BERLIN WATER WORKS

Financial Statements
June 30, 2019

and

Independent Auditor's Report

BERLIN WATER WORKS FINANCIAL STATEMENTS June 30, 2019

TABLE OF CONTENTS

INDI	EPENDENT AUDITOR'S REPORT	Page(s)
MAN	NAGEMENT'S DISCUSSION AND ANALYSIS	i-v
	BASIC FINANCIAL STATEMENTS	
EXH	IIBITS:	
A	Statement of Net Position	1
В	Statement of Revenues, Expenses and Changes in Net Position	2
C	Statement of Cash Flows	3
NOT	ES TO BASIC FINANCIAL STATEMENTS	4-20
	REQUIRED SUPPLEMENTARY INFORMATION	
SCH	EDULES:	
1	Schedule of Changes in the Berlin Water Works' Proportionate Share of the Net OPEB Liability	21
2	Schedule of Berlin Water Works OPEB Contributions	22
3	Schedule of Changes in the Berlin Water Works' Total OPEB Liability and Related Ratios	23
4	Schedule of Changes in the Berlin Water Works' Proportionate Share of the Net Pension Liability	24
5	Schedule of Berlin Water Works Pension Contributions	25
NOT	ES TO REQUIRED SUPPLEMENTARY INFORMATION	26



CERTIFIED PUBLIC ACCOUNTANTS

608 Chestnut Street • Manchester, New Hampshire 03104 (603) 622-7070 • Fax: (603) 622-1452 • www.vachonclukay.com

INDEPENDENT AUDITOR'S REPORT

To the Board of Water Commissioners of the Berlin Water Works

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Berlin Water Works (a component unit of the City of Berlin, New Hampshire), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Berlin Water Works' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the Berlin Water Works, as of June 30, 2019, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in Berlin Water Works' proportionate share of the net OPEB liability, schedule of Berlin Water Works OPEB contributions, schedule of changes in Berlin Water Works' total OPEB liability and related ratios, schedule of changes in Berlin Water Works' proportionate share of the net pension liability, and schedule of Berlin Water Works pension contributions on pages i-v and 21-26 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Vachon Clubary & Company PC
Manchester, New Hampshire

January 21, 2020

THE FINANCIAL STATEMENTS AND REPORTING ENTITY

The Financial Statements

The financial statements presented herein include all of the activities of the Berlin Water Works using the integrated approach as prescribed by GASB Statement #34.

The financial statements present the financial picture of the Berlin Water Works from the economic resources measurement focus using the accrual basis of accounting. These statements include all assets (including infrastructure) and deferred outflows of resources of the Berlin Water Works, as well as all liabilities (including long-term obligations) and deferred inflows of resources.

The Berlin Water Works is a component unit of the City of Berlin (City). Berlin Water Works is reported as a business-type activity whereas it charges a user fee to customers to cover the cost of services it provides.

The Berlin Water Works is governed by a Board of Water Commissioners, appointed by the Mayor of the City of Berlin. Berlin Water Works primary function is to provide water services for residential, commercial, industrial and industrial entities for the City.

REPORTING THE BERLIN WATER WORKS AS A WHOLE

The Statement of Net Position and the Statement of Revenues, Expenses and Changes in Net Position

The Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position report information about the Berlin Water Works as a whole and about its activities. These statements include *all* assets, deferred outflows of resources, liabilities, and deferred inflows of resources of the Berlin Water Works using the accrual basis of accounting, which is similar to the accounting used by most private-sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid.

The two statements report the Berlin Water Works' net position and changes in them. Net position is the difference between assets and deferred outflows of resources, less liabilities and deferred inflows of resources, one way to measure the Berlin Water Works' financial health, or financial position. Over time, increases or decreases in the Berlin Water Works' net position are one indicator of whether its financial health is improving or deteriorating. Other factors to consider are changes in the Berlin Water Works' customer base and condition of the Berlin Water Works infrastructure.

Net Position of the Berlin Water Works as of June 30, 2019 and 2018 are as follows:

	2019	2018
Capital and other assets:		
Capital assets, net	\$ 39,184,576	\$ 39,906,512
Other assets	3,392,405	2,988,874
Total assets	42,576,981	42,895,386
D-C1		
Deferred outflows of resources:	00.166	1.026
Deferred outflows of resources related to OPEB	90,166	1,836
Deferred outflows of resources related to pensions	133,326	168,942
Total deferred outflows of resources	223,492	170,778
Long-term and other liabilities:		
Long-term liabilities	11,070,009	11,890,473
Other liabilities	177,912	210,731
Total liabilities	11,247,921	12,101,204
Deferred inflows of resources:		
Deferred inflows of resources related to OPEB	43,691	6,232
Deferred inflows of resources related to pensions	275,779	224,443
Total deferred inflows of resources	319,470	230,675
Net position:		
Net investment in capital assets	29,375,631	29,373,551
Unrestricted	1,857,451	1,360,734
Total net position	\$ 31,233,082	\$ 30,734,285
<u> </u>	-	

The change in net position for the fiscal years ended June 30, 2019 and 2018 are follows:

Operating revenues Operating expenses Net operating profit (loss)	\$ 2,808,110 (2,755,213) 52,897	2018 \$ 2,715,520 (2,833,489) (117,969)
Non-operating revenues Non-operating expenses Loss before capital contributions	17,318 (239,781) (169,566)	7,456 (333,113) (443,626)
Capital contributions	668,363	728,500
Change in net position	\$ 498,797	\$ 284,874

Total net position increased by \$498,797 or 1.6% for fiscal year 2019. Unrestricted net position increased by \$496,717 or 36.5% in 2019.

BERLIN WATER WORKS ACTIVITIES

As shown in the Statement of Revenues, Expenses and Changes in Net Position, the revenue earned from users of the system were \$2,808,110 and \$2,715,520 for fiscal years 2019 and 2018, respectively. For fiscal year 2019 this represents a 3.4% increase from the prior year. Capital contributions for the fiscal years 2019 and 2018 were \$668,363 and \$728,500, respectively. For fiscal year 2019 this represents an decrease of 8.25% from the prior year, mainly the result of receiving 25% or \$500,000 of principal forgiveness on State of NH Revolving Loan #10 in the prior year, whereas principal forgiveness on the State of NH Revolving Loan #11 was granted at 20% or \$400,000. Operating expenses experienced were \$2,755,213 and \$2,833,489 for fiscal years 2019 and 2018, respectively. For fiscal year 2019 this represents a 2.8% decrease from the prior year.

Cash Management

Cash represents cash on hand and cash deposits maintained by the Berlin Water Works. The funds are invested in the state investment pool, certificates of deposit, and savings accounts to maximize returns and maintain timely availability to meet the debt payment schedule.

Capital Assets

The capital assets of the Berlin Water Works are those assets, which are used in the performance of Berlin Water Works daily operations, including infrastructure assets. At June 30, 2019 and 2018, net capital assets of the Berlin Water Works totaled \$39,184,576 and \$39,906,512, respectively. See Note 3 in the Notes to the Basic Financial Statements for a summary of all capital assets activity.

Debt Administration

Debt, considered a liability of business-type activities, decrease in total for fiscal year 2018 by \$724,016. This consisted of scheduled payments and principal forgiveness on the existing notes of \$1,460,013 and drawdowns of \$735,997 on the State of New Hampshire revolving loan program. See Note 4 in the Notes to the Basic Financial Statements for additional information on the long-term obligations of the Berlin Water Works.

