

**MADISON METROPOLITAN
SEWERAGE DISTRICT**

**FINANCIAL STATEMENTS AND
SUPPLEMENTARY INFORMATION**

YEARS ENDED DECEMBER 31, 2018 AND 2017

TABLE OF CONTENTS

	PAGE
INDEPENDENT AUDITOR'S REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	3
BASIC FINANCIAL STATEMENTS	
Statements of Net Position.....	12
Statements of Revenues, Expenses, and Changes in Net Position.....	14
Statements of Cash Flows	15
Statements of Fiduciary Net Position	17
Statements of Changes in Fiduciary Net Position	18
Notes to Financial Statements	19
REQUIRED SUPPLEMENTARY INFORMATION	53
Schedule of Madison Metropolitan Sewerage District's (MMSD) Proportionate Share of the Net Pension Liability (Asset).....	54
Schedule of Madison Metropolitan Sewerage District Pension Contributions	54
Schedule of Changes in Total OPEB Liability and Related Ratios.....	55
Schedule of Madison Metropolitan Sewerage District's Proportionate Share Of the Net OPEB Liability (Asset).....	56
Schedule of Madison Metropolitan Sewerage District OPEB Contributions.....	56
Notes to the Required Supplementary Information.....	56



INDEPENDENT AUDITORS' REPORT

Board of Commissioners
Madison Metropolitan Sewerage District
Madison, Wisconsin

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and aggregate fiduciary funds of the Madison Metropolitan Sewerage District (the District), as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the entity's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and aggregate fiduciary funds of the Madison Metropolitan Sewerage District as of December 31, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis-of-Matter

As discussed in Note 11 to the financial statements, in 2018, Madison Metropolitan Sewerage District adopted new accounting guidance, GASB Statement No. 84, *Fiduciary Activities*. The district also recognized the liability associated with the Local Retiree Life Insurance Fund (LRLIF), a multiple-employer OPEB plan which is presented in accordance with GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pension Plans*. As a result of these items, Madison Metropolitan Sewerage District reported a restatement for the change in accounting principle. Our opinions are not modified with respect to these matters.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management Discussion and Analysis, Schedule of the District's Proportionate Share of the Net Pension Liability (Asset), the Schedule of the District's Pension Contributions, the Schedule of Changes in Total OPEB Liability and Related Ratios, the Schedule of the District's Proportionate Share of the Net OPEB Liability (Asset), and the Schedule of the District's OPEB Contributions as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



CliftonLarsonAllen LLP

Milwaukee, Wisconsin
April 17, 2019

Management's Discussion and Analysis for 2018 and 2017

The management of the Madison Metropolitan Sewerage District (the District) offers this narrative overview and analysis of the District's financial performance for calendar years 2018 and 2017. It should be read in conjunction with the District's financial statements which follow this section. The 2018 and 2017 financial statements have been prepared in accordance with generally accepted accounting principles.

Financial Highlights

- Net position increased by \$7.7 million (5.8 percent) from \$133.5 million to \$141.2 million in 2018. This compares to a \$3.4 million (2.6 percent) increase in 2017.
- Operating revenues increased by \$3.4 million (9.7 percent) from \$34.6 million to \$37.9 million in 2018. This compares to a \$0.3 million (0.9 percent) increase in 2017.
- Operating expenses, excluding depreciation, increased by \$0.5 million (2.3 percent) from \$21.1 million to \$21.6 million in 2018. This compares to an increase of \$1.9 million (9.6 percent) in 2017.
- During the year ended December 31, 2018, the District adopted GASB Statement No. 84, *Fiduciary Activities*. As a result, the financial information attributed to Yahara WINS will be presented in the attached Fiduciary Statement of Net Position and Fiduciary Statement of Changes in Net Position.

Overview of the Financial Statements

This annual financial report includes this Management Discussion and Analysis report, the independent auditors' report, the basic financial statements and the financial statements of the fiduciary funds. The financial statements also include notes that explain in more detail some of the information in the financial statements.

Basic Financial Statements

The basic financial statements of the District report information of the District using accounting methods similar to those used by private sector companies. These statements offer short-term and long-term financial information about its activities.

The Statement of Net Position includes all of the District's assets, deferred outflows, liabilities and deferred inflows and provides information about the nature and amounts of investments in resources (assets) and the obligations to District creditors (liabilities). It also provides the basis for evaluating the capital structure of the District and assessing the liquidity and financial flexibility of the District.

All of the District's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position. This statement measures the success of the District's operations over the past year and can be used to determine whether the District has successfully recovered all its costs through its user fees and other charges, profitability, and credit worthiness.

The Statement of Cash Flows reports cash receipts, cash payments, and net changes in cash resulting from operations, investing and financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting period.

Fiduciary Fund Financial Statements

Fiduciary funds are used to account for resources held for the benefit of parties outside the District. The District manages fiduciary funds for the Yahara Watershed Improvement Network (WINS) Group, a separate legal entity established by Intergovernmental Agreement. WINS issues separate financial statements that are available upon request from the Group. As the District has control of the assets held for WINS, the District includes WINS as a Fiduciary Fund. All of the District's fiduciary activities are reported in a separate statements of fiduciary net position and a statement of changes in fiduciary net position. The District is responsible for ensuring that the assets reported in these funds are used for their intended purposes.

Net Position

A summary of the District's Statement of Net Position is presented in Table A-1.

Table A-1
Condensed Statement of Net Position
(000's)

	2018	2017	2016
Current Assets	\$ 44,593	\$ 41,935	\$ 40,110
Noncurrent Assets			
Capital assets, net of accumulated depreciation	226,548	228,202	229,756
Other assets	10,934	9,648	9,655
Total assets	282,075	279,785	279,521
Deferred Outflows:			
Deferred outflows of resources related to Pension	2,883	3,722	4,612
Deferred outflows of resources related to OPEB	418	413	-
Total Deferred Outflows	3,301	4,135	4,612
Current Liabilities	15,480	14,227	13,721
Noncurrent Liabilities	124,068	132,909	136,938
Total liabilities	139,548	147,136	150,659
Deferred Inflows:			
Interceptor connection charges	974	1,087	1,587
Deferred inflows of resources related to Pension	3,187	1,863	1,830
Deferred inflows of resources related to OPEB	490	361	-
Total Deferred Inflows	4,651	3,311	3,417
Net Position:			
Invested in capital assets, net of related debt	99,291	92,324	89,147
Restricted for:			
Debt Service	20,950	18,977	17,875
Equipment Replacement	3,300	3,175	3,075
Net Pension asset	1,582		
Unrestricted:	16,054	18,997	19,960
Total net position	\$ 141,177	\$ 133,473	\$ 130,057

As of December 31, 2018 the District had total assets and deferred outflows of resources net of accumulated depreciation and deferred outflows of \$285.4 million and total liabilities and deferred inflows of resources of \$144.2 million, resulting in \$141.2 million of net position. Net position increased by \$7.7 million (5.8 percent) in 2018. This compares to a net position increase of \$3.4 million (2.6 percent) in 2017. The 2018 increase was due to income before capital contributions of \$5.2 million and capital contributions of \$2.9 million offset by a \$0.4 million adjustment for the restatement for recognition of the multi-employer other postemployment benefit plan in accordance with GASB 75. GASB 84 was adopted in the current year which resulted in restatement of assets and liabilities, but no net impact to Net Position. Capital assets net of related debt increased \$7.0 million, restricted assets increased by \$3.7 million, and the district's Wisconsin Retirement System net pension assets increased by \$1.6 million in 2018. Funds represented by the 2018 increase will be used to finance future construction, to increase reserves, and to offset a portion of future operating costs. Capital assets (land, structures, equipment, vehicles, etc.) comprise \$226.5 million, 80.3 percent of total assets at the end of 2018. At the end of 2017 capital assets had a value of \$228.2 million and represented 81.6 percent of total assets. Capital assets decreased \$1.7 million in 2018 compared to a \$1.6 million decrease in 2017. In both years the value of new assets added was less than the depreciation for the year.

Future principal payments on bonds total \$127.3 million at the end of 2018 and represent 91.2 percent of the District's liabilities. At the end of 2017, future principal payments on bonds totaled \$135.9 million and represented 92.3% percent of the District's liabilities. Future principal payments were \$8.6 million less than at the end of 2017 because principal payments (\$9.5 million) on debt in 2018 exceeded the amount of new debt (\$0.8 million) incurred. Future principal payments at the end of 2017 were \$4.7 million less than at the end of 2016. Construction activity funded with bond funds decreased significantly in 2018 and 2017 compared to the previous years.

The District's restricted net position consists of reserves for the payment of debt service, for unexpected expenses for the repair and replacement of equipment and net pension assets. Restricted assets increased by \$3.7 million in 2018 because debt service reserves increased \$2.0 million, the equipment replacement fund increased \$0.13 million and the net pension asset was \$1.6 million. Restricted net position increased by \$1.2 million in 2017.

Unrestricted net position, which is the district's unrestricted cash and investments, decreased \$2.9 million in 2018. The overall 2018 increase in net position occurred in capital assets, \$7.0 million, in debt service reserves, a restricted asset, \$2.0 million, and in net pension assets, \$1.6 million.

Revenues, Expenses, and Changes in Net Position

The District's revenues, expenses, and changes in net position are summarized in Table A-2.

Table A-2
Condensed Statement of Revenues,
Expenses, and Changes in Net Position
(000's)

	2018	2017	2016
Operating Revenues	\$ 37,907	\$ 34,552	\$ 34,247
Nonoperating Revenues	904	475	380
Total revenues	38,811	35,027	34,627
Depreciation Expense	8,328	8,285	7,608
Other Operating Expense	21,604	21,123	19,269
Nonoperating Expense	3,695	4,662	3,572
Total expense	33,627	34,070	30,449
Income (Loss) Before Capital Contributions	5,184	957	4,178
Capital Contributions	2,933	3,564	1,170
Increase in net position	8,117	4,521	5,348
Beginning Net Position	133,473	130,057	124,708
Restatement Due to GASB 75.	(413)	(1,105)	-
Beginning of Year, Restated	133,060	128,952	124,708
Ending Net Position	\$ 141,177	\$ 133,473	\$ 130,057

Revenues, Expenses, and Changes in Net Position (Continued)

Operating revenue for 2018 increased by \$3.4 million, or 9.7 percent, from \$34.6 million to \$37.9 million. This compares to the 2017 operating revenue increase of \$0.3 million, or 0.9 percent. The 2018 increase was primarily due to higher revenues from service charges.

Non-operating revenues for 2018 were \$0.43 million (90.3 percent) higher than in 2017, due largely to higher interest rates providing increased investment revenue. Non-operating revenues for 2017 were 25 percent higher than in 2016 due to higher investment income.

Depreciation expense in 2018 of \$8.3 million was essentially the same as for 2017, increasing \$0.04 million or 0.5% over 2017, due to a small increase in capital assets in 2018. The 2017 depreciation expense of \$8.3 million was a \$0.68 million increase over 2016.

Other operating expenses for 2018 of \$21.6 million were \$0.48 million (2.3 percent) higher than 2017 expenses of \$21.1 million. Other operating expenses for 2017 were 9.6 percent higher than 2016 expenses of \$19.3 million. The increase in other operating expenses in 2018 was due largely to increase in salaries (\$0.20) million and power (\$0.22) million.

