \$4,513,000 by 2021 as employees continue working. The difference between the 2019 figure of \$4,454,359 and this year's figure of \$4,639,970 is due to:

• Expected increase in the APVPBP since 2019	\$ 58,589
• Change in discount rate from 4.21% to 3.79%	372,163
• Medical premiums lower than expected	(507,793)
• Miscellaneous experience gains and losses	<u>262,652</u>
Total of changes	\$ 185,611

The discount rate assumption change is explained below under “Actuarial Assumptions”. The experience loss of \$262,652 is almost entirely because no employees terminated or retired since 2019.

These figures are 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, the District must show a liability equal to the NOL.

At June 30, 2020 and June 30, 2021, these amounts are:

	<u>June 30, 2020</u>	<u>June 30, 2021</u>
Present value of benefits for employees	\$ 1,179,058	\$ 1,400,462
Present value of benefits for retirees	<u>2,221,413</u>	<u>2,043,331</u>
Total OPEB Liability	\$ 3,400,471	\$ 3,443,793
Accumulated assets in the CERBT trust	<u>\$ 2,487,522</u>	<u>\$ 2,856,724</u>
Plan Fiduciary Net Position	\$ 2,487,522	\$ 2,856,724
Total OPEB Liability	\$ 3,400,471	\$ 3,443,793
Plan Fiduciary Net Position	<u>(2,487,522)</u>	<u>(2,856,724)</u>
Net OPEB Liability	\$ 912,949	\$ 587,069

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.

This average for District employees is 5.8 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 to be accrued during the fiscal year ending June 30, 2022 is **\$94,739**. For the year ending June 30, 2021, the OPEB Expense was **\$178,051**. Derivations of these amounts are shown in Exhibit 4.

Disclosure Information as of June 30, 2021 and June 30, 2022

Amounts to be disclosed in the footnotes to the District audited financial statements as of June 30, 2021 and as of June 30, 2022 are shown in Exhibits 2 through 6 of this report. Numbers labelled as “June 30, 2020” are to be disclosed at June 30, 2021. Numbers labelled as “June 30, 2021” are to be disclosed at June 30, 2022.

Exhibit 7 shows estimated retiree benefits and OPEB expense for the next nine years after that.

Actuarial Assumptions

All actuarial assumptions are unchanged from the June 30, 2019 valuation, except as described below. The assumptions are described in detail in Exhibit 9.

The assumed discount rate has been changed from 4.21% to 3.79%. Under the requirements of GASB 75, the discount rate should be computed as a blend of the expected long term rate of return on assets (for as long as the plan assets are projected to be adequate to pay all benefits to retirees in future years) and a 20-year yield rate on fixed-income bonds (for years after the plan assets are no longer projected to be adequate). As Exhibit 9 shows, the expected long term rate of return on assets has been estimated to be 5.75%, and the bond rate is 2.16%. The projection showed that if the CERBT assets are assumed to earn 5.75% per year, then the assets are estimated to be sufficient to pay all benefits through 2052. If future benefits payable through 2052 are discounted at 5.75%, and benefits payable after 2052 are discounted at 2.16%, the resulting present value is the same as if a single interest rate of 3.79% were used. Making this change increased the APVPBP by \$372,163.

Exhibit 1 - Actuarial Values as of June 30, 2021

The Actuarial Present Value of Projected Benefit Payments (APVPBP) as of June 30, 2021 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	\$ 2,596,639	11
Retired Employees	<u>2,043,331</u>	<u>13</u>
	\$ 4,639,970	24

As of June 30, 2021, the District has accumulated \$2,856,724 in an irrevocable trust toward this liability.