SIGNIFICANT ACCOMPLISHMENTS OF THE BERLIN WATER WORKS FOR FISCAL YEAR 2019

A \$1,500,000 NHSRL #12 was awarded to BWW on November 22, 2017. The proposed work is to continue planned water main replacement of vintage 1890 through 1930's unlined 6" and 8" diameter cast iron pipe. The water main replaced will be the highest failure rate water main sin the BWW Distribution System based on our records. Running water Customers will also be addressed by lowering and insulating service lines to prevent freezing. Most of the proposed scope streets have stamped design drawings from previously funded projects. BWW has completed water main work on Twelfth Street from Sweden Street to Nansen Street. BWW has also completed work on Willard Street between Hillside Ave and School Street and on High Street between Emery Street and Pleasant Street.

The Berlin Water Works permanent staffing is at 12 full time positions. The temporary employees were increased to 3 temps plus 4 summer employees to support "force account" construction. Starting in 2013,

the total Temporary labor was reduced by plan as funding availability decreases. The manning level will decrease for the next year as NHSRL funded projects are completed.

Berlin Water Works continued to pass the lead and copper compliance regulations for the 9th consecutive round of testing. The next schedule test is in September 2019.

Economic Factors, Rates and 2019 Budget

In considering the BWW Projected Revenue and the level of "force account" funded work available for FY2020, the Board of Water Commissioners and BWW staff determined no need to increase the water rates imposed on customers for the year 2020. The decision to maintain existing water rates would not have been possible without the NHSRLs and the outstanding funding from the RUD Grant. The force account needed to balance the budget for FY 2020 is \$232,537.

Key assumptions in our revenue forecast were:

That the BWW revenues have begun to increase and are now similar to before FY 2006 when the permanent shutdown and demolition of the Fraser pulp mill began. Other small revenue reduction changes due to customer base erosion continue to be expected in 2020. The Federal Prison operation continues to not achieve forecasted operating levels in FY2020 and water sales revenue was lower than anticipated. On the positive side, Prison population and employee levels continue to increase so the Federal Prison has and will continue to increase at some unknown rate. A significant increase in revenue was experienced by mid FY2014 from the Bio-Mass Project "on and off line" Start-up. BWW anticipates that cash flow will continue to improve as annual debt payments decrease and revenue strengthens.

The proposed FY2020 budget had a short fall of revenue vs. operating income as did the FY19 & FY18 budget. The deficiency between water revenue and debt and operating cost is beginning to lessen as debt decreases and revenue increases. The Board decided to continue at the moderate level of "force account" work with additional "temporary crewing" (up to 5) and using BWW construction to increase cash flow. The total balance of grant and loan funding and the NHDOT project will support "force account" projects for this year with the remaining funds from NHSRL #12.

The high annual debt payments have been reduced significantly by the full payment of the 1993 Bond (FY 2014), the 1994 Bond (FY2015) and the 1995 Bond (FY 2016). This FY 2020 budget will have a total of \$686,757 for debt payment of seven NHSRL's and one USDA Rural Development Grant and Loan.

Because of the Berlin Water Works' aggressive progress on capital improvement work, the Board expects to continue reducing unplanned maintenance work such as water main breaks, service line breaks and frozen water lines that requiring thawing. This will support resource availability to continue "force account" work providing funding is available. Berlin Water Works continued "force account" work at a high level as established in 2010 thru 2013. This level reduced slightly for FY2015 and FY 2016, FY 2017, FY 2018, FY2019 and will reduce slightly more for FY2020.

Assumptions

The Berlin Water Works debt repayment schedule was at \$1,187,979 (adjusted for re-financing) for year ending June 30, 2015; at \$1,014,799 for year ending June 30, 2016, \$923,162 for year ending

June 30, 2017, \$703,866 for year ending June 30, 2018 and \$835,604 for year ending June 30, 2019 and \$686,757 for FY2020.

In Fiscal years 2010 thru 2019, significant efforts were applied to the installation of backflow preventers (2314) and additional radio read devices. A total of 1,839 radio read units were authorized to be purchased and installed. The radio read units will reduce hazard exposures and reduce meter read time.

In 2005, Board revised regulations pertaining to backflow preventers that will result in additional costs to the Berlin Water Works over the future. In 2019, approximately 1,159 backflow preventers remain to be purchased and installed over the next 5 to 10 years.

In 2005, Board revised regulation pertaining to maintenance responsibilities of water service lines in the public right-of-way. This has resulted in additional cost to the Berlin Water Works.

All project resident services will continue to be performed by Berlin Water Works permanent employees rather than through engineering contracts in order to reduce project costs. This process continues the reduced resident inspection cost by more than 50%.

FY 2020 BUDGET

The new items specifically addressed in the FY 2020 budget were:

The Berlin Water Works is continuing a path forward to pay down debt on its State Revolving & Rural Development Loans and has not applied for any new State Revolving Loans or Loans from other funding Agencies. In FY19, BWW paid off the last to remaining payments in the amount of \$235,850. State Revolving Loan #05 is now closed.

The FY20 Budget includes \$200,000 for Capital Improvement Projects and also \$200,000 toward early debt payment.

This budget included \$65,000 for a first payment in anticipation of possible loan closure for SRL #12.

The Outstanding Long Term Debt beginning FY20, excluding uncompleted projects, is \$9,343,516.

There has been no rate increase for 22 consecutive years.

CONTACTING BERLIN WATER WORKS' FINANCIAL MANAGEMENT

This financial report is intended to provide our citizens, customers, regulators, and creditors with a general overview of the Berlin Water Works' finances and to show accountability for the money it receives. If you have questions about this report or need to get additional information, contact the Berlin Water Works at 55 Willow Street, Berlin, New Hampshire, 03570, phone (603) 752-1677 or email lcl@bwwberlinnh.org.

EXHIBIT A BERLIN WATER WORKS Statement of Net Position

June 30, 2019

ASSETS

ASSETS	
Current Assets:	
Cash and cash equivalents	\$ 1,714,076
Investments	748,726
Accounts receivable, net	220,717
Unbilled charges	458,720
Inventory	250,166
Total Current Assets	3,392,405
Noncurrent Assets:	
Capital Assets:	
Non-depreciable capital assets	758,048
Depreciable capital assets, net	38,426,528
Total Noncurrent Assets	39,184,576
Total Assets	42,576,981
DEFERRED OUTFLOWS OF RESOURCES	
Deferred outflows of resources related to OPEB	90,166
Deferred outflows of resources related to pension	133,326
Total Deferred Outflows of Resources	223,492
LIABILITIES	
Current Liabilities:	
Accounts payable	29,932
Accrued expenses	147,980
Current portion of notes payable	407,167
Current portion of compensated absences payable	14,428
Total Current Liabilities	599,507
	-
Noncurrent Liabilities:	
Notes payable	8,665,781
State of New Hampshire revolving loan	735,997
Compensated absences payable	133,941
OPEB liability	340,181
Net pension liability	772,514
Total Noncurrent Liabilities	10,648,414
Total Liabilities	11,247,921
Total Batolinio	
DEFERRED INFLOWS OF RESOURCES	
Deferred inflows of resources related to OPEB	43,691
Deferred inflows of resources related to pension	275,779
Total Deferred Inflows of Resources	319,470
Total Deterred lilitows of Resources	
NET POSITION	
Net investment in capital assets	29,375,631
Unrestricted	1,857,451
Total Net Position	\$ 31,233,082
Total Not I Ostilon	\$ 51,255,002