Non-operating expenses for 2018 of \$3.7 million, which are comprised of interest on the District's outstanding debt, other construction expenses, and disposal of equipment, were \$0.97 million (20.7%) lower than 2017 non-operating expenses. The decrease in non-operating expenses was due to reduced expenses for disposal of equipment (\$0.52 million), construction expenses (\$0.31 million), and interest expenses (\$0.14 million). Non-operating expenses in 2017 were \$1.1 million higher than in 2016.

Capital contributions include contributed capital assets and interceptor and treatment plant connection charge revenues. The one-time connection charges are assessed against each property in the District at the time sewerage service is made available. The charges are made on an area basis.

A conveyance facility connection charge rate has been established for each major District interceptor sewer. The conveyance facility connection charge rates are adjusted annually to account for changes in construction costs. The 2018 conveyance facility rates included a one-time increase of 22.8 percent in addition to an annual increase of 3.95 percent. The Engineering News Record's Construction Cost Index is used to determine the annual increase. Conveyance facility charge rates for 2018 increased by 28 percent. This compares to the 2017 increase of 3.4 percent.

The treatment plant connection charge rate is adjusted annually to account for the change in debt service paid by current users for facilities at the treatment plant that will be utilized by new users. The treatment plant connection charge rate is further adjusted by the typical bank passbook savings rate, or 4 percent, whichever is higher. The treatment plant connection charge rate for 2018 increased by 7.72 percent. The 2017 rate increased 8.1 percent.

Capital contributions in 2018 of \$2.9 million were \$0.6 million less than 2017 capital contributions of \$3.6 million. This decrease of 17.7 percent compared to 2017 was due to no contributed assets. The large increase in connection charge revenue in 2017 was largely due to payments before a January 1, 2018 rate increase.

Comparison of Actual Financial Results to Budget

Each year the District adopts annual operating, capital projects and debt service budgets and a six-year capital improvement plan following a public hearing. A comparison of the 2018 budgeted and actual amounts of operating revenues and expenses is shown in Table A-3.

The District does not include depreciation as an operating expense in its annual budget, rather, it budgets sufficient income to cover the subsequent year's debt service payments.

Operating revenues for 2018 of \$37.9 million were \$1.4 million (3.9 percent) more than budgeted primarily due to higher than expected wastewater flows and loadings (\$1.2 million) and higher than expected revenues from Septage disposal (\$0.16 million). Non-operating revenues of \$0.9 million for interest income, rent, and other miscellaneous items were \$0.6 million (202 percent) more than budgeted due primarily to increased interest income on investments (\$0.48) and increased miscellaneous income (\$.013 million).

Operating expenses for 2018, excluding depreciation, were \$0.66 million less than budgeted. The most

significant under budget items were contracted services, replacement parts and services, chemicals, supplies and miscellaneous expenses which were a combined \$1.2 million less than budgeted. The most significant over budget items were salaries and benefit and administrative costs which were a combined \$0.6 million more than budgeted because OPEB and pension expenses are included in this total and the district does not budget for them.

Non-operating expenses, which include the net value of retired equipment, construction expenses and the interest costs on the District's outstanding debt, were \$0.3 million less than budgeted due to low construction and interest expenses. The district does not budget for the disposal of equipment.

Budgeted income before capital contributions for 2018 of \$10.5 million is largely due to \$11.2 million budgeted for principal payments on the District's outstanding debt partially offset by a budgeted use of \$0.3 million in reserves in 2018. The \$5.3 million variance in the actual and budgeted income is primarily due to the \$8.3 million unbudgeted amount for depreciation which is partially offset by a \$2.0 million increase in revenues and \$0.7 million decrease in operating expenses.

It is the District's policy to finance capital improvements for new users through borrowing. Sewerage system improvements typically have useful lives of more than twenty years, and the District typically issues twenty-year bonds. The system's users pay for the costs of the facilities they require for the conveyance and treatment of their wastewater over the life of the bonds. For this reason, the District does not budget to recover depreciation costs in addition to the debt service expenses, since this would in effect result in double-billing current users for these facilities. Charges to recover debt service expenses reflect the cost of the facilities currently in use. Charges to recover depreciation expenses would reflect the cost of replacing these same facilities at the end of their useful lives.

Table A-3
Comparison of Budget to Actual Results for 2018
(000's)

	Budget	Actual	Variance
Revenues			
From operations	\$ 36,498	\$ 37,907	\$ 1,409
Nonoperating	299	\$ 904	605
Total revenues	36,797	\$ 38,811	2,014
Operating Expenses			
Depreciation expense		\$ 8,328	8,328
Other operating expenses:			
Salaries with benefits	10,793	11,163	370
Administrative	343	536	193
Legal and accounting	223	138	(85)
Insurance	219	226	7
Power	3,350	3,448	98
Natural gas	164	163	(1)
Chemicals	903	748	(155)
Motor and LP fuel	111	115	4
Water and sewer services	168	150	(18)
Contracted services	3,122	2,521	(601)
Engineering Consulting	9	-	(9)
Communication services	86	73	(13)
Replacement parts and services	1,886	1,714	(172)
Supplies	532	388	(144)
Miscellaneous	353	221	(132)
Total other operating expenses	22,262	\$ 21,604	(658)
Total operating expenses	22,262	29,932	7,670
Nonoperating Expenses			
Disposal of Equipment		50	50
Construction Expenses	618	375	(243)
Interest expense	3,400	3,270	(130)
Total nonoperating expenses	4,018	3,695	(323)
Total expenses	26,280	33,627	7,347
Income before capital contributions	\$ 10,517	\$ 5,184	\$ (5,333)

Capital Assets

At the end of 2018 the District had \$227 million invested in capital assets comprised of the Nine Springs Wastewater Treatment Plant, eighteen major pumping stations, over one hundred miles of interceptor sewers and force mains, and associated facilities. Table A-4 summarizes these assets.

Table A-4
Capital Assets
(000's)

	2018	2017	2016
Assets			
Land	\$ 7,401	\$ 7,401	\$ 7,401
Structures and improvements	210,137	207,384	199,231
Mechanical equipment	145,639	145,489	134,455
Office furniture and equipment	5,183	5,046	4,800
Vehicles	2,938	2,728	2,705
Construction In progress	6,142	2,959	16,352
Total	377,440	371,007	364,944
Less accumulated depreciation	150,891	142,805	135,187
Net property and equipment	\$ 226,549	\$ 228,202	\$ 229,757

The District's six-year capital improvement plan for 2019 through 2024 includes \$63 million of treatment plant upgrades and expansions and \$81 million of collection system improvements. Larger projects are expected to be financed with Clean Water Fund loans administered by the State of Wisconsin. Smaller projects less than \$500,000 will generally be financed with reserve funds. Reserve fund balances vary depending on construction scheduling, collection of connection charges, and interest earned on investments. A minimum reserve balance of \$3.0 million is maintained to finance any unplanned capital improvement.

Total capital assets increased by \$6.4 million to \$377 million. During 2018 the District completed the Pumping Station 10 Force Main Rehabilitation (\$1.4 million), the Lower Badger Mill Creek Phase 4 (\$1.2 million), and added \$3.2 million to Construction in Progress for projects not completed. Miscellaneous projects and purchases added \$0.5 million in assets.

Debt Administration

The District collects debt service costs through service charges. Since the services of the District are not directly related to the value of property, and since a substantial amount of property within the District is exempt from paying property taxes, a tax levy would result in an inequitable cost recovery system. The District maintains cash and investments in a debt service fund in an amount no less than what is required to abate levying an ad valorem tax for the general obligation debt service. The District manages the debt service fund so that by October 1 of each year the balance in the fund is sufficient to meet the current year's debt service payments plus the subsequent year's debt service payments.

District debt service costs are allocated to used capacity and excess capacity in the facilities constructed with proceeds from the debt being retired. Excess capacity is defined as the difference between the design capacity and the used capacity of each project and is determined annually. Used capacity debt service is recovered based on the volume and pollutant loadings of the users. Excess capacity debt service is allocated in equal amounts to all users through an "actual customer" rate.

General obligation debt outstanding as of the end of 2018 was \$127.3 million which represents the remaining balance on the Clean Water Fund loans from the State of Wisconsin. This compares to a 2017 year-end balance of \$135.9 million and a 2016 year-end balance of \$140.6 million. Interest on these loans is payable semi-annually at rates of 1.8 to 3.2 percent. Detailed information on the District's Clean Water Fund loans is included in the notes to the financial statements.

The District's outstanding debt is expected to increase by \$59 million over the six-year period from 2019 to 2024 due to anticipated projects in the collection system and treatment plant. Annual contributions to our debt service fund increased 6% in 2018 and are projected to increase 4.5% percent annually from 2019 to 2024.

By statute, the District can borrow up to 5 percent of the equalized value of the taxable property within the District. At the end of 2018 the borrowing limit was \$2.43 billion. At the end of 2017 that borrowing limit was \$2.26 billion. Over the next six years, the total amount of anticipated debt would be no more than 8 percent of the current limit. At the end of 2018 the District's debt of \$127.3 million was at 5.2 percent of this limit. At the end of 2017 the District's debt of \$135.9 million was at 6.0 percent of the limit. During the last two years the District did not experience any negative changes in debt credit rating or debt limitation.

Economic Factors

Growth within the District's service area as measured by number of customers has averaged 0.7 percent per year from 2013 to 2018. The future growth trend is projected to remain between 0.5 and 1 percent if the economy remains strong and decrease if economic growth weakens.

The District's customer base consists of residential users and commercial and industrial users that, for the most part, do not utilize large quantities of water or have strong wastewater discharges. This customer base characteristic results in a stable revenue base since the loss of any one user will not significantly impact the District's service charge revenues. The University of Wisconsin is the largest user of District services and provided 5.08 percent of service charge revenues in 2018 and 5.5 percent in 2017. The second largest user, Danisco in Madison, Wisconsin provided 1.6% of service charge revenues in 2018 and 1.3% in 2017.

Contacting the District

This discussion and analysis is intended to provide information for our customers and creditors concerning the District's financial performance and to demonstrate the District's accountability for the money it receives. If you have questions about this information, or need additional information, contact the Madison Metropolitan Sewerage District, 1610 Moorland Road, Madison, Wisconsin 53713-3398.

