MADISON WATER UTILITY

An Enterprise Fund of the
City of Madison, Wisconsin

FINANCIAL STATEMENTS

Including Independent Auditors' Report

As of and for the Years Ended December 31, 2018 and 2017

MADISON WATER UTILITY
An Enterprise Fund of the City of Madison, Wisconsin

TABLE OF CONTENTS
As of and for the Years Ended December 31, 2018 and 2017

INDEPENDENT AUDITORS' REPORT

To the Water Utility Board
Madison Water Utility
Madison, Wisconsin

Report on the Financial Statements

We have audited the accompanying financial statements of Madison Water Utility, an enterprise fund of the City of Madison, Wisconsin, as of and for the years ended December 31, 2018 and 2017, and the related notes to the 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.

Auditors' 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 audits 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 auditors' 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 Madison Water Utility'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 Madison Water Utility'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 Madison Water Utility as of December 31, 2018 and 2017, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 1, the financial statements present only the Madison Water Utility enterprise fund and do not purport to, and do not, present fairly the financial position of the City of Madison, Wisconsin, as of December 31, 2018 and 2017 and the respective changes in financial position, or cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As discussed in Note 1, the Madison Water Utility adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* effective January 1, 2018. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.

Madison Water Utility has not presented the Schedule of Funding Progress for the other post-employment benefit program that accounting principles generally accepted in the United States of America require to supplement, although not be a part of it, the financial statements. Our opinion on the financial statements is not affected by this missing information. We note that this information is included in the City of Madison’s financial statements.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The supplemental information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information is fairly stated in all material respects in relation to the financial statements as a whole.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
June 19, 2019

MANAGEMENT’S DISCUSSION AND ANALYSIS

MADISON WATER UTILITY

MANAGEMENT'S DISCUSSION AND ANALYSIS
December 31, 2018 and 2017

GENERAL INFORMATION ABOUT MADISON WATER UTILITY

Madison recognized the need for a central water supply early in its history. The common council of the City of Madison (municipality) directed its waterworks committee to establish the Madison Waterworks on September 5, 1881. Financing was obtained and contracts let in spring of 1882. Pumping commenced on December 7, 1882. Early management was vested in the common council through its committee, and on March 2, 1884, general management was transferred to a Board of Water Commissioners. The Madison Waterworks achieved department status in the early 1960's and, at that time, became the Madison Water Utility (utility) under a General Manager leadership with a Water Utility Board that continues today.

The utility has always been a groundwater system in spite of being surrounded by lakes. The utility currently has 23 deep wells with a capacity of 71 million gallons per day. In common with other Wisconsin water utilities, the Public Service Commission of Wisconsin (PSCW) regulates the utility in matters of rates, rules and levels of service.

2018 FINANCIAL HIGHLIGHTS

- Total operating revenues increased $180,000 or 0.5% from 2017 to 2018, while pumpage decreased 2.1% for that same time frame.

- Income before capital contributions and transfers decreased $1,000,000 or 23.9% from the prior year. The decrease was due largely to an increase in depreciation expense of $600,000 in 2018 compared to 2017 and an increase of $340,000 in expense associated with the closing of preliminary test well sites.

- The utility implemented GASB Statement No. 75 during 2018 which revised the actuarial method of calculating the city's other postemployment benefits. The new standard increased the water utility's liability by $1,700,000 from 2017 and decreased the beginning net position as of January 1, 2018 by $1,800,000.

- The utility added $29,900,000 in capital assets during 2018 which were financed with the issuance of 2018 revenue bonds. Revenue bonds in the amount of $41,600,000 were issued to cover capital project from 2017 through 2019.

2017 FINANCIAL HIGHLIGHTS

- Total operating revenues decreased $633,000 or 1.8% from 2016 to 2017, while pumpage decreased 4.4% for that same time frame.

- Income before capital contributions and transfers decreased $4.0 million or 49.0% from the prior year. The decrease was due to an over $2.0 million tank painting expense in 2017 compared to 2016, increased interest expense of $700,000 on outstanding debt, and increased depreciation expense of $600,000.

RATES

The utility filed an application to review rates with the Public Service Commission of Wisconsin that was accepted on November 3, 2017 with the final rate order effective November 1, 2018. The Utility was authorized an overall rate increase of 30.6% or $10.4 million in future revenue streams and an 8.0% rate of return. The last rate increase was effective on September 29, 2015. The utility is currently ranked sixth for residential rates out of eighty utilities classified as AB (over 4,000 customers) in Wisconsin.

UTILITY FINANCIAL ANALYSIS

The Statement of Net Position includes all of the utility's assets and liabilities and provides information about the nature and amount of investments in resources and the obligations to creditors. This statement provides the basis for evaluating the capital structure and assessing the liquidity and financial flexibility of the utility.

A summary of the utility's Statements of Net Position is presented in Table 1 as of December 31:

Table 1
Condensed Statements of Net Position
(000's)

	2018	2017	2016
Current and Other Assets	$ 58,926	$ 42,747	$ 62,207
Capital Assets	302,626	286,479	266,711
Total Assets	361,552	329,226	328,918
Deferred Outflows of Resources	4,518	5,248	6,889
Current Liabilities	20,176	18,730	15,643
Long-term Debt Outstanding	202,685	171,785	180,840
Long-term Liabilities	15,983	17,205	16,561
Total Liabilities	238,844	207,720	213,044
Deferred Inflows of Resources	3,270	1,480	1,864
Net Investment in Capital Assets	104,786	115,880	106,282
Restricted	15,249	8,569	7,964
Unrestricted	3,921	826	6,652
Total Net Position	$ 123,956	$ 125,275	$ 120,899

UTILITY FINANCIAL ANALYSIS (cont.)

Total assets combined with deferred outflows of resources increased $31.6 million and total liabilities with deferred inflows of resources increased $32.9 million, resulting in a decrease in net position of $1.3 million from 2017. The change was primarily due to capital assets being placed in service and the related debt used to finance the infrastructure. Also included in the change is a restatement of beginning net position from the implementation of GASB Statement No. 75 related to other postemployment benefits. Implementation of the new standard reduced the utility's net position as of January 1, 2018 by $1.8 million. In 2017, total assets combined with deferred outflows of resources decreased $1.3 million and total liabilities with deferred inflows of resources decreased $5.7 million, resulting in an increase in net position of $4.4 million from 2016.

Table 2

Condensed Statements of Revenues, Expenses and Changes in Net Position (000's)

	Year Ended December 31,		
	2018	2017	2016
Operating Revenues	$ 33,990	$ 33,838	$ 34,588
Other Operating Revenues	1,109	1,082	964
Total Revenues	35,099	34,920	35,552
Operation & Maintenance Expense	17,929	18,431	15,357
Depreciation Expense	7,549	6,945	6,328
Nonoperating Expense	6,420	5,337	5,623
Total Expenses	31,898	30,714	27,308
Income before Capital Contributions and Transfers	3,201	4,206	8,244
Capital Contributions	3,850	6,693	5,789
Transfers, net	(6,601)	(6,578)	(5,753)
Special Item – Net Assets Acquired from Transfer of Operations	-	55	-
Change in Net Position	450	4,376	8,280
Beginning Net Position (as restated)	123,506 *	120,899	112,619
Ending Net Position	$ 123,956	$ 125,275 *	$ 120,899

* The difference of $1.768 million between ending net position as of December 31, 2017 and January 1, 2018 is the result of a restatement for the implementation of GASB Statement No. 75 effective January 1, 2018.

UTILITY FINANCIAL ANALYSIS (cont.)

The utility's total revenues increased $0.2 million or 0.5% from 2017 to 2018 as a result of a 2.1% decrease in pumpage and adding 439 new customers during 2018. Total revenues decreased $0.6 million or 1.8% from 2016 to 2017. Pumping decreased 4.4%, and the utility added 475 new customers in 2017 from the transfer of operations from Waunona Sanitary District No. 2.

MADISON WATER UTILITY

MANAGEMENT'S DISCUSSION AND ANALYSIS
December 31, 2018 and 2017

UTILITY FINANCIAL ANALYSIS (cont.)

Table 3

Operating Revenues and Expenses
(000's)

	Year Ended December 31,		
	2018	2017	2016
OPERATING REVENUES			
Unmetered Sales	$ 190	$ 169	$ 175
Metered Sales			
Residential	12,530	12,290	12,377
Commercial	11,612	11,248	11,534
Duplex	60	-	-
Industrial	532	667	1,060
Public authority	4,357	4,397	4,502
Sales for resale	251	357	262
Total Metered Sales	29,342	28,959	29,735
Private Fire Protection	562	589	585
Public Fire Protection	3,896	4,121	4,094
Total Sales of Water	33,990	33,838	34,589
Customer Late Payment Penalties	159	191	176
Miscellaneous	136	158	100
Rents from water property	258	277	214
Other	556	456	473
Total Operating Revenues	35,099	34,920	35,552
OPERATING EXPENSES			
Source of Supply	250	17	75
Pumping	4,144	3,760	3,584
Water Treatment	836	735	742
Transmission and Distribution	6,896	8,067	5,460
Customer Accounts	870	849	847
Administrative and General	4,378	4,502	4,172
Total Operation and Maintenance	17,374	17,930	14,880
Depreciation	7,549	6,945	6,328
Taxes	555	502	477
Total Operating Expenses	25,478	25,377	21,685
Operating Income	$ 9,621	$ 9,543	$ 13,867

UTILITY FINANCIAL ANALYSIS (cont.)

Revenues

Total operating revenues for 2018 were comparable to those of 2017 totaling $35.1 million and $34.9 million, respectively. The utility's rate increase for 2018 was effective for the December billing period and the additional revenues from the increase were offset by the 2.1% reduction in overall pumpage for the year.

Total operating revenues of $34.9 million for 2017 were slightly lower than 2016 which amounted to $35.5 million. The decrease from 2016 is attributed to a 4.4% reduction in pumpage offset by 475 new customers added in 2017.

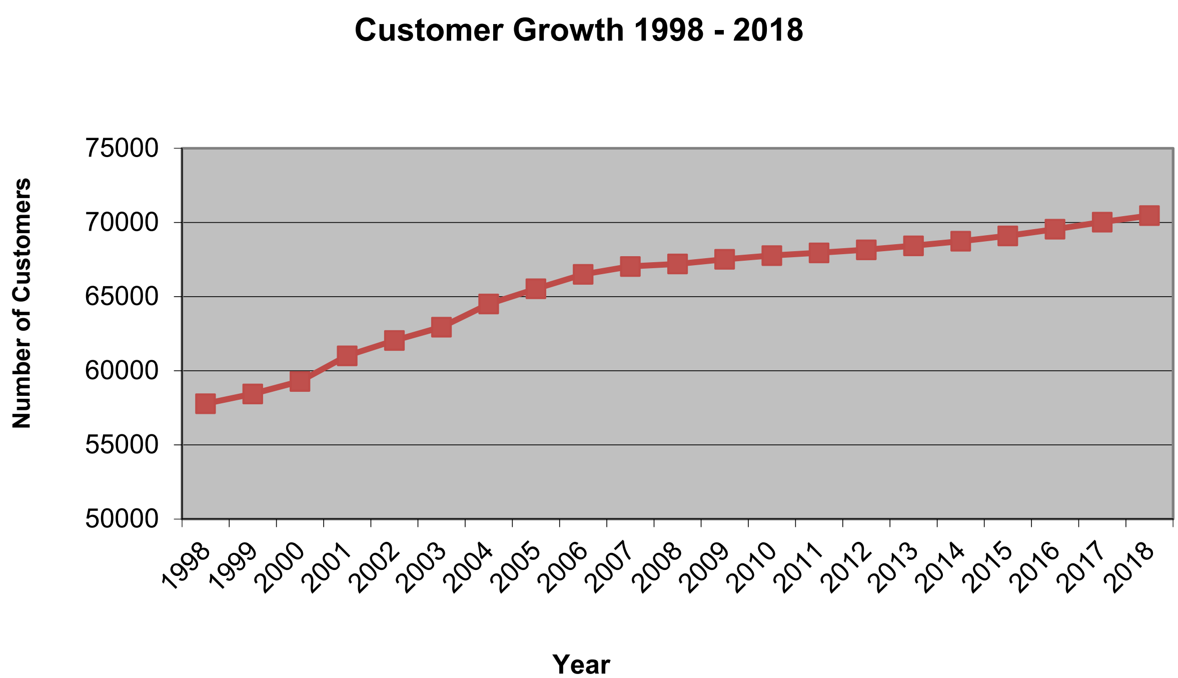
Expenses

Operation and maintenance expenses totaled $17.4 million in 2018, compared to $17.9 million in 2017, a decrease of $0.5 million or 2.8%. The decrease is primarily due to costs incurred in 2017 associated with painting three reservoirs tanks totaling $2.4 million not experienced in 2018. The change was offset by an increase of $720,000 in main-related maintenance during 2018. Depreciation expense increased $600,000 or 8.7% to $7.5 million in 2018 from $6.9 million in 2017 as a result of an additional $29.9 million in capital assets placed into service.