EXHIBIT B

BERLIN WATER WORKS

Statement of Revenues, Expenses and Changes in Net Position

For the Year Ended June 30, 2019

Charges for services \$ 2,680,279 Miscellaneous revenues 127,831 Total operating revenues 2,808,110 Operating expenses: Water supply 387,780 Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Operating revenues:	
Miscellaneous revenues 127,831 Total operating revenues 2,808,110 Operating expenses: 387,780 Water supply 387,780 Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Charges for services	\$ 2,680,279
Operating expenses: 387,780 Water supply 387,780 Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285		127,831
Water supply 387,780 Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Total operating revenues	2,808,110
Water supply 387,780 Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Operating expenses:	
Water distribution 153,337 Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285		387.780
Service department 187,258 Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285		
Administration 824,368 Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285		
Depreciation 1,202,470 Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): 17,318 Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	The state of the s	
Total operating expenses 2,755,213 Operating profit 52,897 Non-operating revenues (expenses): Interest income Interest expense (239,781) Net non-operating revenues (expenses) Loss before capital contributions (169,566) Capital contributions Capital contributions (169,566) Capital contributions (169,566) Capital contributions (169,566) Agraphical contributions (169,566) Capital contributions (169,566) Agraphical contributions (169,566) Agraphical contributions (169,566) Agraphical contributions (169,566) Agraphical contributions (169,566)		
Non-operating revenues (expenses): Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285		
Interest income 17,318 Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Operating profit	52,897
Interest expense (239,781) Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Non-operating revenues (expenses):	
Net non-operating revenues (expenses) (222,463) Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Interest income	17,318
Loss before capital contributions (169,566) Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Interest expense	(239,781)
Capital contributions 668,363 Change in net position 498,797 Net position - July 1, 2018 30,734,285	Net non-operating revenues (expenses)	(222,463)
Change in net position 498,797 Net position - July 1, 2018 30,734,285	Loss before capital contributions	(169,566)
Net position - July 1, 2018	Capital contributions	668,363
The state of the s	Change in net position	498,797
The state of the s	Net position - July 1, 2018	30,734,285
Net position - June 30, 2019 \$ 31,233,082	•	\$ 31,233,082

EXHIBIT C

BERLIN WATER WORKS

Statement of Cash Flows

For the Year Ended June 30, 2019

Coal Company of the coal coal coal coal coal coal coal coal		
Cash flows from operating activities: Cash received from customers	ø	2 774 747
	\$	2,774,747
Cash paid to suppliers		(824,300)
Cash paid to employees	_	(793,894)
Net cash provided by operating activities	_	1,156,553
Cash flows from capital and related financing activities:		
Proceeds from State of New Hampshire revolving loan		735,997
Principal paid on notes payable		(807,491)
Interest paid on long-term debt		(266,449)
Purchases of capital assets		(480,534)
Capital contributions		15,841
Net cash used for capital and related financing activities		(802,636)
Cash flows from investing activities:		
Purchases of investments		(514,777)
Interest on investments	_	17,318
Net cash used by investing activities	_	(497,459)
Net decrease in cash and cash equivalents		(1/12/5/12)
		(143,542) 1,857,618
Cash and cash equivalents, beginning of year	\$	
Cash and cash equivalents, end of year	Φ_	1,714,076
Reconciliation of operating profit to net cash		
provided by operating activities:		
Operating profit	\$	52,897
Adjustments to reconcile operating profit to net cash		,
provided by operating activities:		
Depreciation		1,202,470
Change in deferred outflows related to OPEB		(88,330)
Change in deferred outflows related to pension		35,616
Change in deferred inflows related to OPEB		37,459
Change in deferred inflows related to pension		51,336
Changes in assets and liabilities:		40 189 to 400 AT
Accounts receivable		(14,791)
Unbilled charges		(18,572)
Inventory		1,067
Accounts payable		(7,175)
Accrued expenses		1,024
Compensated absences payable		12,796
OPEB liability		57,047
Net pension liability		(166,291)
Net cash provided by operating activities	\$	1,156,553
Andre Pro 17man of abound new 17man	-	
Noncash transactions affecting financial position:		
Principal forgiveness on notes payable	\$	652,522

BERLIN WATER WORKS NOTES TO BASIC FINANCIAL STATEMENTS

For the Year Ended June 30, 2019

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the Berlin Water Works conform to accounting principles generally accepted in the United States of America for local governmental units, except as indicated hereinafter. The following is a summary of significant accounting policies.

Financial Reporting Entity

The Berlin Water Works was established in 1925. Berlin Water Works is governed by a Board of Water Commissioners appointed by the mayor of the City of Berlin, New Hampshire. Berlin Water Works meets the criteria as a component unit of the City of Berlin, New Hampshire ("the City"). Such criteria includes appointment of the Board of Water Commissioners by the Mayor of the City and debt service guarantees by the City.

Basis of Accounting

The financial statements are presented on the accrual basis of accounting, wherein revenues are recognized when earned and expenses are recognized when incurred.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America require management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources, and Net Position

<u>Cash and Cash Equivalents</u> - For purposes of the Statement of Cash Flows, cash and cash equivalents are comprised of demand deposits and cash on hand.

<u>Investments</u> - Investments are recorded at their fair value. Certificates of deposit with a maturity of greater than ninety days from the date of issuance are included in investments.

<u>Accounts Receivable</u> - At June 2019, accounts receivable includes unpaid water user fees. An allowance for uncollected receivables of \$64,000 has been recorded as of June 30, 2019.

Inventory - Inventory is valued at lower of cost of market on a first-in, first-out basis.

<u>Capital Assets</u> - Capital assets are recorded at cost or estimated historical cost and updated for additions and retirements during the year. Donated capital assets are recorded at their acquisition value as of the date received. Improvements are capitalized; costs of normal maintenance and repairs that do not add to the value of the asset or materially extend an asset's life are not. Berlin Water Works maintains a capitalization threshold of \$10,000. All reported capital assets except for land and construction in progress are depreciated. Depreciation is recorded using the straight-line method over the estimated useful lives of the related assets.

For the Year Ended June 30, 2019

Estimated useful lives are as follows:

	Years
Infrastructure	50
Buildings and improvements	5-50
Machinery and equipment	5-50
Vehicles	5

<u>Compensated Absences</u> - Employees earn vacation and sick leave as they provide services. Employees earn 12 sick days per year, to a maximum of 71 days. Employees may add an additional sick day for each six month period of "perfect attendance", to a maximum cap of 100 days. Vacation time is earned dependent upon length of service and may be carried to the employee's anniversary date, at which time the unused balance is forfeited. Upon retirement employees receive 65% of their accumulated sick time at their current rate of pay. Employees who retire at the early retirement age of 62 receive 100% of their accrued sick time and 100% of unused vacation time at their current rates of pay.

<u>Other Postemployment Benefits</u> - For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the New Hampshire Retirement System (NHRS) OPEB Plan and additions to/deductions from NHRS's fiduciary net position have been determined on the same basis as they are reported by NHRS. For this purpose, NHRS recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for non-registered commingled funds valued at net asset value (NAV) as a practical expedient to estimate fair value.