The Total OPEB Liability (TOL) as of June 30, 2021 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	\$ 1,400,462
Retired former employees	<u>2,043,331</u>
Totals	\$ 3,443,793

Summary of Participating Employees as of June 30, 2021

Active Employees

Number	11 employees
Average Age	45.8 years
Average Service	10.7 years

Retired Former Employees and Surviving Spouses

Number	13 persons
Average Age	73.7 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, 2019; June 30, 2020; and June 30, 2021 these are:

	<u>June 30, 2019</u>	<u>June 30, 2020</u>	<u>June 30, 2021</u>
Total OPEB Liability			
Value of benefits for employees	\$ 1,032,440	\$ 1,179,058	\$ 1,400,462
Value of benefits for retirees	<u>2,301,898</u>	<u>2,221,413</u>	<u>2,043,331</u>
Total OPEB Liability	\$ 3,334,338	\$ 3,400,471	\$ 3,443,793
Plan Fiduciary Net Position			
Fair value of assets in CERBT	<u>\$ 2,494,905</u>	<u>\$ 2,487,522</u>	<u>\$ 2,856,724</u>
Plan Fiduciary Net Position	\$ 2,494,905	\$ 2,487,522	\$ 2,856,724
Net OPEB Liability	\$ 839,433	\$ 912,949	\$ 587,069

The Net OPEB Liability has changed from June 30, 2019 to June 30, 2020 in this way:

	<u>TOL</u>	<u>FNP</u>	<u>NOL</u>
Values at June 30, 2019	\$ 3,334,338	\$ 2,494,905	\$ 839,433
Service cost	103,153		103,153
Interest	136,718		136,718
Differences between actual and expected experience	0		0
Benefit changes	0		0
Employer contributions		32,224	(32,224)
Net investment income		135,368	(135,368)
Benefits paid to retirees	(173,738)	(173,738)	0
Administrative expense		(1,237)	1,237
Net changes	\$ 66,133	\$ (7,383)	\$ 73,516
Values at June 30, 2020	\$ 3,400,471	\$ 2,487,522	\$ 912,949

The Net OPEB Liability has changed from June 30, 2020 to June 30, 2021 in this way:

	<u>TOL</u>	<u>FNP</u>	<u>NOL</u>
Values at June 30, 2020	\$ 3,400,471	\$ 2,487,522	\$ 912,949
Service cost	106,248		106,248
Interest	140,282		140,282
Differences between actual and expected experience	(271,863)		(271,863)
Assumption changes	205,346		205,346
Employer contributions		9,691	(9,691)
Net investment income		497,114	(497,114)
Benefits paid to retirees	(136,691)	(136,691)	0
Administrative expense		(912)	912
Net changes	\$ 43,322	\$ 369,202	\$ (325,880)
Values at June 30, 2021	\$ 3,443,793	\$ 2,856,724	\$ 587,069

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, 2020 and June 30, 2021:

	<u>1% Decrease</u>	<u>Discount Rate</u>	<u>1% Increase</u>
Net OPEB Liability 6-30-2020	3.21% \$ 1,467,860	4.21% \$ 912,949	5.21% \$ 470,427
Net OPEB Liability 6-30-2021	2.79% \$ 1,164,675	3.79% \$ 587,069	4.79% \$ 128,117

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, 2020 and June 30, 2021:

	<u>1% Decrease</u> 4.0%	<u>Trend Rate</u> 5.0%	<u>1% Increase</u> 6.0%
Net OPEB Liability 6-30-2020	\$ 422,423	\$ 912,949	\$ 1,537,439
Net OPEB Liability 6-30-2021	\$ 103,460	\$ 587,069	\$ 1,204,222

Exhibit 4 - OPEB Expense for the Fiscal Year Ending June 30, 2022

For the year ending June 30, 2021, the District recognized OPEB expense of \$178,051, computed as follows:

Service cost	\$ 103,153
Interest	136,718
Expected investment return	(105,009)
Administrative expense	1,237
Change in NOL due to changes in benefits	0
Recognition of difference between actual and expected experience	(22,636)
Recognition of changes in assumptions	70,277
Recognition of difference between projected and actual earnings on investments	<u>(5,689)</u>
Total	\$ 178,051

For the year ending June 30, 2022, the District recognized OPEB expense of \$94,739, computed as follows:

Service cost	\$ 106,248
Interest	140,282
Expected investment return	(104,705)
Administrative expense	912
Change in NOL due to changes in benefits	0
Recognition of difference between actual and expected experience	(69,509)
Recognition of changes in assumptions	105,681
Recognition of difference between projected and actual earnings on investments	<u>(84,170)</u>
Total	\$ 94,739

Exhibit 5 - Deferred Outflows and Inflows of Resources

The values of deferred outflows and inflows of resources related to OPEB as of June 30, 2020, **to be reported as of June 30, 2021**, are:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 0	\$ 255,781
Changes of assumptions	794,128	0
Net difference between projected and actual earnings on OPEB plan investments	5,820	29,919
District contributions subsequent to the measurement date	<u>9,691</u>	<u>0</u>
Total	\$ 809,639	\$ 285,700

Amounts reported as deferred outflows and inflows of resources related to OPEB as of June 30, 2020, **to be reported as of June 30, 2021**, will be recognized in OPEB expense as follows:

Year Ended June 30	
2022	\$ 41,953
2023	42,926
2024	40,016
2025	41,570
2026	47,641
Thereafter	300,142

The values of deferred outflows and inflows of resources related to OPEB as of June 30, 2021, **to be reported as of June 30, 2022**, are:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 0	\$ 458,135
Changes of assumptions	893,793	0
Net difference between projected and actual earnings on OPEB plan investments	2,910	335,248
District contributions subsequent to the measurement date	<u>UNKNOWN</u>	<u>0</u>
Total	\$	\$ 793,383

“UNKNOWN” is the total of amounts contributed by the District to retirees’ benefits and to the CERBT trust during the 12 months ending June 30, 2022. This is the sum of (1) the total contributions **to** CERBT (if any), (2) the actual benefits paid to retirees during the 12 months ending June 30, 2022, and (3) the implicit subsidy of \$23,827, MINUS the amounts reimbursed **from** CERBT to the District.

Amounts reported as deferred outflows and inflows of resources related to OPEB as of June 30, 2021, **to be reported as of June 30, 2022**, will be recognized in OPEB expense as follows:

Year Ended June 30	
2023	\$ (47,025)
2024	(49,935)
2025	(48,381)
2026	(42,309)
2027	38,469
Thereafter	252,501

Exhibit 6 - Schedule of Changes in the Net OPEB Liability

Reporting date	<u>6/30/2021</u>	<u>6/30/2022</u>
Total OPEB liability		
Service cost	\$ 103,153	\$ 106,248
Interest	136,718	140,282
Changes of benefit terms	0	0
Differences between actual and expected experience	0	(271,863)
Changes of assumptions	0	205,346
Benefits paid to retirees	<u>(173,738)</u>	<u>(136,691)</u>
Net change in Total OPEB liability	66,133	43,322
Total OPEB liability – beginning	<u>3,334,338</u>	<u>3,400,471</u>
Total OPEB liability – ending	\$ 3,400,471	\$ 3,443,793
Plan fiduciary net position		
Contributions – employer	\$ 32,224	\$ 9,691
Net investment income	135,368	497,114
Benefits paid to retirees	(173,738)	(136,691)
Administrative expense	<u>(1,237)</u>	<u>(912)</u>
Net change in plan fiduciary net position	(7,383)	369,202
Plan fiduciary net position - beginning	<u>2,494,905</u>	<u>2,487,522</u>
Plan fiduciary net position - ending	\$ 2,487,522	\$ 2,856,724
Net OPEB Liability – ending	\$ 912,949	\$ 587,069
Plan fiduciary net position as a percentage of the Total OPEB liability	73.15 %	82.95 %
Covered-employee payroll	\$ 1,447,843	\$ 1,528,000
Net OPEB liability as a percentage of covered-employee payroll	63.06 %	38.42 %

Exhibit 7 - 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 all actuarial assumptions and the size of the workforce will remain unchanged, that the promised benefits will remain the same, that the District will be reimbursed from CERBT for all cash benefits to retirees each year, and that there are no significant experience gains or losses.