Operations and maintenance expenses increased $3.0 million to $17.9 million in 2017 from $14.9 million in 2016. The increase is attributed to the utility painting three reservoir tanks during 2017 at a total cost of $2.4 million not experienced during 2016. Depreciation expense increased $600,000 or 9.5% to $6.9 million in 2017 from $6.3 million in 2016 as a result of an additional $25.6 million in capital assets placed in service during 2017.

UTILITY FINANCIAL ANALYSIS (cont.)

Chart 1

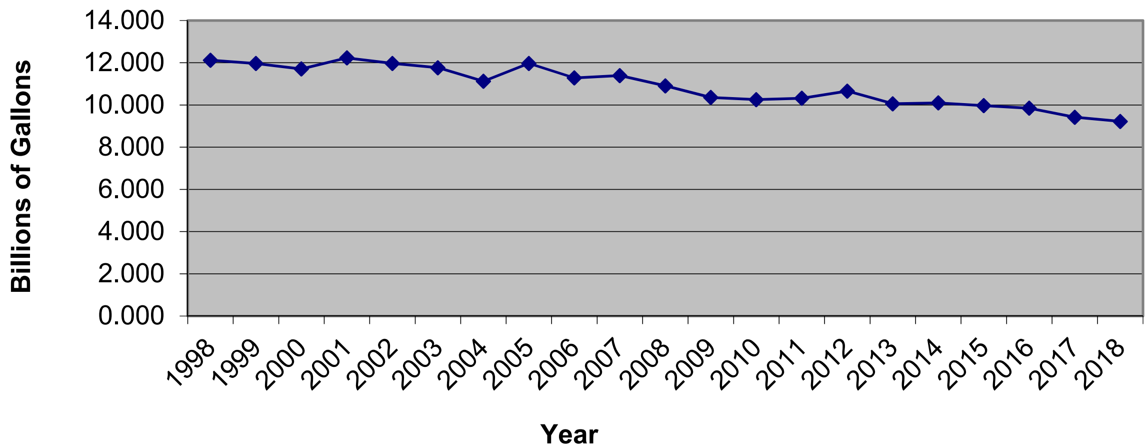


The utility received 609 new applications for service in 2018, compared with 644, 630 and 604 new applications received in 2017, 2016 and 2015, respectively. Fiscal year 2018 was the first year since 2011 that the number of new applications received went down as compared to the prior year. The utility received the most new applications (1,442) in 2002.

UTILITY FINANCIAL ANALYSIS (cont.)

Chart 2

Pumpage 1998 - 2018



Pumping for the year decreased 2.1% from 9.419 billion gallons in 2017 to 9.223 billion gallons in 2018, due to moderate weather conditions and continued water conservation efforts by customers.

CAPITAL EXPENDITURES

The utility added a net $16.1 million of plant in 2018. Of this amount, approximately $3.8 million was contributed by developers and contractors or received by special assessment.

Capital projects paid for by the utility in 2018 included; $7.0 million for a new well, Unit Well #31 and reservoir, $2.9 million for the new Blackhawk reservoir, $13.32 million for new and replacement water mains, $644,000 for various unit well rehabilitations, flow and mag meter additions and variable frequency drives (VFD's) and $570,000 for our meter program.

Capital projects paid for by the utility in 2017 included $13.41 million for new and replacement water mains, $4.24 million for the operations center vehicle and material storage buildings, $412,000 for various unit well flow and mag meter additions and VFD's and $568,000 for our meter program.

Please refer to the notes to the financial statements for further details of the utility's capital assets.

CAPITAL BORROWING

The previous policy of the utility had been to maintain depreciation and net revenues such that depreciation funds could be used for capital projects, and net income could be used for debt retirement. Due to the increased level of planned capital spending, the utility has looked to fund the vast majority of its capital budget needs through the sale of revenue bonds. The utility borrowed $40.2 million in 2018, $38.4 million in 2016, $41.6 million in 2015, $24.3 million in 2013, $21.1 million in 2012, $19.4 million in 2011, and $13.2 million in 2010. The 2018 borrowing included $30.8 million to fund the remainder of the 2017 capital projects and all of 2018 and 2019 capital projects and $9.4 million of taxable revenue notes to fund the 2017 operating cash flow shortfall. Management envisions a reduction in their capital borrowing due to reduced capital budgets for the next several years. The utility is currently working with the PSC to explore alternative funding sources for our main replacement program. This could include accelerated depreciation on mains replaced during the year to effectuate a "pay as you go" funding for our main replacement program thereby reducing the amount of capital borrowing required by the utility.

ECONOMIC FACTORS AND FUTURE BUDGET ISSUES

Madison has a unique status in terms of economic stability, being the state capital and home to the University of Wisconsin – Madison and its 43,000 students, versus the national economy. While customer growth has slowed, the utility added a net 17.2 miles of water main in the last three years as its service area has grown. Growth entails the need for additional infrastructure while meeting the challenge of upkeep of current infrastructure. Management believes that future rate increases will ensure that the utility is well prepared to handle these challenges. While rates are expected to increase over time, management expects utility rates will remain near the statewide median average.

On August 15, 2017, the City of Madison acquired the assets and customers of Waunona Sanitary District #2. Waunona Sanitary District #2 had been a wholesale customer of Madison Water Utility. The acquisition included 4.5 miles of main, 392 service laterals, 27 hydrants and 465 meters. Madison Water Utility continues to serve the Village of Maple Bluff, Village of Shorewood Hills and a portion of the City of Fitchburg as wholesale customers.

UTILITY CONTACT INFORMATION

This financial report is designed to provide customers and creditors with a general overview of the utility's finances and to demonstrate the utility's accountability for the funds it receives. Anyone having questions regarding this report or desiring additional information may contact Jeff Stanek, Chief Financial Officer, Madison Water Utility, 119 East Olin Avenue, Madison, Wisconsin 53713 or by phone at (608) 267-8689 or e-mail at jstanek@madisonwater.org.

FINANCIAL STATEMENTS

MADISON WATER UTILITY

STATEMENTS OF NET POSITION
As of December 31, 2018 and 2017

	2018	2017
ASSETS		
CURRENT ASSETS		
Cash and investments	$ 3,036,712	$ 20,920
Restricted cash and investments	12,772,842	9,781,679
Customer accounts receivable	8,058,158	6,394,352
Prepaids	183,467	172,805
Materials and supplies	714,523	778,893
Current portion of special assessments	182,709	158,075
Other current assets, net	244,492	455,992
Total Current Assets	25,192,903	17,762,716
NONCURRENT ASSETS		
Restricted Assets		
Cash and investments	27,218,541	17,050,217
Net pension asset	1,594,540	-
Other Assets		
Special assessments receivable	3,705,482	3,267,857
Preliminary survey and investigation	411,829	394,466
Property held for future use	112,087	4,009,072
Nonutility property (net of accumulated depreciation)	690,873	263,319
Capital Assets		
Plant in service	388,165,409	358,287,677
Accumulated depreciation	(88,306,628)	(82,346,902)
Construction work in progress	2,767,186	10,538,547
Total Noncurrent Assets	336,359,319	311,464,253
Total Assets	361,552,222	329,226,969
DEFERRED OUTFLOWS OF RESOURCES		
Unamortized loss on advance refunding	1,528,538	1,675,129
Deferred outflows related to pension	2,989,450	3,572,521
Total Deferred Outflows of Resources	4,517,988	5,247,650

	2018	2017
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable	$ 1,548,994	$ 834,553
Other current liabilities	776,645	914,325
Payable to other funds	4,198,586	3,302,211
Current portion of implicit financing from city	-	3,079,684
Current portion of loan from municipality	765,000	765,000
Current portion of advance from municipality	107,022	97,451
Current Liabilities Payable From Restricted Assets		
Current portion of revenue bonds	9,255,000	6,890,000
Accrued interest	3,525,495	2,846,660
Total Current Liabilities	20,176,742	18,729,884
NONCURRENT LIABILITIES		
Revenue bonds	202,685,000	171,785,000
Unamortized debt premium	10,239,105	9,015,887
Accrued compensated absences	2,028,589	1,808,215
Total OPEB liability	2,504,210	773,380
Noncurrent portion of implicit financing from city	-	3,079,684
Advance from municipality	1,167,090	1,265,783
Loan from municipality	-	765,000
Customer advances for construction	44,030	58,341
Net pension liability	-	438,906
Total Noncurrent Liabilities	218,668,024	188,990,196
Total Liabilities	238,844,766	207,720,079
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows related to OPEB's	218,946	-
Deferred inflows related to pension	3,050,553	1,479,658
Total Deferred Inflows of Resources	3,269,499	1,479,658
NET POSITION		
Net investment in capital assets	104,786,488	115,880,264
Restricted for:		
Debt service	12,167,902	7,668,536
Capital repairs and replacement	1,486,898	900,000
Pension	1,594,540	-
Unrestricted	3,920,117	826,082
TOTAL NET POSITION	$ 123,955,945	$ 125,274,882

See accompanying notes to financial statements.

MADISON WATER UTILITY

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Years Ended December 31, 2018 and 2017

	2018	2017
OPERATING REVENUES		
Sales of water	$ 33,990,160	$ 33,838,096
Other	1,109,022	1,081,845
Total Operating Revenues	35,099,182	34,919,941
OPERATING EXPENSES		
Operation and maintenance	17,928,862	18,431,561
Depreciation	7,548,684	6,944,967
Total Operating Expenses	25,477,546	25,376,528
Operating Income	9,621,636	9,543,413
NONOPERATING REVENUES (EXPENSES)		
Merchandising and jobbing	71,843	199,433
Bond issuance costs	(118,898)	-
Investment income	413,102	511,259
Interest and amortization expense	(6,624,262)	(6,585,178)
Interest charged to construction	-	116,127
Gain on transfer of operations	-	21,919
Other	(162,604)	398,613
Total Nonoperating Revenues (Expenses)	(6,420,819)	(5,337,827)
Income before Capital Contributions and Transfers	3,200,817	4,205,586
CAPITAL CONTRIBUTIONS	3,849,748	6,693,090
TRANSFERS IN / (OUT)	171,148	187,769
TRANSFERS - TAX EQUIVALENT	(6,975,603)	(6,923,928)
CAPITALIZED TAX EQUIVALENT	203,623	158,879
SPECIAL ITEM		
Net assets acquired from transfer of operations	-	54,749
Change in Net Position	449,733	4,376,145
NET POSITION - Beginning of Year (as restated)	123,506,212	120,898,737
NET POSITION - END OF YEAR	$ 123,955,945	$ 125,274,882

See accompanying notes to financial statements.