<u>Pensions</u> - For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the New Hampshire Retirement System (NHRS) and additions to/deductions from NHRS's fiduciary net position have been determined on the same basis as they are reported by NHRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms.

<u>Net Position</u> - Net position represents the difference between assets, deferred outflows of resources, liabilities and deferred inflows of resources. The net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by any outstanding balances of bonds, notes or other borrowings used for the acquisition, construction or improvement of those assets. Net position is reported as restricted when there are limitations imposed on their use either through enabling legislation adopted by Berlin Water Works or through external restrictions imposed by creditors, grantors or laws or regulations of other governments. Unrestricted net position is the net amount of the assets, deferred outflows of resources, liabilities and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted components of net position.

Berlin Water Works' policy is to first apply restricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position is available.

Revenues and Expenses

<u>Operating Revenues and Expenses</u> - Operating revenues and expenses for Berlin Water Works are those that result from providing services and producing and delivering goods in connection with its principal ongoing

For the Year Ended June 30, 2019

operations. Operating expenses include the cost of sales and services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

<u>Capital Contributions</u> - Funds received from other governments for the purpose of constructing assets are recorded as capital contributions.

NOTE 2—DEPOSITS AND INVESTMENTS

Deposits and investments as of June 30, 2019 are classified in the accompanying financial statements as follows:

Statement of Net Position:	
Cash and cash equivalents	\$ 1,714,076
Investments	748,726
Total deposits and investments	\$ 2,462,802

Deposits and investments at June 30, 2019 consist of the following:

Cash on hand	\$ 1:	50
Deposits with financial institutions	1,713,92	26
Investments	748,72	26
Total deposits and investments	\$ 2,462,86	02

Berlin Water Works follows the City of Berlin, New Hampshire's investment policy. The City's investment policy requires that deposits be made in federally insured banks chartered under the laws of the State of New Hampshire or the federal government with a branch within the State of New Hampshire. The City limits its investments to the New Hampshire Public Deposit Investment Pool (NHPDIP), an external investment pool in accordance with New Hampshire State law, and federally insured banks chartered under the laws of New Hampshire or the federal government with a branch within the State to the following investment types: money market accounts, certificates of deposit, repurchase agreements, all other types of interest bearing accounts, or obligations fully guaranteed as to principal and interest by the United States government.

Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by assignment of a rating by a nationally recognized statistical rating organization. The City's investment policy for managing credit risk is based on the prudent person principal to ensure capital preservation and protection of investment principal while maintaining sufficient liquidity and seeking a fair rate of return.

As of June 30, 2019, Berlin Water Works' investments in the NHPDIP, a state investment pool, had a fair value of \$748,726 and was rated *AAA-m*.

BERLIN WATER WORKS

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

For the Year Ended June 30, 2019

Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a bank failure, Berlin Water Works' deposits may not be returned. The custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The City's investment policy for assurance against custodial credit risk requires collateralization for all deposits not covered by Federal Depository Insurance.

Of Berlin Water Works' deposits with financial institutions at year end, \$1,492,492 was collateralized by securities held by the bank in the bank's name.

Investments in NHPDIP

Berlin Water Works is a voluntary participant in the New Hampshire Public Deposit Investment Pool (NHPDIP), an external investment pool. The NHPDIP is not registered with the United States Securities and Exchange Commission as an investment company. The NHPDIP was created by state law and is administered by a public body of state, local and banking officials. Financial statements for the NHPDIP can be accessed through the NHPDIP's website at www.NHPDIP.com.

Berlin Water Works' exposure to derivatives is indirect through its participation in the NHPDIP. Berlin Water Works' proportional share of these derivatives is not available. The fair value of the position in the investment pool is equal to the value of the pool shares.

NOTE 3—CAPITAL ASSETS

The following is a summary of changes in capital assets during the year ended June 30, 2019:

	Balance			Balance
	7/1/2018	Additions	Reductions	6/30/2019
Capital assets not being depreciated:				
Land	\$ 353,649			\$ 353,649
Construction in progress	288,109	\$ 342,871	\$ (226,581)	404,399
Total capital assets not being depreciated	641,758	342,871	(226,581)	758,048
Other capital assets:				
Infrastructure	40,785,591	334,244		41,119,835
Buildings and improvements	15,095,363			15,095,363
Machinery and equipment	2,155,548			2,155,548
Vehicles	273,956	30,000		303,956
Total other capital assets at historical cost	58,310,458	364,244		58,674,702
Less accumulated depreciation for:				
Infrastructure	(10,694,440)	(811,368)		(11,505,808)
Buildings and improvements	(6,599,188)	(336,427)		(6,935,615)
Machinery and equipment	(1,528,695)	(41,109)		(1,569,804)
Vehicles	(223,381)	(13,566)		(236,947)
Total accumulated depreciation	(19,045,704)	(1,202,470)		(20,248,174)
Total other capital assets, net	39,264,754	(838,226)	<u> </u>	38,426,528
Total capital assets, net	\$ 39,906,512	\$ (495,355)	\$ (226,581)	\$ 39,184,576

For the Year Ended June 30, 2019

NOTE 4—LONG-TERM OBLIGATIONS

Changes in Long-term Obligations

The changes in Berlin Water Works long-term obligations for the year ended June 30, 2019 are as follows:

	Balance			Balance	Due Within
	7/1/2018	Additions	Reductions	6/30/2019	One Year
Notes payable	\$ 8,532,961	\$ 2,000,000	\$(1,460,013)	\$ 9,072,948	\$ 407,167
State of New Hampshire revolving loan	2,000,000	735,997	(2,000,000)	735,997	-
Compensated absences	135,573	12,796		148,369	14,428
Total	\$ 10,668,534	\$ 2,748,793	\$(3,460,013)	\$ 9,957,314	\$ 421,595

Notes Payable

Notes payable at June 30, 2019 are comprised of the following individual issues:

		Final	Balance
	Interest	Maturity	at
	Rate	Date	6/30/2019
Rural Utilities Service - Water Facility	2.25%	October 2041	\$ 843,034
State of NH Revolving Loan #6	1.87%	September 2024	591,040
State of NH Revolving Loan #7	2.69%	October 2031	1,109,532
State of NH Revolving Loan #8	2.46%	December 2035	2,706,720
State of NH Revolving Loan #9	2.46%	December 2035	846,447
State of NH Revolving Loan #10	1.96%	October 2036	1,431,043
State of NH Revolving Loan #11	2.53%	May 2033	1,545,132
Totals			\$ 9,072,948

Debt service requirements to retire outstanding notes payable net of principal forgiveness from the State of New Hampshire to be forgiven over the life of the related notes of \$1,653,833 at June 30, 2019 are as follows:

Year Ending			
June 30,	Principal	Interest	<u>Total</u>
2020	\$ 407,167	\$ 214,590	\$ 621,757
2021	420,247	202,387	622,634
2022	433,617	189,872	623,489
2023	447,277	177,043	624,320
2024	461,237	163,889	625,126
2025-2029	2,186,489	622,221	2,808,710
2030-2034	2,113,129	293,225	2,406,354
2035-2039	814,075	55,015	869,090
2040-2042	135,877	6,159	142,036
Total	7,419,115	1,924,401	9,343,516
Add: Principal forgiveness	1,653,833		1,653,833
Total Notes Payable	\$ 9,072,948	\$ 1,924,401	\$ 10,997,349

For the Year Ended June 30, 2019

State of New Hampshire Revolving Loan

The Berlin Water Works has drawn \$735,997 of \$1,500,000 in funds under the State of New Hampshire Drinking Water Revolving Loan Fund Program for various waterline projects. Payments on the State of New Hampshire revolving loan balance are not scheduled to commence until the first anniversary of the scheduled completion date of the project or the date of substantial completion, whichever is earliest. Interest is accrued at 1% during the construction period of the project and is to be paid upon completion of the project within the following year.

