### AUDITED FINANCIAL STATEMENTS AND OTHER FINANCIAL INFORMATION

**JUNE 30, 2019** 

### Table of Contents

	<u>Page</u>
INDEPENDENT AUDITOR'S REPORT	1 - 3
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)	4 - 10
FINANCIAL STATEMENTS	
Statement of Net Position	11 - 12
Statement of Revenue, Expenses and Changes in Net Position	13
Statement of Cash Flows	14 - 15
Notes to Financial Statements	16 - 34
SUPPLEMENTARY INFORMATION	
Schedule of Utility Rates (Unaudited)	35
Schedule of Number of Customers (Unaudited)	36
Schedule of Unaccounted for Water (Unaudited)	37 - 38
Schedule of Pledged Revenue Coverage (Unaudited)	39
Schedule of Restricted Cash and Cash Equivalents	40
OTHER REPORT	
Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards	41 - 42



#### Independent Auditor's Report

The Honorable Mayor and Members of Council The Metropolitan Government of Nashville and Davidson County, Tennessee

#### **Report on Financial Statements**

We have audited the accompanying financial statements of the Department of Water and Sewerage Services (the "Department"), an enterprise fund of The Metropolitan Government of Nashville and Davidson County, Tennessee (the "Metropolitan Government"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Department'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.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

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

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

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Department of Water and Sewerage Services, an enterprise fund of the Metropolitan Government of Nashville and Davidson County, Tennessee, as of June 30, 2019, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

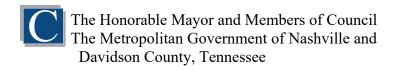
#### **Emphasis of Matter**

As discussed in Note A, the financial statements present only the Department of Water and Sewerage Services, an enterprise fund of the Metropolitan Government of Nashville and Davidson County, Tennessee, and do not purport to, and do not present fairly the financial position of the Metropolitan Government of Nashville and Davidson County, Tennessee, as of June 30, 2019, and changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

#### Other Matters

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis, 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.



#### Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Department's basic financial statements. The Schedule of Utility Rates, Schedule of Number of Customers, Schedule of Unaccounted for Water, Schedule of Pledged Revenue Coverage and Schedule of Restricted Cash and Cash Equivalents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Restricted Cash and Cash Equivalents is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Schedule of Utility Rates, Schedule of Number of Customers, Schedule of Unaccounted for Water, and Schedule of Pledged Revenue Coverage have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 31, 2019, on our consideration of the Department's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Department's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Department's internal control over financial reporting and compliance.

Crosslin, PLLC

Nashville, Tennessee October 31, 2019, except for Note I, as to which date is March 25, 2020

JUNE 30, 2019

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Management of the Metropolitan Government of Nashville and Davidson County (the "Metropolitan Government"), Department of Water and Sewerage Services (the "Department") - (an enterprise fund of the Government), offer readers of the Department's financial statements this overview and analysis of the financial activities of the Department for the fiscal year ended June 30, 2019. This information should be read in conjunction with the Metropolitan Government audited financial statements.

#### FINANCIAL HIGHLIGHTS

The Department provides water and sewerage service to most of Davidson County, Tennessee, and small portions of the surrounding counties. It serves 209,048 water accounts and 212,061 sewer accounts. Activities are funded entirely from revenues generated from its operations, with no tax revenues from the Metropolitan Government. A covenant with the bondholders provides assurance that there will be adequate funds for necessary major repairs and replacement of facilities, by requiring revenues to equal at least 110% of the sum of the year's operating budget (exclusive of depreciation and certain other expenses) and the debt service on its outstanding revenue bonds. These monies, not required for normal operations, flow into the Extension and Replacement Fund to be used to finance ongoing capital requirements of the Department, as supplemented with revenue bonds. Water rates were last increased on May 1 of 2009, 2010, and 2011 by 5% each year. Sewerage rates were last increased by 9% on May 1, 2009, by 8% on May 1, 2010, and by 7% on May 1, 2011. In March of 2018, the Tennessee Water and Waste Financing Board (Board) reviewed financials and found the Department to be "financially distressed" pursuant to T.C.A. 68-221-1010(a). In April of 2018, the Board issued an Order to provide a rate study and proposed plan by August 2019. A cost of service study was submitted to the state in August of 2019 after the reporting period.

At June 30, 2019, assets and deferred outflows of the Department were \$2.5 billion and exceeded liabilities and deferred inflows by \$1.3 billion (total net position). In 2019, increases in consumption and development positively affected operating revenues of \$227.7 million resulting in an increase of \$3.9 million as compared to 2018. For 2019, operating expenses were \$201.6 million, an increase of \$8.0 million from 2018 mainly caused by an increase in depreciation expense. Investment income increased from \$2.5 million in 2018 to \$5.9 million in 2018. Capital grants and contributions increased by \$1.9 million to \$20.7 million in 2019, due to slight increase in development through infrastructure deeds. The Department ended 2019 \$9.8 million under its operating budget of \$129.6 million.

In 2019, unrestricted cash and cash equivalents increased by approximately \$5.8 million to \$67.0 million, and restricted cash/cash equivalents increased by approximately \$14.2 million. For 2019, capital assets increased by approximately \$103.3 million, before depreciation of \$90.3 million, for a net increase of \$13 million. These assets were acquired using revenues of the Department, revenue bonds, commercial paper, grants, contributions, and cash.

JUNE 30, 2019

The Water System and the Sewer System have gradually been expanded and include: improvements financed by revenues; improvements resulting from capital contributions in aid of construction by private developers; all improvements, additions and extensions financed with the proceeds of outstanding bonds and governmental grants; and facilities acquired from the Nashville Suburban Utility District, the First Suburban Water Utility District of Davidson County, Tennessee, the Parkwood Service Company, the Joelton Water Utility District, the City of Lakewood sewerage system, Rayon City Water Company, the Cumberland Utility District, Old Hickory Utility District, and the sewerage service of the Nolensville/College Grove Utility District in Williamson County.

Under the Charter and Tennessee Code Annotated §7-3-302, the Metropolitan Government can assume and take over any water and/or sewer utility district located within its boundaries through ordinances adopted by the Metropolitan Council. Several such systems currently operate inside Davidson County and if a decision is made to consolidate these operations into the Department, the Metropolitan Government will take subject to or retire all debts and liabilities of the systems. The economic impact of such an assumption or takeover would be evaluated prior to the submission of any legislation to the Metropolitan Council. By contract dated February 1996, the Metropolitan Government has agreed not to take over the Harpeth Valley Utility District before February 2026.

Historically, the Department managed and partially funded the stormwater operations of the Metropolitan Government. In 2009, the Metropolitan Government established a Stormwater Division of the Department as a stand-alone enterprise fund with its own set of service fees, which are now an itemized part of the water bill. Stormwater fees increased in 2017. Stormwater operations is funded solely through stormwater fees and any associated bonds supported by those fees. These financial statements include Water and Sewer Divisions and exclude Stormwater operations.

In December 2005, the Department received an inquiry from United States Environmental Protection Agency ("EPA"), pertaining to the Department's Operations, Capital Plan, and Stormwater Management. The Department's response was submitted in January 2006. The Department, TDEC and EPA agreed on a recommended consent decree on March 12, 2009 (the "Consent Decree") to address and correct deficiencies within the Department's sewer system that have caused violations of the Clean Water Act ("CWA"). The original Consent Decree required that the Department fully develop, in two years, a Corrective Action Plan/Engineering Report ("CAP/ER") for its separate sewer system and a Long Term Control Plan ("LTCP") for its combined sewer system to achieve the goals of the CWA. Upon submittal and approval of the plans, the Department would have an additional nine years to complete the work as developed by the plans.

On May 14, 2010, Metro petitioned EPA and TDEC for a time extension for the delivery of both plans and the final compliance with the Consent Decree based on the flood of May 2010. EPA and TDEC granted the requested time extensions to the Department. The Department met the current deadline for submittal of the CAP/ER and LTCP of September 11, 2011 and the deadline for final compliance with the Consent Decree is eleven years after the final approval of

JUNE 30, 2019

the plans by EPA and TDEC. On August 10, 2017, the EPA approved the CAP/ER; the timeline (11 years) to complete the work officially commenced. The Department has had discussions of potential changes with respect to the LTCP, but those discussions have not included anything considered material to the original submission. The LCTP has not been officially approved.

Failure to comply with the Consent Decree and meet future established deadlines could result in penalties up to \$3,000 per occurrence, and up to \$5,000 per day for failure to implement work. The Department has thus far been successful in meeting all the deadlines established by the Consent Decree, and is currently in compliance with the Consent Decree in all respects.

#### OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the Department's basic financial statements. The Department's basic financial statements consist of the Statements of Net Position, the Statements of Revenue, Expenses, and Changes in Net Position and the Statements of Cash Flows. Data on these statements represent an enterprise fund of the Metropolitan Government as established by the master bond resolution and the Charter of the Metropolitan Government. These funds consist of the Revenue Fund, the Operating Fund, the Operating Reserve Fund, the Debt Service Fund, the Debt Service Reserve Fund, the Revolving Fund, and the Extension and Replacement Fund. All revenues of the Department are required to be used for the benefit of the ratepayers.