Madison Metropolitan Sewerage District
STATEMENTS OF NET POSITION
December 31, 2018 and 2017

ASSETS	2018	RESTATED 2017
	2018	RESTATED 2017
Current assets:		
Unrestricted assets - Cash and cash equivalents	\$ 16,786,384	\$ 16,749,948
Receivables, net of allowance for uncollectible amounts:		
Transmission and treatment of sewage and septage disposal	9,252,762	8,365,242
Servicing pumping stations	94,154	130,598
Conveyance facilities connection and treatment plan connection charges, current	128,152	276,524
Other	132,036	123,959
Prepaid insurance	333	333
Inventories	1,596,767	1,584,283
Restricted assets - Cash and cash equivalents	16,602,329	14,704,436
Total current assets	44,592,917	41,935,323
Noncurrent assets:		
Unrestricted Assets - Investments	327,265	821,784
Restricted Assets - Investments	8,178,679	8,016,148
Restricted assets - Net pension asset	1,581,897	-
Conveyance facilities connection and treatment plan connection charges, less current portior	846,017	810,197
Capital assets:		
Capital assets not being depreciated	13,542,887	10,360,271
Capital assets being depreciated	363,895,942	360,646,268
	377,438,829	371,006,539
Less: accumulated depreciation	150,890,814	142,804,799
Capital assets, net of depreciation	226,548,015	228,201,740
Total noncurrent assets	237,481,873	237,849,869
Total assets	282,074,790	279,785,192
Deferred Outflows:		
Deferred outflows of resources related to pensions	2,882,646	3,721,757
Deferred outflows of resources related to OPEBs	418,322	413,364
Total Deferred Outflows	3,300,968	4,135,121

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

Madison Metropolitan Sewerage District
STATEMENTS OF NET POSITION (Continued)
December 31, 2018 and 2017

	LIABILITIES	
	<u>2018</u>	<u>RESTATED 2017</u>
Current liabilities:		
Vouchers payable	\$ 4,028,916	\$ 3,120,139
Accrued salaries	310,512	246,412
Payroll withholdings payable	135,425	153,438
Compensated absences, current portion	<u>679,645</u>	<u>632,437</u>
Total current liabilities	<u>5,154,498</u>	<u>4,152,426</u>
Liabilities payable from restricted assets:		
Bonds payable, current portion	9,794,493	9,505,552
Accrued interest payable	<u>531,506</u>	<u>568,679</u>
Total current liabilities payable from restricted assets	<u>10,325,999</u>	<u>10,074,231</u>
Noncurrent liabilities, less current portion:		
Compensated absences	2,073,225	2,183,113
Bonds payable	117,462,299	126,372,138
Net pension liability		429,742
Net OPEB liability	<u>4,532,122</u>	<u>3,924,487</u>
Total noncurrent liabilities	<u>124,067,646</u>	<u>132,909,480</u>
Total liabilities	<u>139,548,143</u>	<u>147,136,137</u>
Deferred Inflow:		
Conveyance facilities connection and treatment plan connection charges	974,169	1,086,721
Deferred inflows of resources related to pensions	3,186,406	1,863,822
Deferred inflows of resources related to OPEBs	<u>490,293</u>	<u>360,508</u>
Total deferred inflows	<u>4,650,868</u>	<u>3,311,051</u>
	NET POSITION	
Net investment in capital assets	99,291,223	92,324,050
Restricted for:		
Debt service	20,949,502	18,976,905
Equipment replacement	3,300,000	3,175,000
Net pension asset	1,581,897	-
Unrestricted	<u>16,054,125</u>	<u>18,997,170</u>
Total net position	<u>\$ 141,176,747</u>	<u>\$ 133,473,125</u>

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

Madison Metropolitan Sewerage District
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
Years Ended December 31, 2018 and 2017

	<u>2018</u>	<u>RESTATED 2017</u>
OPERATING REVENUES		
Charges for services:		
Transmission and treatment of sewage	\$ 36,585,585	\$ 33,368,233
Servicing pumping stations	338,817	398,875
Septage disposal	703,861	555,299
Pretreatment monitoring	21,238	23,801
Struvite Harvesting	<u>257,574</u>	<u>205,570</u>
Total operating revenues	<u>37,907,075</u>	<u>34,551,778</u>
OPERATING EXPENSES		
Administration	6,019,680	5,676,030
Treatment	12,717,863	12,448,173
Collection	2,865,879	2,999,333
Depreciation	<u>8,328,156</u>	<u>8,284,730</u>
Total operating expenses	<u>29,931,578</u>	<u>29,408,266</u>
Operating income	<u>7,975,497</u>	<u>5,143,512</u>
NONOPERATING REVENUES (EXPENSES)		
Investment income (losses)	562,051	199,482
Rent	70,907	71,309
Other	271,032	204,628
Construction expenses	(375,065)	(681,706)
Disposal of property and equipment	(50,372)	(569,487)
Interest expense	<u>(3,270,113)</u>	<u>(3,411,009)</u>
Total nonoperating revenues (expenses)	<u>(2,791,560)</u>	<u>(4,186,783)</u>
Income (loss) before capital contributions	5,183,937	956,729
CAPITAL CONTRIBUTIONS		
Contributed assets	-	798,301
Conveyance facilities connection and treatment plan connection charges	<u>2,932,675</u>	<u>2,765,972</u>
Total capital contributions	<u>2,932,675</u>	<u>3,564,273</u>
CHANGE IN NET POSITION	8,116,612	4,521,002
NET POSITION		
BEGINNING OF YEAR, AS PREVIOUSLY REPORTED	133,473,125	130,056,666
RESTATEMENT	(412,990)	(1,104,543)
BEGINNING OF YEAR, RESTATED	<u>133,060,135</u>	<u>128,952,123</u>
END OF YEAR	<u>\$ 141,176,747</u>	<u>\$ 133,473,125</u>

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

Madison Metropolitan Sewerage District
STATEMENTS OF CASH FLOWS
Years Ended December 31, 2018 and 2017

	<u>2018</u>	<u>RESTATED 2017</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers and users	\$ 37,047,922	\$ 34,518,926
Payments to suppliers	(11,177,653)	(10,333,678)
Payments to employees	(10,411,119)	(9,595,222)
Net cash provided by operating activities	<u>15,459,150</u>	<u>14,590,026</u>
 CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Rent receipts	70,907	71,309
Other receipts	<u>271,032</u>	<u>204,628</u>
Net cash provided by noncapital financing activities	<u>341,939</u>	<u>275,937</u>
 CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Interest paid on long-term debt	(3,307,286)	(3,483,128)
Principal paid on long-term debt	(9,505,550)	(9,226,903)
Proceeds from issuance of long-term debt	884,652	4,495,451
Construction expenses	(375,065)	(681,706)
Acquisition of capital assets	(5,390,225)	(6,361,604)
Capital contributions received	<u>2,932,675</u>	<u>2,765,972</u>
Net cash used in capital and related financing activities	<u>(14,760,799)</u>	<u>(12,491,918)</u>
 CASH FLOWS FROM INVESTING ACTIVITIES		
Net investment income (expense)	562,051	199,482
Purchase of investments	(3,566,096)	(2,976,412)
Proceeds from sales and maturities of investments	<u>3,898,084</u>	<u>2,867,417</u>
Net cash provided by investing activities	<u>894,039</u>	<u>90,487</u>
 NET INCREASE IN CASH AND CASH EQUIVALENTS	1,934,329	2,464,532
 CASH AND CASH EQUIVALENTS		
BEGINNING OF YEAR, RESTATED	<u>31,454,384</u>	<u>28,989,852</u>
 END OF YEAR	<u>\$ 33,388,713</u>	<u>\$ 31,454,384</u>

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

Madison Metropolitan Sewerage District
STATEMENTS OF CASH FLOWS (Continued)
Years Ended December 31, 2018 and 2017

	2018	RESTATED 2017
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 7,975,497	\$ 5,143,512
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	8,328,156	8,284,730
Increase (decrease) from changes in:		
Receivables:		
Transmission and treatment of sewage and septage disposal	(887,520)	70,299
Servicing pumping stations	36,444	(58,576)
Other	(8,077)	(44,575)
Inventories	(12,484)	44,602
Net OPEB Liability	194,645	284,891
Deferred outflows of resources related to OPEB	(4,958)	-
Deferred inflows of resources related to OPEB	129,785	-
Net Pension Liability/Asset	(2,011,639)	525,968
Deferred outflows of resources related to Pension	839,111	-
Deferred inflows of resources related to Pension	1,322,584	-
Vouchers payable	(425,801)	450,466
Other liabilities	(16,593)	(111,291)
	\$ 15,459,150	\$ 14,590,026
NET CASH PROVIDED BY OPERATING ACTIVITIES		
RECONCILIATION OF CASH AND CASH EQUIVALENTS TO THE STATEMENTS OF NET POSITION		
Unrestricted	\$ 16,786,384	\$ 16,749,948
Restricted	16,602,329	14,704,436
TOTAL CASH AND CASH EQUIVALENTS	\$ 33,388,713	\$ 31,454,384
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES		
Contributed capital	\$ -	\$ 798,301
Assets donated to other municipalities	-	(563,894)
Construction in progress reported in accounts payable	2,667,094	1,332,516
Conveyance facilities connection and treatment plan connection charges billed	2,820,123	2,265,888
	\$ 5,487,217	\$ 3,832,811
TOTAL NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES		

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

Madison Metropolitan Sewerage District
STATEMENTS OF FIDUCIARY NET POSITION
December 31, 2018 and 2017

	Custodial Fund	
	<u>2018</u>	RESTATED <u>2017</u>
ASSETS		
Cash and cash equivalents	\$ 1,398,426	\$ 1,063,558
Receivables:		
Accounts receivable	1,506,600	30,000
Total assets	2,905,026	1,093,558
LIABILITIES		
Current liabilities:		
Accounts payable and other liabilities	191,725	193,100
Unearned receivables	1,427,590	-
Total liabilities	1,619,315	193,100
NET POSITION		
Restricted for:		
Other governments	1,285,711	900,458
Total net position	\$ 1,285,711	\$ 900,458

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

Madison Metropolitan Sewerage District
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
Years Ended December 31, 2018 and 2017

	Custodial Fund	
	<u>2018</u>	RESTATED <u>2017</u>
ADDITIONS		
Contributions:		
Members	\$ 1,438,357	\$ 1,457,442
Grants	115,000	310,542
Total contributions	1,553,357	1,767,984
Investment earnings		
Interest, dividends, and other	4,674	2,006
Net investment earnings	4,674	2,006
Total additions	1,558,031	1,769,990
DEDUCTIONS		
Administration	51,626	43,486
Phosphorus reduction	975,600	683,184
Water quality monitoring or modeling	145,552	142,862
Total deductions	1,172,778	869,532
NET INCREASE IN FIDUCIARY NET POSITION	385,253	900,458
NET POSITION		
BEGINNING OF YEAR	900,458	-
END OF YEAR	\$ 1,285,711	\$ 900,458

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

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 1 - NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES

Nature of Activities and Reporting Entity

Madison Metropolitan Sewerage District (the District) is a corporate body with the powers of a municipal corporation for the purpose of carrying out the collection, transmission, and treatment of wastewater. It was created by judgment of the County Court for Dane County entered on February 8, 1930. The District, which serves the City of Madison and surrounding cities, villages and towns in the Greater Madison Metropolitan Area, covering approximately 184 square miles, is a special-purpose government. The District is governed by nine-member Commission appointed for staggered three-year-terms. The Mayor of the City of Madison appoints five individuals as members of the commission. An executive council composed of the elected executive officers of each city and village that is wholly or partly within the boundaries of the district, except Madison, appoints three members of the commission by a majority vote. An executive council composed of the elected executive officers of each town that is wholly or partly within the boundaries of the district appoints one member of the commission by a majority vote. Accountability extends only to the appointment of the District's Commissioners. As the City of Madison, other cities, villages, and towns appoint the commissioners, the District and these entities are considered related organizations. The District is legally separate and fiscally independent of the County of Dane as well as any other state or local governments. It has unlimited taxing powers and has the right to set rates or charges for services provided without the approval of another government.