As authorized by the Drinking Water Revolving Fund Program, the Berlin Water Works shall be provided federal financial assistance, whereby a portion of the principal sum will be forgiven. The principal forgiveness will be applied at the time of the initial loan repayment.

NOTE 5—OTHER POSTEMPLOYMENT BENEFITS

Total OPEB Liabilities, Deferred Outflows of Resources, Deferred Inflows of Resources and OPEB Expense

	2000000		OPEB Deferred Liability Inflows	
Cost-Sharing Multiple Employer Plan	\$ 2,821	\$ 19,004	\$ 60	\$ 3,883
Single Employer Plan	87,345	321,177	43,631	27,771
Total	\$ 90,166	\$ 340,181	\$ 43,691	\$ 31,654

The net amount of deferred outflows of resources and deferred inflows of resources related to OPEB is reflected as an increase to unrestricted net position in the amount of \$46,475.

COST-SHARING MULTIPLE EMPLOYER PLAN

Plan Description

The New Hampshire Retirement System (NHRS) administers a cost-sharing multiple-employer other postemployment benefit plan (OPEB Plan). The OPEB Plan provides a medical insurance subsidy to qualified retired members.

The NHRS issues a publicly available financial report that includes financial statements and required supplementary information for NHRS. That report may be obtained by writing to New Hampshire Retirement System at 54 Regional Drive, Concord, New Hampshire 03301 or from their website at www.nhrs.org.

The OPEB Plan is divided into four membership types. Political subdivision employees, teachers and State employees belong to Group I. Police officers and firefighters belong to Group II. The OPEB plan is closed to new entrants.

For the Year Ended June 30, 2019

Benefits Provided

Benefit amounts and eligibility requirements for the OPEB Plan are set by state law (RSA 100-A:52, RSA 100-A:52-a and RSA 100-A:52-b), and members are designated in statute by type. The medical insurance subsidy is a payment made by NHRS to the former employer or its insurance administrator toward the cost of health insurance for a qualified retiree, his/her qualified spouse, and his/her certified dependent children with a disability who are living in the household and being cared for by the retiree. If the health insurance premium amount is less than the medical subsidy amount, then only the health insurance premium amount will be paid. If the health insurance premium amount exceeds the medical subsidy amount, then the retiree or other qualified person is responsible for paying any portion that the employer does not pay.

Group I benefits are based on creditable service, age and retirement date. Group II benefits are based on hire date, age and creditable service. Medical subsidy rates established by RSA 100-A:52 II are dependent upon whether retirees are eligible for Medicare. Retirees not eligible for Medicare may receive a maximum medical subsidy of \$375.56 for a single person plan and \$751.12 for a two person plan. Retirees eligible for Medicare may receive a maximum medical subsidy of \$236.84 for a single person plan and \$473.68 for a two person plan.

Funding Policy

Per RSA-100:16, contribution rates are established and may be amended by the New Hampshire State legislature and are determined by the NHRS Board of Trustees based on an actuarial valuation. Berlin Water Works' contribution rates for the covered payroll of employees was 0.30% for the year ended June 30, 2019. Contributions to the OPEB plan for Berlin Water Works were \$1,947 for the year ended June 30, 2019. Employees are not required to contribute to the OPEB plan.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2019, the Berlin Water Works reported a liability of \$19,004 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by a roll forward of the actuarial valuation from June 30, 2017. The Berlin Water Works' proportion of the net OPEB liability was based on actual contributions by the Berlin Water Works during the relevant fiscal year relative to the actual contributions of all participating plan members, excluding contributions to separately finance specific liabilities of individual employers or NHRS. At June 30, 2018, the Berlin Water Works' proportion was approximately 0.0042 percent, which was an increase of 0.0008 percentage points from its proportion measured as of June 30, 2017.

For the year ended June 30, 2019, the Berlin Water Works recognized OPEB expense of \$3,883. At June 30, 2019, the Berlin Water Works reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

For the Year Ended June 30, 2019

	Out	eferred flows of sources	Inflo	erred ws of ources
Differences between expected and actual experience	\$	112		
Net difference between projected and actual earnings on OPEB plan investments			\$	60
Changes in proportion and differences between Berlin Water Works contributions and proportionate share of contributions		762		
Berlin Water Works contributions subsequent to the measurement date	1	1,947		
Totals	\$	2,821	\$	60

The Berlin Water Works reported \$1,947 as deferred outflows of resources related to OPEB resulting from Berlin Water Works contributions subsequent to the measurement date. This amount will be recognized as a reduction of the net OPEB liability in the measurement period ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense for the measurement periods as follows:

June 30,	
2019	\$ 855
2020	(19)
2021	(19)
2022	(3)
	\$ 814

Actuarial Assumptions

The total OPEB liability was determined by a roll forward of the actuarial valuation as of June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.5 percent
Wage inflation	3.25 percent
Salary increases	5.6 percent, average, including inflation
Investment rate of return	7.25 percent, net of OPEB plan investment expense, including inflation

Mortality rates were based on the RP-2014 healthy annuitant and employee generational mortality tables for males and females with credibility adjustments, adjusted for fully generational mortality improvements using scale MP-2015, based on the last experience study.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of the most recent actuarial experience study, which was for the period July 1, 2010 – June 30, 2015.

BERLIN WATER WORKS

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

For the Year Ended June 30, 2019

The long-term expected rate of return on OPEB Plan investments was selected from a best estimate range determined using the building block approach. Under this method, an expected future real return range is calculated separately for each asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return net of investment expenses by the target asset allocation percentage and by adding expected inflation. Following is a table presenting target allocations and geometric real rates of return for each asset class:

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return
Fixed income	25%	(0.25)-1.80%
Domestic equity	30%	4.25-4.50%
International equity	20%	4.50-6.00%
Real estate	10%	3.25%
Private equity	5%	6.25%
Private debt	5%	4.25%
Opportunistic	5%	2.15%
Total	100%	

The discount rate used to measure the collective total OPEB liability as of June 30, 2018 was 7.25%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made under the current statute RSA 100-A:16 and that plan member contributions will be made under RSA 100-A:16. Based on those assumptions, the OPEB Plan's fiduciary net position was projected to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB Plan investments was applied to all periods of projected benefit payments to determine the collective total OPEB liability.