	Condensed Financial Information		
	as of June 30,		
	2019	2018	
<b>Statements of Net Position</b>			
Total current assets	\$ 158,507,166	\$ 152,817,023	
Total capital and other noncurrent assets	2,326,297,254	2,300,644,030	
Total Assets	2,484,804,420	2,453,461,053	
Deferred charge on refunding	2,667,744	3,875,115	
Pensions	8,452,367	5,758,511	
Total Deferred Outflows of Resources	11,120,111	9,633,626	
Total current liabilities	287,091,882	217,036,735	
Total noncurrent liabilities	888,922,626	932,408,179	
Total Liabilities	1,176,014,508	1,149,444,914	
Pensions	12,813,821	10,780,535	
Total Deferred Inflows of Resources	12,813,821	10,780,535	
Total Net Position	\$1,307,096,202	\$1,302,869,230	

#### JUNE 30, 2019

In 2019, current assets increased by \$5.7 million to \$158.5 million and current liabilities increased by \$70.1 million to \$287.1 million yielding a current ratio of 0.55. Capital assets, net of accumulated depreciation of \$1.49 billion, increased by \$13 million in 2019 to \$2.1 billion. These increases are from a combination of infrastructure deeded to the Department by developers, Clean Water Nashville projects, and the Department's efforts to maintain and improve the system. The Department has an ongoing program to improve both the water and sewer infrastructure by cleaning and/or relining existing pipes, as well as replacing and extending facilities.

#### Statement of Revenue, Expenses, and Changes in Net Position

· •	Condensed Financial Information as of June 30,		
	2019	2018	
Operating revenues	\$ 227,648,685		
Depreciation (expense)	(90,316,161)	, , , , ,	
Other operating (expenses)	(111,335,275)	(113,857,694)	
Operating income	25,997,249	23,845,732	
Nonoperating revenues (expenses):			
Investment income	5,866,244	2,498,141	
Interest expense	(34,816,690)	(32,285,970)	
Other	435,667	465,356	
Capital grants and contributions Transfers to other funds of the Metropolitan	20,652,395	18,752,603	
Government, net	(13,907,893)	(16,138,329)	
Change in net position	4,226,972	(2,862,467)	
Net Position, beginning of year, as			
restated	1,302,869,230	1,305,731,697	
Net Position, end of year	\$ 1,307,096,202	\$ 1,302,869,230	

JUNE 30, 2019

#### CAPITAL ASSETS AND BONDS AND NOTES PAYABLE

Capital Assets - The Department's investment in capital assets as of June 30, 2019 is \$2.1 billion, which is an increase of .3% from the year ending June 30, 2018. Depreciation expense for FY 2019 totaled \$90.3 million.

	June 30, 2019	June 30, 2018
Utility plant in service	\$ 3,107,075,135	\$ 2,966,362,308
Land	22,509,294	22,509,294
Buildings and improvements	54,602,115	54,412,200
Improvements other than buildings	61,241,081	56,559,768
Furniture, machinery and		
equipment	127,470,436	119,804,316
Construction work in progress	207,494,178	257,420,173
Less accumulated depreciation	(1,489,824,268)	(1,399,508,107)
-	\$ 2,090,567,971	\$ 2,077,559,952

During the year ending June 30, 2019 utility plant in service, increased \$140.7 million to \$3.1 billion and construction work in progress decreased \$49.9 million to \$207.5 million. The primary reason for the increase in utility plant in service was the completion and start of multiple large projects.

The primary reason for the decrease in construction work in process was the completion of multiple large projects such as the Cumberland City Low 60 inch trunk line and the Omohundro Electrical Substation.

Additional information on the Department's capital assets can be found in Note C beginning on page 23 of this report.

Bonds and Notes Payable - At June 30, 2019, the Department had total outstanding bond debt, including deferred charges/premiums, net, of \$918.4 million. The revenues of the Department collateralized all bond debt.

	June 30, 2019		 June 30, 2018
Revenue bonds payable Deferred charges / premiums, net	\$	854,140,000 64,275,635	\$ 892,365,000 70,825,129
Total	\$	918,415,635	\$ 963,190,129

On November 1, 2017, the Department issued \$ 244 million in revenue bonds to refund commercial paper in addition to a defeasance of Bonds 2008A for \$30 million. Additional information on the Department's bonds and note payable can be found in Note D beginning on page 24 of this report.

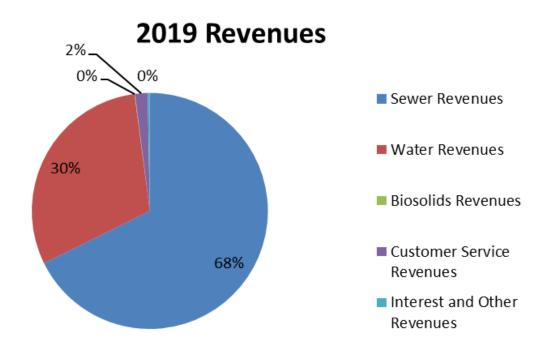
Commercial Paper - In April 2015, the Metropolitan Government instituted a Water and Sewer revenue bond commercial paper program of \$300 million to provide interim and short-term financing for various authorized capital projects of the Department. There was \$ 200 million outstanding commercial paper under the Water and Sewer program at June 30, 2019.

JUNE 30, 2019

#### OTHER INFORMATION

#### Sources of Revenues

The Department collects its primary revenues from charges for water and sewerage services provided to customers. In addition, these revenues are invested to earn interest. Customers are charged fees (Customer Service Revenue) to establish service, for late payment and for insufficient funds checks. The Department also charges a fee to tap onto the water system, a similar fee to connect to the sewerage system and a sewer capacity fee. These sources are illustrated on the chart below as a percentage of total revenues:

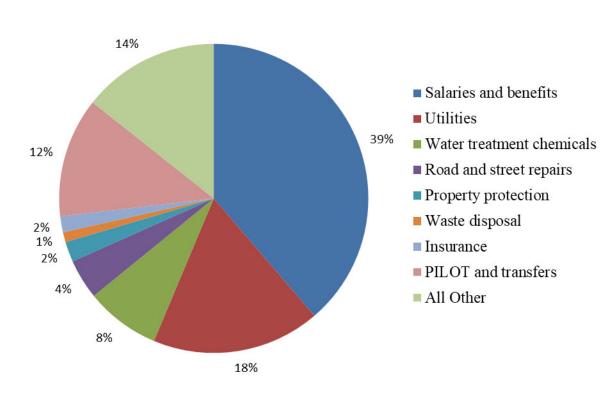


JUNE 30, 2019

#### Major Expenses

In addition to the salaries and benefits of its employees, the major expenses incurred by the Department include electricity, payment in lieu of taxes to the Metropolitan Government (PILOT), water treatment chemicals, biosolids disposal, insurance, and property protection. Other expenses include the materials, supplies, and outside labor to maintain the system. These expense categories are charted below as a percentage of total operating expenses, excluding Depreciation, and Amortization:

### **Expenses 2019**



#### REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Department's finances for citizens, taxpayers, customers, investors, creditors and all others with an interest in the Department's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Metropolitan Government of Nashville and Davidson County, Department of Finance, Division of Accounts, mailto:cafr@nashville.gov.

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STATEMENT OF NET POSITION JUNE 30, 2019

ASSETS:	
Current assets:	
Cash and cash equivalents	\$ 66,954,527
Accounts receivable	18,379,441
Allowance for doubtful accounts	( 679,978)
Accrued interest receivable	505,243
Due from other funds of the Government	907,967
Due from component units	6,016
Inventories of supplies	2,871,638
Other current assets	1,000
Restricted Assets:	
Cash and cash equivalents	47,514,156
Accounts receivable	2,605,876
Accrued interest receivable	119,156
Due from other funds of the Government	19,316,274
Other current assets	5,850
Total current assets	158,507,166
Capital and other noncurrent assets:	
Capital assets:	
Utility plant in service	3,107,075,135
Land	22,509,294
Buildings and improvements	54,602,115
Improvements other than buildings	61,241,081
Furniture, machinery and equipment	127,470,436
Construction in progress	207,494,178
Less accumulated depreciation	_(1,489,824,268)
Capital assets, net	2,090,567,971
Restricted assets:	
Cash and cash equivalents	199,333,816
Other noncurrent assets	36,395,467
Total noncurrent assets	2,326,297,254
Total assets	_2,484,804,420
DEFERRED OUTFLOWS OF RESOURCES:	
Deferred charge on refunding	2,667,744
Pensions	8,452,367
Total deferred outflows of resources	11,120,111

See accompanying notes to financial statements.

