Elmira Water Board

2018 Annual Report



To find out more about the Elmira Water Board, visit us at our Website

www.elmirawaterboard.org

or email us at

waterinfo@elmirawaterboard.org

Front cover features the old Pump Station, on Winsor Ave, that still stands. The view is from the north looking south.



Martin D. Chalk, President

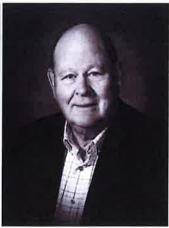


John J. Burin, Vice President

COMMISSIONERS



Danny W. Gray



William D. Roe



Charles A. Shaffer

The Elmira Water Board

President	Term
Martin D. Chalk	2017-2018
Vice President	W
John J. Burin	20,17-2022
Commissioners	
Danny W. Gray	2015-2020
William D. Roe	2016-2021
Charles A. Shaffer	2018-2022

Corporate Counsel John J. Ryan, Jr.

General Manager Mark D. LaDouce

Secretary-Treasurer Alyssa L. Mack

The Commissioners of the Elmira Water Board are elected officials of the City of Elmira authorized and empowered by Charter to make, publish and enforce rules and regulations necessary for the efficient operation of the water works system.

The work done by the Commission, and authorized by the Charter, is to conduct studies essential to developing and maintaining adequate and continuous supplies of potable water and to establish water rates adequate to finance system improvements and operations.

The Board meets monthly at the Elmira Water Board Filtration Plant located at One Fountain Drive, Elmira, New York 14905. Meetings are open to the public and schedules can be obtained by visiting our website at www.elmirawaterboard.org.

The Elmira Water Board ended 2018 at 89% of our expense budget and 104.5% of our revenue budget. The slight increase in revenue was primarily due to a change in billing dates for some residential customers, in order to improve processes within the Office and Meter Departments, offset by a major decrease in usage from our largest customer. This decline in usage (of approximately 5,000 units per month) is expected to continue.

During 2018 there were several factors that resulted in fluctuations in expenditures. The Elmira Water Board changed carriers for our business insurance as well as our worker's compensation insurance, resulting in a noteworthy savings. We also budgeted conservatively for some items, which came in under budget for the year, such as: equipment maintenance, materials, legal and financial expense, utilities and chemicals. There were also several projects that we postponed until 2019, including well redevelopment and permit renewal of a wellfield.

As of December 31, 2018 the Water Board has implemented GASB Statement No. 75 which replaced the requirements of GASB Statement No. 45. The beginning net position for the Water Board has been decreased by \$939,963 as a cumulative effect of the new accounting principle.

Throughout 2018 we experienced an average number of main breaks. Ground movement caused by fluctuating temperatures will always cause breaks in an old system such as ours. However, when breaks do occur it's generally in below average weather conditions. Our employees worked diligently on leak detection; in doing so we were able to locate and repair a significant number of main breaks. We recognize all of the employees who worked tirelessly to ensure our customer base had limited interruption in water service.

Our employee health insurance cost for 2018 came in at 97.60% of the budget as a result of changes in our employees' selections for their health plan. For the 2019 budget, we estimated an average premium increase of 4.72%. Currently, employees are absorbing 10% of the total annual health insurance premium. The Water Board continues to monitor these costs and the impact they have on our total expenditures.

Our staff understands its obligation to be diligent in preventing unnecessary spending. All spending is closely monitored. In the year ahead, we remain committed to the task of fiscal responsibility.

Capital spending details are in the Board's "Letter to the Mayor" attached to this annual report.

Staff Changes:

Darryl Crans retired in May 2018. Darryl was an Operator at the Filter Plant since February 2003. We would like to congratulate Darryl on his retirement and thank him for his years of service.

Kyle Baxter and Jeffrey O'Hara filled two vacancies at the Filter Plant. Both Kyle and Jeffrey were hired as Water Treatment Plant Operator Trainees.

Congratulations to Brett Bowman on his promotion from MEO II to MEO I. This promotion was a result of Brett's hard work and willingness to go above and beyond his normal duties.

Congratulations to Trent Otis on receiving his Distribution Systems Operator Class D License.

Mark D. LaDouce, General Manager

Elmira Water Board Directory	
Mark D. LaDouce, General Manager	733-9179
Main Office	
Monday Through Friday 9:00 AM to 4:00 PM	733-9179
Customer Service & Billing Information	733 3173
David McCarty, Chief Water Treatment Operator	732-2277
Filtration Plant	
24/7 Water Quality Questions &	732-2277
To Report an Emergency	732-2277
Elmira Water Board Website	www.elmirawaterboard.org
Public Elmira Water Board Meetings	
1 Fountain Drive, Elmira, NY	733-9179
Call Main Office for dates and times	733-9179
Other Important Water Numbers	
Chemung County Health Department	
To answer water questions	737-2019
Chemung County Health Department Website	
(click on the environmental tab to view the drinking water page)	www.chemungcountyhealth.org
Environmental Protection Agency	
Safe Drinking Water Hotline	1-800-426-4791

To the Honorable Mayor and Council of the City of Elmira, New York:

The legislation creating the Elmira Water Board requires that we submit an annual report to the City, which summarizes our activities and work completed during the calendar year. In addition, the Charter requires that we advise you of our financial condition. Our audited financial statement for the year ending December 31, 2018 has been included for your review.

Operational Information

The Elmira Water Board currently has a total of 43 employees in its Filtration, Meter, Billing Office, Facilities, Maintenance, and Engineering/Administration departments. We provide service to 17,374 accounts with an estimated population of 54,000. In the relatively recent past, circa 1998, we served a population of approx. 70,000. This 23% decrease in the customer base has been the largest factor in a 28% decrease in billed water volume in the same time period. Other contributing factors include the mandate for low flow fixtures, aging water meter stock, and customer conservation efforts that are partly driven by rising water prices.

Approximately 2.18 billion gallons of water were pumped, treated, and distributed to our customers in 2018. Our raw water sources are primarily the Chemung River and two well fields in close proximity to the river on Foster Island and Hudson Street. The raw water is blended and then pumped to our treatment facilities where it undergoes coagulation and sedimentation for solids removal. Gravity flow is used to move the settled water to the dual media filter beds for final treatment and disinfection.

Our distribution system contains 225 miles of water mains, 1,253 hydrants, and several thousand valves and service lines. In addition to our treatment facilities, we operate and maintain six pumping stations, four finished water reservoirs, and six wells.

Of our 225 miles of water mains, a bit more than half is in excess of 100 years old. There are two maps attached, one from 1914 by the previous owner, the Elmira Water, Light, and Railroad Co., and a second one from our hydraulic model showing the approx. full extents of our system. The 1914 map shows the water mains in red. An old map book we own has an entry from 1899 showing 51 miles of pipe, including 47.5 miles of cast iron and 3.5 miles of wooden mains; by then the wooden mains were mainly on the raw water system, and were replaced by cast iron in 1910. We have also included a map from our GIS showing the water mains color coded by age. The red mains (1915 and earlier) make up a large part of our current system.

Age is a factor in the continued serviceability of our distribution system. Water industry publications give widely varying figures for the service life of various piping materials. For cast iron (about 74% of our system) this ranges from 50 to 100 years on a nationwide basis from some sources, to 100-120 years in the northeast for small and medium systems, from an AWWA study. We are a medium sized system. These figures are an average; there is much more variability from system to system, depending on many factors such as local soil conditions, installation practices in use at the time, etc. We have had some corrosion issues. Attached are some pictures of water mains of a recent vintage, one installed in 1972 on E. Water St. across from the site of a former power plant. Corrosion was evident on other nearby conduits. The second picture on the same sheet was of a pipe installed in 1991 in a former swampland; the fill appeared to contain some ash, contributing to corrosive soil conditions.

Conditions inside a water main are also of great concern. We have extensive tuberculation problems in our mains. This is a common condition with unlined cast iron pipes and surface water sources. Cement lined pipes don't have this problem; cement lining was available from around the mid 1930's. It has been standard on ductile iron for many years.