Sensitivity of the Berlin Water Works' Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate

The following presents the Berlin Water Works' proportionate share of the net OPEB liability calculated using the discount rate of 7.25 percent, as well as what the Berlin Water Works' proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the single discount rate:

	Current					
		Decrease 5.25%)		count Rate 7.25%)		Increase 8.25%)
Net OPEB Liability	\$	19,779	\$	19,004	\$	16,832

SINGLE EMPLOYER PLAN

Plan Description

The Berlin Water Works administers the retiree health care benefits program, a single employer defined benefits plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

BERLIN WATER WORKS

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

For the Year Ended June 30, 2019

Benefits Provided

The Berlin Water Works provides medical and life insurance benefits to its eligible retirees and their covered spouses. Employees and their spouses are eligible to receive the benefits upon retirement with an attained age of 62. Employees are eligible to receive retiree medical coverage at no cost until age 65 if they retire at the early retirement age of 62. The benefits, benefit levels, employee contributions and employer contributions are governed by RSA 100-A:50.

Employees Covered By Benefit Terms

At July 1, 2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	1
Inactive employees entitled to but not yet receiving benefit payments	=
Active employees	12
	13

Total OPEB Liability

Inflation

The Berlin Water Works' total OPEB liability of \$321,177 was measured as of June 30, 2019, and was determined by a roll forward of the actuarial valuation as of July 1, 2018.

Actuarial Assumptions and Other Inputs for OPEB

The total OPEB liability in the July 1, 2018 valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Chained CPI	2.35%
Discount rate	3.5%
Healthcare cost trend rates	8% for 2018, decreasing 0.5% per year to 5.5% then grading down to an ultimate trend rate of 3.9% in 2075

The discount rate was based on the Bond Buyer 20-Bond GO Index published on June 27, 2019.

2.6%

Mortality rates for active employees were based on the RP-2014 Employees Mortality Tables for males and females, projected with generational mortality improvement using scale MP-2015. Mortality rates for retirees were based on the RP-2014 Healthy Annuitant Mortality Tables for males and females, projected with generational mortality improvement using scale MP-2015.

For the Year Ended June 30, 2019

Changes in the Total OPEB Liability

		otal OPEB Liability
Balance at June 30, 2018	\$	267,736
Changes for the year:	Ψ	201,130
Service cost		9,400
Interest		10,290
Changes of benefit terms		-
Differences between expected and actual experience		(47,414)
Changes in assumptions or other inputs		103,671
Benefit payments		(22,506)
Net changes		53,441
Balance at June 30, 2019	\$	321,177

Changes of assumptions and other inputs reflect a change in the discount rate of 3.87% at June 30, 2018 to 3.50% at June 30, 2019. Additionally, the health cost trend rates, mortality improvement scale, and the retirement, disability, and withdrawal rates were updated from the prior measurement.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability of the Berlin Water Works, as well as what the Berlin Water Works' total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	(2.50%) (3.50%) (4.50%)					
	Se (4-77-49)		2017 - H. 2014 - Na. 2		1% Increase (4.50%)	
Total OPEB Liability	\$	349,122	\$	321,177	\$	295,718

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rate

The following presents the total OPEB liability of the Berlin Water Works, as well as what the Berlin Water Works' total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (7 percent decreasing to 2.9 percent) or 1-percentage-point higher (9 percent decreasing to 4.9 percent) than the current healthcare cost trend rate:

			Н	ealthcare			
		Cost Trend					
	1%	Decrease		Rates	1%	6 Increase	
	(7% decreasing (8 to 2.9%)		(8% decreasing to 3.9%)		(9% decreasing to 4.9%)		
Total OPEB Liability	\$	287,912	\$	321,177	\$	360,067	

BERLIN WATER WORKS

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

For the Year Ended June 30, 2019

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2019, the Berlin Water Works recognized OPEB expense of \$27,771. At June 30, 2019, the Berlin Water Works reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	D	eferred	D	eferred
	Outflows of		Inflows of	
	Re	esources	Re	esources
Differences between expected and actual experience			\$	39,947
Changes of assumptions	\$	87,345		3,684
Totals	\$	87,345	\$	43,631

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

June 30,	
2020	\$ 8,041
2021	8,041
2022	8,041
2023	8,041
2024	8,337
Thereafter	 3,213
	\$ 43,714

NOTE 6—DEFINED BENEFIT PENSION PLAN

Plan Description

The Berlin Water Works contributes to the New Hampshire Retirement System (NHRS), a public employee retirement system that administers a single cost-sharing multiple-employer defined benefit pension plan. The plan provides service, disability, death and vested retirement allowances to plan members and beneficiaries. Benefit provisions are established and may be amended by the New Hampshire State legislature.

The NHRS issues a publicly available financial report that includes financial statements and required supplementary information for NHRS. That report may be obtained by writing to New Hampshire Retirement System, 54 Regional Drive, Concord, New Hampshire 03301 or at their website www.nhrs.org.

Substantially all full-time state and local employees, public school teachers, permanent firefighters and permanent police officers within the State are eligible and required to participate in the Pension Plan.

The Pension Plan is divided into two membership groups. State and local employees and teachers belong to Group I. Police and firefighters belong to Group II. All assets are held in a single trust and are available to pay retirement benefits to all members.

For the Year Ended June 30, 2019

Benefits Provided

Group I members at age 60 or 65 (for members who commence service after July 1, 2011) qualify for a normal service retirement allowance based on years of creditable service and average final salary for the highest of either three or five years, depending on when their service commenced. The yearly pension amount is 1/60 or 1.667% of average final compensation (AFC), multiplied by years of creditable service. At age 65, the yearly pension amount is recalculated at 1/66 or 1.515% of AFC multiplied by years of creditable service.

Group II members vested by January 1, 2012, who are age 60, or members who are at least age 45 with at least 20 years of creditable service, can receive a retirement allowance at a rate of 2.5% of AFC for each year of creditable service, not to exceed 40 years. Members commencing service on or after July 1, 2011 or members who have not attained status as of January 1, 2012 can receive a retirement allowance at age 52.5 with 25 years of service or age 60. The benefit shall be equal to 2% of AFC times creditable service up to 42.5 years. However, a member who commenced service on or after July 1, 2011 shall not receive a retirement allowance until attaining the age of 52.5, but may receive a reduced allowance after age 50 if the member has at least 25 years of creditable service where the allowance shall be reduced, for each month by which the benefit commencement date precedes the month after which the member attains 52.5 years of age by 1/4 of 1%. For Group II members who commenced service prior to July 1, 2011, who have not attained vested status prior to January 1, 2012, benefits are calculated depending on age and years of creditable service as follows:

Years of Creditable Service as of		Minimum	Benefit
January 1, 2012	Minimum Age	Service	Multiplier
At least 3 but less than 10 years	46	21	2.4%
At least 6 but less than 8 years	47	22	2.3%
At least 4 but less than 6 years	48	23	2.2%
Less than 4 years	49	24	2.1%

Members of both groups may qualify for vested deferred allowances, disability allowances and death benefit allowances subject to meeting various eligibility requirements. Benefits are based on AFC or earnable compensation and/or service.

Funding Policy

Plan members are required to contribute 7.0% of their covered salary and the Berlin Water Works is required to contribute at an actuarially determined rate. The Berlin Water Works' contribution rate for the covered payroll of general employees was 11.08% for the year ended June 30, 2019. The Berlin Water Works contributes 100% of the employer cost.

Per RSA-100:16, plan member contribution rates are established and may be amended by the New Hampshire State legislature and employer contribution rates are determined by the NHRS Board of Trustees based on an actuarial valuation. The Berlin Water Works' contributions to the NHRS for the year ending June 30, 2019 were \$71,906.