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STATEMENT OF NET POSITION - Continued JUNE 30, 2019

LIABILITIES:	
Current liabilities:	
Accounts payable	\$ 6,254,500
Accrued payroll	2,169,737
Due to other funds of the Government	2,237,490
Due to component units	-
Customer deposits	3,212,850
Other current liabilities	4,020,658
Liabilities payable from restricted assets:	
Accounts payable	7,673,352
Accrued interest	22,403,295
Current portion of long-term debt	39,120,000
Commercial paper payable	200,000,000
Total current liabilities	<u>287,091,882</u>
Noncurrent liabilities:	
Revenue bonds, net	879,295,635
Pension liability, net	9,626,991
Total noncurrent liabilities	888,922,626
Total liabilities	1,176,014,508
DEFERRED INFLOWS OF RESOURCES	
Pensions	12,813,821
Total deferred inflows of resources	
Total deferred liftlows of resources	12,813,821
NET POSITION:	
Net investment in capital assets	1,152,407,076
Restricted for debt retirement	97,262,287
Unrestricted	57,426,839
Total net position	\$1,307,096,202
L	<del>+ - ; - : : ; • &gt; • = • = • = • = • = • = • = • = • =</del>

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STATEMENT OF REVENUE, EXPENSES AND CHANGES IN NET POSITION YEAR ENDED JUNE 30, 2019

Operating revenues:		
Charges for services	\$	227,012,510
Other		636,175
Total operating revenues		227,648,685
Operating expenses:		
Personal services		50,053,505
Contractual services		43,174,721
Supplies and materials		15,259,424
Depreciation		90,316,161
Other		2,847,625
Total operating expenses		201,651,436
Operating income	_	25,997,249
Nonoperating revenue (expense):		
Investment income		5,866,244
Interest expense	(	34,816,690)
Gain on sale of capital assets	`	29,897
Other		405,770
Nonoperating expense, net	(	28,514,779)
Loss before capital grants and contributions and transfers	_(_	2,517,530)
Capital grants and contributions		20,652,395
Transfers to other funds of the Government	_(	13,907,893)
Change in net position		4,226,972
Net position, beginning of year, as restated		1,302,869,230
Net position, end of year	<u>\$</u>	1,307,096,202

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STATEMENT OF CASH FLOWS YEAR ENDED JUNE 30, 2019

Cash flows from operating activities: Receipts from customers and users Payments to suppliers Payments to employees Other payments Net cash provided by operating activities	\$ 224,000,380 ( 61,909,281) ( 48,498,693) ( 2,877,638) 110,714,768
Cash flows from noncapital financing activities:	
Transfers to other funds of the Government	( 13,907,893)
Net cash used in noncapital financing activities	( 13,907,893)
Cash flows from capital and related financing activities:	
Acquisition of capital assets	(100,524,427)
Proceeds from the sale of capital assets	29,897
Proceeds from borrowings	75,000,000
Principal payments on borrowings	( 38,225,000)
Interest subsidy	5,005,565
Interest paid	( 43,930,194)
Capital contributions received	20,196,263
Net cash used in capital and related financing activities	( 82,447,896)
Cash flows from investing activities:	
Interest received	5,596,717
Net cash provided by investing activities	5,596,717
Net change in cash and cash equivalents	19,955,696
Cash and cash equivalents at beginning of year	293,846,803
Cash and cash equivalents at end of year	<u>\$ 313,802,499</u>
Cash and cash equivalents are classified as:	
Current assets	\$ 66,954,527
Current restricted assets	47,514,156
Noncurrent restricted assets	199,333,816
	\$ 313,802,499

See accompanying notes to financial statements.

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY STATEMENT OF CASH FLOWS - Continued YEAR ENDED JUNE 30, 2019

### Reconciliation of operating income to net cash provided by operating activities:

Operating income	\$	25,997,249
Adjustments to reconcile operating income		
to net cash provided by operating activities:		
Depreciation		90,316,161
Bad debt expense	(	881,156)
Other receipts		405,770
Changes in assets, deferred outflows of resources, liabilities		
and deferred inflows of resources:		
Accounts receivable	(	2,117,847)
Due from other funds of the Government		269,178
Due from component units		2,062
Inventories of supplies	(	42,719)
Other current assets		110,924
Deferred outflows pensions	(	2,693,856)
Accounts payable	(	3,432,417)
Accrued payroll		31,441
Due to other funds of the Government	(	1,529,207)
Customer deposits	(	13,127)
Other current liabilities		75,085
Net pension liability		2,183,941
Deferred inflows pensions		2,033,286
Total adjustments		84,717,519
Net cash provided by operating activities	<u>\$ 1</u>	10,714,768
Supplemental disclosure of non-cash items: Contributions of capital assets	<u>\$</u>	13,819,130

See accompanying notes to financial statements.

#### A. <u>SUMMARY SIGNIFICANT ACCOUNTING POLICIES</u>

The accompanying financial statements encompass the financial activities of the Department of Water and Sewerage Services (the "Department"). The Department is an enterprise fund of The Metropolitan Government of Nashville and Davidson County, Tennessee (the "Metropolitan Government") and, accordingly, is included in the basic financial statements of the Metropolitan Government. The accompanying financial statements do not purport to present fairly the financial position of The Metropolitan Government of Nashville and Davidson County, Tennessee and changes in its financial position and its cash flows. The Department provides water and sewerage services to customers in the Metropolitan Nashville area on a self-support basis utilizing a rate structure designed to produce revenues sufficient to fund debt service requirements and operating expenses and maintain adequate working capital.

#### **Basis of Accounting**

The financial statements are presented using the economic resources measurement focus and the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America. The Department applies all relevant Government Accounting Standards Board ("GASB") pronouncements.

#### Estimates

Estimates used in the preparation of financial statements require management to make assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### Cash and Cash Equivalents

Cash and cash equivalents include amounts in demand deposits and highly liquid short-term investments with maturity dates within three months of the date of acquisition. The Department participates in the centrally managed cash and investment pool of the Metropolitan Government, under which the Metropolitan Government remits payments on behalf of the Department. Investment income earned on funds invested in pooled accounts is allocated to the Department by the Metropolitan Government on the basis of relative balances.

#### <u>Inventories</u>

Inventories, principally materials, supplies and replacement parts, are valued at the lower of cost (average cost method) or market. Inventory items are recorded as expenditures when used under the consumption method.

#### A. <u>SUMMARY SIGNIFICANT ACCOUNTING POLICIES</u> - Continued

#### Capital Assets

Utility plant acquired prior to July 31, 1952, is stated at the estimated cost at that date, as determined by independent engineers, with subsequent additions recorded at cost. Net interest expense incurred during the construction of plant and equipment is capitalized as part of the cost of the related asset. The Department capitalized interest totaling \$2,799,753 for the year ended June 30, 2019. Capital assets are generally defined as assets with an individual cost in excess of \$10,000 and a useful life in excess of one year. Depreciation is provided on the straight-line method over the estimated useful lives of the respective assets. The estimated useful lives are as follows:

Utility plant in service	7 - 100 years
Building and improvements	3 - 50 years
Improvements other than buildings	20 - 100 years
Machinery and equipment	3 - 50 years

The Department closes completed construction projects to capital assets upon beneficial use.

#### **Bond Premiums and Discounts**

Bond premiums and discounts are deferred and amortized on a straight-line basis over the term of the related bond issue.

#### Compensated Absences

General policy of the Metropolitan Civil Service Commission permits the accumulation, within certain limitations, of unused vacation days and sick leave. Vacation days may accumulate to an amount equal to three times the current vacation accrual rate. Accumulated unpaid vacation pay is recorded as a liability by the Department. Although sick pay may accumulate, no amounts are vested in the event of employee termination; therefore, no liability for sick pay has been accrued.

#### Restricted Assets

Restricted assets represent amounts which are required to be maintained pursuant to Department bond resolutions relating to bonded indebtedness (construction and sinking funds) and funds received for specific purposes pursuant to U.S. Government grants (related primarily to construction projects).

#### A. SUMMARY SIGNIFICANT ACCOUNTING POLICIES - Continued

#### Deferred outflows of resources

In addition to assets, the Statement of Net Position reports a separate section for deferred outflows of resources. *Deferred outflows of resources* represent a consumption of net position that applies to a future period and so will not be recognized as an outflow of resource (expense) until then. The Department has two items that qualify for reporting in this category. The *deferred charge on refunding* results from the difference in the carrying value of refunded debt and its reacquisition price. The amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The amount for *pensions* relates to certain differences between projected and actuarial results, certain differences between projected and actual investment earnings, contributions between the measurement and reporting dates, as well as changes in assumptions.

#### Operating and Nonoperating Revenues and Expenses

Operating revenues and expenses generally result from providing services and providing and delivering goods and services in connection with the Department's principal ongoing operations and consist primarily of charges to customers or departments, cost of sales and services, administrative expense, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. When both restricted and unrestricted resources are available for use, it is the Department's policy to use restricted resources first and then unrestricted resources, as they are needed.

#### Capital Grants and Contributions

Capital grants and contributions include funds received from federal and state agencies for certain sewer projects by the Department, contributions from local governments and other sources, tap and capacity fees, and deeds of conveyance. Utility plant contributed is recorded/presented in accordance with the provisions of GASB Statement No. 33, Accounting and Financial Reporting for Non-exchange Transactions and GASB Statement No. 34, Basic Financial Statements and Management's Discussion and Analysis' for State and Local Governments. These statements require that capital contributions be reported in the statement of revenue, expenses and changes in net assets as a separate line item after non-operating revenues and expenses, rather than as direct additions to contributed capital, as under previous standards.

#### A. <u>SUMMARY SIGNIFICANT ACCOUNTING POLICIES</u> - Continued

#### **Impairment of Long-Lived Assets**

The carrying value of long-lived assets held and used are reviewed whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. For purposes of evaluating the recoverability of long-lived assets, the recoverability test is performed using undiscounted net cash flows before consideration of interest expense. Should the sum of the expected future net cash flows be less than the carrying value of the asset being evaluated, an impairment loss would be recognized. The evaluation of asset impairment requires the Department to make assumptions about future cash flows over the life of the asset being evaluated. Assets to be disposed of are reported at the lower of their carrying amount or fair value less costs to sell, and are no longer depreciated. No impairment loss was considered necessary during fiscal year 2019.