MADISON WATER UTILITY

STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2018 and 2017

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Received from customers	$ 34,292,058	$ 34,993,485
Paid to suppliers for goods and services	(9,482,872)	(10,775,671)
Paid to employees for services	(6,577,865)	(6,284,891)
Net Cash Flows from Operating Activities	18,231,321	17,932,923
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfers - paid to municipality for tax equivalent	(6,771,980)	(6,765,049)
Loan from municipality receipts (payments) - operating portion	(765,000)	(765,000)
Repayment of advances from other funds	(89,122)	(89,040)
Interest paid on advances and loans from other funds	(53,815)	(55,557)
Transfers from (to) other funds	171,148	187,769
Implicit financing from municipality	(6,159,367)	6,159,367
Net Cash Flows from Noncapital Financing Activities	(13,668,136)	(1,327,510)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(18,216,498)	(23,002,326)
Special assessments received	666,197	868,493
Contributions in aid of construction	(14,311)	(153,466)
Debt issued	40,155,000	-
Premium on debt issued	1,605,579	-
Debt issuance costs	118,898	-
Build America Bond interest credit received	139,305	143,377
Debt retired	(6,890,000)	(8,825,000)
Interest paid	(6,365,178)	(7,424,644)
Advances from other funds	-	4,730
Net Cash Flows from Capital and Related Financing Activities	11,198,992	(38,388,836)
CASH FLOWS FROM INVESTING ACTIVITIES		
Marketable securities purchased	(13,662,522)	(15,276,451)
Marketable securities sold	10,633,222	14,056,177
Investment income	413,102	511,259
Net Cash Flows from Investing Activities	(2,616,198)	(709,015)
Net Change in Cash and Cash Equivalents	13,145,979	(22,492,438)
CASH AND CASH EQUIVALENTS – Beginning of Year	13,701,492	36,193,930
CASH AND CASH EQUIVALENTS – END OF YEAR	$ 26,847,471	$ 13,701,492

	2018	2017
RECONCILIATION OF OPERATING INCOME TO NET CASH FLOWS FROM OPERATING ACTIVITIES		
Operating income	$ 9,621,636	$ 9,543,413
Nonoperating income	(230,066)	454,669
Noncash items included in operating income		
Depreciation	7,548,684	6,944,967
Depreciation charged to other accounts	1,032,196	1,012,476
Net assets acquired from transfer of operations	-	54,749
Changes in Assets and Liabilities		
Customer accounts receivable	(1,663,806)	(497,940)
Receivable from other funds	329,648	(160,522)
Materials and supplies	64,370	(60,325)
Other current assets	(10,662)	(138,974)
Accounts payable and other current liabilities	239,094	(171,942)
Payable to other funds	778,227	247,824
Other postemployment benefit deferrals and liabilities	1,949,776	136,946
Pension related deferrals and liabilities	(1,648,150)	516,618
Accrued compensated absences	220,374	50,964
NET CASH FLOWS FROM OPERATING ACTIVITIES	$ 18,231,321	$ 17,932,923
RECONCILIATION OF CASH AND CASH EQUIVALENTS TO STATEMENT OF NET POSITION ACCOUNTS		
Cash and investments	$ 3,036,712	$ 20,920
Restricted cash and investments - current	12,772,842	9,781,679
Restricted cash and investments - noncurrent	27,218,541	17,050,217
Total Cash and Investments	43,028,095	26,852,816
Less: Noncash equivalents	(16,180,624)	(13,151,324)
CASH AND CASH EQUIVALENTS	$ 26,847,471	$ 13,701,492
NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES		
Municipality, customer and developer financed additions to utility plant	$ 3,598,132	$ 6,274,701
Capital additions assessed to customers	$ 1,128,456	$ 2,101,707
Adjustments to special assessments	$ (162,724)	$ (126,360)
Interest capitalized	$ -	$ 116,127

See accompanying notes to financial statements.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Madison Water Utility (utility) have been prepared in conformity with accounting principles generally accepted in the United States of America as applied to enterprise funds of governmental entities. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

The significant accounting principles and policies utilized by the utility are described below.

Reporting Entity

The utility is a separate enterprise fund of the City of Madison (municipality). The utility provides retail water service to customers in the municipality, portions of the Town of Madison and the Town of Burke, wholesale water service to the Villages of Maple Bluff and Shorewood Hills, and portions of Fitchburg Utility District No. 1. Effective August 15, 2017, Waunona Sanitary District No. 2 transferred all customers and operations to the utility.

The utility charges rates and operates under rules authorized by the Public Service Commission of Wisconsin (PSCW). Accounting records are maintained in accordance with the Uniform System of Accounts prescribed by the PSCW.

The utility is managed by an eight member Water Utility Board comprised of two Madison Common Council members (each serving a two year term), five citizen members, and the Director, Public Health Madison and Dane County (ex-officio), each serving a five year term.

Measurement Focus, Basis of Accounting and Basis of Presentation

The utility is presented as an enterprise fund of the municipality. Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business or where the governing body has decided that the determination of revenues earned, costs incurred and net income is necessary for management accountability.

The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used. Revenues, expenses, gains, losses, assets and liabilities resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, effective for financial statements for years beginning after June 15, 2017. This statement requires governments to report a liability on the face of the financial statements for the Postemployment Benefits Other than Pensions (OPEB) provided by the entities and requires governments to present more extensive note disclosures and required supplementary information about their OPEB liabilities. The utility adopted this statement effective January 1, 2018. The cumulative impact of the implementation is shown in Note 12.

In June 2018, the GASB issued Statement No. 89 - *Accounting for Interest Cost Incurred before the End of a Construction Period*. This statement establishes requirements for interest cost incurred before the end of a construction period. The utilities adopted this statement effective January 1, 2018.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

MEASUREMENT FOCUS, BASIS OF ACCOUNTING AND BASIS OF PRESENTATION (cont.)

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.

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

Deposits and Investments

For purposes of the statement of cash flows, cash and cash equivalents have original maturities of three months or less from the date of acquisition.

Investment of utility funds is restricted by state statutes. Investments are limited to:

1. Time deposits in any credit union, bank, savings bank, trust company maturing in three years or less.
2. Bonds or securities of any county, city, drainage district, technical college district, village, town, or school district of the state. Also, bonds issued by a local exposition district, local professional baseball park district, local professional football stadium district, local cultural arts district, the University of Wisconsin Hospitals and Clinics Authority, or the Wisconsin Aerospace Authority.
3. Bonds or securities issued or guaranteed by the federal government.
4. The local government investment pool.
5. Any security maturing in seven years or less and having the highest or second highest rating category of a nationally recognized rating agency.
6. Securities of an open end management investment company or investment trust, subject to various conditions and investment options.
7. Repurchase agreements with public depositories, with certain conditions.

The utility, as part of the municipality, has adopted an investment policy. The policy follows the state statute for allowable investments.

Investments are stated at fair value, which is the amount at which an investment could be exchanged in a current transaction between willing parties. Fair values are based on methods and inputs as outlined in Note 2. No investments are reported at amortized cost. Adjustments necessary to record investments at fair value are recorded in the operating statement as increases or decreases in investment income. Market values may have changed significantly after year-end.

Restricted Assets

Mandatory segregations of assets are presented as restricted assets. Such segregations are required by bond agreements and other external parties. Current liabilities payable from these restricted assets are so classified.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Receivables/Payables

Transactions between the utility and other funds of the municipality that are representative of lending/borrowing arrangements outstanding at year-end are referred to as advances to/from other funds. All other outstanding balances between the utility and other funds of the municipality are reported as due to/from other funds.

The utility has the right under Wisconsin statutes to place delinquent water bills on the tax roll for collection. As such, no allowance for uncollectible customer utility service billings is considered necessary.

Prepaid Expenses

Prepaid expenses include the cost of insurance paid in the current year and attributable to future periods.

Materials and Supplies

Materials and supplies inventories are generally used for construction, operation and maintenance work, not for resale. They are valued at average cost and charged to construction and expense when used.

Other Current Assets

The balance represents amounts due from other municipalities and miscellaneous receivables.

There has been an allowance account set up relating to miscellaneous accounts receivable. The allowance balance was $-0- and $91,188 in 2018 and 2017, respectively.

Pensions

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Wisconsin Retirement System (WRS) and additions to/deductions from WRS' fiduciary net position have been determined on the same basis as they are reported by WRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms, investments are reported at fair value.

Special Assessments Receivable

The utility assesses the cost of system extensions to benefited properties. This account represents the long-term portion of special assessments to be collected. Interest is charged on the unpaid balance at various rates.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Preliminary Survey and Investigation

The balance represents initial project engineering costs related to utility plant construction or costs incurred for the assessment of future capital facilities. The balance will be transferred as a capital asset or expense upon commencement of the project.

Property Held for Future Use

These amounts represent tower and well sites which are owned by the utility but not currently used during the course of operation.

Nonutility Property

This balance includes sewer meters which are being amortized over an average period of 20 years as well as certain parcels of land related to abandoned facilities or held for future sale.

Capital Assets

Capital assets are defined by the utility as assets with an initial, individual cost of more than $5,000 and an estimated useful life in excess of one year.

Capital assets of the utility are recorded at cost or estimated acquisition cost at the time of contribution to the utility. Major outlays for utility plant are capitalized as projects are constructed. Interest incurred during the construction phase is no longer reflected in the capitalized value of the capital assets constructed. Capital assets in service are depreciated using the straight-line method over the following useful lives:

	Years
Plant in Service	
Source of supply	22–58
Pumping	23–31
Water treatment	17–31
Transmission and distribution	18–77
General	4–34

Deferred Outflows of Resources

A deferred outflow of resources represents a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that future time.

Other Current Liabilities

The balance represents amounts payable relating to accrued wages, comp time, vacation time, and payroll taxes payable.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSETS, DEFERRED OUTFLOWS OF RESOURCES, LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION (cont.)

Implicit Financing from the City

The city manages operating cash through a centralized treasury function for all city-wide funds including the water utility. Deficiencies in operating cash are presented as financings from the city and are replenished when sufficient funds are available. The utility repaid the city with proceeds from revenue bonds in 2018.

Accrued Compensated Absences

Utility employees are allowed to convert, at retirement, the lesser of 100% of accumulated days or 150 days, to a sick leave escrow account maintained in the municipality's trust and agency fund. No payment is made if the employee resigns or is terminated. The balance on the financial statements is based on the probability employees will be employed by the utility at the time of retirement. The liability is liquidated from general operating revenues of the utility.

After the satisfactory employee completion of a probationary period, vacation leave is accrued on the basis of continuous service, including periods of paid absent time. The vacation leave is granted at a rate dependent on the employee's length of service.

Customer Advances for Construction

The balance represents customer advances for construction and meters which may be refundable in part or in whole pursuant to rules prescribed and on file with the PSCW.

Long-Term Obligations

Long-term debt and other obligations are reported as utility liabilities. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Gains or losses on refundings are amortized over the remaining life of the old debt or the life of the new debt, whichever is shorter. The balance at year-end for premiums and discounts is shown as an increase or decrease in the liability section of the statements of net position. The balance at year-end for the loss on refunding is shown as a deferred outflow in the statements of net position.

Total OPEB Liability

For purposes of measuring the total OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information has been determined on the same basis as they are reported by the city's OPEB Plan. For this purpose, the city OPEB Plan recognizes benefit payments when due and payable in accordance with the benefit terms.

Deferred Inflows of Resources

A deferred inflow of resources represents an acquisition of net position that applies to a future period and therefore will not be recognized as an inflow of resources (revenue) until that future time.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

REVENUES AND EXPENSES

The utility distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a utility's principal ongoing operations. The principal operating revenues of the utility are charges to customers for sales and services. Operating expenses for enterprise funds 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 nonoperating revenues and expenses.

Charges for Services

Utility billings are rendered and recorded based on actual service provided. The utility does not accrue revenues beyond billing dates.

Current rates were authorized by the PSCW in an order dated November 1, 2018 and are designed to earn an 8.0% return on rate base.

Transfers – Tax Equivalent

The utility records an annual payment in lieu of taxes (PILOT) expense based on the value of its capital assets times the current assessment ratio and local and school portions of the mill rate.

Capital Contributions

Cash and capital assets are contributed to the utilities from customers, the municipality, or external parties. The value of property contributed to the utilities are reported as revenue on the statements of revenues, expenses, and changes in net position.

Special Item

The activity represents the net fund balance received for the transfer of operations from Waunona Sanitary District #2 during 2018. See Note 11 for details regarding this transaction.

EFFECT OF NEW ACCOUNTING STANDARDS ON CURRENT PERIOD FINANCIAL STATEMENTS

GASB has approved GASB Statement No.83, *Certain Asset Retirement Obligations*, Statement No. 84, *Fiduciary Activities*, Statement No. 86, *Certain Debt Extinguishment Issues*, Statement No. 87, *Leases,* Statement No. 88*, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, and* Statement No. 90*, Majority Equity Interests – an amendment of GASB Statements No. 14 and No. 61*. When they become effective, application of these standards may restate portions of these financial statements.

COMPARATIVE DATA

Certain amounts presented in the prior year data have been reclassified in order to be consistent with the current year’s presentation.

NOTE 2 – DEPOSITS AND INVESTMENTS

	Carrying Value as of December 31, 2018	Carrying Value as of December 31, 2017	Associated Risks
Other Investment Pool	$ 25,183,982	$ 4,522,312	(A)
Money Market Mutual Funds	1,642,569	2,998,893	Custodial credit, interest rate
U.S. Agencies	16,180,624	13,151,324	Custodial credit, interest rate, credit, concentration
Working Funds – Petty Cash	20,920	20,920	None
Totals	$ 43,028,095	$ 20,693,449	

(A) – The other investment pool is commingled with the municipality; therefore, the risk pertaining specifically to the utility cannot be determined individually. Please refer to the municipality's financial statements. The water utility required financing from the city to adequately fund restricted cash balances at December 31, 2017 in the amount of $6,159,367. This amount is presented as implicit financing from the city in current and non-current liabilities. The utility fully reimbursed the city during fiscal year 2018.