The Yahara WINS adaptive management project, also known as Yahara WINS, is the adaptive management approach to reduce the amount of phosphorous in the Yahara River Watershed. The District is the custodian of the project's segregated checking account. The Executive Committee of Yahara WINS authorizes the invoicing of partners in the project and the disbursement of funds out of the account. The District has the authority to make disbursements for contracts that have been approved by the Executive Committee up to the approved contract amount and other invoices up to a threshold of \$1,000. During the year ended December 31, 2018, the District adopted GASB Statement No. 84, *Fiduciary Activities*. As a result, the financial information attributed to Yahara WINS will be presented separately in the fiduciary statement of net position and fiduciary statement of changes in net position.

A summary of significant accounting policies follows:

Basis of Accounting

The accounting policies of the District conform to accounting principles generally accepted in the United States of America as applicable to local government enterprise funds. The accounts of the District are maintained, and the accompanying financial statements have been prepared, on the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned, expenses are recognized when incurred, depreciation of assets is recognized, and all assets, deferred outflows, liabilities, and deferred inflows associated with the operation of the District are included in the statements of net position.

The principal operating revenues of the District are charges for service. Operating expenses for the District include costs directly related to administration, collection, and treatment of wastewater, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 1 - NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

Cash Equivalents

For purposes of the statement of cash flows, highly liquid investments with a maturity of three months or less when acquired are considered to be cash equivalents.

Deposits and Investments

Investments other than in the Local Government Investment Pool (LGIP) are reported 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 quoted market prices. Adjustments necessary to report investments at fair value are recorded in the statement of revenues, expenses and change in net position as increases or decreases in investment income. The Local Government Investment Pool is reported at the per share value as reported by LGIP. Nonnegotiable Certificates of Deposit are deposits reported at cost and are not subject to fair value measurement.

The Wisconsin Local Government Investment Pool is part of the State Investment Fund (SIF), and is managed by the State of Wisconsin Investment Board. The SIF is not registered with the Securities and Exchange Commission, but operates under the statutory authority of Wisconsin Chapter 25. The SIF reports the fair value of its underlying assets annually. Participants in the LGIP have the right to withdraw their funds in total on one day's notice. At December 31, 2018 and 2017 the fair value of the District's share of the LGIP's assets was substantially equal to the amount as reported in these statements.

The District has adopted a formal investment policy and invests in accordance with Wisconsin State Statutes. Under state statute, investments are limited to:

- Time deposits in any credit union, bank, savings bank, trust company, or savings and loan association which is authorized to transact business in the state if the time deposits mature in not more than three years;
- Bonds or securities of any county, city, drainage district, vocational education district, village, town or school district of the state; bonds issued by a local exposition district, local professional baseball park district, local professional football district, local cultural arts district, the University of Wisconsin Hospitals and Clinics Authority or the Wisconsin Aerospace Authority;
- Bonds or securities issued or guaranteed by the federal government;
- Any security which matures within not more than seven years, if that security has a rating which is the highest or 2nd highest rating category assigned by Standard & Poor's corporation, Moody's investors service, or similar rating agency;
- Securities of an open-end management investment company or investment trust, if the company or trust does not charge a sales load, is registered under the investment company act of 1940, and if the portfolio is limited to bonds and securities issued by the federal government, bonds that are guaranteed as to principal and interest by the federal government;
- Repurchase agreements that are fully collateralized by bonds or securities of the federal government;
- The state local government investment pool.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 1 – NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

Inventories

Inventories of supplies are valued at cost under the specific identification method. The consumption method is used to account for inventories. Under the consumption method, inventories are recorded as expenses at the time they are consumed.

Receivables

Receivables are reported at their gross values and are considered to be fully collectible as they are primarily due from other municipalities, except for pretreatment. Receivables related to pretreatment have been reduced by an allowance for the estimated uncollectible amounts of \$3,478 as of December 31, 2018 and 2017, and are included in other receivables

Conveyance Facilities Connection Charges and Treatment Plant Connection Charges

Receivables from conveyance facilities connection charges and treatment plant connection charges are recognized when assessed and the revenue is delayed until the property owner connects with the intercepting sewer. No value has been placed on the future assessments against lands which are not currently served by intercepting sewers that were built with capacity to serve those lands.

Restricted Cash and Investments

Cash and investments are restricted for the purpose of unexpected repair and replacement and repayment of debt obligations.

Capital Assets

Capital assets are defined as assets with an initial cost of \$5,000 or greater with an estimated useful life greater than one year. Capital assets are stated at cost. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the life of the asset are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. For years prior to 2018, interest incurred during the construction phase of capital assets is included as part of the capitalized value of the assets constructed. For the year ending December 31, 2018, the District adopted GASB Statement No. 89, *Accounting for Interest Costs Incurred before the End of a Construction Period*, which discontinued the capitalization of interest costs during construction.

Depreciation of structures, improvements, mechanical equipment, office furniture and equipment, and vehicles is computed using the straight-line method over the following estimated useful lives of the assets:

Structures and improvements	50-75 Years
Heavy mechanical equipment	21-30 Years
Light mechanical equipment	10-20 Years
Office furniture and equipment	5-20 Years
Vehicles	7 Years

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 1 - NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

When capital assets are disposed, depreciation is removed from the respective accounts and the resulting gain or loss, if any, is recorded in nonoperating activities.

Compensated Absences

District employees earn sick leave of fifteen days per year which may be accumulated up to a maximum of 200 days. Each December, employees may elect to receive cash payments for 60 percent of their sick leave accumulated in excess of 100 days and 80 percent for sick leave accumulated in excess of 150 days, paid at their current rate of pay. Each December, employees are paid for all sick leave accumulated in excess of 200 days at their current rate of pay. Upon an employee's retirement or disability, 90 percent (100 percent for employees who have accrued at least 150 days of sick leave at any time during their employment) of previously earned but unpaid sick leave is converted to a cash value based on their current rate of pay, and this amount is contributed to the District's Retirement Health Savings Plan (RHSP) in the employee's name. Monies in this account can be used by the employee on a tax-free basis to pay for qualified medical expenses of the employee, their spouse and dependents. Any amounts remaining in the employee's RHSP account at the time of death of the retired or disabled employee may be used by the surviving spouse or eligible dependents on a tax-free basis to pay for qualified medical expenses. If there is no surviving spouse or dependents at the time of the employee's death, the remaining money in the account reverts to the District. No sick leave conversion amounts are paid to employees that terminate employment for reasons other than retirement or disability. The liability associated with accumulated sick pay for current and retired employees is reported as compensated absences liabilities in the statements of net position.

Employees earn vacation in varying amounts based on length of service. During an employee's first year of employment, vacation is prorated based on their start date and available for immediate use. Exempt employees must use vacation in half-day increments, and nonexempt employees may use vacation in quarter hour increments. After an employee's first year, vacation earned is available for use in the following year. Vacation may be accumulated to a maximum of 27 days. Upon an employee's retirement or disability, 100 percent of previously earned but unpaid vacation is converted to a cash value based on their current rate of pay, and this amount is contributed to the District's Retirement Health Savings Plan (RHSP) in the employee's name. Employees that terminate their employment for reasons other than retirement or disability are paid for earned vacation resulting from a carry over at their current rate of pay. Vacation earned in the year of termination is paid at varying percentages, depending upon the time of the year termination is effective. The liability associated with accumulated vacation is reported as compensated absences liabilities in the statement of net position.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 1 - NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

Nonexempt employees may also accumulate compensatory time for overtime work. All unused compensatory time is paid at their rate of pay on the second payroll in December. Exempt employees may accumulate compensatory time if they exceed 88 hours in a pay period, up to a maximum of 40 hours per calendar year. Exempt employees may carry compensatory time over at year-end, but must be used by March 31. After March 31, exempt employees' unused compensatory time is credited to the employee's base expense account using the employee's current rate of pay, and the accrued salaries liability is reduced accordingly. The liability associated with accumulated compensatory time is reported as accrued salaries liability in the statement of net position.

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.

Other Postemployment Benefits (OPEB) Retiree Health Insurance

The District does offer health insurance coverage to retirees at a rate set by the insurance carrier. Retirees are responsible for the full payment of premiums directly to the District. In addition, the District will make Medicaid and Medicare Supplement plans available to those employees qualified for Medicaid and/or Medicare. If a retired employee elects to discontinue participation in our group health insurance plan, the individual will not be allowed to reenroll at a later date.

Other Postemployment Benefits (OPEB) Retiree Life Insurance.

The fiduciary net position of the Local Retiree Life Insurance Fund (LRLIF) has been determined using the flow of economic resources measurement focus and the accrual basis of accounting. Under this measurement focus and basis the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to other postemployment benefits; OPEB expense; and information about the fiduciary net position of the LRLIF, including additions to/deductions from LRLIFs' fiduciary net position, have been determined on the same basis as they are reported by LRLIF. 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.

Long-Term Debt

The District reports long-term debt at face value in the basic financial statements. Any bond premiums or discounts are capitalized and amortized over the term of the bond using the straight-line method.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 1 - NATURE OF ACTIVITIES, REPORTING ENTITY, AND SIGNIFICANT ACCOUNTING POLICIES (Continued)

Deferred Inflows

Deferred inflows are reported for conveyance facilities connection charges and treatment plant connection charges that will become collectible at the time the related properties are connected to the system.

Net Position: Net position is classified in three separate categories. The categories, and their general descriptions, are as follows:

Net investment in capital assets – consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Restricted net position – consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally a liability or deferred inflow relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or deferred inflows or if the liability will be liquidated with the restricted assets reported.

Unrestricted net position – is the amount of the assets and deferred outflows, net of the liabilities and deferred inflows that are not included in the determination of net investment in capital assets or the restricted components of net position.

When both restricted and unrestricted resources are available for debt service, it is the District's policy to use restricted resources first, then unrestricted resources. For unexpected repairs, it is the District's policy to use unrestricted resources first and restricted resources only when needed.

Capital Contributions

Capital contributions consist of conveyance facilities connection charges and treatment plant connection charges and contributed capital assets.

Risk Management

The District is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets, errors and omissions, natural disasters, and employee injury. The District carries property insurance for buildings on the Nine Springs Treatment Plant campus and several rental units off campus. The District retains the risk of loss for damage or destruction of other elements of the sewerage system and other infrastructure. For all other risks, the District carries commercial insurance. Claims have not exceeded coverage in any of the prior three fiscal years.