#### Deferred inflows of resources

In addition to liabilities, the Statement of Net Position reports a separate section for deferred inflows of resources. *Deferred inflows of resources* represent an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resource (revenue) until that time. The amount for *pensions* relates to certain differences between projected and actual actuarial results and certain differences between projected and actual investment earnings.

#### Revenue Recognition

Revenues from services provided by the Department are recognized from meters read on a monthly cycle basis. At the end of each month, services rendered from the latest date of each meter-reading cycle to month end is accrued and included as accounts receivable, net of an estimated allowance for uncollectible accounts at June 30, 2019 of \$560,089.

#### **Net Position**

The Department's net position classifications are as follows:

• Net investment in capital assets - This component of net position consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any debt and deferred inflows of resources attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net positions' component as the unspent proceeds.

#### A. <u>SUMMARY SIGNIFICANT ACCOUNTING POLICIES</u> - Continued

- Restricted This component consists of net position restricted by grantors, contributors, or laws and regulations of other governments and restrictions imposed by law or through constitutional provisions or enabling legislation, reduced by liabilities and deferred inflows of resources related to those assets.
- Unrestricted This component consists of net position that do not meet the definition of "restricted" or "net investment in capital assets."

#### **Accounting Pronouncements**

The Department adopted GASB Statement No. 83, Certain Asset Retirement Obligations, required for fiscal periods beginning after June 15, 2018, in fiscal 2019. This Statement enhances comparability of financial statements among governments by establishing uniform criteria for recognizing and measuring certain asset retirement obligations (ARO's) and enhances the usefulness of information by requiring disclosures related to ARO's.

The Department plans to adopt GASB Statement No. 84, *Fiduciary Activities*, required for fiscal periods beginning after December 15, 2018, in fiscal 2020. This Statement enhances consistency and comparability by establishing specific criteria for identifying activities that should be reported as fiduciary activities and clarifying whether and how business-type activities should report their fiduciary activities.

The Department plans to adopt GASB Statement No. 87, *Leases*, required for fiscal periods beginning after December 15, 2019, in fiscal 2021. This Statement increases the usefulness of financial statements by requiring reporting of certain lease liabilities that currently are not reported, enhances comparability by requiring lessees and lessors to report leases under a single model, and enhances the usefulness of information by requiring notes to the financial statements regarding leasing arrangements.

The Department adopted GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, required for fiscal periods beginning after June 15, 2018, in fiscal 2019. This Statement improves the information that is disclosed in the notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

The Department plans to adopt GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period, required for fiscal periods beginning after December 15, 2019, in fiscal 2021. This Statement enhances the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and simplifies accounting for interest cost incurred before the end of a construction period.

#### A. <u>SUMMARY SIGNIFICANT ACCOUNTING POLICIES</u> - Continued

The Department plans to adopt GASB Statement No. 90, *Majority Equity Interests*, required for fiscal periods beginning after December 15, 2018, in fiscal 2020. This Statement improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improves the relevance of financial statement information for certain component units.

The Department plans to adopt GASB Statement No. 91, *Conduit Debt Obligations*, required for fiscal periods beginning after December 15, 2020, in fiscal 2022. This Statement improves the comparability of financial reporting for issuers by eliminating the option to recognize a liability for a conduit debt obligation.

Unless otherwise noted, management is in the process of determining the effects that the adoption of these Statements will have on the Department's financial statements.

#### B. <u>CASH AND CASH EQUIVALENTS</u>

#### Deposit Policy

The Department is authorized by policy to invest funds that are not immediately needed in: United States Treasury Bills, Bonds and Notes; the State of Tennessee Local Government Investment Pool; bonds issued by the Government; bonds of commercial entities; and other investments such as repurchase agreements and commercial paper. The Department is authorized to invest in these instruments either directly or through the Metro Investment Pool.

Deposits in financial institutions are required by State statute to be secured and collateralized by the institutions. The collateral must meet certain requirements and must have a total minimum market value of 105% of the value of the deposits placed in the institutions, less the amount protected by federal depository insurance. Collateral requirements are not applicable for financial institutions that participate in the State of Tennessee's collateral pool. As of June 30, 2019, most of the Department's deposits were held by financial institutions, which participate in the bank collateral pool administered by the Treasurer of the State of Tennessee or in the State of Tennessee Local Government Investment Pool. Participating banks determine the aggregated balance of their public fund accounts for the Department. The amount of collateral required to secure these public deposits must be at least 105% of the average daily balance of public deposits held. Collateral securities required to be pledged by the participating banks to protect their public fund accounts are pledged to the State Treasurer on behalf of the bank collateral pool. The securities pledged to protect these

#### B. <u>CASH AND CASH EQUIVALENTS</u> - Continued

accounts are pledged in the aggregate rather than against each individual account. The members of the pool may be required by agreement to pay an assessment to cover any deficiency. Under this additional assessment agreement, public fund accounts covered by the pool are considered to be insured for purposes of credit risk disclosure.

The carrying amount of the cash and cash equivalents totaled \$313,802,499, and the corresponding bank balance was \$312,173,125. The difference between the carrying amounts of cash and cash equivalents and the corresponding bank balances is due primarily to outstanding checks and deposits in transit. The entire balance of cash and cash equivalents was covered by the State collateral pool, federal depository insurance or collateralized with securities held by the government's agent in the government's name.

### C. <u>CAPITAL ASSETS</u>

The following summarizes the changes in capital assets during the year ended June 30, 2019.

	Balance			Balance
	July 1, 2018	<u>Increases</u>	<u>Decreases</u>	June 30, 2019
Depreciable assets:				
	\$2,966,362,308	\$140,712,827	\$ -	\$3,107,075,135
Utility plant in service			\$ -	
Buildings and improvements	54,412,200	189,915	-	54,602,115
Improvements other than	56 550 769	4 (01 212		(1 241 001
buildings	56,559,768	4,681,313	-	61,241,081
Furniture, machinery and	110 004 216	7.666.120		127 470 426
equipment	119,804,316	7,666,120		127,470,436
Total depreciable	2 107 120 502	152 250 175		2 250 200 777
assets	3,197,138,592	153,250,175	<del>-</del>	3,350,388,767
Nondepreciable assets:				
Land	22,509,294	_	-	22,509,294
Construction in progress	257,420,173	83,887,319	133,813,314	207,494,178
Total nondepreciable				
assets	279,929,467	83,887,319	133,813,314	230,003,472
465016	279,929,107		133,013,311	
Total at historical cost	3,477,068,059	237,137,494	133,813,314	3,580,392,239
Less accumulated depreciation	for:			
Utility plant in service	1,268,206,215	75,324,608	-	1,343,530,823
Buildings and improvements	33,556,275	1,735,431	-	35,291,706
Improvements other than	, ,	, ,		, ,
buildings	41,153,289	2,032,130	-	43,185,419
Furniture, machinery and	,,	, ,		-,, -
equipment	56,592,328	11,223,992	_	67,816,320
1 1		<u> </u>		
Total accumulated				
depreciation	1,399,508,107	90,316,161		1,489,824,268
-		_		
Capital assets, net	\$2,077,559,952	<u>\$146,821,333</u>	<u>\$133,813,314</u>	\$2,090,567,971

#### D. <u>BONDS</u>, <u>NOTES AND OTHER OBLIGATIONS</u>

### **Transaction Summary**

Bonds, notes and other obligations activity for the year ended June 30, 2019 was as follows:

	Balance July 1, 2018	Additions	Reductions	Balance June 30, 2019	Due Within One Year
Revenue bonds payable Deferred charges/	\$892,365,000	\$ -	\$(38,225,000)	\$854,140,000	\$39,120,000
premiums, net Net pension liability	70,825,129 7,443,050		( 6,549,494) (23,323,780)	64,275,635 9,626,991	
Total	\$970,633,179	\$25,507,721	\$(68,098,274)	\$928,042,626	\$39,120,000

### Description of Amounts Payable

Amounts payable at June 30, 2019 are as follows:

Interest Rate	<u>Amount</u>
3.25 - 5.25%	\$14,275,000
3.00 - 5.00%	70,590,000
	3.25 - 5.25%

#### D. <u>BONDS, NOTES AND OTHER OBLIGATIONS</u> - Continued

### <u>Description of Amounts Payable</u> - Continued

	Interest Rate	<u>Amount</u>
Department of Water and Sewerage Revenue Bonds, Federally Taxable (BAB's), Series 2010B, due in	6.202 6.76004	<b>#127</b> 000 000
varying amounts to July 1, 2037 Department of Water and Sewerage Revenue Bonds,	6.393 - 6.568%	\$135,000,000
Federally Taxable, Series 2010C, due in varying		
amounts to July 1, 2041	6.693%	75,000,000
Department of Water and Sewerage Revenue Refunding		
Bonds, Series 2012, due in varying amounts to July 1, 2023	1.00 - 5.00%	76,715,000
Department of Water and Sewerage Revenue Refunding	3.00 - 5.00%	227 020 000
Bonds, Series 2013, due in varying amounts to July 1, 2033 Department of Water and Sewerage Revenue Refunding	3.00 - 3.00%	237,930,000
Bonds, Series 2017A (Green Bonds), due in varying		
amounts to July 1, 2046	3.00 - 5.00%	89,420,000
Department of Water and Sewerage Revenue Refunding		
Bonds, Series 2017B, due in varying amounts to		
July 1, 2046	5.00%	155,210,000
Deferred premium (discount)		64,275,635
Total revenue bonds payable		918,415,635
Net pension liability		9,626,991
Total		<u>\$928,042,626</u>

The bonds, notes, and other obligations are classified in the Statement of Net Position as follows:

#### Current liabilities:

Liabilities payable from restricted assets:	
Current portion of long-term liabilities	\$ 39,120,000
Noncurrent liabilities:	
Revenue bonds, net	879,295,635
Pension liability, net	9,626,991
Total	<u>\$928,042,626</u>

#### Collateral

All bonds are collateralized by the revenues of the Department.