Deposits in each local and area bank are insured by the FDIC in the amount of $250,000 for time and savings accounts (including NOW accounts) and $250,000 for demand deposit accounts (interest bearing and noninterest bearing). In addition, if deposits are held in an institution outside of the state in which the government is located, insured amounts are further limited to a total of $250,000 for the combined amount of all deposit accounts.

Bank accounts are also insured by the State Deposit Guarantee Fund (SDGF) in the amount of $400,000. However, due to the relatively small size of the Guarantee Fund in relationship to the total deposits covered and other legal implications, recovery of material principal losses may not be significant to individual municipalities.

The utility may also maintain separate cash and investment accounts at the same financial institutions utilized by the municipality. Federal depository insurance and the State of Wisconsin Guarantee Fund Insurance apply to all municipal accounts, and accordingly, the amount of insured funds is not determinable for the utility alone. Therefore, coverage for the utility may be reduced. Investment income on commingled investments of the entire municipality is allocated based on average investment balances.

FAIR VALUE

The utility categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

At December 31, 2018 and 2017, the utility had investments in US Agency Securities of $16,180,624 and $13,151,324, respectively. These investments were valued using institutional bond quotes (Level 2 input) at December 31, 2018 and December 31, 2017.

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

FAIR VALUE (cont.)

In addition to US Agency Securities, the utility maintains certain investments commingled with the municipality. The fair value hierarchy pertaining specifically to the utility's resources cannot be determined for those accounts. Please refer to the municipality's financial statements for information on the fair value measurements.

CUSTODIAL CREDIT RISK

Deposits

Custodial credit risk is the risk that in an event of a financial institution failure, the utility's deposits may not be returned to the utility.

The utility maintains certain deposits at the same institutions as the municipality. The custodial credit risk pertaining specifically to the utility's resources at these institutions cannot be determined individually for those accounts. The following is a summary of the utility's total deposit balances at these institutions on December 31:

	2018		2017	
	Bank Balance	Carrying Value	Bank Balance	Carrying Value
US Bank	$ 1,642,569	$ 1,642,569	$ 2,998,893	$ 2,998,893

The municipality's investment policy addresses this risk by requiring security for all cash and investments maintained in any financial institution designated as a depository. The municipality exercises this authority under Sec. 34.07 of the Wisconsin Statutes which states that security may be required of any public depository for any public deposits that exceed the amount of deposit insurance provided by an agency of the United States or by the Wisconsin public deposit guarantee program. The utility is covered under the municipality's collateral agreements.

Investments

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the utility will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party.

The utility's investments included $16,180,624 and $13,151,324 of U.S. Agencies securities which were exposed to custodial credit risk as of December 31, 2018 and 2017, respectively, because the investments were neither insured nor registered and are held by counterparty.

NOTE 2 – DEPOSITS AND INVESTMENTS (cont.)

CUSTODIAL CREDIT RISK (cont.)

Investments (cont.)

The municipality's investment policy addresses this risk by requiring funds in excess of insured or guaranteed limits to be secured by some form of collateral. The municipality will accept for collateral any of the following assets: obligations of the United States government or an agency or instrumentality of the United States government; obligations of the State of Wisconsin; investment grade obligations of Wisconsin local jurisdictions; obligations of the City of Madison. The fair market value of all collateral pledged will be not less than 110% of the amount of public funds to be secured at each institution. The ratio of fair market value of collateral to the amount of funds secured will be reviewed regularly and additional collateral will be requested when this ratio declines below the level required. Pledged collateral will be held in safekeeping by a third party. All collateral agreements will be written so as to preclude release of the assets without an authorized signature from the municipality. The municipality will allow for even exchange of collateral.

INTEREST RATE RISK, CREDIT RISK AND CONCENTRATION RISK

Interest rate risk is the risk changes in interest rates will adversely affect the fair market value of an investment. All U.S. Agency securities and Money Market Mutual Funds mature within five years.

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. As of December 31, 2018 and 2017, all of the U.S. Agency investments were rated Aaa by Moody's Investors Service. All of the U.S. Agency investments were rated AA+ by S&P.

Concentration risk is the risk of loss attributable to the magnitude of a government's investments in a single issuer. As of December 31, 2018, the utility had 16% of its portfolio in Federal Farm Credit Bank securities, 5% of its portfolio in Federal Home Loan Bank system securities, and 6% of its portfolio in Federal Home Loan Mortgage Corporation system securities. As of December 31, 2017, the utility had 29% of its portfolio in Federal Farm Credit Bank securities, 19% of its portfolio in Federal Home Loan Bank system securities, and 6% of its portfolio in Federal Home Loan Mortgage Corporation system securities.

The investment policy addresses these risks by permitting investments which mature to meet cash requirements, following state statutes as to allowable investments and limiting certificates with any one institution to 25% of the overall portfolio.

NOTE 3 – INTERFUND RECEIVABLES/PAYABLES AND TRANSFERS

The following is a schedule of interfund balances as of December 31, 2018 and 2017:

		2018		2017	
Due To	Due From	Amount	Principal Purpose	Amount	Principal Purpose
Municipality	Water	$ 4,198,586	Items due to Sewer, Storm, Landfill, and Urban Forestry less items on tax roll	$ 3,302,211	Items due to Sewer, Storm, Landfill, and Urban Forestry less items on tax roll

The following is a schedule of transfer balances as of December 31, 2018 and 2017:

		2018		2017	
To	From	Amount	Principal Purpose	Amount	Principal Purpose
Municipality	Water	$ 6,975,603	Tax equivalent	$ 6,923,928	Tax equivalent
Water	Sewer	171,148	Operating expenses	187,769	Operating expenses

NOTE 4 – RESTRICTED ASSETS

Restricted Accounts

Certain proceeds of the utility's revenue bonds, as well as certain resources set aside for their repayment, are classified as restricted assets on the statements of net position because their use is limited by applicable bond covenants. The following accounts are reported as restricted assets:

Operation and Maintenance Reserve – Used to remedy any deficiency in the operation account, make extraordinary repairs or replacements, or pay principal and interest on the bonds or parity bonds.

Principal and Interest – Used solely for the purpose of paying principal and interest on the bonds or parity bonds.

Reserve – Used solely for the purpose of paying principal and interest on the bonds or parity bonds whenever the balance in the principal and interest account is insufficient for that purpose.

Depreciation – Used for the payment of principal and interest on the bonds and parity bonds whenever the balance in the principal and interest account is insufficient for that purpose, to remedy any deficiency in the principal and interest account, or to make extraordinary repairs or improvements to the utility.

NOTE 4 – RESTRICTED ASSETS (cont.)

RESTRICTED ACCOUNTS (cont.)

Construction – Used to report bond proceeds restricted for use in construction.

Pension – Used to report value of future benefits owed to employees for retirement benefits

The following calculation supports the amount of restricted net position:

	December 31, 2018	December 31, 2017
Restricted Assets		
Current restricted assets		
Principal and interest	$ 12,772,842	$ 9,781,679
Noncurrent Restricted Assets		
Operation and maintenance reserve	-	150,000
Reserve	17,707,576	16,150,217
Construction	8,024,067	-
Assessment construction fund	736,898	-
Depreciation	750,000	750,000
Net pension asset	1,594,540	-
Total Noncurrent Restricted Assets	28,813,081	17,050,217
Total Restricted Assets	41,585,923	26,831,896
Less: Restricted Assets not Funded by Revenues		
Reserve fund	(14,787,021)	(15,416,700)
Construction fund	(8,024,067)	-
Current Liabilities Payable from Restricted Assets	(3,525,495)	(2,846,660)
Total Restricted Net Position	$ 15,249,340	$ 8,568,536
The purpose of the restricted net position is as follows:		
Debt service	$ 12,167,902	$ 7,668,536
Capital repairs and replacement	1,486,898	900,000
Pension	1,594,540	-
Total	$ 15,249,340	$ 8,568,536

NOTE 5 – CHANGES IN CAPITAL ASSETS

A summary of changes in capital assets for 2018 follows:

	1/1/18 Balance	Increases	Decreases	12/31/18 Balance
Capital assets, not being depreciated				
Land and land rights	$ 2,627,753	$ 500,423	$ 7,236	$ 3,120,938
Capital assets being depreciated				
Source of supply	10,698,888	2,489,452	-	13,188,340
Pumping	22,677,407	2,629,833	508,078	24,799,162
Water treatment	4,047,471	1,799,943	42,499	5,804,915
Transmission and distribution	280,577,020	22,145,999	934,636	301,788,383
General	37,659,138	3,033,401	1,228,868	39,463,671
Total Capital Assets Being Depreciated	355,659,924	32,098,628	2,714,081	385,044,471
Total Capital Assets	358,287,677	32,599,051	2,721,317	388,165,409
Less: Accumulated Depreciation				
Source of supply	(5,765,101)	(272,547)	-	(6,037,648)
Pumping	(8,468,520)	(886,554)	483,550	(8,871,524)
Water treatment	(873,230)	(180,309)	43,002	(1,010,537)
Transmission and distribution	(55,439,802)	(5,701,599)	1,012,489	(60,128,912)
General	(11,800,249)	(1,691,199)	1,233,441	(12,258,007)
Total Accumulated Depreciation	(82,346,902)	(8,732,208)	2,772,482	(88,306,628)
Construction in progress	10,538,547	24,623,586	32,394,947	2,767,186
Net Capital Assets	$ 286,479,322			$ 302,625,967

NOTE 5 – CHANGES IN CAPITAL ASSETS (cont.)

A summary of changes in capital assets for 2017 follows:

	1/1/17 Balance	Increases	Decreases	12/13/17 Balance
Capital assets, not being depreciated				
Land and land rights	$ 2,601,317	$ 28,879	$ 2,443	$ 2,627,753
Capital assets being depreciated				
Source of supply	10,698,888	-	-	10,698,888
Pumping	22,154,212	587,362	64,167	22,677,407
Water treatment	4,047,471	-	-	4,047,471
Transmission and distribution	260,242,253	21,424,799	1,090,032	280,577,020
General	32,993,804	5,004,618	339,284	37,659,138
Total Capital Assets Being Depreciated	330,136,628	27,016,779	1,493,483	355,659,924
Total Capital Assets	332,737,945	27,045,658	1,495,926	358,287,677
Less: Accumulated Depreciation				
Source of supply	(5,528,651)	(236,450)	-	(5,765,101)
Pumping	(7,702,273)	(835,247)	69,000	(8,468,520)
Water treatment	(723,506)	(149,724)	-	(873,230)
Transmission and distribution	(51,152,446)	(5,471,359)	1,184,003	(55,439,802)
General	(10,566,445)	(1,573,088)	339,284	(11,800,249)
Total Accumulated Depreciation	(75,673,321)	(8,265,868)	1,592,287	(82,346,902)
Construction in progress	9,645,941	31,755,673	30,863,067	10,538,547
Net Capital Assets	$ 266,710,565			$ 286,479,322

NOTE 6 – LONG-TERM OBLIGATIONS

REVENUE BONDS

Date	Purpose	Final Maturity	Interest Rates	Original Amount	12/31/2018 Amount Outstanding
12/9/09	Refunding debt and system improvements	1/1/30	2.00 - 5.00%	$ 48,540,000	$ 35,520,000
11/10/10	System improvements	1/1/31	0.90 - 5.25%	13,250,000	9,300,000
12/22/11	System improvements	1/1/32	2.00 - 4.00%	19,370,000	14,750,000
12/19/12	System improvements	1/1/33	2.00 - 4.00%	21,095,000	16,725,000
12/18/13	System improvements	1/1/34	3.00 - 5.00%	24,335,000	20,680,000
12/17/15	System improvements	1/1/36	2.85 - 5.00%	41,610,000	38,555,000
12/28/16	Refunding debt and system improvements	1/1/37	1.24 – 3.82%	38,420,000	36,255,000
12/20/18	System improvements and operations	1/1/39	3.00 – 4.00%	40,155,000	40,155,000
	Totals			$ 246,775,000	$ 211,940,000

Revenue bond debt service requirements to maturity follows:

Fiscal Year	Principal	Interest	Federal Credit	Total
2019	$ 9,255,000	$ 7,656,130	$ (145,390)	$ 16,765,740
2020	11,370,000	7,940,292	(138,151)	19,172,141
2021	11,795,000	7,441,235	(130,186)	19,106,049
2022	12,385,000	6,907,623	(121,526)	19,171,097
2023	12,860,000	6,341,710	(112,167)	19,089,543
2024	13,185,000	5,754,583	(102,087)	18,837,496
2025	13,570,000	5,170,120	(91,259)	18,648,861
2026	14,065,000	4,610,478	(79,618)	18,595,860
2027	14,135,000	4,059,343	(66,701)	18,127,642
2028	14,700,000	3,491,436	(52,690)	18,138,746
2029	14,410,000	2,915,834	(38,220)	17,287,614
2030	13,280,000	2,374,179	(23,290)	15,630,889
2031	10,245,000	1,925,249	(7,855)	12,162,394
2032	9,735,000	1,555,131	-	11,290,131
2033	8,715,000	1,221,381	-	9,936,381
2034	7,640,000	923,678	-	8,563,678
2035	6,175,000	669,044	-	6,844,044
2036	6,405,000	438,161	-	6,843,161
2037	3,740,000	245,800	-	3,985,800
2038	2,095,000	129,100	-	2,224,100
2039	2,180,000	43,600	-	2,223,600
Totals	$ 211,940,000	$ 71,814,107	$ (1,109,140)	$ 282,644,967

NOTE 6 – LONG-TERM OBLIGATIONS

REVENUE BONDS (cont.)