Attached are a few pictures which show the extent of the tuberculation in our mains. This condition can greatly degrade water quality and hydraulic capacity and can negatively affect the flows available to large volume users such as the hospitals, larger factories, and the two prisons. This can also restrict flows available for fire fighting. Attached there is a black and red 8 ½ X 11 map with pictures illustrating most of the distribution system, color-coded by "C" value (roughness factor, high "C" value is smooth pipe) of the water mains. The pictures of the clogged mains are the ones that flow test at a "C" value less than 70, shown in red on the map. As can be seen from the map, this is more than half of our system, concentrated in the City of Elmira and Elmira Heights, the oldest portions of our system.

Approximately 100 miles of water main and 2500 valves are reaching or have reached the end of their useful lives. With each passing year, the risk of experiencing a significant breakdown and loss of serviceability increases. The Elmira Water Board is highly concerned about this situation and believes it needs to ramp up its replacement program to help insure the continued operation and reliability of our water distribution system. The cost of replacing this vital infrastructure will be in the tens of millions of dollars.

In addition to old water mains, we also have old valves. Even where a water main has many years of life left, a valve on that line will typically have a 40-60 year service life. We have approx. 5,000 valves in our system, many dating to the 1920's and 1930's. Larger valves, 16"-20", can easily cost \$20,000-\$25,000 installed per valve. It is not unusual for a planned valve replacement to turn into the replacement of several nearby valves as ones needed for a shutdown may not be operable.

In addition to water mains, we have over 17,500 service laterals to customer premises. The majority of our service lines are copper, but we still have approx. 475 lead service lines, and about 500 wrought iron service lines. The lead lines have well-publicized problems and take priority on replacement. The wrought iron lines are subject to the same tuberculation inside as bare cast iron lines, degrading water quality and choking off flow. Externally, they are susceptible to corrosion; there is a picture attached showing some wrought iron lines we have had to replace.

Customer meters are another link in our service area. Water meters are our cash register; accurate meters are critical to accurate billing. Metered water sales were 91% of our revenue budget for 2018; meters are what pays for everything else. Of our approx. 17,500 meters, about 160 are monthly accounts, many with larger meters. The rest, 17,340, are residential, of which about 12,000 are at the end of their service life. We are starting a meter replacement project in 2019. Meters alone are expected to cost about \$1,500,000. Radio equipment for the entire stock of 17,500 meters could cost an additional \$2,200,000. Our system losses have increased over the last three years and radio read equipment will greatly enhance our ability to monitor our system, gather data, help customers detect leakage, and aid in reducing our distribution system water losses.

Residential and commercial water meters are read and billed on a bi-monthly basis; for 2018 the average annual residential bill was \$356.60. Our larger industrial and institutional accounts are billed on a monthly basis, and represent 25.5% of our total water revenue. Public and private fire service accounts are billed on a quarterly basis. The total revenue for 2018 was 104.5% of the amount budgeted.

Overall operating expenses were under budget for 2018. Efficient water production practices by our Filtration Department staff, favorable river conditions throughout the year and chemical bid prices that were beneficial to the Water Board helped to keep chemicals under budget. As gas and diesel prices, as well as usage, can fluctuate greatly over the course of a year we budgeted conservatively for 2018. Due to careful oversight and steady pricing throughout the year our fuel costs were under budget for the year. As a result of a high experience rating the 2017 Workers Compensation expense was 160% of the budgeted amount; 2018 costs were expected to increase \$200,000 over the 2017 budgeted amount. We received a lower price at mid-year from another broker, saving substantially on our workers comp and business insurance costs.

Employee wage and benefit costs were 58.07% of the total operating expenses for 2018. Employee Health Insurance was slightly under budget. In 2019, wages will increase by 3.5% for all CSEA unit employees, as agreed upon in the current contract.

Capital Projects

<u>Water Main Replacement & Water Line Main-To-Curb Replacements</u> Total Cost \$77.055

Our maintenance crews are responsible for the ongoing repair, upgrade, and operation of our water distribution system. This system of water mains, valves, hydrants, and service lines encompasses the City of Elmira, the Village of Elmira Heights, and portions of the Towns of Southport, Horseheads, and Elmira.

The Elmira Water Board's construction crews are also called upon to install significant sections of replacement mains. In 2018, crews installed the following 1,587 feet of ductile iron water main and 38 feet of copper water main:

W. 7^{th} St. 1113 feet -6" Ductile Iron Ogden St. 474 feet -8" Ductile Iron E. Washington Ave. 38 feet $-1\frac{1}{2}$ " Copper

When crews replace mains, they also evaluate the need for the installation of valves, hydrants, and service line connections and complete these upgrades as needed. In 2018, 54 main to curb service lines were replaced or added for a cost of \$78,014; which includes 38 wrought-iron services replaced in preparation for a sewer project being done in the Town of Southport. There were also 86 new/replaced valves for a total cost of \$286,272; which includes one 16", three 20", and one 24" valve. Additionally, there were 23 new/replaced hydrants totaling \$68,037.

In 2018 we continued our large valve replacement program. We will continue our program in 2019 and each year thereafter. In doing so, we will be better prepared for a large valve shut-down in an emergency situation. We continuously strive to update our infrastructure.

The mains and service lines replaced or added above represent Elmira Water Board's continued commitment to address problems in the distribution system. Our system has many more areas that warrant our attention and will require much needed upgrades.

Capitalized Items

During 2018 the Water Board also had the following large capital expenditures:

Filter Plant / Pump Station Improvements	
ABB Variable Frequency Drives (2)	\$52,587
Maintenance Department	
2018 Case Backhoe	\$97,065
2018 Chevrolet Silverado	\$25,144
Rotair Air Compressor	\$15,995
1	, ,
Meter Department	
2018 Chevrolet Silverado w/cap	\$31,017
Zoro encircularion memp	Ψ01,017
Facilities Improvements	
Roof Replacements	\$17,805
John Deere Utility Tractor	\$26,519
voim Beere office Tractor	Ψ20,517
Computer IT upgrades	
Computers/Laptops/Tablets (10)	\$ 8,677
SCADA Upgrades	\$ 5,698
Power Edge Server	\$19,739
Software Upgrades	\$19,920
Software Opgraces	Ψ17,720

Other Activities

The Elmira Water Board is vigilant in its quest to discover and repair leaks. Our Maintenance and Meter crews are trained in leak detection and continually find and repair leaks.

In addition to the Elmira Water Board's efforts, in 2018 independent leak detection contractor Northeast Water Technology of Liberty, New York surveyed several miles of main throughout our distribution system. Water leaks on mains or services and several hydrant leaks, all of varying magnitude, were discovered and located through the use of electronic leak noise detectors and computerized correlators. Our maintenance crews subsequently repaired these leaks.

Village of Wellsburg

The water sold to the Village of Wellsburg amounted to \$33,754 in additional revenue.

While growth within its distribution system remains stagnant for the Elmira Water Board, opportunities to expand beyond the geographical system to help increase the revenue base are actively sought and encouraged.

Goals

The replacement of approximately 2,000-3,000 feet of pipe is scheduled for 2019. Infrastructure improvements are essential to the maintenance of the distribution system and are a top priority in budgetary planning. Reinvesting revenue funds back into the infrastructure is critical to maintaining the 140+ year old-system.

We will also be replacing lead service lines as part of the NYS Lead Service Line Replacement Grant program. We have completed a review of our main-to-curb records, resulting in the count of lead service lines decreasing from 1415 suspected lines to approx. 475 known active lines. This will allow us to better target replacement efforts, with fewer exploratory excavations.