For the Year Ended June 30, 2019

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2019, the Berlin Water Works reported a liability of \$772,514 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by a roll forward of the actuarial valuation from June 30, 2017. The Berlin Water Works' proportion of the net pension liability was based on actual contributions by the Berlin Water Works during the relevant fiscal year relative to the actual contributions of all participating plan members, excluding contributions to separately finance specific liabilities of individual employers or NHRS. At June 30, 2018, the Berlin Water Works' proportion was approximately 0.0160 percent, which was a decrease of 0.0030 percentage points from its proportion measured as of June 30, 2017.

For the year ended June 30, 2019, the Berlin Water Works recognized negative pension expense of (\$7,434). At June 30, 2019, the Berlin Water Works reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

	Deferred		I	Deferred	
	Ου	tflows of	It	nflows of	
	R	esources	R	esources	
Differences between expected and actual experience	\$	6,166	\$	6,255	
*	Ψ	-	Ψ	0,233	
Changes of assumptions		53,462			
Net difference between projected and actual earnings on pension plan investments				17,877	
Changes in proportion and differences between Berlin Water Works contributions and proportionate share of contributions		1,792		251,647	
Berlin Water Works' contributions subsequent to the measurement date		71,906			
Totals	\$	133,326	\$	275,779	

The net amount of deferred outflows of resources and deferred inflows of resources related to pension is reflected as a decrease to unrestricted net position in the amount of \$142,453. The Berlin Water Works reported \$71,906 as deferred outflows of resources related to pension resulting from the Berlin Water Works' contributions subsequent to the measurement date that will be recognized as a reduction of the net pension liability in the measurement period ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense in the measurement periods as follows:

June 30,	
2019	\$ (54,186)
2020	(63,833)
2021	(71,122)
2022	(25,218)
	\$ (214,359)

For the Year Ended June 30, 2019

Actuarial Assumptions

The total pension liability was determined by a roll forward of the actuarial valuation as of June 30, 2017, using the following actuarial assumptions:

Inflation	2.5 percent
Wage inflation	3.25 percent
Salary increases	5.6 percent, average, including inflation
Investment rate of return	7.25 percent, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2014 employee generational mortality tables for males and females, with credibility adjustments, adjusted for fully generational mortality improvements using Scale MP-2015, based on the last experience study.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of the most recent actuarial experience study, which was for the period July 1, 2010 – June 30, 2015.

The long-term expected rate of return on pension plan investments was selected from a best estimate range determined using the building block approach. Under this method, an expected future real return range is calculated separately for each asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return net of investment expenses by the target asset allocation percentage and by adding expected inflation. Following is a table presenting target allocations and geometric real rates of return for each asset class:

		Weighted Average Long-Term
Asset Class	Target Allocation	Expected Real Rate of Return
Fixed Income	25%	(0.25)-1.80%
Domestic equity	30%	4.25-4.50%
International equity	20%	4.50-6.00%
Real estate	10%	3.25%
Private equity	5%	6.25%
Private debt	5%	4.25%
Opportunistic	5%	2.15%
Total	100%	

Discount Rate

The discount rate used to measure the collective pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. For purposes of the projection, member contributions and employer contributions are projected based on the expected payroll of current members only. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the collective pension liability.

BERLIN WATER WORKS

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

For the Year Ended June 30, 2019

Sensitivity of the Berlin Water Works' Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the Berlin Water Works' proportionate share of the net pension liability calculated using the discount rate of 7.25 percent, as well as what the Berlin Water Works' proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the single discount rate:

	Current					
	1% Decrease (6.25%)	Discount Rate (7.25%)	1% Increase (8.25%)			
Berlin Water Works' proportionate						
share of the net pension liability	\$ 1,027,837	\$ 772,514	\$ 558,547			

NOTE 7—RISK MANAGEMENT

The Berlin Water Works is exposed to various risks of losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. During the fiscal year ended June 30, 2019, the Berlin Water Works was a member of and participated in a public entity risk pool (Trust) for property and liability insurance and worker's compensation coverage. Coverage has not been significantly reduced from the prior year and settled claims have not exceeded coverage in any of the past three years.

The Trust agreements permit the Trust to make additional assessments to members should there be a deficiency in Trust assets to meet its liabilities. Accounting principles generally accepted in the United States of America require members of pools with a sharing of risk to determine whether or not such assessment is probable and, if so, a reasonable estimate of such assessment. At this time, the Trust foresees no likelihood of an additional assessment for any of the past years. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. Based on the best available information there is no liability at June 30, 2019.

Property and Liability Insurance

The Trust provides certain property and liability insurance coverage to member towns, cities, and other qualified political subdivisions of New Hampshire. As a member of the Trust, the Berlin Water Works shares in contributing to the cost of and receiving benefit from a self-insured pooled risk management program. The program includes a Self-Insured Retention Fund from which is paid up to \$500,000 for each and every covered property, crime and/or liability loss that exceeds \$1,000, up to an aggregate of \$1,200,000. Each property loss is subject to a \$1,000 deductible. All losses over the aggregate are covered by insurance policies.

Worker's Compensation

The Trust provides statutory worker's compensation coverage to member towns, cities, and other qualified political subdivisions of New Hampshire. The Trust is self-sustaining through annual member premiums and provides coverage for the statutorily required workers' compensation benefits and employer's liability coverage up to \$2,000,000. The program includes a Loss Fund from which is paid up to \$500,000 for each and every covered claim.

For the Year Ended June 30, 2019

NOTE 8—CONTINGENCIES

Litigation

There may be various claims and suits pending against the Berlin Water Works, which arise in the normal course of the Berlin Water Works' activities. In the opinion of Berlin Water Works' management, any potential claims against the Berlin Water Works, which are not covered by insurance, are immaterial and would not affect the financial position of the Berlin Water Works.

Federal Grants

The Berlin Water Works participates in a number of federally assisted grant programs. These programs are subject to financial and compliance audits by the grantors or their representatives. The amounts, if any, of expenses which may be disallowed by the granting agency cannot be determined at this time, although the Berlin Water Works expects such amounts, if any, to be immaterial.

NOTE 9—SIGNIFICANT CONCENTRATION OF REVENUE RISK

For the year ended June 30, 2019, a single industrial consumer approximated 24.7% of the total revenue generated from user charges.

NOTE 10—SUBSEQUENT EVENTS

State of New Hampshire Revolving Loan Drawdowns

Subsequent to June 30, 2019, the Berlin Water Works has received drawdowns of \$667,492 on the State of New Hampshire Drinking Water State Revolving Fund Program for water main replacement projects.