The 2010 bonds are Build America Bonds.The amount disclosed is based on the originally approved 35% credit. During the federal fiscal year 2018 interest subsidies were reduced by 6.6% and during the federal fiscal year 2017, the subsidy payments had been reduced by 6.9%. This amount may change based on sequestration.

The bonds are secured by a pledge of the redemption fund, net utility revenues and a mortgage lien on utility plant. Principal and interest paid for 2018 and 2017 were $13,246,118 and $16,360,483, respectively. Total customer net revenues as defined for 2018 and 2017 were $17,583,422 and $16,999,639, respectively. Annual principal and interest payments are expected to require 77% of net revenues.

ADVANCE FROM MUNICIPALITY

Date	Purpose	Final Maturity	Interest Rate	Original Amount	12/31/18 Amount Outstanding
10/3/10	Payoff unfunded pension liability	10/1/24	3.41%	$ 1,404,052	$ 818,474
04/23/08	Advance from Municipality, Burke Utility District #1	(A)	0.83%	393,762	455,638

Advance debt service requirements to maturity follows:

Year	Principal	Interest	Total
2019	$ 107,022	$ 30,614	$ 137,636
2020	117,464	27,136	144,600
2021	129,065	23,025	152,090
2022	141,536	18,314	159,850
2023	154,587	12,936	167,523
2024	168,800	6,752	175,552
Totals	$ 818,474	$ 118,777	$ 937,251

(A) – No repayment schedule has been established for this advance. Accrued interest is added to the advance balance based on the municipality's pooled investment rate plus 0.25%.

NOTE 6 – LONG-TERM OBLIGATIONS (cont.)

LOAN FROM MUNICIPALITY

On August 4, 2005, the Madison Common Council approved a loan from the municipality to the utility to be used as financing for capital and operating expenses with interest charged monthly at 0.25% higher than the monthly rate earned through the utility's other investment pool.

The following table shows the activity since the inception of this loan:

Year	Beginning Balance	Additions	Reductions	Ending Balance
2005	$ -	$ 4,573,000	$ -	$ 4,573,000
2006	4,573,000	1,877,000	5,235,000	1,215,000
2007	1,215,000	10,305,169	7,257,169	4,263,000
2008	4,263,000	1,830,000	688,000	5,405,000
2009	5,405,000	4,520,000	855,000	9,070,000
2010	9,070,000	1,220,000	2,045,000	8,245,000
2011	8,245,000	-	2,125,000	6,120,000
2012	6,120,000	-	765,000	5,355,000
2013	5,355,000	-	765,000	4,590,000
2014	4,590,000	-	765,000	3,825,000
2015	3,825,000	-	765,000	3,060,000
2016	3,060,000	-	765,000	2,295,000
2017	2,295,000	-	765,000	1,530,000
2018	1,530,000	-	765,000	765,000

The utility anticipates making principal payments totaling $765,000 in 2019. No formal schedule for repayment has been established. At December 31, 2018 and 2017, the outstanding balance pertains to operating activities.

LONG-TERM OBLIGATIONS SUMMARY

Long-term obligation activity for the year ended December 31, 2018, is as follows:

	1/1/18 Balance	Additions	Reductions	12/31/18 Balance	Due Within One Year
Revenue bonds	$ 178,675,000	$ 40,155,000	6,890,000	$ 211,940,000	$ 9,255,000
Accrued compensated absences	1,808,215	371,957	151,583	2,028,589	-
Net pension liability (asset)	438,906	-	2,033,446	(1,594,540)	-
Other postemployment benefit obligation	773,380	1,730,830	-	2,504,210	-
Customer advances for construction	58,341	151,909	166,220	44,030	-
Advance from municipality	1,363,234	-	89,122	1,274,112	107,022
Loan from municipality – operating	1,530,000	-	765,000	765,000	765,000
Unamortized debt premium	9,015,887	1,843,375	620,157	10,239,105	-
Totals	$ 193,662,963	$ 44,253,071	$ 10,715,528	$ 227,200,506	$ 10,127,022

NOTE 6 – LONG-TERM OBLIGATIONS (cont.)

LONG-TERM OBLIGATIONS SUMMARY (cont.)

Long-term obligation activity for the year ended December 31, 2017, is as follows:

	1/1/17 Balance	Additions	Reductions	12/31/17 Balance	Due Within One Year
Revenue bonds	$ 187,500,000	$ -	$ 8,825,000	$ 178,675,000	$ 6,890,000
Accrued compensated absences	1,757,251	426,027	375,063	1,808,215	-
Net pension liability	880,490	-	441,584	438,906	-
Other postemployment benefit obligation	636,434	289,818	152,872	773,380	-
Customer advances for construction	211,807	50,341	203,807	58,341	-
Advance from municipality	1,447,544	4,730	89,040	1,363,234	97,451
Loan from municipality – operating	2,295,000	-	765,000	1,530,000	765,000
Unamortized debt premium	10,186,093	-	1,170,206	9,015,887	-
Totals	$ 204,914,619	$ 770,916	$ 12,022,572	$ 193,662,963	$ 7,752,451

PRIOR YEAR DEFEASANCE OF DEBT

In 2016, the utility defeased $17,410,000 of the 2007 bonds by placing the proceeds in an irrevocable trust to provide for all future debt service payments on 2007 bonds. Accordingly, the trust account assets and liability for the defeased bonds are not included in the utility's financial statements. The old bonds were called on January 1, 2018.

COMPLIANCE WITH FUNDING REQUIREMENTS

The utility is required to comply with various debt covenants as a result of issuing revenue bonds. One such requirement states that net revenues earned must be at least 1.25 times the highest combined annual principal and interest requirements on outstanding revenue bonds. The utility did not meet this requirement in 2017 or 2018.

NUMBER OF CUSTOMERS

At December 31, 2018 and 2017, the utility served the following number of customers:

	2018	2017
Residential	58,646	58,421
Multifamily	4,293	4,253
Duplex	166	-
Commercial	5,089	5,014
Industrial	52	50
Public Authority	499	490
Totals	68,745	68,228

NOTE 6 – LONG-TERM OBLIGATIONS (cont.)

WATER PUMPED AND BILLED

During the years ended December 31, 2018 and 2017, the following amounts of water were pumped and billed:

	(000 gallons)	
	2018	2017
Water pumped	9,222,650	9,418,562
Water billed	7,902,414	8,048,070

RISK MANAGEMENT

The utility is exposed to various risks of loss related to torts, theft of, damage to, or destruction of assets, errors and omissions, workers compensation, and health care of its employees. These risks are covered through the purchase of commercial insurance, with minimal deductibles. Settled claims have not exceeded coverage in any of the last three years. There were no significant reductions in coverage compared to the prior year.

NOTE 7 – NET POSITION

GASB No. 34 requires the classification of net position into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

Net investment in capital assets – This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets; rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position – The component of net position consisting of net position that does not meet the definition of "restricted" or " net investment in capital assets."

When both restricted and unrestricted resources are available for use, it is the utility's policy to use restricted resources first, then unrestricted resources as they are needed.

NOTE 7 – NET POSITION (cont.)

The following calculation supports the net investment in capital assets:

	December 31, 2018	December 31, 2017
Plant in Service	$ 388,165,409	$ 358,287,677
Accumulated Depreciation	(88,306,628)	(82,346,902)
Construction Work in Progress	2,767,186	10,538,547
Subtotals	302,625,967	286,479,322
Less: Capital Related Debt		
Current portion of capital related long-term debt	9,255,000	6,890,000
Long-term portion of capital related long-term debt	202,685,000	171,785,000
Unamortized debt premium	10,239,105	9,015,887
Unamortized loss on advance refunding	(1,528,538)	(1,675,129)
Subtotals	220,650,567	186,015,758
Add: Borrowed Funds on Hand		
Reserve fund	14,787,021	15,416,700
Construction fund	8,024,067	-
Subtotals	22,811,088	15,416,700
Total Net Investment in Capital Assets	$ 104,786,488	$ 115,880,264

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM

General Information About the Pension Plan

Plan description. The WRS is a cost-sharing multiple-employer defined benefit pension plan. WRS benefits and other plan provisions are established by Chapter 40 of the Wisconsin Statutes. Benefit terms may only be modified by the legislature. The retirement system is administered by the Wisconsin Department of Employee Trust Funds (ETF). The system provides coverage to all eligible State of Wisconsin, local government and other public employees. All employees, initially employed by a participating WRS employer on or after July 1, 2011, and expected to work at least 1200 hours a year and expected to be employed for at least one year from employee's date of hire are eligible to participate in the WRS.

ETF issues a standalone Comprehensive Annual Financial Report (CAFR), which can be found at http://etf.wi.gov/publications/cafr.htm.

Vesting. For employees beginning participation on or after January 1, 1990, and no longer actively employed on or after April 24, 1998, creditable service in each of five years is required for eligibility for a retirement annuity. Participants employed prior to 1990 and on or after April 24, 1998, and prior to July 1, 2011, are immediately vested. Participants who initially became WRS eligible on or after July 1, 2011, must have five years of creditable service to be vested.

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

General Information About the Pension Plan (cont.)

Benefits provided. Employees who retire at or after age 65 (54 for protective occupation employees, 62 for elected officials and State executive participants) are entitled to receive an unreduced retirement benefit. The factors influencing the benefit are: (1) final average earnings, (2) years of creditable service, and (3) a formula factor.

Final average earnings is the average of the participant's three highest years' earnings. Creditable service is the creditable current and prior service expressed in years or decimal equivalents of partial years for which a participant receives earnings and makes contributions as required. The formula factor is a standard percentage based on employment category.

Employees may retire at age 55 (50 for protective occupation employees) and receive reduced benefits. Employees terminating covered employment before becoming eligible for a retirement benefit may withdraw their contributions and forfeit all rights to any subsequent benefits.

The WRS also provides death and disability benefits for employees.

Postretirement adjustments. The Employee Trust Funds Board may periodically adjust annuity payments from the retirement system based on annual investment performance in accordance with s. 40.27, Wis. Stat. An increase (or decrease) in annuity payments may result when investment gains (losses), together with other actuarial experience factors, create a surplus (shortfall) in the reserves, as determined by the system’s consulting actuary. Annuity increases are not based on cost of living or other similar factors. For Core annuities, decreases may be applied only to previously granted increases. By law, Core annuities cannot be reduced to an amount below the original, guaranteed amount (the “floor”) set at retirement. The Core and Variable annuity adjustments granted during recent years are as follows:

Year	Core Fund Adjustment	Variable Fund Adjustment
2007	3.0%	10%
2008	6.6	0
2009	(2.1)	(42)
2010	(1.3)	22
2011	(1.2)	11
2012	(7.0)	(7)
2013	(9.6)	9
2014	4.7	25
2015	2.9	2
2016	0.5	(5)
2017	2.0	4.0

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

General Information About the Pension Plan (cont.)

Contributions. Required contributions are determined by an annual actuarial valuation in accordance with Chapter 40 of the Wisconsin Statutes. The employee required contribution is one-half of the actuarially determined contribution rate for General category employees and Executives and Elected Officials. Required contributions for protective employees are the same rate as general employees. Employers are required to contribute the remainder of the actuarially determined contribution rate. The employer may not pay the employee required contribution unless provided for by an existing collective bargaining agreement.