Funding for capital improvements, except for lead service line replacements, for 2019 will come from operating revenue and borrowed funds. Ultimately, all costs - operational costs, capital spending, debt service – are paid for by operating revenue. As detailed above we have substantial needs for investment in this infrastructure. The City's attempts to divert money from the water system, if successful, will leave less water funds available for water system maintenance and replacements. The Board has closely reviewed each item's necessity and will monitor all spending during the year.

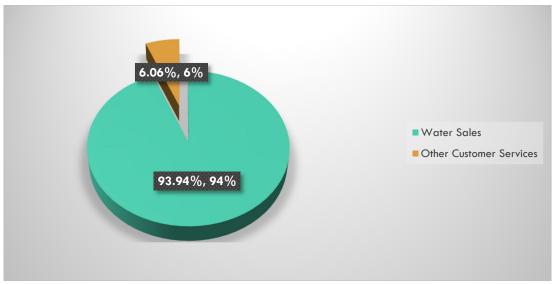
In closing, the Elmira Water Board would like to thank the officials, management, and staff of the City of Elmira for your continued assistance and support during 2018.

Respectfully Submitted,

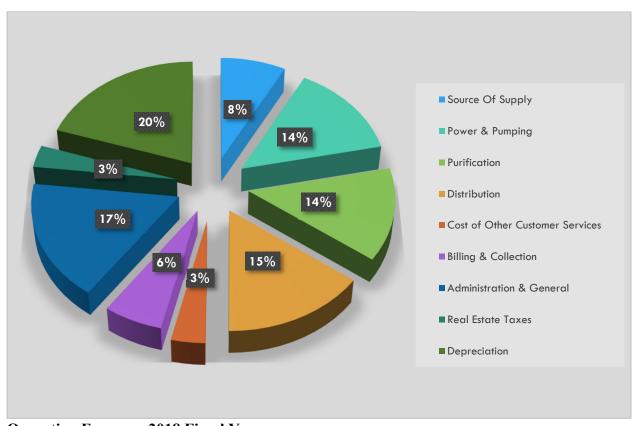
Martin do. Chalk

Martin D. Chalk,

President, Elmira Water Board



Operating Revenues 2018 Fiscal Year



Operating Expenses 2018 Fiscal Year

ELMIRA, NEW YORK

AUDITED FINANCIAL STATEMENTS

OTHER FINANCIAL INFORMATION

AND

INDEPENDENT AUDITOR'S REPORT

DECEMBER 31, 2018 AND 2017



Certified Public Accountants

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INDEPENDENT AUDITOR'S REPORT

Elmira Water Board (An Enterprise Fund of the City of Elmira, New York)

Report on the Financial Statements

We have audited the accompanying financial statements of Elmira Water Board, which comprise the statements of net position as of December 31, 2018 and 2017, and the related statements of activities and changes in net position and cash flows for the years then ended, and the related notes to the financial statements.

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 audits. We conducted our audits 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.

As discussed in Note A, the financial statements present only the accounts of the Elmira Water Board and are not intended to present the financial position, results of operations and cash flows of the City of Elmira, New York, in conformity with accounting principles generally accepted in the United States of America.

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 Elmira Water Board as of December 31, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note G to the financial statements, for the year ended December 31, 2018, the Company adopted new accounting guidance, Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Our opinion is not modified with respect to this matter.

Other Matter

Report on Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of the Company's proportionate share of the net pension liability, schedule of Company contributions, and schedule of changes in the total other postemployment benefits liability and related ratios on pages 5 through 9 and 34 through 37, 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 audits 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.

Mongel, Metzger, Barr & Co. LLP

Elmira, New York April 10, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2018

Introduction:

Our discussion and analysis of Elmira Water Board's (the "Company") financial performance provides an overview of the Company's financial activities for the fiscal year ended December 31, 2018. It also provides a description and understanding of the various financial statements and other financial and statistical information contained herein. Please read it in conjunction with the Company's basic financial statements.

Elmira Water Board is a local water company which provides water to various communities in the County of Chemung, New York.

Mission:

The Company is committed to providing the community with high quality water; to insuring the safety of our system; and to being fiscally responsible to our entire customer base.

Values:

- Water quality standards
- Customer service and satisfaction
- Fiscal responsibility
- Quality personnel
- Equitable rules and regulations

Continuing Goals:

- Maintain and upgrade infrastructure, consumer relations/outreach, consumer base expansion, and meet all Federal and State water quality standards.
- Utilize every resource available to meet all Federal and State water quality standards.
- Maintain and rehabilitate infrastructure to help ensure uninterrupted service.
- Expand consumer relations by educating customers on the history of the Company and providing water component and usage information.

MANAGEMENT'S DISCUSSION AND ANALYSIS, Cont'd

FOR THE YEAR ENDED DECEMBER 31, 2018

Operational Information:

The Company currently provides service to 17,349 accounts with an estimated population of 54,000 residents. Our institutional/industrial and wholesale customer bases represent 25.5% of our total water revenue and the residential customer base represents 74.5%.

We pumped, treated, and distributed to our customers approximately 2.18 billion gallons of water in 2018. In 2018, total water sales amounted to \$8,460,373; an increase of \$80,214 over the 2017 water sales of \$8,380,159. In 2018, the average annual residential usage, in gallons, was 47,462, and the average yearly residential bill was \$356.60.

In 2018 the Company altered billing dates for some residential bills in order to improve processes within the Office and Meter departments. This change resulted in residential water revenue of \$244,812. Moving forward these billing dates will remain consistent from year-to-year.

The distribution system contains 225 miles of water mains, 1,253 hydrants, approximately 5,000 valves, and several thousand service lines. The Company's Maintenance Department, consisting of 13 employees, maintains the system and updates the infrastructure throughout the distribution system.

Our water treatment plant provides twenty-four/seven supervision of water production. The Filtration Department's 10 employees oversee the filtration process. In conjunction with the Filter Plant, we operate and maintain six pumping stations, four finished water reservoirs, and six wells. The Company's Facilities Department, which consists of five employees, services these structures and related equipment as well as all other Company assets.

Residential and commercial water meters are read by our Meter Department, which total over 100,000 reads per year. The five employees in the department are also responsible for the installation and maintenance of meters, service line inspections, and other customer service related activities.

The Main Office, with its 5 employees, bills all residential and commercial accounts including fire lines and out-ofdistrict hydrants, processes payments from customers, provides customer service, administers delinquent accounts, and performs all accounting functions, i.e. accounts payable, accounts receivable, and employee payroll for the Company.

Employee wage and benefit costs comprise 58.07% of the operating expenses of the Company. The mandated New York State pension cost also continues to be a financial strain to the operations of the Company. The Company makes every effort to reserve the needed contributory funds and make prepaid payments to take advantage of extended New York State pension discounts.

MANAGEMENT'S DISCUSSION AND ANALYSIS, Cont'd

FOR THE YEAR ENDED DECEMBER 31, 2018

Capital Projects:

In 2018, the Company's maintenance department installed 1,587 feet of ductile iron water main to replace existing mains. The total capitalized cost of this work was \$77,055.

The engineering and maintenance departments also evaluate the need for the installation or replacement of valves, hydrants, and service line connections throughout the distribution system. In 2018 the Water Board continued its valve replacement program. In 2018 there were 86 valves replaced, for a total cost of \$286,272. By continuing the valve replacement program, the Company will be better prepared for emergency situations.

In 2018 there were also 54 main to curb service lines replaced or added for a cost of \$78,014. Additionally, there were 23 hydrants replaced or added for a total cost of \$68,037.

During 2018 the Water Board also had the following capital expenditures: replacement of one backhoe for \$97,065; replacement of two ABB Variable Frequency Drives at the Pump Station for a total cost of \$52,587; replacement of two vehicles for a total cost of \$56,161; and the purchase of a utility tractor with a backhoe attachment for \$34,915.

Financial Statements:

The Statement of Activities and Changes in Net Position present information showing the change in the Company's net position during the most recent fiscal year end, December 31, 2018. All changes in the net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of cash flows. Thus, revenues and expenses reported in this statement include all items that will result in cash received or disbursed in future fiscal periods. For example, the receipts due from customers, or the payment accrued for accumulated vacation days.