### D. <u>BONDS, NOTES AND OTHER OBLIGATIONS</u> - Continued

#### **Bond Covenants**

The various revenue bond indentures contain significant limitations and restrictions on annual debt service requirements, maintenance of a flow of monies through various restricted accounts, minimum amounts to be maintained in various sinking funds, and minimum revenue bond coverages. As of June 30, 2019, the Department believes it is in compliance with all financial limitations and restrictions.

#### Annual Debt Service Requirements

The annual requirements to amortize all revenue bonds outstanding as of June 30, 2019 are as follows:

	Revenue	e Bonds
Year Ending June 30,	<u>Principal</u>	<u>Interest</u>
2020	\$ 39,120,000	\$ 44,225,115
2021	25,080,000	42,304,977
2022	29,955,000	40,984,827
2023	36,775,000	39,449,077
2024	27,475,000	37,987,378
2025 - 2029	118,070,000	172,635,905
2030 - 2034	148,375,000	137,030,539
2035 - 2039	187,265,000	89,923,575
2040 - 2044	195,170,000	33,764,959
2045 - 2047	46,855,000	3,584,625
	854,140,000	641,890,977
Deferred premium/(discount)	64,275,635	
Total	\$918,415,635	\$641,890,977

#### D. BONDS, NOTES AND OTHER OBLIGATIONS - Continued

#### Commercial Paper

In April 2015, the Department established a \$200 million commercial paper program. The program allows the Department to issue short-term notes to finance water and sewer capital projects, until long-term bonds can be issued to provide permanent project financing. As notes mature (prior to the issuance of the long-term bonds), new notes are issued to repay the maturing notes. If market conditions are such that new notes cannot be issued, the bank has agreed to pay the principal amount of any maturing commercial paper notes pursuant to a revolving credit agreement. If the bank advances funds pursuant to the revolving credit agreement, the Department has 180 days within which to reimburse the bank, either from the proceeds of a new commercial paper note issue, the proceeds of long-term bonds or funds of the Department. If the Department cannot reimburse the bank within 180 days, the bank advance converts to a term loan, payable in equal semi-annual installments of principal over three years. The Department may at any time prepay the term loan from the proceeds of a new commercial paper note issue or long-term bonds. In October 2015, the revolving credit agreement was replaced by a letter-of-credit and reimbursement agreement (LOC). The par amount of the commercial paper program was also reduced from \$200 million to \$183 million, the payment of which is now supported by the LOC on substantially the same terms as the revolving credit agreement as described above. This program expired July 12, 2018.

In July 2018, the Department established a \$183 million commercial paper program. Commercial paper notes are issued to provide interim or short-term financing of various water and sewer capital projects. The notes may be refunded with new notes (rollover notes) until the Department is prepared to issue long-term bonds and thereby provide permanent financing for the capital projects financed under the commercial paper program. As notes mature (prior to the issuance of the long-term bonds) new notes are issued to repay the maturing notes. If market conditions are such that new notes cannot be issued, the bank has agreed to pay the principal amount of any maturing commercial paper notes pursuant to a Reimbursement Agreement. If the bank advances funds pursuant to the reimbursement agreement, the Department has 180 days within which to reimburse the bank, either from the proceeds of a new commercial paper note issue, the proceeds of long-term bonds or funds of the Department. If the Department cannot reimburse the bank within 180 days, the bank advance converts to a term loan, payable in equal quarterly installments of principal over three years. The Department may at any time prepay the term loan from the proceeds of a new commercial paper note issue or long-term bonds. In April 2015, the Department began a \$100 million Extendable Commercial Paper (ECP) program. The ECP dealer issues commercial paper notes with original maturities of 1 to 90 days. If the ECP dealer was ever unable to market notes in

#### D. BONDS, NOTES AND OTHER OBLIGATIONS - Continued

the amount needed to pay the maturing notes, the Department could extend the original maturity date to 270 days from the original date of issue. During this period long-term financing would be arranged to pay the notes at maturity. The combined programs total \$300 million of commercial paper notes available for short term capital financing.

Revenue commercial paper is issued as federally tax-exempt notes. The commercial paper is sold at par as interest-bearing obligations in minimum denominations of \$100,000 with interest payable at maturity. The commercial paper has varying maturities not to exceed 270 days, and all rollover commercial paper will not have a final maturity more than two years from the initial dates of issuance. The State has waived the two-year final maturity limitation and approved a final maturity not to exceed six years. Interest rates vary depending on the market. At June 30, 2019, the amount of principal outstanding could not exceed \$300 million. Commercial paper obligations of \$200 million with interest rates ranging from 1.50% to 1.77% were outstanding at June 30, 2019. The obligations are considered short-term debt at June 30, 2019 and are recorded as a liability of the Department.

### **Redemption Options**

Certain bonds are subject to redemption prior to maturity at the option of the Department. The stated payments of principal and interest on the Department's Series 1992 and Series 2010A, B, C and D are insured by municipal bond insurance policies which cannot be canceled.

#### E. EMPLOYEE BENEFIT PLANS

#### Pension Plans

The Government sponsors or guarantees several single-employer pension plans, including (a) the closed City Plan ("City Plan"), (b) the Davidson County Employees' Retirement Fund (County Plan), both of which were closed to new members on April 1, 1963, and (c) The Metropolitan Employees' Benefit Trust Fund Division A or B ("Metro Plan"). Division A of the Metro Plan was established at the inception of The Government on April 1, 1963, and was closed to new members on July 1, 1995. Division B of the Metro Plan was established as of July 1, 1995.

#### E. EMPLOYEE BENEFIT PLANS - Continued

All plans of the Government were established by or continue under the authority of the Metropolitan Charter, Article XIII, effective April 1, 1963. Approval of the Metropolitan Council is required to establish and amend benefit provisions. Article XIII also requires that all pension plans be actuarially sound. Administrative costs of the plans are financed by plan assets. The plans are managed and administered by the Metropolitan Employee Benefit Board, an independent board created by the Metropolitan Charter. The financial position and results of operations of the pension plans are reported as fiduciary funds of the Government and, accordingly, are not included in the financial statements of the Department.

Substantially all employees of the Department are members of the Metropolitan Plan. Periodic contributions by the Department to the Metropolitan Plan are at actuarially determined rates that are designed to accumulate sufficient assets to pay benefits when due. Contributions to closed plans are made on a pay-as-you-go basis whereby contributions are made in amounts sufficient to cover benefits paid during the year. Actuarially required employer contributions are not computed because the plans are closed and there are few active employees. Employees do not contribute to any of the pension plans.

Normal retirement for employees occurs at age 65 - Division A, or 60 - Division B, and entitles employees to a lifetime monthly benefit as determined under the Plan. Benefits fully vest upon completing five years of service for employees employed on or between October 1, 2001 and December 31, 2012, who vest before leaving employment. Benefits fully vest on completing 10 years of service for employees and non-vested employees rehired on or after January 1, 2013.

A net pension liability has been recorded in the financial statement of the Department based on its pro rata share of the total net pension liability for the Government. The net pension liability was \$9,626,991 at June 30, 2019.

Certain differences between expected and actual actuarial experience and certain differences between projected and actual investment earnings are recorded as either deferred outflows of resources or deferred inflows of resources. The deferred outflows of resources and deferred inflows of resources were \$8,452,367 and \$12,813,821, respectively, at June 30, 2019. The amounts will be recognized as pension expense in future years.

Additional information regarding the pension plans of the Government is available in the Comprehensive Annual Financial Report which can be obtained from the Department of Finance, Financial Operations, 700 2<sup>nd</sup> Avenue South, P.O. Box 196300, Nashville, TN, 37219-6300, or <a href="http://www.nashville.gov/Finance/Financial-Operations.aspx">http://www.nashville.gov/Finance/Financial-Operations.aspx</a>.

#### E. EMPLOYEE BENEFIT PLANS - Continued

Contributions to the various pension plans totaled \$4,801,699 for the year ended June 30, 2019.

#### Other Post-Employment Benefit (OPEB) Plans

Retirees in the Metropolitan, City or County Plans may elect to participate in the Metropolitan Employees' Medical Benefit Plan, a single-employer defined benefit healthcare plan. The Metropolitan Plan is administered by the Employee Benefit Board and provides medical, dental and life insurance. The other post-employment benefits for Government employees were authorized by the Government's charter and code. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The Metropolitan Plan does not issue a stand-alone financial report.