During the reporting period, the WRS recognized $562,396 and $521,123 in contributions from the utility during the current and prior reporting periods, respectively.

Contribution rates as of December 31 are:

	2018		2017	
	Employee	Employer	Employee	Employer
General (including Executives and Elected Officials)	6.7%	6.7%	6.8%	6.8%
Protective with Social Security	6.7%	10.7%	6.8%	10.6%
Protective without Social Security	6.7%	14.9%	6.8%	14.9%

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

At December 31, 2018, the utility reported a liability (asset) of $(1,594,540) for its proportionate share of the net pension liability (asset). The net pension liability (asset) was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation as of December 31, 2016 rolled forward to December 31, 2017. No material changes in assumptions or benefit terms occurred between the actuarial valuation date and the measurement date. The utility's proportion of the net pension liability (asset) was based on the utility's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2017, the City of Madison's proportion was 1.689%, which was an increase of 0.069% from its proportion measured as of December 31, 2016.

At December 31, 2017, the utility reported a liability of $438,906 for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2015 rolled forward to December 31, 2016. No material changes in assumptions or benefit terms occurred between the actuarial valuation date and the measurement date. The utility's proportion of the net pension liability was based on the utility's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2016, the City of Madison's proportion was 1.620%, which was an increase of 0.038% from its proportion measured as of December 31, 2015.

For the years ended December 31, 2018 and 2017, the utility recognized pension expense of $120,520 and $516,618, respectively.

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (cont.)

At December 31, 2018, the utility reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 2,042,807	$ (1,066,420)
Changes in assumptions	354,534	-
Net differences between projected and actual earnings on pension plan investments	-	(1,958,121)
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	(26,012)
Employer contributions subsequent to the measurement date	592,109	-
Totals	$ 2,989,450	$ (3,050,553)

At December 31, 2017, the utility reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 178,862	$ (1,454,568)
Changes in assumptions	483,575	-
Net differences between projected and actual earnings on pension plan investments	2,347,688	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	(25,090)
Employer contributions subsequent to the measurement date	562,396	-
Totals	$ 3,572,521	$ (1,479,658)

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (cont.)

Deferred outflows related to pension resulting from WRS Employer's contributions subsequent to the measurement date reported in the table above will be recognized as a reduction of the net pension liability in the subsequent year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

2018		2017	
Year Ended December 31	Water Utility	Year Ended December 31	Water Utility
2019	$ 130,316	2018	$ 624,021
2020	(17,702)	2019	624,021
2021	(438,874)	2020	425,985
2022	(329,977)	2021	(144,165)
2023	3,025	2022	605
Total	$ (653,212)	Total	$ 1,530,467

Actuarial assumptions. The total pension liability in the actuarial valuation used in the current and prior year was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	2018	2017
Actuarial valuation date	December 31, 2016	December 31, 2015
Measurement date of net Pension liability (Asset)	December 31, 2017	December 31, 2016
Actuarial cost method	Entry Age Normal	Entry Age Normal
Asset valuation method	Fair value	Fair value
Long-term expected rate of return	7.2%	7.2%
Discount rate	7.2%	7.2%
Salary increases		
Inflation	3.2%	3.2%
Seniority/Merit	0.2% - 5.6%	0.2% - 5.6%
Mortality	Wisconsin 2012 Mortality Table	Wisconsin 2012 Mortality Table
Post-retirement adjustments*	2.1%	2.1%

** No postretirement adjustment is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. 2.1% is the assumed annual adjustment based on the investment return assumption and the postretirement discount rate.*

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (cont.)

Actuarial assumptions used in the December 31, 2016 and 2015 actuarial valuations are based upon an experience study conducted in 2015 using experience from 2012 – 2014. The total pension liability for December 31, 2017 is based upon a roll-forward of the liability calculated from the December 31, 2016 actuarial valuation.

Long-term expected return on plan assets. 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 returns, net of pension plan investment expense 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 as of December 31, 2018 are summarized in the following table:

Core Fund Asset Class	Current Asset Allocation	Destination Target Asset Allocation	Long-Term Expected Nominal Rate of Return %	Long-Term Expected Real Rate of Return %
Global Equities	50.0%	45.0%	8.2%	5.3%
Fixed Income	24.5	37.0	4.2	1.4
Inflation Sensitive Assets	15.5	20.0	3.8	1.0
Real Estate	8.0	7.0	6.5	3.6
Private Equity/Debt	8.0	7.0	9.4	6.5
Multi-Asset	4.0	4.0	6.5	3.6
Total Core Fund	110.0	120.0	7.3	4.4
Variable Fund Asset Class				
US Equities	70.0	70.0	7.5	4.6
International Equities	30.0	30.0	7.8	4.9
Total Variable Fund	100.0	100.0	7.9	5.0

New England Pension Consultants Long-Term US CPI (Inflation) Forecast: 2.75%

Asset Allocations are managed within established ranges, target percentages may differ from actual monthly allocations

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (cont.)

The target allocation and best estimates of arithmetic real rates of return for each major asset class as of December 31, 2017 are summarized in the following table:

Core Fund Asset Class	Current Asset Allocation	Destination Target Asset Allocation	Long-Term Expected Nominal Rate of Return %	Long-Term Expected Real Rate of Return %
Global Equities	50.0%	45.0%	8.30%	5.4%
Fixed Income	24.5	37.0	4.24	1.4
Inflation Sensitive Assets	15.5	20.0	4.30	1.5
Real Estate	8.0	7.0	6.50	3.6
Private Equity/Debt	7.0	7.0	9.40	6.5
Multi-Asset	4.0	4.0	6.60	3.7
Total Core Fund	109.0	120.0	7.40	4.5
Variable Fund Asset Class				
US Equities	70.0	70.0	7.60	4.7
International Equities	30.0	30.0	8.50	5.6
Total Variable Fund	100.0	100.0	7.9	5.0

New England Pension Consultants Long-Term US CPI (Inflation) Forecast: 2.75%

Asset Allocations are managed within established ranges, target percentages may differ from actual monthly allocations

Single discount rate. A single discount rate of 7.20% was used to measure the total pension liability as of December 31, 2018 and December 31, 2017. This single discount rate was based on the expected rate of return on pension plan investments of 7.20% and a long-term bond rate of 3.31% in 2018 and 3.78% in 2017. Because of the unique structure of WRS, the 7.20% expected rate of return implies that a dividend of approximately 2.1% will always be paid. For purposes of the single discount rate, it was assumed that the dividend would always be paid. The projection of cash flows used to determine this single 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. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments (including expected dividends) 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.

NOTE 8 – EMPLOYEES RETIREMENT SYSTEM (cont.)

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (cont.)

Sensitivity of the utility's proportionate share of the net pension liability (asset) to changes in the discount rate. The following presents the utility's proportionate share of the net pension liability (asset) calculated using the discount rate of 7.20 percent, as well as what the utility's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.20 percent) or 1-percentage-point higher (8.20 percent) than the current rate:

The sensitivity analysis as of December 31, 2018 is as follows:

	1% Decrease to Discount Rate (6.20%)	Current Discount Rate (7.20%)	1% Increase to Discount Rate (8.20%)
Utility's proportionate share of the net pension liability	$ 4,126,195	$ (1,594,540)	$ (5,942,867)

The sensitivity analysis as of December 31, 2017 is as follows:

	1% Decrease to Discount Rate (6.20%)	Current Discount Rate (7.20%)	1% Increase to Discount Rate (8.20%)
Utility's proportionate share of the net pension liability	$ 5,854,746	$ 438,906	$ (3,720,684)

***Pension plan fiduciary net position*.** Detailed information about the pension plan's fiduciary net position is available in separately issued financial statements available at http://etf.wi.gov/publications/cafr.htm.

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS

GENERAL INFORMATION ABOUT THE OPEB PLAN

The utility implemented GASB No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, effective January 1, 2018. The cumulative effect of the change in net position due to the change in accounting standard is shown as a change in beginning net position for 2018. The prior year balances for deferred outflows of resources, deferred inflows of resources, and the total OPEB liability were not restated due to the measurement date used for the calculation of the balances and the timing of the information received by the Plan.

The municipality sponsors a single-employer defined benefit healthcare plan, (the plan) in which the utility participates. The plan provides healthcare coverage to active and eligible retired municipal employees and their spouses. The plan is affiliated with the Wisconsin Public Employer's Group Health Insurance – Dane County service area plan, a purchasing plan administered by the State of Wisconsin. Benefit provisions are established through collective bargaining agreements. The plan does not issue a publicly available financial report. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

The plan provides eligible retirees with the opportunity to stay on the municipality's health insurance plan. Contribution requirements are established through collective bargaining agreements and may be amended only through negotiations between the City and the union. Eligible retirees and spouses contribute the full amount of the premiums after age 55, except for AFSCME union members who contribute the difference between the rate paid by the municipality and the current year rate. As the eligibility requirements for different classes of employees vary, please see the audit report of the municipality for complete details of all benefits offered as well as the funding policy and required contribution rates.

Employees covered by benefit terms. At December 31, 2018, the following employees were covered by the benefit terms:

	Water Utility
Inactive plan members or beneficiaries currently receiving benefit payments	19
Inactive plan members entitled to but not yet receiving benefit payments	13
Active plan members	113
	145

TOTAL OPEB LIABILITY

The utility's total OPEB liability of $2,504,210 was measured as of December 31, 2018, and was determined by an actuarial valuation as of that date.

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS (cont.)

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

Inflation	2.70%
Salary increases	3.20%
Investment rate of return	3.56% as of January 1, 2018 and 4.11% as of December 31, 2018
Healthcare cost trend rates	8.0% initially reduced by decrements to an ultimate rate of 4.5% after 8 years
Retirees' share of benefit-related costs	100%
Discount rate	4.11%

The discount rate was based on the yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

Mortality Rates are based on SOA RPH-2018 Total Dataset Mortality Table fully generational using Scale MP-2018

Other assumptions are based on a City-determined analysis of past trends and future expectations.

CHANGES IN THE TOTAL OPEB LIABILITY

	Total OPEB Liability
Balances at January 1, 2018	$ 2,588,052
Changes for the year:	
Service cost	179,319
Interest	96,586
Differences between expected and actual experience	(198,756)
Changes in assumptions	(51,468)
Employer contributions	(109,523)
Net changes	(83,842)
Balances at December 31, 2018	$ 2,504,210

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS (cont.)

CHANGES IN THE TOTAL OPEB LIABILITY (cont.)

Changes in assumptions and other inputs from December 31, 2017 to December 31, 2018 include the following, respectively; change in the actuarial cost method from the Projected Unit Credit with linear proration to decrement to the Entry Age Normal Level % of Salary, change in the discount rate from 3.56% to 4.11%, update in the mortality table from SOA RPH-2017 Total Dataset Mortality Table fully generational using Scale MP-2017 to SOA RPH-2018 Total Dataset Mortality Table fully generational using Scale MP-2018 and an update in the health care and subsidy trend rates from an initial rate of 7.50% decreasing by 0.05% annually to an ultimate rate of 4.50% to an initial rate of 8.00% decreasing by 0.05% annually to an ultimate rate of 4.50%.

Sensitivity of the total OPEB liability to changes in the discount rate. The following presents the total OPEB liability of the utility, as well as what the utility's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.11 percent) or 1-percentage-point higher (5.11 percent) than the current discount rate:

	1% Decrease (3.11%)	Discount Rate (4.11%)	1% Increase (5.11%)
Total OPEB liability	$ 2,705,514	$ 2,504,210	$ 2,321,569

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates. The following presents the total OPEB liability of the utility, as well as what the utility's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (7.0 percent decreasing to an ultimate rate of 3.5%) or 1-percentage-point higher (9.0 percent decreasing to 5.5% percent) than the current healthcare cost trend rates:

	1% Decrease (7.00%)	Healthcare Cost Trend Rates (8.00%)	1% Increase (9.00%)
Total OPEB liability	$ 2,282,958	$ 2,504,210	$ 2,764,037

OPEB EXPENSE AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

For the year ended December 31, 2018, the utilities recognized OPEB expense of $244,626. At December 31, 2018, the utility reported deferred inflows of resources related to OPEB from the following sources:

	Deferred Inflows of Resources
Changes of assumptions or other inputs	$ (45,035)
Differences between expected and actual experience	(173,911)
Total	$ (218,946)

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS (cont.)

OPEB EXPENSE AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB (cont.)