Pollution Remediation Obligations

The District owns land that has been remediated under a Superfund clean-up project. Ongoing monitoring and maintenance of the lands is reported as an operating expense. These expenses totaled \$18,041 and \$4,060 in 2018 and 2017, respectively. Future expenses are expected to range from \$10,000 to \$30,000 annually.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 2 - CASH, CASH EQUIVALENTS, AND INVESTMENTS

As of December 31, 2018 and 2017, cash, cash equivalents, and investments included the following:

	<u>2018</u>	<u>2017</u>
Petty Cash	\$ 250	\$ 250
Deposits:		
Demand deposits	295,358	182,136
Savings accounts	3,397,882	4,535,368
Investments		
Institutional investment account:		
U.S. agency obligations	8,505,944	8,837,932
Insured deposit account	587,121	185,180
Local Government Investment Pool	<u>29,108,102</u>	<u>26,551,450</u>
Total District cash, cash equivalents and investments	41,894,657	40,292,316
 Fiduciary deposits - savings accounts	 <u>1,398,426</u>	 <u>1,063,558</u>
	 <u>\$ 43,293,083</u>	 <u>\$ 41,355,874</u>

The cash and investments are reported in the statements of net position as follows:

	<u>2018</u>	<u>2017</u>
Cash and cash equivalents:		
Unrestricted	\$ 16,786,384	\$ 16,749,948
Restricted	16,602,329	14,704,436
Investments:		
Unrestricted	327,265	821,784
Restricted	<u>8,178,679</u>	<u>8,016,148</u>
Total District cash, cash equivalents and investments	41,894,657	40,292,316
 Fiduciary cash and investments	 <u>1,398,426</u>	 <u>1,063,558</u>
	 <u>\$ 43,293,083</u>	 <u>\$ 41,355,874</u>

Deposits of governmental entities held by an official custodian in banks located in the same state as the governmental entity are insured by the Federal Deposit Insurance Corporation (FDIC) in the amount of \$250,000 for time and savings deposits and \$250,000 for demand deposits per financial institution. In addition, the state of Wisconsin has a State Guarantee Fund, which provides a maximum of \$400,000 per financial institution above the amount provided by the FDIC. However, due to the relatively small size of the State Guarantee Fund in relation to the total coverage, total recovery of losses may not be available.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 2 - CASH, CASH EQUIVALENTS, AND INVESTMENTS (Continued)

The carrying amount of the District's deposits totaled \$3,706,839 and \$4,902,684, with bank balances of \$3,757,092 and \$4,936,222 for the years ended December 31, 2018 and 2017, respectively. Of the bank balances, \$3,757,092 and \$4,936,222 was covered by FDIC insurance and collateralized, leaving \$-0- as uninsured and uncollateralized for the years ended December 31, 2018 and 2017. The District does not have a formal policy related to custodial credit risk, but it is their policy to ensure deposits are fully insured or collateralized.

The investments in the Local Government Investment Pool (LGIP) are covered up to \$400,000 by the State Guarantee Fund. Certificates of deposit held in the LGIP are covered by FDIC insurance, which applies to the proportionate public unit share of accounts.

The District also has investments in U.S. government and U.S. government agency obligations purchased through a private sector securities dealer and held by a third-party custodian. These investments are readily marketable, specifically identifiable and include discount notes and adjustable and fixed rate mortgage backed securities.

Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the value of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of net position.

Fair Value Measurement

The District uses fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures.

The District follows an accounting standard that defines fair value, establishes a framework for measuring fair value, establishes a fair value hierarchy based on the quality of inputs used to measure fair value, and requires expanded disclosures about fair value measurements. In accordance with this standard, the District has categorized its investments, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument.

Financial assets and liabilities recorded on the combined statements of financial position are categorized based on the inputs to the valuation techniques as follows:

Level 1 – Financial assets and liabilities are valued using inputs that are unadjusted quoted prices in active markets accessible at the measurement date of identical financial assets and liabilities.

Level 2 – Financial assets and liabilities are valued based on quoted prices for similar assets, or inputs that are observable, either directly or indirectly for substantially the full term through corroboration with observable market data.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 2 - CASH, CASH EQUIVALENTS, AND INVESTMENTS (Continued)

Level 3 – Financial assets and liabilities are valued using pricing inputs which are unobservable for the asset, inputs that reflect the reporting entity’s own assumptions about the assumptions market participants and would use in pricing the asset.

The District has the following assets that are subject to fair value measurements as of December 31, 2018:

<u>Investment Type</u>	Fair Value Level			
	<u>Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
SBA pools	\$1,933,249	\$ -	\$1,933,249	\$ -
Government National Mortgage Association	681,875	-	681,875	-
Federal National Mortgage Association	2,879,537	-	2,879,537	-
Federal Home Loan Mortgage Corporation	<u>3,011,283</u>	<u>-</u>	<u>3,011,283</u>	<u>-</u>
	<u>\$8,505,944</u>	<u>\$ -</u>	<u>\$8,505,944</u>	<u>\$ -</u>

The District has the following assets that are subject to fair value measurements as of December 31, 2017:

<u>Investment Type</u>	Fair Value Level			
	<u>Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
SBA pools	\$2,271,041	\$ -	\$2,271,041	\$ -
Government National Mortgage Association	918,495	-	918,495	-
Federal National Mortgage Association	2,277,009	-	2,277,009	-
Federal Home Loan Mortgage Corporation	<u>3,371,387</u>	<u>-</u>	<u>3,371,387</u>	<u>-</u>
	<u>\$8,837,932</u>	<u>\$ -</u>	<u>\$8,837,932</u>	<u>\$ -</u>

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 2 - CASH, CASH EQUIVALENTS, AND INVESTMENTS (Continued)

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As of December 31, 2018, the District had the following investments and maturities:

Investment Type	Fair Value	Investment Maturities (in Years)			
		<1	1-5	6-10	>10
Local government investment pool **	\$29,108,102	\$29,108,102	\$ -	\$ -	\$ -
Money Market	587,121	587,121	-	-	-
SBA pools	1,933,249	-	393,804	29,015	1,510,430
Government National Mortgage Association	681,875	-	6,850	3,416	671,609
Federal National Mortgage Association	2,879,537	74	14,977	15,231	2,849,255
Federal Home Loan Mortgage Corporation	3,011,283	525,812	738,709	13,598	1,733,164
	<u>\$38,201,167</u>	<u>\$ 30,221,109</u>	<u>\$ 1,154,340</u>	<u>\$ 61,260</u>	<u>\$ 6,764,458</u>

As of December 31, 2017, the District had the following investments and maturities:

Investment Type	Fair Value	Investment Maturities (in Years)			
		<1	1-5	6-10	>10
Local government investment pool **	\$26,551,450	\$26,551,450	\$ -	\$ -	\$ -
Money Market	185,180	185,180	-	-	-
SBA pools	2,271,041	-	396,488	33,107	1,841,446
Government National Mortgage Association	918,495	-	6,722	7,483	904,290
Federal National Mortgage Association	2,277,009	-	22,887	9,594	2,244,528
Federal Home Loan Mortgage Corporation	3,371,387	900,510	1,139,643	10,311	1,320,923
	<u>\$35,574,562</u>	<u>\$ 27,637,140</u>	<u>\$ 1,565,740</u>	<u>\$ 60,495</u>	<u>\$ 6,311,187</u>

** Because the LGIP had a weighted average maturity of less than one year as of December 31, 2018 and 2017 it has been presented as an investment with a maturity of less than one year.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The LGIP is unrated with regard to the credit quality rating. The remaining investments of the District are U.S. governmental or agency securities that are explicitly guaranteed, and therefore credit rating is not applicable, or has the highest rating issued by Moody's. The District has not developed policies governing the exposure of its cash deposits and investments to credit risk.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 2 - CASH, CASH EQUIVALENTS, AND INVESTMENTS (Continued)

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributable to the magnitude of a government's investment in a single issuer. It is the policy of the District that funds deposited in any one bank or savings and loan association shall not exceed \$1,500,000 at any given time. Investments in Wells Fargo Bank, the LGIP, and U.S. government or agency obligations are not limited as to amount.

Custodial Credit Risk-Investments

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

All of the District's U.S. government and agency obligations are uninsured and unregistered investments for which the investments are held by the counterparty's trust department or agent in the District's name. The LGIP is not subject to the custodial credit risk. The District has not developed policies governing the exposure of its investments to custodial credit risk.

Custodial Credit Risk-Deposits

For deposits, custodial credit risk is the risk that in the event of the failure of a depository financial institution, the District will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party.

The District has not developed policies governing the exposure of its cash deposits and investments to custodial credit risk. The District's deposits are fully insured or collateralized.

NOTE 3 - RESTRICTED NET POSITION

Restricted net position of the District consisted of the following at December 31, 2018 and 2017:

	<u>2018</u>	<u>2017</u>
Restricted assets:		
Cash and cash equivalents:		
Debt service	\$ 16,602,329	\$ 14,704,436
Investments:		
Debt service	4,878,679	4,841,148
Unexpected repair and replacement	3,300,000	3,175,000
Net pension asset	<u>1,581,897</u>	<u>-</u>
Total restricted assets	26,362,905	22,720,584
 Current Liabilities payable from restricted assets	 <u>(\$531,506)</u>	 <u>(\$568,679)</u>
	 <u>\$ 25,831,399</u>	 <u>\$ 22,151,905</u>

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 3 - RESTRICTED NET POSITION (Continued)

Equipment Replacement

As a condition of receiving State of Wisconsin Clean Water Fund (CWF) loans, the District is required to establish an equipment replacement fund for mechanical equipment. To satisfy this requirement, the District has restricted \$3.3 million of its investments and net position for unexpected equipment replacement. In addition, the District annually budgets for replacement of equipment.

According to the CWF equipment replacement percentage schedule option the District must maintain a minimum replacement fund balance of five percent of the original cost of "mechanical equipment". For this purpose the District uses the sum of its light mechanical equipment, office furniture and equipment, and vehicles capital assets. The District has three years from the date of the first principal payment on a Clean Water Fund loan to meet the required five percent addition for a project. The sum of these capital assets for the year ending December 31, 2018 is \$66,794,882. The required five percent of this value is \$3,339,744. The 2018 value of the equipment replacement fund is \$3,300,000. The District is adding annual contributions to the equipment replacement fund and will meet the \$3,339,744 requirement in 2019, within the three-year time frame allowed by the CWF. For the year ending December 31, 2017, the corresponding "mechanical equipment" total was \$66,449,932 and 5% of this amount was \$3,322,497.

Debt Service

In accordance with state statutes and provisions of applicable loan covenants, the District maintains cash and investments in debt service funds in amounts no less than what is required to meet the balance of the current year debt service requirements.