The post-employment benefits for the Metropolitan plans were authorized by the Government's Charter. As the Government has assumed the responsibility for funding these benefits, the Department has accrued no liability as of June 30, 2019.

The contribution requirements of Metropolitan Employees' Medical Benefit Plan members and the Government are established and may be amended by the Employee Benefit Board. The required contribution is based on projected pay-as-you-go financing requirements under which contributions are made in amounts sufficient to cover benefits paid, administrative costs and anticipated inflationary increases. For health insurance, the Government contributes 75% of all premium payments, and the retirees contribute 25%. The Government also provides a 50% matching contribution on dental insurance for any retiree who elects to participate. Finally, the Government provides life insurance at no charge to the retirees.

#### Deferred Compensation Plan

The Government offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan, available to all employees, permits deferral of a portion of salary until future years. The deferred compensation is not available to employees until termination, retirement, death or unforeseeable emergency. Because the assets are not held in a trustee capacity by the Government, they are not included in the Government's financial statements. No contributions are made to this plan by the Government.

#### F. COMMITMENTS AND CONTINGENCIES

#### Litigation

The Department is a party to various litigation filed in the normal course of business. It is believed that the outcome of these cases will not have a material effect on the financial position of the Department.

#### Insurance and Benefits

The Department is subject to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; illnesses or injuries to employees; and natural disasters. The Department is a member of the Government's self-insurance program with respect to the first \$3,000,000 of liability claims and casualty losses in any one year. Liabilities for accidents are generally limited under the Governmental Tort Liability Act of the Tennessee Code as follows; bodily injury - \$300,000 per person, \$700,000 per accident; and property damage - \$100,000 per accident. Claims on real and personal property in losses to a \$10,000 deductible.

The Department is also a member of the Government's self-insurance program with respect to medical benefits and employee blanket bond coverage. Premiums paid by the Department to the program were \$7,481,133 for the year ended June 30, 2019.

#### Federal and State Financial Assistance

The Department has received federal and state financial assistance for specific purposes that is subject to review and audit by the grantor agencies. Although such audits could generate expenditure disallowances under terms of the programs, the Department believes that any required reimbursements would not be material to the Department's financial statements. Accordingly, no provision has been made for any potential reimbursements to the grantor agencies.

#### F. COMMITMENTS AND CONTINGENCIES - Continued

Prior to the issuance of the Water and Sewer Revenue Refunding Bonds, Series 2010A, on December 16, 2010, the full faith and credit of the Government was pledged for possible deficiencies in the collection of required state sewer user fees established in connection with certain grants received from the State Funding Board (TCA 68-221-202 through 68-221-214). The Department acted as a conduit with respect to sewer user fees imposed by the state. These user fees were set at an amount sufficient to recover the project costs, including related interest expense. A portion of the proceeds from the Series 2010A Bonds was used to fully prepay the Tennessee Local Development Authority ("TLDA") loans. The amount of prepayment is \$36,395,467 at June 30, 2019 and is reported as other noncurrent assets. Subsequent to the issuance of the Bonds, the user fees are considered a general sewer charge and reflected as revenue. The amounts received were recorded as capital grants and contributions by the Department.

At June 30, 2019, the Department had commitments of \$40,250,921 for construction contracts.

The Department, the Metropolitan Council, the State of Tennessee Department of Environment and Conservation ("TDEC"), the United States Department of Justice (DOJ) and the United States Environmental Protection Agency ("EPA"), have agreed on a consent decree to address and correct deficiencies within the Department's sewer system that have caused violations of the Clean Water Act ("CWA"). The consent decree was approved by the Federal Court in March 2009. Per the original decree, the Department was required to fully develop, in two years, a Corrective Action Plan/Engineering Report ("CAP/ER") for its sanitary sewer system and a Long-term Control Plan ("LTCP") for its combined sewer system to achieve the goals of the CWA and meet water quality requirements in the Cumberland River. Upon submittal and approval of the Plans, the Department will have an additional nine years to complete the work as developed by the Plans.

Due to the historic floods that occurred in Nashville in May 2010, the Department petitioned EPA and TDEC for a six-month extension for developing the CAP/ER and LTCP and a two year extension for completing the work (final compliance) under the force majeure clause of the consent decree. Approval has been granted for both extensions. The due date for the CAP/ER and LTCP was September 11, 2011, and the due date for all work coming out of those two plans (final compliance) is eleven years

#### F. COMMITMENTS AND CONTINGENCIES - Continued

after approval of the plans by EPA and TDEC. The Department submitted both plans on September 9, 2011. On August 10, 2017, the EPA approved the CAP/ER and the timeline of eleven years to complete the work. Negotiation for approval of the LTCP continues with EPA and TDEC. The Department is proceeding with the work under both plans. The Department has hired an internal program director as well as an external program management team composed of engineering consultants to manage planning, design and oversight of the program. The Department has also contracted for a construction management team to protect the investment in construction projects. A group of five small business project set designers has been selected to assist with the design of rehabilitation projects. Designers for other types of projects will be selected on a case by case basis.

The future related capital expenditures are expected to be between \$1 billion and \$1.5 billion. Continuing to have sewer overflows along with failure to comply with the mandate and meet future established deadlines could result in stipulated penalties of up to \$3,000 per occurrence for sanitary sewer overflows, and up to \$5,000 per day for failure to implement the improvements on a timely basis. EPA sent a demand letter for \$147,000 in stipulated penalties for sanitary overflow on September 9, 2011. This was for a negotiated 147 violations for 2010 and the first quarter of 2011. The Department and the EPA have discussed recent stipulated penalties and expect a demand letter in fiscal year 2020. No penalties have been demanded for any delays in submitting reports and deliverables nor from the failure to timely implement work. Proposed plans to fund capital expenditures for the next few years include internally generated cash and borrowings.

#### G. <u>RELATED PARTY TRANSACTIONS</u>

The Department supplies water and sewerage services to the other departments of the Government, for which standard rates are charged.

The Government performs certain administrative functions for the Department. The cost of such services included in operating expenses is \$10,345,422 for the year ended June 30, 2019.

In addition, in February 1996, the Metropolitan Government adopted a resolution which requires the Department to make an annual payment to the Government of \$4,000,000, representing a payment in lieu of ad valorem taxes. This payment is included in operating expenses for the year ended June 30, 2019.

#### H. RESTATEMENT OF NET POSITION

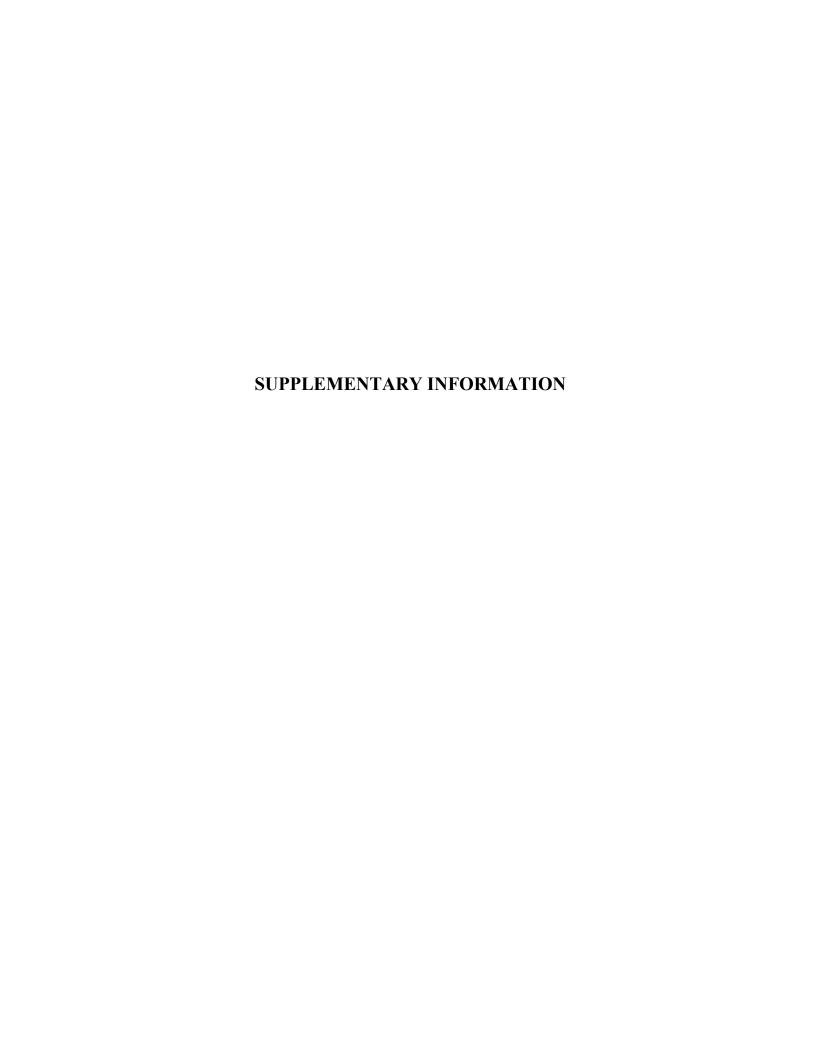
For the year ended June 30, 2018, depreciation on certain capital assets of the Department was incorrectly calculated. The impact on the financial statements was a decrease to beginning net position as follows:

Net position - beginning of year, as previously reported	\$ 1,309,271,930
Adjustment to record revision to accumulated depreciation	( 6,402,700)

#### I. SUBSEQUENT EVENTS

On September 3, 2019, the Department issued commercial paper notes in the amount of \$25,000,00 with maturing on November 20, 2019, with various interest rates ranging from 1.40% to 1.70%. These obligations were or will be refunded with rollover notes at their maturity dates.