Fiscal Year Ending:	Employer-Paid Retiree Payments	Projected Implicit Rate Subsidy Payments	GASB 75 OPEB Expense
2022	\$ 131,000	\$ 23,827	\$ 94,739
2023	132,000	24,008	79,000
2024	129,000	21,000	80,000
2025	129,000	8,000	86,000
2026	138,000	26,000	97,000
2027	135,000	7,000	182,000
2028	143,000	11,000	196,000
2029	150,000	31,000	201,000
2030	139,000	0	206,000
2031	146,000	3,000	212,000

Exhibit 8 - 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 9 - Summary of Actuarial Assumptions

Actuarial Assumptions: The following assumptions as of June 30, 2021 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 using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. The asset class percentages are taken from the current composition of the CERBT trust, and the expected yields are taken from a recent CalPERS publication for the Pension Fund:

	<u>% of Fund</u>	<u>Real return, next 10 years</u>
Global equity	40 %	5.25 %
Fixed income	43 %	0.99 %
Treasury securities	5 %	0.45 %
Real estate trusts	8 %	4.50 %
Commodities	<u>4 %</u>	3.00 %
	100 %	

The estimated yield of 3% for commodities was obtained from various sources, and is a rough guess. Using these figures, the weighted-average real rate of return is estimated to be 3.028%. Adding estimated inflation of 2.75%, we obtain 5.778% as an estimate of the expected rate of return, which is rounded to: **5.75%**.

20-Year Bond Rate: The District has chosen the "Bond Buyer 20-Bond General Obligation Index" as its 20-year bond rate. That Index was 2.16% at June 30, 2021 and 3.50% at June 30, 2019.

Discount rate: 3.79% per year. Determining this rate is a 3-step process:
 Step 1: The CERBT assets were projected into the future, assuming that the assets earn the long term rate of return (5.75% per year) and that the District is reimbursed from the trust for all benefits paid to retirees. The projection indicates that the assets appear to be sufficient to pay all benefits to retirees through 2052. Step 2: All projected retiree benefits through the year 2052 are discounted back to 2021 using the 5.75% interest rate. All projected retiree benefits after the year 2052 are discounted back to 2021 using the 2.16% 20-year bond rate. The sum of the discounted present values was \$4,638,000. Step 3: The single interest rate at which the present value of all projected retiree benefits is \$4,638,000 is approximately 3.79%. This is the discount rate as of June 30, 2021. The discount rate at June 30, 2019 was 4.21%.

Medical Cost Increases (Trend): CalPERS medical premiums are assumed to increase 5%.

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

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 2017 CalPERS valuation.

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 2017 CalPERS pension valuation for “public agency miscellaneous 3% at 60”. Sample rates are:

	<u>10 Years Service</u>	<u>20 Years Service</u>	<u>30 Years Service</u>
Age 55	4.0 %	9.3 %	15.4 %
Age 58	5.4 %	9.0 %	13.1 %
Age 61	8.8 %	14.6 %	18.9 %
Age 64	12.9 %	19.6 %	24.9 %

Disability: Incidence of disability is considered to be included in the termination and retirement rates here, so no explicit recognition of disablement has been included.

Turnover (withdrawal): Likelihood of termination within the next year is taken from the 2017 CalPERS valuation. Sample rates are:

	<u>5 Years Service</u>	<u>10 Years Service</u>	<u>15 Years Service</u>
Age 20	6.54 %		
Age 30	6.15 %	4.16 %	2.62 %
Age 40	5.19 %	3.75 %	2.43 %
Age 50	4.41 %	2.86 %	1.88 %

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 2021-2022 fiscal year are as follows (rates are shown for certain ages only):

<u>Age</u>	<u>Annual Claims</u>
40	\$ 7,670
45	9,275
50	11,460
55	14,133
60	16,473
64	17,672

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