The Statement of Cash Flows provides information on the major sources and uses of cash during the year. The cash flow statement portrays net cash provided or used from operating and capital and related financing activities.

Current Assets and Liabilities

Current assets include cash and cash equivalents, accounts receivable, prepaid expenses, and inventory. Accounts receivable includes amounts due from customers. Current liabilities include accounts payable, accrued liabilities, interest payable, deferred revenues, and the current portion (due within one year) of long-term liabilities.

Accounts payable are amounts due to vendors and other agencies. Accrued liabilities include accrued payroll, payroll taxes, and other payroll related liabilities such as accumulated sick and vacation. Deferred revenues represent amounts received from customers during the current fiscal year for services to be rendered in the following year.

MANAGEMENT'S DISCUSSION AND ANALYSIS, Cont'd

FOR THE YEAR ENDED DECEMBER 31, 2018

Capital Assets, Net

The Company had been recording depreciation on its capital assets prior to implementing GASB Statement No. 34 at a rate of approximately 2% per year. As a result of the GASB pronouncement, the Company began recording depreciation on its capital assets at rates specific to each individual asset over its useful life, rather than applying a blanket rate to all capital assets. Depreciation expense on capital assets for the years ended December 31, 2018 and 2017 was \$1,348,957 and \$1,254,306, respectively.

In addition to recording depreciation on all capital assets using new rates specific to each individual class of assets, the Company changed its capitalization policy during 2017 to include all assets or repairs of \$1,000 or greater and/or the asset or major repair must have a useful life of more than two years or extend the useful life of an existing asset by more than two years.

The Water Board continues to replace/rehabilitate water mains, valves, hydrants and service lines throughout its entire service area. Larger capital projects of this nature are sometimes funded by bonding which is issued by the City of Elmira on behalf of the Company. Construction in progress represents the expenditure of funds during the 2018 fiscal year for four chlorinators located at the Filter Plant which will be placed in service during 2019.

Noncurrent Liabilities

Noncurrent liabilities consist of the long-term portion of debt related to the Company facilities. Included in long-term debt are obligations of the State of New York. Other long-term liabilities include other postretirement benefits payable and compensated absences payable (sick and vacation accruals to be paid upon departure).

Description of Expenses

- **Source of supply** includes activities related to the maintenance and operation of the raw water supply system.
- **Power and pumping** reflects activities related to powering and pumping of the water supply.
- **Purification** includes activities related to treatment and purification of the water supply.
- **Distribution** includes activities related to getting the water supply to the consumer.
- Cost of other customer services includes minor expenses not related to other functional categories.
- **Billing and collection** represents all support functions related to meter reading, billing, and collection of water revenues.
- Administration and general represents activities related to finance, personnel, and administrative functions.
- Real estate taxes represent property taxes paid on properties owned by the Company.
- **Depreciation** represents the cost/use of equipment, machinery and other properties in operations during the year.

MANAGEMENT'S DISCUSSION AND ANALYSIS, Cont'd

FOR THE YEAR ENDED DECEMBER 31, 2018

Non-operating Expenses

This amount represents interest and bond administration payments on outstanding debt.

Looking Forward:

The Company will continue to replace/rehabilitate mains, valves, services and hydrants throughout the distribution system. In addition, the Water Board is analyzing Automated Meter Reading (AMR and AMI) technology. This type of technology has the potential for significant savings in the labor and equipment categories of expenses. Various funding options will be reviewed to complete this project. The Water Board is also continuing to work on the replacement of lead service lines throughout its distribution system and has been awarded funds, eligible as a reimbursement, through New York's Clean Water Infrastructure Act of 2017 Lead Service Line Replacement Program (LSLRP).

Contacting the Water Board's Financial Management:

For further information, contact Mr. Mark LaDouce, General Manager, or Mrs. Alyssa L. Mack, Treasurer, at 261 West Water Street, Elmira, New York 14901.

STATEMENTS OF NET POSITION

		December 31,			
			2018		2017
ASSETS AND DEFERRED	OUTFLOWS				
CLIDDEN'T ACCETO					
CURRENT ASSETS		Ф	4.505.105	Ф	2 204 600
Cash		\$	4,507,197	\$	3,204,609
Restricted cash			1,749,489		1,833,729
Accounts receivable, less allowance for doub	otful				
accounts of \$35,000			925,931		864,454
Inventories			452,522		375,879
	TOTAL CURRENT ASSETS		7,635,139		6,278,671
DEFERRED OUTFLOWS OF RESOURCES					
Prepaid expenses			324,364		299,836
Related to postemployment benefits			979,630		-
Related to pensions			1,039,110		811,838
			2,343,104		1,111,674
<u>CAPITAL ASSETS</u> ,					
net of accumulated depreciation			33,714,184		34,089,844
1					
		\$	43,692,427	\$	41,480,189

The accompanying notes are an integral part of the financial statements.

December 31,			1,
	2018		2017
Ф	122.560	Ф	126.600
\$		\$	426,688
	,		131,930
	*		180,574
			104,391
	,		32,111
	303,300		267,956
	1,216,677		1,143,650
	2 249 185		241,102
	, ,		833,377
	,		3,689,945
			410,160
	6,193,071		5,174,584
	1.040.027		207.102
	1,048,936		207,103
	30,024,240		29,973,211
	774,889		774,297
	4,434,614		4,207,344
	35,233,743		34,954,852
\$	43,692,427	\$	41,480,189
	\$	\$ 432,569 175,026 159,954 117,347 28,481 303,300 1,216,677 2,249,185 278,322 3,257,375 408,189 6,193,071 1,048,936 30,024,240 774,889 4,434,614 35,233,743	\$ 432,569 \$ 175,026 159,954 117,347 28,481 303,300 1,216,677 2,249,185 278,322 3,257,375 408,189 6,193,071 1,048,936 30,024,240 774,889 4,434,614 35,233,743

STATEMENTS OF ACTIVITIES AND CHANGES IN NET POSITION

		Year ended I	Decen	nber 31,
		2018		2017
Operating revenues:				
Water sales		\$ 8,460,373	\$	8,380,159
Other customer services		 545,366		501,841
TOTAL	OPERATING REVENUES	9,005,739		8,882,000
Operating expenses:				
Source of supply		166,505		66,080
Power and pumping		885,160		855,382
Purification		776,380		760,371
Distribution		1,649,962		1,535,950
Cost of other customer services		152,937		150,132
Billing and collection		465,032		433,140
Administration and general		2,051,959		2,321,998
Real estate taxes		235,390		230,457
Depreciation		 1,348,957		1,254,306
TOTA	L OPERATING EXPENSES	 7,732,282		7,607,816
	OPERATING INCOME	1,273,457		1,274,184
Non-operating revenues (expenses):				
Interest income		1,508		596
Gain (loss) on disposal of capital assets		69,331		(35,057)
Interest and bond expense		 (125,442)		(138,131)
TOTAL NO	N-OPERATING EXPENSES	(54,603)		(172,592)
C	HANGE IN NET POSITION	 1,218,854		1,101,592
Net position at beginning of year		34,954,852		33,853,260
Cumulative effect of new accounting principle		(939,963)		
NET PO	SITION AT END OF YEAR	\$ 35,233,743	\$	34,954,852

The accompanying notes are an integral part of the financial statements.