On December 3, 2019, the Metropolitan Council adopted an Ordinance to implement a five-year plan of increases for both water and wastewater rates. Both water and sewer rates were restructured in accordance with a cost of services study. In the restructuring, rates were increased an equivalent of 26.4% to meet planned capital needs. Water and Sewer Rate increases are 4% for calendar year 2021; and 3% for the calendar years 2022, 2023, and 2024. Beginning in calendar year 2025, annual rate increases based on the Consumer Price Index for all Urban Consumers occur in perpetuity.



# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF UTILITY RATES (UNAUDITED) JUNE 30, 2019

The rate structure is composed of a meter charge and a volume charge.

The Department had the following rate structure in effect at June 30, 2019:

Water				Se	ewer			
METE	ER:							
Meter <u>Size</u>	Residential	Small Commercial	Intermediate Commercial	Large Commercial	Residential	Small Commercial	Intermediate Commercial	Large Commercial
Size	residential	Commercial	Commercial	Commercial	residential	Commercial	Commercia	Commercial
5/8"	\$3.13	\$3.98	\$13.85	\$597.23	\$7.62	\$8.51	\$27.89	\$1,076.37
3/4"	10.62	11.32	19.64	603.69	21.63	24.22	39.55	1,088.01
1"	12.77	13.63	21.51	605.80	26.05	29.17	43.33	1,091.79
1 1/2"	18.77	20.03	26.71	611.60	38.29	42.89	53.81	1,102.25
2"	25.29	26.97	32.63	618.22	51.57	57.75	65.73	1,114.18
3"	33.38	35.6	140.84	624.04	68.04	76.21	82.26	1,124.65
4"	54.41	58.03	64.65	650.65	110.88	124.18	130.22	1,172.65
6"	85.42	91.12	99.81	689.96	174.12	195.01	201.05	1,243.48
8"	133.59	142.50	155.38	755.41	272.29	304.96	312.96	1,361.43
10"	133.59	142.50	155.38	755.41	272.29	304.96	312.96	1,361.43
VOLU	JME:							
Water usage charges per 100 cubic feet (For usage over 200 cubic feet)					s per 100 cubic 200 cubic feet)	feet		
\$2	2.33 \$2.4	8 \$2.14	\$1.81		\$4.74	\$5.30	\$4.32	\$3.26

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF NUMBER OF CUSTOMERS (UNAUDITED) JUNE 30, 2019

	Residential	Commercial	<u>Total</u>
Water Customers Sewer Customers	181,793 <u>192,290</u>	27,255 19,771	209,048 212,061
Total Customers	<u>374,083</u>	<u>47,026</u>	421,109

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF UNACCOUNTED FOR WATER (UNAUDITED) JUNE 30, 2019

	AWWA Free Water Audit Software: Reporting Worksheet	WAS v5.0 American Water Works Association. Copyright © 2014, All Rights Reserved.				
	Report for: Metro Water Services rting Year: 2019   7/2018 - 6/2019					
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades						
	All volumes to be entered as: MILLION GALLONS (US) PER YEAR	₹				
where the utility meets or exceeds	ng for each input, determine the highest grade sall criteria for that grade and all grades below	Master Meter and Supply Error Adjustments				
WATER SUPPLIED	< Enter grading in column 'E' and 'J'	Pcnt: Value:				
Volume from ow Wate	vn sources: + ? 9 32,975.690 MG/Yr + er imported: + ? n/a MG/Yr +	? 9 2.384 MG/Yr MG/Yr				
	er exported: + ? 5 243.454 MG/Yr +	9 -22.00% (a) MG/Yr				
WATER S	<b>32,661.185</b> MG/Yr	Enter negative % or value for under-registration Enter positive % or value for over-registration				
AUTHORIZED CONSUMPTION		Clickhere: ?				
	ed metered: + ? 7 22,718.679 MG/Yr	for help using option buttons below				
	unmetered: + ? n/a MG/Yr ad metered: + ? n/a MG/Yr	Pcnt: Value:				
Unbilled (	unmetered: + ? 10 199.517 MG/Yr	(a) 199.517 MG/Yr				
		Use buttons to select				
AUTHORIZED CONS	<b>UMPTION:</b> 22,918.196 MG/Yr	percentage of water supplied				
WATER LOSSES (Water Supplied - Authorized Consu	mption) 9,742.989 MG/Yr	OR value				
Apparent Losses	. ,	Pcnt: ▼ Value:				
	nsumption: + ? 7 83.478 MG/Yr	○ ● 83.478 MG/Yr				
·	ime entered is greater than the recommended default value					
Customer metering ina Systematic data hand		○ ② 329.347 MG/Yr ○ ② 4.544 MG/Yr				
Appare	ent Losses: 2 417.369 MG/Yr					
Real Losses (Current Annual Real Losses or CARL)						
Real Losses = Water Losses - Appare						
Real Losses = Water Losses - Appare	## Int Losses: 9,325.620 MG/Yr  R LOSSES: 9,742.989 MG/Yr					
Real Losses = Water Losses - Appare WATER NON-REVENUE WATER NON-REVENU	R LOSSES: 9,742.989 MG/Yr					
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU = Water Losses + Unbilled Metered + Unbilled Unmetered	R LOSSES: 9,742.989 MG/Yr					
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA	R LOSSES: 9,742.989 MG/Yr  BE WATER: 9,942.506 MG/Yr					
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service oc	R LOSSES: 9,742.989 MG/Yr  BE WATER: 9,942.506 MG/Yr  In of mains: 1 9 3.064.4 miles connections: 1 9 9 202,680					
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service oc Service connective	R LOSSES: 9,742.989 MG/Yr  IE WATER: 9 9,942.506 MG/Yr  In of mains: + 7 9 3,064.4 miles  Sonnections: + 7 9 202,680 on density: 7 96 conn/mile main					
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service oc	R LOSSES: 9,742.989 MG/Yr  BE WATER: 9 9,942.506 MG/Yr  In of mains: 1 9 3,064.4 miles  Sonnections: 1 9 202,680 on density: 9 66 conn/mile main or property  Display 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ce line, beyond the property				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service or Service connective  Are customer meters typically located at the curbstop  Average length of customer's	R LOSSES: 9,742.989 MG/Yr  BE WATER: 7 9,942.506 MG/Yr  In of mains: 4 7 9 3,064.4 miles    202,680     300     400     500     500     600     700	ce line, <u>beyond</u> the property s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service or Service connective  Are customer meters typically located at the curbstop  Average length of customer's	R LOSSES:  9,742.989 MG/Yr  h of mains:  1 9 3,064.4 miles connections:  2 9 202,680 on density: 7 66 conn/mile main or property line? Service line:  1 9 4 202,680 boundary, that boundary, that boundary, that	s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service oc Service connecti  Are customer meters typically located at the curbstop  Average length of customer service line I	R LOSSES:  9,742.989 MG/Yr  h of mains:  1 9 3,064.4 miles connections:  2 9 202,680 on density: 7 66 conn/mile main or property line? Service line:  1 9 4 202,680 boundary, that boundary, that boundary, that	s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service oc Service connecti  Are customer meters typically located at the curbstop  Average length of customer service line I	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains: 9 3,064.4 miles connections: 9 202,680 or density: 9 66 conn/mile main or property line? Yes service line: 1 7 90.7 psi	s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service or Service connection  Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating water  Total annual cost of operating water  Total annual cost of operating water  NON-REVENUE  Annual Cost of operating water  NON-REVENUE  Average length of customer service line I  Average operating water  Total annual cost of operating water  NON-REVENUE  Annual Cost of operating water  NON-REVENUE  Annual Cost of operating water  NON-REVENUE  Average length of customer service line I  Average operating water  Total annual cost of operating water  NON-REVENUE  Annual Cost of operating water  NON-REVENUE  Average length of customer service line I  Average operating water  Total annual cost of operating water  NON-REVENUE  Annual Cost of operating water  NON-REVENUE  Average length of customer service line I  Average operating water  Total annual cost of operating water  NON-REVENUE  Average length of customer service line I  Average operating water  NON-REVENUE  SYSTEM DATA	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains:  7  9  3,064.4  miles  connections:  202,680  or density:  7  66  conn/mile main  (length of service line:  boundary, that it boundar	s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service consection  Service connection  Are customer meters typically located at the curbstop  Average length of customers  Average length of customer service line I  Average operating	R LOSSES: 9,742.989   MG/Yr	s the responsibility of the utility) lied				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service connectic Are customer meters typically located at the curbstop  Average length of customer's  Average length of customer's  Average length of customer service line Inactive  Average operating  COST DATA  Total annual cost of operating wat Customer retail unit cost (applied to Appare)	R LOSSES: 9,742.989   MG/Yr	s the responsibility of the utility)				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service connectic  Are customer meters typically located at the curbstop  Average length of customer's  Average length of customer's  Average length of customer service line Inactive  Average operating  COST DATA  Total annual cost of operating wat  Customer retail unit cost (applied to Appare)	R LOSSES: 9,742.989   MG/Yr	s the responsibility of the utility) lied				
NON-REVENUE WATER  NON-REVENUE  Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt Number of active AND inactive service or Service connection Are customer meters typically located at the curbstop  Average length of customer service line I Average operating  COST DATA  Total annual cost of operating water Customer retail unit cost (applied to Apparent Variable production cost (applied to Re	R LOSSES: 9,742.989   MG/Yr	s the responsibility of the utility) lied				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service consection  Service connection  Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating water Customer retail unit cost (applied to Apparent Variable production cost (applied to Re  WATER AUDIT DATA VALIDITY SCORE:	R LOSSES: 9,742.989   MG/Yr	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service consection  Service connection  Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating water Customer retail unit cost (applied to Apparent Variable production cost (applied to Re  WATER AUDIT DATA VALIDITY SCORE:	R LOSSES:  9,742.989  MG/Yr  IE WATER:  9,942.506  MG/Yr  In of mains:  19,942.506  MG/Yr  In les conn/mile main conn/mile mai	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service conservice connection  Are customer meters typically located at the curbstop  Average length of customer service line In Average operating  COST DATA  Total annual cost of operating water Customer retail unit cost (applied to Apparent Variable production cost (applied to Reference Components)  WATER AUDIT DATA VALIDITY SCORE:	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains:  7 9 3,064.4  connections:  7 9 202,680  on density: 7 9 202,680  on density: 7 9 9 0.7  service line: 7 9 90.7  g pressure: 7 90.7  yes  ter system: 7 10 \$97,317,842  g pressure: 8 7 10 \$97,317,842  s 10 \$97,317,842  s 277.83  \$//Year  *** YOUR SCORE IS: 82 out of 100 ***  s of consumption and water loss is included in the calculation of the Water A	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service or Service connectic  Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating wat  Customer retail unit cost (applied to Appare  Variable production cost (applied to Re  WATER AUDIT DATA VALIDITY SCORE:  A weighted scale for the components  PRIORITY AREAS FOR ATTENTION:	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains:  7 9 3,064.4  connections:  7 9 202,680  on density: 7 9 202,680  on density: 7 9 9 0.7  service line: 7 9 90.7  g pressure: 7 90.7  yes  ter system: 7 10 \$97,317,842  g pressure: 8 7 10 \$97,317,842  s 10 \$97,317,842  s 277.83  \$//Year  *** YOUR SCORE IS: 82 out of 100 ***  s of consumption and water loss is included in the calculation of the Water A	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENU  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service or Service connectic  Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating wat  Customer retail unit cost (applied to Appare  Variable production cost (applied to Re  WATER AUDIT DATA VALIDITY SCORE:  Aweighted scale for the components  PRIORITY AREAS FOR ATTENTION:  Based on the information provided, audit accuracy can be imposed.	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains:  7 9 3,064.4  connections:  7 9 202,680  on density: 7 9 202,680  on density: 7 9 9 0.7  service line: 7 9 90.7  g pressure: 7 90.7  yes  ter system: 7 10 \$97,317,842  g pressure: 8 7 10 \$97,317,842  s 10 \$97,317,842  s 277.83  \$//Year  *** YOUR SCORE IS: 82 out of 100 ***  s of consumption and water loss is included in the calculation of the Water A	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				
Real Losses = Water Losses - Appare  WATER  NON-REVENUE WATER  NON-REVENUE  = Water Losses + Unbilled Metered + Unbilled Unmetered  SYSTEM DATA  Lengt  Number of active AND inactive service connectic Are customer meters typically located at the curbstop  Average length of customer service line I  Average operating  COST DATA  Total annual cost of operating wat  Customer retail unit cost (applied to Apparent Variable production cost (applied to Re  WATER AUDIT DATA VALIDITY SCORE:  Aweighted scale for the components  PRIORITY AREAS FOR ATTENTION:  Based on the information provided, audit accuracy can be imposed to the components of the	R LOSSES:  9,742.989  MG/Yr  9,942.506  MG/Yr  h of mains:  7 9 3,064.4  connections:  7 9 202,680  on density: 7 9 202,680  on density: 7 9 9 0.7  service line: 7 9 90.7  g pressure: 7 90.7  yes  ter system: 7 10 \$97,317,842  g pressure: 8 7 10 \$97,317,842  s 10 \$97,317,842  s 277.83  \$//Year  *** YOUR SCORE IS: 82 out of 100 ***  s of consumption and water loss is included in the calculation of the Water A	s the responsibility of the utility) lied se Customer Retail Unit Cost to value real losses				