Amounts available in the debt service funds on October 1, 2018 and 2017 were sufficient to finance the subsequent year's debt service requirements, and accordingly, the District was not required to place an amount on the tax roll for debt service.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 4 - CAPITAL ASSETS

During the year ended December 31, 2018, the changes in capital assets were as follows:

	Balance January 1, 2018	Additions/ Reclassifications	Retirements/ Reclassifications	Balance December 31, 2018
Capital assets not being depreciated:				
Construction in progress	\$ 2,959,361	\$5,898,405	\$ 2,715,789	\$ 6,141,977
Land and easements	7,400,910	-	-	7,400,910
	<u>10,360,271</u>	<u>5,898,405</u>	<u>2,715,789</u>	<u>13,542,887</u>
Capital assets being depreciated:				
Structures and improvements	207,383,811	2,753,180	-	210,136,991
Heavy mechanical equipment	86,812,525	320,569	169,025	86,964,069
Light mechanical equipment	58,676,373	120,969	123,488	58,673,854
Office furniture and equipment	5,045,759	137,391	-	5,183,150
Vehicles	2,727,800	210,078	-	2,937,878
	<u>360,646,268</u>	<u>3,542,187</u>	<u>292,513</u>	<u>363,895,942</u>
Accumulated depreciation:				
Structures and improvements	67,964,034	3,549,822	-	71,513,856
Heavy mechanical equipment	37,017,117	2,301,507	118,653	39,199,971
Light mechanical equipment	31,332,614	2,283,778	123,488	33,492,904
Office furniture and equipment	4,141,015	100,302	-	4,241,317
Vehicles	2,350,019	92,747	-	2,442,766
	<u>142,804,799</u>	<u>8,328,156</u>	<u>242,141</u>	<u>150,890,814</u>
Capital assets being depreciated, net	<u>217,841,466</u>	<u>(4,785,969)</u>	<u>50,372</u>	<u>213,005,128</u>
Total capital assets, net	<u>\$228,201,740</u>	<u>\$ 1,112,436</u>	<u>\$ 2,766,161</u>	<u>\$ 226,548,015</u>

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 4 - CAPITAL ASSETS (Continued)

During the year ended December 31, 2017, the changes in capital assets were as follows:

	Balance January 1, 2017	Additions/ Reclassifications	Retirements/ Reclassifications	Balance December 31, 2017
Capital assets not being depreciated:				
Construction in progress	\$ 16,352,338	\$ 6,290,703	\$ 19,683,680	\$ 2,959,361
Land and easements	7,400,910	-	-	7,400,910
	<u>23,753,248</u>	<u>6,290,703</u>	<u>19,683,680</u>	<u>10,360,271</u>
Capital assets being depreciated:				
Structures and improvements	199,231,212	8,174,251	21,652	207,383,811
Heavy mechanical equipment	81,825,866	5,289,038	302,379	86,812,525
Light mechanical equipment	52,628,793	6,354,299	306,719	58,676,373
Office furniture and equipment	4,799,562	246,197	-	5,045,759
Vehicles	2,704,863	65,046	42,109	2,727,800
	<u>341,190,296</u>	<u>20,128,831</u>	<u>672,859</u>	<u>360,646,268</u>
Accumulated depreciation:				
Structures and improvements	64,512,658	3,473,027	21,652	67,964,034
Heavy mechanical equipment	35,052,575	2,261,956	297,414	37,017,117
Light mechanical equipment	29,293,273	2,345,436	306,091	31,332,614
Office furniture and equipment	4,041,555	99,458	-	4,141,015
Vehicles	2,287,275	104,853	42,109	2,350,019
	<u>135,187,336</u>	<u>8,284,730</u>	<u>667,266</u>	<u>142,804,799</u>
Capital assets being depreciated, net	<u>206,002,960</u>	<u>11,844,098</u>	<u>5,593</u>	<u>217,841,466</u>
Total capital assets, net	<u>\$229,756,208</u>	<u>\$18,134,801</u>	<u>\$ 19,689,273</u>	<u>\$228,201,740</u>

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 5 - 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 (880 hours for teachers and school district educational support employees) 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/carf.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.

Benefits provided

Employees who retire at or after age 65 (54 for protective occupations and 62 for elected officials and executive service retirement plan participants, if hired on or before 12/31/2016) are entitled to a retirement benefit based on a formula factor, their final average earnings, and creditable service.

Final average earnings is the average of the participant's three highest annual earnings periods. Creditable service includes current service and prior service for which a participant received earnings and made contributions as required. Creditable service also includes creditable military service. The retirement benefit will be calculated as a money purchase benefit based on the employee's contributions plus matching employer's contributions, with interest, if that benefit is higher than the formula benefit.

Vested participants may retire at or after age 55 (50 for protective occupations) and receive an actuarially-reduced benefit. Participants terminating covered employment prior to eligibility for an annuity may either receive employee-required contributions plus interest as a separation benefit or leave contributions on deposit and defer application until eligible to receive a retirement benefit.

The WRS also provides death and disability benefits for employees.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 5 – PENSION PLAN (Continued)

Post-Retirement 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	(5.0)
2017	2.0	4.0

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, including teachers, 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 \$542,916 in contributions from the employer.

Contribution rates as of December 31, 2018 are:

Employee Category	Employee	Employer
General (including teachers)	6.7%	6.7%
Executives & Elected Officials	6.7%	6.7%
Protective with Social Security	6.7%	10.7%
Protective without Social Security	6.7%	14.9%

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 5 – PENSION PLAN (Continued)

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

At December 31, 2018, the Madison Metropolitan Sewerage District reported assets of \$1,581,897 for its proportionate share of the net pension asset. The net pension asset was measured as of December 31, 2017, and the total pension liability used to calculate the net pension 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 District's proportion of the net pension asset was based on the District's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2017, the District's proportion was .05327834%, which was an increase of .00114025% from its proportion measured as of December 31, 2016.

For the year ended December 31, 2018, the District recognized pension expense of \$653,461.

At December 31, 2018, the District 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	\$2,027,178	940,136
Changes in assumptions	312,552	-
Net differences between projected and actual earnings on pension plan investments	-	2,174,170
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	72,100
Employer contributions subsequent to the measurement date	542,916	-
Total	\$2,882,646	\$3,186,406

\$542,916 reported as deferred outflows related to pension resulting from the WRS Employer's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability (asset) in the year ended December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

Year ended December 31:	Net Outflows/(Inflows) of Resources
2019	138,432
2020	(39,166)
2021	(553,098)
2022	(413,954)
2023	21,110

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 5 – PENSION PLAN (Continued)

Actuarial Assumptions

The total pension liability in the December 31, 2017, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Valuation Date:	December 31, 2016
Measurement Date of Net Pension Liability (Asset)	December 31, 2017
Actuarial Cost Method:	Entry Age
Asset Valuation Method:	Fair Market Value
Long-Term Expected Rate of Return:	7.2%
Discount Rate:	7.2%
Salary Increases:	
Inflation	3.2%
Seniority/Merit	0.2% - 5.6%
Mortality:	Wisconsin 2012 Mortality Table
Post-Retirement Adjustments*	2.1%

** No post-retirement 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 post-retirement discount rate.*

Actuarial assumptions 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 are summarized in the following table:

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 5 – PENSION PLAN (continued)

Asset Allocation Targets and Expected Returns			
As of December 31, 2017			
<u>Core Fund Asset Class</u>	<u>Asset Allocation %</u>	<u>Long-Term Expected Nominal Rate of Return %</u>	<u>Long-Term Expected Real Rate of Return %</u>
Global Equities	50	8.2	5.3
Fixed Income	24.5	4.2	1.4
Inflation Sensitive Assets	15.5	3.8	1.0
Real Estate	8	6.5	3.6
Private Equity/Debt	8	9.4	6.5
Multi-Asset	4	6.5	3.6
Total Core Fund	110	7.3	4.4
<u>Variable Fund Asset Class</u>			
U.S. Equities	70	7.5	4.6
International Equities	30	7.8	4.9
Total Variable Fund	100	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. 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 3.78%. 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.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 5 – PENSION PLAN (Continued)

Sensitivity of the District's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate

The following presents the District's proportionate share of the net pension liability (asset) calculated using the discount rate of 7.20 percent, as well as what the District'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:

	1% Decrease to Discount Rate (6.20%)	Current Discount Rate (7.20%)	1% Increase To Discount Rate (8.20%)
District's proportionate share of the net pension liability (asset)	\$4,092,907	(\$1,581,897)	(\$5,894,924)

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 6 - LONG-TERM DEBT

As of December 31, 2018 and 2017, the long-term debt of the District consisted of the following:

	<u>2018</u>	<u>2017</u>
General Obligation Sewerage System Bonds		
Clean Water Fund Program Project Number 4010-14 \$1,788,729 Series 2000, issued November 22, 2000 for the Pump Station No. 2 Force Main Replacement Project, interest at 3.202%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2020.	\$ 242,534	\$ 358,185
Clean Water Fund Program Project Number 4010-15 \$2,057,994 Series 2001, issued May 9, 2001 for the Pump Station No. 2 Force Main Replacement Project, interest at 3.202%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2021.	397,081	521,315
General Obligation Sewerage System Promissory Notes		
Clean Water Fund Program Project Number 4010-17 \$7,674,449 Series 2003A, issued July 23, 2003, for the Rehabilitation of Pumping Stations No. 1, 2, and 10, interest at 2.824%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2023.	2,434,222	2,881,699

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 6 - LONG-TERM DEBT (Continued)

	<u>2018</u>	<u>2017</u>
General Obligation Sewerage System Promissory Notes (Continued)		
Clean Water Fund Program Project Number 4010-16 \$35,427,273 Series 2003B, issued August 27, 2003, for the Tenth Addition to Nine Springs, interest at 2.796% interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2023.	\$ 11,782,228	\$ 13,949,926
Clean Water Fund Program Project Number 4010-99 \$279,437 Series 2005A, issued October 12, 2005, for the Rehabilitation of Pumping Stations No. 1, 2, and 10, amendment, interest at 2.428%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2025.	115,317	130,266
Clean Water Fund Program Project Number 4010-20 \$1,730,252 Series 2006A, issued September 13, 2006, for the Effluent Equalization Project, interest at 2.365%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2026.	791,547	880,484
Clean Water Fund Program Project Number 4010-23 \$2,622,948 Series 2007A, issued December 12, 2007, for the West Interceptor Extension Replacement Project, interest at 2.555%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2027.	1,401,142	1,538,083
Clean Water Fund Program Project Number 4010-26 \$8,391,175 Series 2008A, issued November 12, 2008, for the Pumping Stations 6 and 8 Rehabilitation, interest at 2.368%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2028.	5,101,969	5,549,531
Clean Water Fund Program Project Number 4010-27 \$8,876,034 Series 2010A, issued May 26, 2010, for the Pumping Station 10 to Lien Road Relief Sewer, interest at 2.369%, interest payments on May 1 and November 1 of each year and principal payments on May 1 of each year, final payment due May 1, 2030.	5,824,206	6,239,679
Clean Water Fund Programs Project Number 4010-34 \$47,544,072 Series 2012A, issued February 22, 2012, for the Eleventh Addition to Nine Springs, interest at 2.518%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2015, and each subsequent May 1, final payment due May 1, 2031.	38,093,539	40,545,020

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 6 - LONG-TERM DEBT (Continued)

	<u>2018</u>	<u>2017</u>
General Obligation Sewerage System Promissory Notes (Continued)		
Clean Water Funds Programs Project Number 4010-38 \$2,955,949 Series 2012B, issued May 23, 2012, for the Operations Building HVAC Rehabilitation, interest at 3%, interest payments on May 1 and November 1 of each year and principal payments beginning on May 1, 2013 and each subsequent May 1, and final payment due May 1, 2032.	\$ 2,253,432	\$ 2,381,477
Clean Water Fund Programs Project Number 4010-40 \$8,012,046 Series 2013A, issued May 8, 2013, for the Northeast Interceptor/Far East Interceptor to Southeast Interceptor Replacement, interest at 2.795%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2014, and each subsequent May 1, final payment due May 1, 2033.	6,410,619	6,750,993
Clean Water Fund Programs Project Number 4010-39 \$14,425,956 Series 2013B, issued September 25, 2013, for the Pumping Station 18 Construction, interest at 2.643%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2015, and each subsequent May 1, final payment due May 1, 2033.	11,970,845	12,614,486
Clean Water Fund Programs Project Number 4010-37 \$4,276,508 Series 2013C, issued November 27, 2013, for the Process Control System Upgrade, interest at 2.625%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2016, and each subsequent May 1, final payment due May 1, 2033.	3,694,781	3,893,735
Clean Water Fund Programs Project Number 4010-43 \$11,554,883 Series 2014A, issued February 26, 2014, for the Pumping Station 18 Force Main Construction, interest at 2.72%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2015, and each subsequent May 1, final payment due May 1, 2033.	9,610,007	10,123,602
Clean Water Fund Programs Project Number 4010-42 \$10,663,025 Series 2015A, issued February 25, 2015, for the Pumping Station 11 & 12 Rehabilitation, interest at 2.262%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2016, and each subsequent May 1, final payment due May 1, 2034.	8,862,829	9,049,244