Deferred outflows related to OPEB resulting from the employer's contributions subsequent to the measurement date reported in the table above will be recognized as a reduction of the net OPEB liability in the subsequent year. Other 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:	
2019	$ (31,278)
2020	(31,278)
2021	(31,278)
2022	(31,278)
2023	(31,278)
Thereafter	(62,556)

OTHER POSTEMPLOYMENT BENEFIT DISCLOSURES REQUIRED UNDER GASB NO. 45

The municipality's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following table shows the components of the annual OPEB cost for the year ended December 31:

	Municipality		Water Utility	
	2017	2016	2017	2016
Annual required contribution	$ 7,833,432	$ 7,922,687	$ 261,178	$ 257,117
Interest on net OPEB obligation	1,482,006	1,323,596	28,640	25,062
Adjustment to the ARC	(2,021,836)	(1,805,724)	(41,585)	(34,895)
Annual OPEB Cost	7,293,602	7,440,559	248,233	247,284
Contributions made	(2,625,538)	(3,920,348)	(111,287)	(167,790)
Net Change in OPEB obligation	4,668,064	3,520,211	136,946	79,494
Net OPEB Obligation – 1/1	32,933,461	29,413,249	636,434	556,940
Net OPEB Obligation – 12/31	$ 37,601,525	$ 32,933,461	$ 773,380	$ 636,434

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS (cont.)

OTHER POSTEMPLOYMENT BENEFIT DISCLOSURES REQUIRED UNDER GASB NO. 45 (cont.)

The municipality's and utility's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2017 and 2016, were as follows:

	Fiscal Year Ended	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
Municipality	2017	$ 7,293,602	36.0%	$ 37,601,525
Municipality	2016	7,440,559	52.7%	32,933,461
Municipality	2015	6,808,834	43.2%	29,413,249
Water Utility	2017	248,233	44.8%	773,380
Water Utility	2016	247,284	67.9%	636,434
Water Utility	2015	136,001	45.0%	556,940

The funded status of the plan (overall municipality) as of December 31, 2017, the most recent actuarial valuation date, was as follows:

Actuarial accrued liability (AAL)	$ 62,674,237
Actuarial value of plan assets	-
Unfunded Actuarial Accrued Liability (UAAL)	$ 62,674,237
Funded ratio (actuarial value of plan assets/AAL)	0.0%
Covered payroll (active plan members)	$ 190,626,255
UAAL as a percentage of covered payroll	32.9%

Please see the required supplemental information for the entire plan included in the municipality audit report.

Actuarial valuations of an ongoing plan involve estimates for the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information in the municipality's financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members to that point. The methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

NOTE 9 – OTHER POSTEMPLOYMENT BENEFITS (cont.)

OTHER POSTEMPLOYMENT BENEFIT DISCLOSURES REQUIRED UNDER GASB NO. 45 (cont.)

In the actuarial valuation, the projected unit credit with liner proration to decrement actuarial cost method was used. The actuarial assumptions include a 4.5% investment rate of return and an annual healthcare cost trend rate of 8.0% for 2018, reduced by decrements to an ultimate rate of 4.5% for 2025 and beyond. Both rates include a 3% inflation assumption. The plan's unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll on an open basis. The amortization period at December 31, 2017, was 30 years.

NOTE 10 – COMMITMENTS AND CONTINGENCIES

CLAIMS AND JUDGMENTS

From time to time, the utility is party to various pending claims and legal proceedings. Although the outcome of such matters cannot be forecasted with certainty, it is the opinion of management and the utility's legal counsel that the likelihood is remote that any such claims or proceedings will have a material adverse effect on the utility's financial position or results of operations.

OPEN CONTRACTS

The utility has construction contracts that continue into subsequent years. The value of service provided and the corresponding liability as of December 31, 2018 and 2017 has been accrued in these financial statements.

NOTE 11 – TRANSFER OF OPERATIONS

On August 15, 2017, the PSCW granted the dissolution of Waunona Sanitary District #2 (District) and the acquisition of its customers and assets by the utility. Prior to the decision, the District operated independently and purchased wholesale water from the utility. The District was experiencing difficulties in finding acceptable staffing levels necessary to operate the District and therefore requested that the utility take over operation of both the water and sewer functions. The utility agreed to take over the operations and began providing water and sewer service to the acquired customers after the effective date of transition.

As a result of the transfer of operations, the utility recognized the following assets and net assets from the District as follows:

	Carrying Value as of Effective Date of Transfer
Current Assets	$ 21,919
Net Assets	54,749

NOTE 12 – RESTATEMENT OF NET POSITION FOR THE CUMULATIVE EFFECT OF A CHANGE IN ACCOUNTING PRINCIPLE

The utility adopted GASB Statement No. 75 effective January 1, 2018. A restatement to beginning net position as of January 1, 2018 is presented on the statement of revenues, expenses and changes in net position as opposed to a separate cumulative effect presentation as required by GASB No. 75 for the purpose of consistent reporting with the City of Madison financial report. The cumulative effect of implementation is reflected as a change in net position at January 1, 2018 as follows:

Net Position – December 31, 2017 (as previously reported)	$	125,274,882
Net OPEB liability, January 1, 2018		(1,814,672)
Deferred inflows, January 1, 2018		46,002
Net Position – January 1, 2018 (as restated)	$	123,506,212

Additional information required for retroactive implementation was not provided by the OPEB plan.

NOTE 13 – SUBSEQUENT EVENTS

The utility evaluated subsequent events through the date that the financial statements were available to be issued for events requiring recording or disclosure in the financial statements.

SUPPLEMENTAL INFORMATION

MADISON WATER UTILITY

REVENUE BOND DEBT REPAYMENT SCHEDULES
As of December 31, 2018

Year	2009A Refunding Principal	2009A Refunding Interest	2009A Refunding Total	2009C Bonds Principal	2009C Bonds Interest	2009C Bonds Total	2010 BAB's Principal	2010 BAB's Interest	2010 BAB's Federal Credit (1)	2010 BAB's Total
2019	$ 2,055,000	$ 1,174,238	$ 3,229,238	$ 365,000	$ 361,532	$ 726,532	$ 605,000	$ 415,399	$ (145,390)	$ 875,009
2020	2,040,000	1,079,570	3,119,570	390,000	344,026	734,026	620,000	394,718	(138,151)	876,567
2021	2,110,000	975,820	3,085,820	415,000	323,901	738,901	635,000	371,961	(130,186)	876,775
2022	2,510,000	860,320	3,370,320	300,000	306,026	606,026	650,000	347,218	(121,526)	875,692
2023	2,955,000	723,695	3,678,695	-	298,526	298,526	670,000	320,478	(112,167)	878,311
2024	2,900,000	577,320	3,477,320	-	298,526	298,526	685,000	291,676	(102,087)	874,589
2025	2,900,000	446,820	3,346,820	-	298,526	298,526	705,000	260,739	(91,259)	874,480
2026	2,970,000	329,420	3,299,420	-	298,526	298,526	725,000	227,481	(79,618)	872,863
2027	2,085,000	228,320	2,313,320	515,000	288,226	803,226	750,000	190,575	(66,701)	873,874
2028	2,175,000	141,760	2,316,760	530,000	266,995	796,995	775,000	150,544	(52,690)	872,854
2029	2,280,000	48,450	2,328,450	2,615,000	200,495	2,815,495	800,000	109,200	(38,220)	870,980
2030	-	-	-	3,410,000	72,463	3,482,463	825,000	66,544	(23,290)	868,254
2031	-	-	-	-	-	-	855,000	22,444	(7,855)	869,589
Totals	$ 26,980,000	$ 6,585,733	$ 33,565,733	$ 8,540,000	$ 3,357,768	$ 11,897,768	$ 9,300,000	$ 3,168,977	$ (1,109,140)	$ 11,359,837

(1) - The 2010 bonds are Build America Bonds. The amount disclosed is based on the originally approved 35% credit. During the federal fiscal year 2015 interest subsidies were reduced by 7.1% and during federal fiscal year 2016, the subsidy payments have been reduced by 7.1%. This amount may continue to change based on sequestration.

Year	2011 Revenue Bonds Principal	2011 Revenue Bonds Interest	2011 Revenue Bonds Total	2012 Revenue Bonds Principal	2012 Revenue Bonds Interest	2012 Revenue Bonds Total	2013 Revenue Bonds Principal	2013 Revenue Bonds Interest	2013 Revenue Bonds Total
2019	$ 840,000	$ 485,906	$ 1,325,906	$ 935,000	$ 552,700	$ 1,487,700	$ 995,000	$ 866,525	$ 1,861,525
2020	865,000	460,331	1,325,331	950,000	515,000	1,465,000	1,020,000	816,150	1,836,150
2021	890,000	429,556	1,319,556	970,000	476,600	1,446,600	1,055,000	764,275	1,819,275
2022	920,000	397,956	1,317,956	990,000	437,400	1,427,400	1,085,000	710,775	1,795,775
2023	950,000	369,906	1,319,906	1,015,000	397,300	1,412,300	1,115,000	655,775	1,770,775
2024	985,000	339,650	1,324,650	1,040,000	356,200	1,396,200	1,150,000	599,150	1,749,150
2025	1,020,000	308,344	1,328,344	1,065,000	314,100	1,379,100	1,190,000	546,600	1,736,600
2026	1,055,000	276,560	1,331,560	1,095,000	276,375	1,371,375	1,240,000	498,000	1,738,000
2027	1,090,000	242,363	1,332,363	1,125,000	243,075	1,368,075	1,290,000	447,400	1,737,400
2028	1,135,000	205,497	1,340,497	1,160,000	208,800	1,368,800	1,340,000	394,800	1,734,800
2029	1,175,000	165,781	1,340,781	1,195,000	173,475	1,368,475	1,390,000	340,200	1,730,200
2030	1,225,000	123,016	1,348,016	1,235,000	137,025	1,372,025	1,440,000	283,600	1,723,600
2031	1,275,000	76,906	1,351,906	1,275,000	99,375	1,374,375	1,500,000	224,800	1,724,800
2032	1,325,000	26,500	1,351,500	1,315,000	60,525	1,375,525	1,560,000	163,600	1,723,600
2033	-	-	-	1,360,000	20,400	1,380,400	1,620,000	100,000	1,720,000
2034	-	-	-	-	-	-	1,690,000	33,800	1,723,800
Totals	$ 14,750,000	$ 3,908,272	$ 18,658,272	$ 16,725,000	$ 4,268,350	$ 20,993,350	$ 20,680,000	$ 7,445,450	$ 28,125,450

MADISON WATER UTILITY

REVENUE BOND DEBT REPAYMENT SCHEDULES
As of December 31, 2018

Year	2015 Revenue Bonds Principal	2015 Interest	2015 Total	2016A Revenue Bonds Principal	2016A Interest	2016A Total	2016B Revenue Bonds Principal	2016B Interest	2016B Total
2019	$ 1,600,000	$ 1,388,204	$ 2,988,204	$ 790,000	$ 989,950	$ 1,779,950	$ 1,070,000	$ 606,600	$ 1,676,600
2020	1,635,000	1,307,329	2,942,329	820,000	957,750	1,777,750	1,120,000	562,800	1,682,800
2021	1,680,000	1,224,454	2,904,454	855,000	924,250	1,779,250	1,160,000	517,200	1,677,200
2022	1,735,000	1,139,079	2,874,079	885,000	885,025	1,770,025	1,215,000	463,625	1,678,625
2023	1,785,000	1,051,079	2,836,079	930,000	839,650	1,769,650	1,270,000	401,500	1,671,500
2024	1,855,000	960,079	2,815,079	980,000	791,900	1,771,900	1,340,000	336,250	1,676,250
2025	1,930,000	865,454	2,795,454	1,025,000	741,775	1,766,775	1,405,000	267,625	1,672,625
2026	2,005,000	787,129	2,792,129	1,080,000	689,150	1,769,150	1,475,000	195,625	1,670,625
2027	2,090,000	725,704	2,815,704	1,135,000	633,775	1,768,775	1,550,000	120,000	1,670,000
2028	2,170,000	663,431	2,833,431	1,190,000	575,650	1,765,650	1,625,000	40,625	1,665,625
2029	2,235,000	598,983	2,833,983	1,250,000	514,650	1,764,650	-	-	-
2030	2,305,000	529,731	2,834,731	1,310,000	457,200	1,767,200	-	-	-
2031	2,380,000	455,924	2,835,924	1,365,000	403,700	1,768,700	-	-	-
2032	2,460,000	379,406	2,839,406	1,420,000	348,000	1,768,000	-	-	-
2033	2,540,000	301,281	2,841,281	1,475,000	290,100	1,765,100	-	-	-
2034	2,625,000	220,578	2,845,578	1,535,000	229,900	1,764,900	-	-	-
2035	2,715,000	135,444	2,850,444	1,595,000	167,300	1,762,300	-	-	-
2036	2,810,000	45,661	2,855,661	1,660,000	102,200	1,762,200	-	-	-
2037	-	-	-	1,725,000	34,500	1,759,500	-	-	-
Totals	$ 38,555,000	$ 12,778,950	$ 51,333,950	$ 23,025,000	$ 10,576,425	$ 33,601,425	$ 13,230,000	$ 3,511,850	$ 16,741,850