STATEMENTS OF CASH FLOWS

	Year ended December 31,			mber 31,
		2018		2017
<u>CASH FLOWS - OPERATING ACTIVITIES</u>		<u> </u>		_
Receipts from services	\$	8,945,262	\$	8,850,163
Payments to suppliers and employees		(6,268,695)		(6,340,977)
NET CASH PROVIDED FROM				
OPERATING ACTIVITIES		2,676,567		2,509,186
CASH FLOWS - CAPITAL AND RELATED				
FINANCING ACTIVITIES				
Interest income received		1,508		596
Proceeds on disposal of capital assets		25,200		-
Purchase and construction of capital assets		(929,166)		(990,451)
Payment of bond principal		(426,689)		(432,415)
Payment of bond interest and administrative fees		(129,072)		(140,844)
NET CASH USED FOR				
CAPITAL AND RELATED FINANCING ACTIVITIES	_	(1,458,219)	_	(1,563,114)
NET CHANGE IN CASH		1,218,348		946,072
Cash at beginning of year		5,038,338		4,092,266
CASH AT END OF YEAR	\$	6,256,686	\$	5,038,338

STATEMENTS OF CASH FLOWS, Cont'd

	Year ended December 31,			nber 31,
		2018		2017
RECONCILIATION OF CHANGE IN NET POSITION TO NET				
CASH PROVIDED FROM OPERATING ACTIVITIES:				
Change in net position	\$	1,218,854	\$	1,101,592
Cumulative effect of new accounting principle		(939,963)		-
Adjustments to reconcile change in net position to net cash				
provided from operating activities:				
Interest income		(1,508)		(596)
Depreciation		1,348,957		1,254,306
(Gain) loss on disposal of capital assets		(69,331)		35,057
Interest and bond expense		125,442		138,131
Bad debts		903		381
Change in assets and liabilities:				
Accounts receivable		(62,380)		(32,218)
Inventories		(76,643)		74,878
Prepaid expenses		(24,528)		(120,950)
Net change in deferred outflows related to postemployment benefits		(979,630)		-
Net change in deferred outflows related to pensions		(227,272)		744,204
Accounts payable		43,096		(404,851)
Accrued expenses		(21,620)		180,574
Accrued compensation and related liabilities		12,956		5,499
Deferred inflows related to pensions		841,833		39,642
Compensated absences payable		33,373		(11,996)
Deferred revenues		1,000		-
Net postemployment benefits liability		2,008,083		58,796
Net pension liability		(555,055)		(553,263)
NET CASH PROVIDED FROM				
OPERATING ACTIVITIES	\$	2,676,567	\$	2,509,186

The accompanying notes are an integral part of the financial statements.

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2018 AND 2017

NOTE A: THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of reporting

Elmira Water Board (the "Company") is a local water company which provides water to various communities in the County of Chemung, New York. The Company is an enterprise fund of the City of Elmira, New York (the "City"). The City has proprietary interest in all assets and the responsibility for all obligations of the Company. The Company's accounts are segregated into a separate enterprise fund.

The financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Revenue recognition

Revenues are recorded when billed. Residential and smaller accounts are billed bi-monthly, and all other customers are billed monthly. In 2018, the Company altered billing dates for some residential bills in order to improve processes within the office and meter departments which resulted in additional residential water revenue in the fiscal year. Moving forward these billing dates will remain consistent from year-to-year.

Cash and cash equivalents

For purposes of cash flow reporting, cash equivalents include all temporary investments purchased with an original maturity of three months or less.

Collateral is required for cash balances not covered by FDIC insurance. Obligations that may be pledged as collateral are obligations of the United States and its agencies or obligations of New York State or its municipalities. At December 31, 2018 and 2017, the Company's cash balances were FDIC insured or collateralized with securities held by the pledging financial institution in the Company's name.

Accounts receivable and allowance for doubtful accounts

Accounts receivable are stated at the amount management expects to collect from outstanding balances. Management provides for probable uncollectible amounts through a provision for bad debt expense and an adjustment to a valuation allowance based on its assessment of the current status of individual receivables. Balances that are still outstanding after management has used reasonable collection efforts are written off through a charge to the valuation allowance for uncollectible accounts and a credit to the applicable accounts receivable. The allowance for uncollectible accounts at December 31, 2018 and 2017 was \$35,000. Based on the information available, the Company believes the allowance as of December 31, 2018 and 2017 is adequate. However, actual write-offs might exceed the recorded allowance.

Inventories

Inventories, consisting of supplies, parts and gasoline, are stated at the lower of cost and net realizable value.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE A: THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Cont'd

Pensions

For purposes of measuring 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 York State and Local Employees' Retirement System ("the System") and additions to/deductions from the System's net position have been determined on the same basis as they are reported by the System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms

Other postemployment benefits (OPEB)

For purposes of measuring the OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the Company's plan has been supplied to an actuary for determination of those amounts. The Company operates the OPEB plan on a pay-as-you-go basis.

Capital assets

Capital assets are stated on the basis of cost. Expenditures for renewals and betterments are capitalized while expenditures for repairs and maintenance are charged to operations as incurred. Upon sale or retirement, the related cost and allowances for depreciation are removed from the accounts and the related gain or loss is reflected in operations. Depreciation is computed using the straight-line method on a basis considered adequate to depreciate the assets over their estimated useful lives, which range from three to one hundred seven years.

Use of estimates in the preparation of financial statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

Subsequent events

The Company has conducted an evaluation of potential subsequent events occurring after the statement of net position date through April 10, 2019, which is the date the financial statements are available to be issued. There were no material subsequent events that required additional disclosures in these financial statements.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE B: RESTRICTED CASH

Restricted cash represents unspent note proceeds and funds set aside for future capital expenditures, debt service, and retirement or postemployment benefit contributions. Certain restricted cash funds are restricted by grantors or by law through the Company's charter. At December 31, 2018 and 2017, these amounts totaled \$774,889 and \$774,297, respectively, and were recorded as net assets restricted for capital improvement on the statements of financial position. Restricted cash balances consist of the following:

	December 31,			1,
	2018		2017	
Water System Improvement Fund	\$	40,082	\$	40,051
New York State Employee's Retirement Reserve Fund		351,678		375,103
Employee Benefit Reserve Fund		65,023		-
System Wide Improvement Fund		455,078		454,730
Capital Reserve Fund		279,730		279,516
Debt Service Fund		557,898		684,329
	\$	1,749,489	\$	1,833,729

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE C: CAPITAL ASSETS

Capital asset activity for the year ended December 31, 2018 follows:

	Balance January 1, 2018	Additions	Deletions	Balance December 31, 2018
Non-depreciable capital assets:				
Land	\$ 510,227	\$ -	\$ -	\$ 510,227
Construction in process	27,390	<u>-</u> _	(10,718)	16,672
TOTAL NON-DEPRECIABLE				
CAPITAL ASSETS	537,617	-	(10,718)	526,899
Depreciable capital assets:				
Source of supply	4,359,400	-	(7,555)	4,351,845
Power and pumping	4,030,352	52,587	(1,177)	4,081,762
Purification and treatment	15,976,364	1,582	-	15,977,946
Distribution	33,070,816	674,885	(31,633)	33,714,068
Other	4,510,232	210,830	(603,988)	4,117,074
TOTAL DEPRECIABLE				
CAPITAL ASSETS	61,947,164	939,884	(644,353)	62,242,695
Less accumulated depreciation for:				
Source of supply	(1,997,776)	(77,915)	92,307	(1,983,384)
Power and pumping	(2,964,646)	(171,869)	1,059	(3,135,456)
Purification and treatment	(9,864,185)	(451,767)	-	(10,315,952)
Distribution	(10,762,477)	(495,041)	8,155	(11,249,363)
Other	(2,805,853)	(152,365)	586,963	(2,371,255)
TOTAL ACCUMULATED				
DEPRECIATION	(28,394,937)	(1,348,957)	688,484	(29,055,410)
CAPITAL ASSETS, NET	\$ 34,089,844	\$ (409,073)	\$ 33,413	\$ 33,714,184

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE D: LONG-TERM DEBT

Long-term debt of the Company is summarized as follows:

	Year ended		Decem	nber 31,
	Decemb	er 31, 2018	2018	2017
	Interest	· · · · · · · · · · · · · · · · · · ·		
Dand marchle in convert installments remains from	payments	payments	Amount	Amount
Bond payable in annual installments varying from \$95,000 to \$110,000 through November 2024 plus interest varying from 4.68% to 4.87%, payable semi-annually.	\$ 16,447	\$ 90,000	\$ 610,000	\$ 700,000
Bond payable in annual installments varying from \$115,000 to \$155,000 through August 2027 plus interest varying from 1.75% to 5%, payable semi-annually. (Refinanced in 2014)	41,994	115,000	1,160,000	1,275,000
Bond payable in annual installments varying from \$30,000 to \$35,000 through November 2024 plus interest varying from 5.93% to 6.18%, payable semi-annually. (Refinanced in 2012)	4,357	30,000	195,000	225,000
Bond payable in an annual installment of \$10,000 in August 2019 plus interest at 1.75%, payable semi-annually. (Refinanced in 2014)	475	15,000	10,000	25,000
Bond payable in annual installments varying from \$70,000 to \$107,400 through May 2029 plus interest varying from 4.13% to 5%, payable semi-annually.	46,623	67,000	966,300	1,033,300
Bond payable in annual installments varying from \$32,800 to \$39,600 through July 2027 plus interest varying from 2% to 2.63%, payable semi-annually.	7,690	32,200	325,600	357,800
Bond payable in annual installments varying from \$48,730 to \$54,560 through May 2025 plus interest varying from 2% to 2.125%, payable semi-annually.	7,809	47,310	360,080	407,390
Balance forward	125,395	396,510	3,626,980	4,023,490

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE D: LONG-TERM DEBT, Cont'd

	Year ended			December 31,				
	December 31, 2018		2018			2017		
		Interest Principal payments payments		Amount			Amount	
Balance forward	\$	125,395	\$	396,510	\$	3,626,980	\$	4,023,490
Capital lease payable in annual installments of \$32,837 including interest at 2.855% through July 2020.		0.550		20.150		(2.04)		02.142
Collateralized by certain equipment. (1)		2,659		30,179		62,964		93,143
Total principal and interest	\$	128,054	\$	426,689		2 (00 044		4.116.622
Total bonds payable						3,689,944		4,116,633
Less current portion						432,569		426,688
					\$	3,257,375	\$	3,689,945

⁽¹⁾ The capital lease is for the right to use certain equipment which is included in machinery and equipment in the statement of net position in the amount of \$175,895 at both December 31, 2018 and 2017. Accumulated depreciation amounted to \$63,339 and \$38,211 for the years ended December 31, 2018 and 2017, respectively, resulting in a net book value of \$112,556 and \$137,684, respectively.

The following is a schedule of maturities of debt:

<u>Year</u>	P	rincipal	Interest		
2019	\$	432,569	\$	140,581	
2020		427,695		126,655	
2021		410,680		112,049	
2022		426,740		97,398	
2023		436,580		81,565	
Thereafter		1,555,680		166,251	
	<u>\$</u>	3,689,944	\$	724,499	

Certain bonds provide for subsidized interest payments. Escrow accounts earn interest which is used to reduce interest payments. The schedule of maturities above does not include this interest subsidy.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE E: EMPLOYEE BENEFIT PLAN

Plan description

The Company participates in the New York State and Local Employees' Retirement System ("the System"). This is a cost-sharing multiple-employer defined benefit retirement system. The net position of the System is held in the New York State Common Retirement Fund ("the Fund"), which was established to hold all assets and record changes in fiduciary net position allocated to the System. The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the System. The Comptroller is an elected official determined in a direct statewide election and serves a four-year term. Thomas P. DiNapoli has served as Comptroller since February 7, 2007. In November 2018, he was elected for a new term commencing January 1, 2019. System benefits are established under the provisions of the New York State Retirement and Social Security Law ("RSSL"). Once a public employer elects to participate in the System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. The System is included in the State's financial report as a pension trust fund. Separately issued for the System can be accessed on the Comptroller's website www.osc.state.nv.us/retire/about us/financial statements index.php or by writing to the New York State and Local Retirement System, 110 State Street, Albany, NY 12244.

Benefits provided

The system provides retirement benefits, as well as death and disability benefits. Eligibility is based on Tier membership and years of service.

Retirement

Generally, the retirement benefit is 1.67% of final average salary for each year of service if the member retires with less than 20 years. If the member retires with 20 or more years of services, the retirement benefit increases depending on Tier membership. Final average salary is the average of the wages earned in the three highest consecutive years of employment. For Tier 3, 4 and 5 members, each year used in the final average salary calculation is limited to no more than 10% greater than the average of the previous two years. For Tier 6 members, each year used in the final average salary calculation is limited to no more than 10% greater than the average of the previous four years.

Disability Retirement Benefits

Disability retirement benefits are available to members unable to perform their job duties because of permanent physical or mental incapacity. There are three general types of disability benefits: ordinary, performance of duty, and accidental disability benefits. Eligibility, benefit amounts, and other rules such as any offsets or other benefits depend on a member's tier, years of service, and plan.

Ordinary Death Benefits

Death benefits are payable upon the death, before retirement, of a member who meets eligibility requirements as set forth by law. The first \$50,000 of an ordinary death benefit is paid in the form of group term life insurance. The benefit is generally three times the member's annual salary. For most members, there is also a reduced post-retirement ordinary death benefit available.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE E: EMPLOYEE BENEFIT PLAN, Cont'd

Post-Retirement Benefit Increases

A cost-of-living adjustment is provided annually to: (i) all pensioners who have attained age 62 and have been retired for five years; (ii) all pensioners who have attained age 55 and have been retired for ten years; (iii) all disability pensioners, regardless of age, who have been retired for five years; (iv) System recipients of an accidental death benefit, regardless of age, who have been receiving such benefit for five years and (v) the spouse of a deceased retiree receiving a lifetime benefit under an option elected by the retiree at retirement. An eligible spouse is entitled to one-half the cost-of-living adjustment amount that would have been paid to the retiree when the retiree would have met the eligibility criteria. This cost-of-living adjustment is a percentage of the annual retirement benefit of the eligible member as computed on a base benefit amount not to exceed \$18,000 of the annual retirement benefit. The cost-of-living percentage shall be 50 percent of the annual Consumer Price Index as published by the U.S. Bureau of Labor, but cannot be less than 1 percent or exceed 3 percent.

Contributions

The System is noncontributory except for employees who joined the System after July 27, 1976, who contribute 3 percent of their salary for the first ten years of membership, and employees who joined on or after January 1, 2010 who generally contribute 3 percent of their salary for their entire length of service. For Tier 6 members, the contribution rate varies from 3 percent to 6 percent depending on salary. Generally, Tier 5 and 6 members are required to contribute for all years of service. Under the authority of the RSSL, the Comptroller annually certifies the actuarially determined rates expressly used in computing the employers' contributions based on salaries paid during the Systems' fiscal year ending March 31. The pension contribution for the years ended December 31, 2018 and 2017 amounted to \$347,826 and \$336,119, respectively.

Pension plan fiduciary net position

The components of the current-year net pension liability of the employers as of March 31, 2018, were approximately as follows:

Employers' total pension liability \$183,400,590,000
Plan net position (180,173,145,000)
Employers' net pension liability \$3,227,445,000

Ratio of plan net position to the employers' total pension

liability 98.24%

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE E: EMPLOYEE BENEFIT PLAN, Cont'd

Actuarial assumptions

The total pension liability for the March 31, 2018 and 2017 measurement dates were determined by using an actuarial valuation as of April 1, 2017 and 2016, respectively, with updated procedures used to roll forward the total pension liability to March 31, 2018 and 2017, respectively. The following actuarial assumptions were used in the valuation as of March 31, 2018 and 2017:

Actuarial cost method	Entry age normal
Inflation	2.5%
Salary scale	3.8%
Investment rate of return,	
including inflation	7.0% compounded annually, net of investment expenses
Cost of living adjustments	1.3% annually
Decrements	Developed from the Plan's 2015 experience study of the
	period April 1, 2010 through March 31, 2015
Mortality improvement	Society of Actuaries Scale MP-2014

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	Target	Long-term expected real
Asset Class	allocation	rate of return
Domestic equity	36 %	4.55 %
International equity	14	6.35 %
Private equity	10	7.50 %
Real Estate	10	5.55 %
Absolute return strategies	2	3.75 %
Opportunistic portfolio	3	5.68 %
Real assets	3	5.29 %
Bonds and mortgages	17	1.31 %
Cash equivalents	1	(.25)%
Inflation-indexed bonds	4	1.25 %
	100 %	

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE E: EMPLOYEE BENEFIT PLAN, Cont'd

The real rate of return is net of the long-term inflation assumption of 2.5%.