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 6 - LONG-TERM DEBT (Continued)

	<u>2018</u>	<u>2017</u>
General Obligation Sewerage System Promissory Notes (Continued)		
Clean Water Fund Programs Project Number 4010-41 \$12,094,707 Series 2015B, issued May 27, 2015, for the New Maintenance Facility Construction, interest at 2.25%, interest payments on May 1 and November 1 of each year and principal payments beginning May 1, 2016, and each subsequent May 1, final payment due May 1, 2035.	\$ 10,339,058	\$ 10,833,921
Clean Water Fund Programs Project Number 4010-46 \$7,196,557 Series 2016A, issued November 9, 2016, for the Rimrock Interceptor/Pumping Station 15 Rehabilitation/Pumping Station 12 Force Main Relocation projects, interest at 1.96%, interest payment on May 1 and November 1 of each year and principal payments beginning May 1, 2018, and each subsequent May 1, final payment due May 1, 2036.*	6,618,883	6,337,451
Clean Water Fund Programs Project Number 4010-44 \$1,439,043 Series 2017A, issued December 27, 2017, for the West Interceptor – Randall St. to Near PS2 Rehabilitation, interest at 1.76%, interest payment on May 1 and November 1 of each year and principal payments beginning May 1, 2018, and each subsequent May 1, final payment due May 1, 2037.*	<u>1,312,553</u>	<u>1,298,594</u>
	127,256,792	135,877,690
Less current maturities	<u>9,794,493</u>	<u>9,505,552</u>
	<u>\$117,462,299</u>	<u>\$ 126,372,138</u>

The District incurred \$3,270,113 and \$3,411,009 of total interest costs for December 31, 2018 and 2017, respectively. The District capitalized interest of \$0 and \$49,306 for the years ended December 31, 2018 and 2017, respectively.

Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017

NOTE 6 - LONG-TERM DEBT (Continued)

A summary of the changes in long-term obligations of the District for the year ended December 31, 2018 was as follows:

	Balance January 1, <u>2018</u>	<u>Additions</u>	<u>Reductions</u>	Balance December 31, <u>2018</u>	Amounts Due in <u>One Year</u>
General obligation sewerage system bonds	\$ 879,500	\$ -	\$ 239,885	\$ 639,615	\$ 247,567
General obligation sewerage system notes	134,998,190	884,652	9,265,665	126,617,177	9,546,926
Subtotal	135,877,690	884,652	9,505,550	127,256,792	9,794,493
Compensated absences	2,818,550	126,125	188,805	2,752,870	679,645
	<u>\$138,696,240</u>	<u>\$1,010,777</u>	<u>\$9,694,355</u>	<u>\$130,009,662</u>	<u>\$10,474,138</u>

A summary of the changes in long-term obligations of the District for the year ended December 31, 2017 was as follows:

	Balance January 1, <u>2017</u>	<u>Additions</u>	<u>Reductions</u>	Balance December 31, <u>2017</u>	Amounts Due in <u>One Year</u>
General obligation sewerage system bonds	\$ 1,432,368	\$ -	\$ 532,868	\$ 879,500	\$ 239,886
General obligation sewerage system notes	139,176,774	4,495,451	8,674,035	134,998,190	9,265,666
Subtotal	140,609,142	4,495,451	9,226,903	135,877,690	9,505,552
Compensated absences	2,894,409	324,816	403,675	2,818,550	632,437
	<u>\$143,590,551</u>	<u>\$4,820,267</u>	<u>\$9,630,578</u>	<u>\$138,696,240</u>	<u>\$10,137,989</u>

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 6 - LONG-TERM DEBT (Continued)

General Obligation Debt: All general obligation debt has been issued under the full faith and credit and unlimited taxing powers of the District. The District has complied with the restrictive covenants of each of the debt issues.

Future principal and interest payments due on long-term debt of the District are approximately as follows:

<u>Years Ending December 31</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2019	\$ 9,794,493	\$ 3,074,327	\$ 12,868,820
2020	10,047,960	2,817,550	12,865,510
2021	10,180,925	2,556,102	12,737,027
2022	10,302,808	2,292,128	12,594,936
2023	10,567,946	2,023,552	12,591,498
2024-2028	40,287,844	6,965,913	47,253,757
2029-2033	32,411,017	2,139,525	34,550,542
2034-2038	<u>3,663,799</u>	<u>88,509</u>	<u>3,752,308</u>
Total	<u>\$127,256,792</u>	<u>\$21,957,606</u>	<u>\$149,214,398</u>

The equalized valuation of the District, as certified by the Wisconsin Department of Revenue, was \$48,508,857,488 for 2018 and \$45,284,126,553 for 2017. The legal debt limit and margin of indebtedness as of December 31, 2018 and 2017, in accordance with Section 67.03(1)(a) of the Wisconsin Statutes, follows:

	<u>2018</u>	<u>2017</u>
Debt limit (5 percent of the equalization value)	\$ 2,425,442,874	\$2,264,206,328
Deduct long-term debt applicable to debt margin	<u>127,256,792</u>	<u>135,877,690</u>
Margin of indebtedness	<u>\$ 2,298,183,082</u>	<u>\$ 2,128,328,638</u>

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 7 - COMMITMENT

As of December 31, 2018, the District had the following commitments with respect to unfinished capital projects:

<u>Projects</u>	<u>Remaining Commitment</u>
Liquid Processing Phase I	\$ 481,458
SWI Haywood Drive Replacement	38,761
Grass Lake Dike Restoration	36,509
SEI Rehab Upstream of PS9	63,341
NSVI/Morse Pond Ext.	195,238
NEI Truax Extension	77,789
PS7 Improvements	190,624
PS10 FM Rehabilitation	70,536
WI Rehab of PS5 to Gammon Ext.	465,320
Gravity Thickener Overflow Pipe	<u>71,188</u>
	<u>\$1,690,764</u>

Projects will be financed through future draws on Clean Water Fund Loans and budgeted capital reserves.

NOTE 8 - MAJOR MUNICIPAL CUSTOMERS

During the years ended December 31, 2018 and 2017, the District had charges for transmission and treatment of sewage and conveyance facilities connection charges and treatment plant connection charges to one major municipal customer, the City of Madison, (defined as being greater than 10 percent of charges) of approximately \$25,516,000 and \$22,884,000, respectively. Accounts receivable as of December 31 from the City of Madison were as follows:

	<u>2018</u>	<u>2017</u>
Pumping stations	\$ 77,693	\$ 97,470
Sewer Service	6,153,342	5,518,638
Conveyance facilities connection charges and treatment plant connection charges	<u>573,746</u>	<u>826,457</u>
	<u>\$ 6,804,781</u>	<u>\$ 6,442,565</u>

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (HEALTH INSURANCE)

Plan Description

The Madison Metropolitan Sewerage District's defined benefit OPEB plan, Madison Metropolitan Sewerage District Postretirement Health Plan (MMSDPHP), provides OPEB for permanent full-time employees of the District. MMSDPHP is a single-employer defined benefit OPEB plan administered by the District. The District Commission establishes the terms of the plan. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement number 75.

Benefits Provided

MMSDPHP provides health insurance benefits for eligible retirees and their spouses through the District's group health insurance plan, which covers both active and retired members. Benefit provisions are established through personnel policy guidelines, or past practice and state that eligible retirees and their spouses receive lifetime healthcare insurance at established contribution rates.

The District pays 88% of the premiums of the insurance carrier for active employees. The employee is responsible for paying the difference. Retirees are responsible for 100% of the premiums applicable for their health insurance group.

Employees covered by benefit terms. At December 31, 2017, the date of the most recent valuation, the following employees were covered by the benefit terms:

Inactive plan members or beneficiaries currently receiving benefit payments	18
Active plan members	98

Total OPEB Liability

The District's total OPEB liability of \$4,061,893 was measured by an actuarial valuation as of December 31, 2017 rolled forward to December 31, 2018.

Actuarial Assumptions and Other Inputs

The total OPEB liability in the December 31, 2018 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Salary Increases:	3.5%
Inflation:	2.5%
Assumed Rate of Return on Plan Assets:	3.17%
Plan Participation of Future Retirees:	80.0%
Discount Rate:	3.64%
Healthcare Cost Trend Rates:	8.5% decreasing to 5% by 2017

The discount rate was based on the S&P Municipal Bond 20-Year High- Grade Rate Index as of December 31, 2018.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (HEALTH INSURANCE) (Continued)

Mortality rates were based on the RP-2014 Healthy Annuitant Mortality Table for Males or Females, as appropriate.

The actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2017–December 31, 2017. This information was rolled forward to determine the valuation as of December 31, 2018.

Changes in the Total OPEB Liability

	<u>Total OPEB Liability</u>
Balances as of December 31, 2017	\$ 3,924,487
Changes for the Year:	
Service Cost	344,010
Interest	121,580
Changes to Assumptions or Other Input	(130,705)
Benefit Payments	(178,292)
Other Changes	<u>(19,187)</u>
Net Changes	137,406
Balances as of 12/31/2018	\$ 4,061,893

Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.64 percent) or 1-percentage-point higher (4.64 percent) than the current discount rate:

Discount Rate			
	1% Decrease	Current Discount Rate	1% Increase
	<u>(2.64%)</u>	<u>(3.64%)</u>	<u>(4.64%)</u>
Net OPEB Liability	\$3,798,336	\$4,061,893	\$4,345,274

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (HEALTH INSURANCE) (Continued)

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

The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (7.5 percent decreasing to 4.0 percent) or 1-percentage-point higher (9.5 percent decreasing to 6.0 percent) than the current healthcare cost trend rates:

Health Care Trend

	1% Decrease (7.5 decreasing to <u>4.0%</u>)	Healthcare Cost Trend Rates (8.5% decreasing to <u>5.0%</u>)	1% Increase (9.5 decreasing to <u>6.0%</u>)
Net OPEB Liability 12/31/2018	\$4,507,416	\$4,061,893	\$3,680,797

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

For the year ended December 31, 2018, the District recognized OPEB expense of \$277,389. At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Difference between Expected and Actual Experience	\$237,340	\$ 0
Changes of Assumptions and Other Inputs	<u>130,129</u>	<u>454,596</u>
Total	\$367,469	\$454,596

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

<u>Year Ended December 31:</u>	<u>Net Deferred Outflows (Inflows) of Resources</u>
December 31, 2019	(\$ 9,910)
December 31, 2020	(9,910)
December 31, 2021	(9,910)
December 31, 2022	(9,910)
December 31, 2023	(9,910)
Thereafter	(37,577)

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (LIFE INSURANCE)

Plan Description

The LRLIF is a multiple-employer defined benefit OPEB plan. LRLIF benefits and other plan provisions are established by Chapter 40 of the Wisconsin Statutes. The Wisconsin Department of Employee Trust Funds (ETF) and the Group Insurance Board have statutory authority for program administration and oversight. The plan provides postemployment life insurance benefits for all eligible employees.