Year	2018A Revenue Bonds Principal	2018A Interest	2018A Total	2018B Refunding Bonds Principal	2018B Interest	2018B Total
2019	$ -	$ 652,902	$ 652,902	$ -	$ 162,174	$ 162,174
2020	1,000,000	1,210,600	2,210,600	910,000	292,018	1,202,018
2021	1,075,000	1,169,100	2,244,100	950,000	264,118	1,214,118
2022	1,120,000	1,125,200	2,245,200	975,000	234,999	1,209,999
2023	1,165,000	1,079,500	2,244,500	1,005,000	204,301	1,209,301
2024	1,210,000	1,032,000	2,242,000	1,040,000	171,832	1,211,832
2025	1,260,000	982,600	2,242,600	1,070,000	137,537	1,207,537
2026	1,310,000	931,200	2,241,200	1,110,000	101,012	1,211,012
2027	1,360,000	877,800	2,237,800	1,145,000	62,105	1,207,105
2028	1,415,000	822,300	2,237,300	1,185,000	21,034	1,206,034
2029	1,470,000	764,600	2,234,600	-	-	-
2030	1,530,000	704,600	2,234,600	-	-	-
2031	1,595,000	642,100	2,237,100	-	-	-
2032	1,655,000	577,100	2,232,100	-	-	-
2033	1,720,000	509,600	2,229,600	-	-	-
2034	1,790,000	439,400	2,229,400	-	-	-
2035	1,865,000	366,300	2,231,300	-	-	-
2036	1,935,000	290,300	2,225,300	-	-	-
2037	2,015,000	211,300	2,226,300	-	-	-
2038	2,095,000	129,100	2,224,100	-	-	-
2039	2,180,000	43,600	2,223,600	-	-	-
Totals	$ 30,765,000	$ 14,561,202	$ 45,326,202	$ 9,390,000	$ 1,651,130	$ 11,041,130

MADISON WATER UTILITY

REVENUE BOND DEBT REPAYMENT SCHEDULES
As of December 31, 2018

	TOTAL			
Year	Principal	Interest	Federal Credit	Total
2019	$ 9,255,000	$ 7,656,130	$ (145,390)	$ 16,765,740
2020	11,370,000	7,940,292	(138,151)	19,172,141
2021	11,795,000	7,441,235	(130,186)	19,106,049
2022	12,385,000	6,907,623	(121,526)	19,171,097
2023	12,860,000	6,341,710	(112,167)	19,089,543
2024	13,185,000	5,754,583	(102,087)	18,837,496
2025	13,570,000	5,170,120	(91,259)	18,648,861
2026	14,065,000	4,610,478	(79,618)	18,595,860
2027	14,135,000	4,059,343	(66,701)	18,127,642
2028	14,700,000	3,491,436	(52,690)	18,138,746
2029	14,410,000	2,915,834	(38,220)	17,287,614
2030	13,280,000	2,374,179	(23,290)	15,630,889
2031	10,245,000	1,925,249	(7,855)	12,162,394
2032	9,735,000	1,555,131	-	11,290,131
2033	8,715,000	1,221,381	-	9,936,381
2034	7,640,000	923,678	-	8,563,678
2035	6,175,000	669,044	-	6,844,044
2036	6,405,000	438,161	-	6,843,161
2037	3,740,000	245,800	-	3,985,800
2038	2,095,000	129,100	-	2,224,100
2039	2,180,000	43,600	-	2,223,600
Totals	$ 211,940,000	$ 71,814,107	$ (1,109,140)	$ 282,644,967

MADISON WATER UTILITY

OPERATING REVENUES AND EXPENSES
For the Years Ended December 31, 2018 and 2017

	2018	2017
OPERATING REVENUES		
Unmetered Sales	$ 190,448	$ 169,131
Metered Sales		
Residential	12,530,268	12,290,566
Commercial	11,612,481	11,247,939
Duplex	59,528	-
Industrial	531,820	666,621
Public authority	4,357,131	4,397,154
Sales for resale	250,796	356,906
Total Metered Sales	29,342,024	28,959,186
Private Fire Protection	561,741	588,913
Public Fire Protection	3,895,947	4,120,866
Total Sales of Water	33,990,160	33,838,096
Customer Late Payment Penalties	158,891	191,137
Miscellaneous	135,902	157,626
Rents from water property	258,603	277,211
Other	555,626	455,871
Total Operating Revenues	35,099,182	34,919,941
OPERATING EXPENSES		
Operation and Maintenance		
Source of Supply		
Maintenance		
Supervision and engineering	13,464	11,214
Collecting and impounding reservoirs	168,687	88
Wells and springs	68,126	5,675
Total Source of Supply	250,277	16,977
Pumping		
Operation supervision and engineering	45,927	42,619
Power purchased for pumping	2,070,053	2,164,640
Pumping labor	419,495	416,998
Miscellaneous	440,465	410,166
Maintenance		
Supervision and engineering	158,104	156,358
Structures and improvements	343,896	155,122
Pumping equipment	666,150	414,394
Total Pumping	4,144,090	3,760,297
Water Treatment		
Operation supervision and engineering	89,647	85,860
Chemicals	157,996	154,129
Operation labor	261,032	253,306
Miscellaneous	120,102	118,811
Maintenance		
Supervision and engineering	12,723	11,214
Water treatment equipment	194,071	111,582
Total Water Treatment	835,571	734,902

MADISON WATER UTILITY

OPERATING REVENUES AND EXPENSES (cont.)
For the Years Ended December 31, 2018 and 2017

	2018	2017
OPERATING EXPENSES (cont.)		
Operation and Maintenance (cont.)		
Transmission and Distribution		
Operation supervision and engineering	$ 287,150	$ 280,047
Storage facilities	114,281	85,502
Transmission and distribution lines	413,089	353,759
Meter	45,108	44,398
Customer installation	349,919	326,358
Miscellaneous	1,406,148	1,246,910
Maintenance		
Reservoirs	152,033	2,442,235
Mains	2,420,840	1,699,904
Services	1,278,967	1,066,095
Meters	178,885	153,272
Hydrants	249,548	368,563
Total Transmission and Distribution	6,895,968	8,067,043
Customer Accounts		
Supervision	23,105	21,693
Meter reading	55,116	42,997
Customer records and collection	537,727	511,721
Conservation	254,234	272,313
Total Customer Accounts	870,182	848,724
Administrative and General		
Salaries	894,162	865,905
Office, building, and supplies	486,776	523,229
Outside services employed	267,394	329,636
Property insurance	35,442	34,334
Injuries and damages	327,732	445,057
Employee pensions and benefits	2,021,507	2,193,777
Miscellaneous	342,549	106,714
Maintenance of general plant	2,664	2,951
Total Administrative and General	4,378,226	4,501,603
Total Operation and Maintenance	17,374,314	17,929,546
Depreciation	7,548,684	6,944,967
Taxes	554,548	502,015
Total Operating Expenses	25,477,546	25,376,528
OPERATING INCOME	$ 9,621,636	$ 9,543,413

REQUIRED SUPPLEMENTARY INFORMATION

MADISON WATER UTILITY

SCHEDULE OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET) -
WISCONSIN RETIREMENT SYSTEM
For the Year Ended December 31, 2018

The required supplementary information presented below represents the proportionate information for the enterprise fund included in this report.

Fiscal Year Ending	City's Proportion of the Net Pension Liability (Asset)	Utility's Proportionate Share of the Net Pension Liability (Asset)	Covered Payroll	Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Asset
12/31/18	1.68891%	$ (1,594,540)	$ 8,270,529	19.28%	102.93%
12/31/17	1.62005%	438,906	7,895,803	5.56%	99.12%
12/31/16	1.58205%	880,490	7,765,706	11.34%	98.20%
12/31/15	1.57042%	(1,359,015)	7,847,129	17.32%	102.74%

SCHEDULE OF EMPLOYER CONTRIBUTIONS - WISCONSIN RETIREMENT SYSTEM
For the Year Ended December 31, 2018

Fiscal Year Ending	Contractually Required Contributions	Contributions in Relation to the Contractually Required Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
12/31/18	$ 592,109	$ 592,109	$ -	$ 8,837,448	6.80%
12/31/17	562,396	562,396	-	8,270,529	6.80%
12/31/16	521,123	521,123	-	7,895,803	6.60%
12/31/15	528,068	528,068	-	7,765,706	6.80%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
For the Year Ended December 31, 2018

Changes of benefit terms . There were no changes of benefit terms for any participating employer in WRS.

Changes of assumptions . There were no changes in the assumptions.

These schedules are presented to illustrate the requirements to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years for which information is available.

See independent auditors' report and accompanying notes to the required supplementary information.

MADISON WATER UTILITY

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY AND RELATED RATIOS
(LAST TEN FISCAL YEARS) *

	2018
Total OPEB Liability	
Service Cost	$ 179,319
Interest on Total OPEB Liability	96,586
Changes in benefits terms	-
Difference between expected and actual experience	(198,756)
Changes in assumptions	(51,468)
Employee Contributions	-
Benefit payments, including employee refunds	(109,523)
Administrative expense	-
Net Change in total OPEB Liability	(83,843)
Total OPEB Liability - beginning	2,588,053
Total OPEB Liability - ending	$ 2,504,210
Covered-employee payroll	$ 7,505,306
Net OPEB liability as a percentage of covered-employee payroll	33.4%

Notes to OPEB Schedule:

Changes in Assumptions

Benefit changes - There were no changes of benefit terms

Changes in assumptions:

Actuarial Methodology - The actuarial cost method has been updated from Projected Unit Credit with linear proration to decrement to Entry Age Normal Level % of Salary in the December 31, 2018 valuation.

Discount Rate - The discount rate has been updated from 3.56% to 4.11% in the December 31, 2018 valuation.

Mortality Table - The mortality table from SOA RPH-2017 Total Dataset Mortality Table fully generational using Scale MP-2017 has been updated to SOA RPH-2018 Total Dataset Mortality Table fully generational using Scale MP-2018.

Health Care and Subsidy Trend Rates - An update in the health care and subsidy trend rates from an initial rate of 7.50% decreasing by 0.05% annually to an ultimate rate of 4.50% to an initial rate of 8.00% decreasing by 0.05% annually to an ultimate rate of 4.50% for the December 31, 2018 valuation.

* Measurement fiscal year 2018 was the first year of GASB 75 implementation, therefore only one year is presented.

MADISON WATER UTILITY

SCHEDULE OF OPEB PLAN CONTRIBUTIONS
(LAST TEN FISCAL YEARS) *

		2018
Actuarially determined contributions	$	109,523
Contributions in relation to the actuarially required contributions		109,523
Contribution deficiency (excess)	$	-
Covered-employee payroll	$	7,575,323
Contributions as a percentage of covered-employee payroll		1.45%

* Measurement fiscal year 2018 was the first year of GASB 75 implementation, therefore only one year is presented.

Notes to OPEB Schedule:

Valuation date:
Actuarially determined contributions rates are calculated as of December 31, 2018 and are based on a weighted average of the 2019 premium rates by plan for all active and retired employees under 65, actuarially increased using current enrollment and health index factors.

Methods and Assumptions used to Determine Contribution Rates:

Actuarial cost method	Entry Age Normal Level
Amortization method	Level percentage of salary
Amortization period	8 years
Asset valuation method	Not applicable
Inflation	2.7 percent
Healthcare cost trend rates	8.0% decreasing to an ultimate rate of 4.50%
Salary increases	0.4% - 4.8%
Investment rate of return	Not applicable
Retirement age	Based upon rates from the December 31, 2017 actuarial valuation for the Wisconsin Retirement System (WRS)
Mortality	Mortality Rates are based on RPH-2018 Total Dataset Mortality Table fully generational using Scale MP-2018

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