Discount rate

The discount rate used to calculate the total pension liability at March 31, 2018 and 2017 was 7.0%. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially. Based upon the assumptions, the System'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 total pension liability.

Sensitivity of the net pension liability to the discount rate assumption

The following presents the current-period net pension liability of the Company calculated using the current-period discount rate assumption of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0%) or 1-percentage-point higher (8.0%) than the current rate at the March 31, 2018 measurement date:

	1% Decrease (6.0%)	Discount (7.0%)	1% Increase (8.0%)	
Company's proportionate share of the Net Pension Liability (Asset)	\$ 2,105,862	\$ 278,322	\$ (1,267,703)	

<u>Pension liabilities</u>, <u>pension expense</u>, and <u>deferred outflows of resources and deferred inflows of resources related to pensions</u>

At December 31, 2018 and 2017, the Company reported a liability of \$278,322 and \$833,377 respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of March 31, 2018 and 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of April 1, 2017 and 2016. The Company's proportion of the net pension liability was based on a projection of the Company's long-term share of contributions to the pension plan relative to the projected contributions of the City of Elmira, New York, actuarially determined. At December 31, 2018 and 2017, the Company's proportion was 52% and 43%, respectively.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE E: EMPLOYEE BENEFIT PLAN, Cont'd

For the years ended December 31, 2018 and 2017, the Company recognized pension expense of \$407,331 and \$566,702, respectively. The Company reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	December 31,			
	2018		20	017
	Deferred	Deferred	Deferred	Deferred
	Outflows of	Inflows of	Outflows of	Inflows of
	Resources	Resources	Resources	Resources
Differences between expected and actual experience	\$ 99,269	\$ 82,032	\$ 20,884	\$ 126,553
Changes in assumptions	184,551	-	284,712	-
Net difference between projected and actual earnings on pension plan	404,241	797,932	166,459	-
Changes in proportion and differences between Company contributions and proportionate share	3,223	168,972	3,664	80,550
Company contributions subsequent to the measurement date	347,826 \$ 1,039,110		336,119 \$ 811,838	\$ 207,103

Deferred outflows of resources related to pensions resulting from Company contributions subsequent to the measurement date will be recognized as a reduction in the net pension liability in the year ended December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended December 31,		
2019	\$	11,656
2020		(2,232)
2021		(249,286)
2022		(117,790)
	<u>\$</u>	(357,652)

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS

Plan description

The Company provides medical coverage to eligible employees, retirees and dependents through a choice of four community rated health plans with Excellus Blue Cross Blue Shield. The benefits of each are outlined in the table below:

Benefits provided

	<u>Platinum 6</u>	Gold 6	Silver 2	Bronze 4
Deductible	None	\$1,400 / \$2,800	\$2,000 / \$4,000	\$6,550 / \$13,100
Coinsurance	None	85%	80%	100%
Out-of-Pocket Maximum	\$6,550 / \$13,100	\$2,800 / \$5,600	\$6,550 / \$13,100	\$6,550 / \$13,100
Out-of-Network Benefits	Covered at 80% subject to deductible (\$500 / \$1,000)	Covered at 70% subject to deductible	Covered at 60% subject to deductible	Covered at 100% subject to deductible
Inpatient Hospitalization	\$750 Copay per admission	Deductible & Coinsurance	Deductible & Coinsurance	Deductible & Coinsurance
Outpatient Services	Copay dependent on service	Deductible & Coinsurance	Deductible & Coinsurance	Deductible & Coinsurance
Office Visits	\$30 PCP / \$50 Specialist	Deductible & Coinsurance	Deductible & Coinsurance	Deductible & Coinsurance
Emergency Room	\$250 Copay per visit	Deductible & Coinsurance	Deductible & Coinsurance	Deductible & Coinsurance
30 Day Rx Supply	\$5 / \$35 / \$70	\$5 / \$35 / \$70	\$5 / \$45 / \$90	Deductible & Coinsurance

To assist in meeting the deductible, the Company makes contributions into a Health Savings Account (HSA) for each member who enrolls in one of the high deductible health plans (Gold 6, Silver 2 and Bronze 4). The Company contributes \$1,400 / \$2,800 for Gold 6 enrollees, \$2,000 / \$4,000 for Silver 2 enrollees and \$3,450 / \$6,850 for Bronze 4 enrollees.

Dental and vision coverage is also provided to retirees.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Eligibility

All retirees hired prior to January 1, 2018 may retire from the Company with a minimum age of fifty-five (55) and a minimum of five (5) years of state retirement eligible service in order to be eligible for postretirement healthcare benefits.

All retirees hired on/after January 1, 2018 may retire from the Company with a minimum age of fifty-five (55) and a minimum of ten (10) consecutive years of service with the Company in order to be eligible for postretirement healthcare benefits. Retirees shall be eligible to select coverage of individual, self plus dependent, self plus child(ren) and family plan, however once a retiree or their dependent becomes eligible for Medicare or Medicaid, whichever comes first, the Company is no longer obligated to provide health care coverage for the retiree, spouse or dependent.

Contributions

Eligible retirees receive medical coverage from the Company until the retiree attains Medicare or Medicaid eligibility, whichever occurs first. For retirees hired prior to January 1, 2018 the Company contributes 75% of the applicable plan premium until the retiree attains age 60, at which point the Company will provide 100% coverage. For retirees hired on / after January 1, 2018 the Company contributes 75% of the applicable plan premium for the duration of the coverage period.

Employees covered by benefit terms

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

Inactive employees or beneficiaries currently	
receiving benefit payments	26
Active employees	42
	68

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Actuarial assumptions

The total other postemployment benefit (OPEB) liability for the January 1, 2018 measurement date was determined by using an actuarial valuation as of that date. The following actuarial assumptions were used in the valuation:

Actuarial Cost Method Entry-Age Normal - Level Percent of Pay

Plan Type Single Employer Defined Benefit Plan

Discount Rate 3.44%, as of the measurement date; Source: Bond Buyer Weekly 20-Bond GO

Index

Salary Scale 3%

Rate of Inflation 2.20%

Mortality The RPH-2014 Mortality Table for Healthy Annuitants, sex distinct, with

generational mortality adjusted to 2006 using scale MP-2014, and projected

forward with scale MP-2017.

Turnover Rates of decrement due to turnover based on the experience under the New

York State & Local Retirement System as prepared by the Department of Civil Service's actuarial consultant in the report titled, <u>Development of Recommended Actuarial Assumption for New York State/SUNY GASB 45</u>

Valuation (September 2016).

Retirement Incidence Rates of decrement due to retirement based on the experience under the New

York State & Local Retirement System as prepared by the Department of Civil Service's actuarial consultant in the report titled, <u>Development of Recommended Actuarial Assumption for New York State/SUNY GASB 45</u>

Valuation (September 2016).