Benefits Provided

The LRLIF plan provides fully paid up life insurance benefits for post-age 64 retired employees and pre-65 retirees who pay for their coverage.

Contributions

The Group Insurance Board approves contribution rates annually, based on recommendations from the insurance carrier. Recommended rates are based on an annual valuation, taking into consideration an estimate of the present value of future benefits and the present value of future contributions. A portion of employer contributions made during a member's working lifetime funds a post-retirement benefit.

Employers are required to pay the following contributions based on employee contributions for active members to provide them with Basic Coverage after age 65. There are no employer contributions required for pre-age 65 annuitant coverage. If a member retires prior to age 65, they must continue paying the employee premiums until age 65 in order to be eligible for the benefit after age 65.

Contribution rates as of December 31, 2017 are:

Coverage Type	Employer Contribution
50% Post Retirement Coverage	40% of employee contribution
25% Post Retirement Coverage	20% of employee contribution

Employee contributions are based upon nine age bands through age 69 and an additional eight age bands for those age 70 and over. Participating employees must pay monthly contribution rates per \$1,000 of coverage until the age of 65 (age 70 if active). The employee contribution rates in effect for the year ended December 31, 2017 are as listed below:

Life Insurance Employee Contribution Rates For the year ended December 31, 2018	
Attained Age	Basic
Under 30	\$0.05
30-34	0.06
35-39	0.07
40-44	0.08
45-49	0.12
50-54	0.22
55-59	0.39
60-64	0.49
65-69	0.57

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (LIFE INSURANCE)
(Continued)

During the reporting period, the LRLIF recognized \$2,968 in contributions from the employer

Total OPEB Liability, OPEB Expenses and Deferred Outflows of Resources and Deferred Inflows of Resources

At December 31, 2018 the district reported a liability of \$470,229 for its proportionate share of the net OPEB liability (asset). The net OPEB liability (asset) was measured as of December 31, 2017, and the total OPEB liability used to calculate the net OPEB 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 district's proportion of the net OPEB liability (asset) was based on the district's share of contributions to the OPEB plan relative to the contributions of all participating employers. At December 31, 2017, the district's proportion was 0.156296%, which was a decrease of 0.013808% from its proportion measured as of December 31, 2016.

For the year ended December 31, 2017, the district recognized OPEB expense of \$45,306.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experiences	\$ 0	\$ 6,625
Net differences between projected and investment earnings on plan investments	5,414	0
Changes in actuarial assumptions	45,430	0
Changes in proportional share and difference in actual contributions	0	29,072
Total	\$50,853	\$35,697

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

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (LIFE INSURANCE)
(Continued)

Year ended December 31:	Net Deferred Outflow/Inflows of Resources
2019	\$2,846
2020	\$2,846
2021	\$2,846
2022	\$2,846
2023	\$1,492
Thereafter	\$2,280

Actuarial Assumptions

The total OPEB liability in the January 1, 2017, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Valuation Date:	January 1, 2017
Measurement Date of Net OPEB Liability (Asset)	December 31, 2017
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield:	3.44%
Long-Term Expected Rate of Return:	5.00%
Discount Rate:	3.63%
Salary Increases	
Inflation:	3.20%
Seniority/Merit:	0.2% - 5.6%
Mortality:	Wisconsin 2012 Mortality Table

Long-Term Expected Return on Plan Assets

The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. Investments for the LRLIF are held with Securian, the insurance carrier. Interest is calculated and credited to the LRLIF based on the rate of return for a segment of the insurance carriers' general fund, specifically 10-year A- Bonds (as a proxy, and not tied to any specific investments). The overall aggregate interest rate is calculated using a tiered approach based on the year the funds were originally invested and the rate of return for that year. Investment interest is credited based on the aggregate rate of return and assets are not adjusted to fair market value. Furthermore, the insurance carrier guarantees the principal amounts of the reserves, including all interest previously credited there to.

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 9 - POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS (LIFE INSURANCE)
(Continued)

**Local OPEB Life Insurance
Asset Allocation Targets and Expected Returns
As of December 31, 2017**

<u>Asset Class</u>	<u>Index</u>	<u>Target Allocation</u>	<u>Long-Term Expected Geometric Real Rate of Return</u>
U.S. Government Bonds	Barclays Government	1%	1.13%
U.S. Credit Bonds	Barclays Credit	65%	2.61%
U.S. Long Credit Bonds	Barclays Long Credit	3%	3.08%
U.S. Mortgages	Barclays MBS	31%	2.19%
Inflation			2.30%
Long-Term Expected Rate of Return			5.00%

Single Discount Rate

A single discount rate of 3.63% was used to measure the total OPEB liability. The Plan's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current active and inactive employees. Therefore, the discount rate for calculating the Total OPEB Liability is equal to the single equivalent rate that results in the same actuarial present value as the long-term expected rate of return applied to benefit payments, to the extent that the plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payment to the extent that the plan's fiduciary net position is projected to be insufficient.

Sensitivity of the District's Proportionate Share of the Net OPEB Liability (Asset) to Changes in the Discount Rate

The following presents the district's proportionate share of the net OPEB liability (asset) calculated using the discount rate of 3.63 percent, as well as what the district's proportionate share of the net OPEB liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (2.63 percent) or 1-percentage-point higher (4.63 percent) than the current rate:

	1% Decrease to Discount Rate (2.63%)	Current Discount Rate (3.63%)	1% Increase To Discount Rate (4.63%)
District's proportionate share of the net OPEB liability (asset)	\$664,612	\$470,229	\$321,060

OPEB plan fiduciary net position.

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

**Madison Metropolitan Sewerage District
NOTES TO FINANCIAL STATEMENTS
December 31, 2018 and 2017**

NOTE 10 – YAHARA WATERSHED IMPROVEMENT NETWORK ADAPTIVE MANAGEMENT PROJECT

As noted in Note 1 to the financial statements, the District adopted GASB Statement No. 84, *Fiduciary Activities* during the year ended December 31, 2018. There are no financial impacts to the district's net positions, as is shown in Note 11. Restricted cash and due to other governments balances for end of year December 31, 2017 have been restated to properly exclude figures attributed to Yahara WINS.

NOTE 11 – RESTATEMENT

During the year ended December 31, 2018 the Districted recognized the OPEB liability associated with the LRLIF multiple-employer OPEB plan which is presented in accordance with GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and adopted GASB Statement No. 84, *Fiduciary Fund Financial Statements*. These pronouncements require restatement of the December 31, 2017 Net Position as follows:

Net position, December 31, 2017, as previously reported	\$133,473,125
Cumulative Effect of Application of GASB 75,	<u>(\$412,990)</u>
Net position, December 31, 2018, as previously reported	<u><u>\$133,060,135</u></u>

REQUIRED SUPPLEMENTARY INFORMATION

**Madison Metropolitan Sewerage District
REQUIRED SUPPLEMENTARY INFORMATION
December 31, 2018 and 2017**

**SCHEDULE OF MADISON METROPOLITAN SEWERAGE DISTRICT'S (MMSD)
PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET)
Wisconsin Retirement System
Last 10 Measurement Periods***

For Year Ended December 31,

	2018	2017	2016	2015
MMSD's proportion of the net pension liability (asset)	0.05327834%	0.05213809%	0.05093867%	0.04901264%
MMSD's proportionate share of the net pension liability (asset)	(\$1,581,897)	\$429,742	\$827,743	(\$1,203,885)
MMSD's covered-employee payroll	\$8,025,692	\$7,638,412	\$7,517,175	\$7,095,005
Plan fiduciary net position as a percentage of the total pension liability (asset)	102.93%	99.12%	98.2%	102.74%

**SCHEDULE OF MADISON METROPOLITAN SEWERAGE DISTRICT
PENSION CONTRIBUTIONS
Wisconsin Retirement System
Last 10 Fiscal Years***

	2018	2017	2016	2015
Contractually required contributions	\$542,916	\$545,747	\$504,135	\$511,168
Contributions in relation to the contractually required contributions	(\$542,916)	(\$545,747)	(\$504,135)	(\$511,168)
Contribution deficiency (excess)	\$0	\$0	\$0	\$0
MMSD's covered-employee payroll	\$8,362,037	\$8,025,692	\$7,638,412	\$7,517,175
Contributions as a percentage of covered-employee payroll	6.5%	6.8%	6.6%	6.8%

* Additional years' information will be displayed as it become available.

**Madison Metropolitan Sewerage District
REQUIRED SUPPLEMENTARY INFORMATION
December 31, 2018 and 2017**

**SCHEDULE OF CHANGES TOTAL OPEB LIABILITY AND RELATED RATIOS
Madison Metropolitan Sewerage District Postretirement Health Plan
Last 10 Fiscal Years***

	<u>2018</u>	<u>2017</u>
Total OPEB Liability		
Service Cost	\$ 344,010	\$ 362,832
Interest	121,580	110,618
Differences Between Expected and Actual Experience	-	296,624
Changes in Assumptions and Other Input	(130,705)	20,618
Benefit Payments	(178,292)	(194,432)
Other Changes	(19,187)	(258,517)
	137,406	337,743
Net Change in Total OPEB Liability	137,406	337,743
Total OPEB Liability - Beginning	3,924,487	3,586,744
Total OPEB Liability - Ending	\$ 4,061,893	\$3,924,487
Covered Employee Payroll	\$ 6,572,694	\$7,814,320
District's Net OPEB Liability as a Percentage of Covered Employee Payroll	61.80%	50.22%

* Additional years' information will be displayed as it become available.

**Madison Metropolitan Sewerage District
REQUIRED SUPPLEMENTARY INFORMATION
December 31, 2018 and 2017**

**SCHEDULE OF MADISON METROPOLITAN SEWERAGE DISTRICT'S
PROPORTIONATE SHARE OF THE NET OPEB LIABILITY (ASSET)
Local Retiree Life Insurance Fund
Last 10 Measurement Years***

2018	
District's proportion of the net OPEB liability (asset)	0.15629600%
District's proportionate share of the net OPEB liability (asset)	\$470,229
District's covered-employee payroll	\$6,572,694
Plan fiduciary net position as a percentage of the total OPEB liability (asset)	44.81%

**SCHEDULE OF MADISON METROPOLITAN SEWERAGE DISTRICT
OPEB CONTRIBUTIONS
Local Retiree Life Insurance Fund
Last 10 Fiscal Years***

2018	
Contractually required contributions	\$2,968
Contributions in relation to the contractually required contributions	(\$2,968)
Contribution deficiency (excess)	\$0
MMSD's covered-employee payroll	\$6,572,694
Contributions as a percentage of covered-employee payroll	0.045157%

* * Additional years' information will be displayed as it become available. .

**MADISON METROPOLITAN SEWERAGE DISTRICT
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
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 for WRS.

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

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