See accompanying auditor's report.

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF UNACCOUNTED FOR WATER (UNAUDITED) - Continued JUNE 30, 2019

	AWWA Free Water Audit S System Attributes and Performa		WAS v5.0 American Water Works Association. Copyright © 2014, All Rights Reserved.			
	Water Audit Report for: Metro Water Services Reporting Year: 2019 7/2018 - 6/2019					
	*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 82 out of 100 ***					
System Attributes:	Apparent Losses:	417.369	MG/Yr			
	+ Real Losses:	9,325.620				
	= Water Losses:	9,742.989	MG/Yr			
	7 Unavoidable Annual Real Losses (UARL):	1,555.31	MG/Yr			
	Annual cost of Apparent Losses:	\$2,287,182				
	Annual cost of Real Losses:	\$2,590,937	Valued at Variable Production Cost			
Performance Indicators:			Return to Reporting Worksheet to change this assumpiton			
renormance mulcators.	Alan rayanya watar as parcent by valuma of Watar Sympliad	30.4%				
Financial	Non-revenue water as percent by volume of Water Supplied: Non-revenue water as percent by cost of operating system:		Real Losses valued at Variable Production Cost			
	Non-revenue water as percent by cost of operating system.	5.1%	Real Losses valued at valiable Floudcion Cost			
Γ	Apparent Losses per service connection per day:	5.64	gallons/connection/day			
	Real Losses per service connection per day:	126.06	gallons/connection/day			
Operational Efficiency:	Real Losses per length of main per day*:	N/A				
	Real Losses per service connection per day per psi pressure:	1.39	gallons/connection/day/psi			
	From Above, Real Losses = Current Annual Real Losses (CARL):	9,325.62	million gallons/year			
	? Infrastructure Leakage Index (ILI) [CARL/UARL]:	6.00				
* This performance indicator appli	es for systems with a low service connection density of less than 32	service connections/mile	of pipeline			

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF PLEDGED REVENUE COVERAGE (UNAUDITED) LAST TEN FISCAL YEARS

(amounts expressed in thousands)

Fiscal	Gross	Direct Operating	Net Revenue Available For	Debt S	Service Require	ment	
<u>Year</u>	Revenue(1)	Expense (2)	Debt Service	Principal Principal	<u>Interest</u>	<u>Total</u>	Coverage
2009-10	\$171,966	\$88,603	\$83,363	\$35,525	\$16,526	\$52,051	1.60
2010-11	196,268	94,478	101,790	37,830	26,998	64,828	1.57
2011-12	201,263	102,485	98,778	42,410	29,386	71,796	1.38
2012-13	209,110	103,423	105,687	30,765	34,189	64,954	1.63
2013-14	213,055	101,703	111,352	31,500	41,367	72,867	1.53
2014-15	215,709	100,825	114,884	20,275	40,175	60,450	1.90
2015-16	219,023	112,208	106,815	28,795	39,029	67,824	1.57
2016-17	219,964	112,654	107,310	37,475	37,476	74,951	1.43
2017-18	226,804	113,858	112,946	38,225	46,136	84,361	1.34
2018-19	233,951	111,335	122,616	39,120	44,225	83,345	1.47

Note: Details regarding the Department's outstanding debt can be found in the notes to the financial statements.

<sup>(1)</sup> Includes interest on investments and other income.

<sup>(2)</sup> Excludes depreciation and amortization expense.

# DEPARTMENT OF WATER AND SEWERAGE SERVICES THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY SCHEDULE OF RESTRICTED CASH AND CASH EQUIVALENTS JUNE 30, 2019

### **Schedule of Restricted Cash and Cash Equivalents**

Debt Service Fund	\$ 54,510,295
Waterworks revolving fund	200,000
Extension and replacement fund	127,088,396
Debt service reserve funds	54,768,298
Construction funds	10,280,983

Total

\$246,847,972



# Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

The Honorable Mayor and Members of Council The Metropolitan Government of Nashville and Davidson County, Tennessee

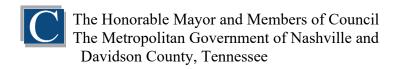
We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Department of Water and Sewerage Services (the "Department"), an enterprise fund of the Metropolitan Government of Nashville and Davidson County, Tennessee (the "Metropolitan Government"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Department's basic financial statements, and have issued our report thereon dated October 31, 2019, except for Note I, as to which the date is March 25, 2020.

#### **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Department's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Department's internal control. Accordingly, we do not express an opinion on the effectiveness of the Department's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Department's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

#### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Nashville, Tennessee October 31, 2019

Crosslin, PLLC