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Medical Trend	To Fiscal Year Ending	Trend
	2019	4.40%
	2020	7.50%
	2021	7.00%
	2022	6.75%
	2023	7.14%
	2028	5.70%
	2033	5.70%
	2038	5.70%
	2048	5.17%
	2058	4.92%
	2068	4.62%
	2078	4.03%
	2088	4.03%

The above trend rates were developed using the baseline projection of the SOA Long-Run Medical Cost Trend Model (v2018_c). The short term (first 4 years) trend rates were based on the recent premium rate history for the Company. The long-term (after 4 years) trend rates were based on the following assumptions:

Rate of Inflation: 2.2%

Rate of Growth in Real Income/GDP per capita: 1.6% Extra Trend due to Technology and other factors: 1.3%

Health Share of GDP Resistance Point: 25%

Excise Tax

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2021 for high cost employer sponsored health coverage beyond applicable thresholds. In order to capture the impact of the excise tax, adjustments were made to the base medical trend rates. Trend rates are scaled up by 10% for the first 20 years after the premium is assumed to exceed the threshold, and scaled up by 5% thereafter.

Dental/Vision Trend 2%

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Election Percentage Upon retirement it is assumed that eligible employees will elect to

participate in the Company's OPEB plan at the following rates:

Participation	% Electing
Group	Coverage
Retiree	100%
Retiree's	85%
Spouse	83%
Surviving	0%
Spouse	U%0

Health Plan Election It has been assumed for this valuation that future retirees will enroll in the

Company's medical plans at the following rates:

Participation	% Electing
Group	Coverage
Platinum 6	5%
Gold 6	80%
Silver 2	10%
Bronze 4	5%

Marriage Rate It is assumed that 70% of retirees will be married at the time of their

retirement, with the male spouse assumed to be approximately 3 years

older than the female.

Morbidity Based on results from Table 5 of "Health Care Costs - From Birth to

Death" by Dale Yamamoto, part of the Health Care Cost Institutes

Independent Report Series, June 2013.

Per Capita Costs

The Company provides four community rated plans to all eligible

employees, retirees and dependents. Age-adjusted premiums, including administrative fees, were used to calculate the actuarial accrued liability.

Discount rate

The discount rate used to calculate the total OPEB liability was 3.44% as of January 1, 2018. With a pay-as-you-go funded plan the discount rate is calculated using a yield index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Changes in the total OPEB liability

Balance at January 1, 2017	\$ 1,270,895
Changes for the year:	
Service cost	50,018
Interest	48,233
Changes of benefit terms	(39,730)
Differences between expected and actual experience	295,460
Changes in assumptions and other inputs	714,138
Benefit payments	 (89,829)
	 978,290
Balance at January 1, 2018	\$ 2,249,185

Changes of assumptions and other inputs reflect a change in the discount rate from 3.78% on January 1, 2017 to 3.44% on January 1, 2018.

Sensitivity of the total OPEB liability to changes in the discount rate assumption

The following presents the Total OPEB Liability of the Company, as well as what the Company's Total OPEB Liability would be if it were calculated using a discount rate that is 1-percentage point lower (2.44%) or 1-percentage point higher (4.44%) than the current discount rate:

	19	% Decrease 2.44%	Current 3.44%		1	% Increase 4.44%
Total OPEB Liability	\$	2,388,034	\$	2,249,185	\$	2,117,951

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates

The following presents the Total OPEB Liability of the Company, as well as what the Company's Total OPEB Liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower or 1-percentage point higher than the current healthcare cost trend rates:

	Current Trend				
	1% Decrease	Rates	1% Increase		
Total OPEB Liability	\$ 2,066,281	\$ 2,249,185	\$ 2,460,827		

OPEB liabilities, OPEB expense, and deferred outflows of resources and deferred inflows of resources related to other postemployment benefits

At December 31, 2018 the Company reported a liability of \$2,249,185. The Net OPEB Liability is equal to the Total OPEB Liability minus the Fiduciary Net Position. Since the Company operates the OPEB Plan on a payas-you-go basis the Fiduciary Net Position is \$0. The Net OPEB liability was measured as of January 1, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2018.

For the year ended December 31, 2018 the Company recognized OPEB expense of \$301,213. The calculation of the OPEB Expense for the measurement period ending January 1, 2018 is shown in the following table:

Service Cost	\$ 50,018
Interest on the total OPEB Liability	48,233
Current-period benefit changes	(39,730)
Expensed portion of current-period difference between expected and	
actual experience in the total OPEB Liability	71,024
Expensed portion of current-period changes of assumptions	 171,668
	\$ 301,213

For the year ended December 31, 2018, the Company reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

		Deferred utflows of esources	Deferred Inflows of Resources
Differences between expected and actual experience Changes of assumptions or other inputs Company contributions subsequent to the measurement date	\$	224,436 542,470 212,724	\$ -
•	\$	979,630	\$ -

NOTES TO FINANCIAL STATEMENTS, Cont'd

DECEMBER 31, 2018 AND 2017

NOTE F: POSTEMPLOYMENT HEALTHCARE BENEFITS, Cont'd

The amortization period for the beginning of the measurement period is 4.16 years for the average expected remaining service life of members. Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ended December 31,

2022	 38,830
2021	242,692
2020	242,692
2019	\$ 242,692

NOTE G: CHANGE IN ACCOUNTING PRINCIPLE

For the year ended December 31, 2018, the Company has implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* which replaced the requirements of GASB Statement 45. The implementation of the statement required the Company to recognize the entire postemployment benefit obligation liability, expense, and deferred outflows of resources and deferred inflows of resources related to the postemployment liability. The beginning net position has been decreased by \$939,963 as a cumulative effect of the new accounting principle. Prior year comparative information does not reflect this change in accounting principle because it was not practical to do so.

NOTE H: LEGAL CONTINGENCIES

The Company is a party to various legal actions arising in the ordinary course of business, the aggregate effect of which, in management's and legal counsel's opinion, would not be material to the financial condition of the Elmira Water Board.

OTHER FINANCIAL INFORMATION

SCHEDULE OF THE COMPANY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Year ended December 31, 2018 2017 2016 2015 Company's proportion of the net pension liability of the City of Elmira, NY 52% 43% 33% 34% Company's proportionate share of the net pension liability 278,322 833,377 \$ 1,386,640 299,059 Company's covered payroll \$ 2,634,199 \$ 2,497,273 \$ 2,349,599 \$ 2,218,205 Company's proportionate share of the net pension liability as a percentage of its coveredemployee payroll 10.6% 33.4% 59.0% 13.5% Plan fiduciary net position as a percentage of the total pension liability 98.20% 94.70% 90.68% 97.95%

The amounts presented for each fiscal year were determined as of the System's measurement date.

SCHEDULE OF COMPANY CONTRIBUTIONS

	Year ended December 31,			
	2018	2017	2016	2015
Contractually required contribution	\$ 347,826	\$ 336,119	\$ 355,615	\$ 368,411
Contribution in relation to the contractually required contribution	347,826	336,119	355,615	368,411
Contribution deficiency (excess)	\$ -	\$ -	<u>\$</u>	\$ -
Company's covered-employee payroll	\$ 2,634,199	\$ 2,497,223	\$ 2,349,599	\$ 2,218,205
Contributions as a percentage of covered- employee payroll	13.2%	13.5%	15.1%	16.6%

The amounts presented for each fiscal year were determined as of the fiscal year end.

SCHEDULE OF CHANGES IN THE COMPANY'S TOTAL OTHER POSTEMPLOYMENT BENEFITS LIABILITY AND RELATED RATIOS

YEAR ENDED DECEMBER 31, 2018

Service cost	\$	50,018
Interest		48,233
Changes of benefit terms		(39,730)
Differences between expected and actual experience		295,460
Changes of assumptions or other inputs		714,138
Benefit payments		(89,829)
Net change in total OPEB liability		978,290
Total OPEB liability - beginning of year	1	,270,895
Total OPEB liability - end of year	\$ 2	2,249,185
Company's covered-employee payroll	\$ 2	2,634,199
Contributions as a percentage of covered-employee payroll		85.4%

Notes to schedule:

Changes in assumptions:

Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period. The discount rate in effect at the current measurement date is 3.44%.