SCHEDULE 1 BERLIN WATER WORKS

Schedule of Changes in the Berlin Water Works' Proportionate Share of the Net OPEB Liability

For the Year Ended June 30, 2019

	Cost-Sharing Multiple Employer Plan Information Only								
						Berlin			
			Berlin			Water Works'			
	Berlin	Wat	ter Works'			Proportionate	Plan Fiduciary		
	Water Works'	Pro	portionate		Berlin	Share of the Net	Net Position		
	Proportion of	Sha	are of the	Water Works'		OPEB Liability	as a Percentage		
Measurement	the Net OPEB	Ne	et OPEB	Covered		as a Percentage of	of the Total		
Period Ended	Liability	Ī	iability	<u>Payroll</u>		Covered Payroll	OPEB Liability		
June 30, 2018	0.00415075%	\$	19,004	\$	611,982	3.11%	7.53%		
June 30, 2017	0.00336763%	\$	15,398	\$	643,939	2.39%	7.91%		
June 30, 2016	0.00384641%	\$	18,621	\$	720,965	2.58%	5.21%		

SCHEDULE 2
BERLIN WATER WORKS
Schedule of Berlin Water Works OPEB Contributions
For the Year Ended June 30, 2019

Cost-Sharing Multiple Employer Plan Information Only

	Cook Sharing Interest Employer I had Internation Only								
			Cont	ributions in					
			Rela	tion to the				Berlin	Contributions
	Con	tractually	Cor	Contractually Contribution				ter Works'	as a Percentage
	Re	equired	Required Deficiency			(Covered	of Covered	
Year Ended	Con	tribution	Con	Contribution (Excess)			<u>Payroll</u>	<u>Payroll</u>	
June 30, 2019	\$	1,947	\$	(1,947)	\$	2	\$	648,972	0.30%
June 30, 2018	\$	1,836	\$	(1,836)	\$	7	\$	611,982	0.30%
June 30, 2017	\$	1,996	\$	(1,996)	\$	*	\$	643,939	0.31%
June 30, 2016	\$	2,235	\$	(2,235)	\$	2	\$	720,965	0.31%

SCHEDULE 3
BERLIN WATER WORKS

Schedule of Changes in the Berlin Water Works' Total OPEB Liability and Related Ratios For the Year Ended June 30, 2019

Single Employer Plan Information Only				
Total OPEB Liability:		2019		2018
Service cost	\$	9,400	\$	6,313
Interest		10,290		9,776
Changes of benefit terms		- 2		120
Changes of assumptions or other inputs		103,671		(5,239)
Differences between expected and actual experience		(47,414)		•
Benefit payments Net change in total OPEB liability	-	(22,506) 53,441	-	(19,761) (8,911)
Total OPEB liability - beginning Total OPEB liability - ending	\$	267,736 321,177	\$	276,647 267,736
Covered employee payroll	\$	662,902	\$	612,927
Total OPEB liability as a percentage of covered employee payroll	4	8.45%	,	43.68%
Significant Actuarial Assumptions	ā			
Discount rate	;	3.50%		3.87%
Health cost trend rates Initial Ultimate		% - 2018 % - 2075		% - 2016 % - 2019
Mortality improvement scale	M	IP-2015	N	/IP-2014

SCHEDULE 4
BERLIN WATER WORKS
Schedule of Changes in the Berlin Water Works' Proportionate Share of the Net Pension Liability
For the Year Ended June 30, 2019

						Berlin	
			Berlin			Water Works'	
	Berlin	W	ater Works'			Proportionate	Plan Fiduciary
	Water Works'	Pr	oportionate		Berlin	Share of the Net	Net Position
	Proportion of	S	hare of the	Wa	ter Works'	Pension Liability (Asset)	as a Percentage
Measurement	the Net Pension	N	et Pension	(Covered	as a Percentage of	of the Total
Period Ended	Liability	Liability			<u>Payroll</u>	Covered Payroll	Pension Liability
June 30, 2018	0.01604324%	\$	772,514	\$	611,982	126.23%	64.73%
June 30, 2017	0.01908920%	\$	938,805	\$	643,939	145.79%	62.66%
June 30, 2016	0.02186584%	\$	1,162,737	\$	720,965	161.28%	58.30%
June 30, 2015	0.02590159%	\$	1,026,099	\$	832,344	123.28%	65.47%
June 30, 2014	0.02598995%	\$	975,555	\$	807,638	120.79%	66.32%
June 30, 2013	0.02560616%	\$	1,102,034	\$	750,833	146.77%	59.81%

SCHEDULE 5
BERLIN WATER WORKS
Schedule of Berlin Water Works Pension Contributions
For the Year Ended June 30, 2019

			Cont	tributions in					
		Relation to the					Berlin		Contributions
	Contractually		Contractually		Contribution		Water Works'		as a Percentage
	Required		Required		Deficiency		Covered		of Covered
Year Ended	Contribution		Contribution		(Excess)		<u>Payroll</u>		<u>Payroll</u>
June 30, 2019	\$	71,906	\$	(71,906)	\$	-	\$	648,972	11.08%
June 30, 2018	\$	67,808	\$	(67,808)	\$	-	\$	611,982	11.08%
June 30, 2017	\$	69,932	\$	(69,932)	\$	-	\$	643,939	10.86%
June 30, 2016	\$	78,297	\$	(78,297)	\$	-	\$	720,965	10.86%
June 30, 2015	\$	86,897	\$	(86,897)	\$	-	\$	832,344	10.44%
June 30, 2014	\$	84,317	\$	(84,317)	\$		\$	807,638	10.44%
June 30, 2013	\$	63,671	\$	(63,671)	\$	(H)	\$	750,833	8.48%

BERLIN WATER WORKS NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

For the Year Ended June 30, 2019

NOTE 1—SCHEDULE OF CHANGES IN THE BERLIN WATER WORKS' PROPORTIONATE SHARE OF THE NET OPEB LIABILITY AND SCHEDULE OF WATER WORKS OPEB CONTRIBUTIONS

In accordance with GASB Statement #75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, the Berlin Water Works is required to disclose historical information for each of the prior ten years within a schedule of changes in the Berlin Water Works' proportionate share of the net OPEB liability and schedule of Berlin Water Works OPEB contributions. The Berlin Water Works implemented the provisions of GASB Statement #75 during the year ended June 30, 2018. Accordingly, the historic information has only been presented for those years which information was readily available. Additional disclosures will be made in future years as additional information becomes available.

NOTE 2—SCHEDULE OF CHANGES IN THE WATER WORKS' TOTAL OPEB LIABILITY AND RELATED RATIOS

In accordance with GASB Statement #75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, the Berlin Water Works is required to disclose historical information for each of the prior ten years within a schedule of changes in the Berlin Water Works' total OPEB liability and related ratios. The Berlin Water Works implemented the provisions of GASB Statement #75 during the year ended June 30, 2018. Accordingly, the historic information has only been presented for those years which information was readily available. Additional disclosures will be made in future years as additional information becomes available.

No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

NOTE 3—SCHEDULE OF CHANGES IN THE BERLIN WATER WORKS' PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AND SCHEDULE OF WATER WORKS PENSION CONTRIBUTIONS

In accordance with GASB Statement #68, Accounting and Financial Reporting for Pensions, the Berlin Water Works is required to disclose historical information for each of the prior ten years within a schedule of changes in the Berlin Water Works' proportionate share of the net pension liability and schedule of Berlin Water Works pension contributions. The Berlin Water Works implemented the provisions of GASB Statement #68 during the year ended June 30, 2015. Accordingly, the historic information has only been presented for those years which information was readily available. Additional disclosures will be made in future years as the information becomes available.

Change in Actuarial Assumptions

For the June 30, 2015 actuarial valuation, the New Hampshire Retirement System reduced its assumption for the investment rate of return from 7.75% to 7.25%, decreased the price inflation from 3.0% to 2.5%, decreased the wage inflation from 3.75% to 3.25%, and decreased the salary increases from 5.8% to 5.6%. Additionally, the mortality table was changed from the RP-2000 projected to 2020 with Scale AA to the RP-2014 employee generational mortality table for males and females, adjusted for mortality improvements using Scale MP-2015.